

**Volume Two**

**The Social and Emotional Wellbeing  
of Aboriginal Children  
and Young People**

## CITATION

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## PROJECT STEERING COMMITTEE

The Western Australian Aboriginal Child Health Survey has been carried out under the direction of the project's Aboriginal Steering Committee. Present and past members of the Committee comprise Ted Wilkes (Chair), Ken Wyatt, Pat Kopusar, Danny Ford, Shane Houston, Henry Councillor, Gregg Stubbs, Shirley Bennell, Lester Coyne, Irene Stainton, Heather D'Antoine and Daniel McAullay.

As the Aboriginal custodians of the survey data, the Steering Committee is responsible for the cultural integrity of the survey content, field methodology, analysis and interpretation of findings. This committee also has oversight of the survey's community feedback and dissemination strategy to ensure the appropriate utilisation of the data for the benefit of Aboriginal people.

## PROJECT FUNDERS

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The survey planning and grant proposals were the initial responsibility of Stephen Zubrick, Sven Silburn, Anne Read and Sandra Eades.

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## FOREWORD

Aboriginal people are a deeply spiritual people, and the breaking down of this spirituality is manifest in trauma to skin, heart, muscle, mind and body.

Speaking from an Aboriginal perspective, there are many words for being unwell and many reasons for being 'sick'. Understanding this requires a proper recognition of the extent of the destruction of life as we knew it and our happiness.

The taking away of our children and our rights is where it began. So, when 'Citizenship Rights' were offered, some Aboriginal people did not apply for these rights because, by not 'being black' or by being excluded from the 'Act', there were many freedoms that our parents, uncles, aunts and grandparents found they could exercise. These included privileges such as having guardianship of your 'kids', holding and keeping your children with love, having your name for your child held up and kept with pride.

Prior to European contact, when an Aboriginal 'state' was maintained, families with their multiple roles practised the age-old Indigenous practices of bringing up children. Work, safety, shelter and food, culture, pride in being in black and Aboriginal, truthfulness and honour were all vital parts of growing up. It also included sharing responsibility for the caring of each precious child which was cherished as a significant experience.

So, we must ask the question: What is normal for Aboriginal children and what is an Aboriginal family? One picture would look like this: A child is born into a group; they would immediately be part of a tribe; there would be many carers with differing roles and many responsibilities. There would also be one, two or three mothers and fathers; there would always be someone to look after and care for the child in a special way, and others who would have responsibility to provide different necessities.

Our traditional child rearing passed on the knowledge of how to live together in good relationships; knowing who would teach children to find food; how food would be shared; and understanding what sharing meant. These practices maintained a proper understanding of who each child was, honouring their names and their place in society. Children always knew there was a space for them and had good reasons to be proud of who they were. The system of having more than one mother also meant the child would always be close to the breast, on the hip, never to be left by themselves until it was time to grow up and take their own places in society.

Colonisation brought many changes to the Indigenous peoples of Australia and this issue is addressed within this volume. Writers have described the 'psychological impact of racism, expulsion, extermination, denigration and degradation being beyond repair'. But it is repairable because, as parents, we can provide the essentials of spirituality to our own children and to the children of others. What we adult Indigenous people must provide to our children is 'cultural vitality'.



In his book, *Return of the Indian: Conquest and Revival in the Americas*, Phillip Wearne has described the need to move beyond ‘Western’ indices of poverty, illiteracy and mortality for understanding of Indigenous health and wellbeing:

*‘There are no equivalents to measure cultural vitality, spiritual wellbeing and ethnic consciousness. After five hundred years of supposed domination, the weakness and dependence of most nation states in the Americas contrasts starkly with the strength and self-sufficiency of indigenous culture. Five hundred years after Europeans set out to conquer, assimilate and convert the continent, Indigenous peoples remain distinct. They speak their own languages, follow their own traditions, farm and hunt as much as their ancestors did. Moreover, they are increasing in number and becoming steadily vociferous in demanding their rights.’<sup>1</sup>*

Today, Australian Indigenous parents may well live in a world where they feel that there is no sunlight at the end of the tunnel. But we can raise our cultural vitality by expanding and increasing our teaching of our children. We should also seek to measure our cultural vitality in the way the Americas Indigenous Nations are doing. In my opinion, restoring cultural vitality is as important as equity in our access to resources to combat ill-health, poverty, education, homelessness, shelter and safety for our children.

The survey findings on our children’s social and emotional wellbeing described in this volume can be used as a tool to bring forward other dimensions of wellbeing for consideration. For me, this means confronting the stark cold statistics that reveal a picture which cannot be denied by scientists, by governments, and by other power-brokers and decision makers. It is important that readers of this publication understand that this is the first population-level, scientific description of the extent of the long-term inter-generational impacts on the child of forced separation – one of the most devastating features of colonisation for Indigenous families.

While there has been a great deal of previous research into the health and other needs of Aboriginal people, there are few examples where this has produced tangible benefits and improvements ‘on the ground’. It is my hope that the scale and scientific rigour of this study based on an holistic view of Aboriginal health will mean we can move beyond emotional arguments when we discuss allocation and resource issues with ‘mainstream’ professionals, agencies and other service providers.

We, the Indigenous people, have in our hands a tool which must be used to bring about more equitable health outcomes and improved life chances for our children. I would also like to see the findings being used to mobilise action to restore the cultural vitality of our peoples.

**Pat Kopusar**

Aboriginal Elder

Chair, WA Aboriginal Health Information and Ethics Committee

Member, Steering Committee for the WA Aboriginal Child Health Survey

Member, WA Women’s Advisory Council

Member, Southwest Land and Sea Council

**ENDNOTE**

1. Wearne P. *Return of the Indian. Conquest and Revival in the Americas*. Cambridge: Cambridge University Press; 1996. p. 28.



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## ABOUT THIS PUBLICATION

This publication was produced by the Telethon Institute for Child Health Research (ICHR) through its Kulunga Research and Training Network, a formal partnership between the Institute and the Western Australian Aboriginal Community Controlled Health Organisations (WAACCHO), with the assistance of the Australian Bureau of Statistics (ABS).

### ATTRIBUTABLE COMMENTS

The views expressed in the numbered chapters of this publication relating to the implications of the Western Australian Aboriginal Child Health Survey (WAACHS) findings and for future directions in Aboriginal health are those of the Institute. Views expressed in the Foreword and in the Preface are those of the authors.

### RELATED PUBLICATIONS

This publication is the second of five volumes planned for release from the results of the Western Australian Aboriginal Child Health Survey. The focus of this volume is Social and Emotional Wellbeing. The first volume, released in June 2004, focussed on Physical Health. Forthcoming volumes will focus on: Education; Family and Community; and Justice issues.

### CUSTODY OF THE DATA

An Aboriginal Steering Committee directed all phases of the Survey. This Committee remains the custodian of all data collected and is responsible for the cultural integrity of the survey methods, analysis and dissemination processes.

### UNDERSTANDING THE DATA

The tables and text included in this volume are derived either directly from the Western Australian Aboriginal Child Health Survey, or through linkage of WAACHS data and administrative data. Survey reports were provided by carers of Aboriginal children and by Aboriginal young people aged 12–17 years and were accepted as given. Interviewers were not in a position to verify responses either at time of interview or afterwards. Medical practitioners were not involved to either diagnose conditions or to validate the reports from carers and young people of given conditions.

### ACCURACY OF THE ESTIMATES

All data presented in this volume have been subject to rigorous statistical analysis. Estimates from the survey have been calculated at a 95% level of confidence. The confidence intervals are displayed on graphs by means of vertical confidence interval bars (  $\bar{\pm}$  ). There is a 95% chance that the true value for a data item lies between the upper and lower limits indicated by the confidence bars for that item. Figures have been rounded to three significant digits. Therefore discrepancies may occur between the sums of the component items and totals.



## COMMUNITY FEEDBACK

The Kulunga Research Network has designed a communication strategy which will maximise information available to Aboriginal communities. The results and findings are being reported and profiled for each of the ATSI regions throughout the state.

## CONTACT FOR INQUIRIES

If you would like more information about any topics covered in this volume or about the survey in general, please email us at:

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## OBTAINING COPIES OF THIS PUBLICATION

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### RESTORING LIFE AND SPIRIT: RECOVERY FROM TRAUMA

*Our country and people have suffered many traumas since colonisation, the magnitude of which is beyond words. Looking through trauma is like being trapped in the back of a mirror, there is no reflection of self. It is like being trapped in darkness, unable to see where to go or what is there, surrounded by 'not knowing', paralysed by fear.*

*When we are wounded, our story is disrupted and life becomes fragmented. We may not be able to find our way forward and may start to see life through warped mirrors. We have to understand that trauma is only a part of our story and our story is part of a much greater story that has a different beginning, is enduring and will continue well beyond our lifetime.*

*To have integrity of existence we need to have an integrated experience throughout so that we do not isolate pockets of our life, disconnected from present reality, and so that we do not live in two worlds but can maintain an essence of continuity throughout our existence on this earth. We cannot play parts without understanding the whole story of Australia.*

*Part of the problem in healing is being able to put all the parts together again as there are still too many of us missing. To survive as peoples distinct in culture, we have to restore the collective. The individual may not be able to carry the survival of the culture into eternity but the collective can.*

*We can return to the dreaming to heal, to rest for a while and have our spirit restored, to find our place on the serpent and recover our purpose in this life. We have to trust that we will be cared for until we can walk again, taking sustenance from the tree of life that has sustained us over generations. Our ancestors watch and wait patiently for our return. They are like the clouds that roll through the sky coming to greet us and shed tears for our wounds, holding us within a teardrop, soothed and bathed in this healing water.*

*Then a new day will dawn and our ancestral guides will once again set us on our journey through life. To recover, we have to allow the sun to shed light and warmth on dark places and assist our wounds to heal. We have to shatter these warped mirrors and find our true reflection of self, spirit and country. We have to stand together, united and proud.*

*We may not always have control over what happens to us in life, but we do have control over truth. The ultimate control we have is the coherence and continuity of our own story.*

*To live without spirit is to sleep without dreams and wake to oblivion.*





## PREFACE

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Director of the Centre for Aboriginal Medical and Dental Health  
University of Western Australia

I would like to acknowledge the significant contribution of my sister and colleague, Jill Milroy, Director of the School of Indigenous Studies, University of Western Australia, for her wisdom, knowledge and expertise in preparing this material.



RESTORING LIFE AND SPIRIT: RECOVERY FROM TRAUMA



## INTRODUCTION

This second volume of findings from the Western Australian Aboriginal Child Health Survey explores some of the key issues surrounding the social and emotional wellbeing of Aboriginal children and young people. It focuses particularly on the protective and risk factors shaping childhood development and mental health. In doing so, it builds on the survey results on physical health already reported in Volume One of the survey findings.<sup>1</sup> Reading both of these volumes in conjunction with one another will assist the reader to gain a more complete view of the health and wellbeing of Aboriginal children. It should also be kept in mind that a further three volumes are to follow. These volumes will report education, community health and justice outcomes. Each volume thus builds a progressively more layered and holistic perspective on the many factors which influence Aboriginal children's outcomes and opportunities.

Writing from the perspective of an Aboriginal medical practitioner and psychiatrist, I have used the term Aboriginal recognising that some of the issues and experiences discussed in this preface may apply to both Aboriginal and Torres Strait Islander peoples. Whatever terms are used to describe Aboriginal and Torres Strait Islander peoples, they should be used with respect and instil a sense of pride, bearing in mind these 'labels' are applied to identify our children on the basis of their unique cultural heritage.

## HEALTH AND WELLBEING AS A HUMAN RIGHT

*Wellbeing* is traditionally understood to refer to the notion of being in a good, healthy or stable state.<sup>2</sup> It is as much about being well as it is about being free of illness. This desirable state of existence and how it is defined obviously varies with individual, cultural, societal and political circumstances. It can also mean different things at stages through the life-course. In this volume, the term *social and emotional wellbeing* is therefore used to refer to the emotional and psychological aspects of child and adult development as well as the importance and nature of social and community relationships supporting good health.

Two recent national policy documents that define these concepts are the *National Mental Health Plan 2003–2008* and the *National Strategic Framework for Aboriginal and Torres Strait Islander Mental Health and Social and Emotional Wellbeing 2004–2009*. According to the *National Mental Health Plan*, mental health may be defined as:

*'A state of emotional and social wellbeing in which the individual can cope with the normal stress of life and achieve his or her potential. It includes being able to work productively and contribute to community life. Mental health describes the capacity of the individuals and groups to interact inclusively and equitably with one another and with their environment in ways that promote subjective wellbeing and optimise opportunities for development and the use of mental abilities. Mental health is not simply the absence of mental illness. Its measurement is complex and there is no widely accepted measurement approach to date.'*<sup>3</sup>

The *National Mental Health Plan* further defines mental health problems and mental illness as:

*'... the range of cognitive, emotional and behavioural disorders that interfere with the lives and productivity of people.'*<sup>3</sup>



These definitions suggest that *health* and *wellbeing* together constitute a broader holistic concept and that *mental health problems* and *specific disorders* are two sub-components that require separate or more specialised consideration. This contrasts with Aboriginal perspectives, where health and mental health are not seen as separate but as intimately connected through the inter-related nature of mind, body and spirit. The need for a holistic approach was argued by the 1989 National Aboriginal Health Strategy (NAHS) Working Party, which stated:

*‘In Aboriginal society there was no word, term or expression for “health” as it is understood in Western society. It would be difficult from the Aboriginal perception to conceptualise “health” as one aspect of life. The word as it is used in Western society almost defies translation but the nearest translation in an Aboriginal context would probably be a term such as “life is health is life”.’<sup>4</sup>*

In 1986 the World Health Organisation (WHO) published its Ottawa Charter outlining the fundamental prerequisites for health and wellbeing. These include: peace, shelter, education, food, income, a stable ecosystem, sustainable resources, social justice and equity.<sup>5</sup> In 1997, the WHO’s Jakarta Declaration asserted that health must be considered a basic human right given that its establishment and maintenance is essential for the social and economic growth of communities and nations. The Jakarta Declaration also concluded that:

*‘... above all, poverty is the greatest threat to health’<sup>6</sup>*

Tackling poverty and all of its associations with equity and access to resources remains a fundamental issue for many Aboriginal communities and critical in the establishment of wellbeing. To improve the state of social and emotional wellbeing and mental health, the *National Strategic Framework for Aboriginal and Torres Strait Islander Mental Health and Social and Emotional Wellbeing 2004–2009* recognised the importance of building on the recommendations from the NAHS (1989) and *Ways Forward, National Consultancy Report on Aboriginal and Torres Strait Islander Mental Health (1995)* as well as the many successful programs currently in operation. As a result, several priorities for action were identified including access and cultural appropriateness of services, effective agreements and partnerships, optimal resourcing, workforce development, and coordination and collaboration across sectors and organisations.<sup>7</sup>

## RISK FACTORS IN ABORIGINAL CHILD DEVELOPMENT

The 2000 National Health and Medical Research Council (NHMRC) discussion paper *Promoting the Mental Health and Wellbeing of Children and Young People*<sup>8</sup> identified some of the main risk factors for the development of mental health problems in the general population. These include exposure to the death of a parent; violence in the family, parental separation and family breakdown; parents who have serious health problems, including mental illness and/or drug and alcohol problems that disrupt effective parenting; psychological trauma; physical illness or disability; lack of peer support; and poverty to name but a few. Despite many of these risks being more common in Aboriginal communities, there has been surprisingly little policy consideration of the effects of chronic and acute stressors on Aboriginal child development.

For many Aboriginal and Torres Strait Islander communities, the occurrence of risks such as early mortality and chronic disease is almost universal. In such communities the consequent increased risk for mental health problems is more or less pervasive.<sup>9</sup>





When the general level of risk in a community is already high, there are far fewer opportunities for children – for example in high-risk families – to be buffered by other protective influences within the community. It is very difficult to hold the infant in mind when the whole community is suffering. The compounding of family and community risks frequently underlies the vicious cycle of deteriorating conditions affecting children, families and communities. Given the levels of grief, loss and trauma suffered within many communities, it is not surprising that some Aboriginal people feel a sense of isolation and disregard by broader society, and struggle to find a sense of pride in the face of the negative images and stereotypes commonly portrayed in media and encountered in everyday life.

In a highly developed country that is steeped in wealth and has first class health, welfare and education systems, it is a source of international shame that Australia appears to tolerate Aboriginal and Torres Strait Islander peoples living in conditions normally associated with third world or developing countries. As a signatory to the United Nations *Millennium Development Goals (2000)*<sup>10</sup>, the Australian Government has committed itself to assist in halving the rate of extreme poverty worldwide by 2015. Australia also contributes money and resources to humanitarian aid on an international level as required. Despite assisting with these worthy aims globally, at home Australia fails to recognise and meet the basic needs of Aboriginal peoples. Recent public debate has suggested that Aboriginal people should take greater responsibility for finding solutions to their own problems yet this approach fails to recognise that Aboriginal control over life, health, services and resources is at best tenuous. It also fails to consider the cumulative impact over generations of the denial of Aboriginal history and its effective invalidation of the lived experience of Aboriginal peoples. In the minds of many Aboriginal people, the violent frontier has never ended and continues in the form of experience of being over-governed and in the continuing high levels of welfare dependency and chronic ill-health. Until the full extent of the effects of this traumatic past is understood and properly acknowledged, there is little hope for meaningful reconciliation, true equality or the full expression of self-determination to assist in recovery. In view of this, where does responsibility for outcomes really reside?

## THE HISTORICAL IMPACT OF COLONISATION

Prior to the invasion of Aboriginal lands and the establishment of the Swan River Colony in 1829, Aboriginal peoples throughout Western Australia lived full and productive lives, in harmony with the environment and supported by extensive kinship systems that linked people through mutual obligations and responsibilities, not only to each other, but to all living things. The 'Dreaming' as it has come to be called, provides the basis for Aboriginal law, culture and society, belief and knowledge systems incorporating past, present and future as one. Aboriginal peoples enjoyed relatively good health and wellbeing with few major threats to life or country, and life, land and culture were sacred. Western Australia's colonial history has left a path of devastation that has had profound consequences still being felt today and likely to reverberate through generations to come. The preface to Volume One of the WAACHS findings described how some of these historical issues impacted on the physical health of Aboriginal peoples. Many of the same issues have also had a profound effect on social and emotional wellbeing – particularly through the multiple losses and traumas experienced as a result of separation from land, family and cultural identity.



When viewing Aboriginal history from a psychological or mental health perspective, three critical themes emerge:

- ◆ The denial of humanity
- ◆ The denial of existence
- ◆ The denial of identity.

Although somewhat sequential yet continuous in their manifestation, they are inextricably linked and arguably still underlie the basis of the relationships between Aboriginal and non-Aboriginal society today. The denial of Aboriginal people's humanity, existence and identity can be seen in racial classification, denigration and criminalisation; incarceration, exclusion and removal; assimilation, welfare and 'mutual obligation' with the vehicle for action being within policy and legislative control.

## Humanity and human rights

In order to understand the full impact on mental health and wellbeing, a brief consideration of the views that existed about Aboriginal peoples at the time of colonisation is critical. The beliefs, values and underlying assumptions about Aboriginal peoples shaped attitudes, determined treatment and formed the basis of subsequent policy and legislation that controlled all aspects of Aboriginal peoples lives. It must always be remembered when considering these events, that a greater impact is likely to occur in the life and development of children.<sup>11-13</sup>

Western Australia has a history of racially based policies and legislation entrenched in a denial of the fundamental humanity and the human rights of Aboriginal peoples. From the beginnings of 'European settlement', ideas regarding the classification of Aboriginal peoples as some form of primitive man or inferior being are prevalent. As one of Western Australia's foremost historians describes it:

*'Europeans perceived the ideal man in their own image, both physically and culturally, and because Aborigines were so different they seriously debated whether or not they were human.'*<sup>14</sup>

Racially based beliefs under-pinning the denigration of Aboriginal peoples included the 'criminalising' of Aboriginal behaviours seen as threatening or not conforming to European expectations and these continued into the twentieth century. From the 1906 edition of a popular local journal *The Golden West* comes this description of Aboriginal peoples:

*'The West Australian aborigine stands right at the bottom of the class to which we belong ... The native black has no intelligence, though his powers of imitation carry him up to the border line. He is as a general rule, to which there are few exceptions, brutish, faithless, vicious, the animal being given the fullest loose, a natural born liar and thief, and only approached by his next of kin, the monkey, for mischief.'*<sup>15</sup>

This denial of the humanity and rights of Aboriginal peoples was at times used to rationalise attitudes and behaviour towards them which in any other circumstance would only be considered applicable in relation to animals e.g. notions of protection and ownership of livestock were at times extended to the Aboriginal population, including being counted along with the livestock on pastoral properties. This also



applied to the handling of children as commodities, whereby they could be forcibly removed, given new names, put out to work as labourers or domestics and denied their cultural heritage.<sup>16</sup>

The racist assumptions underlying such a relationship between a supposedly superior and inferior race, or worse still, between man and beast, have thus precluded any serious consideration of equality or reconciliation. Echoes of such racially based thinking remain evident in the ongoing debates about the identity and rights of Aboriginal peoples today, including rights of sovereignty.

### Exclusion from the State and society

Aboriginal peoples' exclusion from, or categorisation as a lower form of, humanity enabled them to be excluded from the State and society, as well as often being denied access to the system of justice under which they operated:

*'Events from the nineteenth century showed that white men who murdered Aborigines were rarely tried; if tried rarely convicted; and if convicted, rarely punished. In other words, Aborigines were regarded as legal nonentities, denied the legal rights which white society otherwise thought belonged to all humans.'*<sup>12</sup>

In the face of Aboriginal resistance to colonial rule and dispossession, the most extreme form of control that could be exercised was eradication but, failing this, incarceration in prisons, removal to institutions, confinement on missions and reserves, and segregation from mainstream society operated from an 'out of sight, out of mind' mentality that effectively excluded Aboriginal peoples from 'existence'.

Throughout Western Australia's history, little respect has been paid to understanding Aboriginal systems of law, culture and social organisation or cultural differences in the meaning and expression of behaviour. This failure of cultural understanding contributed to a growing burden of punitive and custodial legislation, policies and practices that Aboriginal people had to deal with. According to Rowley, this made Australia:

*'... almost unique in having long standing administrative practices of confining Aborigines in managed institutions, not for having committed offences ... but because they belonged to a particular racial minority. The progress of the Aboriginal from tribesman to inmate has been a special feature of colonial administration and of white settlement in Australia.'*<sup>17</sup>

This history is relevant to understanding the background to the present day over-representation of Aboriginal people – and young people in particular – in the Western Australian and Australian justice systems. For example, Dr Cyril Bryan, an influential figure in Aboriginal Affairs and Policy in Western Australia, gave extensive evidence to the 1934 Moseley Royal Commission into the Conditions and Treatment of Aborigines.<sup>18</sup> Bryan's views were clear in stating:

*'There is only one state of society where the half-caste is received without question the world over ... the society of criminals.'*<sup>19</sup>

The removal of men through incarceration also removed fathers, grandfathers, brothers and uncles from families and this continues unabated. The shocking rate of Aboriginal women in prison today suggests we are now removing mothers, aunties and sisters from families. In much the same way, racially based beliefs and attitudes have resulted in Australian society having a negative view of the level of Aboriginal people's intelligence, their ability to understand, and to be responsible for themselves and care



for their children. Labelling a race as inferior, or even worse criminal, it is then an easy step to see them as incapable. Such assumptions are evident in many of the writings of that time, where Aboriginal people were described as being ‘child-like’, ‘ignorant’, ‘dumb’ and hence in need of being looked after, and for their children to become the property of the State. Unfortunately, some of the prevailing attitudes of the past continue to be expressed in the way Aboriginal people are treated presently.

### Assimilation policies and Aboriginal identity

The data reported in this volume of findings provide some of the first objective evidence documenting the longer-term, population-level effects of the official removal of children from their natural parents and/or the relocation of entire communities from their traditional lands. The findings detail the extent to which contemporary Aboriginal families have been affected by these policies. They are unique in quantifying the extent of the inter-generational effects of these policies for the health and wellbeing of the children and grandchildren of those who were removed. The scale of the survey sample means that the population estimates of the health and well-being outcomes for these affected families can be reliably compared with other families who were not personally subject to removal or relocation. It is therefore appropriate at this point to briefly consider the historical background, context and extent to which forced separation and forced relocation occurred. The *National Inquiry into the separation of Aboriginal and Torres Strait Islander children from their families* (1997) found:

*‘Indigenous children have been forcibly removed from their families and communities since the very first days of European occupation of Australia. In that time, not one Indigenous family has escaped the effects. Most families have been affected in one or more generations by the removal of one or more children. Nationally, the Inquiry concludes that between one in three and one in ten Indigenous children were forcibly removed from their families and communities between 1910 and 1970.’*<sup>16</sup>

While the removal of children and the control of Aboriginal peoples under the *Aborigines Act 1905* was premised on the notion of ‘protection’, the emphasis from the late 1930’s is on ‘assimilation’. There is an intense focus on classifying and defining Aboriginal peoples in the *Native Administration Act 1936*, which extended the powers of the 1905 Act, imposing harsher controls and widening definitions of who was Aboriginal and therefore subject to the Act.

Assimilation was premised on popular theories of eugenics and pseudo scientific ideas regarding the ‘breeding out of colour’ among ‘half-castes’ and the widespread belief that the ‘full bloods’ would eventually die out. At the 1937 Initial Conference of Commonwealth and State Aboriginal Authorities, the resolution passed was quite explicit in its aims to adopt assimilation as the national policy. The Western Australian Chief Protector of Aborigines, A.O. Neville, a strong supporter of ‘biological absorption’ for Aboriginal children of mixed descent, was an influential contributor to the outcomes of the conference. Neville’s views were clear on a long-range solution to the ‘Aboriginal problem’, when he posed this question at the Conference:

*‘Are we going to have a population of 1,000,000 blacks in the Commonwealth, or are we going to merge them into our white community and eventually forget that there were any aborigines in Australia?’*<sup>20</sup>

Although the nature and intent of assimilation changed over time, the forcible removal of Aboriginal children continued.



## A unique identity

Another striking example of the impact of racially based legislation on Aboriginal people's sense of security and identity was the legislation concerning 'exemption certificates' or 'citizen's rights' which was in place in the first half of the twentieth century. Historically, Aboriginal people were denied the right to their own unique identity and place in Australia and made to feel aliens in their own country. In his biography, Jack McPhee makes some important observations about the nature of citizenship for Aboriginal people:

*'It had never occurred to me before that I might not be an Australian Citizen. I thought everyone born here was Australian. My mother had been here before any white people, so I'd never thought we might be considered strangers in our own country.'*<sup>21</sup>

To escape the harsh provisions of the various Aborigines Acts in force at the time (see *Aborigines Act 1905*, *Native Administration Act 1936*, *Native (Citizenship Rights) Act 1944*), Aboriginal people could in some cases apply for exemption certificates or citizenship rights. Applicants had to satisfy several requirements which included severing ties with Aboriginal people, including family members without exemption or citizenship certificates. Under the *Native (Citizenship Rights) Act 1944*, applicants who were successful in gaining their certificate of citizenship were 'deemed to be no longer a native or Aboriginal' and were required to carry their identification papers or 'passports' with them at all times. Exemption certificates and citizenship rights could easily be revoked. The harsh and sometimes arbitrary enforcement of the legislation caused Aboriginal families considerable suffering and insecurity, and was a further denial of the existence and identity of Aboriginal peoples. Consider the impact of having to deny your true self, severing and rejecting ties to generations of ancestry and culture, living a false and re-created identity at the hands of government officials, yet still failing to be considered equal by broader society. The attempts to remove all traces of Aboriginal identity through legislation, the destruction of Aboriginal knowledge, the reframing of perception and experience, and the invalidation of memory have had profound psychological consequences for families and are likely to be far reaching. The United Nations Convention on Genocide<sup>22</sup> outlines a number of actions with the intent to destroy in whole or in part a racial group including the transfer of children and causing serious mental harm to members of the group. As stated in *Bringing Them Home*:

*'Indigenous families and communities have endured gross violations of their human rights. These violations continue to affect Indigenous people's daily lives. They were an act of genocide, aimed at wiping out Indigenous families, communities and cultures, vital to the precious and inalienable heritage of Australia.'*<sup>16</sup>

Genocide occurs across all levels of life and development, including the physical, psychological, social, cultural and spiritual dimensions. However, we may not fully understand how and when psychological annihilation occurs, its full ramifications and what is necessary for recovery. Given the profound and continuing consequences of the policies and legislation for the cultural and racial identity and psychological wellbeing of many Aboriginal people and families today, it can be argued that their intent and the manner of execution have in effect constituted the psychological genocide of a race.<sup>11,12,16,23</sup>





## TRANS-GENERATIONAL EFFECTS OF TRAUMA

Given that the traumas of separation, social control and exclusion have been sustained over several generations and that almost the entire Aboriginal population was affected, the ability of individuals to psychologically integrate and for families and communities to collectively resolve these experiences in the face of ongoing denial of history is extraordinarily difficult. Furthermore, with the forcible removal of Aboriginal children by the State continuing up until the 1970's, the acute effects of these genocidal acts are still being felt and it may well take many generations for these horrific experiences to become a distant memory.

The trans-generational effects of trauma occur via a variety of mechanisms including the impact on the attachment relationship with caregivers; the impact on parenting and family functioning; the association with parental physical and mental illness; disconnection and alienation from extended family, culture and society. These effects are exacerbated by exposure to continuing high levels of stress and trauma including multiple bereavements and other losses, the process of vicarious traumatisation where children witness the on-going effects of the original trauma which a parent or other family member has experienced. Even where children are protected from the traumatic stories of their ancestors, the effects of past traumas still impact on children in the form of ill health, family dysfunction, community violence, psychological morbidity and early mortality.

When children hear the stories of the mistreatment of their mothers, grandmothers and ancestors, they may well despair at how the world stood by and watched the disintegration of their kin and the continuing denial of Aboriginal history. As Lorraine Peters points out:

*'I want to write about my children because people think the suffering stops with me. But I have passed these feelings, teachings, on to my children not realising what I was doing.'*<sup>24</sup>

The effects of past traumas have also often been compounded by the ignorance of those whose treatment of Aboriginal peoples for distress and psychiatric illness was founded on a Western biomedical model that failed to understand or recognise the extent to which trauma, racism and continuing oppression contribute to mental health or behavioural problems. Medical assumptions regarding the meaning of a family history of mental illness also needs to be considered in this light given the likelihood of mislabelling or failure to consider the broader context for understanding symptom formation and behaviour. Although Hunter points out the danger in 'pathologising' culture in the cross-cultural context of psychiatric examination, he also makes the important observation that:

*'Denying or minimising disorder or disease in a cross-cultural context is disarmingly easy and dangerous. There is no simple solution, one strives for an openness to the cultural dimensions of human existence while retaining clinical vigilance.'*<sup>25</sup>

Although some have argued against medicalising issues of social justice, racism and discrimination, the continued failure of the health and mental health professions to take account of the sustained and profound psychological impact of colonisation on Aboriginal peoples perpetuates the continuing high rates of mental health morbidity. This would appear to be an important factor explaining the lack of accessibility and accountability of mainstream services in providing culturally secure services for Aboriginal people to reduce secondary re-traumatisation through culturally inappropriate or inadequate care.



## CONTEMPORARY ISSUES AFFECTING SOCIAL AND EMOTIONAL HEALTH

It is easy to understand the difficulties in establishing the building blocks for good psychological health in light of the historical legacy and the lived reality of many of our Aboriginal children today. The year 2001 marked the tenth anniversary of the final report of the *Royal Commission into Aboriginal Deaths in Custody* and it was in this context that Aboriginal and Torres Strait Islander Social Justice Commissioner Dr. William Jonas made the following poignant observation:

*'... while it is in people's nature to celebrate anniversaries, it must be said that this anniversary is a sad one. There is less to celebrate some ten and a half years after the Royal Commission's findings than we might have hoped for. ... the sense of urgency and commitment to addressing Indigenous over-representation in criminal justice processes has slowly dissipated. Indigenous people have continued to die in custody at high rates in the decade since the Royal Commission, and the average rate of Indigenous people in corrections has steadily increased on a national basis since the Royal Commission. Yet in 2001 this hardly raises a murmur of discontent yet alone outrage among the broader community. These facts either go unnoticed, or perhaps even worse in the age of reconciliation, are simply accepted and not challenged. As a consequence, Indigenous affairs seem to have become a series of anniversaries – operating as an annual reminder of the unfulfilled promises and commitments of governments.'*<sup>26</sup>

With continuing high rates of incarceration of Aboriginal youth, the over-representation of Indigenous children in child removals and abuse cases, the poor school retention and literacy of Aboriginal children, the Northbridge curfew and the impact of mandatory sentencing on Aboriginal youth, one wonders what priority is given in policy, service provision or resources to addressing the needs of Aboriginal children and their families.

The rapid increase in Aboriginal suicide and suicidal behaviour over recent decades is further cause for concern. This phenomenon is one of the clearest indications of the present levels of stress, trauma and psychological morbidity. While the occurrence of these stressors appears to be at crippling levels, there is little systematic research to determine the exact nature, rates and responses required to address their underlying issues. McKendrick *et al* (1992)<sup>27</sup>, in a study of 112 Aboriginal patients attending an urban general practice in Victoria, found 54 per cent were identified as having a psychiatric disorder of which the most common diagnosis was depressive disorder. This should have rung alarm bells years ago for the many children growing up in households where parents or extended family members were suffering such mental health problems.

## ONGOING EFFECTS OF INSTITUTIONALISATION

*Bringing Them Home* cited evidence from a number of expert witnesses and outlined many of the issues related to the forced removal of children including the subsequent effect of institutionalisation on the ability of adults to develop a nurturing bond and parent their own children. The Australian Infant Mental Health Association in their submission to the Inquiry stated that:

*'It has been argued that early loss of a mother or prolonged separation from her before age 11 is conducive to subsequent depression, choice of an inappropriate partner, and difficulties in parenting the next generation. Anti-social activity, violence, depression and suicide have also been suggested as likely results of the severe disruption of affectional bonds.'*<sup>16</sup>



Given this understanding, there is a pressing need for appropriate and adequate resources and interventions to address these issues and to support families to reduce the trans-generational impacts of separation. It is no surprise that establishing trusting, confiding relationships; clear boundaries; respect and self-esteem within family systems may be difficult for those affected by forced separation. The importance of doing so is highlighted by the World Health Organisation's 2004 international review of the evidence concerning the importance of caregiver-child interactions for the survival and healthy development of children. This report directs the attention of governments and service providers to the substantial body of scientific evidence showing that:

*'Sensitive and responsive caregiving is a requirement for the healthy neurophysiological, physical and psychological development of a child ... and factors directly affecting the caregiver and child, as well as underlying social and economic issues, influence the quality of caregiver-child relationships.'*<sup>28</sup>

This review most particularly highlights that:

*'Caring interactions promote the health and development of vulnerable children. They increase the resilience of young children to the potential damaging effects of poverty and deprivation.'*<sup>28</sup>

Given the trauma of past separation, many parents today find that the thought of needing to seek help for children can provoke fear and anxiety. Children who themselves have not directly experienced separation are nevertheless highly sensitised to this issue. In such cases, simply talking about Aboriginal history can help to make sense of what has happened within an individual's own family and be an important means for recovery from trauma. New scientific understanding of the way in which traumatic and chronic levels of stress during the early years affects the development of the brain and the endocrine system has led to a greater appreciation of the role of environmental stressors in the origins of common health and mental health problems. Children who have experienced or witnessed very traumatic events can grow up in a state of semi-permanent hyper-vigilance and fear. The high levels of autonomic nervous system arousal associated with such stress responses can easily lead to a range of maladaptive coping behaviours. They are also now known to have long-lasting effects which account for a significant proportion of the known risks for serious adult health problems such as cardiovascular disease and depression.<sup>29-31</sup>

## THE EXTENT OF CONTINUING LOSS AND GRIEF

The degree and impact of loss and grief experienced by Aboriginal families due to chronic illnesses, accidents and other injuries is often under-estimated and its frequency has resulted in such losses becoming 'normalised' in some communities. Hence children raised by grandparents have a greater likelihood of losing their primary carer early in life and be at additional risk for later problems. Devitt and McMasters' 1998 study of end-stage renal disease among Aboriginal people noted the frequency and devastation of continued morbidity on families:

*'This level of illness and death represents Aboriginal family trauma and loss on a shocking scale, described without exaggeration as "sorrows nearly every year [because] the young and the old are dying".'*<sup>32</sup>

The experience of such bereavements for children may then be further exacerbated by having to move away from their friends and familiar surroundings thus leaving the child more vulnerable to the impact of other future losses.



## PSYCHOLOGICAL STRENGTHS AND RECOVERY FROM TRAUMA

The very fact that Aboriginal peoples are the oldest living culture and have survived the onslaught of colonisation is testimony to their resilience. The fact that elders have retained a sense of compassion despite the brutality they have experienced is almost beyond belief but reveals genuine wisdom and strength of spirit. The ability to retain cultural and spiritual integrity despite great adversity ensures survival for the next generation. From a clinical perspective as a child and adolescent psychiatrist, I observe many psychological strengths even in some of the most traumatised Aboriginal children. These include children's sense of autonomy early in life, their ability to consider and understand psychological issues, their capacity for humour, and their general creativity and playfulness evident in their love of drama, art and imagery. Most Aboriginal children show a strong sense of acceptance, concern and commitment to siblings and family. Aboriginal families respect for children's early autonomy has enabled many children to develop good adaptational and survival skills, to take on personal responsibilities and to act independently. This is often useful in treatment as such children are willing to take personal responsibility for their own recovery. Where a child has established a trusting relationship in therapy, the potential for recovery is facilitated through the intense nature of their kinship attachments. However, the issues of abandonment must always be considered very carefully and, in some cases, treatment and support should be continued for some years.

One of the key strengths of Aboriginal families is their acceptance of children within an extended family system. As noted in the Australian Government's recent monograph on promotion, prevention and early intervention in mental health:

*'There is a special need for Aboriginal and Torres Strait Islander parents to recognise their vast collective and personal parenting resources, inherited from family and community across the generations. These resources are all-inclusive and non-discriminating in their practice, and these are particular strengths upon which to build.'*<sup>9</sup>

The commitment to family, to country, to culture and to life has existed for thousands and thousands of years. It is in the best interests of all Australians to ensure healthy psychological development for Aboriginal children. According to the *Declaration of Berlin, 2004*:

*'A failure to ensure healthy mental development detracts from the capacity of societies to be productive, to avoid conflicts, and to advance in the modern era.'*<sup>33</sup>

## TRUTH AND RECONCILIATION

Internationally, countries such as South Africa have embarked along the process of reconciliation by laying open the past to scrutiny in preparation for a better future. Without truth, honesty and sincerity, all we will have is an empty process, another attempt to deceive with the implicit message Aboriginal people are somehow at fault. Unless reconciliation is entered into from a position of equality and openness, it is unlikely to be embraced or understood. Attempts to water down the process by emphasising only practical considerations without an underlying moral or compassionate perspective are, at best, ineffectual and, at worst, insulting. From this view, it is worth considering the value of an apology.



From an Aboriginal perspective, to say or be ‘sorry’ is to understand and feel the pain of the other, joining with them in their sense of sorrow and entering into this process through their eyes. In this way, the sadness is shared, the support offered, the experience acknowledged and a pathway to healing is created. For this to occur at a national level would be remarkable. It is interesting to note the apologies that have been offered from State governments, public and private organizations, medical colleges and community groups. Following the release of *Bringing Them Home*, the Royal Australian and New Zealand College of Psychiatry prepared a position statement outlining the continuing impact of past policies and offering an apology on behalf of its members:

*‘...The Royal Australian and New Zealand College of Psychiatrists wishes to apologise to the Aboriginal and Torres Strait Islander peoples for our failure as a group of doctors and psychiatrists to act early and effectively to try and prevent and reverse these disastrous practices. The College recognises that Australia, as a nation, needs to take the steps to put right what can be put right and to provide appropriate restitution or compensation to the communities and individuals who have been injured by these policies.’<sup>34</sup>*

It takes a politician to fear compensation and waste millions in legal battles, but it will take a statesman to act for the greater good and heal the nation.

Much has been said recently about capacity building, up-skilling, developing human and social capital in Aboriginal communities. These are not new ideas and if these individual and community resources had not been systematically destroyed in the first place, there would be no need for re-building. There is no doubt that it will take generations to restore the health and wellbeing of Aboriginal peoples, families and communities. We have to ‘grow up’ a healthy population. At the same time it must also be acknowledged that there has been significant progress made in recent years to address the social and emotional wellbeing and mental health issues for Aboriginal and Torres Strait Islander peoples. Some recent initiatives include:

- ◆ The development of link-up services to restore kinship and assist in family reunions
- ◆ Access to *Bringing Them Home* counsellors for the Stolen Generations
- ◆ The development of Social and Emotional Wellbeing centres throughout Australia
- ◆ Promotion of Social Health Teams within the Aboriginal community controlled health sector
- ◆ Development of the Aboriginal mental health workforce
- ◆ Promotion of research into resilience and a healthy early start to life for Aboriginal and Torres Strait Islander families
- ◆ Collaboration and partnerships between the mainstream mental health sector and Aboriginal communities and organizations
- ◆ Development of Indigenous therapies, culturally appropriate services with a greater acceptance and incorporation of traditional healing practices.





However, while the 'Aboriginal group' remains the add-on to policy, the afterthought or appendage, the disadvantaged or special needs group, there is a continuing sense that Aboriginal issues remain in the 'too hard basket' and are peripheral instead of being an integral part of 'core' business. This sort of approach is almost guaranteed to produce delay, piecemeal implementation, inadequate resourcing – or even being entirely excluded. It is all too easy to exclude Aboriginal families from consideration in the status quo of mainstream service provision; to be inclusive requires a considerable shift in attitude and determination that goes far beyond policy. As Stanner remind us:

*'We have been able for so long to disremember the Aborigines that we are now hard put to keep them in mind even when we most want to do so.'*<sup>35</sup>

## RESTORATION AND HEALING

It would seem that there are now two contrasting views of the experience of Aboriginal people in Australian society. For Aboriginal peoples who have struggled to survive, there is a need to understand how it is possible for a group of people to continue acting in this way against another. For many non-Aboriginal peoples who have grown up in a society where their views have been more highly valued, there is difficulty entertaining the possibility that these terrible events really happened or indeed things were that severe. Comprehending the unthinkable is a difficult task when the power of denial and repression provide an easier alternative. Hearing, understanding and incorporating Aboriginal history into the psyche of all Australians is a painful, emotionally provocative but necessary process if we are to prepare the way for future generations to live in a society of acceptance, understanding and harmony with one another.

From an Aboriginal perspective, it is important not only to have connection to kin but also to 'country'. To look at the landscape and feel welcome, to watch the birds and feel related, to bathe in the rock pool and feel nurtured, to sit on the land and know your place. It is essential for Australia's ongoing prosperity that future generations of Aboriginal children be assured of their right to fulfil their responsibilities and obligations as custodians of country. So many Aboriginal children and families are misunderstood or are viewed as 'a problem' and hence fail to 'measure up' to what broader Australian society deems to be normal. So many Aboriginal children not only have a wounded soul from the many layers of trauma they have endured but also a ragged soul from the layers of grief and loss that have torn away their connections in life. Little wonder it is hard for them to look past the warped images and negative stereotypes they so often see of themselves and their families to find their special purpose in life. Yet so many children can still experience the joy in life and warm our hearts.

All children need to feel loved and valued throughout life, not just by their family or community but also by society. Aboriginal children can and should be proud of their truly unique identity. As they grow and develop and struggle with a society full of contradictions and double messages, they will see themselves reflected in the responses of those around them. We must therefore ask ourselves as a nation, what do we really want them to see?



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# Chapter 1

## THE SURVEY – OBJECTIVES, DESIGN AND PROCESS

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# Chapter 1

## THE SURVEY – OBJECTIVES, DESIGN AND PROCESS

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*The Western Australian Aboriginal Child Health Survey was undertaken in 2000 and 2001 by the Telethon Institute for Child Health Research. The survey provides an epidemiological knowledge base of the health and wellbeing of Western Australian Aboriginal and Torres Strait Islander children. From this knowledge base, preventive strategies can be developed to promote and maintain healthy development and the social, emotional, academic, and vocational wellbeing of Aboriginal children and young people.*

*This volume reports on the social and emotional wellbeing of Aboriginal children and young people, particularly protective and risk factors that shape the development of both their physical and mental health. In this chapter, issues of defining mental health and mental health disorders in Indigenous populations are discussed in order to provide the context for the detailed findings which follow.*

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### SUMMARY

- ◆ The primary objective of the Western Australian Aboriginal Child Health Survey (WAACHS) was to identify the developmental and environmental factors that enable competency and resiliency in Aboriginal children and young people aged 0–17 years.
- ◆ The survey describes the population of families with Aboriginal children under the age of 18 years. Data were collected for 5,289 eligible children.
- ◆ An Aboriginal Steering Committee has directed the planning, implementation and reporting of the survey. The survey content and processes were developed in consultation with Aboriginal leaders, key Aboriginal bodies, and through extensive consultations throughout the state with Aboriginal community councils, parents and key service providers.
- ◆ The Institute for Child Health Research (ICHR) is home to the Kulunga Research Network – a collaborative maternal and child health research, information and training network. The Kulunga Research Network is an advocate for Aboriginal children and families in Western Australia and is developing additional materials from the survey for Aboriginal readers.
- ◆ An index of Level of Relative Isolation (LORI) has been specifically developed for use in this survey. LORI allows greater discrimination of the circumstances of survey respondents with respect to their isolation from population centres of various sizes and helps to better differentiate between respondents in areas and communities that are extremely isolated from those in major metropolitan centres.



**SUMMARY** *(continued)*

- ◆ There has been a meagre epidemiological base, both within Australia and internationally, from which to draw conclusions about the scope, prevalence and burden of mental health problems in Indigenous children. From information that is available, the prevalence rates of emotional and behavioural problems in Indigenous populations are, in all likelihood, higher than in the majority populations.
- ◆ Population studies of Australia's Aboriginal people to date have largely focused upon Aboriginal and Torres Strait Islander people aged 18 years and over. Relatively few data are available from which to describe the current social and emotional circumstances in which young Aboriginal people live and develop.

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## THE TELETHON INSTITUTE FOR CHILD HEALTH RESEARCH

The Telethon Institute for Child Health Research (ICHR) is a centre of excellence for the conduct of research into child health. Founded in 1987, the Institute's research programs include the study of asthma and allergic diseases, birth defects, child and adolescent social and emotional wellbeing, childhood death and disability, leukaemia and other cancers, as well as Aboriginal health and infectious disease.

The Institute's mission is to improve the health of children through the development and application of research into:

- ◆ causes of ill health
- ◆ the maintenance of good health
- ◆ prevention of ill health
- ◆ the treatment of conditions affecting children.

The Institute is the home of the Kulunga Research Network – a collaborative maternal and child health research, information and training network, involving the ICHR and member services of the Western Australian Aboriginal Community Controlled Health Organisation (WAACCHO). The Kulunga Research Network is an advocate for Aboriginal children and families in Western Australia. The Network seeks to ensure that community-based and culturally relevant research benefits Aboriginal people by influencing the policy and planning of government and other key agencies, and by involving Aboriginal people in all areas of research and implementation of outcomes. The WAACHS was a project of the Network.

## SURVEY OBJECTIVES

The survey's primary objective was to identify developmental and environmental factors that enable competency and resiliency in Aboriginal children and young people. There was emphasis on defining priority targets for existing and future health, education and social services. Building an epidemiological knowledge base from which preventive strategies can be developed to facilitate the social, emotional, academic and vocational competency of young people was a notable feature of this survey.

The specific aims of the survey were to:

- ◆ describe and define the health and wellbeing of Western Australian Aboriginal and Torres Strait Islander children and young people aged 0–17 years
- ◆ estimate the prevalence and distribution of commonly occurring chronic medical conditions and disabilities (e.g. asthma, cerebral palsy, visual and hearing impairments, intellectual disability) and describe how they may affect a child's wellbeing and functioning
- ◆ estimate the prevalence, distribution and functional impact of common physical health and social and emotional problems in Aboriginal children and young people aged 0–17 years and their families
- ◆ estimate the prevalence and distribution of adverse health behaviours (e.g. smoking, alcohol, drug and volatile substance misuse)



- ◆ estimate the prevalence and distribution of other psychosocial problems, such as early school leaving, conduct problems, and juvenile offending
- ◆ describe Aboriginal and Torres Strait Islander children, adolescents and their families' access to, effective use of, and satisfaction with health care, education, juvenile justice, housing and social services
- ◆ identify factors resulting in protection from poor health and wellbeing, adverse health behaviours and other psychosocial problems
- ◆ develop estimates of risk and markers identifying Aboriginal and Torres Strait Islander children and young people at increased risk for various health, educational and vocational outcomes.

## SURVEY CONCEPT AND DEVELOPMENT

The concept of gathering child health and wellbeing information from families with Aboriginal and Torres Strait Islander children was first proposed in 1991 during the development of the Western Australian Child Health Survey. However, for reasons owing to scale, cost, and expertise, families with Aboriginal children were principally excluded from this earlier survey. The Telethon Institute for Child Health Research undertook to reassess the feasibility of conducting an Aboriginal Child Health Survey following the conclusion of the original Western Australian Child Health Survey. The assessment of the feasibility, design and scope of the Western Australian Aboriginal Child Health Survey (WAACHS) was subsequently undertaken between 1996 and 1999.

Survey methodology and instrumentation were developed in consultation with Aboriginal leaders, key Aboriginal bodies (the Aboriginal and Torres Strait Islander Commission regional council, the Aboriginal Council of Elders, the Aboriginal Justice Council, and WAACCHO), and through extensive community consultations throughout the state. A survey project team, reporting to an Aboriginal Steering Committee, had basic carriage of securing funding, developing the survey instruments, and implementing the fieldwork.

The Australian Bureau of Statistics (ABS) was a principal provider of consultancy services, expertise and support through all phases of survey development, implementation and analyses. Efforts were made to ensure that the data collected are both scientifically relevant and pertinent to current government information needs and policy initiatives. To do this, reference groups were convened during 1997–1998 with representation from the various government departments and community agencies that had an interest in the outcome of the survey findings. This process involved senior policy input from the Western Australian Government Departments of Health, Education and Training, Community Development and Police; the Alcohol and Drug Authority; the Disability Services Commission; the State Housing Commission; the Catholic Education Office of Western Australia; and the Association of Independent Schools of Western Australia. Commonwealth Departments were also consulted to advise on policy needs and were asked to specifically comment on content and design of the survey.



## ABORIGINAL DIRECTION

All phases of the survey and its development, design, and implementation were under the direction of the Western Australian Aboriginal Child Health Survey Steering Committee. Established in 1997, the Steering Committee had the responsibility to control and maintain:

- ◆ cultural integrity of survey methods and processes
- ◆ employment opportunities for Aboriginal people
- ◆ data access issues and communication of the findings to the Aboriginal and general community
- ◆ appropriate and respectful relations within the study team, with participants and communities, with stakeholders and funding agencies and with the governments of the day.

## COMMUNITY CONSULTATION AND APPROVAL

The survey represented a large undertaking involving extensive household sampling and voluntary participation in the survey of many Aboriginal and Torres Strait Islander people across Western Australia. Seeking support and approval for the survey required establishing an extensive and ongoing process of consultation. Repeated consultations were undertaken during 1998 and 1999 with specific visits to Aboriginal communities in Albany, Bunbury, Broome, Carnarvon, Collie, Derby, Esperance, Fitzroy Crossing, Geraldton, Halls Creek, Kalgoorlie, Karratha, Katanning, Kwinana, Kununurra, Narrogin, Perth, Pinjarra, Port Hedland, and Roebourne. Every attempt was made to engage participation of community leaders, community councils, administration staff, service providers, and local residents in discussing their views about the need for the survey and to request their approval to be included in the survey. People were asked about the methods and processes that they felt would assist or hinder the success of the survey, their requirements with respect to specific survey content, their expectations about the use of the survey data, and intended outcomes.

The initial community consultations for the survey established that most participating carers and young people expressed a preference for the survey to be written and administered in English. The precise wording of survey questions was kept as simple as possible. The survey materials presented in this format were assessed in the pilot test and dress rehearsal and found to yield reliable and valid information for all but the most isolated and culturally intact Aboriginal communities where there was a high level of traditional language use. In these communities, the majority of (but not all) families chose to be interviewed with the assistance of an Aboriginal language translator employed through the local community council or Aboriginal Medical Service.

Approval for the survey was also obtained from WAACHO, the Western Australian Council of Elders, the Aboriginal Justice Advisory Committee and the Aboriginal and Torres Strait Islander Commission (ATSIC) State Council.



## ETHICAL APPROVAL FOR THE SURVEY

This project met the requirements of, and was approved by, the Western Australian Department of Health's Aboriginal Health Information and Ethics Committee as well as the Ethics Committee of King Edward Memorial and Princess Margaret Hospitals. These clearances ensured that the survey process and procedures conformed with requirements and protocols for health research with Aboriginal people and that they adhered to National Health and Medical Research Council (NHMRC) ethical standards and guidelines for research with human subjects.

## ABORIGINAL IDENTIFICATION AND THE SCOPE OF THE SURVEY

The survey was based on an area sample of dwellings (see *Glossary*). Families in selected dwellings who reported that there were 'Aboriginal or Torres Strait Islander children or teenagers living at this address who are aged between 0 and 18 years' (see *Indigenous status* in *Glossary*) were eligible to be in the survey.

Children living within group homes, institutions and non-private dwellings were not in the scope of the survey. However, where a selected household had a child temporarily living away from home (e.g. in a boarding school or hostel), these children were included in the scope of the survey.

Once the authority for the survey and the nature of the survey was explained to a responsible adult (usually the carer(s) or head of the household), and consent to participate was obtained, Aboriginal status was determined for each person who was reported to usually live in the dwelling by asking, 'Does (the person) consider him/herself to be of Aboriginal or Torres Strait Islander origin?' Data were gathered on all Aboriginal and Torres Strait Islander children under the age of 18 in each of the participating households.

### TERMINOLOGY

Throughout this publication the term 'Aboriginal and Torres Strait Islander peoples' has been used as the most precise and inclusive reference for Aboriginal Australians. This is the form recommended by ATSIC for use in official documents. Where other group terms such as Aboriginal people have been used, it should be noted that this is intended to refer to Aboriginal and Torres Strait Islander peoples.

## THE SURVEY POPULATION

The terms 'children' and 'child' for this survey refer to persons under the age of 18 years at the time of the initial interview.

For purposes of analysis and presentation of the findings, they are further grouped into the following age groups:

- ◆ 0–3 years
- ◆ 4–11 years
- ◆ 12–17 years.





## SURVEY OUTPUTS AND COMMUNITY FEEDBACK

This is the second volume of results from the WAACHS. Volume One was published in June 2004, and is available from the ICHR web site: [www.ichr.uwa.edu.au](http://www.ichr.uwa.edu.au). After this volume, three further volumes of results are planned. These volumes will focus on education, family and community, and justice issues. A summary booklet for each volume will be produced. As well, there are plans to write a number of research papers and professional journal articles based on the findings of the survey.

A communication and dissemination strategy has been designed to maximise knowledge and awareness of the findings to both the Aboriginal and wider communities. The strategy, driven by the Kulunga Research Network, aims to engage Aboriginal communities in committed action using the data as a catalyst for political and community action and social change. The data results and findings are being reported and profiled for each of the ATSIC regions throughout the state.

ATSIC regional profiles have been produced for each ATSIC region in WA based on results published in Volume One of the WAACHS findings. These have been disseminated throughout the regions during consultation and feedback visits that have been conducted in every ATSIC region. This process will continue with each subsequent volume. The results published in each main volume will guide the production of community information resources which will be followed by the conduct of an extensive series of meetings, workshops and seminars in each ATSIC region to inform and educate survey participants and Aboriginal communities in general about the survey findings.

## LEVEL OF RELATIVE ISOLATION

### MEASURING ACCESS TO SERVICES

A new classification of remoteness and isolation – the Level of Relative Isolation (LORI) – has been used in the WAACHS. The LORI is based on a product from the National Key Centre for Social Application of Geographic Information Systems (GISCA) at Adelaide University, called ARIA++. The ARIA++ is an extension of ARIA (the Accessibility/Remoteness Index of Australia), which has been widely adopted as the standard classification of remoteness in Australia. Because ARIA is based on describing the entire population of Australia, it has not been specifically designed to describe the circumstances of Aboriginal people living in remote areas. The ARIA++ gives a more detailed description of the most remote areas of Australia by including more service centres, of smaller sizes, in calculating the remoteness scores.

Under the original ARIA, over two-thirds of the land mass of WA, and over one quarter of Aboriginal people in WA live in areas classified as ‘very remote’. However, WAACHS data have revealed that, within this group, there were marked differences in access to basic services, cultures, lifestyles and health outcomes. The greater detail of ARIA++ enables these differences to be more adequately described in the Aboriginal population.

The Australian Bureau of Statistics has incorporated a measure of remoteness into the Australian Standard Geographic Classification (ASGC). The five ‘Remoteness Areas’ are based on ARIA+ and differ slightly from the original ARIA categories. However the Remoteness Areas have been defined to describe the total population of Australia, and the ‘very remote’ remoteness area is quite similar to the area defined as ‘very remote’ in the original ARIA.



## ILLUSTRATING THE DIFFERENCE BETWEEN ARIA AND ARIA++

As an example of the difference between ARIA and ARIA++, the town of Halls Creek in the East Kimberley – population about 1,300 people – is classified as ‘very remote’ under ARIA. However, it has a 4-bed hospital facility which provides health services to the town and communities throughout the surrounding region. One of those communities, Yiyili, about 120 kilometres east of Halls Creek, has a population of around 250 people. The Halls Creek Health Service provides a weekly community nursing clinic in the Yiyili community. Under ARIA’s 12 point remoteness scale, both Halls Creek and Yiyili receive the maximum score of 12 (‘very remote’).

Under ARIA++, which has an extended 18 point remoteness scale, Halls Creek receives a score of 12 and Yiyili receives a score of 18. Compared with major capital cities, both Halls Creek and Yiyili would be regarded as small places with limited access to services. However, analysis of WAACHS data has shown that the difference in isolation between Halls Creek and Yiyili is reflected not only in different access to basic services, but also in a different level of adherence to traditional cultures and languages, and different health outcomes.

## LORI CATEGORIES

Based on the ARIA++ scores, five categories of isolation have been defined to more appropriately reflect differences in cultures, access to services and health outcomes for Aboriginal children. To avoid confusion with the original ARIA, the five categories are referred to as Levels of Relative Isolation (LORI) and range from None (the Perth Metropolitan Area) to Low (e.g. Albany), Moderate (e.g. Broome), High (e.g. Kalumburu) and Extreme (e.g. Yiyili).

Figure 1.1 shows the proportion of Aboriginal children under 18 years in each LORI category. While one quarter of Aboriginal children in WA live in areas classified as ‘very remote’ in the original ARIA, only 9.5 per cent (CI: 6.8%–12.7%) of children live in areas of extreme relative isolation.

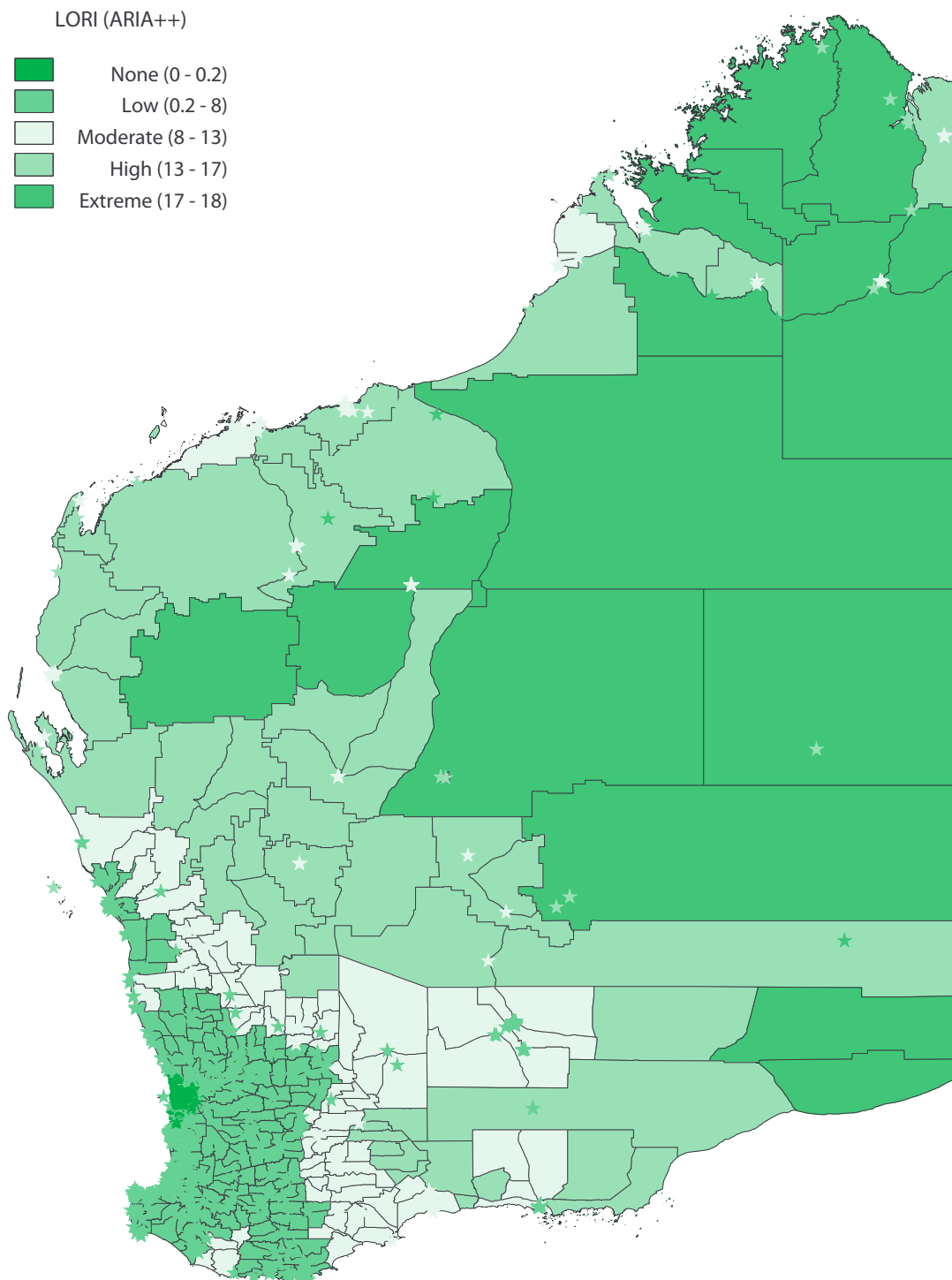
Figure 1.2 illustrates the five LORI categories for Western Australia. This map is based on 1996 Census Collection districts, which were used as the sampling frame for the WAACHS. An important feature of the LORI categories is that, except for LORI none which is virtually identical with the Remoteness Area ‘Capital City Australia’ from the original ARIA, each area is more remote than the equivalent point on the ARIA scale. Areas classified as ‘very remote’ under the original ARIA can be classified as moderate, high or extreme on the LORI scale.

**FIGURE 1.1: ABORIGINAL CHILDREN AGED 0–17 YEARS, BY LEVEL OF RELATIVE ISOLATION (LORI)**

LORI	Number	95% CI	%	95% CI
None	10 200	(10 000 - 10 400)	34.1	(31.5 - 36.8)
Low	7 270	(6 640 - 7 930)	24.4	(21.8 - 27.0)
Moderate	6 390	(5 400 - 7 420)	21.4	(18.1 - 25.1)
High	3 170	(2 360 - 4 160)	10.6	(7.9 - 14.0)
Extreme	2 830	(2 040 - 3 800)	9.5	(6.8 - 12.7)
<b>Total</b>	<b>29 800</b>	<b>(29 800 - 29 800)</b>	<b>100.0</b>	



**FIGURE 1.2: WESTERN AUSTRALIA — LEVEL OF RELATIVE ISOLATION (LORI) CATEGORIES BASED ON ARIA++ VALUES**



## INDIGENOUS CONCEPTS AND DEFINITIONS OF MENTAL HEALTH

Perhaps in no other circumstance is the unity of mind, body and place more vivid than when attempting to define mental health in Indigenous populations. Researchers face formidable challenges given the cultural and linguistic diversity within the Australian Aboriginal population and the totality of the Indigenous experience. Nowhere is this diversity more evident than in the historical tendency of writers to combine definitions of Indigenous mental illnesses with their causes. Much of this reflects the past and present impact of colonisation, along with contemporary social and cultural factors, on the physical health and emotional wellbeing of Indigenous populations. As a result, any attempt to establish the incidence of mental health problems in Aboriginal communities begs the larger question of what constitutes a valid definition of mental health and a valid classification of mental health disorders.

In order to provide some perspective on this, historical and contemporary definitions of mental health, and particularly mental ill-health, are reviewed here. Because various terms have been used through time to describe the mental wellbeing of Aboriginal Australians, including 'social health', 'social and emotional wellbeing', 'social wellbeing' and 'spiritual wellbeing' some clarity in choice is required here. In this section the term 'mental health' is used to maintain a consistency in terminology with the scientific literature. At present, the term 'mental health' has been consistently used by the World Health Organisation to refer to the mental wellbeing of Indigenous peoples in the world.<sup>1</sup>

### EARLY DEFINITIONS OF MENTAL HEALTH IN AUSTRALIAN ABORIGINAL CULTURES

While the terms, 'mental health' or 'mental illness' are Western medical terms, distress and disturbed behaviour are recognised in most cultures, although their causes and meaning may be understood in many different ways.<sup>2</sup>

Within Australia, the first systematic descriptions of Aboriginal mental health commenced in the 1960s and early 1970s with the work of Cawte,<sup>3-6</sup> Jones and Horne,<sup>7</sup> Nurcombe *et al*,<sup>8</sup> Eastwell,<sup>9</sup> Kamien<sup>10</sup> and others. These investigations were mostly of remote Aboriginal communities and tended to employ Western ethnographic and psychiatric conceptual frameworks to describe firstly the 'traditional' mental health disorders unique to various Aboriginal cultures and the 'transitional' disorders considered to arise from the impact of ongoing colonisation on traditional culture, ties, lands and obligations. During the 1970s and 1980s there were few reports on the mental health of urban and country town Aboriginal communities and these, apart from some notable exceptions,<sup>10</sup> tended to focus on more general community problems such as domestic violence and alcohol abuse<sup>11</sup> and on specific incidents such as deaths in custody.<sup>12</sup> The studies of this period were characterised by a greater convergence of medical anthropology, psychiatry, cross-cultural psychology and other social sciences in the consideration of broader contextual factors in understanding the nature and dynamics of adjustment to social and cultural change.<sup>13</sup> It was only a decade ago that Radford *et al*,<sup>14</sup> and Clayer and Divakaran-Brown<sup>15</sup> provided the first description of the psychosocial circumstances of Aboriginal families in urban areas. Using a random sample of approximately 15 per cent of Aboriginal households in the urban areas of Adelaide, Radford *et al*<sup>14</sup> employed multidisciplinary and participatory methodologies that addressed community defined mental health issues. While primarily focusing on adults, the findings provided a unique insight into historical, cultural and situational



contexts of specific mental health problems such as stress and depression, exposure to destructive behaviours such as domestic violence and sexual abuse, deliberate self-harm and suicide.

Aboriginal languages provide essential insight into traditional Aboriginal concepts of mental health. In Central Australian Aboriginal communities, aberrant behaviour is described as ‘silly, stupid, mad (*rama-rama*), mad or crazy (*walpanalpa*), or thoughtless (*kawa-kawa*)’.<sup>16</sup> Dunlop found that in all languages of the areas in Central Australia where she conducted her research, the terms used for ‘madness’ also applied to ‘deafness’, and there were a variety of descriptive words for abnormal or disturbed behaviours. In general, there was a high degree of acceptance of abnormal behaviour in the communities. There are also important subtleties of language that distinguish between certain types of emotional and mental disorder. For example, both grief and depression were considered as normal reactions. Anger was commonly understood to be acceptable in the presence of socially justifiable context. Aggression, on the other hand, was distinguished as a personality trait or disorder.<sup>17-20</sup> Importantly however, where local service providers considered someone to be mentally ill, the Aboriginal communities also perceived them as having a problem.

With respect to causal attribution, disturbed behaviour was attributable to ‘some problem in the head’. Disturbed people were seen as affected by external forces that they have no control over: they could not ‘see’ or ‘hear’ when acting in a disturbed way. Spiritual causes were most often cited for severe cases. Behavioural disturbance was seen to operate at different levels and relate to intermediate or recent past experience. Disturbed behaviours included: walking around the camp all the time, talking non-stop, having sleep disturbance, hearing voices, frequently moving between communities or heading ‘out bush’, keeping out of normal social interactions, sleeping anywhere, being naked. Such behaviours were viewed as pointless, worrying and irritating. Personality traits that described disturbed people included: angry, upset, restless, frustrated, mistrustful, bored, and lonely.

Based on a sample of over 200 people described as problematic by the Aboriginal communities where Dunlop carried out her research, two different types of behavioural problems were identified – those which were disruptive and those which were not. Individuals with behaviours that were not disruptive were seen by the community as being ‘abnormal’ or ‘mad’; this group of people demonstrated ‘odd’ traits, were or were not able to communicate verbally and they caused problems principally to themselves and carers. In contrast, those individuals with disruptive behaviours displayed varying degrees of violence, and people with such behaviours were seen as a significant burden to the community and carers.<sup>16</sup>

Early mental health researchers described the nature and extent of disturbed behaviour found in traditional Aboriginal communities as ‘mental illness’ and described syndromes similar to those in Western medicine (e.g. schizophrenia and depression).<sup>4-6,21</sup> Cawte detailed two types of mental illnesses afflicting Aboriginal Australians: those arising in traditional life and those arising in communities undergoing transition.<sup>4,5</sup> Dunlop emphasized that substance abuse was closely interwoven with disturbed behaviours and with the perceptions, descriptions and understanding of them. Therefore, it was impossible to completely separate behaviours that were induced by substance abuse from those with other causes.



This early literature is meagre. However it points to both differences and similarities in the majority culture and Aboriginal views of mental health. In both views, distress and disturbed behaviours, including violence, were seen as problem behaviours and a burden to the community and family. Major differences exist in the labels and causal attributions of mental health problems. Also, there is a greater emphasis in Indigenous cultures on the interconnection between physical and mental health and on the interrelationship between social and cultural environments and mental health outcomes.

## CONTEMPORARY DEFINITIONS OF MENTAL HEALTH BY AUSTRALIAN ABORIGINAL PEOPLE

*Ways Forward* represents a comprehensive contemporary overview of the mental health needs and problems of Aboriginal Australians.<sup>22</sup> Conceived through the National Aboriginal Mental Health Conference (Sydney, November 1993), the report incorporates many insights and recommendations from Aboriginal people from different Australian settings and communities who attended the conference. *Ways Forward* details Aboriginal perspectives of health and mental health as being holistic, encompassing spiritual, social, emotional, cultural, physical and mental wellbeing. Such a definition is intimately related to both historical and contemporary social and political contexts. For these reasons, the subsequent discussions about contemporary Australian Aboriginal definitions of mental health will be mainly based on this literature.

Indigenous mental health is defined as:

*'The capacity of the individual, the groups and the environment to interact with one another in ways which promote subjective wellbeing, the optimal development and use of mental abilities (cognitive, affective (or emotional) and relational), the achievement of individual and collective goals consistent with the attainment and presentation of conditions of fundamental equality.'*<sup>22</sup>

A mental health problem is defined as:

*'A disruption of the interactions between the individual and the environment producing a diminishing state of mental health.'*<sup>22</sup>

A mental disorder is defined as:

*'A recognised, medically diagnosed illness that results in the significant impairment of an individual's cognitive, affective or relational abilities.'*<sup>22</sup>

Since *Ways Forward*, considerable effort within government has been brought to bear on defining mental wellbeing and mental ill health with respect to Australian Aboriginal and Torres Strait Islander people. Both the *National Mental Health Plan 2003–2008* and the *National Strategic Framework for Aboriginal and Torres Strait Islander Mental Health and Social and Emotional Wellbeing 2004–2009* build on and extend the principals and definitions embraced in *Ways Forward* (see *Preface*). While these definitions of mental health are consistent with the perspectives from other disciplines on health and wellbeing, such as medical sociology and anthropology and social epidemiology, they are also similar to the WHO's definition of health as 'a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity'.<sup>23</sup>





## DEFINITIONS OF MENTAL HEALTH IN OTHER INDIGENOUS POPULATIONS

Limited data are available on Indigenous mental health worldwide.<sup>1</sup> There are no data on the mental health of Indigenous people in developing countries and regions, such as China, India, and Africa. Given the fact that Indigenous peoples worldwide have endured severe traumas in the past five hundred years as a result of colonisation, genocide, historical and continuous loss of lands, culture, traditions and family stability and economic disadvantages, it is of little surprise that the physical and mental health status of many of the world's indigenous populations is far below that of general populations.<sup>1</sup>

The available literature on the definitions of Indigenous mental health in other parts of the world is predominately derived from trans-cultural and cross-cultural studies in psychiatry and the terms used reflect this taxonomy. Central to many of these studies is the issue of the diagnostic validity of proposed definitions and taxonomies.<sup>1</sup>

For example, the lack of well-validated assessment instruments for American Indians and Alaskan Natives has hindered substantive research on psychopathology in these populations.<sup>24</sup> Depressive symptoms may be culturally constructed: depression in non-Western populations tends to express itself in the form of somatic rather than psychological symptoms,<sup>25</sup> and the symptom duration differs.<sup>26</sup> Only a small minority of the research subjects from the Hopi Indians in the American Southwest knew of any Hopi word or phrases equivalent to the term 'depression'.<sup>26</sup> Yet depression is the most frequently diagnosed problem among American Indians who present at mental health treatment services with about 50 per cent of a clinical sample, as compared with 25 per cent from the general population suffering from depression.<sup>1,26</sup> In Tarahumara Indians of northern Mexico, the concept of mental illness refers more to antisocial behaviour than to other symptoms of mental disorders.<sup>1,27</sup>

Similar to the Australian Aboriginal concept of holistic health, Maori peoples in New Zealand traditionally view health holistically. Maori theories of health have been based on a strong belief in the power of the mind and vulnerability to deities.<sup>28,29</sup> Mental illness (*wairangi, porangi*) is considered to be a subset of illnesses for which there are no obvious external causes. This type of illness is seen to be of spiritual origin and to be an illness of the Gods. Such mental illness tends to be attributed to either an infringement of the laws of *tapu* (an effective social sanction which guided interpersonal interactions and the relationship with the physical environment) or to the sensitivities of powerful others whose retaliation could produce derangement even without physical confrontations. Mental illness is closely linked with accepted social values and often indicates a deviation from community norms either by the patient or the wider family. Distinctions between individuals and the family have less emphasis to Maori people, as they regarded the health of an individual as a symptom of the other.<sup>30</sup>

Depression has become the leading mental health problem in Maori women in New Zealand since 1977, and although suicide rates have been rising since then, the overall suicide rates among Maori women remain lower than that of the general population.<sup>30,31</sup> Increases in suicide rates in the 1973–1984 period raised alarm in Maori communities.<sup>30</sup> This emergence of suicidal behaviour is linked to the rapid economic, social and cultural changes in Maori society, with the removal of social sanctions, such as *tapu*, and the diminishing authority of tribal elders without clear and meaningful substitutes.<sup>30</sup>



Indigenous (i.e. 'culturally-bounded') mental health disorders have been reported among American Indians and Alaskan Natives. It remains unclear whether or not, and to what extent, these syndromes have their parallels in categories of Western classifications. Some of the better documented mental disorders include *pibloqtoq* (arctic hysteria) which may have environmental and dietary causes, and more general categories of disorders, such as soul loss, spirit intrusion, syndromes which are related to the breaking of religious or social prohibitions, and ghost sickness.<sup>24,32</sup> Five categories of illness internal to the culture were identified by Hopi informants in Arizona.<sup>26</sup> Each was associated with a cluster of cognitive, affective, and behavioural states. None of these disorders, however, met the standard criteria for a major depressive episode.

Even the defining characteristics of disorders that have more manifest organic causes can be culturally bounded. To the Tamong of Nepal, mental retardation manifests itself mainly in the form of speech problems rather than cognitive disabilities.<sup>33</sup> Symptoms of lack of emotional responses, 'hallucinations involving spirits', and 'prolonged mourning' have been reported as more frequent among American Indians and have been treated as serious disturbance.<sup>34</sup> Yet it is possible that the converse of these manifestations, such as 'emotional lability', 'inability to contact the spirit world', or 'truncated mourning' may in fact signal a greater pathology for these populations.<sup>34</sup> Depression may also have positive meanings: it may be an expression of belonging, and to be depressed demonstrates maturity and connectedness to the Indian world.

Despite these differences in Western and Indigenous conceptions of mental disorders, substance abuse, depression and suicide represent the most debilitating mental health problems in Indigenous populations worldwide, which cannot be separated from the social, cultural and historic contexts in which they occur.<sup>1</sup> For instance, Australian Aboriginal people consider the conditions of their mental health to be both serious and disabling, and they fall into the terms of 'serious mental health problems and mental disorder' as identified by the National Mental Health Policy. Furthermore, Aboriginal people saw the loss of mental wellbeing as a major contributing factor to their poor physical health.

These observations suggest there must be a certain degree of agreement between Western and Indigenous conceptualisations of mental illness and perceptions of the severity of the mental problems, despite marked differences in the labels, causal attributions and sometimes manifestations of mental disorders between the majority and Indigenous cultures. In the end, specific labels and causal attributions make little difference to how people react to deviant behaviour. What is important are greater familiarity of a particular mental health problem and expectations for recovery.<sup>35</sup> The attitudes of Indigenous communities towards mental illness are an important determinant of the helping-seeking behaviour of those who suffer from the problem and as well the effectiveness of treatment. For example, stigmatisation inhibits individuals with mental illness from seeking treatment and care.

## SUICIDE

Suicide is taken as a primary indicator of psychological distress by lay and professional people alike. Definitions of mental illness inevitably cite suicide and suicidal behaviour as a significant outcome or symptom of mental ill health. The relationship between suicide and psychiatric disorder has been demonstrated time and again and



suicide rates are commonly used or recommended as an indicator of cause-specific mortality linked to psychological state and psychiatric illness.<sup>36</sup> Not surprisingly, the international literature documenting the mental health of Indigenous populations tends to be better developed, particularly with respect to the epidemiology of suicide and suicidal behaviour. These findings show considerable variability in Indigenous populations.

In Micronesia and Western Samoa, the rate of suicide is high due to the unusually high incidence among adolescent men (160 per 100,000 by 1990) and a very high ratio of male to female suicides.<sup>1,37</sup>

The suicide rate in Native youths (aged 15–24 years) in the Province of British Columbia was five times as high as that of youths in the general population (about 110 per 100,000 compared with 30 per 100,000) in 1987–1992.<sup>38</sup> Substantial variability exists within the First Nations population of the Province. For example, in six of the 29 tribal councils, there were no deaths from suicide during the study period of 1987–1992, and among the 23 remaining councils, suicide rates ranged from below the provincial average (around 30 per 100,000) to 633 per 100,000. Among the 16 language groups, five groups had no youth suicide. The remaining 11 groups had rates that ranged from 25 per 100,000 to as high as above 200 per 100,000.<sup>38-40</sup>

Major depression and substance abuse were the most common mental health problems in American Indians and Alaskan Natives, and the prevalence of depressive disorders is higher in this population than other groups.<sup>24</sup> Suicide rates for people aged 10–24 years were reported to be around 2.3 to 2.8 times as high as overall U.S. rates, and some communities experienced even much higher rates at times and clusters of suicides.<sup>41</sup> Mortality rates as a result from para-suicidal accidental injury were also high, and often involved alcohol drinking immediately before the act.<sup>42</sup>

There are also temporal variations in the incidence of mental health problems. In Micronesia and Western Samoa, children born after 1950 were the first generation to enter adolescence at a time of social and cultural disruptions eroding traditional support for adolescent socialisation. As a consequence, the suicide rates surged between the mid 1960s and the late 1970s.<sup>37</sup> In New Zealand, since 1977 depression among Maori women has become a leading mental health problem.<sup>30</sup> Prior to 1968, Native Hawaiian men had the lowest crude suicide rate in the state (10.5 per 100,000). But by the 1978–1982 period, the rate increased to the second highest (25.5 per 100,000).<sup>1</sup> Cheng and Hsu (1992) suggested a dramatic increase in alcohol abuse among the aboriginal peoples of Taiwan in the decades following World War II and speculated that the incidence of mental health problems has also increased significantly during this period.<sup>43</sup>

Similar temporal trends in suicide and mental disorders have also occurred in the Australian Aboriginal population as evidenced by a change in the pattern of mental disorders in the recent past as Aboriginal communities have undergone rapid social changes. Suicide was rarely reported in the 1960s and 1970s in Indigenous communities, but has increased dramatically over the last fifteen years.<sup>44,45</sup> Hunter attributes this trend to what he calls the ‘deregulation’ period in the 1970s, a period when the legislation that had previously constrained the freedom of Australian Indigenous people was replaced by structural and economic impediments. He also attributes this trend to increases in access to the cash economy and alcohol.<sup>45</sup>



In Australia, positive changes have also occurred during this period, including the foundation and expansion of community-controlled organisations, the land rights movement, and increases in the number of Aboriginal students progressing to tertiary education. It would seem puzzling on one hand that, despite these positive trends, the incidence rate of suicide and other mental health problems has increased dramatically since 1980, and suicide is now becoming more common in not just urban but also remote and 'traditional' communities.<sup>45</sup> On the other hand, there are major offsetting trends since 1980: namely, widespread community and family instability caused by alcohol and substance abuse, continued disenfranchisement through social exclusion and inequality, and the ongoing trauma of loss.

## THE MENTAL HEALTH OF INDIGENOUS CHILDREN AND YOUNG PEOPLE

Given the relative paucity of data to describe the mental health and wellbeing of Indigenous adults, it is not surprising that data on mental health among Indigenous children are extremely limited. In Australia, the few small-scale studies that have investigated mental health problems in Aboriginal children have done so with respect to behavioural disorder, conduct disorder and social maladjustment.<sup>13,45-49</sup> These studies were based on small and non-representative samples of Aboriginal children and collected no data on non-Aboriginal children for comparison, thus limiting policy implications for population level interventions. As Hunter concludes, there is a shocking lack of knowledge about patterns of normal childhood development in Australian Aboriginal children and the effect of physical, emotional, and social disturbances on these processes.<sup>45</sup>

Beiser, too, noted in 1981 that there were scant data on Native North American children's mental health and, fifteen years ago in the United States, Neligh (1990) noted that children's mental health was the largest area of unmet need for American Indian people.<sup>50</sup> Attempts to comprehensively ascertain the incidence and prevalence of mental health problems in Canadian First Nations children and their families pose some striking similarities to the Australian experience. Reviews of the literature on the mental health of First Nations peoples noted four key issues or recurring themes: the residential school experience in which government policies of the day permitted the compulsory removal of children from their families of origin to government residential schools; suicide and suicidal ideation; abuse (physical, sexual and emotional); and alcohol and substance use.<sup>51</sup> Since then Canada has made progress in developing more appropriate and culturally sensitive approaches to measuring mental health in its minority First Nations population. These include the Flower of Two Soils Study<sup>52,53</sup> which sampled children living in two Canadian and two USA sites, the Ontario First Nations Regional Health Survey<sup>54</sup> and the First Nations and Inuit Regional Health Surveys.<sup>55</sup> These approaches estimate that almost 17 per cent of First Nations and Inuit Regional Health Survey children aged 6–17 years have behavioural or emotional problems that exceed other children of a similar age<sup>55</sup> while 25 per cent of First Nations children aged 12 and above were reported to have mental health problems in the Ontario First Nations Regional Health Survey.<sup>54</sup> A more comprehensive coverage of trends in research on mental health in Canadian Aboriginal peoples can be found elsewhere.<sup>56</sup>



In summary, both within Australia and internationally, there remains a meagre epidemiological base from which to draw conclusions about the scope, prevalence and burden of mental health problems in Indigenous children. What is available suggests that prevalence rates of emotional and behavioural problems are, in all likelihood, higher than in the majority population. Based on the information about mental and physical health of Indigenous adult populations, one could reasonably expect at least a parallel differential between Indigenous and non-Indigenous children and young people for one simple but important reason. The mental wellbeing of children is intimately connected to the emotional and physical wellbeing of their parents, and risk factors for vulnerability to mental and physical illness are often transmitted across generations in the absence of interventions to break the cycles of vulnerability.

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# Chapter 2

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## Chapter 2

# THE EMOTIONAL AND BEHAVIOURAL HEALTH OF ABORIGINAL CHILDREN AND YOUNG PEOPLE

*Social and emotional wellbeing is an essential part of the more holistic view of health held by Aboriginal people. Aboriginal concepts of health encompass spiritual, physical, social and emotional dimensions that recognise their traditional and historical connections with the Australian land and its history both prior to and following colonisation. This chapter describes the distribution of emotional and behavioural difficulties as part of a more general description of the social and emotional wellbeing of Aboriginal children aged 4–17 years. Particular attention is given to the distribution of emotional and behavioural difficulties by age, sex and Level of Relative Isolation, and characteristics of the birth mother. Specific emotional or behavioural difficulties are also discussed. These measures form the foundations for the subsequent chapters in this volume.*

### SUMMARY

This is the first attempt to systematically assess proportions of children at high risk of clinically significant emotional or behavioural difficulties in a large representative sample of Western Australian Aboriginal children and young people using carer reports. Emotional or behavioural difficulties experienced by Western Australian Aboriginal children aged 4–17 years as documented in this chapter are based on carer responses to the Goodman's Strengths and Difficulties questionnaire (Goodman's SDQ). The same questionnaire was administered to the carers of non-Aboriginal children aged 4–17 years to enable comparisons between Aboriginal and non-Aboriginal child populations.

In respect of 4–17 year-old Aboriginal children:

- ◆ *The proportion at high risk of clinically significant emotional or behavioural difficulties is significantly higher than in the non-Aboriginal child population.* Almost one quarter (24.0 per cent) of Aboriginal children aged 4–17 years were at high risk of clinically significant emotional or behavioural difficulties, a proportion significantly above the 15.0 per cent found among the state's general child population. This compares with data collected by the New South Wales Health Department using Goodman's parent-reported SDQ, from which it is estimated that 22.9 per cent of Aboriginal children in that state are at high risk of emotional or behavioural difficulties.
- ◆ *A greater proportion of younger children are at high risk of clinically significant emotional or behavioural difficulties.* The proportion of Aboriginal children at high risk declined with increasing age, with children aged 15–17 years 62 per cent less likely to be at high risk compared with children aged 4–7 years. This contrasts with proportions found in the general child population, which began to decline from age 11 and showed no significant difference in the level of high risk experienced by younger and older children.
- ◆ *Males were twice as likely as females to be at high risk of clinically significant emotional or behavioural difficulties.* A greater proportion of male Aboriginal children were at high risk of clinically significant emotional or behavioural difficulties than female Aboriginal children and, after taking into account



## SUMMARY (continued)

the age of the child and their level of relative isolation, were twice as likely as females to experience such difficulties. For non-Aboriginal children, there was no significant difference in the proportion of males and females at high risk of clinically significant emotional or behavioural difficulties.

- ◆ *Extreme isolation may be a factor protecting against high risk of clinically significant emotional or behavioural difficulties.* Aboriginal children living in the most isolated areas of the state were significantly less likely to be at high risk of clinically significant emotional or behavioural difficulties. In areas of extreme isolation, children were 83 per cent less likely than Aboriginal children living in the Perth metropolitan area to be at high risk. While there are a number of factors influencing this finding, it is nevertheless evident that in areas of extreme isolation, adherence to Aboriginal culture and traditional ways of life may be protective against high risk of clinically significant emotional or behavioural difficulties. The lowest proportions of children at high risk of clinically significant emotional or behavioural difficulties were recorded in the Warburton and Broome ATSI regions, while the highest proportions were recorded in the ATSI regions of South Hedland, Perth and Geraldton.
- ◆ *Conduct problems and hyperactivity were significantly more common than in non-Aboriginal children.* The specific emotional or behavioural difficulty affecting the highest proportion of Aboriginal children aged 4–17 years was conduct problems. Nearly one third of children (33.9 per cent) were at high risk of clinically significant conduct problems compared with 15.8 per cent of non-Aboriginal children. In respect of hyperactivity problems, 15.3 per cent of Aboriginal children were at high risk compared with 9.7 per cent for non-Aboriginal children. The proportions of children with conduct problems and hyperactivity were lowest in areas of extreme isolation.
- ◆ *Impairment of function as a result of being at high risk of clinically significant emotional or behavioural difficulties was lower compared with non-Aboriginal children.* This survey assessed the level of impact (or functional impairment) that the presence of emotional or behavioural difficulties has on the home life, friendships, learning and leisure activities of the child. Of those Aboriginal children at high risk of clinically significant emotional or behavioural difficulties, 30.9 per cent were at high risk of clinically significant functional impairment as a result of these difficulties. In the non-Aboriginal child population, the proportion was higher at 40.6 per cent.

Among all Aboriginal children, 10.4 per cent were at high risk of clinically significant functional impairment, compared with 9.3 per cent of all non-Aboriginal children. Although the proportion of non-Aboriginal children at high risk of clinically significant emotional or behavioural difficulties was significantly lower than that for Aboriginal children, non-Aboriginal children were at higher risk of clinically significant functional impairment as a result of these difficulties. As a result the overall proportions of children at high risk of clinically significant functional impairment were about the same.





## MENTAL HEALTH AND SOCIAL AND EMOTIONAL WELLBEING

The Social Health Reference Group specifically differentiates social and emotional wellbeing from definitions of mental health and of social health. Mental health, social and emotional wellbeing and social health represent three nested concepts.

- ◆ Poor mental health refers to the range of mental health issues, problems and diagnoses that may affect an individual when their social and emotional wellbeing is so compromised that the individual can no longer function to the satisfaction of themselves or the community. It is generally dealt with by mainstream mental health services.<sup>1</sup>
- ◆ Mental health represents one part of the concept of social and emotional wellbeing. Social and emotional wellbeing reflects a holistic Aboriginal definition of health and includes mental health; suicide and self harm; emotional, psychological and spiritual wellbeing and issues impacting specifically on wellbeing in Aboriginal and Torres Islander communities such as grief, loss, trauma and issues surrounding the forced separation of children from their families.
- ◆ The social and emotional wellbeing of each individual contributes to the social health of the community, where social health is used to cover a wide range of issues including social and emotional wellbeing, substance use, family and community violence and child abuse.

Data describing the social and emotional wellbeing of children aged 4–17 years are the subject of this chapter. The data were gathered from carers of all survey children aged 4–17 years. Interviews conducted with carers canvassed information about their children that included difficulties with emotions, feelings and behaviours; specific episodes of self-harm or attempted suicide; cultural and spiritual engagement and family experiences of grief, loss and trauma. In addition to questions about the overall social and emotional wellbeing of children, interviewers also administered a version of the Strengths and Difficulties Questionnaire.<sup>2,3</sup> This questionnaire, used throughout the world to measure emotional or behavioural difficulties in children and young people, was specifically modified for Aboriginal children in this survey.

The same information was requested separately from young people aged 12–17 years. These youth self report data are documented in chapters 4 and 5.

### MEASURING EMOTIONAL AND BEHAVIOURAL DIFFICULTIES IN ABORIGINAL CHILDREN

In this survey, the Strengths and Difficulties Questionnaire (SDQ) was used to measure emotional or behavioural difficulties in Aboriginal children. The SDQ comprises twenty-five items probing five areas of psychological adjustment in children. While the SDQ is widely used in research, pilot testing with Australian Aboriginal families indicated that some modifications were needed, particularly with respect to the wording of some items and to the response scale. Permission was obtained from the author of the SDQ to undertake these modifications. All SDQ data reported in this volume are based upon this modified instrument.

*Continued . . . .*



## MEASURING EMOTIONAL AND BEHAVIOURAL DIFFICULTIES IN ABORIGINAL CHILDREN

(continued)

### Administration and Content

Respondents were the carers in the household who knew the most about the child. For the most part, this person was the mother of the child. The SDQ was conducted in a face-to-face interview with the carer. A range of information related to the child's health, behaviours and emotions, social and environmental circumstances was gathered.

Carers were shown a prompt card that illustrated the response categories of No, Yes or Sometimes. These categories were given numerical values of 0, 2 and 1 respectively in order to score the SDQ. Administration followed a standard procedure in which respondents were asked: 'Thinking about (child's name) behaviour over the past 6 months, that is since (calendar event or month), has the child:

- A been considerate of other people's feelings <sup>+</sup>
- B been restless, overactive, cannot stay still for long
- C often complained of headaches, stomach aches or sickness
- D readily shared with other children (lollies, toys, pencils, etc.) <sup>+</sup>
- E often had temper tantrums
- F tended to play by him/herself
- G usually done what adults told him/her to do
- H often seemed worried
- I been helpful if someone is hurt, upset or feeling ill <sup>+</sup>
- J constantly been fidgeting or squirming
- K had at least one good friend
- L been in fights with other children or has he/she bullied them
- M often been unhappy, sad or tearful
- N generally been liked by other children
- O been easily distracted or had poor concentration
- P been nervous or clingy in new situations, easily lost confidence
- Q been kind to younger children <sup>+</sup>
- R often lied or cheated
- S been picked on or bullied by other children
- T often volunteered to help others (parents, teachers, other children) <sup>+</sup>
- U been able to stop and think things over before acting
- V stolen from home, school or elsewhere
- W been getting on better with adults than with other children
- X been fearful, easily scared
- Y had good attention and finished the things he/she starts'

<sup>+</sup>A prosocial behaviour score item which is not included in calculating the SDQ total score. See commentary box *Measuring Specific Emotional or Behavioural Difficulties — The Strengths and Difficulties Questionnaire (SDQ) Scale Scores* below for more information about the prosocial behaviour score.

*Continued . . .*



## MEASURING EMOTIONAL AND BEHAVIOURAL DIFFICULTIES IN ABORIGINAL CHILDREN

(continued)

### Measures derived from the SDQ

Several measures may be derived from the SDQ. Three of them are used extensively in this report:

1. The *strengths and difficulties total score* is a continuous measure derived by summing 20 of the 25 SDQ items. For children in the WAACHS, the strengths and difficulties total score ranged from zero to 38 (the maximum score possible was 40) and had a mean of 11.3 (CI: 10.9–11.7).
2. The strengths and difficulties total score can be grouped into three ranges — the *normal* range (0–13), *borderline* range (14–16) and *abnormal* range (17–40). These categories and their ranges are described by Goodman.<sup>2</sup>
3. The strengths and difficulties total score can be grouped into a two level (i.e. binary) variable that combines scores in the normal and borderline ranges (0–16) and allows their comparison with scores in the abnormal range (17–40).

Classification of the SDQ total score into normal, borderline and abnormal ranges is typically used within a clinical setting by mental health professionals to help identify and diagnose specific emotional or behavioural difficulties amongst children. In clinical settings, the SDQ may be used in conjunction with other techniques to assess an individual child in accordance with recognised diagnostic standards.

In household-based population surveys such as the WAACHS, where it is not possible to conduct comprehensive clinical assessments of individual children, the SDQ is more appropriately used to assess *risk status for clinically significant emotional or behavioural difficulties*. Thus, groups of children with SDQ scores in the range 0–13 are identified as having a *low risk*, those in the range 14–16 as having a *moderate risk* and those in the range 17–40 as having a *high risk* of clinically significant emotional or behavioural difficulties.

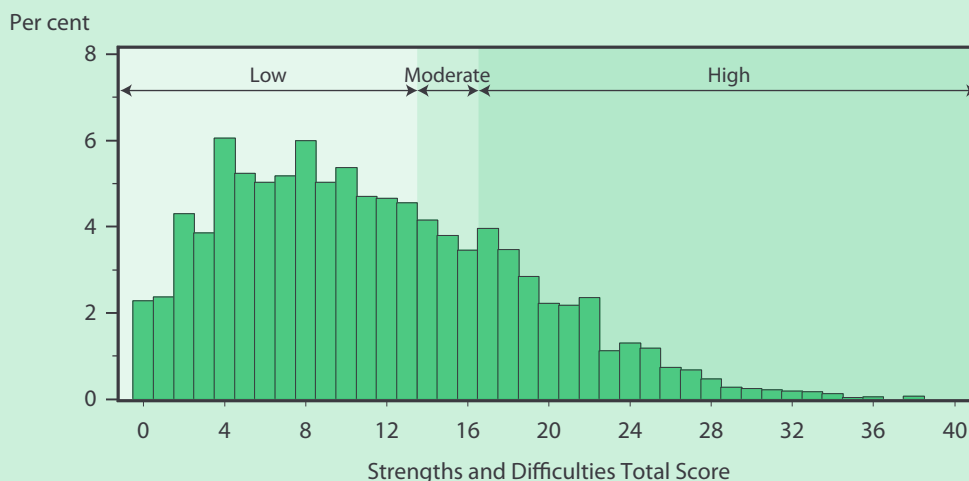
The following graph shows the distribution of the SDQ total scores. Additional details about the reliability and validity of the SDQ will be published in a forthcoming technical paper. See our web site: [www.ichr.uwa.edu.au](http://www.ichr.uwa.edu.au) for details of the release of this technical paper.

Continued . . . .



**MEASURING EMOTIONAL AND BEHAVIOURAL DIFFICULTIES IN ABORIGINAL CHILDREN**  
(continued)

ABORIGINAL CHILDREN AGED 4–17 YEARS — DISTRIBUTION OF STRENGTHS AND DIFFICULTIES TOTAL SCORES



**EMOTIONAL OR BEHAVIOURAL DIFFICULTIES**

The following sections describe the relationship between risk of clinically significant emotional or behavioural difficulties and the age and sex of the child, location with respect to LORI and ATSIC region, and characteristics of the carer. SDQ scores calculated from carer responses for each of the survey children were used as the basis for the estimates in this chapter.

**PROPORTION OF CHILDREN WITH EMOTIONAL OR BEHAVIOURAL DIFFICULTIES**

Almost one quarter (24.0 per cent; CI: 21.9%–26.1%) of Aboriginal children aged 4–17 years were assessed from carer responses to the SDQ as being at high risk of clinically significant emotional or behavioural difficulties. Another one in every ten children (11.4 per cent; CI: 10.3%–12.6%) were assessed to be at moderate risk of clinically significant emotional or behavioural difficulties (Table 2.1).



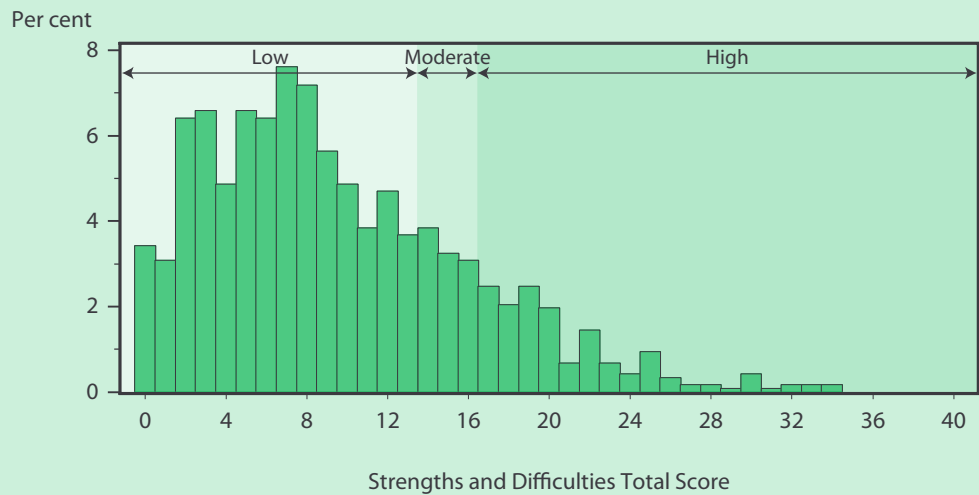
**EMOTIONAL OR BEHAVIOURAL DIFFICULTIES IN NON-ABORIGINAL CHILDREN**

The SDQ with the modifications described earlier has never been administered before in Western Australia. In order to provide a benchmark for comparing the results from the WAACHS, a survey of 1,200 carers of children aged 4–17 years in WA was commissioned by the WAACHS survey team. The sample was selected randomly from the Electronic White Pages and conducted in September 2004 using Computer Assisted Telephone Interviewing (CATI) by the Survey Research Centre at the University of Western Australia.

In addition to administering the SDQ, the age and sex of the survey child and postcode of usual residence were also collected. These variables were used to compare the sample obtained from the CATI survey with the distribution of children aged 4–17 years in WA in the 2001 Census. These results showed no sign of any bias in the survey sample by age, sex or place of usual residence. Postcodes were also grouped according to levels of socio-economic advantage and disadvantage, and no sign of response bias was found.

Based on this CATI survey, the proportion of non-Aboriginal children aged 4–17 years in WA at high risk of clinically significant emotional or behavioural difficulties was estimated to be 15.0 per cent (CI: 12.9%–17.0%), substantially lower than the 24.0 per cent found among Aboriginal children. A further 10.2 per cent (CI: 8.4%–11.9%) of children were at moderate risk of clinically significant emotional or behavioural difficulties (Table 2.2). Results from the CATI survey are included in the commentary and tables for this chapter.

**NON-ABORIGINAL CHILDREN AGED 4–17 YEARS — DISTRIBUTION OF STRENGTHS AND DIFFICULTIES TOTAL SCORES**



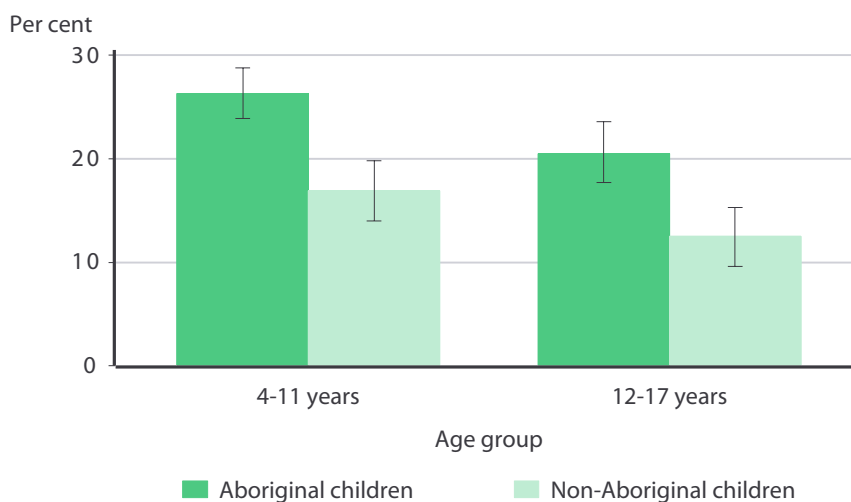
**AGE OF CHILD**

In terms of age groups, 26.3 per cent (CI: 23.9%–28.8%) of Aboriginal children aged 4–11 years were at high risk of clinically significant emotional or behavioural difficulties compared with 20.5 per cent (CI: 17.7%–23.6%) of children aged 12–17 years. A further 12.8 per cent (CI: 11.5%–14.2%) of 4–11 year-olds were at moderate



risk compared with 9.4 per cent (CI: 7.5%–11.5%) of 12–17 year-olds (Table 2.1). By way of comparison, the CATI survey of non-Aboriginal children found that 16.9 per cent (CI: 14.0%–19.8%) of non-Aboriginal children aged 4–11 years and 12.5 per cent (CI: 9.6%–15.3%) of non-Aboriginal children aged 12–17 years were at high risk of clinically significant emotional or behavioural difficulties (Figure 2.1).

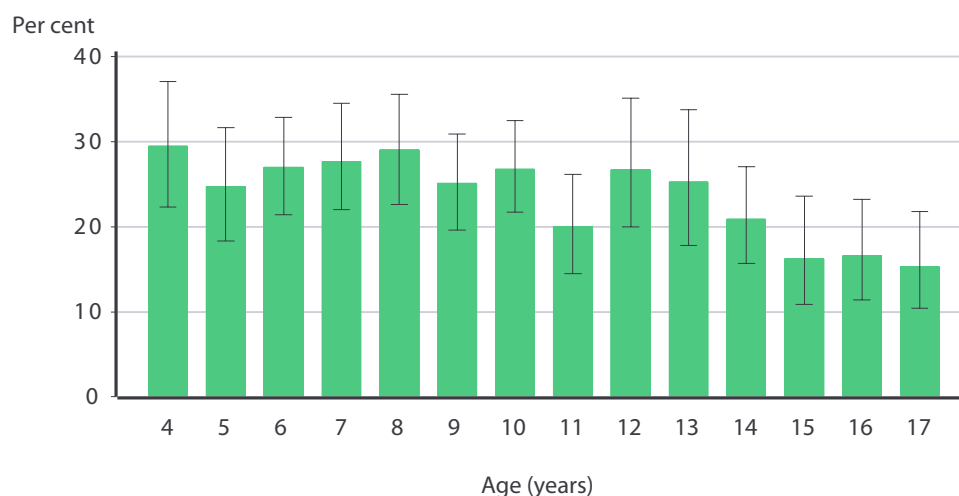
**FIGURE 2.1:** ABORIGINAL AND NON-ABORIGINAL CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP



Source: Tables 2.1 and 2.2

The proportions of Aboriginal children aged 4–14 years at high risk of clinically significant emotional or behavioural difficulties were estimated to be in the range 20 per cent to 30 per cent. The proportions for 15–17 year-olds were markedly lower at around 16 per cent.

**FIGURE 2.2:** ABORIGINAL CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE



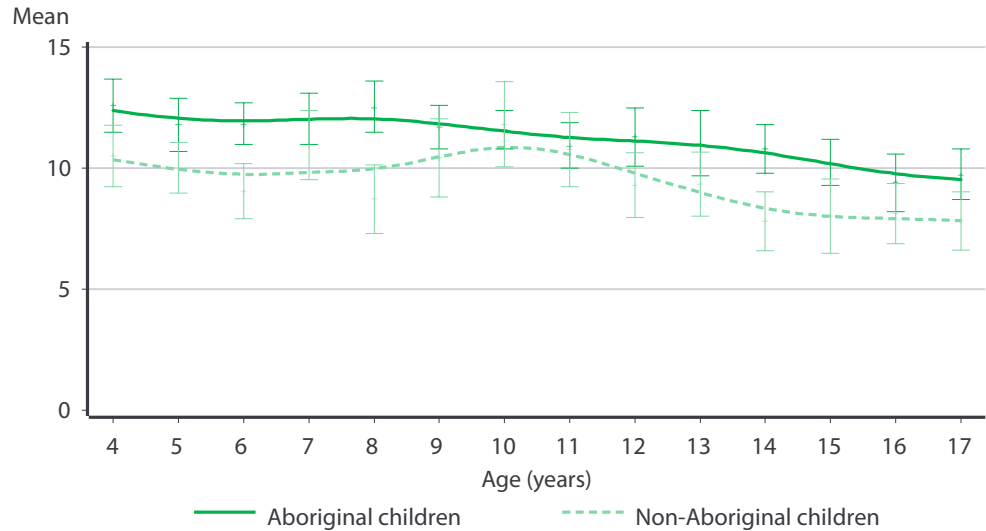
Source: Table 2.3





The mean strengths and difficulties total score for Aboriginal children aged 4–17 years declined consistently with increasing age, the mean scores for 16 and 17 year-olds being significantly lower than the mean scores for children aged up to 10 years. For non-Aboriginal children, mean strengths and difficulties total scores for younger children remained at around 10, the highest score occurring at 10 years of age. Beyond this age, there was a consistent downward trend (Figure 2.3).

**FIGURE 2.3:** ABORIGINAL AND NON-ABORIGINAL CHILDREN AGED 4–17 YEARS — MEAN STRENGTHS AND DIFFICULTIES TOTAL SCORE, BY AGE



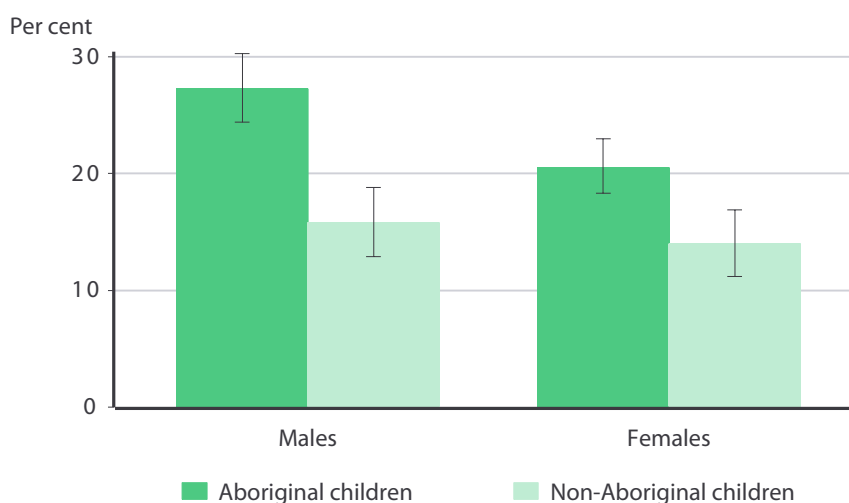
Source: Table 2.4

## SEX OF CHILD

Over one quarter (27.3 per cent; CI: 24.4%–30.3%) of male Aboriginal children aged 4–17 years were assessed as being at high risk of clinically significant emotional or behavioural difficulties. This was significantly higher than the proportion of females (20.5 per cent; CI: 18.3%–23.0%). There was no significant difference in the proportions of males compared with females (Table 2.5) who were at moderate risk. For non-Aboriginal children aged 4–17 years, there was no significant difference in the proportion of males and females at high risk (males 15.8 per cent; CI: 12.9%–18.8%; females 14.0 per cent; CI: 11.2%–16.9%) (Table 2.6).



**FIGURE 2.4:** ABORIGINAL AND NON-ABORIGINAL CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY SEX



Source: Tables 2.5 and 2.6

### AGE AND SEX OF CHILD

The highest proportions of emotional or behavioural difficulties occurred in Aboriginal males aged 4–11 years with almost three in every ten (29.6 per cent; CI: 26.2%–33.3%) at high risk of clinically significant emotional or behavioural difficulties compared with 22.6 per cent (CI: 19.9%–25.6%) of Aboriginal females aged 4–11 years. Nearly one quarter (23.5 per cent; CI: 19.6%–27.9%) of males aged 12–17 years were assessed from carer responses to the SDQ to be at high risk of clinically significant emotional or behavioural difficulties, while only 17.5 per cent (CI: 14.0%–21.5%) females in this age group were at high risk (Table 2.7).

Results from the CATI survey of non-Aboriginal children aged 4–17 years showed a similar trend for males and females in the 4–11 year age group, although the differences were not statistically significant. Of 4–11 year-old males 18.1 per cent (CI: 14.0%–22.1%) were at high risk of clinically significant emotional or behavioural difficulties compared with 15.6 per cent (CI: 11.6%–19.6%) of 4–11 year-old females. For 12–17 year-olds, the proportions for males and females were similar (males 12.8 per cent; CI: 8.8%–16.9% compared with females 12.1 per cent; CI: 8.1%–16.1%) (Table 2.8).

### BIRTH MOTHER

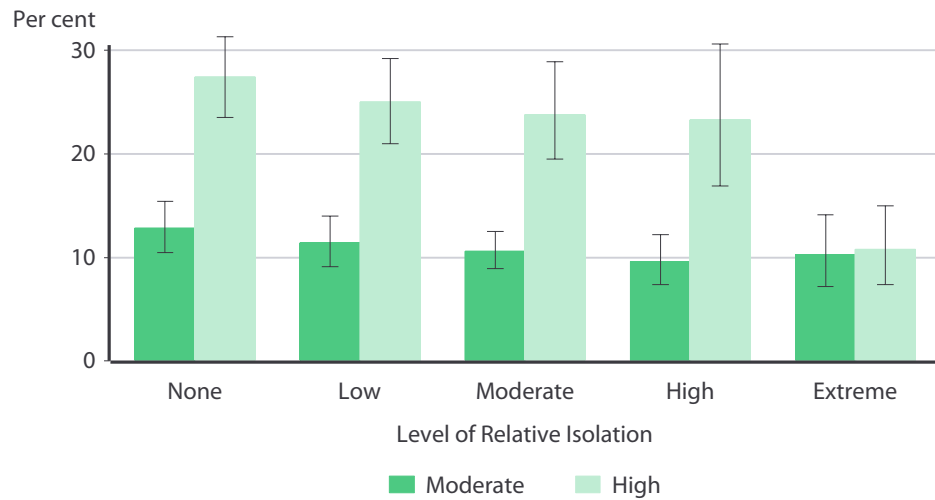
There was no statistically significant difference in the proportions at high risk of clinically significant emotional or behavioural difficulties for children either cared for, or not cared for, by their birth mother. This was true for both younger and older children (Table 2.9).

### LORI AND AGE

The proportion of Aboriginal children at high risk of clinically significant emotional or behavioural difficulties was significantly lower in the most isolated areas of the state. In areas of extreme isolation, just over one in ten children (10.8 per cent; CI: 7.4%–15.0%) were at high risk compared with 23.3 per cent (CI: 16.9%–30.6%) in areas of high isolation and 27.4 per cent (CI: 23.5%–31.3%) in the Perth metropolitan area (Table 2.10).



**FIGURE 2.5:** ABORIGINAL CHILDREN AGED 4–17 YEARS — PROPORTION AT MODERATE OR HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION



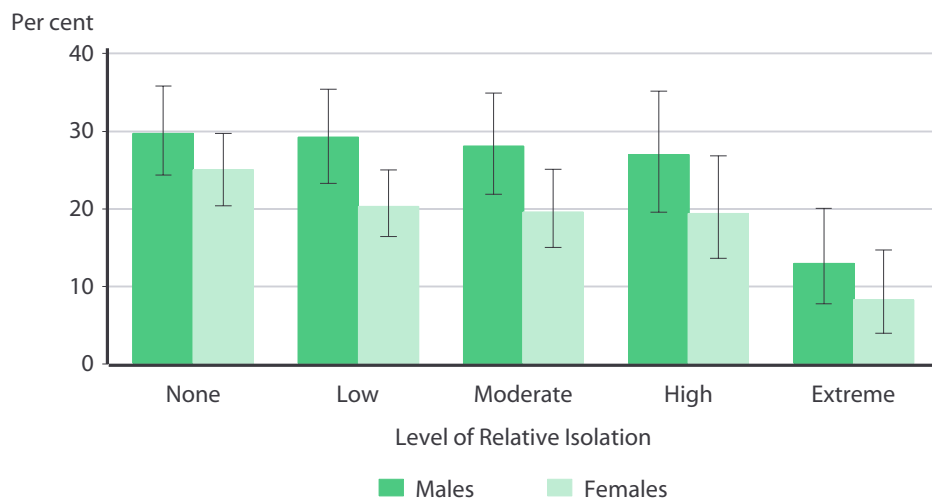
Source: Table 2.10

Across all levels of relative isolation, there was a trend towards a higher proportion of children aged 4–11 years being at high risk of clinically significant emotional or behavioural difficulties than 12–17 year-olds. This difference was significant only in areas of extreme isolation — 15.6 per cent (CI: 10.4%–22.0%) of younger children compared with 4.6 per cent (CI: 2.0%–8.7%) of older children (Table 2.10).

## LORI AND SEX

For each level of relative isolation, a higher proportion of Aboriginal males aged 4–17 years were at high risk of clinically significant emotional or behavioural difficulties than Aboriginal females, particularly in areas of low, moderate and high isolation, although the differences were not statistically significant (Table 2.11).

**FIGURE 2.6:** ABORIGINAL CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION AND SEX



Source: Table 2.11



## EMOTIONAL OR BEHAVIOURAL DIFFICULTIES AND LEVEL OF RELATIVE ISOLATION

Our observation that the proportion of children at high risk of clinically significant emotional or behavioural difficulties is lowest in areas of extreme isolation may surprise some people in light of the periodic media attention given to specific problems in some remote areas. Several points should be borne in mind regarding these findings:

- ◆ Levels of relative isolation have been defined specifically for this survey, and differ from the standard remoteness areas used by the ABS (see *Level of Relative Isolation* in Chapter 1). As described in Volume One, areas of extreme relative isolation are predominantly communities with strong ties to traditional culture and limited contact with non-Aboriginal people or which have a history of contact with a very select group of non-Aboriginal people (e.g. clergy or missionaries). Communities close to rural towns are rated as less isolated. In this survey, some locations that the ABS classifies as very remote are classified as being of moderate or high relative isolation. The proportion of children at high risk of clinically significant emotional or behavioural difficulties was found to be high in areas of moderate and high relative isolation.
- ◆ While problems such as petrol sniffing and suicide in specific Aboriginal communities have received much publicity, there are other extremely isolated Aboriginal communities that, on balance, function well.
- ◆ It is not possible to rule out the effects of culture and language on survey responses. While translators and interpreters were used wherever appropriate, issues of privacy and cultural respect could have affected the willingness of some respondents to discuss emotional or behavioural difficulties in their children.<sup>4</sup>
- ◆ Some of the behaviours that are measured in the SDQ have less relevance in some traditional Aboriginal communities. For instance, where there is a culture of community ownership, the concept of stealing has less meaning. Where all members of a small community are known to one another, and the community becomes almost like an extended family, children may have limited opportunities to interact with people not familiar to them. Children in extremely isolated communities may have less experience of the western cultural values upon which some of the SDQ items are based.
- ◆ The proportion of children at high risk of clinically significant emotional or behavioural difficulties in extremely isolated areas seems low in comparison to the high proportions in other areas, but when compared with the state estimates for non-Aboriginal children they are not statistically significantly different.

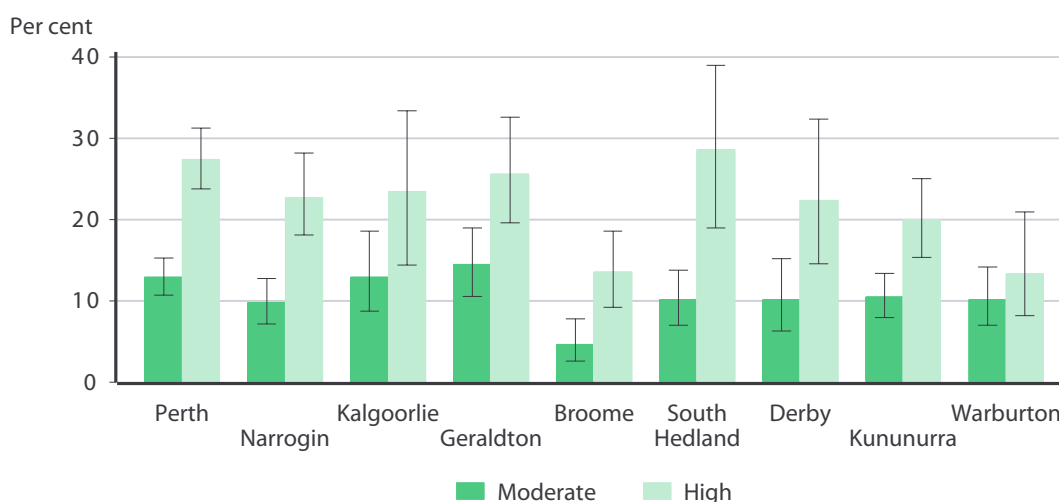
Taking these factors into account, it is evident that the proportions of Aboriginal children at high risk of clinically significant emotional or behavioural difficulties are high in areas of moderate and high isolation. However, in areas of extreme isolation it appears that adherence to Aboriginal culture and traditional ways of life is protective against these problems.



## ATSIC REGION

The lowest proportions of children at high risk of clinically significant emotional or behavioural difficulties were recorded in the Warburton (13.3 per cent; CI: 8.2%–21.0%) and Broome (13.6 per cent; CI: 9.2%–18.6%) ATSIC regions. Regions recording the highest proportions were South Hedland (28.6 per cent; CI: 19.0%–39.0%), Perth (27.4 per cent; CI: 23.8%–31.3%) and Geraldton (25.6 per cent; CI: 19.6%–32.6%) (Table 2.12).

**FIGURE 2.7: ABORIGINAL CHILDREN AGED 4–17 YEARS — PROPORTION AT MODERATE OR HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY ATSIC REGION**



Source: Table 2.12

## CATEGORIES OF SOCIO-ECONOMIC DISADVANTAGE

Nine in ten Aboriginal children aged 4–17 years were living in areas classified in the bottom 50 per cent on the index of relative socio-economic disadvantage (see *Glossary*), with approximately one in four living in areas classified in the bottom 5 per cent. Across the five categories of socio-economic disadvantage, there were no statistically significant differences in the proportions of 4–17 year-olds at high risk of clinically significant emotional or behavioural difficulties (Table 2.13).

## BIRTH MOTHER STATUS AND ABORIGINAL STATUS OF PRIMARY CARER

The proportion of 4–17 year-old Aboriginal children in the primary care of their birth mother who were at high risk of clinically significant emotional or behavioural difficulties (24.1 per cent; CI: 21.8%–26.6%) was not significantly different from children whose primary carer was not their birth mother (23.5 per cent; CI: 19.5%–27.9%). Similarly, there was no significant difference in the proportion of Aboriginal children at high risk whether their primary carer was Aboriginal or non-Aboriginal (Table 2.14).



While the majority (66.4 per cent; CI: 64.0%–68.8%) of 4–17 year-old Aboriginal children were in the primary care of an Aboriginal birth mother, another 19.9 per cent (CI: 18.0%–22.0%) were cared for by an Aboriginal carer who was not their birth mother. A further 10.5 per cent (CI: 8.8%–12.3%) were in the care of a birth mother who was non-Aboriginal. Only a very small proportion of children (2.4 per cent; CI: 1.5%–3.7%) had as their primary carer a person who was not their birth mother and also not Aboriginal (Figure 2.8). For further information on the demographics of children and their birth mothers, see Volume One of WAACHS results.

**FIGURE 2.8: ABORIGINAL CHILDREN AGED 4–17 YEARS — BIRTH MOTHER STATUS AND ABORIGINAL STATUS OF THE CHILD’S PRIMARY CARER**

<i>Birth mother status and Aboriginal status of primary carer</i>	<i>%</i>	<i>95% CI</i>
Birth mother		
Aboriginal	66.4	(64.0 - 68.8)
Non-Aboriginal	10.5	(8.8 - 12.3)
Not stated	0.6	(0.3 - 1.0)
Not birth mother		
Aboriginal	19.9	(18.0 - 22.0)
Non-Aboriginal	2.4	(1.5 - 3.7)
Not stated	0.2	(0.0 - 0.4)
<b>Total children</b>	<b>100.0</b>	

## MULTIVARIATE MODELLING — AGE, SEX AND LORI

The association between the child’s age, sex, LORI, location (ATSIC region), and carer characteristics (i.e. birth mother and Aboriginal status) and being at high risk of clinically significant emotional or behavioural difficulties was further investigated using multivariate logistic regression modelling (see *Glossary*). An initial multivariate model indicated that the association between carer characteristics (both birth mother status and Aboriginal status) and likelihood of the child being at high risk of clinically significant emotional or behavioural difficulties was not statistically significant. Also, once LORI was accounted for, ATSIC region did not significantly predict likelihood of being at high risk. These variables were subsequently deleted from the model and likelihood of being at high risk was fitted in a multivariate model along with the child’s age, sex and LORI (Figure 2.9). This allows an assessment of each of these variables after adjusting for the effects of the other variables on likelihood of being at high risk.

The strongest difference by age was found in young people aged 15–17 years who were 62 per cent less likely (Odds Ratio 0.38; CI: 0.22–0.65) to be at high risk of clinically significant emotional or behavioural difficulties when compared with children aged 4–7 years. Children living in extremely remote areas were 83 per cent less likely (Odds Ratio 0.17; CI: 0.06–0.49) to be at high risk than those children living in the Perth metropolitan area. Relative to females, males were twice as likely to be at high risk (Odds Ratio 2.03; CI: 1.56–2.63).





**FIGURE 2.9:** ABORIGINAL CHILDREN AGED 4–17 YEARS — LIKELIHOOD OF BEING AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, ASSOCIATED WITH CHILD AGE GROUP, SEX AND LEVEL OF RELATIVE ISOLATION

Parameter	Odds Ratio	95% CI
Age group (years)—		
4–7	1.00	
8–11	0.90	(0.65 - 1.23)
12–14	0.93	(0.64 - 1.36)
15–17	0.38	(0.22 - 0.65)
Sex—		
Male	2.03	(1.56 - 2.63)
Female	1.00	
Level of Relative Isolation—		
None	1.00	
Low	0.70	(0.43 - 1.14)
Moderate	0.98	(0.50 - 1.89)
High	0.56	(0.19 - 1.67)
Extreme	0.17	(0.06 - 0.49)

### EMOTIONAL OR BEHAVIOURAL DIFFICULTIES IN ABORIGINAL CHILDREN

This is the first attempt to systematically assess the proportion of Aboriginal children and young people at high risk of clinically significant emotional or behavioural difficulties in a large representative sample using carer reports. The findings show that about one quarter of Aboriginal children were at high risk (24.0 per cent; CI: 21.9%–26.1%). Another one in ten (11.4 per cent; CI: 10.3%–12.6%) were at moderate risk. In non-Aboriginal children these proportions were 15.0 per cent (CI: 12.9%–17.0%) and 10.2 per cent (CI: 8.4%–11.9%) respectively.

After adjusting for age and LORI, Aboriginal males were about twice as likely to be at high risk compared with females. In contrast, there was no significant difference in proportions at high risk of clinically significant emotional or behavioural difficulties between non-Aboriginal males and females.

Proportions of Aboriginal children at high risk declined with increasing age — with a particularly dramatic drop for young people aged 15–17 years. In contrast, while the proportion of 12–17 year-old non-Aboriginal children at high risk was lower than for non-Aboriginal children aged 4–11 years, this difference was not significant, nor was there a significant drop in proportions for 15–17 year-olds.

Finally, a higher proportion of Aboriginal children were at high risk in the metropolitan area than in areas of extreme relative isolation. No differences were observed among children cared for by Aboriginal and by non-Aboriginal primary carers, nor were differences observed for children in the care of their birth mother or someone else.

*Continued . . . .*



## EMOTIONAL OR BEHAVIOURAL DIFFICULTIES IN ABORIGINAL CHILDREN *(continued)*

These findings show a substantial increase in the proportion of Aboriginal children at high risk relative to non-Aboriginal children. Unlike non-Aboriginal children, the proportion of Aboriginal children at high risk appears to significantly decline with age — although at 20.5 per cent (CI: 17.7%–23.6%) for 12–17 year-olds, this proportion is still significantly above the proportion of non-Aboriginal 12–17 year-olds and is comparable to that found in American Indian adolescents.<sup>5</sup>

The fact that a smaller proportion of Aboriginal children aged 15–17 years was at high risk of clinically significant emotional or behavioural difficulties may reflect other sources of variation:

- ◆ It may reflect a true difference in proportion of children at high risk of clinically significant emotional or behavioural difficulties as Aboriginal children develop and get older. The proportion of younger Aboriginal children at high risk is very high. Lower proportions in older Aboriginal children may occur because of reductions in adverse exposures through departures from home, community settings or school.
- ◆ It may reflect a relative lack of carer knowledge of young people compared with their knowledge of younger children. Carers may simply lack sufficient and sustained contact with older Aboriginal children and young people and are thus less able to reliably observe and report on social and emotional behaviours for this age group.
- ◆ Finally, both of these factors may contribute to the lower proportion of older Aboriginal children assessed as being at high risk.

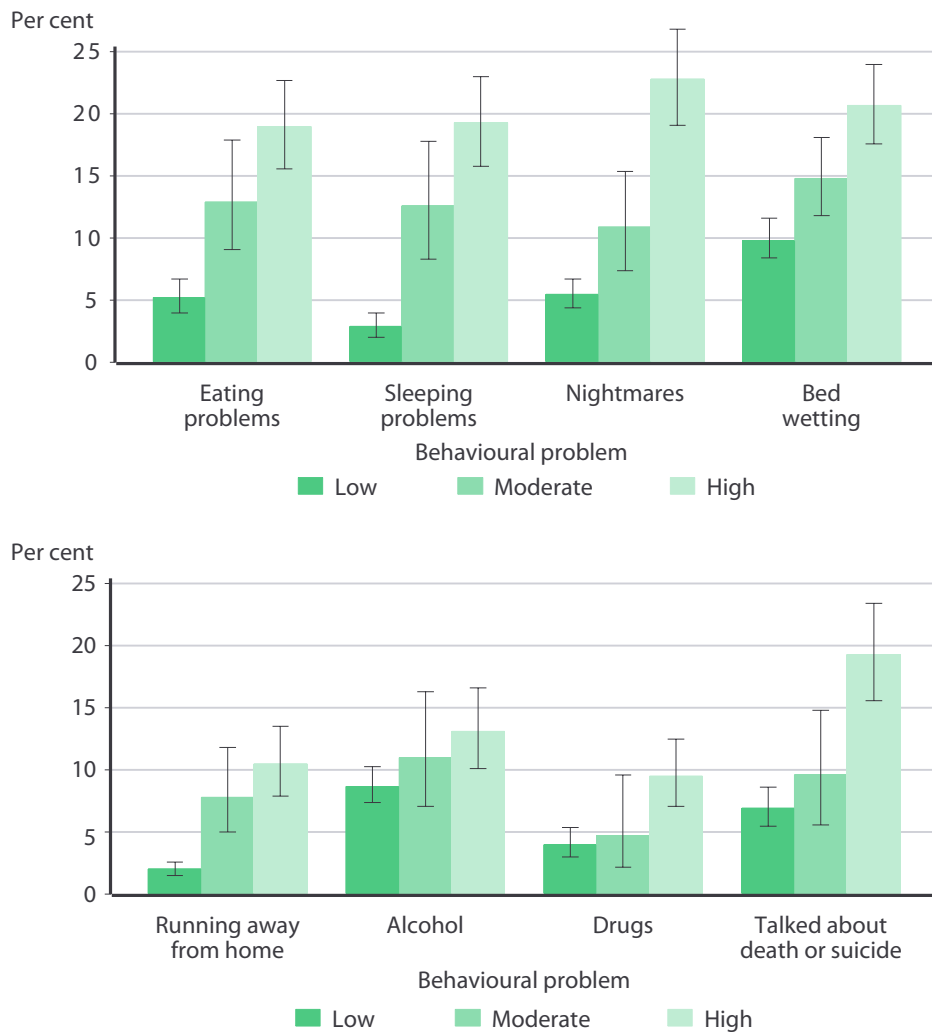
The significantly lower proportion of children at high risk of clinically significant emotional or behavioural difficulties in areas of extreme isolation should also be noted. When adjusted for age and sex, there was an 83 per cent reduction (Odds Ratio 0.17; CI: 0.06–0.49) in the likelihood of children being at high risk living in areas of extreme isolation compared with children living in the Perth metropolitan area. This may reflect a real lower risk for children living in extremely isolated areas where there are fewer stresses arising from interactions with mainstream settings and expectations, a greater preservation of traditional cultural practices, more intact family structures, and a greater number of carers involved in child rearing. The lower proportion at high risk may also reflect issues arising from the use of the SDQ in extremely isolated settings where English was not commonly spoken and the probes, questions and translations were not appropriate to the context or well understood by the respondents.



## RELATIONSHIP BETWEEN THE SDQ AND PROBLEM BEHAVIOURS IN ABORIGINAL CHILDREN AGED 4–17 YEARS

Carers were asked about a number of problem behaviours such as eating and sleeping problems, drinking alcohol or using other drugs. Responses to these questions were used to assess how well the SDQ correlated with these behavioural problems. Figure 2.10 shows the proportion of children who had each particular problem by whether their SDQ scores indicated that they were at low, moderate or high risk of clinically significant emotional or behavioural difficulties. A higher proportion of children at high risk were reported to have problem behaviours compared with children who were at low risk. Out of all the problem behaviours, only alcohol consumption did not show a statistically significant increase in proportion, but it followed the same trend as the other problem behaviours. For children who experienced nightmares, there was a significant difference between all three levels of risk, while among young people who have talked about suicide, there was a significant difference between the proportion at moderate risk (9.6 per cent; CI: 5.6%–14.8%) and those at high risk (19.3 per cent; CI: 15.6%–23.4%).

**FIGURE 2.10:** ABORIGINAL CHILDREN AGED 4–17 YEARS — PROPORTION WITH BEHAVIOURAL PROBLEMS, BY RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES



Source: Table 2.15



## SPECIFIC EMOTIONAL OR BEHAVIOURAL DIFFICULTIES

In addition to the strengths and difficulties total score, the 25 items comprising the SDQ can be used to derive 5 underlying scale scores that measure specific symptoms, problems and behaviours. These specific scale scores are:

- ◆ Emotional symptoms score
- ◆ Conduct problems score
- ◆ Hyperactivity score
- ◆ Peer problems score
- ◆ Prosocial behaviour score.

### MEASURING SPECIFIC EMOTIONAL OR BEHAVIOURAL DIFFICULTIES — THE STRENGTHS AND DIFFICULTIES QUESTIONNAIRE (SDQ) SCALE SCORES

The 25 items of the SDQ can be used to derive the five specific scale scores. Scale scores range from 0 to 10 and can be grouped into three categories — *normal*, *borderline* or *abnormal*. However, for reasons described previously in this chapter (see the commentary box *Measuring Emotional or Behavioural Difficulties in Aboriginal Children*), it is more appropriate to identify children in these ranges as having low risk, moderate risk or high risk (respectively) of clinically significant emotional symptoms, conduct problems, hyperactivity, peer problems or problems with prosocial behaviour.

The scale scores, together with the criteria for categorising each of them to low, moderate or high risk, are described below.

#### Emotional symptoms score

Children and young people who are overly sad, fearful, worried or nervous may be displaying significant emotional problems. They may also complain of physical symptoms even when these are shown to have no physical cause. Five items are used to measure emotional symptoms:

- Has often complained of headaches, stomach aches or sickness
- Has often seemed worried
- Has often been unhappy, sad or tearful
- Has been nervous or clingy in new situations, easily lost confidence
- Has been fearful, easily scared

Emotional symptoms scores are classified as *low risk* (0–3), *moderate risk* (4) or *high risk* (5–10).

*Continued . . . .*



## MEASURING SPECIFIC EMOTIONAL OR BEHAVIOURAL DIFFICULTIES — THE STRENGTHS AND DIFFICULTIES QUESTIONNAIRE (SDQ) SCALE SCORES *(continued)*

### Conduct problems score

Lying, stealing, and fighting, along with temper tantrums and disobedience, comprise those behaviours that are referred to as conduct problems. Unlike some problems that children and young people have, conduct problems are often readily observable by carers and others. Five items are used to measure conduct problems:

- Has often had temper tantrums
- Has usually done what adults told him/her to do\*
- Has been in fights with other children or has bullied them
- Has often lied or cheated
- Has stolen from home, school or elsewhere

Conduct problem scores are classified as *low risk* (0–2), *moderate risk* (3) or *high risk* (4–10).

### Hyperactivity score

Some children and young people show signs of significant problems with restlessness, fidgeting and are easily distracted and often unable to stop and think things through or finish what they have started. These symptoms may be important signs of hyperactivity. Five items are used to measure hyperactivity:

- Has been restless, overactive, cannot stay still for long
- Has constantly been fidgeting or squirming
- Has been easily distracted or had poor concentration
- Has been able to stop and think things over before acting\*
- Has had good attention and finished the things he/she starts\*

Hyperactivity scores are classified as *low risk* (0–5), *moderate risk* (6) or *high risk* (7–10).

### Peer problems score

Not having friends, not being liked, or alternately being picked on or playing alone or preferring adult company to the company of peers, may indicate problems with peers. Five items are used to measure peer problems:

- Has tended to play by him/her self
- Has had at least one good friend \*
- Has generally been liked by other children\*
- Has been picked on or bullied by other children
- Has been getting on better with adults than with other children

Peer problems scores are classified as *low risk* (0–3), *moderate risk* (4) or *high risk* (5–10).

\* *Conduct problems, Hyperactivity and Peer problems items marked with an asterisk (\*) have been reverse coded to be consistent with the other items in each score.*

*Continued . . . .*



## MEASURING SPECIFIC EMOTIONAL OR BEHAVIOURAL DIFFICULTIES — THE STRENGTHS AND DIFFICULTIES QUESTIONNAIRE (SDQ) SCALE SCORES *(continued)*

### Prosocial behaviour score (not included in the SDQ total score)

Social skills that entail being considerate, sharing, helpful and kind are abilities that are important at home, in school, and at work and in recreation. Five items are used to measure prosocial behaviour:

- Has been considerate of other people's feelings
- Has readily shared with other children (lollies, toys, pencils, etc.)
- Has been helpful if someone is hurt, upset or feeling ill
- Has been kind to younger children
- Has often volunteered to help others (parents, teachers, other children)

Prosocial behaviour scores are classified as *low risk* (6–10), *moderate risk* (5) or *high risk* (0–4).

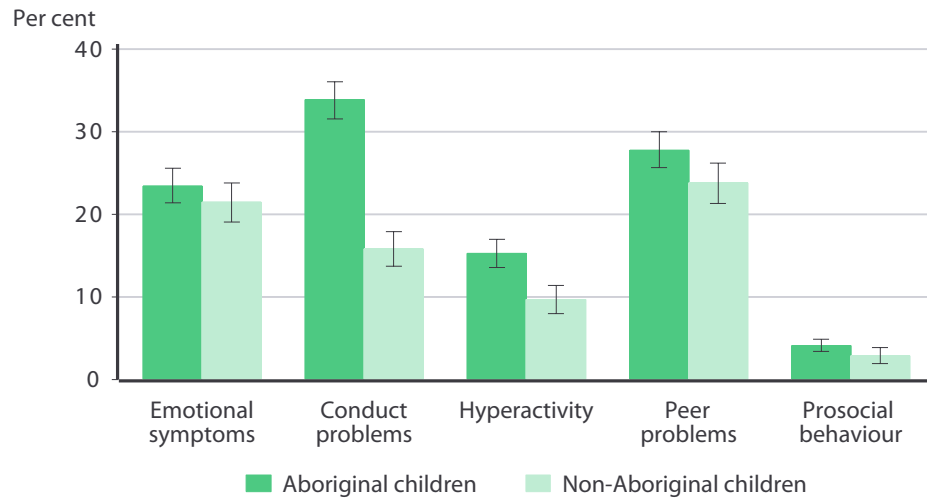
Of the specific emotional or behavioural difficulties, a significant proportion of Aboriginal children aged 4–17 years were at high risk of clinically significant conduct problems (33.9 per cent; CI: 31.6%–36.1%), peer problems (27.8 per cent; CI: 25.7%–30.0%) and emotional symptoms (23.4 per cent; CI: 21.4%–25.6%) (Table 2.16). For non-Aboriginal children aged 4–17 years, the greatest proportions of children at high risk were for peer problems (23.8 per cent; CI: 21.3%–26.2%) and emotional symptoms (21.5 per cent; CI: 19.1%–23.8%) (Table 2.17).

In terms of being at high risk of clinically significant specific difficulties, Aboriginal children aged 4–17 years differed significantly from non-Aboriginal children in that age range in respect of:

- ◆ conduct problems, where 33.9 per cent (CI: 31.6%–36.1%) of Aboriginal children were at high risk of clinically significant conduct problems compared with 15.8 per cent (CI: 13.7%–17.9%) of non-Aboriginal children
- ◆ hyperactivity, which was experienced by 15.3 per cent (CI: 13.6%–17.0%) of Aboriginal children compared with 9.7 per cent (CI: 8.0%–11.4%) of non-Aboriginal children.



**FIGURE 2.11:** ABORIGINAL AND NON-ABORIGINAL CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT SPECIFIC DIFFICULTIES, BY DIFFICULTY



Source: Tables 2.16 and 2.17

Because of the known variability in the specific symptoms, problems and behaviours as measured by the five scale scores, findings on children at high risk of each of these specific emotional or behavioural difficulties are provided in the sections that follow.

## EMOTIONAL SYMPTOMS

### Age of child

Just under one quarter (23.4 per cent; CI: 21.4%–25.6%) of Aboriginal children aged 4–17 years were assessed from carer responses to the SDQ as being at high risk of clinically significant emotional symptoms. This proportion was similar to the 21.5 per cent (CI: 19.1%–23.8%) of non-Aboriginal children also assessed from carer SDQ responses as being at high risk of clinically significant emotional symptoms.

There was little variation in the proportion 4–17 year-old Aboriginal children at high risk across all individual ages and age groups. This was also the case for the proportion of Aboriginal children at moderate risk which was estimated to be 11.2 per cent (CI: 9.9%–12.6%). For non-Aboriginal children, a higher proportion of 4–11 year-olds were at high risk of clinically significant emotional symptoms (23.9 per cent; CI: 20.6%–27.2%) compared with 12–17 year-olds (18.3 per cent; CI: 15.0%–21.7%) although the difference was not statistically significant (Tables 2.18, 2.19 and 2.20).

### Age and sex of child

There was no significant difference in proportions of Aboriginal children at high risk of clinically significant emotional symptoms both within and between younger and older male and female children (Table 2.21).





### LORI and age

There were no significant LORI or age effects with respect to the proportion of Aboriginal children and young people at high risk of clinically significant emotional symptoms. About one in four (26.8 per cent; CI: 23.2%–30.8%) children in the Perth area were assessed as being at high risk. These proportions were 18.7 per cent (CI: 13.4%–25.6%) in areas of high isolation and 20.8 per cent (CI: 12.6%–31.1%) in areas of extreme isolation. Within each Level of Relative Isolation, there was little difference in the proportion of younger and older age groups at high risk (Table 2.22).

### ATSIC region

The proportions of children at high risk of clinically significant emotional symptoms were similar across most of the ATSIC regions. However, the lowest proportion at high risk was recorded for children living in the Broome ATSIC region (11.1 per cent; CI: 3.9%–21.2%) — a proportion significantly lower than that for children living in the Perth ATSIC region (26.8 per cent; CI: 23.3%–30.6%) (Table 2.23).

### Aboriginal status of the primary carer

There was no statistically significant difference in the proportions of children at high risk of clinically significant emotional symptoms according to whether their primary carer was either Aboriginal or non-Aboriginal (Table 2.24). Note that four in five non-Aboriginal primary carers were also the child's natural mother.

## CONDUCT PROBLEMS

### Age of child

Just over one third (33.9 per cent; CI: 31.6%–36.1%) of Aboriginal children aged 4–17 years were assessed as being at high risk of clinically significant conduct problems. This proportion is significantly above the overall proportion at high risk of clinically significant emotional or behavioural difficulties of 24.0 per cent (CI: 21.9%–26.1%) and the highest of the specific types of emotional or behavioural difficulties surveyed. It is also significantly higher than the 15.8 per cent (CI: 13.7%–17.9%) of non-Aboriginal children assessed from carer responses to the SDQ as being at high risk of clinically significant conduct problems.

A higher proportion of Aboriginal children aged 4–11 years were at high risk of clinically significant conduct problems (35.5 per cent; CI: 33.0%–38.2%) compared with children aged 12–17 years (31.4 per cent; CI: 28.0%–34.7%) due mainly to the lower proportions of 16 and 17 year-olds at high risk (around 22 per cent). A higher proportion of younger non-Aboriginal children were also at high risk (18.0 per cent; CI: 15.0%–20.9%) compared with older non-Aboriginal children (13.1 per cent; CI: 10.1%–16.0%) (Tables 2.25, 2.26 and 2.27).

### Age and sex of child

The proportion of Aboriginal males aged 4–17 years at high risk of clinically significant conduct problems (38.6 per cent; CI: 35.6%–41.6%) was much higher than that for Aboriginal females (28.9 per cent; CI: 26.3%–31.6%).



The proportion of males at high risk was greater than that for females for both younger and older children. High risk of clinically significant conduct problems was found in 40.4 per cent (CI: 36.9%–44.1%) of younger males compared with 30.2 per cent (CI: 27.0%–33.5%) of younger females while, for 12–17 year-olds, the proportions were 35.6 per cent of males (CI: 31.2%–40.2%) and 27.1 per cent of females (CI: 22.8%–31.5%) (Table 2.28).

### LORI and age

Proportions of children at high risk of clinically significant conduct problems varied significantly by LORI. Aboriginal children living in areas of extreme isolation had the lowest proportion (20.9 per cent; CI: 15.8%–26.8%). The proportion in other areas ranged from 37.2 per cent (CI: 33.4%–41.4%) in the Perth area to 31.7 per cent (CI: 25.1%–39.5%) in areas of high isolation.

In the Perth area, there was no difference in the proportion of 4–11 year-olds and 12–17 year-olds at high risk of clinically significant conduct problems (both 37 per cent). This contrasts with proportions of younger and older children in extremely isolated areas of the state — 27.7 per cent (CI: 19.8%–36.2%) and 12.2 per cent (CI: 6.0%–20.0%) respectively (Table 2.29).

### ATSI region

Relative to other ATSI regions, the proportion of children at high risk of clinically significant conduct problems was lowest for those living in the Warburton (19.0 per cent; CI: 13.1%–25.4%) and Broome (22.8 per cent; CI: 17.9%–28.2%) ATSI regions (Table 2.30).

### Aboriginal status of the primary carer

There was no statistically significant difference in the proportions of children at high risk of conduct problems according to whether their primary carer was either Aboriginal or non-Aboriginal (Table 2.31).

## HYPERACTIVITY

### Age of child

The proportion of Aboriginal children aged 4–17 years who were at high risk of clinically significant hyperactivity was 15.3 per cent (CI: 13.6%–17.0%), while a further 9.3 per cent (CI: 8.2%–10.6%) were at moderate risk. A significantly higher proportion of Aboriginal children were at high risk compared with non-Aboriginal children aged 4–17 years, where one in ten (9.7 per cent; CI: 8.0%–11.4%) were at high risk of clinically significant hyperactivity.

High risk of clinically significant hyperactivity was more common in Aboriginal children aged 4–11 years (17.1 per cent; CI: 15.2%–19.1%) than children aged 12–17 years (12.5 per cent; CI: 10.0%–15.1%). The proportions tend to decrease from the early teens with 8.0 per cent (CI: 3.0%–16.8%) of 16 year-olds and 9.3 per cent (CI: 5.5%–14.4%) of 17 year-olds at high risk. High risk of clinically significant hyperactivity was also more common in younger non-Aboriginal children (12.2 per cent; CI: 9.7%–14.7%) compared with non-Aboriginal children aged 12–17 years (6.4 per cent; CI: 4.3%–8.6%) (Tables 2.32, 2.33 and 2.34).



### Age and sex of child

A significantly higher proportion of male Aboriginal children aged 4–17 years were at high risk of clinically significant hyperactivity (18.0 per cent; CI: 15.7%–20.7%) compared with females (12.3 per cent; CI: 10.6%–14.2%). There was also a higher proportion of males at moderate risk of clinically significant hyperactivity compared with females — 11.3 per cent (CI: 9.6%–13.2%) compared with 7.2 per cent (CI: 5.9%–8.7%) (Table 2.35).

### LORI and age

Higher than average proportions of Aboriginal children at high risk of clinically significant hyperactivity were found in the Perth metropolitan area (18.8 per cent; CI: 15.6%–22.3%) and areas with low isolation (17.5 per cent; CI: 14.6%–20.9%). The lowest proportion at high risk were living in areas of extreme isolation (5.2 per cent; CI: 2.5%–9.2%).

The most noticeable differences in the proportions of younger and older children at high risk of clinically significant hyperactivity occurred in areas of moderate isolation — 16.4 per cent (CI: 13.3%–19.9%) and 6.9 per cent (CI: 2.8%–15.4%) respectively; and areas of extreme isolation — 7.2 per cent (CI: 3.3%–13.0%) and 2.6 per cent (CI: 1.0%–5.6%) respectively (Table 2.36).

### ATSI region

Proportions of children at high risk of clinically significant hyperactivity were lowest in the ATSI regions of Broome (4.8 per cent; CI: 2.7%–7.6%) and Warburton (3.5 per cent; CI: 1.6%–7.1%). These proportions were significantly lower than those of children in the Perth ATSI region (19.0 per cent; CI: 16.0%–22.4%) (Table 2.37).

### Aboriginal status of the primary carer

There was no statistically significant difference in the proportions of children at high risk of clinically significant hyperactivity according to whether their primary carer was either Aboriginal or non-Aboriginal (Table 2.38).

## PEER PROBLEMS

### Age of child

After conduct problems, peer problems was the second most common specific difficulty experienced by Aboriginal children, with 27.8 per cent (CI: 25.7%–30.0%) at high risk of clinically significant peer problems. This proportion is comparable to that for non-Aboriginal children (23.8 per cent; CI: 21.3%–26.2%), with peer problems (together with emotional symptoms) being the most commonly occurring specific difficulty in non-Aboriginal children.

A higher proportion of younger Aboriginal children were at high risk of clinically significant peer problems than older Aboriginal children, with around one third (31.6 per cent; CI: 28.9%–34.4%) of children aged 4–11 years being at high risk compared with 22.2 per cent (CI: 19.4%–25.3%) of children aged 12–17 years. A higher proportion of non-Aboriginal children aged 4–11 years were at high risk of clinically significant peer problems than older non-Aboriginal children (26.5 per cent; CI: 23.1%–29.9% compared with 20.3 per cent; CI: 16.8%–23.8%) although the difference was not statistically significant (Tables 2.39, 2.40 and 2.41).



### Age and sex of child

High risk peer problems were experienced equally by males and females. This was also true within each age group (Table 2.42).

### LORI and age

The lowest proportion of Aboriginal children at high risk of clinically significant peer problems was found in areas of extreme isolation (17.1 per cent; CI: 13.1%–22.1%). Proportions in other areas were consistently higher. This pattern of high risk of clinically significant peer problems was also reflected within each age group, where a lower proportion of younger and older children in areas of extreme isolation were at high risk compared with younger and older age groups (respectively) in other areas.

With the exception of areas of extreme isolation, a lower proportion of 12–17 year-olds in the remaining four levels of relative isolation were at high risk of clinically significant peer problems than younger children. In areas of extreme isolation, the proportions of children at high risk in these age groups were similar (Table 2.43).

### ATSIC region

The lowest proportions of children at high risk of clinically significant peer problems were found in the ATSIC regions of Broome (18.5 per cent; CI: 11.1%–27.9%), Kununurra (21.3 per cent; CI: 16.0%–27.2%), Warburton (21.4 per cent; CI: 15.0%–28.4%) and Derby (21.8 per cent; CI: 14.3%–30.8%). ATSIC regions in which carers reported elevated proportions of children at high risk were Kalgoorlie (35.0 per cent; CI: 23.3%–48.0%), South Hedland (34.3 per cent; CI: 26.6%–41.9%) and Perth (31.0 per cent; CI: 27.2%–35.2%) (Table 2.44).

### Aboriginal status of the primary carer

There was no statistically significant difference in the proportions of children at high risk of clinically significant peer problems according to whether their primary carer was either Aboriginal or non-Aboriginal (Table 2.45).

## PROSOCIAL BEHAVIOUR

The vast proportion of Aboriginal children aged 4–17 years were assessed from carer responses to the SDQ as being at low risk of clinically significant problems with prosocial behaviour (92.6 per cent; CI: 91.5%–93.6%). Small proportions of Aboriginal children were assessed as being at moderate risk (3.3 per cent; CI: 2.6%–4.0%) or at high risk (4.1 per cent; CI: 3.4%–4.9%) (Table 2.46).

There was no significant difference in these proportions for younger children compared with older children or when compared with proportions of non-Aboriginal children. No significant variation in the proportions of children at high risk of clinically significant problems with prosocial behaviour were observed for older and younger Aboriginal children living in areas of differing isolation, for children living in different ATSIC regions, or for children living with Aboriginal and non-Aboriginal carers.



## SUMMARY OF SPECIFIC EMOTIONAL OR BEHAVIOURAL DIFFICULTIES

The most common specific emotional or behavioural difficulties experienced by Aboriginal children were conduct problems followed by peer problems and emotional symptoms.

Nearly one third of Aboriginal children were assessed as being at high risk of clinically significant conduct problems (33.9 per cent; CI: 31.6%–36.1%) compared with 15.8 per cent (CI: 13.7%–17.9%) of non-Aboriginal children. A significantly higher proportion of Aboriginal children were at high risk of clinically significant hyperactivity (15.3 per cent; CI: 13.6%–17.0% compared with 9.7 per cent; CI: 8.0%–11.4%).

Almost one quarter of Aboriginal children (23.4 per cent; CI: 21.4%–25.6%) were at high risk of clinically significant emotional symptoms, the proportions comparable for both 4–11 year-olds and 12–17 year-olds. In contrast, significantly larger proportions of 4–11 year-old children than young people aged 12–17 years were at high risk of clinically significant hyperactivity or peer problems.

The proportions of males at high risk of clinically significant conduct problems and hyperactivity were greater than for females while males and females had similar proportions at high risk of clinically significant emotional problems and peer problems.

The distribution of specific difficulties across regions showed notable variation. Children living in areas of extreme isolation were assessed as having the lowest proportions at high risk of clinically significant conduct problems, peer problems and hyperactivity. Children living in the Perth metropolitan region had the highest proportion at high risk of clinically significant hyperactivity. At the ATSI region level, the Broome ATSI region had consistently low rates of all of the specific difficulties. The Warburton region also had particularly low proportions of children at high risk of clinically significant conduct and peer problems and hyperactivity.

## CARER REPORTS OF THE IMPACT OF EMOTIONAL OR BEHAVIOURAL DIFFICULTIES

When they are present, emotional or behavioural difficulties may impact upon carers, other individuals both within and outside of the immediate family, and on the day-to-day functioning of the child or young person themselves. Carers were asked if they thought their children had trouble with emotions, concentration, behaviour or getting on with people and, if so, were asked questions about the duration of these difficulties, the nature of the distress that they caused and about any social impairment and burden to others.



## MEASURING THE IMPACT OF EMOTIONAL OR BEHAVIOURAL DIFFICULTIES — THE STRENGTHS AND DIFFICULTIES QUESTIONNAIRE (SDQ) IMPACT SCORE

Carers were asked to rate the level of impact that emotional or behavioural difficulties had on the home life, friendships, learning, and leisure activities of their children. These ratings were made in accordance with the scoring instructions for the Impact Score of the Strengths and Difficulties Questionnaire.<sup>2</sup>

Impact questions were asked immediately following the administration of the SDQ items.

Five questions were used to calculate an Impact Score. The first question asked if carers thought their child had trouble with emotions, concentration, behaviour or getting on with people. Rating categories were: 'No', 'Only a little', 'Quite a lot' or 'Very much'. The first two categories were scored zero (0) and the third and fourth categories received scoring values of one (1) and two (2). Children of carers who reported that the child had 'No' difficulties with emotions, concentration, behaviour or getting on with people were assigned an Impact Score of zero (0) and were not asked the remaining four questions. Carers who reported 'Only a little' (0), 'Quite a lot' (1) or 'Very much' (2) to this question were asked the four remaining questions: That is, whether these troubles caused difficulties at home, with friends, in learning and in leisure activities. Carers could choose from one of four response categories: 'No', 'Only a little', 'Quite a lot' or 'Very much'. As before, the first two categories were scored zero (0) and the third and fourth categories received scoring values of one (1) and two (2). Thus, Impact Scores summed across these five questions could range from 0 to 10.

Goodman provides levels and ranges for Impact Scores that are considered to be in the *normal* range (0), *borderline* range (1) and *abnormal* range (2–10).<sup>3</sup> However, for reasons described previously in this chapter, it is more appropriate to identify children in these impact ranges as having *low risk*, *moderate risk* or *high risk of clinically significant functional impairment*.

Of the 5,490 children (CI: 5,020–5,980) aged 4–17 years who were estimated to be at high risk of clinically significant emotional or behavioural difficulties, just over three in ten (30.9 per cent; CI: 26.7%–35.5%) were assessed from carer SDQ responses to be at high risk of clinically significant functional impairment. Another 9.6 per cent (CI: 7.0%–12.5%) were at moderate risk of clinically significant functional impairment (Table 2.47).

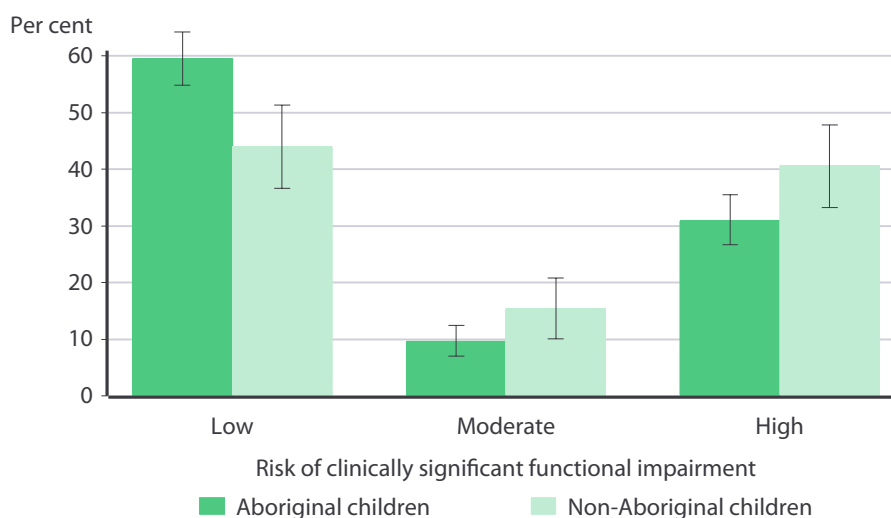
In respect of non-Aboriginal children and young people, about four in ten (40.6 per cent; CI: 33.3%–47.8%) were at high risk of clinically significant functional impairment while another 15.4 per cent (CI: 10.1%–20.8%) were at moderate risk (Table 2.48).

Among all Aboriginal children, 10.4 per cent (CI: 9.0%–11.9%) were at high risk of clinically significant functional impairment, compared with 9.3 per cent (CI: 7.7%–11.0%) of non-Aboriginal children. Although the proportion of non-Aboriginal children at high risk of clinically significant emotional or behavioural difficulties was significantly lower than that for Aboriginal children, a greater proportion of non-Aboriginal children were at high risk of clinically significant functional impairment as a result of these difficulties. As a consequence, the overall proportions of children at high risk of clinically significant functional impairment were about the same.





**FIGURE 2.12:** ABORIGINAL AND NON-ABORIGINAL CHILDREN AGED 4–17 YEARS AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES — RISK OF CLINICALLY SIGNIFICANT FUNCTIONAL IMPAIRMENT



Source: Tables 2.47 and 2.48

### EMOTIONAL OR BEHAVIOURAL DIFFICULTIES IN ABORIGINAL CHILDREN AND YOUNG PEOPLE

The data in this chapter reveal that a higher proportion of Aboriginal children aged 4–17 years were at high risk of clinically significant emotional or behavioural difficulties compared with non-Aboriginal children.

Reser, in his review of Australian Aboriginal mental health,<sup>6</sup> noted that the first professional descriptions of Aboriginal mental health commenced in the 1960s and early 1970s and among these studies there were scant references to the prevalence of mental health disorders in Australian Aboriginal children. Where they do exist, they are principally on accidental samples, or samples of small numbers of children, or both.<sup>7-9</sup> While the sampling and methods of ascertaining mental health status in these early studies prohibit meaningful comparison to the current survey, there is some Australian evidence that suggests that this current estimate may indeed be a reasonable estimate across jurisdictions.

*Continued . . .*





## EMOTIONAL OR BEHAVIOURAL DIFFICULTIES IN ABORIGINAL CHILDREN AND YOUNG PEOPLE *(continued)*

In conducting the child and adolescent component of the Australian National Mental Health Survey, Sawyer *et al* gathered a small sample of 161 Aboriginal children as part of the total random sample.<sup>10-12</sup> Using the parent-reported Child Behavior Checklist,<sup>13</sup> Sawyer *et al* found the prevalence of behaviour problems in the clinical range for Aboriginal children to be 21.0 per cent with higher reported rates of clinically significant externalising problems (25.2 per cent) as opposed to internalising problems (18.2 per cent). These proportions are higher than those reported for non-Aboriginal children — Total Behaviour Problem prevalence for non-Aboriginal children was 14.1 per cent with lower rates of Internalising and Externalising problems – 12.8 per cent and 12.9 per cent respectively.

The New South Wales Health Department collects information on children aged 5–15 years using Goodman's parent-reported Strengths and Difficulties Questionnaire and Computer Assisted Telephone Interviewing. These random samples contain a proportion of carers of Aboriginal children. The Department's version of the SDQ has some modifications to the wording of some questions for Australian usage but otherwise maintains the original scale as published by Goodman.<sup>14</sup> Using these data, it is estimated that 22.9 per cent (CI: 10.4%–35.3%) of Aboriginal children in New South Wales are at high risk of clinically significant emotional or behavioural difficulties.<sup>15</sup>

The National Survey of Child and Adolescent Mental Health and Well Being contained very few Aboriginal children and the instrument (i.e. the Child Behaviour Checklist) is substantially different from the SDQ — although there is good evidence to suggest that the CBCL and SDQ total scores are highly correlated ( $r = 0.87$ ).<sup>16</sup> The New South Wales Health Department data are based upon random samples drawn during Computer Assisted Telephone Interviewing. In addition to having an Aboriginal population restricted to less isolated areas, it is not known how telephone sampling would affect the representativeness of the Aboriginal sample with respect to the population of Aboriginal people living in New South Wales. Finally, neither of these samples were based upon pilot studies that sought to determine the appropriateness of these measures for their use in Aboriginal populations.

While these are significant qualifications to the above observations, they do suggest that, regardless of the instrument used, the prevalence of emotional or behavioural difficulties in Australian Aboriginal children is higher by a factor of about 1.5 to 2.0. There is also the suggestion that externalised problems (such as conduct problems and hyperactivity) are more predominant in Aboriginal children.

It is noteworthy that while the overall proportion of Aboriginal children at high risk of clinically significant emotional or behavioural difficulties was higher than that for non-Aboriginal children, the proportion of these children at high risk of clinically significant functional impairment was lower than that for non-Aboriginal children. In fact, overall the proportions of Aboriginal and non-Aboriginal children at high risk of clinically significant functional impairment were about the same.

*Continued . . .*



## EMOTIONAL OR BEHAVIOURAL DIFFICULTIES IN ABORIGINAL CHILDREN AND YOUNG PEOPLE *(continued)*

There may be several reasons for this. First, carers of Aboriginal children and young people may not be as strict, particularly with younger children and this may reflect the benefits stemming from traditional cultural practices and access to extended kinship and family support that buffer the effects of adverse behaviours and distress in children. Alternately, Aboriginal carers may be sensitive to lesser degrees of social and emotional distress in their children. This could be the result of other sources of stress upon the carer, such as higher levels of poverty, lower levels of social support, and neighbourhood or community circumstances such as violence. Third, a lack of access to, or provision or use of, services in health, education and community services may result in lower levels of reported functional impairment from these agencies back to the carers themselves. It may be that all of these effects are involved. The WAACHS data do not have the ability to provide a definitive answer as to why carer responses to the SDQ show lower proportions of clinically significant functional impairment in Aboriginal children at high risk of clinically significant emotional or behavioural difficulties. However, what the WAACHS has done is to provide a foundation for further research into Aboriginal child social and emotional wellbeing.

Finally, to what extent are the present findings on Australian Aboriginal children and young people comparable to those found in Aboriginal populations elsewhere in the world? Unfortunately, there are very few international comparisons that can be made with data comparably collected on Aboriginal children living elsewhere. A 1992 report noted the paucity of available information on Canadian native children, although what was available indicated significant mental health morbidity.<sup>17</sup> Respondents in the Canadian First Nations and Inuit Regional Health Survey reported that about 17 per cent of their children had behavioural and emotional problems in the past six months.<sup>18</sup> A similar question in the Ontario First Nations Regional Health Survey revealed 22.2 per cent of carers thought their children to be similarly affected.<sup>19</sup>

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## DETAILED TABLES

### EMOTIONAL AND BEHAVIOURAL DIFFICULTIES

**TABLE 2.1:** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
4–11 years				
Low	8 420	(7 960 - 8 880)	61.0	(58.3 - 63.6)
Moderate	1 760	(1 570 - 1 960)	12.8	(11.5 - 14.2)
High	3 620	(3 270 - 3 980)	26.3	(23.9 - 28.8)
<b>Total</b>	<b>13 800</b>	<b>(13 300 - 14 200)</b>	<b>100.0</b>	
12–17 years				
Low	6 380	(5 960 - 6 810)	70.1	(66.5 - 73.4)
Moderate	850	(680 - 1 060)	9.4	(7.5 - 11.5)
High	1 870	(1 590 - 2 170)	20.5	(17.7 - 23.6)
<b>Total</b>	<b>9 100</b>	<b>(8 660 - 9 560)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 2.2:** NON-ABORIGINAL CHILDREN AGED 4–17 YEARS (a) — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
4–11 years				
Low	144 000	(134 000 - 154 000)	70.5	(67.0 - 74.0)
Moderate	25 800	(20 400 - 31 100)	12.6	(10.1 - 15.2)
High	34 500	(28 400 - 40 600)	16.9	(14.0 - 19.8)
12–17 years				
Low	128 000	(118 000 - 138 000)	80.5	(77.1 - 83.9)
Moderate	11 200	(7 600 - 14 800)	7.0	(4.8 - 9.2)
High	19 900	(15 100 - 24 600)	12.5	(9.6 - 15.3)
<b>Total</b>				
Low	272 000	(263 000 - 281 000)	74.9	(72.4 - 77.4)
Moderate	36 900	(30 700 - 43 200)	10.2	(8.4 - 11.9)
High	54 300	(46 900 - 61 700)	15.0	(12.9 - 17.0)

(a) Source: Computer-Assisted Telephone Interview (CATI) survey conducted for the WAACHS by the Survey Research Centre at the University of Western Australia.



**TABLE 2.3: ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE**

Age (years)	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
4	Low	960	(760 - 1 190)	57.6	(49.7 - 65.4)
	Moderate	210	(150 - 290)	12.9	(9.3 - 17.6)
	High	490	(360 - 650)	29.5	(22.3 - 37.1)
	<b>Total</b>	<b>1 660</b>	<b>(1 420 - 1 930)</b>	<b>100.0</b>	
5	Low	1 120	(930 - 1 330)	63.1	(56.0 - 69.6)
	Moderate	220	(160 - 280)	12.2	(9.1 - 15.8)
	High	440	(310 - 590)	24.7	(18.3 - 31.7)
	<b>Total</b>	<b>1 770</b>	<b>(1 540 - 2 010)</b>	<b>100.0</b>	
6	Low	1 100	(960 - 1 250)	62.4	(56.5 - 68.1)
	Moderate	190	(140 - 250)	10.6	(7.8 - 13.7)
	High	480	(360 - 610)	27.0	(21.4 - 32.9)
	<b>Total</b>	<b>1 770</b>	<b>(1 580 - 1 960)</b>	<b>100.0</b>	
7	Low	1 060	(870 - 1 270)	61.3	(54.1 - 68.0)
	Moderate	190	(120 - 280)	11.0	(7.3 - 15.9)
	High	480	(370 - 610)	27.7	(22.0 - 34.5)
	<b>Total</b>	<b>1 730</b>	<b>(1 510 - 1 980)</b>	<b>100.0</b>	
8	Low	980	(820 - 1 170)	56.1	(49.3 - 62.9)
	Moderate	260	(200 - 350)	14.9	(11.1 - 19.3)
	High	510	(390 - 650)	29.0	(22.6 - 35.6)
	<b>Total</b>	<b>1 750</b>	<b>(1 550 - 1 970)</b>	<b>100.0</b>	
9	Low	1 070	(870 - 1 290)	62.9	(55.8 - 69.3)
	Moderate	200	(140 - 290)	12.0	(7.9 - 16.9)
	High	430	(330 - 530)	25.1	(19.6 - 30.9)
	<b>Total</b>	<b>1 700</b>	<b>(1 480 - 1 950)</b>	<b>100.0</b>	
10	Low	1 020	(880 - 1 180)	57.8	(51.8 - 63.5)
	Moderate	270	(200 - 360)	15.4	(11.7 - 20.1)
	High	480	(380 - 590)	26.8	(21.7 - 32.5)
	<b>Total</b>	<b>1 770</b>	<b>(1 580 - 1 970)</b>	<b>100.0</b>	
11	Low	1 110	(950 - 1 290)	66.9	(60.6 - 72.9)
	Moderate	220	(170 - 270)	13.0	(10.2 - 16.3)
	High	330	(240 - 460)	20.0	(14.5 - 26.2)
	<b>Total</b>	<b>1 660</b>	<b>(1 470 - 1 870)</b>	<b>100.0</b>	
12	Low	1 070	(900 - 1 280)	64.5	(56.9 - 71.9)
	Moderate	140	(110 - 200)	8.7	(6.2 - 11.7)
	High	440	(320 - 610)	26.7	(20.0 - 35.1)
	<b>Total</b>	<b>1 660</b>	<b>(1 440 - 1 900)</b>	<b>100.0</b>	
13	Low	1 100	(900 - 1 310)	66.7	(57.9 - 74.6)
	Moderate	130	(70 - 210)	8.0	(4.5 - 13.2)
	High	420	(280 - 590)	25.3	(17.8 - 33.8)
	<b>Total</b>	<b>1 650</b>	<b>(1 420 - 1 910)</b>	<b>100.0</b>	
14	Low	1 100	(940 - 1 270)	68.6	(61.6 - 75.5)
	Moderate	170	(90 - 300)	10.5	(5.7 - 17.1)
	High	330	(250 - 450)	20.9	(15.7 - 27.1)
	<b>Total</b>	<b>1 600</b>	<b>(1 400 - 1 820)</b>	<b>100.0</b>	
15	Low	1 070	(910 - 1 250)	73.4	(65.3 - 80.1)
	Moderate	150	(80 - 260)	10.3	(5.6 - 16.9)
	High	240	(150 - 350)	16.2	(10.9 - 23.6)
	<b>Total</b>	<b>1 450</b>	<b>(1 260 - 1 660)</b>	<b>100.0</b>	

Continued....



**TABLE 2.3 (continued):** ABORIGINAL CHILDREN AGED 4-17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE

Age (years)	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
16	Low	1 070	(920 - 1 240)	75.2	(66.9 - 82.6)
	Moderate	120	(50 - 210)	8.2	(4.1 - 14.1)
	High	240	(150 - 350)	16.6	(11.4 - 23.2)
	<b>Total</b>	<b>1 420</b>	<b>(1 230 - 1 630)</b>	<b>100.0</b>	
17	Low	980	(820 - 1 160)	74.1	(65.5 - 80.9)
	Moderate	140	(70 - 250)	10.6	(5.7 - 19.0)
	High	200	(140 - 300)	15.3	(10.4 - 21.8)
	<b>Total</b>	<b>1 320</b>	<b>(1 130 - 1 540)</b>	<b>100.0</b>	
<b>Total</b>	Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
	Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
	High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 2.4:** ABORIGINAL AND NON-ABORIGINAL CHILDREN AGED 4-17 YEARS — MEAN STRENGTHS AND DIFFICULTIES QUESTIONNAIRE TOTAL SCORE, BY AGE.

Age (years)	Aboriginal children		Non-Aboriginal children (a)	
	Mean SDQ score	95% CI	Mean SDQ score	95% CI
4	12.6	(11.5 - 13.7)	10.5	(9.2 - 11.8)
5	11.8	(10.7 - 12.9)	10.0	(9.0 - 11.1)
6	11.8	(11.0 - 12.7)	9.1	(7.9 - 10.2)
7	12.0	(11.0 - 13.1)	11.0	(9.5 - 12.4)
8	12.5	(11.5 - 13.6)	8.7	(7.3 - 10.2)
9	11.7	(10.8 - 12.6)	10.4	(8.8 - 12.1)
10	11.6	(10.8 - 12.4)	11.8	(10.1 - 13.6)
11	10.9	(10.0 - 11.9)	10.8	(9.2 - 12.3)
12	11.3	(10.1 - 12.5)	9.3	(8.0 - 10.6)
13	11.0	(9.7 - 12.4)	9.3	(8.0 - 10.7)
14	10.8	(9.8 - 11.8)	7.8	(6.6 - 9.0)
15	10.2	(9.3 - 11.2)	8.0	(6.4 - 9.6)
16	9.4	(8.2 - 10.6)	8.1	(6.9 - 9.4)
17	9.7	(8.7 - 10.8)	7.8	(6.6 - 9.0)
<b>Total</b>	<b>11.3</b>	<b>(10.9 - 11.7)</b>	<b>9.5</b>	<b>(9.1 - 9.9)</b>

(a) Source: Computer-Assisted Telephone Interview (CATI) survey conducted for the WAACHS by the Survey Research Centre at the University of Western Australia.



**TABLE 2.5:** ABORIGINAL CHILDREN AGED 4-17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY SEX

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>				
Low	7 170	(6 720 - 7 640)	61.1	(57.9 - 64.3)
Moderate	1 360	(1 190 - 1 540)	11.6	(10.2 - 13.2)
High	3 200	(2 840 - 3 580)	27.3	(24.4 - 30.3)
<b>Total</b>	<b>11 700</b>	<b>(11 300 - 12 200)</b>	<b>100.0</b>	
<b>Females</b>				
Low	7 630	(7 210 - 8 060)	68.3	(65.5 - 71.0)
Moderate	1 250	(1 070 - 1 460)	11.2	(9.6 - 13.0)
High	2 290	(2 030 - 2 590)	20.5	(18.3 - 23.0)
<b>Total</b>	<b>11 200</b>	<b>(10 800 - 11 600)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 2.6:** NON-ABORIGINAL CHILDREN AGED 4-17 YEARS (a) — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY SEX

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>				
Low	136 000	(126 000 - 146 000)	73.2	(69.6 - 76.7)
Moderate	20 500	(15 700 - 25 300)	11.0	(8.5 - 13.5)
High	29 500	(23 800 - 35 200)	15.8	(12.9 - 18.8)
<b>Females</b>				
Low	136 000	(126 000 - 146 000)	76.7	(73.2 - 80.1)
Moderate	16 500	(12 100 - 20 800)	9.3	(6.9 - 11.7)
High	24 800	(19 600 - 30 100)	14.0	(11.2 - 16.9)
<b>Total</b>				
Low	272 000	(263 000 - 281 000)	74.9	(72.4 - 77.4)
Moderate	36 900	(30 700 - 43 200)	10.2	(8.4 - 11.9)
High	54 300	(46 900 - 61 700)	15.0	(12.9 - 17.0)

(a) Source: Computer-Assisted Telephone Interview (CATI) survey conducted for the WAACHS by the Survey Research Centre at the University of Western Australia.





**TABLE 2.7: ABORIGINAL CHILDREN AGED 4-17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP AND SEX**

Sex	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
4–11 years					
Males	Low	4 110	(3 770 - 4 460)	57.1	(53.5 - 60.8)
	Moderate	950	(820 - 1 090)	13.2	(11.5 - 15.1)
	High	2 130	(1 860 - 2 440)	29.6	(26.2 - 33.3)
	<b>Total</b>	<b>7 190</b>	<b>(6 790 - 7 590)</b>	<b>100.0</b>	
Females	Low	4 310	(3 960 - 4 680)	65.2	(61.9 - 68.4)
	Moderate	810	(680 - 960)	12.2	(10.3 - 14.4)
	High	1 490	(1 300 - 1 710)	22.6	(19.9 - 25.6)
	<b>Total</b>	<b>6 610</b>	<b>(6 220 - 7 010)</b>	<b>100.0</b>	
<b>Total</b>	Low	8 420	(7 960 - 8 880)	61.0	(58.3 - 63.6)
	Moderate	1 760	(1 570 - 1 960)	12.8	(11.5 - 14.2)
	High	3 620	(3 270 - 3 980)	26.3	(23.9 - 28.8)
	<b>Total</b>	<b>13 800</b>	<b>(13 300 - 14 200)</b>	<b>100.0</b>	
12–17 years					
Males	Low	3 060	(2 750 - 3 400)	67.5	(62.8 - 71.9)
	Moderate	410	(310 - 540)	9.0	(6.8 - 11.8)
	High	1 070	(870 - 1 300)	23.5	(19.6 - 27.9)
	<b>Total</b>	<b>4 540</b>	<b>(4 180 - 4 920)</b>	<b>100.0</b>	
Females	Low	3 320	(3 040 - 3 620)	72.7	(68.1 - 76.9)
	Moderate	440	(310 - 610)	9.7	(6.9 - 13.1)
	High	800	(630 - 1 010)	17.5	(14.0 - 21.5)
	<b>Total</b>	<b>4 560</b>	<b>(4 230 - 4 910)</b>	<b>100.0</b>	
<b>Total</b>	Low	6 380	(5 960 - 6 810)	70.1	(66.5 - 73.4)
	Moderate	850	(680 - 1 060)	9.4	(7.5 - 11.5)
	High	1 870	(1 590 - 2 170)	20.5	(17.7 - 23.6)
	<b>Total</b>	<b>9 100</b>	<b>(8 660 - 9 560)</b>	<b>100.0</b>	



**TABLE 2.8:** NON-ABORIGINAL CHILDREN AGED 4-17 YEARS (a) — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP AND SEX

Sex	<i>Risk of clinically significant emotional or behavioural difficulties</i>	Number	95% CI	%	95% CI
<b>4–11 years</b>					
Males	Low	72 300	(64 000 - 80 600)	67.9	(63.0 - 72.9)
	Moderate	14 900	(10 800 - 19 000)	14.0	(10.3 - 17.7)
	High	19 200	(14 600 - 23 900)	18.1	(14.0 - 22.1)
Females	Low	71 400	(63 100 - 79 700)	73.2	(68.4 - 78.1)
	Moderate	10 900	(7 300 - 14 400)	11.1	(7.7 - 14.6)
	High	15 200	(11 000 - 19 400)	15.6	(11.6 - 19.6)
<b>Total</b>	Low	144 000	(134 000 - 154 000)	70.5	(67.0 - 74.0)
	Moderate	25 800	(20 400 - 31 100)	12.6	(10.1 - 15.2)
	High	34 500	(28 400 - 40 600)	16.9	(14.0 - 19.8)
<b>12–17 years</b>					
Males	Low	64 000	(56 000 - 71 900)	80.2	(75.3 - 85.0)
	Moderate	5 590	(3 030 - 8 150)	7.0	(3.9 - 10.1)
	High	10 200	(6 800 - 13 700)	12.8	(8.8 - 16.9)
Females	Low	64 300	(56 300 - 72 200)	80.9	(76.0 - 85.7)
	Moderate	5 590	(3 030 - 8 150)	7.0	(3.9 - 10.2)
	High	9 620	(6 300 - 13 000)	12.1	(8.1 - 16.1)
<b>Total</b>	Low	128 000	(118 000 - 138 000)	80.5	(77.1 - 83.9)
	Moderate	11 200	(7 600 - 14 800)	7.0	(4.8 - 9.2)
	High	19 900	(15 100 - 24 600)	12.5	(9.6 - 15.3)
<b>Total</b>					
Males	Low	136 000	(126 000 - 146 000)	73.2	(69.6 - 76.7)
	Moderate	20 500	(15 700 - 25 300)	11.0	(8.5 - 13.5)
	High	29 500	(23 800 - 35 200)	15.8	(12.9 - 18.8)
Females	Low	136 000	(126 000 - 146 000)	76.7	(73.2 - 80.1)
	Moderate	16 500	(12 100 - 20 800)	9.3	(6.9 - 11.7)
	High	24 800	(19 600 - 30 100)	14.0	(11.2 - 16.9)
<b>Total</b>	Low	272 000	(263 000 - 281 000)	74.9	(72.4 - 77.4)
	Moderate	36 900	(30 700 - 43 200)	10.2	(8.4 - 11.9)
	High	54 300	(46 900 - 61 700)	15.0	(12.9 - 17.0)

(a) Source: Computer-Assisted Telephone Interview (CATI) survey conducted for the WAACHS by the Survey Research Centre at the University of Western Australia.



**TABLE 2.9:** ABORIGINAL CHILDREN AGED 4-17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THE PRIMARY CARER WAS THE BIRTH MOTHER AND THE AGE GROUP OF THE CHILD

Age group	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
Not the birth mother					
4–11 years	Low	1 580	(1 340 - 1 850)	62.4	(56.4 - 68.0)
	Moderate	320	(240 - 410)	12.6	(9.6 - 16.1)
	High	630	(490 - 810)	25.0	(20.0 - 30.7)
	<b>Total</b>	<b>2 530</b>	<b>(2 220 - 2 880)</b>	<b>100.0</b>	
12–17 years	Low	1 790	(1 520 - 2 080)	68.1	(61.1 - 74.7)
	Moderate	260	(160 - 410)	9.8	(6.1 - 15.0)
	High	580	(420 - 770)	22.1	(16.5 - 28.5)
	<b>Total</b>	<b>2 620</b>	<b>(2 300 - 2 960)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 370	(3 000 - 3 780)	65.3	(60.5 - 69.9)
	Moderate	580	(450 - 740)	11.2	(8.7 - 14.0)
	High	1 210	(990 - 1 480)	23.5	(19.5 - 27.9)
	<b>Total</b>	<b>5 160</b>	<b>(4 690 - 5 640)</b>	<b>100.0</b>	
Birth mother					
4–11 years	Low	6 840	(6 370 - 7 320)	60.7	(57.6 - 63.7)
	Moderate	1 440	(1 270 - 1 630)	12.8	(11.3 - 14.4)
	High	2 990	(2 660 - 3 330)	26.5	(23.8 - 29.4)
	<b>Total</b>	<b>11 300</b>	<b>(10 800 - 11 800)</b>	<b>100.0</b>	
12–17 years	Low	4 600	(4 240 - 4 970)	70.9	(67.0 - 74.7)
	Moderate	590	(460 - 750)	9.2	(7.1 - 11.5)
	High	1 290	(1 060 - 1 550)	19.9	(16.6 - 23.4)
	<b>Total</b>	<b>6 480</b>	<b>(6 070 - 6 900)</b>	<b>100.0</b>	
<b>Total</b>	Low	11 400	(10 900 - 12 000)	64.4	(61.8 - 67.0)
	Moderate	2 040	(1 820 - 2 280)	11.5	(10.2 - 12.8)
	High	4 280	(3 870 - 4 730)	24.1	(21.8 - 26.6)
	<b>Total</b>	<b>17 700</b>	<b>(17 300 - 18 200)</b>	<b>100.0</b>	

**TABLE 2.10:** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND AGE GROUP

Age group	Level of risk	Number	95% CI	%	95% CI
LORI — None					
4–11 years	Low	2 700	(2 400 - 3 030)	57.8	(52.4 - 62.9)
	Moderate	650	(520 - 790)	13.9	(11.1 - 16.9)
	High	1 320	(1 090 - 1 580)	28.3	(23.7 - 33.5)
	<b>Total</b>	<b>4 670</b>	<b>(4 350 - 5 000)</b>	<b>100.0</b>	
12–17 years	Low	1 980	(1 730 - 2 260)	62.8	(56.6 - 69.0)
	Moderate	360	(240 - 520)	11.3	(7.4 - 15.9)
	High	820	(640 - 1 050)	25.9	(20.4 - 31.9)
	<b>Total</b>	<b>3 160</b>	<b>(2 850 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>	Low	4 680	(4 360 - 5 030)	59.8	(55.6 - 64.0)
	Moderate	1 000	(830 - 1 210)	12.8	(10.5 - 15.4)
	High	2 140	(1 850 - 2 470)	27.4	(23.5 - 31.3)
	<b>Total</b>	<b>7 830</b>	<b>(7 680 - 7 980)</b>	<b>100.0</b>	

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**TABLE 2.10 (continued):** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND AGE GROUP

Age group	Level of risk	Number	95% CI	%	95% CI
LORI — Low					
4–11 years	Low	2 050	(1 780 - 2 360)	59.4	(54.1 - 64.7)
	Moderate	440	(340 - 550)	12.6	(10.1 - 15.6)
	High	970	(790 - 1 180)	28.0	(23.6 - 32.7)
	<b>Total</b>	<b>3 460</b>	<b>(3 090 - 3 860)</b>	<b>100.0</b>	
12–17 years	Low	1 500	(1 260 - 1 770)	70.4	(62.2 - 78.2)
	Moderate	200	(120 - 320)	9.4	(5.8 - 14.7)
	High	430	(290 - 600)	20.2	(14.4 - 27.5)
	<b>Total</b>	<b>2 130</b>	<b>(1 840 - 2 440)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 550	(3 170 - 3 970)	63.6	(58.6 - 68.2)
	Moderate	640	(500 - 800)	11.4	(9.1 - 14.0)
	High	1 400	(1 140 - 1 680)	25.0	(21.0 - 29.2)
	<b>Total</b>	<b>5 590</b>	<b>(5 100 - 6 100)</b>	<b>100.0</b>	
LORI — Moderate					
4–11 years	Low	1 690	(1 380 - 2 040)	60.2	(55.2 - 64.8)
	Moderate	370	(290 - 470)	13.3	(11.0 - 15.8)
	High	740	(580 - 940)	26.5	(21.8 - 31.4)
	<b>Total</b>	<b>2 800</b>	<b>(2 360 - 3 330)</b>	<b>100.0</b>	
12–17 years	Low	1 380	(1 110 - 1 690)	73.7	(65.9 - 80.9)
	Moderate	120	(80 - 180)	6.5	(4.3 - 9.2)
	High	370	(250 - 550)	19.8	(14.2 - 27.2)
	<b>Total</b>	<b>1 870</b>	<b>(1 540 - 2 260)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 070	(2 550 - 3 670)	65.6	(60.4 - 70.6)
	Moderate	490	(390 - 610)	10.6	(8.9 - 12.5)
	High	1 110	(850 - 1 430)	23.8	(19.5 - 28.9)
	<b>Total</b>	<b>4 680</b>	<b>(3 940 - 5 480)</b>	<b>100.0</b>	
LORI — High					
4–11 years	Low	1 030	(750 - 1 420)	64.7	(56.3 - 72.3)
	Moderate	170	(110 - 260)	10.8	(7.9 - 14.5)
	High	390	(250 - 580)	24.5	(17.4 - 33.5)
	<b>Total</b>	<b>1 600</b>	<b>(1 170 - 2 090)</b>	<b>100.0</b>	
12–17 years	Low	680	(480 - 930)	71.1	(61.5 - 79.2)
	Moderate	70	(40 - 120)	7.6	(4.3 - 12.6)
	High	200	(120 - 300)	21.2	(14.2 - 29.7)
	<b>Total</b>	<b>960</b>	<b>(710 - 1 260)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 710	(1 260 - 2 280)	67.1	(59.3 - 74.6)
	Moderate	250	(170 - 340)	9.6	(7.4 - 12.2)
	High	590	(390 - 840)	23.3	(16.9 - 30.6)
	<b>Total</b>	<b>2 550</b>	<b>(1 910 - 3 270)</b>	<b>100.0</b>	
LORI — Extreme					
4–11 years	Low	940	(670 - 1 260)	74.1	(66.5 - 80.3)
	Moderate	130	(80 - 200)	10.4	(7.1 - 14.7)
	High	200	(110 - 330)	15.6	(10.4 - 22.0)
	<b>Total</b>	<b>1 270</b>	<b>(920 - 1 740)</b>	<b>100.0</b>	
12–17 years	Low	840	(600 - 1 130)	85.2	(76.6 - 91.1)
	Moderate	100	(40 - 200)	10.2	(4.7 - 18.1)
	High	50	(20 - 90)	4.6	(2.0 - 8.7)
	<b>Total</b>	<b>990</b>	<b>(730 - 1 320)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 780	(1 290 - 2 350)	78.9	(72.6 - 84.7)
	Moderate	230	(140 - 350)	10.3	(7.2 - 14.1)
	High	240	(140 - 380)	10.8	(7.4 - 15.0)
	<b>Total</b>	<b>2 260</b>	<b>(1 670 - 3 020)</b>	<b>100.0</b>	



**TABLE 2.11:** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND SEX

Sex	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>LORI — None</b>					
Males	Low	2 230	(1 950 - 2 530)	56.3	(50.1 - 62.0)
	Moderate	550	(440 - 680)	14.0	(11.1 - 17.2)
	High	1 180	(940 - 1 440)	29.7	(24.4 - 35.8)
	<b>Total</b>	<b>3 960</b>	<b>(3 670 - 4 260)</b>	<b>100.0</b>	
Females	Low	2 460	(2 190 - 2 750)	63.5	(57.9 - 68.7)
	Moderate	450	(320 - 620)	11.6	(8.3 - 15.7)
	High	970	(780 - 1 170)	25.0	(20.4 - 29.7)
	<b>Total</b>	<b>3 870</b>	<b>(3 580 - 4 180)</b>	<b>100.0</b>	
<b>Total</b>	Low	4 680	(4 360 - 5 030)	59.8	(55.6 - 64.0)
	Moderate	1 000	(830 - 1 210)	12.8	(10.5 - 15.4)
	High	2 140	(1 850 - 2 470)	27.4	(23.5 - 31.3)
	<b>Total</b>	<b>7 830</b>	<b>(7 680 - 7 980)</b>	<b>100.0</b>	
<b>LORI — Low</b>					
Males	Low	1 770	(1 510 - 2 060)	60.3	(53.8 - 66.2)
	Moderate	310	(230 - 400)	10.5	(8.0 - 13.7)
	High	860	(660 - 1 090)	29.2	(23.3 - 35.4)
	<b>Total</b>	<b>2 940</b>	<b>(2 600 - 3 300)</b>	<b>100.0</b>	
Females	Low	1 780	(1 540 - 2 050)	67.3	(61.2 - 72.7)
	Moderate	330	(230 - 460)	12.4	(8.9 - 16.9)
	High	540	(420 - 690)	20.3	(16.4 - 25.0)
	<b>Total</b>	<b>2 650</b>	<b>(2 340 - 2 980)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 550	(3 170 - 3 970)	63.6	(58.6 - 68.2)
	Moderate	640	(500 - 800)	11.4	(9.1 - 14.0)
	High	1 400	(1 140 - 1 680)	25.0	(21.0 - 29.2)
	<b>Total</b>	<b>5 590</b>	<b>(5 100 - 6 100)</b>	<b>100.0</b>	
<b>LORI — Moderate</b>					
Males	Low	1 460	(1 140 - 1 830)	62.4	(54.3 - 69.6)
	Moderate	220	(160 - 290)	9.5	(7.2 - 12.2)
	High	660	(490 - 880)	28.1	(21.9 - 34.9)
	<b>Total</b>	<b>2 340</b>	<b>(1 930 - 2 810)</b>	<b>100.0</b>	
Females	Low	1 610	(1 320 - 1 940)	68.8	(63.4 - 73.6)
	Moderate	270	(210 - 350)	11.6	(9.2 - 14.4)
	High	460	(330 - 620)	19.6	(15.0 - 25.1)
	<b>Total</b>	<b>2 330</b>	<b>(1 950 - 2 760)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 070	(2 550 - 3 670)	65.6	(60.4 - 70.6)
	Moderate	490	(390 - 610)	10.6	(8.9 - 12.5)
	High	1 110	(850 - 1 430)	23.8	(19.5 - 28.9)
	<b>Total</b>	<b>4 680</b>	<b>(3 940 - 5 480)</b>	<b>100.0</b>	

Continued . . .



**TABLE 2.11 (continued):** ABORIGINAL CHILDREN AGED 4-17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND SEX

Sex	<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>LORI — High</b>					
Males	Low	820	(580 - 1 110)	63.6	(53.5 - 72.3)
	Moderate	120	(70 - 190)	9.3	(5.9 - 13.8)
	High	350	(240 - 510)	27.0	(19.6 - 35.2)
	<b>Total</b>	<b>1 290</b>	<b>(970 - 1 680)</b>	<b>100.0</b>	
Females	Low	890	(640 - 1 220)	70.6	(62.2 - 78.1)
	Moderate	130	(80 - 180)	10.0	(7.1 - 13.2)
	High	240	(150 - 360)	19.4	(13.6 - 26.8)
	<b>Total</b>	<b>1 260</b>	<b>(940 - 1 670)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 710	(1 260 - 2 280)	67.1	(59.3 - 74.6)
	Moderate	250	(170 - 340)	9.6	(7.4 - 12.2)
	High	590	(390 - 840)	23.3	(16.9 - 30.6)
	<b>Total</b>	<b>2 550</b>	<b>(1 910 - 3 270)</b>	<b>100.0</b>	
<b>LORI — Extreme</b>					
Males	Low	880	(640 - 1 170)	74.2	(64.9 - 82.6)
	Moderate	150	(90 - 260)	12.8	(8.2 - 18.8)
	High	160	(80 - 270)	13.0	(7.8 - 20.1)
	<b>Total</b>	<b>1 190</b>	<b>(860 - 1 590)</b>	<b>100.0</b>	
Females	Low	900	(650 - 1 200)	84.3	(76.4 - 90.5)
	Moderate	80	(40 - 140)	7.4	(4.2 - 11.6)
	High	90	(40 - 170)	8.3	(4.0 - 14.7)
	<b>Total</b>	<b>1 060</b>	<b>(770 - 1 430)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 780	(1 290 - 2 350)	78.9	(72.6 - 84.7)
	Moderate	230	(140 - 350)	10.3	(7.2 - 14.1)
	High	240	(140 - 380)	10.8	(7.4 - 15.0)
	<b>Total</b>	<b>2 260</b>	<b>(1 670 - 3 020)</b>	<b>100.0</b>	



**TABLE 2.12:** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY ATSIC REGION

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Perth ATSIC region</b>				
Low	4 930	(4 600 - 5 280)	59.7	(55.6 - 63.6)
Moderate	1 060	(880 - 1 270)	12.9	(10.7 - 15.3)
High	2 270	(1 960 - 2 590)	27.4	(23.8 - 31.3)
<b>Total</b>	<b>8 260</b>	<b>(8 150 - 8 370)</b>	<b>100.0</b>	
<b>Narrogin ATSIC region</b>				
Low	2 130	(1 860 - 2 430)	67.4	(61.1 - 73.1)
Moderate	310	(220 - 430)	9.8	(7.2 - 12.8)
High	720	(540 - 930)	22.7	(18.1 - 28.2)
<b>Total</b>	<b>3 150</b>	<b>(2 780 - 3 540)</b>	<b>100.0</b>	
<b>Kalgoorlie ATSIC region</b>				
Low	740	(480 - 1 130)	63.6	(50.9 - 75.1)
Moderate	150	(90 - 250)	12.9	(8.8 - 18.6)
High	270	(150 - 460)	23.5	(14.4 - 33.4)
<b>Total</b>	<b>1 170</b>	<b>(780 - 1 660)</b>	<b>100.0</b>	
<b>Geraldton ATSIC region</b>				
Low	1 350	(1 040 - 1 720)	59.8	(52.6 - 66.5)
Moderate	330	(220 - 460)	14.5	(10.6 - 19.0)
High	580	(410 - 800)	25.6	(19.6 - 32.6)
<b>Total</b>	<b>2 260</b>	<b>(1 800 - 2 780)</b>	<b>100.0</b>	
<b>Broome ATSIC region</b>				
Low	980	(640 - 1 450)	81.8	(76.0 - 87.1)
Moderate	60	(30 - 110)	4.7	(2.6 - 7.8)
High	160	(100 - 260)	13.6	(9.2 - 18.6)
<b>Total</b>	<b>1 200</b>	<b>(770 - 1 760)</b>	<b>100.0</b>	
<b>South Hedland ATSIC region</b>				
Low	1 260	(870 - 1 750)	61.2	(50.1 - 70.9)
Moderate	210	(130 - 310)	10.2	(7.0 - 13.8)
High	590	(340 - 920)	28.6	(19.0 - 39.0)
<b>Total</b>	<b>2 060</b>	<b>(1 460 - 2 750)</b>	<b>100.0</b>	
<b>Derby ATSIC region</b>				
Low	1 020	(670 - 1 530)	67.4	(55.4 - 77.5)
Moderate	150	(80 - 260)	10.2	(6.3 - 15.2)
High	340	(200 - 570)	22.4	(14.6 - 32.4)
<b>Total</b>	<b>1 520</b>	<b>(1 010 - 2 170)</b>	<b>100.0</b>	
<b>Kununurra ATSIC region</b>				
Low	1 290	(880 - 1 770)	69.5	(62.4 - 75.7)
Moderate	190	(130 - 280)	10.5	(8.0 - 13.4)
High	370	(250 - 540)	20.0	(15.4 - 25.1)
<b>Total</b>	<b>1 850</b>	<b>(1 310 - 2 520)</b>	<b>100.0</b>	
<b>Warburton ATSIC region</b>				
Low	1 100	(740 - 1 580)	76.5	(68.9 - 82.9)
Moderate	150	(90 - 230)	10.2	(7.0 - 14.2)
High	190	(90 - 320)	13.3	(8.2 - 21.0)
<b>Total</b>	<b>1 430</b>	<b>(960 - 2 000)</b>	<b>100.0</b>	
<b>Western Australia</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	





**TABLE 2.13:** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY CATEGORIES OF SOCIO-ECONOMIC DISADVANTAGE

<i>Categories of Socio-economic disadvantage</i>	<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Bottom 5%	Low	4 050	(3 420 - 4 760)	67.7	(62.3 - 72.7)
	Moderate	680	(530 - 850)	11.3	(9.3 - 13.7)
	High	1 250	(960 - 1 630)	21.0	(16.8 - 25.9)
	<b>Total</b>	<b>5 980</b>	<b>(5 140 - 6 910)</b>	<b>100.0</b>	
5%–10%	Low	1 920	(1 490 - 2 400)	64.3	(59.4 - 69.3)
	Moderate	310	(230 - 420)	10.6	(8.0 - 13.5)
	High	750	(560 - 970)	25.1	(20.5 - 29.9)
	<b>Total</b>	<b>2 980</b>	<b>(2 380 - 3 620)</b>	<b>100.0</b>	
10%–25%	Low	3 590	(3 040 - 4 180)	62.4	(57.9 - 66.6)
	Moderate	690	(570 - 840)	12.1	(10.2 - 14.1)
	High	1 470	(1 180 - 1 810)	25.5	(21.6 - 29.8)
	<b>Total</b>	<b>5 750</b>	<b>(4 960 - 6 580)</b>	<b>100.0</b>	
25%–50%	Low	3 790	(3 250 - 4 410)	62.8	(58.0 - 67.4)
	Moderate	700	(540 - 890)	11.6	(9.3 - 14.3)
	High	1 550	(1 240 - 1 920)	25.6	(21.7 - 30.0)
	<b>Total</b>	<b>6 040</b>	<b>(5 240 - 6 910)</b>	<b>100.0</b>	
Top 50%	Low	1 460	(1 000 - 2 060)	67.3	(57.9 - 76.3)
	Moderate	230	(120 - 400)	10.5	(5.6 - 17.0)
	High	480	(290 - 750)	22.2	(14.6 - 31.0)
	<b>Total</b>	<b>2 160</b>	<b>(1 550 - 2 930)</b>	<b>100.0</b>	
<b>Total</b>	Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
	Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
	High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 2.14:** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THE PRIMARY CARER WAS THE BIRTH MOTHER AND OF ABORIGINAL DESCENT

Aboriginal status of primary carer	Level of risk	Number	95% CI	%	95% CI
<b>Not the birth mother</b>					
Aboriginal	Low	2 970	(2 610 - 3 350)	65.0	(60.1 - 69.8)
	Moderate	530	(400 - 690)	11.6	(8.9 - 14.7)
	High	1 070	(870 - 1 310)	23.4	(19.3 - 27.9)
	<b>Total</b>	<b>4 560</b>	<b>(4 130 - 5 030)</b>	<b>100.0</b>	
Non-Aboriginal	Low	370	(220 - 590)	66.4	(46.8 - 81.4)
	Moderate	50	(20 - 100)	8.8	(3.7 - 15.8)
	High	140	(50 - 290)	24.8	(10.7 - 44.9)
	<b>Total</b>	<b>560</b>	<b>(350 - 850)</b>	<b>100.0</b>	
Not stated	Low	30	(0 - 90)	80.0	(2.5 - 100.0)
	Moderate	0	(0 - 60)	0.0	(0.0 - 84.2)
	High	10	(0 - 20)	20.0	(0.0 - 97.5)
	<b>Total</b>	<b>30</b>	<b>(10 - 100)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 370	(3 000 - 3 780)	65.3	(60.5 - 69.9)
	Moderate	580	(450 - 740)	11.2	(8.7 - 14.0)
	High	1 210	(990 - 1 480)	23.5	(19.5 - 27.9)
	<b>Total</b>	<b>5 160</b>	<b>(4 690 - 5 640)</b>	<b>100.0</b>	
<b>Birth mother</b>					
Aboriginal	Low	9 860	(9 300 - 10 400)	64.8	(62.0 - 67.5)
	Moderate	1 760	(1 570 - 1 980)	11.6	(10.3 - 13.0)
	High	3 590	(3 190 - 4 010)	23.6	(21.1 - 26.2)
	<b>Total</b>	<b>15 200</b>	<b>(14 600 - 15 800)</b>	<b>100.0</b>	
Non-Aboriginal	Low	1 490	(1 200 - 1 850)	62.3	(54.1 - 69.8)
	Moderate	260	(170 - 390)	11.1	(7.2 - 16.0)
	High	640	(460 - 850)	26.6	(19.7 - 34.1)
	<b>Total</b>	<b>2 400</b>	<b>(2 010 - 2 820)</b>	<b>100.0</b>	
Not stated	Low	80	(20 - 180)	57.4	(25.1 - 80.8)
	Moderate	10	(0 - 20)	4.9	(0.7 - 18.2)
	High	50	(30 - 90)	37.7	(15.2 - 64.6)
	<b>Total</b>	<b>140</b>	<b>(70 - 240)</b>	<b>100.0</b>	
<b>Total</b>	Low	11 400	(10 900 - 12 000)	64.4	(61.8 - 67.0)
	Moderate	2 040	(1 820 - 2 280)	11.5	(10.2 - 12.8)
	High	4 280	(3 870 - 4 730)	24.1	(21.8 - 26.6)
	<b>Total</b>	<b>17 700</b>	<b>(17 300 - 18 200)</b>	<b>100.0</b>	
<b>All primary carers</b>					
Aboriginal	Low	12 800	(12 300 - 13 400)	64.9	(62.4 - 67.3)
	Moderate	2 290	(2 060 - 2 550)	11.6	(10.4 - 12.9)
	High	4 660	(4 210 - 5 130)	23.5	(21.4 - 25.9)
	<b>Total</b>	<b>19 800</b>	<b>(19 300 - 20 200)</b>	<b>100.0</b>	
Non-Aboriginal	Low	1 860	(1 530 - 2 260)	63.1	(55.8 - 70.0)
	Moderate	310	(210 - 450)	10.6	(7.3 - 14.7)
	High	780	(570 - 1 030)	26.3	(20.0 - 33.2)
	<b>Total</b>	<b>2 960</b>	<b>(2 520 - 3 450)</b>	<b>100.0</b>	
Not stated	Low	110	(40 - 210)	62.1	(38.4 - 83.7)
	Moderate	10	(0 - 20)	3.9	(0.5 - 13.7)
	High	60	(30 - 90)	34.1	(13.9 - 54.9)
	<b>Total</b>	<b>170</b>	<b>(100 - 290)</b>	<b>100.0</b>	
<b>Total</b>	Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
	Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
	High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 2.15: ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, ASSOCIATED WITH SPECIFIC PROBLEM BEHAVIOURS**

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Eating problems</b>				
Low	770	(580 - 980)	5.2	(4.0 - 6.7)
Moderate	340	(230 - 480)	12.9	(9.1 - 17.9)
High	1 040	(850 - 1 280)	19.0	(15.6 - 22.7)
<b>Sleeping problems</b>				
Low	430	(290 - 590)	2.9	(2.0 - 4.0)
Moderate	330	(210 - 480)	12.6	(8.3 - 17.8)
High	1 060	(850 - 1 300)	19.3	(15.8 - 23.0)
<b>Nightmares</b>				
Low	810	(650 - 1 000)	5.5	(4.4 - 6.7)
Moderate	280	(190 - 410)	10.9	(7.4 - 15.4)
High	1 250	(1 020 - 1 520)	22.8	(19.1 - 26.8)
<b>Bedwetting</b>				
Low	1 460	(1 220 - 1 710)	9.8	(8.4 - 11.6)
Moderate	390	(310 - 480)	14.8	(11.8 - 18.1)
High	1 140	(960 - 1 350)	20.7	(17.6 - 24.0)
<b>Running away from home</b>				
Low	300	(230 - 390)	2.0	(1.5 - 2.6)
Moderate	200	(130 - 320)	7.8	(5.0 - 11.8)
High	570	(430 - 750)	10.5	(7.9 - 13.5)
<b>Alcohol consumption</b>				
Low	1 290	(1 090 - 1 520)	8.7	(7.4 - 10.3)
Moderate	290	(180 - 450)	11.0	(7.1 - 16.3)
High	720	(540 - 940)	13.1	(10.1 - 16.6)
<b>Other drugs</b>				
Low	600	(440 - 790)	4.0	(3.0 - 5.4)
Moderate	120	(50 - 240)	4.7	(2.2 - 9.6)
High	520	(380 - 700)	9.5	(7.1 - 12.5)
<b>Talked about death or suicide</b>				
Low	1 030	(810 - 1 280)	6.9	(5.5 - 8.6)
Moderate	250	(150 - 410)	9.6	(5.6 - 14.8)
High	1 060	(840 - 1 320)	19.3	(15.6 - 23.4)



## SPECIFIC EMOTIONAL OR BEHAVIOURAL DIFFICULTIES

**TABLE 2.16:** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT SPECIFIC EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY SPECIFIC DIFFICULTY

<i>Risk of clinically significant specific difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Emotional symptoms</b>				
Low	15 000	(14 400 - 15 500)	65.4	(63.1 - 67.7)
Moderate	2 560	(2 270 - 2 880)	11.2	(9.9 - 12.6)
High	5 370	(4 910 - 5 860)	23.4	(21.4 - 25.6)
<b>Conduct problems</b>				
Low	12 400	(11 900 - 13 000)	54.2	(51.8 - 56.6)
Moderate	2 730	(2 440 - 3 040)	11.9	(10.6 - 13.3)
High	7 750	(7 250 - 8 270)	33.9	(31.6 - 36.1)
<b>Hyperactivity</b>				
Low	17 300	(16 800 - 17 700)	75.4	(73.4 - 77.4)
Moderate	2 130	(1 870 - 2 420)	9.3	(8.2 - 10.6)
High	3 490	(3 120 - 3 890)	15.3	(13.6 - 17.0)
<b>Peer problems</b>				
Low	13 600	(13 100 - 14 200)	59.5	(57.1 - 61.8)
Moderate	2 910	(2 600 - 3 230)	12.7	(11.3 - 14.1)
High	6 380	(5 890 - 6 880)	27.8	(25.7 - 30.0)
<b>Prosocial behaviour</b>				
Low	21 200	(21 000 - 21 400)	92.6	(91.5 - 93.6)
Moderate	750	(600 - 930)	3.3	(2.6 - 4.0)
High	940	(780 - 1 110)	4.1	(3.4 - 4.9)

**TABLE 2.17:** NON-ABORIGINAL CHILDREN AGED 4–17 YEARS (a) — RISK OF CLINICALLY SIGNIFICANT SPECIFIC EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY SPECIFIC DIFFICULTY

<i>Risk of clinically significant specific difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Emotional symptoms</b>				
Low	245 000	(236 000 - 255 000)	67.5	(64.8 - 70.2)
Moderate	40 000	(33 500 - 46 600)	11.0	(9.2 - 12.8)
High	77 900	(69 400 - 86 500)	21.5	(19.1 - 23.8)
<b>Conduct problems</b>				
Low	263 000	(254 000 - 273 000)	72.5	(69.9 - 75.0)
Moderate	42 500	(35 800 - 49 200)	11.7	(9.9 - 13.6)
High	57 400	(49 800 - 65 000)	15.8	(13.7 - 17.9)
<b>Hyperactivity</b>				
Low	301 000	(293 000 - 309 000)	82.9	(80.7 - 85.1)
Moderate	27 000	(21 500 - 32 500)	7.4	(5.9 - 8.9)
High	35 100	(28 900 - 41 200)	9.7	(8.0 - 11.4)
<b>Peer problems</b>				
Low	236 000	(226 000 - 246 000)	65.0	(62.2 - 67.7)
Moderate	41 000	(34 400 - 47 600)	11.3	(9.5 - 13.1)
High	86 300	(77 400 - 95 200)	23.8	(21.3 - 26.2)
<b>Prosocial behaviour</b>				
Low	345 000	(341 000 - 350 000)	95.0	(93.8 - 96.3)
Moderate	7 450	(4 500 - 10 400)	2.1	(1.2 - 2.9)
High	10 600	(7 100 - 14 100)	2.9	(1.9 - 3.9)

(a) Source: Computer-Assisted Telephone Interview (CATI) survey conducted for the WAACHS by the Survey Research Centre at the University of Western Australia.



## EMOTIONAL SYMPTOMS

**TABLE 2.18:** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL SYMPTOMS, BY AGE GROUP

<i>Risk of clinically significant emotional symptoms</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
4–11 years				
Low	8 910	(8 450 - 9 370)	64.6	(61.8 - 67.3)
Moderate	1 550	(1 330 - 1 800)	11.3	(9.7 - 13.0)
High	3 340	(2 990 - 3 720)	24.2	(21.8 - 26.7)
<b>Total</b>	<b>13 800</b>	<b>(13 300 - 14 200)</b>	<b>100.0</b>	
12–17 years				
Low	6 070	(5 640 - 6 510)	66.7	(63.3 - 69.9)
Moderate	1 010	(830 - 1 210)	11.0	(9.1 - 13.3)
High	2 030	(1 770 - 2 320)	22.3	(19.6 - 25.3)
<b>Total</b>	<b>9 100</b>	<b>(8 660 - 9 560)</b>	<b>100.0</b>	
<b>Total</b>				
Low	15 000	(14 400 - 15 500)	65.4	(63.1 - 67.7)
Moderate	2 560	(2 270 - 2 880)	11.2	(9.9 - 12.6)
High	5 370	(4 910 - 5 860)	23.4	(21.4 - 25.6)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 2.19:** NON-ABORIGINAL CHILDREN AGED 4–17 YEARS (a) — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL SYMPTOMS, BY AGE GROUP

<i>Risk of clinically significant emotional symptoms</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
4–11 years				
Low	132 000	(122 000 - 142 000)	64.7	(61.0 - 68.3)
Moderate	23 300	(18 200 - 28 400)	11.4	(9.0 - 13.8)
High	48 700	(41 600 - 55 800)	23.9	(20.6 - 27.2)
12–17 years				
Low	113 000	(104 000 - 123 000)	71.2	(67.2 - 75.1)
Moderate	16 800	(12 400 - 21 100)	10.5	(7.9 - 13.2)
High	29 200	(23 500 - 34 800)	18.3	(15.0 - 21.7)
<b>Total</b>				
Low	245 000	(236 000 - 255 000)	67.5	(64.8 - 70.2)
Moderate	40 000	(33 500 - 46 600)	11.0	(9.2 - 12.8)
High	77 900	(69 400 - 86 500)	21.5	(19.1 - 23.8)

(a) Source: Computer-Assisted Telephone Interview (CATI) survey conducted for the WAACHS by the Survey Research Centre at the University of Western Australia.



**TABLE 2.20: ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL SYMPTOMS, BY AGE**

Age (years)	Risk of clinically significant emotional symptoms	Number	95% CI	%	95% CI
4	Low	1 050	(850 - 1 270)	63.0	(54.8 - 70.8)
	Moderate	190	(130 - 250)	11.2	(7.9 - 15.5)
	High	430	(300 - 590)	25.8	(19.0 - 33.7)
	<b>Total</b>	<b>1 660</b>	<b>(1 420 - 1 930)</b>	<b>100.0</b>	
5	Low	1 170	(1 000 - 1 360)	66.2	(59.2 - 72.9)
	Moderate	200	(140 - 280)	11.3	(8.1 - 15.3)
	High	400	(260 - 560)	22.4	(16.0 - 30.3)
	<b>Total</b>	<b>1 770</b>	<b>(1 540 - 2 010)</b>	<b>100.0</b>	
6	Low	1 170	(1 030 - 1 330)	66.4	(60.1 - 72.3)
	Moderate	190	(110 - 310)	10.6	(6.4 - 17.1)
	High	410	(320 - 510)	23.0	(18.3 - 28.2)
	<b>Total</b>	<b>1 770</b>	<b>(1 580 - 1 960)</b>	<b>100.0</b>	
7	Low	1 100	(940 - 1 280)	63.7	(55.5 - 70.8)
	Moderate	170	(90 - 280)	9.8	(5.6 - 15.7)
	High	460	(320 - 640)	26.5	(19.7 - 34.7)
	<b>Total</b>	<b>1 730</b>	<b>(1 510 - 1 980)</b>	<b>100.0</b>	
8	Low	1 100	(940 - 1 290)	63.0	(56.2 - 69.7)
	Moderate	180	(130 - 250)	10.3	(7.1 - 14.0)
	High	470	(350 - 620)	26.6	(20.7 - 33.7)
	<b>Total</b>	<b>1 750</b>	<b>(1 550 - 1 970)</b>	<b>100.0</b>	
9	Low	1 090	(900 - 1 310)	64.4	(57.5 - 71.3)
	Moderate	190	(120 - 280)	11.3	(7.4 - 16.3)
	High	410	(320 - 540)	24.3	(18.7 - 30.4)
	<b>Total</b>	<b>1 700</b>	<b>(1 480 - 1 950)</b>	<b>100.0</b>	
10	Low	1 080	(950 - 1 230)	61.3	(55.6 - 66.7)
	Moderate	240	(170 - 330)	13.5	(9.8 - 18.1)
	High	450	(350 - 570)	25.3	(20.4 - 30.8)
	<b>Total</b>	<b>1 770</b>	<b>(1 580 - 1 970)</b>	<b>100.0</b>	
11	Low	1 140	(970 - 1 330)	68.5	(62.1 - 74.7)
	Moderate	200	(150 - 270)	12.0	(8.7 - 15.9)
	High	320	(230 - 440)	19.5	(14.1 - 25.4)
	<b>Total</b>	<b>1 660</b>	<b>(1 470 - 1 870)</b>	<b>100.0</b>	
12	Low	1 080	(900 - 1 280)	64.8	(56.9 - 71.7)
	Moderate	200	(140 - 270)	12.2	(8.7 - 16.7)
	High	380	(270 - 530)	23.0	(16.7 - 30.5)
	<b>Total</b>	<b>1 660</b>	<b>(1 440 - 1 900)</b>	<b>100.0</b>	
13	Low	1 100	(900 - 1 340)	66.9	(58.4 - 74.2)
	Moderate	190	(100 - 310)	11.3	(6.0 - 18.1)
	High	360	(260 - 480)	21.8	(15.8 - 28.4)
	<b>Total</b>	<b>1 650</b>	<b>(1 420 - 1 910)</b>	<b>100.0</b>	
14	Low	1 070	(910 - 1 260)	67.1	(60.1 - 73.4)
	Moderate	170	(110 - 250)	10.7	(7.1 - 14.8)
	High	350	(250 - 470)	22.2	(16.5 - 28.5)
	<b>Total</b>	<b>1 600</b>	<b>(1 400 - 1 820)</b>	<b>100.0</b>	
15	Low	940	(790 - 1 110)	64.4	(56.4 - 71.8)
	Moderate	160	(90 - 260)	10.8	(5.9 - 17.2)
	High	360	(260 - 490)	24.8	(18.4 - 32.6)
	<b>Total</b>	<b>1 450</b>	<b>(1 260 - 1 660)</b>	<b>100.0</b>	

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**TABLE 2.20 (continued):** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL SYMPTOMS, BY AGE

Age (years)	Risk of clinically significant emotional symptoms	Number	95% CI	%	95% CI
16	Low	980	(840 - 1 140)	68.9	(61.2 - 75.9)
	Moderate	140	(80 - 230)	9.7	(5.6 - 15.8)
	High	300	(200 - 430)	21.4	(15.1 - 28.8)
	<b>Total</b>	<b>1 420</b>	<b>(1 230 - 1 630)</b>	<b>100.0</b>	
17	Low	900	(750 - 1 090)	68.4	(60.1 - 76.3)
	Moderate	150	(100 - 220)	11.5	(7.6 - 16.3)
	High	270	(170 - 390)	20.1	(13.6 - 28.1)
	<b>Total</b>	<b>1 320</b>	<b>(1 130 - 1 540)</b>	<b>100.0</b>	
<b>Total</b>	Low	15 000	(14 400 - 15 500)	65.4	(63.1 - 67.7)
	Moderate	2 560	(2 270 - 2 880)	11.2	(9.9 - 12.6)
	High	5 370	(4 910 - 5 860)	23.4	(21.4 - 25.6)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	





**TABLE 2.21: ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL SYMPTOMS, BY AGE GROUP AND SEX**

Sex	Risk of clinically significant emotional symptoms	Number	95% CI	%	95% CI
<b>4–11 years</b>					
Males	Low	4 630	(4 300 - 4 980)	64.4	(60.8 - 68.1)
	Moderate	770	(610 - 970)	10.7	(8.5 - 13.3)
	High	1 790	(1 540 - 2 070)	24.9	(21.7 - 28.3)
	<b>Total</b>	<b>7 190</b>	<b>(6 790 - 7 590)</b>	<b>100.0</b>	
Females	Low	4 280	(3 940 - 4 630)	64.7	(61.1 - 68.1)
	Moderate	780	(660 - 930)	11.9	(10.0 - 14.0)
	High	1 550	(1 330 - 1 790)	23.5	(20.5 - 26.7)
	<b>Total</b>	<b>6 610</b>	<b>(6 220 - 7 010)</b>	<b>100.0</b>	
<b>Total</b>	Low	8 910	(8 450 - 9 370)	64.6	(61.8 - 67.3)
	Moderate	1 550	(1 330 - 1 800)	11.3	(9.7 - 13.0)
	High	3 340	(2 990 - 3 720)	24.2	(21.8 - 26.7)
	<b>Total</b>	<b>13 800</b>	<b>(13 300 - 14 200)</b>	<b>100.0</b>	
<b>12–17 years</b>					
Males	Low	3 180	(2 840 - 3 550)	70.2	(65.6 - 74.5)
	Moderate	420	(320 - 560)	9.4	(6.9 - 12.3)
	High	930	(760 - 1 120)	20.5	(16.7 - 24.5)
	<b>Total</b>	<b>4 540</b>	<b>(4 180 - 4 920)</b>	<b>100.0</b>	
Females	Low	2 890	(2 620 - 3 170)	63.2	(58.6 - 67.7)
	Moderate	580	(450 - 730)	12.7	(10.0 - 15.7)
	High	1 100	(900 - 1 330)	24.0	(20.1 - 28.4)
	<b>Total</b>	<b>4 560</b>	<b>(4 230 - 4 910)</b>	<b>100.0</b>	
<b>Total</b>	Low	6 070	(5 640 - 6 510)	66.7	(63.3 - 69.9)
	Moderate	1 010	(830 - 1 210)	11.0	(9.1 - 13.3)
	High	2 030	(1 770 - 2 320)	22.3	(19.6 - 25.3)
	<b>Total</b>	<b>9 100</b>	<b>(8 660 - 9 560)</b>	<b>100.0</b>	
<b>Total</b>					
Males	Low	7 820	(7 360 - 8 290)	66.7	(63.5 - 69.8)
	Moderate	1 190	(1 000 - 1 430)	10.2	(8.5 - 12.1)
	High	2 720	(2 390 - 3 070)	23.2	(20.5 - 26.0)
	<b>Total</b>	<b>11 700</b>	<b>(11 300 - 12 200)</b>	<b>100.0</b>	
Females	Low	7 160	(6 760 - 7 590)	64.1	(61.1 - 66.9)
	Moderate	1 360	(1 170 - 1 570)	12.2	(10.6 - 14.0)
	High	2 650	(2 360 - 2 970)	23.7	(21.2 - 26.3)
	<b>Total</b>	<b>11 200</b>	<b>(10 800 - 11 600)</b>	<b>100.0</b>	
<b>Total</b>	Low	15 000	(14 400 - 15 500)	65.4	(63.1 - 67.7)
	Moderate	2 560	(2 270 - 2 880)	11.2	(9.9 - 12.6)
	High	5 370	(4 910 - 5 860)	23.4	(21.4 - 25.6)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 2.22: ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL SYMPTOMS, BY LEVEL OF RELATIVE ISOLATION (LORI) AND AGE GROUP**

Age group	Risk of clinically significant emotional symptoms	Number	95% CI	%	95% CI
<b>LORI — None</b>					
4–11 years	Low	2 890	(2 590 - 3 210)	62.0	(56.8 - 67.0)
	Moderate	510	(360 - 680)	10.8	(7.8 - 14.3)
	High	1 270	(1 050 - 1 530)	27.2	(22.7 - 32.2)
	<b>Total</b>	<b>4 670</b>	<b>(4 350 - 5 000)</b>	<b>100.0</b>	
12–17 years	Low	2 030	(1 780 - 2 310)	64.3	(58.2 - 70.2)
	Moderate	300	(180 - 440)	9.4	(5.9 - 13.9)
	High	830	(650 - 1 040)	26.3	(21.0 - 32.1)
	<b>Total</b>	<b>3 160</b>	<b>(2 850 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>	Low	4 930	(4 600 - 5 250)	62.9	(58.8 - 66.9)
	Moderate	800	(620 - 1 020)	10.2	(8.0 - 13.1)
	High	2 100	(1 820 - 2 420)	26.8	(23.2 - 30.8)
	<b>Total</b>	<b>7 830</b>	<b>(7 680 - 7 980)</b>	<b>100.0</b>	
<b>LORI — Low</b>					
4–11 years	Low	2 230	(1 960 - 2 530)	64.5	(59.2 - 69.6)
	Moderate	380	(280 - 500)	10.9	(8.2 - 14.1)
	High	850	(670 - 1 080)	24.6	(20.0 - 29.6)
	<b>Total</b>	<b>3 460</b>	<b>(3 090 - 3 860)</b>	<b>100.0</b>	
12–17 years	Low	1 420	(1 190 - 1 690)	66.8	(60.0 - 73.1)
	Moderate	280	(200 - 390)	13.1	(9.1 - 17.9)
	High	430	(310 - 570)	20.1	(15.0 - 25.9)
	<b>Total</b>	<b>2 130</b>	<b>(1 840 - 2 440)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 660	(3 280 - 4 050)	65.4	(60.9 - 69.6)
	Moderate	660	(510 - 820)	11.7	(9.3 - 14.4)
	High	1 280	(1 050 - 1 550)	22.9	(19.4 - 26.8)
	<b>Total</b>	<b>5 590</b>	<b>(5 100 - 6 100)</b>	<b>100.0</b>	
<b>LORI — Moderate</b>					
4–11 years	Low	1 810	(1 470 - 2 190)	64.4	(58.6 - 70.1)
	Moderate	370	(250 - 510)	13.1	(9.5 - 17.5)
	High	630	(480 - 800)	22.5	(18.1 - 27.2)
	<b>Total</b>	<b>2 800</b>	<b>(2 360 - 3 330)</b>	<b>100.0</b>	
12–17 years	Low	1 250	(980 - 1 560)	66.9	(59.2 - 74.0)
	Moderate	210	(130 - 310)	11.3	(7.3 - 16.4)
	High	410	(290 - 550)	21.8	(16.8 - 27.8)
	<b>Total</b>	<b>1 870</b>	<b>(1 540 - 2 260)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 060	(2 520 - 3 650)	65.4	(59.8 - 70.8)
	Moderate	580	(420 - 790)	12.4	(9.4 - 16.1)
	High	1 040	(810 - 1 330)	22.2	(18.4 - 26.7)
	<b>Total</b>	<b>4 680</b>	<b>(3 940 - 5 480)</b>	<b>100.0</b>	

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**TABLE 2.22 (continued):** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL SYMPTOMS, BY LEVEL OF RELATIVE ISOLATION (LORI) AND AGE GROUP

Age group	Risk of clinically significant emotional symptoms	Number	95% CI	%	95% CI
<b>LORI — High</b>					
4–11 years	Low	1 080	(790 - 1 440)	67.8	(59.6 - 75.8)
	Moderate	190	(120 - 290)	12.1	(8.2 - 16.6)
	High	320	(190 - 490)	20.0	(13.7 - 27.0)
	<b>Total</b>	<b>1 600</b>	<b>(1 170 - 2 090)</b>	<b>100.0</b>	
12–17 years	Low	670	(470 - 930)	70.3	(61.2 - 78.8)
	Moderate	130	(70 - 190)	13.3	(8.7 - 19.4)
	High	160	(100 - 250)	16.5	(10.2 - 25.1)
	<b>Total</b>	<b>960</b>	<b>(710 - 1 260)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 760	(1 290 - 2 300)	68.7	(61.2 - 75.3)
	Moderate	320	(220 - 440)	12.5	(9.6 - 16.0)
	High	480	(300 - 720)	18.7	(13.4 - 25.6)
	<b>Total</b>	<b>2 550</b>	<b>(1 910 - 3 270)</b>	<b>100.0</b>	
<b>LORI — Extreme</b>					
4–11 years	Low	890	(640 - 1 200)	70.3	(59.4 - 79.5)
	Moderate	110	(60 - 190)	8.7	(5.3 - 13.9)
	High	270	(120 - 470)	20.9	(11.7 - 32.1)
	<b>Total</b>	<b>1 270</b>	<b>(920 - 1 740)</b>	<b>100.0</b>	
12–17 years	Low	690	(490 - 940)	70.2	(58.7 - 79.7)
	Moderate	90	(50 - 170)	9.2	(4.9 - 16.5)
	High	200	(100 - 350)	20.6	(12.0 - 31.6)
	<b>Total</b>	<b>990</b>	<b>(730 - 1 320)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 580	(1 160 - 2 110)	70.3	(60.8 - 79.0)
	Moderate	200	(120 - 320)	8.9	(5.7 - 12.8)
	High	470	(260 - 820)	20.8	(12.6 - 31.1)
	<b>Total</b>	<b>2 260</b>	<b>(1 670 - 3 020)</b>	<b>100.0</b>	

**TABLE 2.23:** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL SYMPTOMS, BY ATSI REGION

Risk of clinically significant emotional symptoms	Number	95% CI	%	95% CI
<b>Perth ATSI region</b>				
Low	5 210	(4 890 - 5 550)	63.1	(59.1 - 66.9)
Moderate	830	(650 - 1 040)	10.1	(7.9 - 12.7)
High	2 210	(1 920 - 2 520)	26.8	(23.3 - 30.6)
<b>Total</b>	<b>8 260</b>	<b>(8 150 - 8 370)</b>	<b>100.0</b>	
<b>Narrogin ATSI region</b>				
Low	2 180	(1 890 - 2 500)	69.1	(63.7 - 74.0)
Moderate	310	(220 - 440)	9.9	(7.0 - 13.4)
High	660	(520 - 840)	21.1	(17.2 - 25.4)
<b>Total</b>	<b>3 150</b>	<b>(2 780 - 3 540)</b>	<b>100.0</b>	
<b>Kalgoorlie ATSI region</b>				
Low	750	(470 - 1 110)	64.2	(51.1 - 77.1)
Moderate	180	(80 - 320)	15.0	(8.7 - 24.5)
High	240	(130 - 390)	20.8	(13.6 - 29.0)
<b>Total</b>	<b>1 170</b>	<b>(780 - 1 660)</b>	<b>100.0</b>	

Continued . . .



**TABLE 2.23 (continued): ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL SYMPTOMS, BY ATSIK REGION**

<i>Risk of clinically significant emotional symptoms</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Geraldton ATSIK region</b>				
Low	1 410	(1 110 - 1 760)	62.5	(56.9 - 68.1)
Moderate	290	(210 - 400)	13.0	(9.9 - 16.9)
High	550	(390 - 790)	24.5	(18.5 - 31.0)
<b>Total</b>	<b>2 260</b>	<b>(1 800 - 2 780)</b>	<b>100.0</b>	
<b>Broome ATSIK region</b>				
Low	910	(570 - 1 340)	76.2	(68.1 - 82.9)
Moderate	150	(100 - 230)	12.7	(9.3 - 16.9)
High	130	(40 - 280)	11.1	(3.9 - 21.2)
<b>Total</b>	<b>1 200</b>	<b>(770 - 1 760)</b>	<b>100.0</b>	
<b>South Hedland ATSIK region</b>				
Low	1 270	(890 - 1 720)	61.7	(51.7 - 71.5)
Moderate	310	(180 - 500)	14.9	(9.6 - 21.8)
High	480	(280 - 770)	23.3	(16.4 - 32.4)
<b>Total</b>	<b>2 060</b>	<b>(1 460 - 2 750)</b>	<b>100.0</b>	
<b>Derby ATSIK region</b>				
Low	1 020	(660 - 1 510)	67.0	(54.3 - 78.4)
Moderate	140	(80 - 240)	9.4	(6.0 - 14.5)
High	360	(190 - 670)	23.6	(13.6 - 36.6)
<b>Total</b>	<b>1 520</b>	<b>(1 010 - 2 170)</b>	<b>100.0</b>	
<b>Kununurra ATSIK region</b>				
Low	1 190	(810 - 1 640)	64.5	(54.9 - 73.4)
Moderate	210	(120 - 350)	11.2	(6.7 - 16.9)
High	450	(270 - 680)	24.3	(16.8 - 32.5)
<b>Total</b>	<b>1 850</b>	<b>(1 310 - 2 520)</b>	<b>100.0</b>	
<b>Warburton ATSIK region</b>				
Low	1 030	(660 - 1 510)	71.7	(61.4 - 80.1)
Moderate	140	(70 - 240)	9.5	(5.3 - 15.4)
High	270	(160 - 430)	18.8	(12.6 - 27.4)
<b>Total</b>	<b>1 430</b>	<b>(960 - 2 000)</b>	<b>100.0</b>	
<b>Western Australia</b>				
Low	15 000	(14 400 - 15 500)	65.4	(63.1 - 67.7)
Moderate	2 560	(2 270 - 2 880)	11.2	(9.9 - 12.6)
High	5 370	(4 910 - 5 860)	23.4	(21.4 - 25.6)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 2.24: ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL SYMPTOMS, BY ABORIGINAL STATUS OF PRIMARY CARER**

<i>Risk of clinically significant emotional symptoms</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Aboriginal</b>				
Low	13 100	(12 500 - 13 600)	66.0	(63.5 - 68.4)
Moderate	2 210	(1 940 - 2 490)	11.2	(9.8 - 12.6)
High	4 520	(4 070 - 4 980)	22.8	(20.7 - 25.1)
<b>Total</b>	<b>19 800</b>	<b>(19 300 - 20 200)</b>	<b>100.0</b>	
<b>Non-Aboriginal</b>				
Low	1 830	(1 500 - 2 200)	61.8	(54.1 - 69.3)
Moderate	340	(200 - 530)	11.4	(7.0 - 16.9)
High	790	(580 - 1 050)	26.8	(20.2 - 33.6)
<b>Total</b>	<b>2 960</b>	<b>(2 520 - 3 450)</b>	<b>100.0</b>	



## CONDUCT PROBLEMS

**TABLE 2.25: ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT CONDUCT PROBLEMS, BY AGE GROUP**

<i>Risk of clinically significant conduct problems</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
4–11 years				
Low	7 160	(6 700 - 7 630)	51.9	(49.0 - 54.7)
Moderate	1 740	(1 500 - 2 010)	12.6	(10.9 - 14.5)
High	4 900	(4 520 - 5 300)	35.5	(33.0 - 38.2)
<b>Total</b>	<b>13 800</b>	<b>(13 300 - 14 200)</b>	<b>100.0</b>	
12–17 years				
Low	5 260	(4 870 - 5 680)	57.8	(54.3 - 61.3)
Moderate	990	(810 - 1 180)	10.8	(9.0 - 13.0)
High	2 850	(2 530 - 3 210)	31.4	(28.0 - 34.7)
<b>Total</b>	<b>9 100</b>	<b>(8 660 - 9 560)</b>	<b>100.0</b>	
<b>Total</b>				
Low	12 400	(11 900 - 13 000)	54.2	(51.8 - 56.6)
Moderate	2 730	(2 440 - 3 040)	11.9	(10.6 - 13.3)
High	7 750	(7 250 - 8 270)	33.9	(31.6 - 36.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 2.26: NON-ABORIGINAL CHILDREN AGED 4–17 YEARS (a) — RISK OF CLINICALLY SIGNIFICANT CONDUCT PROBLEMS, BY AGE GROUP**

<i>Risk of clinically significant conduct problems</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
4–11 years				
Low	140 000	(130 000 - 150 000)	68.5	(64.9 - 72.0)
Moderate	27 600	(22 100 - 33 100)	13.5	(10.9 - 16.2)
High	36 600	(30 400 - 42 900)	18.0	(15.0 - 20.9)
12–17 years				
Low	124 000	(114 000 - 133 000)	77.6	(74.0 - 81.2)
Moderate	14 900	(10 800 - 19 000)	9.4	(6.8 - 11.9)
High	20 800	(16 000 - 25 600)	13.1	(10.1 - 16.0)
<b>Total</b>				
Low	263 000	(254 000 - 273 000)	72.5	(69.9 - 75.0)
Moderate	42 500	(35 800 - 49 200)	11.7	(9.9 - 13.6)
High	57 400	(49 800 - 65 000)	15.8	(13.7 - 17.9)

(a) Source: Computer-Assisted Telephone Interview (CATI) survey conducted for the WAACHS by the Survey Research Centre at the University of Western Australia.



**TABLE 2.27: ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT CONDUCT PROBLEMS, BY AGE**

Age (years)	Risk of clinically significant conduct problems	Number	95% CI	%	95% CI
4	Low	820	(660 - 1 020)	49.7	(41.1 - 57.6)
	Moderate	200	(130 - 310)	12.1	(7.6 - 17.4)
	High	630	(470 - 830)	38.2	(30.0 - 46.5)
	<b>Total</b>	<b>1 660</b>	<b>(1 420 - 1 930)</b>	<b>100.0</b>	
5	Low	890	(720 - 1 080)	50.2	(42.6 - 57.4)
	Moderate	250	(150 - 390)	14.1	(9.0 - 21.3)
	High	630	(500 - 770)	35.6	(29.1 - 42.6)
	<b>Total</b>	<b>1 770</b>	<b>(1 540 - 2 010)</b>	<b>100.0</b>	
6	Low	1 000	(870 - 1 140)	56.7	(50.8 - 62.5)
	Moderate	190	(120 - 270)	10.7	(7.3 - 15.4)
	High	570	(460 - 710)	32.6	(26.9 - 38.4)
	<b>Total</b>	<b>1 770</b>	<b>(1 580 - 1 960)</b>	<b>100.0</b>	
7	Low	940	(760 - 1 160)	54.7	(47.1 - 61.8)
	Moderate	220	(140 - 340)	12.7	(8.1 - 18.9)
	High	560	(460 - 680)	32.7	(26.4 - 39.0)
	<b>Total</b>	<b>1 730</b>	<b>(1 510 - 1 980)</b>	<b>100.0</b>	
8	Low	800	(650 - 980)	45.9	(39.2 - 53.0)
	Moderate	240	(170 - 330)	13.8	(9.8 - 18.6)
	High	700	(580 - 850)	40.2	(33.7 - 46.8)
	<b>Total</b>	<b>1 750</b>	<b>(1 550 - 1 970)</b>	<b>100.0</b>	
9	Low	920	(730 - 1 140)	53.9	(46.0 - 61.1)
	Moderate	200	(120 - 310)	11.9	(7.5 - 17.9)
	High	580	(480 - 700)	34.2	(28.3 - 40.8)
	<b>Total</b>	<b>1 700</b>	<b>(1 480 - 1 950)</b>	<b>100.0</b>	
10	Low	870	(740 - 1 030)	49.4	(43.7 - 55.3)
	Moderate	220	(160 - 300)	12.5	(9.1 - 17.0)
	High	670	(560 - 800)	38.0	(32.7 - 43.8)
	<b>Total</b>	<b>1 770</b>	<b>(1 580 - 1 970)</b>	<b>100.0</b>	
11	Low	910	(760 - 1 080)	54.6	(47.7 - 61.2)
	Moderate	220	(140 - 320)	13.0	(8.6 - 18.6)
	High	540	(430 - 660)	32.4	(26.6 - 38.6)
	<b>Total</b>	<b>1 660</b>	<b>(1 470 - 1 870)</b>	<b>100.0</b>	
12	Low	860	(680 - 1 080)	51.5	(43.3 - 59.1)
	Moderate	100	(60 - 160)	6.3	(3.5 - 9.8)
	High	700	(570 - 860)	42.2	(35.0 - 50.2)
	<b>Total</b>	<b>1 660</b>	<b>(1 440 - 1 900)</b>	<b>100.0</b>	
13	Low	890	(730 - 1 080)	54.0	(45.7 - 62.4)
	Moderate	190	(120 - 270)	11.3	(7.6 - 16.5)
	High	570	(400 - 780)	34.7	(26.3 - 43.9)
	<b>Total</b>	<b>1 650</b>	<b>(1 420 - 1 910)</b>	<b>100.0</b>	
14	Low	940	(770 - 1 130)	58.7	(51.9 - 65.3)
	Moderate	160	(100 - 250)	10.0	(6.0 - 15.3)
	High	500	(410 - 610)	31.3	(25.6 - 37.5)
	<b>Total</b>	<b>1 600</b>	<b>(1 400 - 1 820)</b>	<b>100.0</b>	
15	Low	830	(710 - 970)	57.0	(49.1 - 64.8)
	Moderate	160	(90 - 260)	10.8	(6.1 - 16.9)
	High	470	(340 - 640)	32.2	(24.5 - 40.2)
	<b>Total</b>	<b>1 450</b>	<b>(1 260 - 1 660)</b>	<b>100.0</b>	

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**TABLE 2.27 (continued):** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT CONDUCT PROBLEMS, BY AGE

Age (years)	Risk of clinically significant conduct problems	Number	95% CI	%	95% CI
16	Low	900	(760 - 1 060)	63.2	(55.0 - 70.8)
	Moderate	210	(130 - 310)	14.7	(9.8 - 20.8)
	High	310	(220 - 430)	22.2	(16.2 - 29.2)
	<b>Total</b>	<b>1 420</b>	<b>(1 230 - 1 630)</b>	<b>100.0</b>	
17	Low	850	(690 - 1 030)	64.5	(56.8 - 71.3)
	Moderate	170	(120 - 240)	13.0	(9.3 - 17.5)
	High	300	(200 - 410)	22.6	(16.1 - 30.3)
	<b>Total</b>	<b>1 320</b>	<b>(1 130 - 1 540)</b>	<b>100.0</b>	
<b>Total</b>	Low	12 400	(11 900 - 13 000)	54.2	(51.8 - 56.6)
	Moderate	2 730	(2 440 - 3 040)	11.9	(10.6 - 13.3)
	High	7 750	(7 250 - 8 270)	33.9	(31.6 - 36.1)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 2.28:** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT CONDUCT PROBLEMS, BY AGE GROUP AND SEX

Sex	Risk of clinically significant conduct problems	Number	95% CI	%	95% CI
4–11 years					
Males	Low	3 420	(3 090 - 3 760)	47.5	(43.8 - 51.3)
	Moderate	870	(710 - 1 050)	12.0	(9.9 - 14.5)
	High	2 910	(2 610 - 3 210)	40.4	(36.9 - 44.1)
	<b>Total</b>	<b>7 190</b>	<b>(6 790 - 7 590)</b>	<b>100.0</b>	
Females	Low	3 740	(3 420 - 4 090)	56.6	(53.0 - 60.2)
	Moderate	870	(700 - 1 070)	13.2	(10.7 - 16.0)
	High	2 000	(1 770 - 2 240)	30.2	(27.0 - 33.5)
	<b>Total</b>	<b>6 610</b>	<b>(6 220 - 7 010)</b>	<b>100.0</b>	
<b>Total</b>	Low	7 160	(6 700 - 7 630)	51.9	(49.0 - 54.7)
	Moderate	1 740	(1 500 - 2 010)	12.6	(10.9 - 14.5)
	High	4 900	(4 520 - 5 300)	35.5	(33.0 - 38.2)
	<b>Total</b>	<b>13 800</b>	<b>(13 300 - 14 200)</b>	<b>100.0</b>	
12–17 years					
Males	Low	2 370	(2 080 - 2 700)	52.3	(47.6 - 57.0)
	Moderate	550	(440 - 680)	12.1	(9.7 - 15.0)
	High	1 620	(1 400 - 1 860)	35.6	(31.2 - 40.2)
	<b>Total</b>	<b>4 540</b>	<b>(4 180 - 4 920)</b>	<b>100.0</b>	
Females	Low	2 890	(2 620 - 3 180)	63.3	(58.7 - 67.9)
	Moderate	440	(320 - 580)	9.6	(7.1 - 12.5)
	High	1 240	(1 030 - 1 480)	27.1	(22.8 - 31.5)
	<b>Total</b>	<b>4 560</b>	<b>(4 230 - 4 910)</b>	<b>100.0</b>	
<b>Total</b>	Low	5 260	(4 870 - 5 680)	57.8	(54.3 - 61.3)
	Moderate	990	(810 - 1 180)	10.8	(9.0 - 13.0)
	High	2 850	(2 530 - 3 210)	31.4	(28.0 - 34.7)
	<b>Total</b>	<b>9 100</b>	<b>(8 660 - 9 560)</b>	<b>100.0</b>	

Continued . . .





**TABLE 2.28 (continued):** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT CONDUCT PROBLEMS, BY AGE GROUP AND SEX

Sex	Risk of clinically significant conduct problems	Number	95% CI	%	95% CI
<b>Total</b>					
Males	Low	5 790	(5 350 - 6 240)	49.4	(46.2 - 52.6)
	Moderate	1 420	(1 220 - 1 640)	12.1	(10.4 - 13.9)
	High	4 520	(4 160 - 4 910)	38.6	(35.6 - 41.6)
	<b>Total</b>	<b>11 700</b>	<b>(11 300 - 12 200)</b>	<b>100.0</b>	
Females	Low	6 630	(6 230 - 7 040)	59.3	(56.4 - 62.2)
	Moderate	1 310	(1 110 - 1 530)	11.7	(9.9 - 13.7)
	High	3 230	(2 920 - 3 560)	28.9	(26.3 - 31.6)
	<b>Total</b>	<b>11 200</b>	<b>(10 800 - 11 600)</b>	<b>100.0</b>	
<b>Total</b>	Low	12 400	(11 900 - 13 000)	54.2	(51.8 - 56.6)
	Moderate	2 730	(2 440 - 3 040)	11.9	(10.6 - 13.3)
	High	7 750	(7 250 - 8 270)	33.9	(31.6 - 36.1)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 2.29:** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT CONDUCT PROBLEMS, BY LEVEL OF RELATIVE ISOLATION (LORI) AND AGE GROUP

Age group	Risk of clinically significant conduct problems	Number	95% CI	%	95% CI
<b>LORI — None</b>					
4–11 years	Low	2 260	(1 970 - 2 590)	48.4	(42.9 - 53.7)
	Moderate	670	(510 - 870)	14.4	(11.0 - 18.2)
	High	1 740	(1 500 - 1 990)	37.2	(32.2 - 42.2)
	<b>Total</b>	<b>4 670</b>	<b>(4 350 - 5 000)</b>	<b>100.0</b>	
12–17 years	Low	1 640	(1 410 - 1 900)	51.9	(45.6 - 58.3)
	Moderate	340	(230 - 480)	10.8	(7.4 - 15.0)
	High	1 180	(960 - 1 430)	37.3	(31.2 - 43.6)
	<b>Total</b>	<b>3 160</b>	<b>(2 850 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 900	(3 570 - 4 240)	49.8	(45.6 - 53.9)
	Moderate	1 020	(820 - 1 230)	13.0	(10.5 - 15.8)
	High	2 920	(2 610 - 3 240)	37.2	(33.4 - 41.4)
	<b>Total</b>	<b>7 830</b>	<b>(7 680 - 7 980)</b>	<b>100.0</b>	
<b>LORI — Low</b>					
4–11 years	Low	1 820	(1 550 - 2 130)	52.6	(46.9 - 58.1)
	Moderate	360	(270 - 480)	10.5	(7.8 - 13.6)
	High	1 280	(1 070 - 1 510)	36.9	(31.8 - 41.9)
	<b>Total</b>	<b>3 460</b>	<b>(3 090 - 3 860)</b>	<b>100.0</b>	
12–17 years	Low	1 210	(1 010 - 1 440)	56.7	(49.7 - 63.6)
	Moderate	220	(150 - 320)	10.5	(7.2 - 14.4)
	High	700	(520 - 900)	32.8	(25.9 - 40.2)
	<b>Total</b>	<b>2 130</b>	<b>(1 840 - 2 440)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 030	(2 670 - 3 410)	54.2	(49.6 - 58.9)
	Moderate	590	(470 - 730)	10.5	(8.4 - 12.8)
	High	1 970	(1 670 - 2 290)	35.3	(31.1 - 39.8)
	<b>Total</b>	<b>5 590</b>	<b>(5 100 - 6 100)</b>	<b>100.0</b>	

Continued....



**TABLE 2.29 (continued):** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT CONDUCT PROBLEMS, BY LEVEL OF RELATIVE ISOLATION (LORI) AND AGE GROUP

Age group	Risk of clinically significant conduct problems	Number	95% CI	%	95% CI
<b>LORI — Moderate</b>					
4–11 years	Low	1 390	(1 130 - 1 690)	49.4	(43.8 - 55.2)
	Moderate	440	(330 - 580)	15.5	(12.4 - 19.2)
	High	980	(760 - 1 240)	35.0	(29.6 - 40.8)
	<b>Total</b>	<b>2 800</b>	<b>(2 360 - 3 330)</b>	<b>100.0</b>	
12–17 years	Low	1 040	(820 - 1 310)	55.8	(48.1 - 63.4)
	Moderate	230	(140 - 350)	12.1	(7.7 - 18.0)
	High	600	(430 - 800)	32.1	(25.0 - 39.6)
	<b>Total</b>	<b>1 870</b>	<b>(1 540 - 2 260)</b>	<b>100.0</b>	
<b>Total</b>	Low	2 430	(2 010 - 2 910)	52.0	(47.0 - 57.1)
	Moderate	660	(510 - 850)	14.2	(11.6 - 17.0)
	High	1 580	(1 250 - 1 980)	33.9	(29.0 - 39.3)
	<b>Total</b>	<b>4 680</b>	<b>(3 940 - 5 480)</b>	<b>100.0</b>	
<b>LORI — High</b>					
4–11 years	Low	910	(640 - 1 250)	56.9	(48.3 - 64.7)
	Moderate	130	(90 - 200)	8.4	(5.8 - 11.7)
	High	560	(390 - 770)	34.7	(27.4 - 42.2)
	<b>Total</b>	<b>1 600</b>	<b>(1 170 - 2 090)</b>	<b>100.0</b>	
12–17 years	Low	600	(410 - 850)	62.8	(52.0 - 73.8)
	Moderate	100	(60 - 150)	10.4	(6.7 - 15.0)
	High	260	(160 - 370)	26.7	(18.6 - 36.8)
	<b>Total</b>	<b>960</b>	<b>(710 - 1 260)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 510	(1 100 - 2 030)	59.1	(50.8 - 67.4)
	Moderate	230	(160 - 320)	9.2	(6.9 - 11.8)
	High	810	(560 - 1 120)	31.7	(25.1 - 39.5)
	<b>Total</b>	<b>2 550</b>	<b>(1 910 - 3 270)</b>	<b>100.0</b>	
<b>LORI — Extreme</b>					
4–11 years	Low	790	(560 - 1 050)	61.8	(52.0 - 71.5)
	Moderate	130	(30 - 320)	10.5	(3.6 - 23.6)
	High	350	(210 - 540)	27.7	(19.8 - 36.2)
	<b>Total</b>	<b>1 270</b>	<b>(920 - 1 740)</b>	<b>100.0</b>	
12–17 years	Low	770	(550 - 1 060)	78.1	(68.8 - 85.0)
	Moderate	100	(50 - 150)	9.7	(5.7 - 14.9)
	High	120	(60 - 220)	12.2	(6.0 - 20.0)
	<b>Total</b>	<b>990</b>	<b>(730 - 1 320)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 550	(1 130 - 2 080)	68.9	(60.2 - 76.1)
	Moderate	230	(110 - 410)	10.2	(5.3 - 16.3)
	High	470	(310 - 690)	20.9	(15.8 - 26.8)
	<b>Total</b>	<b>2 260</b>	<b>(1 670 - 3 020)</b>	<b>100.0</b>	



**TABLE 2.30: ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT CONDUCT PROBLEMS, BY ATSI REGION**

<i>Risk of clinically significant conduct problems</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Perth ATSI region</b>				
Low	4 100	(3 770 - 4 440)	49.6	(45.6 - 53.6)
Moderate	1 080	(890 - 1 310)	13.1	(10.8 - 15.9)
High	3 080	(2 760 - 3 400)	37.3	(33.4 - 41.1)
<b>Total</b>	<b>8 260</b>	<b>(8 150 - 8 370)</b>	<b>100.0</b>	
<b>Narrogin ATSI region</b>				
Low	1 810	(1 550 - 2 080)	57.3	(51.4 - 62.8)
Moderate	330	(250 - 430)	10.4	(7.9 - 13.5)
High	1 020	(800 - 1 270)	32.3	(26.9 - 38.2)
<b>Total</b>	<b>3 150</b>	<b>(2 780 - 3 540)</b>	<b>100.0</b>	
<b>Kalgoorlie ATSI region</b>				
Low	650	(410 - 960)	55.8	(44.1 - 67.2)
Moderate	130	(50 - 280)	11.5	(4.8 - 20.2)
High	380	(220 - 590)	32.7	(23.4 - 43.0)
<b>Total</b>	<b>1 170</b>	<b>(780 - 1 660)</b>	<b>100.0</b>	
<b>Geraldton ATSI region</b>				
Low	1 120	(850 - 1 440)	49.4	(42.2 - 56.7)
Moderate	250	(170 - 340)	11.1	(8.3 - 14.6)
High	890	(650 - 1 170)	39.5	(32.3 - 47.0)
<b>Total</b>	<b>2 260</b>	<b>(1 800 - 2 780)</b>	<b>100.0</b>	
<b>Broome ATSI region</b>				
Low	820	(520 - 1 210)	68.1	(59.7 - 76.5)
Moderate	110	(60 - 200)	9.0	(5.3 - 14.3)
High	270	(170 - 430)	22.8	(17.9 - 28.2)
<b>Total</b>	<b>1 200</b>	<b>(770 - 1 760)</b>	<b>100.0</b>	
<b>South Hedland ATSI region</b>				
Low	1 050	(700 - 1 460)	50.9	(40.5 - 60.4)
Moderate	270	(170 - 420)	13.1	(9.1 - 18.0)
High	740	(460 - 1 090)	36.0	(26.5 - 46.7)
<b>Total</b>	<b>2 060</b>	<b>(1 460 - 2 750)</b>	<b>100.0</b>	
<b>Derby ATSI region</b>				
Low	740	(470 - 1 100)	48.6	(38.7 - 58.5)
Moderate	210	(100 - 400)	13.6	(7.8 - 22.2)
High	580	(380 - 860)	37.8	(29.3 - 46.4)
<b>Total</b>	<b>1 520</b>	<b>(1 010 - 2 170)</b>	<b>100.0</b>	
<b>Kununurra ATSI region</b>				
Low	1 140	(780 - 1 580)	61.4	(52.6 - 70.4)
Moderate	190	(120 - 290)	10.4	(7.6 - 14.1)
High	520	(320 - 780)	28.2	(20.8 - 36.5)
<b>Total</b>	<b>1 850</b>	<b>(1 310 - 2 520)</b>	<b>100.0</b>	
<b>Warburton ATSI region</b>				
Low	1 010	(660 - 1 470)	70.1	(60.5 - 78.4)
Moderate	160	(90 - 250)	10.9	(6.8 - 16.3)
High	270	(160 - 410)	19.0	(13.1 - 25.4)
<b>Total</b>	<b>1 430</b>	<b>(960 - 2 000)</b>	<b>100.0</b>	
<b>Western Australia</b>				
Low	12 400	(11 900 - 13 000)	54.2	(51.8 - 56.6)
Moderate	2 730	(2 440 - 3 040)	11.9	(10.6 - 13.3)
High	7 750	(7 250 - 8 270)	33.9	(31.6 - 36.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 2.31: ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT CONDUCT PROBLEMS, BY ABORIGINAL STATUS OF PRIMARY CARER**

<i>Risk of clinically significant conduct problems</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Aboriginal</b>				
Low	10 700	(10 200 - 11 300)	54.3	(51.8 - 56.9)
Moderate	2 340	(2 070 - 2 620)	11.8	(10.5 - 13.2)
High	6 700	(6 220 - 7 210)	33.9	(31.5 - 36.3)
<b>Total</b>	<b>19 800</b>	<b>(19 300 - 20 200)</b>	<b>100.0</b>	
<b>Non-Aboriginal</b>				
Low	1 580	(1 280 - 1 950)	53.5	(45.8 - 60.8)
Moderate	370	(230 - 570)	12.5	(8.0 - 18.2)
High	1 000	(770 - 1 270)	34.0	(27.2 - 41.0)
<b>Total</b>	<b>2 960</b>	<b>(2 520 - 3 450)</b>	<b>100.0</b>	

## HYPERACTIVITY

**TABLE 2.32: ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT HYPERACTIVITY, BY AGE GROUP**

<i>Risk of clinically significant hyperactivity</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>4–11 years</b>				
Low	10 100	(9 600 - 10 500)	72.9	(70.5 - 75.3)
Moderate	1 380	(1 170 - 1 610)	10.0	(8.5 - 11.6)
High	2 360	(2 080 - 2 650)	17.1	(15.2 - 19.1)
<b>Total</b>	<b>13 800</b>	<b>(13 300 - 14 200)</b>	<b>100.0</b>	
<b>12–17 years</b>				
Low	7 210	(6 780 - 7 650)	79.2	(76.1 - 82.1)
Moderate	760	(610 - 940)	8.3	(6.7 - 10.3)
High	1 130	(910 - 1 400)	12.5	(10.0 - 15.1)
<b>Total</b>	<b>9 100</b>	<b>(8 660 - 9 560)</b>	<b>100.0</b>	
<b>Total</b>				
Low	17 300	(16 800 - 17 700)	75.4	(73.4 - 77.4)
Moderate	2 130	(1 870 - 2 420)	9.3	(8.2 - 10.6)
High	3 490	(3 120 - 3 890)	15.3	(13.6 - 17.0)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 2.33: NON-ABORIGINAL CHILDREN AGED 4–17 YEARS (a) — RISK OF CLINICALLY SIGNIFICANT HYPERACTIVITY, BY AGE GROUP**

<i>Risk of clinically significant hyperactivity</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>4–11 years</b>				
Low	163 000	(153 000 - 174 000)	80.1	(77.0 - 83.1)
Moderate	15 800	(11 600 - 20 100)	7.8	(5.7 - 9.8)
High	24 800	(19 600 - 30 100)	12.2	(9.7 - 14.7)
<b>12–17 years</b>				
Low	138 000	(128 000 - 148 000)	86.5	(83.6 - 89.5)
Moderate	11 200	(7 600 - 14 800)	7.0	(4.8 - 9.2)
High	10 200	(6 800 - 13 700)	6.4	(4.3 - 8.6)
<b>Total</b>				
Low	301 000	(293 000 - 309 000)	82.9	(80.7 - 85.1)
Moderate	27 000	(21 500 - 32 500)	7.4	(5.9 - 8.9)
High	35 100	(28 900 - 41 200)	9.7	(8.0 - 11.4)

(a) Source: Computer-Assisted Telephone Interview (CATI) survey conducted for the WAACHS by the Survey Research Centre at the University of Western Australia.



**TABLE 2.34: ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT HYPERACTIVITY, BY AGE**

Age (years)	Risk of clinically significant hyperactivity	Number	95% CI	%	95% CI
4	Low	1 140	(940 - 1 360)	68.8	(60.4 - 76.4)
	Moderate	160	(70 - 290)	9.8	(5.0 - 18.0)
	High	360	(250 - 490)	21.4	(15.5 - 28.7)
	<b>Total</b>	<b>1 660</b>	<b>(1 420 - 1 930)</b>	<b>100.0</b>	
5	Low	1 260	(1 060 - 1 490)	71.5	(64.6 - 77.8)
	Moderate	180	(110 - 280)	10.4	(6.6 - 16.2)
	High	320	(230 - 430)	18.0	(13.2 - 23.7)
	<b>Total</b>	<b>1 770</b>	<b>(1 540 - 2 010)</b>	<b>100.0</b>	
6	Low	1 290	(1 140 - 1 460)	73.1	(67.0 - 78.7)
	Moderate	180	(120 - 270)	10.3	(6.7 - 14.5)
	High	290	(200 - 410)	16.6	(11.9 - 22.4)
	<b>Total</b>	<b>1 770</b>	<b>(1 580 - 1 960)</b>	<b>100.0</b>	
7	Low	1 270	(1 070 - 1 490)	73.4	(67.1 - 79.3)
	Moderate	150	(100 - 210)	8.5	(5.7 - 12.3)
	High	310	(220 - 430)	18.0	(13.3 - 24.2)
	<b>Total</b>	<b>1 730</b>	<b>(1 510 - 1 980)</b>	<b>100.0</b>	
8	Low	1 250	(1 070 - 1 450)	71.5	(65.5 - 76.8)
	Moderate	230	(170 - 300)	12.9	(9.5 - 17.0)
	High	270	(190 - 370)	15.6	(11.4 - 20.9)
	<b>Total</b>	<b>1 750</b>	<b>(1 550 - 1 970)</b>	<b>100.0</b>	
9	Low	1 260	(1 060 - 1 480)	74.0	(67.5 - 79.7)
	Moderate	130	(80 - 200)	7.8	(5.0 - 11.9)
	High	310	(220 - 420)	18.1	(13.2 - 24.5)
	<b>Total</b>	<b>1 700</b>	<b>(1 480 - 1 950)</b>	<b>100.0</b>	
10	Low	1 310	(1 160 - 1 480)	74.2	(68.7 - 79.4)
	Moderate	170	(120 - 250)	9.7	(6.6 - 13.5)
	High	280	(210 - 390)	16.1	(12.0 - 21.2)
	<b>Total</b>	<b>1 770</b>	<b>(1 580 - 1 970)</b>	<b>100.0</b>	
11	Low	1 280	(1 100 - 1 470)	76.9	(71.1 - 82.5)
	Moderate	170	(100 - 260)	10.2	(6.2 - 15.3)
	High	210	(150 - 300)	12.9	(9.0 - 17.5)
	<b>Total</b>	<b>1 660</b>	<b>(1 470 - 1 870)</b>	<b>100.0</b>	
12	Low	1 290	(1 110 - 1 490)	77.7	(69.4 - 85.1)
	Moderate	130	(40 - 280)	7.6	(2.3 - 15.7)
	High	240	(150 - 360)	14.7	(9.6 - 21.3)
	<b>Total</b>	<b>1 660</b>	<b>(1 440 - 1 900)</b>	<b>100.0</b>	
13	Low	1 220	(1 010 - 1 460)	73.9	(65.9 - 80.3)
	Moderate	150	(110 - 210)	9.4	(6.4 - 12.9)
	High	280	(170 - 430)	16.7	(10.4 - 24.4)
	<b>Total</b>	<b>1 650</b>	<b>(1 420 - 1 910)</b>	<b>100.0</b>	
14	Low	1 210	(1 040 - 1 400)	75.8	(69.5 - 81.7)
	Moderate	170	(120 - 240)	10.7	(7.4 - 14.5)
	High	220	(130 - 330)	13.5	(8.6 - 20.1)
	<b>Total</b>	<b>1 600</b>	<b>(1 400 - 1 820)</b>	<b>100.0</b>	
15	Low	1 160	(980 - 1 350)	79.7	(72.8 - 85.2)
	Moderate	130	(70 - 220)	9.1	(5.0 - 14.7)
	High	160	(100 - 240)	11.2	(7.1 - 16.3)
	<b>Total</b>	<b>1 450</b>	<b>(1 260 - 1 660)</b>	<b>100.0</b>	

Continued....



**TABLE 2.34 (continued):** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT HYPERACTIVITY, BY AGE

Age (years)	Risk of clinically significant hyperactivity	Number	95% CI	%	95% CI
16	Low	1 150	(990 - 1 330)	81.2	(73.9 - 87.6)
	Moderate	150	(110 - 210)	10.9	(7.8 - 14.7)
	High	110	(40 - 260)	8.0	(3.0 - 16.8)
	<b>Total</b>	<b>1 420</b>	<b>(1 230 - 1 630)</b>	<b>100.0</b>	
17	Low	1 180	(1 000 - 1 390)	89.2	(84.2 - 93.2)
	Moderate	20	(10 - 40)	1.6	(0.9 - 2.9)
	High	120	(70 - 190)	9.3	(5.5 - 14.4)
	<b>Total</b>	<b>1 320</b>	<b>(1 130 - 1 540)</b>	<b>100.0</b>	
<b>Total</b>	Low	17 300	(16 800 - 17 700)	75.4	(73.4 - 77.4)
	Moderate	2 130	(1 870 - 2 420)	9.3	(8.2 - 10.6)
	High	3 490	(3 120 - 3 890)	15.3	(13.6 - 17.0)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 2.35:** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT HYPERACTIVITY, BY AGE GROUP AND SEX

Sex	Risk of clinically significant hyperactivity	Number	95% CI	%	95% CI
4–11 years					
Males	Low	4 900	(4 560 - 5 250)	68.2	(64.6 - 71.6)
	Moderate	870	(700 - 1 070)	12.1	(9.7 - 14.6)
	High	1 420	(1 200 - 1 670)	19.7	(16.9 - 22.8)
	<b>Total</b>	<b>7 190</b>	<b>(6 790 - 7 590)</b>	<b>100.0</b>	
Females	Low	5 160	(4 790 - 5 540)	78.1	(75.1 - 80.9)
	Moderate	510	(400 - 640)	7.7	(6.1 - 9.5)
	High	940	(790 - 1 110)	14.3	(12.0 - 16.6)
	<b>Total</b>	<b>6 610</b>	<b>(6 220 - 7 010)</b>	<b>100.0</b>	
<b>Total</b>	Low	10 100	(9 600 - 10 500)	72.9	(70.5 - 75.3)
	Moderate	1 380	(1 170 - 1 610)	10.0	(8.5 - 11.6)
	High	2 360	(2 080 - 2 650)	17.1	(15.2 - 19.1)
	<b>Total</b>	<b>13 800</b>	<b>(13 300 - 14 200)</b>	<b>100.0</b>	
12–17 years					
Males	Low	3 380	(3 050 - 3 730)	74.5	(69.8 - 78.8)
	Moderate	460	(340 - 590)	10.1	(7.7 - 13.2)
	High	700	(530 - 910)	15.4	(11.9 - 19.8)
	<b>Total</b>	<b>4 540</b>	<b>(4 180 - 4 920)</b>	<b>100.0</b>	
Females	Low	3 830	(3 520 - 4 150)	83.9	(80.3 - 87.0)
	Moderate	300	(210 - 420)	6.6	(4.6 - 9.2)
	High	430	(320 - 590)	9.5	(6.9 - 12.5)
	<b>Total</b>	<b>4 560</b>	<b>(4 230 - 4 910)</b>	<b>100.0</b>	
<b>Total</b>	Low	7 210	(6 780 - 7 650)	79.2	(76.1 - 82.1)
	Moderate	760	(610 - 940)	8.3	(6.7 - 10.3)
	High	1 130	(910 - 1 400)	12.5	(10.0 - 15.1)
	<b>Total</b>	<b>9 100</b>	<b>(8 660 - 9 560)</b>	<b>100.0</b>	

Continued . . .



**TABLE 2.35 (continued): ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT HYPERACTIVITY, BY AGE GROUP AND SEX**

Sex	Risk of clinically significant hyperactivity	Number	95% CI	%	95% CI
<b>Total</b>					
Males	Low	8 280	(7 850 - 8 720)	70.6	(67.7 - 73.4)
	Moderate	1 330	(1 120 - 1 570)	11.3	(9.6 - 13.2)
	High	2 120	(1 820 - 2 440)	18.0	(15.7 - 20.7)
	<b>Total</b>	<b>11 700</b>	<b>(11 300 - 12 200)</b>	<b>100.0</b>	
Females	Low	8 990	(8 570 - 9 420)	80.5	(78.2 - 82.6)
	Moderate	810	(660 - 970)	7.2	(5.9 - 8.7)
	High	1 380	(1 190 - 1 600)	12.3	(10.6 - 14.2)
	<b>Total</b>	<b>11 200</b>	<b>(10 800 - 11 600)</b>	<b>100.0</b>	
<b>Total</b>	Low	17 300	(16 800 - 17 700)	75.4	(73.4 - 77.4)
	Moderate	2 130	(1 870 - 2 420)	9.3	(8.2 - 10.6)
	High	3 490	(3 120 - 3 890)	15.3	(13.6 - 17.0)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 2.36: ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT HYPERACTIVITY, BY LEVEL OF RELATIVE ISOLATION (LORI) AND AGE GROUP**

Age group	Risk of clinically significant hyperactivity	Number	95% CI	%	95% CI
<b>LORI — None</b>					
4–11 years	Low	3 160	(2 850 - 3 480)	67.6	(62.6 - 72.4)
	Moderate	570	(430 - 740)	12.2	(9.1 - 15.7)
	High	940	(750 - 1 170)	20.2	(16.1 - 24.6)
	<b>Total</b>	<b>4 670</b>	<b>(4 350 - 5 000)</b>	<b>100.0</b>	
12–17 years	Low	2 290	(2 010 - 2 590)	72.4	(66.6 - 77.8)
	Moderate	340	(250 - 470)	10.9	(7.8 - 14.4)
	High	530	(380 - 720)	16.7	(12.0 - 22.1)
	<b>Total</b>	<b>3 160</b>	<b>(2 850 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>	Low	5 440	(5 130 - 5 770)	69.5	(65.6 - 73.3)
	Moderate	920	(740 - 1 120)	11.7	(9.4 - 14.2)
	High	1 470	(1 220 - 1 750)	18.8	(15.6 - 22.3)
	<b>Total</b>	<b>7 830</b>	<b>(7 680 - 7 980)</b>	<b>100.0</b>	
<b>LORI — Low</b>					
4–11 years	Low	2 470	(2 170 - 2 800)	71.5	(66.7 - 76.0)
	Moderate	330	(230 - 450)	9.5	(6.8 - 12.8)
	High	660	(520 - 820)	19.1	(15.7 - 23.0)
	<b>Total</b>	<b>3 460</b>	<b>(3 090 - 3 860)</b>	<b>100.0</b>	
12–17 years	Low	1 630	(1 390 - 1 900)	76.8	(69.8 - 83.0)
	Moderate	180	(110 - 260)	8.3	(5.3 - 12.2)
	High	320	(210 - 470)	15.0	(10.5 - 20.9)
	<b>Total</b>	<b>2 130</b>	<b>(1 840 - 2 440)</b>	<b>100.0</b>	
<b>Total</b>	Low	4 110	(3 710 - 4 530)	73.5	(69.4 - 77.2)
	Moderate	500	(380 - 650)	9.0	(7.0 - 11.5)
	High	980	(790 - 1 190)	17.5	(14.6 - 20.9)
	<b>Total</b>	<b>5 590</b>	<b>(5 100 - 6 100)</b>	<b>100.0</b>	

Continued....





**TABLE 2.36 (continued):** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT HYPERACTIVITY, BY LEVEL OF RELATIVE ISOLATION (LORI) AND AGE GROUP

Age group	Risk of clinically significant hyperactivity	Number	95% CI	%	95% CI
<b>LORI — Moderate</b>					
4–11 years	Low	2 070	(1 700 - 2 480)	73.7	(69.5 - 77.7)
	Moderate	280	(210 - 370)	10.0	(7.7 - 12.6)
	High	460	(350 - 580)	16.4	(13.3 - 19.9)
	<b>Total</b>	<b>2 800</b>	<b>(2 360 - 3 330)</b>	<b>100.0</b>	
12–17 years	Low	1 610	(1 310 - 1 970)	85.9	(77.4 - 92.0)
	Moderate	130	(60 - 270)	7.1	(3.2 - 14.0)
	High	130	(50 - 300)	6.9	(2.8 - 15.4)
	<b>Total</b>	<b>1 870</b>	<b>(1 540 - 2 260)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 670	(3 060 - 4 330)	78.6	(74.0 - 82.6)
	Moderate	410	(290 - 580)	8.8	(6.5 - 11.8)
	High	590	(410 - 800)	12.6	(9.2 - 16.5)
	<b>Total</b>	<b>4 680</b>	<b>(3 940 - 5 480)</b>	<b>100.0</b>	
<b>LORI — High</b>					
4–11 years	Low	1 300	(950 - 1 750)	81.4	(73.3 - 87.4)
	Moderate	90	(50 - 140)	5.5	(3.4 - 8.3)
	High	210	(120 - 340)	13.1	(7.9 - 20.3)
	<b>Total</b>	<b>1 600</b>	<b>(1 170 - 2 090)</b>	<b>100.0</b>	
12–17 years	Low	760	(560 - 1 030)	79.8	(71.3 - 86.8)
	Moderate	60	(30 - 110)	6.4	(2.9 - 11.4)
	High	130	(70 - 220)	13.8	(8.0 - 22.8)
	<b>Total</b>	<b>960</b>	<b>(710 - 1 260)</b>	<b>100.0</b>	
<b>Total</b>	Low	2 060	(1 530 - 2 700)	80.8	(73.7 - 86.3)
	Moderate	150	(90 - 240)	5.8	(3.5 - 8.9)
	High	340	(210 - 540)	13.4	(8.5 - 19.7)
	<b>Total</b>	<b>2 550</b>	<b>(1 910 - 3 270)</b>	<b>100.0</b>	
<b>LORI — Extreme</b>					
4–11 years	Low	1 070	(770 - 1 430)	84.3	(74.0 - 92.0)
	Moderate	110	(30 - 250)	8.5	(3.1 - 17.0)
	High	90	(40 - 190)	7.2	(3.3 - 13.0)
	<b>Total</b>	<b>1 270</b>	<b>(920 - 1 740)</b>	<b>100.0</b>	
12–17 years	Low	920	(660 - 1 240)	92.9	(88.9 - 95.9)
	Moderate	50	(20 - 80)	4.6	(2.5 - 8.1)
	High	30	(10 - 50)	2.6	(1.0 - 5.6)
	<b>Total</b>	<b>990</b>	<b>(730 - 1 320)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 990	(1 460 - 2 620)	88.0	(81.5 - 92.5)
	Moderate	150	(70 - 280)	6.8	(3.8 - 11.6)
	High	120	(50 - 220)	5.2	(2.5 - 9.2)
	<b>Total</b>	<b>2 260</b>	<b>(1 670 - 3 020)</b>	<b>100.0</b>	



**TABLE 2.37: ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT HYPERACTIVITY, BY ATSIIC REGION**

<i>Risk of clinically significant hyperactivity</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Perth ATSIIC region</b>				
Low	5 720	(5 420 - 6 040)	69.3	(65.4 - 72.9)
Moderate	970	(790 - 1 170)	11.7	(9.5 - 14.1)
High	1 570	(1 320 - 1 850)	19.0	(16.0 - 22.4)
<b>Total</b>	<b>8 260</b>	<b>(8 150 - 8 370)</b>	<b>100.0</b>	
<b>Narrogin ATSIIC region</b>				
Low	2 460	(2 160 - 2 790)	77.9	(73.0 - 82.1)
Moderate	220	(150 - 330)	7.1	(4.9 - 9.9)
High	470	(360 - 620)	14.9	(11.6 - 18.9)
<b>Total</b>	<b>3 150</b>	<b>(2 780 - 3 540)</b>	<b>100.0</b>	
<b>Kalgoorlie ATSIIC region</b>				
Low	830	(540 - 1 240)	71.5	(59.9 - 81.9)
Moderate	140	(70 - 250)	12.2	(6.6 - 19.7)
High	190	(100 - 340)	16.3	(8.7 - 25.6)
<b>Total</b>	<b>1 170</b>	<b>(780 - 1 660)</b>	<b>100.0</b>	
<b>Geraldton ATSIIC region</b>				
Low	1 660	(1 310 - 2 080)	73.5	(66.9 - 79.4)
Moderate	220	(140 - 310)	9.6	(6.6 - 13.2)
High	380	(270 - 540)	17.0	(12.7 - 22.0)
<b>Total</b>	<b>2 260</b>	<b>(1 800 - 2 780)</b>	<b>100.0</b>	
<b>Broome ATSIIC region</b>				
Low	1 080	(690 - 1 590)	89.8	(84.8 - 93.5)
Moderate	70	(30 - 140)	5.5	(2.1 - 11.7)
High	60	(30 - 100)	4.8	(2.7 - 7.6)
<b>Total</b>	<b>1 200</b>	<b>(770 - 1 760)</b>	<b>100.0</b>	
<b>South Hedland ATSIIC region</b>				
Low	1 500	(1 070 - 2 050)	72.8	(63.2 - 81.1)
Moderate	210	(90 - 370)	10.0	(5.5 - 16.6)
High	350	(180 - 590)	17.2	(9.8 - 27.3)
<b>Total</b>	<b>2 060</b>	<b>(1 460 - 2 750)</b>	<b>100.0</b>	
<b>Derby ATSIIC region</b>				
Low	1 250	(830 - 1 800)	82.1	(74.4 - 88.5)
Moderate	70	(20 - 210)	4.8	(1.2 - 11.1)
High	200	(110 - 350)	13.1	(7.4 - 20.3)
<b>Total</b>	<b>1 520</b>	<b>(1 010 - 2 170)</b>	<b>100.0</b>	
<b>Kununurra ATSIIC region</b>				
Low	1 480	(1 040 - 2 050)	80.1	(74.1 - 85.4)
Moderate	150	(100 - 210)	8.0	(5.8 - 10.8)
High	220	(130 - 350)	11.9	(7.8 - 17.5)
<b>Total</b>	<b>1 850</b>	<b>(1 310 - 2 520)</b>	<b>100.0</b>	
<b>Warburton ATSIIC region</b>				
Low	1 290	(850 - 1 810)	90.1	(83.2 - 95.3)
Moderate	90	(40 - 180)	6.4	(3.2 - 11.6)
High	50	(20 - 100)	3.5	(1.6 - 7.1)
<b>Total</b>	<b>1 430</b>	<b>(960 - 2 000)</b>	<b>100.0</b>	
<b>Western Australia</b>				
Low	17 300	(16 800 - 17 700)	75.4	(73.4 - 77.4)
Moderate	2 130	(1 870 - 2 420)	9.3	(8.2 - 10.6)
High	3 490	(3 120 - 3 890)	15.3	(13.6 - 17.0)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 2.38: ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT HYPERACTIVITY, BY ABORIGINAL STATUS OF PRIMARY CARER**

<i>Risk of clinically significant hyperactivity</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Aboriginal</b>				
Low	15 000	(14 500 - 15 600)	76.0	(73.8 - 78.1)
Moderate	1 810	(1 560 - 2 080)	9.1	(7.9 - 10.5)
High	2 930	(2 590 - 3 300)	14.8	(13.1 - 16.7)
<b>Total</b>	<b>19 800</b>	<b>(19 300 - 20 200)</b>	<b>100.0</b>	
<b>Non-Aboriginal</b>				
Low	2 110	(1 750 - 2 520)	71.4	(64.4 - 77.6)
Moderate	300	(210 - 430)	10.2	(7.0 - 14.1)
High	540	(380 - 770)	18.4	(13.1 - 24.9)
<b>Total</b>	<b>2 960</b>	<b>(2 520 - 3 450)</b>	<b>100.0</b>	

## PEER PROBLEMS

**TABLE 2.39: ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT PEER PROBLEMS, BY AGE GROUP**

<i>Risk of clinically significant peer problems</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>4–11 years</b>				
Low	7 690	(7 240 - 8 150)	55.7	(52.8 - 58.5)
Moderate	1 750	(1 530 - 1 990)	12.7	(11.1 - 14.4)
High	4 360	(3 960 - 4 790)	31.6	(28.9 - 34.4)
<b>Total</b>	<b>13 800</b>	<b>(13 300 - 14 200)</b>	<b>100.0</b>	
<b>12–17 years</b>				
Low	5 930	(5 530 - 6 350)	65.1	(61.8 - 68.3)
Moderate	1 160	(970 - 1 360)	12.7	(10.8 - 14.8)
High	2 020	(1 740 - 2 320)	22.2	(19.4 - 25.3)
<b>Total</b>	<b>9 100</b>	<b>(8 660 - 9 560)</b>	<b>100.0</b>	
<b>Total</b>				
Low	13 600	(13 100 - 14 200)	59.5	(57.1 - 61.8)
Moderate	2 910	(2 600 - 3 230)	12.7	(11.3 - 14.1)
High	6 380	(5 890 - 6 880)	27.8	(25.7 - 30.0)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 2.40: NON-ABORIGINAL CHILDREN AGED 4–17 YEARS (a) — RISK OF CLINICALLY SIGNIFICANT PEER PROBLEMS, BY AGE GROUP**

<i>Risk of clinically significant peer problems</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>4–11 years</b>				
Low	124 000	(115 000 - 134 000)	61.0	(57.3 - 64.8)
Moderate	25 500	(20 100 - 30 800)	12.5	(10.0 - 15.0)
High	54 000	(46 600 - 61 400)	26.5	(23.1 - 29.9)
<b>12–17 years</b>				
Low	111 000	(102 000 - 121 000)	70.0	(66.0 - 73.9)
Moderate	15 500	(11 300 - 19 700)	9.7	(7.2 - 12.3)
High	32 300	(26 400 - 38 200)	20.3	(16.8 - 23.8)
<b>Total</b>				
Low	236 000	(226 000 - 246 000)	65.0	(62.2 - 67.7)
Moderate	41 000	(34 400 - 47 600)	11.3	(9.5 - 13.1)
High	86 300	(77 400 - 95 200)	23.8	(21.3 - 26.2)

(a) Source: Computer-Assisted Telephone Interview (CATI) survey conducted for the WAACHS by the Survey Research Centre at the University of Western Australia.



**TABLE 2.41: ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT PEER PROBLEMS, BY AGE**

Age (years)	Risk of clinically significant peer problems	Number	95% CI	%	95% CI
4	Low	910	(730 - 1 130)	54.6	(46.0 - 62.8)
	Moderate	220	(150 - 320)	13.5	(9.1 - 18.8)
	High	530	(390 - 700)	31.9	(24.6 - 39.8)
	<b>Total</b>	<b>1 660</b>	<b>(1 420 - 1 930)</b>	<b>100.0</b>	
5	Low	990	(810 - 1 190)	56.3	(49.1 - 63.2)
	Moderate	260	(180 - 350)	14.5	(10.3 - 19.4)
	High	520	(390 - 670)	29.2	(23.2 - 36.2)
	<b>Total</b>	<b>1 770</b>	<b>(1 540 - 2 010)</b>	<b>100.0</b>	
6	Low	960	(830 - 1 100)	54.5	(48.6 - 60.3)
	Moderate	220	(160 - 300)	12.3	(8.8 - 16.3)
	High	590	(470 - 720)	33.2	(27.7 - 39.1)
	<b>Total</b>	<b>1 770</b>	<b>(1 580 - 1 960)</b>	<b>100.0</b>	
7	Low	930	(790 - 1 080)	53.7	(45.7 - 61.0)
	Moderate	180	(130 - 240)	10.4	(7.3 - 13.9)
	High	620	(450 - 840)	35.9	(28.3 - 44.4)
	<b>Total</b>	<b>1 730</b>	<b>(1 510 - 1 980)</b>	<b>100.0</b>	
8	Low	940	(780 - 1 130)	53.8	(46.8 - 60.6)
	Moderate	270	(200 - 360)	15.7	(11.7 - 20.2)
	High	540	(420 - 680)	30.6	(24.4 - 37.2)
	<b>Total</b>	<b>1 750</b>	<b>(1 550 - 1 970)</b>	<b>100.0</b>	
9	Low	960	(810 - 1 130)	56.6	(48.9 - 63.9)
	Moderate	240	(150 - 350)	13.9	(9.1 - 20.3)
	High	500	(370 - 680)	29.5	(22.5 - 37.3)
	<b>Total</b>	<b>1 700</b>	<b>(1 480 - 1 950)</b>	<b>100.0</b>	
10	Low	1 020	(890 - 1 160)	57.6	(51.6 - 63.2)
	Moderate	200	(140 - 270)	11.1	(8.0 - 14.9)
	High	550	(440 - 690)	31.2	(26.1 - 36.7)
	<b>Total</b>	<b>1 770</b>	<b>(1 580 - 1 970)</b>	<b>100.0</b>	
11	Low	980	(820 - 1 150)	58.7	(51.9 - 65.3)
	Moderate	170	(120 - 220)	10.0	(7.3 - 13.1)
	High	520	(400 - 660)	31.2	(24.7 - 37.9)
	<b>Total</b>	<b>1 660</b>	<b>(1 470 - 1 870)</b>	<b>100.0</b>	
12	Low	1 030	(850 - 1 240)	61.8	(54.8 - 68.7)
	Moderate	250	(170 - 370)	15.3	(10.5 - 21.8)
	High	380	(280 - 490)	22.8	(17.6 - 29.1)
	<b>Total</b>	<b>1 660</b>	<b>(1 440 - 1 900)</b>	<b>100.0</b>	
13	Low	1 070	(880 - 1 270)	64.8	(55.8 - 73.1)
	Moderate	220	(140 - 340)	13.2	(8.1 - 19.3)
	High	360	(230 - 550)	22.0	(14.3 - 30.8)
	<b>Total</b>	<b>1 650</b>	<b>(1 420 - 1 910)</b>	<b>100.0</b>	
14	Low	1 040	(890 - 1 200)	64.9	(57.8 - 71.4)
	Moderate	180	(130 - 240)	11.0	(8.0 - 15.0)
	High	380	(270 - 540)	24.1	(17.9 - 31.8)
	<b>Total</b>	<b>1 600</b>	<b>(1 400 - 1 820)</b>	<b>100.0</b>	
15	Low	1 040	(880 - 1 220)	71.4	(63.4 - 78.1)
	Moderate	160	(110 - 230)	11.1	(7.5 - 15.5)
	High	250	(150 - 390)	17.5	(11.2 - 25.5)
	<b>Total</b>	<b>1 450</b>	<b>(1 260 - 1 660)</b>	<b>100.0</b>	

Continued....



**TABLE 2.41 (continued):** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT PEER PROBLEMS, BY AGE

Age (years)	Risk of clinically significant peer problems	Number	95% CI	%	95% CI
16	Low	940	(790 - 1 110)	66.1	(59.5 - 72.0)
	Moderate	190	(130 - 260)	13.2	(9.3 - 17.7)
	High	290	(220 - 390)	20.7	(15.4 - 26.6)
	<b>Total</b>	<b>1 420</b>	<b>(1 230 - 1 630)</b>	<b>100.0</b>	
17	Low	820	(660 - 1 010)	62.1	(53.9 - 69.8)
	Moderate	160	(100 - 240)	11.9	(7.6 - 17.8)
	High	340	(250 - 460)	26.0	(19.6 - 33.9)
	<b>Total</b>	<b>1 320</b>	<b>(1 130 - 1 540)</b>	<b>100.0</b>	
<b>Total</b>	Low	13 600	(13 100 - 14 200)	59.5	(57.1 - 61.8)
	Moderate	2 910	(2 600 - 3 230)	12.7	(11.3 - 14.1)
	High	6 380	(5 890 - 6 880)	27.8	(25.7 - 30.0)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 2.42:** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT PEER PROBLEMS, BY AGE GROUP AND SEX

Sex	Risk of clinically significant peer problems	Number	95% CI	%	95% CI
4–11 years					
Males	Low	3 910	(3 580 - 4 250)	54.4	(50.5 - 58.2)
	Moderate	950	(770 - 1 150)	13.2	(10.8 - 15.8)
	High	2 330	(2 040 - 2 640)	32.4	(28.9 - 36.3)
	<b>Total</b>	<b>7 190</b>	<b>(6 790 - 7 590)</b>	<b>100.0</b>	
Females	Low	3 780	(3 460 - 4 110)	57.2	(53.5 - 60.7)
	Moderate	810	(690 - 930)	12.2	(10.4 - 14.0)
	High	2 030	(1 760 - 2 320)	30.7	(27.2 - 34.3)
	<b>Total</b>	<b>6 610</b>	<b>(6 220 - 7 010)</b>	<b>100.0</b>	
<b>Total</b>	Low	7 690	(7 240 - 8 150)	55.7	(52.8 - 58.5)
	Moderate	1 750	(1 530 - 1 990)	12.7	(11.1 - 14.4)
	High	4 360	(3 960 - 4 790)	31.6	(28.9 - 34.4)
	<b>Total</b>	<b>13 800</b>	<b>(13 300 - 14 200)</b>	<b>100.0</b>	
12–17 years					
Males	Low	2 980	(2 670 - 3 310)	65.6	(61.1 - 69.9)
	Moderate	590	(470 - 720)	12.9	(10.4 - 15.7)
	High	980	(780 - 1 200)	21.5	(17.4 - 26.1)
	<b>Total</b>	<b>4 540</b>	<b>(4 180 - 4 920)</b>	<b>100.0</b>	
Females	Low	2 950	(2 670 - 3 240)	64.7	(60.2 - 68.9)
	Moderate	570	(440 - 720)	12.5	(9.8 - 15.6)
	High	1 040	(850 - 1 260)	22.8	(19.2 - 26.9)
	<b>Total</b>	<b>4 560</b>	<b>(4 230 - 4 910)</b>	<b>100.0</b>	
<b>Total</b>	Low	5 930	(5 530 - 6 350)	65.1	(61.8 - 68.3)
	Moderate	1 160	(970 - 1 360)	12.7	(10.8 - 14.8)
	High	2 020	(1 740 - 2 320)	22.2	(19.4 - 25.3)
	<b>Total</b>	<b>9 100</b>	<b>(8 660 - 9 560)</b>	<b>100.0</b>	

Continued . . .



**TABLE 2.42 (continued):** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT PEER PROBLEMS, BY AGE GROUP AND SEX

Sex	Risk of clinically significant peer problems	Number	95% CI	%	95% CI
<b>Total</b>					
Males	Low	6 890	(6 440 - 7 340)	58.7	(55.6 - 61.9)
	Moderate	1 530	(1 310 - 1 770)	13.1	(11.2 - 15.1)
	High	3 310	(2 960 - 3 680)	28.2	(25.4 - 31.3)
	<b>Total</b>	<b>11 700</b>	<b>(11 300 - 12 200)</b>	<b>100.0</b>	
Females	Low	6 730	(6 340 - 7 140)	60.2	(57.4 - 63.1)
	Moderate	1 370	(1 200 - 1 570)	12.3	(10.7 - 14.0)
	High	3 070	(2 740 - 3 420)	27.5	(24.7 - 30.2)
	<b>Total</b>	<b>11 200</b>	<b>(10 800 - 11 600)</b>	<b>100.0</b>	
<b>Total</b>	Low	13 600	(13 100 - 14 200)	59.5	(57.1 - 61.8)
	Moderate	2 910	(2 600 - 3 230)	12.7	(11.3 - 14.1)
	High	6 380	(5 890 - 6 880)	27.8	(25.7 - 30.0)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 2.43:** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT PEER PROBLEMS, BY LEVEL OF RELATIVE ISOLATION (LORI) AND AGE GROUP

Age group	Risk of clinically significant peer problems	Number	95% CI	%	95% CI
<b>LORI — None</b>					
4–11 years	Low	2 480	(2 200 - 2 800)	53.2	(47.6 - 58.8)
	Moderate	560	(420 - 710)	12.0	(9.2 - 15.2)
	High	1 630	(1 370 - 1 930)	34.9	(29.5 - 40.2)
	<b>Total</b>	<b>4 670</b>	<b>(4 350 - 5 000)</b>	<b>100.0</b>	
12–17 years	Low	1 960	(1 710 - 2 250)	62.1	(55.8 - 68.2)
	Moderate	390	(290 - 510)	12.2	(9.2 - 16.1)
	High	810	(620 - 1 040)	25.7	(20.2 - 31.7)
	<b>Total</b>	<b>3 160</b>	<b>(2 850 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>	Low	4 450	(4 110 - 4 800)	56.8	(52.4 - 61.0)
	Moderate	940	(780 - 1 140)	12.1	(9.9 - 14.5)
	High	2 440	(2 130 - 2 790)	31.1	(27.0 - 35.3)
	<b>Total</b>	<b>7 830</b>	<b>(7 680 - 7 980)</b>	<b>100.0</b>	
<b>LORI — Low</b>					
4–11 years	Low	1 900	(1 640 - 2 180)	54.9	(49.1 - 60.8)
	Moderate	480	(370 - 610)	13.7	(10.7 - 17.3)
	High	1 080	(850 - 1 360)	31.3	(25.7 - 37.3)
	<b>Total</b>	<b>3 460</b>	<b>(3 090 - 3 860)</b>	<b>100.0</b>	
12–17 years	Low	1 390	(1 170 - 1 650)	65.5	(58.5 - 71.8)
	Moderate	300	(210 - 400)	14.0	(10.1 - 19.0)
	High	440	(300 - 600)	20.5	(15.1 - 27.4)
	<b>Total</b>	<b>2 130</b>	<b>(1 840 - 2 440)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 290	(2 920 - 3 690)	58.9	(53.9 - 63.8)
	Moderate	770	(600 - 970)	13.8	(10.9 - 17.0)
	High	1 520	(1 250 - 1 840)	27.2	(22.8 - 31.8)
	<b>Total</b>	<b>5 590</b>	<b>(5 100 - 6 100)</b>	<b>100.0</b>	

Continued....



**TABLE 2.43 (continued):** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT PEER PROBLEMS, BY LEVEL OF RELATIVE ISOLATION (LORI) AND AGE GROUP

Age group	Risk of clinically significant peer problems	Number	95% CI	%	95% CI
<b>LORI — Moderate</b>					
4–11 years	Low	1 540	(1 250 - 1 890)	54.8	(48.6 - 60.6)
	Moderate	310	(240 - 390)	11.0	(9.0 - 13.2)
	High	960	(750 - 1 200)	34.2	(29.1 - 39.8)
	<b>Total</b>	<b>2 800</b>	<b>(2 360 - 3 330)</b>	<b>100.0</b>	
12–17 years	Low	1 220	(980 - 1 500)	65.4	(58.3 - 71.7)
	Moderate	260	(160 - 390)	13.8	(9.1 - 19.4)
	High	390	(270 - 540)	20.9	(15.0 - 27.3)
	<b>Total</b>	<b>1 870</b>	<b>(1 540 - 2 260)</b>	<b>100.0</b>	
<b>Total</b>	Low	2 760	(2 290 - 3 290)	59.0	(54.0 - 63.9)
	Moderate	570	(430 - 730)	12.1	(9.6 - 14.9)
	High	1 350	(1 050 - 1 690)	28.8	(24.5 - 33.4)
	<b>Total</b>	<b>4 680</b>	<b>(3 940 - 5 480)</b>	<b>100.0</b>	
<b>LORI — High</b>					
4–11 years	Low	930	(690 - 1 260)	58.3	(50.8 - 65.3)
	Moderate	210	(130 - 310)	12.8	(9.1 - 17.2)
	High	460	(310 - 670)	28.9	(22.7 - 36.1)
	<b>Total</b>	<b>1 600</b>	<b>(1 170 - 2 090)</b>	<b>100.0</b>	
12–17 years	Low	650	(450 - 880)	67.6	(57.1 - 76.5)
	Moderate	90	(50 - 150)	9.2	(5.3 - 15.5)
	High	220	(140 - 340)	23.2	(15.7 - 32.5)
	<b>Total</b>	<b>960</b>	<b>(710 - 1 260)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 580	(1 170 - 2 090)	61.7	(54.5 - 68.4)
	Moderate	290	(190 - 420)	11.5	(8.3 - 15.4)
	High	680	(480 - 960)	26.8	(20.7 - 33.0)
	<b>Total</b>	<b>2 550</b>	<b>(1 910 - 3 270)</b>	<b>100.0</b>	
<b>LORI — Extreme</b>					
4–11 years	Low	840	(590 - 1 170)	66.0	(57.2 - 73.9)
	Moderate	200	(100 - 370)	16.1	(8.2 - 26.7)
	High	230	(130 - 350)	17.9	(12.4 - 24.5)
	<b>Total</b>	<b>1 270</b>	<b>(920 - 1 740)</b>	<b>100.0</b>	
12–17 years	Low	700	(490 - 980)	71.3	(62.4 - 79.8)
	Moderate	120	(70 - 210)	12.7	(6.9 - 19.7)
	High	160	(100 - 250)	16.0	(10.4 - 23.5)
	<b>Total</b>	<b>990</b>	<b>(730 - 1 320)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 540	(1 110 - 2 100)	68.3	(61.9 - 74.1)
	Moderate	330	(200 - 540)	14.6	(8.9 - 21.6)
	High	390	(260 - 550)	17.1	(13.1 - 22.1)
	<b>Total</b>	<b>2 260</b>	<b>(1 670 - 3 020)</b>	<b>100.0</b>	





**TABLE 2.44: ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT PEER PROBLEMS, BY ATSIC REGION**

<i>Risk of clinically significant peer problems</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Perth ATSIC region</b>				
Low	4 670	(4 330 - 5 030)	56.6	(52.4 - 60.7)
Moderate	1 020	(850 - 1 220)	12.4	(10.3 - 14.8)
High	2 560	(2 240 - 2 900)	31.0	(27.2 - 35.2)
<b>Total</b>	<b>8 260</b>	<b>(8 150 - 8 370)</b>	<b>100.0</b>	
<b>Narrogin ATSIC region</b>				
Low	1 930	(1 660 - 2 240)	61.3	(55.2 - 66.9)
Moderate	410	(310 - 520)	12.9	(10.2 - 16.2)
High	810	(630 - 1 030)	25.8	(20.7 - 31.5)
<b>Total</b>	<b>3 150</b>	<b>(2 780 - 3 540)</b>	<b>100.0</b>	
<b>Kalgoorlie ATSIC region</b>				
Low	630	(410 - 920)	53.6	(41.2 - 65.7)
Moderate	130	(50 - 280)	11.4	(5.0 - 23.3)
High	410	(210 - 670)	35.0	(23.3 - 48.0)
<b>Total</b>	<b>1 170</b>	<b>(780 - 1 660)</b>	<b>100.0</b>	
<b>Geraldton ATSIC region</b>				
Low	1 270	(980 - 1 620)	56.3	(48.9 - 63.9)
Moderate	360	(230 - 520)	15.7	(11.0 - 21.7)
High	630	(450 - 850)	28.0	(22.1 - 34.8)
<b>Total</b>	<b>2 260</b>	<b>(1 800 - 2 780)</b>	<b>100.0</b>	
<b>Broome ATSIC region</b>				
Low	900	(570 - 1 290)	74.8	(67.3 - 81.2)
Moderate	80	(50 - 130)	6.7	(4.3 - 9.9)
High	220	(110 - 420)	18.5	(11.1 - 27.9)
<b>Total</b>	<b>1 200</b>	<b>(770 - 1 760)</b>	<b>100.0</b>	
<b>South Hedland ATSIC region</b>				
Low	1 030	(710 - 1 430)	49.8	(41.9 - 58.1)
Moderate	330	(200 - 480)	15.9	(11.4 - 21.1)
High	710	(470 - 1 040)	34.3	(26.6 - 41.9)
<b>Total</b>	<b>2 060</b>	<b>(1 460 - 2 750)</b>	<b>100.0</b>	
<b>Derby ATSIC region</b>				
Low	1 020	(640 - 1 520)	67.4	(56.0 - 76.9)
Moderate	160	(90 - 280)	10.8	(6.5 - 16.4)
High	330	(190 - 520)	21.8	(14.3 - 30.8)
<b>Total</b>	<b>1 520</b>	<b>(1 010 - 2 170)</b>	<b>100.0</b>	
<b>Kununurra ATSIC region</b>				
Low	1 250	(860 - 1 710)	67.4	(60.4 - 74.1)
Moderate	210	(90 - 390)	11.3	(5.9 - 19.8)
High	390	(260 - 590)	21.3	(16.0 - 27.2)
<b>Total</b>	<b>1 850</b>	<b>(1 310 - 2 520)</b>	<b>100.0</b>	
<b>Warburton ATSIC region</b>				
Low	920	(600 - 1 360)	64.3	(56.5 - 71.3)
Moderate	210	(120 - 340)	14.3	(9.4 - 21.2)
High	310	(210 - 450)	21.4	(15.0 - 28.4)
<b>Total</b>	<b>1 430</b>	<b>(960 - 2 000)</b>	<b>100.0</b>	
<b>Western Australia</b>				
Low	13 600	(13 100 - 14 200)	59.5	(57.1 - 61.8)
Moderate	2 910	(2 600 - 3 230)	12.7	(11.3 - 14.1)
High	6 380	(5 890 - 6 880)	27.8	(25.7 - 30.0)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 2.45:** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT PEER PROBLEMS, BY ABORIGINAL STATUS OF PRIMARY CARER

<i>Risk of clinically significant peer problems</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Aboriginal</b>				
Low	11 700	(11 200 - 12 300)	59.3	(56.9 - 61.8)
Moderate	2 570	(2 280 - 2 880)	13.0	(11.6 - 14.6)
High	5 470	(5 020 - 5 940)	27.7	(25.4 - 29.9)
<b>Total</b>	<b>19 800</b>	<b>(19 300 - 20 200)</b>	<b>100.0</b>	
<b>Non-Aboriginal</b>				
Low	1 830	(1 490 - 2 190)	61.8	(53.9 - 68.9)
Moderate	310	(200 - 450)	10.6	(7.2 - 15.2)
High	820	(580 - 1 090)	27.6	(20.6 - 35.1)
<b>Total</b>	<b>2 960</b>	<b>(2 520 - 3 450)</b>	<b>100.0</b>	

## PROSOCIAL BEHAVIOUR

**TABLE 2.46:** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT PROBLEMS WITH PROSOCIAL BEHAVIOUR, BY AGE GROUP AND SEX

<i>Sex</i>	<i>Risk of clinically significant problems with prosocial behaviour</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>4–11 years</b>					
Males	Low	6 540	(6 140 - 6 940)	90.9	(88.9 - 92.7)
	Moderate	300	(200 - 430)	4.1	(2.7 - 5.8)
	High	360	(280 - 450)	4.9	(3.9 - 6.3)
	<b>Total</b>	<b>7 190</b>	<b>(6 790 - 7 590)</b>	<b>100.0</b>	
Females	Low	6 200	(5 820 - 6 600)	93.8	(92.1 - 95.1)
	Moderate	190	(140 - 260)	2.9	(2.1 - 3.9)
	High	220	(150 - 320)	3.4	(2.3 - 4.8)
	<b>Total</b>	<b>6 610</b>	<b>(6 220 - 7 010)</b>	<b>100.0</b>	
<b>Total</b>	Low	12 700	(12 300 - 13 200)	92.3	(90.9 - 93.5)
	Moderate	490	(370 - 630)	3.5	(2.7 - 4.5)
	High	580	(460 - 710)	4.2	(3.4 - 5.1)
	<b>Total</b>	<b>13 800</b>	<b>(13 300 - 14 200)</b>	<b>100.0</b>	
<b>12–17 years</b>					
Males	Low	4 150	(3 800 - 4 520)	91.4	(88.5 - 93.8)
	Moderate	180	(120 - 260)	4.0	(2.6 - 5.8)
	High	210	(130 - 330)	4.6	(2.7 - 7.0)
	<b>Total</b>	<b>4 540</b>	<b>(4 180 - 4 920)</b>	<b>100.0</b>	
Females	Low	4 330	(4 000 - 4 680)	94.8	(93.3 - 96.2)
	Moderate	90	(50 - 140)	1.9	(1.2 - 3.0)
	High	150	(100 - 200)	3.3	(2.3 - 4.5)
	<b>Total</b>	<b>4 560</b>	<b>(4 230 - 4 910)</b>	<b>100.0</b>	
<b>Total</b>	Low	8 480	(8 030 - 8 930)	93.1	(91.5 - 94.5)
	Moderate	270	(190 - 360)	2.9	(2.1 - 4.0)
	High	360	(260 - 480)	3.9	(2.8 - 5.3)
	<b>Total</b>	<b>9 100</b>	<b>(8 660 - 9 560)</b>	<b>100.0</b>	

Continued...



**TABLE 2.46 (continued):** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT PROBLEMS WITH PROSOCIAL BEHAVIOUR, BY AGE GROUP AND SEX

Sex	<i>Risk of clinically significant problems with prosocial behaviour</i>	Number	95% CI	%	95% CI
<b>Total</b>					
Males	Low	10 700	(10 200 - 11 100)	91.1	(89.4 - 92.7)
	Moderate	480	(340 - 630)	4.1	(2.9 - 5.4)
	High	560	(440 - 710)	4.8	(3.8 - 6.1)
	<b>Total</b>	<b>11 700</b>	<b>(11 300 - 12 200)</b>	<b>100.0</b>	
Females	Low	10 500	(10 100 - 10 900)	94.2	(93.0 - 95.2)
	Moderate	280	(210 - 360)	2.5	(1.9 - 3.2)
	High	370	(280 - 480)	3.3	(2.6 - 4.3)
	<b>Total</b>	<b>11 200</b>	<b>(10 800 - 11 600)</b>	<b>100.0</b>	
<b>Total</b>	Low	21 200	(21 000 - 21 400)	92.6	(91.5 - 93.6)
	Moderate	750	(600 - 930)	3.3	(2.6 - 4.0)
	High	940	(780 - 1 110)	4.1	(3.4 - 4.9)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

### CARER REPORTS OF THE IMPACT OF EMOTIONAL OR BEHAVIOURAL DIFFICULTIES

**TABLE 2.47:** ABORIGINAL CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT FUNCTIONAL IMPAIRMENT, BY RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Risk of clinically significant functional impairment</i>	Number	95% CI	%	95% CI
Low	Low	14 200	(13 600 - 14 700)	95.6	(94.6 - 96.5)
	Moderate	270	(170 - 420)	1.9	(1.2 - 2.8)
	High	370	(290 - 460)	2.5	(2.0 - 3.1)
	<b>Total</b>	<b>14 800</b>	<b>(14 300 - 15 300)</b>	<b>100.0</b>	
Moderate	Low	2 180	(1 950 - 2 420)	83.4	(79.2 - 87.2)
	Moderate	120	(80 - 190)	4.8	(3.0 - 7.0)
	High	310	(210 - 420)	11.9	(8.4 - 15.9)
	<b>Total</b>	<b>2 610</b>	<b>(2 360 - 2 890)</b>	<b>100.0</b>	
High	Low	3 270	(2 920 - 3 650)	59.5	(54.8 - 64.2)
	Moderate	530	(380 - 700)	9.6	(7.0 - 12.5)
	High	1 690	(1 410 - 2 010)	30.9	(26.7 - 35.5)
	<b>Total</b>	<b>5 490</b>	<b>(5 020 - 5 980)</b>	<b>100.0</b>	
<b>Total</b>	Low	19 600	(19 200 - 20 000)	85.6	(83.8 - 87.2)
	Moderate	930	(740 - 1 150)	4.0	(3.2 - 5.0)
	High	2 380	(2 060 - 2 730)	10.4	(9.0 - 11.9)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 2.48: NON-ABORIGINAL CHILDREN AGED 4-17 YEARS (a) — RISK OF CLINICALLY SIGNIFICANT FUNCTIONAL IMPAIRMENT, BY RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES**

<i>Risk status for clinically significant emotional or behavioural difficulties</i>	<i>Risk of clinically significant functional impairment</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Low	Low	258 000	(249 000 - 267 000)	94.9	(93.4 - 96.3)
	Moderate	7 450	(4 500 - 10 400)	2.7	(1.7 - 3.8)
	High	6 520	(3 760 - 9 280)	2.4	(1.4 - 3.4)
Moderate	Low	25 800	(20 400 - 31 100)	69.7	(61.5 - 78.0)
	Moderate	5 900	(3 270 - 8 530)	16.0	(9.4 - 22.5)
	High	5 280	(2 790 - 7 770)	14.3	(8.0 - 20.6)
High	Low	23 900	(18 700 - 29 100)	44.0	(36.6 - 51.4)
	Moderate	8 380	(5 300 - 11 500)	15.4	(10.1 - 20.8)
	High	22 000	(17 100 - 27 000)	40.6	(33.3 - 47.8)
<b>Total</b>	Low	308 000	(300 000 - 315 000)	84.7	(82.6 - 86.8)
	Moderate	21 700	(16 800 - 26 700)	6.0	(4.6 - 7.3)
	High	33 800	(27 800 - 39 900)	9.3	(7.7 - 11.0)

(a) Source: Computer-Assisted Telephone Interview (CATI) survey conducted for the WAACHS by the Survey Research Centre at the University of Western Australia.

2



# Chapter 3

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## Chapter 3

# FACTORS ASSOCIATED WITH THE EMOTIONAL AND BEHAVIOURAL HEALTH OF ABORIGINAL CHILDREN AND YOUNG PEOPLE

*There are numerous factors potentially associated with the social and emotional wellbeing of Aboriginal children and young people. These factors include the health of the mother at the time of the birth of the child as well as the physical health of the child at birth and subsequently. Circumstances in the home environment such as use of alcohol by family members and dietary quality are also of potential significance to the wellbeing of children. Social determinants such as carer income, education, family size and structure, mobility, life stress events and the household care arrangements for children may each or jointly have an effect on risk of clinically significant emotional or behavioural difficulties in children. These potential influences on the emotional and behavioural health and wellbeing of Aboriginal children and young people are the subject of this Chapter.*

### SUMMARY

Children most at risk of clinically significant emotional or behavioural difficulties

Family and household factors show some of the strongest associations with risk of clinically significant emotional or behavioural difficulties in Aboriginal children and young people, particularly:

- ◆ *Life stress events (such as illness, family break-up, arrests or financial difficulties).* Just over one in five children were living in families where 7 or more major life stress events had occurred over the preceding 12 months. These children were five and a half times as likely to be at high risk of clinically significant emotional or behavioural difficulties than children in families where 2 or less life stress events had occurred.
- ◆ *Quality of parenting.* Around one in four children were living in families with poor quality of parenting. Children living in families with poor quality of parenting were almost four times as likely to be at high risk of clinically significant emotional or behavioural difficulties than children living in families with very good quality of parenting.
- ◆ *Family functioning.* Around one in five children were living in families that functioned poorly. These children were over twice as likely to be at high risk of clinically significant emotional or behavioural difficulties than children living in families with very good family functioning.

Carer circumstances and the physical health of the child also play a part, the most significant factors for emotional and behavioural difficulties being:

- ◆ *The physical health of the carer.* Children in the primary care of a person with a long term and limiting medical condition were over three times as likely to be at high risk of clinically significant emotional or behavioural difficulties than children whose primary carer had no medical condition lasting six months or more.





## SUMMARY (continued)

- ◆ *Speech impairment in the child.* Children with a speech difficulty (having trouble saying certain sounds) were over three times as likely to be at high risk of clinically significant emotional or behavioural difficulties.

### Other significant factors predisposing children to high risk of clinically significant emotional or behavioural difficulties

A number of other family, carer and child physical health factors were found to be significant in terms of the likelihood of children being at high risk of clinically significant emotional or behavioural difficulties:

- ◆ *Family arrangements.* Just over one-third of children were in the care of a sole parent. These children were almost twice as likely to be at high risk of clinically significant emotional or behavioural difficulties than children living with both their original parents. Children cared for by a person other than an original parent (such as aunts and uncles) were over twice as likely to be at high risk.
- ◆ *Residential Mobility.* Children that had lived in five or more different homes since birth were one and a half times more likely to be at high risk of clinically significant emotional or behavioural difficulties than children who had lived in fewer than five homes.
- ◆ *Carers' use of mental health services.* Children in the primary care of a person who had used Mental Health Services in WA were one and a half times as likely to be at high risk of clinically significant emotional or behavioural difficulties than children in the primary care of a person who had not used these services.
- ◆ *Children with runny ears.* A child suffering from runny ears, a more severe form of otitis media, was over one and a half times more likely to be at high risk of clinically significant emotional or behavioural difficulties than a child not suffering from runny ears.
- ◆ *Children with vision problems.* A child without normal vision in both eyes was over one and a half times as likely to be at high risk of clinically significant emotional or behavioural difficulties than a child with normal vision in both eyes.

### Protective factors

The likelihood of Aboriginal children experiencing emotional and behavioural difficulties was found to be lower where the following circumstances existed:

- ◆ *High household occupancy level.* Children living in homes with a high household occupancy level were half as likely to be at high risk of clinically significant emotional or behavioural difficulties than children living in homes with a low household occupancy level.
- ◆ *Living in extremely isolated locations.* Children living in areas of extreme isolation were one-fifth as likely to be at high risk of clinically significant emotional or behavioural difficulties compared with children in the Perth metropolitan area (no isolation).



## IDENTIFYING FACTORS ASSOCIATED WITH EMOTIONAL OR BEHAVIOURAL DIFFICULTIES IN ABORIGINAL CHILDREN

Goodman's Strengths and Difficulties Questionnaire – SDQ (see Chapter 2) – was used in the WAACHS to measure the risk of clinically significant emotional or behavioural difficulties in Aboriginal children and young people.

Although factors associated with the emotional and behavioural wellbeing of Aboriginal children vary, they can be grouped into three types:

- ◆ maternal health during pregnancy and the child's own physical health status
- ◆ the socioeconomic status, physical health and mental health of the carers
- ◆ family and household circumstances.

The following discussion of factors associated with risk of clinically significant emotional or behavioural difficulties based on WAACHS data is presented from each of these viewpoints. Data were provided by carers of the Aboriginal children who were in their care at the time of the survey.

A stepwise approach has been used to present the analysis of factors associated with risk of clinically significant emotional or behavioural difficulties. The initial analysis examines the direct relationships between child health, carer and family factors and the degree to which each is associated with the level of risk in Aboriginal children aged 4–17 years.

While information on direct relationships from this initial analysis is helpful in understanding the relative strengths of factor associations with risk of clinically significant emotional or behavioural difficulties, there are other factors that can have a bearing on the strength of these direct relationships. They include demographic factors such as the age and sex of the child and the Level of Relative Isolation (LORI). As an example, LORI introduces variations in levels of both asthma (which is highest in the least isolated areas) and runny ears (the highest risk for this condition being in the most isolated areas). Both of these health issues are thought to be factors determining whether a child is at high risk of clinically significant emotional or behavioural difficulties. In order to verify if asthma and runny ears are directly related to risk of clinically significant emotional or behavioural difficulties, or just appear to be because of their relationship to LORI, modelling techniques have also been used (see *Multivariate logistic regression modelling* in *Glossary*). The second level of analysis used in this chapter has therefore used modelling techniques to test if each child health, carer or family factor has a direct impact on the child's risk of clinically significant emotional or behavioural difficulties independently of other factors (such as LORI), or whether the relationship is more as a result of each factor's relationship to other factors.

Four models are presented in this chapter. Separate models have been run to test each of the factors within the three broad types – child health, carer and family factors. At the end of the chapter, a fourth model is presented which shows the joint impact of child health, carer and family factors found to have the most significant impact on risk of clinically significant emotional or behavioural difficulties experienced by Aboriginal children. This final model assesses the relative importance of each factor.



## MATERNAL HEALTH, CHILD HEALTH AND EMOTIONAL OR BEHAVIOURAL DIFFICULTIES

### ASSOCIATIONS WITH MATERNAL AND NEONATAL HEALTH

The importance of a healthy start to life as a predictor of later health and wellbeing is well recognised.<sup>1,2</sup> Using WAACHS data linked to birth records and midwives reports (see *Record Linkage* in the *Glossary*), this section details the associations between maternal age, maternal health and other characteristics of Aboriginal children at birth with the child's risk of clinically significant emotional or behavioural difficulties. Also described in this section are associations between health characteristics of children aged 4–17 years at various levels of their physical development and the risk of clinically significant emotional or behavioural difficulties in these children.

#### Age of mother at birth of child

A relatively high proportion of mothers of Aboriginal children were aged under 18 years at the time of the birth of the child – 13.1 per cent (CI: 12.0%–14.3%) compared with 2.1 per cent of the total state population. Around 2,720 children aged 4–17 years were born to mothers aged under 18 years. Of these children, an estimated 28.8 per cent (CI: 22.8%–36.0%) were at high risk of clinically significant emotional or behavioural difficulties. While this estimate is higher than the proportion of children of older mothers at high risk of clinically significant emotional or behavioural difficulties (23.7 per cent; CI: 21.4%–26.1%), the difference is not statistically significant (Table 3.1).

#### Use of tobacco and alcohol during pregnancy

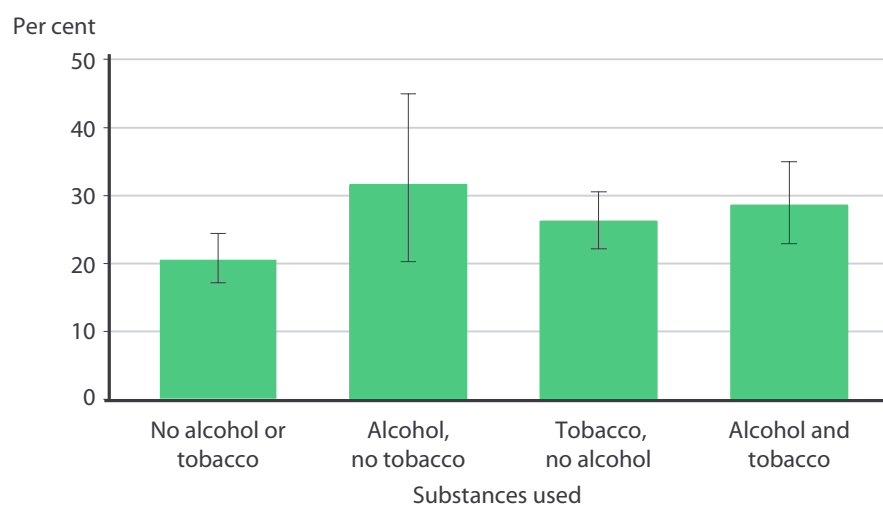
Volume One from the WAACHS found disturbingly high rates of tobacco use by mothers of Aboriginal children during pregnancy regardless of LORI.<sup>3</sup> The mothers of almost half (49.3 per cent; CI: 46.9%–51.8%) of children used tobacco during pregnancy. Results from Volume One also showed that the birth mothers of an estimated 22.8 per cent (CI: 20.8%–24.9%) of Aboriginal children drank alcohol during their pregnancy. While this is lower than the proportion of pregnant women that drink alcohol in the general population, it is known that those Aboriginal women who do consume alcohol are more likely to do so at hazardous levels, particularly women of child bearing age.<sup>4-7</sup>

A higher proportion of Aboriginal children aged 4–17 years born to mothers who used alcohol and/or tobacco during pregnancy were at high risk of clinically significant emotional or behavioural difficulties (27.5 per cent; CI: 24.3%–31.0%) than children born to mothers who did not report using these substances (20.6 per cent; CI: 17.2%–24.4%) (Table 3.2).

Whether the mother used alcohol only, tobacco only or both alcohol and tobacco during their pregnancy, there was a trend toward higher proportions of children at high risk of clinically significant emotional or behavioural difficulties where these substances were used, although differences in the levels of these problems for each type of substance use were not statistically significant (Figure 3.1).



**FIGURE 3.1:** CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY MATERNAL ALCOHOL AND TOBACCO USE DURING PREGNANCY



Source: Table 3.3

### Gestational age and birth weight

Relative to the general population, a higher proportion of Aboriginal infants are born premature (less than 37 weeks gestation) or born of low birth weight (less than 2,500 grams). Although premature birth is a possible cause of low birth weight, and low birth weight infants are more likely to experience health problems early in life than infants of normal birth weight, the proportions of children at high risk of clinically significant emotional or behavioural difficulties for either premature or low birth weight babies were not significantly higher than infants who were full term or of normal birth weight (Table 3.4).

### Percentage of Optimal Birth Weight (POBW)

An infant's weight at birth depends both on the length of gestation and the rate at which it has grown in utero. Not all foetuses grow at the same rate. Boys grow faster than girls, children of tall mothers grow faster than those of short mothers, and a woman's first child grows more slowly than her subsequent children. However growth rate is also affected by a number of pathological conditions, most of which decrease growth rate (the exception being maternal diabetes, which increases growth rate). The appropriateness of an infant's growth can be estimated as the ratio of the infant's observed birth weight to the infant's optimal birth weight. Infants that have grown normally have a Percentage of Optimal Birth Weight (POBW) close to 100 per cent and, in these analyses, percentages below 85 per cent are classified as having sub-optimal intrauterine growth.<sup>8</sup>

About 20.9 per cent (CI: 19.2%–22.6%) of Aboriginal infants have sub-optimal intrauterine growth.<sup>3</sup> The data presented in Table 3.5 show that there is no significant association between sub-optimal intrauterine growth and later risk of clinically significant emotional or behavioural difficulties. This was also true within each level of relative isolation.



### Breastfeeding

Almost nine in every ten Aboriginal children (88.0 per cent; CI: 86.5%–89.4%) had been breastfed. There was no difference in the proportion of children aged 4–17 years at high risk of clinically significant emotional or behavioural difficulties between those who had been breastfed and those who had not been breastfed (Table 3.6).

For children who had been breastfed, there was a trend for the proportion at high risk of clinically significant emotional or behavioural difficulties to decrease the longer the period of breastfeeding, although the results were not statistically significant. Almost three in ten children (28.6 per cent; CI: 23.9%–33.6%) who were breastfed for up to six months were at high risk of clinically significant emotional or behavioural difficulties compared with just over two in ten children (21.2 per cent; CI: 18.0%–24.5%) who were breastfed for 12 months or more (Table 3.7).

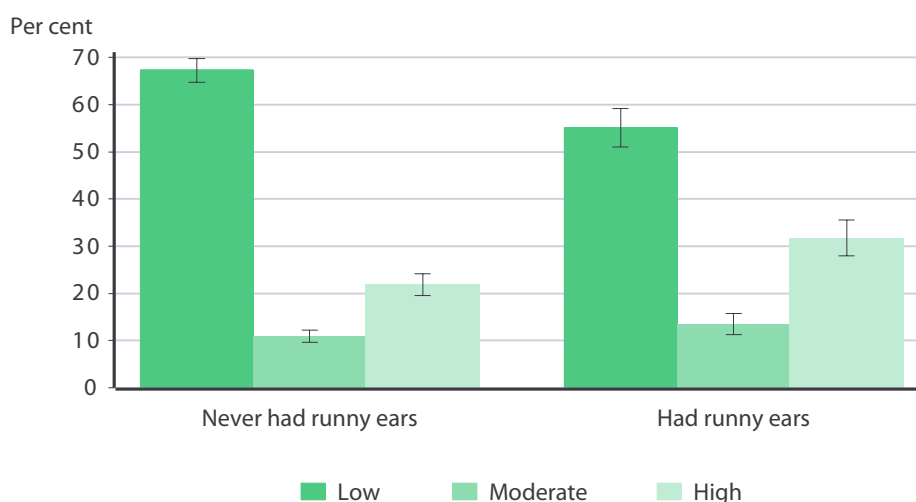
## ASSOCIATIONS WITH THE CHILD'S PHYSICAL HEALTH

### Otitis media (Runny ears)

Otitis media is an infection of the middle ear. It may occur in one or both ears and is the most common ear problem in children. Where pressure in the middle ear becomes too great and the eardrum ruptures, hearing is temporarily impaired and there is a discharge from the ear ('runny ears'). Runny ears represents a more severe form of otitis media. The condition often occurs early in life and may persist through the lengthy developmental period that encompasses the acquisition of speech and language, subsequent school enrolment and engagement in learning. The prevalence of runny ears increases with increasing isolation and decreases with increasing age.<sup>3</sup>

A higher proportion of children who had ever had runny ears were at high risk of clinically significant emotional or behavioural difficulties (31.6 per cent; CI: 27.9%–35.6%) than children not affected by the condition (21.8 per cent; CI: 19.6%–24.2%).

**FIGURE 3.2:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER EVER HAD RUNNY EARS



Source: Table 3.8

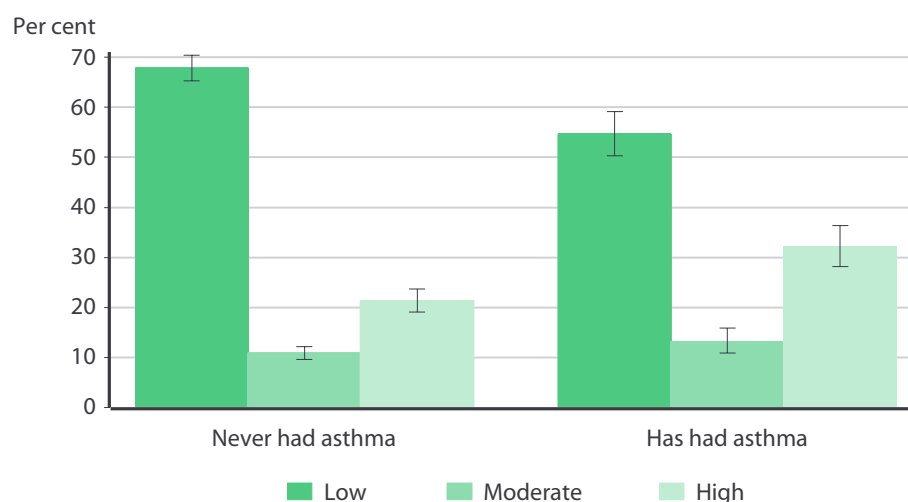


The significant association between runny ears and emotional and behavioural difficulties was true regardless of the age of the child. Almost one third (32.4 per cent; CI: 28.1%–36.9%) of children aged 4–11 years who had ever had runny ears were at high risk of clinically significant emotional or behavioural difficulties compared with almost one quarter (24.2 per cent; CI: 21.4%–27.0%) of 4–11 year-olds who had never had runny ears. For children aged 12–17 years, 29.8 per cent (CI: 23.5%–36.9%) who had ever had runny ears were at high risk of clinically significant emotional or behavioural difficulties compared with 18.6 per cent (CI: 15.5%–22.0%) who had never had runny ears (Table 3.8).

## Asthma

The lifetime occurrence of asthma was found to be associated with risk of clinically significant emotional or behavioural difficulties. A higher proportion of children who had ever had asthma were at high risk of clinically significant emotional or behavioural difficulties (32.1 per cent; CI: 28.1%–36.3%) compared with children who had never suffered asthma (21.3 per cent; CI: 19.1%–23.6%) (Figure 3.3).

**FIGURE 3.3:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER EVER HAD ASTHMA



Source: Table 3.9

Whether a child had ever had asthma has a significant impact on risk of clinically significant emotional or behavioural difficulties regardless of age. Just over one third (34.5 per cent; CI: 29.5%–40.2%) of children aged 4–11 years who have ever had asthma were at high risk of clinically significant emotional or behavioural difficulties compared with almost one quarter (23.4 per cent; CI: 20.9%–26.1%) of children who have never had asthma. For children aged 12–17 years, 28.2 per cent (CI: 22.5%–34.2%) of those who have ever had asthma were at high risk of clinically significant emotional or behavioural difficulties compared with 18.0 per cent (CI: 14.9%–21.7%) of those who have never had asthma (Table 3.10).



Diet

Carers were asked a number of questions relating to the diet of the children in their care, including information about how often children eat fruit and vegetables, and what types of beverages were consumed. From this information, an index of dietary quality was compiled.

**INDICATORS OF DIETARY QUALITY**

The available data allowed a range of indicators of dietary quality to be devised. These indicators did not measure dietary intake, but were designed to reflect whether the principles of a healthy diet were being observed. It must be noted that these indicators are based on interview responses, which were not further validated.

*Indicator 1:* met if water was usually drunk when thirsty.

*Indicator 2:* met if some form of unsweetened and unflavoured cow or soy milk was regularly consumed.

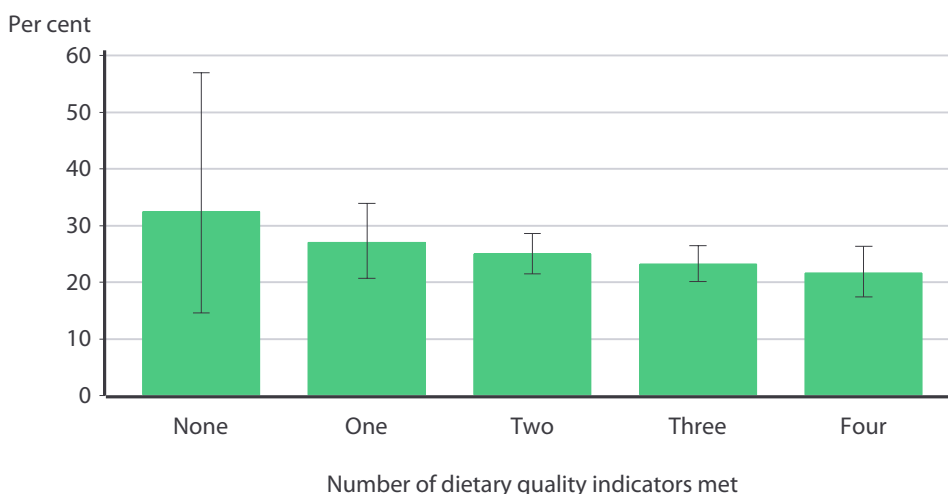
*Indicator 3:* met if fresh fruit was usually consumed on 6 or 7 days of the week.

*Indicator 4:* met if at least half a cup of a variety of at least 3 fresh vegetables, other than potato, were usually consumed on 6 or 7 days of the week.

The number of these indicators that were met was used as an overall indicator of dietary quality.

The association between diet and risk of clinically significant emotional or behavioural difficulties was investigated. Although there were no statistically significant differences, there appeared to be a trend toward lower proportions of children at high risk of clinically significant emotional or behavioural difficulties as more dietary indicators were met (Table 3.11).

**FIGURE 3.4:** CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY NUMBER OF DIETARY QUALITY INDICATORS MET



Source: Table 3.11

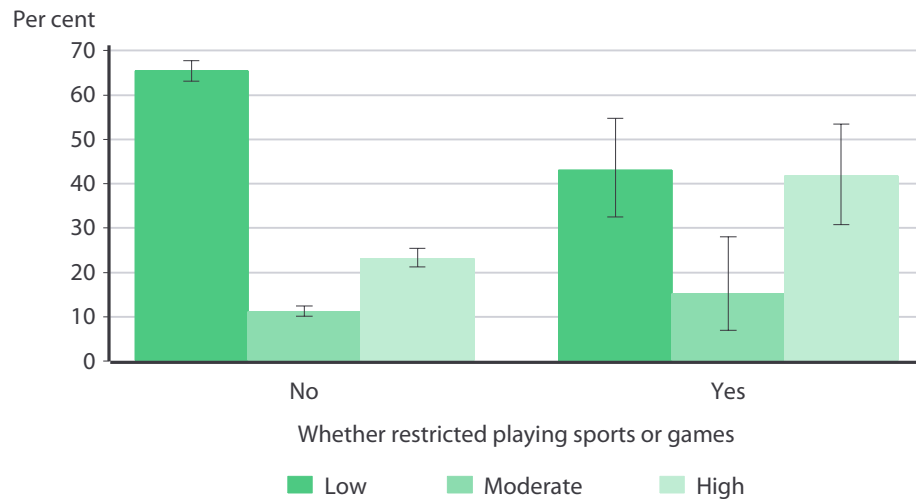




### Restricted at sports

An estimated 4.1 per cent (CI: 3.3%–5.0%) of Aboriginal children aged 4–17 years could not play sports or games involving strong exercise because of an illness or disability. A significantly higher proportion of these children were at high risk of clinically significant emotional or behavioural difficulties (41.7 per cent; CI: 30.8%–53.4%) than other children (23.2 per cent; CI: 21.2%–25.4%) (Figure 3.5).

**FIGURE 3.5:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THE CHILD WAS RESTRICTED PLAYING SPORTS OR GAMES



Source: Table 3.12

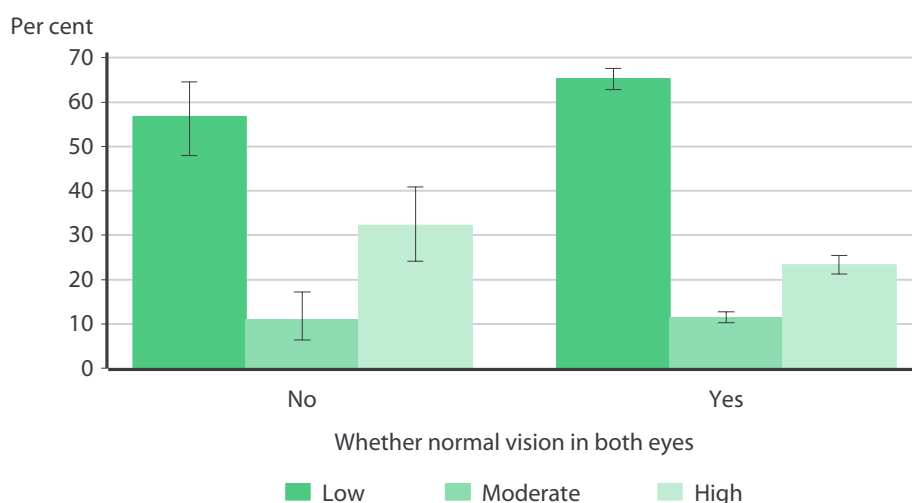
## ASSOCIATIONS WITH DISABILITIES AND FUNCTIONAL IMPAIRMENTS

### Vision

Some 8.1 per cent (CI: 6.8%–9.1%) of 4–17 year-old Aboriginal children did not have normal vision in both eyes. Nearly one-third (32.2 per cent; CI: 24.1%–40.9%) of these children were at high risk of clinically significant emotional or behavioural difficulties. Although this proportion was higher than the estimated proportion of children with normal vision in both eyes who were at high risk of clinically significant emotional or behavioural difficulties (23.3 per cent; CI: 21.1%–25.4%), the difference was not statistically significant even though the overlap was small (Figure 3.6).



**FIGURE 3.6:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THE CHILD HAS NORMAL VISION IN BOTH EYES



Source: Table 3.13

### Hearing

There was no statistically significant difference in risk of clinically significant emotional or behavioural difficulties for those 4–17 year-old Aboriginal children without normal hearing in both ears (31.5 per cent; CI: 23.9%–39.5%) compared with children with normal hearing in both ears (23.4 per cent; CI: 21.4%–25.6%) (Table 3.14). The lack of normal hearing in both ears affected 6.8 per cent (CI: 5.9%–7.8%) of children.

### Speech

Speech difficulties are factors significantly associated with risk of clinically significant emotional or behavioural difficulties.

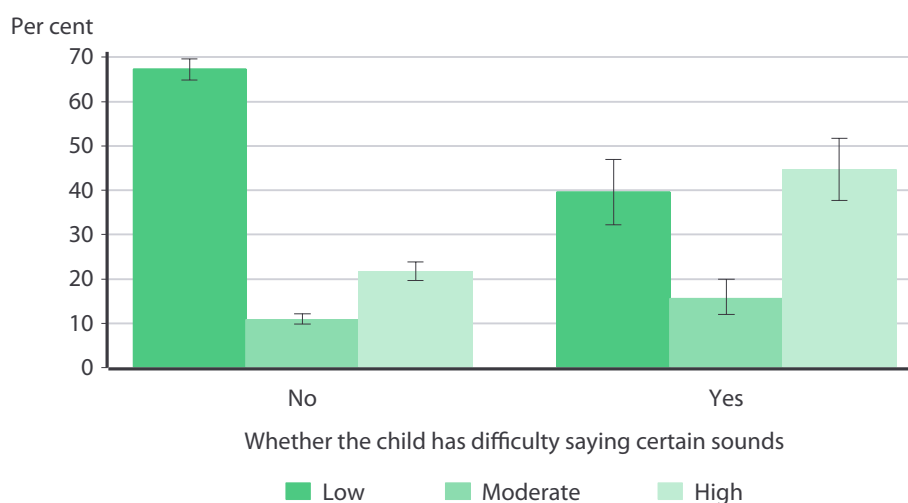
Approximately one in ten children had trouble saying certain sounds (9.8 per cent; CI: 8.6%–11.0%). Of those children who had difficulty saying certain sounds, 44.7 per cent (CI: 37.7%–51.7%) were at high risk of clinically significant emotional or behavioural difficulties compared with 21.7 per cent (CI: 19.7%–23.9%) of other children (Figure 3.7).

Although stuttering or stammering are less common problems, in children who stutter or stammer the proportion at high risk of clinically significant emotional or behavioural difficulties was significantly higher than in other children who do not stutter or stammer – 47.3 per cent (CI: 37.9%–56.9%) compared with 22.9 per cent (CI: 20.8%–25.0%) (Table 3.16).

A higher proportion of children whose speech is impaired to the point that other people need help to understand what they are saying were at high risk of clinically significant emotional or behavioural difficulties. Of these children, 42.8 per cent (CI: 35.9%–49.6%) were assessed as being at high risk compared with 22.2 per cent (CI: 20.1%–24.3%) of children whose speech can be understood (Table 3.17).



**FIGURE 3.7:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THE CHILD HAS DIFFICULTIES SAYING CERTAIN SOUNDS



Source: Table 3.15

### Mobility

Due to the small number of children considered to need help to get around (210 children; CI: 110–360), the estimated proportion of such children at high risk of clinically significant emotional or behavioural difficulties is subject to a wide confidence interval. Although there is no statistically significant difference in the proportion at high risk, the data would suggest a higher proportion of children needing help are at high risk of clinically significant emotional or behavioural difficulties (Table 3.18).

### Activities of daily living

A higher proportion of children needing special help to carry out basic personal functions (eating, bathing, dressing or using the toilet) due to illness or disability were at high risk of clinically significant emotional or behavioural difficulties. Six in ten of these children (60.1 per cent; CI: 42.1%–74.4%) were at high risk. This contrasts with 23.4 per cent (CI: 21.3%–25.5%) for children without such functional limitations. It should be noted that only one quarter (25.8 per cent; CI: 16.0%–38.5%) of children with these functional limitations were at low risk of clinically significant emotional or behavioural difficulties (Table 3.19).

## RELATIVE IMPORTANCE OF CHILD, MATERNAL AND PHYSICAL HEALTH FACTORS ON EMOTIONAL AND BEHAVIOURAL DIFFICULTIES IN ABORIGINAL CHILDREN

Figure 3.8 presents the results of modelling child, maternal and physical health factors discussed in the preceding analysis. The statistical modelling tested each factor to determine the degree to which it was associated with high risk of clinically significant emotional or behavioural difficulties independently of the effects of demographic and other child, maternal and physical health factors.



### EXPLORING RELATIONSHIPS WITH MODELLING

Previous sections have explored the relationship between risk of clinically significant emotional or behavioural difficulties and a range of factors. These factors may themselves be interrelated. For instance, a relationship was found between risk of clinically significant emotional or behavioural difficulties and both whether the child has ever had asthma and LORI. However, asthma is also associated with LORI, so it is possible that the observed relationship between emotional or behavioural difficulties and asthma may merely reflect the relationships between emotional or behavioural difficulties and LORI, and between asthma and LORI.

Statistical modelling can be used to assess the simultaneous impact of multiple factors and to determine the individual effects of each factor. *Logistic regression modelling* (see *Glossary*) have been used to explore these relationships. The modelling techniques used in this survey account for the survey weights and the hierarchical structure of the data due to the selection of children within families and within communities. Furthermore, each model adjusts for the independent effects of the other variables in the model. Thus, for example, the association between risk of clinically significant emotional or behavioural difficulties and asthma can be separated from the association with LORI.

The results of logistic regression models are expressed in terms of *odds ratios* (see *Glossary*). The odds ratios are calculated relative to an index category for each variable. The statistical significance of an odds ratio can be judged by whether the confidence interval includes the reference value of one (see *Appendix E – Reliability of Estimates*, for more information on confidence intervals). Finally, odds ratios are multiplicative – that is, the overall risk of emotional and behavioural difficulties associated with the presence of more than one of the risk indicators considered can be determined by multiplying their associated odds ratios.

Child, maternal and physical health factors found not to be statistically significant predictors of risk of clinically significant emotional or behavioural difficulties, both in the preceding analysis and as a result of statistical modelling, were the age of mother at birth; gestational age; birth weight; POBW; breastfeeding; hearing difficulties (whether the child does not have normal hearing in both ears); and whether the child needs help to get around.

Whether the child is restricted at sports appeared to be significantly associated with risk of clinically significant emotional or behavioural difficulties but, when modelled with other factors, was not found to be a significant predictor in its own right.

There were seven child, maternal and physical health factors which data modelling suggested were predictors of high risk of clinically significant emotional or behavioural difficulties independent of the effects of demographic and other child, maternal and physical health factors. The results of the modelling are shown in Figure 3.8 as odds ratios (see *Glossary*). The odds ratios are calculated relative to an index category for each variable that has been assigned a reference value of one. Not all odds ratios in Figure 3.8 differ significantly from the reference value of one. In addition, some of the odds ratios are associated with significant *decreases* in emotional or behavioural



difficulties – for example, there is an 80 per cent reduction in emotional or behavioural difficulties for children living in extremely isolated areas (Odds Ratio 0.20; CI: 0.07–0.54).

**Use of alcohol or tobacco during pregnancy.** Aboriginal children born to mothers who had used alcohol or tobacco during pregnancy were over one and a half times (Odds Ratio 1.67; CI: 1.10–2.54) more likely to be at high risk of clinically significant emotional or behavioural difficulties than children born to mothers who had not used these substances during pregnancy.

**Asthma and Otitis media.** While there are demonstrable relationships between risk of clinically significant emotional or behavioural difficulties on the one hand, and asthma and otitis media on the other, there are also complex associations between otitis media and asthma and their distributions by sex, age and LORI.<sup>3</sup> Data modelling facilitates the disentangling of known associations between otitis media, asthma, sex, age and LORI with risk of clinically significant emotional or behavioural difficulties. Relative to children without asthma, children with asthma were about one and a half times (Odds Ratio 1.47; CI: 1.06–2.05) more likely to be at high risk of clinically significant emotional or behavioural difficulties. Similarly, relative to children who have never had runny ears, children who have had runny ears were almost twice (Odds Ratio 1.92; CI: 1.40–2.62) as likely to be at high risk of clinically significant emotional or behavioural difficulties.

**Diet (number of dietary quality indicators met).** In the preceding analysis of the direct relationship between diet and emotional or behavioural difficulties, no statistically significant association was established. Volume One from the WAACHS found variations in the way Aboriginal children in different age groups and living in different levels of relative isolation met the number of dietary indicators. For example, 4–11 year-olds were more likely to meet all four indicators than 12–17 year-olds. All four indicators were more likely to be met by children aged 4–11 years living in areas of moderate or high isolation. After taking into account these demographic factors, Aboriginal children aged 4–17 years were found to be twice as likely (Odds Ratio 2.03; CI: 1.00–4.13) to be at high risk of clinically significant emotional or behavioural difficulties if they met only one indicator and almost twice as likely (Odds Ratio 1.85; CI: 1.06–3.25) if they met only two indicators than children who met all four indicators. While the odds ratio for children who met no indicators was high (Odds Ratio 3.62; CI: 1.00–13.30), the number of children represented in this category was small and estimate therefore has a wide confidence interval. Although other factors such as dietary knowledge (as related to the educational attainment of the primary carer) and the ability to afford nutritious food (as measured in the survey by level of financial strain) also influence diet, excluding them from the model had an insignificant impact on the odds ratios.

**Vision.** Whether the child had normal vision in both eyes was another factor (in addition to diet) where the preceding analysis did not find a statistically significant association with risk of clinically significant emotional or behavioural difficulties. As with diet, Volume One from the WAACHS showed variations in vision impairment depending on the child's age and LORI. Poor vision was more common in 12–17 year-olds and decreased with increasing isolation. After modelling to take these factors into account, children who did not have normal vision in both eyes were over one and a half times (Odds Ratio 1.74; CI: 1.08–2.81) more likely to be at high risk of clinically significant emotional or behavioural difficulties than children with normal vision in both eyes.



**Speech.** Whether the child has difficulty saying certain sounds was used as the measure of speech difficulties (as distinct from whether the child stutters or stammers; or whether people needed help understanding what the child is saying). The impact of a speech difficulty was significant, with children having difficulty saying certain sounds over three times (Odds Ratio 3.42; CI: 2.28–5.11) more likely to be at high risk of clinically significant emotional or behavioural difficulties.

**Activities of daily living.** The number of children represented in this category was small and estimates are therefore associated with wide confidence intervals. Although not included in Figure 3.8, children needing special help to carry out basic personal functions due to illness or disability were four and a half times (Odds Ratio 4.51; CI: 1.90–10.70) more likely to be at high risk of clinically significant emotional or behavioural difficulties, a level not unexpected given the severity of their disability.

**FIGURE 3.8:** CHILDREN AGED 4–17 YEARS — LIKELIHOOD OF BEING AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, ASSOCIATED WITH CHILD, MATERNAL AND PHYSICAL HEALTH FACTORS

Parameter	Odds Ratio	95% CI
Sex—		
Male	1.83	(1.41 - 2.37)
Female	1.00	
Age group (years)—		
4–7	1.00	
8–11	1.02	(0.74 - 1.41)
12–14	1.08	(0.72 - 1.62)
15–17	0.46	(0.26 - 0.80)
Level of Relative Isolation—		
None	1.00	
Low	0.73	(0.46 - 1.16)
Moderate	1.09	(0.59 - 2.01)
High	0.66	(0.23 - 1.89)
Extreme	0.20	(0.07 - 0.54)
Use of alcohol or tobacco during pregnancy—		
No alcohol or tobacco	1.00	
Alcohol and/or tobacco	1.67	(1.10 - 2.54)
Not applicable	1.52	(0.98 - 2.36)
Whether child has ever had runny ears—		
No	1.00	
Yes	1.92	(1.40 - 2.62)
Whether child has ever had asthma—		
No	1.00	
Yes	1.47	(1.06 - 2.05)
Number of dietary quality indicators met—		
No indicators met	3.62	(1.00 - 13.3)
1 indicator met	2.03	(1.00 - 4.13)
2 indicators met	1.85	(1.06 - 3.25)
3 indicators met	1.51	(0.91 - 2.50)
All 4 indicators met	1.00	
Whether child has normal vision in both eyes—		
No	1.74	(1.08 - 2.81)
Yes	1.00	
Whether child has difficulty saying certain sounds—		
No	1.00	
Yes	3.42	(2.28 - 5.11)



## FACTORS ASSOCIATED WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES: MATERNAL AND NEONATAL HEALTH, CHILD PHYSICAL HEALTH, DISABILITY AND FUNCTIONAL IMPAIRMENT

### Maternal and neonatal health

No association was found between foetal growth as measured by gestational age, birth weight or POBW. A previous study of all Western Australian children reported a relationship between foetal growth and subsequent mental health problems between the ages of 4 and 13.<sup>9</sup> The lack of such an association in Aboriginal children may possibly reflect the effects of a more disadvantaged social environment. The influence of low birth weight in the causal pathway to child behavioural problems has been suggested to be minimal in advantaged environments, most evident in lower middle class environments, and absent in disadvantaged environments. In disadvantaged environments the biological influence of birth weight on behaviour is small compared with the effect of social factors.<sup>10</sup>

The relationship between increases in the use of alcohol, tobacco and substance use during pregnancy and lower birth weight was reported in Volume One.<sup>3</sup> Some 16.9 per cent (CI: 15.1%–18.8%) of children were born to mothers who used both tobacco and alcohol during pregnancy. The data in this chapter show that, where women used both alcohol and tobacco during pregnancy, the likelihood of their children being at high risk of clinically significant emotional or behavioural difficulties increased by over one and a half times (Odds Ratio 1.67; CI: 1.10–2.54). Mothers who used alcohol or tobacco during pregnancy are likely to continue to use these substances. Some 85.2 per cent (CI: 82.3%–87.4%) of mothers who smoked tobacco during pregnancy were still smoking at the time of the survey. Birth mothers were not asked about current use of alcohol, but were asked whether, at the time of the interview, ‘overuse of alcohol causes a problem in the household’. A higher proportion of children whose birth mother reported using alcohol during pregnancy lived in a household where problems were caused by the overuse of alcohol – 20.3 per cent; (CI: 16.4%–24.8%) compared with 12.6 per cent (CI: 10.8%–14.6%) of children whose birth mother did not drink alcohol whilst pregnant.

### Child physical health

**Asthma and Otitis Media.** Recent reports have demonstrated a higher prevalence of mental disorders in adults with clinically diagnosed asthma.<sup>12</sup> The findings from the WAACHS extend these observations into populations of Aboriginal children. Aboriginal children with asthma were one and a half times more likely (Odds Ratio 1.47; CI: 1.06–2.05) to be at high risk of clinically significant emotional or behavioural difficulties. Moreover, the association between physical illness and emotional and behavioural difficulties was not just confined to asthma. Those children with otitis media, specifically runny ears, were almost twice as likely (Odds Ratio 1.92; CI: 1.40–2.62) to be at high risk of clinically significant emotional or behavioural difficulties. These odds ratios are simultaneously adjusted and include covariates for the child’s age, sex and LORI.

*Continued . . .*





## FACTORS ASSOCIATED WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES: MATERNAL AND NEONATAL HEALTH, CHILD PHYSICAL HEALTH, DISABILITY AND FUNCTIONAL IMPAIRMENT *(continued)*

### Child physical health *(continued)*

**Diet and dietary quality.** The WAACHS used an index of dietary quality to assess some aspects of dietary nutritional adequacy.<sup>3</sup> Children who met none of the four indicators of dietary adequacy were three and a half times more likely (Odds Ratio 3.62; CI: 1.00–13.3) to be at high risk of clinically significant emotional or behavioural difficulties than children whose diets met all four criteria. These results are adjusted for the child's age, sex, and LORI, suggesting that dietary quality makes an independent contribution to child behaviour.

Relationships between the physical and emotional development of children and their early and ongoing nutritional intake are well documented – particularly as they pertain to starvation and malnutrition. However there is a surprising lack of rigorous research on the relationship between sub-optimal nutrition and the emotional and behavioural status of children and young people. Ongoing research findings in brain biochemistry and psychoneuroimmunology point to links between nutritional intake, central nervous system and immune function, and psychological health status.<sup>13</sup> These findings may lead to greater acceptance of the inclusion of nutritional and dietary treatment approaches among health practitioners addressing psychological disorders.<sup>14</sup> Dietary behaviour has been found to be strongly associated with self-perceived general and mental health status.<sup>15,16</sup>

It is important to note that the dietary measure used in the WAACHS is crude and based upon carer report rather than direct observation, blood studies or reports of food frequency. Notwithstanding this, these findings suggest a significant association between the quality of diet and child emotional and behavioural difficulties. This may reflect indirect causal mechanisms associated with poor quality diet, resultant physical illness and onward causal impacts on the social and emotional status of the child. Alternately it may reflect the direct impact of a manifestly poor diet and resultant low nutritional status on social and emotional outcomes in children.

### Disability and functional impairment

Losses of vision and hearing that remain uncorrected or are not amenable to correction are relatively rare. While the findings in this chapter show consistent elevations in risk of clinically significant emotional or behavioural difficulties for children with visual or hearing impairments compared with those children who had normal vision and hearing, these differences were only significant for children with visual impairments.

In contrast, the proportion of children at high risk of clinically significant emotional or behavioural difficulties was significantly higher where Aboriginal children had functional impairments of speech or restrictions in physical activity or self-care.

*Continued . . . .*



## FACTORS ASSOCIATED WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES: MATERNAL AND NEONATAL HEALTH, CHILD PHYSICAL HEALTH, DISABILITY AND FUNCTIONAL IMPAIRMENT (*continued*)

### Disability and functional impairment (*continued*)

**Problems with speech.** The likelihood of children being at high risk of clinically significant emotional or behavioural difficulties was over three times higher (Odds Ratio 3.42; CI: 2.28 – 5.11) where Aboriginal children had difficulty saying certain sounds.

**Restriction in physical activity.** About 42 per cent of children who could not play sports involving strong exercise were at high risk of clinically significant emotional or behavioural difficulties – a proportion about double of that compared with children who are not restricted in their activity level.

**Restricted in activities of daily living.** Six in ten children who required help with eating, dressing, bathing or using the toilet were at high risk of clinically significant emotional or behavioural difficulties – nearly a three-fold increase in proportion of children at high risk when compared with those children who did not have restrictions in these activities.

3

## CARER FACTORS AND EMOTIONAL OR BEHAVIOURAL DIFFICULTIES

### CARER EDUCATION AND FINANCIAL STRAIN

#### Carer education

Primary carers of three in ten Aboriginal children aged 4–17 years had left school before completing Year 10, the level of schooling necessary to achieve a secondary school certificate. The primary carers of another four in ten children had left school at the completion of Year 10 while the primary carers of just over one quarter of children went on to complete their formal schooling in Years 11 or 12. Across these levels of educational attainment of the primary carers, there was no statistically significant variation in proportions of their children at high risk of clinically significant emotional or behavioural difficulties. This was the case for both school and post-school educational attainment (Table 3.20).

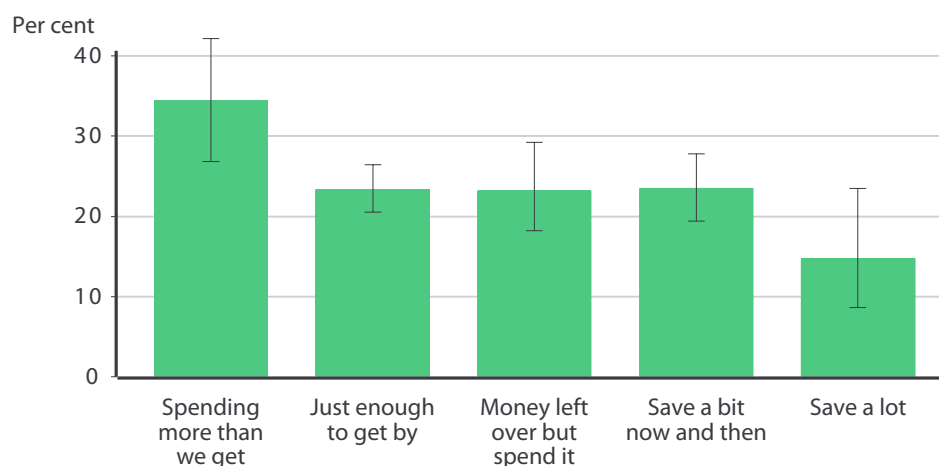
#### Family financial strain

Over half of children were living in families which were either spending more than they got (9.0 per cent; CI: 7.5%–10.6%) or had just enough money to get by (45.2 per cent; CI: 42.6%–47.9%). This compares with around 5 per cent of families which were saving a lot (4.7 per cent; CI: 3.5%–6.2%).

A higher proportion of children living in families with the most financial strain ('spending more money than we get') were at high risk of clinically significant emotional or behavioural difficulties (34.4 per cent; CI: 26.8%–42.2%) than children living in families with the lowest financial strain (families that could 'save a lot') (14.7 per cent; CI: 8.6%–23.5%). The level of emotional and behavioural difficulties for families between these two extremes was comparable at around 23 per cent of children (Figure 3.9).



**FIGURE 3.9:** CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL AND BEHAVIOURAL DIFFICULTIES, BY FAMILY FINANCIAL STRAIN



Source: Table 3.21

## ASSOCIATIONS WITH CARER PHYSICAL HEALTH

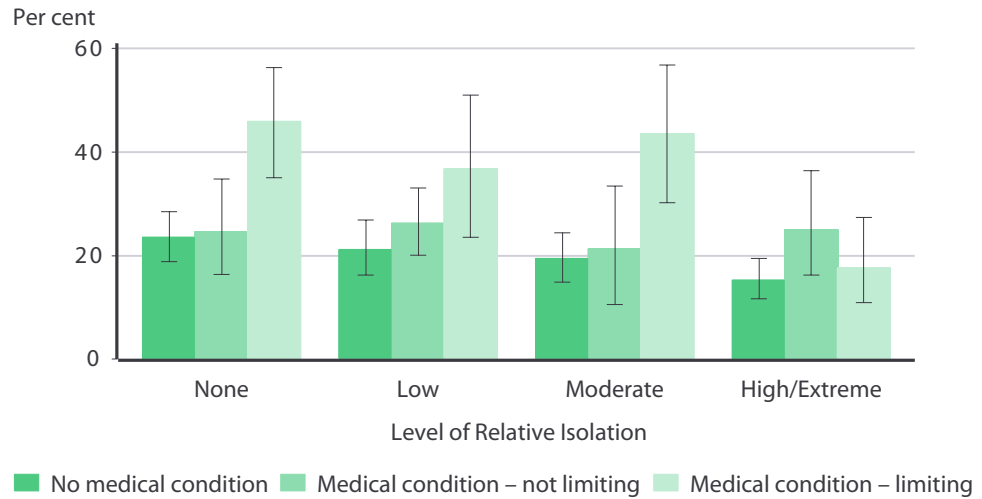
### Carer’s physical health

Carers were asked if they had any medical condition lasting six months or more, and if so whether they were limited in any way doing normal daily activities as a result of this problem. An estimated 15.4 per cent (CI: 13.6%–17.3%) of Aboriginal children were in the care of a primary carer who was limited in normal daily activities because of a medical or health problem. An estimated 37.3 per cent (CI: 31.5%–43.7%) of children living in these circumstances were at high risk of clinically significant emotional or behavioural difficulties compared with 24.4 per cent (CI: 20.3%–29.2%) of children whose primary carer had a medical condition lasting for 6 months or more that was not limiting, and 20.4 per cent (CI: 18.0%–22.9%) of children whose primary carer did not have a medical condition lasting 6 months or more (Table 3.22).

The impact of the physical health of the primary carer on risk of clinically significant emotional or behavioural difficulties in the children in their care was most pronounced in the Perth area and in areas of moderate isolation. An estimated 45.9 per cent (CI: 35.0%–56.4%) of Perth children whose primary carer’s medical condition was limiting were at high risk of clinically significant emotional and behavioural difficulties compared with 23.5 per cent (CI: 18.9%–28.5%) of children whose primary carer had no medical condition lasting 6 months or more. For areas of moderate isolation, the proportions were 43.6 per cent (CI: 30.2%–56.8%) and 19.5 per cent (CI: 14.9%–24.4%) respectively. These proportions are in contrast to an area which combines high and extreme isolation (due to low sample numbers) where the proportion of children at high risk of clinically significant emotional or behavioural difficulties whose primary carer had a limiting medical condition was markedly lower (17.6 per cent; CI: 10.9%–27.4%) and similar to children in this area whose primary carer had no lasting medical condition (15.2 per cent; CI: 11.7%–19.4%) (Figure 3.10).



**FIGURE 3.10:** CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THE PRIMARY CARER HAD ANY MEDICAL CONDITIONS LASTING 6 MONTHS OR MORE, AND LEVEL OF RELATIVE ISOLATION

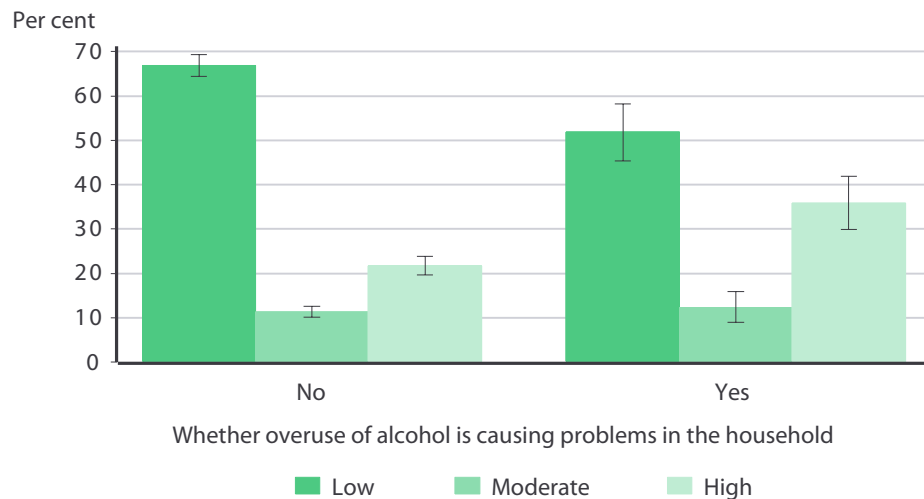


Source: Table 3.23

### Overuse of alcohol causing problems in the household

An estimated 15.4 per cent (CI: 13.5%–17.4%) of Aboriginal children aged 4–17 years were living in households in which overuse of alcohol caused problems. These problems were found to be strongly associated with emotional or behavioural difficulties in children. Over one third (35.8 per cent; CI: 29.9%–41.9%) of children living in households affected by overuse of alcohol were at high risk of clinically significant emotional or behavioural difficulties, while a little over half (51.9 per cent; CI: 45.4%–58.2%) of children living in such households were at low risk. By contrast, in households where alcohol was not considered to be a problem these proportions were 21.7 per cent (CI: 19.7%–23.9%) and 66.9 per cent (CI: 64.5%–69.3%) respectively (Figure 3.11).

**FIGURE 3.11:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER OVERUSE OF ALCOHOL CAUSES PROBLEMS IN THE HOUSEHOLD



Source: Table 3.24



The association between overuse of alcohol causing problems and risk of clinically significant emotional or behavioural difficulties was observed for both younger and older children. In children 4–11 years, 37.6 per cent (CI: 30.9%–44.8%) were at high risk if they lived in a household where alcohol caused problems, compared with 24.1 per cent (CI: 21.6%–26.6%) in households where alcohol was not considered to cause problems. Similarly for 12–17 year-olds, 33.4 per cent (CI: 25.4%–41.6%) were at high risk of clinically significant emotional or behavioural difficulties in households where alcohol caused problems compared with 18.1 per cent (CI: 15.1%–21.3%) of children in other households (Table 3.25).

The level of child emotional and behavioural difficulties for households where alcohol was reported to be a problem was estimated to be highest in the Perth area, where two in every five children (41.4 per cent; CI: 29.1%–55.1%) in such households were at high risk of clinically significant emotional or behavioural difficulties. The proportion of children at high risk fell to 31.6 per cent (CI: 20.9%–45.3%) in an area combining high and extreme isolation, although the differences by LORI were not statistically significant (Table 3.26).

3

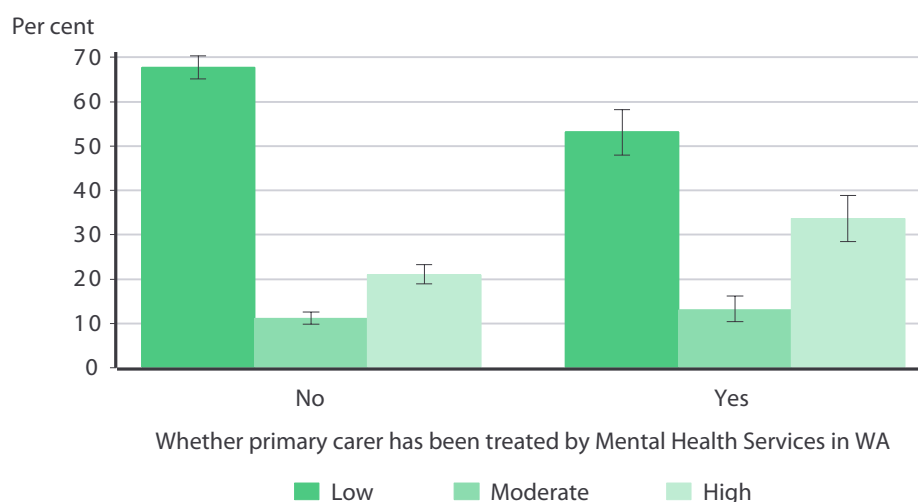
### ASSOCIATIONS WITH CARER MENTAL HEALTH AND CARER RELATIONSHIPS

#### Carer’s mental health

The poor physical health of the primary carer is not the only health factor that predisposes Aboriginal children in their care to a higher risk of clinically significant emotional or behavioural difficulties. The mental health of the primary carer, as measured by the use primary carers have made of the Mental Health Services in WA, also predicts emotional or behavioural difficulties in children in their care.

Around one third (33.7 per cent; CI: 28.5%–38.9%) of children aged 4–17 years whose primary carer had used Mental Health Services in WA were at high risk of clinically significant emotional or behavioural difficulties compared with 21.0 per cent (CI: 18.9%–23.3%) of children whose carer had not used these services (Figure 3.12). More details about use of Mental Health Services by Aboriginal children and their carers are provided in Chapter 6.

**FIGURE 3.12:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER PRIMARY CARER EVER TREATED BY MENTAL HEALTH SERVICES IN WA



Source: Table 3.27



### Primary carer and partner/spouse care for each other

An estimated 61.9 per cent (CI: 59.5%–64.4%) of Aboriginal children were living in families where the primary carer had a spouse or partner. Almost three quarters of these children (74.1 per cent; CI: 69.5%–79.0%) were living in families where the primary carer and spouse or partner ‘quite often’ or ‘almost always’ showed signs that they cared for each other. Fewer Aboriginal children living in these families were at high risk of clinically significant emotional or behavioural difficulties (19.1 per cent; CI: 16.3%–22.3%) compared with families where the carers ‘never’ or ‘hardly ever’ showed signs that they cared for each other (31.3 per cent; CI: 24.6%–38.6%) (Table 3.28).

### Primary carer and partner/spouse argue with each other

Of those Aboriginal children living in families where the primary carer had a spouse or partner, an estimated 29.8 per cent (CI: 26.1%–33.8%) had carers that ‘never’ or ‘hardly ever’ argued. Fewer of these children were at high risk of clinically significant emotional or behavioural difficulties (17.7 per cent; CI: 14.0%–22.3%) compared with children in families where carers argued ‘quite often’ or ‘almost always’ (27.1 per cent; CI: 22.3%–32.1%) (Table 3.29).

## ASSOCIATIONS WITH SOCIAL ENVIRONMENT OF THE HOUSEHOLD

### Carer can discuss their problems with someone

Primary carers were asked if they had anyone to yarn to about their problems. When considered as a likely factor associated with emotional or behavioural difficulties in children, there was no statistically significant difference in such outcomes whether or not the primary carer had access to such a support mechanism (Table 3.30).

### Speaking an Aboriginal language

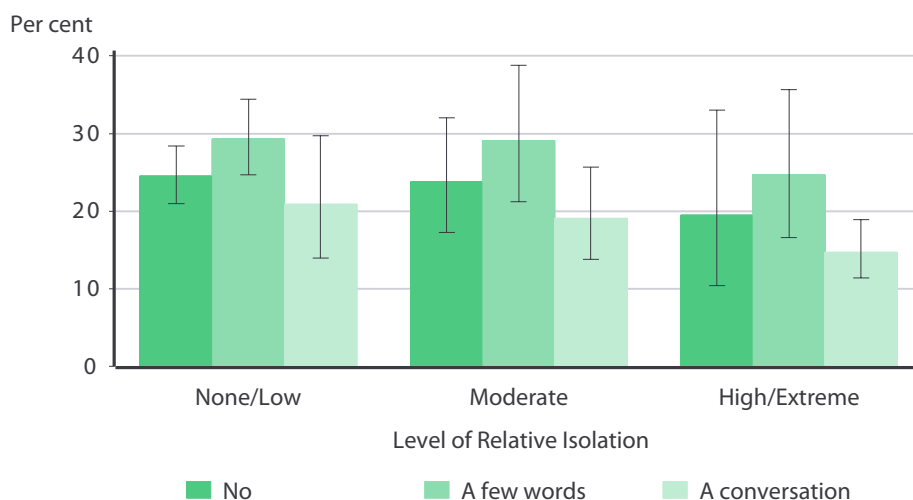
Fewer children in the primary care of persons who were conversant in an Aboriginal language were at high risk of clinically significant emotional or behavioural difficulties (17.0 per cent; CI: 14.1%–19.9%) than either children whose carers knew a few words of an Aboriginal language (28.7 per cent; CI: 25.0%–32.7%) or children with carers who did not speak an Aboriginal language (24.0 per cent; CI: 21.0%–27.3%). Even though speakers of Aboriginal languages are concentrated in areas of high and extreme relative isolation, the association between speaking an Aboriginal language and risk of clinically significant emotional or behavioural difficulties did not vary by LORI (Figure 3.13).

Carers may also influence their child’s learning of an Aboriginal language and the ability of the child to be conversant in that language. Carers were asked if any of their children spoke an Aboriginal language. Where carers indicated that at least one child in their care was conversant in an Aboriginal language, fewer children in such situations were at high risk of clinically significant emotional or behavioural difficulties (16.4 per cent; CI: 13.0%–20.2%) compared with children who either lived in households where at least one child knew only a few words of an Aboriginal language (24.6 per cent; CI: 21.4%–27.8%) or no children spoke an Aboriginal language (26.3 per cent; CI: 23.1%–29.6%) (Table 3.32).

Analysis by LORI showed no statistically significant differences (Figure 3.13).



**FIGURE 3.13:** CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THE PRIMARY CARER CAN SPEAK AN ABORIGINAL LANGUAGE, AND LEVEL OF RELATIVE ISOLATION



Source: Table 3.31

### Participation in Aboriginal cultural activities

Primary carers were considered to have participated in Aboriginal cultural activities if they were either conversant in an Aboriginal language or, over the past 12 months, had participated in Aboriginal ceremonies or festivals or been involved with an Aboriginal organisation.

Whether or not primary carers had participated in Aboriginal cultural activities had no statistically significant impact on emotional or behavioural difficulties of Aboriginal children (Table 3.33).

### Gambling causing problems in the household

Gambling problems in the household was not associated with any statistically significant difference in proportion of children at high risk of clinically significant emotional or behavioural difficulties compared with households where gambling is not a problem (Table 3.34).

### Primary carer ever arrested or charged

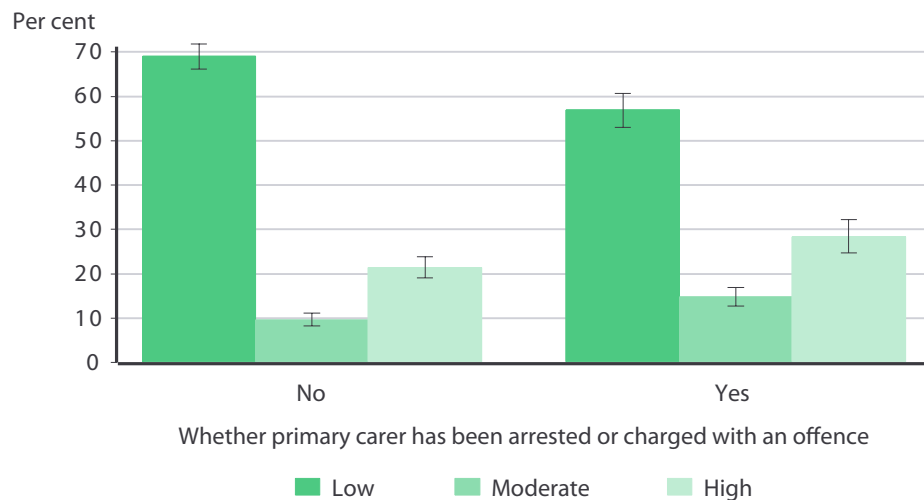
An estimated 36.0 per cent (CI: 33.5%–38.7%) of children were living with primary carers who have been arrested or charged with an offence at some stage of their lives. A higher proportion of children of primary carers who had ever been arrested or charged with an offence were at high risk of clinically significant emotional or behavioural difficulties – 28.3 per cent (CI: 24.7%–32.2%) compared with 21.4 per cent (CI: 19.1%–23.9%) of children whose primary carer had never been arrested or charged (Figure 3.14).





Within each level of relative isolation, there were no statistically significant differences in proportions of children at high risk of clinically significant emotional or behavioural difficulties when comparing children cared for by primary carers who had been arrested or charged with those who had not been arrested or charged. A higher proportion of children living with a primary carer who had been arrested or charged were at high risk of clinically significant emotional or behavioural difficulties if they were from areas of no or low relative isolation – 29.8 per cent (CI: 23.3%–37.5%) and 29.7 per cent (CI: 23.1%–36.7%) respectively – than children living in areas of extreme isolation (13.8 per cent; CI: 7.7%– 23.0%) (Table 3.36).

**FIGURE 3.14:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER PRIMARY CARER HAS EVER BEEN ARRESTED OR CHARGED WITH AN OFFENCE



Source: Table 3.35

### Primary carer’s partner/spouse ever arrested/charged

A higher proportion of children living with a primary carer whose partner or spouse had ever been arrested or charged for an offence were at high risk of clinically significant emotional or behavioural difficulties – 24.2 per cent (CI: 20.8%–27.7%) compared with 15.8 per cent (CI: 12.6%–19.4%) for children with a primary carer whose partner/spouse had never been arrested or charged (Table 3.37).

## RELATIVE IMPORTANCE OF FACTORS RELATED TO CARERS ON EMOTIONAL AND BEHAVIOURAL DIFFICULTIES IN ABORIGINAL CHILDREN

Figure 3.15 presents the results of modelling carer factors discussed in the preceding analysis. The statistical modelling tested each factor to determine the degree to which it was associated with the likelihood of a child being at high risk of clinically significant emotional or behavioural difficulties independently of the effects of demographic factors (both child age and sex and primary carer age and sex as well as LORI) and other carer factors.



Carer factors found not to be statistically significant predictors of risk of clinically significant emotional or behavioural difficulties, both in the preceding analysis and as a result of statistical modelling, were carer education; carer social support (whether the primary carer had someone to yarn to about their problems); participation in cultural activities; and gambling causing problems in the household.

A number of other carer factors appeared to be significantly associated with the child's risk of clinically significant emotional or behavioural difficulties in the preceding analysis but, when taking into account other factors, were not found to be significant predictors of emotional and behavioural difficulties. They were the level of financial strain; whether the primary carer and partner/spouse care for each other; whether the primary carer and partner/spouse argue with each other; whether the primary carer speaks an Aboriginal language; whether the primary carer had ever been arrested or charged; and whether the primary carer's partner/spouse had ever been arrested or charged.

There were three carer factors which data modelling suggested were predictors of children being at high risk of clinically significant emotional or behavioural difficulties independent of the effects of demographic and other carer factors. These were:

**Primary carer's physical health.** Aboriginal children aged 4–17 years in the primary care of a person who suffers from a long term and limiting medical condition were significantly more likely to be at high risk of clinically significant emotional or behavioural difficulties (Odds Ratio 3.81; CI: 2.10–6.92) compared with children whose primary carer had no medical condition lasting six months or more.

**Primary carer's mental health.** Aboriginal children whose primary carer had made use of Mental Health Services in WA were twice as likely (Odds Ratio 2.01; CI: 1.31–3.09) to be at high risk of clinically significant emotional or behavioural difficulties than children in the primary care of a person who had not accessed these services.

**Overuse of alcohol causing problems in the household.** There were variations in the degree to which overuse of alcohol caused household problems, the most noticeable being a relatively high proportion in the Perth area. After accounting for LORI and other carer factors, children living in households where alcohol caused problems were two and a half times (Odds Ratio 2.47; CI: 1.49–4.11) more likely to be at high risk of clinically significant emotional or behavioural difficulties than children living in households where alcohol was not considered to cause problems.



**FIGURE 3.15:** CHILDREN AGED 4–17 YEARS – LIKELIHOOD OF BEING AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, ASSOCIATED WITH FACTORS RELATED TO THE CHILD’S CARERS

<i>Parameter</i>	<i>Odds Ratio</i>	<i>95% CI</i>
Sex—		
Male	2.09	(1.61 - 2.72)
Female	1.00	
Age group (years)—		
4–7	1.00	
8–11	0.99	(0.71 - 1.37)
12–14	0.98	(0.66 - 1.47)
15–17	0.38	(0.21 - 0.68)
Level of Relative Isolation—		
None	1.00	
Low	0.71	(0.45 - 1.13)
Moderate	0.93	(0.46 - 1.87)
High	0.61	(0.22 - 1.69)
Extreme	0.17	(0.07 - 0.42)
Primary carer’s age (years)—		
24 and under	1.00	
25–34	0.45	(0.23 - 0.87)
35–44	0.42	(0.21 - 0.85)
45 and over	0.44	(0.18 - 1.06)
Don’t know	0.26	(0.05 - 1.42)
Primary carer’s sex—		
Male	0.55	(0.23 - 1.28)
Female	1.00	
Whether primary carer has a medical condition lasting 6 months or more—		
No medical condition	1.00	
Medical condition - not limiting	1.32	(0.80 - 2.18)
Medical condition - limiting	3.81	(2.10 - 6.92)
Don’t know	1.47	(0.81 - 2.64)
Whether primary carer has used Mental Health Services—		
No	1.00	
Yes	2.01	(1.31 - 3.09)
Don’t know	1.54	(0.44 - 5.40)
Whether overuse of alcohol causes problems—		
Not stated	1.47	(0.81 - 2.64)
No	1.00	
Yes	2.47	(1.49 - 4.11)



## FACTORS ASSOCIATED WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES: CARER EDUCATION, FINANCIAL STRAIN, PHYSICAL AND MENTAL HEALTH AND THE SOCIAL ENVIRONMENT OF THE HOUSEHOLD

### Carer education and financial strain

Education and income are important aspects of human capital and can be used to influence child development.<sup>17,18</sup> The previous volume of results from the WAACHS was notable for finding no associations between social determinants such as income and education and the physical health status of Aboriginal children and young people.<sup>3</sup>

The findings here continue to confirm these observations and extend them to include emotional and behavioural difficulties. Once again, no strong social gradient emerges. Unlike children in the general population,<sup>11</sup> there was no evidence that additional levels of carer education beyond Year 10, or lower levels of financial strain, had any impact on the proportion of Aboriginal children at high risk of clinically significant emotional or behavioural difficulties.

Globally, social gradients in health have been consistently demonstrated in developed countries.<sup>19</sup> Their emergence and the widening disparity they document have been a relatively new characteristic underlying understanding of patterns of health in these countries. The absence of strong social gradients in Aboriginal health, and child emotional and behavioural wellbeing particularly, is notable because it suggests that *other* causal factors potentially moderate this effect.

### Carer physical health

Where Aboriginal carers are limited in their normal daily activities, there are substantial risks to the social and emotional wellbeing of their children. Relative to children living with carers who are not limited in their normal daily activity because of a health condition, a higher proportion of children living with carers who are limited in their daily activity were at high risk of clinically significant emotional or behavioural difficulties. Clearly, prevention of illness and the maintenance and restoration of good physical health in Aboriginal carers carries with it the potential for significant benefits for Aboriginal children.

### Carer mental health

Data from non-Aboriginal families shows that, relative to children whose carer or carers had no history of emotional and behavioural difficulties, children with carers who had such a history were at higher risk of having emotional and behavioural difficulties and were more likely to be affected in their functioning at school.<sup>20</sup> Similar results were found for Aboriginal children. Relative to children whose primary carer had not had contact with Mental Health Services, children with carers who have used Mental Health Services were twice as likely to be at high risk of clinically significant emotional or behavioural difficulties.

*Continued . . .*



**FACTORS ASSOCIATED WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES:  
CARER EDUCATION, FINANCIAL STRAIN, PHYSICAL AND MENTAL HEALTH AND THE SOCIAL  
ENVIRONMENT OF THE HOUSEHOLD** *(continued)*

The social environment of the household

When alcohol use causes a problem in the household, children from these households were about two and half times more likely to be at high risk of clinically significant emotional or behavioural difficulties relative to children from households where alcohol does not cause a problem. Presence of social support for the carer, use of an Aboriginal language and participation in cultural activities were not associated with emotional or behavioural difficulties in Aboriginal children. Similarly, once alcohol was accounted for in the multivariate model, other factors such as history of arrest or police charges did not significantly predict risk of clinically significant emotional or behavioural difficulties.

**FAMILY AND HOUSEHOLD FACTORS AND EMOTIONAL OR BEHAVIOURAL DIFFICULTIES**

**FAMILY CARE ARRANGEMENTS**

Volume One from the WAACHS detailed the classification used to describe the household care arrangements for each Aboriginal child.<sup>3</sup> For children aged 4–17 years, most (42.4 per cent; CI: 40.0%–44.8%) were in the care of both of their original parents. This arrangement included children cared for by their original parents in combination with other extended family members in the household, although these other members did not have any direct responsibility for the child’s care. Around one third (33.9 per cent; CI: 31.5%–36.4%) of children were cared for by a sole parent (including sole parent families where other extended family members were in the household) while an estimated 8.9 per cent (CI: 7.7%–10.2%) of children were cared for by an original parent living with a new partner and a further 14.9 per cent (CI: 13.0%–16.8%) were in other care arrangements (such as living with aunts and uncles, foster parents).<sup>3</sup>

Where care arrangements in the household included both original parents, the proportion of children who were at high risk of clinically significant emotional or behavioural difficulties was the lowest. Almost one in five (18.5 per cent; CI: 15.8%–21.5%) children in the care of both original parents were at high risk of clinically significant emotional or behavioural difficulties compared with three in ten children living with a sole parent (30.2 per cent; CI: 26.4%–34.1%) and 27.0 per cent (CI: 21.9%–32.8%) of children in the care of family other than an original parent. Fewer children in the care of families with one original parent who was living with a new partner were at high risk of clinically significant emotional or behavioural difficulties (21.4 per cent; CI: 16.4%–27.3%) but this proportion was not statistically different from outcomes for children living with either a sole parent or other family care arrangements (Table 3.38).

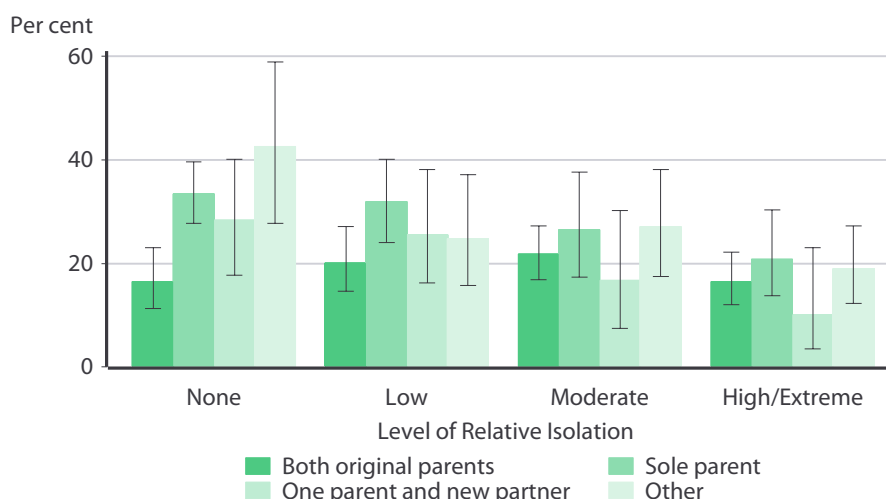


Around one in ten children (11.7 per cent; CI: 9.9%–13.8%) aged 4–11 years were cared for by someone other than their original parent or parents – such as aunts and uncles, or grandparents – compared with two in ten children aged 12–17 years (19.6 per cent; CI: 16.8%–22.7%). Such care arrangements occurred more in areas of high or extreme isolation. While older children were more likely to have moved out of the care of an original parent,<sup>3</sup> the level of risk of clinically significant emotional or behavioural difficulties of these children was lower than that of younger children across each type of care arrangement, although the differences were not statistically significant (Table 3.39).

Family care arrangements vary significantly across levels of isolation. In areas of low, high and extreme isolation, Aboriginal children were mostly cared for by both original parents. Children cared for by a sole parent constituted the greatest proportion of children living in the Perth metropolitan area (43.4 per cent; CI: 38.9%–48.0%) falling to 15.4 per cent (CI: 10.9%–20.5%) of children in areas of extreme isolation. Around one in ten children (8.9 per cent; CI: 6.5%–11.8%) living in the Perth area were in the care of family other than an original parent, the proportion rising with increasing isolation to 26.7 per cent (CI: 19.0%–34.8%) living in extremely isolated areas (Table 3.40).

Level of risk of clinically significant emotional or behavioural difficulties for each type of family care arrangement were markedly different for Aboriginal children living in the Perth metropolitan area (no isolation) compared with all other levels of relative isolation. Where Perth children were cared for by both original parents, an estimated 16.5 per cent (CI: 11.3%–23.0%) were at high risk of clinically significant emotional or behavioural difficulties. This proportion increased significantly for children living with a sole parent (33.4 per cent; CI: 27.7%–39.6%) or cared for by someone other than their original parent or parents (42.6 per cent; CI: 27.7–59.0) (Figure 3.16).

**FIGURE 3.16:** CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY TYPE OF FAMILY CARE ARRANGEMENT AND LEVEL OF RELATIVE ISOLATION



Source: Table 3.41



## HOUSEHOLD OCCUPANCY LEVEL

### HOUSEHOLD OCCUPANCY LEVEL

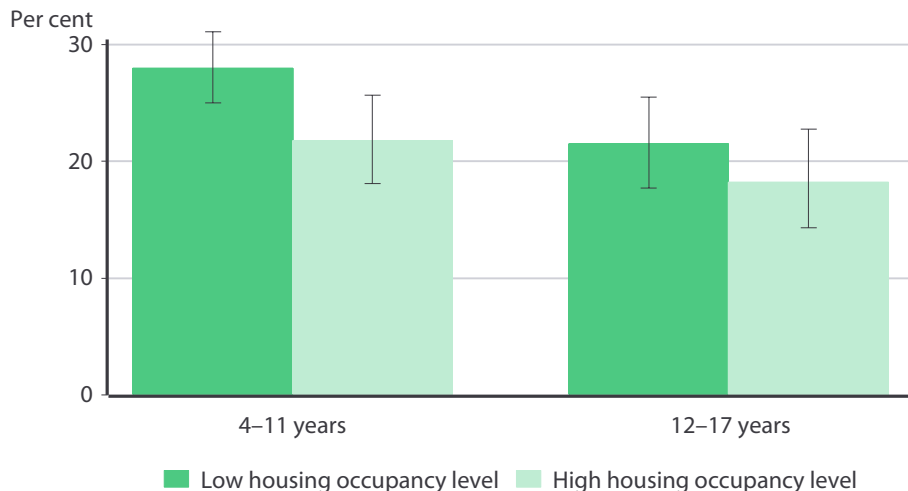
A two-level index of household occupancy was created based on the number of bedrooms and the number of people usually sleeping in the home. A household was considered to have a high level of household occupancy if it had the following attributes in terms of number of bedrooms and number of people sleeping in the home:<sup>3</sup>

<i>Number of bedrooms</i>	<i>Number of people sleeping there</i>
1 or 2	5 or more
3	6 or more
4	7 or more
5 or more	8 or more

Although not statistically significant, there was a trend suggesting that fewer children living in homes with a high household occupancy level were at high risk of clinically significant emotional or behavioural difficulties. Of these children, an estimated 20.1 per cent (CI: 17.0%–23.5%) were at high risk compared with 25.5 per cent (CI: 23.0%–28.2%) of children who were living in homes with a low level of household occupancy (Table 3.42). The mean SDQ score for 4–17 year-old children living in homes with a high level of household occupancy was 10.6 (CI: 10.0–11.2), lower than the mean SDQ score of 11.6 (CI: 11.2–12.1) for children living in homes with a low household occupancy level (Table 3.43).

The trend toward a high household occupancy as a protective factor against risk of clinically significant emotional or behavioural difficulties was most noticeable in younger children, with 21.5 per cent (CI: 17.7%–25.5%) of 4–11 year-old’s living in homes with a high level of household occupancy being at high risk of clinically significant emotional or behavioural difficulties compared with 28.0 per cent (CI: 25.0%–31.1%) living in households with a low household occupancy level (Table 3.44).

**FIGURE 3.17:** CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY HOUSEHOLD OCCUPANCY LEVEL AND AGE GROUP



Source: Table 3.44





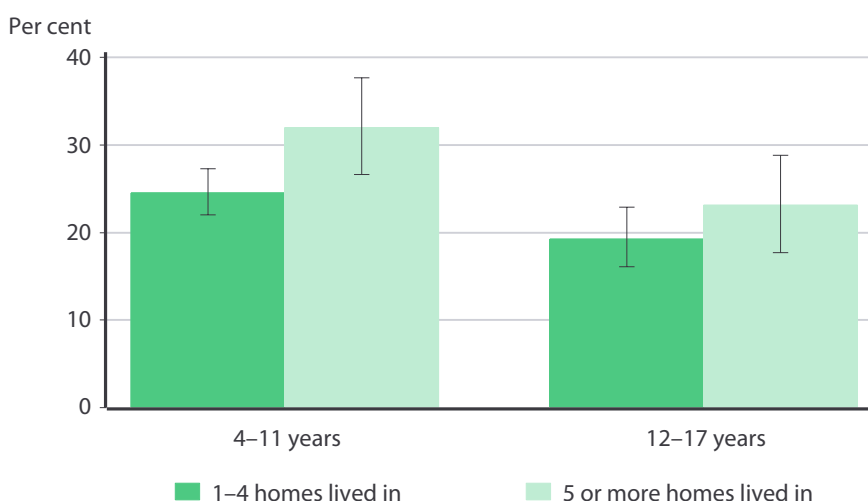
### NUMBER OF DIFFERENT HOMES LIVED IN

Over one quarter (27.4 per cent; CI: 25.2%–29.6%) of Aboriginal children aged 4–17 years had lived in five or more homes since birth. Children living in areas of no or low isolation were significantly more likely to have lived in five or more homes than children in more isolated areas – 35.6 per cent (CI: 31.7%–39.7%) of children in the Perth area (no isolation) compared with 12.5 per cent (CI: 8.1%–18.2%) in areas of extreme isolation (Table 3.45).

The proportion of children who have lived in five or more different homes since birth who were at high risk of clinically significant emotional or behavioural difficulties (27.6 per cent; CI: 23.6%–31.8%) was higher, although not significantly so, than for children who have lived in fewer different homes (22.6 per cent; CI: 20.4%–25.0%) (Table 3.46). In terms of the mean SDQ score, however, 4–17 year-old children who have lived in five or more homes scored notably higher (Mean 12.1; CI: 11.4–12.8) than children living in fewer than five homes (Mean 11.0; CI: 10.6–11.4) (Table 3.47).

For younger children, there was a trend suggesting that fewer of those who had lived in less than five different homes since birth were at high risk of clinically significant emotional or behavioural difficulties. Around one quarter (24.5 per cent; CI: 22.0%–27.3%) of 4–11 year-olds who had lived in less than five homes since birth were at high risk of clinically significant emotional or behavioural difficulties compared with almost one third (32.0 per cent; CI: 26.6%–37.7%) of children in this age group who had lived in 5 or more homes. There was little difference in the comparable proportions for 12–17 year-olds (Figure 3.18).

**FIGURE 3.18:** CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP AND NUMBER OF DIFFERENT HOMES LIVED IN



Source: Table 3.46



## FAMILY FUNCTIONING

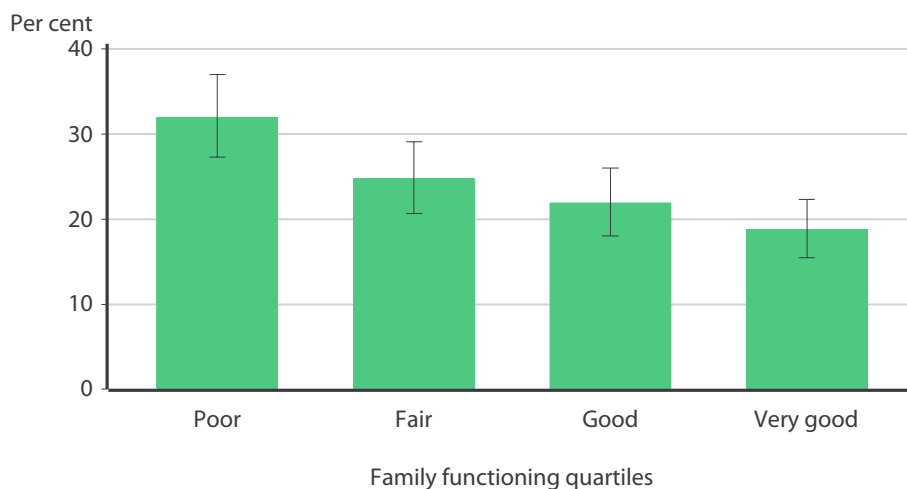
### FAMILY FUNCTIONING

Family disharmony is known to be associated with poorer child development outcomes. The WAACHS used a nine-item scale to measure the extent to which families have established a climate of cooperation, emotional support and good communication. Primary carers were asked to rate each of nine statements on a scale of 1–5 as to how accurately each statement described their family circumstances. The nine statements included items about communications and decision making in the family, emotional support, time spent together, and family cooperation. These ratings were summed to produce an overall score. Families were then split into quartiles based on this score, with approximately 25 per cent of children in each category. These categories have been labelled poor, fair, good and very good family functioning in this publication. In some cases the categories fair to very good have been combined in the analysis.

For details of the nine items and how they were combined to form the family functioning score, see *Appendix C – Measures derived from multiple responses and scales*.

There were an estimated 4,830 (CI: 4,330–5,260) – around one in five – Aboriginal children living in families in the bottom quartile of family functioning (poor family function). Nearly one third of these children (32.0 per cent; CI: 27.3%–37.0%) were at high risk of clinically significant emotional or behavioural difficulties. This compares with around two in every ten children in families that had either good functioning (21.9 per cent; CI: 18.0%–26.0%) or very good functioning (18.8 per cent; CI: 15.5%–22.3%) (Table 3.48).

**FIGURE 3.19:** CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF FAMILY FUNCTIONING



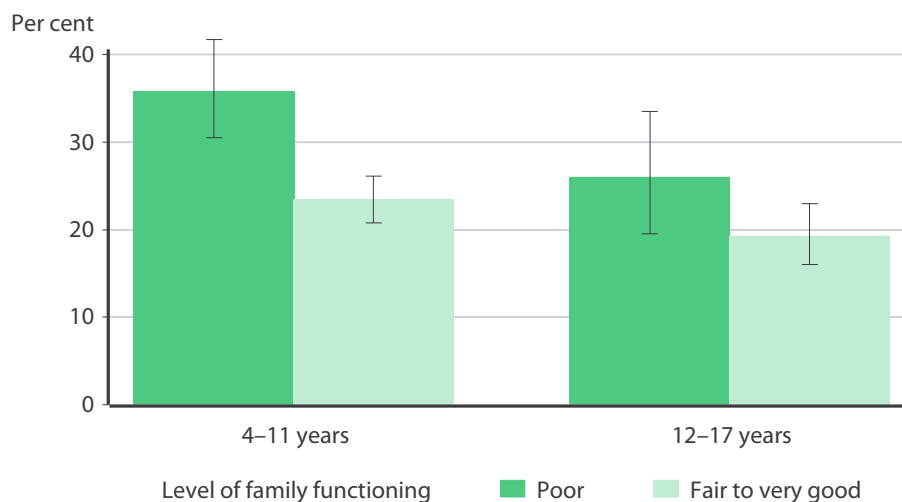
Source: Table 3.48



In view of the marked difference between the proportion of children at high risk of clinically significant emotional or behavioural difficulties in poorly functioning families and all other families, those families which were assessed as having fair, good or very good family functioning have been grouped for the purposes of further analysis as having ‘fair to very good’ functioning. Just over one in every five children (21.7 per cent; CI: 19.5%–24.1%) living in fair to very good functioning families were at high risk of clinically significant emotional or behavioural difficulties (Table 3.49).

Children aged 4–11 years living in families with poor functioning were at high risk of clinically significant emotional or behavioural difficulties. A significant 35.8 per cent (CI: 30.5%–41.7%) of these children were assessed as being at high risk of clinically significant emotional and behavioural difficulties compared with 23.4 per cent (CI: 20.8%–26.1%) of 4–11 year-olds living in families with fair to very good functioning. By comparison, the proportions of 12–17 year-old Aboriginal children, at high risk of clinically significant emotional or behavioural difficulties, whether in poorly functioning families or families with fair to very good functioning, were lower although the differences were not statistically significant (Figure 3.20).

**FIGURE 3.20:** CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF FAMILY FUNCTIONING AND AGE GROUP



Source: Table 3.50

Regardless of the level of family dysfunction, fewer Aboriginal children living in more isolated areas were at high risk of clinically significant emotional or behavioural difficulties than children in the Perth area (no isolation). While 20.7 per cent (CI: 14.1%–29.0%) of children in poorly functioning families living in high and extreme isolation were at high risk of clinically significant emotional or behavioural difficulties, the proportion living in poorly functioning families in the Perth area was almost double at 39.1 per cent (CI: 30.8%–47.9%). The proportion of children at high risk of clinically significant emotional or behavioural difficulties in poorly functioning families in areas of low or moderate isolation was approximately mid-way between these lower and upper values, at around 30 per cent.

Proportions of children at high risk of clinically significant emotional or behavioural difficulties living in families whose functioning was fair to very good tended to decrease with increasing isolation, from 24.0 per cent (CI: 19.8%–28.7%) in the Perth area to 16.9 per cent (CI: 13.0%–21.6%) in areas of high and extreme isolation,



although the differences were not statistically significant. The proportions of children at high risk in families whose function was fair to very good were lower across all levels of isolation, the only statistically significant difference being in the Perth area – 39.1 per cent (CI: 30.8%–47.9%) in poorly functioning families compared with 24.0 per cent (CI: 19.8%–28.7%) (Table 3.51).

## QUALITY OF PARENTING

### QUALITY OF PARENTING

The nature of the relationship between a child and his or her primary carer, and the style and quality of the carer's parenting are important influences on the development and wellbeing of children. The WAACHS asked a series of questions of carers about their relationship with each of their children. An index of quality of parenting has been derived from three of these items: how often carers praise their children, how often they hit or smack their children and how often they laugh together with their children. These three items, which measure the concepts of parenting warmth and harshness, were rated by carers on a five-point frequency scale from 'Never' through to 'Almost always'. An overall score was produced by summing these three items. Children were then ranked by score, and split into quartiles based on this score, with approximately 25 per cent of children in each category. These categories have been labelled poor, fair, good and very good quality of parenting in this publication.

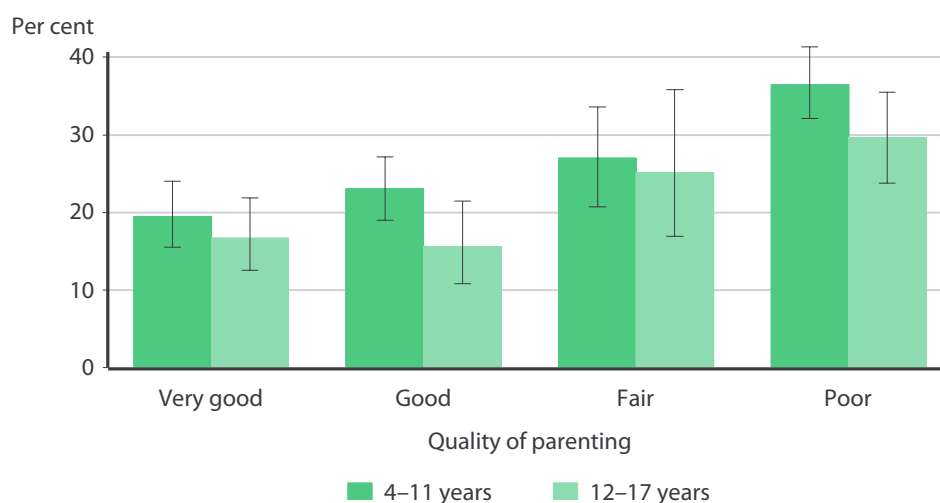
For further details on the quality of parenting items, and how they were combined to form the quality of parenting score, see *Appendix C — Measures derived from multiple responses and scales*.

The quality of parenting by carers of Aboriginal children was strongly associated with the levels of risk of clinically significant emotional or behavioural difficulties of their children. Around one in three children (34.1 per cent; CI: 30.1%–38.0%) were at high risk of clinically significant emotional or behavioural difficulties if their primary carer's parenting was rated as poor. This compares with one in five children where the quality of parenting was either very good (18.2 per cent of children; CI: 15.2%–21.7%) or good (20.4 per cent; CI: 16.9%–24.1%). Just over one quarter (26.3 per cent; CI: 21.0–32.1%) of children in families with fair parenting quality were at high risk of clinically significant emotional or behavioural difficulties although this proportion was not statistically significant from that in families where parenting was of lower or higher quality (Table 3.52).

A similar pattern of high risk of clinically significant emotional or behavioural difficulties was found amongst both younger and older children. For children aged 4–11 years, the proportion found to be at high risk in each category of parenting quality was higher than the proportions for children aged 12–17 years, although the differences were not statistically significant (Figure 3.21).



**FIGURE 3.21:** CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY QUALITY OF PARENTING



Source: Table 3.52

The association between quality of parenting and LORI in respect of emotional and behavioural difficulties was most pronounced in the Perth metropolitan area. The estimated proportions of Perth children at high risk of clinically significant emotional or behavioural difficulties were markedly lower in families where parenting quality was very good (23.2 per cent; CI: 17.6%–30.1%) or good (21.0 per cent; CI: 14.8%–28.6%) compared with families where the parenting quality was poor (41.2 per cent; CI: 33.3%–49.4%). As the level of relative isolation increased, the strength of association between parenting quality and child emotional and behavioural difficulties reduced. The proportion of children at high risk in areas of low or moderate isolation differed significantly only between families with very good parenting quality compared with poor parenting quality. In the most isolated areas (high and extreme isolation), there was no statistically significant difference in the proportions of children at high risk across each level of parenting quality (Table 3.53).



## LIFE STRESS EVENTS

### LIFE STRESS EVENTS

The number of stressful life events that occur in a single period can impact on a families' abilities to cope. Most people are able to cope with a single stressful event, but when multiple stressful or traumatic events occur simultaneously it can be more and more difficult to cope.

In the WAACHS, primary carers were asked if any of fourteen major life stresses had occurred in the family in the preceding 12 months. These events included illness, hospitalisation or death of a close family member, family break-up, arrests, job loss and financial difficulties.

For analysis, the number of life stress events in the previous 12 months were grouped as follows: 0–2, 3–4, 5–6, 7 or more, with each category containing approximately one quarter of survey children. Previous Western Australian research has suggested that three or more life stress events in one 12 month period may be a risk factor for a range of problems.<sup>20</sup>

Details of the life stress events measured in the survey can be found in *Appendix C — Measures derived from multiple responses and scales.*

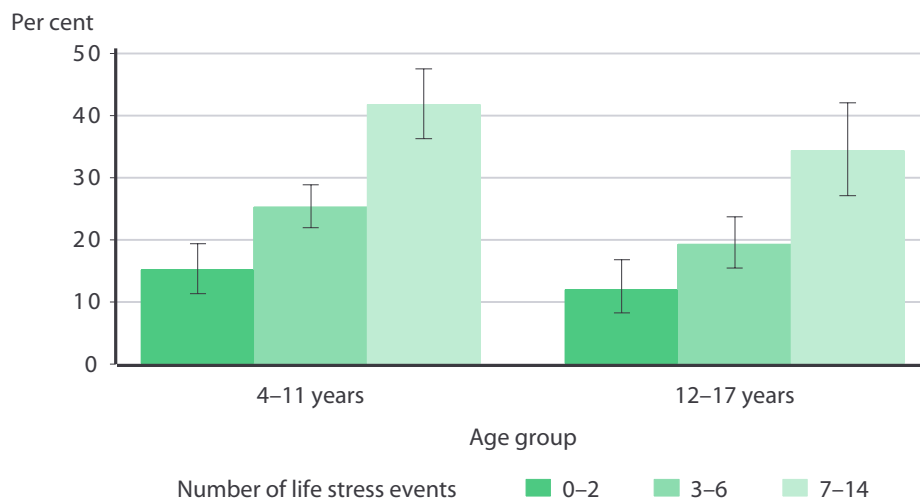
A significant number of Aboriginal children aged 4–17 years (22.0 per cent; CI: 19.9%–24.2%) were living in families where 7 or more major life stress events had occurred over the preceding 12 months.

As the number of life stress events occurring within families with Aboriginal children increased, so too did the proportion of children at high risk of clinically significant emotional or behavioural difficulties. Proportions of children at high risk of clinically significant emotional or behavioural difficulties ranged from 13.9 per cent (CI: 11.0%–17.4%) of children in families that had experienced none, one or two stressful events to 38.9 per cent (CI: 34.0%–43.8%) of children in families that had experienced 7 or more stressful events.

As was the finding with family functioning, children aged 4–11 years were less resilient to the impact of family stresses. Where 2 or fewer stressful events had occurred, 15.2 per cent (CI: 11.4%–19.4%) of 4–11 year-olds were at high risk of clinically significant emotional or behavioural difficulties, increasing to 25.3 per cent (CI: 22.0%–28.9%) in families experiencing 3–6 stressful events and 41.8 per cent (CI: 36.3%–47.6%) in families experiencing 7 or more such events. By comparison, the proportions of 12–17 year-old Aboriginal children at high risk of clinically significant emotional or behavioural difficulties were lower, although the differences were not statistically significant. There was no significant difference in the proportions of 12–17 year-olds at high risk in families experiencing either 0–2 or 3–6 stressful family events whereas the difference was significant between these two levels of family stress and the proportion at high risk where the family had experienced 7 or more stressful events (Figure 3.22).



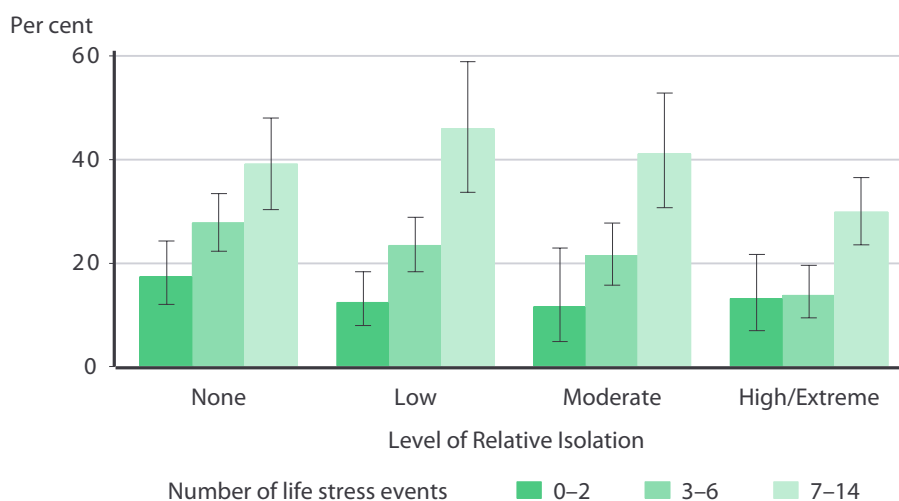
**FIGURE 3.22:** CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY NUMBER OF LIFE STRESS EVENTS AND AGE GROUP



Source: Table 3.54

Across all levels of relative isolation, a significantly higher proportion of children in families that had experienced 7 or more stressful events were at high risk of clinically significant emotional or behavioural difficulties compared with children in families that had experienced 0–2 stressful family events. The degree of difference was greatest in areas of low isolation and least in an area combining high and extreme isolation (Figure 3.23).

**FIGURE 3.23:** CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY NUMBER OF LIFE STRESS EVENTS AND LEVEL OF RELATIVE ISOLATION



Source: Table 3.55





## RELATIVE IMPORTANCE OF FAMILY AND HOUSEHOLD FACTORS ON EMOTIONAL OR BEHAVIOURAL DIFFICULTIES IN ABORIGINAL CHILDREN

Figure 3.24 presents the results of modelling family and household factors discussed in the preceding analysis. The statistical modelling tested each factor to determine the degree to which it was associated with the likelihood of a child being at high risk of clinically significant emotional or behavioural difficulties independently of the effects of demographic and other family and household factors.

Data modelling indicated that each of the five family and household factors analysed above was a predictor of child emotional and behavioural difficulties independent of the effects of demographic and other family and household factors.

**Family care arrangements.** Family care arrangements for Aboriginal children vary according to the age of the child and the level of isolation. For example, older children are less likely to be in the care of any original parent, while children living in areas of extreme isolation are much more likely to be in the care of both original parents or with extended family or grandparents and much less likely to be in the care of a sole parent. After these demographic factors were accounted for, 4–17 year-olds in the care of a sole parent were twice as likely (Odds Ratio 1.95; CI: 1.29–2.96) to be at high risk of clinically significant emotional or behavioural difficulties than children living with both their original parents, while children living in circumstances other than with an original parent, such as with aunts and uncles, were over twice as likely (Odds Ratio 2.39; CI: 1.47–3.87) to be at high risk.

**Level of household occupancy.** High levels of household occupancy are more prevalent with increasing isolation. This is due to the average number of people sleeping in a dwelling increasing with increasing levels of isolation, while the average number of bedrooms per dwelling remains relatively steady regardless of the level of isolation.<sup>3</sup> After data modelling to take into account demographic factors, children living in homes with a high level of housing occupancy were half as likely to be at high risk of clinically significant emotional or behavioural difficulties (Odds Ratio 0.43; CI: 0.27–0.71) as children who were living in homes with a low level of housing occupancy.

**Number of different homes lived in.** Older children (aged 12–17 years) and children living in areas of no or low isolation were more likely to have lived in five or more different homes since birth. After accounting for these factors, children who have lived in five or more different homes were one and a half times (Odds Ratio 1.51; CI: 1.05–2.17) more likely to be at high risk of clinically significant emotional or behavioural difficulties than children who had lived in fewer than five homes since birth.

**Family functioning.** After accounting for demographic and other factors, family functioning was found to be one of the most important predictors of child emotional and behavioural difficulties. Keeping in mind that 25 per cent of Aboriginal children live in families in the bottom quartile of family functioning, these children were over twice as likely (Odds Ratio 2.39; CI: 1.36–4.19) to be at high risk of clinically significant emotional or behavioural difficulties compared with children living in families with very good functioning.

**Quality of parenting.** Poor parenting quality was strongly associated with poor family functioning. When both variables were included in the model, each remained a significant predictor of child emotional and behavioural difficulties. Children in families with poor parenting quality were almost four times as likely (Odds Ratio 3.80; CI: 2.39–6.04) to be at high risk of clinically significant emotional or behavioural difficulties than children in families with very good parenting quality.



**Life stress events.** Over 20 per cent of Aboriginal children were living in families where 7 or more major life stress events had occurred over the preceding 12 months. These children were over seven times as likely (Odds Ratio 7.34; CI: 4.30–12.7) to be at high risk of clinically significant emotional or behavioural difficulties than children in families where 2 or less life stress events had occurred. This variable is the strongest predictor of emotional and behavioural difficulties in Aboriginal children.

**FIGURE 3.24:** CHILDREN AGED 4–17 YEARS — LIKELIHOOD OF BEING AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES ASSOCIATED WITH FAMILY AND ENVIRONMENT FACTORS

<i>Parameter</i>	<i>Odds Ratio</i>	<i>95% CI</i>
Sex—		
Male	2.05	(1.58 - 2.65)
Female	1.00	
Age group (years)—		
4–7	1.00	
8–11	0.85	(0.61 - 1.18)
12–14	0.88	(0.61 - 1.27)
15–17	0.34	(0.20 - 0.58)
Level of Relative Isolation—		
None	1.00	
Low	0.81	(0.51 - 1.27)
Moderate	0.86	(0.47 - 1.55)
High	0.81	(0.27 - 2.46)
Extreme	0.21	(0.09 - 0.50)
Child care arrangement—		
Both original parents	1.00	
Sole parent	1.95	(1.29 - 2.96)
One parent and new partner	1.05	(0.56 - 1.98)
Other (e.g. Aunts or uncles)	2.39	(1.47 - 3.87)
Household occupancy level—		
Low	1.00	
High	0.43	(0.27 - 0.71)
Not stated	1.67	(1.20 - 2.32)
Number of homes lived in—		
1–4	1.00	
5 or more	1.51	(1.05 - 2.17)
Family functioning (quartiles)—		
Poor	2.39	(1.36 - 4.19)
Fair	1.18	(0.68 - 2.06)
Good	1.60	(0.94 - 2.73)
Very good	1.00	
Not stated	1.67	(1.20 - 2.32)
Quality of parenting—		
Poor	3.80	(2.39 - 6.04)
Fair	1.76	(1.10 - 2.80)
Good	1.43	(0.90 - 2.28)
Very good	1.00	
Not stated	3.87	(0.30 - 53.9)
Number of life stress events—		
0–2	1.00	
3–6	2.03	(1.18 - 3.49)
7–14	7.34	(4.30 - 12.7)
Not stated	1.67	(1.20 - 2.32)

3



### FACTORS ASSOCIATED WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES: FAMILY AND HOUSEHOLD FACTORS

Extended Aboriginal kinship systems and traditional practices of child rearing carry with them a great diversity in care arrangements for children. This diversity varies significantly by LORI.<sup>3</sup> However, the circumstances that result in some children requiring exclusive care from family members other than their original parents are likely to be those that also impart higher risks of clinically significant emotional or behavioural difficulties. In the main, lower proportions of children at high risk of clinically significant emotional or behavioural difficulties were observed where two carers – either the original carers or an original carer and a new partner – were present. Children who were not being cared for by either of their original parents, such as those being cared for by aunt and uncles or grandparents showed the highest proportion at high risk of clinically significant emotional or behavioural difficulties. A higher proportion of children being cared for by sole parents were also at high risk of clinically significant emotional or behavioural difficulties compared with children cared for by both original parents.

The survey data also show that significantly fewer children were at high risk of clinically significant emotional or behavioural difficulties where there was a high household occupancy level. This effect was independent of family composition and the care arrangement for the child within the household. It was also adjusted for age, LORI, the primary carer's age and health.

Relationships between health and the level of household occupancy are not straightforward. Concepts of household occupancy level and crowding are subject to normative judgements and large variations in definition. Recent comprehensive reviews of evidence in respect of crowding, as distinct from the household occupancy level as measured in WAACHS, found small relationships between overcrowding and the physical health of both children and adults.<sup>21, 22</sup> Data specifically on the relationship between social and emotional wellbeing and overcrowding were scant and what was available suggested a mixed relationship – that is, in some circumstances overcrowding appeared to have a bearing on social and emotional outcomes, and in other instances the relationship was not significant. For children specifically, there was limited evidence to suggest that there was an effect between overcrowding and child development.<sup>22, 23</sup>

Level of household occupancy, as measured in the WAACHS, indicates the presence of more people (rather than less) in the immediate household environment of the child. There may be benefits for the social and emotional wellbeing of Aboriginal children in having more people in the immediate household. There may be practical help and assistance to the carer and there may be safety in numbers with a buffering of potential risk exposure or risk severity relevant to the emotional and behavioural health of the child.

Child social and emotional wellbeing further improves where there is an adequate level of family functioning – that is to say, good communication, emotional support, and the celebration of family traditions and milestones. These findings parallel those of mainstream Australian and New Zealand families.<sup>20, 24</sup> Survey findings also indicate that the risk of clinically significant emotional or behavioural

*Continued . . . .*



### FACTORS ASSOCIATED WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES: FAMILY AND HOUSEHOLD FACTORS (*continued*)

difficulties in younger Aboriginal children is particularly associated with the level of family functioning – about two thirds of 4–11 year-old children were at low risk where family functioning was in the fair to very good range. Just over half of children in this age group were at low risk if family functioning was poor. These effects were most pronounced in the Perth metropolitan area.

Time and again, both within and across cultures, the quality of parenting has been shown to be associated with child social and emotional wellbeing.<sup>25-28</sup> There is clear evidence linking parenting and family risk factors to the development of conduct problems. Specifically, the lack of a warm, positive relationship with parents; insecure attachment; harsh, inflexible, rigid or inconsistent discipline practices; inadequate supervision of and involvement with children; marital conflict and breakdown; and parental psychopathology (particularly maternal depression and high levels of parenting stress) increase the risk that children develop major behavioural and emotional problems, including conduct problems, substance abuse, antisocial behaviour, and participation in delinquent activities.<sup>29-31</sup> These patterns of interactions occur across all population groups in Australia, and are by no means a unique feature of Aboriginal families. Effective prevention strategies are increasingly being documented in mainstream populations<sup>32,33</sup> and their extension to Aboriginal populations, while requiring suitable modification for context and culture, is urgently required.

Of the many variables examined in this section, the number of life stress events was most strongly associated with risk of clinically significant emotional or behavioural difficulties in Aboriginal children. The measurement of stressful life events has been extensively studied.<sup>34-39</sup> Their association with poor social and emotional wellbeing and psychiatric outcomes is well documented,<sup>40, 41</sup> although the establishment of their causal relationship to mental illness is plagued with considerable methodological challenges.<sup>42</sup> Recently, prospective longitudinal findings have documented a gene-by-environment interaction between exposures to stress and the expression of depression.<sup>43</sup> Additionally, life stress events show moderate familiarity (i.e. they ‘run in families’) and are associated with anxiety and depression in community samples.<sup>44</sup>

In the WAACHS, life stress events experienced by the family ranked as the factor most strongly associated with high risk of clinically significant emotional or behavioural difficulties in Aboriginal children. Family strife and fear, illness and death, and problems with employment and money are examples of the common stresses reported by carers in the twelve months prior to the survey.

#### Summary

Family and household factors show some of the strongest associations with risk of clinically significant emotional or behavioural difficulties in Aboriginal children. When carers or families are unable to cope owing to high life stress, when there is poor family functioning, and when the care of children is by a sole parent or a carer other than an original parent, children’s social and emotional wellbeing suffers – and most particularly for younger children.



## RELATIVE IMPORTANCE OF CHILD PHYSICAL HEALTH AND CARER AND FAMILY FACTORS ON EMOTIONAL AND BEHAVIOURAL DIFFICULTIES IN ABORIGINAL CHILDREN

In the preceding sections of this chapter, data have been modelled for a range of child, maternal and physical health factors. Separate modelling was also undertaken for carer factors and for family and household factors. For each group of factors, the model more accurately reflected the relative importance and impact of each factor on risk of clinically significant emotional or behavioural difficulties in Aboriginal children independently of other factors in the group and of demographic factors.

A final model has been developed that incorporates those factors associated with the child, the child's carer, and the family and family environment found in the preceding analyses to be statistically significantly associated with the likelihood of Aboriginal children being at high risk of clinically significant emotional or behavioural difficulties. As a consequence of this final modelling, not all of the variables previously examined were found to have a significant impact on child emotional or behavioural difficulties independently of other child, carer and family factors.

Factors eliminated from the final model were

- ◆ whether the child has asthma
- ◆ the number of dietary quality indicators met
- ◆ use of alcohol and/or tobacco during pregnancy
- ◆ overuse of alcohol causing problems in the household.

It is important to note that this does not mean that these variables are not associated with high risk of clinically significant emotional or behavioural difficulties in Aboriginal children. For example, alcohol causing problems in the household is strongly associated with poor family functioning. When *both* variables are included in the model, family functioning is shown to be the most significant predictor of child emotional and behavioural difficulties. However, it is clear that overuse of alcohol is a contributing factor to poor family functioning, which in turn leads to high risk of clinically significant emotional or behavioural difficulties.

Factors determined to have an independent and significant impact on whether children were at high risk of clinically significant emotional or behavioural difficulties are presented in Figure 3.25. It is now possible to estimate the likelihood of, for example, runny ears predicting high risk of clinically significant emotional or behavioural difficulties in Aboriginal children independently of other significant child, carer and family factors.

In terms of child factors, data modelling found that:

- ◆ males were twice as likely (Odds Ratio 1.97; CI: 1.52–2.57) as females to be at high risk of clinically significant emotional and behavioural difficulties
- ◆ children aged 15–17 years were 62 per cent (Odds Ratio 0.38; CI: 0.21–0.69) less likely to be at high risk of clinically significant emotional or behavioural difficulties than 4–7 year-olds
- ◆ children with a speech difficulty (having trouble saying certain sounds) were three times (Odds Ratio 3.04; CI: 2.00–4.61) more likely to be at high risk of clinically significant emotional or behavioural difficulties



- ◆ a child suffering from runny ears, a more severe form of otitis media, was over one and a half times (Odds Ratio 1.66; CI: 1.20–2.30) more likely to be at high risk of clinically significant emotional or behavioural difficulties than a child not suffering from runny ears
- ◆ a child without normal vision in both eyes was over one and a half times (Odds Ratio 1.67; CI: 1.01–2.78) as likely to be at high risk of clinically significant emotional or behavioural difficulties than a child with normal vision in both eyes.

In terms of carer factors:

- ◆ children in the primary care of a person with a long term and limiting medical condition were over three times (Odds Ratio 3.52; CI: 2.03–6.13) more likely to be at high risk of clinically significant emotional or behavioural difficulties than children whose primary carer had no medical condition lasting six months or more
- ◆ children in the primary care of a person who has used Mental Health Services in WA were one and a half times (Odds Ratio 1.57; CI: 1.04–2.36) as likely to be at high risk of clinically significant emotional or behavioural difficulties than children in the primary care of a person who had not accessed these services.

In terms of family factors:

- ◆ children living in families where 7 or more major life stress events had occurred over the preceding 12 months were over five times (Odds Ratio 5.46; CI: 3.18–9.37) as likely to be at high risk of clinically significant emotional or behavioural difficulties than children in families where 2 or less life stress events had occurred
- ◆ children living in families that functioned poorly were over twice as likely (Odds Ratio 2.39; CI: 1.34–4.25) to be at high risk of clinically significant emotional or behavioural difficulties than children living in families with very good family functioning
- ◆ children in families with poor parenting quality were almost four times (Odds Ratio 3.78; CI: 2.37–6.03) as likely to be at high risk of clinically significant emotional or behavioural difficulties than children in families with very good parenting quality
- ◆ children in the care of a sole parent were over one and a half times (Odds Ratio 1.79; CI: 1.19–2.70) as likely to be at high risk of clinically significant emotional or behavioural difficulties than children living with both their original parents, while those in the care of a person other than an original parent (such as aunts and uncles) were over twice as likely (Odds Ratio 2.09; CI: 1.28–3.41) to be at high risk
- ◆ children that had lived in 5 or more different homes since birth were one and a half times (Odds Ratio 1.54; CI: 1.07–2.04) more likely to be at high risk of clinically significant emotional or behavioural difficulties than children who had lived in fewer than 5 homes
- ◆ children living in homes with a high level of household occupancy were half as likely (Odds Ratio 0.48; CI: 0.29–0.78) to be at high risk of clinically significant emotional or behavioural difficulties than children living in homes with a low level of household occupancy
- ◆ children living in areas of extreme isolation were one-fifth as likely (Odds Ratio 0.20; CI: 0.08–0.48) to be at high risk of clinically significant emotional or behavioural difficulties compared with children in the Perth metropolitan area (no isolation).





**FIGURE 3.25:** CHILDREN AGED 4–17 YEARS — LIKELIHOOD OF BEING AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, ASSOCIATED WITH CHILD, CARER AND FAMILY CHARACTERISTICS

<i>Parameter</i>	<i>Odds Ratio</i>	<i>95% CI</i>
Sex—		
Male	1.97	(1.52 - 2.57)
Female	1.00	
Age group (years)—		
4–7	1.00	
8–11	0.95	(0.67 - 1.34)
12–14	0.99	(0.67 - 1.46)
15–17	0.38	(0.21 - 0.69)
Level of Relative Isolation—		
None	1.00	
Low	0.79	(0.50 - 1.24)
Moderate	0.89	(0.47 - 1.67)
High	0.86	(0.28 - 2.65)
Extreme	0.20	(0.08 - 0.48)
Whether child has runny ears—		
No	1.00	
Yes	1.66	(1.20 - 2.30)
Whether child has normal vision in both eyes—		
No	1.67	(1.01 - 2.78)
Yes	1.00	
Whether child has difficulty saying certain sounds—		
No	1.00	
Yes	3.04	(2.00 - 4.61)
Whether primary carer has a medical condition lasting 6 months or more—		
No medical condition	1.00	
Medical condition - not limiting	1.44	(0.90 - 2.30)
Medical condition - limiting	3.52	(2.03 - 6.13)
Not stated	1.47	(1.07 - 2.04)
Whether primary carer has used Mental Health Services—		
No	1.00	
Yes	1.57	(1.04 - 2.36)
Don't know	1.54	(0.43 - 5.49)
Child care arrangement—		
Both original parents	1.00	
Sole parent	1.79	(1.19 - 2.70)
One parent and new partner	1.03	(0.55 - 1.94)
Other (e.g. Aunts or uncles)	2.09	(1.28 - 3.41)
Household occupancy level—		
Low	1.00	
High	0.48	(0.29 - 0.78)
Not stated	1.47	(1.07 - 2.04)
Number of homes lived in—		
1–4	1.00	
5 or more	1.54	(1.07 - 2.04)
Family functioning (quartiles)—		
Poor	2.39	(1.34 - 4.25)
Fair	1.29	(0.75 - 2.24)
Good	1.76	(1.05 - 2.98)
Very good	1.00	
Not stated	1.47	(1.07 - 2.04)

*Continued . . .*





**FIGURE 3.25:** ABORIGINAL CHILDREN AGED 4–17 YEARS — LIKELIHOOD OF BEING AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES ASSOCIATED WITH CHILD, CARER AND FAMILY CHARACTERISTICS (*continued*)

Parameter	Odds Ratio	95% CI
Quality of parenting—		
Poor	3.78	(2.37 - 6.03)
Fair	1.88	(1.15 - 3.05)
Good	1.46	(0.90 - 2.36)
Very good	1.00	
Not stated	5.02	(0.30 - 74.5)
Number of life stress events—		
0–2	1.00	
3–6	1.77	(1.03 - 3.04)
7–14	5.46	(3.18 - 9.37)
Not stated	1.47	(1.07 - 2.04)

3

### FACTORS ASSOCIATED WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES

The factors most strongly associated with high risk of clinically significant emotional or behavioural difficulties in Aboriginal children are number of life stress events, poor family functioning, poor quality of parenting, poor physical health of carers and speech impairments in the child. Children being cared for by carers other than their original parents were also at high risk of clinically significant emotional or behavioural difficulties as were children in sole parent families. When children themselves are physically ill or impaired, their likelihood of being at high risk increases further.

The WAACHS is a cross-sectional survey, not longitudinal, and as such estimates of association rather than causal effects are presented in this chapter. However, where families are overwhelmed by stress, or function poorly, or where carers themselves are physically or mentally ill, the likelihood of transitions in the care of children from intact families to sole parent or non-parental care also increases. These observations are in keeping with developmental findings across many cultures.

Aboriginal children and young people are afforded some protection from emotional and behavioural difficulties where there are more people in the household. This is specifically true for young children. Just why this is so may relate to more help being available within the household, greater flexibility in managing stresses, and greater buffering of risk exposures.

The findings are also important for what is not significant. At present, neither carer income nor education is significantly associated with risk of clinically significant emotional or behavioural difficulties. This is contrary to what is observed in the general Australian population and in major population studies elsewhere in the world where lower rates of emotional and behavioural difficulties are associated with higher levels of education and income.<sup>45-47</sup> The lack of this gradient in

*Continued . . .*



**FACTORS ASSOCIATED WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES** *(continued)*

Aboriginal families is important. These data suggest that increases in carer income and education are not effectively translated into better child social and emotional wellbeing because they are moderated (e.g. weakened) by the effects of life stress, poor family functioning and carer health. The pattern of results suggests that these stresses are, for many, overwhelming the benefits that may accrue through improved education and income.

Finally, the ongoing association between physical health (both of the carer and of the child) and risk of clinically significant emotional or behavioural difficulties clearly demonstrates the critical importance of effectively lowering the burden of physical morbidity in the Aboriginal population.

**ENDNOTES**

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## DETAILED TABLES

### MATERNAL HEALTH, CHILD HEALTH AND CHILD MENTAL HEALTH

**TABLE 3.1:** BIRTHS LINKED TO MCHRDB – CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE OF MOTHER AT BIRTH

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Maternal age less than 18 years</b>				
Low	1 570	(1 360 - 1 790)	57.6	(51.2 - 63.7)
Moderate	370	(290 - 460)	13.5	(10.7 - 17.0)
High	790	(590 - 1 040)	28.8	(22.8 - 36.0)
<b>Total</b>	<b>2 720</b>	<b>(2 430 - 3 040)</b>	<b>100.0</b>	
<b>Maternal age 18 years or more</b>				
Low	11 000	(10 400 - 11 500)	64.9	(62.2 - 67.5)
Moderate	1 930	(1 700 - 2 170)	11.4	(10.1 - 12.8)
High	4 000	(3 600 - 4 420)	23.7	(21.4 - 26.1)
<b>Total</b>	<b>16 900</b>	<b>(16 400 - 17 400)</b>	<b>100.0</b>	
<b>Total</b>				
Low	12 600	(12 000 - 13 100)	64.0	(61.4 - 66.5)
Moderate	2 300	(2 060 - 2 560)	11.7	(10.5 - 13.0)
High	4 780	(4 330 - 5 260)	24.3	(22.1 - 26.7)
<b>Total</b>	<b>19 700</b>	<b>(19 200 - 20 000)</b>	<b>100.0</b>	

**TABLE 3.2:** CHILDREN AGED 4–17 YEARS WHOSE PRIMARY CARER IS THEIR BIRTH MOTHER — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY SUBSTANCES CONSUMED BY BIRTH MOTHER DURING PREGNANCY

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>No alcohol or tobacco</b>				
Low	4 710	(4 290 - 5 160)	67.6	(63.5 - 71.4)
Moderate	830	(670 - 1 000)	11.9	(9.7 - 14.2)
High	1 430	(1 180 - 1 730)	20.6	(17.2 - 24.4)
<b>Total</b>	<b>6 970</b>	<b>(6 470 - 7 470)</b>	<b>100.0</b>	
<b>Alcohol and/or tobacco</b>				
Low	5 190	(4 760 - 5 630)	60.9	(57.2 - 64.5)
Moderate	980	(850 - 1 140)	11.6	(10.0 - 13.3)
High	2 340	(2 010 - 2 690)	27.5	(24.3 - 31.0)
<b>Total</b>	<b>8 510</b>	<b>(7 980 - 9 050)</b>	<b>100.0</b>	
<b>Primary carer is not birth mother</b>				
Low	4 900	(4 460 - 5 370)	66.0	(62.2 - 69.7)
Moderate	800	(650 - 990)	10.8	(8.7 - 13.2)
High	1 720	(1 460 - 2 000)	23.2	(20.0 - 26.7)
<b>Total</b>	<b>7 420</b>	<b>(6 910 - 7 940)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 3.3:** CHILDREN AGED 4–17 YEARS WHOSE PRIMARY CARER IS THEIR BIRTH MOTHER — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY SPECIFIC SUBSTANCES CONSUMED BY BIRTH MOTHER DURING PREGNANCY

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>No alcohol or tobacco used during pregnancy</b>				
Low	4 710	(4 290 - 5 160)	67.6	(63.5 - 71.4)
Moderate	830	(670 - 1 000)	11.9	(9.7 - 14.2)
High	1 430	(1 180 - 1 730)	20.6	(17.2 - 24.4)
<b>Total</b>	<b>6 970</b>	<b>(6 470 - 7 470)</b>	<b>100.0</b>	
<b>Alcohol, no tobacco used</b>				
Low	510	(350 - 720)	56.8	(43.3 - 69.0)
Moderate	110	(60 - 180)	11.6	(6.6 - 19.0)
High	290	(170 - 450)	31.6	(20.3 - 45.0)
<b>Total</b>	<b>900</b>	<b>(690 - 1 170)</b>	<b>100.0</b>	
<b>Tobacco, no alcohol used</b>				
Low	3 140	(2 830 - 3 480)	63.4	(59.1 - 67.8)
Moderate	520	(420 - 620)	10.4	(8.5 - 12.5)
High	1 300	(1 050 - 1 560)	26.2	(22.2 - 30.5)
<b>Total</b>	<b>4 950</b>	<b>(4 520 - 5 400)</b>	<b>100.0</b>	
<b>Alcohol and tobacco used</b>				
Low	1 530	(1 270 - 1 820)	57.7	(51.0 - 64.1)
Moderate	360	(280 - 470)	13.7	(10.5 - 17.5)
High	760	(580 - 980)	28.6	(22.9 - 35.0)
<b>Total</b>	<b>2 660</b>	<b>(2 310 - 3 030)</b>	<b>100.0</b>	
<b>Primary carer is not birth mother</b>				
Low	4 900	(4 460 - 5 370)	66.0	(62.2 - 69.7)
Moderate	800	(650 - 990)	10.8	(8.7 - 13.2)
High	1 720	(1 460 - 2 000)	23.2	(20.0 - 26.7)
<b>Total</b>	<b>7 420</b>	<b>(6 910 - 7 940)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 3.4:** BIRTHS LINKED TO MCHRDB – CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY GESTATIONAL AGE AND BIRTH WEIGHT

<i>Birth characteristics</i>	<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Gestational age</b>					
Less than 37 weeks	Low	1 540	(1 290 - 1 830)	59.0	(52.5 - 65.3)
	Moderate	320	(240 - 410)	12.3	(9.2 - 15.7)
	High	750	(590 - 930)	28.7	(23.0 - 34.8)
	<b>Total</b>	<b>2 610</b>	<b>(2 310 - 2 940)</b>	<b>100.0</b>	
37 weeks or more	Low	11 000	(10 400 - 11 500)	64.6	(61.9 - 67.2)
	Moderate	1 980	(1 750 - 2 230)	11.6	(10.3 - 13.1)
	High	4 030	(3 610 - 4 470)	23.7	(21.4 - 26.2)
	<b>Total</b>	<b>17 000</b>	<b>(16 500 - 17 400)</b>	<b>100.0</b>	
<b>Birth weight</b>					
Less than 2500 grams	Low	1 300	(1 070 - 1 580)	60.7	(53.7 - 67.5)
	Moderate	290	(210 - 390)	13.7	(9.9 - 18.1)
	High	550	(420 - 710)	25.6	(20.0 - 32.1)
	<b>Total</b>	<b>2 140</b>	<b>(1 850 - 2 470)</b>	<b>100.0</b>	
2500 grams or more	Low	11 300	(10 700 - 11 800)	64.4	(61.7 - 67.0)
	Moderate	2 010	(1 780 - 2 250)	11.5	(10.2 - 12.8)
	High	4 230	(3 810 - 4 690)	24.2	(21.9 - 26.6)
	<b>Total</b>	<b>17 500</b>	<b>(17 000 - 18 000)</b>	<b>100.0</b>	

**TABLE 3.5:** BIRTHS LINKED TO MCHRDB – CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY PERCENTAGE OF OPTIMAL BIRTH WEIGHT (POBW)

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>POBW less than 85%</b>				
Low	2 470	(2 180 - 2 780)	62.2	(57.2 - 67.0)
Moderate	480	(380 - 590)	12.0	(9.6 - 14.7)
High	1 020	(810 - 1 260)	25.7	(21.3 - 30.8)
<b>Total</b>	<b>3 960</b>	<b>(3 600 - 4 360)</b>	<b>100.0</b>	
<b>POBW 85% or more</b>				
Low	9 760	(9 200 - 10 300)	64.2	(61.3 - 67.0)
Moderate	1 770	(1 550 - 2 010)	11.7	(10.3 - 13.2)
High	3 670	(3 290 - 4 100)	24.2	(21.7 - 26.7)
<b>Total</b>	<b>15 200</b>	<b>(14 700 - 15 700)</b>	<b>100.0</b>	
<b>POBW not stated</b>				
Low	350	(260 - 450)	71.3	(62.1 - 80.0)
Moderate	50	(30 - 80)	10.4	(6.3 - 15.2)
High	90	(60 - 140)	18.3	(11.7 - 27.1)
<b>Total</b>	<b>490</b>	<b>(390 - 600)</b>	<b>100.0</b>	
<b>Total</b>				
Low	12 600	(12 000 - 13 100)	64.0	(61.4 - 66.5)
Moderate	2 300	(2 060 - 2 560)	11.7	(10.5 - 13.0)
High	4 780	(4 330 - 5 260)	24.3	(22.1 - 26.7)
<b>Total</b>	<b>19 700</b>	<b>(19 200 - 20 000)</b>	<b>100.0</b>	





**TABLE 3.6:** CHILDREN AGED 4–17 YEARS WHOSE PRIMARY CARER IS THE BIRTH MOTHER — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER EVER BREASTFED

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Never breastfed</b>				
Low	1 290	(1 060 - 1 540)	61.7	(54.5 - 68.4)
Moderate	230	(160 - 310)	10.9	(7.7 - 14.8)
High	570	(420 - 750)	27.4	(20.7 - 34.3)
<b>Total</b>	<b>2 090</b>	<b>(1 810 - 2 400)</b>	<b>100.0</b>	
<b>Breastfed</b>				
Low	10 100	(9 600 - 10 700)	64.8	(62.1 - 67.5)
Moderate	1 810	(1 600 - 2 030)	11.5	(10.2 - 12.9)
High	3 710	(3 310 - 4 120)	23.7	(21.3 - 26.2)
<b>Total</b>	<b>15 700</b>	<b>(15 100 - 16 200)</b>	<b>100.0</b>	
<b>Total</b>				
Low	11 400	(10 900 - 12 000)	64.4	(61.8 - 67.0)
Moderate	2 040	(1 820 - 2 280)	11.5	(10.2 - 12.8)
High	4 280	(3 870 - 4 730)	24.1	(21.8 - 26.6)
<b>Total</b>	<b>17 700</b>	<b>(17 300 - 18 200)</b>	<b>100.0</b>	

**TABLE 3.7:** CHILDREN AGED 4–17 YEARS WHOSE PRIMARY CARER IS THE BIRTH MOTHER — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY DURATION OF BREASTFEEDING

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>0–less than 6 months</b>				
Low	2 790	(2 460 - 3 130)	59.5	(54.3 - 64.3)
Moderate	560	(460 - 670)	11.9	(9.8 - 14.3)
High	1 340	(1 090 - 1 630)	28.6	(23.9 - 33.6)
<b>Total</b>	<b>4 680</b>	<b>(4 260 - 5 120)</b>	<b>100.0</b>	
<b>6–less than 12 months</b>				
Low	2 620	(2 300 - 2 970)	66.2	(61.3 - 70.9)
Moderate	460	(360 - 580)	11.7	(9.2 - 14.8)
High	880	(700 - 1 080)	22.1	(18.1 - 26.8)
<b>Total</b>	<b>3 960</b>	<b>(3 590 - 4 350)</b>	<b>100.0</b>	
<b>12 months or more</b>				
Low	4 720	(4 290 - 5 150)	67.6	(63.7 - 71.3)
Moderate	780	(630 - 950)	11.2	(9.2 - 13.5)
High	1 480	(1 250 - 1 740)	21.2	(18.0 - 24.5)
<b>Total</b>	<b>6 980</b>	<b>(6 500 - 7 460)</b>	<b>100.0</b>	
<b>Still being breastfed</b>				
Low	20	(10 - 60)	53.4	(21.2 - 86.3)
Moderate	10	(0 - 20)	15.5	(2.5 - 55.6)
High	10	(10 - 30)	31.1	(9.9 - 65.1)
<b>Total</b>	<b>40</b>	<b>(20 - 80)</b>	<b>100.0</b>	
<b>Total</b>				
Low	10 100	(9 600 - 10 700)	64.8	(62.1 - 67.5)
Moderate	1 810	(1 600 - 2 030)	11.5	(10.2 - 12.9)
High	3 710	(3 310 - 4 120)	23.7	(21.3 - 26.2)
<b>Total</b>	<b>15 700</b>	<b>(15 100 - 16 200)</b>	<b>100.0</b>	



**TABLE 3.8:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP AND WHETHER EVER HAD RUNNY EARS

Whether ever had runny ears	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>4–11 years</b>					
No	Low	6 600	(6 170 - 7 030)	63.9	(60.9 - 66.9)
	Moderate	1 230	(1 070 - 1 400)	11.9	(10.4 - 13.5)
	High	2 490	(2 200 - 2 820)	24.2	(21.4 - 27.0)
	<b>Total</b>	<b>10 300</b>	<b>(9 900 - 10 800)</b>	<b>100.0</b>	
Yes	Low	1 820	(1 620 - 2 050)	52.3	(47.7 - 56.7)
	Moderate	530	(440 - 650)	15.3	(12.7 - 18.2)
	High	1 130	(960 - 1 320)	32.4	(28.1 - 36.9)
	<b>Total</b>	<b>3 480</b>	<b>(3 210 - 3 770)</b>	<b>100.0</b>	
<b>Total</b>	Low	8 420	(7 960 - 8 880)	61.0	(58.3 - 63.6)
	Moderate	1 760	(1 570 - 1 960)	12.8	(11.5 - 14.2)
	High	3 620	(3 270 - 3 980)	26.3	(23.9 - 28.8)
	<b>Total</b>	<b>13 800</b>	<b>(13 300 - 14 200)</b>	<b>100.0</b>	
<b>12–17 years</b>					
No	Low	5 420	(5 030 - 5 830)	72.0	(68.1 - 75.8)
	Moderate	710	(550 - 900)	9.4	(7.4 - 11.9)
	High	1 400	(1 150 - 1 690)	18.6	(15.5 - 22.0)
	<b>Total</b>	<b>7 530</b>	<b>(7 090 - 7 970)</b>	<b>100.0</b>	
Yes	Low	960	(790 - 1 170)	61.2	(53.8 - 68.2)
	Moderate	140	(90 - 210)	9.0	(5.6 - 13.4)
	High	470	(360 - 600)	29.8	(23.5 - 36.9)
	<b>Total</b>	<b>1 580</b>	<b>(1 360 - 1 820)</b>	<b>100.0</b>	
<b>Total</b>	Low	6 380	(5 960 - 6 810)	70.1	(66.5 - 73.4)
	Moderate	850	(680 - 1 060)	9.4	(7.5 - 11.5)
	High	1 870	(1 590 - 2 170)	20.5	(17.7 - 23.6)
	<b>Total</b>	<b>9 100</b>	<b>(8 660 - 9 560)</b>	<b>100.0</b>	
<b>Total</b>					
No	Low	12 000	(11 500 - 12 500)	67.3	(64.7 - 69.8)
	Moderate	1 940	(1 720 - 2 190)	10.9	(9.6 - 12.2)
	High	3 890	(3 490 - 4 320)	21.8	(19.6 - 24.2)
	<b>Total</b>	<b>17 800</b>	<b>(17 500 - 18 200)</b>	<b>100.0</b>	
Yes	Low	2 790	(2 500 - 3 090)	55.1	(51.0 - 59.2)
	Moderate	670	(560 - 800)	13.3	(11.2 - 15.7)
	High	1 600	(1 380 - 1 840)	31.6	(27.9 - 35.6)
	<b>Total</b>	<b>5 060</b>	<b>(4 700 - 5 440)</b>	<b>100.0</b>	
<b>Total</b>	Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
	Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
	High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 3.9: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER EVER HAD ASTHMA**

Whether ever had asthma	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
No	Low	11 700	(11 100 - 12 200)	67.9	(65.3 - 70.4)
	Moderate	1 850	(1 640 - 2 090)	10.8	(9.6 - 12.1)
	High	3 650	(3 270 - 4 050)	21.3	(19.1 - 23.6)
	<b>Total</b>	<b>17 200</b>	<b>(16 700 - 17 600)</b>	<b>100.0</b>	
Yes	Low	3 150	(2 780 - 3 530)	54.7	(50.3 - 59.1)
	Moderate	760	(630 - 910)	13.2	(10.9 - 15.8)
	High	1 850	(1 590 - 2 120)	32.1	(28.1 - 36.3)
	<b>Total</b>	<b>5 750</b>	<b>(5 330 - 6 190)</b>	<b>100.0</b>	
<b>Total</b>	Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
	Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
	High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 3.10: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP AND WHETHER EVER HAD ASTHMA**

Whether ever had asthma	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
4–11 years					
No	Low	6 590	(6 170 - 7 010)	64.1	(61.3 - 66.9)
	Moderate	1 280	(1 130 - 1 450)	12.5	(11.0 - 14.0)
	High	2 400	(2 140 - 2 700)	23.4	(20.9 - 26.1)
	<b>Total</b>	<b>10 300</b>	<b>(9 800 - 10 700)</b>	<b>100.0</b>	
Yes	Low	1 830	(1 540 - 2 160)	51.9	(46.2 - 57.6)
	Moderate	480	(380 - 590)	13.6	(10.8 - 16.7)
	High	1 220	(1 020 - 1 450)	34.5	(29.5 - 40.2)
	<b>Total</b>	<b>3 530</b>	<b>(3 170 - 3 910)</b>	<b>100.0</b>	
<b>Total</b>	Low	8 420	(7 960 - 8 880)	61.0	(58.3 - 63.6)
	Moderate	1 760	(1 570 - 1 960)	12.8	(11.5 - 14.2)
	High	3 620	(3 270 - 3 980)	26.3	(23.9 - 28.8)
	<b>Total</b>	<b>13 800</b>	<b>(13 300 - 14 200)</b>	<b>100.0</b>	
12–17 years					
No	Low	5 070	(4 690 - 5 450)	73.6	(69.6 - 77.5)
	Moderate	570	(420 - 750)	8.3	(6.2 - 10.8)
	High	1 240	(1 010 - 1 520)	18.0	(14.9 - 21.7)
	<b>Total</b>	<b>6 880</b>	<b>(6 470 - 7 290)</b>	<b>100.0</b>	
Yes	Low	1 320	(1 090 - 1 560)	59.2	(52.6 - 65.8)
	Moderate	280	(190 - 400)	12.6	(8.7 - 17.6)
	High	630	(500 - 780)	28.2	(22.5 - 34.2)
	<b>Total</b>	<b>2 220</b>	<b>(1 950 - 2 510)</b>	<b>100.0</b>	
<b>Total</b>	Low	6 380	(5 960 - 6 810)	70.1	(66.5 - 73.4)
	Moderate	850	(680 - 1 060)	9.4	(7.5 - 11.5)
	High	1 870	(1 590 - 2 170)	20.5	(17.7 - 23.6)
	<b>Total</b>	<b>9 100</b>	<b>(8 660 - 9 560)</b>	<b>100.0</b>	



**TABLE 3.11: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY NUMBER OF DIETARY QUALITY INDICATORS MET**

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>No dietary quality indicators met</b>				
Low	120	(50 - 270)	53.1	(23.0 - 77.0)
Moderate	30	(10 - 90)	14.4	(3.0 - 36.3)
High	70	(40 - 140)	32.5	(14.6 - 57.0)
<b>Total</b>	<b>230</b>	<b>(130 - 390)</b>	<b>100.0</b>	
<b>1 indicator met</b>				
Low	1 610	(1 350 - 1 920)	63.3	(55.6 - 70.4)
Moderate	250	(160 - 360)	9.7	(6.7 - 13.7)
High	690	(500 - 920)	27.0	(20.7 - 33.9)
<b>Total</b>	<b>2 550</b>	<b>(2 190 - 2 940)</b>	<b>100.0</b>	
<b>2 indicators met</b>				
Low	4 750	(4 330 - 5 200)	63.9	(59.8 - 68.0)
Moderate	830	(650 - 1 030)	11.1	(8.9 - 13.6)
High	1 860	(1 570 - 2 170)	25.0	(21.5 - 28.6)
<b>Total</b>	<b>7 440</b>	<b>(6 920 - 7 970)</b>	<b>100.0</b>	
<b>3 indicators met</b>				
Low	5 420	(4 960 - 5 900)	65.0	(61.6 - 68.3)
Moderate	990	(850 - 1 140)	11.8	(10.2 - 13.6)
High	1 930	(1 650 - 2 230)	23.2	(20.2 - 26.5)
<b>Total</b>	<b>8 330</b>	<b>(7 800 - 8 870)</b>	<b>100.0</b>	
<b>All 4 indicators met</b>				
Low	2 890	(2 510 - 3 310)	66.5	(61.3 - 71.2)
Moderate	520	(410 - 650)	12.0	(9.5 - 14.7)
High	940	(730 - 1 180)	21.6	(17.4 - 26.4)
<b>Total</b>	<b>4 350</b>	<b>(3 880 - 4 850)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

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**TABLE 3.12:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THERE ARE ANY SPORTS OR GAMES INVOLVING STRONG EXERCISE THAT THE CHILD CAN'T DO DUE TO ILLNESS OR DISABILITY

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Not restricted playing sports or games</b>				
Low	14 400	(13 900 - 14 900)	65.5	(63.2 - 67.8)
Moderate	2 470	(2 230 - 2 720)	11.2	(10.2 - 12.4)
High	5 100	(4 650 - 5 570)	23.2	(21.2 - 25.4)
<b>Total</b>	<b>22 000</b>	<b>(21 700 - 22 200)</b>	<b>100.0</b>	
<b>Restricted playing sports or games</b>				
Low	400	(290 - 540)	43.1	(32.5 - 54.7)
Moderate	140	(50 - 280)	15.2	(6.9 - 28.1)
High	390	(270 - 540)	41.7	(30.8 - 53.4)
<b>Total</b>	<b>940</b>	<b>(750 - 1 160)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 3.13:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THE CHILD HAS NORMAL VISION IN BOTH EYES

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Does not have normal vision in both eyes</b>				
Low	1 050	(860 - 1 270)	56.8	(48.0 - 64.6)
Moderate	200	(120 - 340)	11.0	(6.4 - 17.2)
High	600	(420 - 830)	32.2	(24.1 - 40.9)
<b>Total</b>	<b>1 850</b>	<b>(1 550 - 2 190)</b>	<b>100.0</b>	
<b>Has normal vision in both eyes</b>				
Low	13 800	(13 200 - 14 300)	65.3	(62.9 - 67.6)
Moderate	2 410	(2 170 - 2 660)	11.4	(10.3 - 12.7)
High	4 900	(4 470 - 5 360)	23.3	(21.2 - 25.4)
<b>Total</b>	<b>21 100</b>	<b>(20 700 - 21 400)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 3.14:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THE CHILD HAS NORMAL HEARING IN BOTH EARS

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Does not have normal hearing in both ears				
Low	920	(770 - 1 090)	59.0	(51.4 - 66.4)
Moderate	150	(110 - 200)	9.5	(6.6 - 13.0)
High	490	(360 - 670)	31.5	(23.9 - 39.5)
<b>Total</b>	<b>1 560</b>	<b>(1 350 - 1 790)</b>	<b>100.0</b>	
Has normal hearing in both ears				
Low	13 900	(13 300 - 14 400)	65.0	(62.6 - 67.4)
Moderate	2 460	(2 220 - 2 730)	11.5	(10.4 - 12.8)
High	5 000	(4 550 - 5 470)	23.4	(21.4 - 25.6)
<b>Total</b>	<b>21 300</b>	<b>(21 100 - 21 600)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 3.15:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THE CHILD HAS DIFFICULTY SAYING CERTAIN SOUNDS

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Does not have difficulty saying certain sounds				
Low	13 900	(13 400 - 14 400)	67.3	(64.9 - 69.6)
Moderate	2 260	(2 020 - 2 530)	10.9	(9.8 - 12.2)
High	4 490	(4 070 - 4 930)	21.7	(19.7 - 23.9)
<b>Total</b>	<b>20 700</b>	<b>(20 400 - 20 900)</b>	<b>100.0</b>	
Has difficulty saying certain sounds				
Low	890	(690 - 1 130)	39.6	(32.3 - 47.0)
Moderate	350	(270 - 440)	15.7	(12.0 - 19.9)
High	1 000	(820 - 1 210)	44.7	(37.7 - 51.7)
<b>Total</b>	<b>2 240</b>	<b>(1 970 - 2 520)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 3.16: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THE CHILD STUTTERS OR STAMMERS**

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Does not stutter or stammer</b>				
Low	14 400	(13 900 - 14 900)	65.9	(63.5 - 68.2)
Moderate	2 460	(2 210 - 2 730)	11.2	(10.1 - 12.5)
High	5 000	(4 570 - 5 460)	22.9	(20.8 - 25.0)
<b>Total</b>	<b>21 900</b>	<b>(21 700 - 22 100)</b>	<b>100.0</b>	
<b>Stutters or stammers</b>				
Low	390	(260 - 570)	37.8	(27.8 - 48.6)
Moderate	150	(100 - 220)	14.8	(9.8 - 21.8)
High	490	(390 - 630)	47.3	(37.9 - 56.9)
<b>Total</b>	<b>1 040</b>	<b>(850 - 1 250)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 3.17: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER OTHER PEOPLE NEED HELP TO UNDERSTAND WHAT THE CHILD IS SAYING**

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Speech is understandable</b>				
Low	14 000	(13 400 - 14 500)	66.7	(64.3 - 69.0)
Moderate	2 320	(2 080 - 2 590)	11.1	(10.0 - 12.4)
High	4 650	(4 230 - 5 110)	22.2	(20.1 - 24.3)
<b>Total</b>	<b>20 900</b>	<b>(20 600 - 21 200)</b>	<b>100.0</b>	
<b>Speech is not understandable</b>				
Low	840	(650 - 1 070)	42.6	(35.5 - 50.2)
Moderate	290	(220 - 370)	14.6	(11.1 - 19.0)
High	840	(690 - 1 030)	42.8	(35.9 - 49.6)
<b>Total</b>	<b>1 970</b>	<b>(1 710 - 2 260)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	





**TABLE 3.18:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THE CHILD NEEDS HELP TO GET AROUND

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Does not need help to get around</b>				
Low	14 700	(14 200 - 15 300)	64.9	(62.5 - 67.2)
Moderate	2 570	(2 320 - 2 830)	11.3	(10.2 - 12.5)
High	5 400	(4 930 - 5 880)	23.8	(21.7 - 25.9)
<b>Total</b>	<b>22 700</b>	<b>(22 500 - 22 800)</b>	<b>100.0</b>	
<b>Needs help to get around</b>				
Low	70	(30 - 140)	34.4	(15.2 - 64.6)
Moderate	40	(10 - 170)	20.7	(2.5 - 55.6)
High	100	(40 - 230)	44.9	(17.7 - 71.1)
<b>Total</b>	<b>210</b>	<b>(110 - 360)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 3.19:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THE CHILD NEEDS HELP WITH EATING, DRESSING, ETC DUE TO ILLNESS OR DISABILITY

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>No help needed with eating, dressing, etc.</b>				
Low	14 700	(14 200 - 15 200)	65.3	(62.9 - 67.6)
Moderate	2 560	(2 310 - 2 820)	11.4	(10.3 - 12.6)
High	5 260	(4 810 - 5 750)	23.4	(21.3 - 25.5)
<b>Total</b>	<b>22 500</b>	<b>(22 400 - 22 600)</b>	<b>100.0</b>	
<b>Help needed with eating, dressing, etc.</b>				
Low	100	(70 - 140)	25.8	(16.0 - 38.5)
Moderate	50	(10 - 160)	14.1	(2.9 - 34.9)
High	230	(140 - 340)	60.1	(42.1 - 74.4)
<b>Total</b>	<b>380</b>	<b>(270 - 510)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



## CARER FACTORS AND CHILD MENTAL HEALTH

**TABLE 3.20:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY HIGHEST SCHOOL YEAR COMPLETED BY THE PRIMARY CARER AND WHETHER THE PRIMARY CARER RECEIVED ANY POST-SCHOOL QUALIFICATIONS

<i>Education status</i>	<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Schooling — Highest year completed</b>					
Did not go to school	Low	530	(360 - 730)	79.5	(65.1 - 91.2)
	Moderate	20	(0 - 70)	3.3	(0.7 - 9.0)
	High	110	(50 - 270)	17.2	(7.0 - 35.5)
	<b>Total</b>	<b>670</b>	<b>(480 - 930)</b>	<b>100.0</b>	
Year 9 or less	Low	3 790	(3 360 - 4 230)	58.7	(54.2 - 62.8)
	Moderate	900	(750 - 1 080)	14.0	(11.8 - 16.6)
	High	1 770	(1 490 - 2 080)	27.3	(23.5 - 31.4)
	<b>Total</b>	<b>6 460</b>	<b>(5 920 - 7 010)</b>	<b>100.0</b>	
Year 10	Low	6 260	(5 740 - 6 780)	67.1	(63.6 - 70.6)
	Moderate	1 080	(910 - 1 270)	11.6	(9.9 - 13.5)
	High	1 990	(1 690 - 2 340)	21.4	(18.4 - 24.7)
	<b>Total</b>	<b>9 330</b>	<b>(8 710 - 9 930)</b>	<b>100.0</b>	
Year 11 or 12	Low	3 840	(3 430 - 4 290)	65.4	(61.0 - 69.7)
	Moderate	560	(420 - 720)	9.5	(7.3 - 12.0)
	High	1 470	(1 220 - 1 760)	25.1	(21.2 - 29.3)
	<b>Total</b>	<b>5 880</b>	<b>(5 340 - 6 420)</b>	<b>100.0</b>	
<b>Post-school achievement</b>					
Has post-school qualifications	Low	5 000	(4 520 - 5 520)	62.6	(58.4 - 66.6)
	Moderate	940	(760 - 1 150)	11.8	(9.6 - 14.2)
	High	2 050	(1 720 - 2 400)	25.6	(22.0 - 29.5)
	<b>Total</b>	<b>7 990</b>	<b>(7 400 - 8 610)</b>	<b>100.0</b>	



**TABLE 3.21: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY FAMILY FINANCIAL STRAIN**

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Spending more money than we get</b>				
Low	1 030	(830 - 1 280)	50.4	(42.7 - 58.5)
Moderate	310	(200 - 460)	15.2	(10.5 - 21.2)
High	710	(520 - 940)	34.4	(26.8 - 42.2)
<b>Total</b>	<b>2 050</b>	<b>(1 720 - 2 430)</b>	<b>100.0</b>	
<b>Just enough money to get to next pay</b>				
Low	6 810	(6 290 - 7 340)	65.7	(62.3 - 69.0)
Moderate	1 130	(960 - 1 320)	10.9	(9.3 - 12.7)
High	2 420	(2 080 - 2 780)	23.3	(20.5 - 26.4)
<b>Total</b>	<b>10 400</b>	<b>(9 700 - 11 000)</b>	<b>100.0</b>	
<b>Some money over but spend</b>				
Low	1 950	(1 640 - 2 320)	64.2	(58.3 - 69.9)
Moderate	380	(290 - 500)	12.6	(9.8 - 16.0)
High	700	(530 - 910)	23.2	(18.2 - 29.2)
<b>Total</b>	<b>3 040</b>	<b>(2 640 - 3 500)</b>	<b>100.0</b>	
<b>Save a bit now and again</b>				
Low	3 820	(3 400 - 4 280)	66.1	(61.5 - 70.6)
Moderate	610	(480 - 750)	10.5	(8.4 - 12.8)
High	1 360	(1 090 - 1 640)	23.5	(19.4 - 27.8)
<b>Total</b>	<b>5 780</b>	<b>(5 270 - 6 310)</b>	<b>100.0</b>	
<b>Save a lot</b>				
Low	800	(590 - 1 060)	73.4	(60.9 - 82.8)
Moderate	130	(60 - 250)	11.9	(6.0 - 19.1)
High	160	(80 - 270)	14.7	(8.6 - 23.5)
<b>Total</b>	<b>1 080</b>	<b>(800 - 1 410)</b>	<b>100.0</b>	
<b>Not stated</b>				
Low	380	(260 - 550)	66.1	(49.8 - 78.6)
Moderate	50	(20 - 100)	8.7	(4.7 - 15.1)
High	150	(70 - 260)	25.2	(12.9 - 39.5)
<b>Total</b>	<b>580</b>	<b>(410 - 810)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

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**TABLE 3.22: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THE PRIMARY CARER HAD ANY MEDICAL CONDITIONS LASTING SIX MONTHS OR MORE**

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>No medical condition lasting six months or more</b>				
Low	9 380	(8 800 - 9 950)	67.1	(64.2 - 69.9)
Moderate	1 750	(1 530 - 1 980)	12.5	(11.0 - 14.1)
High	2 850	(2 510 - 3 230)	20.4	(18.0 - 22.9)
<b>Total</b>	<b>14 000</b>	<b>(13 400 - 14 600)</b>	<b>100.0</b>	
<b>Medical condition – not limiting</b>				
Low	3 140	(2 770 - 3 540)	65.0	(60.1 - 69.6)
Moderate	510	(410 - 640)	10.6	(8.5 - 13.0)
High	1 180	(950 - 1 450)	24.4	(20.3 - 29.2)
<b>Total</b>	<b>4 830</b>	<b>(4 360 - 5 310)</b>	<b>100.0</b>	
<b>Medical condition – limiting</b>				
Low	1 900	(1 600 - 2 230)	54.0	(47.8 - 60.1)
Moderate	300	(210 - 440)	8.7	(6.0 - 12.2)
High	1 310	(1 060 - 1 600)	37.3	(31.5 - 43.7)
<b>Total</b>	<b>3 520</b>	<b>(3 110 - 3 960)</b>	<b>100.0</b>	
<b>Not stated</b>				
Low	380	(260 - 550)	66.1	(49.8 - 78.6)
Moderate	50	(20 - 100)	8.7	(4.7 - 15.1)
High	150	(70 - 260)	25.2	(12.9 - 39.5)
<b>Total</b>	<b>580</b>	<b>(410 - 810)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 3.23: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND WHETHER THE PRIMARY CARER HAD ANY MEDICAL CONDITIONS LASTING SIX MONTHS OR MORE**

Whether any medical conditions lasting six months or more	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>LORI — None</b>					
No medical condition	Low	3 040	(2 710 - 3 390)	62.3	(57.1 - 67.5)
	Moderate	690	(550 - 870)	14.2	(11.2 - 17.4)
	High	1 150	(910 - 1 430)	23.5	(18.9 - 28.5)
	<b>Total</b>	<b>4 880</b>	<b>(4 520 - 5 270)</b>	<b>100.0</b>	
Medical condition – not limiting	Low	1 000	(770 - 1 260)	66.0	(56.4 - 75.3)
	Moderate	140	(90 - 220)	9.5	(5.8 - 14.1)
	High	370	(230 - 560)	24.6	(16.4 - 34.8)
	<b>Total</b>	<b>1 520</b>	<b>(1 230 - 1 830)</b>	<b>100.0</b>	
Medical condition – limiting	Low	520	(360 - 720)	41.3	(31.2 - 52.5)
	Moderate	160	(80 - 310)	12.8	(6.4 - 22.6)
	High	580	(420 - 780)	45.9	(35.0 - 56.4)
	<b>Total</b>	<b>1 270</b>	<b>(1 010 - 1 570)</b>	<b>100.0</b>	
Not stated	Low	120	(60 - 230)	71.2	(34.9 - 96.8)
	Moderate	10	(0 - 20)	4.5	(0.5 - 14.8)
	High	40	(10 - 170)	24.2	(3.7 - 71.0)
	<b>Total</b>	<b>170</b>	<b>(80 - 290)</b>	<b>100.0</b>	
<b>Total</b>	Low	4 680	(4 360 - 5 030)	59.8	(55.6 - 64.0)
	Moderate	1 000	(830 - 1 210)	12.8	(10.5 - 15.4)
	High	2 140	(1 850 - 2 470)	27.4	(23.5 - 31.3)
	<b>Total</b>	<b>7 830</b>	<b>(7 680 - 7 980)</b>	<b>100.0</b>	
<b>LORI — Low</b>					
No medical condition	Low	2 270	(1 940 - 2 640)	66.5	(60.3 - 72.6)
	Moderate	420	(300 - 570)	12.3	(8.9 - 16.1)
	High	720	(540 - 970)	21.2	(16.2 - 26.9)
	<b>Total</b>	<b>3 410</b>	<b>(2 990 - 3 870)</b>	<b>100.0</b>	
Medical condition – not limiting	Low	790	(620 - 980)	61.6	(54.2 - 69.0)
	Moderate	150	(90 - 240)	12.1	(7.6 - 17.9)
	High	340	(250 - 440)	26.3	(20.1 - 33.1)
	<b>Total</b>	<b>1 280</b>	<b>(1 070 - 1 530)</b>	<b>100.0</b>	
Medical condition – limiting	Low	440	(280 - 650)	56.3	(41.4 - 69.1)
	Moderate	50	(30 - 80)	6.9	(4.0 - 10.4)
	High	290	(180 - 450)	36.8	(23.6 - 51.0)
	<b>Total</b>	<b>790</b>	<b>(590 - 1 050)</b>	<b>100.0</b>	
Not stated	Low	50	(20 - 130)	47.3	(9.9 - 81.6)
	Moderate	10	(0 - 50)	9.8	(1.6 - 38.3)
	High	40	(10 - 130)	42.9	(15.2 - 72.3)
	<b>Total</b>	<b>100</b>	<b>(40 - 220)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 550	(3 170 - 3 970)	63.6	(58.6 - 68.2)
	Moderate	640	(500 - 800)	11.4	(9.1 - 14.0)
	High	1 400	(1 140 - 1 680)	25.0	(21.0 - 29.2)
	<b>Total</b>	<b>5 590</b>	<b>(5 100 - 6 100)</b>	<b>100.0</b>	

Continued . . .



**TABLE 3.23 (continued): CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND WHETHER THE PRIMARY CARER HAD ANY MEDICAL CONDITIONS LASTING SIX MONTHS OR MORE**

<i>Whether any medical conditions lasting six months or more</i>	<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>LORI — Moderate</b>					
No medical condition	Low	1 890	(1 510 - 2 340)	69.1	(62.9 - 74.9)
	Moderate	310	(240 - 410)	11.4	(9.0 - 14.2)
	High	530	(380 - 710)	19.5	(14.9 - 24.4)
	<b>Total</b>	<b>2 740</b>	<b>(2 240 - 3 310)</b>	<b>100.0</b>	
Medical condition – not limiting	Low	690	(490 - 940)	66.5	(54.6 - 78.2)
	Moderate	130	(80 - 190)	12.2	(7.6 - 18.2)
	High	220	(110 - 400)	21.3	(10.6 - 33.5)
	<b>Total</b>	<b>1 030</b>	<b>(760 - 1 370)</b>	<b>100.0</b>	
Medical condition – limiting	Low	370	(270 - 490)	51.3	(38.9 - 64.0)
	Moderate	40	(20 - 60)	5.1	(2.9 - 7.9)
	High	310	(180 - 490)	43.6	(30.2 - 56.8)
	<b>Total</b>	<b>710</b>	<b>(530 - 950)</b>	<b>100.0</b>	
Not stated	Low	120	(80 - 200)	63.1	(42.7 - 83.6)
	Moderate	20	(10 - 40)	10.3	(5.1 - 18.1)
	High	50	(20 - 120)	26.6	(11.6 - 47.8)
	<b>Total</b>	<b>200</b>	<b>(120 - 300)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 070	(2 550 - 3 670)	65.6	(60.4 - 70.6)
	Moderate	490	(390 - 610)	10.6	(8.9 - 12.5)
	High	1 110	(850 - 1 430)	23.8	(19.5 - 28.9)
	<b>Total</b>	<b>4 680</b>	<b>(3 940 - 5 480)</b>	<b>100.0</b>	
<b>LORI — High/Extreme</b>					
No medical condition	Low	2 180	(1 760 - 2 670)	73.8	(67.7 - 79.0)
	Moderate	330	(230 - 450)	11.1	(8.4 - 14.0)
	High	450	(330 - 600)	15.2	(11.7 - 19.4)
	<b>Total</b>	<b>2 950</b>	<b>(2 420 - 3 540)</b>	<b>100.0</b>	
Medical condition – not limiting	Low	660	(490 - 880)	66.3	(55.1 - 76.3)
	Moderate	90	(50 - 150)	8.8	(5.4 - 13.8)
	High	250	(150 - 390)	25.0	(16.2 - 36.4)
	<b>Total</b>	<b>990</b>	<b>(760 - 1 270)</b>	<b>100.0</b>	
Medical condition – limiting	Low	570	(400 - 800)	75.5	(64.6 - 83.6)
	Moderate	50	(30 - 90)	6.9	(4.0 - 10.9)
	High	130	(80 - 210)	17.6	(10.9 - 27.4)
	<b>Total</b>	<b>750</b>	<b>(550 - 990)</b>	<b>100.0</b>	
Not stated	Low	90	(30 - 250)	81.1	(48.2 - 97.7)
	Moderate	10	(0 - 60)	11.0	(0.2 - 36.0)
	High	10	(0 - 40)	7.9	(0.2 - 41.3)
	<b>Total</b>	<b>110</b>	<b>(30 - 310)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 490	(2 900 - 4 150)	72.6	(67.6 - 77.3)
	Moderate	480	(360 - 620)	9.9	(8.0 - 12.0)
	High	840	(620 - 1 100)	17.4	(13.5 - 21.6)
	<b>Total</b>	<b>4 810</b>	<b>(4 040 - 5 650)</b>	<b>100.0</b>	



**TABLE 3.24:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER OVERUSE OF ALCOHOL IS CAUSING PROBLEMS IN THE HOUSEHOLD

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Overuse of alcohol problems not known</b>				
Low	380	(260 - 550)	66.1	(49.8 - 78.6)
Moderate	50	(20 - 100)	8.7	(4.7 - 15.1)
High	150	(70 - 260)	25.2	(12.9 - 39.5)
<b>Total</b>	<b>580</b>	<b>(410 - 810)</b>	<b>100.0</b>	
<b>Overuse of alcohol does not cause problems</b>				
Low	12 600	(12 000 - 13 100)	66.9	(64.5 - 69.3)
Moderate	2 130	(1 900 - 2 370)	11.3	(10.1 - 12.6)
High	4 080	(3 690 - 4 500)	21.7	(19.7 - 23.9)
<b>Total</b>	<b>18 800</b>	<b>(18 300 - 19 300)</b>	<b>100.0</b>	
<b>Overuse of alcohol causes problems</b>				
Low	1 830	(1 550 - 2 150)	51.9	(45.4 - 58.2)
Moderate	430	(310 - 580)	12.3	(9.0 - 15.9)
High	1 260	(1 010 - 1 570)	35.8	(29.9 - 41.9)
<b>Total</b>	<b>3 520</b>	<b>(3 080 - 3 990)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

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**TABLE 3.25: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER OVERUSE OF ALCOHOL IS CAUSING PROBLEMS IN THE HOUSEHOLD BY AGE GROUP**

Age group	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>Overuse of alcohol problems not known</b>					
4–11 years	Low	180	(90 - 330)	55.1	(36.4 - 71.9)
	Moderate	40	(20 - 80)	11.9	(6.3 - 21.0)
	High	110	(60 - 170)	33.0	(17.9 - 54.3)
	<b>Total</b>	<b>330</b>	<b>(190 - 490)</b>	<b>100.0</b>	
12–17 years	Low	200	(140 - 290)	80.1	(44.4 - 97.5)
	Moderate	10	(0 - 40)	4.6	(0.1 - 16.2)
	High	40	(0 - 170)	15.3	(0.3 - 48.2)
	<b>Total</b>	<b>250</b>	<b>(160 - 380)</b>	<b>100.0</b>	
<b>Total</b>	Low	380	(260 - 550)	66.1	(49.8 - 78.6)
	Moderate	50	(20 - 100)	8.7	(4.7 - 15.1)
	High	150	(70 - 260)	25.2	(12.9 - 39.5)
	<b>Total</b>	<b>580</b>	<b>(410 - 810)</b>	<b>100.0</b>	
<b>Overuse of alcohol does not cause problems</b>					
4–11 years	Low	7 280	(6 820 - 7 750)	63.5	(60.8 - 66.2)
	Moderate	1 420	(1 250 - 1 600)	12.4	(11.0 - 13.9)
	High	2 760	(2 460 - 3 070)	24.1	(21.6 - 26.6)
	<b>Total</b>	<b>11 500</b>	<b>(11 000 - 11 900)</b>	<b>100.0</b>	
12–17 years	Low	5 300	(4 910 - 5 720)	72.3	(68.6 - 75.8)
	Moderate	710	(550 - 900)	9.7	(7.6 - 12.2)
	High	1 330	(1 090 - 1 580)	18.1	(15.1 - 21.3)
	<b>Total</b>	<b>7 340</b>	<b>(6 890 - 7 810)</b>	<b>100.0</b>	
<b>Total</b>	Low	12 600	(12 000 - 13 100)	66.9	(64.5 - 69.3)
	Moderate	2 130	(1 900 - 2 370)	11.3	(10.1 - 12.6)
	High	4 080	(3 690 - 4 500)	21.7	(19.7 - 23.9)
	<b>Total</b>	<b>18 800</b>	<b>(18 300 - 19 300)</b>	<b>100.0</b>	
<b>Overuse of alcohol causes problems</b>					
4–11 years	Low	960	(760 - 1 170)	47.4	(40.2 - 54.7)
	Moderate	300	(220 - 420)	15.0	(11.0 - 19.7)
	High	760	(590 - 960)	37.6	(30.9 - 44.8)
	<b>Total</b>	<b>2 020</b>	<b>(1 730 - 2 340)</b>	<b>100.0</b>	
12–17 years	Low	870	(720 - 1 060)	58.0	(49.0 - 67.3)
	Moderate	130	(70 - 230)	8.6	(4.4 - 14.3)
	High	500	(350 - 680)	33.4	(25.4 - 41.6)
	<b>Total</b>	<b>1 510</b>	<b>(1 260 - 1 780)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 830	(1 550 - 2 150)	51.9	(45.4 - 58.2)
	Moderate	430	(310 - 580)	12.3	(9.0 - 15.9)
	High	1 260	(1 010 - 1 570)	35.8	(29.9 - 41.9)
	<b>Total</b>	<b>3 520</b>	<b>(3 080 - 3 990)</b>	<b>100.0</b>	



**TABLE 3.26:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND WHETHER OVERUSE OF ALCOHOL CAUSES PROBLEMS IN THE HOUSEHOLD

<i>Whether overuse of alcohol causes problems</i>	<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>LORI — None</b>					
Not stated	Low	120	(60 - 230)	71.2	(34.9 - 96.8)
	Moderate	10	(0 - 20)	4.5	(0.5 - 14.8)
	High	40	(10 - 170)	24.2	(3.7 - 71.0)
	<b>Total</b>	<b>170</b>	<b>(80 - 290)</b>	<b>100.0</b>	
No	Low	4 150	(3 810 - 4 510)	61.9	(57.3 - 66.1)
	Moderate	850	(690 - 1 040)	12.7	(10.3 - 15.6)
	High	1 700	(1 450 - 2 000)	25.4	(21.6 - 29.5)
	<b>Total</b>	<b>6 710</b>	<b>(6 420 - 7 000)</b>	<b>100.0</b>	
Yes	Low	420	(300 - 570)	43.6	(31.7 - 56.7)
	Moderate	140	(80 - 230)	15.0	(8.5 - 22.5)
	High	400	(230 - 620)	41.4	(29.1 - 55.1)
	<b>Total</b>	<b>960</b>	<b>(720 - 1 230)</b>	<b>100.0</b>	
<b>Total</b>	Low	4 680	(4 360 - 5 030)	59.8	(55.6 - 64.0)
	Moderate	1 000	(830 - 1 210)	12.8	(10.5 - 15.4)
	High	2 140	(1 850 - 2 470)	27.4	(23.5 - 31.3)
	<b>Total</b>	<b>7 830</b>	<b>(7 680 - 7 980)</b>	<b>100.0</b>	
<b>LORI — Low</b>					
Not stated	Low	50	(20 - 130)	47.3	(9.9 - 81.6)
	Moderate	10	(0 - 50)	9.8	(1.6 - 38.3)
	High	40	(10 - 130)	42.9	(15.2 - 72.3)
	<b>Total</b>	<b>100</b>	<b>(40 - 220)</b>	<b>100.0</b>	
No	Low	3 180	(2 800 - 3 590)	67.5	(62.2 - 72.3)
	Moderate	470	(370 - 590)	10.0	(7.9 - 12.4)
	High	1 070	(840 - 1 320)	22.6	(18.4 - 27.1)
	<b>Total</b>	<b>4 720</b>	<b>(4 260 - 5 220)</b>	<b>100.0</b>	
Yes	Low	320	(210 - 450)	41.8	(30.4 - 52.8)
	Moderate	160	(80 - 300)	20.6	(10.4 - 33.0)
	High	290	(180 - 420)	37.6	(26.7 - 50.8)
	<b>Total</b>	<b>760</b>	<b>(570 - 1 020)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 550	(3 170 - 3 970)	63.6	(58.6 - 68.2)
	Moderate	640	(500 - 800)	11.4	(9.1 - 14.0)
	High	1 400	(1 140 - 1 680)	25.0	(21.0 - 29.2)
	<b>Total</b>	<b>5 590</b>	<b>(5 100 - 6 100)</b>	<b>100.0</b>	

Continued...



**TABLE 3.26 (continued): CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND WHETHER OVERUSE OF ALCOHOL CAUSES PROBLEMS IN THE HOUSEHOLD**

<i>Whether overuse of alcohol causes problems</i>	<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>LORI — Moderate</b>					
Not stated	Low	120	(80 - 200)	63.1	(42.7 - 83.6)
	Moderate	20	(10 - 40)	10.3	(5.1 - 18.1)
	High	50	(20 - 120)	26.6	(11.6 - 47.8)
	<b>Total</b>	<b>200</b>	<b>(120 - 300)</b>	<b>100.0</b>	
No	Low	2 330	(1 910 - 2 840)	67.1	(62.2 - 71.7)
	Moderate	410	(320 - 510)	11.7	(9.6 - 14.2)
	High	740	(550 - 960)	21.2	(17.0 - 26.0)
	<b>Total</b>	<b>3 480</b>	<b>(2 870 - 4 130)</b>	<b>100.0</b>	
Yes	Low	610	(430 - 820)	60.9	(47.3 - 72.9)
	Moderate	70	(30 - 130)	6.6	(3.3 - 11.3)
	High	330	(200 - 510)	32.5	(22.0 - 44.3)
	<b>Total</b>	<b>1 000</b>	<b>(750 - 1 330)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 070	(2 550 - 3 670)	65.6	(60.4 - 70.6)
	Moderate	490	(390 - 610)	10.6	(8.9 - 12.5)
	High	1 110	(850 - 1 430)	23.8	(19.5 - 28.9)
	<b>Total</b>	<b>4 680</b>	<b>(3 940 - 5 480)</b>	<b>100.0</b>	
<b>LORI — High/Extreme</b>					
Not stated	Low	90	(30 - 250)	81.1	(48.2 - 97.7)
	Moderate	10	(0 - 60)	11.0	(0.2 - 36.0)
	High	10	(0 - 40)	7.9	(0.2 - 41.3)
	<b>Total</b>	<b>110</b>	<b>(30 - 310)</b>	<b>100.0</b>	
No	Low	2 920	(2 430 - 3 490)	75.0	(70.0 - 79.5)
	Moderate	400	(290 - 530)	10.3	(8.1 - 12.8)
	High	580	(430 - 770)	14.8	(11.4 - 18.6)
	<b>Total</b>	<b>3 900</b>	<b>(3 270 - 4 610)</b>	<b>100.0</b>	
Yes	Low	480	(300 - 710)	60.2	(46.1 - 74.2)
	Moderate	70	(40 - 100)	8.2	(4.9 - 12.9)
	High	250	(150 - 390)	31.6	(20.9 - 45.3)
	<b>Total</b>	<b>800</b>	<b>(570 - 1 080)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 490	(2 900 - 4 150)	72.6	(67.6 - 77.3)
	Moderate	480	(360 - 620)	9.9	(8.0 - 12.0)
	High	840	(620 - 1 100)	17.4	(13.5 - 21.6)
	<b>Total</b>	<b>4 810</b>	<b>(4 040 - 5 650)</b>	<b>100.0</b>	



**TABLE 3.27:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THE PRIMARY CARER HAS USED MENTAL HEALTH SERVICES IN WA

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Carer has not used Mental Health Services</b>				
Low	11 100	(10 500 - 11 700)	67.8	(65.2 - 70.3)
Moderate	1 830	(1 620 - 2 070)	11.2	(9.9 - 12.6)
High	3 430	(3 060 - 3 830)	21.0	(18.9 - 23.3)
<b>Total</b>	<b>16 300</b>	<b>(15 700 - 16 900)</b>	<b>100.0</b>	
<b>Carer has used Mental Health Services</b>				
Low	2 800	(2 450 - 3 180)	53.2	(48.0 - 58.2)
Moderate	690	(540 - 870)	13.1	(10.4 - 16.2)
High	1 770	(1 440 - 2 150)	33.7	(28.5 - 38.9)
<b>Total</b>	<b>5 260</b>	<b>(4 720 - 5 820)</b>	<b>100.0</b>	
<b>Not known if carer has used Mental Health Services</b>				
Low	930	(700 - 1 210)	71.0	(60.7 - 79.4)
Moderate	90	(50 - 140)	6.9	(4.2 - 10.2)
High	290	(170 - 450)	22.1	(14.6 - 32.4)
<b>Total</b>	<b>1 310</b>	<b>(1 030 - 1 670)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

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**TABLE 3.28: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THE CHILD’S PRIMARY CARER AND PARTNER/SPOUSE CARE FOR EACH OTHER**

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Not stated				
Low	380	(260 - 550)	66.1	(49.8 - 78.6)
Moderate	50	(20 - 100)	8.7	(4.7 - 15.1)
High	150	(70 - 260)	25.2	(12.9 - 39.5)
<b>Total</b>	<b>580</b>	<b>(410 - 810)</b>	<b>100.0</b>	
Never/hardly ever care for each other				
Low	720	(530 - 960)	58.1	(48.8 - 66.7)
Moderate	130	(70 - 200)	10.6	(6.2 - 16.1)
High	390	(300 - 500)	31.3	(24.6 - 38.6)
<b>Total</b>	<b>1 240</b>	<b>(980 - 1 520)</b>	<b>100.0</b>	
Care for each other once in a while				
Low	1 570	(1 300 - 1 900)	64.5	(57.7 - 71.3)
Moderate	370	(260 - 500)	15.1	(11.1 - 19.8)
High	500	(370 - 650)	20.4	(15.7 - 25.8)
<b>Total</b>	<b>2 440</b>	<b>(2 090 - 2 820)</b>	<b>100.0</b>	
Care for each other quite often/almost always				
Low	7 380	(6 860 - 7 920)	70.3	(66.9 - 73.6)
Moderate	1 110	(930 - 1 320)	10.6	(9.0 - 12.4)
High	2 010	(1 680 - 2 370)	19.1	(16.3 - 22.3)
<b>Total</b>	<b>10 500</b>	<b>(9 900 - 11 100)</b>	<b>100.0</b>	
No partner/spouse				
Low	4 740	(4 300 - 5 200)	58.2	(54.2 - 61.9)
Moderate	950	(800 - 1 120)	11.7	(9.9 - 13.7)
High	2 450	(2 110 - 2 820)	30.1	(26.5 - 33.8)
<b>Total</b>	<b>8 150</b>	<b>(7 590 - 8 710)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 3.29: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THE CHILD’S PRIMARY CARER AND PARTNER/SPOUSE ARGUE WITH EACH OTHER**

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Not stated				
Low	380	(260 - 550)	66.1	(49.8 - 78.6)
Moderate	50	(20 - 100)	8.7	(4.7 - 15.1)
High	150	(70 - 260)	25.2	(12.9 - 39.5)
<b>Total</b>	<b>580</b>	<b>(410 - 810)</b>	<b>100.0</b>	
Never/hardly ever argue with each other				
Low	3 090	(2 690 - 3 520)	73.1	(68.0 - 77.7)
Moderate	390	(270 - 530)	9.2	(6.7 - 12.3)
High	750	(580 - 970)	17.7	(14.0 - 22.3)
<b>Total</b>	<b>4 230</b>	<b>(3 750 - 4 750)</b>	<b>100.0</b>	
Argue with each other once in a while				
Low	4 710	(4 250 - 5 210)	70.1	(65.9 - 74.1)
Moderate	750	(610 - 900)	11.1	(9.1 - 13.3)
High	1 270	(1 010 - 1 570)	18.8	(15.3 - 22.7)
<b>Total</b>	<b>6 720</b>	<b>(6 160 - 7 300)</b>	<b>100.0</b>	
Argue with each other quite often/almost always				
Low	1 880	(1 600 - 2 180)	58.1	(52.5 - 63.3)
Moderate	480	(350 - 640)	14.8	(11.1 - 18.8)
High	880	(710 - 1 080)	27.1	(22.3 - 32.1)
<b>Total</b>	<b>3 230</b>	<b>(2 850 - 3 660)</b>	<b>100.0</b>	
No partner/spouse				
Low	4 740	(4 300 - 5 200)	58.2	(54.2 - 61.9)
Moderate	950	(800 - 1 120)	11.7	(9.9 - 13.7)
High	2 450	(2 110 - 2 820)	30.1	(26.5 - 33.8)
<b>Total</b>	<b>8 150</b>	<b>(7 590 - 8 710)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

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**TABLE 3.30: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THE PRIMARY CARER HAS ANYONE TO YARN TO ABOUT THEIR PROBLEMS**

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Not stated				
Low	380	(260 - 550)	66.1	(49.8 - 78.6)
Moderate	50	(20 - 100)	8.7	(4.7 - 15.1)
High	150	(70 - 260)	25.2	(12.9 - 39.5)
<b>Total</b>	<b>580</b>	<b>(410 - 810)</b>	<b>100.0</b>	
Primary carer has no one to yarn to				
Low	1 800	(1 500 - 2 140)	64.2	(57.2 - 71.0)
Moderate	240	(160 - 330)	8.4	(5.7 - 11.7)
High	770	(570 - 1 000)	27.4	(21.5 - 34.4)
<b>Total</b>	<b>2 800</b>	<b>(2 420 - 3 230)</b>	<b>100.0</b>	
Primary carer has someone to yarn to				
Low	12 600	(12 100 - 13 200)	64.6	(62.2 - 67.1)
Moderate	2 330	(2 080 - 2 590)	11.9	(10.7 - 13.2)
High	4 580	(4 150 - 5 030)	23.4	(21.3 - 25.7)
<b>Total</b>	<b>19 500</b>	<b>(19 100 - 19 900)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	





**TABLE 3.31: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND WHETHER THE PRIMARY CARER SPEAKS AN ABORIGINAL LANGUAGE**

Whether primary carer speaks an Aboriginal language	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>LORI — None/Low</b>					
Not stated	Low	170	(90 - 280)	62.0	(35.4 - 84.8)
	Moderate	20	(0 - 50)	6.6	(1.3 - 17.2)
	High	80	(30 - 210)	31.5	(13.3 - 59.0)
	<b>Total</b>	<b>270</b>	<b>(160 - 430)</b>	<b>100.0</b>	
No	Low	4 490	(4 040 - 4 970)	64.0	(59.8 - 68.1)
	Moderate	810	(630 - 1 010)	11.5	(9.1 - 14.2)
	High	1 720	(1 450 - 2 020)	24.5	(21.0 - 28.4)
	<b>Total</b>	<b>7 020</b>	<b>(6 480 - 7 560)</b>	<b>100.0</b>	
A few words	Low	3 080	(2 700 - 3 490)	57.2	(52.1 - 62.2)
	Moderate	720	(580 - 910)	13.5	(10.8 - 16.6)
	High	1 570	(1 270 - 1 900)	29.3	(24.7 - 34.4)
	<b>Total</b>	<b>5 370</b>	<b>(4 870 - 5 910)</b>	<b>100.0</b>	
A conversation	Low	500	(360 - 680)	66.7	(56.6 - 76.4)
	Moderate	90	(50 - 150)	12.3	(7.0 - 19.3)
	High	160	(90 - 250)	20.9	(14.0 - 29.7)
	<b>Total</b>	<b>750</b>	<b>(560 - 980)</b>	<b>100.0</b>	
<b>Total</b>	Low	8 240	(7 730 - 8 750)	61.4	(58.3 - 64.5)
	Moderate	1 640	(1 410 - 1 890)	12.2	(10.6 - 14.1)
	High	3 540	(3 140 - 3 950)	26.4	(23.6 - 29.2)
	<b>Total</b>	<b>13 400</b>	<b>(12 900 - 13 900)</b>	<b>100.0</b>	
<b>LORI — Moderate</b>					
Not stated	Low	120	(80 - 200)	63.1	(42.7 - 83.6)
	Moderate	20	(10 - 40)	10.3	(5.1 - 18.1)
	High	50	(20 - 120)	26.6	(11.6 - 47.8)
	<b>Total</b>	<b>200</b>	<b>(120 - 300)</b>	<b>100.0</b>	
No	Low	890	(660 - 1 180)	67.3	(57.9 - 76.3)
	Moderate	120	(70 - 190)	8.9	(5.6 - 13.2)
	High	320	(190 - 490)	23.8	(17.3 - 32.0)
	<b>Total</b>	<b>1 320</b>	<b>(970 - 1 730)</b>	<b>100.0</b>	
A few words	Low	870	(650 - 1 140)	59.5	(50.4 - 68.8)
	Moderate	170	(110 - 240)	11.4	(8.3 - 15.2)
	High	420	(270 - 620)	29.1	(21.2 - 38.8)
	<b>Total</b>	<b>1 460</b>	<b>(1 130 - 1 870)</b>	<b>100.0</b>	
A conversation	Low	1 180	(860 - 1 610)	69.8	(61.5 - 76.9)
	Moderate	190	(130 - 260)	11.2	(7.9 - 15.1)
	High	320	(220 - 450)	19.1	(13.8 - 25.7)
	<b>Total</b>	<b>1 700</b>	<b>(1 280 - 2 160)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 070	(2 550 - 3 670)	65.6	(60.4 - 70.6)
	Moderate	490	(390 - 610)	10.6	(8.9 - 12.5)
	High	1 110	(850 - 1 430)	23.8	(19.5 - 28.9)
	<b>Total</b>	<b>4 680</b>	<b>(3 940 - 5 480)</b>	<b>100.0</b>	

Continued . . .



**TABLE 3.31 (continued): CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND WHETHER THE PRIMARY CARER SPEAKS AN ABORIGINAL LANGUAGE**

<i>Whether primary carer speaks an Aboriginal language</i>	<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>LORI — High/Extreme</b>					
Not stated	Low	90	(30 - 250)	81.1	(48.2 - 97.7)
	Moderate	10	(0 - 60)	11.0	(0.2 - 36.0)
	High	10	(0 - 40)	7.9	(0.2 - 41.3)
	<b>Total</b>	<b>110</b>	<b>(30 - 310)</b>	<b>100.0</b>	
No	Low	520	(330 - 780)	67.9	(52.9 - 82.4)
	Moderate	100	(60 - 140)	12.6	(8.3 - 18.7)
	High	150	(80 - 260)	19.5	(10.4 - 33.0)
	<b>Total</b>	<b>760</b>	<b>(530 - 1 050)</b>	<b>100.0</b>	
A few words	Low	680	(480 - 910)	67.5	(54.7 - 79.1)
	Moderate	80	(30 - 190)	7.8	(3.0 - 16.4)
	High	250	(140 - 410)	24.7	(16.6 - 35.7)
	<b>Total</b>	<b>1 010</b>	<b>(730 - 1 360)</b>	<b>100.0</b>	
A conversation	Low	2 210	(1 750 - 2 750)	75.3	(70.6 - 79.8)
	Moderate	290	(210 - 400)	10.0	(7.6 - 12.7)
	High	430	(310 - 570)	14.7	(11.4 - 18.9)
	<b>Total</b>	<b>2 930</b>	<b>(2 370 - 3 590)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 490	(2 900 - 4 150)	72.6	(67.6 - 77.3)
	Moderate	480	(360 - 620)	9.9	(8.0 - 12.0)
	High	840	(620 - 1 100)	17.4	(13.5 - 21.6)
	<b>Total</b>	<b>4 810</b>	<b>(4 040 - 5 650)</b>	<b>100.0</b>	
<b>Western Australia</b>					
Not stated	Low	380	(260 - 550)	66.1	(49.8 - 78.6)
	Moderate	50	(20 - 100)	8.7	(4.7 - 15.1)
	High	150	(70 - 260)	25.2	(12.9 - 39.5)
	<b>Total</b>	<b>580</b>	<b>(410 - 810)</b>	<b>100.0</b>	
No	Low	5 900	(5 370 - 6 440)	64.8	(61.2 - 68.4)
	Moderate	1 020	(840 - 1 240)	11.2	(9.3 - 13.4)
	High	2 190	(1 890 - 2 530)	24.0	(21.0 - 27.3)
	<b>Total</b>	<b>9 110</b>	<b>(8 480 - 9 750)</b>	<b>100.0</b>	
A few words	Low	4 630	(4 170 - 5 090)	59.0	(54.8 - 63.0)
	Moderate	970	(800 - 1 170)	12.4	(10.3 - 14.7)
	High	2 250	(1 900 - 2 640)	28.7	(25.0 - 32.7)
	<b>Total</b>	<b>7 840</b>	<b>(7 230 - 8 460)</b>	<b>100.0</b>	
A conversation	Low	3 890	(3 390 - 4 420)	72.4	(68.5 - 75.9)
	Moderate	570	(470 - 690)	10.7	(8.9 - 12.7)
	High	910	(750 - 1 100)	17.0	(14.1 - 19.9)
	<b>Total</b>	<b>5 380</b>	<b>(4 800 - 5 990)</b>	<b>100.0</b>	
<b>Total</b>	Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
	Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
	High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 3.32: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND WHETHER AT LEAST ONE CHILD IN THE HOUSEHOLD SPEAKS AN ABORIGINAL LANGUAGE**

Whether a child speaks an Aboriginal language	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>LORI — None/Low</b>					
Not stated	Low	170	(90 - 280)	62.0	(35.4 - 84.8)
	Moderate	20	(0 - 50)	6.6	(1.3 - 17.2)
	High	80	(30 - 210)	31.5	(13.3 - 59.0)
	<b>Total</b>	<b>270</b>	<b>(160 - 430)</b>	<b>100.0</b>	
No	Low	4 160	(3 730 - 4 640)	60.7	(56.4 - 64.9)
	Moderate	770	(630 - 930)	11.2	(9.3 - 13.4)
	High	1 930	(1 640 - 2 250)	28.1	(24.3 - 32.1)
	<b>Total</b>	<b>6 860</b>	<b>(6 330 - 7 430)</b>	<b>100.0</b>	
A few words	Low	3 620	(3 220 - 4 050)	61.9	(56.8 - 66.6)
	Moderate	790	(610 - 1 000)	13.4	(10.7 - 16.8)
	High	1 440	(1 160 - 1 760)	24.7	(20.4 - 29.2)
	<b>Total</b>	<b>5 850</b>	<b>(5 330 - 6 390)</b>	<b>100.0</b>	
A conversation	Low	290	(180 - 430)	66.1	(48.3 - 79.4)
	Moderate	70	(20 - 150)	15.4	(5.5 - 33.7)
	High	80	(40 - 150)	18.6	(9.3 - 31.4)
	<b>Total</b>	<b>440</b>	<b>(300 - 630)</b>	<b>100.0</b>	
<b>Total</b>	Low	8 240	(7 730 - 8 750)	61.4	(58.3 - 64.5)
	Moderate	1 640	(1 410 - 1 890)	12.2	(10.6 - 14.1)
	High	3 540	(3 140 - 3 950)	26.4	(23.6 - 29.2)
	<b>Total</b>	<b>13 400</b>	<b>(12 900 - 13 900)</b>	<b>100.0</b>	
<b>LORI — Moderate</b>					
Not stated	Low	120	(80 - 200)	63.1	(42.7 - 83.6)
	Moderate	20	(10 - 40)	10.3	(5.1 - 18.1)
	High	50	(20 - 120)	26.6	(11.6 - 47.8)
	<b>Total</b>	<b>200</b>	<b>(120 - 300)</b>	<b>100.0</b>	
No	Low	1 020	(760 - 1 330)	66.9	(57.8 - 74.7)
	Moderate	180	(110 - 260)	11.5	(8.0 - 15.9)
	High	330	(190 - 510)	21.6	(14.9 - 29.8)
	<b>Total</b>	<b>1 530</b>	<b>(1 140 - 1 970)</b>	<b>100.0</b>	
A few words	Low	1 380	(1 080 - 1 740)	63.7	(56.5 - 70.5)
	Moderate	250	(190 - 320)	11.4	(8.9 - 14.1)
	High	540	(360 - 750)	24.9	(18.5 - 32.2)
	<b>Total</b>	<b>2 170</b>	<b>(1 750 - 2 660)</b>	<b>100.0</b>	
A conversation	Low	540	(340 - 840)	68.8	(55.8 - 78.8)
	Moderate	50	(30 - 100)	6.6	(3.2 - 11.6)
	High	190	(130 - 270)	24.7	(15.6 - 35.1)
	<b>Total</b>	<b>790</b>	<b>(540 - 1 100)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 070	(2 550 - 3 670)	65.6	(60.4 - 70.6)
	Moderate	490	(390 - 610)	10.6	(8.9 - 12.5)
	High	1 110	(850 - 1 430)	23.8	(19.5 - 28.9)
	<b>Total</b>	<b>4 680</b>	<b>(3 940 - 5 480)</b>	<b>100.0</b>	

Continued . . .



**TABLE 3.32 (continued): CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND WHETHER AT LEAST ONE CHILD IN THE HOUSEHOLD SPEAKS AN ABORIGINAL LANGUAGE**

<i>Whether a child speaks an Aboriginal language</i>	<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>LORI — High/Extreme</b>					
Not stated	Low	90	(30 - 250)	81.1	(48.2 - 97.7)
	Moderate	10	(0 - 60)	11.0	(0.2 - 36.0)
	High	10	(0 - 40)	7.9	(0.2 - 41.3)
	<b>Total</b>	<b>110</b>	<b>(30 - 310)</b>	<b>100.0</b>	
No	Low	460	(280 - 690)	68.3	(51.3 - 82.5)
	Moderate	90	(50 - 160)	13.9	(8.7 - 21.6)
	High	120	(60 - 240)	17.8	(7.8 - 31.4)
	<b>Total</b>	<b>680</b>	<b>(470 - 970)</b>	<b>100.0</b>	
A few words	Low	1 140	(880 - 1 470)	67.8	(58.8 - 75.9)
	Moderate	140	(70 - 240)	8.4	(5.1 - 12.5)
	High	400	(250 - 580)	23.7	(17.6 - 30.7)
	<b>Total</b>	<b>1 680</b>	<b>(1 290 - 2 160)</b>	<b>100.0</b>	
A conversation	Low	1 800	(1 400 - 2 300)	76.9	(71.8 - 81.8)
	Moderate	230	(160 - 320)	9.8	(7.3 - 12.8)
	High	310	(210 - 440)	13.2	(9.3 - 17.8)
	<b>Total</b>	<b>2 340</b>	<b>(1 820 - 2 920)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 490	(2 900 - 4 150)	72.6	(67.6 - 77.3)
	Moderate	480	(360 - 620)	9.9	(8.0 - 12.0)
	High	840	(620 - 1 100)	17.4	(13.5 - 21.6)
	<b>Total</b>	<b>4 810</b>	<b>(4 040 - 5 650)</b>	<b>100.0</b>	
<b>Western Australia</b>					
Not stated	Low	380	(260 - 550)	66.1	(49.8 - 78.6)
	Moderate	50	(20 - 100)	8.7	(4.7 - 15.1)
	High	150	(70 - 260)	25.2	(12.9 - 39.5)
	<b>Total</b>	<b>580</b>	<b>(410 - 810)</b>	<b>100.0</b>	
No	Low	5 640	(5 120 - 6 180)	62.3	(58.6 - 65.8)
	Moderate	1 040	(880 - 1 220)	11.5	(9.8 - 13.3)
	High	2 380	(2 060 - 2 740)	26.3	(23.1 - 29.6)
	<b>Total</b>	<b>9 060</b>	<b>(8 430 - 9 720)</b>	<b>100.0</b>	
A few words	Low	6 140	(5 650 - 6 660)	63.3	(59.6 - 66.8)
	Moderate	1 170	(970 - 1 390)	12.1	(10.2 - 14.2)
	High	2 380	(2 030 - 2 770)	24.6	(21.4 - 27.8)
	<b>Total</b>	<b>9 700</b>	<b>(9 000 - 10 400)</b>	<b>100.0</b>	
A conversation	Low	2 630	(2 190 - 3 120)	73.8	(69.3 - 78.0)
	Moderate	350	(260 - 470)	9.8	(7.4 - 12.6)
	High	580	(460 - 730)	16.4	(13.0 - 20.2)
	<b>Total</b>	<b>3 560</b>	<b>(3 040 - 4 150)</b>	<b>100.0</b>	
<b>Total</b>	Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
	Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
	High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 3.33: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THE PRIMARY CARER PARTICIPATED IN ANY ABORIGINAL CULTURAL ACTIVITIES (a) IN THE PAST 12 MONTHS**

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Participated in Aboriginal cultural activities				
Low	10 300	(9 700 - 10 900)	64.6	(61.8 - 67.3)
Moderate	1 800	(1 580 - 2 040)	11.3	(10.0 - 12.8)
High	3 830	(3 430 - 4 270)	24.0	(21.6 - 26.6)
<b>Total</b>	<b>15 900</b>	<b>(15 300 - 16 500)</b>	<b>100.0</b>	
No participation				
Low	4 510	(4 060 - 4 980)	64.6	(60.3 - 68.7)
Moderate	810	(660 - 980)	11.6	(9.6 - 13.9)
High	1 660	(1 380 - 2 000)	23.8	(20.2 - 27.6)
<b>Total</b>	<b>6 980</b>	<b>(6 400 - 7 580)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

(a) Cultural activities include whether the primary carer was conversant in the Aboriginal language or, in the past 12 months, had participated in Aboriginal ceremonies or festivals or had been involved with an Aboriginal organisation.

**TABLE 3.34: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER BETTING OR GAMBLING CAUSES PROBLEMS IN THE HOUSEHOLD**

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Not stated				
Low	380	(260 - 550)	66.1	(49.8 - 78.6)
Moderate	50	(20 - 100)	8.7	(4.7 - 15.1)
High	150	(70 - 260)	25.2	(12.9 - 39.5)
<b>Total</b>	<b>580</b>	<b>(410 - 810)</b>	<b>100.0</b>	
Betting or gambling does not cause problems				
Low	13 800	(13 200 - 14 300)	64.6	(62.2 - 67.0)
Moderate	2 460	(2 220 - 2 730)	11.5	(10.4 - 12.8)
High	5 080	(4 610 - 5 560)	23.8	(21.7 - 26.0)
<b>Total</b>	<b>21 300</b>	<b>(21 000 - 21 700)</b>	<b>100.0</b>	
Betting or gambling causes problems				
Low	630	(450 - 840)	63.1	(50.3 - 73.6)
Moderate	100	(50 - 180)	10.2	(5.4 - 16.5)
High	260	(160 - 400)	26.7	(18.4 - 37.4)
<b>Total</b>	<b>990</b>	<b>(760 - 1 280)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 3.35: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THE PRIMARY CARER HAS EVER BEEN ARRESTED OR CHARGED WITH AN OFFENCE**

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Not stated				
Low	380	(260 - 550)	66.1	(49.8 - 78.6)
Moderate	50	(20 - 100)	8.7	(4.7 - 15.1)
High	150	(70 - 260)	25.2	(12.9 - 39.5)
<b>Total</b>	<b>580</b>	<b>(410 - 810)</b>	<b>100.0</b>	
Primary carer never arrested or charged				
Low	9 720	(9 100 - 10 300)	69.1	(66.2 - 71.8)
Moderate	1 340	(1 140 - 1 570)	9.5	(8.2 - 11.1)
High	3 010	(2 670 - 3 350)	21.4	(19.1 - 23.9)
<b>Total</b>	<b>14 100</b>	<b>(13 500 - 14 600)</b>	<b>100.0</b>	
Primary carer has been arrested or charged				
Low	4 700	(4 280 - 5 140)	56.9	(53.0 - 60.7)
Moderate	1 220	(1 050 - 1 410)	14.8	(12.8 - 16.9)
High	2 340	(1 980 - 2 730)	28.3	(24.7 - 32.2)
<b>Total</b>	<b>8 260</b>	<b>(7 670 - 8 850)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 3.36: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND WHETHER THE PRIMARY CARER HAS EVER BEEN ARRESTED OR CHARGED WITH AN OFFENCE**

Whether primary carer arrested or charged	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>LORI — None</b>					
Not stated	Low	120	(60 - 230)	71.2	(34.9 - 96.8)
	Moderate	10	(0 - 20)	4.5	(0.5 - 14.8)
	High	40	(10 - 170)	24.2	(3.7 - 71.0)
	<b>Total</b>	<b>170</b>	<b>(80 - 290)</b>	<b>100.0</b>	
No	Low	2 900	(2 570 - 3 260)	63.1	(57.7 - 68.1)
	Moderate	510	(370 - 700)	11.0	(8.0 - 15.0)
	High	1 190	(980 - 1 420)	25.8	(21.5 - 30.5)
	<b>Total</b>	<b>4 590</b>	<b>(4 230 - 4 960)</b>	<b>100.0</b>	
Yes	Low	1 670	(1 400 - 1 960)	54.2	(47.3 - 61.2)
	Moderate	490	(390 - 620)	15.9	(12.5 - 19.8)
	High	920	(670 - 1 200)	29.8	(23.3 - 37.5)
	<b>Total</b>	<b>3 070</b>	<b>(2 730 - 3 450)</b>	<b>100.0</b>	
<b>Total</b>	Low	4 680	(4 360 - 5 030)	59.8	(55.6 - 64.0)
	Moderate	1 000	(830 - 1 210)	12.8	(10.5 - 15.4)
	High	2 140	(1 850 - 2 470)	27.4	(23.5 - 31.3)
	<b>Total</b>	<b>7 830</b>	<b>(7 680 - 7 980)</b>	<b>100.0</b>	
<b>LORI — Low</b>					
Not stated	Low	50	(20 - 130)	47.3	(9.9 - 81.6)
	Moderate	10	(0 - 50)	9.8	(1.6 - 38.3)
	High	40	(10 - 130)	42.9	(15.2 - 72.3)
	<b>Total</b>	<b>100</b>	<b>(40 - 220)</b>	<b>100.0</b>	
No	Low	2 270	(1 920 - 2 670)	69.3	(62.9 - 75.1)
	Moderate	310	(220 - 410)	9.4	(7.1 - 12.4)
	High	700	(530 - 910)	21.3	(16.3 - 26.7)
	<b>Total</b>	<b>3 280</b>	<b>(2 860 - 3 730)</b>	<b>100.0</b>	
Yes	Low	1 230	(1 040 - 1 440)	55.8	(48.8 - 62.3)
	Moderate	320	(220 - 460)	14.5	(10.2 - 20.2)
	High	650	(480 - 870)	29.7	(23.1 - 36.7)
	<b>Total</b>	<b>2 200</b>	<b>(1 890 - 2 530)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 550	(3 170 - 3 970)	63.6	(58.6 - 68.2)
	Moderate	640	(500 - 800)	11.4	(9.1 - 14.0)
	High	1 400	(1 140 - 1 680)	25.0	(21.0 - 29.2)
	<b>Total</b>	<b>5 590</b>	<b>(5 100 - 6 100)</b>	<b>100.0</b>	
<b>LORI — Moderate</b>					
Not stated	Low	120	(80 - 200)	63.1	(42.7 - 83.6)
	Moderate	20	(10 - 40)	10.3	(5.1 - 18.1)
	High	50	(20 - 120)	26.6	(11.6 - 47.8)
	<b>Total</b>	<b>200</b>	<b>(120 - 300)</b>	<b>100.0</b>	
No	Low	1 990	(1 600 - 2 470)	68.6	(62.7 - 74.4)
	Moderate	260	(190 - 340)	8.9	(6.9 - 11.2)
	High	650	(490 - 860)	22.4	(17.3 - 28.2)
	<b>Total</b>	<b>2 900</b>	<b>(2 380 - 3 470)</b>	<b>100.0</b>	
Yes	Low	950	(720 - 1 220)	60.3	(49.8 - 70.0)
	Moderate	220	(160 - 290)	13.6	(10.5 - 17.4)
	High	410	(260 - 640)	26.1	(18.0 - 35.8)
	<b>Total</b>	<b>1 580</b>	<b>(1 250 - 1 980)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 070	(2 550 - 3 670)	65.6	(60.4 - 70.6)
	Moderate	490	(390 - 610)	10.6	(8.9 - 12.5)
	High	1 110	(850 - 1 430)	23.8	(19.5 - 28.9)
	<b>Total</b>	<b>4 680</b>	<b>(3 940 - 5 480)</b>	<b>100.0</b>	

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**TABLE 3.36 (continued): CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND WHETHER THE PRIMARY CARER HAS EVER BEEN ARRESTED OR CHARGED WITH AN OFFENCE**

<i>Whether primary carer arrested or charged</i>	<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>LORI — High</b>					
Not stated	Low	30	(0 - 240)	79.3	(2.5 - 100.0)
	Moderate	10	(0 - 70)	20.7	(0.0 - 97.5)
	High	0	(0 - 60)	0.0	(0.0 - 84.2)
	<b>Total</b>	<b>30</b>	<b>(0 - 330)</b>	<b>100.0</b>	
No	Low	1 260	(900 - 1 740)	74.0	(64.7 - 81.8)
	Moderate	130	(80 - 200)	7.4	(5.0 - 10.9)
	High	320	(190 - 490)	18.6	(11.7 - 26.5)
	<b>Total</b>	<b>1 700</b>	<b>(1 260 - 2 280)</b>	<b>100.0</b>	
Yes	Low	430	(260 - 660)	52.3	(41.2 - 63.4)
	Moderate	110	(60 - 180)	13.7	(10.1 - 18.0)
	High	280	(180 - 430)	34.0	(23.9 - 44.7)
	<b>Total</b>	<b>820</b>	<b>(530 - 1 160)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 710	(1 260 - 2 280)	67.1	(59.3 - 74.6)
	Moderate	250	(170 - 340)	9.6	(7.4 - 12.2)
	High	590	(390 - 840)	23.3	(16.9 - 30.6)
	<b>Total</b>	<b>2 550</b>	<b>(1 910 - 3 270)</b>	<b>100.0</b>	
<b>LORI — Extreme</b>					
Not stated	Low	70	(20 - 180)	81.9	(28.4 - 99.5)
	Moderate	10	(0 - 30)	7.0	(0.2 - 36.0)
	High	10	(0 - 40)	11.1	(0.3 - 52.7)
	<b>Total</b>	<b>80</b>	<b>(20 - 190)</b>	<b>100.0</b>	
No	Low	1 290	(910 - 1 740)	81.4	(71.7 - 88.4)
	Moderate	140	(70 - 250)	8.9	(5.2 - 14.6)
	High	150	(80 - 290)	9.7	(5.7 - 15.9)
	<b>Total</b>	<b>1 580</b>	<b>(1 100 - 2 150)</b>	<b>100.0</b>	
Yes	Low	430	(280 - 630)	71.9	(62.1 - 79.8)
	Moderate	90	(50 - 140)	14.4	(10.1 - 19.8)
	High	80	(40 - 150)	13.8	(7.7 - 23.0)
	<b>Total</b>	<b>590</b>	<b>(410 - 860)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 780	(1 290 - 2 350)	78.9	(72.6 - 84.7)
	Moderate	230	(140 - 350)	10.3	(7.2 - 14.1)
	High	240	(140 - 380)	10.8	(7.4 - 15.0)
	<b>Total</b>	<b>2 260</b>	<b>(1 670 - 3 020)</b>	<b>100.0</b>	



**TABLE 3.37:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THE PRIMARY CARER’S PARTNER/SPOUSE HAS EVER BEEN ARRESTED OR CHARGED WITH AN OFFENCE

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Not stated				
Low	380	(260 - 550)	66.1	(49.8 - 78.6)
Moderate	50	(20 - 100)	8.7	(4.7 - 15.1)
High	150	(70 - 260)	25.2	(12.9 - 39.5)
<b>Total</b>	<b>580</b>	<b>(410 - 810)</b>	<b>100.0</b>	
Primary carer’s partner/spouse never arrested or charged				
Low	4 820	(4 330 - 5 340)	74.8	(70.6 - 78.6)
Moderate	610	(470 - 780)	9.4	(7.3 - 11.8)
High	1 020	(810 - 1 280)	15.8	(12.6 - 19.4)
<b>Total</b>	<b>6 450</b>	<b>(5 890 - 7 040)</b>	<b>100.0</b>	
Primary carer’s partner/spouse has been arrested or charged				
Low	4 720	(4 270 - 5 180)	63.1	(59.2 - 66.9)
Moderate	950	(790 - 1 120)	12.7	(10.7 - 14.8)
High	1 810	(1 530 - 2 130)	24.2	(20.8 - 27.7)
<b>Total</b>	<b>7 470</b>	<b>(6 910 - 8 040)</b>	<b>100.0</b>	
No partner/spouse				
Low	4 880	(4 440 - 5 340)	58.0	(54.2 - 61.8)
Moderate	1 010	(850 - 1 180)	12.0	(10.1 - 14.0)
High	2 520	(2 180 - 2 890)	30.0	(26.6 - 33.6)
<b>Total</b>	<b>8 410</b>	<b>(7 850 - 8 960)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

3



## FAMILY AND HOUSEHOLD FACTORS AND CHILD MENTAL HEALTH

**TABLE 3.38:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY TYPE OF FAMILY CARE ARRANGEMENT

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Both original parents</b>				
Low	6 850	(6 360 - 7 360)	70.6	(67.3 - 73.8)
Moderate	1 060	(900 - 1 240)	10.9	(9.3 - 12.7)
High	1 790	(1 510 - 2 100)	18.5	(15.8 - 21.5)
<b>Total</b>	<b>9 700</b>	<b>(9 200 - 10 300)</b>	<b>100.0</b>	
<b>Sole parent</b>				
Low	4 480	(4 040 - 4 930)	57.6	(53.6 - 61.7)
Moderate	950	(810 - 1 110)	12.2	(10.4 - 14.3)
High	2 340	(2 000 - 2 720)	30.2	(26.4 - 34.1)
<b>Total</b>	<b>7 770</b>	<b>(7 220 - 8 330)</b>	<b>100.0</b>	
<b>One parent and new partner</b>				
Low	1 350	(1 120 - 1 610)	66.5	(59.9 - 72.7)
Moderate	240	(160 - 350)	12.0	(8.3 - 16.9)
High	440	(330 - 560)	21.4	(16.4 - 27.3)
<b>Total</b>	<b>2 030</b>	<b>(1 770 - 2 330)</b>	<b>100.0</b>	
<b>Other (e.g. Aunts/uncles)</b>				
Low	2 120	(1 810 - 2 460)	62.4	(56.2 - 68.0)
Moderate	360	(250 - 510)	10.6	(7.5 - 14.3)
High	920	(720 - 1 160)	27.0	(21.9 - 32.8)
<b>Total</b>	<b>3 400</b>	<b>(2 990 - 3 840)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 3.39: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY TYPE OF FAMILY CARE ARRANGEMENT AND AGE GROUP OF CHILD**

Age group	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>Both original parents</b>					
4–11 years	Low	4 130	(3 760 - 4 520)	67.2	(63.6 - 70.7)
	Moderate	730	(610 - 860)	11.8	(10.0 - 13.8)
	High	1 290	(1 080 - 1 540)	21.0	(17.9 - 24.6)
	<b>Total</b>	<b>6 150</b>	<b>(5 710 - 6 600)</b>	<b>100.0</b>	
12–17 years	Low	2 720	(2 420 - 3 030)	76.5	(70.5 - 81.6)
	Moderate	330	(220 - 470)	9.3	(6.4 - 12.9)
	High	500	(350 - 710)	14.1	(10.1 - 19.4)
	<b>Total</b>	<b>3 550</b>	<b>(3 200 - 3 920)</b>	<b>100.0</b>	
<b>Total</b>	Low	6 850	(6 360 - 7 360)	70.6	(67.3 - 73.8)
	Moderate	1 060	(900 - 1 240)	10.9	(9.3 - 12.7)
	High	1 790	(1 510 - 2 100)	18.5	(15.8 - 21.5)
	<b>Total</b>	<b>9 700</b>	<b>(9 200 - 10 300)</b>	<b>100.0</b>	
<b>Sole parent</b>					
4–11 years	Low	2 710	(2 370 - 3 090)	54.7	(49.8 - 59.7)
	Moderate	640	(540 - 770)	13.0	(10.9 - 15.4)
	High	1 590	(1 330 - 1 880)	32.2	(27.7 - 36.9)
	<b>Total</b>	<b>4 940</b>	<b>(4 500 - 5 410)</b>	<b>100.0</b>	
12–17 years	Low	1 770	(1 530 - 2 040)	62.7	(56.8 - 68.5)
	Moderate	300	(220 - 420)	10.7	(7.7 - 14.4)
	High	750	(580 - 950)	26.6	(21.3 - 32.3)
	<b>Total</b>	<b>2 820</b>	<b>(2 510 - 3 150)</b>	<b>100.0</b>	
<b>Total</b>	Low	4 480	(4 040 - 4 930)	57.6	(53.6 - 61.7)
	Moderate	950	(810 - 1 110)	12.2	(10.4 - 14.3)
	High	2 340	(2 000 - 2 720)	30.2	(26.4 - 34.1)
	<b>Total</b>	<b>7 770</b>	<b>(7 220 - 8 330)</b>	<b>100.0</b>	
<b>One parent and new partner</b>					
4–11 years	Low	630	(480 - 810)	57.7	(48.8 - 66.7)
	Moderate	180	(100 - 270)	16.1	(10.1 - 23.8)
	High	290	(210 - 380)	26.2	(19.3 - 34.5)
	<b>Total</b>	<b>1 090</b>	<b>(910 - 1 310)</b>	<b>100.0</b>	
12–17 years	Low	720	(570 - 910)	76.7	(67.8 - 84.4)
	Moderate	70	(40 - 120)	7.3	(4.0 - 12.3)
	High	150	(90 - 250)	15.9	(9.3 - 25.2)
	<b>Total</b>	<b>940</b>	<b>(760 - 1 140)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 350	(1 120 - 1 610)	66.5	(59.9 - 72.7)
	Moderate	240	(160 - 350)	12.0	(8.3 - 16.9)
	High	440	(330 - 560)	21.4	(16.4 - 27.3)
	<b>Total</b>	<b>2 030</b>	<b>(1 770 - 2 330)</b>	<b>100.0</b>	
<b>Other (e.g. Aunts/uncles)</b>					
4–11 years	Low	950	(760 - 1 170)	58.8	(51.2 - 65.9)
	Moderate	210	(150 - 300)	13.2	(9.5 - 18.2)
	High	450	(340 - 600)	28.0	(21.5 - 35.0)
	<b>Total</b>	<b>1 620</b>	<b>(1 360 - 1 900)</b>	<b>100.0</b>	
12–17 years	Low	1 170	(970 - 1 400)	65.7	(57.0 - 74.0)
	Moderate	150	(70 - 300)	8.3	(3.6 - 15.3)
	High	470	(320 - 640)	26.1	(18.8 - 34.0)
	<b>Total</b>	<b>1 790</b>	<b>(1 530 - 2 090)</b>	<b>100.0</b>	
<b>Total</b>	Low	2 120	(1 810 - 2 460)	62.4	(56.2 - 68.0)
	Moderate	360	(250 - 510)	10.6	(7.5 - 14.3)
	High	920	(720 - 1 160)	27.0	(21.9 - 32.8)
	<b>Total</b>	<b>3 400</b>	<b>(2 990 - 3 840)</b>	<b>100.0</b>	



**TABLE 3.40: CHILDREN AGED 4–17 YEARS — TYPE OF FAMILY CARE ARRANGEMENT BY LEVEL OF RELATIVE ISOLATION (LORI)**

Type of family care arrangement	Number	95% CI	%	95% CI
<b>LORI — None</b>				
Both original parents	2 960	(2 630 - 3 320)	37.9	(33.5 - 42.3)
Sole parent	3 400	(3 050 - 3 780)	43.4	(38.9 - 48.0)
One parent and new partner	770	(580 - 990)	9.8	(7.4 - 12.6)
Other (e.g. Aunts/uncles)	700	(510 - 930)	8.9	(6.5 - 11.8)
<b>Total</b>	<b>7 830</b>	<b>(7 680 - 7 980)</b>	<b>100.0</b>	
<b>LORI — Low</b>				
Both original parents	2 660	(2 310 - 3 060)	47.7	(42.4 - 52.8)
Sole parent	1 880	(1 560 - 2 230)	33.6	(28.7 - 38.7)
One parent and new partner	390	(300 - 510)	7.0	(5.4 - 9.0)
Other (e.g. Aunts/uncles)	660	(490 - 870)	11.8	(8.9 - 15.3)
<b>Total</b>	<b>5 590</b>	<b>(5 100 - 6 100)</b>	<b>100.0</b>	
<b>LORI — Moderate</b>				
Both original parents	1 820	(1 470 - 2 200)	38.9	(33.9 - 43.7)
Sole parent	1 560	(1 240 - 1 950)	33.3	(28.4 - 38.4)
One parent and new partner	460	(320 - 630)	9.8	(7.1 - 13.0)
Other (e.g. Aunts/uncles)	840	(590 - 1 170)	18.0	(13.2 - 23.7)
<b>Total</b>	<b>4 680</b>	<b>(3 940 - 5 480)</b>	<b>100.0</b>	
<b>LORI — High</b>				
Both original parents	1 140	(850 - 1 530)	44.7	(38.2 - 51.1)
Sole parent	580	(400 - 850)	22.8	(17.2 - 28.9)
One parent and new partner	230	(150 - 330)	8.9	(6.4 - 12.1)
Other (e.g. Aunts/uncles)	600	(410 - 850)	23.6	(18.2 - 29.5)
<b>Total</b>	<b>2 550</b>	<b>(1 910 - 3 270)</b>	<b>100.0</b>	
<b>LORI — Extreme</b>				
Both original parents	1 110	(800 - 1 520)	49.4	(41.9 - 56.6)
Sole parent	350	(220 - 510)	15.4	(10.9 - 20.5)
One parent and new partner	190	(120 - 290)	8.5	(5.6 - 12.3)
Other (e.g. Aunts/uncles)	600	(370 - 940)	26.7	(19.0 - 34.8)
<b>Total</b>	<b>2 260</b>	<b>(1 670 - 3 020)</b>	<b>100.0</b>	
<b>Western Australia</b>				
Both original parents	9 700	(9 200 - 10 300)	42.4	(40.0 - 44.8)
Sole parent	7 770	(7 220 - 8 330)	33.9	(31.5 - 36.4)
One parent and new partner	2 030	(1 770 - 2 330)	8.9	(7.7 - 10.2)
Other (e.g. Aunts/uncles)	3 400	(2 990 - 3 840)	14.9	(13.0 - 16.8)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 3.41:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND TYPE OF FAMILY CARE ARRANGEMENT

Family care arrangement	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>LORI — None</b>					
Both original parents	Low	2 090	(1 810 - 2 410)	70.6	(64.1 - 76.4)
	Moderate	380	(280 - 510)	12.9	(9.5 - 16.9)
	High	490	(320 - 700)	16.5	(11.3 - 23.0)
	<b>Total</b>	<b>2 960</b>	<b>(2 630 - 3 320)</b>	<b>100.0</b>	
Sole parent	Low	1 800	(1 520 - 2 130)	52.9	(46.4 - 59.5)
	Moderate	470	(360 - 600)	13.7	(10.6 - 17.4)
	High	1 140	(920 - 1 390)	33.4	(27.7 - 39.6)
	<b>Total</b>	<b>3 400</b>	<b>(3 050 - 3 780)</b>	<b>100.0</b>	
One parent and new partner	Low	480	(320 - 680)	62.5	(48.5 - 75.1)
	Moderate	70	(20 - 180)	9.0	(2.5 - 21.7)
	High	220	(140 - 320)	28.4	(17.7 - 40.1)
	<b>Total</b>	<b>770</b>	<b>(580 - 990)</b>	<b>100.0</b>	
Other (e.g. Aunts/uncles)	Low	320	(210 - 470)	45.0	(29.8 - 61.3)
	Moderate	90	(30 - 210)	12.3	(4.3 - 27.4)
	High	300	(170 - 480)	42.6	(27.7 - 59.0)
	<b>Total</b>	<b>700</b>	<b>(510 - 930)</b>	<b>100.0</b>	
<b>Total</b>	Low	4 680	(4 360 - 5 030)	59.8	(55.6 - 64.0)
	Moderate	1 000	(830 - 1 210)	12.8	(10.5 - 15.4)
	High	2 140	(1 850 - 2 470)	27.4	(23.5 - 31.3)
	<b>Total</b>	<b>7 830</b>	<b>(7 680 - 7 980)</b>	<b>100.0</b>	
<b>LORI — Low</b>					
Both original parents	Low	1 860	(1 570 - 2 170)	69.9	(62.1 - 76.4)
	Moderate	270	(180 - 400)	10.0	(6.6 - 14.1)
	High	540	(370 - 760)	20.1	(14.6 - 27.1)
	<b>Total</b>	<b>2 660</b>	<b>(2 310 - 3 060)</b>	<b>100.0</b>	
Sole parent	Low	1 030	(790 - 1 300)	54.8	(46.4 - 63.2)
	Moderate	250	(180 - 330)	13.2	(9.7 - 17.5)
	High	600	(440 - 810)	32.0	(24.0 - 40.1)
	<b>Total</b>	<b>1 880</b>	<b>(1 560 - 2 230)</b>	<b>100.0</b>	
One parent and new partner	Low	230	(160 - 330)	59.3	(47.0 - 71.5)
	Moderate	60	(30 - 100)	15.2	(8.3 - 24.5)
	High	100	(60 - 150)	25.5	(16.3 - 38.1)
	<b>Total</b>	<b>390</b>	<b>(300 - 510)</b>	<b>100.0</b>	
Other (e.g. Aunts/uncles)	Low	430	(310 - 580)	65.6	(52.6 - 77.9)
	Moderate	60	(20 - 140)	9.5	(3.5 - 19.3)
	High	160	(90 - 270)	24.8	(15.8 - 37.1)
	<b>Total</b>	<b>660</b>	<b>(490 - 870)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 550	(3 170 - 3 970)	63.6	(58.6 - 68.2)
	Moderate	640	(500 - 800)	11.4	(9.1 - 14.0)
	High	1 400	(1 140 - 1 680)	25.0	(21.0 - 29.2)
	<b>Total</b>	<b>5 590</b>	<b>(5 100 - 6 100)</b>	<b>100.0</b>	

Continued...



**TABLE 3.41 (continued): CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND TYPE OF FAMILY CARE ARRANGEMENT**

<i>Family care arrangement</i>	<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>LORI — Moderate</b>					
Both original parents	Low	1 200	(940 - 1 490)	66.1	(59.9 - 71.6)
	Moderate	220	(160 - 290)	12.1	(9.4 - 15.4)
	High	400	(290 - 520)	21.8	(16.8 - 27.2)
	<b>Total</b>	<b>1 820</b>	<b>(1 470 - 2 200)</b>	<b>100.0</b>	
Sole parent	Low	1 010	(790 - 1 260)	64.8	(54.2 - 73.6)
	Moderate	130	(90 - 190)	8.7	(6.0 - 11.8)
	High	410	(250 - 670)	26.5	(17.3 - 37.7)
	<b>Total</b>	<b>1 560</b>	<b>(1 240 - 1 950)</b>	<b>100.0</b>	
One parent and new partner	Low	330	(210 - 480)	72.0	(58.4 - 83.5)
	Moderate	50	(20 - 90)	11.3	(5.7 - 19.2)
	High	80	(30 - 140)	16.7	(7.5 - 30.2)
	<b>Total</b>	<b>460</b>	<b>(320 - 630)</b>	<b>100.0</b>	
Other (e.g. Aunts/uncles)	Low	530	(330 - 790)	62.5	(50.2 - 74.7)
	Moderate	90	(50 - 140)	10.4	(5.8 - 16.8)
	High	230	(140 - 360)	27.1	(17.5 - 38.2)
	<b>Total</b>	<b>840</b>	<b>(590 - 1 170)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 070	(2 550 - 3 670)	65.6	(60.4 - 70.6)
	Moderate	490	(390 - 610)	10.6	(8.9 - 12.5)
	High	1 110	(850 - 1 430)	23.8	(19.5 - 28.9)
	<b>Total</b>	<b>4 680</b>	<b>(3 940 - 5 480)</b>	<b>100.0</b>	
<b>LORI — High/Extreme</b>					
Both original parents	Low	1 690	(1 360 - 2 100)	75.1	(68.4 - 81.1)
	Moderate	190	(130 - 260)	8.4	(6.1 - 11.2)
	High	370	(260 - 510)	16.5	(12.0 - 22.2)
	<b>Total</b>	<b>2 250</b>	<b>(1 860 - 2 730)</b>	<b>100.0</b>	
Sole parent	Low	640	(470 - 830)	68.6	(57.7 - 77.3)
	Moderate	100	(50 - 170)	10.6	(6.1 - 17.1)
	High	190	(110 - 300)	20.8	(13.8 - 30.3)
	<b>Total</b>	<b>930</b>	<b>(710 - 1 210)</b>	<b>100.0</b>	
One parent and new partner	Low	310	(230 - 430)	74.5	(62.6 - 85.0)
	Moderate	60	(30 - 110)	15.5	(8.0 - 24.7)
	High	40	(10 - 100)	10.1	(3.5 - 23.1)
	<b>Total</b>	<b>420</b>	<b>(320 - 550)</b>	<b>100.0</b>	
Other (e.g. Aunts/uncles)	Low	850	(640 - 1 120)	70.6	(61.9 - 77.8)
	Moderate	130	(70 - 230)	10.4	(5.9 - 15.9)
	High	230	(150 - 350)	19.0	(12.3 - 27.3)
	<b>Total</b>	<b>1 210</b>	<b>(920 - 1 540)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 490	(2 900 - 4 150)	72.6	(67.6 - 77.3)
	Moderate	480	(360 - 620)	9.9	(8.0 - 12.0)
	High	840	(620 - 1 100)	17.4	(13.5 - 21.6)
	<b>Total</b>	<b>4 810</b>	<b>(4 040 - 5 650)</b>	<b>100.0</b>	





**TABLE 3.42: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY HOUSEHOLD OCCUPANCY LEVEL**

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Household occupancy level — Low</b>				
Low	9 960	(9 400 - 10 600)	63.3	(60.4 - 66.1)
Moderate	1 760	(1 530 - 2 020)	11.2	(9.7 - 12.8)
High	4 020	(3 590 - 4 470)	25.5	(23.0 - 28.2)
<b>Total</b>	<b>15 700</b>	<b>(15 100 - 16 300)</b>	<b>100.0</b>	
<b>Household occupancy level — High</b>				
Low	4 450	(4 000 - 4 920)	67.7	(63.9 - 71.3)
Moderate	800	(670 - 950)	12.2	(10.4 - 14.2)
High	1 320	(1 090 - 1 590)	20.1	(17.0 - 23.5)
<b>Total</b>	<b>6 580</b>	<b>(6 010 - 7 180)</b>	<b>100.0</b>	
<b>Household occupancy level — Not stated</b>				
Low	380	(260 - 550)	66.1	(49.8 - 78.6)
Moderate	50	(20 - 100)	8.7	(4.7 - 15.1)
High	150	(70 - 260)	25.2	(12.9 - 39.5)
<b>Total</b>	<b>580</b>	<b>(410 - 810)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 3.43: CHILDREN AGED 4–17 YEARS — MEAN STRENGTHS AND DIFFICULTIES TOTAL SCORE, BY HOUSEHOLD OCCUPANCY LEVEL**

<i>Household occupancy level</i>	<i>Mean</i>	<i>95% CI</i>
Low	11.60	(11.2 - 12.1)
High	10.60	(10 - 11.2)
Not stated	11.50	(9.4 - 13.6)
<b>Total</b>	<b>11.30</b>	<b>(10.9 - 11.7)</b>



**TABLE 3.44: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP AND HOUSING OCCUPANCY LEVEL**

<i>Housing occupancy level</i>	<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>4–11 years</b>					
Low	Low	5 740	(5 280 - 6 240)	59.8	(56.5 - 63.0)
	Moderate	1 180	(1 010 - 1 370)	12.3	(10.6 - 14.1)
	High	2 690	(2 370 - 3 020)	28.0	(25.0 - 31.1)
	<b>Total</b>	<b>9 600</b>	<b>(9 000 - 10 200)</b>	<b>100.0</b>	
High	Low	2 500	(2 230 - 2 790)	64.5	(60.2 - 68.5)
	Moderate	540	(450 - 660)	14.0	(11.8 - 16.5)
	High	830	(660 - 1 030)	21.5	(17.7 - 25.5)
	<b>Total</b>	<b>3 870</b>	<b>(3 500 - 4 270)</b>	<b>100.0</b>	
Not stated	Low	180	(90 - 330)	55.1	(36.4 - 71.9)
	Moderate	40	(20 - 80)	11.9	(6.3 - 21.0)
	High	110	(60 - 170)	33.0	(17.9 - 54.3)
	<b>Total</b>	<b>330</b>	<b>(190 - 490)</b>	<b>100.0</b>	
<b>Total</b>	Low	8 420	(7 960 - 8 880)	61.0	(58.3 - 63.6)
	Moderate	1 760	(1 570 - 1 960)	12.8	(11.5 - 14.2)
	High	3 620	(3 270 - 3 980)	26.3	(23.9 - 28.8)
	<b>Total</b>	<b>13 800</b>	<b>(13 300 - 14 200)</b>	<b>100.0</b>	
<b>12–17 years</b>					
Low	Low	4 220	(3 840 - 4 640)	68.8	(64.1 - 73.2)
	Moderate	580	(430 - 770)	9.5	(7.0 - 12.3)
	High	1 340	(1 080 - 1 620)	21.8	(18.1 - 25.7)
	<b>Total</b>	<b>6 140</b>	<b>(5 680 - 6 620)</b>	<b>100.0</b>	
High	Low	1 960	(1 710 - 2 220)	72.3	(67.2 - 77.0)
	Moderate	260	(180 - 370)	9.5	(6.5 - 13.2)
	High	490	(380 - 640)	18.2	(14.3 - 22.8)
	<b>Total</b>	<b>2 710</b>	<b>(2 420 - 3 010)</b>	<b>100.0</b>	
Not stated	Low	200	(140 - 290)	80.1	(44.4 - 97.5)
	Moderate	10	(0 - 40)	4.6	(0.1 - 16.2)
	High	40	(0 - 170)	15.3	(0.3 - 48.2)
	<b>Total</b>	<b>250</b>	<b>(160 - 380)</b>	<b>100.0</b>	
<b>Total</b>	Low	6 380	(5 960 - 6 810)	70.1	(66.5 - 73.4)
	Moderate	850	(680 - 1 060)	9.4	(7.5 - 11.5)
	High	1 870	(1 590 - 2 170)	20.5	(17.7 - 23.6)
	<b>Total</b>	<b>9 100</b>	<b>(8 660 - 9 560)</b>	<b>100.0</b>	



**TABLE 3.45: CHILDREN AGED 4–17 YEARS — NUMBER OF DIFFERENT HOMES LIVED IN, BY LEVEL OF RELATIVE ISOLATION (LORI)**

<i>Number of homes lived in</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>LORI — None</b>				
1–4	5 040	(4 720 - 5 370)	64.4	(60.3 - 68.3)
5 or more	2 790	(2 480 - 3 110)	35.6	(31.7 - 39.7)
<b>Total</b>	<b>7 830</b>	<b>(7 680 - 7 980)</b>	<b>100.0</b>	
<b>LORI — Low</b>				
1–4	3 750	(3 360 - 4 170)	67.0	(62.5 - 71.3)
5 or more	1 840	(1 560 - 2 170)	33.0	(28.7 - 37.5)
<b>Total</b>	<b>5 590</b>	<b>(5 100 - 6 100)</b>	<b>100.0</b>	
<b>LORI — Moderate</b>				
1–4	3 660	(3 050 - 4 320)	78.3	(72.8 - 82.9)
5 or more	1 010	(750 - 1 340)	21.7	(17.1 - 27.2)
<b>Total</b>	<b>4 680</b>	<b>(3 940 - 5 480)</b>	<b>100.0</b>	
<b>LORI — High</b>				
1–4	2 210	(1 650 - 2 880)	86.4	(80.7 - 91.2)
5 or more	350	(210 - 520)	13.6	(8.8 - 19.3)
<b>Total</b>	<b>2 550</b>	<b>(1 910 - 3 270)</b>	<b>100.0</b>	
<b>LORI — Extreme</b>				
1–4	1 970	(1 400 - 2 620)	87.5	(81.8 - 91.9)
5 or more	280	(170 - 430)	12.5	(8.1 - 18.2)
<b>Total</b>	<b>2 260</b>	<b>(1 670 - 3 020)</b>	<b>100.0</b>	
<b>Western Australia</b>				
1–4	16 600	(16 100 - 17 100)	72.6	(70.4 - 74.8)
5 or more	6 270	(5 780 - 6 780)	27.4	(25.2 - 29.6)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

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**TABLE 3.46: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP AND NUMBER OF HOMES LIVED IN**

Number of homes lived in	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>4–11 years</b>					
1–4	Low	6 810	(6 370 - 7 260)	64.1	(61.2 - 66.8)
	Moderate	1 210	(1 070 - 1 370)	11.4	(10.1 - 12.9)
	High	2 610	(2 310 - 2 930)	24.5	(22.0 - 27.3)
	<b>Total</b>	<b>10 600</b>	<b>(10 100 - 11 100)</b>	<b>100.0</b>	
5 or more	Low	1 610	(1 350 - 1 910)	50.7	(44.8 - 56.5)
	Moderate	550	(430 - 690)	17.3	(14.0 - 21.3)
	High	1 020	(820 - 1 230)	32.0	(26.6 - 37.7)
	<b>Total</b>	<b>3 170</b>	<b>(2 800 - 3 560)</b>	<b>100.0</b>	
<b>Total</b>	Low	8 420	(7 960 - 8 880)	61.0	(58.3 - 63.6)
	Moderate	1 760	(1 570 - 1 960)	12.8	(11.5 - 14.2)
	High	3 620	(3 270 - 3 980)	26.3	(23.9 - 28.8)
	<b>Total</b>	<b>13 800</b>	<b>(13 300 - 14 200)</b>	<b>100.0</b>	
<b>12–17 years</b>					
1–4	Low	4 260	(3 870 - 4 650)	70.9	(66.7 - 75.0)
	Moderate	590	(440 - 790)	9.9	(7.3 - 12.8)
	High	1 150	(940 - 1 390)	19.2	(16.1 - 22.9)
	<b>Total</b>	<b>6 000</b>	<b>(5 560 - 6 450)</b>	<b>100.0</b>	
5 or more	Low	2 130	(1 880 - 2 390)	68.6	(62.7 - 74.1)
	Moderate	260	(190 - 340)	8.4	(6.2 - 11.2)
	High	710	(530 - 940)	23.1	(17.7 - 28.8)
	<b>Total</b>	<b>3 100</b>	<b>(2 800 - 3 430)</b>	<b>100.0</b>	
<b>Total</b>	Low	6 380	(5 960 - 6 810)	70.1	(66.5 - 73.4)
	Moderate	850	(680 - 1 060)	9.4	(7.5 - 11.5)
	High	1 870	(1 590 - 2 170)	20.5	(17.7 - 23.6)
	<b>Total</b>	<b>9 100</b>	<b>(8 660 - 9 560)</b>	<b>100.0</b>	
<b>Total</b>					
1–4	Low	11 100	(10 500 - 11 600)	66.5	(63.8 - 69.1)
	Moderate	1 800	(1 580 - 2 050)	10.8	(9.5 - 12.3)
	High	3 760	(3 380 - 4 170)	22.6	(20.4 - 25.0)
	<b>Total</b>	<b>16 600</b>	<b>(16 100 - 17 100)</b>	<b>100.0</b>	
5 or more	Low	3 730	(3 360 - 4 130)	59.5	(55.2 - 63.7)
	Moderate	810	(670 - 970)	12.9	(10.8 - 15.3)
	High	1 730	(1 440 - 2 070)	27.6	(23.6 - 31.8)
	<b>Total</b>	<b>6 270</b>	<b>(5 780 - 6 780)</b>	<b>100.0</b>	
<b>Total</b>	Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
	Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
	High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 3.47: ABORIGINAL CHILDREN AGED 4–17 YEARS — MEAN STRENGTHS AND DIFFICULTIES TOTAL SCORE, BY THE NUMBER OF HOMES THE CHILD HAS LIVED IN SINCE BIRTH**

Number of homes lived in	Mean	95% CI
1–4	11.0	(10.6 - 11.4)
5 or more	12.1	(11.4 - 12.8)
<b>Total</b>	<b>11.3</b>	<b>(10.9 - 11.7)</b>



**TABLE 3.48: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF FAMILY FUNCTIONING QUARTILES**

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Poor family functioning</b>				
Low	2 690	(2 330 - 3 080)	55.7	(50.5 - 60.9)
Moderate	600	(450 - 770)	12.4	(9.6 - 15.5)
High	1 540	(1 270 - 1 840)	32.0	(27.3 - 37.0)
<b>Total</b>	<b>4 830</b>	<b>(4 330 - 5 360)</b>	<b>100.0</b>	
<b>Fair family functioning</b>				
Low	3 760	(3 370 - 4 180)	62.7	(58.3 - 67.1)
Moderate	750	(630 - 900)	12.6	(10.5 - 15.0)
High	1 480	(1 190 - 1 790)	24.7	(20.7 - 29.1)
<b>Total</b>	<b>5 990</b>	<b>(5 490 - 6 520)</b>	<b>100.0</b>	
<b>Good family functioning</b>				
Low	3 680	(3 250 - 4 140)	68.6	(64.1 - 73.1)
Moderate	510	(390 - 640)	9.5	(7.5 - 11.7)
High	1 170	(950 - 1 440)	21.9	(18.0 - 26.0)
<b>Total</b>	<b>5 370</b>	<b>(4 860 - 5 910)</b>	<b>100.0</b>	
<b>Very good family functioning</b>				
Low	4 290	(3 820 - 4 790)	69.8	(65.8 - 73.7)
Moderate	700	(560 - 860)	11.4	(9.2 - 14.0)
High	1 150	(940 - 1 390)	18.8	(15.5 - 22.3)
<b>Total</b>	<b>6 140</b>	<b>(5 590 - 6 710)</b>	<b>100.0</b>	
<b>Family functioning not stated</b>				
Low	380	(260 - 550)	66.1	(49.8 - 78.6)
Moderate	50	(20 - 100)	8.7	(4.7 - 15.1)
High	150	(70 - 260)	25.2	(12.9 - 39.5)
<b>Total</b>	<b>580</b>	<b>(410 - 810)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 3.49: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER FAMILY IS IN THE BOTTOM QUARTILE OF FAMILY FUNCTIONING**

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Poor family functioning</b>				
Low	2 690	(2 330 - 3 080)	55.7	(50.5 - 60.9)
Moderate	600	(450 - 770)	12.4	(9.6 - 15.5)
High	1 540	(1 270 - 1 840)	32.0	(27.3 - 37.0)
<b>Total</b>	<b>4 830</b>	<b>(4 330 - 5 360)</b>	<b>100.0</b>	
<b>Fair to very good family functioning</b>				
Low	11 700	(11 200 - 12 300)	67.0	(64.4 - 69.5)
Moderate	1 960	(1 750 - 2 200)	11.2	(10.0 - 12.5)
High	3 800	(3 390 - 4 240)	21.7	(19.5 - 24.1)
<b>Total</b>	<b>17 500</b>	<b>(17 000 - 18 000)</b>	<b>100.0</b>	
<b>Family functioning not stated</b>				
Low	380	(260 - 550)	66.1	(49.8 - 78.6)
Moderate	50	(20 - 100)	8.7	(4.7 - 15.1)
High	150	(70 - 260)	25.2	(12.9 - 39.5)
<b>Total</b>	<b>580</b>	<b>(410 - 810)</b>	<b>100.0</b>	



**TABLE 3.50: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP AND WHETHER FAMILY IS IN THE BOTTOM QUARTILE OF FAMILY FUNCTIONING**

<i>Family functioning bottom quartile</i>	<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>4–11 years</b>					
Poor	Low	1 500	(1 280 - 1 750)	51.2	(45.5 - 56.6)
	Moderate	380	(300 - 470)	13.0	(10.4 - 16.0)
	High	1 050	(840 - 1 280)	35.8	(30.5 - 41.7)
	<b>Total</b>	<b>2 930</b>	<b>(2 600 - 3 290)</b>	<b>100.0</b>	
Fair to very good	Low	6 740	(6 280 - 7 220)	63.9	(60.9 - 66.7)
	Moderate	1 340	(1 170 - 1 520)	12.7	(11.2 - 14.4)
	High	2 470	(2 170 - 2 770)	23.4	(20.8 - 26.1)
	<b>Total</b>	<b>10 500</b>	<b>(10 000 - 11 100)</b>	<b>100.0</b>	
Not stated	Low	180	(90 - 330)	55.1	(36.4 - 71.9)
	Moderate	40	(20 - 80)	11.9	(6.3 - 21.0)
	High	110	(60 - 170)	33.0	(17.9 - 54.3)
	<b>Total</b>	<b>330</b>	<b>(190 - 490)</b>	<b>100.0</b>	
<b>Total</b>	Low	8 420	(7 960 - 8 880)	61.0	(58.3 - 63.6)
	Moderate	1 760	(1 570 - 1 960)	12.8	(11.5 - 14.2)
	High	3 620	(3 270 - 3 980)	26.3	(23.9 - 28.8)
	<b>Total</b>	<b>13 800</b>	<b>(13 300 - 14 200)</b>	<b>100.0</b>	
<b>12–17 years</b>					
Poor	Low	1 190	(960 - 1 460)	62.6	(54.0 - 71.1)
	Moderate	220	(120 - 380)	11.4	(6.6 - 19.0)
	High	490	(350 - 660)	26.0	(19.5 - 33.5)
	<b>Total</b>	<b>1 900</b>	<b>(1 590 - 2 250)</b>	<b>100.0</b>	
Fair to very good	Low	4 990	(4 610 - 5 390)	71.8	(67.8 - 75.4)
	Moderate	620	(480 - 780)	9.0	(7.0 - 11.2)
	High	1 340	(1 090 - 1 610)	19.2	(16.0 - 23.0)
	<b>Total</b>	<b>6 950</b>	<b>(6 530 - 7 380)</b>	<b>100.0</b>	
Not stated	Low	200	(140 - 290)	80.1	(44.4 - 97.5)
	Moderate	10	(0 - 40)	4.6	(0.1 - 16.2)
	High	40	(0 - 170)	15.3	(0.3 - 48.2)
	<b>Total</b>	<b>250</b>	<b>(160 - 380)</b>	<b>100.0</b>	
<b>Total</b>	Low	6 380	(5 960 - 6 810)	70.1	(66.5 - 73.4)
	Moderate	850	(680 - 1 060)	9.4	(7.5 - 11.5)
	High	1 870	(1 590 - 2 170)	20.5	(17.7 - 23.6)
	<b>Total</b>	<b>9 100</b>	<b>(8 660 - 9 560)</b>	<b>100.0</b>	



**TABLE 3.51: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND WHETHER FAMILY IS IN THE BOTTOM QUARTILE OF FAMILY FUNCTIONING**

Family functioning bottom quartile	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>LORI — None</b>					
Poor	Low	870	(680 - 1 100)	49.5	(40.8 - 58.4)
	Moderate	200	(120 - 330)	11.4	(6.9 - 18.4)
	High	680	(510 - 910)	39.1	(30.8 - 47.9)
	<b>Total</b>	<b>1 750</b>	<b>(1 460 - 2 070)</b>	<b>100.0</b>	
Fair to very good	Low	3 700	(3 360 - 4 060)	62.6	(57.7 - 67.2)
	Moderate	800	(650 - 970)	13.5	(10.9 - 16.4)
	High	1 420	(1 160 - 1 710)	24.0	(19.8 - 28.7)
	<b>Total</b>	<b>5 920</b>	<b>(5 590 - 6 250)</b>	<b>100.0</b>	
Not stated	Low	120	(60 - 230)	71.2	(34.9 - 96.8)
	Moderate	10	(0 - 20)	4.5	(0.5 - 14.8)
	High	40	(10 - 170)	24.2	(3.7 - 71.0)
	<b>Total</b>	<b>170</b>	<b>(80 - 290)</b>	<b>100.0</b>	
<b>Total</b>	Low	4 680	(4 360 - 5 030)	59.8	(55.6 - 64.0)
	Moderate	1 000	(830 - 1 210)	12.8	(10.5 - 15.4)
	High	2 140	(1 850 - 2 470)	27.4	(23.5 - 31.3)
	<b>Total</b>	<b>7 830</b>	<b>(7 680 - 7 980)</b>	<b>100.0</b>	
<b>LORI — Low</b>					
Poor	Low	550	(390 - 770)	52.7	(39.7 - 64.6)
	Moderate	180	(100 - 330)	17.2	(9.2 - 26.8)
	High	320	(190 - 480)	30.1	(20.8 - 42.2)
	<b>Total</b>	<b>1 050</b>	<b>(790 - 1 360)</b>	<b>100.0</b>	
Fair to very good	Low	2 950	(2 580 - 3 350)	66.5	(61.3 - 71.4)
	Moderate	450	(340 - 570)	10.1	(8.0 - 12.6)
	High	1 040	(820 - 1 290)	23.4	(19.2 - 28.2)
	<b>Total</b>	<b>4 430</b>	<b>(3 960 - 4 920)</b>	<b>100.0</b>	
Not stated	Low	50	(20 - 130)	47.3	(9.9 - 81.6)
	Moderate	10	(0 - 50)	9.8	(1.6 - 38.3)
	High	40	(10 - 130)	42.9	(15.2 - 72.3)
	<b>Total</b>	<b>100</b>	<b>(40 - 220)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 550	(3 170 - 3 970)	63.6	(58.6 - 68.2)
	Moderate	640	(500 - 800)	11.4	(9.1 - 14.0)
	High	1 400	(1 140 - 1 680)	25.0	(21.0 - 29.2)
	<b>Total</b>	<b>5 590</b>	<b>(5 100 - 6 100)</b>	<b>100.0</b>	

Continued...



**TABLE 3.51 (continued): CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND WHETHER FAMILY IS IN THE BOTTOM QUARTILE OF FAMILY FUNCTIONING**

<i>Family functioning bottom quartile</i>	<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>LORI — Moderate</b>					
Poor	Low	660	(450 - 930)	58.0	(46.6 - 69.2)
	Moderate	120	(80 - 170)	10.4	(7.1 - 14.5)
	High	360	(230 - 530)	31.6	(21.7 - 43.8)
	<b>Total</b>	<b>1 130</b>	<b>(850 - 1 470)</b>	<b>100.0</b>	
Fair to very good	Low	2 290	(1 870 - 2 770)	68.3	(62.1 - 74.0)
	Moderate	360	(280 - 450)	10.6	(8.5 - 12.9)
	High	700	(480 - 970)	21.1	(15.7 - 27.2)
	<b>Total</b>	<b>3 350</b>	<b>(2 770 - 3 970)</b>	<b>100.0</b>	
Not stated	Low	120	(80 - 200)	63.1	(42.7 - 83.6)
	Moderate	20	(10 - 40)	10.3	(5.1 - 18.1)
	High	50	(20 - 120)	26.6	(11.6 - 47.8)
	<b>Total</b>	<b>200</b>	<b>(120 - 300)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 070	(2 550 - 3 670)	65.6	(60.4 - 70.6)
	Moderate	490	(390 - 610)	10.6	(8.9 - 12.5)
	High	1 110	(850 - 1 430)	23.8	(19.5 - 28.9)
	<b>Total</b>	<b>4 680</b>	<b>(3 940 - 5 480)</b>	<b>100.0</b>	
<b>LORI — High/Extreme</b>					
Poor	Low	610	(430 - 830)	68.3	(58.2 - 76.7)
	Moderate	100	(60 - 150)	11.1	(7.3 - 15.8)
	High	180	(120 - 280)	20.7	(14.1 - 29.0)
	<b>Total</b>	<b>890</b>	<b>(660 - 1 170)</b>	<b>100.0</b>	
Fair to very good	Low	2 790	(2 300 - 3 350)	73.4	(68.0 - 78.4)
	Moderate	370	(270 - 490)	9.6	(7.4 - 12.2)
	High	640	(470 - 870)	16.9	(13.0 - 21.6)
	<b>Total</b>	<b>3 800</b>	<b>(3 160 - 4 500)</b>	<b>100.0</b>	
Not stated	Low	90	(30 - 250)	81.1	(48.2 - 97.7)
	Moderate	10	(0 - 60)	11.0	(0.2 - 36.0)
	High	10	(0 - 40)	7.9	(0.2 - 41.3)
	<b>Total</b>	<b>110</b>	<b>(30 - 310)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 490	(2 900 - 4 150)	72.6	(67.6 - 77.3)
	Moderate	480	(360 - 620)	9.9	(8.0 - 12.0)
	High	840	(620 - 1 100)	17.4	(13.5 - 21.6)
	<b>Total</b>	<b>4 810</b>	<b>(4 040 - 5 650)</b>	<b>100.0</b>	





**TABLE 3.52: CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP AND QUALITY OF PARENTING**

Quality of parenting	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>4–11 years</b>					
Very good	Low	2 840	(2 490 - 3 220)	70.2	(65.2 - 74.8)
	Moderate	410	(320 - 520)	10.2	(8.1 - 13.0)
	High	790	(610 - 990)	19.5	(15.5 - 24.0)
	<b>Total</b>	<b>4 040</b>	<b>(3 630 - 4 470)</b>	<b>100.0</b>	
Good	Low	2 540	(2 220 - 2 880)	65.3	(60.8 - 69.7)
	Moderate	450	(360 - 570)	11.7	(9.3 - 14.3)
	High	900	(740 - 1 080)	23.0	(19.0 - 27.2)
	<b>Total</b>	<b>3 890</b>	<b>(3 520 - 4 280)</b>	<b>100.0</b>	
Fair	Low	1 240	(1 040 - 1 460)	57.2	(50.6 - 63.5)
	Moderate	340	(250 - 450)	15.8	(12.0 - 20.4)
	High	590	(430 - 770)	27.0	(20.7 - 33.6)
	<b>Total</b>	<b>2 170</b>	<b>(1 900 - 2 470)</b>	<b>100.0</b>	
Poor	Low	1 790	(1 550 - 2 070)	48.6	(43.8 - 53.3)
	Moderate	550	(460 - 650)	14.9	(12.5 - 17.5)
	High	1 350	(1 150 - 1 570)	36.5	(32.1 - 41.3)
	<b>Total</b>	<b>3 690</b>	<b>(3 350 - 4 060)</b>	<b>100.0</b>	
Not stated	Low	0	(0 - 10)	38.9	(1.3 - 98.7)
	Moderate	0	(0 - 60)	0.0	(0.0 - 97.5)
	High	10	(0 - 10)	61.1	(1.3 - 98.7)
	<b>Total</b>	<b>10</b>	<b>(0 - 20)</b>	<b>100.0</b>	
<b>Total</b>	Low	8 420	(7 960 - 8 880)	61.0	(58.3 - 63.6)
	Moderate	1 760	(1 570 - 1 960)	12.8	(11.5 - 14.2)
	High	3 620	(3 270 - 3 980)	26.3	(23.9 - 28.8)
	<b>Total</b>	<b>13 800</b>	<b>(13 300 - 14 200)</b>	<b>100.0</b>	
<b>12–17 years</b>					
Very good	Low	2 760	(2 450 - 3 080)	76.0	(69.9 - 81.2)
	Moderate	260	(150 - 430)	7.2	(4.2 - 11.5)
	High	610	(440 - 810)	16.7	(12.6 - 21.9)
	<b>Total</b>	<b>3 630</b>	<b>(3 260 - 4 010)</b>	<b>100.0</b>	
Good	Low	1 600	(1 370 - 1 860)	75.0	(69.2 - 80.6)
	Moderate	200	(150 - 260)	9.4	(6.9 - 12.4)
	High	330	(230 - 480)	15.6	(10.8 - 21.5)
	<b>Total</b>	<b>2 140</b>	<b>(1 880 - 2 420)</b>	<b>100.0</b>	
Fair	Low	850	(660 - 1 070)	64.4	(52.9 - 74.0)
	Moderate	140	(80 - 210)	10.5	(6.4 - 15.7)
	High	330	(200 - 500)	25.1	(16.9 - 35.8)
	<b>Total</b>	<b>1 320</b>	<b>(1 080 - 1 600)</b>	<b>100.0</b>	
Poor	Low	1 170	(970 - 1 390)	58.0	(51.0 - 64.5)
	Moderate	250	(160 - 380)	12.4	(8.0 - 17.9)
	High	600	(470 - 740)	29.6	(23.8 - 35.5)
	<b>Total</b>	<b>2 020</b>	<b>(1 770 - 2 290)</b>	<b>100.0</b>	
Not stated	Low	0	(0 - 60)	.	
	Moderate	0	(0 - 60)	.	
	High	0	(0 - 60)	.	
	<b>Total</b>	<b>0</b>	<b>(0 - 60)</b>	<b>.</b>	
<b>Total</b>	Low	6 380	(5 960 - 6 810)	70.1	(66.5 - 73.4)
	Moderate	850	(680 - 1 060)	9.4	(7.5 - 11.5)
	High	1 870	(1 590 - 2 170)	20.5	(17.7 - 23.6)
	<b>Total</b>	<b>9 100</b>	<b>(8 660 - 9 560)</b>	<b>100.0</b>	

Continued...



**TABLE 3.52 (continued): CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP AND QUALITY OF PARENTING**

Quality of parenting	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>Total</b>					
Very good	Normal	5 590	(5 120 - 6 090)	73.0	(69.2 - 76.7)
	Borderline	680	(520 - 860)	8.8	(6.8 - 11.0)
	Abnormal	1 400	(1 150 - 1 680)	18.2	(15.2 - 21.7)
	<b>Total</b>	<b>7 670</b>	<b>(7 150 - 8 210)</b>	<b>100.0</b>	
Good	Normal	4 150	(3 740 - 4 580)	68.7	(65.0 - 72.5)
	Borderline	660	(550 - 780)	10.9	(9.1 - 12.9)
	Abnormal	1 230	(1 010 - 1 480)	20.4	(16.9 - 24.1)
	<b>Total</b>	<b>6 030</b>	<b>(5 560 - 6 510)</b>	<b>100.0</b>	
Fair	Normal	2 090	(1 820 - 2 390)	59.9	(53.8 - 65.6)
	Borderline	480	(380 - 610)	13.8	(10.9 - 17.2)
	Abnormal	920	(710 - 1 190)	26.3	(21.0 - 32.1)
	<b>Total</b>	<b>3 490</b>	<b>(3 120 - 3 900)</b>	<b>100.0</b>	
Poor	Normal	2 960	(2 620 - 3 340)	51.9	(47.6 - 56.3)
	Borderline	800	(670 - 950)	14.0	(11.8 - 16.4)
	Abnormal	1 940	(1 690 - 2 230)	34.1	(30.1 - 38.0)
	<b>Total</b>	<b>5 710</b>	<b>(5 250 - 6 180)</b>	<b>100.0</b>	
Not stated	Normal	0	(0 - 10)	38.9	(1.3 - 98.7)
	Borderline	0	(0 - 60)	0.0	(0.0 - 97.5)
	Abnormal	10	(0 - 10)	61.1	(1.3 - 98.7)
	<b>Total</b>	<b>10</b>	<b>(0 - 20)</b>	<b>100.0</b>	
<b>Total</b>	Normal	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
	Borderline	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
	Abnormal	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 3.53:** CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND QUALITY OF PARENTING

Quality of parenting	Level of risk	Number	95% CI	%	95% CI
<b>LORI — None</b>					
Very good	Low	1 960	(1 670 - 2 280)	66.2	(58.6 - 72.7)
	Moderate	310	(190 - 480)	10.6	(6.3 - 15.7)
	High	690	(500 - 900)	23.2	(17.6 - 30.1)
	<b>Total</b>	<b>2 950</b>	<b>(2 620 - 3 310)</b>	<b>100.0</b>	
Good	Low	1 260	(1 030 - 1 540)	65.9	(58.1 - 72.8)
	Moderate	250	(180 - 340)	13.0	(9.3 - 17.4)
	High	400	(280 - 560)	21.0	(14.8 - 28.6)
	<b>Total</b>	<b>1 920</b>	<b>(1 660 - 2 220)</b>	<b>100.0</b>	
Fair	Low	750	(580 - 940)	58.3	(48.8 - 67.8)
	Moderate	180	(120 - 250)	13.7	(9.4 - 19.4)
	High	360	(230 - 550)	28.0	(19.1 - 38.6)
	<b>Total</b>	<b>1 280</b>	<b>(1 050 - 1 550)</b>	<b>100.0</b>	
Poor	Low	720	(560 - 900)	42.9	(35.2 - 50.9)
	Moderate	260	(180 - 360)	15.9	(11.3 - 21.0)
	High	690	(520 - 880)	41.2	(33.3 - 49.4)
	<b>Total</b>	<b>1 670</b>	<b>(1 420 - 1 940)</b>	<b>100.0</b>	
Not stated	Low	0	(0 - 60)	0.0	(0.0 - 100.0)
	Moderate	0	(0 - 60)	0.0	(0.0 - 100.0)
	High	10	(0 - 10)	100.0	(0.0 - 100.0)
	<b>Total</b>	<b>10</b>	<b>(0 - 10)</b>	<b>100.0</b>	
<b>Total</b>	Low	4 680	(4 360 - 5 030)	59.8	(55.6 - 64.0)
	Moderate	1 000	(830 - 1 210)	12.8	(10.5 - 15.4)
	High	2 140	(1 850 - 2 470)	27.4	(23.5 - 31.3)
	<b>Total</b>	<b>7 830</b>	<b>(7 680 - 7 980)</b>	<b>100.0</b>	
<b>LORI — Low</b>					
Very good	Low	1 290	(1 040 - 1 580)	73.5	(64.8 - 81.4)
	Moderate	160	(100 - 250)	9.3	(5.7 - 13.6)
	High	300	(190 - 460)	17.2	(11.2 - 24.3)
	<b>Total</b>	<b>1 750</b>	<b>(1 460 - 2 090)</b>	<b>100.0</b>	
Good	Low	1 070	(860 - 1 310)	65.8	(57.9 - 72.8)
	Moderate	130	(80 - 200)	7.9	(4.9 - 11.6)
	High	430	(310 - 580)	26.3	(19.6 - 33.9)
	<b>Total</b>	<b>1 620</b>	<b>(1 360 - 1 910)</b>	<b>100.0</b>	
Fair	Low	550	(400 - 740)	61.7	(46.1 - 74.2)
	Moderate	120	(60 - 220)	13.3	(6.7 - 23.5)
	High	220	(110 - 400)	25.1	(13.9 - 40.3)
	<b>Total</b>	<b>890</b>	<b>(680 - 1 150)</b>	<b>100.0</b>	
Poor	Low	650	(490 - 840)	49.0	(40.2 - 58.3)
	Moderate	230	(170 - 310)	17.4	(12.6 - 23.0)
	High	450	(310 - 620)	33.7	(25.5 - 43.0)
	<b>Total</b>	<b>1 320</b>	<b>(1 090 - 1 600)</b>	<b>100.0</b>	
Not stated	Low	0	(0 - 60)	.	
	Moderate	0	(0 - 60)	.	
	High	0	(0 - 60)	.	
	<b>Total</b>	<b>0</b>	<b>(0 - 60)</b>	<b>.</b>	
<b>Total</b>	Low	3 550	(3 170 - 3 970)	63.6	(58.6 - 68.2)
	Moderate	640	(500 - 800)	11.4	(9.1 - 14.0)
	High	1 400	(1 140 - 1 680)	25.0	(21.0 - 29.2)
	<b>Total</b>	<b>5 590</b>	<b>(5 100 - 6 100)</b>	<b>100.0</b>	

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**TABLE 3.53 (continued): CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND QUALITY OF PARENTING**

Quality of parenting	Level of risk	Number	95% CI	%	95% CI
<b>LORI — Moderate</b>					
Very good	Low	1 160	(910 - 1 460)	79.0	(71.6 - 85.0)
	Moderate	90	(50 - 150)	6.3	(4.0 - 9.5)
	High	220	(130 - 340)	14.7	(9.5 - 21.9)
	<b>Total</b>	<b>1 470</b>	<b>(1 170 - 1 830)</b>	<b>100.0</b>	
Good	Low	860	(620 - 1 150)	67.7	(58.0 - 76.8)
	Moderate	140	(100 - 190)	11.1	(7.8 - 15.4)
	High	270	(160 - 410)	21.2	(12.7 - 30.7)
	<b>Total</b>	<b>1 260</b>	<b>(980 - 1 600)</b>	<b>100.0</b>	
Fair	Low	320	(230 - 430)	51.1	(38.0 - 65.3)
	Moderate	120	(70 - 190)	19.3	(14.6 - 25.2)
	High	190	(100 - 330)	29.6	(18.0 - 43.6)
	<b>Total</b>	<b>630</b>	<b>(460 - 850)</b>	<b>100.0</b>	
Poor	Low	730	(520 - 1 020)	55.6	(46.8 - 64.5)
	Moderate	140	(90 - 200)	10.6	(7.3 - 14.4)
	High	440	(340 - 580)	33.8	(26.0 - 41.8)
	<b>Total</b>	<b>1 310</b>	<b>(1 020 - 1 660)</b>	<b>100.0</b>	
Not stated	Low	0	(0 - 60)	.	
	Moderate	0	(0 - 60)	.	
	High	0	(0 - 60)	.	
	<b>Total</b>	<b>0</b>	<b>(0 - 60)</b>	<b>.</b>	
<b>Total</b>	Low	3 070	(2 550 - 3 670)	65.6	(60.4 - 70.6)
	Moderate	490	(390 - 610)	10.6	(8.9 - 12.5)
	High	1 110	(850 - 1 430)	23.8	(19.5 - 28.9)
	<b>Total</b>	<b>4 680</b>	<b>(3 940 - 5 480)</b>	<b>100.0</b>	
<b>LORI — High</b>					
Very good	Low	600	(410 - 840)	75.4	(63.5 - 84.9)
	Moderate	40	(20 - 90)	5.7	(2.9 - 10.6)
	High	150	(80 - 240)	18.9	(11.3 - 29.1)
	<b>Total</b>	<b>790</b>	<b>(580 - 1 080)</b>	<b>100.0</b>	
Good	Low	390	(250 - 600)	75.9	(63.5 - 84.9)
	Moderate	50	(30 - 100)	9.7	(5.1 - 16.2)
	High	80	(30 - 150)	14.5	(6.5 - 29.5)
	<b>Total</b>	<b>520</b>	<b>(340 - 760)</b>	<b>100.0</b>	
Fair	Low	260	(160 - 420)	62.5	(43.5 - 76.9)
	Moderate	40	(10 - 80)	8.7	(3.4 - 18.7)
	High	120	(70 - 200)	28.9	(15.9 - 47.0)
	<b>Total</b>	<b>420</b>	<b>(290 - 590)</b>	<b>100.0</b>	
Poor	Low	460	(290 - 660)	55.7	(42.6 - 67.4)
	Moderate	110	(70 - 180)	14.0	(9.1 - 21.0)
	High	250	(160 - 370)	30.3	(20.5 - 40.6)
	<b>Total</b>	<b>820</b>	<b>(590 - 1 100)</b>	<b>100.0</b>	
Not stated	Low	0	(0 - 10)	100.0	(0.0 - 100.0)
	Moderate	0	(0 - 60)	0.0	(0.0 - 100.0)
	High	0	(0 - 60)	0.0	(0.0 - 100.0)
	<b>Total</b>	<b>0</b>	<b>(0 - 10)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 710	(1 260 - 2 280)	67.1	(59.3 - 74.6)
	Moderate	250	(170 - 340)	9.6	(7.4 - 12.2)
	High	590	(390 - 840)	23.3	(16.9 - 30.6)
	<b>Total</b>	<b>2 550</b>	<b>(1 910 - 3 270)</b>	<b>100.0</b>	

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**TABLE 3.53 (continued): CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND QUALITY OF PARENTING**

Quality of parenting	Level of risk	Number	95% CI	%	95% CI
<b>LORI — Extreme</b>					
Very good	Low	590	(400 - 850)	85.1	(75.8 - 91.4)
	Moderate	60	(30 - 110)	9.1	(4.9 - 14.9)
	High	40	(20 - 90)	5.9	(2.1 - 12.1)
	<b>Total</b>	<b>690</b>	<b>(470 - 970)</b>	<b>100.0</b>	
Good	Low	560	(370 - 830)	79.8	(72.7 - 86.3)
	Moderate	90	(50 - 160)	12.3	(7.4 - 19.7)
	High	60	(30 - 110)	7.9	(4.2 - 12.4)
	<b>Total</b>	<b>710</b>	<b>(470 - 1 030)</b>	<b>100.0</b>	
Fair	Low	210	(140 - 320)	78.7	(66.9 - 86.9)
	Moderate	30	(10 - 70)	11.1	(3.0 - 25.4)
	High	30	(10 - 70)	10.3	(4.4 - 20.6)
	<b>Total</b>	<b>270</b>	<b>(170 - 400)</b>	<b>100.0</b>	
Poor	Low	420	(260 - 600)	70.8	(52.5 - 84.9)
	Moderate	50	(10 - 160)	8.9	(2.5 - 21.2)
	High	120	(60 - 240)	20.3	(11.3 - 32.2)
	<b>Total</b>	<b>590</b>	<b>(360 - 880)</b>	<b>100.0</b>	
Not stated	Low	0	(0 - 60)	.	
	Moderate	0	(0 - 60)	.	
	High	0	(0 - 60)	.	
	<b>Total</b>	<b>0</b>	<b>(0 - 60)</b>	<b>.</b>	
<b>Total</b>	Low	1 780	(1 290 - 2 350)	78.9	(72.6 - 84.7)
	Moderate	230	(140 - 350)	10.3	(7.2 - 14.1)
	High	240	(140 - 380)	10.8	(7.4 - 15.0)
	<b>Total</b>	<b>2 260</b>	<b>(1 670 - 3 020)</b>	<b>100.0</b>	

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**TABLE 3.54: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP AND NUMBER OF LIFE STRESS EVENTS**

Number of life stress events	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>4–11 years</b>					
0–2	Low	2 910	(2 580 - 3 260)	73.8	(69.3 - 77.9)
	Moderate	440	(350 - 540)	11.0	(8.9 - 13.6)
	High	600	(440 - 790)	15.2	(11.4 - 19.4)
	<b>Total</b>	<b>3 940</b>	<b>(3 560 - 4 360)</b>	<b>100.0</b>	
3–6	Low	4 030	(3 640 - 4 440)	62.1	(58.3 - 65.8)
	Moderate	820	(680 - 970)	12.6	(10.5 - 14.8)
	High	1 640	(1 400 - 1 920)	25.3	(22.0 - 28.9)
	<b>Total</b>	<b>6 490</b>	<b>(6 010 - 6 980)</b>	<b>100.0</b>	
7–14	Low	1 300	(1 070 - 1 550)	42.7	(36.9 - 48.4)
	Moderate	470	(380 - 580)	15.5	(12.6 - 18.5)
	High	1 270	(1 070 - 1 510)	41.8	(36.3 - 47.6)
	<b>Total</b>	<b>3 040</b>	<b>(2 720 - 3 400)</b>	<b>100.0</b>	
Not stated	Low	180	(90 - 330)	55.1	(36.4 - 71.9)
	Moderate	40	(20 - 80)	11.9	(6.3 - 21.0)
	High	110	(60 - 170)	33.0	(17.9 - 54.3)
	<b>Total</b>	<b>330</b>	<b>(190 - 490)</b>	<b>100.0</b>	
<b>Total</b>	Low	8 420	(7 960 - 8 880)	61.0	(58.3 - 63.6)
	Moderate	1 760	(1 570 - 1 960)	12.8	(11.5 - 14.2)
	High	3 620	(3 270 - 3 980)	26.3	(23.9 - 28.8)
	<b>Total</b>	<b>13 800</b>	<b>(13 300 - 14 200)</b>	<b>100.0</b>	
<b>12–17 years</b>					
0–2	Low	2 010	(1 700 - 2 350)	81.5	(75.5 - 86.5)
	Moderate	160	(90 - 260)	6.5	(3.6 - 10.4)
	High	290	(200 - 410)	12.0	(8.3 - 16.8)
	<b>Total</b>	<b>2 460</b>	<b>(2 130 - 2 830)</b>	<b>100.0</b>	
3–6	Low	3 030	(2 720 - 3 360)	69.1	(64.0 - 74.0)
	Moderate	510	(370 - 690)	11.6	(8.5 - 15.3)
	High	850	(660 - 1 070)	19.3	(15.5 - 23.7)
	<b>Total</b>	<b>4 390</b>	<b>(4 000 - 4 780)</b>	<b>100.0</b>	
7–14	Low	1 140	(960 - 1 370)	57.1	(49.4 - 64.2)
	Moderate	170	(110 - 270)	8.5	(5.2 - 12.7)
	High	690	(520 - 900)	34.4	(27.2 - 42.1)
	<b>Total</b>	<b>2 000</b>	<b>(1 740 - 2 310)</b>	<b>100.0</b>	
Not stated	Low	200	(140 - 290)	80.1	(44.4 - 97.5)
	Moderate	10	(0 - 40)	4.6	(0.1 - 16.2)
	High	40	(0 - 170)	15.3	(0.3 - 48.2)
	<b>Total</b>	<b>250</b>	<b>(160 - 380)</b>	<b>100.0</b>	
<b>Total</b>	Low	6 380	(5 960 - 6 810)	70.1	(66.5 - 73.4)
	Moderate	850	(680 - 1 060)	9.4	(7.5 - 11.5)
	High	1 870	(1 590 - 2 170)	20.5	(17.7 - 23.6)
	<b>Total</b>	<b>9 100</b>	<b>(8 660 - 9 560)</b>	<b>100.0</b>	

Continued...



**TABLE 3.54 (continued): CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP AND NUMBER OF LIFE STRESS EVENTS**

Number of life stress events	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>Total</b>					
0–2	Low	4 910	(4 410 - 5 450)	76.8	(73.0 - 80.2)
	Moderate	600	(480 - 730)	9.3	(7.5 - 11.3)
	High	890	(700 - 1 140)	13.9	(11.0 - 17.4)
	<b>Total</b>	<b>6 400</b>	<b>(5 830 - 6 990)</b>	<b>100.0</b>	
3–6	Low	7 060	(6 540 - 7 600)	64.9	(61.5 - 68.1)
	Moderate	1 330	(1 130 - 1 550)	12.2	(10.5 - 14.1)
	High	2 490	(2 160 - 2 850)	22.9	(20.1 - 25.8)
	<b>Total</b>	<b>10 900</b>	<b>(10 300 - 11 500)</b>	<b>100.0</b>	
7–14	Low	2 440	(2 130 - 2 790)	48.4	(43.8 - 53.3)
	Moderate	640	(520 - 790)	12.7	(10.3 - 15.3)
	High	1 960	(1 660 - 2 310)	38.9	(34.0 - 43.8)
	<b>Total</b>	<b>5 050</b>	<b>(4 560 - 5 550)</b>	<b>100.0</b>	
Not stated	Low	380	(260 - 550)	66.1	(49.8 - 78.6)
	Moderate	50	(20 - 100)	8.7	(4.7 - 15.1)
	High	150	(70 - 260)	25.2	(12.9 - 39.5)
	<b>Total</b>	<b>580</b>	<b>(410 - 810)</b>	<b>100.0</b>	
<b>Total</b>	Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
	Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
	High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 3.55: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND NUMBER OF LIFE STRESS EVENTS**

Number of life stress events	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>LORI — None</b>					
0–2	Low	1 470	(1 200 - 1 780)	73.2	(66.1 - 80.0)
	Moderate	190	(120 - 300)	9.5	(5.6 - 14.3)
	High	350	(230 - 500)	17.3	(12.0 - 24.3)
	<b>Total</b>	<b>2 010</b>	<b>(1 690 - 2 350)</b>	<b>100.0</b>	
3–6	Low	2 340	(2 030 - 2 670)	57.9	(51.9 - 63.9)
	Moderate	580	(440 - 760)	14.3	(10.9 - 18.4)
	High	1 130	(890 - 1 410)	27.8	(22.3 - 33.5)
	<b>Total</b>	<b>4 050</b>	<b>(3 690 - 4 450)</b>	<b>100.0</b>	
7–14	Low	750	(570 - 970)	46.9	(38.5 - 56.2)
	Moderate	220	(150 - 310)	14.0	(9.9 - 19.2)
	High	630	(470 - 840)	39.1	(30.3 - 48.0)
	<b>Total</b>	<b>1 610</b>	<b>(1 330 - 1 910)</b>	<b>100.0</b>	
Not stated	Low	120	(60 - 230)	71.2	(34.9 - 96.8)
	Moderate	10	(0 - 20)	4.5	(0.5 - 14.8)
	High	40	(10 - 170)	24.2	(3.7 - 71.0)
	<b>Total</b>	<b>170</b>	<b>(80 - 290)</b>	<b>100.0</b>	
<b>Total</b>	Low	4 680	(4 360 - 5 030)	59.8	(55.6 - 64.0)
	Moderate	1 000	(830 - 1 210)	12.8	(10.5 - 15.4)
	High	2 140	(1 850 - 2 470)	27.4	(23.5 - 31.3)
	<b>Total</b>	<b>7 830</b>	<b>(7 680 - 7 980)</b>	<b>100.0</b>	
<b>LORI — Low</b>					
0–2	Low	1 310	(1 060 - 1 600)	77.0	(70.4 - 83.0)
	Moderate	180	(120 - 260)	10.6	(7.4 - 14.8)
	High	210	(130 - 320)	12.4	(8.0 - 18.4)
	<b>Total</b>	<b>1 700</b>	<b>(1 400 - 2 030)</b>	<b>100.0</b>	
3–6	Low	1 690	(1 400 - 2 020)	63.9	(57.1 - 70.1)
	Moderate	330	(240 - 450)	12.7	(9.3 - 16.6)
	High	620	(470 - 790)	23.4	(18.4 - 28.9)
	<b>Total</b>	<b>2 640</b>	<b>(2 280 - 3 030)</b>	<b>100.0</b>	
7–14	Low	500	(360 - 690)	44.1	(33.9 - 55.9)
	Moderate	110	(40 - 230)	9.9	(4.1 - 19.5)
	High	520	(350 - 770)	46.0	(33.7 - 59.0)
	<b>Total</b>	<b>1 140</b>	<b>(870 - 1 450)</b>	<b>100.0</b>	
Not stated	Low	50	(20 - 130)	47.3	(9.9 - 81.6)
	Moderate	10	(0 - 50)	9.8	(1.6 - 38.3)
	High	40	(10 - 130)	42.9	(15.2 - 72.3)
	<b>Total</b>	<b>100</b>	<b>(40 - 220)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 550	(3 170 - 3 970)	63.6	(58.6 - 68.2)
	Moderate	640	(500 - 800)	11.4	(9.1 - 14.0)
	High	1 400	(1 140 - 1 680)	25.0	(21.0 - 29.2)
	<b>Total</b>	<b>5 590</b>	<b>(5 100 - 6 100)</b>	<b>100.0</b>	

Continued...





**TABLE 3.55 (continued): CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI) AND NUMBER OF LIFE STRESS EVENTS**

Number of life stress events	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>LORI — Moderate</b>					
0–2	Low	910	(650 - 1 250)	80.9	(69.9 - 89.1)
	Moderate	90	(50 - 150)	7.6	(3.9 - 12.6)
	High	130	(60 - 280)	11.5	(4.9 - 22.9)
	<b>Total</b>	<b>1 130</b>	<b>(820 - 1 500)</b>	<b>100.0</b>	
3–6	Low	1 560	(1 240 - 1 940)	69.4	(62.4 - 75.8)
	Moderate	210	(140 - 300)	9.2	(6.5 - 12.6)
	High	480	(340 - 660)	21.4	(15.8 - 27.7)
	<b>Total</b>	<b>2 250</b>	<b>(1 830 - 2 720)</b>	<b>100.0</b>	
7–14	Low	470	(310 - 650)	42.5	(32.1 - 53.1)
	Moderate	180	(130 - 250)	16.4	(12.3 - 20.9)
	High	450	(300 - 660)	41.1	(30.7 - 52.9)
	<b>Total</b>	<b>1 100</b>	<b>(830 - 1 400)</b>	<b>100.0</b>	
Not stated	Low	120	(80 - 200)	63.1	(42.7 - 83.6)
	Moderate	20	(10 - 40)	10.3	(5.1 - 18.1)
	High	50	(20 - 120)	26.6	(11.6 - 47.8)
	<b>Total</b>	<b>200</b>	<b>(120 - 300)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 070	(2 550 - 3 670)	65.6	(60.4 - 70.6)
	Moderate	490	(390 - 610)	10.6	(8.9 - 12.5)
	High	1 110	(850 - 1 430)	23.8	(19.5 - 28.9)
	<b>Total</b>	<b>4 680</b>	<b>(3 940 - 5 480)</b>	<b>100.0</b>	
<b>LORI — High/Extreme</b>					
0–2	Low	1 220	(910 - 1 570)	78.1	(69.9 - 85.1)
	Moderate	140	(90 - 200)	8.9	(6.1 - 12.0)
	High	200	(110 - 350)	13.1	(6.9 - 21.7)
	<b>Total</b>	<b>1 560</b>	<b>(1 200 - 1 960)</b>	<b>100.0</b>	
3–6	Low	1 460	(1 140 - 1 860)	75.7	(67.5 - 82.4)
	Moderate	200	(130 - 310)	10.4	(7.3 - 14.8)
	High	270	(160 - 400)	13.8	(9.4 - 19.6)
	<b>Total</b>	<b>1 930</b>	<b>(1 510 - 2 430)</b>	<b>100.0</b>	
7–14	Low	720	(540 - 930)	59.8	(52.0 - 67.8)
	Moderate	130	(80 - 190)	10.4	(7.0 - 14.6)
	High	360	(260 - 490)	29.8	(23.6 - 36.5)
	<b>Total</b>	<b>1 200</b>	<b>(940 - 1 500)</b>	<b>100.0</b>	
Not stated	Low	90	(30 - 250)	81.1	(48.2 - 97.7)
	Moderate	10	(0 - 60)	11.0	(0.2 - 36.0)
	High	10	(0 - 40)	7.9	(0.2 - 41.3)
	<b>Total</b>	<b>110</b>	<b>(30 - 310)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 490	(2 900 - 4 150)	72.6	(67.6 - 77.3)
	Moderate	480	(360 - 620)	9.9	(8.0 - 12.0)
	High	840	(620 - 1 100)	17.4	(13.5 - 21.6)
	<b>Total</b>	<b>4 810</b>	<b>(4 040 - 5 650)</b>	<b>100.0</b>	



## Chapter 4

# HEALTH RISK BEHAVIOURS IN ABORIGINAL YOUNG PEOPLE AGED 12–17 YEARS

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## Chapter 4

# HEALTH RISK BEHAVIOURS IN ABORIGINAL YOUNG PEOPLE AGED 12–17 YEARS

*The ages 12–17 years represent an important period in the social and emotional development of young people. The transition to adulthood brings with it a range of demands, pressures and temptations. Compared with earlier generations, today's young people are under greater pressure, with a more competitive labour market requiring higher educational standards and greater skills. Aboriginal young people, like other groups in society who are sometimes marginalised and subject to discrimination, are potentially more vulnerable to harmful health risk behaviours.*

### SUMMARY

Aboriginal young people aged 12–17 years were asked about their experiences with cigarette smoking, drinking alcohol, using marijuana, physical exercise, sexual knowledge and experience, and bullying and racism.

#### Cigarette smoking

- ◆ Over one third of all 12–17 year-old young people (35 per cent) have smoked cigarettes regularly. Over half of 17 year-olds (58 per cent) have smoked regularly.
- ◆ Young people not attending school were 63 per cent more likely to have smoked cigarettes regularly than young people of the same age still in school.
- ◆ Young people who have at least one parent who smokes were almost twice as likely to have smoked cigarettes regularly than young people whose parents do not smoke.

#### Alcohol

- ◆ Just over one quarter of all young people (27 per cent) drank alcohol. At 17 years of age, 61 per cent of males and 43 per cent of females were drinking alcohol.
- ◆ Almost one in five young people (19 per cent) had been in a car with a drunk driver in the six months prior to the survey.

#### Marijuana

- ◆ Thirty per cent of young people have used marijuana at some time in their lives. Marijuana was used at least weekly by 45 per cent of 17 year-old males and 21 per cent of 17 year-old females.
- ◆ Three quarters of young people (75 per cent) who drank alcohol and smoked cigarettes also used marijuana, compared with only 8 per cent of young people who neither drank alcohol or smoked cigarettes.



## SUMMARY (continued)

### Physical activity

- ◆ More than one quarter of young people (28 per cent) had not done strenuous physical exercise in the week prior to the survey. One in five males (20 per cent) and more than one in three females (36 per cent) had not done strenuous exercise in the previous week.
- ◆ Almost half of all 17 year-old females (49 per cent) had done strenuous exercise in the week prior to the survey compared with only 8 per cent of 17 year-old males.
- ◆ Young people no longer attending school were half as likely to have exercised strenuously in week prior to the survey as young people still attending school.
- ◆ Young people who have smoked cigarettes were less likely to have exercised strenuously in the past seven days.

### Sexual knowledge and experience

- ◆ About 28 per cent of young people have had sex. Among 17 year-olds, three quarters (75 per cent) have had sex.
- ◆ Almost half (49 per cent) of 17 year-olds first had sex before the age of 16 years.
- ◆ Compared with young people of the same age and sex, a greater proportion of young people who had left school, used marijuana daily, smoked cigarettes regularly or drank alcohol have had sex.
- ◆ One in eight young people (13 per cent) who have had sex had not received any sexual education.
- ◆ School was a source of sexual education for 60 per cent of young people and the sole source for 41 per cent.

### Bullying and racism

- ◆ Almost one third of young people (31 per cent) who were still attending school have been bullied. Young people who had smoked cigarettes regularly were over twice as likely to have been bullied.
- ◆ Over one in five young people (22 per cent) had been refused service or treated badly because they were Aboriginal.



## INTRODUCTION

Aboriginal young people aged 12–17 years were asked to complete a Youth Self Report (YSR) questionnaire. The questionnaire asked a range of questions about their activities and behaviours, including their experiences of alcohol, smoking cigarettes and other drugs; their sexual knowledge and experience; their involvement in physical exercise and organised sport; bullying and racism.

### PARTICIPATION IN THE YOUTH SELF REPORT

#### Administering the Youth Self Report

The YSR was developed specifically for 12–17 year-olds and interviewer assistance was available for those young people who required help completing it. Of the 1,480 young people aged 12–17 years in the survey sample, 1,073 (72.5 per cent) completed a YSR questionnaire, 19 per cent of whom received the help of an interviewer. Due to the sensitive nature of some questions it is possible that the presence of an interviewer may have had some impact on the responses, but this could not be measured.

#### The effects of non-response

One quarter of 12–17 year-olds in the survey did not complete the YSR. An investigation of carer responses (see *Appendix D — Levels of family and youth participation*) confirmed that respondents did not comprise a random sample with respect to age, sex and Level of Relative Isolation (Table 4.1). Carer reports, available for 1,399 12–17 year-olds, indicated that a higher proportion of non-respondents than respondents were at high risk of clinically significant emotional or behavioural difficulties (Table 4.1). In order to generalise observations to the entire population of Western Australian Aboriginal young people, those responding to the survey were weighted by sex, age and Level of Relative Isolation to represent the entire population (see *Appendix B — Sample design* in Volume One<sup>1</sup>). This weighting procedure accounted for the different response rates by sex, age and LORI. However, the distribution of other variables, such as the risk of clinically significant emotional or behavioural difficulties, could not be taken into account in the weighting procedure. As a result, the estimates based on YSR responses reported in Chapters 4 and 5 will under-represent the proportion of young people at high risk of clinically significant emotional or behavioural difficulties. This must be borne in mind when interpreting results based on the YSR and when comparing them with results based on carer reports as reported in other chapters in this volume.

#### Sample size

The estimates in Chapters 4 and 5 are based on 1,073 young people who completed YSR questionnaires. This sample is considerably smaller than the 3,993 children aged 4–17 years for whom carer reports were obtained. This smaller sample size means that associations are less likely to achieve statistical significance, even if considered to be of social or clinical significance. Associations meeting this description are reported but qualified in Chapters 4 and 5.





## CIGARETTE SMOKING

The survey asked young people aged 12–17 years ‘Have you smoked cigarettes more than just once or twice’ and if so, ‘How old were you the first time you smoked daily for a month or longer?’ To establish whether parental smoking was an influence in the smoking behaviour of young people, they were also asked whether either of their parents smoked cigarettes.

Over one third (35.4 per cent; CI: 32.1%–38.8%) of young people had smoked cigarettes more than just once or twice (Table 4.2). All of these young people reported having smoked daily for at least a month at some point in their lives indicating that, in the survey, having smoked more than just once or twice was synonymous with daily smoking. The term *smoking regularly* in this chapter therefore refers to ever having smoked cigarettes daily for at least a month.

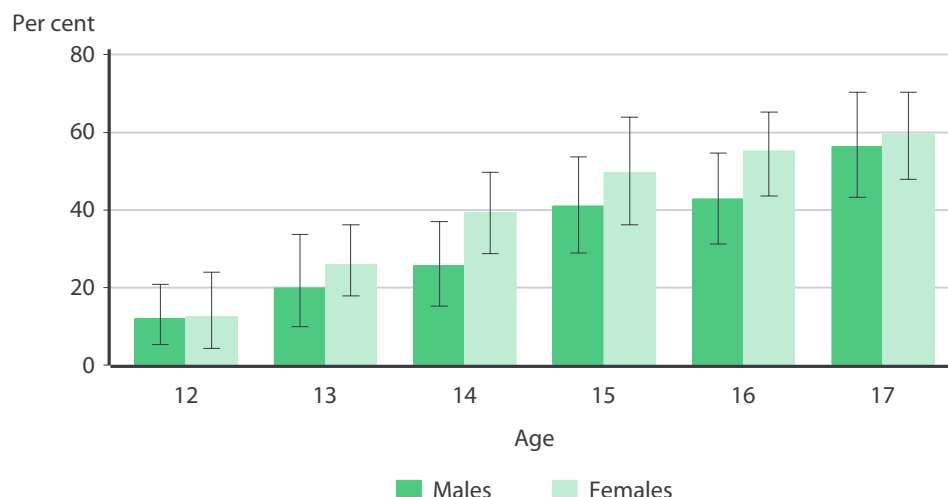
The 1993 Western Australian Child Health Survey (CHS) asked the same question of 12–16 year-olds in the general Western Australian population (the CHS did not survey 17 year-olds). When WAACHS data was limited to 12–16 year-olds the proportion of Aboriginal young people who smoked regularly (31.5 per cent; CI: 28.1%–35.0%) was comparable to that for young people in the general population (28.8 per cent; CI: 24.9%–32.9%) (Table 4.4).<sup>2</sup>

### CIGARETTE SMOKING AND AGE, SEX AND LEVEL OF RELATIVE ISOLATION

An estimated 40.1 per cent (CI: 35.5%–45.1%) of 12–17 year-old females had smoked regularly compared with 30.7 per cent (CI: 26.1%–35.8%) of males (Table 4.3).

The proportion of young people who had smoked regularly was higher in older young people, ranging from 12.2 per cent (CI: 7.3%–19.4%) of 12 year-olds to 58.0 per cent (CI: 49.3%–66.5%) of 17 year-olds (Table 4.3).

**FIGURE 4.1: YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE SMOKED CIGARETTES REGULARLY, BY AGE AND SEX**



Source: Table 4.5

The proportion of 12 year-olds who had smoked regularly was the same for both males and females. For young people aged 13 years or older, the proportion of males who had smoked regularly was consistently lower than the proportion of females, although

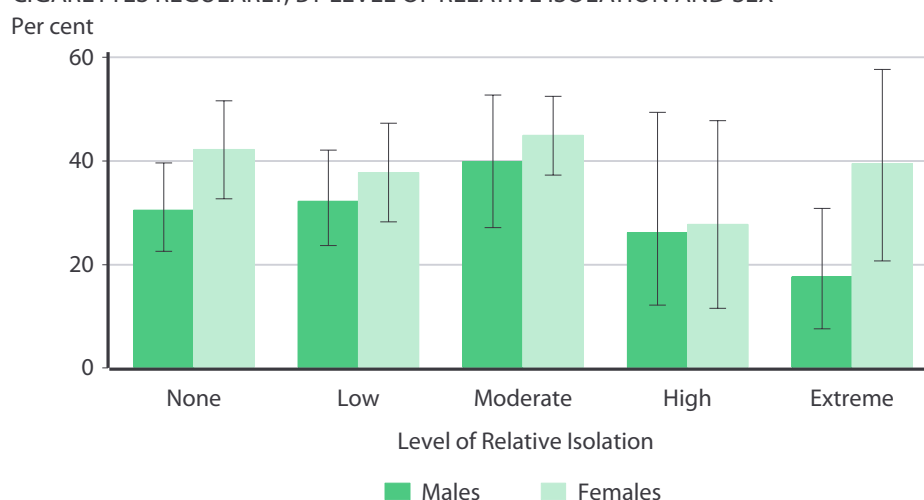


the differences were not statistically significant. The proportion of females who had smoked regularly rose from 12.4 per cent (CI: 4.4%–23.9%) at 12 years of age to 59.5 per cent (CI: 47.9%–70.4%) at 17 years of age, while among males the proportion rose from 12.0 per cent (CI: 5.4%–20.8%) to 56.3 per cent (CI: 43.2%–70.3%) (Table 4.3).

There was a tendency for smoking to be less prevalent in areas of high or extreme isolation (27.0 per cent; CI: 19.5%–35.4%), than in less isolated areas (37.5 per cent; CI: 33.8%–41.3%), although this difference was not statistically significant (Table 4.2).

The proportion of females who had smoked regularly was higher than the proportion of males who smoked regularly at all levels of relative isolation, with the greatest difference in areas of extreme isolation, where twice as many females as males had smoked regularly (Figure 4.2). None of these differences are statistically significant.

**FIGURE 4.2:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE SMOKED CIGARETTES REGULARLY, BY LEVEL OF RELATIVE ISOLATION AND SEX



Source: Table 4.4

## COMPARISON WITH OTHER SURVEYS

The 1993 CHS estimated that 29.2 per cent (CI: 23.5%–35.0%) of all WA males aged 12–16 years had smoked cigarettes regularly.<sup>2</sup> This proportion is not significantly different to the 27.0 per cent (CI: 22.3%–32.1%) of Aboriginal males aged 12–16 years who smoked regularly (Table 4.4). The same study estimated that 28.5 per cent (CI: 23.2%–34.2%) of all WA females aged 12–16 years had smoked regularly compared with 36.4 per cent (CI: 31.4%–41.7%) of Aboriginal females aged 12–16 years (Table 4.4). Again, these differences are not statistically significant.

As shown in Figure 4.3, at each age the proportion of Aboriginal males who had smoked regularly was similar to the proportion of all males as measured in the 1993 CHS.

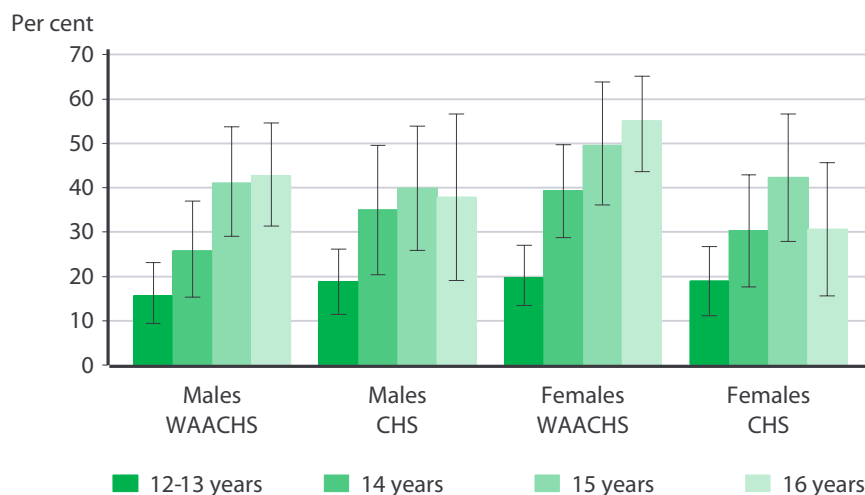
In females, the proportion in the total population who had smoked regularly peaked at 15 years (42.3 per cent; CI: 32.1%–54.1%) and declined to 30.7 per cent (CI: 20.8%–41.6%) in 16 year-olds. However, in Aboriginal females, the proportion who had smoked regularly continued to increase with age — from 49.5 per cent (CI: 36.1%–63.9%) in 15 year-olds to 55.1 per cent (CI: 43.6%–65.2%) in 16 year-olds.

The 2001 ABS National Health Survey estimated that the proportion of non-Aboriginal 18–24 year-olds who had ever smoked was 42 per cent (CI: 41%–43%)<sup>3</sup>



and the proportion of 18–24 year-old Aboriginal people who had ever smoked was 64 per cent (CI: 51%–76%).<sup>3</sup> The WAACHS estimated that the proportion of Aboriginal young people who had smoked regularly was 45.1 per cent (CI: 36.4%–54.3%) at 15 years, 48.9 per cent (CI: 40.9%–57.2%) at 16 years and 56.3 per cent (CI: 43.2%–70.3%) at 17 years of age (Table 4.6). The 1993 CHS found that smoking rates peaked in the total population at 15 years. This suggests that smoking rates peak both higher and at an older age among Aboriginal young people.

**FIGURE 4.3: YOUNG PEOPLE AGED 12–16 YEARS — PROPORTION WHO HAVE SMOKED REGULARLY, WAACHS COMPARED WITH CHS, BY SEX AND AGE**



Source: Table 4.6 and CHS data<sup>2</sup>

### SMOKING AND SCHOOL ATTENDANCE

Table 4.7 shows the proportion of young people who have smoked cigarettes regularly by age, sex and whether they were still attending school. Since very few 12–14 year-olds have left school, the effect of leaving school prior to 15 years of age on the proportion who smoked regularly cannot be reliably estimated from the survey. For males who were attending school, the proportion who had smoked regularly rose from 34.6 per cent (CI: 21.8%–47.8%) of 15 year-olds to 51.1 per cent (CI: 23.4%–83.3%) of 17 year-olds. However, for females who were attending school, the proportion who had smoked regularly decreased with age, from 45.4 per cent (CI: 29.3%–61.5%) of 15 year-olds to 33.1 per cent (CI: 11.8%–61.6%) of 17 year-olds. This suggests that school attendance may delay rather than inhibit males from starting smoking, but inhibit females from starting to smoke, although the differences were not statistically significant.

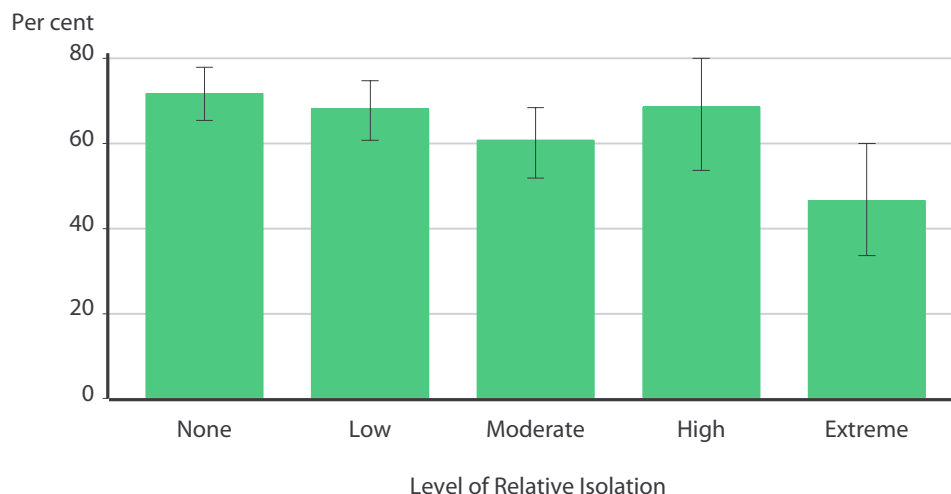
### YOUTH SMOKING AND PARENTAL SMOKING

The 1993 CHS indicated that the likelihood of regular smoking by young people was higher (Odds Ratio 3:1) when one or both parents smoked than when neither smoked.<sup>2</sup> The WAACHS found that approximately two thirds (65.8 per cent; CI: 62.1%–69.4%) of all Aboriginal young people reported that at least one of their parents were current smokers at the time of the survey. Parental smoking was significantly higher in areas of no or low relative isolation (71.8 per cent; CI: 65.4%–77.9% and 68.2 per cent; CI: 60.8%–74.8% respectively) than in areas of extreme isolation (46.6 per cent; CI: 33.7%–60.0%) (Figure 4.4).

4



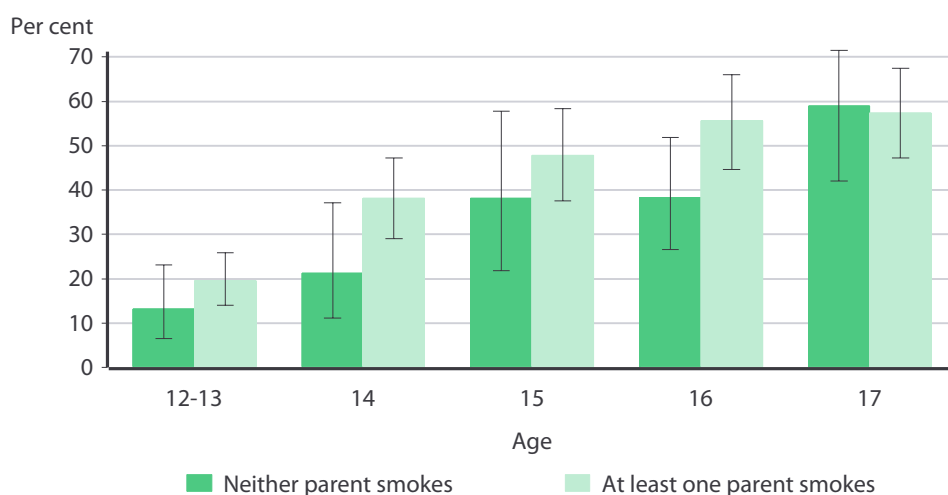
**FIGURE 4.4:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHOSE PARENTS SMOKE, BY LEVEL OF RELATIVE ISOLATION



Source: Table 4.8

The association between parental smoking and smoking in young people appeared to vary with age, sex and LORI. For instance, 38.1 per cent (CI: 29.1%–47.2%) of 14 year-olds whose parents smoke had themselves smoked regularly compared with 21.3 per cent (CI: 11.2%–37.1%) of 14 year-olds whose parents were non-smokers, although the difference was not statistically significant. In 17 year-olds, there was no difference in the proportion of young people who had smoked regularly regardless of whether their parents smoke, with 59.0 per cent (CI: 42.1%–73.7%) of young people whose parents do not smoke themselves smoking compared with 57.4 per cent (CI: 47.2%–67.5%) of young people whose parents smoke.

**FIGURE 4.5:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE SMOKED CIGARETTES REGULARLY, BY PARENTAL SMOKING



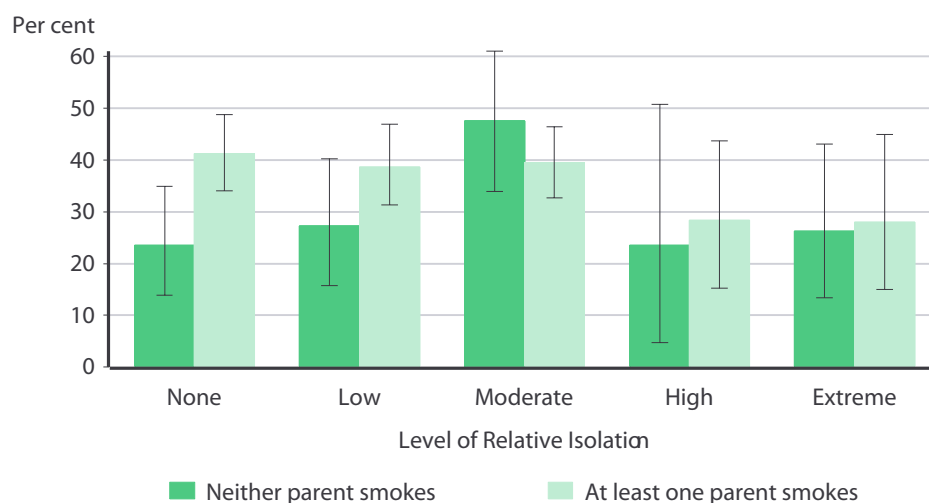
Source: Table 4.10



Figure 4.6 shows that in the Perth metropolitan area, parental smoking was associated with a large increase in the proportion of young people who had smoked regularly. In more isolated areas the association with parental smoking was weaker or nonexistent.

One possible explanation is that smoking rates may be determined by community norms as well as parental behaviour. Young people living in nuclear families (as is more common in less isolated areas<sup>1</sup>) may be more influenced by their parents, while young people in extended families with strong community networks (as is more common in areas of high or extreme relative isolation<sup>1</sup>) may be more influenced by the overall habits of the community in which they live.

**FIGURE 4.6:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE SMOKED REGULARLY, BY PARENTAL SMOKING AND LEVEL OF RELATIVE ISOLATION



Source: Table 4.9

### SMOKING AND PARENTING STYLE

The proportion of young people who had smoked cigarettes regularly tended to be higher among those who had experienced a poor parenting style (46.8 per cent; CI 36.8%–56.1%) than among those who had experienced adequate (33.5 per cent; CI: 28.4%–38.8%) or sub-optimal (34.3 per cent; CI: 29.5%–39.3%) parenting styles. These differences did not reach statistical significance (Table 4.11).

The difference in the proportion of young people who had smoked regularly by adequacy of parenting style was maintained with increasing age. However, the overall proportion of young people who had smoked regularly was higher in older young people regardless of adequacy of parenting style. At 17 years of age, 70.2 per cent (CI: 29.9%–92.5%) of young people who experienced a poor parenting style had smoked regularly, compared with 54.5 per cent (CI: 41.8%–66.9%) of those who experienced an adequate parenting style (Table 4.12).

Within each category of age and sex (except for 12 year-old females in which the proportion of smokers was very low) being allowed to go out at night *often* or *very often* was positively, but not statistically significantly, associated with having smoked regularly (Table 4.13).



## PARENTING STYLE

The manner in which parents teach and try to enforce socially acceptable behaviour in their children is believed to have a significant effect on the child's behaviour, their sense of security and their emotional wellbeing.

The WAACHS asked a series of questions about how young people perceived their interactions with their carers. Using these items, factor analysis identified three attributes associated with parenting style (See *Appendix C — Measures derived from multiple responses and scales*):

- ◆ Nurturing behaviour: smiling, praising, helping
- ◆ Harsh behaviour: hitting, or threatening to hit
- ◆ Consistent behaviour: remembering and keeping rules.

A fourth factor, permissiveness, was based on a question about being allowed to go out at night and responses varied with age. Therefore this factor was not included in the overall assessment of parenting style, but investigated independently by age and sex.

For each of the first three factors, scores that fell into the bottom 25 per cent were classified as being the least nurturing, most harsh or least consistent. As these are arbitrary cut-offs, they indicate that these parents were perceived as being less nurturing, more harsh or less consistent than the majority of carers.

These three components of parenting style were combined into an overall measure of adequacy of parenting style. Where carers were rated as not unresponsive nor inconsistent nor harsh, parenting style was considered to be adequate. Where carers were rated as harsh, and either or both un-nurturing and inconsistent then parenting style was considered to be poor. Other combinations were considered to represent a sub-optimal parenting style. About 11.2 per cent (CI: 9.3%–13.4%) of young people perceived a poor parenting style and the remainder were equally divided between sub-optimal and adequate parenting styles.

## MODELLING THE ASSOCIATION BETWEEN YOUTH SMOKING, PARENTAL SMOKING, SCHOOL ATTENDANCE AND PARENTING STYLE

A multivariate logistic regression model (see *Glossary*) was used to investigate the association between the various factors that have been found to be related to youth smoking. The model adjusted for age, sex and LORI. After adjusting for these factors, it was found that parental smoking, school attendance and parenting style were all independently associated with regular cigarette smoking in young people (Table 4.14).

**School attendance.** Aboriginal young people not attending school were found to be over one and a half times as likely to have smoked cigarettes regularly (Odds Ratio 1.63; CI: 1.06–2.49) than those who were still attending school.

**Parental smoking.** Young people who have at least one parent who smokes were almost twice as likely to have smoked regularly (Odds Ratio 1.85; CI: 1.27–2.70) than young people whose parents do not smoke.



**Parenting style.** Parenting style was most strongly associated with regular smoking. Compared with young people who experienced an adequate parenting style, young people who experienced poor parenting were two and a half times more likely to have smoked regularly (Odds Ratio 2.51; CI: 1.48–4.28).

**Permissiveness.** Young people who were allowed to go out any night they want either often or very often were over twice as likely to have smoked regularly (Odds Ratio 2.11; CI: 1.38–3.22) (Table 4.14).

## SMOKING

Smoking cigarettes causes more illness and death than any other drug. It has been estimated that life expectancy for Aboriginal men and women would increase by two to three years if tobacco related deaths were eliminated.<sup>4</sup> With smokers generally taking up the habit at an early age, effective strategies to deter young people from starting smoking could dramatically improve the overall health of Aboriginal people.

Many studies have investigated which factors are associated with young people taking up smoking. The majority of studies find a positive association with parental smoking. The risk of smoking was approximately doubled in the presence of parental smoking in each age group of 12–16 year-olds in the 1993 WA Child Health Survey where it was found that where either parents smoked the proportion of 12–16 year-olds who smoked was 41.6 per cent (CI: 33.7%–49.8%) compared with 20.2 per cent (CI: 15.5%–25.5%) among young people whose parents were non-smokers.<sup>1</sup> Several other studies have suggested that the strength of association appears to vary with racial origin, being higher for people of European descent than for African-American or for Maori adolescents.<sup>5,6</sup> It may be that the relative importance of various determinants of adolescent smoking is community specific. It is reasonable to assume that as a young person moves from a predominantly family environment to engage increasingly with peers and the larger community, the impact of parental smoking habits on behaviour decreases and the habits of peers and the larger community have a larger impact. Susceptibility to external example decreases later in adolescence, thus the earlier a child's social centre shifts away from the nuclear family, the more susceptible they will be to community influences. It may therefore be anticipated that the influence of parental smoking habits on the child's habits may well be stronger the longer they remain closely associated with their immediate family. The reverse may be anticipated in more gregarious communities, in which strategies to reduce rates of smoking in young people will require a total population approach. The influence of community attitudes on young people may be a reason why smoking is so common in 16 year-old and 17 year-old Aboriginal young people.

It has been suggested that the earlier age of starting smoking by females, in communities in which money represents a significant barrier to smoking, may be associated with a greater likelihood of females (rather than males) acquiring cigarettes through non-commercial sources such as adults who purchase cigarettes for young people or borrowing from friends.<sup>7</sup> This suggests that controlling the sale

*Continued . . . .*





**SMOKING** *(continued)*

of cigarettes is not of itself the way to combat youth smoking as young people who wish to smoke are likely to find other ways to obtain cigarettes.

These data suggest that regardless of parental smoking, factors outside the home environment are important in smoking behaviour. High rates of smoking suggest widespread acceptability of smoking within the Aboriginal population. It appears that anti-smoking messages targeted at the general population have had little impact in the Aboriginal population. Future anti-smoking activities need to be targeted at specific population groups where smoking rates remain high, such as among Aboriginal young people.

**ALCOHOL CONSUMPTION****ALCOHOL CONSUMPTION AND AGE AND SEX**

Young people who participated in the survey were asked ‘Do you drink alcohol?’ Frequency and quantity of consumption were not measured, but to assess the frequency of drinking to excess, young people who drank alcohol were asked whether they had ever vomited due to drinking too much alcohol, and if so, whether it was just once or twice in the last six months, or more than twice. Very few young people drank to excess on more than two occasions in the last six months, so for the purpose of this analysis any occurrence of alcohol-induced vomiting in the last six months was considered to indicate drinking to excess.

Overall, 27.2 per cent (CI: 24.1%–30.5%) of young people said that they drank alcohol. The proportion of young people who drank without drinking to excess (14.8 per cent; CI: 12.4%–17.5%) was similar to the proportion that drank to excess (12.4 per cent; CI: 10.2%–15.0%) (Table 4.15).

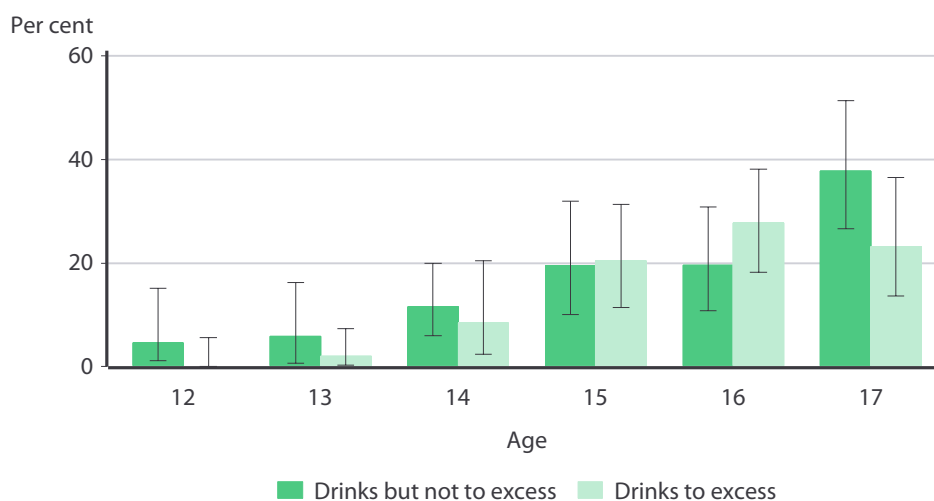
Both drinking and drinking to excess tended to increase with age in both males and females (Figures 4.7 and 4.8). From 12 to 16 years of age there was little difference between the proportion of males and females drinking alcohol. Among 17 year-olds, 61.0 per cent (CI: 45.5%–75.6%) of males were drinking alcohol compared with 43.2 per cent (CI: 31.9%–54.7%) of females (Table 4.15).

Of those young people who drank alcohol, 45.6 per cent (CI: 38.6%–52.5%) drank to excess in the six months prior to the survey. This proportion exceeded 50 per cent in 15 and 16 year-olds, but did not vary significantly or systematically by age (Table 4.16).



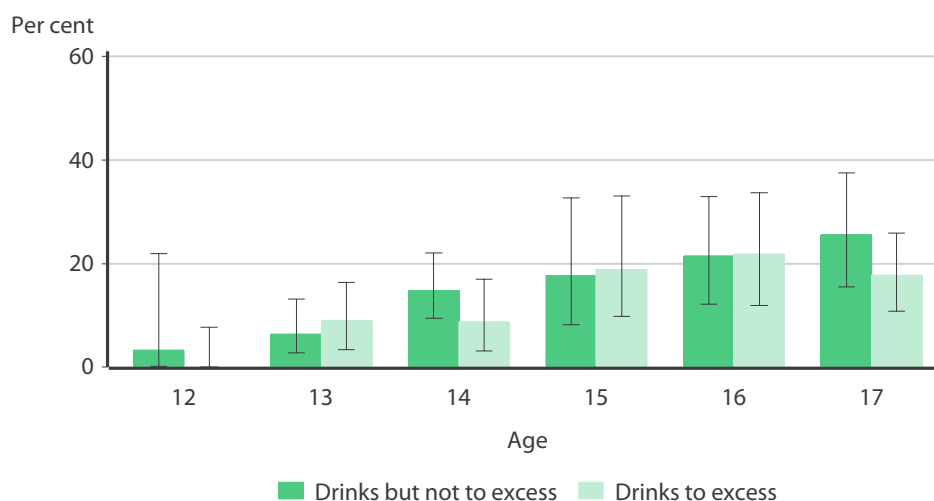


**FIGURE 4.7: MALES AGED 12–17 YEARS — ALCOHOL CONSUMPTION, BY AGE AND SEX**



Source: Table 4.15

**FIGURE 4.8: FEMALES AGED 12–17 YEARS — ALCOHOL CONSUMPTION, BY AGE AND SEX**



Source: Table 4.15

### ALCOHOL CONSUMPTION AND LEVEL OF RELATIVE ISOLATION

In areas of high or extreme isolation the proportion of Aboriginal young people who drank alcohol to excess was significantly lower than in young people living in less isolated areas (4.1 per cent; CI: 1.5%–10.2%, compared with 14.5 per cent; CI: 11.9%–17.5%) (Table 4.17). Similarly the proportion of young people who drank alcohol but not to excess was lower in areas of high or extreme relative isolation (5.5 per cent; CI: 2.6%–10.5%) than in areas of none to moderate relative isolation (17.2 per cent; CI: 14.4%–20.4%) (Table 4.17).

Initiation of both drinking and drinking to excess occurs at older ages in areas of high and extreme isolation. At 16 and 17 years of age, the proportion of young people drinking alcohol remains well below that in less isolated areas (Table 4.17).



## ALCOHOL CONSUMPTION AND SCHOOL ATTENDANCE

Since school attendance and alcohol consumption were both strongly associated with age and with extreme isolation, multivariate logistic regression analyses were run to adjust for these factors. These models found firstly that school attendance did not have any effect on whether young people drank alcohol (Odds Ratio 0.95; CI: 0.62–1.45) (Table 4.19) and secondly that the likelihood of having drunk to excess was higher in young people no longer attending school, although this was not statistically significant (Odds Ratio 1.52; CI: 0.94–2.47) (Table 4.20).

## COMPARISON WITH OTHER SURVEYS

The 1993 WA Child Health Survey asked 12–16 year-olds ‘how many times have you had one or more drinks of beer, wine (including coolers) or spirits in your lifetime?’ Four response options were available: Never, 1–2 times, 3–9 times, and 10 or more times. While comparisons have been made with this survey by assuming that *never* in the CHS equated with answering no to drinking alcohol in the WAACHS, it must be recognised that the questions in the two surveys are different. The WAACHS data relate to current drinking while the CHS data relates to alcohol consumption over a lifetime. This may result in a bias in favour of lower estimates in the WAACHS compared with the CHS.

The 1993 CHS found that 17.5 per cent (CI: 13.5%–22.1%) of 12–14 year-olds and 48.5 per cent (CI: 41.6%–55.6%) of 15–16 year-olds drank alcohol.<sup>2</sup> These proportions were somewhat, though not statistically significantly, higher than those observed in the WAACHS where 12.3 per cent (CI: 9.2%–15.8%) of 12–14 year-olds and 41.7 per cent (CI: 35.8%–47.8%) of 15–16 year-olds drank alcohol. These differences may be due to differences in the wording of the questions (Table 4.21).

The question concerning excess drinking was the same in both surveys and yielded very similar figures. In the CHS, excess drinking in the last 6 months was reported by 4.9 per cent (CI: 3.1%–7.1%) of 12–14 year-olds compared with 4.6 per cent (CI: 2.8%–7.2%) of 12–14 year-olds in the WAACHS and by 25.9 per cent (CI: 19.6%–32.8%) of 15–16 year-olds in the CHS compared with 22.2 per cent of 15–16 year-olds in the WAACHS (CI: 17.3%–27.8%) (Table 4.22).

## ALCOHOL USE

Early onset of regular drinking is associated with increased risk of alcohol abuse as adults and a range of social and health problems. Alcohol plays a significant role in road traffic and other injuries, domestic violence, obesity, increased blood pressure, cancers, mental health disorders and suicide. It is a contributing factor in many divorces and in many violent crimes. Excessive alcohol consumption by pregnant women can result in intellectual disability, congenital abnormalities and low birth weight in their children.<sup>8,9</sup> Since more than one in ten Aboriginal children are born to mothers aged 17 years or less,<sup>1</sup> alcohol consumption in young people can significantly impact on the health of future generations.

*Continued . . .*



#### ALCOHOL USE (continued)

The proportion of Aboriginal people who drink alcohol is lower than that of the general population, however misuse of alcohol among Aboriginal people who do drink is a major health concern.<sup>8,9</sup>

The Drug and Alcohol Office has conducted surveys of alcohol and drug use by WA school students aged 12–17 years on a triennial basis since 1984. The WA component of the 2002 Australian School Students Alcohol and Drug Survey (ASSAD) showed that of all 12–17 year-old students, 33 per cent had drunk alcohol in the week preceding the survey, 49 per cent had drunk alcohol in the month preceding the survey and 73 per cent had drunk alcohol in the year preceding the survey\*. Frequency of drinking increased with age — 28 per cent of 12 year-old school students had drunk alcohol in the last month compared with 69 per cent of 17 year-old school students — and less female students generally drank alcohol than males. At-risk drinking was defined as more than six drinks for males and more than four drinks for females on any one day. Of students who drank alcohol in the previous week, 25 per cent of females and 22 per cent of males met this definition. This proportion increased with age from about 3 per cent of 12 year-old drinkers to 44 per cent of 17 year-old drinkers.<sup>10,11</sup>

Differences in the wording of the questions between the WAACHS and the 1993 Child Health Survey make direct comparisons difficult. However, whether drinking alcohol in the WAACHS survey is taken to mean drinking in the last week, last month or last year, a smaller proportion of Aboriginal young people aged 12–17 years were found to drink alcohol. This is particularly marked in 12–15 year-olds where the proportion reporting that they drank alcohol is consistently below the proportion of school students who drank alcohol in the last week in the ASSAD, as well as the proportion of young people who reported drinking in the 1993 CHS. In each survey, the highest ratio of female to male drinkers was found in 13 year-olds and 14 year-olds. Unfortunately, the definitions of excessive drinking are too different, both in time period (last 6 months compared with last week) and actions (vomiting compared with exceeding a certain number of drinks) for direct comparison to be made. However, each survey suggested that levels of excessive drinking are high among young people.

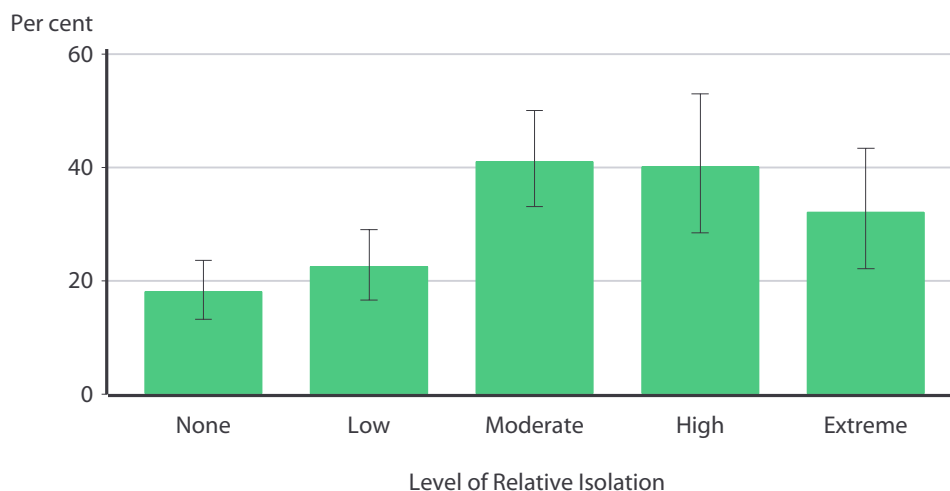
\* *Confidence intervals were not reported for the ASSAD survey. However, the authors of the ASSAD report note that based on the sample size, all prevalence estimates from the survey are within 7 per cent of the true population values.*

#### HOUSEHOLDS WITH ALCOHOL PROBLEMS

In order to assess the exposure of young people to problems that alcohol can cause in the home, they were asked ‘Does alcohol cause problems at your house?’

Alcohol was perceived to cause a problem in the households of 27.5 per cent (CI: 24.3%–30.8%) of young people. Household alcohol problems were more common in areas of moderate to extreme isolation than in less isolated areas. There was a tendency for the proportion of females reporting household alcohol problems to decrease with age, but this was not the case for males (Table 4.23).



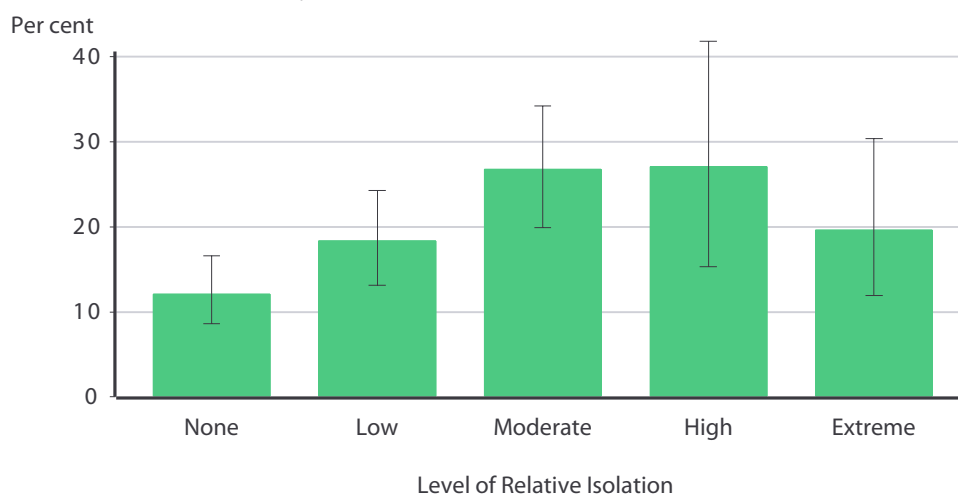
**FIGURE 4.9:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION REPORTING ALCOHOL PROBLEMS AT HOME, BY LEVEL OF RELATIVE ISOLATION

Source: Table 4.24

There were no significant or consistent associations between alcohol problems in the household and level of alcohol consumption by young people (Table 4.25).

## ALCOHOL AND ROAD SAFETY

Almost one in five young people (18.9 per cent; CI: 16.2%–21.9%) had travelled in a car driven by a person who was drunk in the six months prior to the survey (Table 4.26). The proportion of young people who have been in a car with a drunk driver varied by LORI, being lowest in the Perth metropolitan area (Figure 4.10).

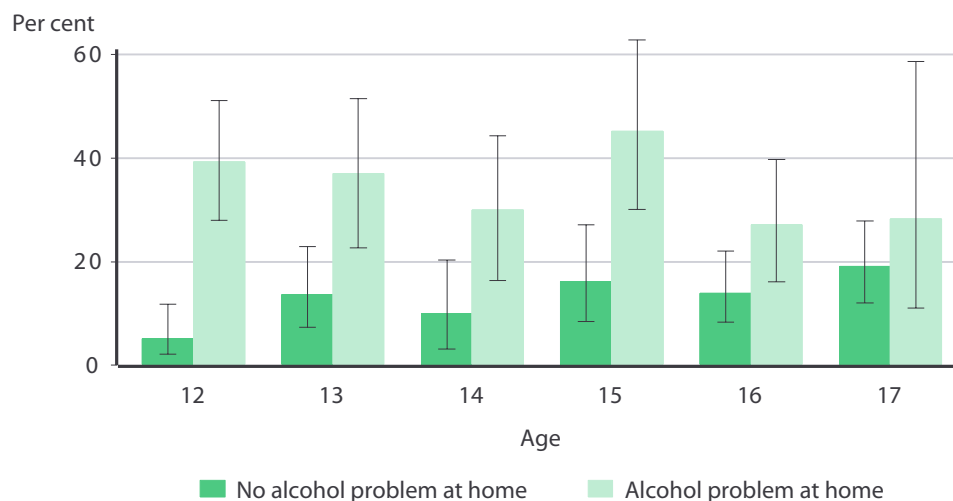
**FIGURE 4.10:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION HAVING BEEN IN A CAR WITH DRUNK DRIVER, BY LEVEL OF RELATIVE ISOLATION

Source: Table 4.26

The proportion of young people who had been a car when the driver was drunk was higher among young people from households with alcohol problems. The association between exposure to drunk driving and household alcohol problems was strongest for young people below the age of 16 years but was still evident for both 16 year-olds and 17 year-olds (Figure 4.11).



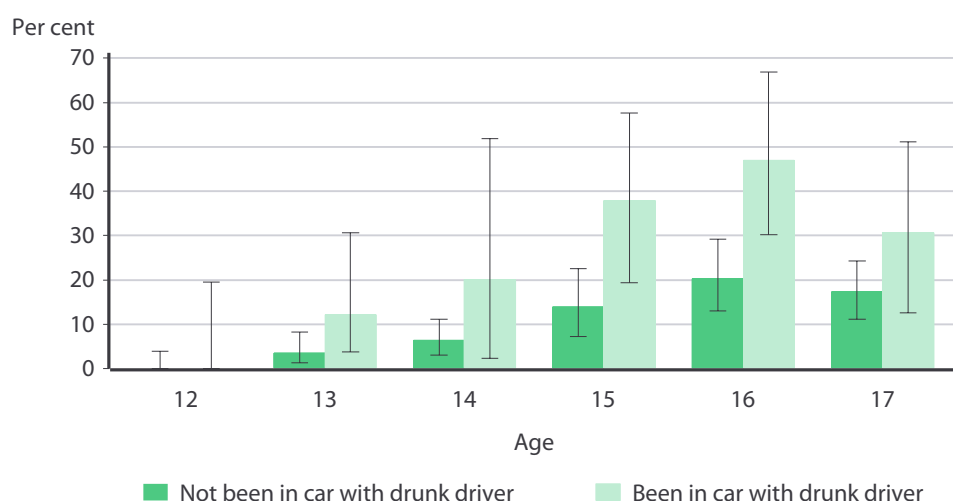
**FIGURE 4.11:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION HAVING BEEN IN A CAR WITH A DRUNK DRIVER, BY ALCOHOL PROBLEMS IN THE HOME AND AGE



Source: Table 4.27

Injuries and fatalities involving young people who were driving while drunk are a major concern for families and the community. The survey did not ask for the identity or age of the drunk driver, nor the circumstances in which the young person was in the car. Being in a car with a drunk driver was associated with both drinking and drinking to excess in the young person, but reached statistical significance only for 16 year-olds drinking to excess (Figure 4.12).

**FIGURE 4.12:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE DRUNK TO EXCESS, BY AGE AND WHETHER BEEN A PASSENGER IN A CAR WHEN THE DRIVER WAS DRUNK



Source: Table 4.28

Of 16 year-olds who had been in a car with a drunk driver, 47.0 per cent (CI: 30.2%–66.9%) had themselves drunk to excess in the last six months, compared with 20.2 per cent (CI: 13.0%–29.2%) of 16 year-olds who had not been in a car with a drunk driver.



## ALCOHOL AND ROAD SAFETY

These data show that a significant proportion of Aboriginal young people have been exposed to the dangers of being in a vehicle with a drunk driver, particularly in areas of moderate and high relative isolation. These areas contain smaller country towns well outside the Perth metropolitan area where there are often larger distances to travel and a smaller police presence. For young people who have no independent means of travel, it is not clear whether they have been obliged to ride in a vehicle with a drunk driver or have chosen to do so voluntarily. The survey did not collect information about the details of these experiences. However it is clear that a significant proportion of Aboriginal young people are being exposed to the unnecessary risk of travelling in a vehicle with a drunk driver. Given the difficulties of policing drink driving in lightly populated areas with large road distances to travel, it seems important to address this issue through promotion activities that not only address the issue of drivers driving drunk, but encourage people of all ages to choose not to travel in a vehicle with a drunk driver wherever possible.

## ALCOHOL USE AND PARENTING STYLE

There was almost no association between the risk of excessive drinking and either adequacy of parenting style, or any of its component factors. There was a slight tendency for those experiencing a poor parenting style to drink and to drink to excess, but differences were small and not statistically significant (Table 4.29).

Both alcohol use and parents' attitude to allowing young people to go out any night they want vary with age. Using a multivariate logistic regression model that adjusted for age as a three-factor variable (12–14 years, 15–16 years and 17 years) young people whose carers often or very often allowed them to go out any night they want were almost twice (Odds Ratio 1.86; CI: 1.27–2.74) as likely to have drunk to excess (Table 4.30).

## ILLEGAL DRUGS

Young people were asked how often they had used marijuana (also known as gunjah), inhalants (glue, paint, petrol), speed/amphetamines, heroin, trips or mushies. Due to the sensitive nature of these questions, young people were asked to complete the self-report questionnaire and to return it in the confidential envelope supplied. Nevertheless, reluctance to admit to illegal drug use, or to submit the self-report if illegal drugs were used, may be responsible for the low level of reported illegal substance use other than marijuana. Marijuana is probably the most commonly used illegal drug and its recreational use tends to be more tolerated by the community than other illegal drugs. Therefore, this section is confined to reporting responses concerning marijuana use.



## MARIJUANA

Marijuana may be used to alleviate depression or anxiety, for relaxation, socialising, curiosity or as a result of peer pressure. However, as with cigarette smoking, marijuana has a number of negative effects. It can cause depression, lack of motivation and decreases alertness, making it dangerous to drive a vehicle or operate machinery. Smoking marijuana can cause lung cancer and emphysema.

### MARIJUANA USE AND AGE, SEX AND SCHOOL ATTENDANCE

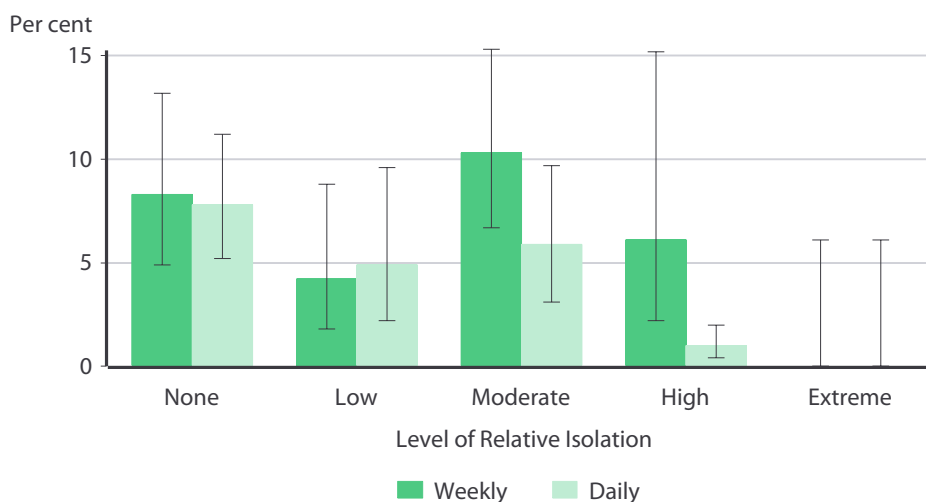
At the time of the survey, 29.7 per cent (CI: 26.3%–33.0%) of Aboriginal young people had used marijuana at some time in their lives. This 29.7 per cent comprised 10.1 per cent (CI: 8.1%–12.4%) who had not used marijuana in the 12 months prior to the survey, 7.7 per cent (CI: 6.0%–9.5%) who used it less than once a month, 6.6 per cent (CI: 4.9%–8.8%) who used marijuana weekly and 5.2 per cent (CI: 3.9%–6.9%) who were daily users (Table 4.31). Marijuana use increased with age, and this was more marked in males than in females (Table 4.31). Among 17 year-olds, 44.6 per cent (CI: 32.0%–59.4%) of males used marijuana at least weekly compared with 21.1 per cent (CI: 12.2%–32.0%) of females (Tables 4.32).

Adjusted for age, those who had left school were significantly more likely to have tried marijuana than those who remained at school (Odds Ratio 1.59; CI: 1.04–2.43) (Table 4.33) and significantly more likely to use marijuana at least weekly (Odds Ratio 2.21; CI: 1.25–3.91) (Table 4.34).

### MARIJUANA USE AND LEVEL OF RELATIVE ISOLATION

Marijuana use varied with LORI (Figure 4.13), perhaps as a result of availability. In areas of extreme isolation, approximately one in eight young people (12.1 per cent; CI: 4.7%–11.9%) have used marijuana compared with one in three young people (33.6 per cent; CI: 27.7%–40.3%) in the Perth metropolitan area (Table 4.35).

**FIGURE 4.13:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE USED MARIJUANA WEEKLY OR DAILY, BY LEVEL OF RELATIVE ISOLATION



Source: Table 4.35



Marijuana was used daily by 7.8 per cent (CI: 5.2%–11.2%) of young people living in the Perth metropolitan area. In areas of extreme isolation no young people were estimated to have been using marijuana daily. Weekly use of marijuana by young people was highest in areas of moderate isolation (10.3 per cent; CI: 6.7%–15.3%). Again, in areas of extreme isolation no young people were estimated to have used marijuana on a weekly basis (Figure 4.13).

## COMPARISON WITH OTHER SURVEYS

The overall proportions of young people using marijuana estimated from the WAACHS were very similar to those of all Western Australian 12–17 year-old school students in the 2002 Australian School Students Alcohol and Drug Survey (ASSAD). The ASSAD survey found that 31 per cent of students had used marijuana at some point in their life, and 9 per cent of students had used marijuana in the previous week.<sup>12</sup> This compares with 29.7 per cent (CI: 26.4%–33.0%) of Aboriginal young people who have used marijuana and 11.9 per cent (CI: 9.7%–14.4%) who used marijuana in the week prior to the WAACHS. The ASSAD survey also found that between 1996 and 2002 the proportion of 12–17 year-old school students who have used marijuana has declined, from 40 per cent in 1996 to 31 per cent in 2002.

A similar question, ‘How often have you used marijuana (mull, grass) for non-medical purposes’, was asked of 12–16 year-olds in the 1993 Child Health Survey. In that survey 18.5 per cent (CI: 13.5%–23.5%) of males and 16.6 per cent (CI: 12.0%–21.2%) of females had used marijuana at some time in their lives. These proportions were lower than for 12–16 year-olds in the WAACHS, in which 23.5 per cent (CI: 19.2%–28.4%) of young Aboriginal males and 25.1 per cent (CI: 20.5%–30.3%) of young Aboriginal females have used marijuana (Table 4.36). This difference may be a result of the different times at which the two surveys were conducted, given that the ASSAD surveys show that the proportion of young people using marijuana can change rapidly over time.

## SCHOOL CULTURE

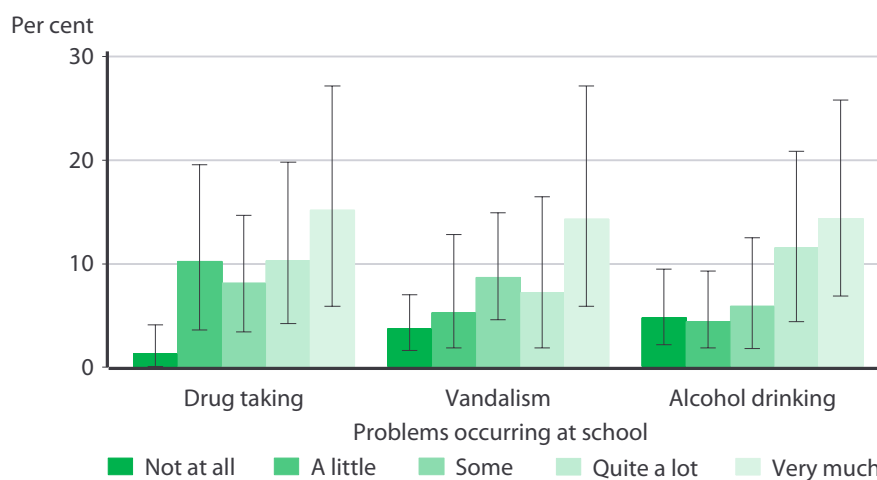
A higher proportion of young people who reported that other students at their school used drugs before and after school used marijuana themselves. Use of marijuana was also positively associated with reports of vandalism in the school and alcohol consumption at school (Figure 4.14).

Marijuana use was not associated with fighting, bullying and stealing in school. A smaller proportion of young people who said that they were doing okay at school used marijuana compared with those who said that they were not doing okay at school (Table 4.37). These observations are similar to those found in the 1993 WA CHS.





**FIGURE 4.14:** YOUNG PEOPLE AGED 12–17 YEARS (a) — PROPORTION WHO HAVE USED MARIJUANA WEEKLY OR MORE OFTEN, BY EXTENT THAT SELECTED PROBLEM BEHAVIOURS OCCUR AT THEIR SCHOOL



(a) Excludes 26.6 per cent of young people not attending school

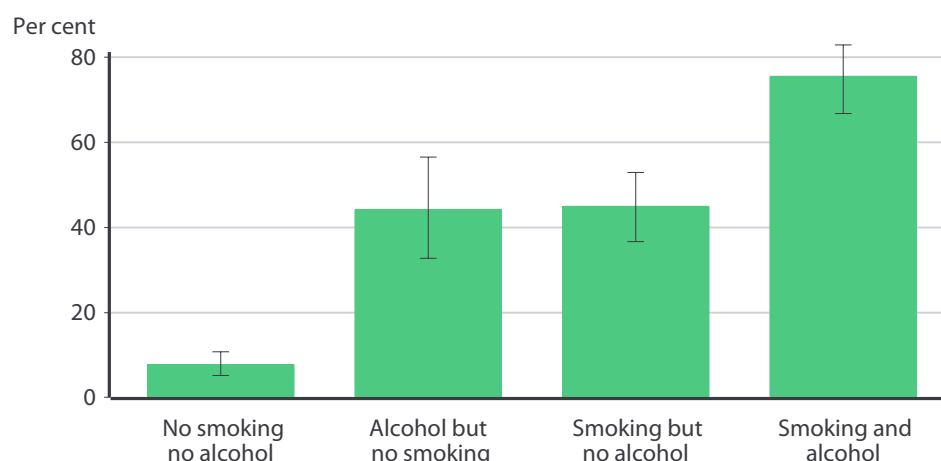
Source: Tables 4.38, 4.39, 4.40

4

### COMBINED USE OF MARIJUANA, CIGARETTE SMOKING AND ALCOHOL

The proportion of young people who used marijuana was significantly higher if they also drank alcohol or smoked cigarettes. Over three quarters (75.5 per cent; CI: 66.8%–82.4%) of young people who both smoked and drank alcohol also used marijuana compared with 7.7 per cent (CI: 5.1%–10.7%) of young people who used neither (Table 4.41).

**FIGURE 4.15:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE USED MARIJUANA, BY WHETHER THEY ALSO SMOKED CIGARETTES OR DRANK ALCOHOL



Source: Table 4.41

Adjusting for age and sex using multivariate logistic regression analysis, it was confirmed that cigarette smoking was strongly associated both with alcohol use and with marijuana use, particularly with frequent marijuana use (Table 4.42).

**Drank alcohol but not to excess.** Young people who drank alcohol but not to excess were over four times more likely (Odds Ratio 4.37; CI: 2.65–7.21) to smoke regularly



than young people who did not drink alcohol.

**Drank alcohol to excess.** Young people who drank alcohol to excess were four and a half times more likely (Odds Ratio 4.66; CI: 2.33–9.34) to smoke regularly than those who did not drink.

**Used marijuana weekly or more often.** Young people who were frequent users of marijuana were over 11 times more likely (Odds Ratio 11.1; CI: 6.00–20.6) to smoke than those who did not use marijuana.

## PARENTAL USE OF DRUGS

Less than one in ten young people (8.2 per cent; CI: 6.3%–10.5%) reported that their parents used drugs other than tobacco or alcohol (Table 4.43). No questions were asked about the type of drugs used. A higher proportion of young people living in areas of low or moderate isolation reported parental drug use compared with young people living in other areas (Table 4.43). There was no association between parental drug use and the age of the young person.

The proportion of young people who used marijuana weekly or more often was significantly higher among those whose parents use drugs (24.3 per cent; CI: 14.3%–35.9%) than among those whose parents did not use drugs (10.8 per cent; CI: 8.5%–13.2%) (Table 4.44). Similarly, the proportion of young people who both smoked cigarettes regularly and used marijuana was significantly higher among those whose parents used drugs (Table 4.45).

The proportion of young people who did not drink alcohol was significantly higher among young people whose parents did not use drugs (74.4 per cent; CI: 71.2%–77.6%) than it was among those whose parents used drugs (54.1 per cent; CI: 41.8%–66.9%). Among the young people who did drink alcohol, the tendency to drink to excess was higher among young people whose parents used drugs (Table 4.46).

## USE OF MARIJUANA BY YOUNG PEOPLE

Marijuana is the most widely used illicit drug in Australia. In 2001, 12.9 per cent of Australians reported that they had used marijuana in the previous 12 months.<sup>13</sup> The drug is widely considered to be as harmful as tobacco and has significant negative consequences, both on the user and the community.

### Physical effects of marijuana use

The physical effects of marijuana use are well known, and depend largely on how the substance is used (eaten or smoked), how much is used, whether other drugs are used at the time, and what is happening around the person at the time.

Marijuana is often used in combination with tobacco. With both being high in tar and other chemicals, people are inhaling damaging chemicals from two sources. In a study from the British Lung Foundation, it was found that smoking pure marijuana was as harmful as smoking tobacco.<sup>14</sup> The study found that three marijuana joints a day caused the same damage to the lining of the airways as 20 cigarettes.

*Continued . . . .*



#### USE OF MARIJUANA BY YOUNG PEOPLE (*continued*)

People who use large amounts of the drug may experience confusion, forgetfulness, anxiety, hallucinations, delusions, agitation and, in rare cases, paranoia. People susceptible to mental illnesses such as schizophrenia are at risk of bringing on attacks, or exacerbating their condition.

In 2001, a study conducted by the Early Psychosis Prevention and Intervention Centre (EPPIC) and Melbourne University found that 'over 40 per cent of young people who present with first episode psychosis are using cannabis on a weekly basis.' People aged 15–29 years using marijuana were found to have 'higher ratings on measures of psychotic symptoms including depression, suicidality and suspiciousness.'<sup>15</sup>

#### Societal and environmental effects of marijuana use

The negative effects of marijuana are particularly apparent in isolated Aboriginal communities. Clough *et al* expressed concern about the rising use of cannabis in north-east Arnhem Land in the Northern Territory brought about, in principal, by the expansion of supply links. Concern was also expressed about the social effects of marijuana smoking in the community, namely 'increased family violence, drug-alcohol psychosis, self-harm and suicide and community disruption.'<sup>18</sup>

#### Why people use marijuana

People use drugs for many reasons including pleasure, relaxation, peer pressure, boredom, and loneliness. Aboriginal young people who have little to occupy themselves can also feel caught between the pressures of Aboriginal culture and western influences. 'Community stress, boredom, frustration and peer pressure can draw people into drug using lifestyles.'<sup>16</sup>

Longitudinal studies have investigated the antecedents of marijuana use, particularly daily use which has the potential for most harm. A study following almost 1,700 young Australians for 3 years from age 14–15 years, found that daily use was infrequent, but was more frequent in males (3.7 per cent) in whom availability and use by their peers were the strongest predictors. Few females used marijuana daily (1.7 per cent) and in these females it was predicted by excessive alcohol consumption and delinquent behaviour. In all young people, daily use was predicted by cigarette smoking and by prior occasional marijuana use.<sup>19</sup> This is consistent with longitudinal studies demonstrating that there is a sequence in the initiation of drug use, from legal drugs (alcohol and tobacco), through marijuana to hard drugs such as cocaine and heroin. Almost all young people who use marijuana regularly have first used tobacco and alcohol regularly. Similarly almost all who use harder illicit drugs have first used marijuana. Progression along this sequence is predicted by an earlier age of initiation and greater frequency of use of earlier drugs in the sequence. Thus delaying initiation of use of earlier drugs in the sequence, namely alcohol and tobacco, may constitute the best public health policy for reducing involvement in more serious forms of drug use.<sup>20</sup>

*Continued . . .*



## USE OF MARIJUANA BY YOUNG PEOPLE (continued)

### The National Drug Strategy

The National Drug Strategy<sup>21</sup> has adopted the principle of harm minimisation in its aim to improve the health, social and economic outcomes for individuals and the community.

While not condoning drug use, harm minimisation refers to policies and programs aimed at reducing drug-related harm and encompasses a wide range of approaches, including strategies that are abstinence-oriented. The focus of the harm minimization strategy is on both legal and illicit drugs and includes preventing harm and reducing actual harm. This approach is consistent with a comprehensive approach to drug-related harm that involves balancing demand reduction, supply reduction and harm reduction.

In 2003 a complementary action plan specifically for Aboriginal and Torres Strait Islander Peoples was launched. The action plan was structured around six key result areas, with objectives ‘based on general activities for each area, control of supply, management of demand, reduction of harm, early intervention and treatment.’<sup>21</sup> The plan anticipates that to ‘achieve change, action will be required across a range of sectors and at all levels of government, led by and in partnership with Aboriginal and Torres Strait Islander individuals, families, communities and organisations.’<sup>21</sup>

## PHYSICAL ACTIVITY

The *National Physical Activity Guidelines for Australians*<sup>13</sup> makes recommendations for minimum levels of physical exercise to be undertaken by adults and children. The guidelines suggest a minimum of 30 minutes of moderate activity (such as brisk walking, dancing or swimming) on three to four days per week.

In addition to the recommended minimum, the guidelines also suggest that children and young people under the age of 18 years should routinely do at least 30 minutes of vigorous physical activity on three to four days per week. Vigorous activities include sports such as football and basketball, and fitness activities like jogging, fast cycling, aerobics and circuit training. The recommendations for vigorous activity are also extended to those adults who seek levels of health and fitness over and above those achievable via the minimum recommendation.

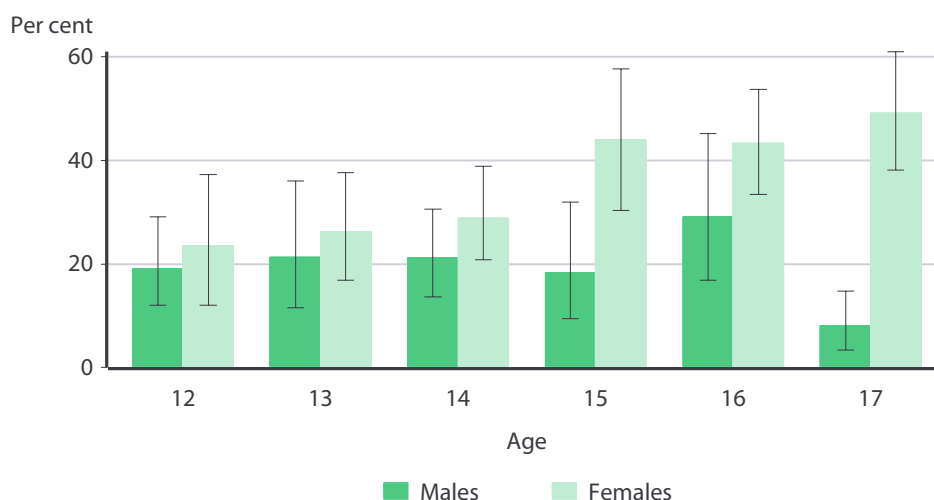
### STRENUOUS EXERCISE AND AGE AND SEX

Young people aged 12–17 years were asked how often in the last 7 days had they exercised or played sport or games enough to make themselves sweat or breathe hard. The term *strenuous exercise* is used throughout this chapter to refer to this level of physical exertion. Available responses to the question were: ‘daily’, ‘three or more times a week’, ‘once a week’ or ‘none’. More than one quarter (27.6 per cent; CI: 24.6%–30.7%) of young people had not exercised in the seven days prior to the survey (Table 4.47).



Around one in five males (19.9 per cent; CI: 15.8%–24.2%) and more than one in three females (35.6 per cent; CI: 31.1%–40.2%) had not done strenuous exercise in the seven days prior to the survey (Table 4.47). There was a tendency for a higher proportion of females not to have done strenuous exercise in the previous week at every age, compared with males, but the difference was statistically significant only for 17 year-olds. While 49.2 per cent (CI: 38.1%–60.7%) of females aged 17 years had not done strenuous exercise in the week prior to the survey, the proportion of 17 year-old males who had not done any strenuous exercise in the week prior to the survey was a substantially lower 8.1 per cent ((CI: 3.4%–14.7%) (Figure 4.16).

**FIGURE 4.16:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO DID NOT EXERCISE STRENUOUSLY IN THE WEEK PRIOR TO THE SURVEY, BY AGE AND SEX

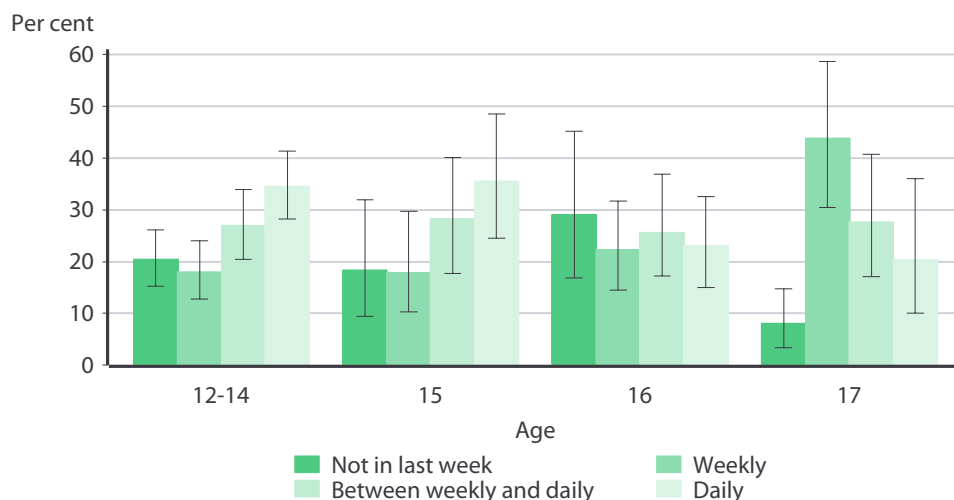


Source: Table 4.47

Although most of the estimates do not show statistically significant differences, the different overall pattern of exercise between young Aboriginal males and females is shown in Figures 4.17 and 4.18. Females seem to decrease their overall involvement in strenuous exercise from age 15 years onwards, whereas males appear to remain engaged in strenuous exercise, merely altering the balance toward weekly sessions in the later years.

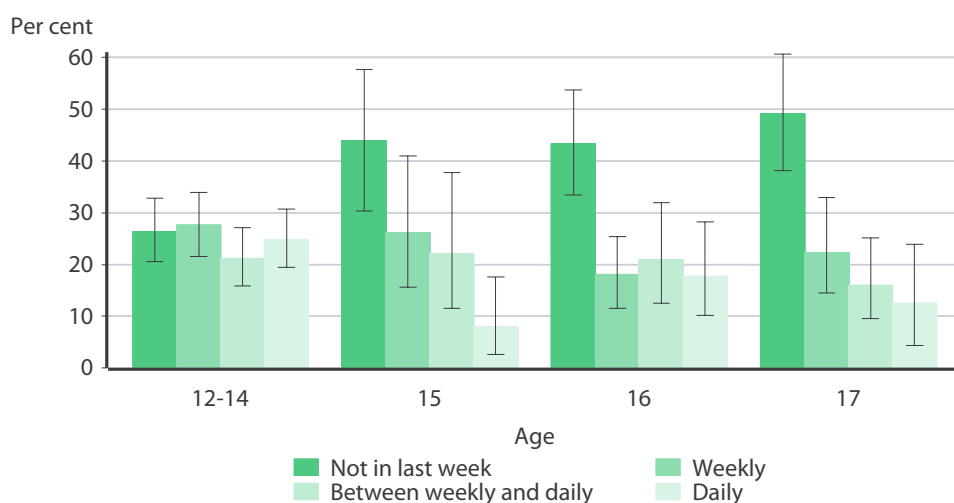


**FIGURE 4.17: MALES AGED 12–17 YEARS — FREQUENCY OF STRENUOUS EXERCISE, BY SEX AND AGE**



Source: Table 4.48

**FIGURE 4.18: FEMALES AGED 12–17 YEARS — FREQUENCY OF STRENUOUS EXERCISE, BY SEX AND AGE**



Source: Table 4.48

### COMPARISON WITH OTHER SURVEYS

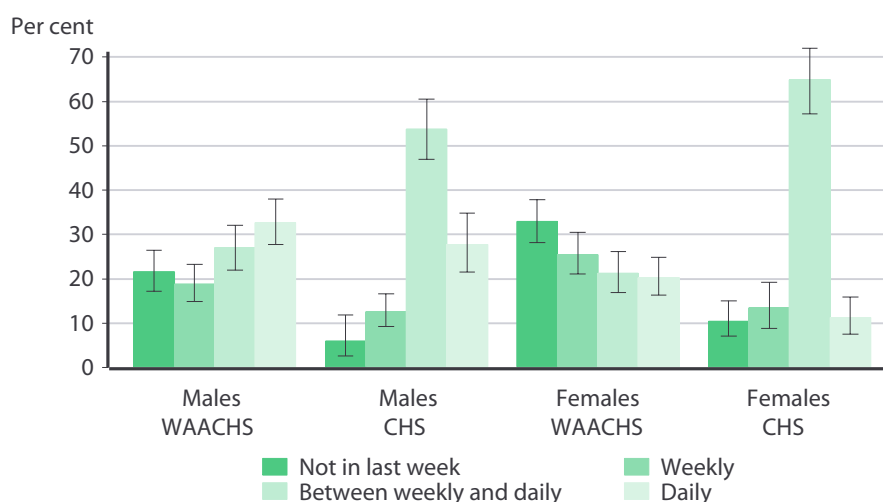
Comparable questions on physical activity were asked in the 1993 CHS, although this survey only included young people aged 12–16 years. The 1993 CHS found that 8.3 per cent (CI: 5.6%–11.5%) of 12–16 year-olds in the general population had not exercised strenuously in the previous week. This was significantly lower than the proportion of Aboriginal young people in the WAACHS aged 12–16 years (27.1 per cent; CI: 23.9%–30.5%) who had not exercised strenuously in the week prior to the survey (Table 4.50). This means that a significantly higher proportion of Aboriginal young people aged 12–16 years are at risk of missing out on the potential health benefits of meeting the recommendations of the *National Physical Activity Guidelines for Australians*.<sup>22</sup>



One third (33.0 per cent; CI: 28.2%–37.9%) of 12–16 year-old Aboriginal females had not exercised strenuously in the last week, substantially higher than the 10.4 per cent (CI: 7.1%–15.8%) of 12–16 year-old females found in the 1993 CHS (Table 4.49). One fifth (21.6 per cent; CI: 17.2%–26.9%) of 12–16 year-old Aboriginal males had not exercised strenuously in the last week, compared with a much lower 6.0 per cent (CI: 2.7%–11.0%) of 12–16 year-old males found in the 1993 CHS (Tables 4.49 and 4.50).

Conversely, a higher proportion of young Aboriginal females engaged in daily strenuous exercise than did females in the general population. One in five (20.2 per cent; CI: 16.3%–24.8%) 12–16 year-old Aboriginal females engaged in daily strenuous exercise compared with 11.3 per cent (CI: 7.5%–15.9%) of females aged 12–16 years in the general population. There was no statistically significant difference found between Aboriginal males and males in the general population, although the data are suggestive of a similar trend (Figure 4.19).

**FIGURE 4.19: YOUNG PEOPLE AGED 12–16 YEARS — FREQUENCY OF STRENUOUS EXERCISE, COMPARISON OF TWO SURVEYS**

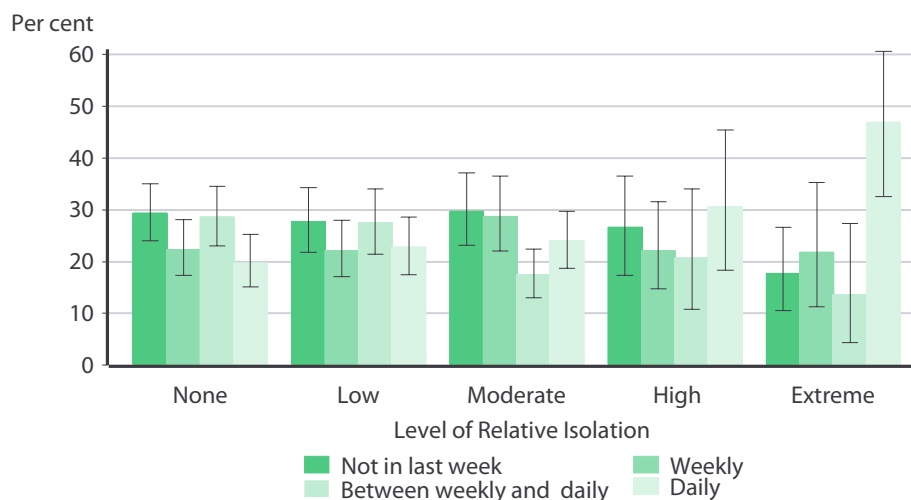


Source: Tables 4.49 and 4.50

### FREQUENCY OF STRENUOUS EXERCISE AND LEVEL OF RELATIVE ISOLATION

There were few statistically significant or systematic differences in the distribution of frequency of strenuous exercise by LORI (Figure 4.20). The exception was the proportion of young people exercising daily, which increased significantly with increasing isolation. In areas of extreme isolation, almost half of all 12–17 year-olds (46.9 per cent; CI: 32.6%–60.4%) exercised strenuously daily, a significantly greater proportion than was observed in areas of no isolation (19.7 per cent; CI: 15.1%–25.3%), low isolation (22.8 per cent; CI: 17.5%–28.6%) or moderate isolation (24.0 per cent; CI: 18.7%–29.7%).



**FIGURE 4.20: YOUNG PEOPLE AGED 12–17 YEARS — FREQUENCY OF STRENUOUS EXERCISE, BY LEVEL OF RELATIVE ISOLATION**

Source: Table 4.51

## STRENUOUS EXERCISE AND SCHOOL ATTENDANCE

In each age group there was a tendency for a higher proportion of young people to have exercised strenuously in the seven days prior to the survey if they were still attending school. The difference reached statistical significance for 16 year-olds of whom 78.2 per cent (CI: 60.8%–89.9%) had exercised strenuously if they attended school compared with 51.2 per cent (CI: 41.4%–60.3%) of those who no longer attended school (Table 4.52).

## ORGANISED SPORT

Young people aged 12–17 years were asked whether they had taken part in any organised sport in the past 12 months, not counting physical education classes at school. In the previous 12 months, an estimated 62.9 per cent (CI: 59.6%–66.2%) of Aboriginal young people participated in organised sports (Table 4.53). The proportion of 12–16 year-olds was 64.3 per cent (CI: 60.6%–67.8%), which was comparable to the proportion of 12–16 year-olds in the general population participating in organised sport outside the school as found in the 1993 CHS (68.9 per cent; CI: 64.9%–72.9%).

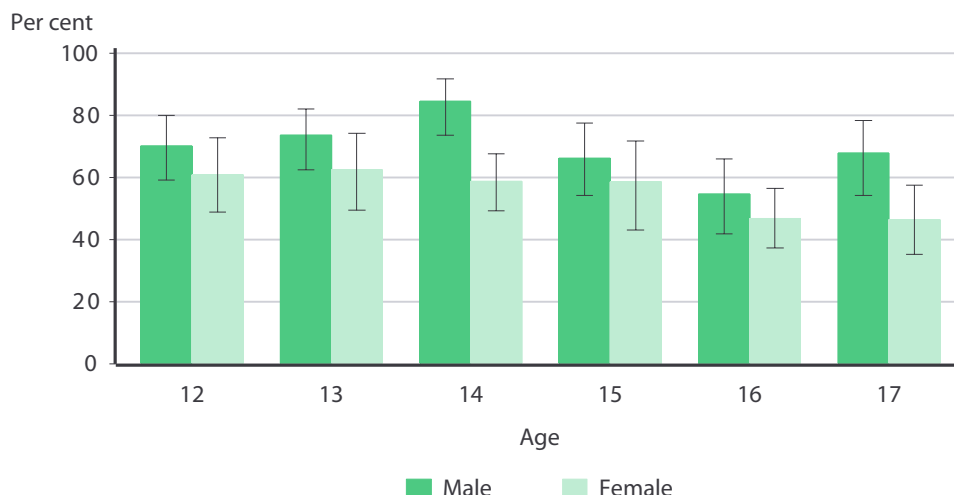
A higher proportion of Aboriginal males participated in organised sport (69.8 per cent; CI: 65.3%–74.2%) than females (55.8 per cent; CI: 51.1%–60.3%). As shown in Figure 4.21 this trend is apparent in all age groups, reaching statistical significance for 14 year-olds and 17 year-olds.

Organised sport outside of school is often seasonal and may incur expenses such as fees, equipment and travel costs that prohibit some young people from participating.





**FIGURE 4.21:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE PARTICIPATED IN ORGANISED SPORT IN THE LAST TWELVE MONTHS, BY AGE AND SEX



Source: Table 4.53

4

#### ORGANISED SPORT AND STRENUOUS EXERCISE

Strenuous exercise in the week prior to the survey was associated with participation in organised sport in the last year. Of those who participated in organised sport in the last year, 81.0 per cent (CI: 77.1%–84.4%) had exercised strenuously in the week prior to the survey, compared with 60.0 per cent (CI: 54.5%–65.2%) of those who had not participated in organised sport in the last year (Table 4.55).

About one in five (19.0 per cent; CI: 15.6%–22.9%) of those who participated in organised sport had not exercised strenuously in the week prior to the survey.

An estimated 14.3 per cent (CI: 12.1%–16.8%) of all Aboriginal young people had neither exercised strenuously in the last week, nor participated in organised sport in the last year and must be considered at high risk of failing to meet the recommendations of the *National Physical Activity Guidelines for Australians*<sup>22</sup> and benefiting from the health outcomes that follow. Twice as many females (19.2 per cent; CI: 15.8%–23.1%) as males (9.6 per cent; CI: 7.0%–12.5%) had neither exercised strenuously or participated in organised sports (Table 4.57). The proportion of 17 year-olds who had neither exercised strenuously in the week prior to the survey or participated in organised sports in the previous year was substantially higher than the proportion of 12–14 year-olds (20.0 per cent; CI: 14.3%–26.6% compared with 10.7 per cent; CI: 8.4%–13.5%) (Table 4.58).

Strenuous exercise in the last week without participation in organised sport was reported about twice as frequently than the reverse for both males and females and in all age groups.

Overall, 51.0 per cent (CI: 47.4%–54.4%) of young people aged 12–17 years both did strenuous exercise in the week prior to the survey and participated in organised sport in the past year. This proportion was significantly higher in males (Table 4.57).



## STRENUOUS EXERCISE AND ORGANISED SPORT, AND ALCOHOL CONSUMPTION, CIGARETTE SMOKING AND MARIJUANA USE

A significantly lower proportion of young people aged 12–17 years who have smoked cigarettes regularly had also done strenuous exercise in the seven days prior to the survey (65.9 per cent; CI: 60.4%–70.9%), compared with young people who had not smoked regularly (76.0 per cent; CI: 71.8%–79.9%) (Table 4.59).

A similar difference was found with regard to smoking and organised sport. The proportion of young people aged 12–17 years participating in organised sport was significantly lower among young people who smoked cigarettes regularly (55.5 per cent; CI: 50.1%–61.1%) than among young people who had not smoked regularly (67.0 per cent; CI: 62.7%–70.9%) (Table 4.60).

There were no associations found between the use of alcohol, marijuana or other substances and the proportion of 12–17 year-olds either exercising in the past week or participating in organised sport in the past year.

## MODELLING THE ASSOCIATION BETWEEN PHYSICAL ACTIVITY, CIGARETTE SMOKING AND SCHOOL ATTENDANCE

Age, sex, school attendance, location and lifestyle all affect the likelihood of 12–17 year-olds undertaking strenuous exercise. Multivariate logistic regression modelling techniques (see *Glossary*) were used to simultaneously adjust for all these variables. The model accounted for age, sex and LORI, whether the young person was still in school and whether the young person had smoked cigarettes regularly (Table 4.61). The following variables were found to be independently associated with physical exercise by young people:

**Sex.** Males aged 12–17 years were about two and a half times (Odds Ratio 2.42; CI: 1.67–3.44) more likely to have exercised strenuously in the past seven days than females aged 12–17 years.

**School attendance.** Young people aged 12–17 years who were no longer attending school were about half as likely (Odds Ratio 0.53; CI: 0.34–0.83) to have exercised strenuously in the past seven days as young people aged 12–17 years who were still at school.

**Smoking.** Young people aged 12–17 years who had smoked cigarettes regularly were less likely (Odds Ratio 0.67; CI: 0.44–1.00) to have exercised strenuously in the past seven days than those who had not smoked cigarettes.

**Level of Relative Isolation.** There was a tendency for a higher proportion of young people living in areas of extreme isolation to report exercising strenuously in the past week, but this was not statistically significant (Table 4.61).

None of the following variables were significantly associated with the likelihood of exercising strenuously in the last week: pregnancy, alcohol and marijuana use, whether the young person had ever had sex, importance of spirituality or religion, participation in religious services, and whether the young person had a close friend.



## BENEFITS OF PHYSICAL EXERCISE

The World Health Organisation advises that 'regular physical activity provides young people with substantial physical, mental and social health benefits'. The physical benefits of regular physical activity include maintaining healthy bones, muscles and joints, controlling body weight and improving the function of the heart and lungs. Mental and social health benefits include raising self-esteem levels, controlling feelings of anxiety and depression, and developing social interaction skills.<sup>23</sup>

Over the last 30 years, the benefits of physical activity have also been recognised by the Australian Government Department of Health and Ageing, who indicate that there is strong epidemiological evidence linking the benefits of physical exercise to health and social benefits.<sup>22</sup>

A study by the Centers for Disease Control and Prevention found that the substantial amount of physical activity required for sports participation led naturally to increased health benefits. It also found that team rules and guidelines often promote good nutrition which in turn promotes healthy lifestyles via social pathways.<sup>24</sup>

A Minnesota study involving 4,594 children found that across a two-year period there was an inverse relationship between the change in physical activity and the change in depressive symptoms among young adolescents.<sup>25</sup>

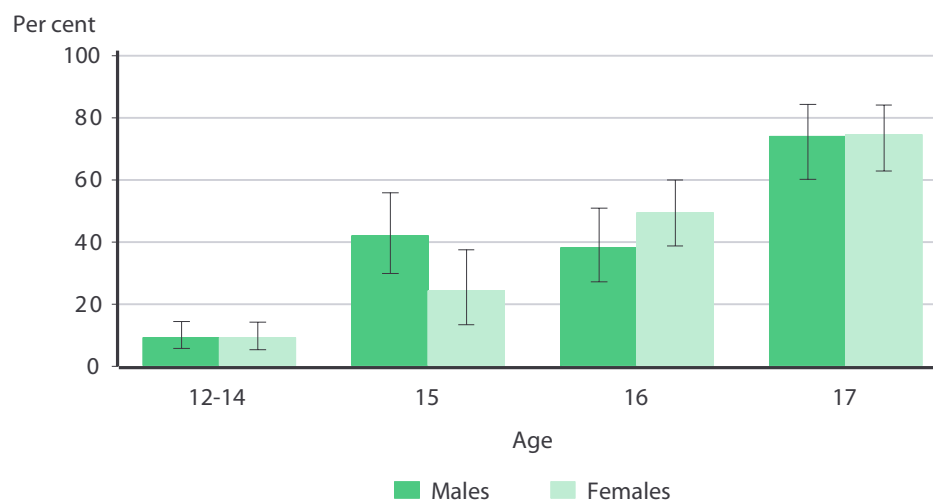
## SEXUAL KNOWLEDGE AND EXPERIENCE

Aboriginal young people aged 12–17 years were asked questions about their sexual knowledge and behaviour in order to describe the prevalence of sexual activity and to obtain information about their awareness of contraception and how to avoid contracting sexually transmitted diseases. Care was taken to address the sensitive nature of these questions by firstly ensuring that all participants knew that they were not obliged to respond to any questions they would prefer not to answer, and secondly providing reassurance that their individual responses would be kept in the strictest confidence. The questionnaire was also designed to ensure that those teenagers who were not yet sexually active were not asked further questions which would have been inapplicable to their experience.

### SEXUAL EXPERIENCE AND AGE AND SEX

An estimated 28.0 per cent (CI: 25.0%–31.4%) of young people aged 12–17 years have had sex. A similar overall proportion of males (27.4 per cent; CI: 22.7%–32.2%) and females (28.7 per cent; CI: 24.5%–33.1%) have had sex. A higher proportion of older young people have had sex with 74.5 per cent (CI: 66.2%–81.6%) of 17 year-olds having had sex compared with 9.4 per cent (CI: 6.8%–12.8%) of 12–14 year-olds.



**FIGURE 4.22: YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION OF MALES AND FEMALES WHO HAVE HAD SEX, BY AGE**

Source: Table 4.62

#### SEXUAL EXPERIENCE AND LEVEL OF RELATIVE ISOLATION

Of young people aged 12–15 years in areas of moderate isolation, 20.7 per cent (CI: 15.2%–27.5%) have had sex, compared with 4.4 per cent (CI: 1.1%–14.1%) of 12–15 year-olds in areas of high isolation. There was also a difference in the proportion of young people aged 12–17 years living in areas of moderate isolation who have had sex (37.9 per cent; CI: 31.6%–44.8%) compared with young people aged 12–17 years living in areas of extreme isolation (18.6 per cent; 10.6%–28.4%) (Table 4.63).

#### SEXUAL EXPERIENCE AND SCHOOL ATTENDANCE

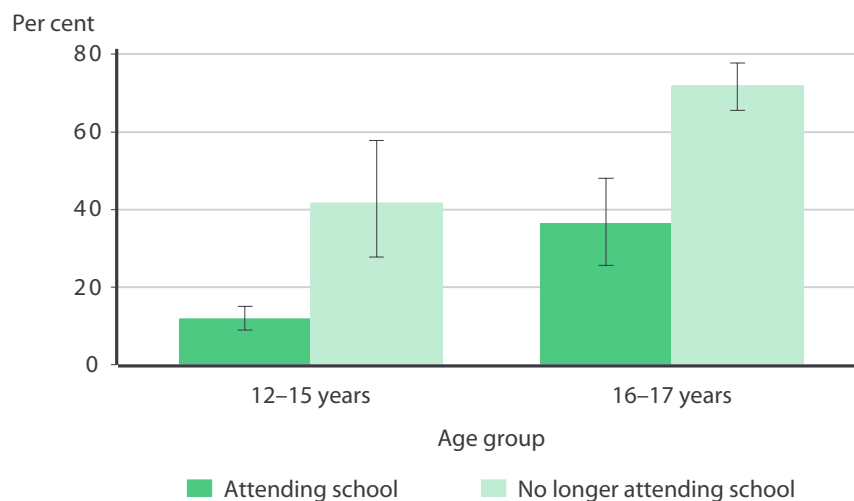
Several findings of statistical significance were made regarding the relationship between school attendance and whether 12–17 year-olds have had sex.

Of young people aged 12–15 years who were still at school, 11.8 per cent (CI: 9.0%–15.1%) have had sex. This is in contrast to the 41.7 per cent (CI: 27.7%–57.8%) of 12–15 year-olds who were no longer in school who also have had sex (Figure 4.23).

The disparity between those still at school and those who no longer attended school was similar for 16–17 year-olds. Of those 16–17 year-olds still in school, 36.3 per cent (CI: 25.7%–48.1%) have had sex. This compares with the 71.9 per cent (CI: 65.6%–77.8%) of 16–17 year-olds no longer attending school who have had sex (Figure 4.23).



**FIGURE 4.23:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE HAD SEX, BY AGE AND WHETHER ATTENDING SCHOOL



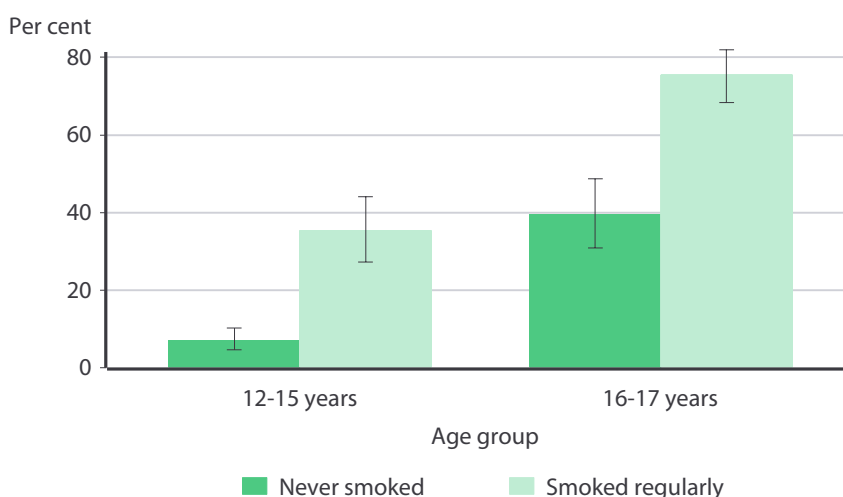
Source: Table 4.64

#### SEXUAL EXPERIENCE AND CIGARETTE SMOKING

Some 35.4 per cent (CI: 27.3%–44.1%) of 12–15 year-olds who have smoked cigarettes regularly have also had sex. This compares with a much lower 7.0 per cent (CI: 4.6%–10.2%) of 12–15 year-olds who have never smoked who have had sex (Figure 4.24).

A similar pattern was seen with 16–17 year-olds with 75.5 per cent (CI: 68.4%–81.6%) of those who have smoked cigarettes regularly having had sex. This compares with a much lower 39.4 per cent (CI: 30.9%–48.7%) of 16–17 year-olds who have never smoked cigarettes who have had sex (Figure 4.24).

**FIGURE 4.24:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE HAD SEX, BY AGE AND WHETHER SMOKED CIGARETTES REGULARLY



Source: Table 4.65

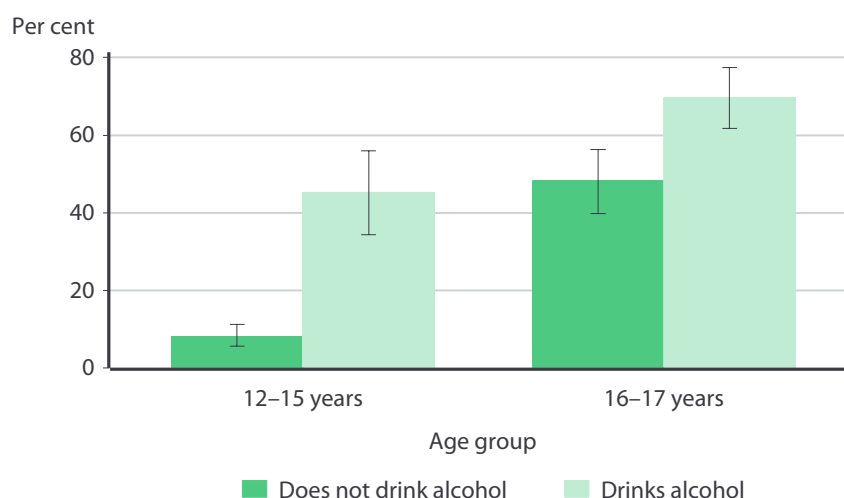


## SEXUAL EXPERIENCE AND ALCOHOL CONSUMPTION

Of young people aged 12–15 years, 8.1 per cent (CI: 5.6%–11.2%) of those who did not drink alcohol have had sex. This compares with a much higher 45.2 per cent (CI: 34.4%–55.9%) of those who did drink alcohol having had sex (Figure 4.25).

A similar picture appears for those aged 16–17 years, where 48.3 per cent (CI: 39.8%–56.3%) of those who did not drink alcohol have had sex. This compares with a somewhat higher 69.7 per cent (CI: 61.7%–77.4%) of those who did drink alcohol having had sex (Figure 4.24).

**FIGURE 4.25: YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE HAD SEX, BY AGE AND WHETHER THEY DRINK ALCOHOL**



Source: Table 4.66

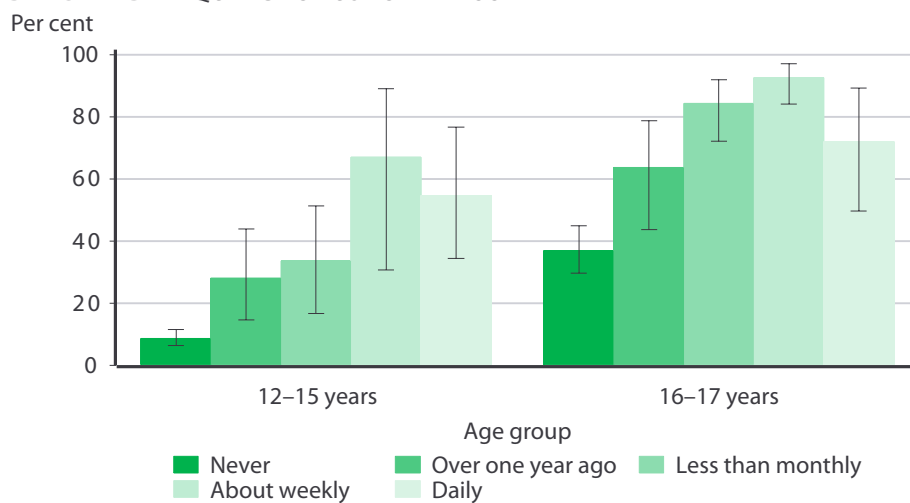
## SEXUAL EXPERIENCE AND FREQUENCY OF MARIJUANA USE

Of young people aged 12–15 years who had never used marijuana, 8.7 per cent (CI: 6.5%–11.6%) have had sex. This is a significantly lower proportion than in those 12–15 year-olds who used marijuana. Of those who used marijuana less than monthly, 33.6 per cent (CI: 16.7%–51.4%) have had sex, and of those who used marijuana on a weekly basis, 67.1 per cent (CI: 30.8%–89.1%) have had sex (Figure 4.26).

In the 16–17 years age group, the pattern was very similar. Of young people aged 16–17 years who had never used marijuana, 36.9 per cent (CI: 29.8%–45.1%) have had sex. This proportion is lower than for all regular marijuana users in this age group. Of those who used marijuana less than monthly, 84.5 per cent (CI: 72.3%–92.0%) have had sex, and of those who used marijuana on a weekly basis, 92.6 per cent (CI: 84.2%–97.2%) have had sex (Figure 4.26).



**FIGURE 4.26:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE HAD SEX, BY AGE AND FREQUENCY OF USE OF MARIJUANA



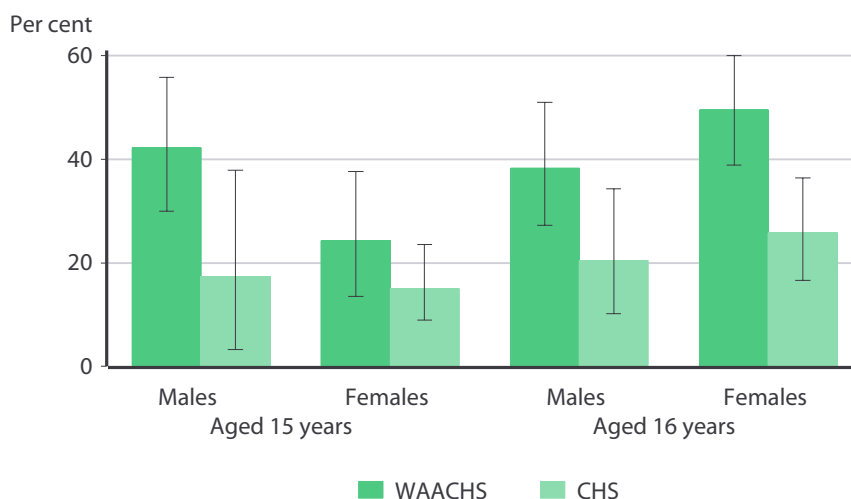
Source: Table 4.67

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**COMPARISON WITH OTHER SURVEYS**

In the 1993 CHS, young people aged 15–16 years were asked about their sexual experience. A higher proportion of Aboriginal young people have had sex. The difference reached statistical significance for 16 year-olds with 43.9 per cent (CI: 36.2%–51.9%) of Aboriginal young people having had sex compared with 23.5 per cent (CI: 16.7%–32.2%) in the general population in the CHS (Figure 4.27).

**FIGURE 4.27:** YOUNG PEOPLE AGED 15–16 YEARS — PROPORTION WHO HAVE HAD SEX, WAACHS COMPARED WITH CHS



Source: Tables 4.62, 4.68

It is possible that young people’s attitudes towards sex have changed in the seven years between the CHS and the WAACHS.



## AGE FIRST HAD SEX

Some insight can be gained about the age at which young people first had sex from the self-reports of 17 year-olds. Three quarters of 17 year-olds (74.5 per cent; CI: 66.2%–81.6%) have had sex. One-quarter (25.8 per cent; CI: 18.6%–33.4%) of these 17 year-olds had sex for the first time at either 16 or 17 years of age, and almost half (48.6 per cent; CI: 39.5%–57.4%) had sex for the first time before they had reached 16 years of age (Table 4.69).

There was no significant difference between males and females, but there was a tendency for a higher proportion of females to have had sex for the first time before the age of 16 years (Table 4.69). There was also a tendency for a greater proportion of 17 year-olds living in areas of moderate isolation to have had sex before the age of 16, but the differences did not reach statistical significance (Table 4.70).

Although direct comparison of the WAACHS findings with the 1993 CHS cannot be made, as only young people aged 15–16 years were asked about their sexual experience in the CHS, some observations can be made that suggest possible differences. In the general WA population, 20.4 per cent (14.3%–27.4%) of young people aged 16 years had had sex (Table 4.68) compared with 48.6 per cent (CI: 39.5%–57.4%) of Aboriginal 17 year-olds who first had sex before the age of 16 years (Table 4.70).

## MODELLING THE ASSOCIATION BETWEEN HAVING HAD SEX, SCHOOL ATTENDANCE, CIGARETTE SMOKING, ALCOHOL AND MARIJUANA USE

The likelihood of 12–17 year-olds having had sex was assessed using multivariate logistic regression modelling techniques (see *Glossary*). The model accounted for age, sex and LORI, whether the young person was still in school and whether the young person had smoked cigarettes regularly, drank alcohol or ever used marijuana (Table 4.71). After adjusting for these variables the following findings were made:

**Level of Relative Isolation.** No association was found between LORI and whether the young person has had sex.

**Age.** Young people aged less than 17 years were less likely than young people aged 17 years to have had sex. Young people aged 16 years were one quarter as likely (Odds Ratio 0.26; CI: 0.09–0.70) to have had sex as 17 year-olds, young people aged 15 years were less than one third as likely (Odds Ratio 0.29; CI: 0.12–0.70), and young people aged 12–14 years were one tenth as likely (Odds Ratio 0.10; CI: 0.04–0.25) to have had sex.

**School attendance.** Young people aged 12–17 years were six times more likely (Odds Ratio 6.01; CI: 2.90–12.6) to have had sex if they no longer attended school.

**Smoking cigarettes.** Young people aged 12–17 years were more than four times as likely (Odds Ratio 4.28; CI: 2.21–8.31) to have had sex if they had smoked cigarettes regularly.

**Alcohol consumption.** Young people aged 12–17 years were more than four times as likely (Odds Ratio 4.11; CI: 2.07–8.14) to have had sex if they drank alcohol.

**Marijuana use.** Independently of age, sex, LORI, school attendance, and use of alcohol and cigarettes, young people aged 12–17 years who used marijuana weekly or daily were over six times more likely (Odds Ratio 6.59; CI: 2.90–15.0) to have had sex than young people who have never used marijuana. Even those young people who last used marijuana over one year ago were three times more likely to have had sex (Odds Ratio





2.99; CI: 1.29–6.97) than young people who have never used marijuana.

The following variables were not found to be associated with the likelihood of having had sex: importance of spirituality or religion, participation in religious services, frequency of strenuous exercise, and whether the young person had a close friend.

## METHODS OF CONTRACEPTION USED

Young people aged 12–17 years who have had sex were asked what one method was used to stop pregnancy the last time they had sex. As shown in Table 4.72, 70.1 per cent (CI: 63.8%–75.8%) of young people who have had sex used condoms. A significantly higher proportion of males who have had sex used condoms to prevent pregnancy (81.3 per cent; CI: 72.3%–87.8%) than females (59.0 per cent; CI: 50.3%–67.1%). Birth control pills were seldom used, with a tendency to be used more often by females (8.6 per cent; CI: 3.4%–16.4%) than males (3.1 per cent; CI: 0.6%–8.4%).

Overall, 18.1 per cent (CI: 13.7%–23.3%) of 12–17 year-olds who have had sex did not use any contraceptive measures the last time they had sex. More females used no contraception (24.7 per cent; CI: 18.1%–32.0%) than males (11.5 per cent; CI: 5.7%–19.2%), the difference approaching statistical significance (Table 4.72).

There was also a tendency for the proportion reporting condom use to decline with increasing age, though none of the differences reached statistical significance. For example, 84.2 per cent (CI: 73.0%–91.2%) of 12–14 year-olds who have had sex used condoms the last time they had sex, compared with 63.8 per cent (CI: 53.3%–73.5%) of 17 year-olds. The proportion who used no contraceptive measures increased from 9.4 per cent (CI: 3.3%–21.4%) to 21.4 per cent (CI: 14.0%–29.7%) in the same age groups respectively, although again this was not statistically significant (Table 4.73).

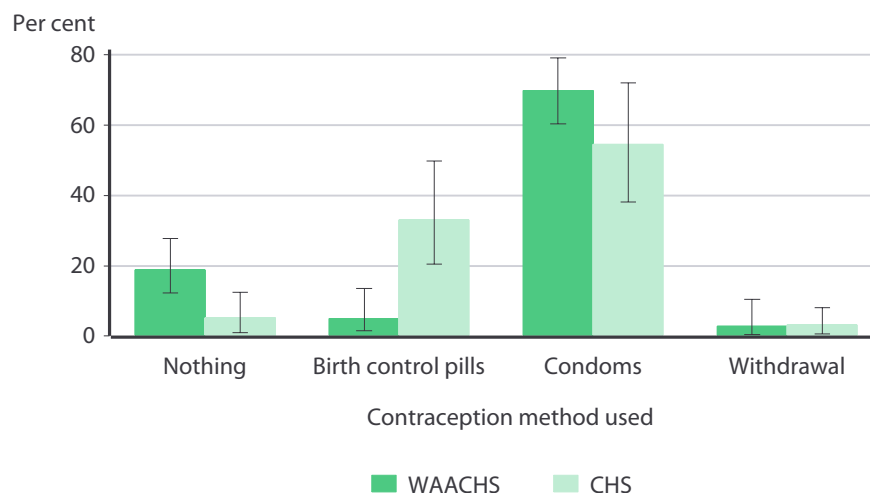
## CONTRACEPTION METHODS — COMPARISON WITH OTHER SURVEYS

The responses of Aboriginal 15 and 16 year-olds in the WAACHS were compared with those aged 15 or 16 years in the 1993 CHS. In both surveys only those young people who said that they have had sex were asked about contraception.

Among Aboriginal 15–16 year-olds who have had sex, 18.9 per cent (CI: 12.2%–27.7%) used no contraception compared with 5.1 per cent (CI: 0.9%–12.5%) of young people in the general population. This difference is close to statistical significance (Table 4.74). A non-statistically significantly higher proportion of Aboriginal females did not use contraception (28.2 per cent, CI: 18.2%–39.6%) than males (10.5 per cent, CI: 1.9%–24.3%), a greater difference between the sexes than observed in the general population: 5.9 per cent (CI: 0.8%–21.4%) and 4.2 per cent (CI: 0.6%–15.8%) for females and males respectively.

Birth control pills were used to prevent pregnancy by a significantly lower proportion of 15–16 year-old Aboriginal people who have had sex (5.0 per cent; CI: 1.5%–13.6%) than young people of the same age in the general population (33.0 per cent; CI: 20.5%–49.9%). About half (51.2 per cent; CI: 33.1%–69.8%) of the 15–16 year-old females in the CHS who have had sex used birth control pills the last time they had sex, compared with 7.0 per cent (CI: 1.4%–17.9%) of Aboriginal females aged 15–16 years (Table 4.74).



**FIGURE 4.28:** YOUNG PEOPLE AGED 15–16 YEARS WHO HAVE HAD SEX — MEASURES TAKEN TO PREVENT PREGNANCY, WAACHS COMPARED WITH CHS

Source Tables 4.74

#### USE OF CONTRACEPTION BY SCHOOL ATTENDANCE AND EDUCATIONAL ACHIEVEMENT OF PRIMARY CARER

Among young people who have had sex, contraceptive use was not consistently associated with either their own school attendance (Table 4.75) or educational achievement of the primary carer (Table 4.76).

#### PREGNANCIES

Females aged 12–17 years were asked if they had ever been pregnant. At the time of the survey 8.3 per cent (CI: 6.4%–10.5%) had been pregnant once and 2.3 per cent (CI: 1.0%–4.7%) more than once. The great majority of these pregnancies were in 16 and 17 year-olds (Table 4.77).

For more information about pregnancy, with a particular focus on births of Aboriginal children to mothers under the age of 18 years, see Chapter Three of Volume One.<sup>1</sup>

#### SEX EDUCATION

##### EDUCATION ABOUT AIDS/HIV AND OTHER SEXUALLY TRANSMITTED DISEASES

Young people aged 12–17 years were asked if they had ever been taught how to avoid AIDS/HIV or other sexually transmitted diseases. Overall, 73.9 per cent (CI: 70.5%–77.2%) of 12–17 year-olds said they had. This proportion was higher in older young people, ranging from 56.0 per cent (CI: 47.7%–64.4%) in 12 year-olds to 89.1 per cent (CI: 81.9%–94.0%) in 17 year-olds (Table 4.78).



## PREVALENCE OF SEXUALLY TRANSMITTED DISEASES

The need for good prevention strategies for avoiding sexually transmitted diseases, especially in more isolated areas, is evident from figures provided by the National Notifiable Diseases Surveillance System which indicates high rates of sexually transmitted diseases in Aboriginal communities.<sup>27</sup>

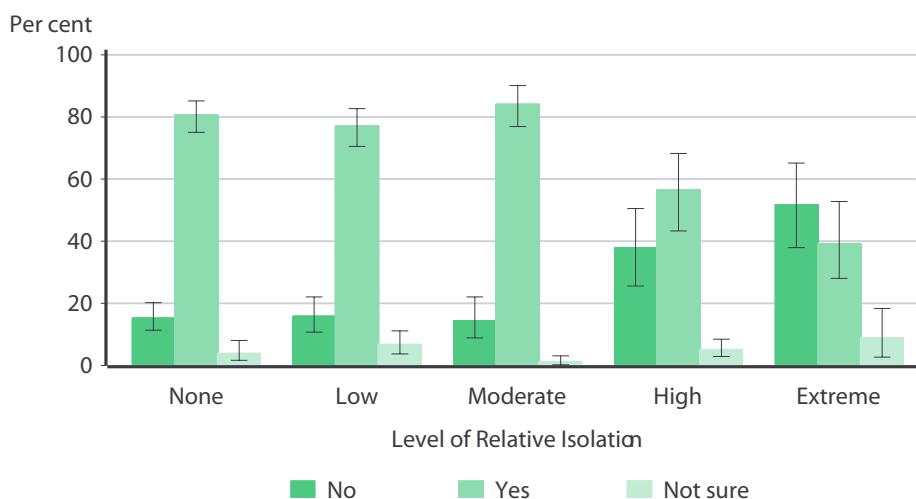
Based on notifications from Northern Territory, South Australia and Western Australia in 2001, the estimated age standardised rate of chlamydial infection among Aboriginal Australians was 880 cases per 100,000 population, compared with 117 cases per 100,000 population in non-Aboriginal Australians. Chlamydia is predominantly a disease of young adults, with just under a third of all cases of chlamydia in the Northern Territory occurring in the 15–19 year age group.<sup>28</sup>

The estimated age standardised rate of gonococcal infection in Aboriginal people was 1,290 cases per 100,000 population, compared with 25 cases per 100,000 population in non-Aboriginal Australians. Aboriginal people experience these infections at a rate about fifty times that of non-Aboriginal Australians.<sup>27</sup>

The highest rates of both chlamydia and gonococcal infections were reported in the Kimberley and Pilbara regions.<sup>28</sup>

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**FIGURE 4.29:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION TAUGHT HOW TO AVOID AIDS/HIV OR OTHER SEXUALLY TRANSMITTED DISEASES, BY LEVEL OF RELATIVE ISOLATION



Source: Table 4.79

As shown in Figure 4.29, the proportion reporting having been taught about AIDS/HIV or other sexually transmitted diseases was significantly lower in areas of high or extreme isolation than in other areas. For example, in areas of moderate isolation 84.3 per cent (CI: 76.9%–90.2%) of 12–17 year-olds had been taught compared with 56.6 per cent (CI: 43.3%–68.3%) and 38.1 per cent (CI: 28.0%–52.9%) of young people in areas of high and extreme isolation respectively.



## EDUCATION ABOUT AIDS/HIV AND OTHER SEXUALLY TRANSMITTED DISEASES, AND SEXUAL EXPERIENCE

Both having had sex and receipt of sexual education are associated with age. Adjusting for age with multivariate logistic regression, the likelihood of having had sex associated with receiving sexual education was estimated. The model found that having been taught how to avoid AIDS/HIV or other sexually transmitted diseases was not significantly associated with young people having had sex (Table 4.80).

However, of all 12–17 year-olds who have had sex, 12.6 per cent (CI: 8.5%–17.5%) had not been taught how to avoid AIDS/HIV or other sexually transmitted diseases and a further 2.8 per cent (CI: 1.5%–4.6%) were not sure whether or not they had received such education (Table 4.81).

## SOURCES OF INFORMATION ABOUT AIDS/HIV AND OTHER SEXUALLY TRANSMITTED DISEASES

Young people aged 12–17 years who had been taught how to avoid AIDS/HIV or other sexually transmitted diseases were asked ‘Where did you learn about this?’ Multiple responses were allowed as young people may get this information from several sources.

The proportion of young people who received this information from schools was 62.6 per cent (CI: 58.9%–66.2%), from family – 23.0 per cent (CI: 20.2%–26.1%), from friends – 0.4 per cent (CI: 8.5%–12.6%), from a nurse – 10.2 per cent (CI: 8.2%–12.4%) and from some other source – 3.2 per cent (CI: 2.1%–4.7%) (Table 4.82).

Around half (50.6 per cent; CI: 47.0%–54.3%) of all young people had obtained information on how to avoid AIDS/HIV or other sexually transmitted diseases from a single source (Table 4.83). Table 4.84 shows the combinations of sources of this information. It can be seen that school is not only the single most common source, but was also the only source for 41.0 per cent (CI: 35.5%–44.7%) of young people aged 12–17 years.

## METHOD OF PREVENTING SEXUALLY TRANSMITTED DISEASES

Young people who have had sex were asked what steps they took to stop getting a sexually transmitted disease (STD). They were offered the same choices of response as for preventing pregnancy, even though condoms are the only contraceptive method listed that also prevents STDs. This question was used as an independent assessment of their understanding of sexual health. Responses were considered to indicate a limited understanding of sexual health if they reported:

- ◆ using methods other than condoms to prevent the transmission of STDs
- ◆ using condoms to prevent pregnancy but nothing to prevent STD transmission
- ◆ using condoms to prevent STDs but nothing to prevent pregnancy
- ◆ they were not sure what they had used to prevent either pregnancy or STD transmission.

The responses of 13.7 per cent (CI: 9.6%–18.5%) of young people who have had sex suggested a limited knowledge of sexual health. It is of concern that the majority of those whose responses suggested a limited knowledge of sexual health (78.7 per cent; CI: 57.8%–92.9%) also claimed that they had been taught how to avoid AIDS/HIV or sexually transmitted diseases (Table 4.86).



## IMPLICATIONS OF FINDINGS OF HEALTH RISK BEHAVIOURS IN ABORIGINAL YOUNG PEOPLE AGED 12–17 YEARS

A greater proportion of Aboriginal young people engage in lifestyles that pose risks to physical and emotional wellbeing than do other Australians of the same age. Even where the proportions engaging in particular health risk behaviours are not different, as with alcohol use, the possibilities for dangerous consequences, such as drunk driving, appear to be greater for Aboriginal young people.

Many health risk behaviours are associated with one another. In a cross-sectional survey such as the WAACHS, nothing can be said about the directions of causality. It is very likely that there are no simple causal directions, but rather, causal feedback loops, in which the community, the family and the individual interact with one another. The community may play a greater and earlier role in influencing the behaviour of Aboriginal young people, particularly in more isolated areas.

School attendance and physical exercise tend to be associated with lifestyles that pose lower health risks, but whether they are causes, consequences or merely associated through common antecedents can only be speculated. If the long term health of Aboriginal people is to improve, effective strategies must be found to encourage Aboriginal young people to make healthy lifestyle choices, and to break the cycles that facilitate poor choices. The results of current efforts are often disappointing.<sup>29</sup> Quick results cannot be anticipated and may require long term strategies.<sup>30</sup>

The possible consequences of poor choices of sexual behaviour are particularly concerning. Not only are sexually transmitted diseases much more common in Aboriginal communities and the threat of HIV/AIDS is very real, but very early or unintended pregnancies can have adverse consequences both for the health and social development of the mother and for the care and wellbeing of the next generation (see Chapter 3 of Volume One<sup>1</sup>). Better choices of sexual behaviour must be guided by a universal understanding of safe sex practices. The WAACHS findings show that a significant proportion of sexually active young people have either received no sexual education or demonstrate insufficient understanding of the education they have received. The successful delivery of sexual education and sexual health screening may be limited by the shame that people feel about presenting for this aspect of health care. An innovative way to overcome this obstacle has been to package the screening within a general health assessment such as the Well Person's Health Check (WPHC).

The WPHC was originally implemented for Aboriginal communities in Central Australia but has since been adapted for use in the Cape York region and in rural Victoria. The Victorian WPHC provides a range of services including: body measurement, lifestyle assessment, eye and diabetes tests, and sexual health assessment; thereby providing the opportunity to provide education on all the health risk factors considered in this chapter. It is provided over a one week period in each community and feedback is provided immediately.<sup>26</sup>



## BULLYING AND BEING PICKED ON

Aboriginal young people who were still attending school were asked whether they had ever been bullied at school. On the questionnaire, *bullying* was defined as ‘when someone is picked on by another person, or a group of people say nasty and unpleasant things to him or her. It is also when someone is hit, kicked, threatened, sent nasty notes, when no one talks to them and things like that.’

The Strengths and Difficulties Questionnaire (SDQ) included on the YSR contained a similar item asking young people whether ‘other kids or young people pick on me or bully me.’ As with the other items on the SDQ, young people were asked if they had been picked on over the previous six months and could respond with ‘no’, ‘yes’, or ‘sometimes’. For the purposes of this analysis, young people answering either yes or sometimes to this SDQ item will be referred to as having been *picked on*.

While the two terms, *bullied* and *picked on*, refer to related experiences, in this survey they differed according to the way in which they were identified, as shown in Figure 4.30.

**FIGURE 4.30: DIFFERENCES BETWEEN DEFINITIONS OF THE TERMS BULLIED AND PICKED ON**

	<i>Bullied</i>	<i>Picked on</i>
Behaviour	Defined	Undefined
Respondents	School attendees only	All young people
Location	School only	Anywhere
Perpetrators	Anyone: identified	Young people: not further identified
Time frame	School career	6 months prior to survey

Almost one third of young people still attending school (31.2 per cent; CI: 27.4%–35.3%) had been bullied at school (Table 4.87). Some 24.5 per cent (CI: 21.7%–27.6%) of all young people said they had been picked on in the six months prior to the survey (Table 4.92). There was no difference in the proportion of young people being picked on between young people who did not attend school (18.2 per cent; CI: 13.8%–23.5%) and young people attending school who have never been bullied at school (18.1 per cent; CI: 14.6%–22.0%). The proportion of young people having been picked on in the last six months was higher among those who have been bullied at school (45.9 per cent; CI: 38.3%–53.7%) (Table 4.88).

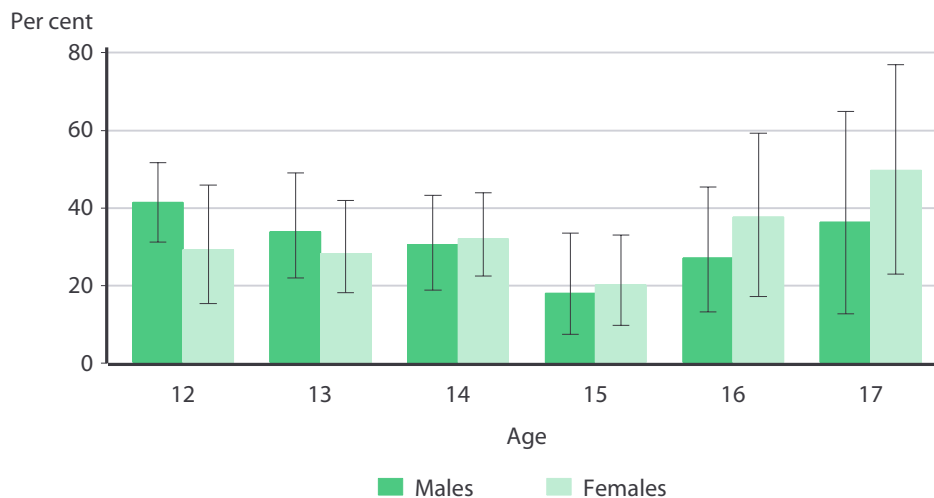
More than half of the young people who have been bullied at school had not been picked on by other young people in the last six months (54.1 per cent; CI: 46.3%–61.7%).

## BULLYING AND AGE, SEX AND LEVEL OF RELATIVE ISOLATION

The proportion of young people who had been bullied at school was higher at both 12 and 17 years of age than at intervening ages. The lowest proportion was found in young people aged 15 years (19.2 per cent; CI: 11.5%–28.0%) and this was statistically significantly lower than the proportion of 12 year-olds (36.3 per cent; CI: 28.3%–45.0%) (Table 4.87). The pattern in males was very similar to that in females, although as shown in Figure 4.31, the age at which bullying was highest in males was 12 years (41.5 per cent; CI: 31.3%–51.7%) and in females it was 17 years (49.7 per cent; CI: 23.0%–77.0%).



**FIGURE 4.31:** YOUNG PEOPLE AGED 12–17 YEARS STILL ATTENDING SCHOOL — PROPORTION BULLIED AT SCHOOL, BY SEX AND AGE



Source: Table 4.87

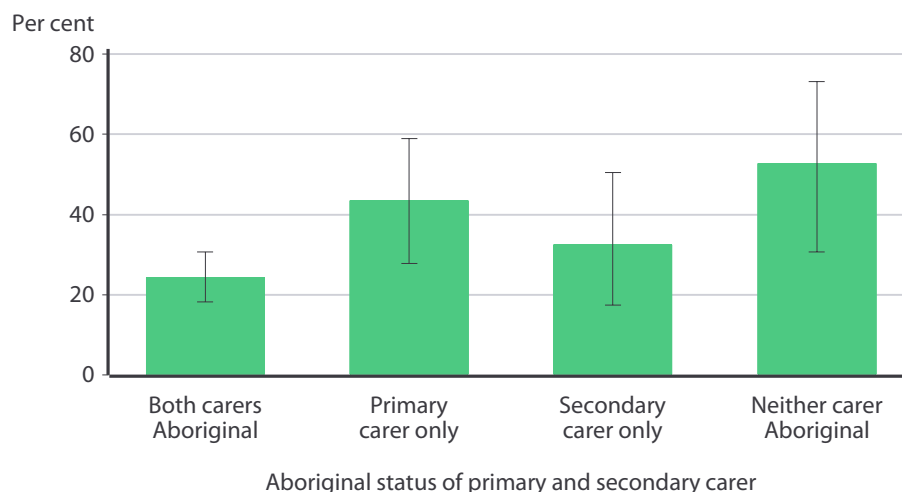
There was no association between LORI and whether young people had ever been bullied (Table 4.89).

#### ABORIGINAL STATUS OF CARERS OF YOUNG PEOPLE WHO HAD BEEN BULLIED AT SCHOOL

A significantly higher proportion of Aboriginal young people whose primary and secondary carers were both non-Aboriginal had been bullied (52.7 per cent; CI: 30.6%–73.2%) compared with young people whose primary and secondary carers were both Aboriginal (24.2 per cent; CI: 18.2%–30.6%).

The differences were reduced and no longer statistically significant where only one of the carers was Aboriginal. However for young people with one Aboriginal and one non-Aboriginal carer, the proportion being bullied was higher among those whose primary carer was Aboriginal (43.4 per cent; CI: 27.7%–59.0%) than among those whose primary carer was non-Aboriginal (32.4 per cent; CI: 17.4%–50.5%) (Figure 4.32).

**FIGURE 4.32:** YOUNG PEOPLE AGED 12–17 YEARS STILL ATTENDING SCHOOL — PROPORTION BULLIED AT SCHOOL, BY ABORIGINAL STATUS OF CARERS



Source Table 4.90





## LANGUAGE AND BEING BULLIED OR PICKED ON

A lower proportion of young people who attended school and whose main language spoken at home was an Aboriginal language had ever been bullied at school compared with young people whose main language spoken at home was English (13.0 per cent; CI: 6.6%–22.0%, compared with 32.2 per cent; CI: 27.8%–36.7%) (Table 4.91).

In contrast, the proportion of young people who had been picked on by other young people in the last six months was slightly higher among those for whom the main language spoken at home was an Aboriginal language (34.2 per cent; CI: 26.8%–41.7%) than it was for those for whom the main language spoken at home was English (22.7 per cent; CI: 19.4%–26.2%) (Table 4.92).

## WHEN BULLYING OCCURRED

Young people who had ever been bullied at school were asked if they had been bullied at their current school, and if so whether it had occurred in the three months prior to the survey. Those for whom bullying occurred at a previous school were asked how often they were bullied.

Young people who had been bullied at school were asked when the bullying occurred — whether before or after school, between classes, in class time or at recess or lunchtime. They were also asked if they were bullied by males, females, younger kids, older kids, by teachers or by other people not from their school. Finally young people who had been bullied were asked how they felt about being bullied — whether it made them sad, angry, didn't bother them, or stressed them out.

The most common time for bullying to occur at school was during recess or lunchtime. An estimated 62.0 per cent (CI: 54.1%–69.3%) of young people who had been bullied were bullied at this time. One quarter to one third of those who had been bullied, were bullied before school, between classes or during classes (Table 4.93).

Almost three quarters (73.8 per cent; CI: 66.6%–79.9%) of young people who had been bullied, were bullied at only one time of day while one in ten (10.1 per cent; CI: 5.9%–16.5%) were bullied throughout the entire day (Table 4.94).

## IDENTITY OF BULLY

The proportion of males who did not specify the sex of their bullies (36.2 per cent; CI: 26.7%–46.0%) was significantly higher than that of females (8.2 per cent; CI: 3.8%–15.0%). The large proportion of missing data makes further comment difficult (Table 4.95).

The majority of females who had been bullied did not specify the relative age of their bullies (81.1 per cent; CI: 71.7%–88.4%) compared with 47.9 per cent (CI: 37.6%–58.4%) of males. Available responses suggest that bullies may be more likely to be older children (Table 4.96).

## REACTION TO BULLYING

Aboriginal young people who had been bullied at school had a range of emotional reactions to having been bullied. Table 4.97 shows the different combinations of reactions to being bullied.

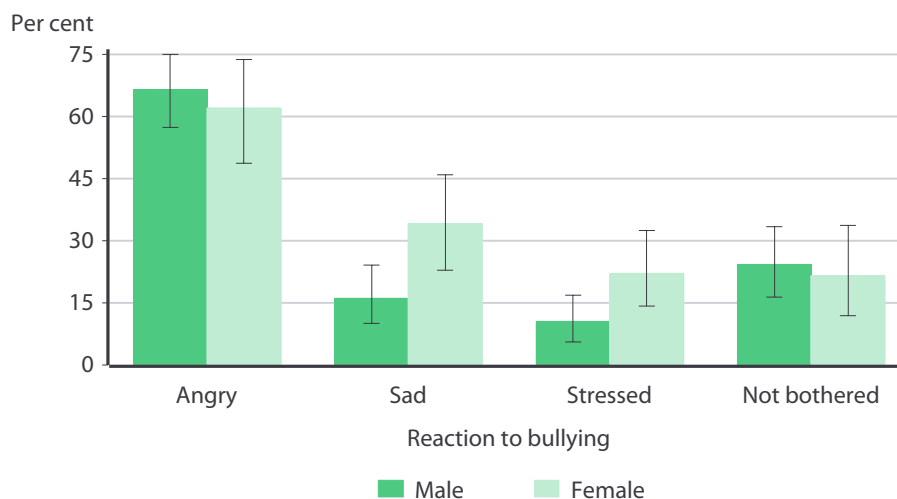
Almost two thirds (64.5 per cent; CI: 56.9%–71.7%) of young people who had been bullied felt angry as a result and about one quarter (24.6 per cent; CI: 18.2%–31.8%)





felt sad. A higher proportion of females felt sad (34.3 per cent; CI: 23.0%–46.0%) compared with males (16.1 per cent; CI: 10.1%–24.2%) (Table 4.98).

**FIGURE 4.33: YOUNG PEOPLE AGED 12–17 YEARS WHO HAD BEEN BULLIED AT SCHOOL — REACTION TO BULLYING, BY SEX**



Source: Table 4.98

Among males who felt angry at having been bullied, more than three quarters (78.2 per cent; CI: 67.1%–87.5%) reported no other emotional response. In comparison, this proportion was 52.3 per cent (CI: 39.1%–65.7%) among females (Table 4.100).

#### MODELLING THE ASSOCIATION BETWEEN BULLYING, BEING PICKED ON AND USE OF ALCOHOL, CIGARETTES OR MARIJUANA

Smoking, drinking alcohol and using marijuana are associated with sex, age and LORI. These factors are also associated with bullying at school and being picked on to varying degrees. Multivariate logistic regression analysis (see *Glossary*) was undertaken to examine the relationship between bullying and substance use. After adjusting for these demographic factors the following findings were made:

**Bullying and smoking.** Smoking was found to be positively associated with being bullied. Young people who had smoked regularly were more than twice as likely to have been bullied at school (Odds Ratio 2.34; CI: 1.51–3.61).

**Bullying and marijuana use.** Use of marijuana was also found to be associated with being bullied. Young people who used marijuana less than monthly were over three times as likely to have been bullied at school (Odds Ratio 3.25; CI: 1.54–6.84) than young people who have never used marijuana. However young people who use marijuana weekly or daily were no more likely to be bullied than young people who have never used marijuana (Odds Ratio 0.78; CI: 0.37–1.62) (Table 4.101).

**Bullying and alcohol consumption.** No association was found between being bullied and use of alcohol, and this variable was eliminated from the final model (Table 4.101).

Responses for being picked on were obtained from the whole sample including those young people no longer attending school, so the association with school attendance was also tested in multivariate logistic regression analysis.



**Picked on and smoking.** Once again, smoking was found to be positively associated with having been picked on in the past six months (Odds Ratio 1.65; CI: 1.15–2.36).

**Picked on and age.** The likelihood of being picked on decreased steadily with increasing age. Young people aged 17 years were only one quarter as likely (Odds Ratio 0.28; CI: 0.14–0.55) to have been picked on in the previous six months as young people aged 12 years.

**Picked on and Level of Relative Isolation.** Young people living in areas of high or extreme relative isolation were more than twice as likely to have been picked on as young people living in Perth. Compared with young people living in Perth, young people living in areas of high isolation were almost three times more likely to be picked on (Odds Ratio 2.79; CI: 1.37–5.68), while people living in areas of extreme relative isolation were twice as likely to be picked on (Odds Ratio 2.14; CI: 1.25–3.66) (Table 4.102).

No association was found with school attendance, drinking alcohol or use of marijuana and these variables were eliminated from the final model.

No comparison can be made with bullying data collected in the 1993 WA Child Health Survey, as the questions used to examine bullying in the CHS were completely different to those used in the WAACHS.

## RACISM

Young people were considered to have experienced *racism* if they responded positively to the question: ‘In the past six months have people ever treated you badly or refused to serve you because you are Aboriginal?’ Young people who reported racism were asked how often they had experienced racism in a range of settings: at school from other kids; at school from teachers; in shops or shopping centres; on public transport; in the street; at home; or when playing sport.

### RACISM AND AGE AND SEX

Overall 21.5 per cent (CI: 18.6%–24.6%) of young people reported racism. In each age group females were less likely to report racism than males, though this difference only reached statistical significance at 17 years at which age when 35.8 per cent (CI: 24.3%–48.9%) of males reported racism compared with 13.3 per cent (CI: 6.6%–22.0%) of females (Table 4.103). There was no association between age and racism (Table 4.103).

### RACISM AND LEVEL OF RELATIVE ISOLATION

There was a tendency for racism to be reported less frequently in areas of extreme relative isolation although this was not statistically significant (Table 4.104).

### WHERE AND HOW OFTEN RACISM IS ENCOUNTERED

Racism was reported at all locations, but the most protected location was at home (Table 4.105). Of those young people who reported racism, 72.9 per cent (CI: 65.6%–79.8%) had never experienced racism at home.

A young person could encounter racism at several locations but there was no obvious pattern to the combinations of locations reported. No young person ‘quite often’ or ‘almost always’ encountered racism in more than five of the seven specified locations (Table 4.106).



## RACISM AND DRUG USE

Adjusting for age and sex, the associations between smoking cigarettes, alcohol and marijuana use and the experience of racism were estimated using multivariate logistic regression analysis (Table 4.107). Smoking cigarettes, marijuana use and alcohol consumption were all statistically significantly associated with the perception of racism, particularly drinking to excess (Odds Ratio 2.11; CI: 1.17–3.81) and frequent marijuana use (Odds Ratio 2.17; CI: 1.19–3.97). This analysis confirmed a statistically significant increased risk for males (Odds Ratio 1.48; CI: 1.02–2.17) and suggested that after controlling for drug use, there was a tendency for the likelihood of experiencing racism to decline with increasing age.

## ASSOCIATIONS BETWEEN BULLYING AND BEING PICKED ON AND RACISM

The proportion of young people who reported racism was significantly higher among those who also had been bullied at school (30.1 per cent; CI: 23.0%–37.7%) than among school attendees who had not been bullied at school (17.1 per cent; CI: 13.2%–21.5%) (Table 4.108). An estimated 44.3 per cent (CI: 35.1%–54.3%) of young people still attending school who reported racism also had been bullied at school compared with 27.6 per cent (CI: 23.5%–32.3%) who did not experience racism (Table 4.109).

Among young people who had been picked on in the six months prior to the survey, 28.7 per cent (22.7%–35.5%) reported racism compared with 19.2 per cent (CI: 16.0%–22.5%) who had not been picked on (Table 4.110).

## IMPLICATIONS OF FINDINGS CONCERNING BULLYING, BEING PICKED ON AND RACISM IN ABORIGINAL YOUNG PEOPLE AGED 12–17 YEARS

Harassment consists of any behaviour that is both unwanted and also humiliating, offensive or intimidating. The perception of harassment therefore has two components: (i) the treatment received and (ii) the reaction it arouses in the subject. To qualify as harassment, there should be knowledge on the part of the perpetrator that the treatment will arouse adverse reactions in the recipient since harassment is defined as behaviour which is anticipated to arouse feelings of shame, annoyance or fear in the person to which the behaviour is directed.

The perception of racism has a third component: the perception of the reasons why one has been treated in this way. Thus the perceptions of harassment and racism may be subjective unless overtly explicit remarks concerning the intended effects or reasons for the behaviour are made. At one extreme, no harassment or racism may be perceived where it exists on the part of the perpetrator, and at the other, harassment and racism may be perceived where none is intended on the part of the perpetrator.

It is unfortunate that there are no suitable data from other populations with which the proportions estimated to have experienced harassment or racism in this survey can be compared. What is clear is that a significant proportion of Aboriginal young people feel harassed in some way. Almost one third of school attendees have felt bullied at school, one quarter of all young people had been picked on by their peers in the last 6 months and one in five have felt themselves to be the object of racism. It is also clear that these feelings are associated with adverse health risk behaviours, though the direction of causality in these associations cannot be known from this cross sectional survey.



## ENDNOTES

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## DETAILED TABLES

**TABLE 4.1:** CARER PROVIDED CHARACTERISTICS OF 12–17 YEAR-OLDS WHO DID AND DID NOT COMPLETE A YOUTH SELF REPORT

	<i>Both carer report and youth self-report</i>		<i>Carer report but no youth self-report</i>	
	%	95% CI	%	95% CI
<b>Sex</b>				
Males	46.5	(43.1 - 50.1)	60.3	(54.3 - 66.3)
Females	53.5	(49.9 - 56.9)	39.7	(33.7 - 45.7)
<b>Age (years)</b>				
12	15.8	(13.4 - 18.5)	21.5	(16.9 - 27.0)
13	19.2	(16.1 - 22.4)	15.4	(11.6 - 20.0)
14	18.3	(15.8 - 20.8)	15.9	(11.5 - 20.8)
15	17.1	(14.7 - 19.8)	12.9	(9.1 - 17.6)
16	15.9	(13.7 - 18.3)	15.1	(10.8 - 19.8)
17	13.7	(11.3 - 16.3)	17.3	(13.3 - 21.9)
<b>LORI — None</b>				
Males	35.0	(29.4 - 40.9)	30.0	(22.0 - 39.0)
Females	39.3	(34.1 - 44.8)	20.5	(12.8 - 29.5)
<b>Total</b>	37.3	(33.1 - 41.5)	26.2	(20.0 - 32.8)
<b>LORI — Low</b>				
Males	26.3	(21.0 - 32.0)	18.7	(12.6 - 26.2)
Females	23.4	(19.3 - 28.1)	18.8	(10.6 - 28.4)
<b>Total</b>	24.8	(21.2 - 28.6)	18.8	(13.1 - 25.6)
<b>LORI — Moderate</b>				
Males	18.3	(13.6 - 23.4)	23.6	(14.0 - 34.2)
Females	21.0	(16.7 - 25.8)	24.0	(15.3 - 35.4)
<b>Total</b>	19.8	(16.1 - 24.0)	23.8	(16.4 - 32.1)
<b>LORI — High</b>				
Males	9.6	(6.6 - 13.6)	14.8	(9.3 - 22.5)
Females	8.8	(5.9 - 12.5)	15.2	(8.6 - 23.3)
<b>Total</b>	9.2	(6.6 - 12.4)	14.9	(9.7 - 21.1)
<b>LORI — Extreme</b>				
Males	10.8	(7.0 - 15.9)	12.9	(8.3 - 18.6)
Females	7.4	(4.9 - 10.5)	21.5	(12.3 - 32.4)
<b>Total</b>	9.0	(6.2 - 12.5)	16.3	(10.7 - 22.9)
<b>Risk of clinically significant emotional or behavioural difficulties</b>				
Low	70.9	(67.2 - 74.5)	68.5	(61.1 - 75.5)
Moderate	9.9	(7.5 - 12.6)	7.3	(4.7 - 10.9)
High	19.2	(16.2 - 22.5)	24.2	(17.7 - 32.1)
<b>Risk of clinically significant emotional symptoms</b>				
Low	67.6	(63.7 - 71.2)	64.9	(57.8 - 71.4)
Moderate	11.1	(8.9 - 13.7)	10.8	(7.1 - 15.6)
High	21.3	(18.4 - 24.6)	24.3	(18.5 - 31.0)
<b>Risk of clinically significant conduct problems</b>				
Low	59.7	(55.8 - 63.5)	51.7	(44.6 - 58.8)
Moderate	11.1	(8.8 - 13.7)	10.6	(7.2 - 14.7)
High	29.2	(25.7 - 33.0)	37.7	(30.5 - 44.9)
<b>Risk of clinically significant hyperactivity</b>				
Low	79.9	(76.8 - 82.7)	77.5	(69.6 - 84.4)
Moderate	8.1	(6.7 - 9.7)	8.7	(4.1 - 14.8)
High	12.0	(9.5 - 14.9)	13.9	(9.1 - 19.7)

Continued . . .



**TABLE 4.1 (continued): CARER PROVIDED CHARACTERISTICS OF 12–17 YEAR-OLDS WHO DID AND DID NOT COMPLETE A YOUTH SELF REPORT**

	Both carer report and youth self-report		Carer report but no youth self-report	
	%	95% CI	%	95% CI
<b>Risk of clinically significant peer problems</b>				
Low	65.5	(61.8 - 69.2)	63.9	(57.2 - 70.0)
Moderate	12.5	(10.3 - 15.0)	13.1	(8.9 - 18.0)
High	22.0	(18.7 - 25.5)	23.0	(17.9 - 28.7)
<b>Risk of clinically significant prosocial behaviour</b>				
Low	93.8	(91.8 - 95.3)	91.4	(87.6 - 94.3)
Moderate	2.8	(1.8 - 4.0)	3.4	(2.1 - 5.1)
High	3.4	(2.3 - 5.0)	5.2	(2.8 - 8.7)
<b>Risk of clinically significant functional impairment</b>				
Low	84.2	(81.4 - 86.8)	84.0	(78.2 - 88.6)
Moderate	3.7	(2.4 - 5.4)	4.0	(2.0 - 7.1)
High	12.1	(9.8 - 14.6)	12.0	(7.6 - 17.2)
<b>Deliberate self harm</b>				
Males	1.8	(0.8 - 3.6)	1.6	(0.2 - 7.2)
Females	3.9	(1.8 - 7.8)	4.6	(1.4 - 12.8)
<b>Total</b>	<b>2.9</b>	<b>(1.6 - 5.0)</b>	<b>2.8</b>	<b>(0.9 - 6.2)</b>
<b>Talked about death or suicide</b>				
Males	11.4	(8.1 - 15.8)	14.5	(9.4 - 20.9)
Females	11.8	(8.9 - 15.0)	12.7	(7.2 - 21.4)
<b>Total</b>	<b>11.6</b>	<b>(9.3 - 14.2)</b>	<b>13.8</b>	<b>(9.5 - 18.9)</b>
<b>Attempted suicide</b>				
Males	1.2	(0.0 - 5.1)	2.0	(0.5 - 6.5)
Females	2.2	(1.0 - 4.0)	3.8	(0.4 - 10.8)
<b>Total</b>	<b>1.7</b>	<b>(0.8 - 3.4)</b>	<b>2.7</b>	<b>(0.9 - 6.1)</b>

## SMOKING

**TABLE 4.2: YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE SMOKED CIGARETTES REGULARLY, BY LEVEL OF RELATIVE ISOLATION (LORI)**

LORI	Number	95% CI	%	95% CI
None	1 150	(960 - 1 350)	36.3	(30.2 - 42.7)
Low	800	(640 - 980)	35.0	(28.8 - 42.0)
Moderate	780	(620 - 950)	42.6	(36.3 - 49.0)
<b>None-moderate</b>	<b>2 720</b>	<b>(2 430 - 3 030)</b>	<b>37.5</b>	<b>(33.8 - 41.3)</b>
High	250	(130 - 420)	26.8	(15.3 - 40.3)
Extreme	240	(150 - 380)	27.1	(17.7 - 38.6)
<b>High-extreme</b>	<b>490</b>	<b>(340 - 680)</b>	<b>27.0</b>	<b>(19.5 - 35.4)</b>
<b>Total</b>	<b>3 220</b>	<b>(2 920 - 3 530)</b>	<b>35.4</b>	<b>(32.1 - 38.8)</b>





**TABLE 4.3:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE SMOKED CIGARETTES REGULARLY, BY AGE AND SEX

Age (years)	Number	95% CI	%	95% CI
<b>Male</b>				
12	120	(50 - 210)	12.0	(5.4 - 20.8)
13	170	(80 - 310)	19.9	(10.0 - 33.7)
14	200	(120 - 300)	25.7	(15.3 - 37.0)
15	300	(210 - 430)	41.0	(29.0 - 53.7)
16	300	(230 - 400)	42.8	(31.3 - 54.6)
17	340	(230 - 480)	56.3	(43.2 - 70.3)
<b>Total</b>	<b>1 430</b>	<b>(1 190 - 1 680)</b>	<b>30.7</b>	<b>(26.1 - 35.8)</b>
<b>Female</b>				
12	90	(30 - 190)	12.4	(4.4 - 23.9)
13	210	(140 - 300)	25.9	(17.9 - 36.1)
14	320	(220 - 460)	39.3	(28.8 - 49.7)
15	350	(230 - 510)	49.5	(36.1 - 63.9)
16	390	(290 - 510)	55.1	(43.6 - 65.2)
17	430	(320 - 570)	59.5	(47.9 - 70.4)
<b>Total</b>	<b>1 790</b>	<b>(1 550 - 2 050)</b>	<b>40.1</b>	<b>(35.5 - 45.1)</b>
<b>Total</b>				
12	200	(110 - 330)	12.2	(7.3 - 19.4)
13	380	(260 - 520)	22.8	(16.2 - 31.0)
14	520	(390 - 680)	32.7	(25.2 - 40.5)
15	660	(510 - 840)	45.1	(36.4 - 54.3)
16	690	(560 - 850)	48.9	(40.9 - 57.2)
17	770	(610 - 950)	58.0	(49.3 - 66.5)
<b>Total</b>	<b>3 220</b>	<b>(2 920 - 3 530)</b>	<b>35.4</b>	<b>(32.1 - 38.8)</b>

**TABLE 4.4:** YOUNG PEOPLE AGED 12–16 YEARS — PROPORTION WHO HAVE SMOKED CIGARETTES REGULARLY

Sex	Number	95% CI	%	95% CI
Males	1 090	(890 - 1 310)	27.0	(22.3 - 32.1)
Females	1 360	(1 140 - 1 600)	36.4	(31.4 - 41.7)
<b>Total</b>	<b>2 450</b>	<b>(2 190 - 2 740)</b>	<b>31.5</b>	<b>(28.1 - 35.0)</b>





**TABLE 4.5:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE SMOKED CIGARETTES REGULARLY, BY LEVEL OF RELATIVE ISOLATION (LORI) AND SEX

LORI	Number	95% CI	%	95% CI
<b>Males</b>				
None	490	(350 - 660)	30.5	(22.5 - 39.6)
Low	370	(260 - 500)	32.2	(23.7 - 42.1)
Moderate	340	(230 - 490)	39.9	(27.1 - 52.7)
High	140	(60 - 290)	26.2	(12.1 - 49.4)
Extreme	90	(30 - 180)	17.6	(7.6 - 30.8)
<b>Total</b>	<b>1 430</b>	<b>(1 190 - 1 680)</b>	<b>30.7</b>	<b>(26.1 - 35.8)</b>
<b>Females</b>				
None	660	(510 - 850)	42.2	(32.7 - 51.7)
Low	430	(300 - 580)	37.8	(28.2 - 47.3)
Moderate	440	(330 - 570)	45.0	(37.3 - 52.5)
High	110	(30 - 240)	27.7	(11.6 - 47.8)
Extreme	150	(90 - 250)	39.5	(20.7 - 57.7)
<b>Total</b>	<b>1 790</b>	<b>(1 550 - 2 050)</b>	<b>40.1</b>	<b>(35.5 - 45.1)</b>
<b>Total</b>				
None	1 150	(960 - 1 350)	36.3	(30.2 - 42.7)
Low	800	(640 - 980)	35.0	(28.8 - 42.0)
Moderate	780	(620 - 950)	42.6	(36.3 - 49.0)
High	250	(130 - 420)	26.8	(15.3 - 40.3)
Extreme	240	(150 - 380)	27.1	(17.7 - 38.6)
<b>Total</b>	<b>3 220</b>	<b>(2 920 - 3 530)</b>	<b>35.4</b>	<b>(32.1 - 38.8)</b>

**TABLE 4.6:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE SMOKED CIGARETTES REGULARLY, BY AGE AND SEX

Age group (years)	Number	95% CI	%	95% CI
<b>Males</b>				
12–13	290	(170 - 450)	15.7	(9.4 - 23.2)
14	200	(120 - 300)	25.7	(15.3 - 37.0)
15	300	(210 - 430)	41.0	(29.0 - 53.7)
16	300	(230 - 400)	42.8	(31.3 - 54.6)
17	340	(230 - 480)	56.3	(43.2 - 70.3)
<b>Total</b>	<b>1 430</b>	<b>(1 190 - 1 680)</b>	<b>30.7</b>	<b>(26.1 - 35.8)</b>
<b>Females</b>				
12–13	290	(190 - 420)	19.6	(13.4 - 27.0)
14	320	(220 - 460)	39.3	(28.8 - 49.7)
15	350	(230 - 510)	49.5	(36.1 - 63.9)
16	390	(290 - 510)	55.1	(43.6 - 65.2)
17	430	(320 - 570)	59.5	(47.9 - 70.4)
<b>Total</b>	<b>1 790</b>	<b>(1 550 - 2 050)</b>	<b>40.1</b>	<b>(35.5 - 45.1)</b>
<b>Total</b>				
12–13	580	(420 - 760)	17.5	(13.2 - 22.9)
14	520	(390 - 680)	32.7	(25.2 - 40.5)
15	660	(510 - 840)	45.1	(36.4 - 54.3)
16	690	(560 - 850)	48.9	(40.9 - 57.2)
17	770	(610 - 950)	58.0	(49.3 - 66.5)
<b>Total</b>	<b>3 220</b>	<b>(2 920 - 3 530)</b>	<b>35.4</b>	<b>(32.1 - 38.8)</b>



**TABLE 4.7:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE SMOKED CIGARETTES REGULARLY, BY AGE, SEX AND WHETHER STILL IN SCHOOL

Sex	Age (years)	Number	95% CI	%	95% CI
Not still in school					
Males	12	0	(0 - 60)	0.0	(0.0 - 70.8)
	13	20	(0 - 50)	23.1	(3.2 - 65.1)
	14	0	(0 - 60)	0.0	(0.0 - 52.2)
	15	120	(50 - 230)	57.9	(31.6 - 86.1)
	16	170	(110 - 240)	49.4	(35.5 - 64.5)
	17	250	(160 - 370)	58.2	(42.1 - 73.0)
	<b>Total</b>		<b>560</b>	<b>(410 - 720)</b>	<b>47.8</b>
Females	12	0	(0 - 60)	0.0	(0.0 - 97.5)
	13	10	(0 - 60)	48.1	(1.3 - 98.7)
	14	40	(0 - 140)	45.5	(5.3 - 85.3)
	15	90	(40 - 160)	66.9	(41.0 - 86.7)
	16	260	(170 - 370)	63.4	(51.3 - 75.0)
	17	370	(270 - 490)	69.4	(57.5 - 79.8)
	<b>Total</b>		<b>770</b>	<b>(620 - 960)</b>	<b>64.2</b>
<b>Total</b>	12	0	(0 - 60)	0.0	(0.0 - 70.8)
	13	30	(10 - 80)	29.8	(6.0 - 61.0)
	14	40	(0 - 140)	25.7	(2.8 - 60.0)
	15	210	(120 - 330)	61.5	(42.4 - 80.6)
	16	430	(320 - 560)	57.1	(47.5 - 66.7)
	17	620	(480 - 780)	64.3	(54.7 - 73.1)
	<b>Total</b>		<b>1 330</b>	<b>(1 120 - 1 560)</b>	<b>56.1</b>
Still in school					
Males	12	120	(50 - 210)	12.5	(5.6 - 21.6)
	13	150	(60 - 280)	19.7	(8.4 - 33.4)
	14	200	(120 - 300)	28.3	(17.5 - 41.4)
	15	190	(120 - 280)	34.6	(21.8 - 47.8)
	16	140	(80 - 210)	36.7	(20.4 - 54.9)
	17	80	(30 - 180)	51.1	(23.4 - 83.3)
	<b>Total</b>		<b>870</b>	<b>(680 - 1 080)</b>	<b>25.0</b>
Females	12	90	(30 - 190)	12.6	(4.5 - 24.3)
	13	190	(130 - 280)	25.2	(16.7 - 34.9)
	14	280	(190 - 400)	38.5	(28.1 - 49.1)
	15	260	(150 - 400)	45.4	(29.3 - 61.5)
	16	130	(80 - 190)	43.2	(27.2 - 62.1)
	17	70	(30 - 160)	33.1	(11.8 - 61.6)
	<b>Total</b>		<b>1 020</b>	<b>(830 - 1 230)</b>	<b>31.2</b>
<b>Total</b>	12	200	(110 - 330)	12.5	(7.4 - 19.8)
	13	350	(230 - 490)	22.4	(15.7 - 31.2)
	14	480	(360 - 630)	33.5	(26.2 - 42.1)
	15	450	(320 - 610)	40.2	(30.7 - 51.1)
	16	260	(190 - 350)	39.6	(28.0 - 52.9)
	17	150	(70 - 260)	41.1	(23.4 - 63.1)
	<b>Total</b>		<b>1 890</b>	<b>(1 640 - 2 150)</b>	<b>28.0</b>

Continued....



**TABLE 4.7 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE SMOKED CIGARETTES REGULARLY, BY AGE, SEX AND WHETHER STILL IN SCHOOL

Sex	Age (years)	Number	95% CI	%	95% CI
<b>Total</b>					
Males	12	120	(50 - 210)	12.0	(5.4 - 20.8)
	13	170	(80 - 310)	19.9	(10.0 - 33.7)
	14	200	(120 - 300)	25.7	(15.3 - 37.0)
	15	300	(210 - 430)	41.0	(29.0 - 53.7)
	16	300	(230 - 400)	42.8	(31.3 - 54.6)
	17	340	(230 - 480)	56.3	(43.2 - 70.3)
	<b>Total</b>		<b>1 430</b>	<b>(1 190 - 1 680)</b>	<b>30.7</b>
Females	12	90	(30 - 190)	12.4	(4.4 - 23.9)
	13	210	(140 - 300)	25.9	(17.9 - 36.1)
	14	320	(220 - 460)	39.3	(28.8 - 49.7)
	15	350	(230 - 510)	49.5	(36.1 - 63.9)
	16	390	(290 - 510)	55.1	(43.6 - 65.2)
	17	430	(320 - 570)	59.5	(47.9 - 70.4)
	<b>Total</b>		<b>1 790</b>	<b>(1 550 - 2 050)</b>	<b>40.1</b>
<b>Total</b>	12	200	(110 - 330)	12.2	(7.3 - 19.4)
	13	380	(260 - 520)	22.8	(16.2 - 31.0)
	14	520	(390 - 680)	32.7	(25.2 - 40.5)
	15	660	(510 - 840)	45.1	(36.4 - 54.3)
	16	690	(560 - 850)	48.9	(40.9 - 57.2)
	17	770	(610 - 950)	58.0	(49.3 - 66.5)
	<b>Total</b>		<b>3 220</b>	<b>(2 920 - 3 530)</b>	<b>35.4</b>

**TABLE 4.8:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHOSE PARENTS SMOKE, BY LEVEL OF RELATIVE ISOLATION (LORI)

LORI	Number	95% CI	%	95% CI
None	2 270	(2 070 - 2 480)	71.8	(65.4 - 77.9)
Low	1 560	(1 350 - 1 770)	68.2	(60.8 - 74.8)
Moderate	1 110	(880 - 1 370)	60.8	(51.9 - 68.5)
High	640	(450 - 870)	68.6	(53.7 - 80.1)
Extreme	420	(260 - 610)	46.6	(33.7 - 60.0)
<b>Total</b>	<b>5 990</b>	<b>(5 650 - 6 320)</b>	<b>65.8</b>	<b>(62.1 - 69.4)</b>



**TABLE 4.9:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE SMOKED CIGARETTES REGULARLY, BY LEVEL OF RELATIVE ISOLATION (LORI) AND WHETHER PARENTS SMOKE

LORI	Number	95% CI	%	95% CI
Parents do not smoke				
None	210	(120 - 320)	23.5	(13.9 - 34.9)
Low	200	(110 - 320)	27.3	(15.8 - 40.3)
Moderate	340	(230 - 490)	47.5	(34.0 - 61.0)
High	70	(10 - 170)	23.5	(4.7 - 50.8)
Extreme	130	(60 - 220)	26.3	(13.4 - 43.1)
<b>Western Australia</b>	<b>940</b>	<b>(750 - 1 160)</b>	<b>30.3</b>	<b>(24.6 - 36.5)</b>
Parents smoke				
None	940	(760 - 1 140)	41.3	(34.1 - 48.8)
Low	600	(470 - 760)	38.6	(31.3 - 46.9)
Moderate	440	(330 - 560)	39.5	(32.7 - 46.4)
High	180	(90 - 320)	28.4	(15.3 - 43.7)
Extreme	120	(60 - 210)	28.0	(15.0 - 44.9)
<b>Western Australia</b>	<b>2 270</b>	<b>(2 010 - 2 550)</b>	<b>37.9</b>	<b>(34.0 - 42.0)</b>
<b>Total</b>				
None	1 150	(960 - 1 350)	36.3	(30.2 - 42.7)
Low	800	(640 - 980)	35.0	(28.8 - 42.0)
Moderate	780	(620 - 950)	42.6	(36.3 - 49.0)
High	250	(130 - 420)	26.8	(15.3 - 40.3)
Extreme	240	(150 - 380)	27.1	(17.7 - 38.6)
<b>Western Australia</b>	<b>3 220</b>	<b>(2 920 - 3 530)</b>	<b>35.4</b>	<b>(32.1 - 38.8)</b>

**TABLE 4.10:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE SMOKED CIGARETTES REGULARLY, BY AGE AND WHETHER PARENTS SMOKE

Age group (years)	Number	95% CI	%	95% CI
Parents do not smoke				
12–13	140	(70 - 260)	13.2	(6.6 - 23.2)
14	110	(50 - 190)	21.3	(11.2 - 37.1)
15	150	(90 - 240)	38.1	(21.8 - 57.8)
16	210	(140 - 300)	38.3	(26.6 - 51.9)
17	330	(210 - 470)	59.0	(42.1 - 73.7)
<b>Total</b>	<b>940</b>	<b>(750 - 1 160)</b>	<b>30.3</b>	<b>(24.6 - 36.5)</b>
Parents smoke				
12–13	430	(300 - 600)	19.5	(14.0 - 25.9)
14	410	(300 - 550)	38.1	(29.1 - 47.2)
15	500	(370 - 680)	47.8	(37.6 - 58.4)
16	480	(380 - 610)	55.6	(44.7 - 66.0)
17	440	(330 - 570)	57.4	(47.2 - 67.5)
<b>Total</b>	<b>2 270</b>	<b>(2 010 - 2 550)</b>	<b>37.9</b>	<b>(34.0 - 42.0)</b>
<b>Total</b>				
12–13	580	(420 - 760)	17.5	(13.2 - 22.9)
14	520	(390 - 680)	32.7	(25.2 - 40.5)
15	660	(510 - 840)	45.1	(36.4 - 54.3)
16	690	(560 - 850)	48.9	(40.9 - 57.2)
17	770	(610 - 950)	58.0	(49.3 - 66.5)
<b>Total</b>	<b>3 220</b>	<b>(2 920 - 3 530)</b>	<b>35.4</b>	<b>(32.1 - 38.8)</b>



**TABLE 4.11:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE SMOKED CIGARETTES REGULARLY, BY QUALITY OF PARENTING AND SEX

Quality of parenting	Number	95% CI	%	95% CI
Males				
Poor	210	(130 - 320)	43.0	(28.2 - 56.8)
Sub-optimal	710	(550 - 890)	32.6	(26.2 - 40.0)
Adequate	510	(370 - 690)	25.7	(19.0 - 33.7)
<b>Total</b>	<b>1 430</b>	<b>(1 190 - 1 680)</b>	<b>30.7</b>	<b>(26.1 - 35.8)</b>
Females				
Poor	270	(190 - 380)	50.2	(36.1 - 63.9)
Sub-optimal	670	(520 - 830)	36.3	(29.8 - 43.5)
Adequate	850	(680 - 1 060)	40.9	(33.6 - 48.8)
<b>Total</b>	<b>1 790</b>	<b>(1 550 - 2 050)</b>	<b>40.1</b>	<b>(35.5 - 45.1)</b>
<b>Total</b>				
Poor	480	(360 - 620)	46.8	(36.8 - 56.1)
Sub-optimal	1 380	(1 170 - 1 610)	34.3	(29.5 - 39.3)
Adequate	1 360	(1 140 - 1 600)	33.5	(28.4 - 38.8)
<b>Total</b>	<b>3 220</b>	<b>(2 920 - 3 530)</b>	<b>35.4</b>	<b>(32.1 - 38.8)</b>

**TABLE 4.12:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE SMOKED CIGARETTES REGULARLY, BY QUALITY OF PARENTING AND AGE

Quality of parenting	Number	95% CI	%	95% CI
12 years				
Poor	50	(20 - 120)	35.0	(11.8 - 61.6)
Sub-optimal	90	(50 - 150)	11.0	(5.8 - 18.4)
Adequate	60	(10 - 190)	8.6	(0.9 - 23.5)
<b>Total</b>	<b>200</b>	<b>(110 - 330)</b>	<b>12.2</b>	<b>(7.3 - 19.4)</b>
13 years				
Poor	70	(20 - 180)	30.3	(9.1 - 61.4)
Sub-optimal	160	(90 - 270)	21.0	(11.3 - 32.2)
Adequate	150	(90 - 230)	22.5	(12.5 - 34.0)
<b>Total</b>	<b>380</b>	<b>(260 - 520)</b>	<b>22.8</b>	<b>(16.2 - 31.0)</b>
14 years				
Poor	110	(70 - 180)	46.1	(30.1 - 62.8)
Sub-optimal	230	(140 - 350)	33.0	(23.1 - 44.9)
Adequate	180	(100 - 290)	27.3	(16.2 - 42.5)
<b>Total</b>	<b>520</b>	<b>(390 - 680)</b>	<b>32.7</b>	<b>(25.2 - 40.5)</b>
15 years				
Poor	110	(60 - 210)	59.6	(32.3 - 83.7)
Sub-optimal	280	(180 - 410)	45.0	(31.3 - 58.5)
Adequate	260	(160 - 400)	40.9	(27.6 - 56.8)
<b>Total</b>	<b>660</b>	<b>(510 - 840)</b>	<b>45.1</b>	<b>(36.4 - 54.3)</b>
16 years				
Poor	70	(40 - 120)	55.3	(26.2 - 87.8)
Sub-optimal	320	(230 - 420)	48.3	(35.1 - 60.5)
Adequate	310	(220 - 420)	48.3	(36.9 - 59.5)
<b>Total</b>	<b>690</b>	<b>(560 - 850)</b>	<b>48.9</b>	<b>(40.9 - 57.2)</b>
17 years				
Poor	60	(40 - 100)	70.2	(29.9 - 92.5)
Sub-optimal	310	(210 - 430)	61.0	(46.9 - 74.1)
Adequate	400	(280 - 550)	54.5	(41.8 - 66.9)
<b>Total</b>	<b>770</b>	<b>(610 - 950)</b>	<b>58.0</b>	<b>(49.3 - 66.5)</b>



**TABLE 4.13:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE SMOKED CIGARETTES REGULARLY, BY WHETHER ALLOWED TO GO OUT ANY NIGHT YOU WANT, AGE AND SEX

Age (years)	How often do your parents let you go out any night you want	Number	95% CI	%	95% CI
<b>Males</b>					
12	Often/ Very often	20	(10 - 40)	18.0	(6.1 - 36.9)
	Never/Sometimes	90	(30 - 190)	11.1	(4.9 - 22.9)
13	Often/ Very often	50	(20 - 140)	22.0	(7.3 - 52.4)
	Never/Sometimes	120	(50 - 260)	19.2	(8.7 - 37.9)
14	Often/ Very often	80	(40 - 130)	40.4	(15.2 - 64.6)
	Never/Sometimes	120	(50 - 220)	20.6	(10.3 - 36.8)
15	Often/ Very often	140	(80 - 220)	52.0	(29.8 - 74.3)
	Never/Sometimes	160	(90 - 270)	34.6	(20.1 - 50.6)
16	Often/ Very often	170	(120 - 250)	50.8	(35.8 - 66.3)
	Never/Sometimes	130	(80 - 200)	35.7	(21.8 - 54.0)
17	Often/ Very often	200	(110 - 350)	62.8	(40.6 - 81.2)
	Never/Sometimes	130	(90 - 190)	48.5	(31.9 - 65.6)
<b>Total</b>	<b>Often/ Very often</b>	<b>670</b>	<b>(500 - 850)</b>	<b>45.2</b>	<b>(36.4 - 54.8)</b>
	<b>Never/Sometimes</b>	<b>760</b>	<b>(600 - 950)</b>	<b>24.0</b>	<b>(19.1 - 29.6)</b>
<b>Females</b>					
12	Often/ Very often	10	(0 - 70)	6.9	(0.0 - 60.2)
	Never/Sometimes	80	(30 - 180)	13.2	(5.3 - 27.9)
13	Often/ Very often	40	(10 - 130)	36.1	(7.5 - 70.1)
	Never/Sometimes	160	(110 - 230)	24.0	(16.2 - 33.9)
14	Often/ Very often	80	(40 - 160)	53.7	(25.1 - 80.8)
	Never/Sometimes	240	(150 - 350)	36.1	(25.7 - 48.1)
15	Often/ Very often	150	(70 - 300)	73.2	(49.8 - 89.3)
	Never/Sometimes	210	(130 - 320)	40.2	(26.3 - 56.8)
16	Often/ Very often	140	(80 - 220)	69.8	(44.0 - 89.7)
	Never/Sometimes	250	(170 - 340)	49.3	(37.2 - 61.4)
17	Often/ Very often	170	(100 - 270)	62.3	(42.4 - 80.6)
	Never/Sometimes	260	(180 - 370)	57.8	(43.2 - 73.0)
<b>Total</b>	<b>Often/ Very often</b>	<b>590</b>	<b>(440 - 780)</b>	<b>56.8</b>	<b>(45.3 - 67.2)</b>
	<b>Never/Sometimes</b>	<b>1 200</b>	<b>(1 020 - 1 420)</b>	<b>35.1</b>	<b>(30.1 - 40.5)</b>
<b>Total</b>					
12	Often/ Very often	30	(10 - 70)	13.3	(2.8 - 33.6)
	Never/Sometimes	170	(90 - 300)	12.0	(6.2 - 19.5)
13	Often/ Very often	90	(40 - 200)	27.0	(12.1 - 49.4)
	Never/Sometimes	280	(190 - 410)	21.7	(14.5 - 30.7)
14	Often/ Very often	160	(100 - 240)	46.1	(26.4 - 64.3)
	Never/Sometimes	360	(250 - 500)	28.9	(21.0 - 38.2)
15	Often/ Very often	290	(180 - 440)	61.0	(43.5 - 76.9)
	Never/Sometimes	370	(260 - 500)	37.5	(27.8 - 48.3)
16	Often/ Very often	310	(220 - 420)	57.9	(45.6 - 70.6)
	Never/Sometimes	380	(290 - 500)	43.5	(33.1 - 53.3)
17	Often/ Very often	370	(250 - 530)	62.5	(49.0 - 76.4)
	Never/Sometimes	390	(300 - 510)	54.3	(43.5 - 65.9)
<b>Total</b>	<b>Often/ Very often</b>	<b>1 250</b>	<b>(1 040 - 1 490)</b>	<b>50.0</b>	<b>(43.3 - 57.2)</b>
	<b>Never/Sometimes</b>	<b>1 970</b>	<b>(1 720 - 2 220)</b>	<b>29.8</b>	<b>(26.3 - 33.6)</b>



**TABLE 4.14:** YOUNG PEOPLE AGED 12–17 YEARS — LIKELIHOOD OF SMOKING CIGARETTES MORE THAN JUST ONCE OR TWICE, ASSOCIATED WITH SEX, AGE, LEVEL OF RELATIVE ISOLATION (LORI), PARENTAL SMOKING, WHETHER STILL IN SCHOOL, PARENTING STYLE AND HOW OFTEN ALLOWED OUT AT NIGHT

Has smoked cigarettes regularly				
Parameter	Significance (p value)	Odds Ratio	95% CI	
<b>Sex</b>				
Male	0.003	0.57	(0.40 - 0.82)	
Female		1.00		
<b>Age (years)</b>				
12		1.00		
13	0.108	1.70	(0.89 - 3.23)	
14	<0.001	2.96	(1.63 - 5.36)	
15	<0.001	3.89	(2.20 - 6.88)	
16	<0.001	4.61	(2.40 - 8.84)	
17	<0.001	4.48	(2.20 - 9.12)	
<b>Level of Relative Isolation</b>				
None		1.00		
Low	0.598	0.90	(0.60 - 1.35)	
Moderate	0.361	0.81	(0.51 - 1.28)	
High	0.004	0.38	(0.20 - 0.73)	
Extreme	0.104	0.60	(0.32 - 1.11)	
<b>Parents smoke?</b>				
No		1.00		
Yes	0.002	1.85	(1.27 - 2.70)	
<b>Still in school</b>				
No	0.026	1.63	(1.06 - 2.49)	
Yes		1.00		
<b>Quality of parenting</b>				
Poor	<0.001	2.51	(1.48 - 4.28)	
Sub-optimal	0.060	1.40	(0.99 - 2.00)	
Adequate		1.00		
<b>How often do your parents let you go out any night you want</b>				
Often/ Very often	<0.001	2.11	(1.38 - 3.22)	
Never/Sometimes		1.00		

4



## ALCOHOL CONSUMPTION

TABLE 4.15: YOUNG PEOPLE AGED 12–17 YEARS — ALCOHOL CONSUMPTION, BY AGE AND SEX

Age (years)	Alcohol consumption	Number	95% CI	%	95% CI
Males					
12	Does not drink	930	(770 - 1 110)	95.4	(84.9 - 98.9)
	Drinks but not to excess	40	(10 - 150)	4.6	(1.1 - 15.1)
	Drinks to excess	0	(0 - 60)	0.0	(0.0 - 5.6)
	<b>Total</b>	<b>970</b>	<b>(800 - 1 160)</b>	<b>100.0</b>	
13	Does not drink	780	(590 - 1 000)	92.1	(80.4 - 97.7)
	Drinks but not to excess	50	(0 - 140)	5.9	(0.6 - 16.2)
	Drinks to excess	20	(0 - 60)	2.0	(0.3 - 7.3)
	<b>Total</b>	<b>850</b>	<b>(640 - 1 080)</b>	<b>100.0</b>	
14	Does not drink	620	(460 - 830)	80.0	(68.2 - 88.9)
	Drinks but not to excess	90	(50 - 150)	11.6	(6.0 - 20.0)
	Drinks to excess	70	(20 - 160)	8.4	(2.4 - 20.4)
	<b>Total</b>	<b>770</b>	<b>(590 - 990)</b>	<b>100.0</b>	
15	Does not drink	440	(320 - 590)	60.1	(47.2 - 72.4)
	Drinks but not to excess	140	(70 - 260)	19.5	(10.0 - 31.9)
	Drinks to excess	150	(90 - 250)	20.5	(11.4 - 31.3)
	<b>Total</b>	<b>740</b>	<b>(580 - 930)</b>	<b>100.0</b>	
16	Does not drink	370	(260 - 520)	52.6	(40.0 - 63.9)
	Drinks but not to excess	140	(70 - 240)	19.6	(10.8 - 30.9)
	Drinks to excess	200	(130 - 290)	27.8	(18.2 - 38.2)
	<b>Total</b>	<b>710</b>	<b>(560 - 890)</b>	<b>100.0</b>	
17	Does not drink	230	(130 - 390)	39.0	(24.4 - 54.5)
	Drinks but not to excess	220	(160 - 310)	37.8	(26.7 - 51.4)
	Drinks to excess	140	(80 - 220)	23.2	(13.6 - 36.6)
	<b>Total</b>	<b>600</b>	<b>(460 - 770)</b>	<b>100.0</b>	
<b>Total</b>	Does not drink	3 380	(3 060 - 3 710)	72.8	(68.0 - 77.2)
	Drinks but not to excess	690	(540 - 880)	14.9	(11.7 - 18.7)
	Drinks to excess	570	(430 - 740)	12.3	(9.4 - 15.8)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
Females					
12	Does not drink	670	(510 - 870)	96.7	(78.1 - 99.9)
	Drinks but not to excess	20	(0 - 170)	3.3	(0.1 - 21.9)
	Drinks to excess	0	(0 - 60)	0.0	(0.0 - 7.7)
	<b>Total</b>	<b>690</b>	<b>(520 - 890)</b>	<b>100.0</b>	
13	Does not drink	680	(530 - 870)	84.8	(76.3 - 91.6)
	Drinks but not to excess	50	(20 - 110)	6.3	(2.7 - 13.1)
	Drinks to excess	70	(30 - 150)	8.9	(3.4 - 16.4)
	<b>Total</b>	<b>800</b>	<b>(630 - 990)</b>	<b>100.0</b>	
14	Does not drink	630	(510 - 780)	76.5	(67.1 - 84.9)
	Drinks but not to excess	120	(70 - 190)	14.7	(9.4 - 22.1)
	Drinks to excess	70	(30 - 160)	8.7	(3.1 - 17.0)
	<b>Total</b>	<b>820</b>	<b>(670 - 1 000)</b>	<b>100.0</b>	
15	Does not drink	450	(330 - 610)	63.6	(48.1 - 75.9)
	Drinks but not to excess	130	(60 - 260)	17.6	(8.2 - 32.7)
	Drinks to excess	130	(70 - 260)	18.8	(9.8 - 33.1)
	<b>Total</b>	<b>710</b>	<b>(550 - 920)</b>	<b>100.0</b>	

Continued....





**TABLE 4.15 (continued): YOUNG PEOPLE AGED 12–17 YEARS — ALCOHOL CONSUMPTION, BY AGE AND SEX**

Age (years)	Alcohol consumption	Number	95% CI	%	95% CI
<b>Females (continued)</b>					
16	Does not drink	400	(320 - 500)	56.8	(45.4 - 68.4)
	Drinks but not to excess	150	(90 - 260)	21.4	(12.1 - 33.0)
	Drinks to excess	150	(90 - 270)	21.8	(11.9 - 33.7)
	<b>Total</b>	<b>710</b>	<b>(580 - 870)</b>	<b>100.0</b>	
17	Does not drink	410	(300 - 550)	56.8	(45.3 - 68.1)
	Drinks but not to excess	190	(110 - 310)	25.5	(15.5 - 37.5)
	Drinks to excess	130	(80 - 190)	17.7	(10.8 - 25.9)
	<b>Total</b>	<b>730</b>	<b>(580 - 910)</b>	<b>100.0</b>	
<b>Total</b>	Does not drink	3 240	(2 950 - 3 550)	72.7	(68.1 - 77.2)
	Drinks but not to excess	660	(500 - 850)	14.7	(11.1 - 18.7)
	Drinks to excess	560	(410 - 740)	12.6	(9.4 - 16.3)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>					
12	Does not drink	1 600	(1 370 - 1 840)	96.0	(88.9 - 99.2)
	Drinks but not to excess	70	(10 - 190)	4.0	(0.8 - 11.1)
	Drinks to excess	0	(0 - 60)	0.0	(0.0 - 3.3)
	<b>Total</b>	<b>1 660</b>	<b>(1 430 - 1 910)</b>	<b>100.0</b>	
13	Does not drink	1 460	(1 230 - 1 720)	88.6	(82.0 - 93.3)
	Drinks but not to excess	100	(40 - 200)	6.1	(2.4 - 11.7)
	Drinks to excess	90	(40 - 170)	5.3	(2.4 - 9.7)
	<b>Total</b>	<b>1 650</b>	<b>(1 410 - 1 920)</b>	<b>100.0</b>	
14	Does not drink	1 250	(1 050 - 1 480)	78.2	(71.2 - 84.6)
	Drinks but not to excess	210	(140 - 300)	13.2	(9.1 - 18.3)
	Drinks to excess	140	(70 - 260)	8.6	(4.2 - 15.2)
	<b>Total</b>	<b>1 600</b>	<b>(1 360 - 1 840)</b>	<b>100.0</b>	
15	Does not drink	900	(720 - 1 090)	61.8	(52.4 - 70.4)
	Drinks but not to excess	270	(170 - 430)	18.6	(11.6 - 27.6)
	Drinks to excess	290	(180 - 420)	19.6	(12.8 - 27.4)
	<b>Total</b>	<b>1 450</b>	<b>(1 220 - 1 700)</b>	<b>100.0</b>	
16	Does not drink	780	(630 - 940)	54.7	(46.3 - 62.7)
	Drinks but not to excess	290	(190 - 420)	20.5	(14.1 - 28.4)
	Drinks to excess	350	(240 - 490)	24.8	(18.0 - 33.1)
	<b>Total</b>	<b>1 420</b>	<b>(1 220 - 1 650)</b>	<b>100.0</b>	
17	Does not drink	640	(490 - 830)	48.8	(39.4 - 57.5)
	Drinks but not to excess	410	(310 - 540)	31.0	(23.8 - 39.5)
	Drinks to excess	270	(190 - 370)	20.2	(14.5 - 27.4)
	<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	
<b>Total</b>	Does not drink	6 620	(6 330 - 6 910)	72.8	(69.5 - 75.9)
	Drinks but not to excess	1 350	(1 130 - 1 590)	14.8	(12.4 - 17.5)
	Drinks to excess	1 130	(930 - 1 370)	12.4	(10.2 - 15.0)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 4.16:** YOUNG PEOPLE AGED 12–17 YEARS WHO DRINK ALCOHOL — PROPORTION WHO DURING THE PAST SIX MONTHS HAVE DRUNK SO MUCH THAT THEY VOMITED, BY AGE

Age (years)	Number	95% CI	%	95% CI
12	0	(0 - 60)	0.0	(0.0 - 60.2)
13	90	(40 - 170)	46.6	(21.3 - 73.4)
14	140	(70 - 260)	39.3	(21.8 - 57.8)
15	290	(180 - 420)	51.4	(36.1 - 68.5)
16	350	(240 - 490)	54.8	(40.7 - 67.6)
17	270	(190 - 370)	39.4	(29.2 - 50.7)
<b>Total</b>	<b>1 130</b>	<b>(930 - 1 370)</b>	<b>45.6</b>	<b>(38.6 - 52.5)</b>

**TABLE 4.17:** YOUNG PEOPLE AGED 12–17 YEARS — ALCOHOL CONSUMPTION, BY LEVEL OF RELATIVE ISOLATION (LORI) AND AGE

LORI	Alcohol consumption	Number	95% CI	%	95% CI
<b>12 years</b>					
None to moderate	Does not drink	1 140	(950 - 1 350)	94.4	(84.9 - 98.9)
	Drinks but not to excess	70	(10 - 190)	5.6	(1.1 - 15.1)
	Drinks to excess	0	(0 - 60)	0.0	(0.0 - 4.5)
	<b>Total</b>	<b>1 200</b>	<b>(1 000 - 1 430)</b>	<b>100.0</b>	
High/extreme	Does not drink	460	(320 - 620)	100.0	(88.4 - 100.0)
	Drinks but not to excess	0	(0 - 60)	0.0	(0.0 - 11.6)
	Drinks to excess	0	(0 - 60)	0.0	(0.0 - 11.6)
	<b>Total</b>	<b>460</b>	<b>(320 - 620)</b>	<b>100.0</b>	
<b>Western Australia</b>	Does not drink	1 600	(1 370 - 1 840)	96.0	(88.9 - 99.2)
	Drinks but not to excess	70	(10 - 190)	4.0	(0.8 - 11.1)
	Drinks to excess	0	(0 - 60)	0.0	(0.0 - 3.3)
	<b>Total</b>	<b>1 660</b>	<b>(1 430 - 1 910)</b>	<b>100.0</b>	
<b>13 years</b>					
None to moderate	Does not drink	1 180	(960 - 1 420)	86.6	(79.2 - 92.4)
	Drinks but not to excess	90	(40 - 210)	7.0	(3.0 - 14.6)
	Drinks to excess	90	(40 - 170)	6.4	(2.9 - 11.6)
	<b>Total</b>	<b>1 360</b>	<b>(1 130 - 1 630)</b>	<b>100.0</b>	
High/extreme	Does not drink	280	(170 - 420)	98.0	(92.0 - 100.0)
	Drinks but not to excess	10	(0 - 20)	2.0	(0.0 - 8.2)
	Drinks to excess	0	(0 - 60)	0.0	(0.0 - 17.6)
	<b>Total</b>	<b>280</b>	<b>(180 - 430)</b>	<b>100.0</b>	
<b>Western Australia</b>	Does not drink	1 460	(1 230 - 1 720)	88.6	(82.0 - 93.3)
	Drinks but not to excess	100	(40 - 200)	6.1	(2.4 - 11.7)
	Drinks to excess	90	(40 - 170)	5.3	(2.4 - 9.7)
	<b>Total</b>	<b>1 650</b>	<b>(1 410 - 1 920)</b>	<b>100.0</b>	
<b>14 years</b>					
None to moderate	Does not drink	940	(780 - 1 130)	73.9	(65.8 - 80.5)
	Drinks but not to excess	200	(140 - 290)	15.8	(10.8 - 21.8)
	Drinks to excess	130	(70 - 220)	10.3	(5.7 - 17.3)
	<b>Total</b>	<b>1 270</b>	<b>(1 070 - 1 490)</b>	<b>100.0</b>	
High/extreme	Does not drink	310	(190 - 470)	95.0	(66.4 - 100.0)
	Drinks but not to excess	10	(0 - 30)	3.2	(0.8 - 10.4)
	Drinks to excess	10	(0 - 340)	1.7	(0.0 - 70.8)
	<b>Total</b>	<b>330</b>	<b>(200 - 500)</b>	<b>100.0</b>	
<b>Western Australia</b>	Does not drink	1 250	(1 050 - 1 480)	78.2	(71.2 - 84.6)
	Drinks but not to excess	210	(140 - 300)	13.2	(9.1 - 18.3)
	Drinks to excess	140	(70 - 260)	8.6	(4.2 - 15.2)
	<b>Total</b>	<b>1 600</b>	<b>(1 360 - 1 840)</b>	<b>100.0</b>	

Continued....



**TABLE 4.17 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — ALCOHOL CONSUMPTION, BY LEVEL OF RELATIVE ISOLATION (LORI) AND AGE

LORI	Alcohol consumption	Number	95% CI	%	95% CI
<b>15 years</b>					
None to moderate	Does not drink	680	(530 - 870)	56.5	(45.7 - 66.4)
	Drinks but not to excess	240	(140 - 390)	20.3	(11.9 - 30.4)
	Drinks to excess	280	(180 - 410)	23.2	(15.7 - 33.0)
	<b>Total</b>	<b>1 210</b>	<b>(990 - 1 450)</b>	<b>100.0</b>	
High/extreme	Does not drink	220	(140 - 320)	87.7	(70.2 - 96.4)
	Drinks but not to excess	20	(10 - 70)	10.1	(2.4 - 29.2)
	Drinks to excess	10	(0 - 20)	2.2	(0.2 - 7.2)
	<b>Total</b>	<b>250</b>	<b>(160 - 350)</b>	<b>100.0</b>	
<b>Western Australia</b>	Does not drink	900	(720 - 1 090)	61.8	(52.4 - 70.4)
	Drinks but not to excess	270	(170 - 430)	18.6	(11.6 - 27.6)
	Drinks to excess	290	(180 - 420)	19.6	(12.8 - 27.4)
	<b>Total</b>	<b>1 450</b>	<b>(1 220 - 1 700)</b>	<b>100.0</b>	
<b>16 years</b>					
None to moderate	Does not drink	610	(480 - 750)	51.1	(42.2 - 60.1)
	Drinks but not to excess	270	(170 - 390)	22.4	(15.3 - 31.3)
	Drinks to excess	310	(210 - 450)	26.5	(18.6 - 35.9)
	<b>Total</b>	<b>1 190</b>	<b>(1 000 - 1 400)</b>	<b>100.0</b>	
High/extreme	Does not drink	170	(90 - 270)	72.7	(48.9 - 87.4)
	Drinks but not to excess	30	(0 - 90)	11.1	(1.4 - 34.7)
	Drinks to excess	40	(20 - 70)	16.2	(6.4 - 32.8)
	<b>Total</b>	<b>230</b>	<b>(150 - 350)</b>	<b>100.0</b>	
<b>Western Australia</b>	Does not drink	780	(630 - 940)	54.7	(46.3 - 62.7)
	Drinks but not to excess	290	(190 - 420)	20.5	(14.1 - 28.4)
	Drinks to excess	350	(240 - 490)	24.8	(18.0 - 33.1)
	<b>Total</b>	<b>1 420</b>	<b>(1 220 - 1 650)</b>	<b>100.0</b>	
<b>17 years</b>					
None to moderate	Does not drink	420	(290 - 600)	40.6	(30.1 - 51.0)
	Drinks but not to excess	380	(280 - 500)	36.2	(27.7 - 46.2)
	Drinks to excess	240	(170 - 320)	23.2	(16.6 - 31.1)
	<b>Total</b>	<b>1 040</b>	<b>(850 - 1 240)</b>	<b>100.0</b>	
High/extreme	Does not drink	220	(140 - 340)	78.7	(54.4 - 93.9)
	Drinks but not to excess	30	(10 - 80)	11.9	(3.8 - 30.7)
	Drinks to excess	30	(0 - 110)	9.4	(0.2 - 36.0)
	<b>Total</b>	<b>280</b>	<b>(190 - 420)</b>	<b>100.0</b>	
<b>Western Australia</b>	Does not drink	640	(490 - 830)	48.8	(39.4 - 57.5)
	Drinks but not to excess	410	(310 - 540)	31.0	(23.8 - 39.5)
	Drinks to excess	270	(190 - 370)	20.2	(14.5 - 27.4)
	<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	
<b>Total</b>					
None to moderate	Does not drink	4 970	(4 610 - 5 310)	68.3	(64.7 - 71.9)
	Drinks but not to excess	1 250	(1 030 - 1 490)	17.2	(14.4 - 20.4)
	Drinks to excess	1 050	(860 - 1 280)	14.5	(11.9 - 17.5)
	<b>Total</b>	<b>7 270</b>	<b>(6 920 - 7 600)</b>	<b>100.0</b>	
High/extreme	Does not drink	1 660	(1 340 - 1 990)	90.4	(83.3 - 95.4)
	Drinks but not to excess	100	(50 - 200)	5.5	(2.6 - 10.5)
	Drinks to excess	80	(30 - 190)	4.1	(1.5 - 10.2)
	<b>Total</b>	<b>1 830</b>	<b>(1 500 - 2 190)</b>	<b>100.0</b>	
<b>Western Australia</b>	Does not drink	6 620	(6 330 - 6 910)	72.8	(69.5 - 75.9)
	Drinks but not to excess	1 350	(1 130 - 1 590)	14.8	(12.4 - 17.5)
	Drinks to excess	1 130	(930 - 1 370)	12.4	(10.2 - 15.0)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 4.18: YOUNG PEOPLE AGED 12–17 YEARS — ALCOHOL CONSUMPTION, BY WHETHER STILL IN SCHOOL**

<i>Alcohol consumption</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Not still in school</b>				
Does not drink	1 370	(1 180 - 1 580)	57.9	(51.5 - 63.9)
Drinks but not to excess	490	(360 - 660)	20.8	(15.7 - 27.0)
Drinks to excess	510	(380 - 650)	21.3	(16.7 - 26.7)
<b>Total</b>	<b>2 370</b>	<b>(2 110 - 2 650)</b>	<b>100.0</b>	
<b>Still in school</b>				
Does not drink	5 250	(4 920 - 5 570)	78.0	(74.3 - 81.5)
Drinks but not to excess	860	(680 - 1 050)	12.7	(10.2 - 15.8)
Drinks to excess	620	(470 - 820)	9.3	(6.9 - 12.1)
<b>Total</b>	<b>6 730</b>	<b>(6 450 - 6 990)</b>	<b>100.0</b>	
<b>Total</b>				
Does not drink	6 620	(6 330 - 6 910)	72.8	(69.5 - 75.9)
Drinks but not to excess	1 350	(1 130 - 1 590)	14.8	(12.4 - 17.5)
Drinks to excess	1 130	(930 - 1 370)	12.4	(10.2 - 15.0)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 4.19: YOUNG PEOPLE AGED 12–17 YEARS — LIKELIHOOD OF DRINKING ALCOHOL, ASSOCIATED WITH SEX, AGE, LEVEL OF RELATIVE ISOLATION AND WHETHER STILL IN SCHOOL**

<b>Drinks alcohol</b>			
<i>Parameter</i>	<i>Significance (p value)</i>	<i>Odds Ratio</i>	<i>95% CI</i>
<b>Sex</b>			
Male	0.576	0.90	(0.62 - 1.30)
Female		1.00	
<b>Age (years)</b>			
12	<0.001	0.04	(0.01 - 0.12)
13	<0.001	0.09	(0.04 - 0.17)
14	<0.001	0.28	(0.15 - 0.52)
15	0.118	0.62	(0.34 - 1.13)
16	0.660	0.86	(0.45 - 1.66)
17		1.00	
<b>Level of Relative Isolation</b>			
None to Moderate		1.00	
High or Extreme	<0.001	0.13	(0.06 - 0.27)
<b>Still in school</b>			
No	0.803	0.95	(0.62 - 1.45)
Yes		1.00	



**TABLE 4.20: YOUNG PEOPLE AGED 12–17 YEARS — LIKELIHOOD OF DRINKING ALCOHOL TO EXCESS ASSOCIATED WITH SEX, AGE, LEVEL OF RELATIVE ISOLATION (LORI) AND WHETHER STILL IN SCHOOL**

Drinks alcohol to excess			
Parameter	Significance (p value)	Odds Ratio	95% CI
Sex			
Male	0.651	0.95	(0.61 - 1.45)
Female		1.00	
Age (years)			
12	<0.001	0.00	(0.00 - 0.00)
13	0.004	0.31	(0.14 - 0.69)
14	0.164	0.57	(0.25 - 1.32)
15	0.498	1.26	(0.64 - 2.46)
16	0.338	1.35	(0.69 - 2.66)
17		1.00	
Level of Relative Isolation			
None to Moderate		1.00	
High or Extreme	<0.001	0.19	(0.08 - 0.46)
Still in school			
No	0.070	1.52	(0.94 - 2.47)
Yes		1.00	

**TABLE 4.21: YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO DRINK ALCOHOL, BY AGE GROUP**

Age group	Number	95% CI	%	95% CI
12-14 years	600	(450 - 780)	12.3	(9.2 - 15.8)
15-16 years	1 200	(990 - 1 420)	41.7	(35.8 - 47.8)
17 years	680	(550 - 840)	51.2	(42.5 - 60.6)
<b>Total</b>	<b>2 480</b>	<b>(2 190 - 2 780)</b>	<b>27.2</b>	<b>(24.1 - 30.5)</b>

**TABLE 4.22: YOUNG PEOPLE AGED 12–17 YEARS — ALCOHOL CONSUMPTION, BY AGE GROUP**

Alcohol consumption	Number	95% CI	%	95% CI
12-14 years				
Does not drink	4 300	(3 990 - 4 620)	87.7	(84.2 - 90.8)
Drinks but not to excess	380	(260 - 530)	7.7	(5.4 - 10.8)
Drinks to excess	220	(140 - 350)	4.6	(2.8 - 7.2)
<b>Total</b>	<b>4 910</b>	<b>(4 600 - 5 220)</b>	<b>100.0</b>	
15-16 years				
Does not drink	1 670	(1 460 - 1 900)	58.3	(52.2 - 64.2)
Drinks but not to excess	560	(410 - 740)	19.5	(14.7 - 25.1)
Drinks to excess	640	(480 - 810)	22.2	(17.3 - 27.8)
<b>Total</b>	<b>2 870</b>	<b>(2 600 - 3 150)</b>	<b>100.0</b>	
17 years				
Does not drink	640	(490 - 830)	48.8	(39.4 - 57.5)
Drinks but not to excess	410	(310 - 540)	31.0	(23.8 - 39.5)
Drinks to excess	270	(190 - 370)	20.2	(14.5 - 27.4)
<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	
<b>Total</b>				
Does not drink	6 620	(6 330 - 6 910)	72.8	(69.5 - 75.9)
Drinks but not to excess	1 350	(1 130 - 1 590)	14.8	(12.4 - 17.5)
Drinks to excess	1 130	(930 - 1 370)	12.4	(10.2 - 15.0)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 4.23:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION REPORTING THAT ALCOHOL IS A PROBLEM AT HOME, BY SEX AND AGE

Age (years)	Number	95% CI	%	95% CI
<b>Males</b>				
12	290	(210 - 380)	29.4	(21.9 - 38.4)
13	270	(170 - 410)	31.9	(19.5 - 44.5)
14	180	(110 - 270)	23.2	(14.3 - 34.0)
15	190	(110 - 300)	26.2	(16.0 - 37.6)
16	220	(140 - 320)	31.1	(21.1 - 43.4)
17	200	(120 - 320)	33.8	(20.8 - 47.9)
<b>Females</b>				
12	210	(140 - 310)	30.9	(19.9 - 43.4)
13	230	(150 - 350)	28.6	(18.8 - 40.0)
14	270	(190 - 360)	32.2	(23.6 - 41.2)
15	200	(120 - 310)	28.1	(17.5 - 41.4)
16	120	(60 - 230)	17.6	(9.4 - 30.0)
17	120	(60 - 190)	15.8	(8.7 - 25.6)
<b>Total</b>	<b>1 150</b>	<b>(950 - 1 370)</b>	<b>25.7</b>	<b>(21.5 - 30.1)</b>
<b>Total</b>				
12	500	(390 - 630)	30.1	(23.4 - 37.3)
13	500	(370 - 670)	30.3	(22.3 - 38.7)
14	450	(340 - 570)	27.9	(21.4 - 34.5)
15	390	(280 - 530)	27.1	(19.8 - 35.3)
16	350	(240 - 480)	24.4	(17.8 - 32.3)
17	320	(210 - 450)	23.9	(16.7 - 32.2)
<b>Total</b>	<b>2 500</b>	<b>(2 210 - 2 800)</b>	<b>27.5</b>	<b>(24.3 - 30.8)</b>

**TABLE 4.24:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION REPORTING THAT ALCOHOL IS A PROBLEM AT HOME, BY LEVEL OF RELATIVE ISOLATION (LORI)

LORI	Number	95% CI	%	95% CI
None	570	(430 - 760)	18.1	(13.3 - 23.7)
Low	510	(380 - 690)	22.5	(16.7 - 29.1)
Moderate	750	(580 - 970)	41.1	(33.2 - 50.1)
High	370	(260 - 540)	40.1	(28.5 - 53.0)
Extreme	290	(170 - 440)	32.1	(22.2 - 43.4)
<b>Western Australia</b>	<b>2 500</b>	<b>(2 210 - 2 800)</b>	<b>27.5</b>	<b>(24.3 - 30.8)</b>



**TABLE 4.25: YOUNG PEOPLE AGED 12–17 YEARS — ALCOHOL CONSUMPTION, BY WHETHER ALCOHOL PROBLEMS AT HOME**

<i>Alcohol consumption</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>No alcohol problems at home</b>				
Does not drink	4 770	(4 430 - 5 110)	72.3	(68.3 - 76.0)
Drinks but not to excess	1 050	(870 - 1 280)	16.0	(13.0 - 19.1)
Drinks to excess	780	(610 - 970)	11.8	(9.3 - 14.8)
<b>Total</b>	<b>6 600</b>	<b>(6 300 - 6 890)</b>	<b>100.0</b>	
<b>Alcohol problems at home</b>				
Does not drink	1 850	(1 620 - 2 110)	74.1	(68.1 - 79.3)
Drinks but not to excess	300	(190 - 440)	11.8	(7.7 - 16.8)
Drinks to excess	350	(240 - 490)	14.1	(9.9 - 19.0)
<b>Total</b>	<b>2 500</b>	<b>(2 210 - 2 800)</b>	<b>100.0</b>	
<b>Total</b>				
Does not drink	6 620	(6 330 - 6 910)	72.8	(69.5 - 75.9)
Drinks but not to excess	1 350	(1 130 - 1 590)	14.8	(12.4 - 17.5)
Drinks to excess	1 130	(930 - 1 370)	12.4	(10.2 - 15.0)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 4.26: YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE BEEN A PASSENGER IN A CAR WHEN THE DRIVER WAS DRUNK, BY LEVEL OF RELATIVE ISOLATION (LORI)**

<i>LORI</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
None	380	(270 - 530)	12.1	(8.6 - 16.6)
Low	420	(300 - 570)	18.3	(13.1 - 24.3)
Moderate	490	(350 - 660)	26.8	(19.9 - 34.2)
High	250	(130 - 450)	27.1	(15.3 - 41.8)
Extreme	180	(90 - 300)	19.6	(11.9 - 30.4)
<b>Western Australia</b>	<b>1 720</b>	<b>(1 470 - 1 990)</b>	<b>18.9</b>	<b>(16.2 - 21.9)</b>



**TABLE 4.27:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE BEEN A PASSENGER IN A CAR WHEN THE DRIVER WAS DRUNK, BY AGE AND WHETHER THERE ARE ALCOHOL PROBLEMS AT HOME

Age (years)	Number	95% CI	%	95% CI
<b>No alcohol problems at home</b>				
12	60	(20 - 140)	5.1	(2.1 - 11.8)
13	160	(80 - 260)	13.7	(7.3 - 22.9)
14	110	(40 - 260)	9.9	(3.1 - 20.3)
15	170	(90 - 300)	16.1	(8.4 - 27.1)
16	150	(80 - 240)	13.9	(8.3 - 22.0)
17	190	(120 - 290)	19.1	(12.0 - 27.9)
<b>Total</b>	<b>840</b>	<b>(660 - 1 070)</b>	<b>12.8</b>	<b>(10.0 - 16.2)</b>
<b>Alcohol problems at home</b>				
12	200	(130 - 270)	39.3	(28.0 - 51.2)
13	180	(110 - 270)	37.0	(22.7 - 51.5)
14	130	(70 - 240)	30.0	(16.4 - 44.3)
15	180	(100 - 280)	45.2	(30.1 - 62.8)
16	90	(60 - 130)	27.1	(16.1 - 39.7)
17	90	(20 - 230)	28.2	(11.0 - 58.7)
<b>Total</b>	<b>880</b>	<b>(700 - 1 080)</b>	<b>35.0</b>	<b>(28.6 - 41.4)</b>
<b>Total</b>				
12	260	(180 - 350)	15.4	(10.6 - 21.0)
13	340	(240 - 470)	20.8	(14.4 - 27.9)
14	250	(140 - 400)	15.5	(8.9 - 23.4)
15	350	(230 - 500)	24.0	(16.4 - 32.4)
16	240	(170 - 340)	17.1	(11.9 - 23.1)
17	280	(170 - 420)	21.3	(13.6 - 30.0)
<b>Total</b>	<b>1 720</b>	<b>(1 470 - 1 990)</b>	<b>18.9</b>	<b>(16.2 - 21.9)</b>





**TABLE 4.28: YOUNG PEOPLE AGED 12–17 YEARS — ALCOHOL CONSUMPTION, BY WHETHER BEEN A PASSENGER IN A CAR WHEN THE DRIVER WAS DRUNK AND AGE**

<i>In car with drunk driver</i>	<i>Alcohol consumption</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>12 years</b>					
No	Does not drink	1 340	(1 120 - 1 580)	95.2	(86.9 - 99.0)
	Drinks but not to excess	70	(10 - 190)	4.8	(1.0 - 13.1)
	Drinks to excess	0	(0 - 60)	0.0	(0.0 - 3.9)
	<b>Total</b>	<b>1 410</b>	<b>(1 180 - 1 650)</b>	<b>100.0</b>	
Yes	Does not drink	260	(180 - 350)	100.0	(80.5 - 100.0)
	Drinks but not to excess	0	(0 - 60)	0.0	(0.0 - 19.5)
	Drinks to excess	0	(0 - 60)	0.0	(0.0 - 19.5)
	<b>Total</b>	<b>260</b>	<b>(180 - 350)</b>	<b>100.0</b>	
<b>13 years</b>					
No	Does not drink	1 200	(980 - 1 450)	92.2	(86.0 - 96.5)
	Drinks but not to excess	60	(10 - 130)	4.3	(1.1 - 9.9)
	Drinks to excess	50	(20 - 100)	3.5	(1.4 - 8.2)
	<b>Total</b>	<b>1 300</b>	<b>(1 070 - 1 560)</b>	<b>100.0</b>	
Yes	Does not drink	260	(170 - 370)	74.7	(53.7 - 88.9)
	Drinks but not to excess	40	(10 - 130)	13.1	(2.7 - 32.4)
	Drinks to excess	40	(10 - 110)	12.2	(3.8 - 30.7)
	<b>Total</b>	<b>340</b>	<b>(240 - 470)</b>	<b>100.0</b>	
<b>14 years</b>					
No	Does not drink	1 080	(890 - 1 280)	79.7	(72.7 - 85.9)
	Drinks but not to excess	190	(120 - 270)	13.8	(9.0 - 19.5)
	Drinks to excess	90	(50 - 160)	6.4	(3.0 - 11.2)
	<b>Total</b>	<b>1 350</b>	<b>(1 150 - 1 570)</b>	<b>100.0</b>	
Yes	Does not drink	170	(80 - 300)	69.8	(41.9 - 91.6)
	Drinks but not to excess	20	(10 - 50)	10.1	(3.2 - 21.0)
	Drinks to excess	50	(10 - 160)	20.1	(2.3 - 51.8)
	<b>Total</b>	<b>250</b>	<b>(140 - 400)</b>	<b>100.0</b>	
<b>15 years</b>					
No	Does not drink	720	(560 - 900)	64.8	(54.6 - 74.9)
	Drinks but not to excess	240	(140 - 370)	21.3	(13.7 - 32.0)
	Drinks to excess	150	(80 - 260)	13.9	(7.2 - 22.6)
	<b>Total</b>	<b>1 100</b>	<b>(910 - 1 320)</b>	<b>100.0</b>	
Yes	Does not drink	180	(100 - 290)	52.3	(31.3 - 72.2)
	Drinks but not to excess	30	(0 - 160)	9.9	(0.2 - 36.0)
	Drinks to excess	130	(70 - 230)	37.8	(19.4 - 57.6)
	<b>Total</b>	<b>350</b>	<b>(230 - 500)</b>	<b>100.0</b>	
<b>16 years</b>					
No	Does not drink	680	(550 - 840)	57.6	(48.2 - 66.7)
	Drinks but not to excess	260	(170 - 390)	22.2	(14.5 - 30.7)
	Drinks to excess	240	(150 - 360)	20.2	(13.0 - 29.2)
	<b>Total</b>	<b>1 180</b>	<b>(990 - 1 390)</b>	<b>100.0</b>	
Yes	Does not drink	100	(50 - 160)	40.5	(23.7 - 59.4)
	Drinks but not to excess	30	(10 - 80)	12.5	(2.5 - 31.2)
	Drinks to excess	110	(60 - 180)	47.0	(30.2 - 66.9)
	<b>Total</b>	<b>240</b>	<b>(170 - 340)</b>	<b>100.0</b>	

Continued...



**TABLE 4.28 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — ALCOHOL CONSUMPTION, BY WHETHER BEEN A PASSENGER IN A CAR WHEN THE DRIVER WAS DRUNK AND AGE

<i>In car with drunk driver</i>	<i>Alcohol consumption</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>17 years</b>					
No	Does not drink	530	(400 - 700)	51.2	(41.7 - 61.0)
	Drinks but not to excess	330	(240 - 430)	31.4	(23.7 - 40.6)
	Drinks to excess	180	(120 - 260)	17.4	(11.2 - 24.3)
	<b>Total</b>	<b>1 040</b>	<b>(870 - 1 230)</b>	<b>100.0</b>	
Yes	Does not drink	110	(40 - 250)	39.7	(15.2 - 64.6)
	Drinks but not to excess	80	(40 - 170)	29.6	(11.3 - 52.2)
	Drinks to excess	90	(40 - 160)	30.7	(12.6 - 51.1)
	<b>Total</b>	<b>280</b>	<b>(170 - 420)</b>	<b>100.0</b>	
<b>Total</b>					
No	Does not drink	5 550	(5 210 - 5 870)	75.1	(71.7 - 78.3)
	Drinks but not to excess	1 130	(940 - 1 350)	15.3	(12.7 - 18.2)
	Drinks to excess	710	(550 - 880)	9.6	(7.5 - 12.0)
	<b>Total</b>	<b>7 380</b>	<b>(7 110 - 7 630)</b>	<b>100.0</b>	
Yes	Does not drink	1 080	(880 - 1 310)	62.6	(53.9 - 70.2)
	Drinks but not to excess	220	(130 - 360)	12.7	(7.6 - 19.7)
	Drinks to excess	420	(300 - 580)	24.7	(17.7 - 32.4)
	<b>Total</b>	<b>1 720</b>	<b>(1 470 - 1 990)</b>	<b>100.0</b>	



**TABLE 4.29: YOUNG PEOPLE AGED 12–17 YEARS — ALCOHOL CONSUMPTION, BY PARENTING STYLE**

<i>Alcohol consumption</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Poor parenting style</b>				
Does not drink	680	(540 - 850)	66.3	(56.8 - 75.6)
Drinks but not to excess	210	(120 - 320)	20.2	(13.1 - 30.0)
Drinks to excess	140	(80 - 220)	13.4	(7.9 - 21.7)
<b>Total</b>	<b>1 020</b>	<b>(850 - 1 220)</b>	<b>100.0</b>	
<b>Sub-optimal parenting style</b>				
Does not drink	2 950	(2 680 - 3 240)	73.7	(68.7 - 78.1)
Drinks but not to excess	580	(430 - 750)	14.5	(10.9 - 18.4)
Drinks to excess	470	(340 - 630)	11.8	(8.7 - 15.7)
<b>Total</b>	<b>4 010</b>	<b>(3 710 - 4 310)</b>	<b>100.0</b>	
<b>Adequate parenting style</b>				
Does not drink	2 990	(2 690 - 3 310)	73.4	(68.6 - 78.1)
Drinks but not to excess	560	(420 - 740)	13.8	(10.5 - 17.9)
Drinks to excess	520	(390 - 680)	12.7	(10.5 - 17.9)
<b>Total</b>	<b>4 010</b>	<b>(3 760 - 4 400)</b>	<b>100.0</b>	
<b>Total</b>				
Does not drink	6 620	(6 330 - 6 910)	72.8	(69.5 - 75.9)
Drinks but not to excess	1 350	(1 130 - 1 590)	14.8	(12.4 - 17.5)
Drinks to excess	1 130	(930 - 1 370)	12.4	(10.2 - 15.0)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 4.30: YOUNG PEOPLE AGED 12–17 YEARS — LIKELIHOOD OF DRINKING TO EXCESS, ASSOCIATED WITH AGE GROUP AND WHETHER YOUR PARENTS ALLOW YOU TO GO OUT ANY NIGHT YOU WANT**

<b>Drinks to excess</b>			
<i>Parameter</i>	<i>Significance (p value)</i>	<i>Odds Ratio</i>	<i>95% CI</i>
<b>Age group</b>			
12–14 years		1.00	
15–16 years	<. 0001	4.44	(2.83 - 6.98)
17 years	<. 0001	4.48	(2.57 - 7.79)
<b>How often do your parents let you go out any night you want</b>			
Often/ Very often	0.0017	1.86	(1.27 - 2.74)
Never/Sometimes		1.00	



## MARIJUANA

TABLE 4.31: YOUNG PEOPLE AGED 12–17 YEARS — MARIJUANA USE, BY AGE AND SEX

Age (years)	Marijuana use	Number	95% CI	%	95% CI
Males					
12	Never	880	(720 - 1 060)	90.3	(82.8 - 95.6)
	Over one year ago	60	(20 - 160)	6.4	(2.3 - 15.3)
	Less than monthly	10	(0 - 20)	0.7	(0.2 - 1.8)
	About weekly	10	(0 - 40)	1.2	(0.1 - 4.3)
	Daily	10	(0 - 30)	1.4	(0.4 - 3.7)
	<b>Total</b>	<b>970</b>	<b>(800 - 1 160)</b>	<b>100.0</b>	
13	Never	740	(560 - 970)	87.3	(76.7 - 95.0)
	Over one year ago	50	(10 - 120)	5.5	(1.1 - 14.1)
	Less than monthly	20	(10 - 30)	2.3	(1.1 - 4.1)
	About weekly	20	(0 - 170)	2.2	(0.0 - 18.5)
	Daily	20	(10 - 40)	2.8	(1.3 - 5.4)
	<b>Total</b>	<b>850</b>	<b>(640 - 1 080)</b>	<b>100.0</b>	
14	Never	600	(440 - 810)	77.5	(66.0 - 86.5)
	Over one year ago	60	(30 - 120)	8.0	(3.6 - 15.6)
	Less than monthly	60	(20 - 150)	8.2	(2.9 - 19.0)
	About weekly	20	(0 - 70)	2.9	(0.6 - 8.9)
	Daily	30	(20 - 40)	3.3	(2.2 - 5.1)
	<b>Total</b>	<b>770</b>	<b>(590 - 990)</b>	<b>100.0</b>	
15	Never	450	(330 - 590)	61.2	(48.1 - 73.4)
	Over one year ago	160	(100 - 260)	22.1	(13.2 - 32.6)
	Less than monthly	50	(20 - 120)	7.2	(2.4 - 16.1)
	About weekly	30	(10 - 160)	4.6	(0.7 - 20.2)
	Daily	40	(0 - 140)	4.9	(0.1 - 18.3)
	<b>Total</b>	<b>740</b>	<b>(580 - 930)</b>	<b>100.0</b>	
16	Never	430	(310 - 570)	59.8	(48.1 - 71.5)
	Over one year ago	100	(50 - 180)	14.0	(7.3 - 23.8)
	Less than monthly	40	(10 - 90)	5.2	(1.6 - 11.1)
	About weekly	90	(30 - 200)	12.5	(4.6 - 24.8)
	Daily	60	(30 - 110)	8.5	(4.0 - 14.4)
	<b>Total</b>	<b>710</b>	<b>(560 - 890)</b>	<b>100.0</b>	
17	Never	170	(110 - 270)	29.2	(18.8 - 43.2)
	Over one year ago	60	(20 - 170)	9.6	(3.0 - 25.4)
	Less than monthly	100	(30 - 220)	16.6	(5.1 - 31.9)
	About weekly	180	(110 - 290)	31.0	(19.1 - 44.8)
	Daily	80	(50 - 130)	13.5	(7.7 - 22.0)
	<b>Total</b>	<b>600</b>	<b>(460 - 770)</b>	<b>100.0</b>	
<b>Total</b>	Never	3 270	(2 960 - 3 580)	70.5	(65.6 - 75.0)
	Over one year ago	490	(360 - 650)	10.6	(7.8 - 13.8)
	Less than monthly	280	(170 - 420)	6.0	(3.6 - 9.0)
	About weekly	360	(230 - 520)	7.8	(5.0 - 11.1)
	Daily	240	(170 - 340)	5.2	(3.5 - 7.2)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	

Continued . . .



**TABLE 4.31 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — MARIJUANA USE, BY AGE AND SEX

Age (years)	Marijuana use	Number	95% CI	%	95% CI
Females					
12	Never	660	(490 - 860)	95.5	(88.9 - 98.8)
	Over one year ago	10	(0 - 40)	1.4	(0.0 - 5.8)
	Less than monthly	20	(0 - 70)	3.1	(0.7 - 10.0)
	About weekly	0	(0 - 60)	0.0	(0.0 - 7.7)
	Daily	0	(0 - 60)	0.0	(0.0 - 7.7)
	<b>Total</b>	<b>690</b>	<b>(520 - 890)</b>	<b>100.0</b>	
13	Never	690	(530 - 880)	86.2	(77.9 - 91.9)
	Over one year ago	20	(0 - 70)	3.0	(0.6 - 8.5)
	Less than monthly	40	(20 - 60)	4.5	(2.2 - 7.7)
	About weekly	20	(10 - 50)	3.1	(1.2 - 7.2)
	Daily	30	(0 - 110)	3.2	(0.5 - 13.2)
	<b>Total</b>	<b>800</b>	<b>(630 - 990)</b>	<b>100.0</b>	
14	Never	620	(490 - 780)	75.9	(63.5 - 84.9)
	Over one year ago	50	(20 - 90)	5.5	(2.4 - 11.6)
	Less than monthly	70	(10 - 170)	8.0	(2.5 - 21.7)
	About weekly	40	(20 - 110)	5.3	(1.3 - 11.7)
	Daily	40	(20 - 90)	5.3	(2.1 - 10.5)
	<b>Total</b>	<b>820</b>	<b>(670 - 1 000)</b>	<b>100.0</b>	
15	Never	450	(320 - 620)	62.9	(49.0 - 76.4)
	Over one year ago	100	(40 - 220)	14.1	(5.4 - 28.5)
	Less than monthly	100	(60 - 160)	14.4	(8.6 - 22.7)
	About weekly	30	(0 - 240)	4.8	(0.1 - 28.7)
	Daily	30	(20 - 40)	3.8	(2.1 - 6.2)
	<b>Total</b>	<b>710</b>	<b>(550 - 920)</b>	<b>100.0</b>	
16	Never	370	(290 - 480)	52.8	(41.4 - 63.0)
	Over one year ago	140	(70 - 240)	19.5	(11.1 - 31.8)
	Less than monthly	70	(40 - 110)	10.0	(5.9 - 16.0)
	About weekly	50	(30 - 90)	7.2	(3.5 - 12.0)
	Daily	70	(20 - 170)	10.5	(3.3 - 21.8)
	<b>Total</b>	<b>710</b>	<b>(580 - 870)</b>	<b>100.0</b>	
17	Never	340	(240 - 460)	46.3	(34.5 - 57.9)
	Over one year ago	110	(50 - 230)	15.6	(6.7 - 27.6)
	Less than monthly	120	(80 - 180)	17.0	(11.2 - 24.6)
	About weekly	90	(40 - 160)	12.2	(6.4 - 21.3)
	Daily	60	(20 - 160)	8.9	(3.1 - 20.3)
	<b>Total</b>	<b>730</b>	<b>(580 - 910)</b>	<b>100.0</b>	
<b>Total</b>	Never	3 130	(2 820 - 3 440)	70.2	(65.3 - 74.7)
	Over one year ago	430	(300 - 590)	9.7	(6.7 - 13.1)
	Less than monthly	420	(320 - 540)	9.4	(7.2 - 12.1)
	About weekly	240	(150 - 380)	5.4	(3.4 - 8.3)
	Daily	240	(140 - 370)	5.3	(3.3 - 8.3)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	

Continued...



**TABLE 4.31 (continued): YOUNG PEOPLE AGED 12–17 YEARS — MARIJUANA USE, BY AGE AND SEX**

Age (years)	Marijuana use	Number	95% CI	%	95% CI
<b>Total</b>					
12	Never	1 540	(1 310 - 1 790)	92.4	(87.5 - 96.1)
	Over one year ago	70	(30 - 160)	4.3	(1.7 - 9.7)
	Less than monthly	30	(10 - 70)	1.7	(0.4 - 4.0)
	About weekly	10	(0 - 40)	0.7	(0.1 - 2.5)
	Daily	10	(0 - 30)	0.8	(0.2 - 2.1)
	<b>Total</b>	<b>1 660</b>	<b>(1 430 - 1 910)</b>	<b>100.0</b>	
13	Never	1 430	(1 190 - 1 680)	86.8	(80.0 - 91.8)
	Over one year ago	70	(20 - 150)	4.3	(1.3 - 9.3)
	Less than monthly	50	(40 - 80)	3.3	(2.1 - 5.1)
	About weekly	40	(10 - 160)	2.6	(0.3 - 9.3)
	Daily	50	(20 - 110)	3.0	(0.9 - 6.3)
	<b>Total</b>	<b>1 650</b>	<b>(1 410 - 1 920)</b>	<b>100.0</b>	
14	Never	1 230	(1 020 - 1 450)	76.7	(68.7 - 83.3)
	Over one year ago	110	(60 - 180)	6.7	(3.9 - 11.1)
	Less than monthly	130	(60 - 250)	8.1	(3.5 - 15.0)
	About weekly	70	(30 - 130)	4.1	(1.6 - 8.1)
	Daily	70	(40 - 110)	4.3	(2.5 - 6.9)
	<b>Total</b>	<b>1 600</b>	<b>(1 360 - 1 840)</b>	<b>100.0</b>	
15	Never	900	(730 - 1 110)	62.1	(52.8 - 70.9)
	Over one year ago	260	(160 - 390)	18.2	(11.9 - 26.4)
	Less than monthly	160	(100 - 240)	10.7	(6.6 - 15.6)
	About weekly	70	(10 - 230)	4.7	(0.5 - 14.8)
	Daily	60	(20 - 160)	4.4	(1.2 - 10.6)
	<b>Total</b>	<b>1 450</b>	<b>(1 220 - 1 700)</b>	<b>100.0</b>	
16	Never	800	(660 - 970)	56.3	(48.5 - 64.3)
	Over one year ago	240	(150 - 360)	16.7	(10.7 - 23.6)
	Less than monthly	110	(70 - 160)	7.6	(4.7 - 11.3)
	About weekly	140	(80 - 240)	9.9	(5.4 - 16.5)
	Daily	130	(70 - 230)	9.5	(5.2 - 15.8)
	<b>Total</b>	<b>1 420</b>	<b>(1 220 - 1 650)</b>	<b>100.0</b>	
17	Never	510	(390 - 650)	38.6	(30.1 - 47.2)
	Over one year ago	170	(80 - 290)	12.9	(6.9 - 21.7)
	Less than monthly	220	(140 - 340)	16.8	(10.7 - 24.5)
	About weekly	270	(180 - 390)	20.7	(14.5 - 28.8)
	Daily	150	(90 - 230)	11.0	(6.2 - 16.7)
	<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	
<b>Total</b>	Never	6 400	(6 100 - 6 700)	70.3	(67.0 - 73.6)
	Over one year ago	920	(740 - 1 130)	10.1	(8.1 - 12.4)
	Less than monthly	700	(550 - 870)	7.7	(6.0 - 9.5)
	About weekly	600	(450 - 800)	6.6	(4.9 - 8.8)
	Daily	480	(360 - 630)	5.2	(3.9 - 6.9)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 4.32: YOUNG PEOPLE AGED 12–17 YEARS — MARIJUANA USE, BY AGE AND SEX**

Age (years)	Marijuana use	Number	95% CI	%	95% CI
<b>Males</b>					
12	Never	880	(720 - 1 060)	90.3	(82.8 - 95.6)
	Less than monthly	70	(30 - 160)	7.1	(2.8 - 15.8)
	Weekly or more often	30	(10 - 60)	2.7	(0.8 - 5.6)
	<b>Total</b>	<b>970</b>	<b>(800 - 1 160)</b>	<b>100.0</b>	
13	Never	740	(560 - 970)	87.3	(76.7 - 95.0)
	Less than monthly	70	(20 - 130)	7.8	(2.9 - 16.0)
	Weekly or more often	40	(10 - 150)	5.0	(0.6 - 16.9)
	<b>Total</b>	<b>850</b>	<b>(640 - 1 080)</b>	<b>100.0</b>	
14	Never	600	(440 - 810)	77.5	(66.0 - 86.5)
	Less than monthly	130	(60 - 230)	16.2	(7.9 - 27.3)
	Weekly or more often	50	(20 - 80)	6.2	(2.9 - 10.8)
	<b>Total</b>	<b>770</b>	<b>(590 - 990)</b>	<b>100.0</b>	
15	Never	450	(330 - 590)	61.2	(48.1 - 73.4)
	Less than monthly	220	(140 - 320)	29.3	(19.7 - 41.5)
	Weekly or more often	70	(10 - 210)	9.5	(2.0 - 25.0)
	<b>Total</b>	<b>740</b>	<b>(580 - 930)</b>	<b>100.0</b>	
16	Never	430	(310 - 570)	59.8	(48.1 - 71.5)
	Less than monthly	140	(80 - 220)	19.2	(11.7 - 30.1)
	Weekly or more often	150	(80 - 250)	21.0	(11.3 - 32.2)
	<b>Total</b>	<b>710</b>	<b>(560 - 890)</b>	<b>100.0</b>	
17	Never	170	(110 - 270)	29.2	(18.8 - 43.2)
	Less than monthly	160	(70 - 300)	26.2	(13.8 - 44.1)
	Weekly or more often	270	(180 - 370)	44.6	(32.0 - 59.4)
	<b>Total</b>	<b>600</b>	<b>(460 - 770)</b>	<b>100.0</b>	
<b>Females</b>					
12	Never	660	(490 - 860)	95.5	(88.9 - 98.8)
	Less than monthly	30	(10 - 80)	4.5	(1.3 - 11.2)
	Weekly or more often	0	(0 - 60)	0.0	(0.0 - 7.7)
	<b>Total</b>	<b>690</b>	<b>(520 - 890)</b>	<b>100.0</b>	
13	Never	690	(530 - 880)	86.2	(77.9 - 91.9)
	Less than monthly	60	(30 - 100)	7.5	(3.6 - 12.5)
	Weekly or more often	50	(20 - 110)	6.3	(2.0 - 13.7)
	<b>Total</b>	<b>800</b>	<b>(630 - 990)</b>	<b>100.0</b>	
14	Never	620	(490 - 780)	75.9	(63.5 - 84.9)
	Less than monthly	110	(50 - 220)	13.5	(5.7 - 23.9)
	Weekly or more often	90	(40 - 150)	10.6	(5.3 - 18.0)
	<b>Total</b>	<b>820</b>	<b>(670 - 1 000)</b>	<b>100.0</b>	
15	Never	450	(320 - 620)	62.9	(49.0 - 76.4)
	Less than monthly	200	(120 - 320)	28.5	(17.8 - 42.1)
	Weekly or more often	60	(20 - 210)	8.6	(2.1 - 26.5)
	<b>Total</b>	<b>710</b>	<b>(550 - 920)</b>	<b>100.0</b>	
16	Never	370	(290 - 480)	52.8	(41.4 - 63.0)
	Less than monthly	210	(130 - 310)	29.5	(20.3 - 41.3)
	Weekly or more often	130	(70 - 220)	17.8	(9.3 - 28.4)
	<b>Total</b>	<b>710</b>	<b>(580 - 870)</b>	<b>100.0</b>	
17	Never	340	(240 - 460)	46.3	(34.5 - 57.9)
	Less than monthly	240	(160 - 350)	32.6	(22.2 - 43.4)
	Weekly or more often	150	(90 - 260)	21.1	(12.2 - 32.0)
	<b>Total</b>	<b>730</b>	<b>(580 - 910)</b>	<b>100.0</b>	

Continued . . .



**TABLE 4.32 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — MARIJUANA USE, BY AGE AND SEX

Age (years)	Marijuana use	Number	95% CI	%	95% CI
<b>Total</b>					
12	Never	1 540	(1 310 - 1 790)	92.4	(87.5 - 96.1)
	Less than monthly	100	(40 - 180)	6.0	(2.7 - 10.9)
	Weekly or more often	30	(10 - 60)	1.6	(0.6 - 3.6)
	<b>Total</b>	<b>1 660</b>	<b>(1 430 - 1 910)</b>	<b>100.0</b>	
13	Never	1 430	(1 190 - 1 680)	86.8	(80.0 - 91.8)
	Less than monthly	130	(70 - 210)	7.6	(4.2 - 12.3)
	Weekly or more often	90	(30 - 190)	5.6	(2.0 - 11.5)
	<b>Total</b>	<b>1 650</b>	<b>(1 410 - 1 920)</b>	<b>100.0</b>	
14	Never	1 230	(1 020 - 1 450)	76.7	(68.7 - 83.3)
	Less than monthly	240	(140 - 370)	14.8	(9.1 - 22.0)
	Weekly or more often	140	(90 - 210)	8.5	(5.3 - 12.8)
	<b>Total</b>	<b>1 600</b>	<b>(1 360 - 1 840)</b>	<b>100.0</b>	
15	Never	900	(730 - 1 110)	62.1	(52.8 - 70.9)
	Less than monthly	420	(310 - 570)	28.9	(21.7 - 37.6)
	Weekly or more often	130	(40 - 280)	9.0	(3.6 - 19.6)
	<b>Total</b>	<b>1 450</b>	<b>(1 220 - 1 700)</b>	<b>100.0</b>	
16	Never	800	(660 - 970)	56.3	(48.5 - 64.3)
	Less than monthly	350	(250 - 470)	24.3	(18.1 - 31.9)
	Weekly or more often	280	(180 - 400)	19.4	(13.1 - 27.1)
	<b>Total</b>	<b>1 420</b>	<b>(1 220 - 1 650)</b>	<b>100.0</b>	
17	Never	510	(390 - 650)	38.6	(30.1 - 47.2)
	Less than monthly	390	(270 - 550)	29.7	(21.6 - 39.1)
	Weekly or more often	420	(310 - 550)	31.7	(24.0 - 40.1)
	<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	
<b>Total</b>	Never	6 400	(6 100 - 6 700)	70.3	(67.0 - 73.6)
	Less than monthly	1 620	(1 380 - 1 880)	17.8	(15.1 - 20.6)
	Weekly or more often	1 080	(880 - 1 310)	11.9	(9.7 - 14.4)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 4.33:** YOUNG PEOPLE AGED 12–17 YEARS — LIKELIHOOD OF HAVING USED MARIJUANA, ASSOCIATED WITH AGE AND WHETHER STILL IN SCHOOL

Parameter	Has used marijuana		
	Significance ( <i>p</i> value)	Odds Ratio	95% CI
Age (years)			
12		1.00	
13	0.139	1.92	(0.81 - 4.52)
14	<0.001	4.48	(2.00 - 10.1)
15	<0.001	6.71	(2.80 - 15.9)
16	<0.001	8.10	(3.20 - 20.4)
17	<0.001	11.50	(4.70 - 27.6)
Still in school			
No	0.035	1.59	(1.04 - 2.43)
Yes		1.00	





**TABLE 4.34: YOUNG PEOPLE AGED 12–17 YEARS — LIKELIHOOD OF FREQUENT MARIJUANA USE (AT LEAST WEEKLY), ASSOCIATED WITH AGE AND WHETHER STILL IN SCHOOL**

Used marijuana at least weekly				
Parameter	Significance (p value)	Odds Ratio	95% CI	
Age (years)				
12		1.00		
13	0.122	3.72	(0.70 - 19.6)	
14	0.033	6.58	(1.20 - 37.0)	
15	0.069	4.84	(0.90 - 26.4)	
16	0.017	8.66	(1.50 - 50.2)	
17	0.003	13.00	(2.40 - 69.0)	
Still in school				
No	0.007	2.21	(1.25 - 3.91)	
Yes		1.00		

**TABLE 4.35: YOUNG PEOPLE AGED 12–17 YEARS — MARIJUANA USE, BY LEVEL OF RELATIVE ISOLATION (LORI)**

Marijuana use	Number	95% CI	%	95% CI
LORI — None				
Never	2 100	(1 900 - 2 310)	66.4	(59.7 - 72.3)
Over one year ago	380	(250 - 550)	12.1	(7.9 - 17.4)
Less than monthly	170	(100 - 270)	5.5	(3.2 - 8.6)
About weekly	260	(160 - 420)	8.3	(4.9 - 13.2)
Daily	250	(160 - 350)	7.8	(5.2 - 11.2)
<b>Total</b>	<b>3 160</b>	<b>(3 070 - 3 250)</b>	<b>100.0</b>	
LORI — Low				
Never	1 580	(1 380 - 1 800)	69.2	(62.2 - 75.6)
Over one year ago	280	(180 - 400)	12.1	(8.0 - 17.7)
Less than monthly	220	(160 - 300)	9.6	(6.8 - 12.9)
About weekly	100	(40 - 200)	4.2	(1.8 - 8.8)
Daily	110	(50 - 220)	4.9	(2.2 - 9.6)
<b>Total</b>	<b>2 280</b>	<b>(2 080 - 2 510)</b>	<b>100.0</b>	
LORI — Moderate				
Never	1 220	(980 - 1 490)	66.8	(60.4 - 72.8)
Over one year ago	100	(70 - 150)	5.7	(3.8 - 8.1)
Less than monthly	210	(120 - 320)	11.3	(6.8 - 17.2)
About weekly	190	(120 - 280)	10.3	(6.7 - 15.3)
Daily	110	(60 - 180)	5.9	(3.1 - 9.7)
<b>Total</b>	<b>1 820</b>	<b>(1 520 - 2 180)</b>	<b>100.0</b>	
LORI — High				
Never	710	(490 - 1 020)	76.4	(62.8 - 86.1)
Over one year ago	80	(50 - 130)	9.1	(5.5 - 14.1)
Less than monthly	70	(20 - 150)	7.4	(2.9 - 16.2)
About weekly	60	(20 - 140)	6.1	(2.2 - 15.1)
Daily	10	(0 - 20)	1.0	(0.4 - 2.0)
<b>Total</b>	<b>930</b>	<b>(670 - 1 250)</b>	<b>100.0</b>	
LORI — Extreme				
Never	790	(550 - 1 080)	87.9	(78.1 - 95.3)
Over one year ago	80	(30 - 150)	8.4	(3.7 - 16.1)
Less than monthly	30	(10 - 160)	3.6	(0.6 - 16.2)
About weekly	0	(0 - 60)	0.0	(0.0 - 6.1)
Daily	0	(0 - 60)	0.0	(0.0 - 6.1)
<b>Total</b>	<b>900</b>	<b>(630 - 1 210)</b>	<b>100.0</b>	



**TABLE 4.36:** YOUNG PEOPLE AGED 12–16 YEARS — WHETHER USED MARIJUANA, BY SEX

<i>Ever used marijuana</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>				
No	3 100	(2 800 - 3 400)	76.5	(71.6 - 80.8)
Yes	950	(760 - 1 170)	23.5	(19.2 - 28.4)
<b>Total</b>	<b>4 050</b>	<b>(3 730 - 4 380)</b>	<b>100.0</b>	
<b>Females</b>				
No	2 790	(2 500 - 3 100)	74.9	(69.7 - 79.5)
Yes	940	(750 - 1 150)	25.1	(20.5 - 30.3)
<b>Total</b>	<b>3 730</b>	<b>(3 420 - 4 050)</b>	<b>100.0</b>	

**TABLE 4.37:** YOUNG PEOPLE AGED 12–17 YEARS AND STILL IN SCHOOL — MARIJUANA USE, BY WHETHER DOING OKAY AT SCHOOL

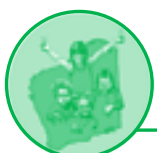
<i>Marijuana use</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Not doing okay at school</b>				
Never		(460 - 770)	64.1	(51.1 - 74.5)
Over one year ago	120	(60 - 230)	13.0	(6.7 - 23.5)
Less than monthly	90	(40 - 170)	9.9	(5.0 - 17.8)
About weekly	80	(20 - 220)	8.2	(1.7 - 21.4)
Daily	50	(20 - 100)	4.9	(2.1 - 10.2)
<b>Total</b>	<b>940</b>	<b>(740 - 1 150)</b>	<b>100.0</b>	
<b>Doing okay at school</b>				
Never	4 680	(4 350 - 5 000)	80.7	(77.1 - 84.2)
Over one year ago	490	(350 - 660)	8.4	(6.0 - 11.4)
Less than monthly	310	(230 - 410)	5.3	(3.8 - 7.0)
About weekly	190	(100 - 320)	3.3	(1.8 - 5.6)
Daily	130	(70 - 230)	2.3	(1.2 - 3.9)
<b>Total</b>	<b>5 800</b>	<b>(5 490 - 6 090)</b>	<b>100.0</b>	
<b>Total</b>				
Never	5 280	(4 950 - 5 590)	78.4	(74.6 - 81.8)
Over one year ago	610	(440 - 790)	9.0	(6.6 - 11.8)
Less than monthly	400	(300 - 520)	5.9	(4.4 - 7.8)
About weekly	270	(150 - 430)	4.0	(2.2 - 6.4)
Daily	180	(110 - 280)	2.7	(1.6 - 4.1)
<b>Total</b>	<b>6 730</b>	<b>(6 450 - 6 990)</b>	<b>100.0</b>	



**TABLE 4.38: YOUNG PEOPLE AGED 12–17 YEARS — MARIJUANA USE, BY LEVEL OF DRUG USE BY CHILDREN AT THEIR SCHOOL**

<i>Marijuana use</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>No drug use at school</b>				
Never	2 360	(2 050 - 2 680)	91.7	(87.1 - 94.7)
Less than monthly	180	(110 - 270)	7.1	(4.4 - 10.7)
Weekly or more often	30	(0 - 110)	1.3	(0.1 - 4.1)
<b>Total</b>	<b>2 570</b>	<b>(2 270 - 2 910)</b>	<b>100.0</b>	
<b>A little drug use at school</b>				
Never	740	(600 - 910)	70.6	(60.2 - 79.9)
Less than monthly	200	(120 - 310)	19.2	(12.2 - 28.9)
Weekly or more often	110	(40 - 220)	10.2	(3.6 - 19.6)
<b>Total</b>	<b>1 040</b>	<b>(860 - 1 250)</b>	<b>100.0</b>	
<b>Some drug use at school</b>				
Never	1 220	(990 - 1 470)	72.5	(64.7 - 80.0)
Less than monthly	330	(230 - 440)	19.4	(14.0 - 26.1)
Weekly or more often	140	(60 - 260)	8.1	(3.4 - 14.7)
<b>Total</b>	<b>1 680</b>	<b>(1 430 - 1 970)</b>	<b>100.0</b>	
<b>Quite a lot of drug use at school</b>				
Never	630	(490 - 790)	69.4	(57.5 - 79.8)
Less than monthly	180	(100 - 320)	20.3	(11.6 - 31.7)
Weekly or more often	90	(40 - 190)	10.3	(4.2 - 19.8)
<b>Total</b>	<b>910</b>	<b>(740 - 1 100)</b>	<b>100.0</b>	
<b>Very much drug use at school</b>				
Never	330	(200 - 490)	63.3	(44.9 - 78.5)
Less than monthly	110	(50 - 250)	21.5	(9.6 - 41.1)
Weekly or more often	80	(40 - 160)	15.2	(5.9 - 27.2)
<b>Total</b>	<b>520</b>	<b>(370 - 720)</b>	<b>100.0</b>	
<b>Not attending school</b>				
Never	1 120	(940 - 1 320)	47.4	(40.9 - 53.8)
Less than monthly	610	(460 - 790)	25.9	(20.2 - 32.3)
Weekly or more often	630	(490 - 800)	26.6	(21.1 - 32.5)
<b>Total</b>	<b>2 370</b>	<b>(2 110 - 2 650)</b>	<b>100.0</b>	
<b>Total</b>				
Never	6 400	(6 100 - 6 700)	70.3	(67.0 - 73.6)
Less than monthly	1 620	(1 380 - 1 880)	17.8	(15.1 - 20.6)
Weekly or more often	1 080	(880 - 1 310)	11.9	(9.7 - 14.4)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

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**TABLE 4.39:** YOUNG PEOPLE AGED 12–17 YEARS — MARIJUANA USE, BY DEGREE OF VANDALISM AT THEIR SCHOOL

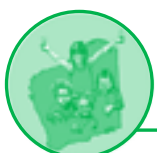
<i>Marijuana use</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
No school vandalism				
Never	1 570	(1 320 - 1 850)	87.1	(81.7 - 91.6)
Less than monthly	170	(100 - 260)	9.2	(5.5 - 14.1)
Weekly or more often	70	(30 - 120)	3.7	(1.6 - 7.0)
<b>Total</b>	<b>1 800</b>	<b>(1 540 - 2 080)</b>	<b>100.0</b>	
A little school vandalism				
Never	1 260	(1 050 - 1 500)	77.6	(69.4 - 84.2)
Less than monthly	280	(180 - 390)	17.1	(11.6 - 23.6)
Weekly or more often	90	(30 - 220)	5.3	(1.9 - 12.8)
<b>Total</b>	<b>1 620</b>	<b>(1 390 - 1 890)</b>	<b>100.0</b>	
Some school vandalism				
Never	1 170	(960 - 1 410)	73.9	(65.9 - 80.9)
Less than monthly	280	(180 - 400)	17.4	(11.6 - 24.4)
Weekly or more often	140	(70 - 230)	8.7	(4.6 - 14.9)
<b>Total</b>	<b>1 590</b>	<b>(1 340 - 1 840)</b>	<b>100.0</b>	
Quite a lot of school vandalism				
Never	960	(770 - 1 180)	78.4	(68.2 - 87.1)
Less than monthly	180	(90 - 290)	14.4	(8.1 - 23.9)
Weekly or more often	90	(20 - 210)	7.2	(1.9 - 16.5)
<b>Total</b>	<b>1 230</b>	<b>(1 000 - 1 470)</b>	<b>100.0</b>	
Very much school vandalism				
Never	310	(230 - 430)	63.5	(46.9 - 77.9)
Less than monthly	110	(40 - 220)	22.2	(9.6 - 41.1)
Weekly or more often	70	(30 - 140)	14.3	(5.9 - 27.2)
<b>Total</b>	<b>490</b>	<b>(370 - 650)</b>	<b>100.0</b>	
Not attending school				
Never	1 120	(940 - 1 320)	47.4	(40.9 - 53.8)
Less than monthly	610	(460 - 790)	25.9	(20.2 - 32.3)
Weekly or more often	630	(490 - 800)	26.6	(21.1 - 32.5)
<b>Total</b>	<b>2 370</b>	<b>(2 110 - 2 650)</b>	<b>100.0</b>	
<b>Total</b>				
Never	6 400	(6 100 - 6 700)	70.3	(67.0 - 73.6)
Less than monthly	1 620	(1 380 - 1 880)	17.8	(15.1 - 20.6)
Weekly or more often	1 080	(880 - 1 310)	11.9	(9.7 - 14.4)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 4.40: YOUNG PEOPLE AGED 12–17 YEARS — MARIJUANA USE, BY LEVEL OF ALCOHOL CONSUMPTION AT THEIR SCHOOL**

<i>Marijuana use</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>No alcohol at school</b>				
Never	2 750	(2 450 - 3 070)	86.2	(80.6 - 90.3)
Less than monthly	290	(190 - 420)	9.0	(5.7 - 12.8)
Weekly or more often	150	(70 - 310)	4.8	(2.2 - 9.5)
<b>Total</b>	<b>3 190</b>	<b>(2 870 - 3 520)</b>	<b>100.0</b>	
<b>A little alcohol consumption at school</b>				
Never	670	(520 - 860)	76.8	(65.2 - 85.3)
Less than monthly	170	(90 - 280)	18.8	(10.3 - 29.7)
Weekly or more often	40	(20 - 80)	4.4	(1.9 - 9.3)
<b>Total</b>	<b>880</b>	<b>(710 - 1 090)</b>	<b>100.0</b>	
<b>Some alcohol consumption at school</b>				
Never	910	(720 - 1 140)	74.7	(65.8 - 81.8)
Less than monthly	240	(170 - 320)	19.4	(13.7 - 26.3)
Weekly or more often	70	(20 - 160)	5.9	(1.8 - 12.5)
<b>Total</b>	<b>1 220</b>	<b>(1 010 - 1 450)</b>	<b>100.0</b>	
<b>Quite a lot of alcohol consumption at school</b>				
Never	570	(430 - 730)	67.9	(54.3 - 78.4)
Less than monthly	170	(80 - 290)	20.6	(11.2 - 33.4)
Weekly or more often	100	(40 - 190)	11.5	(4.4 - 20.9)
<b>Total</b>	<b>830</b>	<b>(660 - 1 030)</b>	<b>100.0</b>	
<b>Very much alcohol consumption at school</b>				
Never	380	(240 - 550)	61.7	(45.5 - 75.6)
Less than monthly	150	(70 - 260)	23.9	(12.1 - 39.5)
Weekly or more often	90	(40 - 160)	14.4	(6.9 - 25.8)
<b>Total</b>	<b>610</b>	<b>(440 - 810)</b>	<b>100.0</b>	
<b>Not attending school</b>				
Never	1 120	(940 - 1 320)	47.4	(40.9 - 53.8)
Less than monthly	610	(460 - 790)	25.9	(20.2 - 32.3)
Weekly or more often	630	(490 - 800)	26.6	(21.1 - 32.5)
<b>Total</b>	<b>2 370</b>	<b>(2 110 - 2 650)</b>	<b>100.0</b>	
<b>Total</b>				
Never	6 400	(6 100 - 6 700)	70.3	(67.0 - 73.6)
Less than monthly	1 620	(1 380 - 1 880)	17.8	(15.1 - 20.6)
Weekly or more often	1 080	(880 - 1 310)	11.9	(9.7 - 14.4)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

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**TABLE 4.41: YOUNG PEOPLE AGED 12–17 YEARS — MARIJUANA USE, BY WHETHER DRANK ALCOHOL OR SMOKED CIGARETTES**

Whether drank alcohol	Marijuana use	Number	95% CI	%	95% CI
Does not smoke cigarettes					
No	Never	4 730	(4 400 - 5 060)	92.3	(89.3 - 94.9)
	Over one year ago	220	(120 - 360)	4.3	(2.4 - 7.1)
	Less than monthly	50	(20 - 90)	0.9	(0.4 - 1.7)
	About weekly	60	(20 - 150)	1.2	(0.3 - 2.9)
	Daily	70	(30 - 130)	1.3	(0.6 - 2.4)
	<b>Total</b>	<b>5 120</b>	<b>(4 800 - 5 450)</b>	<b>100.0</b>	
Yes	Never	420	(320 - 560)	55.8	(43.4 - 67.3)
	Over one year ago	130	(60 - 240)	17.2	(8.9 - 30.4)
	Less than monthly	90	(60 - 140)	12.2	(7.6 - 17.9)
	About weekly	90	(40 - 180)	11.3	(4.9 - 22.9)
	Daily	30	(0 - 120)	3.5	(0.1 - 14.9)
	<b>Total</b>	<b>760</b>	<b>(610 - 940)</b>	<b>100.0</b>	
Total	Never	5 160	(4 830 - 5 480)	87.6	(84.4 - 90.5)
	Over one year ago	350	(230 - 520)	5.9	(3.7 - 8.6)
	Less than monthly	140	(100 - 200)	2.4	(1.6 - 3.3)
	About weekly	150	(70 - 260)	2.5	(1.3 - 4.5)
	Daily	100	(40 - 190)	1.6	(0.7 - 3.1)
	<b>Total</b>	<b>5 880</b>	<b>(5 570 - 6 180)</b>	<b>100.0</b>	
Smoked cigarettes regularly					
No	Never	830	(670 - 1 000)	55.1	(47.0 - 63.3)
	Over one year ago	270	(190 - 370)	18.0	(12.8 - 24.1)
	Less than monthly	180	(90 - 320)	12.3	(6.9 - 20.6)
	About weekly	140	(70 - 260)	9.2	(4.6 - 16.5)
	Daily	80	(40 - 160)	5.5	(2.3 - 10.1)
	<b>Total</b>	<b>1 500</b>	<b>(1 280 - 1 740)</b>	<b>100.0</b>	
Yes	Never	420	(280 - 590)	24.5	(17.6 - 33.2)
	Over one year ago	300	(200 - 450)	17.7	(12.1 - 25.2)
	Less than monthly	370	(270 - 510)	21.8	(15.8 - 28.6)
	About weekly	320	(210 - 470)	18.7	(12.1 - 26.0)
	Daily	300	(210 - 420)	17.4	(12.0 - 23.8)
	<b>Total</b>	<b>1 720</b>	<b>(1 470 - 1 990)</b>	<b>100.0</b>	
Total	Never	1 250	(1 040 - 1 470)	38.7	(33.1 - 44.5)
	Over one year ago	570	(440 - 740)	17.8	(13.7 - 22.3)
	Less than monthly	560	(420 - 730)	17.4	(13.2 - 22.0)
	About weekly	460	(320 - 630)	14.2	(10.0 - 19.0)
	Daily	380	(280 - 510)	11.8	(8.5 - 15.8)
	<b>Total</b>	<b>3 220</b>	<b>(2 920 - 3 530)</b>	<b>100.0</b>	

Continued....



**TABLE 4.41 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — MARIJUANA USE, BY WHETHER DRANK ALCOHOL OR SMOKED CIGARETTES

Whether drank alcohol	Marijuana use	Number	95% CI	%	95% CI
<b>Total</b>					
No	Never	5 560	(5 230 - 5 880)	83.9	(80.6 - 86.9)
	Over one year ago	490	(360 - 650)	7.4	(5.4 - 9.8)
	Less than monthly	230	(140 - 370)	3.5	(2.1 - 5.6)
	About weekly	200	(110 - 340)	3.0	(1.7 - 5.1)
	Daily	150	(90 - 240)	2.3	(1.3 - 3.5)
	<b>Total</b>	<b>6 620</b>	<b>(6 330 - 6 910)</b>	<b>100.0</b>	
Yes	Never	850	(680 - 1 050)	34.1	(27.9 - 40.8)
	Over one year ago	430	(310 - 610)	17.5	(12.6 - 23.4)
	Less than monthly	470	(350 - 610)	18.8	(14.4 - 23.7)
	About weekly	410	(270 - 570)	16.4	(11.3 - 22.2)
	Daily	320	(220 - 460)	13.1	(9.1 - 18.1)
	<b>Total</b>	<b>2 480</b>	<b>(2 190 - 2 780)</b>	<b>100.0</b>	
<b>Total</b>	Never	6 400	(6 100 - 6 700)	70.3	(67.0 - 73.6)
	Over one year ago	920	(740 - 1 130)	10.1	(8.1 - 12.4)
	Less than monthly	700	(550 - 870)	7.7	(6.0 - 9.5)
	About weekly	600	(450 - 800)	6.6	(4.9 - 8.8)
	Daily	480	(360 - 630)	5.2	(3.9 - 6.9)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 4.42:** YOUNG PEOPLE AGED 12–17 YEARS — LIKELIHOOD OF SMOKING CIGARETTES, ASSOCIATED WITH SEX, AGE GROUP, ALCOHOL CONSUMPTION AND MARIJUANA USE

Ever smoked cigarettes regularly			
Parameter	Significance (p value)	Odds Ratio	95% CI
Sex			
Male	0.002	0.51	(0.34 - 0.78)
Female		1.00	
Age group			
12–14 years		1.00	
15–16 years	0.226	1.30	(0.85 - 1.98)
17 years	0.990	1.00	(0.56 - 1.76)
Alcohol drinking			
Does not drink		1.00	
Drinks but not to excess	<0.001	4.37	(2.65 - 7.21)
Drinks to excess	<0.001	4.66	(2.33 - 9.34)
Marijuana use			
Never		1.00	
Less than monthly	<0.001	6.89	(4.10 - 11.6)
Weekly or more often	<0.001	11.1	(6.00 - 20.6)



**TABLE 4.43:** YOUNG PEOPLE AGED 12–17 YEARS — WHETHER PARENTS USE DRUGS, BY LEVEL OF RELATIVE ISOLATION (LORI)

<i>Whether parents use drugs</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
LORI — None				
No	2 880	(2 750 - 3 010)	91.2	(87.7 - 94.1)
Yes	280	(190 - 390)	8.8	(5.9 - 12.3)
<b>Total</b>	<b>3 160</b>	<b>(3 070 - 3 250)</b>	<b>100.0</b>	
LORI — Low				
No	2 040	(1 830 - 2 270)	89.3	(83.2 - 93.6)
Yes	240	(140 - 380)	10.7	(6.4 - 16.8)
<b>Total</b>	<b>2 280</b>	<b>(2 080 - 2 510)</b>	<b>100.0</b>	
LORI — Moderate				
No	1 620	(1 330 - 1 940)	89.0	(81.8 - 93.7)
Yes	200	(110 - 340)	11.0	(6.3 - 18.2)
<b>Total</b>	<b>1 820</b>	<b>(1 520 - 2 180)</b>	<b>100.0</b>	
LORI — High				
No	930	(670 - 1 250)	100.0	(94.2 - 100.0)
Yes	0	(0 - 60)	0.0	(0.0 - 5.8)
<b>Total</b>	<b>930</b>	<b>(670 - 1 250)</b>	<b>100.0</b>	
LORI — Extreme				
No	870	(620 - 1 200)	97.3	(94.3 - 99.0)
Yes	20	(10 - 50)	2.7	(1.0 - 5.7)
<b>Total</b>	<b>900</b>	<b>(630 - 1 210)</b>	<b>100.0</b>	
<b>Western Australia</b>				
No	8 350	(8 150 - 8 530)	91.8	(89.5 - 93.7)
Yes	750	(580 - 950)	8.2	(6.3 - 10.5)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 4.44:** YOUNG PEOPLE AGED 12–17 YEARS — FREQUENCY OF MARIJUANA USE, BY WHETHER PARENTS USE DRUGS

<i>Marijuana use</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Parents do not use drugs				
Never	6 010	(5 680 - 6 330)	71.9	(68.4 - 75.3)
Less than monthly	1 450	(1 220 - 1 710)	17.3	(14.6 - 20.4)
Weekly or more often	900	(720 - 1 110)	10.8	(8.5 - 13.2)
<b>Total</b>	<b>8 350</b>	<b>(8 150 - 8 530)</b>	<b>100.0</b>	
Parents use drugs				
Never	390	(260 - 580)	52.7	(40.1 - 66.0)
Less than monthly	170	(120 - 250)	23.1	(15.2 - 33.8)
Weekly or more often	180	(100 - 280)	24.3	(14.3 - 35.9)
<b>Total</b>	<b>750</b>	<b>(580 - 950)</b>	<b>100.0</b>	
<b>Total</b>				
Never	6 400	(6 100 - 6 700)	70.3	(67.0 - 73.6)
Less than monthly	1 620	(1 380 - 1 880)	17.8	(15.1 - 20.6)
Weekly or more often	1 080	(880 - 1 310)	11.9	(9.7 - 14.4)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	





**TABLE 4.45: YOUNG PEOPLE AGED 12–17 YEARS —CIGARETTE SMOKING AND MARIJUANA USE, BY WHETHER PARENTS USE DRUGS**

<i>Cigarette smoking and marijuana use</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Parents do not use drugs				
None	5 170	(4 840 - 5 500)	61.9	(58.2 - 65.4)
Cigarettes only	1 710	(1 470 - 1 960)	20.4	(17.7 - 23.5)
Marijuana only	280	(190 - 400)	3.3	(2.2 - 4.8)
Cigarettes and marijuana	1 190	(990 - 1 430)	14.3	(11.8 - 17.1)
<b>Total</b>	<b>8 350</b>	<b>(8 150 - 8 530)</b>	<b>100.0</b>	
Parents use drugs				
None	330	(220 - 490)	44.2	(31.7 - 56.7)
Cigarettes only	110	(50 - 210)	15.0	(7.0 - 26.2)
Marijuana only	100	(50 - 180)	13.5	(6.7 - 23.5)
Cigarettes and marijuana	200	(130 - 310)	27.3	(17.6 - 39.1)
<b>Total</b>	<b>750</b>	<b>(580 - 950)</b>	<b>100.0</b>	
<b>Total</b>				
None	5 500	(5 180 - 5 810)	60.5	(56.9 - 63.9)
Cigarettes only	1 820	(1 580 - 2 080)	20.0	(17.3 - 22.8)
Marijuana only	380	(270 - 520)	4.2	(3.0 - 5.7)
Cigarettes and marijuana	1 400	(1 180 - 1 640)	15.4	(12.9 - 18.0)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 4.46: YOUNG PEOPLE AGED 12–17 YEARS —ALCOHOL CONSUMPTION, BY WHETHER PARENTS USE DRUGS**

<i>Cigarette smoking and marijuana use</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Parents do not use drugs				
Does not drink	6 220	(5 900 - 6 510)	74.4	(71.2 - 77.6)
Drinks but not to excess	1 170	(970 - 1 390)	14.0	(11.6 - 16.7)
Drinks to excess	960	(770 - 1 170)	11.5	(9.3 - 14.0)
<b>Total</b>	<b>8 350</b>	<b>(8 150 - 8 530)</b>	<b>100.0</b>	
Parents use drugs				
Does not drink	400	(280 - 570)	54.1	(41.8 - 66.9)
Drinks but not to excess	180	(100 - 290)	23.7	(13.4 - 36.0)
Drinks to excess	170	(100 - 270)	22.2	(13.6 - 33.4)
<b>Total</b>	<b>750</b>	<b>(580 - 950)</b>	<b>100.0</b>	
<b>Total</b>				
Does not drink	6 620	(6 330 - 6 910)	72.8	(69.5 - 75.9)
Drinks but not to excess	1 350	(1 130 - 1 590)	14.8	(12.4 - 17.5)
Drinks to excess	1 130	(930 - 1 370)	12.4	(10.2 - 15.0)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



## PHYSICAL EXERCISE AND ORGANISED SPORT

**TABLE 4.47:** YOUNG PEOPLE AGED 12–17 YEARS — WHETHER DID STRENUOUS EXERCISE IN LAST SEVEN DAYS, BY AGE

Age (years)	Strenuous exercise	Number	95% CI	%	95% CI
Males					
12	No	190	(110 - 290)	19.1	(12.0 - 29.1)
	Yes	780	(630 - 950)	80.9	(70.9 - 88.0)
	<b>Total</b>	<b>970</b>	<b>(800 - 1 160)</b>	<b>100.0</b>	
13	No	180	(90 - 330)	21.3	(11.5 - 36.0)
	Yes	670	(490 - 880)	78.7	(64.0 - 88.5)
	<b>Total</b>	<b>850</b>	<b>(640 - 1 080)</b>	<b>100.0</b>	
14	No	160	(120 - 230)	21.2	(13.6 - 30.6)
	Yes	610	(440 - 830)	78.8	(69.4 - 86.4)
	<b>Total</b>	<b>770</b>	<b>(590 - 990)</b>	<b>100.0</b>	
15	No	140	(60 - 240)	18.3	(9.4 - 32.0)
	Yes	600	(460 - 770)	81.7	(68.0 - 90.6)
	<b>Total</b>	<b>740</b>	<b>(580 - 930)</b>	<b>100.0</b>	
16	No	210	(100 - 370)	29.1	(16.8 - 45.2)
	Yes	510	(400 - 630)	70.9	(54.8 - 83.2)
	<b>Total</b>	<b>710</b>	<b>(560 - 890)</b>	<b>100.0</b>	
17	No	50	(20 - 90)	8.1	(3.4 - 14.7)
	Yes	550	(400 - 710)	91.9	(85.4 - 96.6)
	<b>Total</b>	<b>600</b>	<b>(460 - 770)</b>	<b>100.0</b>	
<b>Total</b>	No	920	(730 - 1 140)	19.9	(15.8 - 24.2)
	Yes	3 720	(3 400 - 4 040)	80.1	(75.8 - 84.2)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
Females					
12	No	160	(80 - 280)	23.5	(12.0 - 37.3)
	Yes	530	(390 - 710)	76.5	(62.7 - 88.0)
	<b>Total</b>	<b>690</b>	<b>(520 - 890)</b>	<b>100.0</b>	
13	No	210	(130 - 330)	26.3	(16.9 - 37.7)
	Yes	590	(450 - 760)	73.7	(62.3 - 83.1)
	<b>Total</b>	<b>800</b>	<b>(630 - 990)</b>	<b>100.0</b>	
14	No	240	(160 - 340)	28.9	(20.8 - 38.9)
	Yes	590	(450 - 740)	71.1	(61.1 - 79.2)
	<b>Total</b>	<b>820</b>	<b>(670 - 1 000)</b>	<b>100.0</b>	
15	No	310	(210 - 450)	44.0	(30.3 - 57.7)
	Yes	400	(270 - 570)	56.0	(42.3 - 69.7)
	<b>Total</b>	<b>710</b>	<b>(550 - 920)</b>	<b>100.0</b>	
16	No	310	(230 - 400)	43.4	(33.5 - 53.8)
	Yes	400	(290 - 540)	56.6	(46.2 - 66.5)
	<b>Total</b>	<b>710</b>	<b>(580 - 870)</b>	<b>100.0</b>	
17	No	360	(250 - 480)	49.2	(38.1 - 60.7)
	Yes	370	(260 - 500)	50.8	(39.3 - 61.9)
	<b>Total</b>	<b>730</b>	<b>(580 - 910)</b>	<b>100.0</b>	
<b>Total</b>	No	1 590	(1 370 - 1 820)	35.6	(31.1 - 40.2)
	Yes	2 870	(2 570 - 3 180)	64.4	(59.8 - 68.9)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	

Continued....



**TABLE 4.47 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — WHETHER DID STRENUOUS EXERCISE IN LAST SEVEN DAYS, BY AGE

Age (years)	Strenuous exercise	Number	95% CI	%	95% CI
<b>Total</b>					
12	No	350	(230 - 500)	20.9	(14.5 - 28.8)
	Yes	1 310	(1 110 - 1 540)	79.1	(71.2 - 85.5)
	<b>Total</b>	<b>1 660</b>	<b>(1 430 - 1 910)</b>	<b>100.0</b>	
13	No	390	(260 - 560)	23.7	(16.2 - 32.2)
	Yes	1 260	(1 030 - 1 500)	76.3	(67.8 - 83.8)
	<b>Total</b>	<b>1 650</b>	<b>(1 410 - 1 920)</b>	<b>100.0</b>	
14	No	400	(310 - 520)	25.2	(19.4 - 31.8)
	Yes	1 200	(990 - 1 440)	74.8	(68.2 - 80.6)
	<b>Total</b>	<b>1 600</b>	<b>(1 360 - 1 840)</b>	<b>100.0</b>	
15	No	450	(320 - 610)	30.9	(22.8 - 40.3)
	Yes	1 000	(810 - 1 220)	69.1	(59.7 - 77.2)
	<b>Total</b>	<b>1 450</b>	<b>(1 220 - 1 700)</b>	<b>100.0</b>	
16	No	510	(380 - 680)	36.2	(28.0 - 44.4)
	Yes	910	(750 - 1 080)	63.8	(55.6 - 72.0)
	<b>Total</b>	<b>1 420</b>	<b>(1 220 - 1 650)</b>	<b>100.0</b>	
17	No	410	(300 - 530)	30.7	(23.6 - 39.0)
	Yes	920	(740 - 1 110)	69.3	(61.0 - 76.4)
	<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	
<b>Total</b>	No	2 510	(2 240 - 2 800)	27.6	(24.6 - 30.7)
	Yes	6 590	(6 300 - 6 860)	72.4	(69.3 - 75.4)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 4.48:** YOUNG PEOPLE AGED 12–17 YEARS — FREQUENCY OF STRENUOUS EXERCISE, BY AGE AND SEX

Age (years)	Frequency of strenuous exercise	Number	95% CI	%	95% CI
<b>Males</b>					
12–14	Daily	900	(710 - 1 100)	34.5	(28.2 - 41.4)
	Once a week	470	(330 - 650)	18.0	(12.8 - 24.1)
	Three or more times a week	700	(520 - 920)	27.0	(20.5 - 33.9)
	Did not exercise	530	(390 - 700)	20.5	(15.2 - 26.2)
	<b>Total</b>	<b>2 590</b>	<b>(2 310 - 2 900)</b>	<b>100.0</b>	
15	Daily	260	(170 - 380)	35.5	(24.5 - 48.5)
	Once a week	130	(70 - 220)	17.9	(10.3 - 29.7)
	Three or more times a week	210	(130 - 310)	28.2	(17.7 - 40.1)
	Did not exercise	140	(60 - 240)	18.3	(9.4 - 32.0)
	<b>Total</b>	<b>740</b>	<b>(580 - 930)</b>	<b>100.0</b>	
16	Daily	160	(110 - 240)	23.0	(15.0 - 32.6)
	Once a week	160	(110 - 230)	22.3	(14.5 - 31.7)
	Three or more times a week	180	(120 - 270)	25.6	(17.2 - 36.9)
	Did not exercise	210	(100 - 370)	29.1	(16.8 - 45.2)
	<b>Total</b>	<b>710</b>	<b>(560 - 890)</b>	<b>100.0</b>	
17	Daily	120	(60 - 240)	20.3	(10.0 - 36.0)
	Once a week	260	(160 - 390)	43.9	(30.5 - 58.7)
	Three or more times a week	160	(100 - 260)	27.6	(17.1 - 40.8)
	Did not exercise	50	(20 - 90)	8.1	(3.4 - 14.7)
	<b>Total</b>	<b>600</b>	<b>(460 - 770)</b>	<b>100.0</b>	
<b>Total</b>	Daily	1 440	(1 230 - 1 690)	31.1	(26.5 - 35.8)
	Once a week	1 020	(830 - 1 240)	22.0	(18.2 - 26.5)
	Three or more times a week	1 260	(1 020 - 1 500)	27.0	(22.6 - 32.0)
	Did not exercise	920	(730 - 1 140)	19.9	(15.8 - 24.2)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	

Continued . . .



**TABLE 4.48 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — FREQUENCY OF STRENUOUS EXERCISE BY, AGE AND SEX

Age (years)	Frequency of strenuous exercise	Number	95% CI	%	95% CI
<b>Females</b>					
12–14	Daily	570	(450 - 730)	24.8	(19.4 - 30.7)
	Once a week	640	(490 - 810)	27.6	(21.6 - 33.9)
	Three or more times a week	490	(360 - 660)	21.2	(15.9 - 27.1)
	Did not exercise	610	(470 - 790)	26.4	(20.6 - 32.8)
	<b>Total</b>	<b>2 310</b>	<b>(2 040 - 2 590)</b>	<b>100.0</b>	
15	Daily	60	(20 - 130)	7.9	(2.6 - 17.6)
	Once a week	190	(100 - 310)	26.1	(15.6 - 41.0)
	Three or more times a week	160	(70 - 280)	22.0	(11.5 - 37.8)
	Did not exercise	310	(210 - 450)	44.0	(30.3 - 57.7)
	<b>Total</b>	<b>710</b>	<b>(550 - 920)</b>	<b>100.0</b>	
16	Daily	120	(60 - 210)	17.7	(10.2 - 28.3)
	Once a week	130	(90 - 190)	18.1	(11.6 - 25.4)
	Three or more times a week	150	(80 - 250)	20.9	(12.5 - 31.9)
	Did not exercise	310	(230 - 400)	43.4	(33.5 - 53.8)
	<b>Total</b>	<b>710</b>	<b>(580 - 870)</b>	<b>100.0</b>	
17	Daily	90	(30 - 190)	12.5	(4.4 - 23.9)
	Once a week	160	(100 - 250)	22.3	(14.5 - 32.9)
	Three or more times a week	120	(70 - 190)	16.0	(9.6 - 25.2)
	Did not exercise	360	(250 - 480)	49.2	(38.1 - 60.7)
	<b>Total</b>	<b>730</b>	<b>(580 - 910)</b>	<b>100.0</b>	
<b>Total</b>	Daily	850	(680 - 1 040)	19.0	(15.4 - 23.0)
	Once a week	1 110	(910 - 1 340)	25.0	(20.9 - 29.6)
	Three or more times a week	910	(730 - 1 120)	20.4	(16.5 - 24.6)
	Did not exercise	1 590	(1 370 - 1 820)	35.6	(31.1 - 40.2)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>					
12–14	Daily	1 470	(1 250 - 1 720)	30.0	(25.5 - 34.6)
	Once a week	1 100	(900 - 1 330)	22.5	(18.6 - 27.0)
	Three or more times a week	1 190	(970 - 1 440)	24.3	(19.9 - 28.8)
	Did not exercise	1 140	(940 - 1 360)	23.3	(19.3 - 27.4)
	<b>Total</b>	<b>4 910</b>	<b>(4 600 - 5 220)</b>	<b>100.0</b>	
15	Daily	320	(220 - 450)	22.0	(15.4 - 30.0)
	Once a week	320	(210 - 450)	21.9	(14.9 - 30.6)
	Three or more times a week	370	(240 - 520)	25.2	(17.3 - 34.6)
	Did not exercise	450	(320 - 610)	30.9	(22.8 - 40.3)
	<b>Total</b>	<b>1 450</b>	<b>(1 220 - 1 700)</b>	<b>100.0</b>	
16	Daily	290	(200 - 390)	20.3	(14.5 - 27.0)
	Once a week	290	(220 - 370)	20.2	(15.1 - 25.8)
	Three or more times a week	330	(230 - 450)	23.3	(16.7 - 30.3)
	Did not exercise	510	(380 - 680)	36.2	(28.0 - 44.4)
	<b>Total</b>	<b>1 420</b>	<b>(1 220 - 1 650)</b>	<b>100.0</b>	
17	Daily	210	(120 - 350)	16.0	(9.6 - 25.2)
	Once a week	420	(310 - 570)	32.1	(24.2 - 40.8)
	Three or more times a week	280	(190 - 380)	21.2	(14.9 - 28.2)
	Did not exercise	410	(300 - 530)	30.7	(23.6 - 39.0)
	<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	
<b>Total</b>	Daily	2 290	(2 010 - 2 580)	25.2	(22.1 - 28.4)
	Once a week	2 130	(1 870 - 2 420)	23.4	(20.5 - 26.6)
	Three or more times a week	2 170	(1 890 - 2 460)	23.8	(20.8 - 27.0)
	Did not exercise	2 510	(2 240 - 2 800)	27.6	(24.6 - 30.7)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 4.49:** 1993 CHILD HEALTH SURVEY – ALL YOUNG PEOPLE AGED 12–16 YEARS — FREQUENCY OF STRENUOUS EXERCISE IN WEEK PRIOR SURVEY, BY AGE AND SEX (EXCLUDING FREQUENCY OF STRENUOUS EXERCISE NOT STATED)

<i>Frequency of strenuous exercise</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>				
Not in last week	3 170	(1 430 - 6 390)	6.0	(2.7 - 11.9)
Weekly	6 630	(4 840 - 8 910)	12.6	(9.3 - 16.6)
Between daily and weekly	28 400	(24 400 - 32 700)	53.7	(47.0 - 60.5)
Daily	14 600	(10 900 - 18 700)	27.7	(21.5 - 34.8)
<b>Total</b>	<b>52 800</b>	<b>(47 600 - 58 000)</b>	<b>100.0</b>	
<b>Females</b>				
Not in last week	5 930	(4 000 - 8 640)	10.4	(7.1 - 15.0)
Weekly	7 630	(5 000 - 11 200)	13.4	(8.8 - 19.3)
Between daily and weekly	36 800	(31 900 - 42 000)	64.8	(57.2 - 71.6)
Daily	6 420	(4 220 - 9 120)	11.3	(7.5 - 15.9)
<b>Total</b>	<b>56 800</b>	<b>(51 700 - 61 900)</b>	<b>100.0</b>	
<b>Total</b>				
Not in last week	9 100	(6 100 - 12 600)	8.3	(5.6 - 11.5)
Weekly	14 300	(10 900 - 18 000)	13.0	(10.0 - 16.4)
Between daily and weekly	65 200	(59 800 - 70 500)	59.5	(54.6 - 64.4)
Daily	21 000	(16 800 - 25 900)	19.2	(15.3 - 23.5)
<b>Total</b>	<b>110 000</b>	<b>(108 000 - 110 000)</b>	<b>100.0</b>	

**TABLE 4.50** YOUNG PEOPLE AGED 12–16 YEARS — FREQUENCY OF STRENUOUS EXERCISE, BY SEX

<i>Frequency of strenuous exercise</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>				
Not in last week	870	(690 - 1 100)	21.6	(17.2 - 26.5)
Weekly	760	(590 - 950)	18.8	(14.9 - 23.3)
Between daily and weekly	1 090	(880 - 1 340)	27.0	(22.0 - 32.1)
Daily	1 320	(1 110 - 1 560)	32.7	(27.8 - 38.0)
<b>Total</b>	<b>7 780</b>	<b>(7 560 - 7 980)</b>	<b>100.0</b>	
<b>Females</b>				
Not in last week	1 230	(1 040 - 1 450)	33.0	(28.2 - 37.9)
Weekly	950	(770 - 1 160)	25.5	(21.1 - 30.5)
Between daily and weekly	800	(620 - 1 000)	21.3	(16.9 - 26.1)
Daily	760	(600 - 940)	20.2	(16.3 - 24.8)
<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	
<b>Total</b>				
Not in last week	2 100	(1 840 - 2 380)	27.1	(23.9 - 30.5)
Weekly	1 710	(1 460 - 1 970)	22.0	(18.9 - 25.4)
Between daily and weekly	1 890	(1 620 - 2 170)	24.3	(21.0 - 27.8)
Daily	2 080	(1 810 - 2 360)	26.7	(23.4 - 30.3)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 4.51: YOUNG PEOPLE AGED 12–17 YEARS — FREQUENCY OF STRENUOUS EXERCISE, BY LEVEL OF RELATIVE ISOLATION (LORI)**

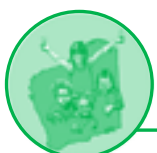
<i>Frequency of strenuous exercise</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>LORI — None</b>				
Daily	620	(480 - 800)	19.7	(15.1 - 25.3)
Once a week	700	(550 - 890)	22.3	(17.4 - 28.1)
Three or more times a week	900	(730 - 1 100)	28.6	(23.1 - 34.5)
Did not exercise	930	(760 - 1 110)	29.4	(24.0 - 35.0)
<b>Total</b>	<b>3 160</b>	<b>(3 070 - 3 250)</b>	<b>100.0</b>	
<b>LORI — Low</b>				
Daily	520	(400 - 670)	22.8	(17.5 - 28.6)
Once a week	500	(390 - 650)	22.0	(17.1 - 28.0)
Three or more times a week	630	(480 - 800)	27.5	(21.5 - 34.1)
Did not exercise	630	(490 - 800)	27.7	(21.8 - 34.3)
<b>Total</b>	<b>2 280</b>	<b>(2 080 - 2 510)</b>	<b>100.0</b>	
<b>LORI — Moderate</b>				
Daily	440	(320 - 570)	24.0	(18.7 - 29.7)
Once a week	530	(390 - 710)	28.8	(22.0 - 36.6)
Three or more times a week	320	(230 - 430)	17.5	(13.0 - 22.4)
Did not exercise	540	(390 - 730)	29.7	(23.2 - 37.1)
<b>Total</b>	<b>1 820</b>	<b>(1 520 - 2 180)</b>	<b>100.0</b>	
<b>LORI — High</b>				
Daily	290	(150 - 470)	30.6	(18.3 - 45.4)
Once a week	210	(120 - 320)	22.0	(14.7 - 31.6)
Three or more times a week	190	(90 - 350)	20.7	(10.8 - 34.1)
Did not exercise	250	(150 - 370)	26.7	(17.3 - 36.6)
<b>Total</b>	<b>930</b>	<b>(670 - 1 250)</b>	<b>100.0</b>	
<b>LORI — Extreme</b>				
Daily	420	(280 - 620)	46.9	(32.6 - 60.4)
Once a week	200	(100 - 360)	21.8	(11.3 - 35.3)
Three or more times a week	120	(40 - 290)	13.6	(4.3 - 27.4)
Did not exercise	160	(90 - 260)	17.7	(10.6 - 26.6)
<b>Total</b>	<b>900</b>	<b>(630 - 1 210)</b>	<b>100.0</b>	
<b>Western Australia</b>				
Daily	2 290	(2 010 - 2 580)	25.2	(22.1 - 28.4)
Once a week	2 130	(1 870 - 2 420)	23.4	(20.5 - 26.6)
Three or more times a week	2 170	(1 890 - 2 460)	23.8	(20.8 - 27.0)
Did not exercise	2 510	(2 240 - 2 800)	27.6	(24.6 - 30.7)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 4.52: YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO DID STRENUOUS EXERCISE IN LAST SEVEN DAYS, BY SCHOOL ATTENDANCE AND AGE**

Whether still in school	Strenuous exercise	Number	95% CI	%	95% CI
12 years					
No	No	20	(0 - 180)	36.4	(1.3 - 98.7)
	Yes	30	(10 - 70)	63.6	(1.3 - 98.7)
	<b>Total</b>	<b>50</b>	<b>(10 - 130)</b>	<b>100.0</b>	
Yes	No	330	(230 - 480)	20.5	(14.0 - 27.8)
	Yes	1 280	(1 080 - 1 510)	79.5	(72.2 - 86.0)
	<b>Total</b>	<b>1 610</b>	<b>(1 380 - 1 860)</b>	<b>100.0</b>	
<b>Total</b>	No	350	(230 - 500)	20.9	(14.5 - 28.8)
	Yes	1 310	(1 110 - 1 540)	79.1	(71.2 - 85.5)
	<b>Total</b>	<b>1 660</b>	<b>(1 430 - 1 910)</b>	<b>100.0</b>	
13 years					
No	No	20	(0 - 70)	23.2	(2.8 - 60.0)
	Yes	70	(40 - 120)	76.8	(40.0 - 97.2)
	<b>Total</b>	<b>100</b>	<b>(60 - 160)</b>	<b>100.0</b>	
Yes	No	370	(240 - 530)	23.7	(16.1 - 32.7)
	Yes	1 180	(970 - 1 430)	76.3	(67.3 - 83.9)
	<b>Total</b>	<b>1 550</b>	<b>(1 310 - 1 820)</b>	<b>100.0</b>	
<b>Total</b>	No	390	(260 - 560)	23.7	(16.2 - 32.2)
	Yes	1 260	(1 030 - 1 500)	76.3	(67.8 - 83.8)
	<b>Total</b>	<b>1 650</b>	<b>(1 410 - 1 920)</b>	<b>100.0</b>	
14 years					
No	No	50	(10 - 140)	32.7	(10.9 - 69.2)
	Yes	110	(50 - 200)	67.3	(30.8 - 89.1)
	<b>Total</b>	<b>160</b>	<b>(90 - 270)</b>	<b>100.0</b>	
Yes	No	350	(270 - 450)	24.3	(18.8 - 31.0)
	Yes	1 080	(880 - 1 310)	75.7	(69.0 - 81.2)
	<b>Total</b>	<b>1 430</b>	<b>(1 210 - 1 670)</b>	<b>100.0</b>	
<b>Total</b>	No	400	(310 - 520)	25.2	(19.4 - 31.8)
	Yes	1 200	(990 - 1 440)	74.8	(68.2 - 80.6)
	<b>Total</b>	<b>1 600</b>	<b>(1 360 - 1 840)</b>	<b>100.0</b>	
15 years					
No	No	140	(70 - 250)	42.2	(23.4 - 63.1)
	Yes	190	(110 - 310)	57.8	(36.9 - 76.6)
	<b>Total</b>	<b>340</b>	<b>(230 - 490)</b>	<b>100.0</b>	
Yes	No	310	(200 - 450)	27.5	(18.5 - 37.1)
	Yes	810	(640 - 1 010)	72.5	(62.9 - 81.5)
	<b>Total</b>	<b>1 120</b>	<b>(910 - 1 340)</b>	<b>100.0</b>	
<b>Total</b>	No	450	(320 - 610)	30.9	(22.8 - 40.3)
	Yes	1 000	(810 - 1 220)	69.1	(59.7 - 77.2)
	<b>Total</b>	<b>1 450</b>	<b>(1 220 - 1 700)</b>	<b>100.0</b>	
16 years					
No	No	370	(280 - 480)	48.8	(39.7 - 58.6)
	Yes	390	(300 - 490)	51.2	(41.4 - 60.3)
	<b>Total</b>	<b>760</b>	<b>(630 - 910)</b>	<b>100.0</b>	
Yes	No	140	(50 - 280)	21.8	(10.1 - 39.2)
	Yes	520	(390 - 670)	78.2	(60.8 - 89.9)
	<b>Total</b>	<b>660</b>	<b>(510 - 840)</b>	<b>100.0</b>	
<b>Total</b>	No	510	(380 - 680)	36.2	(28.0 - 44.4)
	Yes	910	(750 - 1 080)	63.8	(55.6 - 72.0)
	<b>Total</b>	<b>1 420</b>	<b>(1 220 - 1 650)</b>	<b>100.0</b>	

Continued . . . .



**TABLE 4.52 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO DID STRENUOUS EXERCISE IN LAST SEVEN DAYS, BY SCHOOL ATTENDANCE AND AGE

Whether still in school	Strenuous exercise	Number	95% CI	%	95% CI
<b>17 years</b>					
No	No	330	(240 - 440)	34.1	(26.1 - 43.6)
	Yes	640	(500 - 800)	65.9	(56.4 - 73.9)
	<b>Total</b>	<b>960</b>	<b>(790 - 1 150)</b>	<b>100.0</b>	
Yes	No	80	(30 - 160)	21.7	(8.0 - 39.7)
	Yes	280	(180 - 430)	78.3	(60.3 - 92.0)
	<b>Total</b>	<b>360</b>	<b>(240 - 510)</b>	<b>100.0</b>	
<b>Total</b>	No	410	(300 - 530)	30.7	(23.6 - 39.0)
	Yes	920	(740 - 1 110)	69.3	(61.0 - 76.4)
	<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	
<b>Total</b>					
No	No	940	(770 - 1 130)	39.5	(33.7 - 45.7)
	Yes	1 440	(1 230 - 1 650)	60.5	(54.3 - 66.3)
	<b>Total</b>	<b>2 370</b>	<b>(2 110 - 2 650)</b>	<b>100.0</b>	
Yes	No	1 580	(1 340 - 1 840)	23.4	(20.0 - 27.1)
	Yes	5 160	(4 840 - 5 470)	76.6	(72.9 - 80.0)
	<b>Total</b>	<b>6 730</b>	<b>(6 450 - 6 990)</b>	<b>100.0</b>	
<b>Total</b>	No	2 510	(2 240 - 2 800)	27.6	(24.6 - 30.7)
	Yes	6 590	(6 300 - 6 860)	72.4	(69.3 - 75.4)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 4.53:** YOUNG PEOPLE AGED 12–17 YEARS — PARTICIPATION IN ORGANISED SPORT, BY AGE AND SEX

Age (years)	Organised sport	Number	95% CI	%	95% CI
<b>Males</b>					
12	No	50	(30 - 80)	28.5	(12.6 - 51.1)
	Yes	650	(510 - 800)	70.1	(59.2 - 80.0)
	Not stated	10	(0 - 210)	1.0	(0.0 - 20.6)
	<b>Total</b>	<b>920</b>	<b>(750 - 1 110)</b>	<b>100.0</b>	
13	No	240	(160 - 340)	26.4	(17.8 - 37.4)
	Yes	680	(500 - 910)	73.6	(62.6 - 82.2)
	Not stated	0	(0 - 60)	0.0	(0.0 - 5.9)
	<b>Total</b>	<b>920</b>	<b>(720 - 1 150)</b>	<b>100.0</b>	
14	No	100	(50 - 190)	13.7	(6.5 - 24.7)
	Yes	620	(460 - 830)	84.7	(73.6 - 91.9)
	Not stated	10	(10 - 20)	1.6	(0.7 - 3.0)
	<b>Total</b>	<b>730</b>	<b>(550 - 940)</b>	<b>100.0</b>	
15	No	230	(140 - 370)	30.3	(19.6 - 42.9)
	Yes	510	(380 - 660)	66.3	(54.3 - 77.6)
	Not stated	30	(10 - 60)	3.4	(1.2 - 8.3)
	<b>Total</b>	<b>770</b>	<b>(610 - 960)</b>	<b>100.0</b>	
16	No	310	(220 - 440)	42.6	(31.0 - 54.6)
	Yes	400	(280 - 550)	54.8	(42.0 - 66.0)
	Not stated	20	(0 - 80)	2.6	(0.4 - 11.2)
	<b>Total</b>	<b>730</b>	<b>(570 - 920)</b>	<b>100.0</b>	
17	No	190	(120 - 270)	32.1	(21.6 - 45.7)
	Yes	400	(280 - 560)	67.9	(54.3 - 78.4)
	Not stated	0	(0 - 60)	0.0	(0.0 - 9.3)
	<b>Total</b>	<b>580</b>	<b>(440 - 750)</b>	<b>100.0</b>	
<b>Total</b>	No	1 340	(1 130 - 1 560)	28.8	(24.5 - 33.2)
	Yes	3 240	(2 930 - 3 570)	69.8	(65.3 - 74.2)
	Not stated	70	(20 - 160)	1.4	(0.5 - 3.4)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	

Continued....





**TABLE 4.53 (continued): YOUNG PEOPLE AGED 12–17 YEARS — PARTICIPATION IN ORGANISED SPORT, BY AGE AND SEX**

Age (years)	Organised sport	Number	95% CI	%	95% CI
<b>Females</b>					
12	No	280	(200 - 400)	39.1	(27.2 - 51.0)
	Yes	440	(300 - 620)	60.9	(49.0 - 72.8)
	Not stated	0	(0 - 60)	0.0	(0.0 - 7.4)
	<b>Total</b>	<b>730</b>	<b>(560 - 940)</b>	<b>100.0</b>	
13	No	260	(160 - 410)	35.3	(23.7 - 48.7)
	Yes	470	(350 - 610)	62.6	(49.5 - 74.3)
	Not stated	20	(10 - 30)	2.1	(0.8 - 4.7)
	<b>Total</b>	<b>750</b>	<b>(580 - 930)</b>	<b>100.0</b>	
14	No	340	(260 - 450)	41.2	(32.2 - 50.6)
	Yes	490	(370 - 630)	58.8	(49.4 - 67.8)
	Not stated	0	(0 - 60)	0.0	(0.0 - 6.5)
	<b>Total</b>	<b>830</b>	<b>(670 - 1 010)</b>	<b>100.0</b>	
15	No	270	(160 - 430)	38.0	(24.0 - 52.6)
	Yes	410	(290 - 580)	58.7	(43.2 - 71.8)
	Not stated	20	(10 - 60)	3.3	(1.2 - 8.3)
	<b>Total</b>	<b>710</b>	<b>(540 - 910)</b>	<b>100.0</b>	
16	No	380	(290 - 500)	53.2	(43.4 - 62.7)
	Yes	340	(250 - 450)	46.8	(37.3 - 56.6)
	Not stated	0	(0 - 60)	0.0	(0.0 - 7.4)
	<b>Total</b>	<b>720</b>	<b>(590 - 880)</b>	<b>100.0</b>	
17	No	370	(260 - 500)	51.6	(39.9 - 62.4)
	Yes	340	(240 - 460)	46.4	(35.3 - 57.7)
	Not stated	10	(0 - 50)	2.0	(0.2 - 6.3)
	<b>Total</b>	<b>720</b>	<b>(570 - 900)</b>	<b>100.0</b>	
<b>Total</b>	No	1 920	(1 680 - 2 170)	43.0	(38.5 - 47.7)
	Yes	2 490	(2 220 - 2 770)	55.8	(51.1 - 60.3)
	Not stated	50	(30 - 90)	1.2	(0.6 - 2.1)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>					
12	No	550	(420 - 700)	33.4	(26.4 - 41.3)
	Yes	1 090	(900 - 1 310)	66.1	(57.9 - 73.2)
	Not stated	10	(0 - 210)	0.6	(0.0 - 12.3)
	<b>Total</b>	<b>1 650</b>	<b>(1 420 - 1 900)</b>	<b>100.0</b>	
13	No	510	(370 - 670)	30.4	(22.9 - 39.1)
	Yes	1 140	(920 - 1 390)	68.6	(59.9 - 76.1)
	Not stated	20	(10 - 30)	1.0	(0.3 - 2.0)
	<b>Total</b>	<b>1 660</b>	<b>(1 420 - 1 940)</b>	<b>100.0</b>	
14	No	440	(330 - 570)	28.4	(22.0 - 35.5)
	Yes	1 110	(900 - 1 330)	70.9	(63.7 - 77.2)
	Not stated	10	(10 - 20)	0.7	(0.3 - 1.4)
	<b>Total</b>	<b>1 560</b>	<b>(1 340 - 1 810)</b>	<b>100.0</b>	
15	No	500	(340 - 680)	34.0	(24.8 - 43.4)
	Yes	920	(740 - 1 130)	62.6	(52.9 - 71.5)
	Not stated	50	(20 - 90)	3.4	(1.5 - 6.1)
	<b>Total</b>	<b>1 470</b>	<b>(1 250 - 1 720)</b>	<b>100.0</b>	
16	No	690	(560 - 850)	47.9	(39.9 - 55.5)
	Yes	740	(580 - 920)	50.8	(43.1 - 58.7)
	Not stated	20	(0 - 80)	1.3	(0.2 - 5.7)
	<b>Total</b>	<b>1 450</b>	<b>(1 240 - 1 680)</b>	<b>100.0</b>	
17	No	560	(430 - 710)	42.9	(34.3 - 51.2)
	Yes	730	(580 - 920)	56.0	(47.4 - 64.4)
	Not stated	10	(0 - 50)	1.1	(0.1 - 3.5)
	<b>Total</b>	<b>1 310</b>	<b>(1 110 - 1 530)</b>	<b>100.0</b>	
<b>Total</b>	No	3 250	(2 960 - 3 560)	35.8	(32.6 - 39.1)
	Yes	5 730	(5 430 - 6 030)	62.9	(59.6 - 66.2)
	Not stated	120	(70 - 210)	1.3	(0.7 - 2.2)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 4.54:** YOUNG PEOPLE AGED 12–17 YEARS — PARTICIPATION IN ORGANISED SPORT, BY WHETHER DID STRENUOUS EXERCISE IN PAST SEVEN DAYS, BY SEX

<i>Strenuous exercise</i>	<i>Participated in organised sport</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>					
No	No	450	(330 - 590)	48.3	(36.7 - 60.7)
	Yes	410	(270 - 600)	44.6	(32.1 - 56.7)
	Not stated	70	(20 - 160)	7.1	(2.5 - 16.8)
	<b>Total</b>	<b>920</b>	<b>(730 - 1 140)</b>	<b>100.0</b>	
Yes	No	890	(720 - 1 090)	24.0	(19.7 - 28.8)
	Yes	2 830	(2 530 - 3 140)	76.0	(71.2 - 80.3)
	Not stated	0	(0 - 60)	0.0	(0.0 - 1.5)
	<b>Total</b>	<b>3 720</b>	<b>(3 400 - 4 040)</b>	<b>100.0</b>	
<b>Total</b>	No	1 340	(1 130 - 1 560)	28.8	(24.5 - 33.2)
	Yes	3 240	(2 930 - 3 570)	69.8	(65.3 - 74.2)
	Not stated	70	(20 - 160)	1.4	(0.5 - 3.4)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>					
No	No	860	(700 - 1 040)	53.8	(46.3 - 61.6)
	Yes	680	(530 - 860)	42.8	(35.4 - 50.7)
	Not stated	50	(30 - 90)	3.4	(1.6 - 5.7)
	<b>Total</b>	<b>1 590</b>	<b>(1 370 - 1 820)</b>	<b>100.0</b>	
Yes	No	1 060	(870 - 1 270)	37.0	(31.4 - 42.9)
	Yes	1 810	(1 570 - 2 070)	63.0	(57.1 - 68.6)
	Not stated	0	(0 - 60)	0.0	(0.0 - 1.9)
	<b>Total</b>	<b>2 870</b>	<b>(2 570 - 3 180)</b>	<b>100.0</b>	
<b>Total</b>	No	1 920	(1 680 - 2 170)	43.0	(38.5 - 47.7)
	Yes	2 490	(2 220 - 2 770)	55.8	(51.1 - 60.3)
	Not stated	50	(30 - 90)	1.2	(0.6 - 2.1)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>					
No	No	1 300	(1 100 - 1 520)	51.8	(45.3 - 58.5)
	Yes	1 090	(890 - 1 330)	43.4	(37.1 - 50.3)
	Not stated	120	(70 - 210)	4.7	(2.4 - 7.9)
	<b>Total</b>	<b>2 510</b>	<b>(2 240 - 2 800)</b>	<b>100.0</b>	
Yes	No	1 950	(1 710 - 2 210)	29.6	(26.0 - 33.3)
	Yes	4 640	(4 320 - 4 950)	70.4	(66.7 - 74.0)
	Not stated	0	(0 - 60)	0.0	(0.0 - 0.8)
	<b>Total</b>	<b>6 590</b>	<b>(6 300 - 6 860)</b>	<b>100.0</b>	
<b>Total</b>	No	3 250	(2 960 - 3 560)	35.8	(32.6 - 39.1)
	Yes	5 730	(5 430 - 6 030)	62.9	(59.6 - 66.2)
	Not stated	120	(70 - 210)	1.3	(0.7 - 2.2)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 4.55: YOUNG PEOPLE AGED 12–17 YEARS — PARTICIPATION IN ORGANISED SPORT, BY WHETHER DID STRENUOUS PHYSICAL EXERCISE IN PAST SEVEN DAYS**

<i>Strenuous exercise</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Did not participate in organised sport</b>				
No	1 300	(1 100 - 1 520)	40.0	(34.8 - 45.5)
Yes	1 950	(1 710 - 2 210)	60.0	(54.5 - 65.2)
<b>Total</b>	<b>3 250</b>	<b>(2 960 - 3 560)</b>	<b>100.0</b>	
<b>Participated in organised sport</b>				
No	1 090	(890 - 1 330)	19.0	(15.6 - 22.9)
Yes	4 640	(4 320 - 4 950)	81.0	(77.1 - 84.4)
<b>Total</b>	<b>5 730</b>	<b>(5 430 - 6 030)</b>	<b>100.0</b>	
<b>Not stated</b>				
No	120	(70 - 210)	100.0	(63.1 - 100.0)
Yes	0	(0 - 60)	0.0	(0.0 - 36.9)
<b>Total</b>	<b>120</b>	<b>(70 - 210)</b>	<b>100.0</b>	
<b>Total</b>				
No	2 510	(2 240 - 2 800)	27.6	(24.6 - 30.7)
Yes	6 590	(6 300 - 6 860)	72.4	(69.3 - 75.4)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 4.56: YOUNG PEOPLE AGED 12–17 YEARS — WHETHER PARTICIPATED IN ORGANISED SPORT, BY AGE GROUP**

<i>Participated in organised sport</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>12–16 years</b>				
No	2 670	(2 390 - 2 960)	34.3	(30.9 - 38.0)
Yes	5 000	(4 690 - 5 320)	64.3	(60.6 - 67.8)
Not stated	100	(50 - 190)	1.3	(0.6 - 2.4)
<b>Total</b>	<b>7 780</b>	<b>(7 560 - 7 980)</b>	<b>100.0</b>	
<b>17 years</b>				
No	580	(450 - 730)	44.1	(35.5 - 52.3)
Yes	720	(560 - 900)	54.8	(46.0 - 62.9)
Not stated	10	(0 - 50)	1.1	(0.1 - 3.4)
<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	
<b>Total</b>				
No	3 250	(2 960 - 3 560)	35.8	(32.6 - 39.1)
Yes	5 730	(5 430 - 6 030)	62.9	(59.6 - 66.2)
Not stated	120	(70 - 210)	1.3	(0.7 - 2.2)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 4.57:** YOUNG PEOPLE AGED 12–17 YEARS — PARTICIPATION IN STRENUOUS EXERCISE AND ORGANISED SPORT, BY SEX

<i>Strenuous exercise</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>				
No organised sport or strenuous exercise	450	(330 - 590)	9.6	(7.0 - 12.5)
Organised sport only	410	(270 - 600)	8.9	(5.8 - 12.6)
Strenuous exercise only	890	(720 - 1 090)	19.2	(15.7 - 23.2)
Organised sport and strenuous exercise	2 830	(2 530 - 3 140)	60.9	(56.1 - 65.8)
Data not available	70	(20 - 160)	1.4	(0.5 - 3.4)
<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>				
No organised sport or strenuous exercise	860	(700 - 1 040)	19.2	(15.8 - 23.1)
Organised sport only	680	(530 - 860)	15.2	(12.1 - 19.0)
Strenuous exercise only	1 060	(870 - 1 270)	23.8	(19.9 - 28.1)
Organised sport and strenuous exercise	1 810	(1 570 - 2 070)	40.6	(35.9 - 45.3)
Data not available	50	(30 - 90)	1.2	(0.6 - 2.1)
<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>				
No organised sport or strenuous exercise	1 300	(1 100 - 1 520)	14.3	(12.1 - 16.8)
Organised sport only	1 090	(890 - 1 330)	12.0	(9.8 - 14.6)
Strenuous exercise only	1 950	(1 710 - 2 210)	21.5	(18.8 - 24.3)
Organised sport and strenuous exercise	4 640	(4 320 - 4 950)	51.0	(47.4 - 54.4)
Data not available	120	(70 - 210)	1.3	(0.7 - 2.2)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 4.58:** YOUNG PEOPLE AGED 12–17 YEARS — PARTICIPATION IN STRENUOUS EXERCISE AND ORGANISED SPORT, BY AGE

	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>12–14 years</b>				
No organised sport or strenuous exercise	530	(420 - 670)	10.7	(8.4 - 13.5)
Organised sport only	570	(420 - 770)	11.7	(8.5 - 15.4)
Strenuous exercise only	970	(790 - 1 180)	19.7	(16.2 - 23.9)
Organised sport and strenuous exercise	2 800	(2 500 - 3 100)	57.0	(52.1 - 61.8)
Data not available	40	(10 - 130)	0.8	(0.2 - 2.6)
<b>Total</b>	<b>4 910</b>	<b>(4 600 - 5 220)</b>	<b>100.0</b>	
<b>15–16 years</b>				
No organised sport or strenuous exercise	510	(370 - 680)	17.7	(13.3 - 23.2)
Organised sport only	390	(280 - 550)	13.6	(9.7 - 18.5)
Strenuous exercise only	670	(520 - 840)	23.2	(18.3 - 28.6)
Organised sport and strenuous exercise	1 240	(1 050 - 1 460)	43.3	(37.2 - 49.3)
Data not available	60	(30 - 120)	2.2	(1.0 - 4.1)
<b>Total</b>	<b>2 870</b>	<b>(2 600 - 3 150)</b>	<b>100.0</b>	
<b>17 years</b>				
No organised sport or strenuous exercise	260	(180 - 360)	20.0	(14.3 - 26.6)
Organised sport only	130	(60 - 220)	9.6	(5.1 - 16.2)
Strenuous exercise only	320	(220 - 440)	24.1	(17.1 - 31.9)
Organised sport and strenuous exercise	600	(460 - 780)	45.2	(36.5 - 54.0)
Data not available	10	(0 - 50)	1.1	(0.1 - 3.4)
<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	
<b>Total</b>				
No organised sport or strenuous exercise	1 300	(1 100 - 1 520)	14.3	(12.1 - 16.8)
Organised sport only	1 090	(890 - 1 330)	12.0	(9.8 - 14.6)
Strenuous exercise only	1 950	(1 710 - 2 210)	21.5	(18.8 - 24.3)
Organised sport and strenuous exercise	4 640	(4 320 - 4 950)	51.0	(47.4 - 54.4)
Data not available	120	(70 - 210)	1.3	(0.7 - 2.2)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 4.59: YOUNG PEOPLE AGED 12–17 YEARS — WHETHER DID STRENUOUS EXERCISE IN LAST SEVEN DAYS, BY WHETHER SMOKED CIGARETTES REGULARLY**

<i>Strenuous exercise</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Never smoked				
No	1 410	(1 170 - 1 670)	24.0	(20.1 - 28.2)
Yes	4 470	(4 140 - 4 800)	76.0	(71.8 - 79.9)
<b>Total</b>	<b>5 880</b>	<b>(5 570 - 6 180)</b>	<b>100.0</b>	
Smoked				
No	1 100	(920 - 1 300)	34.1	(29.1 - 39.6)
Yes	2 120	(1 860 - 2 410)	65.9	(60.4 - 70.9)
<b>Total</b>	<b>3 220</b>	<b>(2 920 - 3 530)</b>	<b>100.0</b>	
<b>Total</b>				
No	2 510	(2 240 - 2 800)	27.6	(24.6 - 30.7)
Yes	6 590	(6 300 - 6 860)	72.4	(69.3 - 75.4)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 4.60: YOUNG PEOPLE AGED 12–17 YEARS — WHETHER PARTICIPATED IN ORGANISED SPORT, BY WHETHER SMOKED CIGARETTES REGULARLY**

<i>Participated in organised sport</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Never smoked				
No	1 890	(1 640 - 2 140)	32.0	(28.1 - 36.2)
Yes	3 940	(3 620 - 4 270)	67.0	(62.7 - 70.9)
Not stated	60	(20 - 140)	0.9	(0.2 - 2.2)
<b>Total</b>	<b>5 880</b>	<b>(5 570 - 6 180)</b>	<b>100.0</b>	
Smoked				
No	1 370	(1 160 - 1 590)	42.5	(37.1 - 48.1)
Yes	1 790	(1 550 - 2 040)	55.5	(50.1 - 61.1)
Not stated	60	(30 - 120)	2.0	(0.9 - 3.8)
<b>Total</b>	<b>3 220</b>	<b>(2 920 - 3 530)</b>	<b>100.0</b>	
<b>Total</b>				
No	3 250	(2 960 - 3 560)	35.8	(32.6 - 39.1)
Yes	5 730	(5 430 - 6 030)	62.9	(59.6 - 66.2)
Not stated	120	(70 - 210)	1.3	(0.7 - 2.2)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

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**TABLE 4.61:** YOUNG PEOPLE AGED 12–17 YEARS — LIKELIHOOD OF HAVING DONE STRENUOUS EXERCISE IN THE PAST SEVEN DAYS, ASSOCIATED WITH SEX, AGE, LEVEL OF RELATIVE ISOLATION WHETHER STILL IN SCHOOL AND WHETHER SMOKED CIGARETTES

Did strenuous exercise in past seven days			
Parameter	Significance (p value)	Odds Ratio	95% CI
Sex			
Male	<0.001	2.42	(1.69 - 3.46)
Female		1.00	
Age (years)			
12		1.00	
13	0.862	0.95	(0.54 - 1.69)
14	0.808	0.93	(0.51 - 1.69)
15	0.375	0.74	(0.37 - 1.45)
16	0.276	0.69	(0.36 - 1.34)
17	0.598	0.82	(0.38 - 1.74)
Level of Relative Isolation			
None		1.00	
Low	0.613	1.11	(0.74 - 1.66)
Moderate	0.077	0.65	(0.40 - 1.05)
High	0.754	0.87	(0.35 - 2.14)
Extreme	0.058	1.99	(0.98 - 4.03)
Still in school			
No	0.006	0.53	(0.34 - 0.83)
Yes		1.00	
Smoked cigarettes			
No		1.00	
Yes	0.052	0.67	(0.44 - 1.00)

## SEXUAL KNOWLEDGE AND EXPERIENCE

**TABLE 4.62:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE EVER HAD SEX, BY AGE GROUP AND SEX

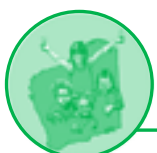
Age group (years)	Number	95% CI	%	95% CI
<b>Males</b>				
12–14	240	(150 - 370)	9.4	(5.8 - 14.4)
15	310	(200 - 470)	42.2	(30.0 - 55.9)
16	270	(180 - 400)	38.3	(27.2 - 51.0)
17	440	(320 - 590)	74.2	(60.3 - 84.5)
<b>Total</b>	1 270	(1 040 - 1 520)	27.4	(22.7 - 32.2)
<b>Females</b>				
12–14	220	(130 - 340)	9.3	(5.4 - 14.2)
15	170	(100 - 300)	24.3	(13.5 - 37.6)
16	350	(270 - 450)	49.5	(38.9 - 60.0)
17	540	(420 - 710)	74.7	(62.9 - 84.2)
<b>Total</b>	1 280	(1 070 - 1 500)	28.7	(24.5 - 33.1)
<b>Total</b>				
12–14	460	(320 - 620)	9.4	(6.8 - 12.8)
15	490	(340 - 660)	33.4	(24.6 - 42.4)
16	620	(500 - 770)	43.9	(36.2 - 51.9)
17	980	(800 - 1 180)	74.5	(66.2 - 81.6)
<b>Total</b>	<b>2 550</b>	<b>(2 270 - 2 850)</b>	<b>28.0</b>	<b>(25.0 - 31.4)</b>



**TABLE 4.63:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE EVER HAD SEX, BY AGE GROUP AND LEVEL OF RELATIVE ISOLATION (LORI)

Age group	Had sex	Number	95% CI	%	95% CI
<b>LORI — None</b>					
12–15 years	No	1 790	(1 590 - 2 000)	82.4	(74.9 - 88.2)
	Yes	380	(250 - 550)	17.6	(11.8 - 25.1)
	<b>Total</b>	<b>2 170</b>	<b>(1 990 - 2 360)</b>	<b>100.0</b>	
16–17 years	No	470	(360 - 610)	47.4	(37.5 - 58.4)
	Yes	520	(390 - 690)	52.6	(41.6 - 62.5)
	<b>Total</b>	<b>990</b>	<b>(820 - 1 180)</b>	<b>100.0</b>	
<b>Total</b>	No	2 260	(2 060 - 2 460)	71.5	(65.0 - 77.1)
	Yes	900	(720 - 1 110)	28.5	(22.9 - 35.0)
	<b>Total</b>	<b>3 160</b>	<b>(3 070 - 3 250)</b>	<b>100.0</b>	
<b>LORI — Low</b>					
12–15 years	No	1 440	(1 260 - 1 650)	86.0	(77.4 - 92.0)
	Yes	240	(130 - 400)	14.0	(8.0 - 22.6)
	<b>Total</b>	<b>1 680</b>	<b>(1 480 - 1 900)</b>	<b>100.0</b>	
16–17 years	No	270	(190 - 370)	44.0	(33.4 - 55.9)
	Yes	340	(250 - 450)	56.0	(44.1 - 66.6)
	<b>Total</b>	<b>600</b>	<b>(490 - 750)</b>	<b>100.0</b>	
<b>Total</b>	No	1 710	(1 510 - 1 920)	74.9	(68.3 - 80.5)
	Yes	570	(440 - 740)	25.1	(19.5 - 31.7)
	<b>Total</b>	<b>2 280</b>	<b>(2 080 - 2 510)</b>	<b>100.0</b>	
<b>LORI — Moderate</b>					
12–15 years	No	950	(740 - 1 200)	79.3	(72.5 - 84.8)
	Yes	250	(170 - 350)	20.7	(15.2 - 27.5)
	<b>Total</b>	<b>1 190</b>	<b>(950 - 1 490)</b>	<b>100.0</b>	
16–17 years	No	190	(110 - 310)	29.6	(18.8 - 44.1)
	Yes	440	(330 - 590)	70.4	(55.9 - 81.2)
	<b>Total</b>	<b>630</b>	<b>(480 - 810)</b>	<b>100.0</b>	
<b>Total</b>	No	1 130	(890 - 1 400)	62.1	(55.2 - 68.4)
	Yes	690	(550 - 870)	37.9	(31.6 - 44.8)
	<b>Total</b>	<b>1 820</b>	<b>(1 520 - 2 180)</b>	<b>100.0</b>	
<b>LORI — High</b>					
12–15 years	No	630	(430 - 890)	95.6	(85.9 - 98.9)
	Yes	30	(10 - 90)	4.4	(1.1 - 14.1)
	<b>Total</b>	<b>660</b>	<b>(450 - 910)</b>	<b>100.0</b>	
16–17 years	No	90	(40 - 170)	31.1	(14.6 - 57.0)
	Yes	190	(110 - 320)	68.9	(45.1 - 86.1)
	<b>Total</b>	<b>280</b>	<b>(170 - 420)</b>	<b>100.0</b>	
<b>Total</b>	No	710	(490 - 980)	76.5	(65.1 - 86.1)
	Yes	220	(120 - 350)	23.5	(13.9 - 34.9)
	<b>Total</b>	<b>930</b>	<b>(670 - 1 250)</b>	<b>100.0</b>	
<b>LORI — Extreme</b>					
12–15 years	No	610	(400 - 860)	92.0	(83.4 - 97.0)
	Yes	50	(20 - 110)	8.0	(3.0 - 16.6)
	<b>Total</b>	<b>660</b>	<b>(440 - 930)</b>	<b>100.0</b>	
16–17 years	No	130	(60 - 210)	52.4	(33.9 - 72.5)
	Yes	110	(60 - 190)	47.6	(27.5 - 66.1)
	<b>Total</b>	<b>240</b>	<b>(150 - 360)</b>	<b>100.0</b>	
<b>Total</b>	No	730	(500 - 1 020)	81.4	(71.6 - 89.4)
	Yes	170	(90 - 270)	18.6	(10.6 - 28.4)
	<b>Total</b>	<b>900</b>	<b>(630 - 1 210)</b>	<b>100.0</b>	

Continued...



**TABLE 4.63 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE EVER HAD SEX, BY AGE GROUP AND LEVEL OF RELATIVE ISOLATION (LORI)

Age group	Had sex	Number	95% CI	%	95% CI
<b>Western Australia</b>					
12–15 years	No	5 410	(5 100 - 5 720)	85.1	(81.7 - 88.2)
	Yes	950	(750 - 1 180)	14.9	(11.8 - 18.3)
	<b>Total</b>	<b>6 360</b>	<b>(6 070 - 6 630)</b>	<b>100.0</b>	
16–17 years	No	1 130	(950 - 1 340)	41.4	(35.5 - 47.1)
	Yes	1 610	(1 390 - 1 840)	58.6	(52.9 - 64.5)
	<b>Total</b>	<b>2 740</b>	<b>(2 470 - 3 030)</b>	<b>100.0</b>	
<b>Total</b>	No	6 550	(6 250 - 6 830)	72.0	(68.6 - 75.0)
	Yes	2 550	(2 270 - 2 850)	28.0	(25.0 - 31.4)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 4.64:** YOUNG PEOPLE AGED 12–17 YEARS — WHETHER EVER HAD SEX, BY WHETHER STILL IN SCHOOL AND AGE GROUP

Still in school	Had sex	Number	95% CI	%	95% CI
<b>12–15 years</b>					
No	No	380	(270 - 520)	58.3	(42.2 - 72.3)
	Yes	270	(150 - 440)	41.7	(27.7 - 57.8)
	<b>Total</b>	<b>650</b>	<b>(470 - 850)</b>	<b>100.0</b>	
Yes	No	5 040	(4 710 - 5 350)	88.2	(84.9 - 91.0)
	Yes	680	(520 - 870)	11.8	(9.0 - 15.1)
	<b>Total</b>	<b>5 710</b>	<b>(5 410 - 6 010)</b>	<b>100.0</b>	
<b>Total</b>	No	5 410	(5 100 - 5 720)	85.1	(81.7 - 88.2)
	Yes	950	(750 - 1 180)	14.9	(11.8 - 18.3)
	<b>Total</b>	<b>6 360</b>	<b>(6 070 - 6 630)</b>	<b>100.0</b>	
<b>16–17 years</b>					
No	No	480	(380 - 620)	28.1	(22.2 - 34.4)
	Yes	1 240	(1 060 - 1 450)	71.9	(65.6 - 77.8)
	<b>Total</b>	<b>1 720</b>	<b>(1 500 - 1 950)</b>	<b>100.0</b>	
Yes	No	650	(500 - 830)	63.7	(51.9 - 74.3)
	Yes	370	(250 - 540)	36.3	(25.7 - 48.1)
	<b>Total</b>	<b>1 020</b>	<b>(830 - 1 240)</b>	<b>100.0</b>	
<b>Total</b>	No	1 130	(950 - 1 340)	41.4	(35.5 - 47.1)
	Yes	1 610	(1 390 - 1 840)	58.6	(52.9 - 64.5)
	<b>Total</b>	<b>2 740</b>	<b>(2 470 - 3 030)</b>	<b>100.0</b>	
<b>Total</b>					
No	No	860	(700 - 1 040)	36.4	(30.3 - 42.4)
	Yes	1 510	(1 290 - 1 760)	63.6	(57.6 - 69.7)
	<b>Total</b>	<b>2 370</b>	<b>(2 110 - 2 650)</b>	<b>100.0</b>	
Yes	No	5 690	(5 380 - 6 000)	84.5	(81.2 - 87.5)
	Yes	1 040	(840 - 1 270)	15.5	(12.5 - 18.8)
	<b>Total</b>	<b>6 730</b>	<b>(6 450 - 6 990)</b>	<b>100.0</b>	
<b>Total</b>	No	6 550	(6 250 - 6 830)	72.0	(68.6 - 75.0)
	Yes	2 550	(2 270 - 2 850)	28.0	(25.0 - 31.4)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	





**TABLE 4.65: YOUNG PEOPLE AGED 12–17 YEARS — WHETHER EVER HAD SEX, BY WHETHER SMOKED CIGARETTES REGULARLY AND AGE GROUP**

<i>Smoked?</i>	<i>Had sex</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>12–15 years</b>					
No	No	4 280	(3 950 - 4 610)	93.0	(89.8 - 95.4)
	Yes	320	(220 - 480)	7.0	(4.6 - 10.2)
	<b>Total</b>	<b>4 600</b>	<b>(4 280 - 4 920)</b>	<b>100.0</b>	
Yes	No	1 130	(930 - 1 350)	64.6	(55.9 - 72.7)
	Yes	620	(450 - 810)	35.4	(27.3 - 44.1)
	<b>Total</b>	<b>1 760</b>	<b>(1 520 - 2 020)</b>	<b>100.0</b>	
<b>Total</b>	No	5 410	(5 100 - 5 720)	85.1	(81.7 - 88.2)
	Yes	950	(750 - 1 180)	14.9	(11.8 - 18.3)
	<b>Total</b>	<b>6 360</b>	<b>(6 070 - 6 630)</b>	<b>100.0</b>	
<b>16–17 years</b>					
No	No	780	(620 - 960)	60.6	(51.3 - 69.1)
	Yes	500	(380 - 660)	39.4	(30.9 - 48.7)
	<b>Total</b>	<b>1 280</b>	<b>(1 080 - 1 500)</b>	<b>100.0</b>	
Yes	No	360	(260 - 480)	24.5	(18.4 - 31.6)
	Yes	1 100	(910 - 1 310)	75.5	(68.4 - 81.6)
	<b>Total</b>	<b>1 460</b>	<b>(1 250 - 1 700)</b>	<b>100.0</b>	
<b>Total</b>	No	1 130	(950 - 1 340)	41.4	(35.5 - 47.1)
	Yes	1 610	(1 390 - 1 840)	58.6	(52.9 - 64.5)
	<b>Total</b>	<b>2 740</b>	<b>(2 470 - 3 030)</b>	<b>100.0</b>	
<b>Total</b>					
No	No	5 060	(4 720 - 5 380)	85.9	(82.6 - 88.9)
	Yes	830	(660 - 1 030)	14.1	(11.1 - 17.4)
	<b>Total</b>	<b>5 880</b>	<b>(5 570 - 6 180)</b>	<b>100.0</b>	
Yes	No	1 490	(1 280 - 1 730)	46.4	(40.7 - 52.3)
	Yes	1 720	(1 480 - 2 000)	53.6	(47.7 - 59.3)
	<b>Total</b>	<b>3 220</b>	<b>(2 920 - 3 530)</b>	<b>100.0</b>	
<b>Total</b>	No	6 550	(6 250 - 6 830)	72.0	(68.6 - 75.0)
	Yes	2 550	(2 270 - 2 850)	28.0	(25.0 - 31.4)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 4.66:** YOUNG PEOPLE AGED 12–17 YEARS — WHETHER EVER HAD SEX, BY AGE AND WHETHER DRINKS ALCOHOL

<i>Drinks alcohol</i>	<i>Had sex</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
12–15 years					
No	No	4 780	(4 450 - 5 110)	91.9	(88.8 - 94.4)
	Yes	420	(300 - 590)	8.1	(5.6 - 11.2)
	<b>Total</b>	<b>5 200</b>	<b>(4 890 - 5 520)</b>	<b>100.0</b>	
Yes	No	630	(470 - 830)	54.8	(44.1 - 65.6)
	Yes	520	(380 - 700)	45.2	(34.4 - 55.9)
	<b>Total</b>	<b>1 160</b>	<b>(940 - 1 400)</b>	<b>100.0</b>	
16–17 years					
No	No	730	(590 - 910)	51.7	(43.7 - 60.2)
	Yes	690	(540 - 850)	48.3	(39.8 - 56.3)
	<b>Total</b>	<b>1 420</b>	<b>(1 210 - 1 640)</b>	<b>100.0</b>	
Yes	No	400	(290 - 540)	30.3	(22.6 - 38.3)
	Yes	920	(750 - 1 120)	69.7	(61.7 - 77.4)
	<b>Total</b>	<b>1 320</b>	<b>(1 110 - 1 540)</b>	<b>100.0</b>	
<b>Total</b>					
No	No	5 510	(5 180 - 5 830)	83.3	(80.1 - 86.3)
	Yes	1 110	(910 - 1 320)	16.7	(13.7 - 19.9)
	<b>Total</b>	<b>6 620</b>	<b>(6 330 - 6 910)</b>	<b>100.0</b>	
Yes	No	1 030	(840 - 1 250)	41.7	(35.4 - 48.7)
	Yes	1 440	(1 220 - 1 690)	58.3	(51.3 - 64.6)
	<b>Total</b>	<b>2 480</b>	<b>(2 190 - 2 780)</b>	<b>100.0</b>	

**TABLE 4.67:** YOUNG PEOPLE 12–17 YEARS — WHETHER EVER HAD SEX, BY FREQUENCY OF MARIJUANA USE AND AGE GROUP

<i>Marijuana use</i>	<i>Had sex</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
12–15 years					
Never	No	4 650	(4 320 - 4 980)	91.3	(88.4 - 93.5)
	Yes	440	(330 - 590)	8.7	(6.5 - 11.6)
	<b>Total</b>	<b>5 090</b>	<b>(4 770 - 5 400)</b>	<b>100.0</b>	
Over one year ago	No	370	(260 - 510)	71.9	(56.1 - 85.4)
	Yes	140	(70 - 250)	28.1	(14.6 - 43.9)
	<b>Total</b>	<b>510</b>	<b>(380 - 690)</b>	<b>100.0</b>	
Less than monthly	No	240	(170 - 350)	66.4	(48.6 - 83.3)
	Yes	120	(50 - 220)	33.6	(16.7 - 51.4)
	<b>Total</b>	<b>370</b>	<b>(260 - 500)</b>	<b>100.0</b>	
About weekly	No	60	(20 - 150)	32.9	(10.9 - 69.2)
	Yes	130	(40 - 270)	67.1	(30.8 - 89.1)
	<b>Total</b>	<b>190</b>	<b>(90 - 360)</b>	<b>100.0</b>	
Daily	No	90	(60 - 130)	45.2	(23.2 - 65.5)
	Yes	110	(50 - 220)	54.8	(34.5 - 76.8)
	<b>Total</b>	<b>200</b>	<b>(120 - 290)</b>	<b>100.0</b>	
<b>Total</b>	No	5 410	(5 100 - 5 720)	85.1	(81.7 - 88.2)
	Yes	950	(750 - 1 180)	14.9	(11.8 - 18.3)
	<b>Total</b>	<b>6 360</b>	<b>(6 070 - 6 630)</b>	<b>100.0</b>	

Continued....



**TABLE 4.67 (continued):** YOUNG PEOPLE 12–17 YEARS — WHETHER EVER HAD SEX, BY FREQUENCY OF MARIJUANA USE AND AGE GROUP

Marijuana use	Had sex	Number	95% CI	%	95% CI
<b>16–17 years</b>					
Never	No	830	(670 - 1 010)	63.1	(54.9 - 70.2)
	Yes	480	(380 - 610)	36.9	(29.8 - 45.1)
	<b>Total</b>	<b>1 310</b>	<b>(1 120 - 1 520)</b>	<b>100.0</b>	
Over one year ago	No	150	(80 - 250)	36.3	(21.1 - 56.3)
	Yes	260	(160 - 400)	63.7	(43.7 - 78.9)
	<b>Total</b>	<b>410</b>	<b>(290 - 570)</b>	<b>100.0</b>	
Less than monthly	No	50	(30 - 90)	15.5	(8.0 - 27.7)
	Yes	280	(190 - 400)	84.5	(72.3 - 92.0)
	<b>Total</b>	<b>330</b>	<b>(240 - 460)</b>	<b>100.0</b>	
About weekly	No	30	(10 - 60)	7.4	(2.8 - 15.8)
	Yes	380	(270 - 530)	92.6	(84.2 - 97.2)
	<b>Total</b>	<b>410</b>	<b>(300 - 560)</b>	<b>100.0</b>	
Daily	No	80	(30 - 180)	27.9	(10.7 - 50.2)
	Yes	200	(130 - 300)	72.1	(49.8 - 89.3)
	<b>Total</b>	<b>280</b>	<b>(190 - 410)</b>	<b>100.0</b>	
<b>Total</b>	No	1 130	(950 - 1 340)	41.4	(35.5 - 47.1)
	Yes	1 610	(1 390 - 1 840)	58.6	(52.9 - 64.5)
	<b>Total</b>	<b>2 740</b>	<b>(2 470 - 3 030)</b>	<b>100.0</b>	
<b>Total</b>					
Never	No	5 480	(5 150 - 5 800)	85.5	(82.8 - 88.1)
	Yes	930	(760 - 1 110)	14.5	(11.9 - 17.2)
	<b>Total</b>	<b>6 400</b>	<b>(6 100 - 6 700)</b>	<b>100.0</b>	
Over one year ago	No	520	(380 - 680)	56.2	(44.1 - 67.5)
	Yes	400	(280 - 560)	43.8	(32.5 - 55.9)
	<b>Total</b>	<b>920</b>	<b>(740 - 1 130)</b>	<b>100.0</b>	
Less than monthly	No	300	(210 - 400)	42.3	(31.0 - 54.6)
	Yes	400	(280 - 560)	57.7	(45.4 - 69.0)
	<b>Total</b>	<b>700</b>	<b>(550 - 870)</b>	<b>100.0</b>	
About weekly	No	90	(40 - 180)	15.4	(6.6 - 27.1)
	Yes	510	(360 - 690)	84.6	(72.9 - 93.4)
	<b>Total</b>	<b>600</b>	<b>(450 - 800)</b>	<b>100.0</b>	
Daily	No	170	(110 - 260)	35.0	(23.1 - 50.2)
	Yes	310	(210 - 440)	65.0	(49.8 - 76.9)
	<b>Total</b>	<b>480</b>	<b>(360 - 630)</b>	<b>100.0</b>	
<b>Total</b>	No	6 550	(6 250 - 6 830)	72.0	(68.6 - 75.0)
	Yes	2 550	(2 270 - 2 850)	28.0	(25.0 - 31.4)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

4



**TABLE 4.68:** 1993 CHILD HEALTH SURVEY – ALL YOUNG PEOPLE AGED 15–16 YEARS — WHETHER EVER HAD SEX, BY AGE AND SEX

Age (years)	Ever had sex	Number	95% CI	%	95% CI
<b>Males</b>					
15	No	7 850	(5 500 - 11 100)	76.7	(54.9 - 90.6)
	Yes	1 770	(330 - 4 560)	17.3	(3.2 - 37.9)
	Not stated	620	(210 - 1 530)	6.1	(1.7 - 14.6)
	<b>Total</b>	<b>10 200</b>	<b>(7 200 - 13 900)</b>	<b>100.0</b>	
16	No	6 690	(4 390 - 9 610)	74.5	(59.7 - 85.4)
	Yes	1 830	(970 - 3 090)	20.4	(10.2 - 34.3)
	Not stated	450	(190 - 860)	5.0	(2.2 - 10.6)
	<b>Total</b>	<b>8 970</b>	<b>(6 500 - 11 900)</b>	<b>100.0</b>	
<b>Total</b>	No	14 500	(11 200 - 18 600)	75.7	(64.0 - 85.2)
	Yes	3 600	(1 790 - 6 300)	18.7	(9.7 - 30.9)
	Not stated	1 070	(540 - 1 920)	5.6	(2.7 - 10.1)
	<b>Total</b>	<b>19 200</b>	<b>(15 300 - 23 500)</b>	<b>100.0</b>	
<b>Females</b>					
15	No	9 270	(6 900 - 12 000)	78.1	(67.3 - 86.0)
	Yes	1 780	(1 030 - 2 720)	15.0	(9.0 - 23.6)
	Not stated	820	(210 - 1 960)	6.9	(1.9 - 17.0)
	<b>Total</b>	<b>11 900</b>	<b>(9 200 - 14 900)</b>	<b>100.0</b>	
16	No	8 590	(6 300 - 11 400)	73.9	(63.6 - 83.4)
	Yes	3 000	(1 830 - 4 460)	25.8	(16.6 - 36.4)
	Not stated	20	(0 - 180)	0.2	(0.0 - 1.5)
	<b>Total</b>	<b>11 600</b>	<b>(8 900 - 14 700)</b>	<b>100.0</b>	
<b>Total</b>	No	17 900	(14 500 - 21 500)	76.0	(68.5 - 82.1)
	Yes	4 780	(3 370 - 6 690)	20.4	(14.3 - 27.4)
	Not stated	850	(310 - 2 180)	3.6	(0.9 - 8.2)
	<b>Total</b>	<b>23 500</b>	<b>(19 700 - 27 700)</b>	<b>100.0</b>	
<b>Total</b>					
15	No	17 100	(13 800 - 21 000)	77.4	(67.0 - 85.8)
	Yes	3 550	(1 870 - 6 190)	16.0	(8.7 - 26.6)
	Not stated	1 450	(670 - 2 770)	6.5	(2.8 - 12.3)
	<b>Total</b>	<b>22 100</b>	<b>(18 300 - 26 200)</b>	<b>100.0</b>	
16	No	15 300	(12 200 - 18 900)	74.2	(65.9 - 81.5)
	Yes	4 840	(3 390 - 6 820)	23.5	(16.7 - 32.2)
	Not stated	480	(220 - 910)	2.3	(1.0 - 4.3)
	<b>Total</b>	<b>20 600</b>	<b>(17 100 - 24 400)</b>	<b>100.0</b>	
<b>Total</b>	No	32 400	(28 100 - 37 100)	75.9	(69.4 - 81.3)
	Yes	8 380	(6 100 - 11 400)	19.6	(14.1 - 25.8)
	Not stated	1 920	(1 040 - 3 160)	4.5	(2.5 - 7.6)
	<b>Total</b>	<b>42 700</b>	<b>(38 100 - 47 500)</b>	<b>100.0</b>	



**TABLE 4.69: YOUNG PEOPLE AGED 17 YEARS — AGE FIRST HAD SEX, BY LEVEL OF RELATIVE ISOLATION (LORI) AND SEX**

Sex	Age first had sex	Number	95% CI	%	95% CI
LORI — None					
Males	Less than 16 years	80	(30 - 180)	33.0	(13.3 - 59.0)
	16–17 years	60	(20 - 120)	24.3	(9.8 - 46.7)
	Never had sex	100	(50 - 210)	42.8	(20.3 - 66.5)
	<b>Total</b>	<b>240</b>	<b>(160 - 370)</b>	<b>100.0</b>	
Females	Less than 16 years	120	(50 - 240)	57.6	(27.7 - 84.8)
	16–17 years	50	(0 - 150)	21.6	(2.5 - 55.6)
	Never had sex	40	(10 - 110)	20.7	(4.0 - 45.6)
	<b>Total</b>	<b>210</b>	<b>(120 - 360)</b>	<b>100.0</b>	
<b>Total</b>	Less than 16 years	200	(110 - 340)	44.5	(27.3 - 64.0)
	16–17 years	110	(50 - 210)	23.0	(9.3 - 40.0)
	Never had sex	150	(80 - 250)	32.5	(17.4 - 50.5)
	<b>Total</b>	<b>460</b>	<b>(330 - 620)</b>	<b>100.0</b>	
LORI — Low					
Males	Less than 16 years	30	(20 - 60)	27.4	(14.2 - 45.2)
	16–17 years	70	(40 - 110)	56.3	(37.2 - 75.5)
	Never had sex	20	(10 - 50)	16.3	(4.4 - 34.9)
	<b>Total</b>	<b>120</b>	<b>(80 - 170)</b>	<b>100.0</b>	
Females	Less than 16 years	100	(50 - 160)	60.4	(40.6 - 81.2)
	16–17 years	20	(10 - 60)	13.9	(4.0 - 32.7)
	Never had sex	40	(20 - 90)	25.7	(10.2 - 48.4)
	<b>Total</b>	<b>160</b>	<b>(110 - 230)</b>	<b>100.0</b>	
<b>Total</b>	Less than 16 years	130	(90 - 200)	46.3	(31.4 - 60.8)
	16–17 years	90	(60 - 140)	32.0	(20.6 - 45.6)
	Never had sex	60	(30 - 110)	21.7	(11.1 - 34.7)
	<b>Total</b>	<b>280</b>	<b>(210 - 370)</b>	<b>100.0</b>	
LORI — Moderate					
Males	Less than 16 years	90	(20 - 200)	70.1	(34.8 - 93.3)
	16–17 years	40	(20 - 80)	29.9	(6.7 - 65.2)
	Never had sex	0	(0 - 60)	0.0	(0.0 - 36.9)
	<b>Total</b>	<b>120</b>	<b>(50 - 240)</b>	<b>100.0</b>	
Females	Less than 16 years	110	(70 - 150)	62.1	(42.2 - 78.2)
	16–17 years	30	(20 - 60)	18.7	(9.8 - 29.6)
	Never had sex	30	(10 - 70)	19.2	(6.1 - 36.9)
	<b>Total</b>	<b>170</b>	<b>(120 - 240)</b>	<b>100.0</b>	
<b>Total</b>	Less than 16 years	190	(110 - 300)	65.4	(49.8 - 80.9)
	16–17 years	70	(40 - 110)	23.4	(13.2 - 37.0)
	Never had sex	30	(10 - 70)	11.2	(3.6 - 23.6)
	<b>Total</b>	<b>290</b>	<b>(200 - 410)</b>	<b>100.0</b>	
LORI — High					
Males	Less than 16 years	60	(20 - 150)	100.0	(39.8 - 100.0)
	16–17 years	0	(0 - 60)	0.0	(0.0 - 60.2)
	Never had sex	0	(0 - 60)	0.0	(0.0 - 60.2)
	<b>Total</b>	<b>60</b>	<b>(20 - 150)</b>	<b>100.0</b>	
Females	Less than 16 years	10	(0 - 40)	12.1	(0.3 - 52.7)
	16–17 years	60	(20 - 140)	71.0	(34.9 - 96.8)
	Never had sex	10	(10 - 30)	16.9	(4.3 - 48.1)
	<b>Total</b>	<b>90</b>	<b>(40 - 160)</b>	<b>100.0</b>	
<b>Total</b>	Less than 16 years	70	(30 - 170)	49.1	(18.7 - 81.3)
	16–17 years	60	(20 - 140)	41.1	(13.7 - 78.8)
	Never had sex	10	(10 - 30)	9.8	(2.5 - 21.7)
	<b>Total</b>	<b>150</b>	<b>(80 - 260)</b>	<b>100.0</b>	

Continued....



**TABLE 4.69 (continued):** YOUNG PEOPLE AGED 17 YEARS — AGE FIRST HAD SEX, BY LEVEL OF RELATIVE ISOLATION (LORI) AND SEX

Sex	Age of first sexual experience	Number	95% CI	%	95% CI
<b>LORI — Extreme</b>					
Males	Less than 16 years	0	(0 - 60)	0.0	(0.0 - 70.8)
	16–17 years	10	(10 - 30)	32.4	(3.7 - 71.0)
	Never had sex	30	(10 - 60)	67.6	(29.0 - 96.3)
	<b>Total</b>	<b>40</b>	<b>(20 - 80)</b>	<b>100.0</b>	
Females	Less than 16 years	40	(20 - 90)	44.7	(5.3 - 85.3)
	16–17 years	0	(0 - 60)	0.0	(0.0 - 45.9)
	Never had sex	50	(10 - 150)	55.3	(14.7 - 94.7)
	<b>Total</b>	<b>90</b>	<b>(30 - 180)</b>	<b>100.0</b>	
<b>Total</b>	Less than 16 years	40	(20 - 90)	30.1	(10.3 - 56.0)
	16–17 years	10	(10 - 30)	10.6	(2.9 - 24.8)
	Never had sex	80	(30 - 160)	59.3	(32.3 - 83.7)
	<b>Total</b>	<b>130</b>	<b>(70 - 230)</b>	<b>100.0</b>	
<b>Western Australia</b>					
Males	Less than 16 years	260	(150 - 400)	44.2	(31.1 - 59.7)
	16–17 years	180	(120 - 250)	29.9	(19.9 - 42.0)
	Never had sex	150	(90 - 250)	25.8	(15.5 - 39.7)
	<b>Total</b>	<b>600</b>	<b>(460 - 770)</b>	<b>100.0</b>	
Females	Less than 16 years	380	(270 - 510)	52.2	(39.9 - 64.1)
	16–17 years	160	(90 - 270)	22.5	(12.5 - 34.0)
	Never had sex	180	(110 - 290)	25.3	(15.8 - 37.1)
	<b>Total</b>	<b>730</b>	<b>(580 - 910)</b>	<b>100.0</b>	
<b>Total</b>	Less than 16 years	640	(490 - 820)	48.6	(39.5 - 57.4)
	16–17 years	340	(240 - 460)	25.8	(18.6 - 33.4)
	Never had sex	340	(240 - 470)	25.5	(18.4 - 33.8)
	<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	



**TABLE 4.70: YOUNG PEOPLE AGED 17 YEARS — AGE OF FIRST SEXUAL EXPERIENCE, BY LEVEL OF RELATIVE ISOLATION (LORI)**

LORI	Age of first sexual experience	Number	95% CI	%	95% CI
<b>LORI — None</b>					
None	Less than 16 years	200	(110 - 340)	44.5	(27.3 - 64.0)
	16–17 years	110	(50 - 210)	23.0	(9.3 - 40.0)
	Never had sex	150	(80 - 250)	32.5	(17.4 - 50.5)
	<b>Total</b>	<b>460</b>	<b>(330 - 620)</b>	<b>100.0</b>	
<b>LORI — Low</b>					
Low	Less than 16 years	130	(90 - 200)	46.3	(31.4 - 60.8)
	16–17 years	90	(60 - 140)	32.0	(20.6 - 45.6)
	Never had sex	60	(30 - 110)	21.7	(11.1 - 34.7)
	<b>Total</b>	<b>280</b>	<b>(210 - 370)</b>	<b>100.0</b>	
<b>LORI — Moderate</b>					
Moderate	Less than 16 years	190	(110 - 300)	65.4	(49.8 - 80.9)
	16–17 years	70	(40 - 110)	23.4	(13.2 - 37.0)
	Never had sex	30	(10 - 70)	11.2	(3.6 - 23.6)
	<b>Total</b>	<b>290</b>	<b>(200 - 410)</b>	<b>100.0</b>	
<b>LORI — High</b>					
High	Less than 16 years	70	(30 - 170)	49.1	(18.7 - 81.3)
	16–17 years	60	(20 - 140)	41.1	(13.7 - 78.8)
	Never had sex	10	(10 - 30)	9.8	(2.5 - 21.7)
	<b>Total</b>	<b>150</b>	<b>(80 - 260)</b>	<b>100.0</b>	
<b>LORI — Extreme</b>					
Extreme	Less than 16 years	40	(20 - 90)	30.1	(10.3 - 56.0)
	16–17 years	10	(10 - 30)	10.6	(2.9 - 24.8)
	Never had sex	80	(30 - 160)	59.3	(32.3 - 83.7)
	<b>Total</b>	<b>130</b>	<b>(70 - 230)</b>	<b>100.0</b>	
<b>Western Australia</b>					
<b>Total</b>	Less than 16 years	640	(490 - 820)	48.6	(39.5 - 57.4)
	16–17 years	340	(240 - 460)	25.8	(18.6 - 33.4)
	Never had sex	340	(240 - 470)	25.5	(18.4 - 33.8)
	<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	

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**TABLE 4.71:** YOUNG PEOPLE AGED 12–17 YEARS — LIKELIHOOD OF EVER HAVING HAD SEX, ASSOCIATED WITH SEX, AGE, LEVEL OF RELATIVE ISOLATION, WHETHER STILL IN SCHOOL, EVER SMOKED CIGARETTES MORE THAN JUST ONCE OR TWICE, WHETHER DRINK ALCOHOL AND MARIJUANA USE

Ever had sex			
Parameter	Significance (p value)	Odds Ratio	95% CI
Sex			
Male	0.807	1.08	(0.59 - 1.96)
Female		1.00	
Age group (years)			
12–14	<0.001	0.10	(0.04 - 0.25)
15	0.006	0.29	(0.12 - 0.70)
16	0.008	0.26	(0.09 - 0.70)
17		1.00	
Level of Relative Isolation			
None		1.00	
Low	0.596	0.80	(0.36 - 1.81)
Moderate	0.403	1.61	(0.53 - 4.87)
High	0.614	0.75	(0.25 - 2.27)
Extreme	0.389	0.59	(0.18 - 1.96)
Still in school			
No	<0.001	6.01	(2.90 - 12.6)
Yes		1.00	
Smoked cigarettes			
No		1.00	
Yes	<0.001	4.28	(2.21 - 8.31)
Drinks alcohol			
No		1.00	
Yes	<0.001	4.11	(2.07 - 8.14)
Use of marijuana			
Never		1.00	
Over one year ago	0.011	2.99	(1.29 - 6.97)
Less than monthly	0.026	2.91	(1.14 - 7.44)
Weekly or daily	<0.001	6.59	(2.90 - 15.0)



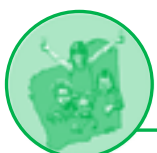


**TABLE 4.72: YOUNG PEOPLE AGED 12–17 YEARS WHO HAVE EVER HAD SEX — METHOD OF CONTRACEPTION USED THE LAST TIME HAD SEX, BY SEX**

Method	Number	95% CI	%	95% CI
<b>Males</b>				
Nothing		(70 - 260)	11.5	(5.7 - 19.2)
Birth control pills	40	(10 - 110)	3.1	(0.6 - 8.4)
Condoms	1 030	(820 - 1 270)	81.3	(72.3 - 87.8)
Withdrawal	30	(10 - 60)	2.4	(0.9 - 5.3)
Some other method	0	(0 - 60)	0.0	(0.0 - 4.3)
Not sure	20	(10 - 50)	1.7	(0.6 - 4.0)
<b>Total</b>	<b>1 270</b>	<b>(1 040 - 1 520)</b>	<b>100.0</b>	
<b>Females</b>				
Nothing	320	(230 - 430)	24.7	(18.1 - 32.0)
Birth control pills	110	(40 - 220)	8.6	(3.4 - 16.4)
Condoms	760	(610 - 930)	59.0	(50.3 - 67.1)
Withdrawal	20	(0 - 130)	1.3	(0.0 - 9.7)
Some other method	60	(20 - 120)	4.6	(1.6 - 9.2)
Not sure	20	(10 - 50)	1.8	(0.7 - 3.6)
<b>Total</b>	<b>1 280</b>	<b>(1 070 - 1 500)</b>	<b>100.0</b>	
<b>Total</b>				
Nothing	460	(340 - 610)	18.1	(13.7 - 23.3)
Birth control pills	150	(70 - 260)	5.9	(2.8 - 10.2)
Condoms	1 790	(1 550 - 2 060)	70.1	(63.8 - 75.8)
Withdrawal	50	(10 - 110)	1.8	(0.5 - 4.5)
Some other method	60	(20 - 120)	2.3	(0.8 - 4.7)
Not sure	40	(20 - 70)	1.7	(0.9 - 3.1)
<b>Total</b>	<b>2 550</b>	<b>(2 270 - 2 850)</b>	<b>100.0</b>	

**TABLE 4.73: YOUNG PEOPLE AGED 12–17 YEARS WHO HAVE EVER HAD SEX — METHOD OF CONTRACEPTION USED THE LAST TIME HAD SEX, BY AGE GROUPS**

Method	Number	95% CI	%	95% CI
<b>12–14 years</b>				
Nothing	40	(20 - 110)	9.4	(3.3 - 21.4)
Condoms	390	(260 - 540)	84.2	(73.0 - 91.2)
Other	30	(20 - 40)	6.4	(3.5 - 10.9)
<b>Total</b>	<b>460</b>	<b>(320 - 620)</b>	<b>100.0</b>	
<b>15–16 years</b>				
Nothing	210	(130 - 320)	18.9	(12.2 - 27.7)
Condoms	770	(610 - 960)	69.9	(60.3 - 79.2)
Other	120	(60 - 230)	11.2	(5.9 - 19.8)
<b>Total</b>	<b>1 110</b>	<b>(920 - 1 320)</b>	<b>100.0</b>	
<b>17 years</b>				
Nothing	210	(140 - 310)	21.4	(14.0 - 29.7)
Condoms	630	(480 - 800)	63.8	(53.3 - 73.5)
Other	150	(70 - 250)	14.8	(7.4 - 24.1)
<b>Total</b>	<b>980</b>	<b>(800 - 1 180)</b>	<b>100.0</b>	
<b>Total</b>				
Nothing	460	(340 - 610)	18.1	(13.7 - 23.3)
Condoms	1 790	(1 550 - 2 060)	70.1	(63.8 - 75.8)
Other	300	(200 - 440)	11.7	(7.7 - 16.5)
<b>Total</b>	<b>2 550</b>	<b>(2 270 - 2 850)</b>	<b>100.0</b>	



**TABLE 4.74:** YOUNG PEOPLE AGED 15 AND 16 YEARS WHO HAVE EVER HAD SEX — COMPARISON OF WAACHS AND THE 1993 CHILD HEALTH SURVEY — METHOD OF CONTRACEPTION USED THE LAST TIME HAD SEX, BY SEX

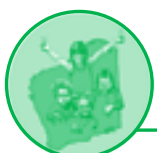
<i>Method</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>WAACHS Males</b>				
Nothing	60	(10 - 150)	10.5	(1.9 - 24.3)
Birth control pills	20	(0 - 130)	3.2	(0.1 - 20.4)
Condoms	480	(340 - 650)	81.3	(65.7 - 92.3)
Withdrawal	20	(10 - 60)	4.1	(1.1 - 10.2)
Some other method	0	(0 - 60)	0.0	(0.0 - 9.0)
Not sure	10	(0 - 20)	0.9	(0.2 - 3.2)
<b>CHS Males</b>				
Nothing	150	(20 - 470)	4.2	(0.6 - 15.8)
Birth control pills	320	(90 - 800)	8.8	(2.0 - 25.8)
Condoms	2 780	(1 420 - 5 020)	77.1	(29.0 - 96.3)
Withdrawal	90	(20 - 270)	2.4	(0.3 - 8.3)
Some other method	—	—	—	—
Not sure	270	(0 - 5 820)	7.4	(0.0 - 84.2)
<b>WAACHS Females</b>				
Nothing	150	(90 - 210)	28.2	(18.2 - 39.6)
Birth control pills	40	(10 - 100)	7.0	(1.4 - 17.9)
Condoms	300	(210 - 420)	57.2	(43.3 - 69.0)
Withdrawal	10	(0 - 230)	1.1	(0.0 - 36.9)
Some other method	10	(0 - 30)	2.1	(0.7 - 6.0)
Not sure	20	(10 - 50)	4.4	(1.8 - 9.1)
<b>CHS Females</b>				
Nothing	280	(30 - 1 010)	5.9	(0.8 - 21.4)
Birth control pills	2 450	(1 520 - 3 890)	51.2	(33.1 - 69.8)
Condoms	1 790	(930 - 2 970)	37.4	(21.1 - 56.3)
Withdrawal	180	(20 - 670)	3.7	(0.5 - 13.7)
Some other method	—	—	—	—
Not sure	90	(30 - 200)	1.9	(0.6 - 4.3)
<b>WAACHS Total</b>				
Nothing	210	(130 - 320)	18.9	(12.2 - 27.7)
Birth control pills	60	(20 - 160)	5.0	(1.5 - 13.6)
Condoms	770	(610 - 960)	69.9	(60.3 - 79.2)
Withdrawal	30	(0 - 120)	2.7	(0.4 - 10.4)
Some other method	10	(0 - 30)	1.0	(0.3 - 2.8)
Not sure	30	(10 - 50)	2.6	(1.1 - 4.7)
<b>CHS Total</b>				
Nothing	430	(120 - 1 150)	5.1	(0.9 - 12.5)
Birth control pills	2 770	(1 690 - 4 120)	33.0	(20.5 - 49.9)
Condoms	4 560	(2 930 - 6 950)	54.5	(38.1 - 72.1)
Withdrawal	260	(80 - 740)	3.1	(0.6 - 8.0)
Some other method	—	—	—	—
Not sure	360	(0 - 4 430)	4.3	(0.0 - 41.0)



**TABLE 4.75: YOUNG PEOPLE AGED 13–17 YEARS WHO HAVE EVER HAD SEX — METHOD OF CONTRACEPTION USED THE LAST TIME HAD SEX, BY WHETHER STILL IN SCHOOL**

Still in school?	Method of contraception	Number	95% CI	%	95% CI
<b>13 years</b>					
No	Nothing	10	(0 - 70)	42.4	(1.3 - 98.7)
	Condoms	20	(0 - 50)	57.6	(1.3 - 98.7)
	Other	0	(0 - 60)	0.0	(0.0 - 84.2)
Yes	Nothing	20	(10 - 30)	9.4	(3.3 - 21.8)
	Condoms	140	(60 - 280)	83.8	(65.5 - 93.2)
	Other	10	(0 - 20)	6.8	(1.9 - 16.5)
<b>14 years</b>					
No	Nothing	0	(0 - 60)	0.0	(0.0 - 60.2)
	Condoms	<b>60</b>	<b>(10 - 190)</b>	<b>100.0</b>	<b>(39.8 - 100.0)</b>
	Other	0	(0 - 60)	0.0	(0.0 - 60.2)
Yes	Nothing	10	(0 - 110)	7.2	(0.3 - 44.5)
	Condoms	150	(110 - 210)	82.6	(63.9 - 95.5)
	Other	20	(10 - 30)	10.2	(5.0 - 19.4)
<b>15 years</b>					
No	Nothing	20	(0 - 130)	10.6	(0.4 - 57.9)
	Condoms	140	(60 - 270)	82.8	(35.9 - 99.6)
	Other	10	(0 - 50)	6.6	(0.1 - 28.7)
Yes	Nothing	80	(40 - 150)	24.4	(11.9 - 44.6)
	Condoms	180	(110 - 290)	57.1	(34.9 - 75.6)
	Other	60	(10 - 160)	18.5	(3.6 - 41.4)
<b>16 years</b>					
No	Nothing	90	(60 - 130)	19.7	(12.7 - 28.7)
	Condoms	330	(240 - 440)	71.9	(61.8 - 81.5)
	Other	40	(20 - 80)	8.4	(3.6 - 17.2)
Yes	Nothing	20	(0 - 140)	14.0	(0.4 - 64.1)
	Condoms	120	(60 - 220)	76.1	(44.4 - 97.5)
	Other	20	(0 - 30)	9.9	(1.8 - 23.1)
<b>17 years</b>					
No	Nothing	180	(120 - 260)	23.2	(15.4 - 32.0)
	Condoms	460	(330 - 600)	59.1	(47.7 - 69.7)
	Other	140	(70 - 230)	17.7	(10.1 - 29.3)
Yes	Nothing	30	(0 - 140)	15.0	(0.3 - 44.5)
	Condoms	170	(100 - 280)	81.3	(47.3 - 99.7)
	Other	10	(0 - 170)	3.8	(0.0 - 60.2)
<b>Total</b>					
No	Nothing	300	(220 - 400)	20.1	(14.5 - 26.2)
	Condoms	1 020	(830 - 1 250)	67.5	(59.5 - 74.9)
	Other	190	(110 - 280)	12.4	(7.4 - 18.3)
Yes	Nothing	160	(80 - 280)	15.3	(8.3 - 25.6)
	Condoms	770	(600 - 960)	73.9	(62.7 - 83.0)
	Other	<b>110</b>	<b>(50 - 220)</b>	<b>10.7</b>	<b>(4.7 - 19.9)</b>

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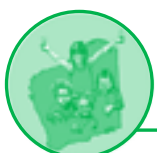
**TABLE 4.76:** YOUNG PEOPLE AGED 12–17 YEARS WHO HAVE EVER HAD SEX — METHOD OF CONTRACEPTION USED THE LAST TIME HAD SEX, BY YEARS OF EDUCATION OF PRIMARY CARER

<i>Method of contraception</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
1–9 years				
Nothing	110	(50 - 200)	18.1	(8.9 - 30.4)
Condoms	430	(320 - 570)	72.2	(59.0 - 84.4)
Other	60	(20 - 160)	9.6	(3.0 - 25.4)
<b>Total</b>	<b>590</b>	<b>(450 - 760)</b>	<b>100.0</b>	
10 years				
Nothing	170	(110 - 250)	16.4	(10.7 - 23.6)
Condoms	740	(570 - 920)	72.2	(62.1 - 80.3)
Other	120	(50 - 220)	11.4	(4.9 - 20.5)
<b>Total</b>	<b>1 020</b>	<b>(830 - 1 220)</b>	<b>100.0</b>	
11–12 years				
Nothing	80	(30 - 160)	19.1	(8.4 - 36.9)
Condoms	310	(210 - 440)	73.0	(56.1 - 85.4)
Other	30	(10 - 70)	7.9	(2.8 - 18.4)
<b>Total</b>	<b>420</b>	<b>(300 - 580)</b>	<b>100.0</b>	
13 years or more				
Nothing	0	(0 - 60)	0.0	(0.0 - 24.7)
Condoms	150	(70 - 280)	74.1	(48.8 - 90.9)
Other	50	(20 - 110)	25.9	(9.1 - 51.2)
<b>Total</b>	<b>200</b>	<b>(100 - 330)</b>	<b>100.0</b>	
No schooling				
Nothing	20	(10 - 40)	26.1	(3.7 - 71.0)
Condoms	50	(0 - 190)	55.7	(9.4 - 99.2)
Other	10	(0 - 40)	18.2	(0.4 - 57.9)
<b>Total</b>	<b>80</b>	<b>(20 - 220)</b>	<b>100.0</b>	
No carer				
Nothing	90	(40 - 190)	36.5	(13.9 - 68.4)
Condoms	130	(40 - 260)	52.7	(21.1 - 78.9)
Other	30	(10 - 50)	10.8	(3.9 - 25.1)
<b>Total</b>	<b>240</b>	<b>(140 - 390)</b>	<b>100.0</b>	
<b>Total</b>				
Nothing	460	(340 - 610)	18.1	(13.7 - 23.3)
Condoms	1 790	(1 550 - 2 060)	70.1	(63.8 - 75.8)
Other	300	(200 - 440)	11.7	(7.7 - 16.5)
<b>Total</b>	<b>2 550</b>	<b>(2 270 - 2 850)</b>	<b>100.0</b>	



**TABLE. 4.77: FEMALES AGED 12–17 YEARS — WHETHER EVER BEEN PREGNANT, BY AGE**

<i>Ever pregnant</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>12 years</b>				
No	690	(520 - 890)	100.0	(92.3 - 100.0)
Once	0	(0 - 60)	0.0	(0.0 - 7.7)
More than once	0	(0 - 60)	0.0	(0.0 - 7.7)
<b>Total</b>	690	(520 - 890)	100.0	
<b>13 years</b>				
No	780	(610 - 970)	97.4	(91.9 - 99.4)
Yes	20	(0 - 60)	2.6	(0.6 - 8.1)
More than once	0	(0 - 60)	0.0	(0.0 - 6.7)
<b>Total</b>	800	(630 - 990)	100.0	
<b>14 years</b>				
No	800	(640 - 970)	96.6	(89.2 - 99.6)
Yes	30	(0 - 90)	3.4	(0.4 - 10.8)
More than once	0	(0 - 60)	0.0	(0.0 - 6.6)
<b>Total</b>	820	(670 - 1 000)	100.0	
<b>15 years</b>				
No	680	(520 - 890)	95.3	(89.5 - 98.2)
Yes	30	(10 - 70)	4.7	(1.8 - 10.5)
More than once	0	(0 - 60)	0.0	(0.0 - 7.5)
<b>Total</b>	710	(550 - 920)	100.0	
<b>16 years</b>				
No	560	(430 - 710)	79.1	(71.2 - 85.1)
Yes	140	(100 - 180)	19.4	(13.7 - 26.3)
More than once	10	(0 - 60)	1.5	(0.0 - 8.9)
<b>Total</b>	710	(580 - 870)	100.0	
<b>17 years</b>				
No	480	(360 - 630)	66.3	(55.7 - 76.4)
Yes	150	(110 - 210)	21.0	(14.4 - 29.2)
More than once	90	(40 - 200)	12.7	(5.3 - 24.5)
<b>Total</b>	730	(580 - 910)	100.0	
<b>Total</b>				
No	3 990	(3 670 - 4 310)	89.4	(86.7 - 91.8)
Yes	370	(290 - 480)	8.3	(6.4 - 10.5)
More than once	100	(50 - 210)	2.3	(1.0 - 4.7)
<b>Total</b>	4 460	(4 140 - 4 790)	100.0	



**TABLE 4.78:** YOUNG PEOPLE AGED 12–17 YEARS — WHETHER TAUGHT HOW TO AVOID AIDS/HIV OR OTHER SEXUALLY TRANSMITTED DISEASES, BY AGE

<i>Learnt about preventing STDs?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
12 years				
No	580	(440 - 760)	35.1	(27.7 - 43.7)
Yes	930	(750 - 1 140)	56.0	(47.7 - 64.4)
Not sure	150	(90 - 240)	8.9	(5.1 - 13.7)
<b>Total</b>	<b>1 660</b>	<b>(1 430 - 1 910)</b>	<b>100.0</b>	
13 years				
No	430	(290 - 610)	26.2	(18.6 - 35.9)
Yes	1 070	(870 - 1 300)	64.8	(55.0 - 73.4)
Not sure	150	(70 - 280)	8.9	(4.0 - 15.5)
<b>Total</b>	<b>1 650</b>	<b>(1 410 - 1 920)</b>	<b>100.0</b>	
14 years				
No	350	(240 - 500)	22.2	(15.8 - 30.3)
Yes	1 210	(1 010 - 1 430)	75.9	(67.3 - 82.7)
Not sure	30	(0 - 160)	1.9	(0.0 - 9.4)
<b>Total</b>	<b>1 600</b>	<b>(1 360 - 1 840)</b>	<b>100.0</b>	
15 years				
No	240	(150 - 370)	16.5	(10.3 - 24.6)
Yes	1 160	(960 - 1 400)	80.1	(72.2 - 87.0)
Not sure	50	(20 - 100)	3.4	(1.4 - 6.3)
<b>Total</b>	<b>1 450</b>	<b>(1 220 - 1 700)</b>	<b>100.0</b>	
16 years				
No	220	(140 - 340)	15.7	(10.0 - 22.7)
Yes	1 180	(1 000 - 1 370)	82.8	(75.8 - 88.6)
Not sure	20	(10 - 40)	1.5	(0.7 - 2.8)
<b>Total</b>	<b>1 420</b>	<b>(1 220 - 1 650)</b>	<b>100.0</b>	
17 years				
No	100	(50 - 200)	7.9	(3.7 - 14.7)
Yes	1 180	(980 - 1 390)	89.1	(81.9 - 94.0)
Not sure	40	(10 - 90)	3.0	(0.8 - 7.4)
<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	
<b>Total</b>				
No	1 940	(1 660 - 2 240)	21.3	(18.2 - 24.6)
Yes	6 730	(6 420 - 7 030)	73.9	(70.5 - 77.2)
Not sure	440	(310 - 600)	4.8	(3.4 - 6.5)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 4.79:** YOUNG PEOPLE AGED 12–17 YEARS — WHETHER TAUGHT HOW TO AVOID AIDS/HIV OR OTHER SEXUALLY TRANSMITTED DISEASES, BY LEVEL OF RELATIVE ISOLATION (LORI)

<i>Learnt about preventing STDs?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>LORI — None</b>				
No	490	(360 - 650)	15.4	(11.3 - 20.3)
Yes	2 550	(2 380 - 2 730)	80.6	(75.1 - 85.3)
Not sure	120	(60 - 250)	3.9	(1.8 - 8.0)
<b>Total</b>	<b>3 160</b>	<b>(3 070 - 3 250)</b>	<b>100.0</b>	
<b>LORI — Low</b>				
No	370	(250 - 520)	16.0	(10.8 - 22.2)
Yes	1 760	(1 550 - 1 980)	77.1	(70.5 - 82.8)
Not sure	160	(80 - 260)	6.9	(3.8 - 11.1)
<b>Total</b>	<b>2 280</b>	<b>(2 080 - 2 510)</b>	<b>100.0</b>	
<b>LORI — Moderate</b>				
No	260	(150 - 410)	14.4	(8.9 - 22.1)
Yes	1 540	(1 260 - 1 840)	84.3	(76.9 - 90.2)
Not sure	20	(10 - 60)	1.2	(0.3 - 3.1)
<b>Total</b>	<b>1 820</b>	<b>(1 520 - 2 180)</b>	<b>100.0</b>	
<b>LORI — High</b>				
No	360	(230 - 540)	38.1	(25.7 - 50.5)
Yes	530	(350 - 780)	56.6	(43.3 - 68.3)
Not sure	50	(30 - 80)	5.3	(2.9 - 8.6)
<b>Total</b>	<b>930</b>	<b>(670 - 1 250)</b>	<b>100.0</b>	
<b>LORI — Extreme</b>				
No	470	(300 - 690)	51.8	(38.0 - 65.3)
Yes	350	(220 - 540)	39.2	(28.0 - 52.9)
Not sure	80	(20 - 170)	9.0	(2.8 - 18.4)
<b>Total</b>	<b>900</b>	<b>(630 - 1 210)</b>	<b>100.0</b>	
<b>Western Australia</b>				
No	1 940	(1 660 - 2 240)	21.3	(18.2 - 24.6)
Yes	6 730	(6 420 - 7 030)	73.9	(70.5 - 77.2)
Not sure	440	(310 - 600)	4.8	(3.4 - 6.5)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 4.80:** YOUNG PEOPLE AGED 12–17 YEARS — LIKELIHOOD OF EVER HAVING HAD SEX, ASSOCIATED WITH AGE AND WHETHER TAUGHT HOW TO AVOID AIDS/HIV OR OTHER SEXUALLY TRANSMITTED DISEASES

<b>Ever had sex</b>				
<i>Parameter</i>	<i>Significance (p value)</i>	<i>Odds Ratio</i>	<i>95% CI</i>	
<b>Age (years)</b>				
12	<0.001	0.01	(0.00 - 0.05)	
13	<0.001	0.06	(0.03 - 0.12)	
14	<0.001	0.08	(0.04 - 0.16)	
15	<0.001	0.22	(0.12 - 0.41)	
16	0.002	0.35	(0.18 - 0.67)	
17		1.00		
<b>Taught how to avoid AIDS/HIV or other sexually transmitted diseases</b>				
No	0.525	0.83	(0.47 - 1.46)	
Yes		1.00		
Not sure	0.847	1.11	(0.39 - 3.16)	



**TABLE 4.81: YOUNG PEOPLE AGED 12–17 YEARS — WHETHER TAUGHT HOW TO AVOID AIDS/HIV OR OTHER SEXUALLY TRANSMITTED DISEASES, BY WHETHER EVER HAD SEX AND AGE**

<i>Had sex</i>	<i>Learnt about preventing STDs?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>12–14 years</b>					
No	No	1 270	(1 040 - 1 520)	28.5	(23.7 - 33.6)
	Yes	2 880	(2 590 - 3 180)	64.7	(59.3 - 69.7)
	Not sure	300	(190 - 470)	6.8	(4.3 - 10.3)
	<b>Total</b>	<b>4 450</b>	<b>(4 140 - 4 750)</b>	<b>100.0</b>	
Yes	No	100	(40 - 200)	21.9	(9.6 - 41.1)
	Yes	340	(230 - 490)	72.9	(56.7 - 87.5)
	Not sure	20	(0 - 70)	5.2	(1.1 - 14.4)
	<b>Total</b>	<b>460</b>	<b>(320 - 620)</b>	<b>100.0</b>	
<b>Total</b>	No	1 370	(1 130 - 1 620)	27.9	(23.6 - 32.8)
	Yes	3 210	(2 920 - 3 520)	65.5	(60.6 - 70.3)
	Not sure	320	(210 - 480)	6.6	(4.2 - 9.6)
	<b>Total</b>	<b>4 910</b>	<b>(4 600 - 5 220)</b>	<b>100.0</b>	
<b>15 years</b>					
No	No	160	(90 - 270)	16.0	(8.6 - 25.3)
	Yes	770	(610 - 960)	79.8	(70.2 - 88.0)
	Not sure	40	(10 - 80)	4.2	(1.5 - 8.7)
	<b>Total</b>	<b>970</b>	<b>(790 - 1 170)</b>	<b>100.0</b>	
Yes	No	80	(30 - 190)	17.4	(7.0 - 35.5)
	Yes	390	(260 - 550)	80.8	(63.1 - 91.6)
	Not sure	10	(0 - 20)	1.8	(0.4 - 5.2)
	<b>Total</b>	<b>490</b>	<b>(340 - 660)</b>	<b>100.0</b>	
<b>Total</b>	No	240	(150 - 370)	16.5	(10.3 - 24.6)
	Yes	1 160	(960 - 1 400)	80.1	(72.2 - 87.0)
	Not sure	50	(20 - 100)	3.4	(1.4 - 6.3)
	<b>Total</b>	<b>1 450</b>	<b>(1 220 - 1 700)</b>	<b>100.0</b>	
<b>16 years</b>					
No	No	150	(80 - 270)	18.3	(10.2 - 30.9)
	Yes	650	(520 - 800)	81.1	(69.5 - 89.9)
	Not sure	10	(0 - 10)	0.6	(0.3 - 1.2)
	<b>Total</b>	<b>800</b>	<b>(640 - 980)</b>	<b>100.0</b>	
Yes	No	80	(40 - 120)	12.3	(6.8 - 19.6)
	Yes	530	(410 - 670)	85.0	(77.3 - 90.9)
	Not sure	20	(10 - 40)	2.7	(1.0 - 5.7)
	<b>Total</b>	<b>620</b>	<b>(500 - 770)</b>	<b>100.0</b>	
<b>Total</b>	No	220	(140 - 340)	15.7	(10.0 - 22.7)
	Yes	1 180	(1 000 - 1 370)	82.8	(75.8 - 88.6)
	Not sure	20	(10 - 40)	1.5	(0.7 - 2.8)
	<b>Total</b>	<b>1 420</b>	<b>(1 220 - 1 650)</b>	<b>100.0</b>	
<b>17 years</b>					
No	No	40	(10 - 140)	13.2	(3.0 - 36.3)
	Yes	270	(180 - 390)	81.4	(60.6 - 93.4)
	Not sure	20	(0 - 50)	5.4	(1.3 - 16.9)
	<b>Total</b>	<b>340</b>	<b>(240 - 470)</b>	<b>100.0</b>	
Yes	No	60	(20 - 120)	6.1	(2.5 - 12.5)
	Yes	900	(730 - 1 100)	91.7	(85.1 - 95.6)
	Not sure	20	(10 - 50)	2.2	(0.7 - 4.8)
	<b>Total</b>	<b>980</b>	<b>(800 - 1 180)</b>	<b>100.0</b>	
<b>Total</b>	No	100	(50 - 200)	7.9	(3.7 - 14.7)
	Yes	1 180	(980 - 1 390)	89.1	(81.9 - 94.0)
	Not sure	40	(10 - 90)	3.0	(0.8 - 7.4)
	<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	

Continued....





**TABLE 4.81 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — WHETHER TAUGHT HOW TO AVOID AIDS/HIV OR OTHER SEXUALLY TRANSMITTED DISEASES, BY WHETHER EVER HAD SEX AND AGE

<i>Had sex</i>	<i>Learnt about preventing STDs?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Total</b>					
No	No	1 620	(1 360 - 1 900)	24.7	(20.8 - 28.7)
	Yes	4 570	(4 240 - 4 900)	69.8	(65.5 - 73.9)
	Not sure	360	(240 - 520)	5.6	(3.7 - 7.9)
	<b>Total</b>	<b>6 550</b>	<b>(6 250 - 6 830)</b>	<b>100.0</b>	
Yes	No	320	(220 - 450)	12.6	(8.5 - 17.5)
	Yes	2 160	(1 890 - 2 450)	84.6	(79.5 - 88.7)
	Not sure	70	(40 - 120)	2.8	(1.5 - 4.6)
	<b>Total</b>	<b>2 550</b>	<b>(2 270 - 2 850)</b>	<b>100.0</b>	
<b>Total</b>	No	1 940	(1 660 - 2 240)	21.3	(18.2 - 24.6)
	Yes	6 730	(6 420 - 7 030)	73.9	(70.5 - 77.2)
	Not sure	440	(310 - 600)	4.8	(3.4 - 6.5)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 4.82:** YOUNG PEOPLE AGED 12–17 YEARS — SOURCES OF INFORMATION ON HOW TO AVOID AIDS/HIV OR OTHER SEXUALLY TRANSMITTED DISEASES

<i>Source of information*</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Family	2 090	(1 840 - 2 380)	23.0	(20.2 - 26.1)
Friends	950	(770 - 1 150)	10.4	(8.5 - 12.6)
Nurse	930	(750 - 1 130)	10.2	(8.2 - 12.4)
School	5 700	(5 360 - 6 020)	62.6	(58.9 - 66.2)
Other	290	(190 - 430)	3.2	(2.1 - 4.7)

\* Information may be obtained from more than one source

**TABLE 4.83:** YOUNG PEOPLE AGED 12–17 YEARS — NUMBER OF SOURCES OF INFORMATION ON HOW TO AVOID AIDS/HIV OR OTHER SEXUALLY TRANSMITTED DISEASES

<i>Number of sources of information</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
None	2 400	(2 100 - 2 710)	26.3	(23.0 - 29.7)
One	4 610	(4 280 - 4 940)	50.6	(47.0 - 54.3)
Two	1 300	(1 110 - 1 520)	14.3	(12.2 - 16.7)
Three	480	(360 - 650)	5.3	(3.9 - 7.2)
Four	250	(150 - 380)	2.7	(1.6 - 4.2)
Five or more	60	(30 - 110)	0.7	(0.3 - 1.3)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 4.84:** YOUNG PEOPLE AGED 12–17 YEARS — COMBINATIONS OF SOURCES OF INFORMATION ON HOW TO AVOID AIDS/HIV OR OTHER SEXUALLY TRANSMITTED DISEASES

Sources of information	Number	95% CI	%	95% CI
Not stated	20	(10 - 40)	0.3	(0.1 - 0.5)
Family only	470	(330 - 650)	5.2	(3.6 - 7.1)
Friends only	90	(40 - 180)	1.0	(0.4 - 2.0)
Nurse only	230	(150 - 330)	2.5	(1.7 - 3.7)
School only	3 730	(3 410 - 4 070)	41.0	(37.5 - 44.7)
Other only	80	(30 - 180)	0.9	(0.4 - 1.9)
Family and friends	60	(40 - 90)	0.7	(0.5 - 1.0)
Family and nurse	50	(10 - 110)	0.5	(0.2 - 1.2)
Family and school	770	(610 - 940)	8.4	(6.7 - 10.3)
Family and other	10	(0 - 50)	0.1	(0.0 - 0.5)
Friends and school	130	(90 - 190)	1.4	(1.0 - 2.1)
Nurse and school	200	(130 - 300)	2.2	(1.5 - 3.3)
Nurse and other	10	(0 - 110)	0.1	(0.0 - 1.2)
School and other	70	(20 - 190)	0.8	(0.2 - 2.1)
Family, friends and school	310	(200 - 450)	3.4	(2.2 - 4.9)
Family nurse and school	120	(60 - 220)	1.3	(0.7 - 2.4)
Family, school and other	10	(10 - 20)	0.1	(0.1 - 0.2)
Friends, nurse and school	30	(10 - 80)	0.3	(0.1 - 0.9)
Friends, school and other	20	(10 - 40)	0.2	(0.1 - 0.4)
Family, friends, nurse and school	220	(130 - 370)	2.5	(1.4 - 4.0)
Family, friends, school and other	20	(10 - 30)	0.2	(0.1 - 0.4)
Friends, nurse, school and other	10	(0 - 20)	0.1	(0.0 - 0.2)
All sources	60	(30 - 110)	0.7	(0.3 - 1.3)
Not taught how to prevent STDs	1 940	(1 660 - 2 240)	21.3	(18.2 - 24.6)
Don't know	440	(310 - 600)	4.8	(3.4 - 6.5)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 4.85:** YOUNG PEOPLE AGED 12–17 YEARS — LIKELIHOOD OF EVER HAVING HAD SEX, ASSOCIATED WITH AGE AND WHETHER TAUGHT HOW TO AVOID AIDS/HIV OR OTHER SEXUALLY TRANSMITTED DISEASES

Ever had sex			
Parameter	Significance ( <i>p</i> value)	Odds Ratio	95% CI
Age (years)			
12	<0.001	0.01	(0.00 - 0.05)
13	<0.001	0.06	(0.03 - 0.12)
14	<0.001	0.08	(0.04 - 0.16)
15	<0.001	0.22	(0.12 - 0.41)
16	0.002	0.35	(0.18 - 0.67)
17		1.00	
Taught how to avoid AIDS/HIV or other sexually transmitted diseases			
No	0.525	0.83	(0.47 - 1.46)
Yes		1.00	
Not sure	0.847	1.11	(0.39 - 3.16)



**TABLE 4.86:** YOUNG PEOPLE AGED 12–17 YEARS WHO HAVE EVER HAD SEX — WHETHER TAUGHT HOW TO AVOID AIDS/HIV OR OTHER SEXUALLY TRANSMITTED DISEASES, BY ADEQUACY OF KNOWLEDGE CONCERNING SEXUAL HEALTH

<i>Learned about preventing STDs</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Responses indicate limited knowledge of sexual health				
No	60	(20 - 160)	18.7	(5.2 - 40.3)
Yes	280	(190 - 380)	78.7	(57.8 - 92.9)
Not sure	10	(0 - 30)	2.7	(0.3 - 9.9)
<b>Total</b>	<b>350</b>	<b>(250 - 480)</b>	<b>100.0</b>	
Responses do not indicate limited knowledge of sexual health				
No	260	(170 - 360)	11.7	(7.9 - 16.2)
Yes	1 880	(1 620 - 2 170)	85.5	(80.8 - 89.5)
Not sure	60	(30 - 100)	2.8	(1.4 - 4.8)
<b>Total</b>	<b>2 200</b>	<b>(1 930 - 2 500)</b>	<b>100.0</b>	
<b>Total</b>				
No	320	(220 - 450)	12.6	(8.5 - 17.5)
Yes	2 160	(1 890 - 2 450)	84.6	(79.5 - 88.7)
Not sure	70	(40 - 120)	2.8	(1.5 - 4.6)
<b>Total</b>	<b>2 550</b>	<b>(2 270 - 2 850)</b>	<b>100.0</b>	

## BULLYING

**TABLE 4.87:** YOUNG PEOPLE AGED 12–17 YEARS STILL ATTENDING SCHOOL — PROPORTION BULLIED AT SCHOOL, BY AGE AND SEX

<i>Age (years)</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Males				
12	390	(270 - 520)	41.5	(31.3 - 51.7)
13	260	(160 - 400)	33.9	(22.0 - 49.1)
14	220	(140 - 320)	30.6	(18.8 - 43.2)
15	100	(40 - 200)	18.1	(7.5 - 33.5)
16	100	(50 - 170)	27.1	(13.3 - 45.5)
17	60	(30 - 110)	36.4	(12.8 - 64.9)
<b>Total</b>	<b>1 120</b>	<b>(920 - 1 340)</b>	<b>32.2</b>	<b>(27.0 - 38.2)</b>
Females				
12	200	(90 - 360)	29.3	(15.4 - 45.9)
13	220	(130 - 340)	28.3	(18.2 - 41.9)
14	230	(150 - 360)	32.0	(22.4 - 43.9)
15	120	(60 - 200)	20.2	(9.8 - 33.1)
16	110	(50 - 240)	37.7	(17.2 - 59.3)
17	100	(40 - 190)	49.7	(23.0 - 77.0)
<b>Total</b>	<b>980</b>	<b>(770 - 1 210)</b>	<b>30.0</b>	<b>(24.4 - 36.2)</b>
<b>Total</b>				
12	590	(430 - 780)	36.3	(28.2 - 45.0)
13	480	(350 - 650)	31.1	(23.1 - 40.5)
14	450	(330 - 600)	31.3	(24.0 - 40.1)
15	210	(120 - 330)	19.2	(11.5 - 28.0)
16	210	(120 - 330)	31.8	(19.9 - 46.3)
17	160	(90 - 250)	43.8	(25.5 - 64.7)
<b>Total</b>	<b>2 100</b>	<b>(1 830 - 2 400)</b>	<b>31.2</b>	<b>(27.4 - 35.3)</b>



**TABLE 4.88:** YOUNG PEOPLE AGED 12–17 YEARS — WHETHER PICKED ON, BY WHETHER BULLIED AT SCHOOL

<i>Whether picked on</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Not bullied at school</b>				
Not picked on	3 790	(3 490 - 4 110)	81.9	(78.0 - 85.4)
Picked on	200	(130 - 300)	4.4	(2.8 - 6.5)
Sometimes picked on	640	(480 - 810)	13.7	(10.6 - 17.5)
<b>Total</b>	<b>4 630</b>	<b>(4 310 - 4 950)</b>	<b>100.0</b>	
<b>Bullied at school</b>				
Not picked on	1 140	(920 - 1 380)	54.1	(46.3 - 61.7)
Picked on	330	(210 - 490)	15.8	(10.1 - 22.4)
Sometimes picked on	630	(490 - 790)	30.1	(23.8 - 36.9)
<b>Total</b>	<b>2 100</b>	<b>(1 830 - 2 400)</b>	<b>100.0</b>	
<b>Not attending school</b>				
Not picked on	1 940	(1 710 - 2 180)	81.8	(76.5 - 86.2)
Picked on	150	(70 - 270)	6.4	(3.0 - 11.1)
Sometimes picked on	280	(200 - 380)	11.9	(8.5 - 15.8)
<b>Total</b>	<b>2 370</b>	<b>(2 110 - 2 650)</b>	<b>100.0</b>	
<b>Total</b>				
Not picked on	6 870	(6 590 - 7 130)	75.5	(72.4 - 78.3)
Picked on	680	(520 - 890)	7.5	(5.7 - 9.7)
Sometimes picked on	1 550	(1 330 - 1 790)	17.0	(14.7 - 19.6)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 4.89:** YOUNG PEOPLE AGED 12–17 YEARS STILL ATTENDING SCHOOL — WHETHER BULLIED AT SCHOOL, BY LEVEL OF RELATIVE ISOLATION (LORI)

<i>Been bullied</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>LORI — None</b>				
No	1 580	(1 390 - 1 800)	65.0	(57.8 - 72.1)
Yes	850	(680 - 1 050)	35.0	(27.9 - 42.2)
<b>Total</b>	<b>2 440</b>	<b>(2 260 - 2 620)</b>	<b>100.0</b>	
<b>LORI — Low</b>				
No	1 190	(1 010 - 1 390)	72.2	(64.4 - 79.7)
Yes	460	(330 - 620)	27.8	(20.3 - 35.6)
<b>Total</b>	<b>1 650</b>	<b>(1 440 - 1 870)</b>	<b>100.0</b>	
<b>LORI — Moderate</b>				
No	880	(690 - 1 110)	67.8	(60.9 - 74.2)
Yes	420	(310 - 550)	32.2	(25.8 - 39.1)
<b>Total</b>	<b>1 300</b>	<b>(1 050 - 1 590)</b>	<b>100.0</b>	
<b>LORI — High</b>				
No	460	(280 - 690)	69.8	(52.0 - 85.8)
Yes	200	(100 - 370)	30.2	(14.2 - 48.0)
<b>Total</b>	<b>660</b>	<b>(450 - 950)</b>	<b>100.0</b>	
<b>LORI — Extreme</b>				
No	510	(340 - 760)	75.5	(59.8 - 88.6)
Yes	170	(70 - 320)	24.5	(11.4 - 40.2)
<b>Total</b>	<b>680</b>	<b>(470 - 990)</b>	<b>100.0</b>	
<b>Western Australia</b>				
No	4 630	(4 310 - 4 950)	68.8	(64.7 - 72.6)
Yes	2 100	(1 830 - 2 400)	31.2	(27.4 - 35.3)
<b>Total</b>	<b>6 730</b>	<b>(6 450 - 6 990)</b>	<b>100.0</b>	



**TABLE 4.90:** YOUNG PEOPLE AGED 12–17 YEARS STILL ATTENDING SCHOOL — PROPORTION BULLIED AT SCHOOL, BY ABORIGINAL STATUS OF PRIMARY AND SECONDARY CARERS

<i>Secondary carer Aboriginal status</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Aboriginal primary carer</b>				
Aboriginal	680	(510 - 910)	24.2	(18.2 - 30.6)
Non-Aboriginal	270	(150 - 430)	43.4	(27.7 - 59.0)
Not stated	660	(520 - 830)	30.9	(25.2 - 37.4)
<b>Total</b>	<b>1 620</b>	<b>(1 370 - 1 880)</b>	<b>28.9</b>	<b>(24.8 - 33.2)</b>
<b>Non-Aboriginal primary carer</b>				
Aboriginal	130	(70 - 230)	32.4	(17.4 - 50.5)
Non-Aboriginal	70	(30 - 140)	52.7	(30.6 - 73.2)
Not stated	170	(80 - 290)	48.7	(28.2 - 71.8)
<b>Total</b>	<b>370</b>	<b>(260 - 520)</b>	<b>41.8</b>	<b>(31.0 - 54.6)</b>
<b>Primary carer Aboriginal status — Not stated</b>				
Aboriginal	30	(10 - 70)	70.0	(1.3 - 98.7)
Non-Aboriginal	0	(0 - 60)	0.0	(0.0 - 97.5)
Not stated	80	(20 - 240)	39.0	(8.5 - 75.5)
<b>Total</b>	<b>110</b>	<b>(30 - 240)</b>	<b>43.2</b>	<b>(17.7 - 71.1)</b>
<b>Total</b>				
Aboriginal	850	(650 - 1 070)	25.8	(20.3 - 31.7)
Non-Aboriginal	350	(220 - 510)	44.6	(31.2 - 57.6)
Not stated	910	(720 - 1 120)	33.8	(28.0 - 40.2)
<b>Total</b>	<b>2 100</b>	<b>(1 830 - 2 400)</b>	<b>31.2</b>	<b>(27.4 - 35.3)</b>

**TABLE 4.91:** YOUNG PEOPLE AGED 12–17 YEARS STILL ATTENDING SCHOOL — PROPORTION BULLIED AT SCHOOL, BY LANGUAGE SPOKEN AT HOME

<i>Language</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
English	1 730	(1 480 - 2 010)	32.2	(27.8 - 36.7)
Broken English	20	(0 - 80)	24.5	(0.8 - 90.6)
Aboriginal English	210	(110 - 350)	38.1	(21.8 - 54.0)
Pidgin English	10	(0 - 30)	43.6	(1.3 - 98.7)
Creole	70	(30 - 130)	30.0	(12.6 - 56.6)
Aboriginal Language	60	(30 - 100)	13.0	(6.6 - 22.0)
Other	0	(0 - 60)	0.0	(0.0 - 84.2)
<b>Total</b>	<b>2 100</b>	<b>(1 830 - 2 400)</b>	<b>31.2</b>	<b>(27.4 - 35.3)</b>

**TABLE 4.92:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE BEEN PICKED ON BY OTHER YOUNG PEOPLE IN LAST SIX MONTHS, BY LANGUAGE IS SPOKEN AT HOME

<i>Language</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
English	1 620	(1 380 - 1 890)	22.7	(19.4 - 26.2)
Broken English	30	(0 - 100)	19.0	(2.5 - 55.6)
Aboriginal English	200	(130 - 300)	24.3	(16.0 - 35.3)
Pidgin English	10	(0 - 30)	43.6	(1.3 - 98.7)
Creole	140	(80 - 240)	49.4	(21.3 - 73.4)
Aboriginal Language	220	(150 - 330)	34.2	(26.8 - 41.7)
Other	10	(0 - 80)	26.9	(0.0 - 100.0)
<b>Total</b>	<b>2 230</b>	<b>(1 970 - 2 510)</b>	<b>24.5</b>	<b>(21.7 - 27.6)</b>



**TABLE 4.93:** YOUNG PEOPLE AGED 12–17 YEARS STILL ATTENDING SCHOOL WHO HAVE BEEN BULLIED AT SCHOOL — WHEN BULLYING OCCURRED

<i>When bullying occurred</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Before school	540	(390 - 720)	25.9	(19.1 - 33.1)
Between classes	710	(540 - 920)	33.9	(26.5 - 41.6)
During Class	600	(440 - 790)	28.8	(21.7 - 36.2)
At recess/lunchtime	1 300	(1 080 - 1 540)	62.0	(54.1 - 69.3)

**TABLE 4.94:** YOUNG PEOPLE AGED 12–17 YEARS WHO WERE BULLIED — NUMBER OF LOCATIONS WHERE BULLYING EXPERIENCED

<i>Number of time periods during which bullying was reported</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
One	1 550	(1 310 - 1 820)	73.8	(66.6 - 79.9)
Two	250	(160 - 360)	11.8	(7.9 - 16.9)
Three	90	(50 - 150)	4.3	(2.2 - 7.0)
Four	210	(110 - 340)	10.1	(5.9 - 16.5)
<b>Total</b>	<b>2 100</b>	<b>(1 830 - 2 400)</b>	<b>100.0</b>	

**TABLE 4.95:** YOUNG PEOPLE AGED 12–17 YEARS WHO HAVE BEEN BULLIED AT SCHOOL — SEX OF PERPETRATOR, BY SEX OF VICTIM

<i>Sex of perpetrators</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males who were bullied</b>				
Males	570	(420 - 760)	51.2	(41.3 - 61.7)
Females	60	(30 - 110)	5.0	(2.1 - 9.1)
Both males and females	90	(40 - 150)	7.6	(3.8 - 13.9)
Not specified	410	(290 - 550)	36.2	(26.7 - 46.0)
<b>Total</b>	<b>1 120</b>	<b>(920 - 1 340)</b>	<b>100.0</b>	
<b>Females who were bullied</b>				
Males	290	(180 - 440)	30.0	(19.3 - 42.3)
Females	380	(250 - 550)	38.7	(27.6 - 51.1)
Both males and females	230	(130 - 360)	23.1	(13.5 - 34.0)
Not specified	80	(40 - 150)	8.2	(3.8 - 15.0)
<b>Total</b>	<b>980</b>	<b>(770 - 1 210)</b>	<b>100.0</b>	
<b>Total bullied</b>				
Males	870	(670 - 1 080)	41.3	(33.4 - 49.2)
Females	430	(300 - 610)	20.7	(14.9 - 27.9)
Both males and females	310	(200 - 460)	14.8	(9.8 - 21.1)
Not specified	490	(360 - 640)	23.2	(17.4 - 29.5)
<b>Total</b>	<b>2 100</b>	<b>(1 830 - 2 400)</b>	<b>100.0</b>	



**TABLE 4.96:** YOUNG PEOPLE AGED 12–17 YEARS WHO HAVE BEEN BULLIED AT SCHOOL — RELATIVE AGE OF BULLYING PERPETRATOR, BY SEX OF VICTIM

<i>Age of perpetrators</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males who were bullied</b>				
Younger children	80	(30 - 170)	7.3	(3.0 - 14.6)
Older children	480	(360 - 630)	42.9	(33.3 - 53.7)
Younger and older children	20	(0 - 70)	2.0	(0.4 - 6.0)
Age unspecified	540	(390 - 720)	47.9	(37.6 - 58.4)
<b>Total</b>	<b>1 120</b>	<b>(920 - 1 340)</b>	<b>100.0</b>	
<b>Females who were bullied</b>				
Younger children	40	(10 - 130)	4.0	(0.9 - 12.5)
Older children	120	(70 - 190)	12.3	(6.6 - 19.1)
Younger and older children	30	(10 - 80)	2.7	(0.6 - 8.4)
Age unspecified	790	(600 - 1 020)	81.1	(71.7 - 88.4)
<b>Total</b>	<b>980</b>	<b>(770 - 1 210)</b>	<b>100.0</b>	
<b>Total</b>				
Younger children	120	(60 - 230)	5.7	(2.9 - 10.7)
Older children	600	(460 - 750)	28.6	(22.4 - 35.8)
Younger and older children	50	(20 - 110)	2.3	(0.9 - 5.3)
Age unspecified	1 330	(1 090 - 1 600)	63.3	(56.2 - 70.5)
<b>Total</b>	<b>2 100</b>	<b>(1 830 - 2 400)</b>	<b>100.0</b>	

**TABLE 4.97:** YOUNG PEOPLE AGED 12–17 YEARS WHO HAVE BEEN BULLIED AT SCHOOL — EMOTIONS FELT, BY SEX

<i>Emotions felt</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>				
None reported	10	(0 - 30)	0.9	(0.1 - 3.0)
Sadness	100	(60 - 160)	9.0	(5.0 - 14.1)
Anger	580	(440 - 760)	52.1	(42.5 - 62.1)
Anger and sadness	40	(0 - 120)	3.3	(0.4 - 10.1)
Not bothered	220	(130 - 350)	19.9	(12.2 - 28.9)
Not bothered and anger	50	(20 - 90)	4.3	(2.1 - 8.4)
Not bothered, anger, sadness	—	—	—	—
Stressed out	30	(10 - 70)	3.1	(1.3 - 6.4)
Stressed out, sadness	10	(0 - 20)	0.5	(0.1 - 1.6)
Stressed out, anger	40	(10 - 110)	3.6	(0.7 - 9.3)
Stressed out, anger, sadness	40	(10 - 90)	3.3	(0.9 - 7.8)
Stressed out, not bothered, anger and sadness	—	—	—	—
<b>Females</b>				
None reported	30	(0 - 180)	2.8	(0.1 - 17.2)
Sadness	110	(40 - 250)	11.6	(4.4 - 23.4)
Anger	320	(230 - 430)	32.5	(23.8 - 43.3)
Anger and sadness	110	(40 - 240)	10.9	(4.3 - 23.0)
Not bothered	180	(90 - 330)	18.4	(9.3 - 31.4)
Not bothered and anger	—	—	—	—
Not bothered, anger, sadness	20	(10 - 30)	1.8	(0.9 - 3.4)
Stressed out	50	(10 - 130)	4.7	(1.4 - 12.5)
Stressed out, sadness	—	—	—	—
Stressed out, anger	70	(20 - 150)	7.3	(2.7 - 14.9)
Stressed out, anger, sadness	80	(30 - 170)	8.4	(3.5 - 16.8)
Stressed out, not bothered, anger and sadness	10	(10 - 20)	1.4	(0.7 - 2.6)

Continued . . .



**TABLE 4.97 (continued):** YOUNG PEOPLE AGED 12–17 YEARS WHO HAVE BEEN BULLIED AT SCHOOL — EMOTIONS FELT, BY SEX

<i>Emotions felt</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Total</b>				
None reported	40	(10 - 180)	1.8	(0.3 - 8.2)
Sadness	210	(120 - 340)	10.2	(6.2 - 16.2)
Anger	900	(730 - 1 100)	43.0	(35.8 - 50.3)
Anger and sadness	140	(60 - 280)	6.8	(3.0 - 12.9)
Not bothered	400	(270 - 590)	19.2	(13.0 - 26.2)
Not bothered and anger	50	(20 - 90)	2.3	(1.1 - 4.3)
Not bothered, anger, sadness	20	(10 - 30)	0.8	(0.4 - 1.5)
Stressed out	80	(40 - 160)	3.9	(1.8 - 7.4)
Stressed out, sadness	10	(0 - 20)	0.4	(0.2 - 1.0)
Stressed out, anger	110	(60 - 210)	5.3	(2.7 - 9.9)
Stressed out, anger, sadness	120	(60 - 210)	5.7	(2.8 - 9.8)
Stressed out, not bothered, anger and sadness	10	(10 - 20)	0.6	(0.3 - 1.2)

**TABLE 4.98:** YOUNG PEOPLE AGED 12–17 YEARS WHO HAVE BEEN BULLIED AT SCHOOL — HOW THEY FELT ABOUT BEING BULLIED (a)

<i>Emotion felt</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>				
Angry	750	(590 - 940)	66.6	(57.4 - 75.1)
Sad	180	(110 - 280)	16.1	(10.1 - 24.2)
Not bothered	270	(180 - 400)	24.3	(16.5 - 33.5)
Stressed out	120	(60 - 200)	10.5	(5.6 - 16.9)
<b>Females</b>				
Angry	610	(460 - 780)	62.1	(48.8 - 73.9)
Sad	340	(210 - 500)	34.3	(23.0 - 46.0)
Not bothered	210	(110 - 350)	21.6	(11.9 - 33.7)
Stressed out	220	(130 - 330)	22.1	(14.3 - 32.6)
<b>Total</b>				
Angry	1 350	(1 140 - 1 590)	64.5	(56.9 - 71.7)
Sad	520	(380 - 700)	24.6	(18.2 - 31.8)
Not bothered	480	(340 - 660)	23.0	(16.5 - 29.9)
Stressed out	<b>330</b>	<b>(230 - 460)</b>	<b>15.9</b>	<b>(11.1 - 21.4)</b>

(a) Respondents could choose all responses that applied

**TABLE 4.99:** YOUNG PEOPLE AGED 12–17 YEARS WHO HAVE BEEN BULLIED AT SCHOOL — PROPORTION WHO WERE STRESSED OUT BY BULLYING, BY LEVEL OF RELATIVE ISOLATION (LORI)

<i>LORI</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
None to moderate	310	(210 - 440)	18.0	(12.7 - 24.7)
High/extreme	20	(10 - 40)	5.8	(2.0 - 13.8)
<b>Total</b>	<b>330</b>	<b>(230 - 460)</b>	<b>100.0</b>	





**TABLE 4.100:** YOUNG PEOPLE AGED 12–17 YEARS WHO WERE ANGRY AT BEING BULLIED AT SCHOOL — OTHER EMOTIONAL REACTIONS, BY SEX

Emotions felt	Number	95% CI	%	95% CI
Males				
None	580	(440 - 760)	78.2	(67.1 - 87.5)
Sadness	40	(0 - 120)	5.0	(0.5 - 15.1)
Not bothered	50	(20 - 90)	6.5	(2.7 - 11.8)
Stressed out	40	(10 - 110)	5.3	(1.0 - 13.9)
Sadness and stressed out	40	(10 - 90)	4.9	(1.3 - 11.7)
Females				
None	320	(230 - 430)	52.3	(39.1 - 65.7)
Sadness	110	(40 - 240)	17.5	(6.8 - 34.5)
Stressed out	70	(20 - 150)	11.7	(4.2 - 22.6)
Sadness and not bothered	20	(10 - 30)	2.9	(1.3 - 5.2)
Sadness and stressed out	80	(30 - 170)	13.5	(5.5 - 25.3)
Sadness, not bothered, stressed out	10	(10 - 20)	2.2	(1.0 - 3.9)

**TABLE 4.101:** YOUNG PEOPLE AGED 12–17 YEARS STILL ATTENDING SCHOOL — LIKELIHOOD OF EVER HAVING BEEN BULLIED, BY AGE, SEX, LORI, USE OF CIGARETTES AND MARIJUANA

Ever been bullied in school				
Parameter	Significance (p value)	Odds Ratio	95% CI	
<b>Sex</b>				
Male	0.633	1.09	(0.76 - 1.58)	
Female		1.00		
<b>Age (years)</b>				
12		1.00		
13	0.227	0.73	(0.44 - 1.21)	
14	0.022	0.54	(0.32 - 0.91)	
15	<0.001	0.33	(0.19 - 0.58)	
16	0.353	0.71	(0.35 - 1.46)	
17	0.883	0.93	(0.37 - 2.35)	
<b>Level of Relative Isolation</b>				
None		1.00		
Low	0.218	0.76	(0.49 - 1.18)	
Moderate	0.192	0.73	(0.46 - 1.17)	
High	0.735	0.88	(0.40 - 1.90)	
Extreme	0.121	0.58	(0.29 - 1.15)	
<b>Ever smoked cigarettes</b>				
No		1.00		
Yes	<0.001	2.34	(1.51 - 3.61)	
<b>Use of marijuana</b>				
Never		1.00		
Over one year ago	0.590	1.20	(0.62 - 2.33)	
Less than monthly	0.002	3.25	(1.54 - 6.84)	
Weekly or daily	0.504	0.78	(0.37 - 1.62)	



**TABLE 4.102:** YOUNG PEOPLE AGED 12–17 YEARS — LIKELIHOOD OF HAVING BEEN PICKED ON IN THE LAST SIX MONTHS, BY AGE, SEX, LORI AND USE OF CIGARETTES

Picked on in last six months			
Parameter	Significance (p value)	Odds Ratio	95% CI
Sex			
Male	0.085	0.72	(0.49 - 1.05)
Female		1.00	
Age (years)			
12		1.00	
13	0.131	0.69	(0.43 - 1.11)
14	0.027	0.59	(0.37 - 0.94)
15	0.001	0.36	(0.20 - 0.66)
16	<0.001	0.22	(0.12 - 0.41)
17	<0.001	0.28	(0.14 - 0.55)
Level of relative isolation			
None		1.00	
Low	0.791	1.06	(0.70 - 1.61)
Moderate	0.037	1.68	(1.03 - 2.72)
High	0.005	2.79	(1.37 - 5.68)
Extreme	0.006	2.14	(1.25 - 3.66)
Ever smoked cigarettes			
No		1.00	
Yes	0.006	1.65	(1.15 - 2.36)

**RACISM****TABLE 4.103:** YOUNG PEOPLE AGED 12–17 YEARS — WHETHER TREATED BADLY OR REFUSED SERVICE BECAUSE THEY ARE ABORIGINAL, BY SEX AND AGE

Sex	Treated badly	Number	95% CI	%	95% CI
12 years					
Males	No	770	(630 - 930)	79.4	(68.2 - 88.9)
	Yes	200	(100 - 340)	20.6	(11.1 - 31.8)
	<b>Total</b>	<b>970</b>	<b>(800 - 1 160)</b>	<b>100.0</b>	
Females	No	590	(430 - 770)	84.6	(73.0 - 92.8)
	Yes	110	(50 - 200)	15.4	(7.2 - 27.0)
	<b>Total</b>	<b>690</b>	<b>(520 - 890)</b>	<b>100.0</b>	
<b>Total</b>	No	1 360	(1 150 - 1 580)	81.6	(73.3 - 87.8)
	Yes	310	(190 - 460)	18.4	(12.2 - 26.7)
	<b>Total</b>	<b>1 660</b>	<b>(1 430 - 1 910)</b>	<b>100.0</b>	
13 years					
Males	No	640	(460 - 840)	75.2	(62.4 - 86.5)
	Yes	210	(120 - 350)	24.8	(13.5 - 37.6)
	<b>Total</b>	<b>850</b>	<b>(640 - 1 080)</b>	<b>100.0</b>	
Females	No	630	(480 - 800)	79.1	(67.0 - 87.9)
	Yes	170	(90 - 270)	20.9	(12.1 - 33.0)
	<b>Total</b>	<b>800</b>	<b>(630 - 990)</b>	<b>100.0</b>	
<b>Total</b>	No	1 270	(1 060 - 1 520)	77.1	(68.5 - 84.3)
	Yes	380	(250 - 540)	22.9	(15.7 - 31.5)
	<b>Total</b>	<b>1 650</b>	<b>(1 410 - 1 920)</b>	<b>100.0</b>	

Continued....



**TABLE 4.103 (continued): YOUNG PEOPLE AGED 12–17 YEARS — WHETHER TREATED BADLY OR REFUSED SERVICE BECAUSE THEY ARE ABORIGINAL, BY SEX AND AGE**

Sex	Treated badly	Number	95% CI	%	95% CI
<b>14 years</b>					
Males	No	600	(430 - 790)	76.9	(66.4 - 85.9)
	Yes	180	(110 - 270)	23.1	(14.1 - 33.6)
	<b>Total</b>	<b>770</b>	<b>(590 - 990)</b>	<b>100.0</b>	
Females	No	660	(520 - 830)	80.1	(71.3 - 87.0)
	Yes	160	(100 - 240)	19.9	(13.0 - 28.7)
	<b>Total</b>	<b>820</b>	<b>(670 - 1 000)</b>	<b>100.0</b>	
<b>Total</b>	No	1 260	(1 040 - 1 490)	78.5	(71.9 - 84.0)
	Yes	340	(250 - 450)	21.5	(16.0 - 28.1)
	<b>Total</b>	<b>1 600</b>	<b>(1 360 - 1 840)</b>	<b>100.0</b>	
<b>15 years</b>					
Males	No	530	(400 - 690)	72.3	(59.0 - 83.9)
	Yes	200	(120 - 350)	27.7	(16.1 - 41.0)
	<b>Total</b>	<b>740</b>	<b>(580 - 930)</b>	<b>100.0</b>	
Females	No	530	(390 - 710)	74.5	(60.4 - 85.7)
	Yes	180	(100 - 320)	25.5	(14.3 - 39.6)
	<b>Total</b>	<b>710</b>	<b>(550 - 920)</b>	<b>100.0</b>	
<b>Total</b>	No	1 070	(880 - 1 280)	73.4	(64.1 - 81.4)
	Yes	390	(260 - 560)	26.6	(18.6 - 35.9)
	<b>Total</b>	<b>1 450</b>	<b>(1 220 - 1 700)</b>	<b>100.0</b>	
<b>16 years</b>					
Males	No	580	(450 - 740)	81.2	(69.1 - 90.3)
	Yes	130	(70 - 240)	18.8	(9.7 - 30.9)
	<b>Total</b>	<b>710</b>	<b>(560 - 890)</b>	<b>100.0</b>	
Females	No	610	(490 - 750)	85.8	(76.6 - 92.1)
	Yes	100	(50 - 170)	14.2	(7.9 - 23.4)
	<b>Total</b>	<b>710</b>	<b>(580 - 870)</b>	<b>100.0</b>	
<b>Total</b>	No	1 190	(1 010 - 1 390)	83.5	(76.4 - 89.3)
	Yes	230	(140 - 350)	16.5	(10.7 - 23.6)
	<b>Total</b>	<b>1 420</b>	<b>(1 220 - 1 650)</b>	<b>100.0</b>	
<b>17 years</b>					
Males	No	380	(260 - 540)	64.2	(51.1 - 75.7)
	Yes	210	(150 - 290)	35.8	(24.3 - 48.9)
	<b>Total</b>	<b>600</b>	<b>(460 - 770)</b>	<b>100.0</b>	
Females	No	630	(490 - 810)	86.7	(78.3 - 93.4)
	Yes	100	(50 - 170)	13.3	(6.6 - 22.0)
	<b>Total</b>	<b>730</b>	<b>(580 - 910)</b>	<b>100.0</b>	
<b>Total</b>	No	1 010	(820 - 1 230)	76.6	(69.1 - 82.7)
	Yes	310	(230 - 410)	23.4	(17.3 - 30.9)
	<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	
<b>Total</b>					
Males	No	3 500	(3 170 - 3 820)	75.4	(70.7 - 79.6)
	Yes	1 140	(940 - 1 380)	24.6	(20.4 - 29.3)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
Females	No	3 640	(3 340 - 3 970)	81.7	(77.5 - 85.3)
	Yes	820	(650 - 1 010)	18.3	(14.7 - 22.5)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>	No	7 140	(6 870 - 7 410)	78.5	(75.4 - 81.4)
	Yes	1 960	(1 690 - 2 240)	21.5	(18.6 - 24.6)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 4.104:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WHO HAVE BEEN TREATED BADLY OR REFUSED SERVICE BECAUSE THEY ARE ABORIGINAL, BY LEVEL OF RELATIVE ISOLATION (LORI)

Level of Relative Isolation	Number	95% CI	%	95% CI
None	810	(640 - 1 000)	25.5	(20.2 - 31.4)
Low	460	(320 - 620)	20.0	(14.5 - 27.0)
Moderate	410	(280 - 580)	22.2	(16.4 - 29.5)
High	180	(100 - 290)	18.8	(11.5 - 28.8)
Extreme	110	(60 - 190)	12.5	(6.8 - 20.4)
<b>Total</b>	<b>1 960</b>	<b>(1 690 - 2 240)</b>	<b>21.5</b>	<b>(18.6 - 24.6)</b>

**TABLE 4.105:** YOUNG PEOPLE AGED 12–17 YEARS WHO HAVE BEEN TREATED BADLY OR REFUSED SERVICE BECAUSE THEY ARE ABORIGINAL — FREQUENCY OF OCCURRENCE, BY LOCATIONS WHERE IT HAS OCCURRED

How often treated badly	Number	95% CI	%	95% CI
At school from other kids				
Never	450	(350 - 590)	23.2	(17.7 - 29.5)
Hardly ever	200	(120 - 300)	10.0	(6.3 - 15.2)
Once in a while	690	(520 - 900)	35.4	(27.7 - 43.5)
Quite often	240	(150 - 350)	12.2	(7.9 - 17.4)
Almost always	80	(20 - 230)	4.1	(0.8 - 11.2)
Not stated	300	(200 - 430)	15.1	(10.2 - 21.3)
At school from teachers				
Never	960	(770 - 1 160)	48.8	(41.3 - 56.5)
Hardly ever	250	(160 - 350)	12.6	(8.5 - 18.0)
Once in a while	290	(200 - 410)	14.8	(10.0 - 20.1)
Quite often	70	(30 - 130)	3.5	(1.6 - 7.0)
Almost always	60	(10 - 210)	3.3	(0.4 - 10.2)
Not stated	330	(220 - 480)	17.0	(11.4 - 23.9)
In shops				
Never	700	(530 - 880)	35.6	(28.5 - 43.6)
Hardly ever	270	(160 - 410)	13.8	(8.6 - 20.1)
Once in a while	350	(240 - 490)	17.9	(12.8 - 24.4)
Quite often	180	(90 - 300)	9.0	(4.7 - 15.0)
Almost always	100	(60 - 160)	5.2	(3.1 - 8.7)
Not stated	360	(240 - 510)	18.4	(12.4 - 25.2)
On public transport				
Never	700	(530 - 880)	35.6	(28.5 - 43.6)
Hardly ever	270	(160 - 410)	13.8	(8.6 - 20.1)
Once in a while	350	(240 - 490)	17.9	(12.8 - 24.4)
Quite often	180	(90 - 300)	9.0	(4.7 - 15.0)
Almost always	100	(60 - 160)	5.2	(3.1 - 8.7)
Not stated	360	(240 - 510)	18.4	(12.4 - 25.2)
In the street				
Never	370	(250 - 530)	18.8	(12.9 - 25.8)
Hardly ever	330	(210 - 470)	16.7	(11.4 - 23.3)
Once in a while	630	(470 - 810)	32.1	(24.9 - 39.6)
Quite often	240	(160 - 350)	12.5	(8.4 - 17.7)
Almost always	90	(40 - 170)	4.4	(2.2 - 8.7)
Not stated	300	(200 - 450)	15.4	(10.0 - 21.9)

Continued . . .



**TABLE 4.105 (continued):** YOUNG PEOPLE AGED 12–17 YEARS WHO HAVE BEEN TREATED BADLY OR REFUSED SERVICE BECAUSE THEY ARE ABORIGINAL — FREQUENCY OF OCCURRENCE, BY LOCATIONS

<i>How often treated badly</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>At home</b>				
Never	1 430	(1 200 - 1 690)	72.9	(65.6 - 79.8)
Hardly ever	70	(30 - 150)	3.8	(1.8 - 7.8)
Once in a while	30	(10 - 80)	1.7	(0.6 - 4.3)
Quite often	20	(0 - 50)	0.9	(0.2 - 2.5)
Almost always	30	(0 - 150)	1.5	(0.0 - 7.4)
Not stated	370	(260 - 520)	19.0	(13.6 - 26.1)
<b>Playing sport</b>				
Never	780	(600 - 1 000)	39.8	(32.3 - 48.0)
Hardly ever	200	(130 - 310)	10.4	(6.3 - 15.3)
Once in a while	430	(310 - 560)	21.9	(16.5 - 28.4)
Quite often	180	(120 - 260)	9.0	(5.8 - 12.9)
Almost always	70	(30 - 140)	3.3	(1.5 - 7.3)
Not stated	300	(200 - 450)	15.5	(10.2 - 22.3)

**TABLE 4.106:** YOUNG PEOPLE AGED 12–17 YEARS WHO HAVE BEEN TREATED BADLY OR REFUSED SERVICE BECAUSE THEY ARE ABORIGINAL — NUMBER OF LOCATIONS AT WHICH RACISM IS OFTEN ENCOUNTERED

<i>Number of locations in which racism is encountered</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
None	1 030	(840 - 1 260)	52.8	(44.7 - 61.1)
One	430	(290 - 590)	21.8	(15.3 - 28.9)
Two	260	(170 - 370)	13.2	(9.1 - 18.5)
Three	170	(90 - 280)	8.7	(4.6 - 14.0)
Four	30	(0 - 110)	1.5	(0.0 - 5.7)
Five or more	40	(20 - 70)	2.0	(1.1 - 3.8)
<b>Total</b>	<b>1 960</b>	<b>(1 690 - 2 240)</b>	<b>100.0</b>	

**TABLE 4.107:** YOUNG PEOPLE AGED 12–17 YEARS — LIKELIHOOD OF BEING TREATED BADLY OR REFUSED SERVICE BECAUSE THEY ARE ABORIGINAL, ASSOCIATED WITH SEX, AGE, WHETHER SMOKE CIGARETTES, DRINK ALCOHOL AND FREQUENCY OF MARIJUANA USE

<b>Treated badly because Aboriginal</b>				
<i>Parameter</i>	<i>Significance (p value)</i>	<i>Odds Ratio</i>	<i>95% CI</i>	
<b>Sex</b>				
Male	0.042	1.48	(1.02 - 2.17)	
Female		1.00		
<b>Age (years)</b>				
12	0.219	1.64	(0.75 - 3.59)	
13	0.082	1.96	(0.92 - 4.16)	
14	0.335	1.37	(0.72 - 2.58)	
15	0.320	1.38	(0.73 - 2.58)	
16	0.414	0.73	(0.34 - 1.56)	
17		1.00		
<b>Smoked regularly</b>				
No		1.00		
Yes	0.050	1.64	(1.00 - 2.70)	
<b>Alcohol consumption</b>				
Does not drink		1.00		
Drinks but not to excess	0.384	1.25	(0.75 - 2.08)	
Drinks to excess	0.014	2.11	(1.17 - 3.81)	
<b>Marijuana use</b>				
Never		1.00		
Less than monthly	0.015	1.98	(1.14 - 3.44)	
Weekly or more often	0.012	2.17	(1.19 - 3.97)	



**TABLE 4.108:** YOUNG PEOPLE AGED 12–17 YEARS — WHETHER TREATED BADLY OR REFUSED SERVICE BECAUSE THEY ARE ABORIGINAL, BY WHETHER BULLIED AT SCHOOL

<i>Treated badly</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Not bullied at school				
No	3 840	(3 520 - 4 170)	82.9	(78.5 - 86.8)
Yes	790	(610 - 1 000)	17.1	(13.2 - 21.5)
<b>Total</b>	<b>4 630</b>	<b>(4 310 - 4 950)</b>	<b>100.0</b>	
Bullied at school				
No	1 470	(1 220 - 1 730)	69.9	(62.3 - 77.0)
Yes	630	(470 - 820)	30.1	(23.0 - 37.7)
<b>Total</b>	<b>2 100</b>	<b>(1 830 - 2 400)</b>	<b>100.0</b>	
Not attending school				
No	1 840	(1 600 - 2 090)	77.5	(72.5 - 82.0)
Yes	530	(410 - 660)	22.5	(18.0 - 27.5)
<b>Total</b>	<b>2 370</b>	<b>(2 110 - 2 650)</b>	<b>100.0</b>	
<b>Total</b>				
No	7 140	(6 870 - 7 410)	78.5	(75.4 - 81.4)
Yes	1 960	(1 690 - 2 240)	21.5	(18.6 - 24.6)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 4.109:** YOUNG PEOPLE AGED 12–17 YEARS STILL AT SCHOOL — WHETHER BULLIED AT SCHOOL, BY WHETHER TREATED BADLY OR REFUSED SERVICE BECAUSE THEY ARE ABORIGINAL

<i>Whether bullied at school</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Not treated badly				
No	3 840	(3 520 - 4 170)	72.4	(67.7 - 76.5)
Yes	1 470	(1 220 - 1 730)	27.6	(23.5 - 32.3)
<b>Total</b>	<b>5 310</b>	<b>(4 980 - 5 630)</b>	<b>100.0</b>	
Treated badly				
No	790	(610 - 1 000)	55.7	(45.7 - 64.9)
Yes	630	(470 - 820)	44.3	(35.1 - 54.3)
<b>Total</b>	<b>1 420</b>	<b>(1 180 - 1 690)</b>	<b>100.0</b>	
<b>Total</b>				
No	4 630	(4 310 - 4 950)	68.8	(64.7 - 72.6)
Yes	2 100	(1 830 - 2 400)	31.2	(27.4 - 35.3)
<b>Total</b>	<b>6 730</b>	<b>(6 450 - 6 990)</b>	<b>100.0</b>	

**TABLE 4.110:** YOUNG PEOPLE AGED 12–17 YEARS — WHETHER TREATED BADLY OR REFUSED SERVICE BECAUSE THEY ARE ABORIGINAL, BY WHETHER THEY HAVE BEEN PICKED ON IN THE PREVIOUS SIX MONTHS

<i>Treated badly</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Not picked on				
No	5 550	(5 240 - 5 870)	80.8	(77.5 - 84.0)
Yes	1 320	(1 100 - 1 560)	19.2	(16.0 - 22.5)
<b>Total</b>	<b>6 870</b>	<b>(6 590 - 7 130)</b>	<b>100.0</b>	
Picked on				
No	1 590	(1 370 - 1 840)	71.3	(64.5 - 77.3)
Yes	640	(490 - 830)	28.7	(22.7 - 35.5)
<b>Total</b>	<b>2 230</b>	<b>(1 970 - 2 510)</b>	<b>100.0</b>	
<b>Total</b>				
No	7 140	(6 870 - 7 410)	78.5	(75.4 - 81.4)
Yes	1 960	(1 690 - 2 240)	21.5	(18.6 - 24.6)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	





# Chapter 5

## SOCIAL AND EMOTIONAL WELLBEING OF ABORIGINAL YOUNG PEOPLE AGED 12–17 YEARS

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## Chapter 5

# SOCIAL AND EMOTIONAL WELLBEING OF ABORIGINAL YOUNG PEOPLE AGED 12–17 YEARS

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*This chapter presents the key findings of the self reported social and emotional wellbeing of Aboriginal young people aged 12–17 years. It also reports associations between these outcomes and health risk behaviours. These observations, collected directly from young people, are compared with those of their carers, the results of which highlight the fact that young people and their carers often have differing views on the occurrence and significance of emotional and behavioural difficulties.*

*Three key indicators of social and emotional wellbeing are explored:*

- ◆ *Youth reported self-esteem*
- ◆ *Emotional and behavioural difficulties based on youth self-reports*
- ◆ *Suicidal behaviour.*

*The selection of these particular indicators was designed to ensure that they encompassed the spectrum of social and emotional wellbeing.*

---

### SUMMARY

This chapter describes the emotional and behavioural wellbeing of Aboriginal young people aged 12–17 years as assessed from their self reports, and how it is associated with health risk behaviours.

#### Self-esteem

- ◆ Low self-esteem was associated with a high risk of clinically significant emotional or behavioural difficulties and with health risk behaviours.
- ◆ Self-esteem was lower for females, 32 per cent of whom had low self-esteem, compared with 21 per cent of males.
- ◆ Self-esteem did not change with age in males but declined with age in females – 20 per cent of 12 year-old females had low self-esteem compared with 40 per cent of 17 year-old females.
- ◆ Young people who were more physically active or took part in organised sport had better self-esteem. Over a third of young people who had not exercised strenuously in the seven days prior to the survey had low self-esteem compared with 23 per cent who had.

#### Emotional or behavioural difficulties

- ◆ One in nine young people (11 per cent) were at high risk of clinically significant emotional or behavioural difficulties.
- ◆ The proportion of females at high risk of clinically significant emotional symptoms was more than double that of males (15 per cent compared with 6 per cent).
- ◆ About 23 per cent of young people were at high risk of clinically significant conduct problems and 15 per cent were at high risk of clinically significant hyperactivity.



## SUMMARY *(continued)*

- ◆ About forty per cent of young people whose carers' parenting style was poor were at high risk of clinically significant conduct problems, compared with 26 per cent of young people whose carers' parenting style was sub-optimal and 15 per cent of young people whose carers' parenting style was adequate.

### Associations with health risk behaviours

- ◆ About 18 per cent of young people who smoked cigarettes were at high risk of clinically significant emotional or behavioural difficulties compared with 7 per cent of non-smokers. This association was most pronounced in females (21 per cent compared with 7 per cent).
- ◆ Over one quarter (29 per cent) of young people who used marijuana daily were at high risk of clinically significant emotional or behavioural difficulties compared with 9 per cent of young people who had never used marijuana.
- ◆ Of young people who did not participate in organised sport, 16 per cent were at high risk of clinically significant emotional or behavioural difficulties compared with 8 per cent of young people who did.
- ◆ Almost one in five (19 per cent) young people who had experienced racism in the past six months were at high risk of clinically significant emotional or behavioural difficulties, compared with 9 per cent of those who had not.

### Suicidal behaviour

- ◆ About 16 per cent of young people aged 12–17 years had seriously thought about ending their own life during the 12 months prior to the survey. Suicidal thoughts were less common in males (12 per cent) than in females (20 per cent).
- ◆ Of those who had had thought about suicide, 39 per cent had also attempted suicide during the 12 months prior to the survey.
- ◆ Approximately 21 per cent of males in the lowest quartile of self-esteem had thought about suicide compared with 5 per cent of males in the highest quartile.
- ◆ A much larger proportion of young people at high risk of clinically significant emotional or behavioural difficulties had thought about suicide (37 per cent) or had attempted suicide (21 per cent) in the 12 months prior to the survey than young people at low risk of clinically significant emotional or behavioural difficulties (10 per cent and 3 per cent respectively).
- ◆ A significantly higher proportion of young people who had used marijuana within the last year, smoked cigarettes regularly or drunk alcohol to excess had seriously thought about ending their own life in the 12 months prior to the survey than those who had not.
- ◆ About 22 per cent of young people exposed to family violence had thought about suicide compared with 9 per cent who had not been exposed to family violence.
- ◆ Almost one quarter (24 per cent) of females with friends or people known to them who had recently attempted suicide had themselves attempted suicide compared with 5 per cent who had no acquaintances who had recently attempted suicide.



## SELF-REPORTED PROBLEMS OF SOCIAL AND EMOTIONAL WELLBEING

This chapter describes the social and emotional wellbeing of Aboriginal young people, as reported by them in Youth Self Report (YSR) questionnaires. Three indicators of the young person's social and emotional wellbeing are considered: self-esteem, risk of clinically significant emotional or behavioural difficulties and suicidal behaviour.

### PARTICIPATION IN THE YOUTH SELF REPORT

#### Administering the Youth Self Report

The YSR was developed specifically for 12–17 year-olds and interviewer assistance was available for those young people who required help completing it. Of the 1,480 young people aged 12–17 years in the survey sample, 1,073 (72.5 per cent) completed a YSR questionnaire, 19 per cent of whom received the help of an interviewer. Due to the sensitive nature of some questions it is possible that the presence of an interviewer may have had some impact on the responses, but this could not be measured.

#### The effects of non-response

One quarter of 12–17 year-olds in the survey did not complete the YSR. An investigation of carer responses (see *Appendix D — Levels of family and youth participation*) confirmed that respondents did not comprise a random sample with respect to age, sex and Level of Relative Isolation (Table 4.1). Carer reports, available for 1,399 12–17 year-olds, indicated that a higher proportion of non-respondents than respondents were at high risk of clinically significant emotional or behavioural difficulties (Table 4.1). In order to generalise observations to the entire population of Western Australian Aboriginal young people, those responding to the survey were weighted by sex, age and Level of Relative Isolation to represent the entire population (see *Appendix B — Sample design in Volume One*<sup>1</sup>). This weighting procedure accounted for the different response rates by sex, age and LORI. However the distribution of other variables, such as the risk of clinically significant emotional or behavioural difficulties, could not be taken into account in the weighting procedure. As a result, the estimates based on YSR responses reported in Chapters 4 and 5, will under-represent the proportion of young people at high risk of clinically significant emotional or behavioural difficulties. This must be borne in mind when interpreting the results based on the YSR and when comparing them with results based on carer reports as reported in other chapters in this volume.

#### Sample size

The estimates in Chapters 4 and 5 are based on 1,073 young people who completed YSR questionnaires. This sample is considerably smaller than the 3,993 children aged 4–17 years for whom carer reports were obtained. This smaller sample size means that associations are less likely to achieve statistical significance, even if considered to be of social or clinical significance. Associations meeting this description are reported but qualified in Chapters 4 and 5.



## YOUTH SELF-REPORTED SELF-ESTEEM

One of the major issues facing Aboriginal children and young people is the way in which they view themselves (self-concept) and how they feel about themselves (self-esteem) in relation to their everyday experiences. The youth-reported measure of self-esteem used in this survey encompasses both these concepts.

Self-esteem is not generally considered to be innate, but something that is developed or constructed by the individual through their interaction with their environment and the way in which they reflect on that interaction.<sup>3</sup> An important corollary of this is that self-esteem is modifiable and, as research with other populations has shown, it is an important mediating factor for several other important youth outcomes (e.g. substance misuse, educational achievement). Self-esteem has thus become a major focus of mental health promotions directed towards young people.<sup>4</sup>

This section describes the associations between the self-esteem score estimated from the YSR and risk of clinically significant emotional or behavioural difficulties and a range of environmental factors and health risk behaviours.

### SELF-ESTEEM IN YOUNG PEOPLE

Self-esteem has been variously defined but is generally understood to include internalised self-image, feelings of self-worth and efficacy. It is known to be both a cause and a consequence of many emotional or behavioural problems. Self-esteem is associated with educational and social outcomes and may be a protective factor in reducing adverse developmental outcomes.

#### Self-esteem quartiles

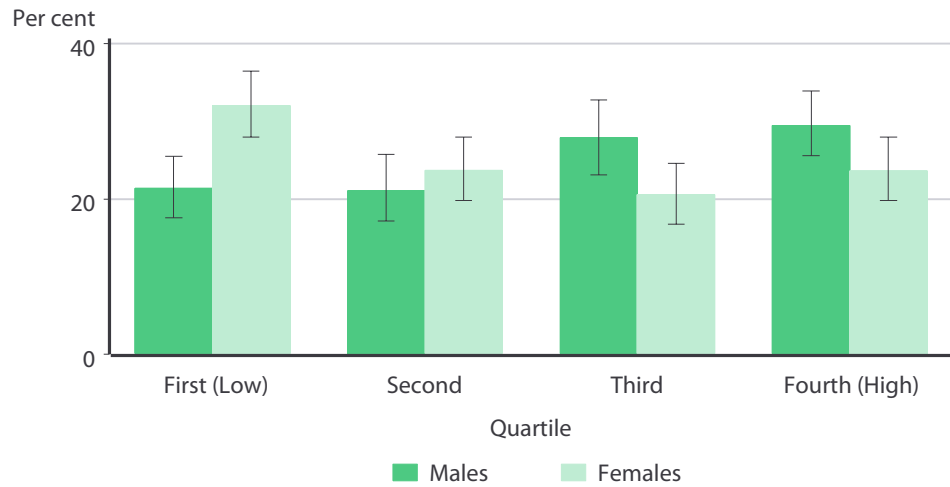
Self-esteem was measured using a scale specifically designed for the WAACHS. Young people were asked to respond to a series of seven statements relating to aspects of self-esteem. They were asked to rate how much each of the statements sounded like them on a five-point scale from 'not at all' to 'very much'. A self-esteem score was produced from these items and young people were grouped into quartiles based on this score. See *Appendix C — Measures derived from multiple responses and scales* for details of the scale, and the derivation of the self-esteem score and quartiles. For the purposes of this survey, *low self-esteem* is defined as having a self-esteem score in the lowest quartile, and *high self-esteem* is defined as having a score in the highest quartile. These are relative measures, indicating only that self-esteem was lower or higher than that found in the majority of young Aboriginal people.

### SELF-ESTEEM AND SEX

A higher proportion of Aboriginal females had low self-esteem compared with males. Almost one in three females had low self-esteem (32.0 per cent; CI: 28.0%–36.5%) compared with one in five males (21.4 per cent; CI: 17.6%–25.5%) (Figure 5.1).



**FIGURE 5.1:** YOUNG PEOPLE AGED 12–17 YEARS — QUARTILES OF SELF-ESTEEM, BY SEX

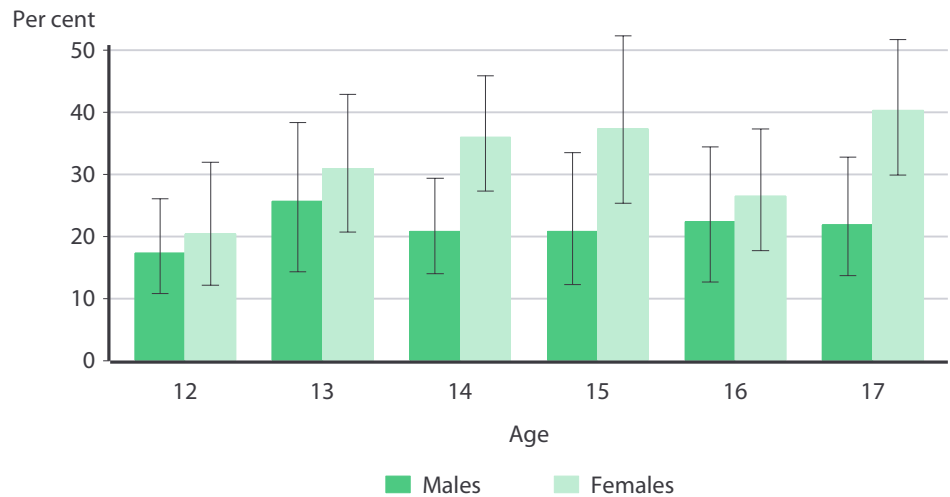


Source: Table 5.1

### SELF-ESTEEM AND AGE

The proportion of males with low self-esteem did not change with age, but the proportion of females with low self-esteem tended to increase with increasing age, although the differences were not statistically significant (Figure 5.2).

**FIGURE 5.2:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION WITH LOW SELF-ESTEEM, BY AGE AND SEX



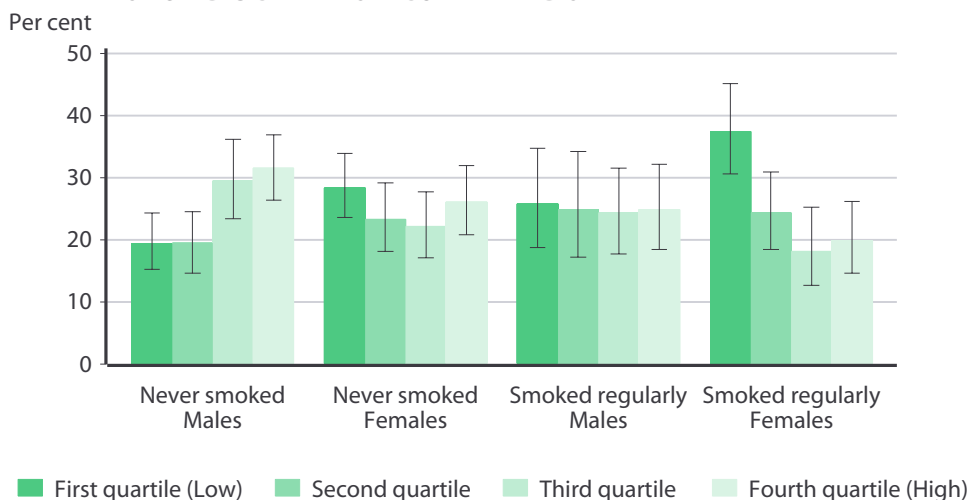
Source: Table 5.1

### SELF-ESTEEM AND CIGARETTE SMOKING

The proportion of young people with low self-esteem was higher among those who had smoked cigarettes regularly (32.3 per cent; CI: 27.1%–37.8%) than among those who have never smoked (23.5 per cent; CI: 20.2%–27.2%) (Table 5.2). The difference in equivalent proportions for both males and females was not statistically significant (Figure 5.3).



**FIGURE 5.3: YOUNG PEOPLE AGED 12–17 YEARS — QUARTILES OF SELF-ESTEEM, BY WHETHER SMOKED CIGARETTES REGULARLY AND SEX**

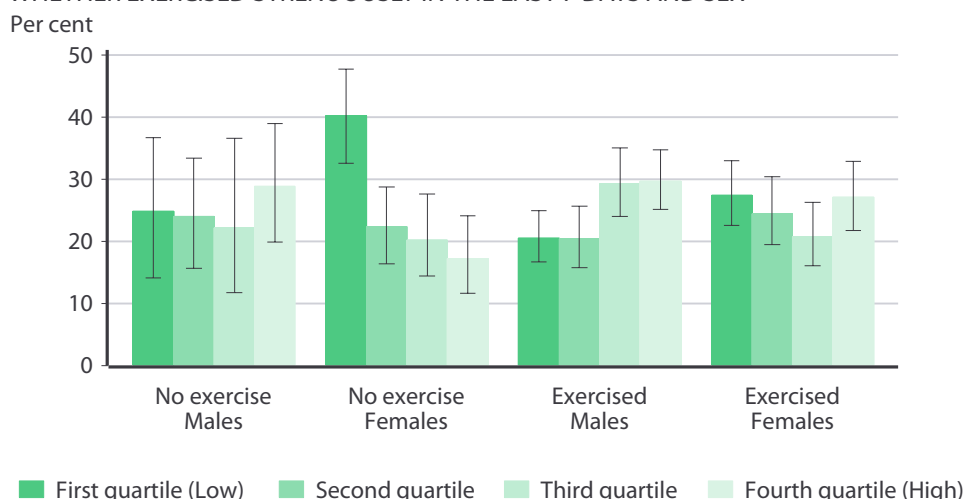


Source: Table 5.2

### SELF-ESTEEM AND PHYSICAL EXERCISE

The proportion of young people with low self-esteem was significantly higher among young people who had not done any strenuous exercise in the seven days prior to the survey (34.6 per cent; CI: 28.2%–40.9%) than among those who had exercised (23.6 per cent; CI: 20.5%–27.0%) (Table 5.3). The association between exercise and self-esteem was strongest in females, with 40.2 per cent (CI: 32.6%–47.8%) who had not exercised strenuously in the seven days prior to the survey having low self-esteem compared with 27.5 per cent (CI: 22.6%–33.0%) of those who had exercised (Figure 5.4).

**FIGURE 5.4: YOUNG PEOPLE AGED 12–17 YEARS — QUARTILES OF SELF-ESTEEM, BY WHETHER EXERCISED STRENUOUSLY IN THE LAST 7 DAYS AND SEX**



Source: Table 5.3

### SELF-ESTEEM AND ORGANISED SPORT

Participation in organised sport in the 12 months prior to the survey was also associated with self-esteem. The proportion of young people with low self-esteem

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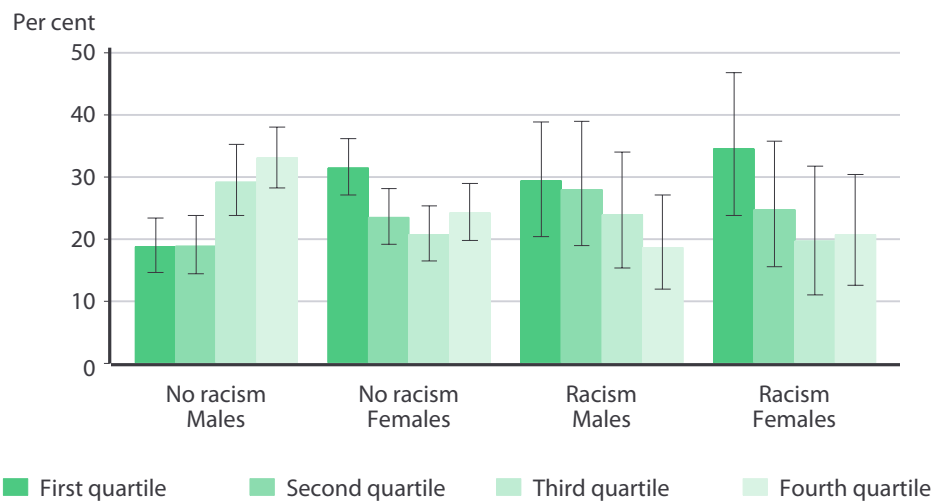


was significantly higher in those who had not participated in organised sport (34.8 per cent; CI: 29.5%–40.8%) compared with young people who had (21.9 per cent; CI: 18.6%–25.6%). This association was seen in both males and females (Table 5.4).

### SELF-ESTEEM AND RACISM

Young people were asked if they had been treated badly because they were Aboriginal. A higher proportion of young people who had not experienced racism had high self-esteem compared with young people who had experienced racism, particularly in males. One third (33.1 per cent; CI: 28.3%–38.1%) of males who had not experienced racism had high self-esteem compared with 18.7 per cent (CI: 12.0%–27.2%) of males who had experienced racism. The association in females was not as marked (Figure 5.5).

**FIGURE 5.5:** YOUNG PEOPLE AGED 12–17 YEARS — QUARTILES OF SELF-ESTEEM, BY WHETHER TREATED BADLY BECAUSE THEY WERE ABORIGINAL AND SEX



Source: Table 5.5

### SELF-ESTEEM AND FAMILY VIOLENCE

Young people were asked whether they had been exposed to some form of family violence (including parents yelling and shouting, parents hitting their kids too hard, people fighting when they are drunk, family fights where people get pushed around or hit). There was no association between self-esteem and exposure to family violence in males, but there was a tendency for females exposed to family violence to have lower self-esteem. Almost one third (30.9 per cent; CI: 24.7%–37.3%) of females not exposed to family violence had high self-esteem, compared with 16.5 per cent (CI: 12.1%–22.3%) of females who had (Table 5.6).

### MODELLING THE ASSOCIATION BETWEEN SELF-ESTEEM, RACISM, FAMILY VIOLENCE AND PHYSICAL EXERCISE, CONTROLLING FOR AGE AND SEX

Sex, age, physical exercise, racism and exposure to some form of family violence were all associated with self-esteem. These variables were also associated with each other. To investigate the independent effects of these variables on self-esteem in young people, a multivariate logistic regression analysis was run to model the probability of having low self-esteem (being in the lowest quartile) (Table 5.7).





**Racism:** The model confirms that independently of age, family violence and physical exercise, males experiencing racism were almost twice as likely (Odds Ratio 1.94; CI: 1.18–3.20) to have low self-esteem compared with males not experiencing racism, but there was no association between self-esteem and racism in females.

**Family violence:** The model confirmed that independently of age, exposure to racism and physical exercise, females exposed to some form of family violence were significantly more likely to have low self-esteem compared with females who were not exposed to family violence (Odds Ratio 1.66; CI: 1.04–2.65), but there was no association between self-esteem and family violence in males.

**Sex:** Independently of age, family violence, racism and physical exercise, females were significantly more likely to have low self-esteem (Odds Ratio 1.73; CI: 1.04–2.85).

**Age:** Self-esteem was not related to age.

**Physical exercise:** Independently of age, sex and exposure to racism or family violence, not doing strenuous exercise remained the factor most strongly associated with low self-esteem. Young people who had neither participated in organised sport in the last year of exercised strenuously in the week prior to the survey were twice as likely (Odds Ratio 2.00; CI: 1.22–3.28) to have low self esteem compared with young people who had both participated in organised sport and exercised strenuously. The likelihood of low self-esteem was greater in the absence of organised sport in the last year, than in the absence of strenuous exercise in the last week: but participation in both was associated with the lowest risk of low self-esteem.

## PROTECTIVE BENEFITS OF HEALTHY SELF-ESTEEM

There is evidence from large-scale surveys of the general population that young people with poor self-esteem have significantly increased likelihood of a range of health risk behaviours including drug use, teenage pregnancy and other youth problems.<sup>6,7</sup> The self-esteem of children and young people is also believed to be predictive of their self-esteem as adults and longer-term social and emotional wellbeing.<sup>8</sup>

For Aboriginal young people, the development of healthy self-esteem is closely associated with their opportunities for positive cultural identification and acknowledgement of their achievements.

Recent Australian and US research has shown that carefully designed and implemented primary prevention interventions targeting the negative explanatory style of young people with chronically low self-esteem can significantly reduce their later risks for depression, anxiety and other mental health problems.<sup>9,10,11</sup>

Improving scientific and community understanding of the processes through which self-esteem develops and how it can be protected and promoted seems to be critical for the development of culturally relevant school- and community-based interventions to improve the social and emotional wellbeing of Aboriginal children and young people. The WAACHS findings suggest that encouraging Aboriginal young people to participate in regular exercise and organised sporting activities

*Continued . . . .*



**PROTECTIVE BENEFITS OF HEALTHY SELF-ESTEEM** *(continued)*

could be beneficial in improving and maintaining their self-esteem and hence their prospects for longer term social and emotional wellbeing. This is consistent with the increasing recognition over the past 30 years of the protective effect of strenuous physical exercise on self-esteem. Participating in sport has also been shown to reduce the possibility of boredom, which has been associated with depression, distractibility and loneliness.<sup>5</sup>

**SELF-REPORTED EMOTIONAL OR BEHAVIOURAL DIFFICULTIES****YOUTH SELF-REPORTED EMOTIONAL OR BEHAVIOURAL DIFFICULTIES**

The youth self-report version of the Strengths and Difficulties Questionnaire (SDQ) includes the same 25 items as the carer-report SDQ (see Chapter 2) and has been used to identify young people at high risk of clinically significant emotional or behavioural difficulties.

The youth self-report version of the SDQ differs from the carer-reported version in two ways. First, the response statements in the youth version were worded in the first person. Second, the cut-off scores separating low, moderate and high risk ranges differ. For the youth self-report SDQ, low risk is defined as Total SDQ scores in the range 0–15, moderate risk is in the range 16–19, and high risk is in the range 20–40. For the carer reported SDQ the ranges were 0–13 at low risk, 14–16 at moderate risk, and 17–40 at high risk of clinically significant emotional or behavioural difficulties.

**RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES**

One in nine (11.1 per cent; CI: 9.0%–13.4%) Aboriginal young people were assessed from their self-reports as being at high risk of clinically significant emotional or behavioural difficulties, 20.8 per cent (CI: 18.1%–23.5%) were at moderate risk and 68.1 per cent (CI: 64.8%–71.4%) were at low risk (Table 5.8). Assessments based on carer reports indicated almost twice the proportion (20.5 per cent; CI: 17.7%–23.6%) at high risk of clinically significant emotional or behavioural difficulties, balanced by half the proportion at moderate risk (9.4 per cent; CI: 7.7%–11.5%) and a similar proportion at low risk. Thus while both carers and young people reported similar proportions at low risk, carers indicated a higher proportion of young people at high risk than did the young people themselves (Table 2.1).

**ASSOCIATIONS WITH DEMOGRAPHIC FACTORS****Sex**

Based on self-reports, a greater proportion of females were at high risk of clinically significant emotional or behavioural difficulties (13.1 per cent; CI: 10.3%–16.1%) than males (9.2 per cent; CI: 6.2%–13.1%), although the difference was not statistically significant (Table 5.8). This contrasts with assessments based on carer reports for 12–



17 year-olds which found that the proportion of females at high risk (17.5 per cent; CI: 14.0%–21.5%) was lower than that for males (23.5 per cent; CI: 19.6%–27.9%) (Table 2.7). Thus carer reports suggested that the proportion of males at high risk of clinically significant emotional or behavioural difficulties was higher than that suggested by youth self-reports.

### Age

The proportion of young people within each of the three categories of risk for clinically significant emotional or behavioural difficulties did not differ significantly by age, although there was a general tendency for the proportion at high risk to increase with age from 9.7 per cent (CI: 6.3%–14.6%) at 12 years to 13.0 per cent (CI: 7.3%–21.8%) at 16 years and then decline to 9.5 per cent (CI: 5.8%–14.8%) at 17 years (Table 5.9). This pattern contrasts with assessments from carer reports which showed that the proportion of young people at high risk of clinically significant emotional or behavioural difficulties decreased steadily with age from 12 years to 17 years (Figure 2.2).

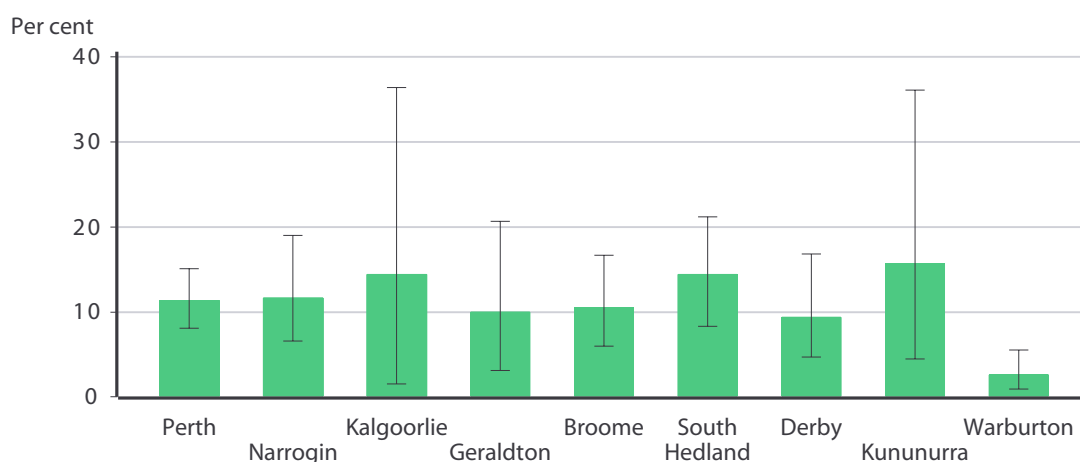
### Level of Relative Isolation

The youth self-reports suggested that the proportion of young people at high risk of clinically significant emotional or behavioural difficulties did not vary across levels of relative isolation (Table 5.10). This is in contrast to carer reports which suggested that risk decreased with increasing relative isolation (Table 2.10).

### ATSIC region

As shown in Figure 5.6, there was little variation in the proportion of young people at high risk of clinically significant emotional or behavioural difficulties across ATSIC regions with the exception of the Warburton ATSIC region, where the proportion of young people at high risk (2.6 per cent; CI: 0.9%–5.5%) was significantly lower than in the Perth, Narrogin, Broome and South Hedland ATSIC regions. Carer reports also suggested a somewhat lower proportion to be at high risk in the Warburton ATSIC region, but no lower than that observed in the Broome ATSIC region (Figure 2.7).

**FIGURE 5.6: YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY ATSIC REGION**



Source: Table 5.11



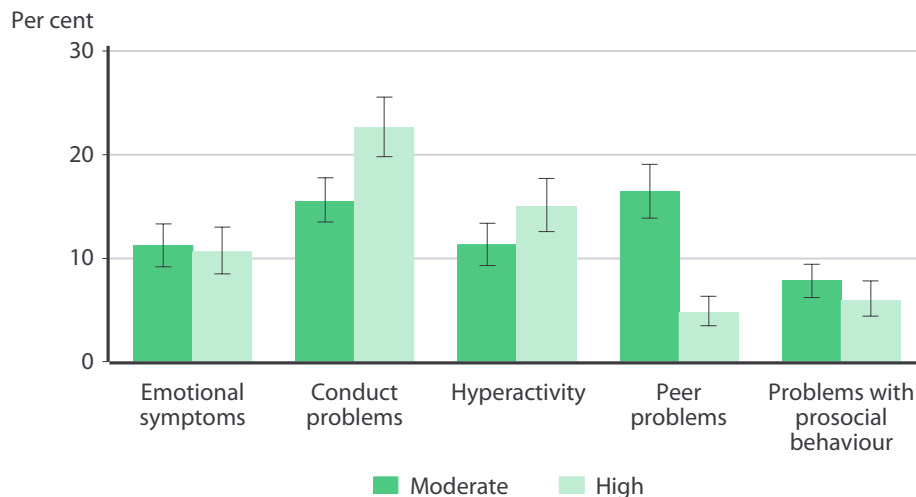
## ASSOCIATION WITH SELF-ESTEEM

The risk of clinically significant emotional or behavioural difficulties was inversely associated with self-esteem. A greater proportion of young people with low self-esteem were at high risk of clinically significant emotional or behavioural difficulties (15.8 per cent; CI: 12.0%–20.7%) than those with high self-esteem (6.3 per cent; CI: 3.8%–10.1%). This association was stronger in females where the proportion at high risk decreased from 19.5 per cent (CI: 13.9%–25.8%) in females with low self-esteem to 7.4 per cent (CI: 3.6%–13.2%) of those with high self-esteem, than it was in males (Table 5.12).

## SPECIFIC EMOTIONAL OR BEHAVIOURAL DIFFICULTIES

Figure 5.7 shows the proportion of young people at moderate or high risk of each of the five SDQ specific difficulties — emotional symptoms, conduct problems, hyperactivity, peer problems and problems with prosocial behaviour – based on self-reports. Conduct problems and hyperactivity were the most commonly occurring specific difficulties in young people.

**FIGURE 5.7: YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION AT MODERATE AND HIGH RISK OF CLINICALLY SIGNIFICANT SPECIFIC DIFFICULTIES, BY SPECIFIC DIFFICULTY**



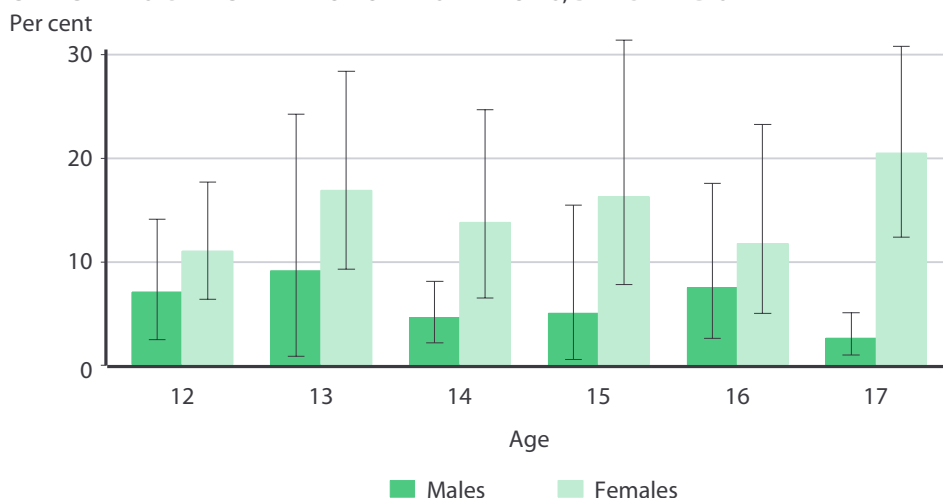
Source: Tables 5.13, 5.16, 5.18, 5.20 and 5.22

### Emotional symptoms

Based on youth self-reports, over three quarters (78.3 per cent; CI: 75.2%–81.1%) of young people were at low risk of clinically significant emotional symptoms while 11.2 per cent (CI: 9.2–13.3 per cent) were at moderate risk and 10.6 per cent (CI: 8.5%–13.0%) were at high risk (Table 5.13). In contrast, carer reports indicated a significantly lower proportion at low risk (66.7 per cent; CI: 63.3%–69.9%) and a significantly higher proportion at high risk (22.3 per cent; CI: 19.6%–25.3%) (Table 2.18).



**FIGURE 5.8:** YOUNG PEOPLE AGED 12–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL SYMPTOMS, BY AGE AND SEX



Source: Table 5.13

A greater proportion of females were at both moderate and high risk of clinically significant emotional symptoms (14.6 per cent; CI: 11.6%–18.2% and 15.1 per cent; CI: 11.8%–18.8% respectively) than were males (7.8 per cent; CI: 5.6%–10.7% and 6.2 per cent; CI: 3.8%–9.7% respectively). There was a tendency for the proportion of females at high risk of clinically significant emotional symptoms to increase with age, but this was not true of males. In 17 year-olds, 20.5 per cent (CI: 12.4%–30.8%) of females were at high risk compared with only 2.6 per cent (CI: 1.0%–5.1%) of males (Figure 5.8).

In females who have experienced racism, almost one quarter (24.7 per cent; CI: 15.1%–35.0%) were at high risk of clinically significant emotional symptoms compared with 13.0 per cent (CI: 9.7%–17.0%) of those who have not experienced racism, a difference approaching statistical significance. In males the risk of clinically significant emotional symptoms was not associated with racism – 5.9 per cent (CI: 1.8%–12.4%) of those who had experienced racism were at high risk, compared with 6.3 per cent (CI: 3.6%–10.6%) who had not (Table 5.14).

Adequacy of parenting style was not associated with risk of clinically significant emotional symptoms in either males or females (Table 5.15).

### Conduct problems

Based on youth self-reports, 22.6 per cent (CI: 19.8%–25.6%) of young people were at high risk of clinically significant conduct problems, 15.5 per cent (CI: 13.5%–17.8%) were at moderate risk and 61.9 per cent (CI: 58.6%–65.2%) were at low risk (Table 5.16). Carer reports showed a higher proportion of young people being at high risk of clinically significant conduct problems (31.4 per cent; CI: 28.0%–34.7%) (Table 2.25).

A higher proportion of males were at high risk of clinically significant conduct problems than females, but the difference was not statistically significant. One quarter of males (25.0 per cent; CI: 20.6%–29.7%) were at high risk compared with one fifth (20.0 per cent; CI: 16.5%–23.7%) of females (Table 5.16). The difference between males and females was consistent with the assessments made from the carer reports for 12–17 year-olds, where a higher proportion of males were at high risk (35.6 per cent; CI: 31.2%–40.2%) than females (27.1 per cent; CI: 22.8%–31.5%) (Table 2.28).



There was no association between risk of clinically significant conduct problems and age (Table 5.16).

There was a strong association between the risk of clinically significant conduct problems and adequacy of parenting style (Table 5.17). Of those exposed to a poor parenting style, 40.3 per cent (CI: 30.9%–50.8%) were at high risk of clinically significant conduct problems, compared with 25.8 per cent (CI: 21.3%–30.4%) of young people exposed to a sub-optimal parenting style and 14.9 per cent (CI: 11.4%–19.1%) of those exposed to an adequate parenting style.

## Hyperactivity

About one in seven (15.0 per cent; CI: 12.6%–17.7%) Aboriginal young people were found to be at high risk of clinically significant hyperactivity. A further 11.3 per cent (CI: 9.3%–13.4%) were at moderate risk and around three quarters (73.7 per cent; CI: 70.6%–76.6%) were at low risk (Table 5.18). Carer reports found smaller proportions of 12–17 year-olds at moderate (8.3 per cent; CI: 6.7%–10.3%) and high risk (12.5 per cent; CI: 10.0%–15.1%) than based on the reports from the young people themselves (Table 2.32). There was little difference between the proportions of males and females at moderate or high risk of clinically significant hyperactivity. However some variation with age was found. Young people aged 15 years had the highest overall proportion at high risk (21.7 per cent; CI: 14.0%–30.8%), significantly higher than the proportion of 17 year-olds (7.7 per cent; CI: 4.2%–12.8%) (Table 5.18).

Adequacy of parenting style was associated with risk of clinically significant hyperactivity. A significantly higher proportion of young people experiencing a poor parenting style (22.5 per cent; CI: 15.2%–31.1%) were at high risk of clinically significant hyperactivity compared with young people experiencing an adequate parenting style (10.9 per cent; CI: 7.9%–14.2%) (Table 5.19).

## Peer Problems

Over three quarters (78.9 per cent; CI: 76.0%–81.7%) of young people were assessed from their self-reports be at low risk of clinically significant peer problems while 16.4 per cent (CI: 13.9%–19.1%) were at moderate risk and 4.7 per cent (CI: 3.5%–6.3%) were at high risk (Table 5.20). The corresponding proportions based on carer reports indicated significantly higher proportions at high risk of clinically significant peer problems (22.2 per cent; CI: 19.4%–25.3%) (Table 2.42). There was no association between high risk of clinically significant peer problems and either age or sex.

Adequacy of parenting style was associated with the risk of peer problems. Of those experiencing an adequate parenting style, 3.1 per cent (CI: 1.8%–5.1%) were at high risk of clinically significant peer problems compared with 12.8 per cent (CI: 7.4%–20.3%) of young people experiencing a poor parenting style (Table 5.21).

## Prosocial Behaviour

Based on youth self-reports, an estimated 86.4 per cent (CI: 84.0%–88.5%) of Aboriginal young people were at low risk of clinically significant problems with prosocial behaviour while 7.8 per cent (CI: 6.2%–9.4%) were at moderate risk and 5.9 per cent (CI: 4.4%–7.8%) were at high risk (Table 5.22). Carer reports showed higher proportions of young people at low risk (93.1 per cent; CI: 91.5%–94.5%) and lower proportions at moderate (2.9 per cent; CI: 2.1%–4.0%) or high risk (3.9 per cent; CI: 2.8%–5.3%) (Table 2.46).





A greater proportion of males were at high risk of clinically significant problems with prosocial behaviour (8.6 per cent; CI: 6.0%–11.7%) compared with females (3.1 per cent; CI: 1.5%–5.1%). The proportion of 12 year-old males at high risk was about the same as that of 12 year-old females. This proportion tended to decrease with age in females but did not change with age in males (Table 5.22).

Although a relatively small proportion of young people were at high risk of clinically significant problems with prosocial behaviour, there was a strong relationship between these problems and adequacy of parenting style. The proportion of young people at high risk of clinically significant problems with prosocial behaviour in those experiencing a poor parenting style (10.5 per cent; CI: 6.7%–15.5%) was significantly higher than in young people experiencing an adequate parenting style (2.4 per cent; CI: 0.8%–5.6%) (Table 5.23).

### DIFFERENCES IN ESTIMATES OF EMOTIONAL AND BEHAVIOURAL DIFFICULTIES BETWEEN CARER REPORTS AND YOUTH SELF-REPORTS

The proportions of young people at moderate and high risk of clinically significant emotional or behavioural difficulties based on carer reports given in Chapter 2 and re-iterated in this chapter, differ from those based on self-reports for two reasons:

- ◆ the samples of 12–17 year old young people on which they are based differ systematically (Table 4.1) (see commentary box *Participation in the youth self report*)
- ◆ there are differences in the way carers and young people perceive the problems of young people (Table 5.24).

To examine this further, Table 5.24 considers only those 12–17 year-olds for whom both a carer report and a youth self-report were received. It compares the risk of clinically significant total difficulties and risk of clinically significant problems with each specific difficulty as assessed from carer reports with those assessed from youth self-reports in the same group of 12–17 year-olds. The differences in distributions shown in Table 5.24 are attributable to differences in the way carers and young people assess the difficulties of young people and not to any differences between the samples. Information from carers was more likely to result in an assessment of being at high risk of clinically significant difficulties than was the information from the young people themselves. The specific difficulties most likely to contribute to this difference were peer problems (22.0 per cent; CI: 18.7%–25.5%, assessed as being at high risk from carer reports compared with 4.4 per cent; CI: 3.2%–5.9%, from youth reports) and emotional problems (21.3 per cent; CI: 18.4%–24.6%, assessed as being at high risk from carer reports compared with 10.6 per cent; CI: 8.5%–13.1%, from youth reports). Only for risk of clinically significant hyperactivity and problems with prosocial behaviour did youth reports suggest a greater proportion of young people to be at high risk than did carer reports. There was most agreement between carers and from young people for conduct problems, for which both assessed that about 60 per cent were at low risk, although carer reports tended to suggest that those at risk were a higher risk than did the youth reports.

*Continued . . . .*



## DIFFERENCES IN ESTIMATES OF EMOTIONAL AND BEHAVIOURAL DIFFICULTIES BETWEEN CARER REPORTS AND YOUTH SELF-REPORTS *(continued)*

The differences in perception of the problems of young people between carers and the young people themselves is the main contributor to observed differences between carer reports and youth self-reports shown in this chapter. Risk of clinically significant conduct problems was the only specific difficulty for which there was an appreciable difference in proportion of young people at high risk between those who completed a YSR (29.2 per cent; CI: 25.7%–33.0%) and those who did not (37.7 per cent; CI: 30.5%–44.9%), although this did not reach statistical significance (Table 4.1).

Agreement between carers and the young people in their care was highest for conduct problems, which are perhaps the most easily and objectively observable. It may be asked which of the two assessments is ‘correct’? Presumably young people recognise what they find to be difficult, while carers recognise what they find to be difficult. Neither can be considered the gold standard. While young people may not always share their problems and feelings with their carers, it is possible that carers may be in a better position to recognise any problems the young people in their care may have. Young people may not have sufficient objectivity or insight to recognise or identify any problems they may have.

## ASSOCIATION BETWEEN EMOTIONAL OR BEHAVIOURAL DIFFICULTIES AND SELF-REPORTED HEALTH RISK BEHAVIOURS

The findings in this section are based on youth self-reports.

### Smoking

The proportion of young people at high risk of clinically significant emotional or behavioural difficulties was significantly higher in young people who have smoked regularly (17.8 per cent; CI: 13.7%–22.6%) than among those who have never smoked cigarettes (7.4 per cent; CI: 5.4%–9.9%) (Table 5.25).

The association with cigarette smoking was more pronounced in females. Approximately one in five females (21.7 per cent; CI: 16.2%–28.1%) who had smoked regularly were at high risk of clinically significant emotional or behavioural difficulties compared with 7.3 per cent (CI: 5.3%–10.1%) of those who had never smoked (Table 5.25).

### Alcohol

A significantly lower proportion of young people who reported drinking to excess in the six months prior to the survey were at low risk of clinically significant emotional or behavioural difficulties than those who did not drink to excess and a significantly higher proportion were at moderate risk. Drinking alcohol without drinking to excess was not associated with an increased risk of clinically significant emotional or behavioural difficulties. About half (50.9 per cent; CI: 41.1%–60.7%) of young people who reported having drunk to excess were at low risk and 32.9 per cent (CI: 25.4%–41.5%) were at moderate risk compared with 70.7 per cent (CI: 66.7%–74.3%) and 19.3 per cent (CI: 16.1%–22.8%) of non-drinkers who were at low and moderate risk respectively (Table 5.26).





## Marijuana

Daily marijuana use was strongly associated with risk of clinically significant emotional or behavioural difficulties. Over one quarter (28.7 per cent; CI: 16.4%–44.3%) of young people who used marijuana daily were at high risk of clinically significant emotional or behavioural difficulties compared with 8.7 per cent (CI: 6.8%–11.1%) of young people who had never used the drug (Table 5.27).

As with cigarette smoking, the association between marijuana use and risk of clinically significant emotional or behavioural difficulties was particularly evident in females. In females the proportion at high risk of clinically significant emotional or behavioural difficulties increased with increasing frequency of marijuana use, reaching 35.4 per cent (CI: 14.2%–61.7%) of daily marijuana users compared with 8.8 per cent (CI: 6.3%–11.8%) of young females who had never used the drug (Table 5.27).

## Physical exercise and organised sport

Young people were asked whether in the seven days prior to the survey they had exercised or played sport or games that made them sweat or breath hard. There was a tendency for a greater proportion of both males and females who had not exercised strenuously to be at high risk of clinically significant emotional or behavioural difficulties, but the differences were not statistically significant (Table 5.28).

The association between risk of clinically significant emotional or behavioural difficulties and organised sport was similar to that of strenuous exercise in males, but in females the association was strong and statistically significant. The proportion of females at high risk of clinically significant emotional or behavioural difficulties was 19.4 per cent (CI: 14.6%–25.2%) if they had not participated in organised sport, significantly higher than the 7.8 per cent (CI: 5.1%–11.4%) of females who had participated in organised sport (Table 5.29).

## Emotional and behavioural difficulties and racism

To assess their experiences of racism, young people were asked ‘in the past six months have people ever treated you badly or refused to serve you because you are Aboriginal?’ They were asked to identify how often this had occurred in various situations such as at school, in the street, while using public transport, in shops, while paying sport or at home.

Risk of clinically significant emotional or behavioural difficulties was associated with exposure to racism. Of those young people who had experienced racism, 18.6 per cent (CI: 13.4%–25.2%) were at high risk of clinically significant emotional or behavioural difficulties, significantly higher than the proportion of young people who had not experienced racism (9.0 per cent (CI: 6.9%–11.6%)) (Table 5.30). In contrast to self-esteem which was more strongly associated with experience of racism in males, the association between risk of clinically significant emotional or behavioural difficulties and racism was stronger in females. Of females experiencing racism, 27.9 per cent (CI: 18.9%–38.2%) were at high risk of clinically significant emotional or behavioural difficulties compared with 9.8 per cent (CI: 7.0%–12.9%) of females who had not experienced racism.



## EFFECTS OF RACISM ON HEALTH AND WELLBEING

In addition to the disadvantage that Aboriginal Australians experience in terms of opportunities for health, education, housing and employment, they also report experiencing significant racial discrimination.<sup>12</sup> The effects of racism on families and children was a leading concern identified at almost all of the community consultation meetings regarding the content areas to be covered by the WAACHS.

There is a large international literature on the adverse effects of perceived discrimination on the physical and mental health of minority populations and indigenous peoples.<sup>13</sup> These studies have sought to identify the types, amounts and aspects of racism and discrimination and to establish how these experiences combine with other risk factors in determining physical and mental health status. For example, perceived discrimination has recently been shown by a large-scale US longitudinal study to be a major factor that independently contributed to substance use by African-American parents and their children. The study found that perceived racism significantly increased the likelihood that these children would misuse substances when assessed several years later as teenagers.<sup>14</sup> The study showed that when socio-economic circumstances and parental education were taken into account, the effects of perceived racism were mediated by internal distress (anxiety and depression), beliefs about the risks associated with substance use and the extent to which young people affiliated with others using substances. The study also demonstrated that the harmful effects of discrimination on children and young people were countered, to some extent, by effective parenting.

Research into strategies used by individuals to cope with racism is more limited.<sup>15</sup> One qualitative Australian study examined the experiences of racism and coping responses reported by a representative group of 34 Koori Aboriginal adults living in Melbourne.<sup>16</sup> The study identified a continuum of coping strategies from defensive to attacking. At the defensive extreme, strategies employed were withdrawal, escape and avoidance of contact, at the other extreme perpetrators were confronted by legal or illegal means. Less extreme strategies included assigning to the perpetrator a behavioural problem or moral deficit, seeking social support, 'passing' oneself off as a member of the dominant group; striving to achieve to demonstrate one's worth as an individual and taking pride in one's cultural identification, this latter often being directed at protecting children from the harmful effects of racism.

## SUMMARY – EMOTIONAL AND BEHAVIOURAL DIFFICULTIES

The overall proportion of young people at high risk of clinically significant emotional or behavioural difficulties did not vary systematically with either age or LORI. A higher proportion of females were at high risk compared with males. All the factors associated with high risk of clinically significant emotional or behavioural difficulties were associated more strongly in females than in males. Smoking cigarettes, marijuana use and exposure to racism were more strongly associated with high risk of clinically significant emotional or behavioural difficulties in females than in males. High self-esteem and participation in organised sport were more strongly associated with low risk of clinically significant emotional or behavioural difficulties in females compared with males.



Alcohol use did not fit the same pattern as other health risk behaviours. Drinking alcohol without drinking to excess was not associated with risk of clinically significant emotional or behavioural difficulties. Drinking to excess was associated with an increased proportion of young people at moderate risk rather than at high risk.

Considering specific difficulties, there tended to be different patterns for males and females. A higher proportion of females were at high risk of clinically significant emotional symptoms, while higher proportions of males were at high risk of clinically significant conduct problems and problems prosocial behaviour. There was little association between the risk of specific difficulties and age in males, but in females the proportion at high risk of clinically significant emotional symptoms increased with age, while the proportion at high risk of clinically significant problems with prosocial behaviour decreased with age.

Adequacy of parenting style was associated with most specific difficulties, particularly problems with prosocial behaviour, but not with emotional symptoms.

Two potentially modifiable factors were associated with lower proportions of young people at high risk of clinically significant emotional or behavioural difficulties – adequacy of parenting style and participation in organised sport. A pragmatic trial in community settings has shown that parenting style can be modified with measurable effects on child behaviour, though these programs have not yet been translated to Aboriginal settings.<sup>17</sup>

Organised sport is recognised as being associated with many desirable outcomes in young people and its promotion is being actively encouraged. However it requires significant resources. The traditional role of parents in mainstream Australian society in organising sporting activities for their children is being taken on by a number of government and non-government bodies. For example, some Aboriginal communities have employed Aboriginal recreation officers with a concomitant decrease in rates of depression and antisocial behaviour. In other Aboriginal communities police have initiated and organised sporting activities, which has the additional benefit of improving relations between police and Aboriginal young people.<sup>18</sup>

## SUICIDAL BEHAVIOUR

The increasing rates of suicide and attempted suicide among young people since the mid 1980s is one of the most pressing social concerns of Aboriginal people in WA and other States and Territories.<sup>1</sup> The close-knit nature of Aboriginal communities and the extensive interconnection of families through traditional kinship systems mean that the death of a young person through suicide can impact on the lives of a considerable number of individuals. The traumatic circumstances often associated with suicide also significantly complicate the grieving process for the families and communities involved.<sup>19</sup>

Attempted suicide can also be highly distressing to communities. In more isolated communities suicide attempts are sometimes made in very public ways thus intensifying their emotional impact on other vulnerable individuals. Young people who are more impressionable or who, for various reasons, may identify with an individual who has recently completed or attempted suicide, may be at increased risk of 'copy-cat' or imitative suicidal behaviour.



## MEASURING SUICIDAL THOUGHTS AND SUICIDE ATTEMPTS

Suicidal thoughts and suicide attempts together represent the third indicator of social and emotional wellbeing reported in this chapter. They were selected to provide an outcome measure indicative of more seriously disturbed emotional and behavioural adjustment. Despite the sensitivity of asking young people about these behaviours, the advice from the community consultation process which preceded the questionnaire design for this survey was that it was essential that this information be collected – provided appropriate ethical and safety measures were put in place. This is consistent with the level of concern about the substantial increase in official rates of fatal and non-fatal suicidal behaviour that have occurred among Aboriginal young people over the past two decades.<sup>1</sup>

To enable comparison with findings from the general population, the youth component of the WAACHS used similar questions as were used in the child and adolescent component of the 1999 National Survey of Mental Health and Wellbeing.<sup>2</sup> This section of the youth questionnaire commenced with the introductory statement ‘sometimes, people feel really down and so depressed they feel they can’t cope anymore. Sometimes they might think about hurting themselves or even killing themselves.’ Respondents were then asked ‘during the past 12 months have you ever seriously thought about ending your own life?’, ‘In the past 12 months have you tried to end your own life?’ and ‘Have any of your friends tried this in the past 12 months?’

The risk management process to support the collection of such personally sensitive information included obtaining ethics approval of the questionnaire and survey process from both the Western Australian Aboriginal Health Information and Research Committee (WAAHIRC) and the King Edward Memorial Hospital and Princess Margaret Hospital for Children’s Ethics Committee. These approvals were conditional on all participants being informed in advance of the nature of the questions covered in the survey and that they were free not to answer any particular questions that they would prefer not to answer. All participating young people and their carers were separately provided with relevant information on how they could obtain assistance for any personal concerns or issues arising from their participation in the survey. This included telephone numbers of the WAACHS survey help-line and of psychiatric emergency and other services available to Aboriginal young people and their families.

Young people were also asked to place their completed questionnaires in a sealed confidentiality envelope to ensure that they were not seen by anyone other than the survey research team. All interviewers and the survey research staff signed confidentiality agreements binding them to the NHMRC and WA Department of Health requirements for the management of personally sensitive information. Finally, in the event of interviewers becoming aware of life-threatening emergency situations during the course of conducting carer or youth interviews, both interviewers and WAACHS survey office staff were provided training to assist in accessing immediate assistance.



## SUICIDAL THOUGHTS

An estimated 15.6 per cent (CI: 13.2%–18.2%) of young people had seriously thought about ending their own life in the 12 months prior to the survey. Significantly fewer males had had suicidal thoughts (11.9 per cent; CI: 9.3%–15.2%) compared with females (19.5 per cent; CI: 16.0%–23.5%) (Table 5.31).

The proportion of young people who had seriously thought about ending their own life tended to be lower in areas of high and extreme isolation, but these differences were not statistically significant (Table 5.32).

## SUICIDE ATTEMPTS

An estimated 6.5 per cent (CI: 5.1%–8.3%) of Aboriginal young people had tried to end their own life in the 12 months prior to the survey. This represented 39.2 per cent (CI: 31.2%–48.1%) of young people who had had suicidal thoughts (Table 5.33). The proportion of females who had attempted suicide (9.0 per cent; CI: 6.7%–11.9%) was significantly higher than the proportion of males (4.1 per cent; CI: 2.6%–6.3%). The proportion attempting suicide did not vary systematically with age (Table 5.34).

The proportion of young people who had attempted suicide was significantly lower in areas of extreme isolation (1.2 per cent; CI: 0.3%–3.1%). All other areas had similar proportions of young people attempting suicide (Table 5.35).

## SUICIDAL BEHAVIOURS AND EMOTIONAL OR BEHAVIOURAL DIFFICULTIES

In the 12 months prior to the survey, over one third (36.9 per cent; CI: 27.5%–47.8%) of young people at high risk of clinically significant emotional or behavioural difficulties had thought about ending their own life compared with 10.0 per cent (CI: 7.6%–12.9%) of those at low risk (Table 5.36). Approximately one in five (20.5 per cent; CI: 12.5%–31.9%) of young people at high risk of clinically significant emotional or behavioural difficulties had attempted to end their own life compared with 3.0 per cent (CI: 1.9%–4.5%) of young people at low risk (Table 5.37). These associations were seen in both males and females.

## SUICIDAL BEHAVIOURS AND SELF-ESTEEM

The proportion of young people who had suicidal thoughts was highest among those who had low self-esteem. One in four young people with low self-esteem had seriously thought about ending their own life (25.3 per cent; CI: 20.4%–30.8%) compared with one in twelve (8.5 per cent; CI: 4.4%–14.3%) young people with high self-esteem. This association was stronger in males than in females (Table 5.38).

## SUICIDAL THOUGHTS AND HEALTH RISK BEHAVIOURS

### Smoking

The proportion of young people who had suicidal thoughts in the 12 months prior to the survey was significantly lower in those who had never smoked cigarettes (10.5 per cent; CI: 7.8%–13.6%) than in those who had smoked regularly (24.9 per cent; CI: 20.6%–29.7%) (Table 5.39).



## Marijuana

The proportion of young people who had had suicidal thoughts in the 12 months prior to the survey was significantly lower in young people who had never used marijuana (12.1 per cent; CI: 9.5%–14.9%) than in young people who had used marijuana in the last year. The proportion having suicidal thoughts within the last year was 25.2 per cent (CI: 17.1%–35.0%), 32.4 per cent (CI: 19.9%–46.3%) and 28.8 per cent (CI: 16.2%–42.5%) of those using marijuana ‘less than monthly’, ‘about weekly’ and ‘daily’ respectively (Table 5.40).

## Alcohol

A lower proportion of young people who did not drink alcohol had had suicidal thoughts in the 12 months prior to the survey (12.5 per cent; CI: 10.1%–15.3%) compared with young people who had drunk to excess in the past six months (26.7 per cent; CI: 19.1%–35.1%). The proportion of young people who had suicidal thoughts in those who drank alcohol without drinking to excess was in between these two figures (21.4 per cent; CI: 14.1%–29.9%) (Table 5.41).

## SUICIDAL THOUGHTS AND SOCIAL INFLUENCES

### Family violence

The proportion of young people who had thought about ending their own life was significantly higher if they had been exposed to some form of family violence (22.4 per cent; CI: 18.6%–26.7%) than if they not been exposed to family violence (9.3 per cent; CI: 6.6%–12.9%). This association was found for both males and females (Table 5.42).

### Peer influences

One in three (34.7 per cent; 27.2%–42.6%) young people with a friend who had attempted suicide had had suicidal thoughts compared with 11.4 per cent (CI: 9.1%–13.9%) of those without such friends. This association was stronger in females than in males (Table 5.43) as was the association with attempted suicide (Table 5.44).

## MODELLING THE ASSOCIATION BETWEEN SUICIDAL THOUGHTS, RACISM, SELF-ESTEEM, FRIENDS WHO HAVE ATTEMPTED SUICIDE, EMOTIONAL OR BEHAVIOURAL DIFFICULTIES AND EXPOSURE TO FAMILY VIOLENCE

Being female, at high risk of clinically significant emotional or behavioural difficulties or being exposed to family violence, experiencing racism, and having low self-esteem or friends who have attempted suicide were all associated with suicidal thoughts. These variables are also associated with each other. Multivariate logistic regression analysis, adjusted for age and LORI, was used to investigate the independent effects of these variables on the likelihood of having suicidal thoughts. The model showed that all these risk factors were independently associated with suicidal thoughts. The likelihood of suicidal thoughts was increased if the young person was female (Odds Ratio 1.72; CI: 1.17–2.54), had experienced racism (Odds Ratio 2.19; CI: 1.40–3.42), had a friend who had attempted suicide (Odds Ratio 2.72; CI: 1.67–4.45), had been exposed to family violence (Odds Ratio 1.95; CI: 1.21–3.14), had low self-esteem (Odds Ratio 2.21; CI: 1.20–4.08) or was at high risk of clinically significant emotional or behavioural difficulties (Odds Ratio 3.80; CI: 2.28–6.32) (Table 5.45).





## PREVENTING SUICIDE AND REDUCING SELF-HARM

It is evident from the data presented in this chapter that there are many risk factors associated with suicidal behaviour. Given that many of these risk factors are inter-related and may be present very early in children's lives, it would seem that concerted action on several fronts is required to address these risk factors, and reduce the high rates of suicidal behaviour among Aboriginal young people.

Community and professional concern about suicidal behaviour among Aboriginal children and young people has led to a number of prevention initiatives being developed at national, state and local levels. In WA, as elsewhere in Australia, there has been a move toward more culturally appropriate responses to mental health care provision but there remains a considerable way to go. In 1998, the WA Youth Suicide Advisory Committee initiated a state-wide process of consultation that involved Aboriginal and non-Aboriginal service providers and community groups in developing a set of recommendations for action across governments to reduce Aboriginal suicide and self-harm.<sup>20</sup>

With State cabinet approval, an Aboriginal Suicide Prevention Steering Committee was established to oversee the implementation of the action plan during 2001 and 2002. This has been effective in addressing some of the obvious gaps in existing services and has improved the awareness and capacity of health professionals and communities to identify and manage suicidal crises and limit 'social contagion' of suicidal behaviour. However, there remains an ongoing need for reflection and consultation to improve the availability of culturally accessible emergency and longer-term treatment and support. At the same time, equivalent priority should be given to supporting community-based 'universal' prevention. Such interventions seek to build the health and resilience of all children by strengthening the capacity of families and communities to ensure their healthy growth and development.<sup>21</sup>

## FUTURE DIRECTIONS

The findings reviewed in this chapter support the validity and holistic nature of the *National Strategic Framework* definition of social and emotional wellbeing.<sup>22</sup> They show the complex inter-relationship between young people's emotional or behavioural wellbeing and family and community wellbeing from the point of view of the young person.

Good self-esteem is an important protective factor for emotional and behavioural wellbeing, as well as being associated with healthier lifestyle choices, such as not smoking. Fewer young people who were physically active and who participated in organised sport had low self-esteem and fewer of these young people were at high risk of clinically significant emotional or behavioural difficulties. Low self-esteem was also an important predictor of suicidal thoughts and suicide attempts.

The findings of this chapter suggest two possible ways of improving and maintaining levels of self-esteem in young people — parenting programmes aimed at reducing the incidence of poor parenting styles, and encouraging exercise and

*Continued . . .*



**FUTURE DIRECTIONS** *continued*

participation in organised sport. These may well be expected to have flow on effects on emotional and behavioural wellbeing as well as suicidal thoughts and suicidal attempts.

However, improving emotional and behavioural wellbeing and reducing the incidence of suicidal thoughts and suicide attempts also depends on the complex interplay between a range of family and community factors, including exposure to family violence, experience of racism and association with peers who have attempted suicide. Many of these risk factors are associated with chronic levels of stress that underpin Aboriginal disadvantage. Commonwealth and state initiatives to address the high levels of Aboriginal disadvantage, which have shown little improvement over the last decade, are important first steps to improving the wellbeing of Aboriginal young people.<sup>23</sup>

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## DETAILED TABLES

## SELF-ESTEEM

TABLE 5.1: YOUNG PEOPLE AGED 12–17 YEARS — SELF-ESTEEM QUARTILES, BY AGE AND SEX

Age (years)	Self-esteem quartiles	Number	95% CI	%	95% CI
Males					
12	Low – 1st quartile	170	(100 - 270)	17.4	(10.9 - 26.1)
	2nd quartile	170	(90 - 310)	17.9	(10.3 - 29.7)
	3rd quartile	280	(200 - 380)	28.5	(20.3 - 37.3)
	High – 4th quartile	350	(260 - 470)	36.2	(27.8 - 45.6)
	<b>Total</b>	<b>970</b>	<b>(800 - 1 160)</b>	<b>100.0</b>	
13	Low – 1st quartile	220	(120 - 350)	25.7	(14.4 - 38.4)
	2nd quartile	210	(130 - 330)	24.8	(15.0 - 37.4)
	3rd quartile	200	(100 - 400)	24.1	(11.1 - 39.3)
	High – 4th quartile	220	(130 - 320)	25.4	(15.8 - 37.1)
	<b>Total</b>	<b>850</b>	<b>(640 - 1 080)</b>	<b>100.0</b>	
14	Low – 1st quartile	160	(120 - 220)	20.9	(14.1 - 29.4)
	2nd quartile	140	(70 - 260)	18.4	(9.9 - 31.4)
	3rd quartile	220	(110 - 370)	28.2	(16.4 - 44.3)
	High – 4th quartile	250	(150 - 390)	32.5	(20.6 - 45.6)
	<b>Total</b>	<b>770</b>	<b>(590 - 990)</b>	<b>100.0</b>	
15	Low – 1st quartile	150	(80 - 260)	20.9	(12.3 - 33.5)
	2nd quartile	220	(120 - 340)	29.3	(18.1 - 42.7)
	3rd quartile	250	(160 - 370)	33.5	(21.8 - 45.4)
	High – 4th quartile	120	(70 - 200)	16.3	(8.7 - 25.6)
	<b>Total</b>	<b>740</b>	<b>(580 - 930)</b>	<b>100.0</b>	
16	Low – 1st quartile	160	(80 - 260)	22.4	(12.7 - 34.5)
	2nd quartile	170	(110 - 240)	23.3	(15.2 - 32.1)
	3rd quartile	180	(100 - 320)	25.9	(14.0 - 38.9)
	High – 4th quartile	200	(140 - 290)	28.5	(19.6 - 39.0)
	<b>Total</b>	<b>710</b>	<b>(560 - 890)</b>	<b>100.0</b>	
17	Low – 1st quartile	130	(80 - 190)	21.9	(13.7 - 32.8)
	2nd quartile	70	(20 - 230)	12.0	(2.8 - 33.6)
	3rd quartile	160	(90 - 290)	27.6	(15.6 - 42.6)
	High – 4th quartile	230	(160 - 330)	38.5	(26.1 - 51.8)
	<b>Total</b>	<b>600</b>	<b>(460 - 770)</b>	<b>100.0</b>	
<b>Total</b>	Low – 1st quartile	990	(820 - 1 210)	21.4	(17.6 - 25.5)
	2nd quartile	980	(780 - 1 200)	21.1	(17.2 - 25.8)
	3rd quartile	1 300	(1 060 - 1 570)	27.9	(23.1 - 32.8)
	High – 4th quartile	1 370	(1 170 - 1 580)	29.5	(25.6 - 33.9)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	

Continued....



**TABLE 5.1 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — SELF-ESTEEM QUARTILES, BY AGE AND SEX

Age (years)	Self-esteem quartiles	Number	95% CI	%	95% CI
Females					
12	Low – 1st quartile	140	(80 - 230)	20.4	(12.2 - 32.0)
	2nd quartile	130	(60 - 240)	18.1	(8.8 - 32.0)
	3rd quartile	190	(90 - 320)	26.8	(15.6 - 42.6)
	High – 4th quartile	240	(150 - 370)	34.7	(22.0 - 49.1)
	<b>Total</b>	<b>690</b>	<b>(520 - 890)</b>	<b>100.0</b>	
13	Low – 1st quartile	250	(150 - 360)	31.0	(20.8 - 42.9)
	2nd quartile	140	(80 - 210)	17.5	(11.2 - 26.6)
	3rd quartile	150	(80 - 270)	18.9	(9.7 - 30.9)
	High – 4th quartile	260	(170 - 380)	32.6	(22.5 - 44.6)
	<b>Total</b>	<b>800</b>	<b>(630 - 990)</b>	<b>100.0</b>	
14	Low – 1st quartile	300	(210 - 400)	36.0	(27.4 - 45.9)
	2nd quartile	200	(130 - 290)	24.8	(17.3 - 34.1)
	3rd quartile	180	(100 - 280)	21.3	(13.4 - 32.1)
	High – 4th quartile	150	(80 - 250)	17.8	(10.3 - 28.6)
	<b>Total</b>	<b>820</b>	<b>(670 - 1 000)</b>	<b>100.0</b>	
15	Low – 1st quartile	270	(170 - 390)	37.4	(25.4 - 52.3)
	2nd quartile	160	(70 - 310)	23.0	(11.1 - 39.3)
	3rd quartile	150	(80 - 250)	21.4	(11.9 - 33.7)
	High – 4th quartile	130	(70 - 220)	18.3	(9.9 - 30.0)
	<b>Total</b>	<b>710</b>	<b>(550 - 920)</b>	<b>100.0</b>	
16	Low – 1st quartile	190	(120 - 280)	26.5	(17.8 - 37.4)
	2nd quartile	270	(200 - 350)	37.5	(28.5 - 47.7)
	3rd quartile	160	(100 - 240)	22.9	(15.0 - 32.2)
	High – 4th quartile	90	(50 - 170)	13.1	(6.2 - 21.8)
	<b>Total</b>	<b>710</b>	<b>(580 - 870)</b>	<b>100.0</b>	
17	Low – 1st quartile	290	(190 - 410)	40.0	(29.9 - 51.7)
	2nd quartile	160	(100 - 250)	22.0	(13.4 - 32.1)
	3rd quartile	90	(60 - 140)	12.6	(8.0 - 18.6)
	High – 4th quartile	180	(110 - 300)	25.3	(15.3 - 36.1)
	<b>Total</b>	<b>730</b>	<b>(580 - 910)</b>	<b>100.0</b>	
<b>Total</b>	Low – 1st quartile	1 430	(1 220 - 1 650)	32.0	(28.0 - 36.5)
	2nd quartile	1 060	(870 - 1 270)	23.7	(19.8 - 28.0)
	3rd quartile	920	(740 - 1 120)	20.6	(16.8 - 24.6)
	High – 4th quartile	1 050	(870 - 1 260)	23.6	(19.8 - 28.0)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	

Continued....

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**TABLE 5.1 (continued): YOUNG PEOPLE AGED 12–17 YEARS — SELF-ESTEEM QUANTILES, BY AGE AND SEX**

Age (years)	Self-esteem quartiles	Number	95% CI	%	95% CI
<b>Total</b>					
12	Low – 1st quartile	310	(220 - 430)	18.7	(13.2 - 25.0)
	2nd quartile	300	(190 - 460)	18.0	(11.9 - 26.4)
	3rd quartile	460	(330 - 610)	27.8	(21.2 - 35.7)
	High – 4th quartile	590	(460 - 750)	35.6	(28.4 - 43.8)
	<b>Total</b>	<b>1 660</b>	<b>(1 430 - 1 910)</b>	<b>100.0</b>	
13	Low – 1st quartile	460	(330 - 640)	28.2	(20.7 - 36.8)
	2nd quartile	350	(240 - 480)	21.3	(15.2 - 28.8)
	3rd quartile	360	(220 - 560)	21.6	(14.0 - 31.9)
	High – 4th quartile	480	(350 - 620)	28.9	(21.9 - 37.1)
	<b>Total</b>	<b>1 650</b>	<b>(1 410 - 1 920)</b>	<b>100.0</b>	
14	Low – 1st quartile	460	(360 - 570)	28.7	(22.8 - 35.7)
	2nd quartile	350	(240 - 480)	21.7	(15.4 - 28.6)
	3rd quartile	390	(260 - 570)	24.7	(17.4 - 33.9)
	High – 4th quartile	400	(280 - 560)	24.9	(17.6 - 32.8)
	<b>Total</b>	<b>1 600</b>	<b>(1 360 - 1 840)</b>	<b>100.0</b>	
15	Low – 1st quartile	420	(300 - 570)	29.0	(21.0 - 37.9)
	2nd quartile	380	(230 - 560)	26.2	(17.7 - 36.7)
	3rd quartile	400	(280 - 550)	27.5	(20.0 - 36.2)
	High – 4th quartile	250	(170 - 360)	17.3	(11.8 - 24.7)
	<b>Total</b>	<b>1 450</b>	<b>(1 220 - 1 700)</b>	<b>100.0</b>	
16	Low – 1st quartile	350	(240 - 480)	24.4	(17.5 - 31.8)
	2nd quartile	430	(340 - 540)	30.4	(23.9 - 37.0)
	3rd quartile	350	(240 - 500)	24.4	(17.6 - 32.8)
	High – 4th quartile	300	(210 - 410)	20.8	(15.1 - 27.9)
	<b>Total</b>	<b>1 420</b>	<b>(1 220 - 1 650)</b>	<b>100.0</b>	
17	Low – 1st quartile	420	(310 - 550)	31.9	(24.5 - 39.9)
	2nd quartile	230	(140 - 370)	17.5	(10.3 - 26.1)
	3rd quartile	260	(170 - 370)	19.3	(12.9 - 26.7)
	High – 4th quartile	410	(300 - 550)	31.3	(23.8 - 39.5)
	<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	
<b>Total</b>	Low – 1st quartile	2 420	(2 160 - 2 700)	26.6	(23.7 - 29.7)
	2nd quartile	2 040	(1 770 - 2 320)	22.4	(19.5 - 25.5)
	3rd quartile	2 210	(1 940 - 2 510)	24.3	(21.3 - 27.5)
	High – 4th quartile	2 430	(2 170 - 2 700)	26.6	(23.9 - 29.7)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 5.2: YOUNG PEOPLE AGED 12–17 YEARS — SELF-ESTEEM QUANTILES, BY WHETHER SMOKED CIGARETTES REGULARLY AND SEX**

Whether smoked	Self-esteem quartiles	Number	95% CI	%	95% CI
<b>Males</b>					
No	Low – 1st quartile	620	(480 - 790)	19.4	(15.3 - 24.4)
	2nd quartile	630	(470 - 810)	19.5	(14.7 - 24.6)
	3rd quartile	950	(730 - 1 210)	29.5	(23.4 - 36.2)
	High – 4th quartile	1 020	(840 - 1 210)	31.6	(26.4 - 36.9)
	<b>Total</b>	<b>3 210</b>	<b>(2 910 - 3 540)</b>	<b>100.0</b>	
Yes	Low – 1st quartile	370	(250 - 520)	25.8	(18.8 - 34.8)
	2nd quartile	360	(230 - 520)	24.9	(17.2 - 34.3)
	3rd quartile	350	(250 - 470)	24.4	(17.8 - 31.6)
	High – 4th quartile	360	(260 - 480)	24.9	(18.5 - 32.2)
	<b>Total</b>	<b>1 430</b>	<b>(1 190 - 1 680)</b>	<b>100.0</b>	
<b>Total</b>	Low – 1st quartile	990	(820 - 1 210)	21.4	(17.6 - 25.5)
	2nd quartile	980	(780 - 1 200)	21.1	(17.2 - 25.8)
	3rd quartile	1 300	(1 060 - 1 570)	27.9	(23.1 - 32.8)
	High – 4th quartile	1 370	(1 170 - 1 580)	29.5	(25.6 - 33.9)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>					
No	Low – 1st quartile	760	(610 - 930)	28.4	(23.6 - 34.0)
	2nd quartile	620	(470 - 800)	23.3	(18.2 - 29.2)
	3rd quartile	590	(450 - 760)	22.2	(17.1 - 27.8)
	High – 4th quartile	700	(540 - 880)	26.1	(20.9 - 32.0)
	<b>Total</b>	<b>2 670</b>	<b>(2 380 - 2 960)</b>	<b>100.0</b>	
Yes	Low – 1st quartile	670	(520 - 850)	37.5	(30.7 - 45.2)
	2nd quartile	440	(330 - 570)	24.4	(18.5 - 31.0)
	3rd quartile	330	(210 - 470)	18.2	(12.7 - 25.3)
	High – 4th quartile	360	(250 - 480)	19.9	(14.7 - 26.2)
	<b>Total</b>	<b>1 790</b>	<b>(1 550 - 2 050)</b>	<b>100.0</b>	
<b>Total</b>	Low – 1st quartile	1 430	(1 220 - 1 650)	32.0	(28.0 - 36.5)
	2nd quartile	1 060	(870 - 1 270)	23.7	(19.8 - 28.0)
	3rd quartile	920	(740 - 1 120)	20.6	(16.8 - 24.6)
	High – 4th quartile	1 050	(870 - 1 260)	23.6	(19.8 - 28.0)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>					
No	Low – 1st quartile	1 380	(1 180 - 1 610)	23.5	(20.2 - 27.2)
	2nd quartile	1 250	(1 030 - 1 480)	21.2	(17.6 - 24.9)
	3rd quartile	1 540	(1 290 - 1 820)	26.2	(22.0 - 30.5)
	High – 4th quartile	1 710	(1 490 - 1 970)	29.1	(25.4 - 33.0)
	<b>Total</b>	<b>5 880</b>	<b>(5 570 - 6 180)</b>	<b>100.0</b>	
Yes	Low – 1st quartile	1 040	(840 - 1 250)	32.3	(27.1 - 37.8)
	2nd quartile	790	(620 - 980)	24.6	(19.6 - 29.9)
	3rd quartile	670	(520 - 840)	20.9	(16.8 - 25.8)
	High – 4th quartile	710	(570 - 870)	22.1	(18.1 - 26.6)
	<b>Total</b>	<b>3 220</b>	<b>(2 920 - 3 530)</b>	<b>100.0</b>	
<b>Total</b>	Low – 1st quartile	2 420	(2 160 - 2 700)	26.6	(23.7 - 29.7)
	2nd quartile	2 040	(1 770 - 2 320)	22.4	(19.5 - 25.5)
	3rd quartile	2 210	(1 940 - 2 510)	24.3	(21.3 - 27.5)
	High – 4th quartile	2 430	(2 170 - 2 700)	26.6	(23.9 - 29.7)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 5.3:** YOUNG PEOPLE AGED 12–17 YEARS — SELF-ESTEEM QUARTILES, BY WHETHER DID ANY STRENUOUS EXERCISE IN WEEK BEFORE SURVEY AND SEX

<i>Strenuous exercise</i>	<i>Self-esteem quartiles</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>					
No	Low – 1st quartile	230	(130 - 370)	24.9	(14.2 - 36.7)
	2nd quartile	220	(150 - 320)	24.1	(15.7 - 33.4)
	3rd quartile	200	(100 - 370)	22.2	(11.8 - 36.6)
	High – 4th quartile	270	(180 - 360)	28.9	(19.9 - 39.0)
	<b>Total</b>	<b>920</b>	<b>(730 - 1 140)</b>	<b>100.0</b>	
Yes	Low – 1st quartile	760	(610 - 940)	20.6	(16.7 - 25.0)
	2nd quartile	760	(570 - 970)	20.4	(15.8 - 25.7)
	3rd quartile	1 090	(880 - 1 340)	29.3	(24.1 - 35.1)
	High – 4th quartile	1 110	(920 - 1 310)	29.7	(25.2 - 34.8)
	<b>Total</b>	<b>3 720</b>	<b>(3 400 - 4 040)</b>	<b>100.0</b>	
<b>Total</b>	Low – 1st quartile	990	(820 - 1 210)	21.4	(17.6 - 25.5)
	2nd quartile	980	(780 - 1 200)	21.1	(17.2 - 25.8)
	3rd quartile	1 300	(1 060 - 1 570)	27.9	(23.1 - 32.8)
	High – 4th quartile	1 370	(1 170 - 1 580)	29.5	(25.6 - 33.9)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>					
No	Low – 1st quartile	640	(500 - 810)	40.2	(32.6 - 47.8)
	2nd quartile	360	(260 - 470)	22.4	(16.4 - 28.8)
	3rd quartile	320	(220 - 440)	20.2	(14.5 - 27.7)
	High – 4th quartile	270	(180 - 390)	17.2	(11.7 - 24.2)
	<b>Total</b>	<b>1 590</b>	<b>(1 370 - 1 820)</b>	<b>100.0</b>	
Yes	Low – 1st quartile	790	(630 - 970)	27.5	(22.6 - 33.0)
	2nd quartile	700	(540 - 890)	24.5	(19.5 - 30.4)
	3rd quartile	600	(450 - 780)	20.8	(16.1 - 26.3)
	High – 4th quartile	780	(620 - 970)	27.2	(21.8 - 32.9)
	<b>Total</b>	<b>2 870</b>	<b>(2 570 - 3 180)</b>	<b>100.0</b>	
<b>Total</b>	Low – 1st quartile	1 430	(1 220 - 1 650)	32.0	(28.0 - 36.5)
	2nd quartile	1 060	(870 - 1 270)	23.7	(19.8 - 28.0)
	3rd quartile	920	(740 - 1 120)	20.6	(16.8 - 24.6)
	High – 4th quartile	1 050	(870 - 1 260)	23.6	(19.8 - 28.0)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>					
No	Low – 1st quartile	870	(690 - 1 070)	34.6	(28.2 - 40.9)
	2nd quartile	580	(450 - 720)	23.0	(18.2 - 28.4)
	3rd quartile	530	(370 - 710)	21.0	(15.3 - 27.4)
	High – 4th quartile	540	(410 - 690)	21.5	(16.8 - 27.0)
	<b>Total</b>	<b>2 510</b>	<b>(2 240 - 2 800)</b>	<b>100.0</b>	
Yes	Low – 1st quartile	1 560	(1 340 - 1 780)	23.6	(20.5 - 27.0)
	2nd quartile	1 460	(1 230 - 1 730)	22.2	(18.7 - 26.0)
	3rd quartile	1 690	(1 440 - 1 950)	25.6	(22.0 - 29.5)
	High – 4th quartile	1 890	(1 650 - 2 150)	28.6	(25.0 - 32.3)
	<b>Total</b>	<b>6 590</b>	<b>(6 300 - 6 860)</b>	<b>100.0</b>	
<b>Total</b>	Low – 1st quartile	2 420	(2 160 - 2 700)	26.6	(23.7 - 29.7)
	2nd quartile	2 040	(1 770 - 2 320)	22.4	(19.5 - 25.5)
	3rd quartile	2 210	(1 940 - 2 510)	24.3	(21.3 - 27.5)
	High – 4th quartile	2 430	(2 170 - 2 700)	26.6	(23.9 - 29.7)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 5.4:** YOUNG PEOPLE AGED 12–17 YEARS — SELF-ESTEEM QUANTILES, BY WHETHER PARTICIPATED IN ORGANISED SPORT IN THE PAST 12 MONTHS AND SEX

Organised sport	Self-esteem quartiles	Number	95% CI	%	95% CI
<b>Males</b>					
No	Low – 1st quartile	390	(270 - 560)	29.4	(21.2 - 38.8)
	2nd quartile	270	(180 - 400)	20.4	(13.6 - 28.5)
	3rd quartile	390	(280 - 530)	29.2	(21.9 - 37.8)
	High – 4th quartile	280	(210 - 360)	21.0	(15.7 - 27.4)
	<b>Total</b>	<b>1 340</b>	<b>(1 130 - 1 560)</b>	<b>100.0</b>	
Yes	Low – 1st quartile	580	(450 - 730)	17.8	(13.9 - 22.4)
	2nd quartile	690	(520 - 880)	21.2	(16.5 - 26.9)
	3rd quartile	900	(680 - 1 150)	27.8	(22.0 - 34.5)
	High – 4th quartile	1 080	(890 - 1 290)	33.3	(27.9 - 38.6)
	<b>Total</b>	<b>3 240</b>	<b>(2 930 - 3 570)</b>	<b>100.0</b>	
Not stated	Low – 1st quartile	20	(10 - 60)	38.0	(5.3 - 85.3)
	2nd quartile	20	(0 - 140)	33.7	(0.8 - 90.6)
	3rd quartile	10	(0 - 90)	8.0	(0.0 - 84.2)
	High – 4th quartile	10	(0 - 40)	20.4	(0.4 - 64.1)
	<b>Total</b>	<b>70</b>	<b>(20 - 160)</b>	<b>100.0</b>	
<b>Total</b>	Low – 1st quartile	990	(820 - 1 210)	21.4	(17.6 - 25.5)
	2nd quartile	980	(780 - 1 200)	21.1	(17.2 - 25.8)
	3rd quartile	1 300	(1 060 - 1 570)	27.9	(23.1 - 32.8)
	High – 4th quartile	1 370	(1 170 - 1 580)	29.5	(25.6 - 33.9)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>					
No	Low – 1st quartile	740	(580 - 930)	38.6	(31.3 - 45.8)
	2nd quartile	440	(330 - 570)	23.0	(17.5 - 29.1)
	3rd quartile	370	(260 - 510)	19.4	(14.1 - 26.3)
	High – 4th quartile	360	(260 - 480)	18.9	(14.2 - 24.9)
	<b>Total</b>	<b>1 920</b>	<b>(1 680 - 2 170)</b>	<b>100.0</b>	
Yes	Low – 1st quartile	680	(540 - 840)	27.2	(21.7 - 33.0)
	2nd quartile	590	(450 - 770)	23.8	(18.4 - 30.2)
	3rd quartile	530	(390 - 690)	21.2	(15.9 - 27.4)
	High – 4th quartile	690	(530 - 880)	27.8	(22.0 - 34.4)
	<b>Total</b>	<b>2 490</b>	<b>(2 220 - 2 770)</b>	<b>100.0</b>	
Not stated	Low – 1st quartile	10	(0 - 50)	21.9	(0.4 - 64.1)
	2nd quartile	20	(10 - 60)	45.8	(13.7 - 78.8)
	3rd quartile	20	(10 - 40)	32.3	(10.9 - 69.2)
	High – 4th quartile	0	(0 - 60)	0.0	(0.0 - 60.2)
	<b>Total</b>	<b>50</b>	<b>(30 - 90)</b>	<b>100.0</b>	
<b>Total</b>	Low – 1st quartile	1 430	(1 220 - 1 650)	32.0	(28.0 - 36.5)
	2nd quartile	1 060	(870 - 1 270)	23.7	(19.8 - 28.0)
	3rd quartile	920	(740 - 1 120)	20.6	(16.8 - 24.6)
	High – 4th quartile	1 050	(870 - 1 260)	23.6	(19.8 - 28.0)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	

Continued . . .

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**TABLE 5.4 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — SELF-ESTEEM QUANTILES, BY WHETHER PARTICIPATED IN ORGANISED SPORT IN THE PAST 12 MONTHS AND SEX

Organised sport	Self-esteem quartiles	Number	95% CI	%	95% CI
<b>Total</b>					
No	Low – 1st quartile	1 130	(920 - 1 360)	34.8	(29.5 - 40.8)
	2nd quartile	710	(570 - 900)	22.0	(17.5 - 27.0)
	3rd quartile	760	(610 - 960)	23.5	(18.9 - 28.5)
	High – 4th quartile	640	(520 - 780)	19.7	(16.1 - 24.0)
	<b>Total</b>	<b>3 250</b>	<b>(2 960 - 3 560)</b>	<b>100.0</b>	
Yes	Low – 1st quartile	1 250	(1 060 - 1 470)	21.9	(18.6 - 25.6)
	2nd quartile	1 280	(1 060 - 1 530)	22.3	(18.7 - 26.4)
	3rd quartile	1 430	(1 180 - 1 710)	24.9	(20.8 - 29.4)
	High – 4th quartile	1 770	(1 530 - 2 030)	30.9	(27.0 - 35.1)
	<b>Total</b>	<b>5 730</b>	<b>(5 430 - 6 030)</b>	<b>100.0</b>	
Not stated	Low – 1st quartile	40	(10 - 80)	30.7	(8.4 - 58.1)
	2nd quartile	50	(10 - 120)	39.1	(13.7 - 78.8)
	3rd quartile	20	(0 - 70)	19.0	(1.9 - 45.4)
	High – 4th quartile	10	(0 - 40)	11.2	(1.7 - 40.5)
	<b>Total</b>	<b>120</b>	<b>(70 - 210)</b>	<b>100.0</b>	
<b>Total</b>	Low – 1st quartile	2 420	(2 160 - 2 700)	26.6	(23.7 - 29.7)
	2nd quartile	2 040	(1 770 - 2 320)	22.4	(19.5 - 25.5)
	3rd quartile	2 210	(1 940 - 2 510)	24.3	(21.3 - 27.5)
	High – 4th quartile	2 430	(2 170 - 2 700)	26.6	(23.9 - 29.7)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	





**TABLE 5.5: YOUNG PEOPLE AGED 12–17 YEARS — SELF-ESTEEM QUANTILES, BY WHETHER BEEN TREATED BADLY BECAUSE THEY WERE ABORIGINAL AND SEX**

<i>Treated badly</i>	<i>Self-esteem quartiles</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>					
No	Low – 1st quartile	660	(510 - 840)	18.8	(14.7 - 23.4)
	2nd quartile	660	(500 - 850)	18.9	(14.5 - 23.8)
	3rd quartile	1 020	(800 - 1 270)	29.2	(23.8 - 35.3)
	High – 4th quartile	1 160	(970 - 1 360)	33.1	(28.3 - 38.1)
	<b>Total</b>	<b>3 500</b>	<b>(3 170 - 3 820)</b>	<b>100.0</b>	
Yes	Low – 1st quartile	340	(230 - 470)	29.4	(20.4 - 38.9)
	2nd quartile	320	(210 - 480)	28.0	(19.0 - 39.0)
	3rd quartile	270	(170 - 420)	24.0	(15.4 - 34.1)
	High – 4th quartile	210	(140 - 320)	18.7	(12.0 - 27.2)
	<b>Total</b>	<b>1 140</b>	<b>(940 - 1 380)</b>	<b>100.0</b>	
<b>Total</b>	Low – 1st quartile	990	(820 - 1 210)	21.4	(17.6 - 25.5)
	2nd quartile	980	(780 - 1 200)	21.1	(17.2 - 25.8)
	3rd quartile	1 300	(1 060 - 1 570)	27.9	(23.1 - 32.8)
	High – 4th quartile	1 370	(1 170 - 1 580)	29.5	(25.6 - 33.9)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>					
No	Low – 1st quartile	1 150	(960 - 1 350)	31.5	(27.1 - 36.2)
	2nd quartile	860	(690 - 1 050)	23.5	(19.2 - 28.2)
	3rd quartile	760	(600 - 940)	20.8	(16.5 - 25.4)
	High – 4th quartile	880	(720 - 1 090)	24.3	(19.8 - 29.0)
	<b>Total</b>	<b>3 640</b>	<b>(3 340 - 3 970)</b>	<b>100.0</b>	
Yes	Low – 1st quartile	280	(180 - 410)	34.6	(23.9 - 46.9)
	2nd quartile	200	(130 - 310)	24.8	(15.6 - 35.8)
	3rd quartile	160	(90 - 280)	19.7	(11.1 - 31.8)
	High – 4th quartile	170	(100 - 260)	20.8	(12.6 - 30.4)
	<b>Total</b>	<b>820</b>	<b>(650 - 1 010)</b>	<b>100.0</b>	
<b>Total</b>	Low – 1st quartile	1 430	(1 220 - 1 650)	32.0	(28.0 - 36.5)
	2nd quartile	1 060	(870 - 1 270)	23.7	(19.8 - 28.0)
	3rd quartile	920	(740 - 1 120)	20.6	(16.8 - 24.6)
	High – 4th quartile	1 050	(870 - 1 260)	23.6	(19.8 - 28.0)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>					
No	Low – 1st quartile	1 810	(1 570 - 2 050)	25.3	(22.2 - 28.7)
	2nd quartile	1 520	(1 280 - 1 770)	21.2	(18.0 - 24.6)
	3rd quartile	1 780	(1 520 - 2 060)	24.9	(21.4 - 28.5)
	High – 4th quartile	2 040	(1 800 - 2 300)	28.6	(25.4 - 32.1)
	<b>Total</b>	<b>7 140</b>	<b>(6 870 - 7 410)</b>	<b>100.0</b>	
Yes	Low – 1st quartile	620	(470 - 800)	31.6	(24.8 - 39.3)
	2nd quartile	520	(380 - 700)	26.7	(19.8 - 33.8)
	3rd quartile	430	(300 - 600)	22.2	(16.0 - 29.8)
	High – 4th quartile	380	(280 - 520)	19.6	(14.4 - 25.5)
	<b>Total</b>	<b>1 960</b>	<b>(1 690 - 2 240)</b>	<b>100.0</b>	
<b>Total</b>	Low – 1st quartile	2 420	(2 160 - 2 700)	26.6	(23.7 - 29.7)
	2nd quartile	2 040	(1 770 - 2 320)	22.4	(19.5 - 25.5)
	3rd quartile	2 210	(1 940 - 2 510)	24.3	(21.3 - 27.5)
	High – 4th quartile	2 430	(2 170 - 2 700)	26.6	(23.9 - 29.7)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 5.6:** YOUNG PEOPLE AGED 12–17 YEARS — SELF-ESTEEM QUARTILES, BY WHETHER EXPOSED TO FAMILY VIOLENCE AND SEX

<i>Exposed to family violence</i>	<i>Self-esteem quartiles</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>					
No	Low - 1st quartile	540	(390 - 700)	21.4	(16.3 - 27.6)
	2nd quartile	490	(340 - 660)	19.5	(14.1 - 25.4)
	3rd quartile	750	(550 - 970)	29.8	(23.2 - 37.5)
	High - 4th quartile	740	(580 - 910)	29.3	(23.9 - 35.4)
	<b>Total</b>	<b>2 510</b>	<b>(2 200 - 2 820)</b>	<b>100.0</b>	
Yes	Low - 1st quartile	460	(340 - 600)	21.4	(16.0 - 27.5)
	2nd quartile	490	(340 - 670)	23.1	(16.8 - 30.4)
	3rd quartile	550	(400 - 730)	25.7	(19.5 - 32.6)
	High - 4th quartile	640	(500 - 800)	29.8	(23.9 - 36.2)
	<b>Total</b>	<b>2 130</b>	<b>(1 870 - 2 430)</b>	<b>100.0</b>	
<b>Total</b>	Low - 1st quartile	990	(820 - 1 210)	21.4	(17.6 - 25.5)
	2nd quartile	980	(780 - 1 200)	21.1	(17.2 - 25.8)
	3rd quartile	1 300	(1 060 - 1 570)	27.9	(23.1 - 32.8)
	High - 4th quartile	1 370	(1 170 - 1 580)	29.5	(25.6 - 33.9)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>					
No	Low - 1st quartile	600	(470 - 760)	27.1	(21.8 - 33.2)
	2nd quartile	530	(400 - 690)	24.1	(18.5 - 30.3)
	3rd quartile	400	(280 - 530)	18.0	(13.2 - 23.6)
	High - 4th quartile	680	(530 - 850)	30.9	(24.7 - 37.3)
	<b>Total</b>	<b>2 210</b>	<b>(1 940 - 2 480)</b>	<b>100.0</b>	
Yes	Low - 1st quartile	830	(660 - 1 030)	36.9	(30.4 - 44.0)
	2nd quartile	530	(400 - 680)	23.4	(18.2 - 29.3)
	3rd quartile	520	(390 - 700)	23.2	(17.8 - 29.5)
	High - 4th quartile	370	(270 - 510)	16.5	(12.1 - 22.3)
	<b>Total</b>	<b>2 250</b>	<b>(1 980 - 2 550)</b>	<b>100.0</b>	
<b>Total</b>	Low - 1st quartile	1 430	(1 220 - 1 650)	32.0	(28.0 - 36.5)
	2nd quartile	1 060	(870 - 1 270)	23.7	(19.8 - 28.0)
	3rd quartile	920	(740 - 1 120)	20.6	(16.8 - 24.6)
	High - 4th quartile	1 050	(870 - 1 260)	23.6	(19.8 - 28.0)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>					
No	Low - 1st quartile	1 130	(940 - 1 350)	24.1	(20.3 - 28.3)
	2nd quartile	1 020	(830 - 1 240)	21.6	(17.7 - 25.8)
	3rd quartile	1 140	(910 - 1 390)	24.3	(19.7 - 29.0)
	High - 4th quartile	1 420	(1 210 - 1 650)	30.1	(26.0 - 34.4)
	<b>Total</b>	<b>4 710</b>	<b>(4 380 - 5 060)</b>	<b>100.0</b>	
Yes	Low - 1st quartile	1 290	(1 090 - 1 520)	29.4	(24.9 - 34.1)
	2nd quartile	1 020	(830 - 1 250)	23.2	(19.1 - 27.6)
	3rd quartile	1 070	(870 - 1 290)	24.4	(20.3 - 28.8)
	High - 4th quartile	1 010	(830 - 1 210)	23.0	(19.2 - 27.3)
	<b>Total</b>	<b>4 390</b>	<b>(4 040 - 4 730)</b>	<b>100.0</b>	
<b>Total</b>	Low - 1st quartile	2 420	(2 160 - 2 700)	26.6	(23.7 - 29.7)
	2nd quartile	2 040	(1 770 - 2 320)	22.4	(19.5 - 25.5)
	3rd quartile	2 210	(1 940 - 2 510)	24.3	(21.3 - 27.5)
	High - 4th quartile	2 430	(2 170 - 2 700)	26.6	(23.9 - 29.7)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 5.7:** YOUNG PEOPLE AGED 12–17 YEARS — LIKELIHOOD OF HAVING LOW SELF-ESTEEM, ASSOCIATED WITH SEX, AGE, PHYSICAL EXERCISE AND WHETHER EXPOSED TO RACISM AND FAMILY VIOLENCE

Has low self-esteem			
Parameter	Significance (p value)	Odds Ratio	95% CI
Sex			
Male		1.00	
Female	0.034	1.73	(1.04 - 2.85)
Age group			
12–14 years		1.00	
15–16 years	0.801	0.96	(0.67 - 1.36)
17 years	0.382	1.27	(0.75 - 2.15)
Treated badly			
Not experienced racism		1.00	
Males experiencing racism	0.010	1.94	(1.18 - 3.20)
Females experiencing racism	0.580	0.86	(0.50 - 1.48)
Been in family violence situation?			
Not exposed to family violence		1.00	
Males exposed to family violence	0.740	0.92	(0.57 - 1.49)
Females exposed to family violence	0.036	1.66	(1.04 - 2.65)
Sport or strenuous exercise			
No organised sport or strenuous exercise	0.006	2.00	(1.22 - 3.28)
Organised sport only	0.240	1.38	(0.81 - 2.35)
Strenuous exercise only	0.034	1.65	(1.04 - 2.62)
Organised sport and strenuous exercise		1.00	
Data not available	0.659	1.40	(0.32 - 6.12)

## EMOTIONAL OR BEHAVIOURAL DIFFICULTIES

**TABLE 5.8:** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY SEX

Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>Males</b>				
Low	3 220	(2 900 - 3 550)	69.4	(64.5 - 74.0)
Moderate	1 000	(820 - 1 190)	21.4	(17.7 - 25.5)
High	430	(290 - 610)	9.2	(6.2 - 13.1)
<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>				
Low	2 980	(2 690 - 3 290)	66.8	(62.1 - 71.1)
Moderate	900	(730 - 1 100)	20.1	(16.4 - 24.2)
High	580	(460 - 730)	13.1	(10.3 - 16.1)
<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>				
Low	6 200	(5 900 - 6 500)	68.1	(64.8 - 71.4)
Moderate	1 890	(1 650 - 2 140)	20.8	(18.1 - 23.5)
High	1 010	(820 - 1 220)	11.1	(9.0 - 13.4)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 5.9: YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE**

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>12 years</b>				
Low	1 110	(910 - 1 320)	66.7	(59.1 - 74.0)
Moderate	390	(280 - 530)	23.5	(17.2 - 30.7)
High	160	(100 - 250)	9.7	(6.3 - 14.6)
<b>Total</b>	<b>1 660</b>	<b>(1 430 - 1 910)</b>	<b>100.0</b>	
<b>13 years</b>				
Low	1 140	(930 - 1 400)	69.3	(60.8 - 77.2)
Moderate	340	(230 - 490)	20.7	(14.2 - 28.8)
High	170	(90 - 280)	10.0	(5.6 - 16.2)
<b>Total</b>	<b>1 650</b>	<b>(1 410 - 1 920)</b>	<b>100.0</b>	
<b>14 years</b>				
Low	1 090	(890 - 1 320)	68.1	(60.4 - 75.2)
Moderate	310	(230 - 420)	19.5	(14.1 - 25.6)
High	200	(120 - 300)	12.4	(7.7 - 18.4)
<b>Total</b>	<b>1 600</b>	<b>(1 360 - 1 840)</b>	<b>100.0</b>	
<b>15 years</b>				
Low	930	(740 - 1 150)	64.3	(54.9 - 72.7)
Moderate	340	(230 - 480)	23.7	(16.7 - 32.2)
High	170	(100 - 290)	12.0	(6.5 - 18.8)
<b>Total</b>	<b>1 450</b>	<b>(1 220 - 1 700)</b>	<b>100.0</b>	
<b>16 years</b>				
Low	1 040	(870 - 1 240)	73.6	(66.0 - 80.7)
Moderate	190	(140 - 260)	13.4	(9.5 - 17.9)
High	180	(90 - 310)	13.0	(7.3 - 21.8)
<b>Total</b>	<b>1 420</b>	<b>(1 220 - 1 650)</b>	<b>100.0</b>	
<b>17 years</b>				
Low	880	(700 - 1 090)	66.7	(58.6 - 74.1)
Moderate	310	(230 - 420)	23.8	(17.4 - 30.9)
High	130	(80 - 200)	9.5	(5.8 - 14.8)
<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	
<b>Total</b>				
Low	6 200	(5 900 - 6 500)	68.1	(64.8 - 71.4)
Moderate	1 890	(1 650 - 2 140)	20.8	(18.1 - 23.5)
High	1 010	(820 - 1 220)	11.1	(9.0 - 13.4)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 5.10:** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY LEVEL OF RELATIVE ISOLATION (LORI)

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>LORI — None</b>				
Low	2 100	(1 910 - 2 300)	66.5	(60.3 - 72.1)
Moderate	730	(580 - 910)	23.2	(18.2 - 28.7)
High	330	(230 - 450)	10.4	(7.3 - 14.3)
<b>Total</b>	<b>3 160</b>	<b>(3 070 - 3 250)</b>	<b>100.0</b>	
<b>LORI — Low</b>				
Low	1 580	(1 390 - 1 790)	69.4	(62.9 - 75.4)
Moderate	390	(290 - 510)	17.3	(13.0 - 22.1)
High	310	(200 - 450)	13.4	(8.5 - 19.1)
<b>Total</b>	<b>2 280</b>	<b>(2 080 - 2 510)</b>	<b>100.0</b>	
<b>LORI — Moderate</b>				
Low	1 200	(950 - 1 490)	65.9	(58.4 - 73.2)
Moderate	360	(260 - 500)	19.8	(14.5 - 25.8)
High	260	(190 - 360)	14.3	(10.7 - 18.7)
<b>Total</b>	<b>1 820</b>	<b>(1 520 - 2 180)</b>	<b>100.0</b>	
<b>LORI — High</b>				
Low	640	(430 - 880)	68.8	(56.9 - 79.5)
Moderate	230	(130 - 390)	24.7	(15.3 - 37.9)
High	60	(30 - 120)	6.5	(3.4 - 11.8)
<b>Total</b>	<b>930</b>	<b>(670 - 1 250)</b>	<b>100.0</b>	
<b>LORI — Extreme</b>				
Low	670	(450 - 940)	74.6	(62.4 - 84.0)
Moderate	170	(110 - 250)	19.3	(13.2 - 26.7)
High	50	(0 - 210)	6.0	(0.1 - 21.9)
<b>Total</b>	<b>900</b>	<b>(630 - 1 210)</b>	<b>100.0</b>	
<b>Western Australia</b>				
Low	6 200	(5 900 - 6 500)	68.1	(64.8 - 71.4)
Moderate	1 890	(1 650 - 2 140)	20.8	(18.1 - 23.5)
High	1 010	(820 - 1 220)	11.1	(9.0 - 13.4)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

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**TABLE 5.11: YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY ATSI REGION**

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Perth ATSI region</b>				
Low	2 180	(1 990 - 2 380)	65.5	(59.3 - 71.0)
Moderate	770	(620 - 960)	23.2	(18.4 - 28.8)
High	380	(270 - 510)	11.3	(8.1 - 15.1)
<b>Total</b>	<b>3 330</b>	<b>(3 280 - 3 380)</b>	<b>100.0</b>	
<b>Narrogin ATSI region</b>				
Low	900	(750 - 1 060)	69.2	(62.0 - 75.8)
Moderate	250	(190 - 330)	19.2	(14.3 - 24.8)
High	150	(80 - 250)	11.6	(6.6 - 19.0)
<b>Total</b>	<b>1 300</b>	<b>(1 140 - 1 480)</b>	<b>100.0</b>	
<b>Kalgoorlie ATSI region</b>				
Low	290	(170 - 480)	74.0	(50.9 - 91.3)
Moderate	50	(10 - 140)	11.6	(2.8 - 33.6)
High	60	10 - 170)	14.4	(1.5 - 36.4)
<b>Total</b>	<b>390</b>	<b>(230 - 610)</b>	<b>100.0</b>	
<b>Geraldton ATSI region</b>				
Low	610	(450 - 800)	73.4	(61.9 - 83.3)
Moderate	140	(90 - 200)	16.6	(11.1 - 23.6)
High	80	(30 - 180)	10.0	(3.1 - 20.7)
<b>Total</b>	<b>830</b>	<b>(640 - 1 040)</b>	<b>100.0</b>	
<b>Broome ATSI region</b>				
Low	370	(240 - 560)	71.7	(55.9 - 83.0)
Moderate	90	(30 - 210)	17.8	(7.5 - 37.5)
High	50	(30 - 90)	10.5	(6.0 - 16.7)
<b>Total</b>	<b>520</b>	<b>(330 - 750)</b>	<b>100.0</b>	
<b>South Hedland ATSI region</b>				
Low	510	(340 - 720)	58.9	(46.6 - 69.6)
Moderate	230	(140 - 370)	26.9	(17.4 - 37.3)
High	120	(70 - 200)	14.1	(8.3 - 21.2)
<b>Total</b>	<b>870</b>	<b>(620 - 1 170)</b>	<b>100.0</b>	
<b>Derby ATSI region</b>				
Low	450	(260 - 700)	71.9	(54.1 - 84.6)
Moderate	120	(50 - 240)	18.7	(7.5 - 33.5)
High	60	(30 - 110)	9.4	(4.7 - 16.8)
<b>Total</b>	<b>630</b>	<b>(400 - 920)</b>	<b>100.0</b>	
<b>Kununurra ATSI region</b>				
Low	420	(230 - 690)	73.6	(55.4 - 88.1)
Moderate	60	(20 - 120)	10.7	(4.2 - 19.8)
High	90	(20 - 220)	15.7	(4.5 - 36.1)
<b>Total</b>	<b>570</b>	<b>(340 - 890)</b>	<b>100.0</b>	
<b>Warburton ATSI region</b>				
Low	470	(310 - 670)	70.2	(62.3 - 76.9)
Moderate	180	(120 - 250)	27.2	(21.2 - 34.0)
High	20	(10 - 40)	2.6	(0.9 - 5.5)
<b>Total</b>	<b>660</b>	<b>(460 - 910)</b>	<b>100.0</b>	
<b>Western Australia</b>				
Low	6 200	(5 900 - 6 500)	68.1	(64.8 - 71.4)
Moderate	1 890	(1 650 - 2 140)	20.8	(18.1 - 23.5)
High	1 010	(820 - 1 220)	11.1	(9.0 - 13.4)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 5.12:** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY QUARTILES OF SELF ESTEEM AND SEX

Self-esteem quartiles	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>Males</b>					
Low - 1st quartile	Low	540	(380 - 720)	54.2	(43.8 - 63.8)
	Moderate	350	(270 - 450)	35.2	(26.8 - 44.4)
	High	110	(60 - 190)	10.6	(5.2 - 17.7)
	<b>Total</b>	<b>990</b>	<b>(820 - 1 210)</b>	<b>100.0</b>	
2nd quartile	Low	660	(500 - 860)	67.4	(54.9 - 77.9)
	Moderate	230	(140 - 350)	23.5	(15.1 - 35.0)
	High	90	(30 - 200)	9.1	(3.0 - 19.6)
	<b>Total</b>	<b>980</b>	<b>(780 - 1 200)</b>	<b>100.0</b>	
3rd quartile	Low	980	(770 - 1 230)	75.8	(66.6 - 84.3)
	Moderate	160	(90 - 250)	12.2	(7.2 - 19.8)
	High	160	(70 - 270)	12.0	(5.8 - 20.6)
	<b>Total</b>	<b>1 300</b>	<b>(1 060 - 1 570)</b>	<b>100.0</b>	
High - 4th quartile	Low	1 040	(860 - 1 230)	75.8	(67.6 - 82.3)
	Moderate	260	(170 - 370)	18.8	(12.6 - 25.9)
	High	70	(30 - 160)	5.5	(1.9 - 10.7)
	<b>Total</b>	<b>1 370</b>	<b>(1 170 - 1 580)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 220	(2 900 - 3 550)	69.4	(64.5 - 74.0)
	Moderate	1 000	(820 - 1 190)	21.4	(17.7 - 25.5)
	High	430	(290 - 610)	9.2	(6.2 - 13.1)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>					
Low - 1st quartile	Low	850	(690 - 1 040)	59.5	(51.3 - 67.5)
	Moderate	300	(200 - 420)	21.0	(14.5 - 28.4)
	High	280	(200 - 380)	19.5	(13.9 - 25.8)
	<b>Total</b>	<b>1 430</b>	<b>(1 220 - 1 650)</b>	<b>100.0</b>	
2nd quartile	Low	660	(510 - 840)	62.3	(53.5 - 70.9)
	Moderate	250	(180 - 340)	23.2	(16.2 - 30.7)
	High	150	(90 - 240)	14.5	(9.0 - 21.3)
	<b>Total</b>	<b>1 060</b>	<b>(870 - 1 270)</b>	<b>100.0</b>	
3rd quartile	Low	710	(570 - 880)	77.7	(64.2 - 87.3)
	Moderate	130	(60 - 280)	14.3	(6.1 - 27.8)
	High	70	(30 - 170)	8.1	(3.2 - 17.5)
	<b>Total</b>	<b>920</b>	<b>(740 - 1 120)</b>	<b>100.0</b>	
High - 4th quartile	Low	760	(590 - 960)	71.7	(63.4 - 78.6)
	Moderate	220	(160 - 290)	20.9	(15.0 - 27.6)
	High	80	(40 - 140)	7.4	(3.6 - 13.2)
	<b>Total</b>	<b>1 050</b>	<b>(870 - 1 260)</b>	<b>100.0</b>	
<b>Total</b>	Low	2 980	(2 690 - 3 290)	66.8	(62.1 - 71.1)
	Moderate	900	(730 - 1 100)	20.1	(16.4 - 24.2)
	High	580	(460 - 730)	13.1	(10.3 - 16.1)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	

Continued . . .



**TABLE 5.12 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY QUANTILES OF SELF ESTEEM AND SEX

Self-esteem quartiles	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>Total</b>					
Low - 1st quartile	Low	1 390	(1 170 - 1 640)	57.3	(50.8 - 63.4)
	Moderate	650	(520 - 800)	26.8	(21.9 - 32.5)
	High	380	(290 - 510)	15.8	(12.0 - 20.7)
	<b>Total</b>	<b>2 420</b>	<b>(2 160 - 2 700)</b>	<b>100.0</b>	
2nd quartile	Low	1 320	(1 100 - 1 570)	64.7	(57.5 - 71.5)
	Moderate	480	(350 - 610)	23.3	(17.8 - 29.8)
	High	240	(150 - 360)	11.9	(7.6 - 17.4)
	<b>Total</b>	<b>2 040</b>	<b>(1 770 - 2 320)</b>	<b>100.0</b>	
3rd quartile	Low	1 700	(1 450 - 1 970)	76.6	(69.3 - 83.2)
	Moderate	290	(170 - 440)	13.0	(8.2 - 19.5)
	High	230	(130 - 370)	10.4	(6.1 - 16.3)
	<b>Total</b>	<b>2 210</b>	<b>(1 940 - 2 510)</b>	<b>100.0</b>	
High - 4th quartile	Low	1 790	(1 560 - 2 040)	74.0	(68.7 - 79.1)
	Moderate	480	(370 - 610)	19.7	(15.3 - 24.6)
	High	150	(90 - 250)	6.3	(3.8 - 10.1)
	<b>Total</b>	<b>2 430</b>	<b>(2 170 - 2 700)</b>	<b>100.0</b>	
<b>Total</b>	Low	6 200	(5 900 - 6 500)	68.1	(64.8 - 71.4)
	Moderate	1 890	(1 650 - 2 140)	20.8	(18.1 - 23.5)
	High	1 010	(820 - 1 220)	11.1	(9.0 - 13.4)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	





**TABLE 5.13:** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL SYMPTOMS, BY AGE AND SEX

Age (years)	Risk of clinically significant emotional symptoms	Number	95% CI	%	95% CI
Male					
12	Low	800	(650 - 980)	82.9	(73.9 - 89.1)
	Moderate	100	(50 - 170)	10.0	(5.1 - 16.4)
	High	70	(20 - 140)	7.1	(2.5 - 14.1)
	<b>Total</b>	<b>970</b>	<b>(800 - 1 160)</b>	<b>100.0</b>	
13	Low	700	(530 - 920)	82.4	(66.5 - 92.5)
	Moderate	70	(30 - 160)	8.5	(3.5 - 19.0)
	High	80	(10 - 230)	9.1	(0.9 - 24.3)
	<b>Total</b>	<b>850</b>	<b>(640 - 1 080)</b>	<b>100.0</b>	
14	Low	720	(530 - 920)	92.5	(87.8 - 95.7)
	Moderate	20	(10 - 50)	2.9	(1.1 - 6.5)
	High	40	(20 - 60)	4.6	(2.2 - 8.1)
	<b>Total</b>	<b>770</b>	<b>(590 - 990)</b>	<b>100.0</b>	
15	Low	680	(530 - 870)	92.3	(82.1 - 97.9)
	Moderate	20	(0 - 60)	2.7	(0.3 - 8.1)
	High	40	(0 - 120)	5.0	(0.6 - 15.5)
	<b>Total</b>	<b>740</b>	<b>(580 - 930)</b>	<b>100.0</b>	
16	Low	590	(460 - 740)	82.5	(68.0 - 91.2)
	Moderate	70	(20 - 180)	10.0	(2.8 - 23.7)
	High	50	(20 - 130)	7.5	(2.6 - 17.6)
	<b>Total</b>	<b>710</b>	<b>(560 - 890)</b>	<b>100.0</b>	
17	Low	500	(370 - 670)	83.8	(76.2 - 90.1)
	Moderate	80	(50 - 120)	13.6	(7.8 - 20.7)
	High	20	(10 - 30)	2.6	(1.0 - 5.1)
	<b>Total</b>	<b>600</b>	<b>(460 - 770)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 990	(3 670 - 4 320)	86.0	(82.1 - 89.5)
	Moderate	360	(260 - 500)	7.8	(5.6 - 10.7)
	High	290	(180 - 460)	6.2	(3.8 - 9.7)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	

Continued...



**TABLE 5.13 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL SYMPTOMS, BY AGE AND SEX

Age (years)	Risk of clinically significant emotional symptoms	Number	95% CI	%	95% CI
Female					
12	Low	540	(390 - 740)	78.4	(65.3 - 87.7)
	Moderate	70	(30 - 160)	10.6	(4.0 - 21.9)
	High	80	(50 - 120)	11.0	(6.4 - 17.7)
	<b>Total</b>	<b>690</b>	<b>(520 - 890)</b>	<b>100.0</b>	
13	Low	570	(430 - 730)	71.6	(57.8 - 82.7)
	Moderate	90	(30 - 210)	11.5	(3.6 - 23.6)
	High	130	(70 - 240)	16.9	(9.3 - 28.4)
	<b>Total</b>	<b>800</b>	<b>(630 - 990)</b>	<b>100.0</b>	
14	Low	560	(440 - 720)	68.3	(58.1 - 77.6)
	Moderate	150	(100 - 210)	17.9	(12.0 - 25.8)
	High	110	(50 - 210)	13.8	(6.5 - 24.7)
	<b>Total</b>	<b>820</b>	<b>(670 - 1 000)</b>	<b>100.0</b>	
15	Low	500	(360 - 670)	69.8	(54.9 - 81.3)
	Moderate	100	(40 - 190)	13.8	(6.3 - 25.8)
	High	120	(50 - 240)	16.3	(7.8 - 31.4)
	<b>Total</b>	<b>710</b>	<b>(550 - 920)</b>	<b>100.0</b>	
16	Low	490	(380 - 610)	68.7	(58.8 - 78.3)
	Moderate	140	(90 - 200)	19.5	(13.0 - 27.3)
	High	80	(40 - 180)	11.8	(5.0 - 23.3)
	<b>Total</b>	<b>710</b>	<b>(580 - 870)</b>	<b>100.0</b>	
17	Low	480	(350 - 620)	65.5	(53.5 - 75.3)
	Moderate	100	(50 - 180)	14.1	(7.3 - 23.8)
	High	150	(90 - 230)	20.5	(12.4 - 30.8)
	<b>Total</b>	<b>730</b>	<b>(580 - 910)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 130	(2 840 - 3 450)	70.3	(65.5 - 74.7)
	Moderate	650	(510 - 820)	14.6	(11.6 - 18.2)
	High	670	(520 - 850)	15.1	(11.8 - 18.8)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	

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**TABLE 5.13 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL SYMPTOMS, BY AGE AND SEX

Age (years)	Risk of clinically significant emotional symptoms	Number	95% CI	%	95% CI
<b>Total</b>					
12	Low	1 350	(1 130 - 1 590)	81.0	(74.1 - 86.7)
	Moderate	170	(100 - 270)	10.2	(6.0 - 16.1)
	High	150	(90 - 220)	8.8	(5.5 - 13.5)
	<b>Total</b>	<b>1 660</b>	<b>(1 430 - 1 910)</b>	<b>100.0</b>	
13	Low	1 270	(1 050 - 1 500)	77.2	(67.1 - 84.9)
	Moderate	160	(80 - 290)	10.0	(4.8 - 17.1)
	High	210	(100 - 360)	12.9	(7.1 - 22.1)
	<b>Total</b>	<b>1 650</b>	<b>(1 410 - 1 920)</b>	<b>100.0</b>	
14	Low	1 280	(1 060 - 1 510)	80.0	(73.6 - 85.6)
	Moderate	170	(120 - 240)	10.6	(7.2 - 14.7)
	High	150	(80 - 250)	9.3	(5.3 - 15.5)
	<b>Total</b>	<b>1 600</b>	<b>(1 360 - 1 840)</b>	<b>100.0</b>	
15	Low	1 180	(980 - 1 420)	81.3	(72.1 - 88.0)
	Moderate	120	(60 - 220)	8.1	(3.9 - 14.3)
	High	150	(80 - 290)	10.6	(5.3 - 19.1)
	<b>Total</b>	<b>1 450</b>	<b>(1 220 - 1 700)</b>	<b>100.0</b>	
16	Low	1 070	(900 - 1 260)	75.6	(68.1 - 82.6)
	Moderate	210	(130 - 310)	14.7	(9.4 - 21.4)
	High	140	(70 - 250)	9.6	(5.2 - 16.6)
	<b>Total</b>	<b>1 420</b>	<b>(1 220 - 1 650)</b>	<b>100.0</b>	
17	Low	970	(800 - 1 190)	73.7	(66.4 - 80.5)
	Moderate	180	(120 - 270)	13.9	(9.0 - 19.5)
	High	160	(100 - 250)	12.4	(7.8 - 18.6)
	<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	
<b>Total</b>	Low	7 120	(6 840 - 7 390)	78.3	(75.2 - 81.1)
	Moderate	1 020	(840 - 1 210)	11.2	(9.2 - 13.3)
	High	960	(780 - 1 180)	10.6	(8.5 - 13.0)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

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**TABLE 5.14: YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL SYMPTOMS, BY WHETHER TREATED BADLY BECAUSE ABORIGINAL AND BY SEX**

<i>Treated badly</i>	<i>Risk of clinically significant emotional symptoms</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>					
No	Low	2 990	(2 690 - 3 320)	85.6	(80.9 - 89.5)
	Moderate	280	(200 - 380)	8.1	(5.9 - 11.2)
	High	220	(110 - 360)	6.3	(3.6 - 10.6)
	<b>Total</b>	<b>3 500</b>	<b>(3 170 - 3 820)</b>	<b>100.0</b>	
Yes	Low	1 000	(810 - 1 220)	87.2	(77.7 - 93.7)
	Moderate	80	(30 - 200)	6.9	(2.5 - 16.6)
	High	70	(20 - 140)	5.9	(1.8 - 12.4)
	<b>Total</b>	<b>1 140</b>	<b>(940 - 1 380)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 990	(3 670 - 4 320)	86.0	(82.1 - 89.5)
	Moderate	360	(260 - 500)	7.8	(5.6 - 10.7)
	High	290	(180 - 460)	6.2	(3.8 - 9.7)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>					
No	Low	2 690	(2 400 - 2 990)	73.7	(68.7 - 78.3)
	Moderate	490	(370 - 620)	13.3	(10.2 - 17.0)
	High	470	(340 - 620)	13.0	(9.7 - 17.0)
	<b>Total</b>	<b>3 640</b>	<b>(3 340 - 3 970)</b>	<b>100.0</b>	
Yes	Low	450	(330 - 590)	55.0	(42.7 - 66.5)
	Moderate	170	(80 - 280)	20.3	(11.3 - 32.2)
	High	200	(120 - 310)	24.7	(15.1 - 35.0)
	<b>Total</b>	<b>820</b>	<b>(650 - 1 010)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 130	(2 840 - 3 450)	70.3	(65.5 - 74.7)
	Moderate	650	(510 - 820)	14.6	(11.6 - 18.2)
	High	670	(520 - 850)	15.1	(11.8 - 18.8)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>					
No	Low	5 680	(5 350 - 6 010)	79.5	(76.1 - 82.5)
	Moderate	770	(630 - 930)	10.8	(8.8 - 13.1)
	High	690	(530 - 880)	9.7	(7.4 - 12.4)
	<b>Total</b>	<b>7 140</b>	<b>(6 870 - 7 410)</b>	<b>100.0</b>	
Yes	Low	1 440	(1 230 - 1 690)	73.8	(65.8 - 80.7)
	Moderate	240	(150 - 390)	12.5	(7.6 - 19.2)
	High	270	(180 - 400)	13.7	(8.9 - 19.2)
	<b>Total</b>	<b>1 960</b>	<b>(1 690 - 2 240)</b>	<b>100.0</b>	
<b>Total</b>	Low	7 120	(6 840 - 7 390)	78.3	(75.2 - 81.1)
	Moderate	1 020	(840 - 1 210)	11.2	(9.2 - 13.3)
	High	960	(780 - 1 180)	10.6	(8.5 - 13.0)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 5.15: YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL SYMPTOMS, BY PARENTING STYLE**

<i>Adequacy of parenting style</i>	<i>Risk of clinically significant emotional symptoms</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>					
Poor	Low	420	(310 - 550)	87.4	(75.9 - 94.8)
	Moderate	40	(20 - 80)	8.8	(3.5 - 16.6)
	High	20	(0 - 80)	3.8	(0.1 - 16.7)
	<b>Total</b>	<b>480</b>	<b>(360 - 620)</b>	<b>100.0</b>	
Sub-optimal	Low	1 840	(1 600 - 2 100)	84.7	(78.0 - 90.5)
	Moderate	200	(120 - 310)	9.2	(5.5 - 14.4)
	High	130	(50 - 300)	6.1	(2.4 - 13.4)
	<b>Total</b>	<b>2 180</b>	<b>(1 910 - 2 450)</b>	<b>100.0</b>	
Adequate	Low	1 730	(1 460 - 2 020)	87.0	(81.9 - 91.0)
	Moderate	120	(70 - 190)	6.1	(3.6 - 9.8)
	High	140	(80 - 220)	6.9	(4.1 - 11.2)
	<b>Total</b>	<b>1 990</b>	<b>(1 720 - 2 290)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 990	(3 670 - 4 320)	86.0	(82.1 - 89.5)
	Moderate	360	(260 - 500)	7.8	(5.6 - 10.7)
	High	290	(180 - 460)	6.2	(3.8 - 9.7)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>					
Poor	Low	330	(230 - 460)	60.4	(46.0 - 73.5)
	Moderate	70	(30 - 120)	12.4	(6.3 - 22.3)
	High	150	(80 - 230)	27.2	(16.7 - 40.9)
	<b>Total</b>	<b>540</b>	<b>(410 - 690)</b>	<b>100.0</b>	
Sub-optimal	Low	1 370	(1 170 - 1 580)	74.6	(67.8 - 80.6)
	Moderate	210	(130 - 310)	11.5	(7.5 - 16.5)
	High	260	(170 - 370)	14.0	(9.5 - 19.9)
	<b>Total</b>	<b>1 830</b>	<b>(1 610 - 2 070)</b>	<b>100.0</b>	
Adequate	Low	1 440	(1 210 - 1 690)	69.1	(61.5 - 75.8)
	Moderate	370	(270 - 520)	18.0	(12.8 - 23.9)
	High	270	(170 - 400)	13.0	(8.3 - 19.0)
	<b>Total</b>	<b>2 090</b>	<b>(1 820 - 2 370)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 130	(2 840 - 3 450)	70.3	(65.5 - 74.7)
	Moderate	650	(510 - 820)	14.6	(11.6 - 18.2)
	High	670	(520 - 850)	15.1	(11.8 - 18.8)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>					
Poor	Low	750	(590 - 920)	73.1	(63.4 - 80.8)
	Moderate	110	(60 - 170)	10.7	(6.3 - 16.5)
	High	170	(90 - 260)	16.2	(9.4 - 24.0)
	<b>Total</b>	<b>1 020</b>	<b>(850 - 1 220)</b>	<b>100.0</b>	
Sub-optimal	Low	3 210	(2 920 - 3 500)	80.1	(75.4 - 84.3)
	Moderate	410	(300 - 560)	10.2	(7.3 - 13.7)
	High	390	(260 - 570)	9.7	(6.6 - 13.7)
	<b>Total</b>	<b>4 010</b>	<b>(3 710 - 4 310)</b>	<b>100.0</b>	
Adequate	Low	3 170	(2 860 - 3 490)	77.8	(72.8 - 82.1)
	Moderate	500	(370 - 650)	12.2	(9.3 - 15.8)
	High	410	(280 - 560)	10.0	(7.0 - 13.5)
	<b>Total</b>	<b>4 070</b>	<b>(3 760 - 4 400)</b>	<b>100.0</b>	
<b>Total</b>	Low	7 120	(6 840 - 7 390)	78.3	(75.2 - 81.1)
	Moderate	1 020	(840 - 1 210)	11.2	(9.2 - 13.3)
	High	960	(780 - 1 180)	10.6	(8.5 - 13.0)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

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**TABLE 5.16: YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT CONDUCT PROBLEMS, BY AGE AND SEX**

Age (years)	Risk of clinically significant conduct problems	Number	95% CI	%	95% CI
Males					
12	Low	540	(420 - 680)	55.7	(45.7 - 65.9)
	Moderate	190	(100 - 310)	19.4	(11.7 - 30.1)
	High	240	(160 - 360)	24.9	(16.7 - 34.9)
	<b>Total</b>	<b>970</b>	<b>(800 - 1 160)</b>	<b>100.0</b>	
13	Low	490	(340 - 700)	57.9	(44.1 - 71.9)
	Moderate	180	(110 - 270)	21.3	(12.7 - 31.5)
	High	180	(80 - 330)	20.8	(9.6 - 34.6)
	<b>Total</b>	<b>850</b>	<b>(640 - 1 080)</b>	<b>100.0</b>	
14	Low	430	(290 - 610)	55.4	(41.5 - 68.3)
	Moderate	130	(80 - 200)	17.1	(10.2 - 26.4)
	High	210	(120 - 350)	27.5	(15.6 - 41.0)
	<b>Total</b>	<b>770</b>	<b>(590 - 990)</b>	<b>100.0</b>	
15	Low	440	(320 - 600)	60.1	(47.2 - 72.4)
	Moderate	100	(50 - 170)	13.6	(6.9 - 22.7)
	High	200	(100 - 320)	26.4	(15.8 - 40.3)
	<b>Total</b>	<b>740</b>	<b>(580 - 930)</b>	<b>100.0</b>	
16	Low	440	(310 - 590)	61.1	(49.0 - 72.8)
	Moderate	100	(50 - 170)	13.5	(6.4 - 22.6)
	High	180	(110 - 270)	25.5	(16.4 - 36.8)
	<b>Total</b>	<b>710</b>	<b>(560 - 890)</b>	<b>100.0</b>	
17	Low	340	(220 - 500)	57.6	(44.9 - 70.9)
	Moderate	100	(60 - 160)	17.0	(10.0 - 26.8)
	High	150	(100 - 220)	25.4	(16.6 - 37.2)
	<b>Total</b>	<b>600</b>	<b>(460 - 770)</b>	<b>100.0</b>	
<b>Total</b>	Low	2 680	(2 390 - 3 000)	57.8	(52.7 - 62.8)
	Moderate	800	(650 - 970)	17.2	(14.0 - 20.7)
	High	1 160	(950 - 1 400)	25.0	(20.6 - 29.7)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	

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**TABLE 5.16 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT CONDUCT PROBLEMS, BY AGE AND SEX

Age (years)	Risk of clinically significant conduct problems	Number	95% CI	%	95% CI
Females					
12	Low	410	(270 - 590)	58.9	(46.4 - 71.5)
	Moderate	130	(70 - 210)	18.7	(9.8 - 29.6)
	High	160	(90 - 240)	22.4	(13.8 - 33.8)
	<b>Total</b>	<b>690</b>	<b>(520 - 890)</b>	<b>100.0</b>	
13	Low	550	(410 - 720)	69.5	(58.8 - 79.5)
	Moderate	100	(50 - 190)	12.3	(5.8 - 22.1)
	High	150	(90 - 240)	18.2	(10.2 - 27.4)
	<b>Total</b>	<b>800</b>	<b>(630 - 990)</b>	<b>100.0</b>	
14	Low	510	(390 - 670)	62.5	(51.5 - 72.6)
	Moderate	100	(60 - 150)	12.1	(7.3 - 18.9)
	High	210	(140 - 310)	25.5	(17.1 - 35.0)
	<b>Total</b>	<b>820</b>	<b>(670 - 1 000)</b>	<b>100.0</b>	
15	Low	480	(340 - 660)	67.1	(54.4 - 79.4)
	Moderate	80	(30 - 170)	11.2	(4.2 - 22.6)
	High	150	(90 - 260)	21.7	(12.3 - 33.5)
	<b>Total</b>	<b>710</b>	<b>(550 - 920)</b>	<b>100.0</b>	
16	Low	510	(400 - 640)	72.4	(61.8 - 81.5)
	Moderate	110	(70 - 160)	15.8	(10.2 - 22.5)
	High	80	(40 - 180)	11.7	(5.0 - 23.3)
	<b>Total</b>	<b>710</b>	<b>(580 - 870)</b>	<b>100.0</b>	
17	Low	490	(360 - 640)	66.8	(56.3 - 76.0)
	Moderate	100	(50 - 160)	13.2	(7.6 - 21.6)
	High	150	(90 - 230)	20.0	(12.4 - 28.6)
	<b>Total</b>	<b>730</b>	<b>(580 - 910)</b>	<b>100.0</b>	
<b>Total</b>	Low	2 950	(2 670 - 3 250)	66.2	(62.0 - 70.2)
	Moderate	610	(490 - 760)	13.8	(11.1 - 16.8)
	High	890	(740 - 1 080)	20.0	(16.5 - 23.7)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	

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**TABLE 5.16 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT CONDUCT PROBLEMS, BY AGE AND SEX

Age (years)	Risk of clinically significant conduct problems	Number	95% CI	%	95% CI
<b>Total</b>					
12	Low	950	(760 - 1 150)	57.0	(48.8 - 64.4)
	Moderate	320	(210 - 450)	19.1	(13.3 - 26.4)
	High	400	(280 - 530)	23.9	(17.6 - 31.0)
	<b>Total</b>	<b>1 660</b>	<b>(1 430 - 1 910)</b>	<b>100.0</b>	
13	Low	1 050	(840 - 1 280)	63.5	(54.8 - 72.1)
	Moderate	280	(190 - 390)	17.0	(11.5 - 23.4)
	High	320	(200 - 470)	19.5	(12.5 - 27.7)
	<b>Total</b>	<b>1 650</b>	<b>(1 410 - 1 920)</b>	<b>100.0</b>	
14	Low	940	(760 - 1 150)	59.0	(50.8 - 67.2)
	Moderate	230	(160 - 320)	14.5	(10.1 - 19.6)
	High	420	(300 - 580)	26.5	(19.3 - 34.5)
	<b>Total</b>	<b>1 600</b>	<b>(1 360 - 1 840)</b>	<b>100.0</b>	
15	Low	920	(730 - 1 140)	63.5	(53.9 - 71.7)
	Moderate	180	(110 - 290)	12.4	(7.5 - 19.3)
	High	350	(240 - 500)	24.1	(16.5 - 32.3)
	<b>Total</b>	<b>1 450</b>	<b>(1 220 - 1 700)</b>	<b>100.0</b>	
16	Low	950	(780 - 1 140)	66.7	(58.3 - 73.9)
	Moderate	210	(140 - 290)	14.6	(10.1 - 19.8)
	High	260	(170 - 380)	18.6	(12.5 - 25.6)
	<b>Total</b>	<b>1 420</b>	<b>(1 220 - 1 650)</b>	<b>100.0</b>	
17	Low	830	(650 - 1 040)	62.6	(54.6 - 70.2)
	Moderate	200	(130 - 270)	14.9	(10.2 - 20.7)
	High	300	(220 - 390)	22.4	(16.8 - 29.3)
	<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	
<b>Total</b>	Low	5 630	(5 330 - 5 930)	61.9	(58.6 - 65.2)
	Moderate	1 410	(1 230 - 1 620)	15.5	(13.5 - 17.8)
	High	2 050	(1 800 - 2 330)	22.6	(19.8 - 25.6)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	





**TABLE 5.17:** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT CONDUCT PROBLEMS, BY ADEQUACY OF PARENTING STYLE

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Poor parenting style</b>				
Low	400	(280 - 550)	39.5	(29.7 - 50.1)
Moderate	210	(140 - 300)	20.2	(13.5 - 28.3)
High	410	(300 - 550)	40.3	(30.9 - 50.8)
<b>Total</b>	<b>1 020</b>	<b>(850 - 1 220)</b>	<b>100.0</b>	
<b>Sub-optimal parenting style</b>				
Low	2 250	(1 990 - 2 520)	56.1	(51.1 - 61.1)
Moderate	730	(580 - 880)	18.1	(14.7 - 21.9)
High	1 030	(840 - 1 250)	25.8	(21.3 - 30.4)
<b>Total</b>	<b>4 010</b>	<b>(3 710 - 4 310)</b>	<b>100.0</b>	
<b>Adequate parenting style</b>				
Low	2 980	(2 690 - 3 300)	73.2	(68.2 - 77.9)
Moderate	480	(360 - 630)	11.8	(8.9 - 15.3)
High	610	(460 - 790)	14.9	(11.4 - 19.1)
<b>Total</b>	<b>4 070</b>	<b>(3 760 - 4 400)</b>	<b>100.0</b>	
<b>Total</b>				
Low	5 630	(5 330 - 5 930)	61.9	(58.6 - 65.2)
Moderate	1 410	(1 230 - 1 620)	15.5	(13.5 - 17.8)
High	2 050	(1 800 - 2 330)	22.6	(19.8 - 25.6)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 5.18: YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT HYPERACTIVITY, BY AGE AND SEX**

Age (years)	Risk of clinically significant hyperactivity	Number	95% CI	%	95% CI
Males					
12	Low	670	(530 - 830)	68.6	(58.2 - 77.4)
	Moderate	130	(70 - 210)	13.0	(7.1 - 20.4)
	High	180	(100 - 290)	18.4	(10.6 - 27.5)
	<b>Total</b>	<b>970</b>	<b>(800 - 1 160)</b>	<b>100.0</b>	
13	Low	570	(400 - 790)	67.0	(54.7 - 79.1)
	Moderate	130	(60 - 230)	14.9	(7.1 - 26.6)
	High	150	(90 - 250)	18.1	(10.3 - 28.6)
	<b>Total</b>	<b>850</b>	<b>(640 - 1 080)</b>	<b>100.0</b>	
14	Low	580	(420 - 760)	74.8	(62.7 - 85.5)
	Moderate	70	(20 - 160)	9.1	(2.3 - 19.6)
	High	130	(60 - 220)	16.1	(8.4 - 27.1)
	<b>Total</b>	<b>770</b>	<b>(590 - 990)</b>	<b>100.0</b>	
15	Low	490	(370 - 630)	66.2	(50.9 - 78.0)
	Moderate	60	(10 - 190)	7.9	(1.8 - 23.1)
	High	190	(100 - 320)	25.9	(14.0 - 38.9)
	<b>Total</b>	<b>740</b>	<b>(580 - 930)</b>	<b>100.0</b>	
16	Low	540	(430 - 680)	76.3	(61.5 - 89.2)
	Moderate	80	(40 - 140)	11.2	(5.4 - 19.3)
	High	90	(20 - 270)	12.4	(2.7 - 32.4)
	<b>Total</b>	<b>710</b>	<b>(560 - 890)</b>	<b>100.0</b>	
17	Low	480	(350 - 650)	80.2	(70.6 - 87.8)
	Moderate	70	(30 - 120)	11.8	(5.9 - 20.8)
	High	50	(30 - 80)	8.1	(4.4 - 13.4)
	<b>Total</b>	<b>600</b>	<b>(460 - 770)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 320	(3 020 - 3 630)	71.6	(66.6 - 76.1)
	Moderate	530	(390 - 700)	11.5	(8.6 - 15.0)
	High	790	(600 - 1 010)	16.9	(12.9 - 21.3)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	

Continued....



**TABLE 5.18 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT HYPERACTIVITY, BY AGE AND SEX

Age (years)	Risk of clinically significant hyperactivity	Number	95% CI	%	95% CI
<b>Females</b>					
12	Low	540	(390 - 740)	78.8	(67.3 - 87.1)
	Moderate	50	(20 - 90)	6.9	(3.1 - 13.4)
	High	100	(60 - 160)	14.3	(8.5 - 22.4)
	<b>Total</b>	<b>690</b>	<b>(520 - 890)</b>	<b>100.0</b>	
13	Low	590	(450 - 760)	74.4	(63.8 - 82.9)
	Moderate	100	(40 - 180)	12.8	(5.9 - 22.4)
	High	100	(60 - 170)	12.8	(7.3 - 20.8)
	<b>Total</b>	<b>800</b>	<b>(630 - 990)</b>	<b>100.0</b>	
14	Low	600	(460 - 760)	72.6	(63.2 - 81.1)
	Moderate	100	(60 - 160)	11.6	(6.2 - 18.6)
	High	130	(80 - 210)	15.8	(9.4 - 24.7)
	<b>Total</b>	<b>820</b>	<b>(670 - 1 000)</b>	<b>100.0</b>	
15	Low	480	(330 - 650)	67.2	(54.0 - 79.7)
	Moderate	110	(60 - 200)	15.4	(7.9 - 27.3)
	High	120	(60 - 230)	17.4	(7.9 - 29.3)
	<b>Total</b>	<b>710</b>	<b>(550 - 920)</b>	<b>100.0</b>	
16	Low	550	(430 - 700)	77.9	(69.3 - 84.6)
	Moderate	80	(50 - 130)	11.6	(6.3 - 18.1)
	High	70	(40 - 110)	10.6	(6.7 - 16.4)
	<b>Total</b>	<b>710</b>	<b>(580 - 870)</b>	<b>100.0</b>	
17	Low	610	(480 - 780)	84.6	(75.6 - 92.1)
	Moderate	60	(30 - 110)	8.0	(3.8 - 14.8)
	High	50	(20 - 140)	7.5	(2.7 - 17.8)
	<b>Total</b>	<b>730</b>	<b>(580 - 910)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 380	(3 080 - 3 700)	75.8	(71.9 - 79.3)
	Moderate	490	(380 - 620)	11.1	(8.5 - 13.9)
	High	580	(460 - 730)	13.1	(10.5 - 16.3)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	

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**TABLE 5.18 (continued): YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT HYPERACTIVITY, BY AGE AND SEX**

Age (years)	Risk of clinically significant hyperactivity	Number	95% CI	%	95% CI
<b>Total</b>					
12	Low	1 210	(1 010 - 1 440)	72.8	(65.3 - 79.5)
	Moderate	170	(110 - 260)	10.5	(6.8 - 15.6)
	High	280	(190 - 400)	16.7	(11.5 - 22.9)
	<b>Total</b>	<b>1 660</b>	<b>(1 430 - 1 910)</b>	<b>100.0</b>	
13	Low	1 160	(940 - 1 410)	70.6	(62.4 - 77.8)
	Moderate	230	(140 - 360)	13.9	(8.4 - 20.8)
	High	260	(170 - 360)	15.5	(10.5 - 21.6)
	<b>Total</b>	<b>1 650</b>	<b>(1 410 - 1 920)</b>	<b>100.0</b>	
14	Low	1 180	(970 - 1 400)	73.7	(66.0 - 80.1)
	Moderate	170	(100 - 270)	10.4	(5.7 - 16.1)
	High	260	(170 - 360)	16.0	(10.8 - 22.4)
	<b>Total</b>	<b>1 600</b>	<b>(1 360 - 1 840)</b>	<b>100.0</b>	
15	Low	970	(790 - 1 170)	66.6	(57.1 - 75.3)
	Moderate	170	(90 - 300)	11.6	(6.0 - 19.1)
	High	320	(200 - 470)	21.7	(14.0 - 30.8)
	<b>Total</b>	<b>1 450</b>	<b>(1 220 - 1 700)</b>	<b>100.0</b>	
16	Low	1 090	(920 - 1 280)	77.1	(68.5 - 84.3)
	Moderate	160	(100 - 240)	11.4	(7.4 - 16.8)
	High	160	(80 - 310)	11.5	(5.2 - 20.0)
	<b>Total</b>	<b>1 420</b>	<b>(1 220 - 1 650)</b>	<b>100.0</b>	
17	Low	1 090	(900 - 1 310)	82.6	(75.9 - 87.7)
	Moderate	130	(80 - 190)	9.7	(5.8 - 14.5)
	High	100	(50 - 170)	7.7	(4.2 - 12.8)
	<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	
<b>Total</b>	Low	6 710	(6 430 - 6 970)	73.7	(70.6 - 76.6)
	Moderate	1 030	(850 - 1 220)	11.3	(9.3 - 13.4)
	High	1 370	(1 140 - 1 610)	15.0	(12.6 - 17.7)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 5.19:** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT HYPERACTIVITY, BY ADEQUACY OF PARENTING STYLE

<i>Risk of clinically significant hyperactivity</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Poor parenting style</b>				
Low	690	(540 - 860)	67.4	(57.4 - 75.6)
Moderate	100	(50 - 190)	10.1	(4.9 - 17.6)
High	230	(160 - 330)	22.5	(15.2 - 31.1)
<b>Total</b>	<b>1 020</b>	<b>(850 - 1 220)</b>	<b>100.0</b>	
<b>Sub-optimal parenting style</b>				
Low	2 710	(2 450 - 3 000)	67.7	(62.5 - 72.4)
Moderate	600	(460 - 760)	14.9	(11.7 - 18.8)
High	700	(530 - 900)	17.4	(13.3 - 21.8)
<b>Total</b>	<b>4 010</b>	<b>(3 710 - 4 310)</b>	<b>100.0</b>	
<b>Adequate parenting style</b>				
Low	3 300	(3 000 - 3 610)	81.1	(76.9 - 84.7)
Moderate	330	(230 - 460)	8.0	(5.5 - 11.1)
High	440	(320 - 590)	10.9	(7.9 - 14.2)
<b>Total</b>	<b>4 070</b>	<b>(3 760 - 4 400)</b>	<b>100.0</b>	
<b>Total</b>				
Low	6 710	(6 430 - 6 970)	73.7	(70.6 - 76.6)
Moderate	1 030	(850 - 1 220)	11.3	(9.3 - 13.4)
High	1 370	(1 140 - 1 610)	15.0	(12.6 - 17.7)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

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**TABLE 5.20:** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT PEER PROBLEMS, BY AGE AND SEX

Age (years)	Risk of clinically significant peer problems	Number	95% CI	%	95% CI
Males					
12	Low	830	(670 - 1 010)	85.6	(78.2 - 91.8)
	Moderate	120	(70 - 180)	12.0	(7.5 - 18.5)
	High	20	(0 - 110)	2.4	(0.1 - 10.9)
	<b>Total</b>	<b>970</b>	<b>(800 - 1 160)</b>	<b>100.0</b>	
13	Low	630	(450 - 860)	74.1	(60.3 - 83.9)
	Moderate	160	(80 - 280)	18.9	(9.9 - 31.4)
	High	60	(20 - 120)	7.1	(2.5 - 13.9)
	<b>Total</b>	<b>850</b>	<b>(640 - 1 080)</b>	<b>100.0</b>	
14	Low	600	(440 - 820)	78.0	(67.9 - 86.6)
	Moderate	120	(70 - 210)	16.1	(8.9 - 26.2)
	High	50	(30 - 70)	5.9	(3.3 - 9.8)
	<b>Total</b>	<b>770</b>	<b>(590 - 990)</b>	<b>100.0</b>	
15	Low	600	(450 - 770)	81.1	(70.3 - 89.7)
	Moderate	120	(60 - 220)	16.2	(7.8 - 26.9)
	High	20	(10 - 40)	2.6	(1.3 - 5.1)
	<b>Total</b>	<b>740</b>	<b>(580 - 930)</b>	<b>100.0</b>	
16	Low	500	(390 - 640)	70.8	(56.4 - 82.0)
	Moderate	140	(70 - 260)	20.3	(10.2 - 32.4)
	High	60	(10 - 180)	9.0	(1.8 - 22.5)
	<b>Total</b>	<b>710</b>	<b>(560 - 890)</b>	<b>100.0</b>	
17	Low	490	(360 - 650)	82.0	(70.9 - 90.9)
	Moderate	90	(40 - 160)	14.6	(7.1 - 26.6)
	High	20	(0 - 50)	3.4	(0.7 - 9.0)
	<b>Total</b>	<b>600</b>	<b>(460 - 770)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 660	(3 330 - 3 980)	78.8	(74.3 - 82.6)
	Moderate	750	(590 - 940)	16.2	(12.9 - 20.1)
	High	230	(150 - 350)	5.0	(3.2 - 7.6)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	

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**TABLE 5.20 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT PEER PROBLEMS, BY AGE AND SEX

Age (years)	Risk of clinically significant peer problems	Number	95% CI	%	95% CI
Females					
12	Low	520	(370 - 710)	74.9	(61.0 - 85.3)
	Moderate	130	(70 - 260)	19.4	(8.8 - 32.0)
	High	40	(20 - 60)	5.7	(3.1 - 9.8)
	<b>Total</b>	<b>690</b>	<b>(520 - 890)</b>	<b>100.0</b>	
13	Low	640	(490 - 810)	80.2	(68.3 - 88.4)
	Moderate	140	(70 - 250)	17.1	(8.6 - 27.9)
	High	20	(10 - 60)	2.7	(0.8 - 7.3)
	<b>Total</b>	<b>800</b>	<b>(630 - 990)</b>	<b>100.0</b>	
14	Low	670	(530 - 840)	81.4	(72.2 - 88.3)
	Moderate	90	(40 - 170)	11.4	(5.5 - 19.5)
	High	60	(30 - 110)	7.2	(3.3 - 13.1)
	<b>Total</b>	<b>820</b>	<b>(670 - 1 000)</b>	<b>100.0</b>	
15	Low	600	(450 - 780)	83.5	(67.2 - 92.7)
	Moderate	110	(30 - 230)	15.1	(6.2 - 32.0)
	High	10	(0 - 30)	1.4	(0.1 - 4.1)
	<b>Total</b>	<b>710</b>	<b>(550 - 920)</b>	<b>100.0</b>	
16	Low	520	(390 - 660)	73.2	(64.3 - 80.3)
	Moderate	170	(120 - 220)	23.5	(16.6 - 31.1)
	High	20	(0 - 60)	3.3	(0.7 - 9.0)
	<b>Total</b>	<b>710</b>	<b>(580 - 870)</b>	<b>100.0</b>	
17	Low	580	(450 - 740)	80.3	(68.7 - 88.6)
	Moderate	100	(60 - 170)	13.7	(7.7 - 22.0)
	High	40	(0 - 130)	6.0	(0.6 - 17.3)
	<b>Total</b>	<b>730</b>	<b>(580 - 910)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 520	(3 220 - 3 840)	79.0	(74.8 - 82.7)
	Moderate	740	(580 - 930)	16.6	(13.1 - 20.4)
	High	200	(130 - 290)	4.4	(2.8 - 6.4)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	

Continued . . .

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**TABLE 5.20 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT PEER PROBLEMS, BY AGE AND SEX

Age (years)	Risk of clinically significant peer problems	Number	95% CI	%	95% CI
<b>Total</b>					
12	Low	1 350	(1 140 - 1 580)	81.2	(74.0 - 86.8)
	Moderate	250	(160 - 370)	15.1	(9.9 - 21.5)
	High	60	(20 - 120)	3.8	(1.5 - 7.4)
	<b>Total</b>	<b>1 660</b>	<b>(1 430 - 1 910)</b>	<b>100.0</b>	
13	Low	1 270	(1 050 - 1 520)	77.0	(68.6 - 83.6)
	Moderate	300	(190 - 430)	18.0	(11.9 - 26.1)
	High	80	(40 - 140)	5.0	(2.4 - 8.9)
	<b>Total</b>	<b>1 650</b>	<b>(1 410 - 1 920)</b>	<b>100.0</b>	
14	Low	1 270	(1 060 - 1 520)	79.7	(73.3 - 85.3)
	Moderate	220	(140 - 320)	13.7	(9.0 - 19.7)
	High	100	(70 - 160)	6.6	(4.2 - 10.0)
	<b>Total</b>	<b>1 600</b>	<b>(1 360 - 1 840)</b>	<b>100.0</b>	
15	Low	1 200	(990 - 1 420)	82.3	(73.7 - 89.0)
	Moderate	230	(130 - 370)	15.7	(8.8 - 24.0)
	High	30	(10 - 50)	2.0	(1.0 - 3.7)
	<b>Total</b>	<b>1 450</b>	<b>(1 220 - 1 700)</b>	<b>100.0</b>	
16	Low	1 020	(850 - 1 210)	72.0	(63.7 - 78.9)
	Moderate	310	(220 - 430)	21.9	(15.8 - 28.9)
	High	90	(30 - 190)	6.1	(1.9 - 13.0)
	<b>Total</b>	<b>1 420</b>	<b>(1 220 - 1 650)</b>	<b>100.0</b>	
17	Low	1 070	(890 - 1 280)	81.1	(73.1 - 87.3)
	Moderate	190	(120 - 280)	14.1	(9.2 - 21.0)
	High	60	(20 - 150)	4.8	(1.2 - 10.9)
	<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	
<b>Total</b>	Low	7 180	(6 920 - 7 440)	78.9	(76.0 - 81.7)
	Moderate	1 490	(1 270 - 1 740)	16.4	(13.9 - 19.1)
	High	430	(320 - 570)	4.7	(3.5 - 6.3)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	





**TABLE 5.21:** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT PEER PROBLEMS , BY ADEQUACY OF PARENTING STYLE

<i>Risk of clinically significant peer problems</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Poor parenting style</b>				
Low	710	(560 - 880)	69.8	(59.3 - 78.1)
Moderate	180	(100 - 280)	17.4	(10.1 - 26.2)
High	130	(80 - 220)	12.8	(7.4 - 20.3)
<b>Total</b>	<b>1 020</b>	<b>(850 - 1 220)</b>	<b>100.0</b>	
<b>Sub-optimal parenting style</b>				
Low	3 080	(2 800 - 3 380)	76.9	(72.3 - 81.1)
Moderate	760	(600 - 940)	18.9	(15.0 - 23.1)
High	170	(90 - 280)	4.2	(2.3 - 6.9)
<b>Total</b>	<b>4 010</b>	<b>(3 710 - 4 310)</b>	<b>100.0</b>	
<b>Adequate parenting style</b>				
Low	3 390	(3 070 - 3 710)	83.2	(79.2 - 86.7)
Moderate	560	(430 - 720)	13.7	(10.4 - 17.3)
High	130	(70 - 210)	3.1	(1.8 - 5.1)
<b>Total</b>	<b>4 070</b>	<b>(3 760 - 4 400)</b>	<b>100.0</b>	
<b>Total</b>				
Low	7 180	(6 920 - 7 440)	78.9	(76.0 - 81.7)
Moderate	1 490	(1 270 - 1 740)	16.4	(13.9 - 19.1)
High	430	(320 - 570)	4.7	(3.5 - 6.3)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

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**TABLE 5.22: YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT PROBLEMS WITH PROSOCIAL BEHAVIOUR, BY AGE AND SEX**

Age (years)	Risk of clinically significant problems with prosocial behaviour	Number	95% CI	%	95% CI
Males					
12	Low	800	(640 - 970)	82.2	(74.3 - 88.3)
	Moderate	110	(70 - 170)	11.2	(6.8 - 16.8)
	High	60	(20 - 130)	6.7	(2.4 - 13.5)
	<b>Total</b>	<b>970</b>	<b>(800 - 1 160)</b>	<b>100.0</b>	
13	Low	690	(510 - 920)	81.5	(71.1 - 90.0)
	Moderate	100	(50 - 180)	11.5	(5.5 - 19.5)
	High	60	(20 - 140)	7.0	(1.9 - 16.5)
	<b>Total</b>	<b>850</b>	<b>(640 - 1 080)</b>	<b>100.0</b>	
14	Low	620	(460 - 820)	79.4	(66.6 - 88.8)
	Moderate	60	(30 - 100)	8.0	(4.3 - 13.7)
	High	100	(30 - 210)	12.6	(3.9 - 25.1)
	<b>Total</b>	<b>770</b>	<b>(590 - 990)</b>	<b>100.0</b>	
15	Low	640	(490 - 810)	86.7	(74.2 - 94.4)
	Moderate	50	(0 - 130)	6.2	(0.6 - 16.9)
	High	50	(20 - 120)	7.1	(2.4 - 15.9)
	<b>Total</b>	<b>740</b>	<b>(580 - 930)</b>	<b>100.0</b>	
16	Low	570	(430 - 740)	80.5	(71.2 - 88.5)
	Moderate	70	(30 - 150)	9.8	(4.2 - 19.8)
	High	70	(40 - 110)	9.7	(5.5 - 15.4)
	<b>Total</b>	<b>710</b>	<b>(560 - 890)</b>	<b>100.0</b>	
17	Low	500	(360 - 660)	83.2	(71.6 - 90.7)
	Moderate	50	(20 - 90)	7.7	(3.2 - 15.4)
	High	50	(20 - 120)	9.1	(3.7 - 20.2)
	<b>Total</b>	<b>600</b>	<b>(460 - 770)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 820	(3 500 - 4 140)	82.2	(78.4 - 85.4)
	Moderate	430	(320 - 560)	9.3	(7.0 - 12.0)
	High	400	(280 - 550)	8.6	(6.0 - 11.7)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	

Continued...



**TABLE 5.22 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT PROBLEMS WITH PROSOCIAL BEHAVIOUR, BY AGE AND SEX

Age (years)	Risk of clinically significant problems with prosocial behaviour	Number	95% CI	%	95% CI
<b>Females</b>					
12	Low	610	(450 - 810)	88.1	(80.5 - 93.8)
	Moderate	30	(10 - 80)	4.9	(1.3 - 11.7)
	High	50	(20 - 90)	7.0	(3.1 - 12.4)
	<b>Total</b>	<b>690</b>	<b>(520 - 890)</b>	<b>100.0</b>	
13	Low	720	(560 - 920)	90.5	(83.8 - 94.9)
	Moderate	30	(10 - 70)	4.3	(1.5 - 8.8)
	High	40	(20 - 90)	5.2	(2.0 - 11.3)
	<b>Total</b>	<b>800</b>	<b>(630 - 990)</b>	<b>100.0</b>	
14	Low	750	(610 - 920)	91.6	(83.2 - 97.0)
	Moderate	50	(10 - 130)	5.6	(1.0 - 13.9)
	High	20	(10 - 60)	2.8	(0.9 - 7.9)
	<b>Total</b>	<b>820</b>	<b>(670 - 1 000)</b>	<b>100.0</b>	
15	Low	650	(490 - 850)	91.6	(81.3 - 96.6)
	Moderate	60	(20 - 130)	8.4	(3.4 - 18.7)
	High	0	(0 - 60)	0.0	(0.0 - 7.5)
	<b>Total</b>	<b>710</b>	<b>(550 - 920)</b>	<b>100.0</b>	
16	Low	630	(500 - 770)	88.9	(81.3 - 94.4)
	Moderate	70	(40 - 120)	9.8	(5.1 - 16.2)
	High	10	(0 - 90)	1.3	(0.1 - 12.9)
	<b>Total</b>	<b>710</b>	<b>(580 - 870)</b>	<b>100.0</b>	
17	Low	680	(530 - 850)	93.4	(84.9 - 97.8)
	Moderate	30	(20 - 60)	4.6	(2.3 - 8.6)
	High	10	(0 - 140)	2.0	(0.1 - 18.3)
	<b>Total</b>	<b>730</b>	<b>(580 - 910)</b>	<b>100.0</b>	
<b>Total</b>	Low	4 050	(3 740 - 4 370)	90.7	(87.7 - 93.2)
	Moderate	280	(190 - 380)	6.2	(4.3 - 8.4)
	High	140	(70 - 230)	3.1	(1.5 - 5.1)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	

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**TABLE 5.22 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT PROBLEMS WITH PROSOCIAL BEHAVIOUR, BY AGE AND SEX

Age (years)	Risk of clinically significant problems with prosocial behaviour	Number	95% CI	%	95% CI
<b>Total</b>					
12	Low	1 410	(1 190 - 1 650)	84.6	(79.4 - 89.3)
	Moderate	140	(90 - 210)	8.5	(5.5 - 12.6)
	High	110	(60 - 180)	6.8	(3.7 - 11.0)
	<b>Total</b>	<b>1 660</b>	<b>(1 430 - 1 910)</b>	<b>100.0</b>	
13	Low	1 410	(1 180 - 1 680)	85.8	(80.0 - 90.9)
	Moderate	130	(80 - 210)	8.0	(4.6 - 12.5)
	High	100	(50 - 190)	6.1	(2.8 - 11.3)
	<b>Total</b>	<b>1 650</b>	<b>(1 410 - 1 920)</b>	<b>100.0</b>	
14	Low	1 370	(1 160 - 1 600)	85.7	(78.8 - 91.5)
	Moderate	110	(60 - 190)	6.8	(3.7 - 11.5)
	High	120	(50 - 250)	7.5	(3.4 - 14.7)
	<b>Total</b>	<b>1 600</b>	<b>(1 360 - 1 840)</b>	<b>100.0</b>	
15	Low	1 290	(1 080 - 1 540)	89.1	(82.2 - 94.4)
	Moderate	110	(50 - 220)	7.3	(3.4 - 14.6)
	High	50	(20 - 120)	3.6	(1.2 - 8.2)
	<b>Total</b>	<b>1 450</b>	<b>(1 220 - 1 700)</b>	<b>100.0</b>	
16	Low	1 200	(1 010 - 1 410)	84.7	(78.7 - 89.2)
	Moderate	140	(80 - 220)	9.8	(6.0 - 15.3)
	High	80	(40 - 130)	5.5	(3.0 - 8.8)
	<b>Total</b>	<b>1 420</b>	<b>(1 220 - 1 650)</b>	<b>100.0</b>	
17	Low	1 170	(980 - 1 390)	88.8	(82.8 - 93.4)
	Moderate	80	(50 - 130)	6.0	(3.3 - 9.4)
	High	70	(20 - 150)	5.2	(1.6 - 10.8)
	<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	
<b>Total</b>	Low	7 860	(7 640 - 8 060)	86.4	(84.0 - 88.5)
	Moderate	710	(570 - 860)	7.8	(6.2 - 9.4)
	High	530	(400 - 710)	5.9	(4.4 - 7.8)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 5.23: YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT PROBLEMS WITH PROSOCIAL BEHAVIOUR, BY ADEQUACY OF PARENTING STYLE**

<i>Risk of clinically significant problems with prosocial behaviour</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Poor parenting style</b>				
Low	800	(630 - 980)	77.9	(70.3 - 84.5)
Moderate	120	(60 - 200)	11.6	(6.5 - 18.8)
High	110	(70 - 160)	10.5	(6.7 - 15.5)
<b>Total</b>	<b>1 020</b>	<b>(850 - 1 220)</b>	<b>100.0</b>	
<b>Sub-optimal parenting style</b>				
Low	3 320	(3 020 - 3 630)	82.9	(79.0 - 86.4)
Moderate	360	(270 - 480)	8.9	(6.6 - 11.9)
High	330	(230 - 450)	8.2	(5.6 - 11.2)
<b>Total</b>	<b>4 010</b>	<b>(3 710 - 4 310)</b>	<b>100.0</b>	
<b>Adequate parenting style</b>				
Low	3 740	(3 430 - 4 070)	91.9	(88.5 - 94.5)
Moderate	230	(150 - 320)	5.6	(3.8 - 8.1)
High	100	(30 - 230)	2.4	(0.8 - 5.6)
<b>Total</b>	<b>4 070</b>	<b>(3 760 - 4 400)</b>	<b>100.0</b>	
<b>Total</b>				
Low	7 860	(7 640 - 8 060)	86.4	(84.0 - 88.5)
Moderate	710	(570 - 860)	7.8	(6.2 - 9.4)
High	530	(400 - 710)	5.9	(4.4 - 7.8)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 5.24:** ESTIMATES BASED ON SUB-SAMPLE OF YOUNG PEOPLE WHERE BOTH CARER AND YOUTH SELF REPORT ARE BOTH AVAILABLE

		<i>Estimates based on carer reports</i>		<i>Estimates based on youth self-reports</i>	
		<i>%</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Risk of clinically significant emotional or behavioural difficulties</b>					
Males	Low	68.5	(62.7 - 73.6)	69.5	(64.7 - 74.2)
	Moderate	8.8	(5.8 - 12.5)	21.4	(17.8 - 25.3)
	High	22.7	(17.9 - 27.8)	9.0	(5.8 - 12.9)
Females	Low	73.0	(68.0 - 77.4)	66.4	(61.6 - 70.9)
	Moderate	10.9	(7.5 - 14.9)	20.1	(16.2 - 24.2)
	High	16.1	(12.7 - 20.1)	13.4	(10.7 - 16.8)
Total	Low	70.9	(67.2 - 74.5)	68.0	(64.6 - 71.3)
	Moderate	9.9	(7.5 - 12.6)	20.8	(18.2 - 23.6)
	High	19.2	(16.2 - 22.5)	11.2	(9.0 - 13.6)
<b>Risk of clinically significant emotional symptoms</b>					
Males	Low	71.7	(66.5 - 76.6)	85.8	(81.7 - 89.4)
	Moderate	8.5	(6.0 - 11.8)	8.2	(5.9 - 11.1)
	High	19.8	(15.5 - 24.3)	6.0	(3.6 - 9.6)
Females	Low	64.0	(58.9 - 68.9)	69.7	(64.8 - 74.3)
	Moderate	13.3	(10.1 - 17.0)	15.0	(11.7 - 18.6)
	High	22.7	(18.3 - 27.3)	15.3	(11.9 - 19.1)
Total	Low	67.6	(63.7 - 71.2)	77.9	(74.6 - 80.8)
	Moderate	11.1	(8.9 - 13.7)	11.6	(9.5 - 13.8)
	High	21.3	(18.4 - 24.6)	10.6	(8.5 - 13.1)
<b>Risk of clinically significant conduct problems</b>					
Males	Low	54.1	(48.6 - 59.7)	57.1	(51.9 - 62.2)
	Moderate	11.8	(8.9 - 15.2)	17.8	(14.5 - 21.6)
	High	34.1	(28.6 - 39.8)	25.2	(20.7 - 30.0)
Females	Low	64.6	(59.5 - 69.6)	65.8	(61.5 - 70.0)
	Moderate	10.4	(7.4 - 14.2)	13.6	(10.9 - 16.8)
	High	24.9	(20.6 - 29.6)	20.6	(17.1 - 24.6)
Total	Low	59.7	(55.8 - 63.5)	61.4	(58.0 - 64.8)
	Moderate	11.1	(8.8 - 13.7)	15.7	(13.6 - 18.1)
	High	29.2	(25.7 - 33.0)	22.9	(20.0 - 26.0)
<b>Risk of clinically significant hyperactivity</b>					
Low		79.9	(76.8 - 82.7)	73.4	(70.2 - 76.4)
Moderate		8.1	(6.7 - 9.7)	11.2	(9.2 - 13.4)
High		12.0	(9.5 - 14.9)	15.4	(13.0 - 18.3)
<b>Risk of clinically significant peer problems</b>					
Low		65.5	(61.8 - 69.2)	79.4	(76.4 - 82.2)
Moderate		12.5	(10.3 - 15.0)	16.2	(13.6 - 19.0)
High		22.0	(18.7 - 25.5)	4.4	(3.2 - 5.9)
<b>Risk of clinically significant prosocial behaviour</b>					
Low		93.8	(91.8 - 95.3)	86.2	(83.8 - 88.4)
Moderate		2.8	(1.8 - 4.0)	7.9	(6.4 - 9.7)
High		3.4	(2.3 - 5.0)	5.8	(4.3 - 7.8)



**TABLE 5.25: YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER SMOKED CIGARETTES REGULARLY AND SEX**

Ever smoked	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>Males</b>					
No	Low	2 350	(2 050 - 2 660)	73.1	(67.4 - 78.1)
	Moderate	620	(490 - 780)	19.4	(15.4 - 24.1)
	High	240	(150 - 380)	7.5	(4.3 - 11.5)
	<b>Total</b>	<b>3 210</b>	<b>(2 910 - 3 540)</b>	<b>100.0</b>	
Yes	Low	870	(700 - 1 080)	61.0	(51.5 - 69.6)
	Moderate	370	(260 - 530)	26.1	(18.9 - 35.0)
	High	180	(100 - 310)	12.9	(7.3 - 21.0)
	<b>Total</b>	<b>1 430</b>	<b>(1 190 - 1 680)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 220	(2 900 - 3 550)	69.4	(64.5 - 74.0)
	Moderate	1 000	(820 - 1 190)	21.4	(17.7 - 25.5)
	High	430	(290 - 610)	9.2	(6.2 - 13.1)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>					
No	Low	2 090	(1 820 - 2 370)	78.2	(73.0 - 82.6)
	Moderate	390	(280 - 520)	14.4	(10.6 - 19.1)
	High	200	(140 - 270)	7.3	(5.3 - 10.1)
	<b>Total</b>	<b>2 670</b>	<b>(2 380 - 2 960)</b>	<b>100.0</b>	
Yes	Low	890	(720 - 1 080)	49.7	(42.2 - 56.7)
	Moderate	510	(380 - 670)	28.6	(22.0 - 35.5)
	High	390	(280 - 520)	21.7	(16.2 - 28.1)
	<b>Total</b>	<b>1 790</b>	<b>(1 550 - 2 050)</b>	<b>100.0</b>	
<b>Total</b>	Low	2 980	(2 690 - 3 290)	66.8	(62.1 - 71.1)
	Moderate	900	(730 - 1 100)	20.1	(16.4 - 24.2)
	High	580	(460 - 730)	13.1	(10.3 - 16.1)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>					
No	Low	4 440	(4 110 - 4 770)	75.4	(71.6 - 78.9)
	Moderate	1 010	(830 - 1 200)	17.1	(14.3 - 20.4)
	High	440	(320 - 580)	7.4	(5.4 - 9.9)
	<b>Total</b>	<b>5 880</b>	<b>(5 570 - 6 180)</b>	<b>100.0</b>	
Yes	Low	1 760	(1 520 - 2 010)	54.7	(49.2 - 60.4)
	Moderate	880	(720 - 1 090)	27.5	(22.7 - 32.8)
	High	570	(430 - 730)	17.8	(13.7 - 22.6)
	<b>Total</b>	<b>3 220</b>	<b>(2 920 - 3 530)</b>	<b>100.0</b>	
<b>Total</b>	Low	6 200	(5 900 - 6 500)	68.1	(64.8 - 71.4)
	Moderate	1 890	(1 650 - 2 140)	20.8	(18.1 - 23.5)
	High	1 010	(820 - 1 220)	11.1	(9.0 - 13.4)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

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**TABLE 5.26:** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY ALCOHOL CONSUMPTION AND SEX

<i>Alcohol consumption</i>	<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>					
Does not drink	Low	2 350	(2 060 - 2 670)	69.5	(63.6 - 75.0)
	Moderate	750	(600 - 940)	22.3	(17.6 - 27.3)
	High	280	(170 - 430)	8.3	(5.1 - 12.7)
	<b>Total</b>	<b>3 380</b>	<b>(3 060 - 3 710)</b>	<b>100.0</b>	
Drinks but not to excess	Low	500	(360 - 660)	72.4	(59.2 - 82.4)
	Moderate	120	(70 - 190)	17.3	(10.3 - 26.7)
	High	70	(20 - 160)	10.3	(3.4 - 22.2)
	<b>Total</b>	<b>690</b>	<b>(540 - 880)</b>	<b>100.0</b>	
Drinks to excess	Low	370	(260 - 500)	65.4	(50.6 - 77.3)
	Moderate	120	(70 - 200)	21.6	(12.9 - 32.7)
	High	70	(20 - 180)	13.0	(3.5 - 29.0)
	<b>Total</b>	<b>570</b>	<b>(430 - 740)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 220	(2 900 - 3 550)	69.4	(64.5 - 74.0)
	Moderate	1 000	(820 - 1 190)	21.4	(17.7 - 25.5)
	High	430	(290 - 610)	9.2	(6.2 - 13.1)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>					
Does not drink	Low	2 330	(2 070 - 2 620)	72.0	(67.0 - 76.7)
	Moderate	530	(390 - 690)	16.3	(12.2 - 21.1)
	High	380	(300 - 470)	11.7	(9.2 - 14.4)
	<b>Total</b>	<b>3 240</b>	<b>(2 950 - 3 550)</b>	<b>100.0</b>	
Drinks but not to excess	Low	440	(310 - 600)	67.2	(52.9 - 79.7)
	Moderate	120	(60 - 230)	18.1	(8.8 - 32.0)
	High	100	(40 - 200)	14.7	(6.9 - 28.1)
	<b>Total</b>	<b>660</b>	<b>(500 - 850)</b>	<b>100.0</b>	
Drinks to excess	Low	200	(120 - 330)	36.1	(23.2 - 52.5)
	Moderate	250	(170 - 350)	44.5	(32.1 - 58.4)
	High	110	(40 - 220)	19.4	(9.3 - 36.5)
	<b>Total</b>	<b>560</b>	<b>(410 - 740)</b>	<b>100.0</b>	
<b>Total</b>	Low	2 980	(2 690 - 3 290)	66.8	(62.1 - 71.1)
	Moderate	900	(730 - 1 100)	20.1	(16.4 - 24.2)
	High	580	(460 - 730)	13.1	(10.3 - 16.1)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	

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**TABLE 5.26 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY ALCOHOL CONSUMPTION AND SEX

Alcohol consumption	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>Total</b>					
Does not drink	Low	4 680	(4 350 - 5 010)	70.7	(66.7 - 74.3)
	Moderate	1 280	(1 070 - 1 520)	19.3	(16.1 - 22.8)
	High	660	(520 - 820)	10.0	(7.9 - 12.4)
	<b>Total</b>	<b>6 620</b>	<b>(6 330 - 6 910)</b>	<b>100.0</b>	
Drinks but not to excess	Low	940	(750 - 1 150)	69.8	(60.9 - 78.2)
	Moderate	240	(150 - 350)	17.7	(11.8 - 25.5)
	High	170	(90 - 290)	12.5	(6.8 - 20.2)
	<b>Total</b>	<b>1 350</b>	<b>(1 130 - 1 590)</b>	<b>100.0</b>	
Drinks to excess	Low	570	(430 - 750)	50.9	(41.1 - 60.7)
	Moderate	370	(280 - 480)	32.9	(25.4 - 41.5)
	High	180	(90 - 320)	16.2	(8.9 - 27.3)
	<b>Total</b>	<b>1 130</b>	<b>(930 - 1 370)</b>	<b>100.0</b>	
<b>Total</b>	Low	6 200	(5 900 - 6 500)	68.1	(64.8 - 71.4)
	Moderate	1 890	(1 650 - 2 140)	20.8	(18.1 - 23.5)
	High	1 010	(820 - 1 220)	11.1	(9.0 - 13.4)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 5.27:** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY FREQUENCY OF MARIJUANA USE AND SEX

Frequency of Marijuana use	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>Males</b>					
Never	Low	2 330	(2 040 - 2 640)	71.1	(65.4 - 76.2)
	Moderate	660	(510 - 830)	20.2	(15.9 - 25.2)
	High	280	(190 - 420)	8.7	(5.8 - 12.7)
	<b>Total</b>	<b>3 270</b>	<b>(2 960 - 3 580)</b>	<b>100.0</b>	
Over one year ago	Low	340	(240 - 480)	69.2	(54.6 - 81.7)
	Moderate	130	(80 - 210)	27.1	(15.8 - 40.3)
	High	20	(0 - 180)	3.7	(0.2 - 31.9)
	<b>Total</b>	<b>490</b>	<b>(360 - 650)</b>	<b>100.0</b>	
Less than monthly	Low	180	(90 - 330)	65.8	(42.7 - 83.6)
	Moderate	60	(40 - 80)	21.7	(11.5 - 36.0)
	High	30	(0 - 140)	12.5	(1.8 - 42.8)
	<b>Total</b>	<b>280</b>	<b>(170 - 420)</b>	<b>100.0</b>	
About weekly	Low	270	(180 - 380)	74.4	(47.6 - 92.7)
	Moderate	60	(10 - 170)	15.9	(4.0 - 45.6)
	High	40	(0 - 170)	9.7	(0.2 - 38.5)
	<b>Total</b>	<b>360</b>	<b>(230 - 520)</b>	<b>100.0</b>	
Daily	Low	100	(50 - 180)	43.1	(23.5 - 61.1)
	Moderate	80	(40 - 150)	34.8	(17.3 - 52.8)
	High	50	(30 - 90)	22.1	(10.6 - 37.6)
	<b>Total</b>	<b>240</b>	<b>(170 - 340)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 220	(2 900 - 3 550)	69.4	(64.5 - 74.0)
	Moderate	1 000	(820 - 1 190)	21.4	(17.7 - 25.5)
	High	430	(290 - 610)	9.2	(6.2 - 13.1)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	

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**TABLE 5.27 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY MARIJUANA USE AND SEX

Marijuana use	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>Females</b>					
Never	Low	2 300	(2 030 - 2 600)	73.6	(68.4 - 78.3)
	Moderate	550	(410 - 720)	17.6	(13.2 - 22.5)
	High	270	(200 - 370)	8.8	(6.3 - 11.8)
	<b>Total</b>	<b>3 130</b>	<b>(2 820 - 3 440)</b>	<b>100.0</b>	
Over one year ago	Low	300	(190 - 440)	68.5	(50.0 - 83.9)
	Moderate	70	(20 - 170)	16.9	(5.8 - 35.8)
	High	60	(20 - 150)	14.6	(5.1 - 31.9)
	<b>Total</b>	<b>430</b>	<b>(300 - 590)</b>	<b>100.0</b>	
Less than monthly	Low	140	(90 - 220)	33.1	(22.1 - 47.4)
	Moderate	180	(110 - 270)	44.0	(31.3 - 58.5)
	High	100	(60 - 160)	22.9	(13.4 - 36.0)
	<b>Total</b>	<b>420</b>	<b>(320 - 540)</b>	<b>100.0</b>	
About weekly	Low	130	(60 - 240)	53.2	(28.9 - 75.6)
	Moderate	50	(0 - 130)	18.8	(1.9 - 45.4)
	High	70	(30 - 110)	28.0	(13.2 - 48.7)
	<b>Total</b>	<b>240</b>	<b>(150 - 380)</b>	<b>100.0</b>	
Daily	Low	110	(50 - 220)	46.6	(24.4 - 71.1)
	Moderate	40	(20 - 70)	18.0	(8.6 - 31.4)
	High	80	(30 - 180)	35.4	(14.2 - 61.7)
	<b>Total</b>	<b>240</b>	<b>(140 - 370)</b>	<b>100.0</b>	
<b>Total</b>	Low	2 980	(2 690 - 3 290)	66.8	(62.1 - 71.1)
	Moderate	900	(730 - 1 100)	20.1	(16.4 - 24.2)
	High	580	(460 - 730)	13.1	(10.3 - 16.1)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>					
Never	Low	4 630	(4 310 - 4 960)	72.3	(68.6 - 75.9)
	Moderate	1 210	(1 010 - 1 440)	18.9	(15.8 - 22.3)
	High	560	(430 - 710)	8.7	(6.8 - 11.1)
	<b>Total</b>	<b>6 400</b>	<b>(6 100 - 6 700)</b>	<b>100.0</b>	
Over one year ago	Low	640	(480 - 810)	68.9	(57.1 - 78.1)
	Moderate	210	(130 - 310)	22.3	(14.3 - 32.6)
	High	80	(30 - 200)	8.8	(3.1 - 20.3)
	<b>Total</b>	<b>920</b>	<b>(740 - 1 130)</b>	<b>100.0</b>	
Less than monthly	Low	320	(210 - 470)	46.2	(33.7 - 59.0)
	Moderate	250	(170 - 340)	35.1	(24.5 - 45.7)
	High	130	(70 - 220)	18.8	(10.3 - 29.7)
	<b>Total</b>	<b>700</b>	<b>(550 - 870)</b>	<b>100.0</b>	
About weekly	Low	400	(280 - 550)	65.9	(49.8 - 80.9)
	Moderate	100	(30 - 240)	17.1	(5.6 - 34.7)
	High	100	(40 - 200)	17.1	(6.8 - 30.7)
	<b>Total</b>	<b>600</b>	<b>(450 - 800)</b>	<b>100.0</b>	
Daily	Low	210	(130 - 330)	44.8	(31.4 - 60.8)
	Moderate	130	(80 - 190)	26.5	(16.3 - 39.1)
	High	140	(70 - 230)	28.7	(16.4 - 44.3)
	<b>Total</b>	<b>480</b>	<b>(360 - 630)</b>	<b>100.0</b>	
<b>Total</b>	Low	6 200	(5 900 - 6 500)	68.1	(64.8 - 71.4)
	Moderate	1 890	(1 650 - 2 140)	20.8	(18.1 - 23.5)
	High	1 010	(820 - 1 220)	11.1	(9.0 - 13.4)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 5.28: YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY STRENUOUS EXERCISE AND SEX**

<i>Strenuous exercise</i>	<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>					
No	Low	630	(470 - 830)	68.3	(57.3 - 78.9)
	Moderate	190	(140 - 270)	20.9	(14.0 - 29.2)
	High	100	(30 - 240)	10.8	(3.6 - 23.6)
	<b>Total</b>	<b>920</b>	<b>(730 - 1 140)</b>	<b>100.0</b>	
Yes	Low	2 590	(2 280 - 2 900)	69.7	(64.4 - 74.7)
	Moderate	800	(640 - 980)	21.6	(17.4 - 26.1)
	High	330	(220 - 470)	8.8	(6.0 - 12.6)
	<b>Total</b>	<b>3 720</b>	<b>(3 400 - 4 040)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 220	(2 900 - 3 550)	69.4	(64.5 - 74.0)
	Moderate	1 000	(820 - 1 190)	21.4	(17.7 - 25.5)
	High	430	(290 - 610)	9.2	(6.2 - 13.1)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>					
No	Low	1 010	(830 - 1 210)	63.3	(55.3 - 70.4)
	Moderate	310	(210 - 450)	19.4	(13.4 - 26.7)
	High	280	(200 - 370)	17.3	(12.5 - 23.1)
	<b>Total</b>	<b>1 590</b>	<b>(1 370 - 1 820)</b>	<b>100.0</b>	
Yes	Low	1 970	(1 710 - 2 260)	68.7	(62.9 - 74.0)
	Moderate	590	(460 - 740)	20.5	(15.9 - 25.4)
	High	310	(220 - 430)	10.8	(7.8 - 14.7)
	<b>Total</b>	<b>2 870</b>	<b>(2 570 - 3 180)</b>	<b>100.0</b>	
<b>Total</b>	Low	2 980	(2 690 - 3 290)	66.8	(62.1 - 71.1)
	Moderate	900	(730 - 1 100)	20.1	(16.4 - 24.2)
	High	580	(460 - 730)	13.1	(10.3 - 16.1)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>					
No	Low	1 640	(1 400 - 1 890)	65.1	(58.7 - 71.0)
	Moderate	500	(380 - 640)	19.9	(15.5 - 25.3)
	High	370	(260 - 520)	14.9	(10.5 - 20.1)
	<b>Total</b>	<b>2 510</b>	<b>(2 240 - 2 800)</b>	<b>100.0</b>	
Yes	Low	4 560	(4 230 - 4 890)	69.2	(65.5 - 72.9)
	Moderate	1 390	(1 200 - 1 610)	21.1	(18.1 - 24.3)
	High	640	(500 - 810)	9.6	(7.5 - 12.1)
	<b>Total</b>	<b>6 590</b>	<b>(6 300 - 6 860)</b>	<b>100.0</b>	
<b>Total</b>	Low	6 200	(5 900 - 6 500)	68.1	(64.8 - 71.4)
	Moderate	1 890	(1 650 - 2 140)	20.8	(18.1 - 23.5)
	High	1 010	(820 - 1 220)	11.1	(9.0 - 13.4)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

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**TABLE 5.29: YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY INVOLVEMENT IN ORGANISED SPORT AND SEX**

<i>Organised sport</i>	<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>					
No	Low	910	(730 - 1 110)	68.0	(59.6 - 75.2)
	Moderate	280	(210 - 380)	21.1	(15.7 - 27.8)
	High	150	(80 - 260)	10.9	(5.9 - 18.6)
	<b>Total</b>	<b>1 340</b>	<b>(1 130 - 1 560)</b>	<b>100.0</b>	
Yes	Low	2 250	(1 970 - 2 570)	69.5	(63.5 - 75.3)
	Moderate	710	(550 - 890)	22.0	(17.2 - 27.1)
	High	270	(150 - 430)	8.5	(4.8 - 13.0)
	<b>Total</b>	<b>3 240</b>	<b>(2 930 - 3 570)</b>	<b>100.0</b>	
Not stated	Low	60	(20 - 150)	91.4	(76.5 - 99.1)
	Moderate	0	(0 - 60)	0.0	(0.0 - 60.2)
	High	10	(0 - 10)	8.6	(0.9 - 23.5)
	<b>Total</b>	<b>70</b>	<b>(20 - 160)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 220	(2 900 - 3 550)	69.4	(64.5 - 74.0)
	Moderate	1 000	(820 - 1 190)	21.4	(17.7 - 25.5)
	High	430	(290 - 610)	9.2	(6.2 - 13.1)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>					
No	Low	1 150	(970 - 1 360)	59.8	(52.6 - 66.7)
	Moderate	400	(280 - 560)	20.8	(15.0 - 27.8)
	High	370	(270 - 490)	19.4	(14.6 - 25.2)
	<b>Total</b>	<b>1 920</b>	<b>(1 680 - 2 170)</b>	<b>100.0</b>	
Yes	Low	1 800	(1 550 - 2 050)	72.2	(66.5 - 77.2)
	Moderate	500	(380 - 630)	20.0	(15.5 - 25.3)
	High	190	(130 - 290)	7.8	(5.1 - 11.4)
	<b>Total</b>	<b>2 490</b>	<b>(2 220 - 2 770)</b>	<b>100.0</b>	
Not stated	Low	30	(10 - 70)	64.8	(29.9 - 92.5)
	Moderate	0	(0 - 60)	0.0	(0.0 - 60.2)
	High	20	(10 - 50)	35.2	(7.5 - 70.1)
	<b>Total</b>	<b>50</b>	<b>(30 - 90)</b>	<b>100.0</b>	
<b>Total</b>	Low	2 980	(2 690 - 3 290)	66.8	(62.1 - 71.1)
	Moderate	900	(730 - 1 100)	20.1	(16.4 - 24.2)
	High	580	(460 - 730)	13.1	(10.3 - 16.1)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	

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**TABLE 5.29 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY INVOLVEMENT IN ORGANISED SPORT AND SEX

<i>Organised sport</i>	<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Total</b>					
No	Low	2 060	(1 810 - 2 310)	63.2	(58.0 - 68.3)
	Moderate	680	(540 - 850)	20.9	(16.9 - 25.6)
	High	520	(390 - 660)	15.9	(12.4 - 20.3)
	<b>Total</b>	<b>3 250</b>	<b>(2 960 - 3 560)</b>	<b>100.0</b>	
Yes	Low	4 050	(3 730 - 4 370)	70.7	(66.3 - 74.6)
	Moderate	1 210	(1 020 - 1 430)	21.1	(17.8 - 24.8)
	High	470	(330 - 640)	8.2	(5.7 - 11.0)
	<b>Total</b>	<b>5 730</b>	<b>(5 430 - 6 030)</b>	<b>100.0</b>	
Not stated	Low	90	(40 - 190)	79.4	(56.3 - 94.3)
	Moderate	0	(0 - 60)	0.0	(0.0 - 36.9)
	High	20	(10 - 50)	20.6	(5.7 - 43.7)
	<b>Total</b>	<b>120</b>	<b>(70 - 210)</b>	<b>100.0</b>	
<b>Total</b>	Low	6 200	(5 900 - 6 500)	68.1	(64.8 - 71.4)
	Moderate	1 890	(1 650 - 2 140)	20.8	(18.1 - 23.5)
	High	1 010	(820 - 1 220)	11.1	(9.0 - 13.4)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

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**TABLE 5.30: YOUNG PEOPLE AGED 12–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER TREATED BADLY BECAUSE THEY WERE ABORIGINAL AND SEX**

<i>Treated badly</i>	<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>					
No	Low	2 510	(2 200 - 2 820)	71.6	(66.2 - 76.6)
	Moderate	710	(560 - 870)	20.2	(16.2 - 24.6)
	High	290	(170 - 440)	8.2	(4.9 - 12.3)
	<b>Total</b>	<b>3 500</b>	<b>(3 170 - 3 820)</b>	<b>100.0</b>	
Yes	Low	720	(560 - 910)	62.6	(52.2 - 72.5)
	Moderate	290	(190 - 410)	25.3	(17.1 - 35.0)
	High	140	(70 - 270)	12.0	(5.8 - 22.1)
	<b>Total</b>	<b>1 140</b>	<b>(940 - 1 380)</b>	<b>100.0</b>	
<b>Total</b>	Low	3 220	(2 900 - 3 550)	69.4	(64.5 - 74.0)
	Moderate	1 000	(820 - 1 190)	21.4	(17.7 - 25.5)
	High	430	(290 - 610)	9.2	(6.2 - 13.1)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>					
No	Low	2 620	(2 330 - 2 910)	71.9	(67.0 - 76.2)
	Moderate	670	(530 - 830)	18.3	(14.6 - 22.5)
	High	360	(250 - 480)	9.8	(7.0 - 12.9)
	<b>Total</b>	<b>3 640</b>	<b>(3 340 - 3 970)</b>	<b>100.0</b>	
Yes	Low	360	(250 - 500)	44.1	(32.4 - 55.3)
	Moderate	230	(140 - 370)	28.1	(17.9 - 41.3)
	High	230	(150 - 330)	27.9	(18.9 - 38.2)
	<b>Total</b>	<b>820</b>	<b>(650 - 1 010)</b>	<b>100.0</b>	
<b>Total</b>	Low	2 980	(2 690 - 3 290)	66.8	(62.1 - 71.1)
	Moderate	900	(730 - 1 100)	20.1	(16.4 - 24.2)
	High	580	(460 - 730)	13.1	(10.3 - 16.1)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>					
No	Low	5 120	(4 800 - 5 440)	71.7	(68.2 - 75.1)
	Moderate	1 370	(1 170 - 1 590)	19.2	(16.5 - 22.2)
	High	650	(490 - 820)	9.0	(6.9 - 11.6)
	<b>Total</b>	<b>7 140</b>	<b>(6 870 - 7 410)</b>	<b>100.0</b>	
Yes	Low	1 070	(880 - 1 290)	54.9	(47.2 - 62.7)
	Moderate	520	(380 - 690)	26.5	(19.8 - 33.7)
	High	360	(250 - 510)	18.6	(13.4 - 25.2)
	<b>Total</b>	<b>1 960</b>	<b>(1 690 - 2 240)</b>	<b>100.0</b>	
<b>Total</b>	Low	6 200	(5 900 - 6 500)	68.1	(64.8 - 71.4)
	Moderate	1 890	(1 650 - 2 140)	20.8	(18.1 - 23.5)
	High	1 010	(820 - 1 220)	11.1	(9.0 - 13.4)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



## SUICIDAL BEHAVIOUR

**TABLE 5.31: YOUNG PEOPLE AGED 12–17 YEARS — WHETHER SERIOUSLY THOUGHT ABOUT ENDING OWN LIFE, BY AGE AND SEX**

Age (years)	Suicidal thoughts	Number	95% CI	%	95% CI
<b>Males</b>					
12	No	880	(720 - 1 070)	90.7	(82.9 - 95.2)
	Yes	90	(40 - 160)	9.3	(4.8 - 17.1)
	<b>Total</b>	<b>970</b>	<b>(800 - 1 160)</b>	<b>100.0</b>	
13	No	740	(560 - 970)	87.3	(75.2 - 95.4)
	Yes	110	(40 - 220)	12.7	(4.6 - 24.8)
	<b>Total</b>	<b>850</b>	<b>(640 - 1 080)</b>	<b>100.0</b>	
14	No	710	(530 - 930)	91.7	(87.1 - 95.1)
	Yes	60	(40 - 100)	8.3	(4.9 - 12.9)
	<b>Total</b>	<b>770</b>	<b>(590 - 990)</b>	<b>100.0</b>	
15	No	660	(520 - 840)	89.6	(78.6 - 96.7)
	Yes	80	(20 - 170)	10.4	(3.3 - 21.4)
	<b>Total</b>	<b>740</b>	<b>(580 - 930)</b>	<b>100.0</b>	
16	No	600	(460 - 770)	83.6	(73.7 - 90.2)
	Yes	120	(60 - 190)	16.4	(9.8 - 26.3)
	<b>Total</b>	<b>710</b>	<b>(560 - 890)</b>	<b>100.0</b>	
17	No	500	(370 - 670)	83.8	(75.6 - 90.4)
	Yes	100	(60 - 150)	16.2	(9.7 - 24.7)
	<b>Total</b>	<b>600</b>	<b>(460 - 770)</b>	<b>100.0</b>	
<b>Total</b>	No	4 090	(3 770 - 4 420)	88.1	(84.8 - 90.7)
	Yes	550	(430 - 710)	11.9	(9.3 - 15.2)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>					
12	No	580	(430 - 760)	84.0	(70.2 - 94.3)
	Yes	110	(40 - 230)	16.0	(5.7 - 29.8)
	<b>Total</b>	<b>690</b>	<b>(520 - 890)</b>	<b>100.0</b>	
13	No	630	(470 - 800)	78.6	(67.8 - 86.9)
	Yes	170	(100 - 260)	21.4	(13.1 - 32.2)
	<b>Total</b>	<b>800</b>	<b>(630 - 990)</b>	<b>100.0</b>	
14	No	640	(500 - 800)	77.5	(69.5 - 84.7)
	Yes	190	(120 - 260)	22.5	(15.3 - 30.5)
	<b>Total</b>	<b>820</b>	<b>(670 - 1 000)</b>	<b>100.0</b>	
15	No	570	(410 - 750)	79.6	(67.7 - 89.2)
	Yes	150	(80 - 240)	20.4	(10.8 - 32.3)
	<b>Total</b>	<b>710</b>	<b>(550 - 920)</b>	<b>100.0</b>	
16	No	610	(500 - 730)	85.6	(72.2 - 93.9)
	Yes	100	(40 - 210)	14.4	(6.1 - 27.8)
	<b>Total</b>	<b>710</b>	<b>(580 - 870)</b>	<b>100.0</b>	
17	No	570	(440 - 740)	78.9	(69.3 - 87.3)
	Yes	150	(90 - 240)	21.1	(12.7 - 30.7)
	<b>Total</b>	<b>730</b>	<b>(580 - 910)</b>	<b>100.0</b>	
<b>Total</b>	No	3 590	(3 290 - 3 900)	80.5	(76.5 - 84.0)
	Yes	870	(700 - 1 060)	19.5	(16.0 - 23.5)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	

Continued . . .



**TABLE 5.31 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — WHETHER SERIOUSLY THOUGHT ABOUT ENDING OWN LIFE, BY AGE AND SEX

Age (years)	Suicidal thoughts	Number	95% CI	%	95% CI
<b>Total</b>					
12	No	1 460	(1 250 - 1 690)	87.9	(81.2 - 93.5)
	Yes	200	(110 - 340)	12.1	(6.5 - 18.8)
	<b>Total</b>	<b>1 660</b>	<b>(1 430 - 1 910)</b>	<b>100.0</b>	
13	No	1 370	(1 140 - 1 630)	83.1	(75.8 - 89.5)
	Yes	280	(170 - 410)	16.9	(10.5 - 24.2)
	<b>Total</b>	<b>1 650</b>	<b>(1 410 - 1 920)</b>	<b>100.0</b>	
14	No	1 350	(1 130 - 1 590)	84.4	(79.3 - 88.4)
	Yes	250	(180 - 330)	15.6	(11.6 - 20.7)
	<b>Total</b>	<b>1 600</b>	<b>(1 360 - 1 840)</b>	<b>100.0</b>	
15	No	1 230	(1 020 - 1 470)	84.7	(77.2 - 90.8)
	Yes	220	(130 - 340)	15.3	(9.2 - 22.8)
	<b>Total</b>	<b>1 450</b>	<b>(1 220 - 1 700)</b>	<b>100.0</b>	
16	No	1 200	(1 030 - 1 400)	84.6	(77.6 - 90.5)
	Yes	220	(130 - 340)	15.4	(9.5 - 22.4)
	<b>Total</b>	<b>1 420</b>	<b>(1 220 - 1 650)</b>	<b>100.0</b>	
17	No	1 070	(880 - 1 280)	81.1	(74.6 - 86.5)
	Yes	250	(170 - 340)	18.9	(13.5 - 25.4)
	<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	
<b>Total</b>	No	7 680	(7 450 - 7 900)	84.4	(81.8 - 86.8)
	Yes	1 420	(1 200 - 1 660)	15.6	(13.2 - 18.2)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 5.32:** YOUNG PEOPLE AGED 12–17 YEARS — WHETHER SERIOUSLY THOUGHT ABOUT ENDING OWN LIFE, BY LEVEL OF RELATIVE ISOLATION (LORI)

Suicidal thoughts	Number	95% CI	%	95% CI
LORI — None				
No	2 570	(2 410 - 2 740)	81.4	(76.4 - 86.0)
Yes	590	(450 - 750)	18.6	(14.0 - 23.6)
<b>Total</b>	<b>3 160</b>	<b>(3 070 - 3 250)</b>	<b>100.0</b>	
LORI — Low				
No	1 970	(1 760 - 2 200)	86.3	(80.8 - 90.4)
Yes	310	(210 - 440)	13.7	(9.6 - 19.2)
<b>Total</b>	<b>2 280</b>	<b>(2 080 - 2 510)</b>	<b>100.0</b>	
LORI — Moderate				
No	1 440	(1 170 - 1 740)	78.9	(73.6 - 83.6)
Yes	390	(290 - 510)	21.1	(16.4 - 26.4)
<b>Total</b>	<b>1 820</b>	<b>(1 520 - 2 180)</b>	<b>100.0</b>	
LORI — High				
No	840	(600 - 1 130)	89.8	(81.1 - 94.7)
Yes	100	(50 - 190)	10.2	(4.6 - 17.8)
<b>Total</b>	<b>930</b>	<b>(670 - 1 250)</b>	<b>100.0</b>	
LORI — Extreme				
No	860	(600 - 1 160)	95.7	(76.2 - 99.9)
Yes	40	(0 - 230)	4.3	(0.1 - 23.8)
<b>Total</b>	<b>900</b>	<b>(630 - 1 210)</b>	<b>100.0</b>	
<b>Western Australia</b>				
No	7 680	(7 450 - 7 900)	84.4	(81.8 - 86.8)
Yes	1 420	(1 200 - 1 660)	15.6	(13.2 - 18.2)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	





**TABLE 5.33:** YOUNG PEOPLE AGED 12–17 YEARS — WHETHER TRIED TO END OWN LIFE IN PAST 12 MONTHS, BY WHETHER SERIOUSLY THOUGHT ABOUT ENDING OWN LIFE

<i>Attempted suicide</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Had not thought about suicide</b>				
No	7 650	(7 410 - 7 860)	99.5	(99.2 - 99.8)
Yes	40	(20 - 60)	0.5	(0.2 - 0.8)
<b>Total</b>	<b>7 680</b>	<b>(7 450 - 7 900)</b>	<b>100.0</b>	
<b>Had thought about suicide</b>				
No	860	(690 - 1 060)	60.8	(51.9 - 68.8)
Yes	560	(420 - 710)	39.2	(31.2 - 48.1)
<b>Total</b>	<b>1 420</b>	<b>(1 200 - 1 660)</b>	<b>100.0</b>	
<b>Total</b>				
No	8 510	(8 350 - 8 640)	93.5	(91.7 - 94.9)
Yes	590	(460 - 760)	6.5	(5.1 - 8.3)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 5.34:** YOUNG PEOPLE AGED 12–17 YEARS — WHETHER TRIED TO END OWN LIFE IN PAST 12 MONTHS, BY AGE AND SEX

<i>Age (years)</i>	<i>Attempted suicide</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>					
12	No	940	(770 - 1 120)	96.4	(87.5 - 99.6)
	Yes	40	(0 - 130)	3.6	(0.4 - 12.5)
	<b>Total</b>	<b>970</b>	<b>(800 - 1 160)</b>	<b>100.0</b>	
13	No	800	(610 - 1 030)	93.9	(83.8 - 98.8)
	Yes	50	(10 - 140)	6.1	(1.2 - 16.2)
	<b>Total</b>	<b>850</b>	<b>(640 - 1 080)</b>	<b>100.0</b>	
14	No	760	(580 - 970)	97.8	(95.3 - 99.1)
	Yes	20	(10 - 40)	2.2	(0.9 - 4.7)
	<b>Total</b>	<b>770</b>	<b>(590 - 990)</b>	<b>100.0</b>	
15	No	710	(560 - 900)	96.4	(93.8 - 97.9)
	Yes	30	(20 - 40)	3.6	(1.9 - 5.9)
	<b>Total</b>	<b>740</b>	<b>(580 - 930)</b>	<b>100.0</b>	
16	No	670	(520 - 850)	94.7	(90.6 - 97.3)
	Yes	40	(20 - 60)	5.3	(2.8 - 9.6)
	<b>Total</b>	<b>710</b>	<b>(560 - 890)</b>	<b>100.0</b>	
17	No	570	(430 - 740)	96.1	(91.0 - 99.0)
	Yes	20	(10 - 60)	3.9	(1.0 - 9.0)
	<b>Total</b>	<b>600</b>	<b>(460 - 770)</b>	<b>100.0</b>	
<b>Total</b>	No	4 450	(4 120 - 4 770)	95.9	(93.7 - 97.4)
	Yes	190	(120 - 290)	4.1	(2.6 - 6.3)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	

*Continued . . .*



**TABLE 5.34 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — WHETHER TRIED TO END OWN LIFE IN PAST 12 MONTHS, BY AGE AND SEX

Age (years)	Attempted suicide	Number	95% CI	%	95% CI
<b>Females</b>					
12	No	640	(480 - 840)	92.8	(87.3 - 96.5)
	Yes	50	(30 - 90)	7.2	(3.5 - 12.7)
	<b>Total</b>	<b>690</b>	<b>(520 - 890)</b>	<b>100.0</b>	
13	No	720	(560 - 910)	90.6	(84.9 - 95.0)
	Yes	70	(40 - 130)	9.4	(5.0 - 15.1)
	<b>Total</b>	<b>800</b>	<b>(630 - 990)</b>	<b>100.0</b>	
14	No	760	(610 - 930)	92.1	(85.9 - 96.1)
	Yes	70	(30 - 120)	7.9	(3.9 - 14.1)
	<b>Total</b>	<b>820</b>	<b>(670 - 1 000)</b>	<b>100.0</b>	
15	No	620	(460 - 800)	86.7	(75.0 - 94.0)
	Yes	100	(40 - 180)	13.3	(6.0 - 25.0)
	<b>Total</b>	<b>710</b>	<b>(550 - 920)</b>	<b>100.0</b>	
16	No	670	(560 - 810)	94.8	(77.2 - 99.9)
	Yes	40	(0 - 180)	5.2	(0.1 - 22.8)
	<b>Total</b>	<b>710</b>	<b>(580 - 870)</b>	<b>100.0</b>	
17	No	650	(500 - 820)	89.2	(83.5 - 93.1)
	Yes	80	(50 - 120)	10.8	(6.5 - 16.0)
	<b>Total</b>	<b>730</b>	<b>(580 - 910)</b>	<b>100.0</b>	
<b>Total</b>	No	4 060	(3 740 - 4 380)	91.0	(88.1 - 93.3)
	Yes	400	(290 - 530)	9.0	(6.7 - 11.9)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>					
12	No	1 580	(1 350 - 1 820)	94.9	(90.1 - 97.5)
	Yes	90	(40 - 170)	5.1	(2.5 - 9.9)
	<b>Total</b>	<b>1 660</b>	<b>(1 430 - 1 910)</b>	<b>100.0</b>	
13	No	1 520	(1 280 - 1 780)	92.3	(87.1 - 95.8)
	Yes	130	(70 - 210)	7.7	(4.2 - 12.9)
	<b>Total</b>	<b>1 650</b>	<b>(1 410 - 1 920)</b>	<b>100.0</b>	
14	No	1 520	(1 290 - 1 760)	94.8	(91.5 - 97.2)
	Yes	80	(40 - 130)	5.2	(2.8 - 8.5)
	<b>Total</b>	<b>1 600</b>	<b>(1 360 - 1 840)</b>	<b>100.0</b>	
15	No	1 330	(1 110 - 1 570)	91.6	(86.3 - 95.7)
	Yes	120	(70 - 210)	8.4	(4.3 - 13.7)
	<b>Total</b>	<b>1 450</b>	<b>(1 220 - 1 700)</b>	<b>100.0</b>	
16	No	1 350	(1 150 - 1 550)	94.8	(88.0 - 98.7)
	Yes	70	(20 - 180)	5.2	(1.3 - 12.0)
	<b>Total</b>	<b>1 420</b>	<b>(1 220 - 1 650)</b>	<b>100.0</b>	
17	No	1 220	(1 020 - 1 440)	92.3	(88.6 - 94.9)
	Yes	100	(70 - 150)	7.7	(5.1 - 11.4)
	<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	
<b>Total</b>	No	8 510	(8 350 - 8 640)	93.5	(91.7 - 94.9)
	Yes	590	(460 - 760)	6.5	(5.1 - 8.3)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 5.35: YOUNG PEOPLE AGED 12–17 YEARS — WHETHER TRIED TO END OWN LIFE IN PAST 12 MONTHS, BY LEVEL OF RELATIVE ISOLATION (LORI)**

<i>Attempted suicide</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>LORI — None</b>				
No	2 960	(2 830 - 3 080)	93.5	(90.2 - 96.2)
Yes	210	(120 - 320)	6.5	(3.8 - 9.8)
<b>Total</b>	<b>3 160</b>	<b>(3 070 - 3 250)</b>	<b>100.0</b>	
<b>LORI — Low</b>				
No	2 120	(1 910 - 2 350)	92.9	(87.9 - 95.9)
Yes	160	(90 - 280)	7.1	(4.1 - 12.1)
<b>Total</b>	<b>2 280</b>	<b>(2 080 - 2 510)</b>	<b>100.0</b>	
<b>LORI — Moderate</b>				
No	1 680	(1 380 - 2 010)	92.2	(89.0 - 94.5)
Yes	140	(100 - 200)	7.8	(5.5 - 11.0)
<b>Total</b>	<b>1 820</b>	<b>(1 520 - 2 180)</b>	<b>100.0</b>	
<b>LORI — High</b>				
No	860	(610 - 1 160)	92.3	(85.1 - 97.3)
Yes	70	(30 - 150)	7.7	(2.7 - 15.1)
<b>Total</b>	<b>930</b>	<b>(670 - 1 250)</b>	<b>100.0</b>	
<b>LORI — Extreme</b>				
No	890	(630 - 1 210)	98.8	(96.9 - 99.7)
Yes	10	(0 - 30)	1.2	(0.3 - 3.1)
<b>Total</b>	<b>900</b>	<b>(630 - 1 210)</b>	<b>100.0</b>	
<b>Western Australia</b>				
No	8 510	(8 350 - 8 640)	93.5	(91.7 - 94.9)
Yes	590	(460 - 760)	6.5	(5.1 - 8.3)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 5.36: YOUNG PEOPLE AGED 12–17 YEARS — WHETHER SERIOUSLY THOUGHT ABOUT ENDING OWN LIFE IN PAST 12 MONTHS, BY RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES AND SEX**

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Had thought about suicide</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>					
Low	No	2 960	(2 640 - 3 280)	91.8	(88.7 - 94.4)
	Yes	270	(180 - 370)	8.2	(5.6 - 11.3)
	<b>Total</b>	<b>3 220</b>	<b>(2 900 - 3 550)</b>	<b>100.0</b>	
Moderate	No	840	(670 - 1 030)	84.0	(76.7 - 89.7)
	Yes	160	(100 - 230)	16.0	(10.3 - 23.3)
	<b>Total</b>	<b>1 000</b>	<b>(820 - 1 190)</b>	<b>100.0</b>	
High	No	300	(180 - 450)	70.0	(48.2 - 85.7)
	Yes	130	(60 - 260)	30.0	(14.3 - 51.8)
	<b>Total</b>	<b>430</b>	<b>(290 - 610)</b>	<b>100.0</b>	
<b>Total</b>	No	4 090	(3 770 - 4 420)	88.1	(84.8 - 90.7)
	Yes	550	(430 - 710)	11.9	(9.3 - 15.2)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>					
Low	No	2 620	(2 350 - 2 900)	88.0	(83.1 - 91.8)
	Yes	360	(240 - 510)	12.0	(8.2 - 16.9)
	<b>Total</b>	<b>2 980</b>	<b>(2 690 - 3 290)</b>	<b>100.0</b>	
Moderate	No	630	(480 - 820)	70.5	(60.0 - 78.8)
	Yes	260	(190 - 370)	29.5	(21.2 - 40.0)
	<b>Total</b>	<b>900</b>	<b>(730 - 1 100)</b>	<b>100.0</b>	
High	No	340	(250 - 450)	58.1	(46.0 - 69.1)
	Yes	250	(160 - 350)	41.9	(30.9 - 54.0)
	<b>Total</b>	<b>580</b>	<b>(460 - 730)</b>	<b>100.0</b>	
<b>Total</b>	No	3 590	(3 290 - 3 900)	80.5	(76.5 - 84.0)
	Yes	870	(700 - 1 060)	19.5	(16.0 - 23.5)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>					
Low	No	5 580	(5 270 - 5 880)	90.0	(87.1 - 92.4)
	Yes	620	(470 - 800)	10.0	(7.6 - 12.9)
	<b>Total</b>	<b>6 200</b>	<b>(5 900 - 6 500)</b>	<b>100.0</b>	
Moderate	No	1 470	(1 250 - 1 720)	77.6	(71.4 - 82.6)
	Yes	420	(320 - 550)	22.4	(17.4 - 28.6)
	<b>Total</b>	<b>1 890</b>	<b>(1 650 - 2 140)</b>	<b>100.0</b>	
High	No	640	(490 - 810)	63.1	(52.2 - 72.5)
	Yes	370	(250 - 510)	36.9	(27.5 - 47.8)
	<b>Total</b>	<b>1 010</b>	<b>(820 - 1 220)</b>	<b>100.0</b>	
<b>Total</b>	No	7 680	(7 450 - 7 900)	84.4	(81.8 - 86.8)
	Yes	1 420	(1 200 - 1 660)	15.6	(13.2 - 18.2)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 5.37: YOUNG PEOPLE AGED 12–17 YEARS — WHETHER TRIED TO END OWN LIFE IN PAST 12 MONTHS, BY RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES AND SEX**

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Attempted suicide</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>					
Low	No	3 150	(2 830 - 3 480)	97.7	(96.4 - 98.7)
	Yes	70	(40 - 120)	2.3	(1.3 - 3.6)
	<b>Total</b>	<b>3 220</b>	<b>(2 900 - 3 550)</b>	<b>100.0</b>	
Moderate	No	920	(750 - 1 120)	92.9	(88.1 - 96.1)
	Yes	70	(40 - 120)	7.1	(3.9 - 11.9)
	<b>Total</b>	<b>1 000</b>	<b>(820 - 1 190)</b>	<b>100.0</b>	
High	No	380	(250 - 550)	88.7	(66.9 - 98.7)
	Yes	50	(10 - 160)	11.3	(1.3 - 33.1)
	<b>Total</b>	<b>430</b>	<b>(290 - 610)</b>	<b>100.0</b>	
<b>Total</b>	No	4 450	(4 120 - 4 770)	95.9	(93.7 - 97.4)
	Yes	190	(120 - 290)	4.1	(2.6 - 6.3)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>					
Low	No	2 860	(2 580 - 3 160)	96.2	(93.9 - 97.9)
	Yes	110	(60 - 190)	3.8	(2.1 - 6.1)
	<b>Total</b>	<b>2 980</b>	<b>(2 690 - 3 290)</b>	<b>100.0</b>	
Moderate	No	770	(600 - 950)	85.7	(77.8 - 91.6)
	Yes	130	(70 - 200)	14.3	(8.4 - 22.2)
	<b>Total</b>	<b>900</b>	<b>(730 - 1 100)</b>	<b>100.0</b>	
High	No	430	(330 - 540)	72.9	(59.1 - 83.3)
	Yes	160	(90 - 260)	27.1	(16.7 - 40.9)
	<b>Total</b>	<b>580</b>	<b>(460 - 730)</b>	<b>100.0</b>	
<b>Total</b>	No	4 060	(3 740 - 4 380)	91.0	(88.1 - 93.3)
	Yes	400	(290 - 530)	9.0	(6.7 - 11.9)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>					
Low	No	6 010	(5 700 - 6 310)	97.0	(95.5 - 98.1)
	Yes	190	(120 - 280)	3.0	(1.9 - 4.5)
	<b>Total</b>	<b>6 200</b>	<b>(5 900 - 6 500)</b>	<b>100.0</b>	
Moderate	No	1 690	(1 460 - 1 940)	89.4	(85.2 - 92.9)
	Yes	200	(130 - 280)	10.6	(7.1 - 14.8)
	<b>Total</b>	<b>1 890</b>	<b>(1 650 - 2 140)</b>	<b>100.0</b>	
High	No	800	(640 - 990)	79.5	(68.1 - 87.5)
	Yes	210	(120 - 340)	20.5	(12.5 - 31.9)
	<b>Total</b>	<b>1 010</b>	<b>(820 - 1 220)</b>	<b>100.0</b>	
<b>Total</b>	No	8 510	(8 350 - 8 640)	93.5	(91.7 - 94.9)
	Yes	590	(460 - 760)	6.5	(5.1 - 8.3)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

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**TABLE 5.38:** YOUNG PEOPLE AGED 12–17 YEARS — WHETHER SERIOUSLY THOUGHT ABOUT ENDING OWN LIFE IN PAST 12 MONTHS, BY SELF ESTEEM QUARTILES AND SEX

<i>Self-esteem quartiles</i>	<i>Thought about suicide</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>					
Low – 1st quartile	No	790	(620 - 980)	79.3	(71.5 - 86.4)
	Yes	210	(140 - 300)	20.7	(13.6 - 28.5)
	<b>Total</b>	<b>990</b>	<b>(820 - 1 210)</b>	<b>100.0</b>	
2nd quartile	No	860	(680 - 1 090)	88.1	(80.9 - 93.4)
	Yes	120	(70 - 190)	11.9	(6.7 - 19.3)
	<b>Total</b>	<b>980</b>	<b>(780 - 1 200)</b>	<b>100.0</b>	
3rd quartile	No	1 130	(900 - 1 390)	87.1	(79.2 - 92.7)
	Yes	170	(100 - 280)	12.9	(7.3 - 20.8)
	<b>Total</b>	<b>1 300</b>	<b>(1 060 - 1 570)</b>	<b>100.0</b>	
High – 4th quartile	No	1 310	(1 120 - 1 520)	95.4	(89.1 - 98.8)
	Yes	60	(20 - 150)	4.6	(1.2 - 10.9)
	<b>Total</b>	<b>1 370</b>	<b>(1 170 - 1 580)</b>	<b>100.0</b>	
<b>Total</b>	No	4 090	(3 770 - 4 420)	88.1	(84.8 - 90.7)
	Yes	550	(430 - 710)	11.9	(9.3 - 15.2)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>					
Low – 1st quartile	No	1 020	(840 - 1 220)	71.5	(63.9 - 77.9)
	Yes	410	(300 - 530)	28.5	(22.1 - 36.1)
	<b>Total</b>	<b>1 430</b>	<b>(1 220 - 1 650)</b>	<b>100.0</b>	
2nd quartile	No	860	(690 - 1 070)	81.2	(74.5 - 87.1)
	Yes	200	(140 - 270)	18.8	(12.9 - 25.5)
	<b>Total</b>	<b>1 060</b>	<b>(870 - 1 270)</b>	<b>100.0</b>	
3rd quartile	No	800	(640 - 980)	87.0	(74.2 - 94.4)
	Yes	120	(50 - 260)	13.0	(5.6 - 25.8)
	<b>Total</b>	<b>920</b>	<b>(740 - 1 120)</b>	<b>100.0</b>	
High – 4th quartile	No	910	(750 - 1 090)	86.5	(75.0 - 94.0)
	Yes	140	(60 - 290)	13.5	(6.0 - 25.0)
	<b>Total</b>	<b>1 050</b>	<b>(870 - 1 260)</b>	<b>100.0</b>	
<b>Total</b>	No	3 590	(3 290 - 3 900)	80.5	(76.5 - 84.0)
	Yes	870	(700 - 1 060)	19.5	(16.0 - 23.5)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>					
Low – 1st quartile	No	1 810	(1 570 - 2 070)	74.7	(69.2 - 79.6)
	Yes	610	(490 - 760)	25.3	(20.4 - 30.8)
	<b>Total</b>	<b>2 420</b>	<b>(2 160 - 2 700)</b>	<b>100.0</b>	
2nd quartile	No	1 720	(1 470 - 1 990)	84.5	(79.7 - 88.4)
	Yes	320	(240 - 420)	15.5	(11.6 - 20.3)
	<b>Total</b>	<b>2 040</b>	<b>(1 770 - 2 320)</b>	<b>100.0</b>	
3rd quartile	No	1 930	(1 660 - 2 210)	87.1	(80.7 - 91.9)
	Yes	290	(170 - 430)	12.9	(8.1 - 19.3)
	<b>Total</b>	<b>2 210</b>	<b>(1 940 - 2 510)</b>	<b>100.0</b>	
High – 4th quartile	No	2 220	(1 980 - 2 480)	91.5	(85.7 - 95.6)
	Yes	210	(110 - 360)	8.5	(4.4 - 14.3)
	<b>Total</b>	<b>2 430</b>	<b>(2 170 - 2 700)</b>	<b>100.0</b>	
<b>Total</b>	No	7 680	(7 450 - 7 900)	84.4	(81.8 - 86.8)
	Yes	1 420	(1 200 - 1 660)	15.6	(13.2 - 18.2)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 5.39: YOUNG PEOPLE AGED 12–17 YEARS — WHETHER SERIOUSLY THOUGHT ABOUT ENDING OWN LIFE IN PAST 12 MONTHS, BY WHETHER HAD SMOKED CIGARETTES REGULARLY**

<i>Thought about suicide</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Never smoked				
No	5 270	(4 940 - 5 580)	89.5	(86.4 - 92.2)
Yes	620	(460 - 810)	10.5	(7.8 - 13.6)
<b>Total</b>	<b>5 880</b>	<b>(5 570 - 6 180)</b>	<b>100.0</b>	
Has smoked				
No	2 420	(2 140 - 2 700)	75.1	(70.3 - 79.4)
Yes	800	(650 - 970)	24.9	(20.6 - 29.7)
<b>Total</b>	<b>3 220</b>	<b>(2 920 - 3 530)</b>	<b>100.0</b>	
<b>Total</b>				
No	7 680	(7 450 - 7 900)	84.4	(81.8 - 86.8)
Yes	1 420	(1 200 - 1 660)	15.6	(13.2 - 18.2)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 5.40: YOUNG PEOPLE AGED 12–17 YEARS — WHETHER SERIOUSLY THOUGHT ABOUT ENDING OWN LIFE IN PAST 12 MONTHS, BY MARIJUANA USE**

<i>Thought about suicide</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Never used marijuana				
No	5 630	(5 310 - 5 950)	87.9	(85.1 - 90.5)
Yes	770	(610 - 960)	12.1	(9.5 - 14.9)
<b>Total</b>	<b>6 400</b>	<b>(6 100 - 6 700)</b>	<b>100.0</b>	
Used marijuana over one year ago				
No	780	(620 - 980)	85.0	(73.0 - 92.8)
Yes	140	(70 - 270)	15.0	(7.2 - 27.0)
<b>Total</b>	<b>920</b>	<b>(740 - 1 130)</b>	<b>100.0</b>	
Use marijuana less than monthly				
No	520	(390 - 690)	74.8	(65.0 - 82.9)
Yes	180	(120 - 250)	25.2	(17.1 - 35.0)
<b>Total</b>	<b>700</b>	<b>(550 - 870)</b>	<b>100.0</b>	
Use marijuana about weekly				
No	410	(270 - 590)	67.6	(53.7 - 80.1)
Yes	200	(120 - 290)	32.4	(19.9 - 46.3)
<b>Total</b>	<b>600</b>	<b>(450 - 800)</b>	<b>100.0</b>	
Use marijuana daily				
No	340	(240 - 460)	71.2	(57.5 - 83.8)
Yes	140	(80 - 230)	28.8	(16.2 - 42.5)
<b>Total</b>	<b>480</b>	<b>(360 - 630)</b>	<b>100.0</b>	
<b>Total</b>				
No	7 680	(7 450 - 7 900)	84.4	(81.8 - 86.8)
Yes	1 420	(1 200 - 1 660)	15.6	(13.2 - 18.2)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 5.41: YOUNG PEOPLE AGED 12–17 YEARS — WHETHER SERIOUSLY THOUGHT ABOUT ENDING OWN LIFE IN PAST 12 MONTHS, BY ALCOHOL CONSUMPTION AND AGE GROUP**

<i>Alcohol consumption</i>	<i>Thought about suicide</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>12–14 years</b>					
Did not drink	No	3 750	(3 440 - 4 060)	87.1	(83.3 - 90.4)
	Yes	550	(410 - 730)	12.9	(9.6 - 16.7)
	<b>Total</b>	<b>4 300</b>	<b>(3 990 - 4 620)</b>	<b>100.0</b>	
Drank but not to excess	No	290	(180 - 440)	76.2	(65.4 - 85.8)
	Yes	90	(60 - 130)	23.8	(14.2 - 34.6)
	<b>Total</b>	<b>380</b>	<b>(260 - 530)</b>	<b>100.0</b>	
Drank to excess	No	140	(60 - 260)	61.7	(38.4 - 81.9)
	Yes	90	(40 - 140)	38.3	(18.1 - 61.6)
	<b>Total</b>	<b>220</b>	<b>(140 - 350)</b>	<b>100.0</b>	
<b>Total</b>	No	4 180	(3 870 - 4 500)	85.1	(81.4 - 88.2)
	Yes	730	(570 - 910)	14.9	(11.8 - 18.6)
	<b>Total</b>	<b>4 910</b>	<b>(4 600 - 5 220)</b>	<b>100.0</b>	
<b>15–16 years</b>					
Did not drink	No	1 510	(1 300 - 1 730)	90.0	(85.8 - 93.3)
	Yes	170	(110 - 240)	10.0	(6.7 - 14.2)
	<b>Total</b>	<b>1 670</b>	<b>(1 460 - 1 900)</b>	<b>100.0</b>	
Drank but not to excess	No	460	(350 - 610)	82.8	(61.2 - 95.0)
	Yes	100	(30 - 270)	17.2	(5.0 - 38.8)
	<b>Total</b>	<b>560</b>	<b>(410 - 740)</b>	<b>100.0</b>	
Drank to excess	No	460	(330 - 620)	72.3	(59.8 - 82.7)
	Yes	180	(100 - 270)	27.7	(17.3 - 40.2)
	<b>Total</b>	<b>640</b>	<b>(480 - 810)</b>	<b>100.0</b>	
<b>Total</b>	No	2 430	(2 180 - 2 690)	84.7	(79.5 - 88.8)
	Yes	440	(320 - 600)	15.3	(11.2 - 20.5)
	<b>Total</b>	<b>2 870</b>	<b>(2 600 - 3 150)</b>	<b>100.0</b>	
<b>17 years</b>					
Did not drink	No	540	(390 - 720)	83.1	(74.0 - 90.4)
	Yes	110	(60 - 170)	16.9	(9.8 - 26.3)
	<b>Total</b>	<b>640</b>	<b>(490 - 830)</b>	<b>100.0</b>	
Drank but not to excess	No	310	(220 - 420)	75.2	(61.7 - 86.2)
	Yes	100	(50 - 170)	24.8	(13.8 - 38.3)
	<b>Total</b>	<b>410</b>	<b>(310 - 540)</b>	<b>100.0</b>	
Drank to excess	No	230	(160 - 330)	85.5	(70.8 - 94.4)
	Yes	40	(20 - 80)	14.5	(5.6 - 29.2)
	<b>Total</b>	<b>270</b>	<b>(190 - 370)</b>	<b>100.0</b>	
<b>Total</b>	No	1 070	(880 - 1 280)	81.1	(74.6 - 86.5)
	Yes	250	(170 - 340)	18.9	(13.5 - 25.4)
	<b>Total</b>	<b>1 320</b>	<b>(1 120 - 1 550)</b>	<b>100.0</b>	

Continued...





**TABLE 5.41 (continued):** YOUNG PEOPLE AGED 12–17 YEARS — WHETHER SERIOUSLY THOUGHT ABOUT ENDING OWN LIFE IN PAST 12 MONTHS, BY ALCOHOL CONSUMPTION AND AGE GROUP

Alcohol consumption	Thought about suicide	Number	95% CI	%	95% CI
<b>Total</b>					
Did not drink	No	5 790	(5 470 - 6 100)	87.5	(84.7 - 89.9)
	Yes	830	(670 - 1 020)	12.5	(10.1 - 15.3)
	<b>Total</b>	<b>6 620</b>	<b>(6 330 - 6 910)</b>	<b>100.0</b>	
Drank but not to excess	No	1 060	(870 - 1 270)	78.6	(70.1 - 85.9)
	Yes	290	(180 - 430)	21.4	(14.1 - 29.9)
	<b>Total</b>	<b>1 350</b>	<b>(1 130 - 1 590)</b>	<b>100.0</b>	
Drank to excess	No	830	(650 - 1 040)	73.3	(64.9 - 80.9)
	Yes	300	(210 - 420)	26.7	(19.1 - 35.1)
	<b>Total</b>	<b>1 130</b>	<b>(930 - 1 370)</b>	<b>100.0</b>	
<b>Total</b>	No	7 680	(7 450 - 7 900)	84.4	(81.8 - 86.8)
	Yes	1 420	(1 200 - 1 660)	15.6	(13.2 - 18.2)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

**TABLE 5.42:** YOUNG PEOPLE AGED 12–17 YEARS — WHETHER SERIOUSLY THOUGHT ABOUT ENDING OWN LIFE IN PAST 12 MONTHS, BY WHETHER BEEN IN SITUATION OF FAMILY VIOLENCE AND SEX

Been in family violence situation	Thought about suicide	Number	95% CI	%	95% CI
<b>Males</b>					
No	No	2 310	(2 020 - 2 610)	92.2	(87.7 - 95.7)
	Yes	190	(110 - 320)	7.8	(4.3 - 12.3)
	<b>Total</b>	<b>2 510</b>	<b>(2 200 - 2 820)</b>	<b>100.0</b>	
Yes	No	1 780	(1 510 - 2 050)	83.3	(78.2 - 87.7)
	Yes	360	(260 - 470)	16.7	(12.3 - 21.8)
	<b>Total</b>	<b>2 130</b>	<b>(1 870 - 2 430)</b>	<b>100.0</b>	
<b>Total</b>	No	4 090	(3 770 - 4 420)	88.1	(84.8 - 90.7)
	Yes	550	(430 - 710)	11.9	(9.3 - 15.2)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>					
No	No	1 960	(1 720 - 2 220)	89.0	(83.2 - 93.2)
	Yes	240	(140 - 370)	11.0	(6.8 - 16.8)
	<b>Total</b>	<b>2 210</b>	<b>(1 940 - 2 480)</b>	<b>100.0</b>	
Yes	No	1 630	(1 400 - 1 890)	72.3	(66.1 - 77.8)
	Yes	630	(490 - 800)	27.7	(22.2 - 33.9)
	<b>Total</b>	<b>2 250</b>	<b>(1 980 - 2 550)</b>	<b>100.0</b>	
<b>Total</b>	No	3 590	(3 290 - 3 900)	80.5	(76.5 - 84.0)
	Yes	870	(700 - 1 060)	19.5	(16.0 - 23.5)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>					
No	No	4 280	(3 940 - 4 610)	90.7	(87.1 - 93.4)
	Yes	440	(300 - 600)	9.3	(6.6 - 12.9)
	<b>Total</b>	<b>4 710</b>	<b>(4 380 - 5 060)</b>	<b>100.0</b>	
Yes	No	3 410	(3 080 - 3 740)	77.6	(73.3 - 81.4)
	Yes	980	(800 - 1 180)	22.4	(18.6 - 26.7)
	<b>Total</b>	<b>4 390</b>	<b>(4 040 - 4 730)</b>	<b>100.0</b>	
<b>Total</b>	No	7 680	(7 450 - 7 900)	84.4	(81.8 - 86.8)
	Yes	1 420	(1 200 - 1 660)	15.6	(13.2 - 18.2)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 5.43: YOUNG PEOPLE AGED 12–17 YEARS — WHETHER SERIOUSLY THOUGHT ABOUT ENDING OWN LIFE IN PAST 12 MONTHS, BY WHETHER FRIENDS HAVE ATTEMPTED SUICIDE AND SEX**

<i>Friends attempted suicide</i>	<i>Thought about suicide</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>					
No	No	3 590	(3 280 - 3 900)	89.9	(87.0 - 92.5)
	Yes	400	(300 - 520)	10.1	(7.5 - 13.0)
	<b>Total</b>	<b>3 990</b>	<b>(3 680 - 4 310)</b>	<b>100.0</b>	
Yes	No	500	(370 - 670)	77.0	(64.0 - 88.5)
	Yes	150	(70 - 250)	23.0	(11.5 - 36.0)
	<b>Total</b>	<b>650</b>	<b>(490 - 830)</b>	<b>100.0</b>	
<b>Total</b>	No	4 090	(3 770 - 4 420)	88.1	(84.8 - 90.7)
	Yes	550	(430 - 710)	11.9	(9.3 - 15.2)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>					
No	No	3 020	(2 730 - 3 320)	87.1	(82.8 - 90.8)
	Yes	450	(320 - 610)	12.9	(9.2 - 17.2)
	<b>Total</b>	<b>3 460</b>	<b>(3 160 - 3 770)</b>	<b>100.0</b>	
Yes	No	570	(440 - 740)	57.6	(47.6 - 67.3)
	Yes	420	(310 - 570)	42.4	(32.7 - 52.4)
	<b>Total</b>	<b>1 000</b>	<b>(820 - 1 210)</b>	<b>100.0</b>	
<b>Total</b>	No	3 590	(3 290 - 3 900)	80.5	(76.5 - 84.0)
	Yes	870	(700 - 1 060)	19.5	(16.0 - 23.5)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>					
No	No	6 610	(6 330 - 6 880)	88.6	(86.1 - 90.9)
	Yes	850	(680 - 1 050)	11.4	(9.1 - 13.9)
	<b>Total</b>	<b>7 460</b>	<b>(7 220 - 7 690)</b>	<b>100.0</b>	
Yes	No	1 070	(880 - 1 280)	65.3	(57.4 - 72.8)
	Yes	570	(430 - 740)	34.7	(27.2 - 42.6)
	<b>Total</b>	<b>1 640</b>	<b>(1 410 - 1 890)</b>	<b>100.0</b>	
<b>Total</b>	No	7 680	(7 450 - 7 900)	84.4	(81.8 - 86.8)
	Yes	1 420	(1 200 - 1 660)	15.6	(13.2 - 18.2)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	



**TABLE 5.44: YOUNG PEOPLE AGED 12–17 YEARS — WHETHER TRIED TO END OWN LIFE IN PAST 12 MONTHS, BY WHETHER FRIENDS HAVE ATTEMPTED SUICIDE AND SEX**

<i>Friends attempted suicide</i>	<i>Attempt suicide</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>					
No	No	3 860	(3 550 - 4 180)	96.7	(95.1 - 97.8)
	Yes	130	(90 - 190)	3.3	(2.2 - 4.9)
	<b>Total</b>	<b>3 990</b>	<b>(3 680 - 4 310)</b>	<b>100.0</b>	
Yes	No	590	(440 - 760)	90.8	(76.9 - 98.2)
	Yes	60	(10 - 160)	9.2	(1.8 - 23.1)
	<b>Total</b>	<b>650</b>	<b>(490 - 830)</b>	<b>100.0</b>	
<b>Total</b>	No	4 450	(4 120 - 4 770)	95.9	(93.7 - 97.4)
	Yes	190	(120 - 290)	4.1	(2.6 - 6.3)
	<b>Total</b>	<b>4 640</b>	<b>(4 310 - 4 960)</b>	<b>100.0</b>	
<b>Females</b>					
No	No	3 300	(3 010 - 3 610)	95.4	(93.2 - 96.9)
	Yes	160	(110 - 240)	4.6	(3.1 - 6.8)
	<b>Total</b>	<b>3 460</b>	<b>(3 160 - 3 770)</b>	<b>100.0</b>	
Yes	No	760	(600 - 930)	75.9	(66.6 - 84.3)
	Yes	240	(150 - 360)	24.1	(15.7 - 33.4)
	<b>Total</b>	<b>1 000</b>	<b>(820 - 1 210)</b>	<b>100.0</b>	
<b>Total</b>	No	4 060	(3 740 - 4 380)	91.0	(88.1 - 93.3)
	Yes	400	(290 - 530)	9.0	(6.7 - 11.9)
	<b>Total</b>	<b>4 460</b>	<b>(4 140 - 4 790)</b>	<b>100.0</b>	
<b>Total</b>					
No	No	7 170	(6 910 - 7 400)	96.1	(94.8 - 97.1)
	Yes	290	(220 - 390)	3.9	(2.9 - 5.2)
	<b>Total</b>	<b>7 460</b>	<b>(7 220 - 7 690)</b>	<b>100.0</b>	
Yes	No	1 340	(1 140 - 1 570)	81.8	(74.4 - 87.9)
	Yes	300	(200 - 450)	18.2	(12.1 - 25.6)
	<b>Total</b>	<b>1 640</b>	<b>(1 410 - 1 890)</b>	<b>100.0</b>	
<b>Total</b>	No	8 510	(8 350 - 8 640)	93.5	(91.7 - 94.9)
	Yes	590	(460 - 760)	6.5	(5.1 - 8.3)
	<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

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**TABLE 5.45:** YOUNG PEOPLE AGED 12–17 YEARS — LIKELIHOOD OF HAVING SERIOUSLY THOUGHT ABOUT ENDING OWN LIFE, ASSOCIATED WITH SEX, AGE, LEVEL OF RELATIVE ISOLATION, WHETHER TREATED BADLY BECAUSE ABORIGINAL, WHETHER FRIENDS HAVE ATTEMPTED TO TAKE THEIR OWN LIFE, WHETHER BEEN IN SITUATION OF FAMILY VIOLENCE, SELF-ESTEEM QUANTILES AND RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES

Thought of ending own life in past 12 months			
Parameter	Significance (p value)	Odds Ratio	95% CI
<b>Sex</b>			
Male		1.00	
Female	0.007	1.72	(1.17 - 2.54)
<b>Age (years)</b>			
12		1.00	
13	0.537	1.24	(0.63 - 2.46)
14	0.971	0.99	(0.46 - 2.10)
15	0.097	0.53	(0.25 - 1.12)
16	0.551	0.80	(0.38 - 1.67)
17	0.237	0.60	(0.25 - 1.40)
<b>Level of Relative Isolation</b>			
None		1.00	
Low	0.213	0.74	(0.45 - 1.19)
Moderate	0.479	1.26	(0.66 - 2.39)
High	0.182	0.58	(0.27 - 1.28)
Extreme	0.060	0.34	(0.11 - 1.04)
<b>Treated badly</b>			
No		1.00	
Yes	<.001	2.19	(1.40 - 3.42)
<b>Friends attempted suicide</b>			
No		1.00	
Yes	<.001	2.72	(1.67 - 4.45)
<b>Exposed to a family violence situation</b>			
No		1.00	
Yes	0.007	1.95	(1.21 - 3.14)
<b>Self-esteem quartiles</b>			
Low - 1st quartile	0.011	2.21	(1.20 - 4.08)
2nd quartile	0.377	1.31	(0.72 - 2.41)
3rd quartile	0.090	1.75	(0.92 - 3.33)
High - 4th quartile		1.00	
<b>Risk of clinically significant emotional or behavioural difficulties</b>			
Low		1.00	
Moderate	0.007	2.00	(1.22 - 3.31)
High	<.001	3.80	(2.28 - 6.32)





# Chapter 6

## USE OF MENTAL HEALTH SERVICES

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## Chapter 6

### USE OF MENTAL HEALTH SERVICES

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*Mental Health Services have a role in helping children and carers who have significant mental health problems. Proper treatment requires having access to suitable and appropriately resourced services, being able to recognise that a person has a mental health problem, and being educated about the best possible avenues for treatment.*

*The WAACHS sought consent from all carers to access their hospital records and the records of their children. Almost all carers in the survey gave consent for the survey team to access their hospital and medical records. This linkage provides valuable information on use of both hospital-based and community-based Mental Health Services by both carers and their children.*

*This chapter describes the nature of contacts with Mental Health Services in WA by both Aboriginal children and their carers, compared with measures of social and emotional wellbeing collected in the survey.*

---

#### SUMMARY

Use of Mental Health Services is more common in Aboriginal carers than in Aboriginal children. In particular:

- ◆ Some 17.5 per cent of male carers and 25.5 per cent of female carers of Aboriginal children have had contact with Mental Health Services in WA. These figures are substantially higher than the WA population averages for people aged 20–49 years which are 10 per cent for males and 13 per cent for females.
- ◆ Carers living in areas of low and moderate relative isolation were more likely to have had contact with Mental Health Services.
- ◆ Use of Mental Health Services was higher among carers who smoked, carers who have chronic medical conditions and carers who had been arrested or charged with an offence. Over half of carers who had been seen by Mental Health Services had been arrested or charged with an offence at some time in their lives.
- ◆ Despite the high proportion of Aboriginal children at high risk of clinically significant emotional and behavioural difficulties, very few children have had contact with Mental Health Services: less than one per cent of children under 4 years of age, 3.8 per cent of children aged 4–11 years, and 11.0 per cent of children aged 12–17 years.
- ◆ Children were more likely to have been seen by Mental Health Services if they were at high risk of clinically significant emotional or behavioural difficulties, lived in a family with poor family functioning, or if their primary carer had been seen by Mental Health Services.





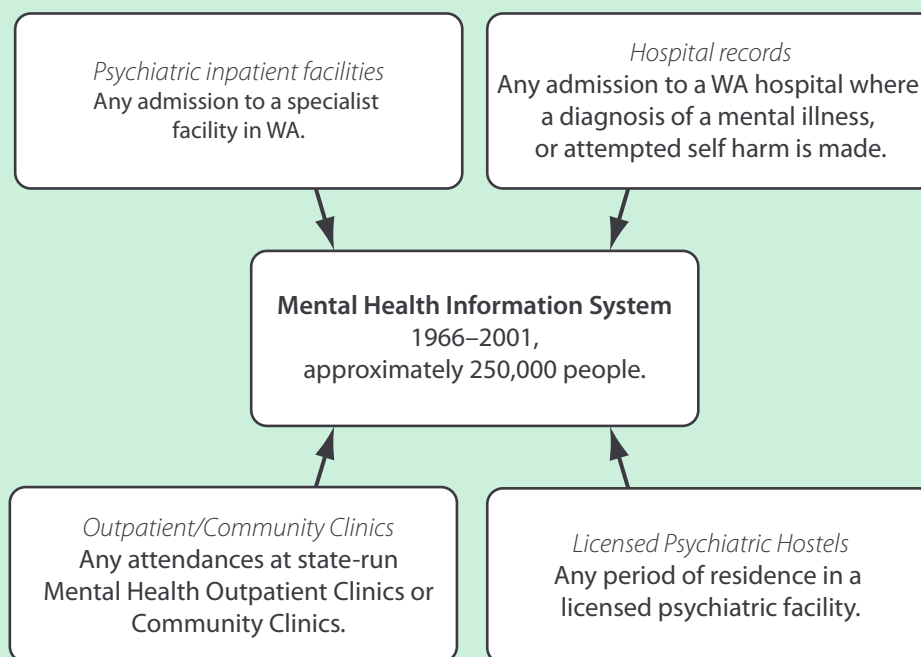
## DATA SOURCES

Data on the use of Mental Health Services by children and carers has been obtained by linking survey responses with administrative health records. These health records include the Mental Health Information System (MHIS), a record of all contacts with inpatient Mental Health Services in WA as well as with state-run outpatient and community clinics.

### THE MENTAL HEALTH INFORMATION SYSTEM

The Mental Health Information System (MHIS) is a database of contacts with Mental Health Services in WA that dates back to 1966. The MHIS has comprehensive coverage of inpatient based episodes of care covering both specialist psychiatric facilities and any admissions to private or public hospitals in WA where a primary diagnosis of a mental illness, attempted self-harm or mental disorder complicating pregnancy is made. In addition, the MHIS records all contacts with state-run outpatient and community based mental health clinics, as well as any periods of residence in licensed psychiatric residential hostels.

#### SOURCES OF DATA FOR THE MENTAL HEALTH INFORMATION SYSTEM



Because of the diversity of its data sources, the MHIS data base comprises a number of separate data tables. The records for each person represented on the system can be grouped together to form logical episodes of care. An episode represents a single admission to an inpatient facility, or a period of regular ongoing care at an outpatient or community clinic.

Information recorded on the system includes demographics, diagnoses, and cause of injury codes in cases of attempted self-harm.

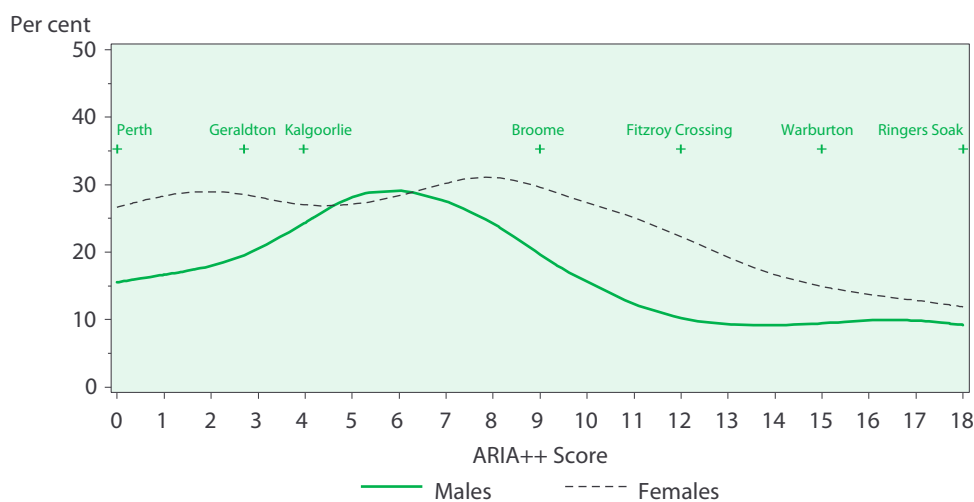


## CARERS' CONTACTS WITH MENTAL HEALTH SERVICES

All carers were asked for consent to link their survey responses to their hospital records, including records contained within the MHIS. Consent was given by 2,042 of 2,113 primary carers (97 per cent) and 960 of 1,040 secondary carers (92 per cent). Of those carers who gave consent for their records to be linked, an estimated 17.5 per cent of males (CI: 15.2%–20.2%) and 25.5 per cent of females (CI: 23.0%–28.2%) were linked to the MHIS, meaning they had some contact with Mental Health Services in WA prior to the survey (Table 6.1).

As not all carers can be expected to have a record in the MHIS, it is not possible to know what percentage of carers had records on the MHIS but did not link. In the case of linkage to birth records (see Chapter 3 of Volume One)<sup>1</sup>, where all births occurring in WA should, in theory, be recorded on the Midwives notification database, four per cent of children whose carers gave consent for linkage of their birth records were not successfully linked to a record. It is possible that the linkage rates for carers to the MHIS will slightly underestimate the true rate of contact with Mental Health Services in WA. Even so, these rates of contact with Mental Health Services of carers of Aboriginal children are substantially higher than population averages. As of December 1998, 9 per cent of the WA population had had contact with Mental Health Services (Table 6.2). While figures are not available specifically for carers of non-Aboriginal children, on average 10 per cent of males aged 20–49 years, and 13 per cent of females aged 20–49 years have had contact with Mental Health Services.

**FIGURE 6.1:** PROPORTION OF CARERS WHO HAVE USED MENTAL HEALTH SERVICES IN WA, BY ARIA++



The proportion of both male and female carers who had contact with Mental Health Services varied with ARIA++ (Figure 6.1). The proportion of carers who had contact with Mental Health Services peaked at around 30 per cent at an ARIA++ score of six for males, and at eight for females. In terms of the five LORI categories, for both male and female carers, the highest rates of contact with Mental Health Services were in areas of low relative isolation (males 23.3 per cent, CI: 18.3%–29.2%; females 30.0 per cent, CI: 25.5%–34.8%). The lowest rates were observed in areas of extreme relative isolation with 9.6 per cent of males (CI: 5.8%–15.1%) and 14.3 per cent of females (CI: 8.8%–22.4%) having a record of contact with Mental Health Services in WA prior to the survey (Table 6.1).



## CARERS' PSYCHIATRIC DIAGNOSES

Most records on the MHIS contain either a diagnosis of some form of mental health problem or of attempted self-harm. These diagnoses are coded using the International Classification of Diseases (ICD).<sup>2</sup> The individual contact records on the MHIS can be grouped together to form episodes of care, and an algorithm has been devised to assign a principal psychiatric diagnosis to each person on the MHIS.<sup>3</sup> This algorithm is based on giving priority to later diagnoses over earlier diagnoses, but subject to a hierarchy that would prefer an earlier more informative diagnosis to a later uninformative diagnosis, or a later diagnosis that is likely to represent a comorbidity. For instance, where people have psychotic disorders and comorbid drug dependence disorders, preference is given to the diagnosis of psychosis.

Among carers linked to the MHIS, the most common diagnoses were neurotic disorders (18.9 per cent; CI: 14.7%–23.4%), followed by alcohol or drug disorders (16.7 per cent; CI: 13.5%–20.1%) and affective psychoses (14.5 per cent; CI: 11.3%–18.0%). Differences were observed between males and females. For females the most common diagnosis was neurotic disorders (20.7 per cent; CI: 15.5%–26.5%) while for males the most common diagnosis was alcohol or drug disorders (29.6 per cent; CI: 23.4%–36.2%). By comparison, neurotic disorders was lower in males at 13.8 per cent (CI: 8.8%–20.3%) while alcohol or drug disorders were significantly lower in females at 12.1 per cent (CI: 8.7%–16.5%) (Table 6.3).

The profile of diagnoses differed between carers of Aboriginal children, and the whole population of WA. Table 6.4 shows the distribution of the population of WA aged 20–49 years who have had contact with Mental Health Services, as of December 1998, by principal diagnosis. Carers of Aboriginal children are less likely to be given a non-specific diagnosis (4.4 per cent; CI: 2.4%–7.5%) than the total population (13.8 per cent). Both male and female carers of Aboriginal children were more likely to have a diagnosis of alcohol or drug disorders—29.6 per cent (CI: 23.4%–36.2%) of male carers of Aboriginal children compared with 15.5 per cent of all males, and 12.1 per cent (CI: 8.7%–16.5%) of female carers compared with 6.1 per cent of all females. Rates of affective psychoses were also higher for both male and female carers of Aboriginal children than the general population (Table 6.4).

## ABORIGINAL IDENTIFICATION ON MHIS

The Mental Health Information System, like most administrative health collections, contains an identifier of Aboriginal status. This has been compared with Aboriginal identification obtained through the survey. At the time of the survey interview, each carer was asked if they considered themselves to be of Aboriginal or Torres Strait Islander descent. Among those carers who were linked to the MHIS, 79.4 per cent (CI: 75.0%–83.1%) identified as being of Aboriginal or Torres Strait Islander descent in the survey. In comparison only 65.6 per cent (CI: 60.7%–70.3%) of these carers were identified as being Aboriginal or Torres Strait Islander people on the MHIS.

Of those carers who identified as being of Aboriginal or Torres Strait Islander descent in the survey, 81.6 per cent (CI: 76.6%–85.8%) were identified as Aboriginal or Torres Strait Islander people on the MHIS, while 98.0 per cent (CI: 95.5%–99.5%) of those who did not identify as being of Aboriginal or Torres Strait Islander descent in the survey were identified as non-Aboriginal on the MHIS (Table 6.5).



In comparison, of those carers who were identified as Aboriginal or Torres Strait Islander people on the MHIS, 98.7 per cent (CI: 97.3%–99.5%) identified as being of Aboriginal or Torres Strait Islander origin in the survey, while 41.7 per cent (CI: 32.7%–51.0%) of those carers who were not identified as Aboriginal or Torres Strait Islander people on the MHIS identified as being of Aboriginal or Torres Strait Islander descent in the survey (Table 6.6).

### CONSISTENCY IN REPORTING AND RECORDING ABORIGINAL STATUS

In Volume One of the WAACHS findings, *The Health of Aboriginal Children and Young People*,<sup>1</sup> a comparison was presented between the Aboriginal status of mothers of survey children as reported in the survey and as reported on the Midwives Notifications Forms at the time of their childrens' births. A slightly higher level of agreement was found between these two data sources than has been observed with the MHIS.

While almost all people who were identified as Aboriginal or Torres Strait Islander people on the MHIS identified as such in the survey, a significant proportion of those who were not identified as Aboriginal or Torres Strait Islander people on the MHIS did identify as being of Aboriginal and Torres Strait Islander descent in the survey. This suggests that there are likely to be few cases where people are incorrectly identified as Aboriginal or Torres Strait Islander people on the MHIS, but there is a significant degree of under-reporting.

Consistency in reporting Aboriginal status reflects both the manner in which the information is gathered and the circumstances surrounding its collection. Despite promotional efforts within the health system to improve data quality and remind people that it is not possible to determine who is an Aboriginal or Torres Strait Islander person without asking the person, clients of Mental Health Services may not always be directly asked about their Aboriginal or Torres Strait Islander status, and the data collected may be based on the perceptions of the practitioners collecting the data.

It is also possible that a person's decision to identify as an Aboriginal or Torres Strait Islander person may be based on perceptions of the effect that self-identification may have on the nature of services they will receive following identification.

### ASSOCIATIONS WITH USE OF MENTAL HEALTH SERVICES

Contact with Mental Health Services is the best indicator available within the survey of mental health problems in carers of Aboriginal children. Only a proportion of people with a mental health problem receive treatment. The *1997-98 National Survey of Mental Health and Wellbeing* found that 19.1 per cent (CI: 18.3%–19.9%) of Western Australian adults had a diagnosable mental health problem in the twelve months prior to the survey, but only 7.4 per cent (CI: 6.8%–8.0%) had used any health service in relation to a mental health problem in the same period.<sup>4</sup>

The association between the use of Mental Health Services by carers and various factors was examined, including carer smoking, financial strain and arrests, in order to investigate whether mental health problems were associated with these factors.

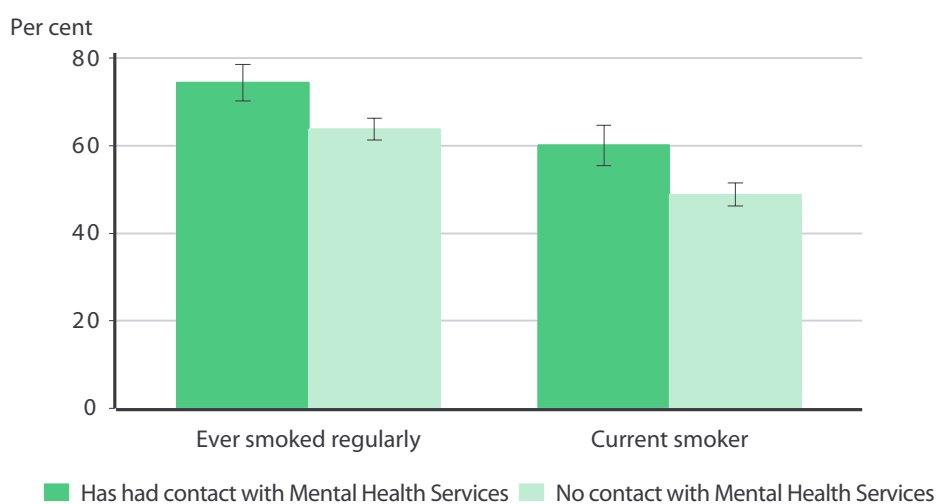


## Smoking

Carers were asked if they had ever smoked cigarettes regularly. Some 66.4 per cent of carers (CI: 64.2%–68.5%) had been regular smokers at some stage in their lives. Use of Mental Health Services was associated with smoking. In carers who have had contact with Mental Health Services, 74.5 per cent (CI: 70.2%–78.6%) have been regular smokers at some point in their lives compared with 63.8 per cent (CI: 61.3%–66.3%) of carers who have not had contact with Mental Health Services (Figure 6.2).

Carers who smoked were also asked if they still smoke cigarettes. In carers who have had contact with Mental Health Services, 60.2 per cent (CI: 55.4%–64.7%) were current smokers at the time of the survey compared with 48.8 per cent (CI: 46.2%–51.5%) of carers who have had no contact with Mental Health Services (Figure 6.2).

**FIGURE 6.2:** CARERS (a) — PROPORTION WHO HAVE EVER SMOKED AND PROPORTION WHO ARE CURRENT SMOKERS, BY USE OF MENTAL HEALTH SERVICES



(a) Only carers who gave consent for the survey team to access their medical records

Source: Tables 6.7, 6.8

### SMOKING AND MENTAL ILLNESS

There is a large literature on the relationship between mental illness and smoking, but surprisingly few programmes have ever been implemented that aim to reduce smoking in people with mental health problems. While anti-smoking campaigns have been instrumental in reducing the overall rate of smoking in the general population over the last 10–20 years, there is little evidence to suggest that people with mental illness have benefited from any of these programmes.

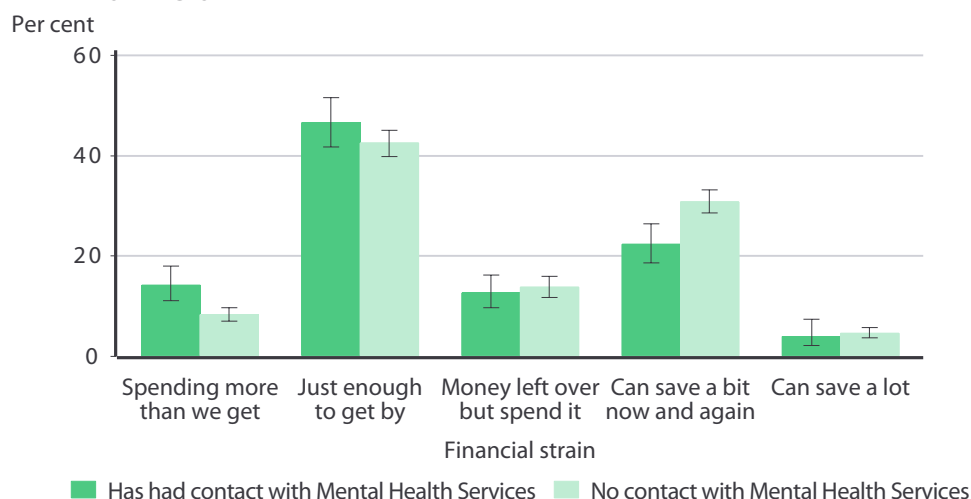
If further reductions in smoking levels are to be achieved, attention will need to be given to people with mental illness. In the United States, 44 per cent of cigarettes are consumed by people with a diagnosable mental health problem.<sup>5</sup> Reductions in smoking rates may be achieved by programmes that recognise smoking and other addictions as part of the overall wellbeing of a person, rather than dealing with these addictions in isolation.



## Financial strain

Carers were asked to rate their family's money situation on a five-point scale of financial strain using the following five categories: 'We are spending more than we get', 'We have just enough money to get us through to the next pay day', 'There's some money left over each week, but we just spend it', 'We can save a bit every now and again', and 'We can save a lot'. Figure 6.3 shows the distribution of ratings of financial strain by whether the carer had ever had contact with Mental Health Services. Compared with carers who had not had contact with Mental Health Services, a higher proportion of carers reported spending more money than they get (14.2 per cent, CI: 11.1%–18.0% compared with 8.3 per cent; CI: 7.0%–9.7%) and a lower proportion reported being able to save a bit now and again (22.4 per cent, CI: 18.7%–26.4% compared with 30.8 per cent; CI: 28.6%–33.2%) (Figure 6.3).

**FIGURE 6.3:** CARERS (a) — LEVEL OF FAMILY FINANCIAL STRAIN, BY USE OF MENTAL HEALTH SERVICES



(a) Only carers who gave consent for the survey team to access their medical records

Source: Table 6.9

## Arrests

Primary carers were asked if they had ever been arrested or charged with an offence. Some 36.6 per cent (CI: 34.3%–38.9%) of primary carers reported that they had been arrested or charged with an offence. There was a significant association between arrests and charges and whether the primary carer had ever had contact with Mental Health Services. Of carers who had used Mental Health Services, 52.7 per cent (CI: 47.6%–57.9%) reported that they had been arrested or charged with an offence compared with 31.3 per cent (CI: 28.8%–33.9%) of carers who had never had contact with Mental Health Services (Table 6.10).

## Modelling associations with use of Mental Health Services

Multivariate logistic regression modelling (see *Glossary*) has been used to explore the relationship between various characteristics that are associated with use of Mental Health Services by carers, including smoking, family financial strain and arrests. In the process of developing this model, a range of additional factors were analysed and found not to be associated with contacts with Mental Health Services. These were: family functioning, number of life stress events, whether the carer speaks an





Aboriginal language, whether overuse of alcohol or gambling cause problems in the household, and whether the carer has a partner.

Female carers were twice as likely to have had contact with Mental Health Services than male carers (Odds Ratio 1.99; CI: 1.44–2.76). After adjusting for age, sex and LORI, carers who were current smokers were found to be over one and a half times more likely (Odds Ratio 1.65; CI: 1.31–2.07) to have used Mental Health Services, confirming the results shown in Figure 6.2. Carers were asked if they had any medical conditions that had lasted or would last for six months or more. If so, carers were asked if they were limited in any way in doing normal daily activities because of a medical or health problem. Carers who were limited in their daily living by a medical condition were almost three times as likely to have used Mental Health Services (Odds Ratio 2.93; CI: 2.27–3.77) compared with carers with no medical condition. Carers who had a medical condition that did not limit their daily activities were still one and a half times more likely (Odds Ratio 1.54; CI: 1.22–1.96) to have had contact with Mental Health Services (Table 6.11) than carers who did not have a condition.

Only primary carers were asked if they had ever been arrested or charged with an offence. Compared with primary carers who had not been arrested or charged, carers who had been were more than twice as likely to have been seen by Mental Health Services in WA (Odds Ratio 2.19; CI: 1.74–2.76) (Table 6.11).

#### FUNDING FOR MENTAL HEALTH SERVICES

In 1998–99 the WA government spent \$4.7 million on services to Aboriginal and Torres Strait Islander people provided through mental health institutions (comprising public psychiatric hospitals and psycho-geriatric nursing homes). This equates to approximately \$79 per capita. By comparison, overall spending on mental health institutions for the total population was \$60 per capita. Spending on services for Aboriginal and Torres Strait Islander people is slightly higher than the population average, but possibly not as high as might be expected considering the higher burden of illness. Spending on community health services is not split between mental health and other services, so figures on community mental health expenditure are not known.<sup>6</sup>

#### ABORIGINAL COMMUNITY CONTROLLED HEALTH SERVICES

Within Aboriginal Community Controlled Health Services, a range of workers can provide social and emotional wellbeing services and support, including Bringing Them Home Counsellors, Aboriginal and Torres Strait Islander health workers, specialist mental health workers and Social Health Teams. Social Health Teams are multi-skilled and multi-disciplinary teams that provide a range of services including mental health support, substance use services, grief and loss counselling, and family and welfare support.<sup>7</sup>

There are three regional centres in WA (located in Perth, Broom and Kalgoorlie) for social and emotional wellbeing that provide training and support to Social Health Teams throughout the state. The four key roles of the regional centres are to develop

*Continued . . .*



**ABORIGINAL COMMUNITY CONTROLLED HEALTH SERVICES** *(continued)*

curricula and deliver training; to develop infrastructure and provide clinical support to health workers; to develop models of intersectoral linkages and inter-agency co-operation; and to develop information systems to monitor services and levels of need.<sup>8</sup>

In 2001–02, 17 of the 21 Aboriginal Community Controlled Health Services in WA provide counselling services. Eleven of the services had a qualified counsellor on staff, while 10 had visiting psychologists, psychiatrists or social workers. There were a total of 18 full-time equivalent (FTE) qualified counsellors, social workers or psychologists employed in services in WA, and an additional eight FTE traditional healers and other counsellors. Eighteen of the 21 services were able to treat serious mental illness.

In 2001–02 there were a total of 11,952 client contacts made with counsellors, social workers or psychologists in Aboriginal Community Controlled Health Services in WA. This represents 3 per cent of the total number of client contacts.

The Australian Government also funds eight Aboriginal substance use specific services in WA. All of these services are involved in treating social and emotional wellbeing issues, and provide counselling services such as grief and loss counselling, self-harm and suicide prevention counselling, and counselling in relation to family and relationship issues and family violence. There were six FTE qualified counsellors, and 25 FTE unqualified counsellors employed in these services in WA in 2002–03. The main emotional and social health issues addressed by these services in 2002–03 were depression, hopelessness and despair; family and community violence; grief and loss issues; and family and relationship issues.<sup>9</sup>

**CONTACTS WITH MENTAL HEALTH SERVICES BY ABORIGINAL CHILDREN**

Among children for whom consent was given to link their survey responses to their medical records, 5.2 per cent (CI: 4.4%–6.1%) were linked to the MHIS, indicating that they had had some contact with Mental Health Services in WA prior to the survey. The proportion of children who had some contact with Mental Health Services increased with age, with less than one per cent of children aged 0–3 years having had contact with Mental Health Services (0.7 per cent; CI: 0.4%–1.2%), compared with 11.0 per cent (CI: 9.0%–13.2%) of children aged 12–17 years (Figure 6.4).

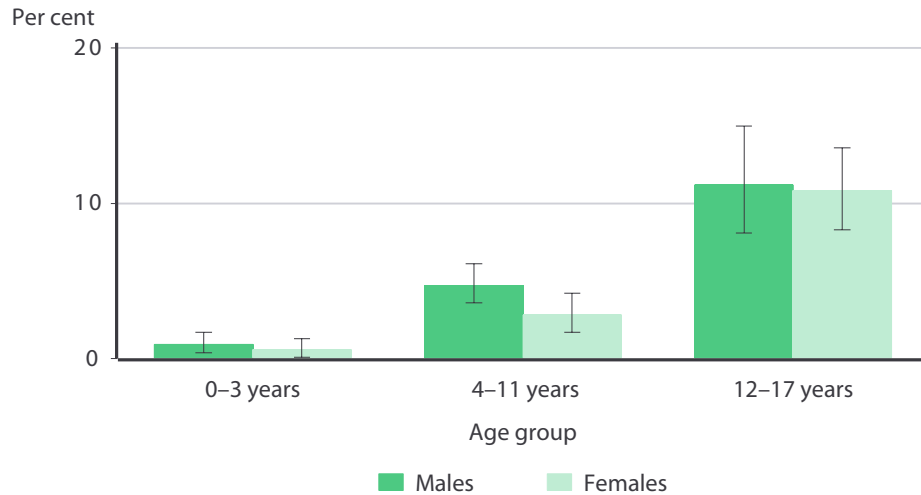
As so few children under the age of 4 years have had contact with Mental Health Services, the remainder of the analysis of use of Mental Health Services is restricted to children aged 4–17 years.

For the age groups 4–11 years and 12–17 years, the proportion of children who have had contact with Mental Health Services decreased with increasing Level of Relative Isolation (Figure 6.5). For children aged 4–11 years, the proportion declined from 5.3 per cent (CI: 3.4%–8.0%) in Perth (no isolation) through to 1.3 per cent (CI: 0.6%–2.8%) in areas of extreme relative isolation. For children aged 12–17 years, the proportion declined from 13.5 per cent (CI: 9.8%–17.7%) in Perth to 4.2 per cent (CI: 2.3%–6.8%) in areas of extreme isolation. This decline reflects both the decreased availability of services in extremely isolated areas and the decrease in the proportion of children at high risk of clinically significant emotional or behavioural difficulties by Level of Relative Isolation (see Chapter 2).





**FIGURE 6.4:** CHILDREN AGED 0–17 YEARS (a) — USE OF MENTAL HEALTH SERVICES, BY AGE AND SEX

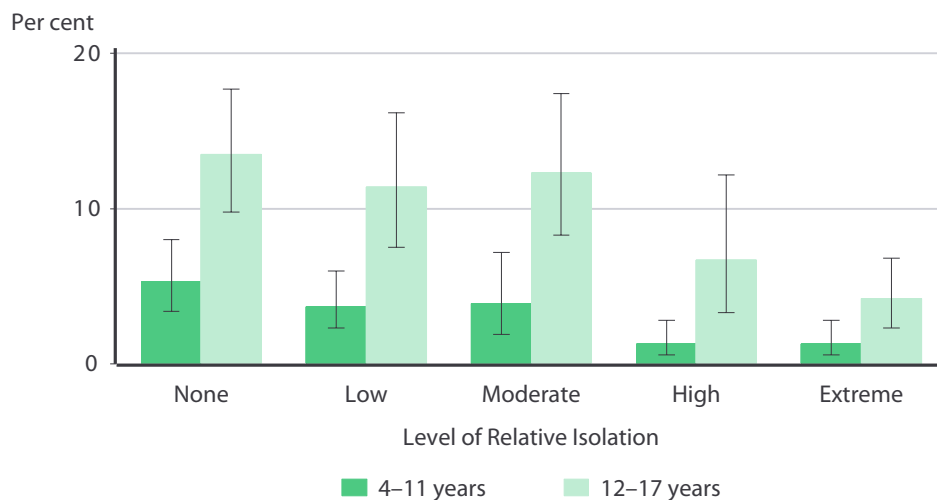


(a) Only children whose carers gave consent for the survey team to access their child’s medical records

Source: Table 6.12

The proportion of Aboriginal children who have had contact with Mental Health Services was slightly higher than the proportion found in the total population. For all children aged 0–17 years, as of December 1998, 3.5 per cent had ever had contact with Mental Health Services compared with 5.2 per cent of Aboriginal children (CI: 4.4%–6.1%). For children aged 12–17 years, 5.2 per cent of all children had ever had contact with Mental Health Services compared with 11.0 per cent of Aboriginal children (CI: 9.0%–13.2%).<sup>3</sup>

**FIGURE 6.5:** CHILDREN AGED 4–17 YEARS (a) — USE OF MENTAL HEALTH SERVICES, BY LEVEL OF RELATIVE ISOLATION AND AGE



(a) Only children whose carers gave consent for the survey team to access their child’s medical records

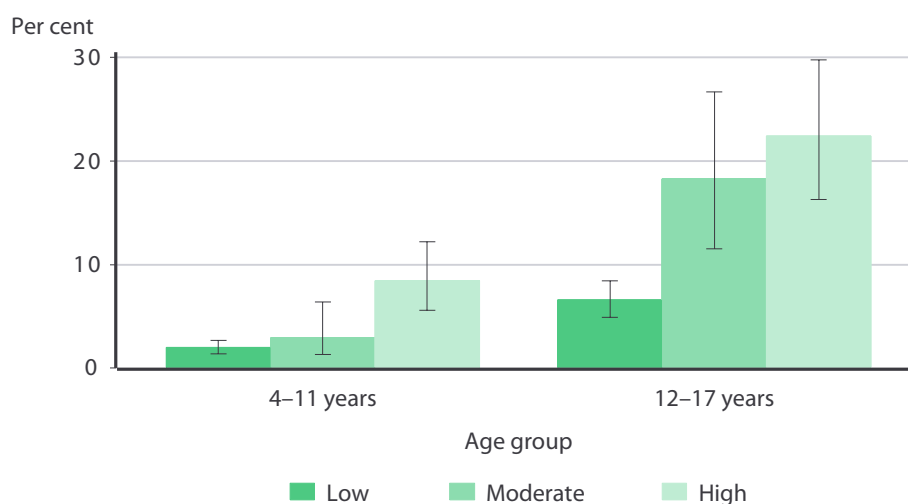
Source: Table 6.13



## USE OF MENTAL HEALTH SERVICES AND RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES IN ABORIGINAL CHILDREN AND YOUNG PEOPLE

In this survey, Goodman's Strengths and Difficulties Questionnaire (SDQ) has been used to measure the risk of clinically significant emotional or behavioural difficulties in Aboriginal children and young people (See Chapter 2). There was a strong association between emotional and behavioural difficulties and use of Mental Health Services (Figure 6.6). For children aged 4–11 years who were at low risk of clinically significant emotional or behavioural difficulties only 2.0 per cent (CI: 1.4%–2.7%) had had contact with Mental Health Services in WA, compared with 8.4 per cent (CI: 5.6%–12.2%) of children at high risk. Similarly, for children aged 12–17 years only 6.6 per cent (CI: 4.9%–8.4%) of those children at low risk had had contact with Mental Health Services compared with 22.4 per cent (CI: 16.3%–29.8%) of children at high risk.

**FIGURE 6.6:** CHILDREN AGED 4–17 YEARS (a) — USE OF MENTAL HEALTH SERVICES, BY RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES



(a) Only children whose carers gave consent for the survey team to access their child's medical records

Source: Table 6.14

In addition to an overall measure of emotional or behavioural difficulties, the SDQ has five sub-scales relating to specific difficulties. Four of these five sub-scales: emotional symptoms, conduct problems, hyperactivity and peer problems, were associated with Aboriginal children's use of Mental Health Services in WA.

### Emotional symptoms

Some 12.8 per cent (CI: 9.8%–16.3%) of children at high risk of clinically significant emotional symptoms had used Mental Health Services in WA compared with 4.2 per cent (CI: 3.3%–5.3%) of children at low risk. Approximately one quarter (23.4 per cent; CI: 21.4%–25.6%) of children aged 4–17 years were at high risk of this specific difficulty (see Chapter 2).



### Conduct problems

The proportion of children who had ever had contact with Mental Health Services in WA increased from 4.4 per cent (CI: 3.5%–5.6%) of children at low risk of clinically significant conduct problems to 10.3 per cent (CI: 8.1%–12.7%) of children at high risk. Conduct problems was the most frequently occurring specific difficulty, with approximately 33.9 per cent (CI: 31.6%–36.1%) of 4–17 year-olds at high risk.

### Hyperactivity

An estimated 15.3 per cent (CI: 13.6%–17.0%) of Aboriginal children aged 4–17 years were at high risk of clinically significant hyperactivity. Of these children, 13.5 per cent (CI: 9.8%–17.8%) had had contact with Mental Health Services prior to the survey, compared with 4.8 per cent (CI: 3.9%–5.8%) of children at low risk of clinically significant hyperactivity, and 10.0 per cent (CI: 7.2%–13.3%) of children at moderate risk.

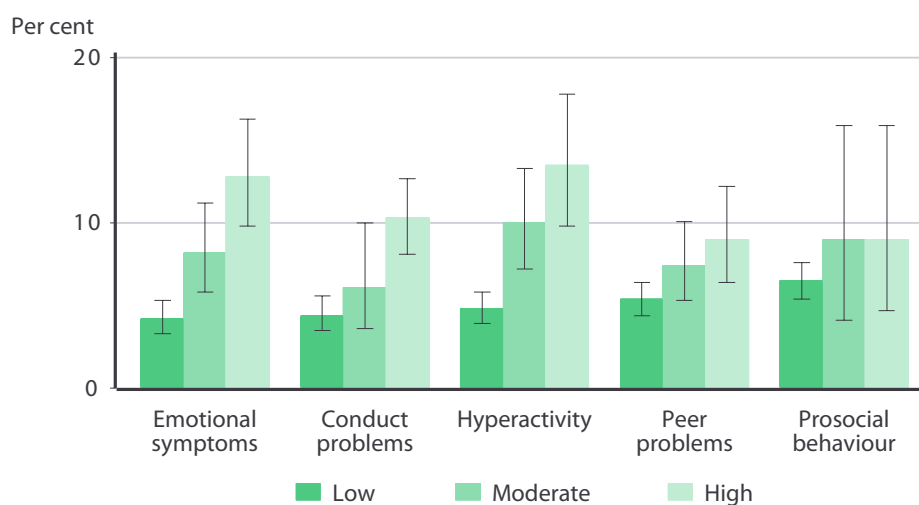
### Peer problems

There was only a small increase in the proportion of children who had used Mental Health Services by risk of clinically significant peer problems: 5.4 per cent (CI: 4.4%–6.4%) of children at low risk of clinically significant peer problems had used Mental Health Services in WA prior to the survey, compared with 9.0 per cent (CI: 6.4%–12.2%) of children at high risk. Over one quarter (27.8 per cent; CI: 25.7%–30.0%) of Aboriginal children were at high risk of clinically significant peer problems.

### Prosocial behaviour

No association was observed between risk of clinically significant problems with prosocial behaviour and contact with Mental Health Services in WA (Figure 6.7). It should be borne in mind that very few Aboriginal children aged 4–17 years were at high risk of clinically significant problems with prosocial behaviour (4.1 per cent; CI: 3.4%–4.9%).

**FIGURE 6.7:** CHILDREN AGED 4–17 YEARS (a) — USE OF MENTAL HEALTH SERVICES, BY RISK OF CLINICALLY SIGNIFICANT SPECIFIC DIFFICULTIES



(a) Only children whose carers gave consent for the survey team to access their child’s medical records

Source: Table 6.15



## CHILD AND ADOLESCENT MENTAL HEALTH SERVICES

Specialist mental health services in WA are provided through Child and Adolescent Mental Health Services (CAMHS). The target population for CAMHS is children and young people aged less than 18 years who have severe mental health problems. Specialist inpatient facilities for children and adolescents are provided through Princess Margaret Hospital and the Bentley Child and Adolescent Unit. There are 20 acute inpatient beds and 16 long stay beds for children under 14 years of age. In addition, there are eight specialist child and adolescent mental health units located throughout the Perth metropolitan area. The inner city Youth Link service provides a mental health service for at-risk and marginalised adolescents who are unable to access mainstream services.<sup>10</sup>

The WAY Centre Adolescent Unit located at Bentley is a 12-bed purpose built inpatient unit to assess and provide initial management for adolescents aged 13–17 years with severe emotional disturbance or mental illness. The unit is a state-wide, tertiary service that accepts referrals from mental health professionals throughout the state. The unit admits over 200 patients per year, of which between 30 and 40 per cent are Aboriginal. The majority of the Aboriginal patients come from outside the Perth metropolitan area with about half from remote communities. The WAY Centre Transition Unit is a day hospital programme for both day and inpatients. The unit is staffed by a multidisciplinary team and aims to assist young people in their recovery and transition back to home, school or employment. The unit can accommodate 24 adolescents in the programme.

Outside of the metropolitan area, services for children are provided through community mental health clinics. Community services with specialist child and adolescent mental health teams include Albany, Bunbury, Geraldton, Esperance and Kalgoorlie.<sup>10</sup>

Specialist mental health services provide a small but vital component of a broader system of care promoting the mental health and wellbeing of children and young people. In addition to the specialist services provided by CAMHS, specialist services relevant to the mental health of children and adolescents are also provided by the Sexual Assault Referral Centre and the Princess Margaret Hospital for Children Child Protection Unit. Other agencies involved in promoting the mental health and wellbeing of children include schools, child care agencies, general practitioners, private mental health practitioners, child health services, the Department for Community Development and the justice system.<sup>11</sup> Non-government agencies also deliver services to families and children at risk by providing a range of treatments including individual counselling and family therapy.

## CHILDRENS' PSYCHIATRIC DIAGNOSES

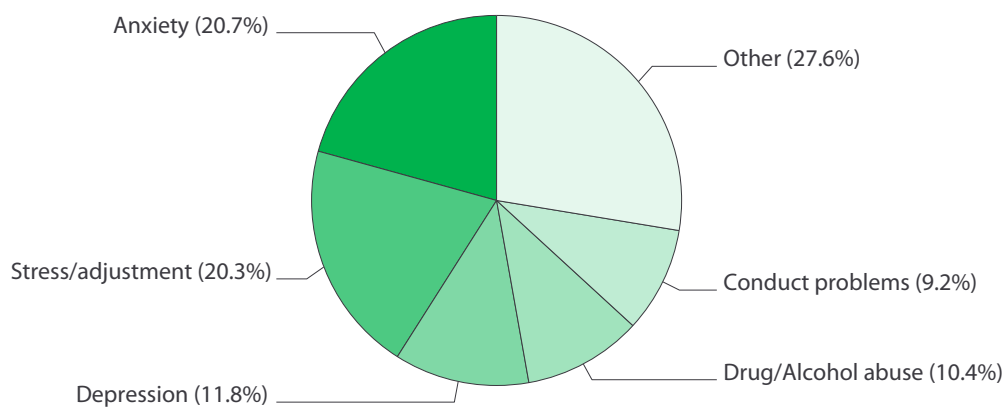
The MHIS records diagnoses for each child who has had contact with Mental Health Services. In instances where more than one diagnosis has been recorded for a child, a principal diagnosis has been assigned using an algorithm that gives preference to the most recent diagnosis made, unless it is non-informative or is a condition that is likely to be a comorbidity of a previously recorded principal diagnosis. The most frequently



occurring diagnoses were anxiety (20.7 per cent of children; CI: 14.7%–27.3%), and stress or adjustment problems (20.3 per cent; CI: 14.7%–27.3%) (Figure 6.8). Among Aboriginal children aged 4–11 years the most commonly recorded conditions were anxiety (22.5 per cent; CI: 13.7%–34.4%) and conduct problems (20.2 per cent; CI: 9.4%–33.9%), while for Aboriginal young people aged 12–17 years conduct problems were rarely recorded (3.3 per cent; CI: 1.0%–8.8%). Some 10.2 per cent (CI: 6.8%–14.4%) of children aged 12–17 years had a primary diagnosis of attempted self-harm. It should be noted that attempted self-harm is only assigned as the primary diagnosis in cases where the young person has been hospitalised after harming himself or herself, but no mental illness is diagnosed, such as in cases where the child or his or her carers do not consent to treatment and no follow-up visits occur (Table 6.16). Thus the number of young people with attempted self-harm as a principal diagnosis cannot be used to measure the number of young people who have attempted self-harm.

By way of comparison, Table 6.17 shows the distribution of principal diagnoses for all children in WA aged 4–17 years as at December, 1998.<sup>3</sup> The distribution of principal diagnoses among Aboriginal children is broadly similar to that for the total population of the same age. Diagnoses of drug and/or alcohol abuse were more common among Aboriginal children (10.4 per cent; CI: 5.6%–17.0% compared with 2.7% for all children). The diagnosis of attempted self-harm was also more common among Aboriginal children aged 12–17 years (10.2 per cent; CI: 6.8%–14.4% compared with 1.8% of all children).

**FIGURE 6.8:** CHILDREN AGED 4–17 YEARS WHO HAVE USED MENTAL HEALTH SERVICES — PRINCIPAL DIAGNOSIS



Source: Table 6.16

## FUNCTIONAL IMPACT AND USE OF MENTAL HEALTH SERVICES

In addition to measuring risk of clinically significant emotional or behavioural difficulties, the SDQ has a series of questions designed to measure the functional impact of emotional and behavioural difficulties. Carers were asked if they thought their children had trouble with emotions, concentration, behaviour or getting on with people and, if so, they were asked questions about the duration of these difficulties, the nature of the distress that they caused and whether they interfered with the child's everyday life (see Chapter 2). Children at high risk of clinically significant functional



impairment were more likely to have ever used Mental Health Services. Some 21.9 per cent (CI: 16.0%–29.1%) of children at high risk of clinically significant functional impairment had ever had contact with Mental Health Services, compared with 4.5 per cent (CI: 3.7%–5.4%) of children at low risk (Table 6.18).

## ASSOCIATION BETWEEN CARER AND CHILD USE OF MENTAL HEALTH SERVICES

Children whose primary carer had had contact with Mental Health Services were more likely to also have been seen by Mental Health Services themselves. Of those children whose primary carer has had contact with Mental Health Services, 12.4 per cent (CI: 9.2%–15.9%) had been seen by Mental Health Services, while only 4.8 per cent (CI: 4.0%–5.9%) of children whose primary carer had not used Mental Health Services had themselves been seen by Mental Health Services (Table 6.19).

In this survey, the mental health of carers has not been separately assessed. Use of Mental Health Services is the only available measure of the mental health problems of the carer. The association between carers' use of Mental Health Services and use of Mental Health Services by their children could reflect the association between mental health problems in parents and children, and it may also reflect the accessibility and availability of services.

After accounting for age, sex and LORI, logistic regression modelling found that family functioning, risk of clinically significant emotional or behavioural difficulties, and carer contact with Mental Health Services are all independent predictors of Mental Health Service use by children and young people (Table 6.20). Children who were at high risk of clinically significant emotional or behavioural difficulties were almost four times more likely to have used Mental Health Services than children at low risk (Odds Ratio 3.71; CI: 2.62–5.26). In addition to the effect of emotional or behavioural difficulties, children in families in the bottom quartile of family functioning were almost twice as likely as children in families in the top quartile of family function to have used Mental Health Services (Odds Ratio 1.81; CI: 1.03–3.17) (Table 6.20).

After adjusting for risk of clinically significant emotional or behavioural difficulties and family functioning, as well as demographic factors, children whose carer had been seen by Mental Health Services were two and a half times more likely (Odds Ratio 2.55; CI: 1.76–3.70) to have used Mental Health Services themselves than children whose carers had never had contact with Mental Health Services (Table 6.20).

Replacing risk of clinically significant emotional or behavioural difficulties as the measure of emotional and behavioural wellbeing with risk of clinically significant functional impairment, it was found that children who were at high risk of clinically significant functional impairment were over four times more likely (Odds Ratio 4.23; CI: 2.88–6.22) to have been seen by Mental Health Services than children at low risk (Table 6.21).



### VALIDITY OF THE STRENGTHS AND DIFFICULTIES QUESTIONNAIRE

The data presented here provide two measures of criterion related validity in carer-reported measures of a child's risk of clinically significant emotional or behavioural difficulties.

First, using contacts with Mental Health Services as an independent measure of mental health problems, these data show a significant relationship between risk of clinically significant emotional or behavioural difficulties measured by the SDQ, and the use of Mental Health Services. Aboriginal children at high risk of clinically significant emotional or behavioural difficulties were almost four times more likely (Odds Ratio 3.71; CI: 2.62–5.26) to have had contact with Mental Health Services at some point in time prior to the survey compared with children at low risk.

Second, those children who were at high risk of clinically significant functional impairment as measured by the SDQ were over four times more likely (Odds Ratio 4.23; CI: 2.88–6.22) to have had contact with Mental Health Services compared with children at low risk.

### MENTAL HEALTH SERVICES: LEVELS OF UNMET NEED FOR ABORIGINAL CHILDREN AND THEIR CARERS

Swan and Raphael in their seminal 1995 report *Ways Forward* noted their frustration at lack of published information on the mental health status of Aboriginal children and their use of mental health services – there was simply non available.<sup>12</sup> The paucity of empirical data on the epidemiology of mental health problems in Aboriginal Australians as well as the absence of comprehensive administrative data on mental health service utilisation by Aboriginal Australians has been highlighted in successive government reports since the National Aboriginal Health Strategy was published in 1989.<sup>13-16</sup>

It is within this wider history and context of Aboriginal health policy — and Aboriginal mental health policy specifically — that the data in this chapter are relevant. To our knowledge these are the first data that describe the use of Mental Health Services by Australian Aboriginal and Torres Strait Islander children. Setting aside the fact that it is not possible to ascertain the cultural appropriateness or quality of the services received, these data show:

- ◆ *Substantial unmet need.* Some 26.3 per cent (CI: 23.9%–28.8%) of Aboriginal children aged 4–11 years and 20.5 per cent (CI: 17.7%–23.6%) of children aged 12–17 years were found to be at high risk of clinically significant emotional or behavioural difficulties. In comparison, of Aboriginal children aged 4–11 years only 3.8 per cent (CI: 2.9%–4.8%) have had contact with Mental Health Services and for children aged 12–17 years only 11.0 per cent (CI: 9.0%–13.2%)

*Continued . . .*





## MENTAL HEALTH SERVICES: LEVELS OF UNMET NEED FOR ABORIGINAL CHILDREN AND THEIR CARERS *(continued)*

have had contact with Mental Health Services. If one accepts that a considerable proportion of those children who are at high risk of clinically significant emotional or behavioural difficulties would benefit from Mental Health Services, then these figures demonstrate considerable unmet need. Looking only at children at high risk of clinically significant emotional or behavioural difficulties, the proportion who have ever had contact with Mental Health Services was only 8.4 per cent (CI: 5.6%–12.2%) of children aged 4–11 years and 22.4 per cent (CI: 16.3%–29.8%) of children aged 12–17 years. Also, children under the age of 4 years are rarely seen. No specific specialist ‘under fives’ mental health programs currently operate in the state. The only dedicated service, the Family Early Intervention Program (FEIP) was closed in 2003. Typically, post-natal depression programs focus on the mother and her newborn child and do not fully cater for the needs of any other children in the family under 5 years.

- ◆ *Higher rates of contact with Mental Health Services by carers of Aboriginal children.* The proportion of carers who have had contact with Mental Health Services was significantly higher than the population average.
- ◆ *Significant associations between carer and child mental health.* As with the general population, there is a clear association between the mental health of carers and the risk of clinically significant emotional or behavioural difficulties in their children — children of carers who have had contact with Mental Health Services were two and a half times more likely to have had contact with Mental Health Services compared with children whose carers had no previous contact. Poor family functioning was also significantly and independently associated with use of Mental Health Services.
- ◆ *Geographical variation in use of Mental Health Services by carers.* The proportion of carers who have had contact with Mental Health Services was highest in areas of low and moderate relative isolation. These proportions were higher than for carers who live in the Perth metropolitan region. The lowest proportions were found in areas of high and extreme relative isolation.

Unlike the Perth metropolitan area where Mental Health Services are delivered by tertiary hospitals and specialist mental health clinics, Mental Health Services in rural areas are delivered from regional hospitals or community health centres. This may result in a greater likelihood of carers of Aboriginal children having access to, or being seen for, mental health care. Regional services may also be more culturally appropriate or perceived by Aboriginal people to be so, partly owing to the larger population proportion of Aboriginal people living in or near these regional centres.

*Continued . . . .*





## MENTAL HEALTH SERVICES: LEVELS OF UNMET NEED FOR ABORIGINAL CHILDREN AND THEIR CARERS (continued)

- ◆ *The proportion of Aboriginal children who have had contact with Mental Health Services declines steadily with increasing relative isolation.* This reflects both the decreasing proportion of children at high risk of clinically significant emotional or behavioural difficulties in these areas as well as the lack of available services.

The delivery of Mental Health Services for children and young people occurs across a range of settings — government, non-government and private agencies. These services are not merely the responsibility of the Mental Health Services organised and delivered by the Department of Health. Notwithstanding this, there is considerable unmet need for mental health services to Aboriginal and non-Aboriginal children; a notable lack of mental health services for Aboriginal children; and a serious likelihood that such problems, when they occur at a young age are less likely to receive assistance when early intervention has a greater impact on life course outcome.

## ENDNOTES

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## DETAILED TABLES

### CARERS CONTACTS WITH MENTAL HEALTH SERVICES

**TABLE 6.1:** CARERS CONSENTING TO RECORD LINKAGE — CONTACT WITH MENTAL HEALTH SERVICES, BY LEVEL OF RELATIVE ISOLATION (LORI)

LORI	Used Mental Health Services?	Number	95% CI	%	95% CI
<b>Males</b>					
None	No	1 760	(1 600 - 1 950)	84.0	(78.6 - 88.3)
	Yes	340	(240 - 460)	16.0	(11.7 - 21.4)
	<b>Total</b>	<b>2 100</b>	<b>(1 930 - 2 280)</b>	<b>100.0</b>	
Low	No	1 280	(1 120 - 1 450)	76.7	(70.8 - 81.7)
	Yes	390	(300 - 500)	23.3	(18.3 - 29.2)
	<b>Total</b>	<b>1 670</b>	<b>(1 490 - 1 860)</b>	<b>100.0</b>	
Moderate	No	980	(790 - 1 210)	80.1	(74.5 - 85.3)
	Yes	240	(170 - 330)	19.9	(14.7 - 25.5)
	<b>Total</b>	<b>1 220</b>	<b>(1 000 - 1 480)</b>	<b>100.0</b>	
High	No	530	(380 - 720)	89.3	(83.5 - 93.2)
	Yes	60	(30 - 100)	10.7	(6.8 - 16.5)
	<b>Total</b>	<b>590</b>	<b>(430 - 800)</b>	<b>100.0</b>	
Extreme	No	620	(440 - 840)	90.4	(84.9 - 94.2)
	Yes	70	(40 - 110)	9.6	(5.8 - 15.1)
	<b>Total</b>	<b>680</b>	<b>(500 - 910)</b>	<b>100.0</b>	
<b>Total</b>	No	5 170	(4 880 - 5 460)	82.5	(79.8 - 84.8)
	Yes	1 100	(940 - 1 270)	17.5	(15.2 - 20.2)
	<b>Total</b>	<b>6 270</b>	<b>(5 980 - 6 560)</b>	<b>100.0</b>	
<b>Females</b>					
None	No	3 190	(2 950 - 3 440)	72.8	(67.6 - 77.6)
	Yes	1 190	(980 - 1 440)	27.2	(22.4 - 32.4)
	<b>Total</b>	<b>4 380</b>	<b>(4 180 - 4 590)</b>	<b>100.0</b>	
Low	No	2 120	(1 860 - 2 390)	70.0	(65.2 - 74.5)
	Yes	910	(750 - 1 080)	30.0	(25.5 - 34.8)
	<b>Total</b>	<b>3 030</b>	<b>(2 730 - 3 350)</b>	<b>100.0</b>	
Moderate	No	1 860	(1 560 - 2 180)	72.5	(67.0 - 77.7)
	Yes	710	(530 - 910)	27.5	(22.3 - 33.0)
	<b>Total</b>	<b>2 570</b>	<b>(2 160 - 3 000)</b>	<b>100.0</b>	
High	No	940	(630 - 1 330)	86.6	(80.4 - 91.2)
	Yes	150	(90 - 220)	13.4	(8.8 - 19.6)
	<b>Total</b>	<b>1 080</b>	<b>(760 - 1 510)</b>	<b>100.0</b>	
Extreme	No	1 000	(730 - 1 320)	85.7	(77.6 - 91.2)
	Yes	170	(90 - 290)	14.3	(8.8 - 22.4)
	<b>Total</b>	<b>1 160</b>	<b>(860 - 1 540)</b>	<b>100.0</b>	
<b>Total</b>	No	9 110	(8 740 - 9 480)	74.5	(71.8 - 77.0)
	Yes	3 120	(2 800 - 3 450)	25.5	(23.0 - 28.2)
	<b>Total</b>	<b>12 200</b>	<b>(11 900 - 12 500)</b>	<b>100.0</b>	



**TABLE 6.2:** WA POPULATION — PROPORTION WHO HAVE HAD CONTACT WITH MENTAL HEALTH SERVICES, DECEMBER 1998

Age group	Males	Females	Persons
	%	%	%
0–4	0.6	0.4	0.5
5–9	3.6	2.2	2.9
10–14	7.2	4.7	6.0
15–19	8.9	8.2	8.6
20–24	10.0	10.6	10.3
25–29	10.8	12.8	11.8
30–34	10.0	13.5	11.8
35–39	9.7	13.7	11.7
40–44	9.6	14.0	11.8
45–49	9.4	13.9	11.6
50–54	8.8	12.9	10.8
55–59	8.5	12.0	10.2
60–64	7.6	10.0	8.8
65–69	6.9	9.0	7.9
70–74	6.3	8.4	7.4
75–79	6.5	9.1	8.0
80–84	7.9	11.8	10.3
85 and over	14.5	17.0	16.2
<b>Total</b>	<b>8.0</b>	<b>10.0</b>	<b>9.0</b>

Source: Duty to Care<sup>3</sup>

## CARERS' PSYCHIATRIC DIAGNOSES

**TABLE 6.3:** CARERS WHO HAVE USED MENTAL HEALTH SERVICES — PRINCIPAL PSYCHIATRIC DIAGNOSIS RECORDED ON MHIS

<i>Principal diagnosis</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Males</b>				
Dementia	10	(0 - 150)	1.3	(0.0 - 12.3)
Alcohol/drug disorders	330	(250 - 410)	29.6	(23.4 - 36.2)
Schizophrenia	30	(10 - 80)	3.2	(1.0 - 6.7)
Affective psychoses	130	(90 - 190)	12.0	(8.2 - 16.8)
Other psychoses	20	(10 - 50)	2.1	(0.9 - 4.6)
Neurotic disorders	150	(90 - 230)	13.8	(8.8 - 20.3)
Personality disorders	40	(10 - 100)	3.8	(1.3 - 8.9)
Adjustment reaction	90	(60 - 130)	8.0	(5.2 - 11.8)
Depressive disorder	10	(0 - 20)	0.9	(0.3 - 2.1)
Other mental disorder	140	(90 - 210)	13.1	(8.5 - 18.4)
Attempted self harm	100	(40 - 190)	8.9	(4.2 - 17.7)
Non specific diagnosis	30	(10 - 70)	3.1	(1.3 - 6.5)
<b>Total</b>	<b>1 100</b>	<b>(940 - 1 270)</b>	<b>100.0</b>	
<b>Females</b>				
Dementia	0	(0 - 60)	0.0	(0.0 - 1.8)
Alcohol/drug disorders	380	(260 - 510)	12.1	(8.7 - 16.5)
Schizophrenia	60	(30 - 100)	1.9	(1.1 - 3.1)
Affective psychoses	480	(360 - 640)	15.3	(11.6 - 20.1)
Other psychoses	40	(20 - 70)	1.3	(0.6 - 2.2)
Neurotic disorders	640	(470 - 870)	20.7	(15.5 - 26.5)
Personality disorders	80	(40 - 140)	2.5	(1.3 - 4.2)
Adjustment reaction	260	(170 - 400)	8.5	(5.6 - 12.7)
Depressive disorder	290	(190 - 410)	9.4	(6.4 - 13.0)
Other mental disorder	350	(250 - 500)	11.3	(7.9 - 15.6)
Attempted self harm	380	(280 - 490)	12.1	(9.1 - 15.6)
Non specific diagnosis	150	(70 - 290)	4.8	(2.2 - 8.9)
<b>Total</b>	<b>3 120</b>	<b>(2 800 - 3 450)</b>	<b>100.0</b>	
<b>Persons</b>				
Dementia	10	(0 - 150)	0.3	(0.0 - 3.4)
Alcohol/drug disorders	700	(570 - 860)	16.7	(13.5 - 20.1)
Schizophrenia	100	(60 - 150)	2.3	(1.4 - 3.5)
Affective psychoses	610	(480 - 780)	14.5	(11.3 - 18.0)
Other psychoses	60	(40 - 100)	1.5	(0.9 - 2.3)
Neurotic disorders	800	(610 - 1 030)	18.9	(14.7 - 23.4)
Personality disorders	120	(70 - 190)	2.9	(1.6 - 4.5)
Adjustment reaction	350	(250 - 480)	8.4	(6.0 - 11.5)
Depressive disorder	300	(200 - 420)	7.2	(5.0 - 10.0)
Other mental disorder	500	(370 - 640)	11.8	(8.9 - 15.0)
Attempted self harm	480	(360 - 610)	11.3	(8.6 - 14.3)
Non specific diagnosis	180	(100 - 320)	4.4	(2.4 - 7.5)
<b>Total</b>	<b>4 210</b>	<b>(3 860 - 4 580)</b>	<b>100.0</b>	



**TABLE 6.4:** PERSONS AGED 20–49 YEARS IN WA WHO HAVE HAD CONTACT WITH MENTAL HEALTH SERVICES — PRINCIPAL PSYCHIATRIC DIAGNOSIS BY SEX, DECEMBER 1998

Principal diagnosis	Males	Females	Persons
	%	%	%
Dementia	0.0	0.0	0.0
Alcohol/drug disorders	15.5	6.1	10.3
Schizophrenia	6.9	2.5	4.5
Affective psychoses	6.5	8.8	7.8
Other psychoses	2.6	1.8	2.2
Neurotic disorders	10.5	17.9	14.6
Personality disorders	5.0	3.4	4.1
Adjustment reaction	7.8	11.6	9.9
Depressive disorder	2.3	4.8	3.7
Other mental disorder	22.1	15.3	18.3
Attempted self harm	8.4	11.6	10.2
Non specific diagnosis	11.8	15.5	13.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Duty to Care<sup>3</sup>**ABORIGINAL IDENTIFICATION ON MHIS****TABLE 6.5:** CARERS WHO HAVE USED MENTAL HEALTH SERVICES — ABORIGINAL IDENTIFICATION IN WAACHS COMPARED TO MHIS

MHIS Aboriginal status	Number	95% CI	%	95% CI
WAACHS Aboriginal status — Aboriginal or Torres Strait Islander				
Aboriginal or Torres Strait Islander	2 730	(2 440 - 3 030)	81.6	(76.6 - 85.8)
Non-Aboriginal	590	(440 - 780)	17.6	(13.3 - 22.4)
Not stated	30	(10 - 80)	0.8	(0.2 - 2.5)
<b>Total</b>	<b>3 350</b>	<b>(3 020 - 3 680)</b>	<b>100.0</b>	
WAACHS Aboriginal status — Non-Aboriginal				
Aboriginal or Torres Strait Islander	0	(0 - 10)	0.4	(0.1 - 0.9)
Non-Aboriginal	820	(650 - 1 020)	98.0	(95.3 - 99.5)
Not stated	10	(0 - 40)	1.6	(0.3 - 4.7)
<b>Total</b>	<b>840</b>	<b>(670 - 1 040)</b>	<b>100.0</b>	
WAACHS Aboriginal status — Not stated				
Aboriginal or Torres Strait Islander	30	(10 - 70)	100.0	(15.8 - 100.0)
Non-Aboriginal	0	(0 - 60)	0.0	(0.0 - 84.2)
Not stated	0	(0 - 60)	0.0	(0.0 - 84.2)
<b>Total</b>	<b>30</b>	<b>(10 - 70)</b>	<b>100.0</b>	
WAACHS Aboriginal status — Total				
Aboriginal or Torres Strait Islander	2 770	(2 480 - 3 070)	65.6	(60.7 - 70.3)
Non-Aboriginal	1 410	(1 170 - 1 660)	33.4	(28.7 - 38.3)
Not stated	40	(10 - 90)	1.0	(0.3 - 2.2)
<b>Total</b>	<b>4 210</b>	<b>(3 860 - 4 580)</b>	<b>100.0</b>	



**TABLE 6.6:** CARERS WHO HAVE USED MENTAL HEALTH SERVICES — ABORIGINAL IDENTIFICATION IN WAACHS COMPARED TO MHIS

<i>WAACHS Aboriginal status</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>MHIS Aboriginal Status — Aboriginal or Torres Strait Islander</b>				
Aboriginal or Torres Strait Islander	2 730	(2 440 - 3 030)	98.7	(97.3 - 99.5)
Non-Aboriginal	0	(0 - 10)	0.1	(0.0 - 0.3)
Not stated	30	(10 - 70)	1.2	(0.4 - 2.6)
<b>Total</b>	<b>2 770</b>	<b>(2 480 - 3 070)</b>	<b>100.0</b>	
<b>MHIS Aboriginal Status — Non-Aboriginal</b>				
Aboriginal or Torres Strait Islander	590	(440 - 780)	41.7	(32.7 - 51.0)
Non-Aboriginal	820	(650 - 1 020)	58.3	(49.0 - 67.3)
Not stated	0	(0 - 60)	0.0	(0.0 - 3.9)
<b>Total</b>	<b>1 410</b>	<b>(1 170 - 1 660)</b>	<b>100.0</b>	
<b>MHIS Aboriginal Status — Not stated</b>				
Aboriginal or Torres Strait Islander	30	(10 - 80)	67.7	(14.7 - 94.7)
Non-Aboriginal	10	(0 - 40)	32.3	(5.3 - 85.3)
Not stated	0	(0 - 60)	0.0	(0.0 - 70.8)
<b>Total</b>	<b>40</b>	<b>(10 - 90)</b>	<b>100.0</b>	
<b>MHIS Aboriginal Status — Total</b>				
Aboriginal or Torres Strait Islander	3 350	(3 020 - 3 680)	79.4	(75.0 - 83.1)
Non-Aboriginal	840	(670 - 1 040)	19.8	(16.1 - 24.2)
Not stated	30	(10 - 70)	0.8	(0.2 - 1.7)
<b>Total</b>	<b>4 210</b>	<b>(3 860 - 4 580)</b>	<b>100.0</b>	

## ASSOCIATIONS WITH CONTACTS WITH MENTAL HEALTH SERVICES

**TABLE 6.7:** CARERS — EVER SMOKED CIGARETTES REGULARLY, BY USE OF MENTAL HEALTH SERVICES

<i>Ever smoked cigarettes regularly?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Never used Mental Health Services</b>				
No	5 160	(4 780 - 5 560)	36.2	(33.7 - 38.7)
Yes	9 110	(8 680 - 9 540)	63.8	(61.3 - 66.3)
<b>Total</b>	<b>14 300</b>	<b>(13 900 - 14 700)</b>	<b>100.0</b>	
<b>Has used Mental Health Services</b>				
No	1 080	(890 - 1 280)	25.5	(21.4 - 29.8)
Yes	3 140	(2 820 - 3 470)	74.5	(70.2 - 78.6)
<b>Total</b>	<b>4 210</b>	<b>(3 860 - 4 580)</b>	<b>100.0</b>	
<b>Consent not given to link to medical records</b>				
No	310	(210 - 440)	30.9	(22.2 - 39.7)
Yes	690	(540 - 870)	69.1	(60.3 - 77.8)
<b>Total</b>	<b>1 000</b>	<b>(800 - 1 230)</b>	<b>100.0</b>	
<b>Total</b>				
No	6 550	(6 140 - 6 970)	33.6	(31.5 - 35.8)
Yes	12 900	(12 500 - 13 400)	66.4	(64.2 - 68.5)
<b>Total</b>	<b>19 500</b>	<b>(19 400 - 19 500)</b>	<b>100.0</b>	



**TABLE 6.8:** CARERS — WHETHER CURRENTLY SMOKES CIGARETTES, BY USE OF MENTAL HEALTH SERVICES

<i>Currently smoke cigarettes?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Never used Mental Health Services</b>				
No longer smokes regularly	2 150	(1 900 - 2 420)	15.0	(13.3 - 16.8)
Smokes regularly	6 970	(6 550 - 7 390)	48.8	(46.2 - 51.5)
Never smoked regularly	5 160	(4 780 - 5 560)	36.2	(33.7 - 38.7)
<b>Total</b>	<b>14 300</b>	<b>(13 900 - 14 700)</b>	<b>100.0</b>	
<b>Has used Mental Health Services</b>				
No longer smokes regularly	600	(470 - 760)	14.3	(11.3 - 17.8)
Smokes regularly	2 540	(2 250 - 2 850)	60.2	(55.4 - 64.7)
Never smoked regularly	1 080	(890 - 1 280)	25.5	(21.4 - 29.8)
<b>Total</b>	<b>4 210</b>	<b>(3 860 - 4 580)</b>	<b>100.0</b>	
<b>Consent not given to link to medical records</b>				
No longer smokes regularly	260	(170 - 390)	26.3	(18.1 - 35.6)
Smokes regularly	430	(320 - 550)	42.8	(33.7 - 51.9)
Never smoked regularly	310	(210 - 440)	30.9	(22.2 - 39.7)
<b>Total</b>	<b>1 000</b>	<b>(800 - 1 230)</b>	<b>100.0</b>	
<b>Total</b>				
No longer smokes regularly	3 010	(2 720 - 3 330)	15.5	(13.9 - 17.1)
Smokes regularly	9 930	(9 500 - 10 400)	51.0	(48.6 - 53.3)
Never smoked regularly	6 550	(6 140 - 6 970)	33.6	(31.5 - 35.8)
<b>Total</b>	<b>19 500</b>	<b>(19 400 - 19 500)</b>	<b>100.0</b>	





**TABLE 6.9: CARERS — REPORTED FINANCIAL STRAIN, BY USE OF MENTAL HEALTH SERVICES**

<i>Family's money situation</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Never used Mental Health Services</b>				
Spending more money than we get	1 180	(1 000 - 1 380)	8.3	(7.0 - 9.7)
Have just enough to get through to next pay	6 070	(5 670 - 6 480)	42.5	(39.9 - 45.1)
Some money left over each week but spend it	1 970	(1 680 - 2 300)	13.8	(11.8 - 16.0)
Can save a bit now and again	4 400	(4 060 - 4 760)	30.8	(28.6 - 33.2)
Can save a lot	660	(520 - 820)	4.6	(3.7 - 5.7)
<b>Total</b>	<b>14 300</b>	<b>(13 900 - 14 700)</b>	<b>100.0</b>	
<b>Has used Mental Health Services</b>				
Spending more money than we get	600	(460 - 770)	14.2	(11.1 - 18.0)
Have just enough to get through to next pay	1 970	(1 720 - 2 250)	46.7	(41.8 - 51.6)
Some money left over each week but spend it	530	(400 - 690)	12.6	(9.7 - 16.2)
Can save a bit now and again	950	(790 - 1 130)	22.4	(18.7 - 26.4)
Can save a lot	170	(80 - 300)	4.0	(2.1 - 7.4)
<b>Total</b>	<b>4 210</b>	<b>(3 860 - 4 580)</b>	<b>100.0</b>	
<b>Consent not given to link to medical records</b>				
Spending more money than we get	70	(40 - 110)	7.0	(3.9 - 10.8)
Have just enough to get through to next pay	340	(240 - 480)	34.1	(25.4 - 44.0)
Some money left over each week but spend it	200	(120 - 310)	19.9	(13.5 - 28.7)
Can save a bit now and again	360	(260 - 480)	36.0	(27.4 - 44.7)
Can save a lot	30	(0 - 110)	2.9	(0.4 - 10.8)
<b>Total</b>	<b>1 000</b>	<b>(800 - 1 230)</b>	<b>100.0</b>	
<b>Total</b>				
Spending more money than we get	1 850	(1 610 - 2 110)	9.5	(8.3 - 10.8)
Have just enough to get through to next pay	8 380	(7 920 - 8 830)	43.0	(40.7 - 45.3)
Some money left over each week but spend it	2 700	(2 370 - 3 050)	13.8	(12.1 - 15.7)
Can save a bit now and again	5 710	(5 320 - 6 110)	29.3	(27.3 - 31.3)
Can save a lot	860	(680 - 1 050)	4.4	(3.5 - 5.4)
<b>Total</b>	<b>19 500</b>	<b>(19 400 - 19 500)</b>	<b>100.0</b>	

**TABLE 6.10: PRIMARY CARERS — WHETHER EVER ARRESTED, BY USE OF MENTAL HEALTH SERVICES**

<i>Ever arrested?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Never used Mental Health Services</b>				
No	6 220	(5 910 - 6 540)	68.7	(66.1 - 71.2)
Yes	2 840	(2 600 - 3 080)	31.3	(28.8 - 33.9)
<b>Total</b>	<b>9 060</b>	<b>(8 770 - 9 340)</b>	<b>100.0</b>	
<b>Has used Mental Health Services</b>				
No	1 450	(1 250 - 1 670)	47.3	(42.1 - 52.4)
Yes	1 620	(1 420 - 1 830)	52.7	(47.6 - 57.9)
<b>Total</b>	<b>3 060</b>	<b>(2 790 - 3 340)</b>	<b>100.0</b>	
<b>Consent not given to link to medical records</b>				
No	300	(210 - 410)	66.9	(54.0 - 77.8)
Yes	150	(90 - 220)	33.1	(22.2 - 46.0)
<b>Total</b>	<b>440</b>	<b>(330 - 580)</b>	<b>100.0</b>	
<b>Total</b>				
No	7 960	(7 670 - 8 260)	63.4	(61.1 - 65.7)
Yes	4 600	(4 310 - 4 890)	36.6	(34.3 - 38.9)
<b>Total</b>	<b>12 600</b>	<b>(12 500 - 12 600)</b>	<b>100.0</b>	



**TABLE 6.11: CARERS CONSENTING TO RECORD LINKAGE: LIKELIHOOD OF HAVING HAD CONTACT WITH MENTAL HEALTH SERVICES IN WA**

Has had contact with Mental Health Services in WA			
Parameter	Significance (p value)	Odds Ratio	95% CI
<b>Sex</b>			
Male		1.00	
Female	<0.001	1.99	(1.44 - 2.76)
<b>Age group</b>			
< 25 years		1.00	
25–34 years	0.496	1.10	(0.83 - 1.45)
35–44 years	0.999	1.00	(0.74 - 1.34)
45 years or over	0.339	1.19	(0.84 - 1.69)
Not stated	0.252	0.54	(0.19 - 1.55)
<b>Level of Relative Isolation</b>			
None		1.00	
Low	0.050	1.26	(1.00 - 1.59)
Moderate	0.224	1.18	(0.90 - 1.54)
High	0.008	0.52	(0.32 - 0.84)
Extreme	0.001	0.48	(0.31 - 0.74)
<b>Smokes cigarettes?</b>			
Never smoked		1.00	
Former smoker	0.178	1.23	(0.91 - 1.66)
Current smoker	<0.001	1.65	(1.31 - 2.07)
<b>Family's money situation</b>			
Spending more money than we get	0.125	1.50	(0.89 - 2.52)
Just enough to get through to next pay	0.651	0.90	(0.56 - 1.43)
Some money left over each week but spend it	0.184	0.70	(0.42 - 1.18)
Can save a bit now and again	0.059	0.63	(0.39 - 1.02)
Can save a lot		1.00	
<b>Physical health</b>			
No medical condition > 6 months		1.00	
Medical condition but not limiting	<0.001	1.54	(1.22 - 1.96)
Limited in daily activities	<0.001	2.93	(2.27 - 3.77)
<b>Primary carer arrested charged with offence (a)?</b>			
Primary carer—			
Never arrested or charged		1.00	
Arrested or charged with an offence	<0.001	2.19	(1.74 - 2.76)
Secondary carer	0.022	1.50	(1.06 - 2.13)

(a) Only primary carers were asked if they had ever been arrested or charged with an offence



**CONTACTS WITH MENTAL HEALTH SERVICES BY ABORIGINAL CHILDREN**

**TABLE 6.12:** CHILDREN AGED 0–17 YEARS (a) — CONTACT WITH MENTAL HEALTH SERVICES, BY AGE GROUP AND SEX

Age Group	Used Mental Health Services?	Number	95% CI	%	95% CI
<b>Males</b>					
0–3 years	No	3 530	(3 220 - 3 860)	99.1	(98.4 - 99.6)
	Yes	30	(10 - 60)	0.9	(0.4 - 1.7)
	<b>Total</b>	<b>3 560</b>	<b>(3 240 - 3 890)</b>	<b>100.0</b>	
4–11 years	No	6 590	(6 220 - 6 970)	95.3	(93.9 - 96.4)
	Yes	330	(250 - 420)	4.7	(3.6 - 6.1)
	<b>Total</b>	<b>6 920</b>	<b>(6 540 - 7 300)</b>	<b>100.0</b>	
12–17 years	No	3 790	(3 390 - 4 220)	88.8	(85.0 - 91.9)
	Yes	480	(350 - 650)	11.2	(8.1 - 15.0)
	<b>Total</b>	<b>4 270</b>	<b>(3 860 - 4 700)</b>	<b>100.0</b>	
<b>Total</b>	No	13 900	(13 400 - 14 400)	94.3	(93.0 - 95.5)
	Yes	840	(680 - 1 040)	5.7	(4.5 - 7.0)
	<b>Total</b>	<b>14 700</b>	<b>(14 300 - 15 200)</b>	<b>100.0</b>	
<b>Females</b>					
0–3 years	No	3 180	(2 880 - 3 510)	99.4	(98.7 - 99.9)
	Yes	20	(0 - 40)	0.6	(0.1 - 1.3)
	<b>Total</b>	<b>3 200</b>	<b>(2 890 - 3 530)</b>	<b>100.0</b>	
4–11 years	No	6 140	(5 740 - 6 550)	97.2	(95.8 - 98.3)
	Yes	170	(110 - 260)	2.8	(1.7 - 4.2)
	<b>Total</b>	<b>6 310</b>	<b>(5 910 - 6 730)</b>	<b>100.0</b>	
12–17 years	No	3 900	(3 570 - 4 250)	89.2	(86.4 - 91.7)
	Yes	470	(360 - 600)	10.8	(8.3 - 13.6)
	<b>Total</b>	<b>4 370</b>	<b>(4 020 - 4 740)</b>	<b>100.0</b>	
<b>Total</b>	No	13 200	(12 700 - 13 700)	95.2	(94.1 - 96.1)
	Yes	660	(530 - 810)	4.8	(3.9 - 5.9)
	<b>Total</b>	<b>13 900</b>	<b>(13 400 - 14 400)</b>	<b>100.0</b>	
<b>Total</b>					
0–3 years	No	6 710	(6 270 - 7 170)	99.3	(98.7 - 99.6)
	Yes	50	(30 - 90)	0.7	(0.4 - 1.2)
	<b>Total</b>	<b>6 760</b>	<b>(6 320 - 7 220)</b>	<b>100.0</b>	
4–11 years	No	12 700	(12 200 - 13 200)	96.2	(95.2 - 97.1)
	Yes	500	(390 - 640)	3.8	(2.9 - 4.8)
	<b>Total</b>	<b>13 200</b>	<b>(12 700 - 13 700)</b>	<b>100.0</b>	
12–17 years	No	7 690	(7 180 - 8 220)	89.0	(86.8 - 91.0)
	Yes	950	(780 - 1 150)	11.0	(9.0 - 13.2)
	<b>Total</b>	<b>8 640</b>	<b>(8 120 - 9 180)</b>	<b>100.0</b>	
<b>Total</b>	No	27 100	(26 700 - 27 500)	94.8	(93.9 - 95.6)
	Yes	1 500	(1 270 - 1 760)	5.2	(4.4 - 6.1)
	<b>Total</b>	<b>28 600</b>	<b>(28 300 - 28 900)</b>	<b>100.0</b>	

(a) Only children whose carers gave consent for the survey team to access their child’s medical records



**TABLE 6.13: CHILDREN AGED 4–17 YEARS (a) —USE OF MENTAL HEALTH SERVICES, BY AGE GROUP AND LEVEL OF RELATIVE ISOLATION (LORI)**

LORI	Used Mental Health Services?	Number	95% CI	%	95% CI
4–11 years					
None	No	4 290	(3 970 - 4 630)	94.7	(92.0 - 96.6)
	Yes	240	(150 - 360)	5.3	(3.4 - 8.0)
	<b>Total</b>	<b>4 530</b>	<b>(4 220 - 4 860)</b>	<b>100.0</b>	
Low	No	3 250	(2 880 - 3 630)	96.3	(94.0 - 97.7)
	Yes	130	(70 - 200)	3.7	(2.3 - 6.0)
	<b>Total</b>	<b>3 370</b>	<b>(3 000 - 3 760)</b>	<b>100.0</b>	
Moderate	No	2 530	(2 100 - 3 010)	96.1	(92.8 - 98.1)
	Yes	100	(40 - 180)	3.9	(1.9 - 7.2)
	<b>Total</b>	<b>2 630</b>	<b>(2 200 - 3 130)</b>	<b>100.0</b>	
High	No	1 440	(1 070 - 1 880)	98.7	(97.2 - 99.4)
	Yes	20	(10 - 40)	1.3	(0.6 - 2.8)
	<b>Total</b>	<b>1 460</b>	<b>(1 100 - 1 930)</b>	<b>100.0</b>	
Extreme	No	1 220	(860 - 1 640)	98.7	(97.2 - 99.4)
	Yes	20	(10 - 30)	1.3	(0.6 - 2.8)
	<b>Total</b>	<b>1 230</b>	<b>(890 - 1 680)</b>	<b>100.0</b>	
<b>Total</b>	No	12 700	(12 300 - 13 200)	96.2	(95.1 - 97.1)
	Yes	500	(380 - 660)	3.8	(2.9 - 4.9)
	<b>Total</b>	<b>13 200</b>	<b>(12 800 - 13 700)</b>	<b>100.0</b>	
12–17 years					
None	No	2 650	(2 350 - 2 950)	86.5	(82.3 - 90.2)
	Yes	410	(300 - 550)	13.5	(9.8 - 17.7)
	<b>Total</b>	<b>3 060</b>	<b>(2 760 - 3 380)</b>	<b>100.0</b>	
Low	No	1 810	(1 540 - 2 110)	88.6	(83.8 - 92.5)
	Yes	230	(150 - 340)	11.4	(7.5 - 16.2)
	<b>Total</b>	<b>2 040</b>	<b>(1 750 - 2 350)</b>	<b>100.0</b>	
Moderate	No	1 450	(1 150 - 1 800)	87.7	(82.6 - 91.7)
	Yes	200	(130 - 290)	12.3	(8.3 - 17.4)
	<b>Total</b>	<b>1 660</b>	<b>(1 340 - 2 030)</b>	<b>100.0</b>	
High	No	860	(640 - 1 150)	93.3	(87.8 - 96.7)
	Yes	60	(30 - 110)	6.7	(3.3 - 12.2)
	<b>Total</b>	<b>920</b>	<b>(680 - 1 210)</b>	<b>100.0</b>	
Extreme	No	920	(670 - 1 220)	95.8	(93.2 - 97.7)
	Yes	40	(20 - 70)	4.2	(2.3 - 6.8)
	<b>Total</b>	<b>960</b>	<b>(710 - 1 280)</b>	<b>100.0</b>	
<b>Total</b>	No	7 690	(7 250 - 8 150)	89.0	(86.9 - 90.9)
	Yes	950	(790 - 1 130)	11.0	(9.1 - 13.1)
	<b>Total</b>	<b>8 640</b>	<b>(8 190 - 9 100)</b>	<b>100.0</b>	

Continued . . .



**TABLE 6.13 (continued): CHILDREN AGED 4–17 YEARS (a) — USE OF MENTAL HEALTH SERVICES, BY AGE GROUP AND LEVEL OF RELATIVE ISOLATION (LORI)**

LORI	Used Mental Health Services?	Number	95% CI	%	95% CI
<b>Total</b>					
None	No	6 940	(6 700 - 7 180)	91.4	(88.9 - 93.4)
	Yes	650	(500 - 840)	8.6	(6.6 - 11.1)
	<b>Total</b>	<b>7 590</b>	<b>(7 400 - 7 780)</b>	<b>100.0</b>	
Low	No	5 060	(4 580 - 5 550)	93.4	(91.3 - 95.2)
	Yes	360	(260 - 480)	6.6	(4.8 - 8.7)
	<b>Total</b>	<b>5 420</b>	<b>(4 920 - 5 930)</b>	<b>100.0</b>	
Moderate	No	3 980	(3 330 - 4 710)	92.9	(89.9 - 95.3)
	Yes	310	(200 - 450)	7.1	(4.7 - 10.1)
	<b>Total</b>	<b>4 290</b>	<b>(3 590 - 5 040)</b>	<b>100.0</b>	
High	No	2 300	(1 750 - 2 980)	96.6	(94.4 - 98.0)
	Yes	80	(40 - 130)	3.4	(2.0 - 5.6)
	<b>Total</b>	<b>2 380</b>	<b>(1 810 - 3 080)</b>	<b>100.0</b>	
Extreme	No	2 140	(1 570 - 2 840)	97.4	(95.8 - 98.4)
	Yes	60	(30 - 90)	2.6	(1.6 - 4.2)
	<b>Total</b>	<b>2 200</b>	<b>(1 600 - 2 890)</b>	<b>100.0</b>	
<b>Total</b>	No	20 400	(20 100 - 20 800)	93.4	(92.2 - 94.4)
	Yes	1 450	(1 230 - 1 700)	6.6	(5.6 - 7.8)
	<b>Total</b>	<b>21 900</b>	<b>(21 600 - 22 100)</b>	<b>100.0</b>	

(a) Only children whose carers gave consent for the survey team to access their child's medical records



## USE OF MENTAL HEALTH SERVICES AND THE MENTAL HEALTH OF ABORIGINAL CHILDREN AND YOUNG PEOPLE

**TABLE 6.14:** CHILDREN AGED 4–17 YEARS (a)— USE OF MENTAL HEALTH SERVICES, BY RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES AND AGE GROUP

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Used Mental Health Services?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>4–11 years</b>					
Low	No	7 900	(7 440 - 8 360)	98.0	(97.3 - 98.6)
	Yes	160	(110 - 220)	2.0	(1.4 - 2.7)
	<b>Total</b>	<b>8 060</b>	<b>(7 600 - 8 520)</b>	<b>100.0</b>	
Moderate	No	1 640	(1 460 - 1 840)	97.1	(93.6 - 98.7)
	Yes	50	(20 - 110)	2.9	(1.3 - 6.4)
	<b>Total</b>	<b>1 690</b>	<b>(1 500 - 1 890)</b>	<b>100.0</b>	
High	No	3 190	(2 880 - 3 530)	91.6	(87.8 - 94.4)
	Yes	290	(190 - 430)	8.4	(5.6 - 12.2)
	<b>Total</b>	<b>3 490</b>	<b>(3 150 - 3 840)</b>	<b>100.0</b>	
<b>Total</b>	No	12 700	(12 300 - 13 200)	96.2	(95.1 - 97.1)
	Yes	500	(380 - 660)	3.8	(2.9 - 4.9)
	<b>Total</b>	<b>13 200</b>	<b>(12 800 - 13 700)</b>	<b>100.0</b>	
<b>12–17 years</b>					
Low	No	5 620	(5 210 - 6 030)	93.4	(91.6 - 95.1)
	Yes	390	(300 - 520)	6.6	(4.9 - 8.4)
	<b>Total</b>	<b>6 010</b>	<b>(5 600 - 6 440)</b>	<b>100.0</b>	
Moderate	No	680	(520 - 860)	81.7	(73.3 - 88.5)
	Yes	150	(100 - 240)	18.3	(11.5 - 26.7)
	<b>Total</b>	<b>830</b>	<b>(650 - 1 030)</b>	<b>100.0</b>	
High	No	1 400	(1 150 - 1 690)	77.6	(70.2 - 83.7)
	Yes	410	(290 - 550)	22.4	(16.3 - 29.8)
	<b>Total</b>	<b>1 810</b>	<b>(1 530 - 2 110)</b>	<b>100.0</b>	
<b>Total</b>	No	7 690	(7 250 - 8 150)	89.0	(86.9 - 90.9)
	Yes	950	(790 - 1 130)	11.0	(9.1 - 13.1)
	<b>Total</b>	<b>8 640</b>	<b>(8 190 - 9 100)</b>	<b>100.0</b>	
<b>Total</b>					
Low	No	13 500	(13 000 - 14 100)	96.1	(95.2 - 96.9)
	Yes	550	(440 - 680)	3.9	(3.1 - 4.8)
	<b>Total</b>	<b>14 100</b>	<b>(13 500 - 14 600)</b>	<b>100.0</b>	
Moderate	No	2 310	(2 080 - 2 570)	92.0	(88.3 - 95.0)
	Yes	200	(120 - 300)	8.0	(5.0 - 11.7)
	<b>Total</b>	<b>2 510</b>	<b>(2 260 - 2 780)</b>	<b>100.0</b>	
High	No	4 590	(4 160 - 5 040)	86.8	(83.3 - 89.9)
	Yes	700	(530 - 910)	13.2	(10.1 - 16.7)
	<b>Total</b>	<b>5 290</b>	<b>(4 830 - 5 780)</b>	<b>100.0</b>	
<b>Total</b>	No	20 400	(20 100 - 20 800)	93.4	(92.2 - 94.4)
	Yes	1 450	(1 230 - 1 700)	6.6	(5.6 - 7.8)
	<b>Total</b>	<b>21 900</b>	<b>(21 600 - 22 100)</b>	<b>100.0</b>	

(a) Only children whose carers gave consent for the survey team to access their child's medical records



**TABLE 6.15:** CHILDREN AGED 4–17 YEARS (a) — USE OF MENTAL HEALTH SERVICES, BY RISK OF CLINICALLY SIGNIFICANT SPECIFIC DIFFICULTIES

<i>Risk of clinically significant specific difficulties</i>	<i>Used Mental Health Services?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Emotional symptoms</b>					
Low	No	13 700	(13 100 - 14 200)	95.8	(94.7 - 96.7)
	Yes	600	(470 - 750)	4.2	(3.3 - 5.3)
	<b>Total</b>	<b>14 300</b>	<b>(13 700 - 14 800)</b>	<b>100.0</b>	
Moderate	No	2 270	(1 990 - 2 590)	91.8	(88.8 - 94.2)
	Yes	200	(140 - 270)	8.2	(5.8 - 11.2)
	<b>Total</b>	<b>2 480</b>	<b>(2 190 - 2 800)</b>	<b>100.0</b>	
High	No	4 460	(4 040 - 4 910)	87.2	(83.7 - 90.2)
	Yes	650	(490 - 840)	12.8	(9.8 - 16.3)
	<b>Total</b>	<b>5 110</b>	<b>(4 660 - 5 570)</b>	<b>100.0</b>	
<b>Total</b>	No	20 400	(20 100 - 20 800)	93.4	(92.2 - 94.4)
	Yes	1 450	(1 230 - 1 700)	6.6	(5.6 - 7.8)
	<b>Total</b>	<b>21 900</b>	<b>(21 600 - 22 100)</b>	<b>100.0</b>	
<b>Conduct problems</b>					
Low	No	11 300	(10 700 - 11 900)	95.6	(94.4 - 96.5)
	Yes	530	(410 - 660)	4.4	(3.5 - 5.6)
	<b>Total</b>	<b>11 800</b>	<b>(11 200 - 12 400)</b>	<b>100.0</b>	
Moderate	No	2 440	(2 160 - 2 740)	93.9	(90.0 - 96.4)
	Yes	160	(90 - 260)	6.1	(3.6 - 10.0)
	<b>Total</b>	<b>2 600</b>	<b>(2 310 - 2 900)</b>	<b>100.0</b>	
High	No	6 700	(6 210 - 7 190)	89.7	(87.3 - 91.9)
	Yes	770	(610 - 960)	10.3	(8.1 - 12.7)
	<b>Total</b>	<b>7 470</b>	<b>(6 960 - 7 980)</b>	<b>100.0</b>	
<b>Total</b>	No	20 400	(20 100 - 20 800)	93.4	(92.2 - 94.4)
	Yes	1 450	(1 230 - 1 700)	6.6	(5.6 - 7.8)
	<b>Total</b>	<b>21 900</b>	<b>(21 600 - 22 100)</b>	<b>100.0</b>	
<b>Hyperactivity</b>					
Low	No	15 600	(15 100 - 16 100)	95.2	(94.2 - 96.1)
	Yes	780	(640 - 960)	4.8	(3.9 - 5.8)
	<b>Total</b>	<b>16 400</b>	<b>(15 900 - 16 900)</b>	<b>100.0</b>	
Moderate	No	1 870	(1 610 - 2 150)	90.0	(86.7 - 92.8)
	Yes	210	(150 - 280)	10.0	(7.2 - 13.3)
	<b>Total</b>	<b>2 080</b>	<b>(1 820 - 2 360)</b>	<b>100.0</b>	
High	No	2 940	(2 600 - 3 310)	86.5	(82.2 - 90.2)
	Yes	460	(330 - 630)	13.5	(9.8 - 17.8)
	<b>Total</b>	<b>3 400</b>	<b>(3 030 - 3 790)</b>	<b>100.0</b>	
<b>Total</b>	No	20 400	(20 100 - 20 800)	93.4	(92.2 - 94.4)
	Yes	1 450	(1 230 - 1 700)	6.6	(5.6 - 7.8)
	<b>Total</b>	<b>21 900</b>	<b>(21 600 - 22 100)</b>	<b>100.0</b>	

Continued ...



**TABLE 6.15 (continued): CHILDREN AGED 4–17 YEARS (a) — USE OF MENTAL HEALTH SERVICES, BY RISK OF CLINICALLY SIGNIFICANT SPECIFIC DIFFICULTIES**

<i>Risk of clinically significant specific difficulties</i>	<i>Used Mental Health Services?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Peer problems</b>					
Low	No	12 300	(11 800 - 12 800)	94.6	(93.6 - 95.6)
	Yes	700	(570 - 840)	5.4	(4.4 - 6.4)
	<b>Total</b>	<b>13 000</b>	<b>(12 400 - 13 500)</b>	<b>100.0</b>	
Moderate	No	2 620	(2 330 - 2 930)	92.6	(89.9 - 94.7)
	Yes	210	(150 - 290)	7.4	(5.3 - 10.1)
	<b>Total</b>	<b>2 830</b>	<b>(2 530 - 3 150)</b>	<b>100.0</b>	
High	No	5 500	(5 060 - 5 960)	91.0	(87.8 - 93.6)
	Yes	550	(380 - 750)	9.0	(6.4 - 12.2)
	<b>Total</b>	<b>6 050</b>	<b>(5 570 - 6 540)</b>	<b>100.0</b>	
<b>Total</b>	No	20 400	(20 100 - 20 800)	93.4	(92.2 - 94.4)
	Yes	1 450	(1 230 - 1 700)	6.6	(5.6 - 7.8)
	<b>Total</b>	<b>21 900</b>	<b>(21 600 - 22 100)</b>	<b>100.0</b>	
<b>Problems with prosocial behaviour</b>					
Low	No	18 900	(18 500 - 19 300)	93.5	(92.4 - 94.6)
	Yes	1 310	(1 090 - 1 540)	6.5	(5.4 - 7.6)
	<b>Total</b>	<b>20 200</b>	<b>(19 900 - 20 600)</b>	<b>100.0</b>	
Moderate	No	650	(520 - 810)	91.0	(84.1 - 95.9)
	Yes	60	(30 - 120)	9.0	(4.1 - 15.9)
	<b>Total</b>	<b>720</b>	<b>(570 - 890)</b>	<b>100.0</b>	
High	No	830	(680 - 990)	91.0	(84.1 - 95.3)
	Yes	80	(40 - 150)	9.0	(4.7 - 15.9)
	<b>Total</b>	<b>910</b>	<b>(750 - 1 090)</b>	<b>100.0</b>	
<b>Total</b>	No	20 400	(20 100 - 20 800)	93.4	(92.2 - 94.4)
	Yes	1 450	(1 230 - 1 700)	6.6	(5.6 - 7.8)
	<b>Total</b>	<b>21 900</b>	<b>(21 600 - 22 100)</b>	<b>100.0</b>	

(a) Only children whose carers gave consent for the survey team to access their child's medical records





## CHILDRENS' PSYCHIATRIC DIAGNOSES

**TABLE 6.16:** CHILDREN AGED 4–17 YEARS WHO HAVE USED MENTAL HEALTH SERVICES — PRINCIPAL DIAGNOSIS, BY AGE GROUP

<i>Principal diagnosis</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>4–11 years</b>				
Schizophrenia	0	(0 - 60)	0.0	(0.0 - 10.6)
Depression	30	(10 - 60)	5.5	(1.7 - 12.0)
Anxiety	110	(70 - 180)	22.5	(13.7 - 34.4)
Drug/alcohol abuse	20	(10 - 40)	4.7	(2.6 - 7.8)
Stress / adjustment	90	(50 - 160)	17.9	(9.5 - 28.8)
Conduct problems	100	(50 - 200)	20.2	(9.4 - 33.9)
Hyperactivity	50	(10 - 170)	10.3	(2.5 - 31.2)
Developmental problems	20	(0 - 60)	3.2	(0.4 - 11.0)
Attempted self-harm	10	(10 - 20)	2.4	(1.1 - 4.6)
Other	30	(10 - 70)	5.8	(2.4 - 13.2)
Observation	40	(10 - 80)	7.4	(2.4 - 16.3)
<b>Total</b>	<b>500</b>	<b>(380 - 660)</b>	<b>100.0</b>	
<b>12–17 years</b>				
Schizophrenia	40	(10 - 120)	4.6	(1.4 - 12.2)
Depression	140	(80 - 230)	15.1	(9.1 - 23.8)
Anxiety	190	(110 - 290)	19.8	(12.1 - 28.6)
Drug/alcohol abuse	130	(60 - 240)	13.4	(6.7 - 23.5)
Stress / adjustment	210	(130 - 300)	21.6	(14.5 - 30.1)
Conduct problems	30	(10 - 80)	3.3	(1.0 - 8.8)
Hyperactivity	20	(0 - 70)	2.5	(0.3 - 7.5)
Developmental problems	40	(20 - 80)	4.4	(2.2 - 8.1)
Attempted self-harm	100	(70 - 130)	10.2	(6.8 - 14.4)
Other	10	(10 - 20)	1.2	(0.5 - 2.4)
Observation	40	(20 - 60)	3.9	(2.2 - 6.5)
<b>Total</b>	<b>950</b>	<b>(790 - 1 130)</b>	<b>100.0</b>	
<b>Total</b>				
Schizophrenia	40	(10 - 120)	3.0	(0.8 - 7.7)
Depression	170	(100 - 260)	11.8	(7.2 - 17.2)
Anxiety	300	(210 - 420)	20.7	(14.7 - 27.3)
Drug/alcohol abuse	150	(80 - 250)	10.4	(5.6 - 17.0)
Stress / adjustment	300	(200 - 410)	20.3	(14.7 - 27.3)
Conduct problems	130	(70 - 220)	9.2	(5.3 - 15.4)
Hyperactivity	80	(30 - 190)	5.2	(1.8 - 12.4)
Developmental problems	60	(30 - 100)	4.0	(2.0 - 7.0)
Attempted self-harm	110	(80 - 150)	7.5	(5.3 - 10.5)
Other	40	(20 - 80)	2.8	(1.4 - 5.3)
Observation	70	(40 - 120)	5.1	(3.0 - 8.4)
<b>Total</b>	<b>1 450</b>	<b>(1 230 - 1 700)</b>	<b>100.0</b>	



**TABLE 6.17:** ALL CHILDREN AGED 4–17 YEARS OF AGE IN WA WHO HAVE HAD CONTACT WITH MENTAL HEALTH SERVICES — PRINCIPAL DIAGNOSIS, BY AGE GROUP

Principal diagnosis	Age group		4–17 years
	4–11 years	12–17 years	
	%	%	%
Schizophrenia	0.0	0.5	0.3
Depression	16.1	19.0	18.0
Anxiety	13.2	16.5	15.4
Drug/alcohol abuse	0.5	3.8	2.7
Stress / adjustment	27.7	25.2	26.1
Conduct problems	12.6	10.5	11.2
Hyperactivity	8.6	5.6	6.6
Developmental problems	6.3	5.0	5.4
Attempted self-harm	0.3	1.8	1.3
Other	14.1	11.5	12.4
Observation	0.1	0.0	0.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Duty to Care<sup>3</sup>

## FUNCTIONAL IMPACT AND USE OF MENTAL HEALTH SERVICES

**TABLE 6.18:** CHILDREN AGED 4–17 YEARS (a) — USE OF MENTAL HEALTH SERVICES, BY RISK OF CLINICALLY SIGNIFICANT FUNCTIONAL IMPAIRMENT AND AGE GROUP

<i>Risk of clinically significant functional impairment</i>	<i>Used Mental Health Services?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>4–11 years</b>					
Low	No	11 200	(10 700 - 11 700)	97.8	(96.9 - 98.5)
	Yes	260	(180 - 360)	2.2	(1.5 - 3.1)
	<b>Total</b>	<b>11 500</b>	<b>(11 000 - 11 900)</b>	<b>100.0</b>	
Moderate	No	520	(370 - 690)	91.6	(85.4 - 96.0)
	Yes	50	(20 - 80)	8.4	(4.0 - 14.6)
	<b>Total</b>	<b>560</b>	<b>(420 - 740)</b>	<b>100.0</b>	
High	No	1 010	(820 - 1 220)	83.5	(75.4 - 89.7)
	Yes	200	(120 - 310)	16.5	(10.3 - 24.6)
	<b>Total</b>	<b>1 210</b>	<b>(1 000 - 1 450)</b>	<b>100.0</b>	
<b>Total</b>	No	12 700	(12 300 - 13 200)	96.2	(95.1 - 97.1)
	Yes	500	(380 - 660)	3.8	(2.9 - 4.9)
	<b>Total</b>	<b>13 200</b>	<b>(12 800 - 13 700)</b>	<b>100.0</b>	
<b>12–17 years</b>					
Low	No	6 650	(6 220 - 7 090)	91.9	(90.1 - 93.6)
	Yes	580	(470 - 720)	8.1	(6.4 - 9.9)
	<b>Total</b>	<b>7 240</b>	<b>(6 810 - 7 690)</b>	<b>100.0</b>	
Moderate	No	280	(180 - 400)	80.2	(69.5 - 89.4)
	Yes	70	(40 - 110)	19.8	(10.6 - 30.5)
	<b>Total</b>	<b>350</b>	<b>(250 - 470)</b>	<b>100.0</b>	
High	No	760	(600 - 940)	71.9	(61.0 - 80.7)
	Yes	300	(190 - 440)	28.1	(19.3 - 39.0)
	<b>Total</b>	<b>1 060</b>	<b>(870 - 1 280)</b>	<b>100.0</b>	
<b>Total</b>	No	7 690	(7 250 - 8 150)	89.0	(86.9 - 90.9)
	Yes	950	(790 - 1 130)	11.0	(9.1 - 13.1)
	<b>Total</b>	<b>8 640</b>	<b>(8 190 - 9 100)</b>	<b>100.0</b>	
<b>Total</b>					
Low	No	17 900	(17 400 - 18 300)	95.5	(94.6 - 96.3)
	Yes	840	(690 - 1 000)	4.5	(3.7 - 5.4)
	<b>Total</b>	<b>18 700</b>	<b>(18 200 - 19 100)</b>	<b>100.0</b>	
Moderate	No	800	(620 - 1 000)	87.3	(81.6 - 91.6)
	Yes	120	(80 - 160)	12.7	(8.4 - 18.4)
	<b>Total</b>	<b>910</b>	<b>(730 - 1 120)</b>	<b>100.0</b>	
High	No	1 770	(1 500 - 2 060)	78.1	(70.9 - 84.0)
	Yes	500	(350 - 700)	21.9	(16.0 - 29.1)
	<b>Total</b>	<b>2 270</b>	<b>(1 950 - 2 610)</b>	<b>100.0</b>	
<b>Total</b>	No	20 400	(20 100 - 20 800)	93.4	(92.2 - 94.4)
	Yes	1 450	(1 230 - 1 700)	6.6	(5.6 - 7.8)
	<b>Total</b>	<b>21 900</b>	<b>(21 600 - 22 100)</b>	<b>100.0</b>	

(a) Only children whose carers gave consent for the survey team to access their child's medical records



## ASSOCIATION BETWEEN CARER AND CHILD USE OF MENTAL HEALTH SERVICES

**TABLE 6.19:** CHILDREN AGED 4–17 YEARS (a)— USE OF MENTAL HEALTH SERVICES, BY CARER USE OF MENTAL HEALTH SERVICES

<i>Child has used Mental Health Services?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Carer has never used Mental Health Services</b>				
No	15 200	(14 600 - 15 800)	95.2	(94.1 - 96.0)
Yes	780	(630 - 940)	4.8	(4.0 - 5.9)
<b>Total</b>	<b>16 000</b>	<b>(15 400 - 16 600)</b>	<b>100.0</b>	
<b>Carer has used Mental Health Services</b>				
No	4 510	(4 010 - 5 030)	87.6	(84.1 - 90.8)
Yes	640	(470 - 840)	12.4	(9.2 - 15.9)
<b>Total</b>	<b>5 150</b>	<b>(4 600 - 5 710)</b>	<b>100.0</b>	
<b>Not known if carer has used Mental Health Services</b>				
No	680	(490 - 910)	94.9	(88.1 - 98.3)
Yes	40	(10 - 80)	5.1	(1.7 - 11.9)
<b>Total</b>	<b>710</b>	<b>(530 - 950)</b>	<b>100.0</b>	
<b>Total</b>				
No	20 400	(20 100 - 20 800)	93.4	(92.2 - 94.4)
Yes	1 450	(1 230 - 1 700)	6.6	(5.6 - 7.8)
<b>Total</b>	<b>21 900</b>	<b>(21 600 - 22 100)</b>	<b>100.0</b>	

(a) Only children whose carers gave consent for the survey team to access their child's medical records



**TABLE 6.20:** CHILDREN AGED 4–17 YEARS (a) — LIKELIHOOD OF HAVING USED MENTAL HEALTH SERVICES, ASSOCIATED WITH VARIOUS CHILD, FAMILY AND COMMUNITY LEVEL CHARACTERISTICS

Has used Mental Health Services in WA			
Parameter	Significance (p value)	Odds Ratio	95% CI
Sex			
Male	0.533	1.12	(0.78 - 1.60)
Female		1.00	
Age group			
4–7 years		1.00	
8–11 years	0.001	2.59	(1.45 - 4.63)
12–14 years	<0.001	5.26	(2.88 - 9.61)
15–17 years	<0.001	7.53	(4.10 - 13.80)
Level of Relative Isolation			
None		1.00	
Low	0.253	0.79	(0.52 - 1.19)
Moderate	0.342	0.78	(0.47 - 1.30)
High	0.002	0.35	(0.18 - 0.67)
Extreme	0.008	0.29	(0.12 - 0.72)
Risk of clinically significant emotional or behavioural difficulties			
Low		1.00	
Moderate	0.005	2.23	(1.28 - 3.88)
High	<0.001	3.71	(2.62 - 5.26)
Carer has used Mental Health Services			
No		1.00	
Yes	<0.001	2.55	(1.76 - 3.70)
Don't know	0.733	1.20	(0.42 - 3.41)
Family functioning quartiles			
Poor	0.040	1.81	(1.03 - 3.17)
Fair	0.177	1.54	(0.82 - 2.89)
Good	0.638	1.16	(0.63 - 2.14)
Very good		1.00	

(a) Only children whose carers gave consent for the survey team to access their child’s medical records

**TABLE 6.21:** CHILDREN AGED 4–17 YEARS (a)— LIKELIHOOD OF HAVING USED MENTAL HEALTH SERVICES, ASSOCIATED WITH RISK OF CLINICALLY SIGNIFICANT FUNCTIONAL IMPAIRMENT (b)

Has used Mental Health Services in WA			
Parameter	Significance (p value)	Odds Ratio	95% CI
Risk of clinically significant functional impairment			
Low		1.00	
Moderate	0.035	2.11	(1.06 - 4.22)
High	<0.001	4.23	(2.88 - 6.22)

(a) Only children whose carers gave consent for the survey team to access their child’s medical records

(b) Model also adjusts for age, sex, Level of Relative Isolation, family functioning and whether carer has used Mental Health Services



# Chapter 7

## FORCED SEPARATION FROM NATURAL FAMILY, FORCED RELOCATION FROM TRADITIONAL COUNTRY OR HOMELAND, AND SOCIAL AND EMOTIONAL WELLBEING OF ABORIGINAL CHILDREN AND YOUNG PEOPLE

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## Chapter 7

# FORCED SEPARATION FROM NATURAL FAMILY, FORCED RELOCATION FROM TRADITIONAL COUNTRY OR HOMELAND, AND SOCIAL AND EMOTIONAL WELLBEING OF ABORIGINAL CHILDREN AND YOUNG PEOPLE

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*The 1997 Report of the National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children From Their Families, Bringing Them Home<sup>1</sup> documented the past laws, practices and policies that saw many Aboriginal and Torres Strait Islander children forcibly separated from their families.*

*Until recently there has been little or no empirical data on the nature and extent of intergenerational effects caused by the policies of forced separations of people from their natural family and forced removals from their traditional homeland. The Western Australian Aboriginal Child Health Survey (WAACHS) sought to obtain information about the association between forced separations and relocations and its effect on the social and emotional wellbeing of subsequent generations.*

*Volume One from the WAACHS described the number of households affected by forced separations and/or forced relocations, and the number of children living in these households.<sup>2</sup> In this chapter, the relationship between forced separations and the social and emotional wellbeing of Aboriginal carers and their children is described.*

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### SUMMARY

Significant associations exist between the social and emotional wellbeing of Aboriginal carers and their children (aged 4–17 years) and the past policies and practices of forced separation of Aboriginal people from their natural families.

#### Effects on carers

Aboriginal carers who were forcibly separated from their natural family by a mission, the government or welfare were:

- ◆ more likely to live in households where there were problems caused by the overuse of alcohol or gambling
- ◆ almost twice as likely to have been arrested or charged with an offence at some time in their life
- ◆ less than half as likely to have someone with whom they could discuss their problems
- ◆ one and a half times more likely to have had contact with Mental Health Services in Western Australia prior to the survey.

#### Effects on children

The children of Aboriginal carers who had been forcibly separated from their natural family by a mission, the government or welfare:

- ◆ were over twice as likely to be at high risk of clinically significant emotional or behavioural difficulties after adjusting for age, sex, LORI and whether the primary carer is the birth mother of the child





**SUMMARY** *(continued)*

- ◆ were more likely to be at high risk of clinically significant emotional symptoms, conduct problems and hyperactivity
- ◆ had levels of both alcohol and other drug use that were approximately twice as high as children whose Aboriginal primary carer had not been forcibly separated from their natural family.

No association was found between risk of clinically significant emotional or behavioural difficulties in children and the forced separation of their carers' parents from their natural family. Also no association was found between forced relocation from traditional country or homeland and social and emotional wellbeing, using measures available in the survey.



## BRINGING THEM HOME<sup>1</sup>

In 1995 a national inquiry was commissioned into practices of separation of Aboriginal and Torres Strait Islander children from their families.<sup>1</sup> The Inquiry was led by the Human Rights and Equal Opportunity Commission (HREOC). Particularly important to the Inquiry was validation of the stories and experiences of Aboriginal people who had been separated from their families as a result of official government policies and actions. The Inquiry noted, that unless the community listened to these stories with an open heart and mind, the continuing devastation of the lives of Aboriginal people could not be addressed and there would be no commitment to reconciliation. *Bringing Them Home*,<sup>1</sup> was released in May 1997 and contained wide-ranging recommendations addressed to Federal, State and Territory Governments and to non-government organisations, including churches.

The Inquiry was a response to increasing concerns among Aboriginal communities and agencies that no formal examination had been undertaken into the consequences of separating Aboriginal children from their families despite evidence of the negative effects of forced separation policies. The 1991 Royal Commission into Aboriginal Deaths in Custody found that 43 of the 99 deaths in custody investigated were people who had been separated from their families as children. A key turning point in the development of the inquiry was the 1994 Going Home Conference held in Darwin. At this conference, people from every state and territory met and shared experiences and discussed survival strategies.

The Inquiry was commissioned to investigate and report on four issues:

- 1. Separation of Aboriginal and Torres Strait Islander children from their families by compulsion, duress or undue influence** — to trace the history of forcible removal of Aboriginal children from their families, whether taken by force or coercion or given up under pressure or influence and to examine the experiences and effects of removal (See commentary box *Bringing Them Home: Experiences and effects of forced separation of Aboriginal children from their families*).
- 2. The need to change current laws, practices and policies related to services and procedures currently available to those affected by the separations** — to examine the adequacy of services available for people affected by forced removal, in particular, access to personal and family records and assistance for family reunions (See commentary box *Family Tracing and Reunion*).
- 3. Assessing what principles were relevant to determine justification for compensation** — the Inquiry was to report on the principles relevant to determining the justification for compensation for persons and communities affected by such forced removal.
- 4. Examine current laws, practices and policies where Indigenous children are placed in care** — to examine whether current laws, practices and policies related to the placement and care of Aboriginal children taken away from their families needed to be changed to take account of the principle of self-determination for Aboriginal people.

*Continued . . . .*



### **BRINGING THEM HOME<sup>1</sup>** (continued)

HREOC President, Sir Ronald Wilson, and Aboriginal and Torres Strait Islander Social Justice Commissioner, Mick Dodson had primary responsibility for conducting the hearings. With the assistance of other HREOC Commissioners and the Queensland Discrimination Commissioner, information for the Inquiry was gathered from every state and territory capital and most regions of the country in the form of written submissions and evidence provided in public and private hearings. Information was provided by Aboriginal people, government and church representatives, former mission staff, foster and adoptive parents, doctors and health professionals, academics, police and others. In Western Australia, evidence was obtained from 57 individuals and organisations plus 58 confidential submissions. Personal support and counselling was provided to Aboriginal witnesses during the process because of the traumatic nature of memories being recalled and the confronting task of talking about this to strangers.

#### Overview of the findings of the Inquiry

The Inquiry reported that the separation of Aboriginal children from their families and the abuse some experienced has permanently scarred their lives. The harm continues in later generations, affecting their children and grandchildren.

From the evidence presented to the Inquiry it was found that:

- ◆ Institutional conditions were often very harsh
- ◆ Education of children in these institutions consisted of basic literacy, numeracy and hygiene, with a view to preparing them for domestic or manual labour
- ◆ Excessive physical punishments were common. Physical assault or brutal punishments were reported by almost one quarter of witnesses who had been fostered or adopted, and by one in six who had been institutionalised
- ◆ Children were vulnerable to sexual abuse and exploitation. Sexual abuse was reported by one in five people who had been fostered or adopted and by one in ten in work placements organised by the Protection Board or institution
- ◆ Some people found happiness
- ◆ People who were separated from their families are not necessarily better off. The 1994 Australian Bureau of Statistics (ABS) National Aboriginal and Torres Strait Islander Survey found that 29.1 per cent of people who were forcibly taken away assessed their health status as 'poor' or 'fair' compared with 15.4 per cent of people who were not taken away. The survey also found that they were not better educated, not more likely to be employed and not receiving significantly higher incomes than people who were raised in their communities
- ◆ As well as suffering loss of family and community, people who were forcibly removed have suffered loss of culture, language, heritage and lands

*Continued . . .*



### **BRINGING THEM HOME<sup>1</sup>** (continued)

- ◆ The loss of so many children affected the health and morale of many Aboriginal families and communities
- ◆ The effects of separation still resonate today. The Inquiry concluded that Aboriginal families and communities have endured gross violations of their human rights and that these violations continue to affect Aboriginal people's daily lives.

#### Recommendations of the Inquiry

*Bringing Them Home* contains 54 recommendations categorised under the following headings:

- ◆ Acknowledgement and apology from parliaments, police forces and churches who were involved
- ◆ Guarantees against repetition by provision of education, training and instituting self-determination principles
- ◆ Restitution by way of counselling services, assistance in maintaining records, language, culture and history centres
- ◆ Rehabilitation through mental health programs, parenting and other services
- ◆ Monetary compensation where a National Compensation Fund would operate.

## **FORCED SEPARATIONS AND THE MENTAL HEALTH AND WELLBEING OF ABORIGINAL CARERS OF ABORIGINAL CHILDREN**

Aboriginal carers were asked whether they were taken away from their natural family by a mission, the government or welfare. Respondents were not asked to identify which of these entities took them, where or when they were taken or under what circumstances this took place. The only information collected was whether they were taken away.

The impact that these forced separations may have had on the social and emotional wellbeing of Aboriginal carers of Aboriginal children was investigated by examining the association between forced separations from natural family and carer reports of mental health and wellbeing. While the survey was not specifically designed to measure the social and emotional wellbeing of carers, a small number of indicator variables have been collected. In addition, linked medical records were examined to investigate if there was any association between forced separations and use of Mental Health Services by carers.

### **OVERUSE OF ALCOHOL IN THE HOUSEHOLD**

All carers (both primary and secondary) were asked if overuse of alcohol caused problems in their household. Among carers who had not been forcibly separated from their natural family, 14.0 per cent (CI: 12.5%–15.6%) said that overuse of alcohol caused problems in the household, while 19.6 per cent (CI: 13.2%–26.7%) of carers who had been forcibly separated from their natural family by a mission, the government or welfare experienced problems due to the overuse of alcohol in the household (Table 7.1). Using multivariate



logistic regression modelling (see *Glossary*) it was found that, after accounting for age, sex and Level of Relative Isolation (LORI), carers who had been forcibly separated from their natural family were over one and a half times as likely (Odds Ratio 1.61; CI: 1.12–2.32) to report that overuse of alcohol caused problems in the household (Table 7.2).

### GAMBLING PROBLEMS IN THE HOUSEHOLD

Carers were also asked if betting or gambling caused problems in the household. Among carers who had not been forcibly separated from their natural family by a mission, the government or welfare, 4.1 per cent (CI: 3.2%–5.2%) said that betting or gambling caused problems in the household compared with 8.1 per cent (CI: 4.8%–12.3%) of carers who had been forcibly separated (Table 7.3). Logistic regression modelling confirmed that after adjusting for demographic factors of age, sex and LORI, carers who had been forcibly separated from their natural family were over twice as likely (Odds Ratio 2.10; CI: 1.25–3.54) to report that betting or gambling caused problems in the household (Table 7.4).

### SMOKING

All carers were asked whether they had ever smoked cigarettes regularly and, if so, did they still smoke cigarettes. This was analysed by whether they were forcibly separated from their natural family by a mission, the government or welfare. No significant findings were made for current or past smokers by all carers, or by carer type (Tables 7.5 and 7.6).

### WHETHER ARRESTED OR CHARGED WITH AN OFFENCE

A higher proportion of primary carers who were forcibly separated from their natural family by a mission, the government or welfare had been arrested or charged with an offence (47.4 per cent; CI: 39.6%–55.5%) than primary carers who were not forcibly separated (36.9 per cent; CI: 34.3%–39.6%) (Table 7.7). Logistic regression modelling confirmed that, after adjusting for age, sex and LORI, primary carers who had been forcibly separated from their natural family by a mission, the government or welfare were almost twice as likely (Odds Ratio 1.95; CI: 1.42–2.68) to have been arrested or charged with an offence (Table 7.8).

### CARER CAN DISCUSS THEIR PROBLEMS WITH SOMEONE

Primary carers were also asked if they had anyone to yarn to about their problems. The findings were not significant, but suggest that fewer carers who were forcibly separated from their natural family had somebody to yarn to about their problems (Table 7.9).

Among carers who had been forcibly separated from their natural family, 20.3 per cent (CI: 13.1%–28.9%) did not have anyone they can yarn to about their problems, compared with 11.8 per cent (CI: 10.2%–13.5%) of carers who had not been separated from their natural family. After adjusting for age, sex and LORI, logistic regression modelling found that carers who were forcibly separated from their natural family were significantly less likely to have someone they can yarn to about problems (Odds Ratio 0.45; CI: 0.30–0.68) (Table 7.10).



Forced separation from natural family, forced relocation from traditional country or homeland, and social and emotional wellbeing of Aboriginal children and young people

## FAMILY FINANCIAL STRAIN

Primary carers were asked about their family's financial strain, by whether a mission, the government or welfare forcibly separated them from their natural family. No significant differences were found (Table 7.11).

## FORCED SEPARATIONS: DATA FROM ABS NATIONAL ABORIGINAL AND TORRES STRAIT ISLANDER SURVEYS

### Background

In 1994, the Australian Bureau of Statistics (ABS) conducted the National Aboriginal and Torres Strait Islander Survey (NATSIS).<sup>3</sup> This was a landmark collection as it made available a range of important social and cultural statistics that had not been collected before.

The survey was developed in response to recommendations made by the Royal Commission into Aboriginal Deaths in Custody.<sup>4</sup> The Royal Commission found that statistical information required for a thorough analysis of the issues to be addressed was not available for Aboriginal and Torres Strait Islander people. The subsequent completion of the NATSIS resulted in a data set that included key social, demographic, health and economic data on Aboriginal and Torres Strait Islander people available at the national, state and ATSI region level.

In 2002, the ABS conducted its second national social survey of Aboriginal and Torres Strait Islander people, titled the National Aboriginal and Torres Strait Islander Social Survey (NATSISS).<sup>5</sup> The sample comprised some 9,400 Aboriginal and Torres Strait Islander Australians aged 15 years and over from all states and territories, including 1,500 from Western Australia. People from both remote and non-remote areas were represented.

### Forced separations, Australia – NATSIS compared with NATSISS

The data items relating to forced separation show strong consistency of reporting over time, with no statistically significant difference in the proportions of persons removed from their natural family (for selected age group cohorts based on closest equivalent age at enumeration) between the 1994 NATSIS and the 2002 NATSISS. For example, for Aboriginal and Torres Strait Islander people aged 25 years or over in 1994, 10.3 per cent (CI: 8.6%–12.0%) had been forcibly separated from their natural family, compared with 10.2 per cent (CI: 8.9%–11.5%) for those aged 35 years and over in 2002. For those aged 15 years or over, the 1994 figure was 8.3 per cent (CI: 6.7%–9.9%), compared with 8.6 per cent (CI: 7.4%–9.8%) for those aged 25 years or over in 2002. Finally, for all Aboriginal and Torres Strait Islander people aged 15 years or over at the time of NATSISS 2002, the figure was 8.4 per cent (CI: 7.2%–9.6%).<sup>5</sup>

*Continued . . . .*



## FORCED SEPARATIONS: DATA FROM THE NATIONAL ABORIGINAL AND TORRES STRAIT ISLANDER SOCIAL SURVEY (continued)

### Forced separations, Western Australia – NATSIS compared with NATSISS

The 1994 NATSIS report for Western Australia showed that for those Aboriginal and Torres Strait Islander people aged 45 years and over, 17.8 per cent (CI: 11.7%–23.9%) had been forcibly separated from their natural family, as did 16.4 per cent (CI: 12.7%–20.1%) of those aged 25–44 years.<sup>6</sup> This compares with findings at the national level of 10.7 per cent (CI: 9.0%–12.4%) and 10.1 per cent (CI: 9.1%–11.1%) respectively for the same age groups. For those aged 25–44 years, the difference was statistically significant.<sup>3</sup>

A significant finding from the 2002 NATSISS was that 53.7 per cent (CI: 48.6%–58.9%) of Western Australian Aboriginal and Torres Strait Islanders aged 15 years and over had either been forcibly separated from their natural family themselves or had a relative who had been.<sup>7</sup> This proportion was substantially higher than the 37.6 per cent (CI: 35.5%–39.7%) for the whole of Australia.<sup>5</sup>

### Forced separations – WAACHS perspective

Keeping in mind that the WAACHS methodology is different, most importantly in that it concentrates on Aboriginal and Torres Strait Islander children and their carers rather than all Aboriginal and Torres Strait Islander people (NATSIS 1994) or Aboriginal and Torres Strait Islander people aged 15 years and over (NATSISS 2002), it is valuable to recap a few key findings on forced separations from natural families published in Volume One of the WAACHS.<sup>2</sup>

The WAACHS asked primary and secondary carers of Aboriginal or Torres Strait Islander descent if they had been taken away from their natural family by a mission, the government or welfare. WAACHS used the same question wording as NATSISS. For primary carers, 12.3 per cent (CI: 10.6%–14.3%) had been forcibly separated from their natural family while, for secondary carers, the estimate was very similar at 12.3 per cent (CI: 9.7%–15.4%) with a wider confidence interval.<sup>2</sup>

The WAACHS also found that over one-third (35.3 per cent; CI: 32.8%–37.8%) of all Aboriginal children in Western Australia were living in households where a carer, or a carer's parent, had been forcibly separated from their natural family by a mission, the government or welfare.

### Forced separations and life outcomes – NATSISS findings

The NATSISS provided the ability to investigate relationships between the forced separation of Aboriginal and Torres Strait Islander people from their natural family and certain life outcomes, from both a national and state perspective.

*Continued . . . .*





## FORCED SEPARATIONS: DATA FROM THE NATIONAL ABORIGINAL AND TORRES STRAIT ISLANDER SOCIAL SURVEY (continued)

### Forced separations and life outcomes – NATSISS findings (continued)

**Self-reported health status.** NATSISS found that, at the national level, 40.0 per cent (CI: 33.4%–46.6%) of Aboriginal and Torres Strait Islander people aged 15 years and over reported their health to be fair or poor if they had been forcibly separated from their natural family. This compares with only 21.8 per cent (CI: 20.2%–23.4%) for those who had not been forcibly separated from their natural family.<sup>8</sup>

For Western Australian Aboriginal and Torres Strait Islander people aged 15 years and over, the equivalent rates were 43.5 per cent (CI: 32.0%–55.0%) and 21.5 per cent (CI: 18.2%–24.8%) respectively.<sup>8</sup>

For the Western Australian general population in 2002 a significantly lower 14.1 per cent (CI: 12.6%–15.6%) of adults described their overall health status as being either fair or poor.<sup>9</sup>

**Smoking.** At the national level, of those Aboriginal and Torres Strait Islander people who had been forcibly separated, a significantly higher proportion were a current daily smoker (64.6 per cent; CI: 57.5%–71.7%) compared with those who had not been forcibly separated (46.8 per cent; CI: 44.5%–49.1%).<sup>8</sup>

In Western Australia, a higher proportion of Aboriginal and Torres Strait Islander people were daily smokers (58.7 per cent; CI: 47.9%–69.5%) if they had been forcibly separated from their natural family compared with those who had not been forcibly separated (42.4 per cent; CI: 37.5%–47.3%).<sup>8</sup>

For the general population in 2001, at the national level a significantly lower 22.4 per cent (CI: 21.9%–22.9%) of adults were current daily smokers.<sup>10</sup>

**Stressful life events.** At the national level, reporting the presence of a stressor in the last 12 months occurs in a higher proportion of those who had been forcibly separated from their natural family (89.0 per cent; CI: 85.3%–92.7%) than those who had not been forcibly separated (81.5 per cent; CI: 79.7%–83.3%). Findings for Western Australia were not statistically significant, partly due to the reduced statistical power caused by a smaller sample at the state level.<sup>8</sup>

For the general population in 2002, at the national level, a significantly lower 57.4 per cent (CI: 56.7%–58.0%) of adults had experienced at least one stressor in the 12 months prior to being surveyed.<sup>10</sup>

*Continued . . . .*





## FORCED SEPARATIONS: DATA FROM THE NATIONAL ABORIGINAL AND TORRES STRAIT ISLANDER SOCIAL SURVEY (continued)

### NATSISS findings and the WAACHS

Despite there being some differences in methodology between the two surveys, the NATSISS and the WAACHS both demonstrate that a link does exist between adverse life outcomes and the forced separation of Aboriginal people from their natural families. From the NATSISS these adverse outcomes include inferior overall self-reported health status, higher levels of smoking and stressful life events. Adverse outcomes found in the WAACHS include a higher likelihood of living in households where alcohol and gambling cause problems, being more likely to have been arrested or charged with an offence, more likely to have had contact with Mental Health Services and less likely to have someone with whom to share their problems.

In addition to this, the WAACHS was also able to show a link between forced separation of Aboriginal carers and some adverse outcomes for their children. The NATSISS did not collect multi-generational data.

Overall, the data from the 2002 NATSISS support the findings presented in this chapter that show there are real differences in life outcomes for those Aboriginal and Torres Strait Islander peoples who were forcibly separated from their natural families.

## CONTACT WITH MENTAL HEALTH SERVICES

As noted in Chapter 6 – *Use of Mental Health Services*, 22.8 per cent (CI: 20.9%–24.8%) of carers had had some contact with Mental Health Services in WA prior to the survey. This finding was based on linking the records of the approximately 95 per cent of carers who gave consent for record linkage with the Mental Health Information System (See Chapter 6).

Among Aboriginal carers who consented to record linkage, 21.3 per cent (CI: 19.2%–23.4%) of those who had not been forcibly separated from their natural family by a mission, government or welfare had had contact with Mental Health Services in WA prior to the survey, compared with 29.5 per cent (CI: 22.7%–37.5%) of those who had been forcibly separated from their natural family (Table 7.12). Logistic regression modelling confirmed that after adjusting for age, sex and LORI, those carers who had been forcibly separated from their natural family by a mission, the government or welfare were one and a half times as likely (Odds Ratio 1.50; CI: 1.12–1.99) to have had contact with Mental Health Services in WA (Table 7.13).



## **FORCED SEPARATIONS OF CARERS AND EMOTIONAL OR BEHAVIOURAL DIFFICULTIES IN THEIR CHILDREN**

While it has been reported that Aboriginal people who were directly impacted by the child removal and family relocation policies of past governments experience many negative life outcomes,<sup>3</sup> there has not been large-scale empirical data available to test whether that social and cultural dislocation has influenced the life outcomes of children in their care.

The WAACHS data permits investigation of the effects of forced separations and removals on emotional and behavioural difficulties in children cared for by Aboriginal people who were forcibly separated from their natural family and/or forcibly relocated from their traditional homeland.

All classifications of forced separation and forced relocation of carers that were used in the demographic analysis in Chapter 2 of Volume One have been investigated to ensure continuity.<sup>2</sup>

The forced separation of primary carers had the greatest impact on child emotional and behavioural difficulties, with consistent statistically significant findings. Secondary carer separations were only significant at the level of moderate risk, and inter-generational effects beyond two generations were generally not significant and for the most part small.

Some combined variables, such as either primary or secondary carer having been forcibly separated from natural family, showed variations of significance. However, it was apparent that this was due to the effect of the separation of the primary carer, and no additional effect was found associated with the forced separation of other carers. As a result, in analyses involving child emotional and behavioural difficulties and carer separation, primary carer separation will be the variable mostly used to describe these effects.

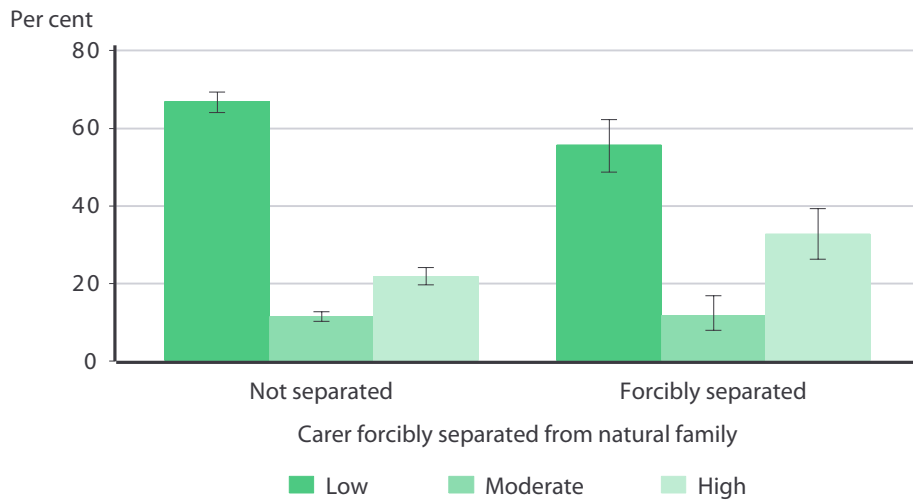
Beyond the effect of forced separation of the primary carer from their natural family, there was no significant association between relocation of primary carer or other carers from traditional country or homeland on emotional and behavioural difficulties in children, using measures available in the survey.

### **PRIMARY CARER FORCED SEPARATION, FORCED RELOCATION AND EMOTIONAL AND BEHAVIOURAL DIFFICULTIES IN ABORIGINAL CHILDREN AGED 4–17 YEARS**

Of those children whose primary carer was forcibly separated from their natural family by a mission, the government or welfare, nearly one third (32.7 per cent; CI: 26.3%–39.3%) were at high risk of clinically significant emotional or behavioural difficulties. This proportion is significantly higher than that found in children looked after by primary carers who had not been forcibly separated from their natural family (21.8 per cent; CI: 19.6%–24.1%) (Figure 7.1).



**FIGURE 7.1:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER PRIMARY CARER WAS FORCIBLY SEPARATED FROM NATURAL FAMILY BY A MISSION, GOVERNMENT OR WELFARE

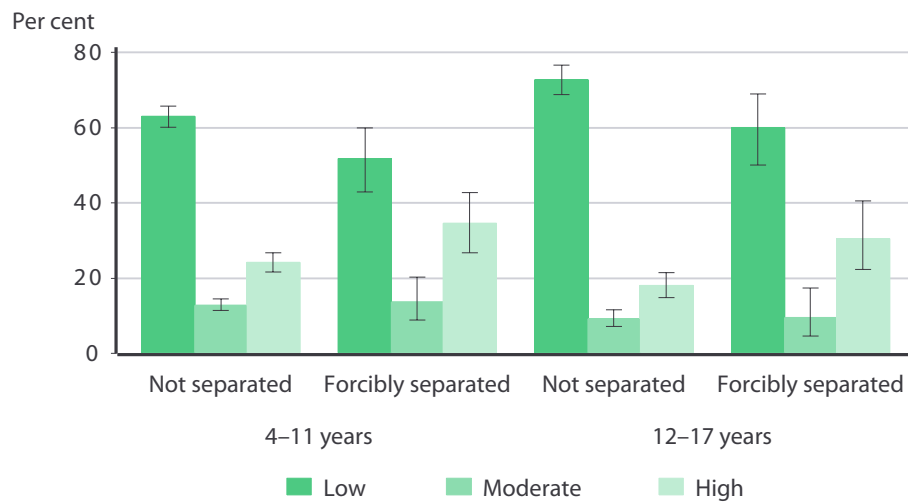


Source: Table 7.14

### Age of the child

Differences were also found between age groups. A higher proportion of children aged 4–11 years whose primary carer was forcibly separated from their natural family by a mission, the government or welfare were at high risk of clinically significant emotional or behavioural difficulties (34.6 per cent; CI: 26.8%–42.8%) than children aged 4–11 years looked after by primary carers who were not forcibly separated (24.2 per cent; CI: 21.7%–26.8%). For children aged 12–17 years the corresponding proportions were 30.5 per cent (CI: 22.3%–40.5%) and 18.0 per cent (CI: 14.8%–21.4%) (Figure 7.2).

**FIGURE 7.2:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER PRIMARY CARER WAS FORCIBLY SEPARATED FROM NATURAL FAMILY, BY A MISSION, GOVERNMENT OR WELFARE AND AGE GROUP



Source: Table 7.15



## CANADIAN FORCED SEPARATIONS – A PARALLEL EXPERIENCE

As described in several commentaries within this chapter, Australia's past policies and practices of forcibly separating Aboriginal children from their natural families resulted in a series of negative life outcomes for many of those involved. The experience for the Aboriginal people of Canada has been broadly similar.

Two Canadian reports from the mid-1990's brought these past policies and practices, and their cultural impact, to the attention of the Canadian government and people. One, the *Report of the Royal Commission On Aboriginal Peoples*, was an expansive document that covered all aspects of the impact on Aboriginal people wrought by European colonisation.<sup>11</sup> The other, *Breaking the silence: An interpretive study of residential school impact and healing as illustrated by the stories of First Nations individuals*, concentrated on one of the main government vehicles impacting on Aboriginal people and their cultural identity—the Residential Schools programme.<sup>12</sup>

Colonial control over the schooling of First Nations children initially came about through the passing of the British North America Act of 1867. The passing of the Indian Act of 1876 further reinforced this control, as it handed the Minister of Indian Affairs overarching power that allowed, for example, the banning of centuries old cultural practices and dances, as well as the regulation of traditional hunting and gathering. A delegate of the Minister, the Indian Agent, generally enforced the powers of the Act at the Reserve level.<sup>12</sup>

The Residential Schools programme, which operated in Canada from 1879 until direct federal control of First Nations schooling began subsiding in 1972, had many similarities with the general pattern of forced separation in Australia. Canadian First Nations children were removed from their natural families under a legal framework established by the colonising government and placed in institutions that denied them contact with their natural family and culture, and imposed upon them a new and different way of life. From the outset, the government formalised a role for Christian churches in the running of the residential schools programme. It was not until the 1950s that the schools started to become secular, government staffed and generally mainstream in their curricula.<sup>12</sup>

At various stages throughout this period, the colonial policy shifted from assimilation (until 1910) to segregation (from 1910 to 1951) and finally integration of First Nations people (1951 to 1972). Whichever policy was being favoured, all were part of the same overall goal, which imposed restrictions on traditional ways and practices in favour of adopting the colonial ideals of the day.<sup>12</sup>

The Canadian *Report of the Royal Commission on Aboriginal Peoples* described this experience as follows:

‘The tragic legacy of residential education began in the late nineteenth century with a three part vision of education in the service of assimilation. It included, first, a justification for removing children from their communities and disrupting Aboriginal families; second, a precise pedagogy for resocializing children in the

*Continued . . .*



### CANADIAN FORCED SEPARATIONS – A PARALLEL EXPERIENCE (*continued*)

schools; and third, schemes for integrating graduates into the non-Aboriginal world.' ... 'The common wisdom of the day that animated the educational plans of church and state was that Aboriginal children had to be rescued from their "evil surroundings", isolated from parents, family and community,<sup>13</sup> and "kept constantly within the circle of civilized conditions".<sup>14</sup>

'Initially, the schools were seen as a bridge from the Aboriginal world into non-Aboriginal communities. That passage was marked out in clear stages: separation, socialization and, finally, assimilation through enfranchisement. By this last step, the male graduate could avail himself of the enfranchisement provisions of the *Indian Act*, leaving behind his Indian status and taking on the privileges and responsibilities of citizenship. Each stage in the passage had its difficulties, and the department was fully aware that its task was not completed with the training that led to graduation. Indeed, it declared in its annual report of 1887, "it is after its completion that the greatest care...needs to be exercised, in order to prevent retrogression." Retrogression — cultural backsliding — was the great fear. Once the connection between child and community had been broken it should not be re-established; the child should never again fall under the influence of Indian "prejudices and traditions" or the "degradations of savage life."<sup>15</sup> To prevent this unhappy occurrence, the department reported in 1887, it would be best "to prevent those whose education at an industrial institution...has been completed from returning to the reserves". They were instead to be placed in the non-Aboriginal world and secured there by employment in the trade they had learned at the school, "so as to cause them to reside in towns, or, in the case of farmers, in settlements of white people, and thus become amalgamated with the general community."<sup>16</sup> By implication, the future was not only one of amalgamating growing numbers of employable graduates but also the progressive decay and final disappearance of reserve communities.'

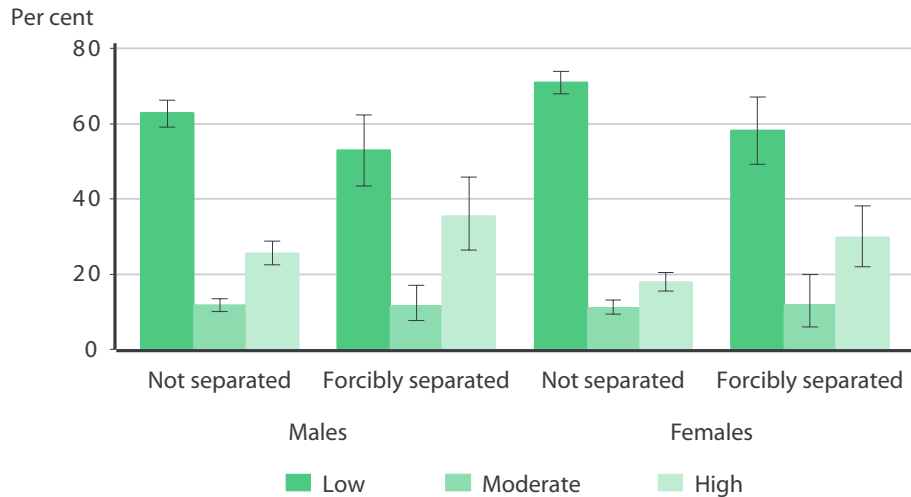
'No segment of our research aroused more outrage and shame than the story of the residential schools. Certainly there were hundreds of children who survived and scores who benefitted from the education they received. And there were teachers and administrators who gave years of their lives to what they believed was a noble experiment. But the incredible damage — loss of life, denigration of culture, destruction of self-respect and self-esteem, rupture of families, impact of these traumas on succeeding generations, and the enormity of the cultural triumphalism that lay behind the enterprise — will deeply disturb anyone who allows this story to seep into their consciousness and recognizes that these policies and deeds were perpetrated by Canadians no better or worse intentioned, no better or worse educated than we are today. This episode reveals what has been demonstrated repeatedly in the subsequent events of this century: the capacity of powerful but grievously false premises to take over public institutions and render them powerless to mount effective resistance. It is also evidence of the capacity of democratic populations to tolerate moral enormities in their midst.<sup>17</sup>



### Sex of the child

Only females showed any statistically significant differences. A higher proportion of female children whose primary carer was forcibly separated from their natural family by a mission, the government or welfare were at high risk of clinically significant emotional or behavioural difficulties (29.8 per cent; CI: 21.9%–38.1%) than children looked after by primary carers who were not forcibly separated (17.8 per cent; CI: 15.5%–20.4%) (Figure 7.3).

**FIGURE 7.3:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER PRIMARY CARER WAS FORCIBLY SEPARATED FROM NATURAL FAMILY BY A MISSION, GOVERNMENT OR WELFARE AND SEX

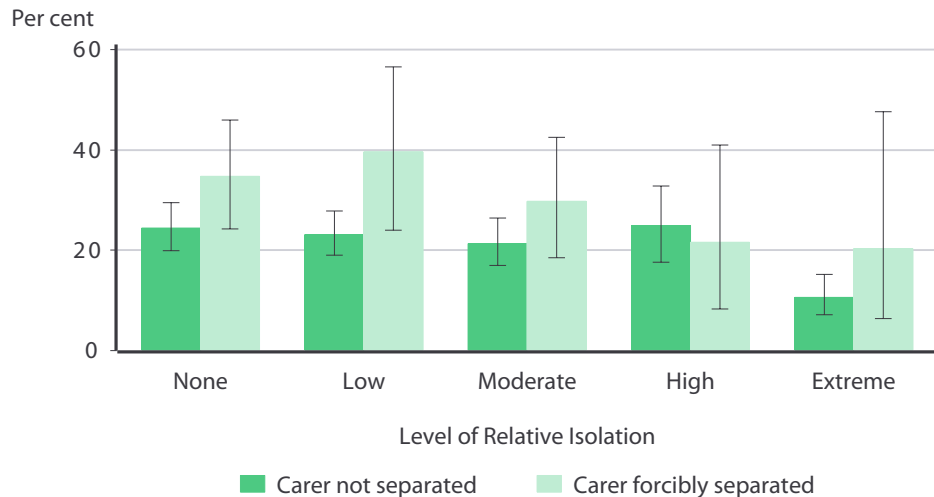


Source: Table 7.16

### LORI

No significant differences were found by LORI according to whether the child’s primary carer was forcibly separated from their natural family by a mission, the government or welfare (Figure 7.4).

**FIGURE 7.4:** CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER PRIMARY CARER WAS FORCIBLY SEPARATED FROM NATURAL FAMILY BY A MISSION, GOVERNMENT OR WELFARE AND LEVEL OF RELATIVE ISOLATION



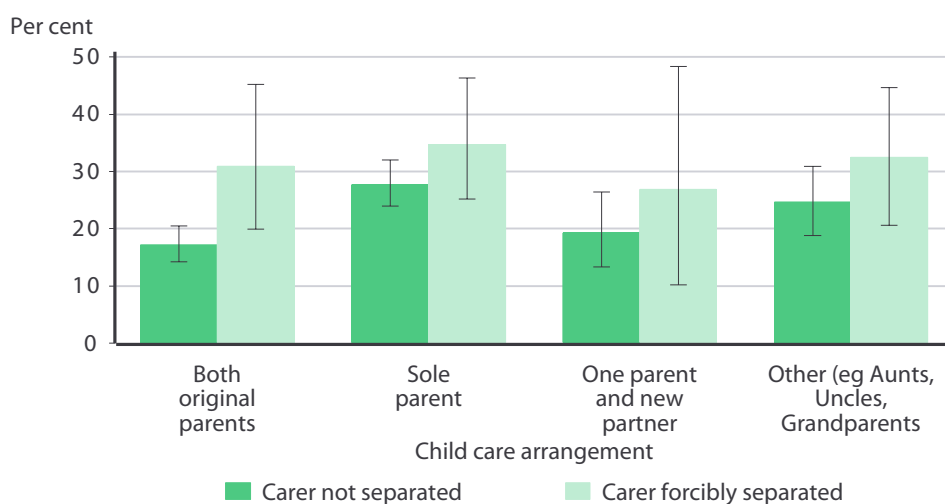
Source: Table 7.17



### Child care arrangement

The relationship between child care arrangement and whether the primary carer was forcibly separated from natural family by a mission, the government or welfare was examined (Figure 7.5). The largest difference due to forced separation from natural family was seen for children who are cared for by both original parents. For these children, 17.1 per cent (CI: 14.2%–20.5%) were at high risk of clinically significant emotional or behavioural difficulties if the primary carer had not been forcibly separated from natural family, whereas 30.9 per cent (CI: 19.9%–45.2%) were at high risk if the primary carer had been forcibly separated from natural family. By contrast, for children cared for by a sole parent, 27.7 per cent (CI: 23.9%–32.0%) were at high risk of clinically significant emotional or behavioural difficulties if the primary carer had not been forcibly separated from natural family, compared with 34.7 per cent (CI: 25.2%–46.4%) where the primary carer had been forcibly separated from natural family.

**FIGURE 7.5:** CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER PRIMARY CARER WAS FORCIBLY SEPARATED FROM NATURAL FAMILY BY A MISSION, GOVERNMENT OR WELFARE AND CHILD CARE ARRANGEMENT



Source: Table 7.18





## **BRINGING THEM HOME<sup>1</sup> – EXPERIENCES AND EFFECTS OF FORCED SEPARATION OF CHILDREN FROM THEIR FAMILIES**

### Children's experiences

When removed from their families, children could have been put into an institution or mission dormitory, fostered or adopted.<sup>1</sup> In many cases children experienced several moves from homes and institutions. Children who had been removed were discouraged from contacting their families and, in many cases, were told falsely either that their parents did not want them or that their parents were dead. They were taught to feel contempt for Aboriginal culture and for other Aboriginal people. For removed children who were old enough to be aware of their cultural heritage, this contempt for their culture was often internalised.

The Inquiry found, in many instances, that the conditions of missions, institutions and children's homes were poor, with insufficient resources preventing improvement or provision of adequate clothing or food. As well as the poor conditions, institutional regimes were often very strict, with severe punishments administered when rules were broken.

Many Aboriginal children who had been fostered, adopted or sent to institutions were subject to excessive physical punishments and/or at risk of sexual abuse. One in four witnesses to the Inquiry reported being physically assaulted in their foster or adoptive placements while one in six institutionalised children reported physical assault. The Inquiry concluded that there was a failure by welfare officials to protect Aboriginal wards from such abuses.

While some children were taken compulsorily (legally or illegally), others had been given up as a consequence of duress or undue influence. Parents were told that relinquishing their child was in the child's best interests in that they would receive a good education. The reality was, however, that education in institutions was essentially preparation for menial labour.

There were some witnesses to the Inquiry who reported finding affection and happiness in their adoptive family, or children's home. The Inquiry found that where child placements were more enlightened, many of the damaging effects of removal were overcome.

### Effects on the children

The experience and effects of forced separation of children from their families and communities have been multiple, continuing and profoundly disabling. The trauma of separation and attempts at 'assimilation' have damaged their self-esteem and wellbeing, and impaired their parenting and relationships. In turn their children suffer. There is a cycle of damage which people find difficult to escape unaided.

*Continued . . . .*





**BRINGING THEM HOME<sup>1</sup> – EXPERIENCES AND EFFECTS OF FORCED SEPARATION OF CHILDREN FROM THEIR FAMILIES** (*continued*)

Loss of primary carer in early childhood

Over half of all children forcibly removed were removed before the age of five years. Expert witnesses to the Inquiry presented substantial evidence of the ill effects of separating children from their mother at an early age. It was argued that the quality of social relationships is profoundly affected by experiences as a baby. Separation can lead to insecurity and lack of self-esteem, depression and suicide, delinquency and violence, alcohol and drug abuse and or lack of trust and intimacy. The Australian Association of Infant Mental Health reported that 'early loss of a mother or prolonged separation from her before age 11 is conducive to subsequent depression, choice of an inappropriate partner, and difficulties in parenting the next generation. Anti-social activity, violence, depression and suicide have also been suggested as likely results of the severe disruption of affectional bonds.'<sup>1</sup> In its submission to the 2000 Senate Inquiry into the Federal Government's implementation of recommendations made in *Bringing Them Home*, the Mental Health Council of Australia argued that the 'likelihood of an individual developing a mental illness is pronounced when a history of childhood separation from biological parents, neglect or institutionalisation exists. This makes Indigenous people particularly vulnerable'.<sup>18</sup>

There had been a commonly held view that forcibly removing children from their families was in their best interests at the time. However, a 1994 Australian Bureau of Statistics (ABS) survey found that a higher proportion of people who were forcibly taken away in childhood assessed their health status as 'fair' or 'poor' compared with people who had not been taken away. The survey also found that people who had been forcibly taken away were not better educated, not more likely to be employed or be receiving significantly higher incomes than people who had remained in their communities.<sup>3</sup>

Loss of parenting skills

The Inquiry found that, as parents, many who had been removed from their families as children have problem children of their own. This next generation of children are at risk of removal by welfare and juvenile justice as a direct result of the lack of opportunity by their parents to acquire good parenting skills caused by being brought up in institutions or a succession of foster homes. Furthermore, their own personal experiences with government and other services make parents of difficult children reluctant to seek support from mainstream services for fear of their own children being taken from them.

*Continued . . . .*



### **BRINGING THEM HOME<sup>1</sup> – EXPERIENCES AND EFFECTS OF FORCED SEPARATION OF CHILDREN FROM THEIR FAMILIES** *(continued)*

#### Loss of culture

Many people who had been forcibly removed as children, as well as their own children, have lost their culture, languages, heritage and lands as well as families and communities. Forcible removal has left many with nowhere to belong, and no sense of identity and has meant loss of opportunity to assert rights under land rights or native title legislation.

#### Effect on those left behind

The children who were removed were not the only victims of forcible removal policies and actions. The Inquiry found that whole families and communities suffered long term harm as a consequence of the removal of their children. In some cases, families who feared having their children removed denied their Aboriginality and isolated themselves from their communities and families. The loss of so many children has contributed to the poor health and low morale of many Aboriginal communities resulting, in many instances, in alcohol abuse, hospitalisation following accidents or assaults or behaviour leading to incarceration or early death.

### **MODELLING THE EFFECT OF THE FORCED SEPARATION OF CARERS FROM THEIR NATURAL FAMILY ON EMOTIONAL AND BEHAVIOURAL DIFFICULTIES IN THEIR CHILDREN**

Associations have been found between the forced separation of a primary carer from natural family and high risk of clinically significant emotional or behavioural difficulties in their children. However, risk of clinically significant emotional or behavioural difficulties has also been found to vary by age and sex of the child, and area of residence, as measured by LORI (see Chapter 2). It is possible that the association between forced separations and child wellbeing could also be influenced by these other factors.

### **EXPLORING RELATIONSHIPS WITH MODELLING**

Statistical modelling can be used to assess the simultaneous impact of multiple factors. Models can be fit to determine the association between forced separations of carers and risk of clinically significant emotional or behavioural difficulties in their children that account for the effects of age, sex and LORI. *Logistic regression models* (see *Glossary*) were used to explore these relationships. The modelling techniques used in this survey account for the use of survey weights and the hierarchical structure of the data with selection of children within families and communities.

*Continued . . . .*



### EXPLORING RELATIONSHIPS WITH MODELLING *(continued)*

The results of logistic regression models are expressed in terms of *odds ratios* (see *Glossary*). The odds ratios are calculated relative to an index category for each variable. For instance in the model examining the probability that a child is at high risk of clinically significant emotional or behavioural difficulties (Table 7.19) the category ‘child’s primary carer was not forcibly separated from his or her natural family by a mission, government or welfare’ was used as the index category. Where the primary carer was forcibly separated from his or her natural family the odds ratio was 2.34 (CI: 1.27–4.32). This can be interpreted as saying that children whose primary carers were forcibly removed from their natural family were 2.34 times more likely to be at high risk of clinically significant emotional or behavioural difficulties than children whose primary carers had not been forcibly removed from their natural family.

Each model adjusts for the independent effects of the other variables in the model. Thus, for example, the association between forced separation of the primary carer and the likelihood that the child has high risk of clinically significant emotional or behavioural difficulties is not an artefact of different ages of the children or different rates of forcible separations in areas of different levels of relative isolation.

The statistical significance of an odds ratio can be judged by whether the confidence interval includes the reference value of one (see *Appendix E — Reliability of Estimates*, for more information on confidence intervals).

Adjusting for age, sex, LORI and whether the primary carer is the birth mother of the child, children whose primary carer had been forcibly separated from their natural family by a mission, government or welfare were over twice as likely (Odds Ratio 2.34; CI: 1.27–4.32) to be at high risk of clinically significant emotional or behavioural difficulties than children whose primary carer was Aboriginal but had not been separated from their natural family (Table 7.19). Where it was not known whether the child’s carer had been forcibly separated from natural family (where the data were not collected or the primary carer chose not to answer this question), or where the primary carer was non-Aboriginal, there was no significant difference in the likelihood that the children would be at high risk of clinically significant emotional or behavioural difficulties compared with children whose primary carer had not been forcibly separated.

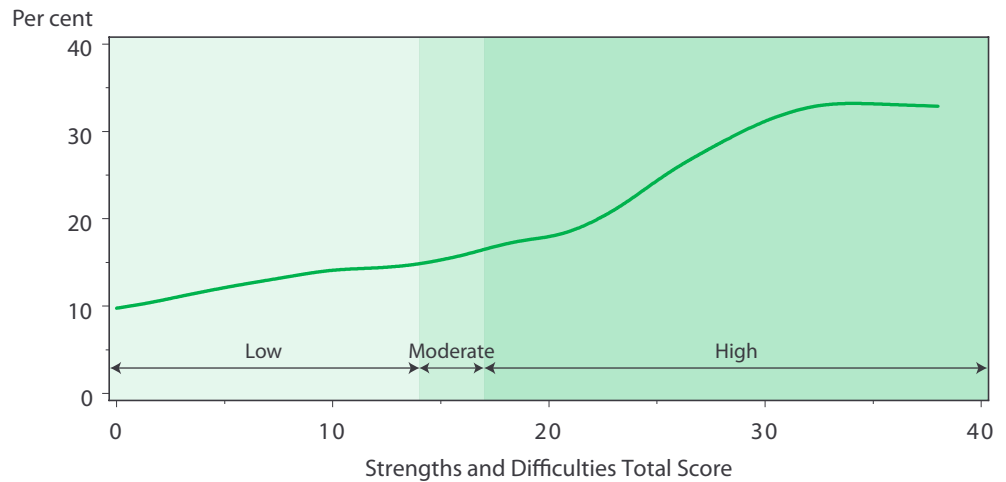
The relationship between forced separation of the primary carer from natural family and Strengths and Difficulties Questionnaire (SDQ) total scores (see Chapter 2) of the children in their care were also examined by looking at the scores on a continuous scale. The mean SDQ score was higher for children with a primary carer who was forcibly separated from their natural family by a mission, the government or welfare (Mean 12.9; CI: 11.9–14.0) than children looked after by primary carers who were not separated (Mean 10.9; CI: 10.5–11.3) (Table 7.20).

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As shown in Figure 7.6, the proportion of children whose primary carer had been forcibly separated from his or her natural family increased steadily with increasing total SDQ score of the child. The rate of increase was greatest for children whose SDQ scores were above 22.

**FIGURE 7.6:** PROPORTION OF CHILDREN WHOSE CARER WAS FORCIBLY SEPARATED FROM NATURAL FAMILY BY A MISSION, GOVERNMENT OR WELFARE, BY TOTAL SDQ SCORE OF THE CHILD



## SPECIFIC EMOTIONAL AND BEHAVIOURAL DIFFICULTIES

The effect of forced separations of carers from their natural family on emotional and behavioural difficulties in their children was investigated further by looking at the outcomes of the five SDQ sub-scales in this setting. There were significant differences in the proportion of children who were at high risk of clinically significant emotional symptoms, conduct problems and hyperactivity. However, there were no significant findings for carer reported peer problems or problems with prosocial behaviour, where the child's primary carer was separated from their natural family by a mission, the government or welfare.

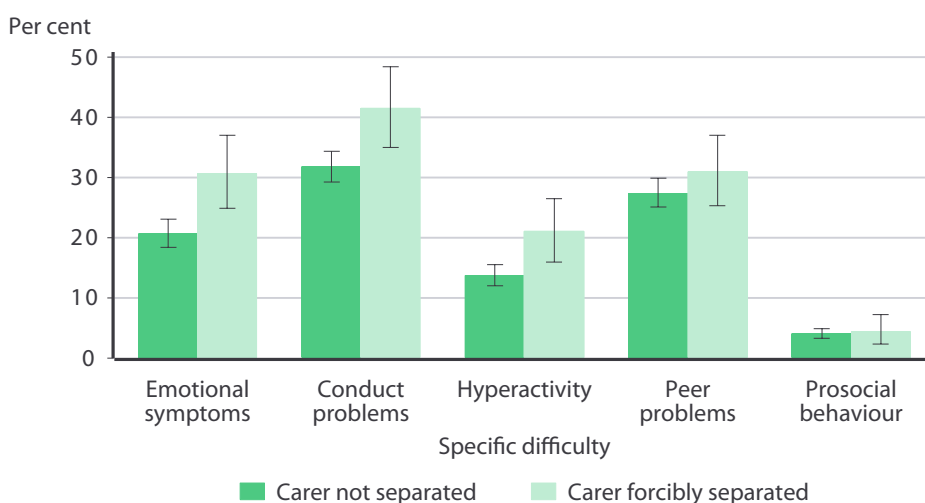
Children with a primary carer who was forcibly separated from their natural family by a mission, the government or welfare were more likely to:

- ◆ suffer from high risk of clinically significant emotional symptoms (30.7 per cent; CI: 24.9%–37.1%) than children looked after by primary carers who were not forcibly separated (20.7 per cent; CI: 18.4%–23.1%).
- ◆ have a higher mean emotional symptoms score (3.24; CI: 2.88–3.61) than children looked after by primary carers who were not forcibly separated (2.56; CI: 2.41–2.70).
- ◆ suffer from high risk of clinically significant conduct problems (41.5 per cent; CI: 35.0%–48.4%) than children looked after by primary carers who were not forcibly separated (31.8 per cent; CI: 29.3%–34.4%).
- ◆ have a higher mean conduct problems score (3.24; CI: 2.89–3.59) than children looked after by primary carers who were not forcibly separated (2.65; CI: 2.51–2.79).



- ◆ suffer from high risk of clinically significant hyperactivity (21.1 per cent; CI: 16.0%–26.5%) than children looked after by primary carers who were not forcibly separated (13.7 per cent; CI: 12.0%–15.5%).
- ◆ have a higher mean hyperactivity score (3.88; CI: 3.49–4.27) than children looked after by primary carers who were not forcibly separated (3.34; CI: 3.19–3.48) (Tables 7.21 and 7.22).

**FIGURE 7.7:** CHILDREN AGED 4–17 YEARS — PROPORTION AT HIGH RISK OF CLINICALLY SIGNIFICANT SPECIFIC DIFFICULTIES, BY WHETHER PRIMARY CARER WAS FORCIBLY SEPARATED FROM NATURAL FAMILY BY A MISSION, GOVERNMENT OR WELFARE



Source: Table 7.21

## MODELLING FORCED SEPARATION OF PRIMARY CARER FROM NATURAL FAMILY BY A MISSION, GOVERNMENT OR WELFARE — ASSOCIATION WITH SPECIFIC DIFFICULTIES

Modelling found significant associations between forced separations of primary carers from their natural family and three of the specific difficulties scores in their children – emotional symptoms, conduct problems and hyperactivity.

### Emotional symptoms

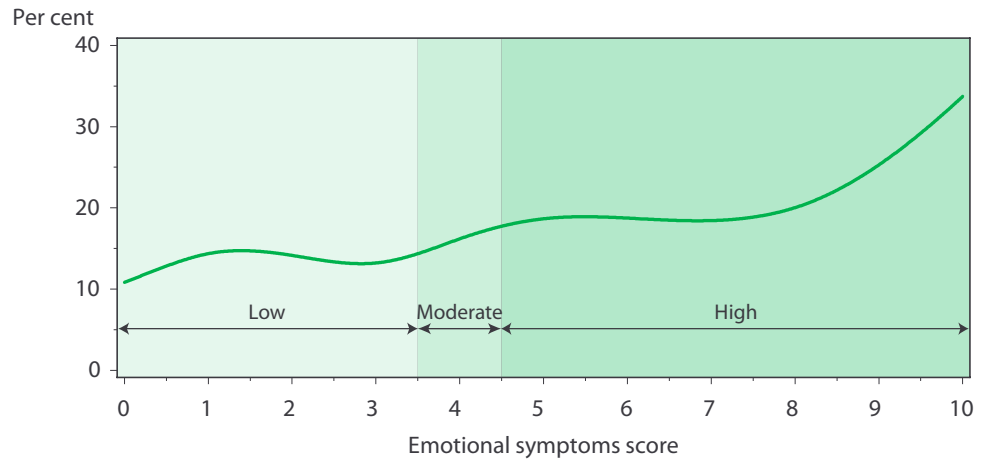
For the SDQ emotional symptoms scale, children whose primary carers had been forcibly separated from their natural families were over one and a half times as likely (Odds Ratio 1.56; CI: 1.07–2.29) to be at high risk of clinically significant emotional symptoms compared with children with Aboriginal primary carers who were not forcibly separated from their natural family (Table 7.23).

Children for whom it was not known if their primary carer had been forcibly separated from their natural family also were over one and a half times as likely (Odds Ratio 1.55; CI: 1.00–2.39) to be at high risk of clinically significant emotional symptoms.

Children with the highest emotional symptoms scores were most likely to be cared for by a primary carer who had been forcibly separated from his or her natural family. The rate of increase in this trend was greatest for children at the most severe end of the scale (Figure 7.8).



**FIGURE 7.8:** PROPORTION OF CHILDREN WHOSE CARER WAS FORCIBLY SEPARATED FROM NATURAL FAMILY BY A MISSION, GOVERNMENT OR WELFARE, BY EMOTIONAL SYMPTOMS SCORE OF THE CHILD

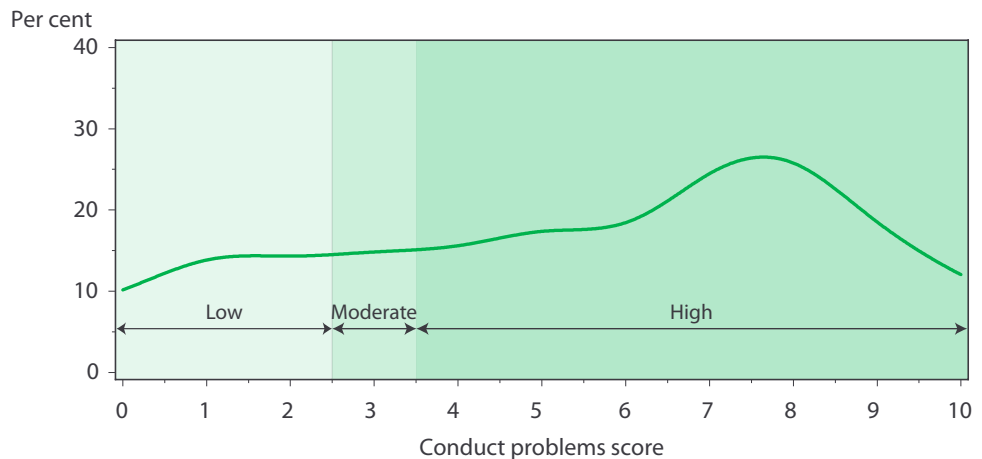


### Conduct problems

Children whose primary carers had been forcibly separated from their natural families were over one and a half times as likely (Odds Ratio 1.75; CI: 1.07–2.89) to be at high risk of clinically significant conduct problems (Table 7.23). Children for whom it was not known if their primary carer had been forcibly separated from their natural family were twice as likely (Odds Ratio 2.00; CI: 1.16–3.46) to be at high risk of clinically significant conduct problems, .

For the conduct problems score, the likelihood that a child’s primary carer had been forcibly separated from his or her natural family peaked at a score of around 8. Children with scores from around 6 up to about 8 were more likely to be living with a carer who had been forcibly separated from his or her natural family (Figure 7.9).

**FIGURE 7.9:** PROPORTION OF CHILDREN WHOSE CARER WAS FORCIBLY SEPARATED FROM NATURAL FAMILY BY A MISSION, GOVERNMENT OR WELFARE, BY CONDUCT PROBLEMS SCORE OF THE CHILD

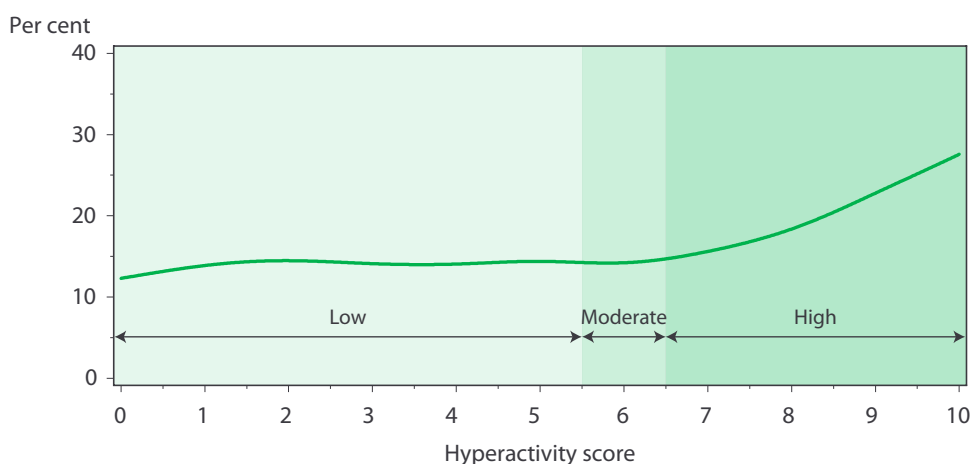


## Hyperactivity

Children whose primary carers had been forcibly separated from their natural families were over two and a half times as likely (Odds Ratio 2.61; CI: 1.43–4.77) to be at high risk of clinically significant hyperactivity (Table 7.23). Where it was not known whether the child’s carer had been forcibly separated from natural family (where the data were not collected or the primary carer chose not to answer this question) there was no significant difference in the risk of clinically significant hyperactivity.

For the hyperactivity scale, children with the highest hyperactivity scores were most likely to be cared for by a primary carer who had been forcibly separated from his or her natural family. Again, the rate of increase in this trend was greatest for children at the most severe end of the scale (Figure 7.10).

**FIGURE 7.10:** PROPORTION OF CHILDREN WHOSE CARER WAS FORCIBLY SEPARATED FROM NATURAL FAMILY BY A MISSION, GOVERNMENT OR WELFARE, BY HYPERACTIVITY SCORE OF THE CHILD



## Peer problems and prosocial behaviour

For the remaining two specific difficulties – peer problems and prosocial behaviour – there was no difference in the likelihood of a child being at high risk of clinically significant problems regardless of whether their primary carer had been forcibly separated from their natural family or not. For the peer problems scale, the odds ratio was 1.15 (CI: 0.77–1.73) and for the prosocial behaviour scale the odds ratio was 1.09 (CI: 0.53–2.21) (Table 7.23).

## RELATIONSHIP WITH OTHER DETERMINANTS OF CHILD SOCIAL AND EMOTIONAL WELLBEING

Chapter 3 considered the association between a range of child, family and community level variables and emotional and behavioural difficulties in Aboriginal children aged 4–17 years. Strong associations were found between emotional and behavioural difficulties and:

- ◆ demographic factors (age, sex and LORI)
- ◆ the physical health of the child (such as whether the child has had runny ears or does not have normal vision)





Forced separation from natural family, forced relocation from traditional country or homeland, and social and emotional wellbeing of Aboriginal children and young people

- ◆ carer characteristics (such as health of carer, whether carer has had contact with Mental Health Services)
- ◆ family characteristics (such as family functioning, number of live stress events experienced in previous 12 months).

A final model was presented showing all the factors which were found to be independent predictors of emotional and behavioural difficulties in Aboriginal children aged 4–17 years.

This model has been augmented by adding in whether the primary carer was forcibly separated from natural family by a mission, the government or welfare (Table 7.24). It should be noted that a fundamental assumption of logistic regression modelling is that the predictor variables are independent. In this case, it is known that this assumption is violated. For example, as shown earlier, whether the carer was forcibly separated from natural family is significantly associated with whether the carer has had contact with Mental Health Services in WA. So the results of this model only show the effects of forced separations additional to the effects of contact with Mental Health Services. As seen in Table 7.24, none of the findings of the original model are substantively altered by the inclusion of forced separation of the primary carer from natural family. However it is seen that, even after accounting for all of these factors – including some factors that may be on the causal pathway from forced separations to the social and emotional wellbeing of children – forced separation was still significantly associated with high risk of clinically significant emotional or behavioural difficulties in children (Odds Ratio 1.80; CI: 1.05–3.11).

## SIGNIFICANCE OF MODEL FINDINGS

The results of these models confirm the findings found in the estimated tables shown earlier in this chapter, that the SDQ total score, and three of the specific difficulties (conduct problems, emotional symptoms and hyperactivity) are significantly associated with the forced separation of the child's primary carer from his or her natural family. These results confirm that the increased proportion of children at high risk of clinically significant emotional or behavioural difficulties whose carers have been forcibly separated from their natural families is not due to differences in the age distribution of these children or the level of relative isolation of the places where they live. In fact, the associations found in the models are even stronger than those found in the estimated tables.

Considered in isolation of other factors, 32.7 per cent (CI: 26.3%–39.3%) of children whose primary carer was forcibly separated from their natural family were found to be at high risk of clinically significant emotional or behavioural difficulties, compared with 21.8 per cent (CI: 19.6%–24.1%) of children whose primary carer was Aboriginal and not forcibly separated from their natural family. This would indicate that children whose primary carer was forcibly separated from their natural family were approximately one and a half times as likely to be at high risk of clinically significant emotional or behavioural difficulties. However, when

*Continued . . . .*





### SIGNIFICANCE OF MODEL FINDINGS (continued)

accounting for the age, sex, and level of relative isolation of the children, the model results found that children whose primary carer had been forcibly separated from their natural family were over twice as likely to be at high risk of clinically significant emotional or behavioural difficulties.

Older children are more likely to have a primary carer who was forcibly separated from their natural family than younger children. Also, older children are less likely to be at high risk of clinically significant emotional or behavioural difficulties. Children living in areas of extreme relative isolation are less likely to be at high risk of clinically significant emotional or behavioural difficulties, and are also less likely to have a primary carer who was forcibly separated from their natural family. The effect of these factors dilutes the strength of association between forced separation from natural family and the effect on their children's social and emotional wellbeing when looking at the two-way tables. The model results more clearly show the impact of forced separations of carers from natural family on the social and emotional wellbeing of their children.

### PROBLEM BEHAVIOURS

The survey asked carers about the general behaviour and emotions of their children in the six-month period prior to being interviewed. These behaviours were then analysed by whether the primary carer had been forcibly separated from their natural family. Questions covered the issues of eating problems, sleeping problems, nightmares, bed-wetting and inappropriate sexual behaviour.

Anecdotal evidence, via publications such as *Bringing Them Home*<sup>1</sup>, would suggest that if a relationship were to exist it would show less optimal outcomes for the children of carers who were forcibly separated. No statistically significant findings were made with regard to these issues but, with the exception of bed-wetting, the data are strongly suggestive of a relationship (Tables 7.25-7.29).

### SPECIFIC ADVERSE BEHAVIOURS

Carers were asked about a set of specific behaviours observed for children in their care for the six-month period prior to the survey.

A significantly higher proportion of children with a primary carer who was forcibly separated from their natural family by a mission, the government or welfare had:

- ◆ drunk alcohol or gotten drunk in the past six months (15.2 per cent; CI: 11.4%–19.9%) compared with children looked after by primary carers who were not forcibly separated (8.8 per cent; CI: 7.4%–10.3%) (Table 7.32).
- ◆ used drugs other than alcohol or inhalants (glue, petrol, aerosols) in the past six months (10.5 per cent; CI: 6.9%–15.3%) compared with children looked after by primary carers who were not forcibly separated (4.4 per cent; CI: 3.4%–5.7%) (Table 7.34).



With regard to the other specific adverse behaviours that were investigated, no statistically significant differences were found by whether a child had not wanted to go to school; run away from home; sniffed glue, petrol or aerosols; deliberately harmed themselves; spoken about death or suicide, or attempted suicide. However, all show a trend in the direction that anecdotal evidence has suggested, and most are close to being significant (Tables 7.30-7.37).

### **BRINGING THEM HOME<sup>1</sup> – FAMILY TRACING AND REUNION**

*Bringing Them Home*<sup>1</sup> identified wide-ranging mental health problems as a consequence of the policies, practices and laws of removal and separation with far reaching implications for Aboriginal families. The effects of forcible removal policies were highlighted in 1991 when the Royal Commission into Aboriginal Deaths in Custody identified family separation as a significant issue affecting the lives of many Aboriginal and Torres Strait Islander people. In almost half the cases of deaths in custody examined by the Royal Commission, the person involved had been removed from their family as a child. Family reunion was identified by *Bringing Them Home* as essential to the healing process, particularly when separation has been painful. Assistance for family reunions was therefore viewed as a significant and urgent need.

People have many reasons for tracing their families, including discovering information about inherited illnesses and for developing close relationships. In its submission to the Inquiry, Link-Up (NSW) argued that ‘you have to know where you come from before you can know where you are going’.<sup>1</sup> Family tracing and reunions are not necessarily an easy matter. Not all people who were forcibly taken will ever be able to return to their families or homeland. Some of the reasons for this are loss of pathways, death of parents and other family members, rejection by parents, language barriers and an unwillingness to admit Aboriginality. Those who do experience reunions can go through a range of emotions including anxiety and fear. Some family reunions are unsupported, with inadequate preparation or counselling resulting in disappointment and grief. Some people are faced with rejection by the community of their family because of their lack of knowledge about the community, while others return to families still suffering from grief and loss.

Three ways were recommended in which governments could help people who had been affected by removal policies:

- ◆ giving easier access to personal files and recorded information about their families with the provision of a Family Information Service in every state or territory
- ◆ funding family tracing and reunion services including counselling and support, services research, referral, advocacy, community education and training
- ◆ funding Aboriginal mental health programs dealing with grief and loss, parenting and families, and other social effects.



## SECONDARY CARER FORCED SEPARATIONS

A higher proportion of children with a secondary carer who was separated from their natural family by a mission, the government or welfare were at moderate risk of clinically significant emotional or behavioural difficulties (18.2 per cent; CI: 13.1%–24.6%) than children whose secondary carers were not separated (10.5 per cent; CI: 8.6%–12.6%) (Table 7.38).

No significant findings were made with regard to high risk of clinically significant emotional or behavioural difficulties.

## CARERS OWN PARENTS' FORCED SEPARATIONS AND FORCED RELOCATION FROM TRADITIONAL HOMELAND

No significant findings were made with respect to risk of clinically significant emotional or behavioural difficulties in children where a child's primary carer had their mother or father forcibly separated from their natural family by a mission, the government or welfare. However, although not statistically significant, the data were suggestive of an inter-generational impact on the child, particularly in cases where the primary carer's mother was forcibly separated. Among children for whom the primary carer's mother had been forcibly separated from her natural family, 27.2 per cent (CI: 22.8%–32.1%) were at high risk of clinically significant emotional or behavioural difficulties, compared with 22.3 per cent (CI: 19.9%–24.8%) of children for whom the primary carer's mother was not forcibly separated from her natural family (Table 7.39).

Logistic regression modelling found that after accounting for age, sex and LORI, those children for whom both their primary carer and their primary carer's mother had been forcibly separated from their natural family were over two and a half times as likely (Odds Ratio 2.62; CI: 0.89–7.70) to be at high risk of clinically significant emotional or behavioural difficulties, while those children whose primary carer was forcibly separated but the primary carer's mother was not separated were over twice as likely (Odds Ratio 2.33; CI: 1.25–4.32) to be at high risk of clinically significant emotional or behavioural difficulties. If only the primary carer's mother was forcibly separated from her natural family, there was no significant difference in likelihood of being at high risk of clinically significant emotional or behavioural difficulties (Odds Ratio 1.17; CI: 0.57–2.38) (Table 7.40). These results confirm the impact of the forced separation of the primary carer from their natural family on the risk of clinically significant emotional or behavioural difficulties in his or her children, but show no evidence to suggest there is any further impact beyond two generations.

No significant findings were made with respect to risk of clinically significant emotional or behavioural difficulties in children where a child's secondary carer had their mother or father forcibly separated from their natural family by a mission, the government or welfare.

With regard to risk of clinically significant emotional or behavioural difficulties in children and the forced relocation of Aboriginal carers from traditional country or homeland, there were no findings of statistical significance (Table 7.41). Note, however, that the data were suggestive of an inter-generational impact on the child in the case where the primary carer's parents were forcibly relocated (Table 7.42).



Forced separation from natural family, forced relocation from traditional country or homeland, and social and emotional wellbeing of Aboriginal children and young people

Lastly, a higher proportion of children with a primary carer who was forcibly separated from their natural family by a mission, the government or welfare, or forcibly relocated from their traditional country or homeland, were at high risk of clinically significant emotional or behavioural difficulties (30.2 per cent; CI: 24.6%–36.5%) than children looked after by primary carers who were not separated or relocated (22.1 per cent; CI: 19.8–24.4%) (Table 7.43).

## YOUTH SELF-REPORTED EMOTIONAL OR BEHAVIOURAL DIFFICULTIES AND FORCED SEPARATION OF THE PRIMARY CARER FROM NATURAL FAMILY

Aboriginal young people aged 12–17 years were asked to separately answer the Strengths and Difficulties Questionnaire as part of the youth self report questionnaire, allowing an investigation of emotional and behavioural difficulties at the self-reported level. It must be noted that the young people for whom no questionnaire was obtained were those more likely to be reported by their carers as being at high risk of clinically significant emotional or behavioural difficulties (see Chapter 5). With this in mind, no significant association was found between youth reported risk of clinically significant emotional or behavioural difficulties and the forced separation of the primary carer from their natural family by a mission, the government or welfare (Table 7.44).

No significant findings were observed between any of the five SDQ sub-scales and the forced separation of the primary carer from his or her natural family.

### BRINGING THEM HOME<sup>1</sup> – GOVERNMENT RESPONSES

*Bringing Them Home*<sup>1</sup> made 54 recommendations to address issues relating to past forced removal policies. For the purposes of more consistent monitoring, these recommendations were grouped under the following themes by the Senate Inquiry into the Federal Government's Implementation of Recommendations made in *Bringing Them Home*<sup>19</sup>:

- ◆ Acknowledgment and apology
- ◆ Records, family tracing and reunion
- ◆ Rehabilitation
- ◆ Education and training
- ◆ Guarantees against repetition
- ◆ Reparation
- ◆ Issues of contemporary separation
- ◆ Consultation, monitoring and coordination

*Continued . . . .*



### **BRINGING THEM HOME<sup>1</sup> – GOVERNMENT RESPONSES** (continued)

These themes were used in an independent evaluation of government and non-government responses to the recommendations of *Bringing Them Home* conducted by the Ministerial Council for Aboriginal and Torres Strait Islander Affairs (MCATSIA)<sup>20</sup> in response to the Senate Inquiry into the Stolen Generation. The subsequent report *Success Works – Evaluation of Responses to Bringing Them Home Report December 2003* represented the period up until the end of 2002.<sup>20</sup> The findings of this report are outlined below.

#### **Acknowledgment and Apology**

On 26 August 1999, the Australian Parliament passed an historic motion expressing its ‘deep and sincere regret that Indigenous Australians suffered injustices under the practices of past generations, and for the hurt and trauma that many Indigenous people continue to feel as a consequence of those practices’.<sup>20</sup> No formal apology has yet been made on the grounds that it could imply that present generations are responsible and accountable for the actions of earlier generations even though those actions were sanctioned by the laws of the time and were believed to be in the best interests of the children.

All jurisdictions have expressed regret and formal apologies have been made at state and territory level.

#### **Records, family tracing and reunion** (See commentary box— *Family Tracing and Reunion*)

The Australian Government’s response to the recommendations of *Bringing Them Home* has focussed on the finding that assisting family reunions was the most urgent and significant need of separated families. As a consequence, family tracing and reunion has received significant attention from Commonwealth and State Governments. The Australian Government’s initial response was dedication of \$117 million dollars to be spent on a variety of initiatives addressing records, family tracing and reunion. Included was \$11.25 million to be allocated over four years to fund a single dedicated Aboriginal family reunion Link-Up service based on the existing services run by ATSIC. The main role of Link-Up is to provide information, dissemination and community contact; provide access to records and family reunion processes; and to establish and maintain service standards and networks.

#### **Rehabilitation**

As well as providing funding for Link-Up and its associated services, the Australian Government has provided funding for a range of counselling and other services including:

- ◆ Funding to provide for 100 full time Bringing Them Home counsellors
- ◆ Funding for Aboriginal family support and parenting programs which are administered by the Australian Government Department of Family and Community Services (FaCS)

*Continued . . . .*



### **BRINGING THEM HOME<sup>1</sup> – GOVERNMENT RESPONSES** (continued)

- ◆ \$1.3 million supplied to the Innovative Grants program administered by the Department of Health and Ageing. This funding is to provide innovative and culturally appropriate alternatives to individual counselling services.

The Australian Government also provided funding for various research projects to evaluate the mental health of Aboriginal people and assess effectiveness of certain therapeutic methods. Among these was funding to support the WAACHS. The WAACHS is also a contribution to the response to recommendation 49 of the Royal Commission into the Aboriginal Deaths in Custody which proposed that a national survey covering a range of social, demographic, health and economic characteristics of the Aboriginal population with full Aboriginal participation at all levels be supported. While not a national survey, WAACHS was a comprehensive state-wide survey conducted with full participation from Aboriginal people in the strategic management of the survey, the design of the questionnaire and the collection, analysis and dissemination of the data.

In Western Australia, the State Government committed funding for counselling positions for the 'Building Solid Families' program, trialling resource materials for parenting skills groups for Aboriginal people and undertaking to finalise the Aboriginal Mental Health Plan. The Building Solid Families program – a joint initiative of ATSIC and the Western Australia Department of Health – provides comprehensive information and support services for Aboriginal and Torres Strait Islander people, families and communities who have been affected by family separation, trauma grief and loss, mental health problems or self harm and is recognised as a national best practice model.<sup>21</sup>

Other strategies delivered by the State, include the 'Building Blocks Program' to support Aboriginal newborns and their parents and the 'Family Futures Program' which has the aim of providing health programs for Aboriginal people that were holistic and culturally appropriate.

#### Education and Training

*Bringing Them Home* emphasized a twofold need for education and training. Firstly, the need for the community to be educated about the history of forcible removal and the effects this has had on Aboriginal communities and individuals and secondly, for Aboriginal communities to have access to skills and information to enable them to retain their cultural identity and language. Recommendations included arrangement of a national commemorative 'sorry' day; inclusion of compulsory modules in primary and secondary school curricula on the history of forcible removal; funding to Aboriginal history, cultural and language centres; training and scholarships for Aboriginal archivists, genealogists, historians, researchers and counsellors; and development of in-service training for employees and students on the history and effects of forcible removal.

*Continued . . .*





## **BRINGING THEM HOME<sup>1</sup> – GOVERNMENT RESPONSES** (continued)

### Education and Training (continued)

The Australian Government has provided \$12 million for training and support to workers supporting people who were forcibly removed and \$9.5 million additional funding to expand the Emotional and Social Wellbeing Regional Centres that provide work force support and skills development to the Aboriginal and Torres Strait Islander health sector. Over \$1.5 million has been provided to support other education and training activities to workers in services responding to grief, loss and trauma caused by past separation practices.

At the time of the report, the Western Australian Government had met six of eight education and training commitments including the allocation of \$82,000 for the development of a training program on Aboriginal understandings of mental health issues. Other initiatives delivered include Aboriginal language fluency as a general curriculum option, workshops for Aboriginal studies, training for triage and remote area nurses and general practitioners and an Aboriginal interpreting service.

### Guarantees against Repetition

Most jurisdictions have established a range of initiatives to support the care and wellbeing of Aboriginal people in prison and in juvenile justice centres. In Western Australia, the focus of commitments were justice and corrections; implementation of a plan to transfer Aboriginal land to Aboriginal organisations and development of the Aboriginal Justice Plan (2000); children and families; and the appointment of a Commission of Elders to advise Government on matters of significance to Aboriginal people.

### Reparation

The issue of monetary compensation remains controversial and unresolved. The Australian Government's view is that there is not an equitable way to provide financial compensation to people affected by removal policies. Rather, the Australian Government views as more important the provision of practical assistance such as facilities for family reunion and emotional health and wellbeing, and has invested \$117 million in *Bringing Them Home* initiatives.

The Western Australian focus has been on the development of a Jurisdictional Justice Plan to achieve practical outcomes in Aboriginal Affairs. A contribution of \$800,000 has been made through the Department of Health for counselling and support for individuals affected by forcible separation and their families.

*Continued . . . .*



## BRINGING THEM HOME<sup>1</sup> – GOVERNMENT RESPONSES (continued)

### Issues of Contemporary Separation

Aboriginal children are still being removed from their families for child protection reasons at a rate higher than in non-Aboriginal families. Recommendation 51a of *Bringing Them Home* stated that when a child is removed, placement is to be made in accordance with the Indigenous Child Placement Principle, which in part recommends that an Aboriginal child be placed in an Aboriginal home. Due to a shortage of Aboriginal foster carers, this is not always possible.

## ENDNOTES

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## DETAILED TABLES

### FORCED SEPARATIONS AND THE MENTAL HEALTH AND WELLBEING OF ABORIGINAL CARERS OF ABORIGINAL CHILDREN

**TABLE 7.1:** ALL CARERS — WHETHER OVERUSE OF ALCOHOL CAUSES PROBLEMS IN THE HOUSEHOLD, BY WHETHER CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE

<i>Carer forcibly separated from natural family?</i>	<i>Whether overuse of alcohol causes problems in the household</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Primary carers</b>					
Not separated	No	7 500	(7 130 - 7 880)	86.7	(84.8 - 88.4)
	Yes	1 150	(1 000 - 1 320)	13.3	(11.6 - 15.2)
	<b>Total</b>	<b>8 650</b>	<b>(8 280 - 9 030)</b>	<b>100.0</b>	
Separated	No	1 010	(830 - 1 210)	78.8	(68.4 - 88.0)
	Yes	270	(150 - 450)	21.2	(12.0 - 31.6)
	<b>Total</b>	<b>1 280</b>	<b>(1 060 - 1 530)</b>	<b>100.0</b>	
Don't want to answer	No	430	(230 - 680)	85.9	(69.7 - 95.2)
	Yes	70	(20 - 160)	14.1	(4.8 - 30.3)
	<b>Total</b>	<b>500</b>	<b>(300 - 810)</b>	<b>100.0</b>	
Not Aboriginal	No	1 920	(1 650 - 2 210)	90.2	(85.1 - 93.7)
	Yes	210	(130 - 320)	9.8	(6.3 - 14.9)
	<b>Total</b>	<b>2 130</b>	<b>(1 860 - 2 440)</b>	<b>100.0</b>	
<b>Total</b>	No	10 900	(10 500 - 11 200)	86.4	(84.6 - 88.2)
	Yes	1 700	(1 490 - 1 940)	13.6	(11.8 - 15.4)
	<b>Total</b>	<b>12 600</b>	<b>(12 300 - 12 800)</b>	<b>100.0</b>	
<b>Secondary carers</b>					
Not separated	No	3 880	(3 630 - 4 130)	84.6	(82.1 - 86.8)
	Yes	700	(600 - 830)	15.4	(13.2 - 17.9)
	<b>Total</b>	<b>4 580</b>	<b>(4 310 - 4 860)</b>	<b>100.0</b>	
Separated	No	570	(460 - 700)	83.3	(75.9 - 89.3)
	Yes	110	(70 - 170)	16.7	(10.7 - 24.1)
	<b>Total</b>	<b>680</b>	<b>(560 - 820)</b>	<b>100.0</b>	
Don't want to answer	No	180	(120 - 250)	87.8	(66.9 - 98.7)
	Yes	20	(0 - 80)	12.2	(1.3 - 33.1)
	<b>Total</b>	<b>200</b>	<b>(140 - 290)</b>	<b>100.0</b>	
Not Aboriginal	No	1 390	(1 220 - 1 590)	95.4	(92.6 - 97.3)
	Yes	70	(40 - 110)	4.6	(2.7 - 7.4)
	<b>Total</b>	<b>1 460</b>	<b>(1 280 - 1 650)</b>	<b>100.0</b>	
<b>Total</b>	No	6 020	(5 760 - 6 280)	86.9	(85.0 - 88.6)
	Yes	910	(790 - 1 050)	13.1	(11.4 - 15.0)
	<b>Total</b>	<b>6 930</b>	<b>(6 660 - 7 200)</b>	<b>100.0</b>	

Continued . . . .



**TABLE 7.1 (continued): ALL CARERS. WHETHER OVERUSE OF ALCOHOL CAUSES PROBLEMS IN THE HOUSEHOLD, BY WHETHER CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE**

<i>Carer forcibly separated from natural family?</i>	<i>Whether overuse of alcohol causes problems in the household</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>All carers</b>					
Not separated	No	11 400	(11 000 - 11 800)	86.0	(84.4 - 87.5)
	Yes	1 860	(1 650 - 2 070)	14.0	(12.5 - 15.6)
	<b>Total</b>	<b>13 200</b>	<b>(12 800 - 13 700)</b>	<b>100.0</b>	
Separated	No	1 580	(1 370 - 1 810)	80.4	(73.3 - 86.8)
	Yes	390	(260 - 570)	19.6	(13.2 - 26.7)
	<b>Total</b>	<b>1 960</b>	<b>(1 710 - 2 240)</b>	<b>100.0</b>	
Don't want to answer	No	600	(400 - 880)	86.5	(75.1 - 94.6)
	Yes	90	(40 - 210)	13.5	(5.4 - 24.9)
	<b>Total</b>	<b>700</b>	<b>(460 - 990)</b>	<b>100.0</b>	
Not Aboriginal	No	3 320	(3 010 - 3 650)	92.3	(89.4 - 94.8)
	Yes	280	(190 - 400)	7.7	(5.2 - 10.6)
	<b>Total</b>	<b>3 590</b>	<b>(3 270 - 3 930)</b>	<b>100.0</b>	
<b>Total</b>	No	16 900	(16 600 - 17 200)	86.6	(85.1 - 88.0)
	Yes	2 610	(2 340 - 2 910)	13.4	(12.0 - 14.9)
	<b>Total</b>	<b>19 500</b>	<b>(19 400 - 19 500)</b>	<b>100.0</b>	

**TABLE 7.2: ALL CARERS — LIKELIHOOD THAT OVERUSE OF ALCOHOL CAUSES PROBLEMS IN THE HOUSEHOLD ASSOCIATED WITH WHETHER CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE, AND DEMOGRAPHIC FACTORS**

Overuse of alcohol causes problems in the household			
<i>Parameter</i>	<i>Significance (p value)</i>	<i>Odds Ratio</i>	<i>95% CI</i>
Sex			
Male		1.00	
Female	0.063	1.28	(0.99 - 1.67)
Age group			
25 years and under		1.00	
25–34 years	0.133	1.33	(0.92 - 1.92)
35–44 years	0.670	1.09	(0.73 - 1.62)
45 years or over	0.246	1.31	(0.83 - 2.06)
Not stated	0.484	0.66	(0.21 - 2.10)
Level of Relative Isolation			
None		1.00	
Low	0.270	1.24	(0.85 - 1.81)
Moderate	0.002	1.96	(1.28 - 3.00)
High	0.012	2.18	(1.19 - 4.00)
Extreme	0.281	1.39	(0.76 - 2.54)
Carer forcibly separated from natural family			
Not separated		1.00	
Separated	0.010	1.61	(1.12 - 2.32)
Don't want to answer	0.384	0.73	(0.36 - 1.49)
Not Aboriginal	0.002	0.53	(0.35 - 0.78)



**TABLE 7.3: ALL CARERS — WHETHER BETTING OR GAMBLING CAUSES PROBLEMS IN THE HOUSEHOLD, BY WHETHER CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE**

<i>Carer forcibly separated from natural family?</i>	<i>Whether gambling causes problems in the household</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Primary carers</b>					
Not separated	No	8 320	(7 940 - 8 700)	96.2	(94.7 - 97.3)
	Yes	330	(230 - 460)	3.8	(2.7 - 5.3)
	<b>Total</b>	<b>8 650</b>	<b>(8 280 - 9 030)</b>	<b>100.0</b>	
Separated	No	1 180	(970 - 1 420)	91.9	(85.2 - 96.2)
	Yes	100	(50 - 190)	8.1	(3.8 - 14.8)
	<b>Total</b>	<b>1 280</b>	<b>(1 060 - 1 530)</b>	<b>100.0</b>	
Don't want to answer	No	480	(300 - 710)	96.2	(15.8 - 100.0)
	Yes	20	(0 - 910)	3.8	(0.0 - 84.2)
	<b>Total</b>	<b>500</b>	<b>(300 - 810)</b>	<b>100.0</b>	
Not Aboriginal	No	2 100	(1 820 - 2 390)	98.3	(93.4 - 99.8)
	Yes	40	(0 - 150)	1.7	(0.2 - 6.6)
	<b>Total</b>	<b>2 130</b>	<b>(1 860 - 2 440)</b>	<b>100.0</b>	
<b>Total</b>	No	12 100	(11 800 - 12 400)	96.1	(94.3 - 97.5)
	Yes	490	(310 - 720)	3.9	(2.5 - 5.7)
	<b>Total</b>	<b>12 600</b>	<b>(12 300 - 12 800)</b>	<b>100.0</b>	
<b>Secondary carers</b>					
Not separated	No	4 370	(4 110 - 4 640)	95.4	(93.9 - 96.5)
	Yes	210	(160 - 280)	4.6	(3.5 - 6.1)
	<b>Total</b>	<b>4 580</b>	<b>(4 310 - 4 860)</b>	<b>100.0</b>	
Separated	No	630	(510 - 760)	91.9	(87.3 - 95.7)
	Yes	60	(30 - 90)	8.1	(4.3 - 12.8)
	<b>Total</b>	<b>680</b>	<b>(560 - 820)</b>	<b>100.0</b>	
Don't want to answer	No	190	(130 - 270)	96.0	(78.9 - 99.9)
	Yes	10	(0 - 40)	4.0	(0.1 - 21.1)
	<b>Total</b>	<b>200</b>	<b>(140 - 290)</b>	<b>100.0</b>	
Not Aboriginal	No	1 430	(1 240 - 1 620)	97.6	(96.1 - 98.6)
	Yes	40	(20 - 60)	2.4	(1.4 - 3.9)
	<b>Total</b>	<b>1 460</b>	<b>(1 280 - 1 650)</b>	<b>100.0</b>	
<b>Total</b>	No	6 620	(6 350 - 6 890)	95.5	(94.4 - 96.4)
	Yes	310	(250 - 390)	4.5	(3.6 - 5.6)
	<b>Total</b>	<b>6 930</b>	<b>(6 660 - 7 200)</b>	<b>100.0</b>	
<b>All carers</b>					
Not separated	No	12 700	(12 300 - 13 100)	95.9	(94.8 - 96.8)
	Yes	540	(420 - 690)	4.1	(3.2 - 5.2)
	<b>Total</b>	<b>13 200</b>	<b>(12 800 - 13 700)</b>	<b>100.0</b>	
Separated	No	1 810	(1 560 - 2 070)	91.9	(87.7 - 95.2)
	Yes	160	(90 - 240)	8.1	(4.8 - 12.3)
	<b>Total</b>	<b>1 960</b>	<b>(1 710 - 2 240)</b>	<b>100.0</b>	
Don't want to answer	No	670	(480 - 930)	96.1	(39.8 - 100.0)
	Yes	30	(0 - 650)	3.9	(0.0 - 60.2)
	<b>Total</b>	<b>700</b>	<b>(460 - 990)</b>	<b>100.0</b>	
Not Aboriginal	No	3 520	(3 200 - 3 860)	98.0	(95.9 - 99.3)
	Yes	70	(30 - 150)	2.0	(0.7 - 4.1)
	<b>Total</b>	<b>3 590</b>	<b>(3 270 - 3 930)</b>	<b>100.0</b>	
<b>Total</b>	No	18 700	(18 500 - 18 900)	95.9	(94.7 - 96.9)
	Yes	800	(610 - 1 040)	4.1	(3.1 - 5.3)
	<b>Total</b>	<b>19 500</b>	<b>(19 400 - 19 500)</b>	<b>100.0</b>	



**TABLE 7.4:** ALL CARERS — LIKELIHOOD THAT BETTING OR GAMBLING CAUSES PROBLEMS IN THE HOUSEHOLD ASSOCIATED WITH WHETHER CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE, AND DEMOGRAPHIC FACTORS

Betting or gambling causes problems in the household			
<i>Parameter</i>	<i>Significance (p value)</i>	<i>Odds Ratio</i>	<i>95% CI</i>
<b>Sex</b>			
Male		1.00	
Female	0.328	0.82	(0.55 - 1.22)
<b>Age group</b>			
25 years and under		1.00	
25–34 years	0.103	1.77	(0.89 - 3.51)
35–44 years	0.111	1.78	(0.88 - 3.61)
45 years or over	0.109	1.89	(0.87 - 4.10)
Not stated	0.534	1.68	(0.33 - 8.67)
<b>Level of Relative Isolation</b>			
None		1.00	
Low	0.883	1.05	(0.57 - 1.91)
Moderate	0.637	1.18	(0.59 - 2.38)
High	0.549	1.36	(0.50 - 3.68)
Extreme	0.004	3.26	(1.45 - 7.34)
<b>Carer forcibly separated from natural family</b>			
Not separated		1.00	
Separated	0.005	2.10	(1.25 - 3.54)
Don't want to answer	0.455	0.58	(0.14 - 2.41)
Not Aboriginal	0.071	0.54	(0.28 - 1.05)



**TABLE 7.5: ALL CARERS — WHETHER EVER SMOKED CIGARETTES REGULARLY, BY WHETHER CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE**

<i>Carer forcibly separated from natural family?</i>	<i>Whether ever smoked cigarettes regularly</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Primary carers</b>					
Not separated	No	3 130	(2 820 - 3 450)	36.2	(33.1 - 39.4)
	Yes	5 520	(5 170 - 5 870)	63.8	(60.6 - 66.9)
	<b>Total</b>	<b>8 650</b>	<b>(8 280 - 9 030)</b>	<b>100.0</b>	
Separated	No	440	(320 - 580)	34.0	(26.0 - 43.0)
	Yes	840	(660 - 1 070)	66.0	(57.0 - 74.0)
	<b>Total</b>	<b>1 280</b>	<b>(1 060 - 1 530)</b>	<b>100.0</b>	
Don't want to answer	No	220	(130 - 330)	43.4	(25.5 - 64.7)
	Yes	280	(110 - 540)	56.6	(35.3 - 74.5)
	<b>Total</b>	<b>500</b>	<b>(300 - 810)</b>	<b>100.0</b>	
Not Aboriginal	No	570	(440 - 740)	26.7	(20.8 - 33.3)
	Yes	1 560	(1 310 - 1 830)	73.3	(66.7 - 79.2)
	<b>Total</b>	<b>2 130</b>	<b>(1 860 - 2 440)</b>	<b>100.0</b>	
<b>Total</b>	No	4 350	(4 020 - 4 710)	34.7	(32.0 - 37.4)
	Yes	8 210	(7 820 - 8 610)	65.3	(62.6 - 68.0)
	<b>Total</b>	<b>12 600</b>	<b>(12 300 - 12 800)</b>	<b>100.0</b>	
<b>Secondary carers</b>					
Not separated	No	1 550	(1 360 - 1 750)	33.8	(30.4 - 37.2)
	Yes	3 030	(2 820 - 3 260)	66.2	(62.8 - 69.6)
	<b>Total</b>	<b>4 580</b>	<b>(4 310 - 4 860)</b>	<b>100.0</b>	
Separated	No	180	(120 - 240)	25.7	(18.6 - 34.5)
	Yes	510	(400 - 640)	74.3	(65.5 - 81.4)
	<b>Total</b>	<b>680</b>	<b>(560 - 820)</b>	<b>100.0</b>	
Don't want to answer	No	70	(30 - 130)	34.4	(15.6 - 55.3)
	Yes	130	(80 - 200)	65.6	(44.7 - 84.4)
	<b>Total</b>	<b>200</b>	<b>(140 - 290)</b>	<b>100.0</b>	
Not Aboriginal	No	400	(310 - 510)	27.4	(21.9 - 33.9)
	Yes	1 060	(900 - 1 240)	72.6	(66.1 - 78.1)
	<b>Total</b>	<b>1 460</b>	<b>(1 280 - 1 650)</b>	<b>100.0</b>	
<b>Total</b>	No	2 190	(1 980 - 2 420)	31.7	(28.9 - 34.6)
	Yes	4 730	(4 480 - 5 000)	68.3	(65.4 - 71.1)
	<b>Total</b>	<b>6 930</b>	<b>(6 660 - 7 200)</b>	<b>100.0</b>	
<b>All carers</b>					
Not separated	No	4 680	(4 310 - 5 060)	35.4	(32.9 - 37.9)
	Yes	8 550	(8 150 - 8 960)	64.6	(62.1 - 67.1)
	<b>Total</b>	<b>13 200</b>	<b>(12 800 - 13 700)</b>	<b>100.0</b>	
Separated	No	610	(490 - 760)	31.1	(25.4 - 37.7)
	Yes	1 350	(1 140 - 1 600)	68.9	(62.3 - 74.6)
	<b>Total</b>	<b>1 960</b>	<b>(1 710 - 2 240)</b>	<b>100.0</b>	
Don't want to answer	No	290	(190 - 400)	40.8	(26.4 - 54.8)
	Yes	410	(240 - 700)	59.2	(45.2 - 73.6)
	<b>Total</b>	<b>700</b>	<b>(460 - 990)</b>	<b>100.0</b>	
Not Aboriginal	No	970	(800 - 1 160)	27.0	(22.6 - 31.7)
	Yes	2 620	(2 330 - 2 930)	73.0	(68.3 - 77.4)
	<b>Total</b>	<b>3 590</b>	<b>(3 270 - 3 930)</b>	<b>100.0</b>	
<b>Total</b>	No	6 550	(6 140 - 6 970)	33.6	(31.5 - 35.8)
	Yes	12 900	(12 500 - 13 400)	66.4	(64.2 - 68.5)
	<b>Total</b>	<b>19 500</b>	<b>(19 400 - 19 500)</b>	<b>100.0</b>	



**TABLE 7.6:** CARERS WHO HAVE EVER SMOKED CIGARETTES — WHETHER CURRENTLY SMOKES CIGARETTES, BY WHETHER CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE

<i>Carer forcibly separated from natural family?</i>	<i>Whether currently smokes cigarettes</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Primary carers</b>					
Not separated	No	1 100	(940 - 1 290)	20.0	(17.1 - 23.1)
	Yes	4 410	(4 090 - 4 760)	80.0	(76.9 - 82.9)
	<b>Total</b>	<b>5 520</b>	<b>(5 170 - 5 870)</b>	<b>100.0</b>	
Separated	No	230	(140 - 350)	27.2	(16.9 - 38.6)
	Yes	620	(450 - 810)	72.8	(61.4 - 83.1)
	<b>Total</b>	<b>840</b>	<b>(660 - 1 070)</b>	<b>100.0</b>	
Don't want to answer	No	50	(20 - 110)	17.1	(3.6 - 41.4)
	Yes	230	(70 - 510)	82.9	(58.6 - 96.4)
	<b>Total</b>	<b>280</b>	<b>(110 - 540)</b>	<b>100.0</b>	
Not Aboriginal	No	510	(370 - 690)	32.9	(24.7 - 41.8)
	Yes	1 050	(840 - 1 280)	67.1	(58.2 - 75.3)
	<b>Total</b>	<b>1 560</b>	<b>(1 310 - 1 830)</b>	<b>100.0</b>	
<b>Total</b>	No	1 900	(1 660 - 2 160)	23.1	(20.3 - 26.1)
	Yes	6 310	(5 910 - 6 720)	76.9	(73.9 - 79.7)
	<b>Total</b>	<b>8 210</b>	<b>(7 820 - 8 610)</b>	<b>100.0</b>	
<b>Secondary carers</b>					
Not separated	No	710	(600 - 840)	23.5	(19.9 - 27.2)
	Yes	2 320	(2 120 - 2 530)	76.5	(72.8 - 80.1)
	<b>Total</b>	<b>3 030</b>	<b>(2 820 - 3 260)</b>	<b>100.0</b>	
Separated	No	100	(60 - 160)	20.0	(12.2 - 31.2)
	Yes	410	(310 - 530)	80.0	(68.8 - 87.8)
	<b>Total</b>	<b>510</b>	<b>(400 - 640)</b>	<b>100.0</b>	
Don't want to answer	No	30	(10 - 70)	21.8	(8.2 - 47.2)
	Yes	100	(60 - 160)	78.2	(52.8 - 91.8)
	<b>Total</b>	<b>130</b>	<b>(80 - 200)</b>	<b>100.0</b>	
Not Aboriginal	No	270	(200 - 370)	25.7	(19.2 - 33.6)
	Yes	790	(650 - 950)	74.3	(66.4 - 80.8)
	<b>Total</b>	<b>1 060</b>	<b>(900 - 1 240)</b>	<b>100.0</b>	
<b>Total</b>	No	1 120	(970 - 1 280)	23.6	(20.6 - 26.7)
	Yes	3 620	(3 380 - 3 860)	76.4	(73.3 - 79.4)
	<b>Total</b>	<b>4 730</b>	<b>(4 480 - 5 000)</b>	<b>100.0</b>	
<b>All carers</b>					
Not separated	No	1 820	(1 610 - 2 050)	21.2	(18.9 - 23.7)
	Yes	6 740	(6 350 - 7 140)	78.8	(76.3 - 81.1)
	<b>Total</b>	<b>8 550</b>	<b>(8 150 - 8 960)</b>	<b>100.0</b>	
Separated	No	330	(230 - 460)	24.5	(17.7 - 32.4)
	Yes	1 020	(830 - 1 230)	75.5	(67.6 - 82.3)
	<b>Total</b>	<b>1 350</b>	<b>(1 140 - 1 600)</b>	<b>100.0</b>	
Don't want to answer	No	80	(30 - 150)	18.6	(6.1 - 36.9)
	Yes	340	(160 - 600)	81.4	(63.1 - 93.9)
	<b>Total</b>	<b>410</b>	<b>(240 - 700)</b>	<b>100.0</b>	
Not Aboriginal	No	790	(620 - 980)	30.0	(24.4 - 36.2)
	Yes	1 840	(1 590 - 2 110)	70.0	(63.8 - 75.6)
	<b>Total</b>	<b>2 620</b>	<b>(2 330 - 2 930)</b>	<b>100.0</b>	
<b>Total</b>	No	3 010	(2 720 - 3 330)	23.3	(21.0 - 25.6)
	Yes	9 930	(9 500 - 10 400)	76.7	(74.4 - 79.0)
	<b>Total</b>	<b>12 900</b>	<b>(12 500 - 13 400)</b>	<b>100.0</b>	



**TABLE 7.7:** PRIMARY CARERS — WHETHER EVER BEEN ARRESTED OR CHARGED WITH AN OFFENCE, BY WHETHER CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE

<i>Ever arrested or charged with an offence</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Not separated</b>				
No	5 460	(5 150 - 5 760)	63.1	(60.4 - 65.7)
Yes	3 200	(2 950 - 3 460)	36.9	(34.3 - 39.6)
<b>Total</b>	<b>8 650</b>	<b>(8 330 - 8 970)</b>	<b>100.0</b>	
<b>Separated</b>				
No	670	(540 - 820)	52.6	(44.5 - 60.4)
Yes	610	(480 - 760)	47.4	(39.6 - 55.5)
<b>Total</b>	<b>1 280</b>	<b>(1 090 - 1 490)</b>	<b>100.0</b>	
<b>Don't want to answer</b>				
No	300	(160 - 490)	60.2	(43.3 - 75.1)
Yes	200	(140 - 290)	39.8	(24.9 - 56.7)
<b>Total</b>	<b>500</b>	<b>(340 - 690)</b>	<b>100.0</b>	
<b>Not Aboriginal</b>				
No	1 530	(1 320 - 1 770)	71.9	(66.2 - 77.4)
Yes	600	(480 - 740)	28.1	(22.6 - 33.8)
<b>Total</b>	<b>2 130</b>	<b>(1 900 - 2 390)</b>	<b>100.0</b>	
<b>Total</b>				
No	7 960	(7 670 - 8 260)	63.4	(61.1 - 65.7)
Yes	4 600	(4 310 - 4 890)	36.6	(34.3 - 38.9)
<b>Total</b>	<b>12 600</b>	<b>(12 500 - 12 600)</b>	<b>100.0</b>	

**TABLE 7.8:** PRIMARY CARERS — LIKELIHOOD OF HAVING BEEN ARRESTED OR CHARGED WITH AN OFFENCE ASSOCIATED WITH WHETHER CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE, AND DEMOGRAPHIC FACTORS

Primary carer ever arrested or charged with an offence			
<i>Parameter</i>	<i>Significance (p value)</i>	<i>Odds Ratio</i>	<i>95% CI</i>
<b>Sex</b>			
Male		1.00	
Female	<0.001	0.22	(0.15 - 0.32)
<b>Age group</b>			
25 years and under		1.00	
25–34 years	0.054	1.30	(1.00 - 1.70)
35–44 years	0.617	1.08	(0.81 - 1.44)
45 years or over	0.003	0.57	(0.39 - 0.83)
Not stated	0.520	0.74	(0.29 - 1.86)
<b>Level of Relative Isolation</b>			
None		1.00	
Low	0.539	0.93	(0.73 - 1.18)
Moderate	0.047	0.75	(0.57 - 1.00)
High	0.780	1.06	(0.70 - 1.61)
Extreme	0.132	0.73	(0.49 - 1.10)
<b>Primary carer forcibly separated from natural family</b>			
Not separated		1.00	
Separated	<0.001	1.95	(1.42 - 2.68)
Don't want to answer	0.347	1.27	(0.77 - 2.10)
Not Aboriginal	<0.001	0.61	(0.47 - 0.80)





**TABLE 7.9:** PRIMARY CARERS — WHETHER CARER HAS ANYONE TO YARN TO ABOUT PROBLEMS, BY WHETHER CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE

<i>Has someone to yarn to about problems?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Not separated</b>				
No	1 020	(880 - 1 170)	11.8	(10.2 - 13.5)
Yes	7 630	(7 310 - 7 950)	88.2	(86.5 - 89.8)
<b>Total</b>	<b>8 650</b>	<b>(8 330 - 8 970)</b>	<b>100.0</b>	
<b>Separated</b>				
No	260	(160 - 390)	20.3	(13.1 - 28.9)
Yes	1 020	(870 - 1 200)	79.7	(71.1 - 86.9)
<b>Total</b>	<b>1 280</b>	<b>(1 090 - 1 490)</b>	<b>100.0</b>	
<b>Don't want to answer</b>				
No	80	(50 - 120)	16.4	(9.5 - 26.7)
Yes	420	(260 - 620)	83.6	(73.3 - 90.5)
<b>Total</b>	<b>500</b>	<b>(340 - 690)</b>	<b>100.0</b>	
<b>Not Aboriginal</b>				
No	200	(120 - 300)	9.2	(5.7 - 13.9)
Yes	1 940	(1 710 - 2 180)	90.8	(86.1 - 94.3)
<b>Total</b>	<b>2 130</b>	<b>(1 900 - 2 390)</b>	<b>100.0</b>	
<b>Total</b>				
No	1 550	(1 370 - 1 760)	12.4	(10.9 - 14.0)
Yes	11 000	(10 800 - 11 200)	87.6	(86.0 - 89.1)
<b>Total</b>	<b>12 600</b>	<b>(12 500 - 12 600)</b>	<b>100.0</b>	

**TABLE 7.10:** PRIMARY CARERS — LIKELIHOOD OF HAVING SOMEONE TO YARN TO ABOUT PROBLEMS, BY WHETHER CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE

<b>Primary carer has someone to yarn to about problems</b>			
<i>Parameter</i>	<i>Significance (p value)</i>	<i>Odds Ratio</i>	<i>95% CI</i>
<b>Sex</b>			
Male		1.00	
Female	0.008	1.90	(1.18 - 3.04)
<b>Age group</b>			
25 years and under		1.00	
25–34 years	0.716	1.08	(0.72 - 1.61)
35–44 years	0.057	1.55	(0.99 - 2.42)
45 years or over	0.660	0.90	(0.55 - 1.46)
Not stated	0.493	0.69	(0.23 - 2.02)
<b>Level of Relative Isolation</b>			
None		1.00	
Low	0.203	1.28	(0.87 - 1.88)
Moderate	0.536	1.14	(0.75 - 1.73)
High	0.186	0.68	(0.39 - 1.20)
Extreme	0.002	0.47	(0.29 - 0.76)
<b>Primary carer forcibly separated from natural family</b>			
Not separated		1.00	
Separated	<0.001	0.45	(0.30 - 0.68)
Don't want to answer	0.880	0.94	(0.44 - 2.01)
Not Aboriginal	0.220	1.31	(0.85 - 2.04)



**TABLE 7.11: PRIMARY CARERS — FAMILY FINANCIAL STRAIN, BY WHETHER CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE**

<i>Family financial strain</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Not separated</b>				
Spending more money than we get	760	(630 - 910)	8.8	(7.3 - 10.4)
Have just enough to get through to next pay	3 790	(3 520 - 4 070)	43.8	(41.0 - 46.7)
Some money left over each week but spend it	1 190	(1 010 - 1 390)	13.8	(11.7 - 15.9)
Can save a bit now and again	2 480	(2 270 - 2 710)	28.7	(26.5 - 31.1)
Can save a lot	430	(320 - 560)	4.9	(3.7 - 6.4)
<b>Total</b>	<b>8 650</b>	<b>(8 330 - 8 970)</b>	<b>100.0</b>	
<b>Separated</b>				
Spending more money than we get	150	(90 - 230)	11.4	(7.0 - 17.6)
Have just enough to get through to next pay	670	(520 - 840)	52.6	(43.9 - 61.0)
Some money left over each week but spend it	150	(100 - 220)	11.6	(7.5 - 16.9)
Can save a bit now and again	290	(210 - 390)	22.7	(16.4 - 29.5)
Can save a lot	20	(0 - 130)	1.7	(0.0 - 9.9)
<b>Total</b>	<b>1 280</b>	<b>(1 090 - 1 490)</b>	<b>100.0</b>	
<b>Don't want to answer</b>				
Spending more money than we get	50	(20 - 90)	9.7	(4.4 - 18.5)
Have just enough to get through to next pay	210	(140 - 320)	42.9	(26.3 - 59.2)
Some money left over each week but spend it	60	(0 - 270)	12.7	(0.2 - 41.3)
Can save a bit now and again	130	(80 - 190)	25.2	(14.4 - 38.4)
Can save a lot	50	(10 - 120)	9.5	(3.5 - 22.7)
<b>Total</b>	<b>500</b>	<b>(340 - 690)</b>	<b>100.0</b>	
<b>Not Aboriginal</b>				
Spending more money than we get	240	(160 - 360)	11.4	(7.5 - 16.4)
Have just enough to get through to next pay	840	(710 - 1 000)	39.5	(33.7 - 45.5)
Some money left over each week but spend it	280	(190 - 390)	13.2	(9.3 - 17.8)
Can save a bit now and again	690	(540 - 860)	32.3	(26.4 - 38.7)
Can save a lot	80	(30 - 140)	3.6	(1.5 - 6.6)
<b>Total</b>	<b>2 130</b>	<b>(1 900 - 2 390)</b>	<b>100.0</b>	
<b>Total</b>				
Spending more money than we get	1 200	(1 030 - 1 390)	9.5	(8.2 - 11.0)
Have just enough to get through to next pay	5 520	(5 220 - 5 830)	43.9	(41.6 - 46.4)
Some money left over each week but spend it	1 690	(1 460 - 1 930)	13.4	(11.6 - 15.3)
Can save a bit now and again	3 590	(3 330 - 3 850)	28.6	(26.5 - 30.6)
Can save a lot	570	(440 - 730)	4.5	(3.5 - 5.8)
<b>Total</b>	<b>12 600</b>	<b>(12 500 - 12 600)</b>	<b>100.0</b>	



**TABLE 7.12:** CARERS CONSENTING TO RECORD LINKAGE — USE OF MENTAL HEALTH SERVICES IN WA, BY WHETHER FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE

<i>Used Mental Health Services?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Not separated</b>				
No	9 900	(9 500 - 10 300)	78.7	(76.6 - 80.8)
Yes	2 670	(2 410 - 2 960)	21.3	(19.2 - 23.4)
<b>Total</b>	<b>12 600</b>	<b>(12 100 - 13 000)</b>	<b>100.0</b>	
<b>Separated</b>				
No	1 330	(1 130 - 1 560)	70.5	(62.5 - 77.3)
Yes	560	(410 - 740)	29.5	(22.7 - 37.5)
<b>Total</b>	<b>1 890</b>	<b>(1 640 - 2 160)</b>	<b>100.0</b>	
<b>Don't want to answer</b>				
No	500	(310 - 750)	78.4	(61.8 - 90.2)
Yes	140	(70 - 270)	21.6	(9.8 - 38.2)
<b>Total</b>	<b>640</b>	<b>(420 - 910)</b>	<b>100.0</b>	
<b>Not Aboriginal</b>				
No	2 550	(2 280 - 2 840)	75.0	(70.2 - 79.7)
Yes	850	(680 - 1 050)	25.0	(20.3 - 29.8)
<b>Total</b>	<b>3 390</b>	<b>(3 080 - 3 720)</b>	<b>100.0</b>	
<b>Total</b>				
No	14 300	(13 900 - 14 700)	77.2	(75.2 - 79.1)
Yes	4 210	(3 860 - 4 580)	22.8	(20.9 - 24.8)
<b>Total</b>	<b>18 500</b>	<b>(18 300 - 18 700)</b>	<b>100.0</b>	

**TABLE 7.13:** CARERS CONSENTING TO RECORD LINKAGE — LIKELIHOOD OF HAVING HAD CONTACT WITH MENTAL HEALTH SERVICES IN WA, ASSOCIATED WITH FORCED SEPARATION FROM NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE, AND DEMOGRAPHIC FACTORS

<b>Had contact with Mental Health Services in WA</b>			
<i>Parameter</i>	<i>Significance (p value)</i>	<i>Odds Ratio</i>	<i>95% CI</i>
<b>Sex</b>			
Male		1.00	
Female	<0.001	1.76	(1.43 - 2.15)
<b>Age group</b>			
25 years and under		1.00	
25–34 years	0.205	1.19	(0.91 - 1.56)
35–44 years	0.579	1.08	(0.82 - 1.44)
45 years or over	0.029	1.44	(1.04 - 1.99)
Not stated	0.229	0.53	(0.19 - 1.49)
<b>Level of Relative Isolation</b>			
None		1.00	
Low	0.151	1.18	(0.94 - 1.48)
Moderate	0.424	1.11	(0.86 - 1.45)
High	0.002	0.48	(0.29 - 0.77)
Extreme	<0.001	0.47	(0.30 - 0.74)
<b>Carer forcibly separated from natural family</b>			
Not separated		1.00	
Separated	0.006	1.50	(1.12 - 1.99)
Don't want to answer	0.777	0.93	(0.55 - 1.56)
Not Aboriginal	0.777	1.03	(0.82 - 1.30)



## FORCED SEPARATIONS OF CARERS AND EMOTIONAL OR BEHAVIOURAL DIFFICULTIES IN THEIR CHILDREN

**TABLE 7.14:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Not separated</b>				
Low	10 400	(9 800 - 11 000)	66.8	(64.1 - 69.3)
Moderate	1 780	(1 580 - 2 000)	11.4	(10.2 - 12.8)
High	3 400	(3 030 - 3 790)	21.8	(19.6 - 24.1)
<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
<b>Separated</b>				
Low	1 530	(1 290 - 1 810)	55.6	(48.8 - 62.2)
Moderate	320	(210 - 490)	11.7	(8.0 - 16.9)
High	900	(690 - 1 160)	32.7	(26.3 - 39.3)
<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	
<b>Not known</b>				
Low	970	(710 - 1 310)	62.1	(52.5 - 71.2)
Moderate	190	(120 - 290)	12.1	(7.7 - 17.4)
High	400	(250 - 600)	25.8	(17.7 - 35.7)
<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	
<b>Not applicable</b>				
Low	1 880	(1 520 - 2 260)	62.8	(55.6 - 69.7)
Moderate	320	(210 - 450)	10.7	(7.4 - 14.7)
High	790	(590 - 1 050)	26.5	(20.5 - 33.7)
<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 7.15:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER CHILD'S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE, AND AGE GROUP

Age group	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>Not separated</b>					
4–11 years	Low	6 020	(5 600 - 6 450)	63.0	(60.1 - 65.8)
	Moderate	1 230	(1 080 - 1 390)	12.8	(11.4 - 14.5)
	High	2 310	(2 040 - 2 590)	24.2	(21.7 - 26.8)
	<b>Total</b>	<b>9 550</b>	<b>(9 100 - 10 100)</b>	<b>100.0</b>	
12–17 years	Low	4 400	(4 030 - 4 800)	72.8	(68.9 - 76.6)
	Moderate	550	(430 - 710)	9.2	(7.1 - 11.6)
	High	1 090	(880 - 1 320)	18.0	(14.8 - 21.4)
	<b>Total</b>	<b>6 050</b>	<b>(5 610 - 6 490)</b>	<b>100.0</b>	
<b>Total</b>	Low	10 400	(9 800 - 11 000)	66.8	(64.1 - 69.3)
	Moderate	1 780	(1 580 - 2 000)	11.4	(10.2 - 12.8)
	High	3 400	(3 030 - 3 790)	21.8	(19.6 - 24.1)
	<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
<b>Separated</b>					
4–11 years	Low	760	(600 - 960)	51.8	(42.9 - 59.9)
	Moderate	200	(130 - 310)	13.7	(8.9 - 20.2)
	High	510	(370 - 680)	34.6	(26.8 - 42.8)
	<b>Total</b>	<b>1 470</b>	<b>(1 220 - 1 740)</b>	<b>100.0</b>	
12–17 years	Low	770	(620 - 950)	59.9	(50.1 - 69.0)
	Moderate	120	(50 - 240)	9.6	(4.5 - 17.4)
	High	390	(260 - 570)	30.5	(22.3 - 40.5)
	<b>Total</b>	<b>1 290</b>	<b>(1 040 - 1 560)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 530	(1 290 - 1 810)	55.6	(48.8 - 62.2)
	Moderate	320	(210 - 490)	11.7	(8.0 - 16.9)
	High	900	(690 - 1 160)	32.7	(26.3 - 39.3)
	<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	
<b>Not known</b>					
4–11 years	Low	540	(340 - 800)	56.9	(46.2 - 66.5)
	Moderate	120	(80 - 180)	13.0	(9.3 - 17.9)
	High	290	(190 - 420)	30.1	(20.5 - 41.8)
	<b>Total</b>	<b>950</b>	<b>(690 - 1 310)</b>	<b>100.0</b>	
12–17 years	Low	430	(310 - 580)	70.1	(52.0 - 85.8)
	Moderate	70	(20 - 180)	10.8	(3.1 - 26.1)
	High	120	(40 - 260)	19.1	(8.0 - 39.7)
	<b>Total</b>	<b>610</b>	<b>(450 - 820)</b>	<b>100.0</b>	
<b>Total</b>	Low	970	(710 - 1 310)	62.1	(52.5 - 71.2)
	Moderate	190	(120 - 290)	12.1	(7.7 - 17.4)
	High	400	(250 - 600)	25.8	(17.7 - 35.7)
	<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	

Continued...



**TABLE 7.15 (continued): CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE, AND AGE GROUP**

Age group	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
Not applicable					
4–11 years	Low	1 100	(830 - 1 420)	60.1	(51.1 - 69.3)
	Moderate	210	(140 - 300)	11.5	(7.7 - 15.8)
	High	520	(360 - 740)	28.5	(20.5 - 37.6)
	<b>Total</b>	<b>1 830</b>	<b>(1 480 - 2 230)</b>	<b>100.0</b>	
12–17 years	Low	780	(590 - 1 010)	67.2	(55.7 - 76.4)
	Moderate	110	(50 - 210)	9.4	(4.1 - 17.3)
	High	270	(170 - 410)	23.4	(15.2 - 33.8)
	<b>Total</b>	<b>1 150</b>	<b>(920 - 1 430)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 880	(1 520 - 2 260)	62.8	(55.6 - 69.7)
	Moderate	320	(210 - 450)	10.7	(7.4 - 14.7)
	High	790	(590 - 1 050)	26.5	(20.5 - 33.7)
	<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>					
4–11 years	Low	8 420	(7 960 - 8 880)	61.0	(58.3 - 63.6)
	Moderate	1 760	(1 570 - 1 960)	12.8	(11.5 - 14.2)
	High	3 620	(3 270 - 3 980)	26.3	(23.9 - 28.8)
	<b>Total</b>	<b>13 800</b>	<b>(13 300 - 14 200)</b>	<b>100.0</b>	
12–17 years	Low	6 380	(5 960 - 6 810)	70.1	(66.5 - 73.4)
	Moderate	850	(680 - 1 060)	9.4	(7.5 - 11.5)
	High	1 870	(1 590 - 2 170)	20.5	(17.7 - 23.6)
	<b>Total</b>	<b>9 100</b>	<b>(8 660 - 9 560)</b>	<b>100.0</b>	
<b>Total</b>	Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
	Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
	High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 7.16:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE, AND SEX

Sex	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>Not separated</b>					
Males	Low	5 010	(4 610 - 5 450)	62.8	(59.1 - 66.2)
	Moderate	930	(800 - 1 080)	11.7	(10.0 - 13.5)
	High	2 040	(1 770 - 2 340)	25.6	(22.5 - 28.8)
	<b>Total</b>	<b>7 990</b>	<b>(7 520 - 8 470)</b>	<b>100.0</b>	
Females	Low	5 410	(5 010 - 5 820)	71.1	(68.0 - 73.9)
	Moderate	850	(710 - 1 000)	11.1	(9.4 - 13.1)
	High	1 360	(1 170 - 1 570)	17.8	(15.5 - 20.4)
	<b>Total</b>	<b>7 610</b>	<b>(7 170 - 8 060)</b>	<b>100.0</b>	
<b>Total</b>	Low	10 400	(9 800 - 11 000)	66.8	(64.1 - 69.3)
	Moderate	1 780	(1 580 - 2 000)	11.4	(10.2 - 12.8)
	High	3 400	(3 030 - 3 790)	21.8	(19.6 - 24.1)
	<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
<b>Separated</b>					
Males	Low	730	(580 - 900)	52.9	(43.5 - 62.3)
	Moderate	160	(100 - 240)	11.6	(7.7 - 17.1)
	High	490	(330 - 700)	35.5	(26.4 - 45.8)
	<b>Total</b>	<b>1 380</b>	<b>(1 150 - 1 660)</b>	<b>100.0</b>	
Females	Low	800	(640 - 990)	58.3	(49.2 - 67.1)
	Moderate	160	(80 - 290)	11.9	(6.0 - 20.0)
	High	410	(290 - 560)	29.8	(21.9 - 38.1)
	<b>Total</b>	<b>1 370</b>	<b>(1 130 - 1 640)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 530	(1 290 - 1 810)	55.6	(48.8 - 62.2)
	Moderate	320	(210 - 490)	11.7	(8.0 - 16.9)
	High	900	(690 - 1 160)	32.7	(26.3 - 39.3)
	<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	
<b>Not known</b>					
Males	Low	480	(330 - 700)	61.7	(49.8 - 73.7)
	Moderate	100	(70 - 150)	13.4	(8.8 - 19.0)
	High	200	(120 - 320)	24.9	(14.8 - 36.9)
	<b>Total</b>	<b>790</b>	<b>(590 - 1 030)</b>	<b>100.0</b>	
Females	Low	480	(300 - 710)	62.4	(48.5 - 75.1)
	Moderate	80	(30 - 180)	10.9	(4.4 - 23.4)
	High	210	(120 - 350)	26.7	(16.9 - 40.2)
	<b>Total</b>	<b>780</b>	<b>(530 - 1 070)</b>	<b>100.0</b>	
<b>Total</b>	Low	970	(710 - 1 310)	62.1	(52.5 - 71.2)
	Moderate	190	(120 - 290)	12.1	(7.7 - 17.4)
	High	400	(250 - 600)	25.8	(17.7 - 35.7)
	<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	

Continued...



**TABLE 7.16 (continued): CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE, AND SEX**

Sex	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
Not applicable					
Males	Low	940	(720 - 1 220)	59.9	(49.5 - 68.9)
	Moderate	160	(90 - 270)	10.3	(5.8 - 16.8)
	High	470	(310 - 670)	29.8	(21.2 - 40.0)
	<b>Total</b>	<b>1 570</b>	<b>(1 270 - 1 910)</b>	<b>100.0</b>	
Females	Low	940	(730 - 1 190)	66.2	(56.8 - 74.2)
	Moderate	160	(100 - 240)	11.0	(7.1 - 16.4)
	High	320	(210 - 470)	22.8	(16.0 - 31.7)
	<b>Total</b>	<b>1 410</b>	<b>(1 150 - 1 710)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 880	(1 520 - 2 260)	62.8	(55.6 - 69.7)
	Moderate	320	(210 - 450)	10.7	(7.4 - 14.7)
	High	790	(590 - 1 050)	26.5	(20.5 - 33.7)
	<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>					
Males	Low	7 170	(6 720 - 7 640)	61.1	(57.9 - 64.3)
	Moderate	1 360	(1 190 - 1 540)	11.6	(10.2 - 13.2)
	High	3 200	(2 840 - 3 580)	27.3	(24.4 - 30.3)
	<b>Total</b>	<b>11 700</b>	<b>(11 300 - 12 200)</b>	<b>100.0</b>	
Females	Low	7 630	(7 210 - 8 060)	68.3	(65.5 - 71.0)
	Moderate	1 250	(1 070 - 1 460)	11.2	(9.6 - 13.0)
	High	2 290	(2 030 - 2 590)	20.5	(18.3 - 23.0)
	<b>Total</b>	<b>11 200</b>	<b>(10 800 - 11 600)</b>	<b>100.0</b>	
<b>Total</b>	Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
	Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
	High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	





**TABLE 7.17:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE, AND LEVEL OF RELATIVE ISOLATION (LORI)

LORI	Level of risk	Number	95% CI	%	95% CI
<b>Not separated</b>					
None	Low	2 900	(2 580 - 3 230)	62.1	(57.0 - 67.1)
	Moderate	630	(500 - 780)	13.5	(10.8 - 16.5)
	High	1 140	(910 - 1 410)	24.4	(19.9 - 29.5)
	<b>Total</b>	<b>4 670</b>	<b>(4 300 - 5 050)</b>	<b>100.0</b>	
Low	Low	2 410	(2 070 - 2 790)	64.8	(59.4 - 70.1)
	Moderate	450	(350 - 580)	12.1	(9.5 - 15.2)
	High	860	(680 - 1 080)	23.1	(19.0 - 27.9)
	<b>Total</b>	<b>3 720</b>	<b>(3 280 - 4 190)</b>	<b>100.0</b>	
Moderate	Low	2 310	(1 860 - 2 810)	69.4	(64.2 - 74.4)
	Moderate	310	(240 - 400)	9.3	(7.5 - 11.3)
	High	710	(530 - 930)	21.3	(17.0 - 26.4)
	<b>Total</b>	<b>3 320</b>	<b>(2 750 - 3 980)</b>	<b>100.0</b>	
High	Low	1 290	(920 - 1 740)	65.9	(56.8 - 74.2)
	Moderate	180	(120 - 260)	9.2	(6.6 - 12.3)
	High	490	(320 - 700)	24.9	(17.6 - 32.8)
	<b>Total</b>	<b>1 950</b>	<b>(1 450 - 2 540)</b>	<b>100.0</b>	
Extreme	Low	1 520	(1 110 - 2 040)	78.5	(71.2 - 85.1)
	Moderate	210	(120 - 330)	10.9	(7.5 - 15.6)
	High	200	(120 - 330)	10.6	(7.1 - 15.2)
	<b>Total</b>	<b>1 930</b>	<b>(1 420 - 2 600)</b>	<b>100.0</b>	
<b>Total</b>	Low	10 400	(9 800 - 11 000)	66.8	(64.1 - 69.3)
	Moderate	1 780	(1 580 - 2 000)	11.4	(10.2 - 12.8)
	High	3 400	(3 030 - 3 790)	21.8	(19.6 - 24.1)
	<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
<b>Separated</b>					
None	Low	600	(440 - 810)	53.6	(42.3 - 64.7)
	Moderate	130	(70 - 240)	11.6	(6.1 - 20.4)
	High	390	(250 - 570)	34.8	(24.3 - 46.0)
	<b>Total</b>	<b>1 120</b>	<b>(870 - 1 410)</b>	<b>100.0</b>	
Low	Low	320	(230 - 450)	51.6	(36.9 - 67.1)
	Moderate	60	(10 - 240)	8.9	(1.2 - 30.4)
	High	250	(130 - 420)	39.6	(24.0 - 56.6)
	<b>Total</b>	<b>630</b>	<b>(440 - 880)</b>	<b>100.0</b>	
Moderate	Low	300	(190 - 430)	53.6	(40.4 - 65.2)
	Moderate	90	(50 - 160)	16.6	(9.8 - 25.6)
	High	170	(80 - 280)	29.8	(18.5 - 42.6)
	<b>Total</b>	<b>560</b>	<b>(380 - 800)</b>	<b>100.0</b>	
High	Low	210	(120 - 360)	68.5	(43.4 - 87.4)
	Moderate	30	(10 - 80)	9.9	(2.9 - 24.2)
	High	70	(30 - 140)	21.6	(8.3 - 41.0)
	<b>Total</b>	<b>300</b>	<b>(180 - 460)</b>	<b>100.0</b>	
Extreme	Low	100	(60 - 170)	69.1	(43.4 - 87.4)
	Moderate	20	(0 - 40)	10.6	(3.2 - 26.7)
	High	30	(10 - 90)	20.3	(6.4 - 47.6)
	<b>Total</b>	<b>150</b>	<b>(80 - 240)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 530	(1 290 - 1 810)	55.6	(48.8 - 62.2)
	Moderate	320	(210 - 490)	11.7	(8.0 - 16.9)
	High	900	(690 - 1 160)	32.7	(26.3 - 39.3)
	<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	

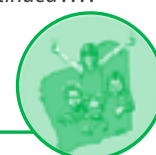
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**TABLE 7.17 (continued): CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER CHILD'S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE, AND LEVEL OF RELATIVE ISOLATION (LORI)**

LORI	Level of risk	Number	95% CI	%	95% CI
Not known					
None	Low	240	(120 - 410)	55.0	(35.3 - 74.5)
	Moderate	50	(10 - 170)	12.6	(2.9 - 34.9)
	High	140	(70 - 250)	32.5	(16.7 - 51.4)
	<b>Total</b>	<b>430</b>	<b>(260 - 650)</b>	<b>100.0</b>	
Low	Low	160	(90 - 260)	59.5	(40.6 - 77.3)
	Moderate	40	(20 - 70)	14.3	(7.1 - 23.3)
	High	70	(30 - 150)	26.2	(12.3 - 45.9)
	<b>Total</b>	<b>270</b>	<b>(160 - 420)</b>	<b>100.0</b>	
Moderate	Low	260	(150 - 400)	55.5	(38.3 - 71.4)
	Moderate	60	(40 - 100)	13.2	(6.6 - 22.0)
	High	150	(40 - 320)	31.2	(14.9 - 53.5)
	<b>Total</b>	<b>460</b>	<b>(290 - 730)</b>	<b>100.0</b>	
High	Low	150	(20 - 470)	69.4	(29.9 - 92.5)
	Moderate	30	(0 - 90)	13.5	(6.8 - 23.8)
	High	40	(10 - 110)	17.1	(2.5 - 55.6)
	<b>Total</b>	<b>220</b>	<b>(40 - 630)</b>	<b>100.0</b>	
Extreme	Low	160	(80 - 310)	91.7	(64.0 - 99.8)
	Moderate	10	(0 - 30)	3.2	(0.1 - 14.9)
	High	10	(0 - 40)	5.1	(0.1 - 22.8)
	<b>Total</b>	<b>170</b>	<b>(80 - 320)</b>	<b>100.0</b>	
<b>Total</b>	Low	970	(710 - 1 310)	62.1	(52.5 - 71.2)
	Moderate	190	(120 - 290)	12.1	(7.7 - 17.4)
	High	400	(250 - 600)	25.8	(17.7 - 35.7)
	<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	
Not applicable					
None	Low	950	(710 - 1 240)	59.0	(48.1 - 69.5)
	Moderate	190	(100 - 310)	11.8	(6.3 - 18.9)
	High	470	(300 - 680)	29.2	(20.3 - 40.7)
	<b>Total</b>	<b>1 600</b>	<b>(1 290 - 1 960)</b>	<b>100.0</b>	
Low	Low	660	(450 - 910)	67.7	(55.8 - 78.8)
	Moderate	90	(50 - 150)	9.6	(5.7 - 14.4)
	High	220	(130 - 360)	22.7	(13.3 - 33.6)
	<b>Total</b>	<b>970</b>	<b>(720 - 1 290)</b>	<b>100.0</b>	
Moderate	Low	210	(110 - 330)	61.7	(42.1 - 77.1)
	Moderate	30	(20 - 60)	9.4	(5.8 - 14.3)
	High	100	(30 - 200)	29.0	(15.1 - 47.5)
	<b>Total</b>	<b>330</b>	<b>(190 - 550)</b>	<b>100.0</b>	
High	Low	70	(20 - 220)	84.9	(76.0 - 91.5)
	Moderate	10	(0 - 40)	7.4	(0.4 - 57.9)
	High	10	(0 - 40)	7.7	(0.3 - 52.7)
	<b>Total</b>	<b>80</b>	<b>(20 - 280)</b>	<b>100.0</b>	
Extreme	Low	0	(0 - 60)	.	
	Moderate	0	(0 - 60)	.	
	High	0	(0 - 60)	.	
	<b>Total</b>	<b>0</b>	<b>(0 - 60)</b>	<b>.</b>	
<b>Total</b>	Low	1 880	(1 520 - 2 260)	62.8	(55.6 - 69.7)
	Moderate	320	(210 - 450)	10.7	(7.4 - 14.7)
	High	790	(590 - 1 050)	26.5	(20.5 - 33.7)
	<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	

Continued...



**TABLE 7.17 (continued): CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE, AND LEVEL OF RELATIVE ISOLATION (LORI)**

LORI	Level of risk	Number	95% CI	%	95% CI
<b>Total</b>					
None	Low	4 680	(4 360 - 5 030)	59.8	(55.6 - 64.0)
	Moderate	1 000	(830 - 1 210)	12.8	(10.5 - 15.4)
	High	2 140	(1 850 - 2 470)	27.4	(23.5 - 31.3)
	<b>Total</b>	<b>7 830</b>	<b>(7 680 - 7 980)</b>	<b>100.0</b>	
Low	Low	3 550	(3 170 - 3 970)	63.6	(58.6 - 68.2)
	Moderate	640	(500 - 800)	11.4	(9.1 - 14.0)
	High	1 400	(1 140 - 1 680)	25.0	(21.0 - 29.2)
	<b>Total</b>	<b>5 590</b>	<b>(5 100 - 6 100)</b>	<b>100.0</b>	
Moderate	Low	3 070	(2 550 - 3 670)	65.6	(60.4 - 70.6)
	Moderate	490	(390 - 610)	10.6	(8.9 - 12.5)
	High	1 110	(850 - 1 430)	23.8	(19.5 - 28.9)
	<b>Total</b>	<b>4 680</b>	<b>(3 940 - 5 480)</b>	<b>100.0</b>	
High	Low	1 710	(1 260 - 2 280)	67.1	(59.3 - 74.6)
	Moderate	250	(170 - 340)	9.6	(7.4 - 12.2)
	High	590	(390 - 840)	23.3	(16.9 - 30.6)
	<b>Total</b>	<b>2 550</b>	<b>(1 910 - 3 270)</b>	<b>100.0</b>	
Extreme	Low	1 780	(1 290 - 2 350)	78.9	(72.6 - 84.7)
	Moderate	230	(140 - 350)	10.3	(7.2 - 14.1)
	High	240	(140 - 380)	10.8	(7.4 - 15.0)
	<b>Total</b>	<b>2 260</b>	<b>(1 670 - 3 020)</b>	<b>100.0</b>	
<b>Total</b>	Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
	Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
	High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 7.18: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER CHILD'S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE, AND CHILD CARE ARRANGEMENT AT HOME**

<i>Child care arrangements at home</i>	<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Not separated</b>					
Both original parents	Low	5 010	(4 560 - 5 480)	72.2	(68.5 - 75.7)
	Moderate	740	(620 - 890)	10.7	(9.0 - 12.6)
	High	1 190	(970 - 1 430)	17.1	(14.2 - 20.5)
	<b>Total</b>	<b>6 940</b>	<b>(6 430 - 7 470)</b>	<b>100.0</b>	
Sole parent	Low	3 010	(2 650 - 3 380)	59.7	(55.3 - 64.2)
	Moderate	630	(520 - 760)	12.6	(10.4 - 15.1)
	High	1 390	(1 170 - 1 660)	27.7	(23.9 - 32.0)
	<b>Total</b>	<b>5 040</b>	<b>(4 580 - 5 500)</b>	<b>100.0</b>	
One parent and new partner	Low	990	(790 - 1 210)	68.0	(60.2 - 74.9)
	Moderate	180	(130 - 250)	12.7	(9.2 - 16.9)
	High	280	(190 - 400)	19.3	(13.3 - 26.4)
	<b>Total</b>	<b>1 450</b>	<b>(1 220 - 1 700)</b>	<b>100.0</b>	
Other (eg Aunts, Uncles, Grandparents)	Low	1 420	(1 160 - 1 720)	65.2	(58.2 - 71.9)
	Moderate	220	(120 - 350)	10.2	(6.3 - 15.5)
	High	530	(410 - 700)	24.6	(18.8 - 30.9)
	<b>Total</b>	<b>2 170</b>	<b>(1 840 - 2 560)</b>	<b>100.0</b>	
<b>Total</b>	Low	10 400	(9 800 - 11 000)	66.8	(64.1 - 69.3)
	Moderate	1 780	(1 580 - 2 000)	11.4	(10.2 - 12.8)
	High	3 400	(3 030 - 3 790)	21.8	(19.6 - 24.1)
	<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
<b>Separated</b>					
Both original parents	Low	480	(330 - 670)	61.7	(47.4 - 73.5)
	Moderate	60	(10 - 170)	7.4	(1.9 - 23.7)
	High	240	(130 - 380)	30.9	(19.9 - 45.2)
	<b>Total</b>	<b>780</b>	<b>(550 - 1 040)</b>	<b>100.0</b>	
Sole parent	Low	630	(480 - 800)	52.1	(42.1 - 63.0)
	Moderate	160	(110 - 220)	13.1	(9.4 - 17.4)
	High	420	(260 - 620)	34.7	(25.2 - 46.4)
	<b>Total</b>	<b>1 200</b>	<b>(960 - 1 490)</b>	<b>100.0</b>	
One parent and new partner	Low	100	(60 - 160)	58.9	(28.9 - 82.3)
	Moderate	20	(0 - 230)	14.2	(0.6 - 80.6)
	High	50	(20 - 90)	26.9	(10.2 - 48.4)
	<b>Total</b>	<b>170</b>	<b>(100 - 280)</b>	<b>100.0</b>	
Other (eg Aunts, Uncles, Grandparents)	Low	320	(250 - 420)	53.7	(41.0 - 66.3)
	Moderate	80	(40 - 160)	13.8	(7.1 - 24.7)
	High	200	(110 - 320)	32.5	(20.6 - 44.7)
	<b>Total</b>	<b>600</b>	<b>(470 - 780)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 530	(1 290 - 1 810)	55.6	(48.8 - 62.2)
	Moderate	320	(210 - 490)	11.7	(8.0 - 16.9)
	High	900	(690 - 1 160)	32.7	(26.3 - 39.3)
	<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	

Continued...



**TABLE 7.18 (continued): CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE, AND CHILD CARE ARRANGEMENT AT HOME**

<i>Child care arrangements at home</i>	<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Not known					
Both original parents	Low	390	(270 - 560)	63.0	(50.7 - 74.6)
	Moderate	100	(60 - 160)	15.9	(10.0 - 23.4)
	High	130	(70 - 210)	21.1	(12.9 - 31.0)
	<b>Total</b>	<b>620</b>	<b>(450 - 840)</b>	<b>100.0</b>	
Sole parent	Low	310	(170 - 500)	58.3	(37.4 - 74.5)
	Moderate	50	(10 - 150)	9.6	(1.0 - 26.0)
	High	170	(80 - 350)	32.1	(14.3 - 51.8)
	<b>Total</b>	<b>530</b>	<b>(330 - 810)</b>	<b>100.0</b>	
One parent and new partner	Low	50	(20 - 100)	72.9	(28.4 - 99.5)
	Moderate	0	(0 - 20)	6.7	(0.1 - 24.9)
	High	10	(0 - 80)	20.4	(0.6 - 80.6)
	<b>Total</b>	<b>70</b>	<b>(30 - 140)</b>	<b>100.0</b>	
Other (eg Aunts, Uncles, Grandparents)	Low	220	(120 - 390)	63.9	(43.9 - 80.1)
	Moderate	40	(10 - 70)	10.4	(4.6 - 19.4)
	High	90	(30 - 210)	25.7	(9.8 - 46.7)
	<b>Total</b>	<b>350</b>	<b>(190 - 580)</b>	<b>100.0</b>	
<b>Total</b>	Low	970	(710 - 1 310)	62.1	(52.5 - 71.2)
	Moderate	190	(120 - 290)	12.1	(7.7 - 17.4)
	High	400	(250 - 600)	25.8	(17.7 - 35.7)
	<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	
Not applicable					
Both original parents	Low	970	(740 - 1 220)	71.1	(61.0 - 80.1)
	Moderate	160	(80 - 260)	11.7	(6.7 - 18.6)
	High	240	(130 - 420)	17.3	(9.2 - 26.8)
	<b>Total</b>	<b>1 360</b>	<b>(1 080 - 1 690)</b>	<b>100.0</b>	
Sole parent	Low	530	(330 - 800)	53.3	(38.5 - 67.1)
	Moderate	110	(60 - 180)	10.7	(5.7 - 18.1)
	High	360	(220 - 540)	36.0	(22.7 - 49.4)
	<b>Total</b>	<b>1 000</b>	<b>(740 - 1 340)</b>	<b>100.0</b>	
One parent and new partner	Low	220	(120 - 360)	62.7	(44.6 - 76.6)
	Moderate	30	(10 - 70)	9.3	(3.3 - 21.4)
	High	100	(60 - 140)	28.0	(17.1 - 43.1)
	<b>Total</b>	<b>340</b>	<b>(230 - 480)</b>	<b>100.0</b>	
Other (eg Aunts, Uncles, Grandparents)	Low	160	(60 - 370)	57.0	(28.9 - 82.3)
	Moderate	20	(0 - 60)	7.6	(2.3 - 19.6)
	High	100	(30 - 250)	35.4	(12.8 - 64.9)
	<b>Total</b>	<b>280</b>	<b>(130 - 530)</b>	<b>100.0</b>	
<b>Total</b>	Low	1 880	(1 520 - 2 260)	62.8	(55.6 - 69.7)
	Moderate	320	(210 - 450)	10.7	(7.4 - 14.7)
	High	790	(590 - 1 050)	26.5	(20.5 - 33.7)
	<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	

Continued...



**TABLE 7.18 (continued): CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE, AND CHILD CARE ARRANGEMENT AT HOME**

<i>Child care arrangements at home</i>	<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Total</b>					
Both original parents	Low	6 850	(6 360 - 7 360)	70.6	(67.3 - 73.8)
	Moderate	1 060	(900 - 1 240)	10.9	(9.3 - 12.7)
	High	1 790	(1 510 - 2 100)	18.5	(15.8 - 21.5)
	<b>Total</b>	9 700	(9 200 - 10 300)	100.0	
Sole parent	Low	4 480	(4 040 - 4 930)	57.6	(53.6 - 61.7)
	Moderate	950	(810 - 1 110)	12.2	(10.4 - 14.3)
	High	2 340	(2 000 - 2 720)	30.2	(26.4 - 34.1)
	<b>Total</b>	7 770	(7 220 - 8 330)	100.0	
One parent and new partner	Low	1 350	(1 120 - 1 610)	66.5	(59.9 - 72.7)
	Moderate	240	(160 - 350)	12.0	(8.3 - 16.9)
	High	440	(330 - 560)	21.4	(16.4 - 27.3)
	<b>Total</b>	2 030	(1 770 - 2 330)	100.0	
Other (eg Aunts, Uncles, Grandparents)	Low	2 120	(1 810 - 2 460)	62.4	(56.2 - 68.0)
	Moderate	360	(250 - 510)	10.6	(7.5 - 14.3)
	High	920	(720 - 1 160)	27.0	(21.9 - 32.8)
	<b>Total</b>	3 400	(2 990 - 3 840)	100.0	
<b>Total</b>	Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
	Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
	High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 7.19:** CHILDREN AGED 4–17 YEARS — LIKELIHOOD OF BEING AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, ASSOCIATED WITH FORCED SEPARATION OF PRIMARY CARER FROM NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE, AND DEMOGRAPHIC FACTORS

High risk of clinically significant emotional or behavioural difficulties			
Parameter	Significance (p value)	Odds Ratio	95% CI
Sex			
Male		1.00	
Female	<0.001	0.49	(0.38 - 0.64)
Age group			
4–7 years		1.00	
8–11 years	0.479	0.89	(0.65 - 1.22)
12–14 years	0.606	0.91	(0.62 - 1.32)
15–17 years	< 0.001	0.36	(0.21 - 0.61)
Level of Relative Isolation			
None		1.00	
Low	0.210	0.74	(0.47 - 1.18)
Moderate	0.990	1.00	(0.55 - 1.83)
High	0.407	0.63	(0.21 - 1.88)
Extreme	0.002	0.20	(0.07 - 0.54)
Primary carer is child's birth mother?			
No		1.00	
Yes	0.658	0.90	(0.58 - 1.41)
Primary carer forcibly separated from natural family?			
Not separated		1.00	
Separated	0.007	2.34	(1.27 - 4.32)
Not known	0.299	1.43	(0.73 - 2.83)
Not applicable	0.290	1.33	(0.78 - 2.25)

**TABLE 7.20:** CHILDREN AGED 4–17 YEARS — MEAN STRENGTHS AND DIFFICULTIES TOTAL SCORE BY WHETHER CHILD'S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE

Primary carer forcibly separated from natural family?	Mean	95% CI
Not separated	10.9	(10.5 - 11.3)
Separated	12.9	(11.9 - 14.0)
Not known	12.3	(10.7 - 13.8)
Not applicable	11.8	(10.7 - 12.9)
<b>Total</b>	<b>11.3</b>	<b>(10.9 - 11.7)</b>



**TABLE 7.21: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT PROBLEMS WITH SPECIFIC DIFFICULTIES BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE, AND DIFFICULTY**

<i>Primary carer forcibly separated from natural family?</i>	<i>Risk of clinically significant problems</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Emotional symptoms</b>					
Not separated	Low	10 700	(10 100 - 11 300)	68.5	(65.8 - 71.1)
	Moderate	1 690	(1 460 - 1 940)	10.8	(9.4 - 12.3)
	High	3 230	(2 860 - 3 630)	20.7	(18.4 - 23.1)
	<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
Separated	Low	1 560	(1 310 - 1 860)	56.7	(50.1 - 62.9)
	Moderate	350	(250 - 480)	12.5	(9.0 - 17.0)
	High	850	(640 - 1 080)	30.7	(24.9 - 37.1)
	<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	
Not known	Low	890	(640 - 1 200)	57.0	(46.8 - 67.6)
	Moderate	180	(100 - 300)	11.8	(6.7 - 18.6)
	High	490	(320 - 740)	31.2	(21.6 - 42.4)
	<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	
Not applicable	Low	1 840	(1 500 - 2 210)	61.6	(53.7 - 68.7)
	Moderate	340	(210 - 540)	11.5	(7.3 - 17.2)
	High	800	(590 - 1 060)	26.9	(20.8 - 34.0)
	<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>	Low	15 000	(14 400 - 15 500)	65.4	(63.1 - 67.7)
	Moderate	2 560	(2 270 - 2 880)	11.2	(9.9 - 12.6)
	High	5 370	(4 910 - 5 860)	23.4	(21.4 - 25.6)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	
<b>Conduct problems</b>					
Not separated	Low	8 780	(8 230 - 9 330)	56.3	(53.5 - 58.9)
	Moderate	1 860	(1 620 - 2 130)	11.9	(10.5 - 13.5)
	High	4 960	(4 540 - 5 410)	31.8	(29.3 - 34.4)
	<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
Separated	Low	1 270	(1 030 - 1 560)	46.2	(39.5 - 53.0)
	Moderate	340	(220 - 480)	12.3	(8.3 - 16.9)
	High	1 140	(920 - 1 420)	41.5	(35.0 - 48.4)
	<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	
Not known	Low	770	(530 - 1 050)	49.2	(39.6 - 59.5)
	Moderate	150	(80 - 240)	9.4	(5.6 - 14.3)
	High	650	(460 - 880)	41.3	(32.6 - 51.3)
	<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	
Not applicable	Low	1 600	(1 290 - 1 950)	53.7	(46.0 - 60.9)
	Moderate	380	(240 - 580)	12.7	(8.1 - 18.3)
	High	1 000	(770 - 1 280)	33.6	(26.9 - 40.6)
	<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>	Low	12 400	(11 900 - 13 000)	54.2	(51.8 - 56.6)
	Moderate	2 730	(2 440 - 3 040)	11.9	(10.6 - 13.3)
	High	7 750	(7 250 - 8 270)	33.9	(31.6 - 36.1)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

Continued....





**TABLE 7.21 (continued): CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT PROBLEMS WITH SPECIFIC DIFFICULTIES BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE, AND DIFFICULTY**

Primary carer forcibly separated from natural family?	Risk of clinically significant problems	Number	95% CI	%	95% CI
<b>Hyperactivity</b>					
Not separated	Low	12 000	(11 400 - 12 600)	76.9	(74.6 - 79.0)
	Moderate	1 470	(1 250 - 1 720)	9.4	(8.1 - 11.0)
	High	2 140	(1 870 - 2 440)	13.7	(12.0 - 15.5)
	<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
Separated	Low	1 960	(1 660 - 2 310)	71.2	(65.0 - 77.0)
	Moderate	210	(140 - 330)	7.8	(5.0 - 11.6)
	High	580	(420 - 780)	21.1	(16.0 - 26.5)
	<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	
Not known	Low	1 190	(880 - 1 590)	76.1	(65.7 - 84.2)
	Moderate	130	(70 - 240)	8.5	(4.1 - 14.1)
	High	240	(140 - 400)	15.4	(8.6 - 23.5)
	<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	
Not applicable	Low	2 130	(1 750 - 2 540)	71.4	(64.6 - 77.8)
	Moderate	320	(220 - 450)	10.6	(7.5 - 14.7)
	High	540	(370 - 760)	18.0	(12.8 - 24.4)
	<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>	Low	17 300	(16 800 - 17 700)	75.4	(73.4 - 77.4)
	Moderate	2 130	(1 870 - 2 420)	9.3	(8.2 - 10.6)
	High	3 490	(3 120 - 3 890)	15.3	(13.6 - 17.0)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	
<b>Peer problems</b>					
Not separated	Low	9 320	(8 740 - 9 910)	59.7	(57.1 - 62.3)
	Moderate	2 000	(1 780 - 2 260)	12.8	(11.4 - 14.4)
	High	4 280	(3 890 - 4 700)	27.4	(25.1 - 29.9)
	<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
Separated	Low	1 540	(1 280 - 1 840)	56.0	(49.2 - 62.4)
	Moderate	360	(240 - 510)	13.0	(9.0 - 18.1)
	High	860	(660 - 1 090)	31.0	(25.3 - 37.1)
	<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	
Not known	Low	950	(700 - 1 230)	60.6	(50.3 - 69.5)
	Moderate	230	(130 - 390)	14.8	(8.4 - 23.7)
	High	380	(220 - 590)	24.5	(16.2 - 33.9)
	<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	
Not applicable	Low	1 810	(1 480 - 2 180)	60.7	(53.2 - 68.1)
	Moderate	310	(200 - 450)	10.5	(7.1 - 15.1)
	High	860	(620 - 1 150)	28.8	(22.2 - 36.7)
	<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>	Low	13 600	(13 100 - 14 200)	59.5	(57.1 - 61.8)
	Moderate	2 910	(2 600 - 3 230)	12.7	(11.3 - 14.1)
	High	6 380	(5 890 - 6 880)	27.8	(25.7 - 30.0)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

Continued . . .



**TABLE 7.21 (continued): CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT PROBLEMS WITH SPECIFIC DIFFICULTIES BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE, AND DIFFICULTY**

<i>Primary carer forcibly separated from natural family?</i>	<i>Risk of clinically significant problems</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Problems with prosocial behaviour</b>					
Not separated	Low	14 500	(13 900 - 15 100)	93.0	(91.8 - 94.0)
	Moderate	470	(360 - 590)	3.0	(2.3 - 3.8)
	High	630	(510 - 770)	4.0	(3.3 - 4.9)
	<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
Separated	Low	2 500	(2 140 - 2 890)	90.8	(84.8 - 94.6)
	Moderate	130	(50 - 290)	4.8	(1.8 - 10.0)
	High	120	(70 - 210)	4.4	(2.3 - 7.2)
	<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	
Not known	Low	1 470	(1 110 - 1 890)	94.4	(91.2 - 96.6)
	Moderate	50	(30 - 70)	3.2	(1.9 - 4.8)
	High	40	(10 - 90)	2.5	(0.8 - 5.5)
	<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	
Not applicable	Low	2 730	(2 310 - 3 210)	91.4	(87.6 - 94.4)
	Moderate	110	(70 - 160)	3.6	(2.2 - 5.6)
	High	150	(70 - 260)	5.0	(2.4 - 8.5)
	<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>	Low	21 200	(21 000 - 21 400)	92.6	(91.5 - 93.6)
	Moderate	750	(600 - 930)	3.3	(2.6 - 4.0)
	High	940	(780 - 1 110)	4.1	(3.4 - 4.9)
	<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 7.22:** CHILDREN AGED 4–17 YEARS — MEAN SPECIFIC DIFFICULTIES SCORES, BY WHETHER PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY, BY A MISSION, GOVERNMENT OR WELFARE

<i>Primary carer forcibly separated from natural family?</i>	<i>Mean</i>	<i>95% CI</i>
<b>Emotional symptoms</b>		
Not separated	2.56	(2.41 - 2.70)
Separated	3.24	(2.88 - 3.61)
Not known	3.22	(2.68 - 3.76)
Not applicable	2.98	(2.56 - 3.40)
<b>Total</b>	<b>2.74</b>	<b>(2.61 - 2.87)</b>
<b>Conduct problems</b>		
Not separated	2.65	(2.51 - 2.79)
Separated	3.24	(2.89 - 3.59)
Not known	3.19	(2.65 - 3.74)
Not applicable	2.77	(2.44 - 3.11)
<b>Total</b>	<b>2.77</b>	<b>(2.65 - 2.90)</b>
<b>Hyperactivity</b>		
Not separated	3.34	(3.19 - 3.48)
Separated	3.88	(3.49 - 4.27)
Not known	3.58	(3.02 - 4.15)
Not applicable	3.69	(3.25 - 4.13)
<b>Total</b>	<b>3.46</b>	<b>(3.33 - 3.60)</b>
<b>Peer problems</b>		
Not separated	2.32	(2.22 - 2.42)
Separated	2.56	(2.35 - 2.77)
Not known	2.28	(1.96 - 2.60)
Not applicable	2.33	(2.01 - 2.65)
<b>Total</b>	<b>2.35</b>	<b>(2.26 - 2.44)</b>
<b>Prosocial behaviour</b>		
Not separated	1.43	(1.34 - 1.52)
Separated	1.62	(1.36 - 1.88)
Not known	1.60	(1.33 - 1.87)
Not applicable	1.59	(1.34 - 1.83)
<b>Total</b>	<b>1.48</b>	<b>(1.41 - 1.56)</b>



**TABLE 7.23: CHILDREN AGED 4–17 YEARS — LIKELIHOOD OF BEING AT HIGH RISK OF CLINICALLY SIGNIFICANT PROBLEMS WITH SPECIFIC DIFFICULTIES, ASSOCIATED WITH FORCED SEPARATION OF PRIMARY CARER FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE (a)**

High risk of clinically significant emotional symptoms			
Parameter	Significance (p value)	Odds Ratio	95% CI
High risk of clinically significant emotional symptoms			
Primary carer forcibly separated from natural family?			
Not separated		1.00	
Separated	0.022	1.56	(1.07 - 2.29)
Not known	0.050	1.55	(1.00 - 2.39)
Not applicable	0.037	1.43	(1.02 - 1.99)
High risk of clinically significant conduct problems			
Primary carer forcibly separated from natural family?			
Not separated		1.00	
Separated	0.027	1.75	(1.07 - 2.89)
Not known	0.013	2.00	(1.16 - 3.46)
Not applicable	0.832	0.96	(0.63 - 1.44)
High risk of clinically significant hyperactivity			
Primary carer forcibly separated from natural family?			
Not separated		1.00	
Separated	0.002	2.61	(1.43 - 4.77)
Not known	0.279	1.59	(0.69 - 3.68)
Not applicable	0.306	1.37	(0.75 - 2.48)
High risk of clinically significant peer problems			
Primary carer forcibly separated from natural family?			
Not separated		1.00	
Separated	0.486	1.15	(0.77 - 1.73)
Not known	0.236	0.73	(0.43 - 1.23)
Not applicable	0.802	1.05	(0.74 - 1.48)
High risk of clinically significant problems with prosocial behaviour			
Primary carer forcibly separated from natural family?			
Not separated		1.00	
Separated	0.816	1.09	(0.53 - 2.21)
Not known	0.381	0.66	(0.26 - 1.67)
Not applicable	0.466	1.23	(0.71 - 2.12)

(a) All models also adjust for age and sex of the child, level of relative isolation, and whether the primary carer of the child was also the child's birth mother.



**TABLE 7.24:** CHILDREN AGED 4–17 YEARS — LIKELIHOOD OF BEING AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY CHILD, FAMILY AND COMMUNITY LEVEL VARIABLES AND WHETHER PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE

High risk of clinically significant emotional or behavioural difficulties			
Parameter	Significance (p value)	Odds Ratio	95% CI
<b>Sex</b>			
Male	<0.001	1.98	(1.52 - 2.57)
Female		1.00	
<b>Age group</b>			
4–7 years		1.00	
8–11 years	0.757	0.95	(0.67 - 1.34)
12–14 years	0.904	0.98	(0.66 - 1.44)
15–17 years	<0.001	0.38	(0.21 - 0.67)
<b>Level of Relative Isolation</b>			
None		1.00	
Low	0.373	0.82	(0.52 - 1.28)
Moderate	0.808	0.93	(0.51 - 1.69)
High	0.887	0.92	(0.29 - 2.88)
Extreme	<0.001	0.22	(0.09 - 0.53)
<b>Has runny ears?</b>			
No		1.00	
Yes	<0.001	1.66	(1.20 - 2.28)
<b>Has difficulty saying certain sounds?</b>			
No		1.00	
Yes	<0.001	3.04	(2.01 - 4.61)
<b>Has normal vision?</b>			
No	0.049	1.66	(1.00 - 2.76)
Yes		1.00	
<b>Primary carer has medical condition lasting 6 months or more</b>			
No medical condition >6 months		1.00	
Medical condition - not limiting	0.151	1.41	(0.88 - 2.26)
Medical condition - limited in daily activities	<0.001	3.41	(1.96 - 5.92)
Not stated	0.068	1.42	(0.97 - 2.08)
<b>Primary carer has had contact with Mental Health Services</b>			
No		1.00	
Yes	0.045	1.52	(1.01 - 2.28)
Don't know	0.512	1.53	(0.43 - 5.39)
<b>Child care arrangement</b>			
Both original parents		1.00	
Sole parent	0.007	1.76	(1.17 - 2.64)
One parent and new partner	0.996	1.00	(0.54 - 1.87)
Other (e.g. Aunts, Uncles, Grandparents)	0.005	2.01	(1.23 - 3.28)
<b>Household occupancy level</b>			
Low		1.00	
High	0.004	0.49	(0.30 - 0.80)
Not stated	0.068	1.42	(0.97 - 2.08)

Continued . . . .



**TABLE 7.24 (continued): CHILDREN AGED 4–17 YEARS — LIKELIHOOD OF BEING AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY CHILD, FAMILY AND COMMUNITY LEVEL VARIABLES AND WHETHER PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE**

High risk of clinically significant emotional or behavioural difficulties			
Parameter	Significance (p value)	Odds Ratio	95% CI
Number of homes lived in			
1-4		1.00	
5 or more	0.022	1.53	(1.06 - 2.19)
Family functioning quartiles			
Poor	0.003	2.37	(1.34 - 4.22)
Fair	0.360	1.29	(0.75 - 2.23)
Good	0.028	1.80	(1.07 - 3.04)
Very good		1.00	
Not stated	0.068	1.42	(0.97 - 2.08)
Number of life stress events experienced by family in last 12 months			
0-2		1.00	
3-6	0.031	1.80	(1.06 - 3.09)
7-14	<0.001	5.40	(3.17 - 9.20)
Not stated	0.068	1.42	(0.97 - 2.08)
Quality of parenting			
Poor	<0.001	3.81	(2.39 - 6.07)
Fair	0.011	1.87	(1.15 - 3.04)
Good	0.096	1.50	(0.93 - 2.40)
Very good		1.00	
Not stated	0.236	5.11	(0.30 - 75.6)
Primary carer forcibly separated from natural family?			
Not separated		1.00	
Separated	0.034	1.80	(1.05 - 3.11)
Don't know	0.516	1.32	(0.57 - 3.07)
Not Aboriginal	0.328	1.31	(0.77 - 2.23)



**TABLE 7.25:** CHILDREN AGED 4–17 YEARS — WHETHER CHILD HAS SUFFERED AN EATING PROBLEM IN THE PAST SIX MONTHS BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE

<i>Has eating problems?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Not separated				
No	14 300	(13 600 - 14 900)	91.6	(90.0 - 92.9)
Yes	1 320	(1 090 - 1 560)	8.4	(7.1 - 10.0)
<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
Separated				
No	2 460	(2 120 - 2 860)	89.3	(83.4 - 94.1)
Yes	290	(170 - 500)	10.7	(5.9 - 16.6)
<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	
Not known				
No	1 420	(1 070 - 1 810)	91.0	(85.4 - 95.0)
Yes	140	(80 - 240)	9.0	(5.0 - 14.6)
<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	
Not applicable				
No	2 590	(2 170 - 3 040)	86.7	(80.7 - 91.6)
Yes	400	(250 - 590)	13.3	(8.4 - 19.3)
<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>				
No	20 800	(20 400 - 21 100)	90.6	(89.1 - 92.0)
Yes	2 150	(1 840 - 2 490)	9.4	(8.0 - 10.9)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 7.26:** CHILDREN AGED 4–17 YEARS — CHILD HAS SUFFERED A SLEEPING PROBLEM IN THE PAST SIX MONTHS BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE

<i>Has sleeping problems?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Not separated				
No	14 600	(14 000 - 15 200)	93.6	(92.4 - 94.7)
Yes	1 000	(820 - 1 190)	6.4	(5.3 - 7.6)
<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
Separated				
No	2 450	(2 100 - 2 840)	88.9	(84.2 - 92.5)
Yes	310	(200 - 450)	11.1	(7.5 - 15.8)
<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	
Not known				
No	1 410	(1 090 - 1 770)	90.4	(80.7 - 95.9)
Yes	150	(60 - 340)	9.6	(4.1 - 19.3)
<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	
Not applicable				
No	2 630	(2 220 - 3 090)	88.1	(82.0 - 92.5)
Yes	360	(210 - 550)	11.9	(7.5 - 18.0)
<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>				
No	21 100	(20 800 - 21 400)	92.1	(90.8 - 93.3)
Yes	1 810	(1 540 - 2 110)	7.9	(6.7 - 9.2)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 7.27:** CHILDREN AGED 4–17 YEARS — WHETHER CHILD HAS SUFFERED FROM NIGHTMARES IN THE PAST SIX MONTHS BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE

<i>Has nightmares?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Not separated				
No	14 100	(13 500 - 14 800)	90.6	(88.9 - 92.1)
Yes	1 460	(1 220 - 1 730)	9.4	(7.9 - 11.1)
<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
Separated				
No	2 380	(2 030 - 2 780)	86.5	(81.5 - 90.4)
Yes	370	(250 - 520)	13.5	(9.6 - 18.5)
<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	
Not known				
No	1 440	(1 090 - 1 840)	92.1	(87.6 - 95.3)
Yes	120	(70 - 200)	7.9	(4.7 - 12.4)
<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	
Not applicable				
No	2 600	(2 190 - 3 050)	87.2	(81.4 - 91.4)
Yes	380	(240 - 560)	12.8	(8.6 - 18.6)
<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>				
No	20 600	(20 200 - 20 900)	89.8	(88.3 - 91.1)
Yes	2 340	(2 040 - 2 680)	10.2	(8.9 - 11.7)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

**TABLE 7.28:** CHILDREN AGED 4–17 YEARS — WHETHER CHILD HAS SUFFERED FROM BED WETTING IN THE PAST SIX MONTHS BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE

<i>Suffered from bed wetting?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Not separated				
No	13 500	(12 900 - 14 100)	86.8	(85.0 - 88.4)
Yes	2 060	(1 800 - 2 360)	13.2	(11.6 - 15.0)
<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
Separated				
No	2 390	(2 040 - 2 770)	86.7	(82.0 - 90.7)
Yes	370	(250 - 530)	13.3	(9.3 - 18.0)
<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	
Not known				
No	1 370	(1 030 - 1 770)	87.5	(81.7 - 92.3)
Yes	200	(120 - 300)	12.5	(7.7 - 18.3)
<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	
Not applicable				
No	2 630	(2 210 - 3 090)	88.2	(83.7 - 91.7)
Yes	350	(250 - 500)	11.8	(8.3 - 16.3)
<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>				
No	19 900	(19 600 - 20 200)	87.0	(85.5 - 88.3)
Yes	2 980	(2 680 - 3 310)	13.0	(11.7 - 14.5)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	





**TABLE 7.29:** CHILDREN AGED 4–17 YEARS — WHETHER CHILD HAS EXHIBITED ANY INAPPROPRIATE SEXUAL BEHAVIOUR IN THE PAST SIX MONTHS BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE

<i>Exhibited any inappropriate sexual behaviours?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Not separated</b>				
No	15 400	(14 800 - 16 000)	98.8	(97.9 - 99.4)
Yes	190	(100 - 320)	1.2	(0.6 - 2.1)
<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
<b>Separated</b>				
No	2 660	(2 290 - 3 080)	96.5	(94.3 - 98.1)
Yes	100	(50 - 160)	3.5	(1.9 - 5.7)
<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	
<b>Not known</b>				
No	1 540	(1 190 - 1 980)	98.8	(97.4 - 99.6)
Yes	20	(10 - 40)	1.2	(0.4 - 2.7)
<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	
<b>Not applicable</b>				
No	2 920	(2 470 - 3 400)	97.8	(96.1 - 98.8)
Yes	70	(30 - 110)	2.2	(1.2 - 3.9)
<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>				
No	22 500	(22 400 - 22 700)	98.4	(97.8 - 98.9)
Yes	370	(250 - 510)	1.6	(1.1 - 2.2)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 7.30: CHILDREN AGED 4–17 YEARS — WHETHER CHILD HAS NOT WANTED TO GO TO SCHOOL IN THE PAST SIX MONTHS, BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE**

<i>Not wanted to go to school?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Not separated</b>				
No	9 530	(9 000 - 10 100)	61.1	(58.7 - 63.6)
Yes	5 380	(4 970 - 5 810)	34.5	(32.2 - 36.8)
Not in school	690	(530 - 870)	4.4	(3.4 - 5.6)
<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
<b>Separated</b>				
No	1 550	(1 290 - 1 850)	56.3	(50.0 - 62.7)
Yes	1 130	(910 - 1 400)	41.0	(34.7 - 47.2)
Not in school	70	(30 - 190)	2.7	(1.0 - 6.7)
<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	
<b>Not known</b>				
No	1 020	(750 - 1 350)	65.2	(55.0 - 73.8)
Yes	490	(320 - 730)	31.2	(22.1 - 41.0)
Not in school	60	(30 - 90)	3.6	(2.1 - 5.6)
<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	
<b>Not applicable</b>				
No	1 770	(1 440 - 2 140)	59.2	(51.7 - 66.1)
Yes	1 160	(890 - 1 460)	38.8	(31.5 - 46.0)
Not in school	60	(30 - 110)	2.0	(1.1 - 3.8)
<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>				
No	13 900	(13 400 - 14 400)	60.6	(58.4 - 62.7)
Yes	8 150	(7 690 - 8 640)	35.6	(33.6 - 37.7)
Not in school	880	(700 - 1 080)	3.8	(3.1 - 4.7)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 7.31:** CHILDREN AGED 4–17 YEARS — WHETHER CHILD HAS RUN AWAY FROM HOME IN THE PAST SIX MONTHS, BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE

<i>Run away from home?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Not separated</b>				
No	14 700	(14 000 - 15 300)	94.0	(92.9 - 95.0)
Yes	660	(530 - 800)	4.2	(3.4 - 5.1)
Too young	280	(210 - 370)	1.8	(1.3 - 2.3)
<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
<b>Separated</b>				
No	2 520	(2 150 - 2 930)	91.3	(86.5 - 94.6)
Yes	200	(120 - 320)	7.4	(4.6 - 11.5)
Too young	30	(0 - 150)	1.2	(0.0 - 5.2)
<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	
<b>Not known</b>				
No	1 480	(1 140 - 1 900)	94.9	(85.9 - 98.9)
Yes	60	(10 - 260)	3.8	(0.6 - 15.5)
Too young	20	(10 - 40)	1.3	(0.5 - 2.6)
<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	
<b>Not applicable</b>				
No	2 780	(2 340 - 3 260)	93.2	(89.8 - 96.0)
Yes	160	(90 - 240)	5.3	(3.2 - 8.2)
Too young	40	(10 - 110)	1.5	(0.4 - 3.7)
<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>				
No	21 400	(21 200 - 21 700)	93.7	(92.6 - 94.6)
Yes	1 080	(890 - 1 290)	4.7	(3.9 - 5.6)
Too young	380	(280 - 500)	1.6	(1.2 - 2.2)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 7.32: CHILDREN AGED 4–17 YEARS — WHETHER CHILD HAS DRUNK ALCOHOL OR GOTTEN DRUNK IN THE PAST SIX MONTHS, BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE?**

<i>Has drunk alcohol or gotten drunk?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Not separated</b>				
No	13 000	(12 400 - 13 600)	83.2	(80.9 - 85.2)
Yes	1 370	(1 150 - 1 600)	8.8	(7.4 - 10.3)
Too young	1 260	(990 - 1 560)	8.0	(6.4 - 9.9)
<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
<b>Separated</b>				
No	2 140	(1 820 - 2 490)	77.5	(71.7 - 82.5)
Yes	420	(300 - 570)	15.2	(11.4 - 19.9)
Too young	200	(100 - 360)	7.3	(3.7 - 12.6)
<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	
<b>Not known</b>				
No	1 290	(970 - 1 680)	82.5	(70.9 - 90.9)
Yes	160	(60 - 370)	10.5	(4.0 - 21.9)
Too young	110	(50 - 200)	7.0	(3.2 - 12.7)
<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	
<b>Not applicable</b>				
No	2 380	(1 980 - 2 840)	79.8	(73.2 - 85.6)
Yes	350	(240 - 490)	11.6	(8.0 - 15.9)
Too young	260	(120 - 470)	8.6	(4.2 - 15.3)
<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>				
No	18 800	(18 300 - 19 200)	82.0	(80.0 - 83.9)
Yes	2 300	(2 010 - 2 610)	10.0	(8.8 - 11.4)
Too young	1 820	(1 500 - 2 210)	8.0	(6.5 - 9.6)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 7.33:** CHILDREN AGED 4–17 YEARS — WHETHER CHILD HAS SNIFFED GLUE, PETROL OR AEROSOLS IN THE PAST SIX MONTHS, BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE

<i>Has sniffed glue, petrol or aerosols?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Not separated</b>				
No	14 200	(13 500 - 14 800)	90.8	(88.9 - 92.5)
Yes	250	(160 - 390)	1.6	(1.0 - 2.5)
Too young	1 180	(940 - 1 480)	7.6	(6.1 - 9.4)
<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
<b>Separated</b>				
No	2 480	(2 120 - 2 880)	89.9	(84.7 - 93.8)
Yes	90	(40 - 200)	3.4	(1.4 - 7.1)
Too young	190	(90 - 320)	6.7	(3.5 - 11.2)
<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	
<b>Not known</b>				
No	1 430	(1 090 - 1 850)	91.4	(83.8 - 96.6)
Yes	20	(0 - 250)	1.6	(0.1 - 15.3)
Too young	110	(50 - 200)	7.0	(3.2 - 12.7)
<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	
<b>Not applicable</b>				
No	2 740	(2 320 - 3 220)	91.7	(85.0 - 96.2)
Yes	0	(0 - 60)	0.0	(0.0 - 1.9)
Too young	250	(110 - 460)	8.3	(3.8 - 15.0)
<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>				
No	20 800	(20 400 - 21 200)	90.8	(89.1 - 92.4)
Yes	370	(250 - 560)	1.6	(1.1 - 2.4)
Too young	1 720	(1 410 - 2 100)	7.5	(6.2 - 9.2)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 7.34: CHILDREN AGED 4–17 YEARS — WHETHER CHILD HAS USED ANY DRUGS OTHER THAN SNIFFING GLUE, AEROSOLS OR PETROL IN THE PAST SIX MONTHS, BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE**

<i>Has used drugs other than sniffing glue, aerosols or petrol?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Not separated</b>				
No	13 700	(13 000 - 14 300)	87.7	(85.6 - 89.7)
Yes	690	(530 - 890)	4.4	(3.4 - 5.7)
Too young	1 220	(960 - 1 520)	7.8	(6.2 - 9.6)
<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
<b>Separated</b>				
No	2 280	(1 930 - 2 650)	82.6	(76.6 - 87.8)
Yes	290	(180 - 430)	10.5	(6.9 - 15.3)
Too young	190	(90 - 350)	7.0	(3.3 - 12.2)
<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	
<b>Not known</b>				
No	1 370	(1 030 - 1 770)	87.7	(79.6 - 93.9)
Yes	80	(20 - 220)	5.3	(1.0 - 13.5)
Too young	110	(50 - 200)	7.0	(3.2 - 12.7)
<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	
<b>Not applicable</b>				
No	2 530	(2 120 - 2 990)	84.8	(77.8 - 90.2)
Yes	180	(90 - 320)	6.0	(3.0 - 10.3)
Too young	270	(140 - 490)	9.2	(4.7 - 16.1)
<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>				
No	19 900	(19 400 - 20 300)	86.7	(84.8 - 88.5)
Yes	1 240	(1 010 - 1 500)	5.4	(4.4 - 6.6)
Too young	1 800	(1 470 - 2 180)	7.9	(6.4 - 9.5)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 7.35:** CHILDREN AGED 4–17 YEARS — WHETHER CHILD HAS DELIBERATELY HARMED HIM/HERSELF IN THE PAST SIX MONTHS, BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE

<i>Has deliberately harmed him/herself?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Not separated</b>				
No	14 400	(13 700 - 15 000)	92.1	(90.1 - 93.8)
Yes	250	(150 - 390)	1.6	(0.9 - 2.5)
Too young	990	(740 - 1 290)	6.4	(4.8 - 8.2)
<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
<b>Separated</b>				
No	2 500	(2 150 - 2 900)	90.8	(85.8 - 94.6)
Yes	120	(60 - 220)	4.2	(2.0 - 7.6)
Too young	140	(50 - 280)	5.0	(2.0 - 9.8)
<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	
<b>Not known</b>				
No	1 470	(1 120 - 1 890)	94.0	(89.0 - 97.0)
Yes	30	(10 - 100)	2.1	(0.5 - 6.5)
Too young	60	(30 - 110)	3.8	(1.6 - 7.0)
<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	
<b>Not applicable</b>				
No	2 790	(2 350 - 3 260)	93.3	(88.5 - 96.6)
Yes	40	(10 - 90)	1.4	(0.4 - 3.0)
Too young	160	(70 - 320)	5.4	(2.4 - 10.7)
<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>				
No	21 100	(20 700 - 21 400)	92.2	(90.6 - 93.6)
Yes	440	(310 - 610)	1.9	(1.3 - 2.7)
Too young	1 350	(1 060 - 1 700)	5.9	(4.6 - 7.4)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 7.36: CHILDREN AGED 4–17 YEARS — WHETHER CHILD HAS TALKED ABOUT DEATH OR SUICIDE IN THE PAST SIX MONTHS, BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE**

<i>Has talked about death or suicide?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Not separated</b>				
No	13 000	(12 400 - 13 700)	83.7	(81.2 - 85.9)
Yes	1 500	(1 230 - 1 820)	9.6	(7.9 - 11.6)
Too young	1 050	(800 - 1 350)	6.7	(5.1 - 8.5)
<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
<b>Separated</b>				
No	2 250	(1 920 - 2 610)	81.6	(75.2 - 87.1)
Yes	390	(250 - 580)	14.2	(9.7 - 20.4)
Too young	120	(40 - 260)	4.2	(1.6 - 9.2)
<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	
<b>Not known</b>				
No	1 380	(1 040 - 1 780)	88.3	(80.6 - 93.2)
Yes	90	(30 - 220)	5.7	(2.0 - 13.5)
Too young	90	(40 - 170)	6.0	(2.9 - 10.6)
<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	
<b>Not applicable</b>				
No	2 450	(2 050 - 2 890)	81.9	(74.8 - 88.1)
Yes	360	(200 - 580)	11.9	(7.2 - 18.7)
Too young	180	(80 - 350)	6.2	(2.7 - 11.7)
<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>				
No	19 100	(18 600 - 19 600)	83.5	(81.4 - 85.4)
Yes	2 340	(1 980 - 2 740)	10.2	(8.6 - 12.0)
Too young	1 440	(1 130 - 1 780)	6.3	(4.9 - 7.8)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	





**TABLE 7.37:** CHILDREN AGED 4–17 YEARS — WHETHER CHILD HAS ATTEMPTED SUICIDE IN THE PAST SIX MONTHS, BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE

<i>Has attempted suicide?</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Not separated				
No	14 300	(13 700 - 15 000)	91.8	(89.9 - 93.6)
Yes	170	(100 - 270)	1.1	(0.7 - 1.8)
Too young	1 100	(850 - 1 410)	7.1	(5.4 - 8.9)
<b>Total</b>	<b>15 600</b>	<b>(15 000 - 16 200)</b>	<b>100.0</b>	
Separated				
No	2 550	(2 200 - 2 950)	92.6	(87.4 - 96.6)
Yes	80	(20 - 210)	2.9	(0.5 - 7.3)
Too young	120	(40 - 250)	4.5	(1.9 - 9.6)
<b>Total</b>	<b>2 760</b>	<b>(2 360 - 3 180)</b>	<b>100.0</b>	
Not known				
No	1 450	(1 110 - 1 860)	92.7	(87.2 - 96.3)
Yes	20	(0 - 110)	1.3	(0.0 - 6.7)
Too young	90	(50 - 180)	6.0	(2.9 - 10.7)
<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	
Not applicable				
No	2 810	(2 380 - 3 300)	94.2	(88.7 - 97.7)
Yes	0	(0 - 10)	0.2	(0.1 - 0.3)
Too young	170	(70 - 350)	5.6	(2.4 - 11.6)
<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>				
No	21 100	(20 800 - 21 500)	92.3	(90.7 - 93.7)
Yes	280	(170 - 430)	1.2	(0.8 - 1.9)
Too young	1 490	(1 180 - 1 840)	6.5	(5.1 - 8.0)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 7.38:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER CHILD'S SECONDARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Not separated</b>				
Low	5 550	(5 060 - 6 080)	71.6	(68.2 - 74.9)
Moderate	810	(660 - 990)	10.5	(8.6 - 12.6)
High	1 380	(1 150 - 1 630)	17.9	(15.1 - 21.0)
<b>Total</b>	<b>7 750</b>	<b>(7 170 - 8 350)</b>	<b>100.0</b>	
<b>Separated</b>				
Low	790	(630 - 960)	58.7	(48.6 - 68.5)
Moderate	240	(170 - 340)	18.2	(13.1 - 24.6)
High	310	(180 - 530)	23.1	(14.7 - 34.8)
<b>Total</b>	<b>1 340</b>	<b>(1 090 - 1 640)</b>	<b>100.0</b>	
<b>Not known</b>				
Low	160	(90 - 280)	52.4	(28.9 - 75.6)
Moderate	80	(40 - 140)	26.7	(13.4 - 43.1)
High	60	(10 - 190)	21.0	(5.0 - 53.8)
<b>Total</b>	<b>300</b>	<b>(180 - 470)</b>	<b>100.0</b>	
<b>Not applicable</b>				
Low	8 310	(7 720 - 8 900)	61.5	(58.3 - 64.6)
Moderate	1 470	(1 270 - 1 700)	10.9	(9.4 - 12.5)
High	3 740	(3 340 - 4 170)	27.6	(24.8 - 30.5)
<b>Total</b>	<b>13 500</b>	<b>(12 900 - 14 100)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 7.39:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER THE MOTHER OF THE CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM HER NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Not separated</b>				
Low	9 500	(8 900 - 10 100)	66.5	(63.6 - 69.2)
Moderate	1 600	(1 400 - 1 800)	11.2	(9.9 - 12.6)
High	3 190	(2 820 - 3 590)	22.3	(19.9 - 24.8)
<b>Total</b>	<b>14 300</b>	<b>(13 600 - 14 900)</b>	<b>100.0</b>	
<b>Separated</b>				
Low	2 460	(2 120 - 2 850)	60.2	(54.7 - 65.4)
Moderate	520	(380 - 680)	12.6	(9.6 - 16.1)
High	1 110	(900 - 1 350)	27.2	(22.8 - 32.1)
<b>Total</b>	<b>4 090</b>	<b>(3 630 - 4 590)</b>	<b>100.0</b>	
<b>Not known</b>				
Low	960	(700 - 1 290)	62.2	(52.1 - 70.9)
Moderate	180	(110 - 280)	11.8	(7.4 - 17.1)
High	400	(250 - 600)	26.0	(17.9 - 36.1)
<b>Total</b>	<b>1 550</b>	<b>(1 190 - 1 990)</b>	<b>100.0</b>	
<b>Not applicable</b>				
Low	1 880	(1 520 - 2 260)	62.8	(55.6 - 69.7)
Moderate	320	(210 - 450)	10.7	(7.4 - 14.7)
High	790	(590 - 1 050)	26.5	(20.5 - 33.7)
<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 7.40:** CHILDREN AGED 4–17 YEARS — LIKELIHOOD OF BEING AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, ASSOCIATED WITH FORCED SEPARATION OF PRIMARY CARER OR PRIMARY CARER’S MOTHER FROM NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE, AND DEMOGRAPHIC FACTORS

High risk of clinically significant emotional or behavioural difficulties			
Parameter	Significance (p value)	Odds Ratio	95% CI
Sex			
Male		1.00	
Female	<0.001	0.49	(0.38 - 0.64)
Age group			
4–7 years		1.00	
8–11 years	0.476	0.89	(0.65 - 1.22)
12–14 years	0.604	0.91	(0.62 - 1.31)
15–17 years	<0.001	0.36	(0.21 - 0.60)
Level of Relative Isolation			
None		1.00	
Low	0.226	0.75	(0.47 - 1.19)
Moderate	0.976	1.01	(0.56 - 1.83)
High	0.417	0.64	(0.21 - 1.90)
Extreme	0.002	0.20	(0.08 - 0.54)
Primary carer is child’s birth mother?			
No		1.00	
Yes	0.664	0.91	(0.58 - 1.42)
Primary carer or carer’s mother forcibly separated from natural family			
Carer and carer’s mother separated	0.079	2.62	(0.89 - 7.70)
Carer separated	0.007	2.33	(1.25 - 4.32)
Carer’s mother separated	0.667	1.17	(0.57 - 2.38)
Neither separated		1.00	
Don’t know	0.263	1.48	(0.74 - 2.95)
Not applicable	0.263	1.38	(0.79 - 2.41)



**TABLE 7.41:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY RELOCATED FROM THEIR TRADITIONAL COUNTRY OR HOMELAND

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Not relocated</b>				
Low	11 200	(10 600 - 11 800)	64.9	(62.3 - 67.4)
Moderate	2 040	(1 810 - 2 280)	11.8	(10.5 - 13.1)
High	4 040	(3 640 - 4 480)	23.4	(21.1 - 25.7)
<b>Total</b>	<b>17 300</b>	<b>(16 700 - 17 900)</b>	<b>100.0</b>	
<b>Relocated</b>				
Low	720	(540 - 930)	69.4	(59.2 - 78.5)
Moderate	60	(20 - 130)	5.7	(2.2 - 12.4)
High	260	(170 - 370)	24.9	(17.4 - 33.9)
<b>Total</b>	<b>1 030</b>	<b>(810 - 1 280)</b>	<b>100.0</b>	
<b>Not known</b>				
Low	980	(710 - 1 300)	61.9	(52.7 - 71.2)
Moderate	200	(120 - 300)	12.6	(8.2 - 17.8)
High	400	(250 - 600)	25.5	(17.6 - 35.4)
<b>Total</b>	<b>1 580</b>	<b>(1 210 - 2 010)</b>	<b>100.0</b>	
<b>Not applicable</b>				
Low	1 880	(1 530 - 2 270)	62.9	(55.6 - 69.7)
Moderate	320	(210 - 450)	10.6	(7.4 - 14.7)
High	790	(590 - 1 050)	26.4	(20.1 - 33.1)
<b>Total</b>	<b>2 990</b>	<b>(2 550 - 3 490)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 7.42: CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER ONE OR BOTH OF THE PRIMARY CARER’S PARENTS WERE FORCIBLY RELOCATED FROM THEIR TRADITIONAL COUNTRY OR HOMELAND**

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Neither of the carer’s parent were forcibly relocated				
Low	9 390	(8 820 - 9 970)	65.6	(62.8 - 68.4)
Moderate	1 710	(1 490 - 1 940)	11.9	(10.5 - 13.5)
High	3 210	(2 840 - 3 610)	22.4	(20.0 - 24.9)
<b>Total</b>	<b>14 300</b>	<b>(13 700 - 14 900)</b>	<b>100.0</b>	
One or both of the carer’s parents forcibly relocated				
Low	2 560	(2 210 - 2 960)	63.3	(58.0 - 68.2)
Moderate	400	(310 - 500)	9.8	(7.7 - 12.0)
High	1 090	(890 - 1 320)	27.0	(22.6 - 31.8)
<b>Total</b>	<b>4 050</b>	<b>(3 590 - 4 520)</b>	<b>100.0</b>	
Not known				
Low	970	(710 - 1 310)	62.0	(51.9 - 70.6)
Moderate	190	(110 - 290)	12.2	(8.0 - 17.8)
High	400	(250 - 600)	25.8	(17.7 - 35.7)
<b>Total</b>	<b>1 560</b>	<b>(1 200 - 2 000)</b>	<b>100.0</b>	
Not applicable				
Low	1 880	(1 520 - 2 260)	62.8	(55.6 - 69.7)
Moderate	320	(210 - 450)	10.7	(7.4 - 14.7)
High	790	(590 - 1 050)	26.5	(20.5 - 33.7)
<b>Total</b>	<b>2 990</b>	<b>(2 540 - 3 480)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 7.43:** CHILDREN AGED 4–17 YEARS — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY WHETHER PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE, AND/OR FORCIBLY RELOCATED FROM THEIR TRADITIONAL COUNTRY OR HOMELAND

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Not separated from family or relocated from land				
Low	10 100	(9 500 - 10 700)	66.3	(63.7 - 69.0)
Moderate	1 760	(1 560 - 1 970)	11.6	(10.3 - 12.9)
High	3 350	(2 980 - 3 740)	22.1	(19.8 - 24.4)
<b>Total</b>	<b>15 200</b>	<b>(14 500 - 15 800)</b>	<b>100.0</b>	
Separated from family or relocated from land				
Low	1 870	(1 590 - 2 180)	59.3	(52.7 - 65.4)
Moderate	330	(220 - 490)	10.5	(7.0 - 14.7)
High	950	(740 - 1 220)	30.2	(24.6 - 36.5)
<b>Total</b>	<b>3 150</b>	<b>(2 740 - 3 590)</b>	<b>100.0</b>	
Not known				
Low	980	(720 - 1 310)	61.8	(52.2 - 70.6)
Moderate	210	(130 - 310)	12.9	(8.5 - 18.1)
High	400	(250 - 600)	25.3	(17.4 - 35.1)
<b>Total</b>	<b>1 590</b>	<b>(1 230 - 2 020)</b>	<b>100.0</b>	
Not applicable				
Low	1 880	(1 530 - 2 270)	62.9	(55.6 - 69.7)
Moderate	320	(210 - 450)	10.6	(7.4 - 14.7)
High	790	(590 - 1 050)	26.4	(20.1 - 33.1)
<b>Total</b>	<b>2 990</b>	<b>(2 550 - 3 490)</b>	<b>100.0</b>	
<b>Total</b>				
Low	14 800	(14 300 - 15 300)	64.6	(62.2 - 66.9)
Moderate	2 610	(2 360 - 2 890)	11.4	(10.3 - 12.6)
High	5 490	(5 020 - 5 980)	24.0	(21.9 - 26.1)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	



**TABLE 7.44: CHILDREN AGED 12–17 YEARS — SELF-REPORTED RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES BY WHETHER CHILD’S PRIMARY CARER WAS FORCIBLY SEPARATED FROM THEIR NATURAL FAMILY BY A MISSION, THE GOVERNMENT OR WELFARE**

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Not separated</b>				
Low	4 200	(3 860 - 4 520)	69.3	(65.5 - 72.8)
Moderate	1 180	(1 000 - 1 370)	19.4	(16.7 - 22.4)
High	680	(550 - 830)	11.3	(9.2 - 13.7)
<b>Total</b>	<b>6 050</b>	<b>(5 700 - 6 390)</b>	<b>100.0</b>	
<b>Separated</b>				
Low	750	(560 - 990)	65.7	(54.8 - 75.8)
Moderate	280	(180 - 410)	25.0	(16.4 - 34.8)
High	110	(50 - 220)	9.3	(4.2 - 17.9)
<b>Total</b>	<b>1 140</b>	<b>(890 - 1 420)</b>	<b>100.0</b>	
<b>Not known</b>				
Low	230	(140 - 380)	55.5	(31.5 - 76.9)
Moderate	110	(40 - 260)	26.8	(8.7 - 49.1)
High	70	(10 - 240)	17.7	(2.1 - 48.4)
<b>Total</b>	<b>420</b>	<b>(260 - 650)</b>	<b>100.0</b>	
<b>Not applicable</b>				
Low	760	(590 - 970)	68.0	(58.0 - 77.8)
Moderate	240	(160 - 370)	21.7	(14.0 - 30.8)
High	120	(50 - 220)	10.3	(5.1 - 19.6)
<b>Total</b>	<b>1 120</b>	<b>(910 - 1 360)</b>	<b>100.0</b>	
<b>Total</b>				
Low	5 930	(5 640 - 6 220)	68.0	(64.7 - 71.3)
Moderate	1 810	(1 590 - 2 060)	20.8	(18.2 - 23.6)
High	980	(790 - 1 180)	11.2	(9.1 - 13.5)
<b>Total</b>	<b>8 720</b>	<b>(8 670 - 8 720)</b>	<b>100.0</b>	







# Chapter 8

## IMPROVING THE SOCIAL AND EMOTIONAL WELLBEING OF ABORIGINAL CHILDREN AND YOUNG PEOPLE

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## Chapter 8

# IMPROVING THE SOCIAL AND EMOTIONAL WELLBEING OF ABORIGINAL CHILDREN AND YOUNG PEOPLE

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*This chapter begins with a clear message for agencies, policy makers and service providers – attempts to formulate effective policies for the arrangement of human services and their delivery to individual Aboriginal children and their families will fail without an understanding of the basic characteristics and processes shaping the Australian Aboriginal population.*

*This is explained with reference to the key findings in this volume along with results from Volume One.<sup>1</sup> In guiding suitable responses on the part of governments, agencies and communities to improve circumstances for Aboriginal Australians, four important areas of existing and emergent knowledge are discussed:*

- ◆ *the prevalence and burden of social and emotional difficulties in Aboriginal children and young people*
  - ◆ *mechanisms that prompt, facilitate and constrain the development of social and emotional wellbeing in children and adults*
  - ◆ *the current policy context*
  - ◆ *drivers of developmental change.*
- 

## INTRODUCTION

The median age of Australian Aboriginal people is 20.5 years, compared with 36.1 years for the total Australian population.<sup>2</sup> In Western Australia, life expectancy of Aboriginal people is estimated at 59 years for males and 67 years for females, compared with 78 years for males and 83 years for females in the total WA population.<sup>3</sup> Nationally, death rates for Aboriginal people were higher than for non-Aboriginal people in all age groups, with the largest difference occurring in the age range 35–54 years, where death rates in Aboriginal people are five times higher than those of the total population.<sup>4</sup>

In WA, 27.8 per cent (CI: 26.3%–29.4%) of Aboriginal children were born to mothers aged under 20 years compared with only 6.3 per cent in the total WA population. Some 6.0 per cent (CI: 4.2%–8.3%) of Aboriginal children aged 0–3 years were not cared for by either biological parent, compared with 19.6 per cent (CI: 16.9%–22.6%) of Aboriginal children aged 12–17 years.<sup>1</sup> In terms of day to day care, about 46.7 per cent (CI: 44.5%–48.9%) of Aboriginal children were cared for by both original parents (40.6 per cent; CI: 38.3%–42.9%, exclusively so) while 30.9 per cent (CI: 28.8%–33.2%) were cared for by a sole mother (24.1 per cent; CI: 22.0%–26.3%, exclusively so).<sup>1</sup>

Compared to the general population, carers of Aboriginal children have lower levels of education. About one third of carers of Aboriginal children left school prior to the completion of ten years of compulsory education. Carers are more likely to have serious chronic illnesses and conditions that compromise their capacity to care. Amid a significantly higher rate of unemployment, employment that is available and undertaken is generally at a lower level of occupational skill and qualification.<sup>1</sup>



This combination of circumstances not only creates impoverishment of the financial wherewithal to raise children, but also compromises the very basis of human, psychological and social capital which forms the wider pool of resources essential for child growth and development, including their social and emotional wellbeing. The impoverishment across all of these resource domains is accompanied by a reduction in the choice, capacity and flexibility of carers, families and communities to meet the demands and challenges of daily living. This is a recipe for cumulative stress.

Given the scale of these population processes, fundamental changes in developmental outcomes that lead to the greater social, civic, and economic participation of Aboriginal people will need to be judged across two to three Aboriginal generations. In order to produce effective change, political leaders, bureaucrats, policy makers and service providers will have to act in concert over the long term (up to three generations), with determination and persistence, and resist the temptation to abandon, re-brand, or water down effective strategies known to produce change in populations and individuals over time. There will be little or no progress without a common understanding leading to coordinated and sustained action among the many players seeking to change the circumstances of Aboriginal people. This requires leadership at the highest levels within the Aboriginal community and from governments of the day.

In this chapter, findings of the current volume are drawn together with those of Volume One<sup>1</sup> to develop a broader understanding of their context and meaning. To guide suitable responses on the part of governments, agencies and communities four important areas are discussed:

- ◆ The prevalence and burden of social and emotional difficulties in Aboriginal children and young people
- ◆ Prompts, facilitators and constraints of social and emotional wellbeing
- ◆ The current policy context for action
- ◆ The drivers of developmental change.

## THE PREVALENCE AND BURDEN OF EMOTIONAL OR BEHAVIOURAL DIFFICULTIES

Based on carer reports, an estimated 24.0 per cent (CI: 21.9%–26.1%) of Aboriginal children aged 4–17 years were at high risk of clinically significant emotional or behavioural difficulties. This equates to an estimated 5,490 (CI: 5,020–5,980) Western Australian Aboriginal children who are likely to benefit from services providing them and their families with thorough and appropriate assessment and treatment.

The burden associated with these emotional or behavioural difficulties may be judged from three perspectives: the individual children, their carers or families, and the community or population. These burdens can also be assessed from moral, social, historical and economic perspectives.

### THE CHILD'S PERSPECTIVE

With respect to the experiences of Aboriginal children, the burden of an emotional or behavioural difficulty is significant. Aboriginal children and young people are more likely than their non-Aboriginal counterparts to be at high risk of clinically significant conduct problems or hyperactivity. Not discounting the burden of suffering associated with emotional symptoms, particularly confronting outcomes were observed with



conduct problems and hyperactivity. Children with hyperactivity are known to sustain poorer academic and social outcomes across the life course.<sup>5,6</sup> Children with conduct problems, particularly boys, have even more problematic outcomes: These include early school leaving, antisocial behaviour, unemployment, and involvement with the justice system.<sup>7-9</sup> Conduct disorders, when they occur early in life, are particularly resistant to treatment.

Independent of their carers, self-reports from Aboriginal young people aged 12–17 years indicate that an estimated 11.1 per cent (CI: 9.0%–13.4%) of young people (an estimated 1,010; CI: 820–1,220) were at high risk of clinically significant emotional or behavioural difficulties. Of this group, one in three reported that these problems either distressed them personally, or caused significant problems with their family members, friends, learning or leisure. These young people were more likely to have thought about ending their own life or of having made an attempt to take their life in the 12 months prior to the survey.

## THE CARER'S PERSPECTIVE

About one third of children at high risk of clinically significant emotional or behavioural difficulties were reported by their carers to have problems affecting their home life, friendships, learning and leisure. Carers who rated their children as being at high risk of clinically significant emotional or behavioural difficulties also reported that higher proportions of these children had eating and sleeping problems (including nightmares), bed wetting, running away from home, alcohol and drug use and suicidal thoughts.

## THE COMMUNITY AND POPULATION PERSPECTIVE

In studies of emotional or behavioural difficulties in children in the general population significant community burden has been demonstrated. In the general population, children with these difficulties are significantly more likely to use a range of health, mental health, education, and family services relative to children without such difficulties.<sup>10-12</sup> A similar profile emerges in the findings on Aboriginal children and young people. Those at high risk of clinically significant emotional or behavioural difficulties were significantly more likely to have been seen by Mental Health Services than children at low risk. However the burden of these problems to communities is only partially evaluated in this volume. Further data on the burden of emotional or behavioural difficulties in Aboriginal children will be featured in subsequent volumes, where themes such as education, and family and community will be explored.

At the population level several observations can be made about this burden.

About 66,100 Aboriginal and Torres Strait Islander people were living in Western Australia at the time of the survey, of whom 36,300 were adults aged 18 years and over. These adults have a principal responsibility for the care of an estimated 5,490 Aboriginal children (CI: 5,020–5,980) who were at high risk of clinically significant emotional or behavioural difficulties. The non-Aboriginal population has about 1.4 million adults aged 18 years and over, and an estimated 54,300 (CI: 46,900–61,700) non-Aboriginal children were at high risk of clinically significant emotional or behavioural difficulties. Thus, at a population level, emotional or behavioural difficulties in children impose a burden on the adult Aboriginal population that is 3.9 times (CI: 3.2–4.6) greater than that imposed on the non-Aboriginal population. This burden is exacerbated in the Aboriginal population by a shorter life expectancy,



greater family disruption, and impoverishment of human, psychological and social capital.<sup>1</sup>

Aboriginal people comprise a very small proportion of the Western Australian population. Just over three in every one hundred Western Australians identify as being of Aboriginal or Torres Strait Islander descent, and six in every one hundred Western Australian children are of Aboriginal or Torres Strait Islander descent. These proportions, and the estimated numbers of children they represent, are a very small fraction of the total Western Australian population of around 2 million people. Whatever the challenges and difficulties may be in addressing the causes of health and mental health burdens in the Aboriginal population, the scale of this problem in human terms needs to be appreciated. These health burdens are disproportionately very large within the Aboriginal population, despite representing small numbers of individuals relative to the size of the Western Australia population and its services and resources. While the complexities of achieving better health and wellbeing in the Aboriginal population are substantial, they can be defined, and entail a small identifiable population. This perspective should foster hope and determination in those with a responsibility in areas of promotion, prevention and treatment.

## PROMPTS, FACILITATORS AND CONSTRAINTS OF SOCIAL AND EMOTIONAL WELLBEING

### INTRODUCTION

Human potential far exceeds what individuals actually manage to do, and it is this contrast that characterises the human predicament.<sup>13</sup> For many people, life and life's potential remain highly circumscribed, constrained by lack of capacity, lack of choice, social exclusion, and inequality. The gulf between human potential and the present circumstance of the Australian Aboriginal population highlights this predicament most vividly.

This section discusses the nature of human development with specific reference to the findings in this volume on the social and emotional wellbeing of Aboriginal children. Our emphasis here is on the circumstances that alter social, civic and economic participation across the life span. This is not to deny the importance of children as beings and becomings and the critical experience of being a child and having a childhood. There are, however, less romantic realities that operate to constrain and significantly alter child developmental trajectories leading to optimal outcomes. For significant numbers of children, particularly Aboriginal children, these outcomes are unnecessarily lost.

### FACTORS ASSOCIATED WITH HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES

The findings from the WAACHS show that the factors most strongly associated with high risk of clinically significant emotional or behavioural difficulties in Aboriginal children were:

- ◆ poor physical and mental health of carers
- ◆ poor physical health of the child (particularly hearing, speech and vision impairment)



- ◆ multiple family life stress events
- ◆ high residential mobility
- ◆ poor quality of parenting
- ◆ poor family functioning
- ◆ exposure to racism
- ◆ use of tobacco and alcohol
- ◆ sole parent care or non-original parent care
- ◆ the primary carer having been forcibly separated from their natural family.

On the surface, this list of associations is similar to findings about children and their development from a range of surveys in Australia and around the world. Some encouragement should be taken from the fact that children, regardless of nation or creed, are affected by similar adversities. This should give hope that the types of preventive and treatment interventions that work well for children, if adapted for local Aboriginal culture and circumstance, may bring significant benefits to Aboriginal children and their families. However, there are some profound differences that are hidden from view in this list that may pose threats to progress in the betterment of circumstances for Aboriginal children and their families.

#### FACTORS THAT WERE NOT ASSOCIATED WITH HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES

The survey findings are critically important for what is *not* significant.

Neither the level of the primary carer's income nor the level of their education was significantly associated with risk of clinically significant emotional or behavioural difficulties. The lack of this association was also observed in relation to the physical health outcomes of Aboriginal children.<sup>1</sup> These observations are in stark contrast to what appears in the non-Aboriginal population where increases in carer income and education are associated with improvements in the health and mental health of their children.

Education and income are critical levers of change for individuals, families and their communities – Aboriginal and non-Aboriginal alike. This does not mean that improvement of education and income for Aboriginal Australians is inconsequential or unimportant. Far from it. What these data suggest, however, is that increases in carer income and education are not being effectively translated across the Aboriginal population into better overall child health. This includes outcomes for both physical health and social and emotional wellbeing.

This is likely to occur because the effects of multiple life stress events, poor family functioning and carer health weaken or cancel the effects of improvements in carer income and education. This pattern of results suggests that these stresses are, for many, overwhelming the benefits that may accrue merely through improving education and income for individuals. This is a population problem, and it is a measure of how much work lies ahead for agencies involved in offering education, training and employment opportunities for Aboriginal Australians. Efforts to improve participation and retention in education, training and employment for Aboriginal people will need to substantially increase beyond their present levels if this is to appreciably affect changes in population outcomes in Aboriginal health and social and emotional wellbeing.





Moreover the context in which these increases occur will have to fundamentally change. In the meantime, and along with these improvements, other initiatives are urgently needed to support Aboriginal capability expansion to break the vicious cycle that commits substantial numbers of children and families to sub-optimal development and a diminution in life prospects.

## DEVELOPING KEY CAPACITIES AND TALENTS FOR LIFE

### DEVELOPING KEY CAPACITIES AND TALENTS FOR LIFE – SOME ESSENTIAL CONCEPTS

#### Key capacities

There are four key capacities essential for good social and emotional development:<sup>14</sup>

- ◆ the capacity to form meaningful attachments to significant others
- ◆ a capacity for personal identity and autonomy
- ◆ the capacity to regulate emotions
- ◆ the capacity to understand societal norms and discriminate right from wrong.

When mastered, these capacities are built upon and developed for the rest of one's life. When one or more of these are damaged or fail, it is widely accepted that a person's development is sub-optimal or, for some, fundamentally compromised. Creating environments that increase the likelihood that these capacities will develop in optimal ways, and decrease the risks that they will not, has been the focus of intense scientific and social scrutiny over the past 75 years.

#### Proximal processes – the engines of child development:<sup>15</sup>

Some settings and situations make them particularly powerful in the way they influence these developmental capacities. Settings and situations that are close to the developing child, fairly regular in their occurrence, present over extended periods of time, and involve 'progressively more complex reciprocal interactions with persons, objects, and symbols in the child's immediate environment'<sup>15</sup> are called proximal processes.

#### Talents for life

Proximal processes are particularly important because they change a child's development through individual and joint action on six principal developmental talents:

- ◆ exploratory behaviour
- ◆ emotional regulation
- ◆ self-direction (initiative)
- ◆ intellectual flexibility
- ◆ introspection
- ◆ self-efficacy.

*Continued . . . .*



## DEVELOPING KEY CAPACITIES AND TALENTS FOR LIFE – SOME ESSENTIAL CONCEPTS

(continued)

These individual developmental talents in turn influence socialisation and how children (and later, adults) come to use their social and physical environment for their own development and that of others. In other words, as humans develop these specific talents they then use them instrumentally for the development of themselves and others.

The development of key capacities and talents (see commentary box *Developing key capacities and talents for life – some essential concepts*) that occurs from childhood to adulthood is neither once and for all nor does it occur in a vacuum. Most of the principles that apply to children apply equally well across an entire human life span. The development of these capacities and talents can be prompted, facilitated and constrained by several key mechanisms. The term *prompts* is used to signify those mechanisms that require or cause development to occur at particular times or in response to specific circumstances. *Facilitators* of development are those mechanisms that assist, or make easier, the growth, establishment, elaboration and maintenance of developmental capacities and talents. *Constraints*, not surprisingly, inhibit, delay or prevent the development of these key capacities and talents. Much is known about these prompts, facilitators and constraints of developmental capacities and talents that is of direct relevance to the findings in this and the previous volume of results from the WAACHS.

### DEVELOPMENTAL PROMPTS

There are three major prompts of optimal social and emotional wellbeing in children and young people:

- ◆ biology
- ◆ expectations
- ◆ opportunities.

#### Biology

Social and emotional development is prompted by biology. At the opening of the 21st century the time honoured tradition of contrasting the roles of nature and nurture in affecting child development has been substantially repositioned to reflect the dynamic interplay that biology has in mediating gene-environment responses. Almost all gene expression is dependent on stimulation from the environment, the presence or absence of which, switches the gene either on or off.<sup>16</sup> Even when severe stress, malnutrition or lack of stimulation slows the growth of brain structures, the order of gene expression is conserved. Each stage of brain growth follows its predecessor, and the genetic plan still unfolds. However, it does this more slowly and less perfectly. Biology prompts development in the form of milestones – crawling, walking and talking – and it prompts physical development and sexual maturation during early adolescence.

The survey data in both the first and this volume of results clearly document the significant association between biology, in the form of the physical health of children,



and their social and emotional outcomes. These analyses also show the extensive association between the physical health of their carers and both the physical and social and emotional wellbeing of Aboriginal children. Children are entitled to good health. Poor health at birth and onward predisposes children to poor health and illness in adulthood. Illness diminishes life's prospects by diminishing human capability. This impairs social, economic and civic participation and is abundantly clear in the extensive literature on Aboriginal adult health. In this way, physical health is central to the development of human capital. The very capacity to benefit from educational, social, and vocational opportunities is compromised by ill health.

## Expectations

Social and emotional development is prompted by expectations. Carers have expectations about the development of their children. Some of these are explicitly acknowledged and others are not. Social and emotional capacities in children are prompted by carer expectations about the capacities of their children. These expectations in the form of carer values, attitudes and beliefs are part of a carer's psychological and human capital. Some of these expectations are revealed in the excitement when parents respond to a child's first steps or words – or alternately express concern in the late appearance of these milestones. Many more of these expectations are revealed in requests, demands and rules that govern such things as picking up, cleaning your room, making your bed, doing chores, doing your homework, reporting in, being home on time, and being polite.

Data from the survey provide an important observation on the relationship between carer expectations in the form of their parenting styles and practices and the social and emotional wellbeing of their children. As with many other studies in Australia and abroad, the WAACHS data show that positive parenting practices are associated with better social and emotional outcomes for children. Parenting practices comprise the expectations that parents have about their children and their child's feelings and behaviours. While these carer expectations certainly include what are commonly known as values and attitudes about desirable and undesirable behaviour, they also comprise expectations about a child's feelings about their whereabouts and about the legitimacy of appeals.

Teachers too have expectations. These include sitting still, paying attention, taking turns, and following directions. At school and outside of school, rules in the form of playing sport, obtaining work or entry to vocational and tertiary experiences may prompt the development of social and emotional capacities in children and young people as well as modulate their expression.

It should not be forgotten that governments prompt social and emotional development in the form of laws that mandate children to attend school, young people and adults to obtain licenses to operate vehicles, and populations to conform with the basic rules and regulations of society.

## Opportunities

Social and emotional development is prompted by opportunities. The opportunities children have to engage in stimulating activities also prompt cognitive development and improve their social and emotional wellbeing. Providing opportunities to talk, play, interact and read, particularly to very young children improves their cognitive outcomes that have significant onward developmental benefits to the child, both in



the form of improved academic achievement but also in the form of improved social and emotional capacities.<sup>17,18</sup> Mentoring in cognitive skills (i.e. labelling, sorting, sequencing, comparing and noting means-ends relationships) provides efficacious opportunities that change key capacities in children.<sup>19</sup> This is seen again in the form of bidirectional interactions between parents and their adolescent children. Explaining facts, talking about expectations, encouraging skills, and soliciting information about daily activities outside the home produces improved social and emotional capacities in older children and young people.<sup>20,21</sup> All of these opportunities entail social interactions that produce change in children and young people.

The relationship between opportunity and health and social and emotional wellbeing in Aboriginal children and young people will be particularly explored in the third volume of results which will focus on education.

## DEVELOPMENTAL FACILITATORS

There are three major facilitators of optimal social and emotional wellbeing in children and young people:

- ◆ intellectual flexibility coupled with an outgoing, easy temperament
- ◆ good language development
- ◆ emotional support, especially in the face of challenge.

### Intellectual flexibility

Social and emotional development is facilitated by intellectual flexibility and an outgoing easy temperament. An easy-going, outward personality, and tolerance of new situations substantially facilitate social functioning.<sup>22</sup> The resilience imparted by these temperamental assets has also been shown to have substantial gene-environment contributions.<sup>23</sup> So the developmental resources of the child in the form of their genes as well as their human, psychological and social capital impart their own facilitation to emergent social capacities.

### Good language development

Social and emotional development is facilitated by good language development. Findings from the survey are consistent in pointing to the association of both physical health and social and emotional wellbeing with good speech and language functioning. Children with poor speech are at high risk of clinically significant emotional or behavioural difficulties relative to those children who do not have problems with speech. There is an obvious association of hearing with speech,<sup>1</sup> however the analysis in this Volume also shows that speech problems make an independent contribution to increasing the risk of clinically significant emotional or behavioural difficulties. The survey did not afford a direct assessment of the language development of children (as distinct from their speech), however, the measure used in the survey can be taken as a good indicator of speech and language development more generally. Enriched language environments certainly prompt the development of language (see above). Just as importantly, better language acquisition, in the form of increasing complexity and sophistication, facilitates and extends social development. It is a tool to establish and maintain friendships, negotiate needs, and resolve conflicts.



## Emotional support

Emotional support, especially in the face of challenge, facilitates good social and emotional wellbeing. Most parents want their children to succeed and generally protect them from excessively adverse experiences. For many children, parental encouragement in the face of difficulty, support in failure, and celebration of success are critical facilitators of their social and emotional wellbeing.

Some examples of emotional support include the encouragement of exploration, celebration of developmental milestones, guided rehearsal and extension of new skills, and protection from inappropriate disapproval, teasing or punishment.<sup>19</sup> These actions allow the extension and elaboration of social responses, validation of the developing child, and once achieved, allow their practice and maintenance. African-American eleven year-olds have better outcomes where parents are taught to provide more regulated communication, racial socialisation about the realities of oppression and the need to overcome this, as well as clear expectations about sex and alcohol use.<sup>21</sup> In the WAACHS there are clear associations between experiences of bullying and higher risks of clinically significant emotional or behavioural difficulties.

## DEVELOPMENTAL CONSTRAINTS

There are four constraints on optimal social and emotional wellbeing in children and young people:

- ◆ stress that accumulates and overwhelms
- ◆ chaos
- ◆ social exclusion
- ◆ social inequality.

## Stress

Social and emotional development in children is constrained by stress that accumulates and overwhelms adaptive abilities.

*Stress* is defined as ‘environmental circumstances or conditions that threaten, challenge, exceed or harm the psychological or biological capacities of the individual’<sup>24</sup> and in experiencing challenge, some level of stress is always present and normal. When present in a context of encouragement and emotional support, and when it does not exceed an individual’s coping capacity, stress triggers adaptive biological arousal that increases motivation and the potential for development through task mastery and increased self-efficacy. When these adaptive systems are efficiently and not too frequently turned on and turned off again, the body is able to cope effectively and is in homeostatic balance. In circumstances where these homeostatic systems are either overstimulated or not able to perform normally, this condition has been termed *allostatic load*, or the price of adaptation. Allostatic load may thus initiate biologically dysregulated responses to stress which disrupt development and may lead to disease over long periods due to its effects on autonomic, central nervous system, neuroendocrine, and immune system activity.<sup>16</sup> The activation of these allostatic processes under exposure to stress varies with the physical maturation of the brain. Constant or recurrent exposure to stressful circumstances is associated with chronically elevated cortisol which has potentially deleterious effects on developing competent cognitive and emotional functioning.<sup>25,26</sup> Chronic stress exposures of this



nature have also been shown to be associated with increases in cardiovascular disease risk factors in children, such as heart rate variability and blood pressure reactivity and it has been suggested that family transmission of essential hypertension is mediated, in part, by recurrent exposure to stress.<sup>27</sup>

Studies on the effects of environmental stressors during infancy indicate there are clear and enduring negative effects of maternal separation, abuse and neglect in infants and these negative effects presumably occur independently of the child's cognitive appraisal.<sup>28,29</sup> With older children and adolescents, stress has tended to be viewed in more transactional terms as a relationship between environmental events or conditions and the individual's cognitive appraisal of the degree and type of challenge, threat, harm or loss.<sup>24</sup> While major family life stress events occur in all income groups they occur significantly more often for children raised in lower income families and this differential stress exposure has been suggested as possibly the central mechanism accounting for social gradients observed in health and other developmental outcomes.<sup>30</sup>

In the WAACHS, interviews with carers revealed excessive levels of stress as measured by a selection of life stress events (see Chapter 3). These included events such as death within the family, serious illness of family members, arrest and incarceration, family violence, and financial incapacity. On average, carers reported 4.20 (CI: 4.07–4.33) life stress events having occurred within the past year, out of a possible 14 events. Higher numbers of carer-reported life stress events were associated with an increased proportion of children at high risk of clinically significant emotional or behavioural difficulties.

## Chaos

Social and emotional development is constrained by chaos. In 1996 Bronfenbrenner and colleagues reviewed what they termed 'growing chaos' in families, schools, unsupervised peer groups and other settings in which children and young people spend extended periods of time. They noted the damaging and disorganising effects of frenetic activity, lack of structure, unpredictability in everyday activities and high levels of ambient stimulation on the development of social and emotional capacities in children.<sup>15</sup> Not only do such contexts disrupt social development, they have the potential to establish alternate developmental processes that lead to poor outcomes.<sup>31,32</sup> Chaotic systems are effective in disrupting attachment, emotional regulation, and autonomy.<sup>33</sup>

Violence is a prime example of a disorganising influence on human development. In its extreme (e.g. war) violence totally undermines human development, reducing it to a matter of survival. However, less extreme forms of violence (abuse, physical punishment, harsh parenting, bullying and other forms of harassment) are also deleterious to human development and may be particularly harmful for individuals who are genetically or otherwise vulnerable to such harm.<sup>34</sup>

WAACHS data showed that Aboriginal children were more likely to be at high risk of clinically significant emotional or behavioural difficulties where they were subject to higher levels of residential mobility, experienced poor quality of parenting, had exposure to racism and bullying, and for those aged 12–17 years, were no longer being cared for by either of their original parents. This is in addition to the impact of multiple life stress events discussed above.

The origin of such developmental chaos in the lives of children is not merely to be found in families and communities. Governments are also imparting chaos in the





lives of children. Policy development for children has become a political fashion with governments of the day formulating policies and branding, re-branding and repackaging children's services and programs for the life of government rather than for the lives of children.

Governments have a responsibility to formulate, implement and evaluate coherent, sustained policies that assist and support in the development of children. This is predicated on understanding the principles of human development and the expansion of human capability. This means more than just seeking advice, and formulating policy, based upon child development. Previously, children's early development was the sole concern of families. It is now profoundly influenced by practices associated with work, child care, school and community practices, all of which have substantial government inputs. Having well articulated policies regarding the health, safety and development of children that intermesh across departmental jurisdictions is a useful and critical first step. But it is only a first step. Across-government policies need to be translated into coordinated, and jointly developed actions and planning time-frames that require sustaining mechanisms which span State and Commonwealth jurisdictions and the lives of children, rather than just the life of a given government. This requires political and scientific leadership to ensure that parents, the broader community and governments recognise the extent to which the sustainability of society and the economy is dependent on such a strategic vision. It requires bipartisan agreement about what is important in this focus and a commitment to change programs affecting children where evidence shows them to be ineffective or sub-optimal and to implement programs where evidence shows them to be efficacious and effective.

### Social exclusion

Social and emotional development is constrained by social exclusion. Social exclusion is a powerful disrupter of the development of social capacities in children and adults alike. At the broadest level, governments have a duty, through legislation and regulatory frameworks, to minimise or prevent actions that result in the unjust exclusion of individuals or groups within the Australian population from participation in social, economic and civic life and to support mechanisms that promote access and equity.

Thus, at the most fundamental level it is the responsibility of governments to address issues of social exclusion. Relative to the period of initial colonization, Aboriginal Australians have had only recent legal recourse to address the fundamental aspects of social exclusion affecting them. Examples include the 1967 constitutional referendum granting the Commonwealth concurrent power to make laws for Aboriginal people wherever they lived, as well as to allow Aboriginal people to be included in the national census; the 1976 Aboriginal Land Rights (Northern Territory) Act establishing the basis upon which Aboriginal people in the Northern Territory could, for the first time, claim rights to land based on their traditional occupation; the Mabo judgement (1992) in which the High Court held that Australia was not *terra nullius* (i.e. land belonging to no one) when settled by the British in 1788, but occupied by Aboriginal and Torres Strait Islander people who had their own laws and customs and whose 'native title' to land survived the Crown's annexation of Australia; and the Wik case (1996) which determined that the granting of a pastoral lease, whether or not the lease has now expired (or has otherwise been terminated), did not necessarily extinguish all native title rights and interests that might otherwise exist.<sup>35</sup> These laws and judgements have



played a central role in recognising not only the existence of Aboriginal people prior to colonization, but in asserting their rights of participation and of ownership.

Social exclusion constrains child and adult development because it restricts access to opportunities and choices to participate socially, economically and civically. Exclusion can take many forms ranging from frank racism and vilification, to bullying and subtler experiences that entail refusals of friendship and non-recognition. These actions also span multiple settings and occur at home, at school, in the work place, and in the day-to-day experiences involving social exchanges and transactions. Experiences such as these alter access to developmental resources and have the potential of establishing reciprocal patterns of socialisation that weaken individual capacities, disrupt social cohesion and alienate groups. Racial discrimination has a major impact on affective function resulting in depression and anxiety and has been shown to prospectively link with drug use in family members.<sup>36</sup>

### **SOCIAL EXCLUSION AND THE INTERGENERATIONAL EFFECTS OF THE PAST POLICIES OF FORCED SEPARATION OF CHILDREN FROM THEIR NATURAL PARENTS**

The WAACHS findings on the intergenerational effects of the past policies of forced separation of children from their natural parents are noteworthy in several respects.

- ◆ These are the first data of their kind to establish both the current proportion of WA Aboriginal children and their families affected by forced separations and document some of the associated outcomes
- ◆ The survey sample is sufficient to report the current proportion of Aboriginal children living in families where a carer or the carer's parent had been forcibly separated from their natural family with a level of precision not previously available. This shows that over one-third (35.3 per cent; CI: 32.8%–37.8%) of Western Australian children aged 0–17 years are currently living in such households.<sup>1</sup>
- ◆ The large sample of almost one-in-six eligible Western Australian Aboriginal families has also enabled the use of multivariate statistical modelling methods which adjust for a range of other possible confounding factors such as age, sex and level of relative isolation. When these adjustments are made, the independent contribution of past experience of forced separation is more clearly apparent.
- ◆ The effects of forced separation appear to be transmitted between carers and their own children rather than between children and their grandparents. Outcomes for children whose carers were not separated, but whose grandparents were separated, do not show poorer outcomes relative to children in families not affected by separation policies.
- ◆ The WAACHS findings on the longer term effects of forced separation include independently recorded corroborative data on health, and mental health outcomes established from consensual record linkage of the survey findings with Western Australian hospital and Mental Health Service records.

*Continued . . . .*





## SOCIAL EXCLUSION AND THE INTERGENERATIONAL EFFECTS OF THE PAST POLICIES OF FORCED SEPARATION OF CHILDREN FROM THEIR NATURAL PARENTS *(continued)*

- ◆ The question on forced separation used in the WAACHS survey was identical to that used in the 2002 ABS National Aboriginal and Torres Strait Islander Social Survey (NATSISS). While there are some differences in the methodology of these two surveys, the NATSISS and the WAACHS both demonstrate the links between adverse health and social outcomes and prior forced separation of Aboriginal people from their natural families.

While the survey findings are confined to the effects of past child removal policies on the Western Australian Aboriginal population, they help to inform aspects of the national discussion which has followed the release of Human Rights and Equal Opportunity Commission's *Bringing Them Home* report in 1997.

Much of this discussion has centred on the report's summary finding that 'somewhere between one-in-three and one-in-ten Aboriginal children had been separated from their families between 1910 and 1970.' The 'one-in-three' estimate has been widely criticised on the grounds that it over-generalised the finding from a number of local studies in Melbourne, the Kimberley region of Western Australia and the Bourke region of New South Wales.<sup>37</sup> The lower estimate of 'one-in-ten' was based on the 1994 ABS National Aboriginal and Torres Strait Islander Survey which reported that 10.1 per cent of those aged 25–44 years, and 10.6 per cent of those older than 44 years had been separated from their natural family by missions or government or welfare.<sup>38</sup> The findings from the WAACHS are consistent with the NATSISS data in showing that a much higher proportion of child separation occurred within Western Australia than occurred nationally.

Given the differences in removal policies which existed between the States and the ways in which these changed in their application over time, it seems unlikely that the number of Aboriginal and Torres Strait Islander people who were removed will ever be precisely ascertained from historical sources. This suggests that the current lived experience of Aboriginal people as reported in representative population surveys such as the WAACHS, NATSIS (1994) and the NATSISS (2002) will have to be relied upon for the best estimate of the minimum number of people and families so affected (see Chapter 7).

The intense debates about the actual numbers of children and families involved have displaced and excluded from the national discussion the reality that these experiences occurred at all and that they have profound significance for Aboriginal people and the nation. These findings should enable a more nuanced and sympathetic discussion of the enduring impact of past forced separations and point to why this remains an unresolved issue of such pressing concern for so many individuals and families. It is our hope that the WAACHS data will enable the national discussion to move beyond disputation of the precise numbers of children and families involved towards a true understanding of the extent of the suffering and disadvantage that past policies of separation have inflicted on Aboriginal Western Australians.



## Social inequality

Finally, social and emotional development in children is constrained by social inequality. Evidence now shows that within and between nations there are sharp social gradients linked to health outcomes and that result in their unequal distribution within populations. The mechanisms that are theorised to link these observed social gradients to unequal population health include:

- ◆ Inadequacies in material circumstances that arise from the absolute income of individuals and their ability to influence their immediate and wider environment to the benefit of their health<sup>39,40</sup>
- ◆ A hereditary predisposition to the effects of stress that arises from perceptions of relative income inequality can cause poorer health<sup>41,42</sup>
- ◆ Unequal accumulation of exposures and experiences that have their source in the material world and that produce an unequal distribution of health and illness.<sup>43</sup>

Social inequality results in the unequal distribution of, and access to, resources for the development of adults and children. These resources certainly include income and wealth, however they extend to include human, psychological and social capital. This inequality may arise from inadequacies in the laws and regulations for the redistribution of wealth and social benefit, differences in the use and accumulation of wealth by individuals and groups, and lack of access to the means for generating these resources by some groups relative to others.

Social inequality constrains access to developmental resources and increases the linkage between developmental resource domains, which include time, income, psychological capital and social capital. Thus, as social inequality increases, the human, psychological and social capital within groups becomes more homogenous. This concentrates risks both within and across contexts for particular groups and sub-populations. For example, as inequality increases it is more likely that within groups of children in their families, or in their neighbourhoods, or in their schools, levels of human, psychological, and social capital are all higher (or lower) – incomes are probably higher too thus enabling more flexibility in purchasing developmental resources from other domains despite lack of time. Several studies have demonstrated the relationship between social inequality and developmental outcomes.<sup>44-46</sup>

Social inequality has been a persistent feature of innumerable reports in which the circumstances of Aboriginal people are compared to those of the majority population. Findings from the WAACHS highlight the extent of social inequality affecting families with Aboriginal children.<sup>1</sup> Along with the other constraints on development, social inequality poses a substantial barrier to effective gains in improving the physical health and social and emotional wellbeing of Aboriginal children and young people.

In summary, this section has detailed the prompts, facilitators and constraints that effect the acquisition of key developmental capacities in children and young people. The application of these principles to children and young people is artificial in the sense that these same mechanisms also apply across the life course to adult development as well. The next section provides policy direction that utilises these developmental principles to suggest actions on the part of governments and agencies seeking to improve the Australian Aboriginal circumstance.



## SUSTAINING INTEGRATED ACTION: WHAT IS MOST NEEDED NOW?

### THE CURRENT POLICY CONTEXT

Aboriginal mental health is a relative newcomer to the national health agenda. The first national analysis of Aboriginal and Torres Strait Islander mental health was reported by Swan and Raphael in 1995 in their *Ways Forward: National Consultancy Report on Aboriginal and Torres Strait Islander Mental Health*.<sup>47</sup> This seminal report led to the development, in 1996, of the *Aboriginal and Torres Strait Islander Emotional and Social Well Being (Mental Health) Action Plan*<sup>48</sup> (1996–2000). An independent review of the *Action Plan* in 2001 recommended a more strategic approach building on the work of the *Plan*.<sup>49</sup> In response to these recommendations, Australian Governments in 2003 developed and implemented agreements based upon a National Strategic Framework for Aboriginal and Torres Strait Islander Health. This Framework identifies nine key result areas, one of which is specific to emotional and social wellbeing.<sup>50,51</sup>

The 2003 National Strategic Framework was developed concurrently with initiatives to improve performance reporting across Commonwealth, State and Territory jurisdictions.<sup>52</sup> However, the key result areas are restricted in their capacity to reflect the population mental health morbidity and mental health care of Aboriginal and Torres Strait Islander peoples. In addition to the challenges of data quality and identification of Aboriginal status in many jurisdictions, these performance indicators are largely confined to the measurement of severe mental health outcomes. Rates of hospitalisation for anxiety and depression, self harm and child abuse substantiations are the principal performance indicators for emotional and social wellbeing.

To better balance the need for upstream indicators of social and emotional wellbeing for Aboriginal Australians, nation-wide consultations were undertaken by the Commonwealth during 2003 regarding a draft Social and Emotional Wellbeing Framework. The draft Framework has received State and Territory approval and is now awaiting final Australian Government endorsement to establish this as policy.<sup>53,54</sup> While it recognises the need to engage with other sectors in addressing the many broader issues affecting mental health outcomes, such as employment, education, housing, justice and Aboriginal and Torres Strait Islander Affairs, it particularly highlights the significant responsibility of the health sector in building partnerships between Aboriginal Community Controlled Health Services and other mental health services.

A number of related policy developments in Aboriginal affairs have also shaped the evolution of policy in Aboriginal mental health. In particular, the Council of Australian Governments' Reconciliation Framework<sup>55</sup> in November 2004 affirmed that all governments would continue their efforts to advance reconciliation and address Indigenous disadvantage. In addition to the continuation of support for reconciliation through the promotion of recognition, respect and understanding between Aboriginal and non-Aboriginal Australians, three priority areas for governments were agreed:

- ◆ Investing in community leadership and governance issues
- ◆ Reviewing and re-engineering programs and services to ensure they deliver practical measure that support families, children and young people; and measures for tackling family violence, drug and alcohol dependency and other symptoms of community dysfunction
- ◆ Forging greater links between the business sector and Aboriginal communities to help promote economic independence.



## INTERSECTORAL POLICY SIMILARITY AND THE COAG TRIALS

It is difficult to underestimate the importance of the COAG initiative with respect to the establishment of policy similarity across government sectors. Drawing on the work of Freeman in studies of cross-national similarity in health care policy, there are three processes in play that increase policy similarity between sectors: *convergence*, in which policy similarity occurs through similar forces acting on different systems; *diffusion*, through the movement of information and technologies between them; and *intersectoralisation*, (in Freeman's work this is 'internationalisation') through the imposition of a common regulatory framework.<sup>56</sup>

Public sector policy convergence in problems of human development has been most commonly driven (at least tacitly) by outcomes of common interest between departments. These problems are inevitably complex and include drug use, juvenile offending, violence, institutional care, truancy, and early pregnancy, to name a few. Whether these outcomes are regarded politically (as forms of social, economic and civic participation), or as strategic issues for the whole of government (i.e. juvenile offending) or as 'core business' for specific government departments (e.g. in the case of education authorities: school failure, truancy, early school leaving) they have a similar basis. This similar basis is in the form of shared and cumulative risk exposures, life course persistence of many of these problems, causal complexity, their appearance across a variety of service sectors (e.g. mental health, education, judicial) and unequal population distributions substantially linked to social exclusion and inequality. No single agency is in a position to effectively manage these problems and tackle their root causes. This commits departments to managing the pointy end of these problems without recourse to the development and implementation of prevention strategies which entail joint initiatives.

Thus far intersectoralisation as a principal force for policy similarity operating across government departments has been achieved through fiscal and prudential regulatory frameworks that largely have sought to achieve cost containment and efficiency in the competitive allocation of resources and services. This has mandated public contracting of government services with the separation of mechanisms of funding from those of purchasing and providing services. Thus intersectoralisation has been achieved principally in the conduct of government business – that is, the form of it – rather than through any coherence of policy (i.e. the content) aimed at developmental outcomes across government departments – be they health, education, welfare or otherwise. Certainly in Australia there has been a recent interest in whole-of-government policy approaches to more complex problems of human development. While the rhetoric of these initiatives suggests intersectoralisation of policy content, in the main such initiatives are linked to short term policy strategies that overarch government departments and that do not regulate joint strategic development of services and, quite particularly, joint accountability for outcomes. Nor have these actions been sustained across the lives of governments (and hence the lives of individuals) in ways to produce policy coherence and efficient progress.

The COAG trials represent an important experiment in which both the form and content of policy are directed at improving Aboriginal circumstances. A key test of this will be the sustainability of this initiative across the lives of governments and hence across the lives of Aboriginal children and families.



A milestone in the implementation of the COAG Reconciliation Framework was the commissioning of a major review of government service provision. Following extensive public consultation on its initial report, the COAG Steering Committee for the Review of Commonwealth/State Service Provision released its *Overcoming Indigenous Disadvantage: Key Indicators 2003* report.<sup>57</sup> The endorsement of the report marked the commitment of Australian governments, to not only to tackle the root causes of Aboriginal disadvantage, but also to monitor the outcomes in a systematic way that crosses jurisdictional and portfolio boundaries. All jurisdictions are now required to report annually against these indicators. While this is an important step towards raising the transparency of government, the indicator framework itself is based on a vision of what life ideally should be like for Aboriginal people and a strategic focus on key areas that need to be targeted if that longer term vision is to be realised.

**FIGURE 8.1: COAG INDICATOR FRAMEWORK**



SOURCE: Steering Committee for the Review of Government Service Provision, November 2003

The *Overcoming Indigenous Disadvantage Indicator Framework* includes three inter-related priority outcome areas required to sustain human and community development:

- ◆ Safe, healthy and supportive family environments with strong communities and cultural identity
- ◆ Positive child development and prevention of violence, crime and self-harm





- ◆ Improved wealth creation and economic sustainability for individuals, families and communities.

The priority outcomes are under-pinned by further two tiers of indicators. These are first, a set of twelve longer-term headline indicator measures of major social and economic factors that need to improve if the vision is to be achieved (see Figure 8.1). The second tier is a set of seven key areas for action and their associated strategic change indicators. These indicators were selected to be of relevance to all governments and Aboriginal stakeholders and their capacity to demonstrate the impact of programs and policy interventions in the short (18 months) to medium term (5 years).

## IMPROVED INFORMATION AND DATA QUALITY

A significant obstacle to progress has been the availability of timely, comprehensive, good quality data specific to the Aboriginal population. In the past decade major steps have been taken to improve this.

The first national survey of Aboriginal and Torres Strait Islander people was conducted in 1994<sup>38,58-60</sup> in response to the 1991 recommendations of the Royal Commission into Aboriginal Deaths in Custody.<sup>61</sup> These data were notable for the inclusion of questions on a diversity of topics, including health. Since this first survey there has been an increasing effort to improve the quantity, timeliness and quality of information on Australia's Aboriginal population.<sup>62-64</sup> These efforts include the Aboriginal and Torres Strait Islander components of the 1995 and 2001 National Health Surveys as well as the biennial reports on the health and welfare of Australia's Aboriginal and Torres Strait Islander Peoples.<sup>2,65-69</sup> At present results of the 2004 Aboriginal and Torres Strait Islander component of the National Health Survey are in preparation. Additionally, the Australian Government has commissioned *Footprints in Time* – the Longitudinal Study of Indigenous Children. This ambitious project will seek to provide the first comprehensive longitudinal data on the development of Australian Aboriginal children.

These surveys, along with the WAACHS, represent significant milestones in the delivery of data to meet information needs for and about Aboriginal Australians. With these data and the evidence that flows from them come expectations of actions and initiatives to address the difficulties that they describe. However, it remains unclear just how the implementation of initiatives such as the COAG trials will measure their progress in meeting their key performance objectives. These objectives call for the collection of adequate quantities of local information targeted specifically to the COAG indicators.

## THE ABOLITION OF ATSIC AND THE MAINSTREAMING OF PROGRAMS

In April 2004 the Australian Government moved to abolish the Aboriginal and Torres Strait Islander Commission (ATSIC) and its regional councils and moved to mainstream the administration of the programs for which ATSIC had responsibility. ATSIC Commissioners, elected by the regional councils, were responsible for policy and accountable for program oversight across activities such as community development and employment, legal services, infrastructure, and land issues. The evolution of ATSIC gave it particular strengths in cross-sectoral activities and, through this, the Commission was able to develop a range of policies and programs that entailed the coordination across government portfolios. As Anderson (2004) noted, '(ATSIC) was the only institutional mechanism (with the exception of time limited



interdepartmental committees) that enabled this . . . up until the implementation of the COAG trials' <sup>70</sup>

From 1 July 2004 some thirty-four programs and portfolio agencies that were previously under the aegis of the Aboriginal and Torres Strait Islander Commission (the elected arm) and the Aboriginal and Torres Strait Islander Services (ATSIS – the executive agency) were transferred across twelve Australian Government departments and portfolios. From that date, a new office, the Office of Indigenous Policy Coordination (OIPC), is responsible for:

- ◆ Providing the primary source of advice on Aboriginal issues to the Minister for Indigenous Affairs
- ◆ Coordinating and driving whole-of-government innovative policy development and service delivery across the Australian Government
- ◆ Developing new ways of engaging directly with Aboriginal Australians at the regional and local level
- ◆ Brokering relations with State and Territory Governments on Aboriginal issues
- ◆ Reporting on the performance of government programs and services for Aboriginal people to inform policy review and development
- ◆ Communicating government policy directions to Aboriginal people and the wider community
- ◆ Managing a number of Aboriginal programs and transitional services, following the effective closure of ATSIC-ATSIS.<sup>71</sup>

The work of the OIPC is supported by 30 Indigenous Coordination Centres in metropolitan and regional Australia (formerly ATSIC-ATSIS offices) that have become (or are becoming) multi-agency centres for coordination of Aboriginal specific programs in the regions.

At present Australian Government and State and Territory jurisdictions are making a considerable commitment to and investment in whole-of-government strategies.<sup>72</sup> With the abolition of ATSIC, advances in whole of government approaches for large segments of the Aboriginal population are now within the carriage of entirely new mechanisms.

## MUTUAL OBLIGATION AND SHARED RESPONSIBILITY AGREEMENTS

One of the more controversial aspects of the Australian Government's July 2004 reforms is the way in which services are to be provided for Aboriginal and Torres Strait Islander people following the abolition of ATSIC. This relates to the way in which Aboriginal interests are to be represented at the local and regional levels and the administrative arrangements supporting coordinated regional planning and accountability.

The regional structures now being established include Regional Partnership Agreements (RPAs) and Shared Responsibility Agreements (SRAs).<sup>71</sup> The concept of RPAs has been generally supported by Aboriginal stakeholders and all levels of government for their potential capacity to bring about more coherent government investment, joint priority setting and coordination of services. However, there has been less universal endorsement of the proposed Shared Responsibility Agreements. Under these arrangements, family or community groups (usually remote) are required to



offer practical commitments in return for Government funding. The SRAs document what the family, community and government are each responsible for contributing to a particular activity, what outcomes are to be achieved, and the agreed milestones to measure progress.

The SRAs have been criticised by some as being potentially punitive and discriminatory and because they might breach existing State and Territory Human Rights Acts and some of Australia's international treaty obligations.<sup>73</sup> Other Aboriginal leaders have urged that mutual obligation not be trivialised or misconstrued by 'people who see themselves as advocates of Aboriginal rights'.<sup>74</sup> These leaders argue that such agreements are needed in very disadvantaged communities where there has been a collapse of expectations regarding the provision of basic services that are simply taken as a given by other Australians. Where SRAs are negotiated on a basis of equal responsibility to the achievement of mutual objectives, some Aboriginal leaders have suggested that these could be

*'...helpful to Aboriginal people and community leaders to ensure the resources needed to sustain culture, language, physical wellbeing and other aspects of their lives for the future of Aboriginal people – but not at the expense of the basic human rights of those they represent.'*<sup>74</sup>

In summary, the findings of the WAACHS emerge at a time of considerable volatility with respect to the current Aboriginal policy setting and the emergent arrangements for regional management of services. Just how these policy settings and service arrangements will affect the uptake and translation of the survey findings into appropriate policy and action is difficult to predict. A potential strength in the current milieu is a focus on the multiple causes of Aboriginal disadvantage and a government imperative for accountable joint action sustained over a longer period of time. Significantly improved data, at least in some jurisdictions, is also of critical value in monitoring progress, although there is now an urgent need to insure timely data collection and delivery to meet need.

## THE DRIVERS OF DEVELOPMENTAL CHANGE

In this section the survey findings are assessed with respect to the burden of social and emotional difficulties, the prompts, facilitators and constraints of development, and the policies most likely to foster desired change at the level of populations, communities, families and individuals.

### DRIVERS OF DEVELOPMENTAL CHANGE IN POPULATIONS

A major theme in the WAACHS findings is the theme of scale. The scale of burden associated with risk of clinically significant emotional or behavioural difficulties in the Aboriginal population is very high, and the size of the Aboriginal population is very small, relative to the majority population. The evidence suggests that at current levels, gains in education, training and employment are not effectively ameliorating the population burden of physical and mental health morbidity in the Western Australian Aboriginal population. Other factors, notably stress and life circumstances, are overwhelming the benefits that may accrue merely through improving education and income for individuals.

It is in this context that the Australian Government has moved to mainstream programs and services for the Aboriginal population (see above). Whatever the merits





or otherwise of this decision, it needs to be kept in mind that, relative to the majority population, there is not a level playing field with respect to the burden of mortality and morbidity in the Aboriginal population. Numerous reports over several decades continue to document this and, along with the WAACHS results, they confirm striking differences in mortality, morbidity and service access and their regional distributions.<sup>4</sup> It is critical that the intensity (i.e. funding, size, availability and relevance) of programs for prevention, identification and treatment of the burden of Aboriginal disease matches this burden. This will inevitably require management of majority population expectations of what is fair and just and provision of the evidence and rationale for the intensity of service provision to the Aboriginal population.

Equality, sustainability, productivity and empowerment form the basis of human development and the expansion of human capabilities.<sup>75</sup> With this in mind, governments are uniquely placed to influence whole populations or sub-populations through the creation of legal and social frameworks and the implementation of policies. In this way, the Australian Government in concert with State and Territory jurisdictions have a principal responsibility for expanding human capabilities in populations. Thus, at the level of the Aboriginal population the major goal of government is in the expansion of human capabilities by:

- ◆ Enforcing legal frameworks that end discrimination, reduce social exclusion and increase economic, social and civic participation
- ◆ Promoting and strengthening local institutions that provide opportunities for participation and empowerment in a range of activities and services
- ◆ Ensuring a fair distribution of opportunities through a fair distribution of income, wealth and the means of income and wealth generation
- ◆ Setting benchmarks for and monitoring three key indicators of human development: income, health and knowledge
- ◆ Directing the creation or maintenance of data sources on which to base evidence of progress.

These actions need not be driven from the top-down, nor do they over-ride local or community participation, or the participation of private sector enterprise or initiatives. As Jolly points out,

*‘the principal goal of these actions is to broaden choice and opportunities . . . Nothing should be decided at a higher level than is necessary to ensure that the interests of all stakeholders are taken into account.’<sup>76</sup>*

However, the investment in these actions by government will need to be commensurate with the scale of the task ahead. Changes attributable to advances in income, education and training with the Australian Aboriginal population are presently too weak and require a substantial new focus and an insistence on improvement in order to effect greater population capability. This is why there is a requirement to focus on improvements in fundamental aspects of Aboriginal human capital – health, education and income – as a central, but not exclusive, strategy in improving capability.

## DRIVERS OF DEVELOPMENTAL CHANGE AT THE COMMUNITY LEVEL

The effective functioning of communities plays a critical role in supporting the economic and social wellbeing of families and children. Good community leadership and governance is well recognised as a primary driver of human development in



Aboriginal communities.<sup>77</sup> Failures in community governance on the other hand have been associated with catastrophic social dysfunction such as endemic alcohol abuse and family violence.<sup>78</sup> Improving community governance is one of the first objectives of the COAG community trials such as those currently underway in the Tjurabalan region of Western Australia and other States and Territories.<sup>72</sup> These trials are seeking to achieve this by maintaining culturally appropriate community democracy and decision making while developing new regional partnerships between communities and governments at all levels. These arrangements are endeavouring to overcome previous structural impediments such as dispersed and fragmented government funding and accountability. They clearly require significant training investments in community leadership, corporate governance, and community based service provision.<sup>79</sup>

Another important community driver of social functioning and human development in Aboriginal people is the maintenance of Aboriginal self-determination consistent with traditional cultural practices and values. This is evident in a number of studies of Indigenous communities in the USA and Canada. For example Chandler and Lalonde's 1998 study of the variation in rates of youth suicidal behaviour between the various First Nations communities across British Columbia's communities demonstrated that the communities which had taken active steps to preserve and rehabilitate their own cultures, languages and traditional practices were those in which rates of suicidal behaviour were dramatically lower.<sup>80</sup> This highlights the importance for communities of maintaining cultural beliefs and traditional practices which assist young people to maintain their sense of personal continuity and cultural identity in the face of rapid developmental and cultural change.

Recent US studies have demonstrated the importance of self-governance in improving economic viability of Indigenous communities and creating vocational and economic opportunities for families and children. The Harvard Project on American Indian Economic Development has extensively researched its technical assistance projects across Indian communities throughout the USA and identified three key factors which underlie the ability of some Indian Nations to have achieved economic viability in contrast to others.<sup>81</sup> First, these communities have given high priority to asserting Indigenous self direction in decision-making. Second, they have community institutions and processes available to settle disputes fairly, to separate the functions of elected representation and business management, and to successfully implement policies that advance tribal strategic goals. Finally, these communities appear to have established a good match between their governing institutions and Indigenous values and beliefs about how authority should be organised and exercised.

## DRIVERS OF DEVELOPMENTAL CHANGE IN FAMILIES

The most substantial drivers of social and emotional wellbeing in children and young people are those directly related to their families. Nowhere is this more evident than in the strength of the association of life stress events, high residential mobility, poor parenting quality and poor family function with the high risk of clinically significant emotional or behavioural difficulties. These exposures are exacerbated where the carer is in poor physical or mental health and where there are fewer, rather than more, family members in the household.

There are three points of intervention that would promote developmental change through families.



The first, and most basic, entails fundamental improvements in Aboriginal family function through improvements in the health and wellbeing of the carers themselves. As previously documented, illness, mental health problems, and a shorter life expectancy impose a primary barrier on the capacity of Aboriginal carers to function well. This diminishes the capacity of a family unit to function well – particularly where early illness and death result in family breakdown and separation.

The second is in improving carers and families to withstand the effects of multiple life stresses. Merely improving a family's capacity to withstand multiple stresses, without addressing the source of these stresses, is both immoral and nonsensical. Families of Aboriginal children report extraordinary levels of stress – death, incarceration, violence, and severe hardship. The source of these stresses is historical, social and personal and is now seen to comprise the Aboriginal circumstance. Much of the root cause is the continued social exclusion and inequality that diminishes opportunity and choice for individuals, families and communities. This is why there is such an emphasis on capability expansion in the Aboriginal population with an emphasis on health, income and knowledge.

However, these actions are not likely to effect rapid capability expansion in carers of Aboriginal children at present. In the meantime, buffering children from the effects of family and carer stresses, building social support for carers, families and communities, improving the capacity of Aboriginal families to function well – that is, to communicate effectively, manage basic decision-making, regulate emotion, and provide practical and emotional support – and providing health, child care and educational services that better recognise and meet the needs of families are critical in improving developmental outcomes for children.

The third point of influence is directly related to the quality of carer-child interactions that seek to directly influence the quality of parenting in Aboriginal families. These programs may take the form of post-natal home visiting, early educational day care, or parenting programs for pre-schoolers or children in early primary years. These are known to be effective in changing child emotional or behavioural outcomes. There is a critical gap in the translation of programs that are effective in the majority population to settings with Aboriginal families in a range of cultural and geographic settings.

## DRIVERS OF DEVELOPMENTAL CHANGE IN INDIVIDUALS

Thus far population, community and family drivers of developmental change have been discussed. This is because the principal findings from the WAACHS suggest that these are major drivers of change. So much so, that without addressing them, a focus on services for individuals will result in minimal or ineffective outcomes.

Individual level drivers of children's social and emotional wellbeing are already in effect in the months prior to conception, throughout gestation, birth and in the years of early childhood. These drivers include the quality of maternal and child health, the way in which this is supported by adequate nutrition, child care and supervision, hygienic living conditions and protection from vaccine preventable diseases, as well as family and social environments supportive of child rearing. The critical impact of these basic requirements for health and growth during the early years, is due to the fact that the rate of brain and nervous system growth is greatest during this time than any other period in life. Optimising nutrition, care and stimulation, and protection from exposure to traumatic violence or other forms of abuse during these growing years is now understood to have life-long consequences in terms of children's cognitive,



emotional and social development and in terms of their longer term adult health and wellbeing.<sup>82</sup>

During the pre-school and primary school years, parenting skills assume a greater role in shaping children's later academic, social and behavioural outcomes. The longer term evaluation of programs such as Headstart in the USA have demonstrated the preventive value of such programs for children's transition from the home environment into formal schooling and longer term benefits for their health, education, emotional and social development.<sup>83,84</sup>

In Western Australia, large-scale trials of systematic parenting initiatives targeting parents with pre-schoolers in disadvantaged areas of Perth have demonstrated that improvements in parenting can improve both the behavioural outcomes of the child and the wellbeing outcomes of the carer.<sup>85</sup> National discussions have recently commenced on initiatives to improve the availability of culturally appropriate parenting information and interventions for Aboriginal and Islander families. These highlight the need for:

- ◆ Promoting existing products more widely
- ◆ Sharing knowledge about existing resources
- ◆ Ensuring local relevance through locally produced resources such as posters, videos and books
- ◆ Maximising impact through use of local images, language and customs
- ◆ Using stories and group discussions to enhance learning and sharing
- ◆ Improving education, advice and assistance to mainstream agencies servicing Aboriginal communities.<sup>86</sup>

Carers at home and in settings away from home (day-care, pre-primary and primary school) need to be skilled in providing specific opportunities for cognitive development, language enrichment, and emotional support. There are specific components of these activities that Aboriginal children would benefit from, including:

- ◆ Activities that involve labelling, sorting, sequencing, comparing and noting means-ends relationships<sup>19</sup>
- ◆ Being read to, drawing and telling stories
- ◆ Adult-child exchanges that promote explaining facts, talking about expectations, encouraging skills, and soliciting information about daily activities outside the home as well as racial socialisation about the realities of oppression and the need to overcome this, as well as clear expectations about sex and alcohol use<sup>20,21</sup>
- ◆ Emotional support from carers which entails the encouragement of exploration, celebration of developmental milestones, guided rehearsal and extension of new skills, and protection from inappropriate disapproval, teasing or punishment.<sup>19</sup>

Certainly some of this happens for some Aboriginal children, but more of it needs to happen regularly for more Aboriginal children and young people. Programs in health, family and children's services and education need to be examined to assess their content with respect to the developmental opportunities and skills needed by carers across settings and the children within them.



Currently, services targeting the mental health of Aboriginal children and young people are inadequately provided at all levels. What now appears to be required is well stated by White-Tenant and Costa (2002):

*'No matter how mental health services are delivered, the understanding of mental health is the same: prevention first, promotion always and intervention when necessary.'*<sup>84</sup>

While there is general support for prevention and promotion initiatives being more widely available in early childhood, there remain significant bureaucratic and jurisdictional barriers to their effective development and delivery. Health, community development, education and justice systems all have a stake in the outcomes that such programs can bring. However, joint delivery and evaluation of such programs along with an insistence to examine alternate funding and accountability is needed.

With regard to young people, the widespread use of alcohol, tobacco and other drugs and substances is a particularly important driver of their poor health and wellbeing. Apart from the immediate health risks, substance use is a manner of coping that frequently interferes with or precludes the necessary development of other critical skills – particularly when taken up at an early age. Young people who learn to use alcohol or drugs to reduce distress may never learn other more adaptive coping skills. This may truncate, interfere with, or circumvent essential and normative maturation processes. Adolescent gang behaviour and other problems associated with petrol inhalation were first described by Nurcombe et al (1970) in the Mornington Island Aboriginal community in terms a psychiatric framework of individual psychopathology.<sup>87</sup> More recent formulations of alcohol and substance abuse among children and adolescents give greater consideration to the psychological, symbolic and social coping functions which the behaviour may serve.<sup>88</sup> Widespread binge drinking and substance abuse by young people are relatively recent and distressing problems for Aboriginal communities; dealing with them is beyond the experience of many people or the ability of agencies. Nevertheless, among remote and more contained urban communities, there have been some encouraging examples of how Aboriginal initiated, and community focused interventions have successfully dealt with the problem by addressing the social context in which these behaviours develop.<sup>89</sup> It remains the case, however, that prevention is the strategy of choice and it is encouraging that both participation in sport and adequacy of parenting are associated with lower proportions of children at high risk of clinically significant emotional or behavioural difficulties. Both of these factors offer realistic intervention opportunities.

Aboriginal children at high risk of clinically significant emotional or behavioural difficulties have a rate of contact with the WA Mental Health System equivalent to their non-Aboriginal counterparts. This observation, however, is misleading for a few reasons. First, there is no capacity for the existing mental health system to meet the existing population need for services and care. This was observed a decade ago,<sup>10</sup> and despite increases in resources for mental health, the mental health system itself will never have the capacity to meet demand – particularly for children and young people. Second, while some comfort might be taken from the fact that Aboriginal children and young people are receiving mental health services at all, the burden associated with their treatment and care is higher. Thus, achieving a comparable level of service to that of the majority population obscures a higher burden requiring (among other things) greater intensity and duration of treatment. Third, the anecdotal information from hospital and clinical services suggests that mental health care is all too often a case of 'too little too late'. When referrals are made there is frequently a much lower level of





engagement and follow through with treatment than with non-Aboriginal children. This may reflect the current paucity of culturally sensitive mental health services for such children and families – particularly in the metropolitan and extremely remote areas of the Western Australia. It could also reflect the practical reality that treatment and support needs cannot be properly met by the child mental health service system alone.

Solutions rest in the development of State policy and local action plans for promoting the social and emotional wellbeing of Aboriginal children and young people across all government sectors. This will require careful community and professional consultation to bring about a better convergence of the human service systems (i.e. health, education, community development, alcohol and drug and justice) having responsibilities for the protection and wellbeing of children and families. It will also require a work force capable of delivering relevant and culturally appropriate services.

## MAKING A DIFFERENCE

This chapter commenced with a message to agencies, policy makers and service providers: Without an understanding of the basic characteristics and processes shaping the Australian Aboriginal population, attempts to formulate effective policies for the arrangement of human services and their delivery to individual Aboriginal children and their families will fail. This assertion has been extended by explaining the nature of the burden of emotional or behavioural difficulties, the prompts, facilitators and constraints of social and emotional development, and the drivers of developmental change in populations, communities, families and children.

The findings to date show that the principal resources available to support and promote the development of children include:

- ◆ the adequacy of the physical environment (i.e. housing, clean water, sanitation and nutrition) in meeting the basic necessities of living
- ◆ levels of family income available to support the development of children
- ◆ the levels of human and psychological capital available to support child development
- ◆ the social capital available to individuals living in the community and wider society.<sup>1</sup>

This present volume of results provides the first comprehensive analysis of the social and emotional wellbeing of Aboriginal children and young people. The findings illustrate the slow rate of change that is likely to occur unless these drivers of change are understood by leaders — Aboriginal and non-Aboriginal alike — and their communities and agencies.

Aboriginal Australians have, of course, lived these experiences and repeatedly voiced their concerns. These concerns have been met with modernity's requirements for 'evidence'. Will better evidence make a difference to the Australian Aboriginal circumstance through improving social and emotional wellbeing for children and young people? Perhaps. The principles for change are known and the evidence for what will work is available. But it will take political will and commitment to long term policies to remove the barriers and deliver to Aboriginal people equality, sustainability, productivity and empowerment. These are central to social and emotional wellbeing and ultimately to human capability and the expansion of choice.



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# APPENDICES

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## APPENDIX A: A GUIDE TO THE SURVEY FIELDWORK INSTRUMENTS

**TABLE A.1:** OVERVIEW OF SURVEY FORMS

<i>Survey Form</i>	<i>Information about</i>	<i>Information provided by</i>	<i>Information recorded by</i>	<i>Number of forms required</i>
<p><b>1. HOUSEHOLD RECORD FORM (HRF)</b></p> <p>Names, sex, age, date of birth, relationship to carers, State/Territory of birth and self-reported Indigenous status of each person in the household.</p> <p>Primary and secondary carers of each child.</p> <p>Duration that each child has lived with primary carer.</p> <p>Relationships within the household.</p> <p>Any other children aged 0–17 years who usually live at this address but who are temporarily away.</p>	Number of people in household and how they are related	Primary carer	Interviewer	One per family
<p><b>2a. CHILD HEALTH QUESTIONNAIRE (CHQLK)</b></p> <p>Collects information about children aged 0–3 years.</p>	Child health information about children 0-3 years	Primary or secondary carer	Interviewer	One for each child 0-3 years
<p><b>2b. CHILD HEALTH QUESTIONNAIRE (CHQBK)</b></p> <p>Collects information about children and young people aged 4–17 years.</p>	Child health information about children and young people 4–17 years	Primary or secondary carer	Interviewer	One for each child/young person 4–17 years
<p><b>3a. PRIMARY CARER'S QUESTIONNAIRE (CARER1)</b></p> <p>Collects information about the carer who is the main person looking after each child.</p>	Family and community circumstances Family life and carer's health Carer's background and experiences	Primary carer	Interviewer	One or more per family
<p><b>3b. SECONDARY CARER'S QUESTIONNAIRE (CARER2)</b></p> <p>Collects information about secondary carer(s) of each child.</p>	Carer's background and experiences	Secondary or primary carer	Interviewer	One or more per family
<p><b>4. YOUTH QUESTIONNAIRE (YSR-S/YSR-I)</b></p> <p>Collects information about young people aged 12–17 years.</p> <p>Two administration methods are available: YSR-S (self-administered) YSR-I (administered by interviewer)</p>	Family and community circumstances Schooling Health risk factors	Young people 12-17 years	Young person or interviewer	One for each young person 12-17 years
<p><b>5. SCHOOL &amp; TEACHER QUESTIONNAIRES</b></p>	Children and young people attending school	Teachers and school leadership team	Teachers and school leadership team	One for each child at school (consent required)



## CONTENT OF THE SURVEY INSTRUMENTS

1. Household Record Form (HRF)
  - List of people currently living in the household
  - List of children about whom information needs to be collected
  - Whether any other children are temporarily away
  
- 2a. Child Health Questionnaire 0–3 years (CHQLK)
  - Information on birth and natural mother
  - Feeding, sleeping and early development
  - Immunisation and health care
  - Common chronic illnesses
  - Dental health
  - Breathing and asthma
  - Separations from family, accidents & hospitalisations
  - Disability and functional impairment
  - Use of medical and other services
  - Use of day care
  - Parenting practices
  
- 2b. Child Health Questionnaire 4–17 years (CHQBK)
  - Information on birth and natural mother
  - Immunisation and health care
  - Common chronic illnesses
  - Dental health
  - Breathing and asthma
  - Separations from family, accidents & hospitalisations
  - Disability and functional impairments
  - Use of medical and other services
  - Use of day care, kindergarten & preschool
  - School and educational progress
  - Emotions, problem behaviours and social development
  - Emotional or behavioural difficulties - Strengths and Difficulties Questionnaire
  - Parenting practices
  - Diet and nutrition



## 3. Carer's Questionnaire (CARER1 and CARER2)

- Languages spoken at home
  - Participation and involvement in Aboriginal activities and culture
  - Education
  - Employment and training
  - Benefits, pensions and income support
  - Family financial strain, carer's income
  - Family stress from alcohol, gambling and violence
  - Experience of forced separation or relocation
  - Positive family interactions and family resilience\*
  - Family life stress events \*
  - Personal and social supports\*
  - Religious beliefs and practice of religion\*
  - Housing arrangements and housing standards\*
  - Perception of local community problems\*
  - Adequacy of, and access to, community amenities and services\*
- \* asked of primary carer only*

## 4. Youth Questionnaire (YSR-I &amp; YSR-S)

- Knowledge of Aboriginal language, culture and heritage
- Health risk behaviour (smoking, sex, alcohol and drugs)
- Diet and nutrition
- Breathing and asthma
- Emotions, problem behaviours and social development
- Emotional or behavioural difficulties – Strengths and Difficulties Questionnaire
- Depression and suicidal behaviour
- Perceptions and experience of school
- Experience of racism and bullying
- Exposure to family violence, alcohol and gambling
- Physical fitness and participation in sport
- Religious beliefs and practice of religion
- Friends and peer influence
- Family support and encouragement





5a. Principal's Questionnaire: School Details

School contact information, school type and year range

Student enrolment (Aboriginal and non-Aboriginal students)

Number of teaching staff (Aboriginal and non-Aboriginal)

Number of non-teaching staff (Aboriginal and non-Aboriginal)

Number of support staff external to the school (Aboriginal and non-Aboriginal)

Proportion of new (inexperienced) teachers

Implementation of professional development and curriculum activities for Aboriginal education

Principal's ratings of:

- School, social and community problems affecting the overall school environment
- School morale and pastoral care arrangements
- School's resources for education of Aboriginal students

Whether school has access to an Aboriginal Islander Education Officer (AIEO)

Whether school has an Aboriginal Student Support and Parent Awareness (ASSPA) Committee

5b. Principal's Questionnaire — Student Academic Details

Main language spoken – at home, in the playground, in the classroom

Rating of overall academic performance

Achievements in literacy and numeracy

Duration of current enrolment at this school

Attendance record this year

Whether boarding, hostel or day student

Whether removed from class for behaviour problems

Use and need of educational support services

5c. Teacher's Questionnaire — Student behaviour

Emotional or behavioural difficulties – Strengths and Difficulties Questionnaire

Functional impairment (peer relations, classroom learning)

Burden and need for professional help

5d. Teacher's Questionnaire\* — Student Skills

Matrices – Non-verbal reasoning skills

Word Definitions – English language proficiency

*\* For high school students this section was administered by a school counsellor, form teacher, year head, or year coordinator*



## APPENDIX B: STRENGTHS AND DIFFICULTIES QUESTIONNAIRE (SDQ) CATI SURVEY OF NON-ABORIGINAL CHILDREN IN WA

### INTRODUCTION

A supplementary survey was undertaken to obtain estimates of the proportion of non-Aboriginal children at high risk of clinically significant emotional or behavioural difficulties, in order to provide comparative figures to those obtained from the WAACHS in respect of Aboriginal Children. To achieve this, a telephone survey of 1,200 responding families with children aged 4–17 years was conducted by the Survey Research Centre at the University of Western Australia. The survey included basic demographic data about the child, and all the questions from the Strengths and Difficulties Questionnaire (SDQ). The data collection for this survey was undertaken in September 2004. The survey was conducted by means of computer assisted telephone interviewing (CATI), with telephone numbers selected at random from the electronic white pages. Figure B.1 gives a summary of how the telephone numbers were selected and screened. Households were only included in the survey if there was at least one child aged 4–17 years who was a resident of Western Australia.

### RESPONSE RATE

In some households, the contacted respondent refused to participate in the survey and terminated the call before it was possible to determine if they would have been in-scope of the survey. As a result it is not possible to calculate an exact response rate. However, it was possible to estimate the approximate response rate, based on knowledge of the proportion of households that would have an in-scope child (24 per cent). Additional respondent refusals occurred after screening had identified the family as in-scope of the survey. Similarly, households that could not be contacted, obviously were not screened. Based on estimating the proportion of unscreened refusals and non-contacts that would be in-scope, it is estimated that 1,814 in-scope families were selected to obtain 1,200 completed interviews — a response rate of approximately 66 per cent.

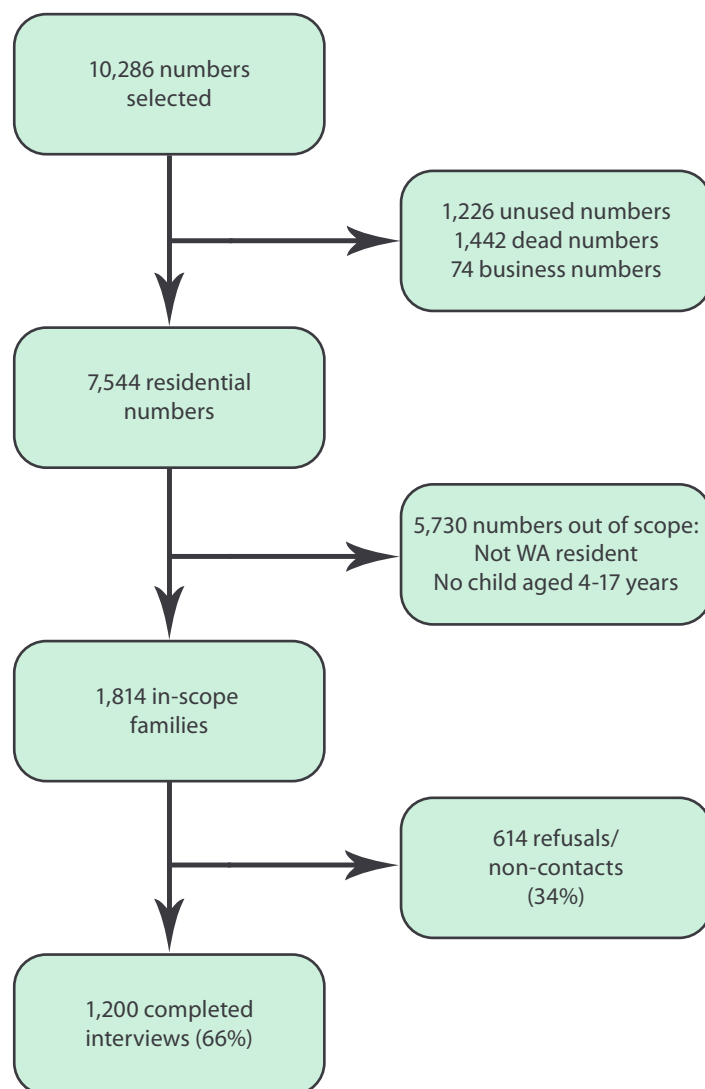
Unlike the WAACHS, where all in-scope children were included in the survey, for the purposes of the CATI survey only one eligible child was included per household. If there was more than one child in the age range 4–17 years living in the household, the child with the next birthday was selected to participate in the survey. The primary carer of the child was then asked about the selected child only.

### REPRESENTATIVENESS OF THE SAMPLE

Age, sex, postcode and indigenous status of the selected child were collected from the primary carer. The distribution of the sample according to these characteristics was compared with data from the 2001 Census. There was no evidence of any response bias by age or sex. Postcodes were mapped firstly to the Perth Statistical Division/ Remainder of WA, and also to each of the four socio-economic indexes in the 2001 SEIFA. There was no evidence of any response bias by either part of state or socio-economic status.



**FIGURE B.1: ESTIMATED SURVEY RESPONSE RATES**



There were only 30 children identified as being of Aboriginal or Torres Strait Islander origin in the CATI survey. Based on 2001 ABS Estimated Resident Population figures,<sup>1</sup> 5.9 per cent of children aged 4–17 years in WA are of Aboriginal or Torres Strait Islander origin, which suggests that about 70 Aboriginal children should have been selected in the CATI survey. Thus it appears that Aboriginal children were under-represented in the CATI sample. However, as the purpose of the CATI survey was to obtain estimates of the proportion of non-Aboriginal children at high risk of clinically significant emotional or behavioural difficulties, and since the non-Aboriginal children in the CATI survey have been analysed separately, this issue does not directly impact on the representativeness of the CATI sample.

**WEIGHTING**

The 1,170 non-indigenous children were analysed separately from the 30 Aboriginal children, and separate weights were derived for non-Aboriginal and Aboriginal children.



As there was no evidence of any consistent non-response bias, the non-Aboriginal sample was treated as self-weighting, and each child was given an equal weight, based on the 2001 ABS Estimated Resident Population figures.<sup>2</sup>

## IMPUTATION

A small amount of item-level non-response occurred in cases where the primary carer answered 'don't know' to a question. Several SDQ items had no 'don't know' responses, while the highest number of non-responses for an item was 19.

The same method of non-response imputation was used for the CATI data as was used in the WAACHS sample (See *Appendix B in Volume One — The Health of Aboriginal Children and Young People*<sup>3</sup>). Random hot deck imputation was used to randomly choose donor records to contribute data for the missing records, within imputation classes. Imputation classes were based on age, sex and a Perth metropolitan area/Ex-metropolitan split.

## RESULTS

### Non-Aboriginal children

Most of the results from the CATI survey are shown in Chapter 2. They provide comparisons for the data on Aboriginal children collected in the WAACHS. Extra tables are presented here, based on region and the ABS Socio-Economic Indexes for Areas.<sup>4</sup> For both of these variables, data collected in the CATI survey is not directly comparable with data collected in the WAACHS. This is due to the fact that the WAACHS survey sample was selected based on Census Collection Districts as used in the 1996 census. For the CATI survey, participants were asked to provide their postcode, but it was not possible to assign participants to census collection districts. Area based statistics from the CATI survey are aggregated from postcodes and not Census Collection Districts.

As only postcode of residence was collected from the participants in the CATI survey, it was not possible to map the CATI survey respondents to the level of relative isolation categories used in the WAACHS. Even if this information had been available, due to the fact that the population of non-Aboriginal children in areas of high and extreme relative isolation is very sparse, it would not have been possible to produce estimates for these areas from this sample.

Table B.1 shows estimates of the proportion of non-Aboriginal children at high risk of clinically significant emotional or behavioural difficulties by age group and part of state. No significant differences were found between children residing within the Perth statistical division and the remainder of the state.



**TABLE B.1: NON-ABORIGINAL CHILDREN AGED 4–17 YEARS IN WA — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP AND PART OF STATE**

Age Group	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>Perth Statistical Division</b>					
4–11 years	Low	107 000	(97 000 - 116 000)	72.4	(68.4 - 76.4)
	Moderate	17 700	(13 200 - 22 200)	12.0	(9.1 - 14.9)
	High	23 000	(17 900 - 28 000)	15.6	(12.3 - 18.8)
12–17 years	Low	86 900	(78 000 - 95 800)	78.2	(73.9 - 82.5)
	Moderate	9 930	(6 500 - 13 300)	8.9	(6.0 - 11.9)
	High	14 300	(10 200 - 18 300)	12.8	(9.4 - 16.3)
<b>Total</b>	Low	194 000	(183 000 - 204 000)	74.9	(72.0 - 77.9)
	Moderate	27 600	(22 100 - 33 100)	10.7	(8.6 - 12.8)
	High	37 300	(30 900 - 43 600)	14.4	(12.0 - 16.8)
<b>Remainder of WA</b>					
4–11 years	Low	36 900	(30 700 - 43 200)	65.4	(58.5 - 72.3)
	Moderate	8 070	(5 000 - 11 100)	14.3	(9.2 - 19.4)
	High	11 500	(7 800 - 15 100)	20.3	(14.5 - 26.2)
12–17 years	Low	41 300	(34 700 - 47 900)	85.8	(80.3 - 91.3)
	Moderate	1 240	(30 - 2 460)	2.6	(0.1 - 5.1)
	High	5 590	(3 030 - 8 150)	11.6	(6.6 - 16.7)
<b>Total</b>	Low	78 200	(69 700 - 86 800)	74.8	(70.1 - 79.4)
	Moderate	9 310	(6 000 - 12 600)	8.9	(5.9 - 11.9)
	High	17 100	(12 700 - 21 500)	16.3	(12.4 - 20.3)
<b>Total WA</b>					
4–11 years	Low	144 000	(134 000 - 154 000)	70.5	(67.0 - 74.0)
	Moderate	25 800	(20 400 - 31 100)	12.6	(10.1 - 15.2)
	High	34 500	(28 400 - 40 600)	16.9	(14.0 - 19.8)
12–17 years	Low	128 000	(118 000 - 138 000)	80.5	(77.1 - 83.9)
	Moderate	11 200	(7 600 - 14 800)	7.0	(4.8 - 9.2)
	High	19 900	(15 100 - 24 600)	12.5	(9.6 - 15.3)
<b>Total</b>	Low	272 000	(263 000 - 281 000)	74.9	(72.4 - 77.4)
	Moderate	36 900	(30 700 - 43 200)	10.2	(8.4 - 11.9)
	High	54 300	(46 900 - 61 700)	15.0	(12.9 - 17.0)

Tables B.2 to B.5 show the relationship between risk of clinically significant emotional or behavioural difficulties and the ABS SEIFA indexes based on postcode of residence. Each of the four indexes produced by the ABS has been tabulated. In Aboriginal children no association was found between socio-economic status and the risk of clinically significant emotional or behavioural difficulties (see Chapter 2). However, there was some evidence of an association between SEIFA and emotional or behavioural difficulties in non-Aboriginal children. The strongest association was seen with the Index of Education and Occupation. Among children living in postcodes in the bottom 20 per cent of the Index of Education and Occupation 19.1 per cent (CI: 13.6%–24.6%) were at high risk of clinically significant emotional or behavioural difficulties, compared to 9.6 per cent (CI: 5.8%–13.4%) of children living in postcodes in the highest 20 per cent of the Index of Education and Occupation.



**TABLE B.2: NON-ABORIGINAL CHILDREN AGED 4–17 YEARS IN WA — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP AND POSTCODE DERIVED QUINTILES OF INDEX OF RELATIVE SOCIO-ECONOMIC ADVANTAGE**

Age Group	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
Index of relative socio-economic advantage — Bottom 20%					
4–11 years	Low	23 300	(18 200 - 28 400)	70.8	(62.1 - 79.4)
	Moderate	3 410	(1 410 - 5 420)	10.4	(4.6 - 16.2)
	High	6 210	(3 510 - 8 910)	18.9	(11.4 - 26.3)
12–17 years	Low	26 100	(20 700 - 31 400)	81.6	(74.1 - 89.0)
	Moderate	1 550	(190 - 2 910)	4.9	(0.7 - 9.0)
	High	4 350	(2 080 - 6 610)	13.6	(7.0 - 20.2)
<b>Total</b>	Low	49 400	(42 200 - 56 500)	76.1	(70.3 - 81.9)
	Moderate	4 970	(2 550 - 7 380)	7.7	(4.1 - 11.3)
	High	10 600	(7 100 - 14 100)	16.3	(11.3 - 21.3)
Index of relative socio-economic advantage — 2nd quintile					
4–11 years	Low	32 900	(26 900 - 38 900)	66.7	(59.3 - 74.0)
	Moderate	6 830	(4 000 - 9 660)	13.8	(8.5 - 19.2)
	High	9 620	(6 300 - 13 000)	19.5	(13.3 - 25.7)
12–17 years	Low	29 800	(24 100 - 35 500)	80.7	(73.6 - 87.8)
	Moderate	2 170	(570 - 3 780)	5.9	(1.7 - 10.1)
	High	4 970	(2 550 - 7 380)	13.4	(7.3 - 19.6)
<b>Total</b>	Low	62 700	(54 800 - 70 600)	72.7	(67.4 - 77.9)
	Moderate	9 000	(5 800 - 12 200)	10.4	(6.8 - 14.0)
	High	14 600	(10 500 - 18 700)	16.9	(12.5 - 21.3)
Index of relative socio-economic advantage — 3rd quintile					
4–11 years	Low	29 800	(24 100 - 35 500)	71.1	(63.5 - 78.8)
	Moderate	5 590	(3 030 - 8 150)	13.3	(7.6 - 19.1)
	High	6 520	(3 760 - 9 280)	15.6	(9.4 - 21.7)
12–17 years	Low	19 200	(14 600 - 23 900)	74.7	(65.3 - 84.1)
	Moderate	2 170	(570 - 3 780)	8.4	(2.5 - 14.4)
	High	4 350	(2 080 - 6 610)	16.9	(8.8 - 24.9)
<b>Total</b>	Low	49 100	(41 900 - 56 200)	72.5	(66.5 - 78.4)
	Moderate	7 760	(4 800 - 10 800)	11.5	(7.2 - 15.7)
	High	10 900	(7 300 - 14 400)	16.1	(11.2 - 20.9)
Index of relative socio-economic advantage — 4th quintile					
4–11 years	Low	31 000	(25 200 - 36 900)	73.5	(66.1 - 80.9)
	Moderate	4 040	(1 850 - 6 220)	9.6	(4.6 - 14.5)
	High	7 140	(4 300 - 10 000)	16.9	(10.6 - 23.2)
12–17 years	Low	20 800	(16 000 - 25 600)	76.1	(67.2 - 85.0)
	Moderate	3 410	(1 410 - 5 420)	12.5	(5.6 - 19.4)
	High	3 100	(1 190 - 5 020)	11.4	(4.7 - 18.0)
<b>Total</b>	Low	51 800	(44 600 - 59 100)	74.6	(68.9 - 80.3)
	Moderate	7 450	(4 500 - 10 400)	10.7	(6.7 - 14.8)
	High	10 200	(6 800 - 13 700)	14.7	(10.1 - 19.4)

Continued....



**TABLE B.2 (continued):** NON-ABORIGINAL CHILDREN AGED 4–17 YEARS IN WA — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP AND POSTCODE DERIVED QUINTILES OF INDEX OF RELATIVE SOCIO-ECONOMIC ADVANTAGE

Age Group	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>Index of relative socio-economic advantage — Top 20%</b>					
4–11 years	Low	26 700	(21 300 - 32 100)	71.7	(63.6 - 79.7)
	Moderate	5 590	(3 030 - 8 150)	15.0	(8.6 - 21.4)
	High	4 970	(2 550 - 7 380)	13.3	(7.3 - 19.4)
12–17 years	Low	32 300	(26 400 - 38 200)	86.7	(80.6 - 92.7)
	Moderate	1 860	(380 - 3 350)	5.0	(1.1 - 8.9)
	High	3 100	(1 190 - 5 020)	8.3	(3.4 - 13.3)
<b>Total</b>	Low	59 000	(51 300 - 66 700)	79.2	(74.0 - 84.3)
	Moderate	7 450	(4 500 - 10 400)	10.0	(6.2 - 13.8)
	High	8 070	(5 000 - 11 100)	10.8	(6.9 - 14.8)
<b>Total</b>					
4–11 years	Low	144 000	(134 000 - 154 000)	70.5	(67.0 - 74.0)
	Moderate	25 800	(20 400 - 31 100)	12.6	(10.1 - 15.2)
	High	34 500	(28 400 - 40 600)	16.9	(14.0 - 19.8)
12–17 years	Low	128 000	(118 000 - 138 000)	80.5	(77.1 - 83.9)
	Moderate	11 200	(7 600 - 14 800)	7.0	(4.8 - 9.2)
	High	19 900	(15 100 - 24 600)	12.5	(9.6 - 15.3)
<b>Total</b>	Low	272 000	(263 000 - 281 000)	74.9	(72.4 - 77.4)
	Moderate	36 900	(30 700 - 43 200)	10.2	(8.4 - 11.9)
	High	54 300	(46 900 - 61 700)	15.0	(12.9 - 17.0)

**TABLE B.3:** NON-ABORIGINAL CHILDREN AGED 4–17 YEARS IN WA — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP AND POSTCODE DERIVED QUINTILES OF INDEX OF RELATIVE SOCIO-ECONOMIC DISADVANTAGE

Age Group	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>Index of relative socio-economic disadvantage — Bottom 20%</b>					
4–11 years	Low	20 800	(16 000 - 25 600)	68.4	(59.2 - 77.6)
	Moderate	4 040	(1 850 - 6 220)	13.3	(6.6 - 20.0)
	High	5 590	(3 030 - 8 150)	18.4	(10.7 - 26.0)
12–17 years	Low	23 300	(18 200 - 28 400)	80.6	(72.6 - 88.7)
	Moderate	1 860	(380 - 3 350)	6.5	(1.5 - 11.4)
	High	3 730	(1 630 - 5 820)	12.9	(6.1 - 19.7)
<b>Total</b>	Low	44 100	(37 300 - 50 900)	74.3	(68.2 - 80.5)
	Moderate	5 900	(3 270 - 8 530)	9.9	(5.7 - 14.2)
	High	9 310	(6 000 - 12 600)	15.7	(10.5 - 20.9)
<b>Index of relative socio-economic disadvantage — 2nd quintile</b>					
4–11 years	Low	25 800	(20 400 - 31 100)	66.4	(58.1 - 74.7)
	Moderate	4 660	(2 320 - 7 000)	12.0	(6.3 - 17.7)
	High	8 380	(5 300 - 11 500)	21.6	(14.4 - 28.8)
12–17 years	Low	24 200	(19 000 - 29 400)	78.8	(70.7 - 86.8)
	Moderate	2 480	(770 - 4 200)	8.1	(2.7 - 13.4)
	High	4 040	(1 850 - 6 220)	13.1	(6.5 - 19.8)
<b>Total</b>	Low	50 000	(42 800 - 57 100)	71.9	(66.0 - 77.8)
	Moderate	7 140	(4 300 - 10 000)	10.3	(6.3 - 14.2)
	High	12 400	(8 600 - 16 200)	17.9	(12.8 - 22.9)

Continued...



**TABLE B.3 (continued): NON-ABORIGINAL CHILDREN AGED 4–17 YEARS IN WA — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP AND POSTCODE DERIVED QUINTILES OF INDEX OF RELATIVE SOCIO-ECONOMIC DISADVANTAGE**

Age Group	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
Index of relative socio-economic disadvantage — 3rd quintile					
4–11 years	Low	36 300	(30 100 - 42 600)	74.5	(67.7 - 81.3)
	Moderate	6 210	(3 510 - 8 910)	12.7	(7.5 - 18.0)
	High	6 210	(3 510 - 8 910)	12.7	(7.5 - 18.0)
12–17 years	Low	24 200	(19 000 - 29 400)	78.0	(69.9 - 86.1)
	Moderate	1 860	(380 - 3 350)	6.0	(1.3 - 10.7)
	High	4 970	(2 550 - 7 380)	16.0	(8.8 - 23.2)
<b>Total</b>	Low	60 500	(52 800 - 68 300)	75.9	(70.6 - 81.1)
	Moderate	8 070	(5 000 - 11 100)	10.1	(6.4 - 13.8)
	High	11 200	(7 600 - 14 800)	14.0	(9.8 - 18.3)
Index of relative socio-economic disadvantage — 4th quintile					
4–11 years	Low	32 900	(26 900 - 38 900)	70.7	(63.4 - 78.0)
	Moderate	5 280	(2 790 - 7 770)	11.3	(6.3 - 16.4)
	High	8 380	(5 300 - 11 500)	18.0	(11.9 - 24.1)
12–17 years	Low	23 900	(18 700 - 29 100)	76.2	(67.9 - 84.5)
	Moderate	4 040	(1 850 - 6 220)	12.9	(6.3 - 19.4)
	High	3 410	(1 410 - 5 420)	10.9	(4.8 - 17.0)
<b>Total</b>	Low	56 800	(49 300 - 64 400)	72.9	(67.4 - 78.4)
	Moderate	9 310	(6 000 - 12 600)	12.0	(7.9 - 16.0)
	High	11 800	(8 100 - 15 500)	15.1	(10.7 - 19.6)
Index of relative socio-economic disadvantage — Top 20%					
4–11 years	Low	27 900	(22 400 - 33 500)	71.4	(63.5 - 79.3)
	Moderate	5 280	(2 790 - 7 770)	13.5	(7.5 - 19.5)
	High	5 900	(3 270 - 8 530)	15.1	(8.8 - 21.3)
12–17 years	Low	32 600	(26 600 - 38 500)	87.5	(81.6 - 93.4)
	Moderate	930	(0 - 1 980)	2.5	(0.0 - 5.3)
	High	3 730	(1 630 - 5 820)	10.0	(4.6 - 15.4)
<b>Total</b>	Low	60 500	(52 800 - 68 300)	79.3	(74.2 - 84.3)
	Moderate	6 210	(3 510 - 8 910)	8.1	(4.7 - 11.5)
	High	9 620	(6 300 - 13 000)	12.6	(8.5 - 16.7)
<b>Total</b>					
4–11 years	Low	144 000	(134 000 - 154 000)	70.5	(67.0 - 74.0)
	Moderate	25 800	(20 400 - 31 100)	12.6	(10.1 - 15.2)
	High	34 500	(28 400 - 40 600)	16.9	(14.0 - 19.8)
12–17 years	Low	128 000	(118 000 - 138 000)	80.5	(77.1 - 83.9)
	Moderate	11 200	(7 600 - 14 800)	7.0	(4.8 - 9.2)
	High	19 900	(15 100 - 24 600)	12.5	(9.6 - 15.3)
<b>Total</b>	Low	272 000	(263 000 - 281 000)	74.9	(72.4 - 77.4)
	Moderate	36 900	(30 700 - 43 200)	10.2	(8.4 - 11.9)
	High	54 300	(46 900 - 61 700)	15.0	(12.9 - 17.0)





**TABLE B.4: NON-ABORIGINAL CHILDREN AGED 4–17 YEARS IN WA — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP AND POSTCODE DERIVED QUINTILES OF INDEX OF EDUCATION AND OCCUPATION**

Age Group	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>Index of education and occupation — Bottom 20%</b>					
4–11 years	Low	22 400	(17 400 - 27 400)	67.3	(58.4 - 76.2)
	Moderate	3 410	(1 410 - 5 420)	10.3	(4.5 - 16.0)
	High	7 450	(4 500 - 10 400)	22.4	(14.5 - 30.3)
12–17 years	Low	22 400	(17 400 - 27 400)	78.3	(69.8 - 86.7)
	Moderate	1 860	(380 - 3 350)	6.5	(1.5 - 11.6)
	High	4 350	(2 080 - 6 610)	15.2	(7.9 - 22.6)
<b>Total</b>	Low	44 700	(37 900 - 51 500)	72.4	(66.1 - 78.6)
	Moderate	5 280	(2 790 - 7 770)	8.5	(4.7 - 12.4)
	High	11 800	(8 100 - 15 500)	19.1	(13.6 - 24.6)
<b>Index of education and occupation — 2nd quintile</b>					
4–11 years	Low	31 000	(25 200 - 36 900)	69.4	(61.9 - 77.0)
	Moderate	5 280	(2 790 - 7 770)	11.8	(6.5 - 17.1)
	High	8 380	(5 300 - 11 500)	18.8	(12.4 - 25.1)
12–17 years	Low	31 000	(25 200 - 36 900)	82.6	(75.9 - 89.4)
	Moderate	1 860	(380 - 3 350)	5.0	(1.1 - 8.8)
	High	4 660	(2 320 - 7 000)	12.4	(6.5 - 18.3)
<b>Total</b>	Low	62 100	(54 300 - 69 900)	75.5	(70.3 - 80.7)
	Moderate	7 140	(4 300 - 10 000)	8.7	(5.3 - 12.1)
	High	13 000	(9 200 - 16 900)	15.8	(11.5 - 20.2)
<b>Index of education and occupation — 3rd quintile</b>					
4–11 years	Low	32 600	(26 600 - 38 500)	68.6	(61.3 - 76.0)
	Moderate	7 450	(4 500 - 10 400)	15.7	(9.9 - 21.4)
	High	7 450	(4 500 - 10 400)	15.7	(9.9 - 21.4)
12–17 years	Low	21 700	(16 800 - 26 700)	76.1	(67.4 - 84.8)
	Moderate	2 170	(570 - 3 780)	7.6	(2.2 - 13.0)
	High	4 660	(2 320 - 7 000)	16.3	(8.8 - 23.9)
<b>Total</b>	Low	54 300	(46 900 - 61 700)	71.4	(65.8 - 77.1)
	Moderate	9 620	(6 300 - 13 000)	12.7	(8.5 - 16.8)
	High	12 100	(8 400 - 15 800)	15.9	(11.3 - 20.5)
<b>Index of education and occupation — 4th quintile</b>					
4–11 years	Low	32 300	(26 400 - 38 200)	74.8	(67.6 - 82.0)
	Moderate	4 040	(1 850 - 6 220)	9.4	(4.5 - 14.2)
	High	6 830	(4 000 - 9 660)	15.8	(9.8 - 21.9)
12–17 years	Low	21 700	(16 800 - 26 700)	76.1	(67.4 - 84.8)
	Moderate	3 100	(1 190 - 5 020)	10.9	(4.5 - 17.2)
	High	3 730	(1 630 - 5 820)	13.0	(6.2 - 19.9)
<b>Total</b>	Low	54 000	(46 600 - 61 400)	75.3	(69.8 - 80.9)
	Moderate	7 140	(4 300 - 10 000)	10.0	(6.1 - 13.8)
	High	10 600	(7 100 - 14 100)	14.7	(10.2 - 19.3)

Continued....



**TABLE B.4 (continued): NON-ABORIGINAL CHILDREN AGED 4–17 YEARS IN WA — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP AND POSTCODE DERIVED QUINTILES OF INDEX OF EDUCATION AND OCCUPATION**

Age Group	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
Index of education and occupation — Top 20%					
4–11 years	Low	25 500	(20 100 - 30 800)	72.6	(64.3 - 80.8)
	Moderate	5 280	(2 790 - 7 770)	15.0	(8.5 - 21.6)
	High	4 350	(2 080 - 6 610)	12.4	(6.3 - 18.5)
12–17 years	Low	31 400	(25 500 - 37 200)	87.1	(81.0 - 93.2)
	Moderate	2 170	(570 - 3 780)	6.0	(1.7 - 10.4)
	High	2 480	(770 - 4 200)	6.9	(2.3 - 11.5)
<b>Total</b>	Low	56 800	(49 300 - 64 400)	79.9	(74.7 - 85.1)
	Moderate	7 450	(4 500 - 10 400)	10.5	(6.5 - 14.4)
	High	6 830	(4 000 - 9 660)	9.6	(5.8 - 13.4)
<b>Total</b>					
4–11 years	Low	144 000	(134 000 - 154 000)	70.5	(67.0 - 74.0)
	Moderate	25 800	(20 400 - 31 100)	12.6	(10.1 - 15.2)
	High	34 500	(28 400 - 40 600)	16.9	(14.0 - 19.8)
12–17 years	Low	128 000	(118 000 - 138 000)	80.5	(77.1 - 83.9)
	Moderate	11 200	(7 600 - 14 800)	7.0	(4.8 - 9.2)
	High	19 900	(15 100 - 24 600)	12.5	(9.6 - 15.3)
<b>Total</b>	Low	272 000	(263 000 - 281 000)	74.9	(72.4 - 77.4)
	Moderate	36 900	(30 700 - 43 200)	10.2	(8.4 - 11.9)
	High	54 300	(46 900 - 61 700)	15.0	(12.9 - 17.0)

**TABLE B.5: NON-ABORIGINAL CHILDREN AGED 4–17 YEARS IN WA — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP AND POSTCODE DERIVED QUINTILES OF INDEX OF ECONOMIC RESOURCES**

Age Group	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
Index of economic resources — Bottom 20%					
4–11 years	Low	29 800	(24 100 - 35 500)	69.1	(61.4 - 76.7)
	Moderate	4 970	(2 550 - 7 380)	11.5	(6.2 - 16.8)
	High	8 380	(5 300 - 11 500)	19.4	(12.8 - 26.0)
12–17 years	Low	30 400	(24 700 - 36 200)	83.1	(76.3 - 89.8)
	Moderate	1 550	(190 - 2 910)	4.2	(0.6 - 7.9)
	High	4 660	(2 320 - 7 000)	12.7	(6.7 - 18.7)
<b>Total</b>	Low	60 200	(52 500 - 68 000)	75.5	(70.2 - 80.7)
	Moderate	6 520	(3 760 - 9 280)	8.2	(4.8 - 11.5)
	High	13 000	(9 200 - 16 900)	16.3	(11.8 - 20.9)
Index of economic resources — 2nd quintile					
4–11 years	Low	24 200	(19 000 - 29 400)	68.4	(59.9 - 77.0)
	Moderate	4 970	(2 550 - 7 380)	14.0	(7.7 - 20.4)
	High	6 210	(3 510 - 8 910)	17.5	(10.6 - 24.5)
12–17 years	Low	22 000	(17 100 - 27 000)	74.7	(66.0 - 83.5)
	Moderate	2 790	(980 - 4 610)	9.5	(3.6 - 15.4)
	High	4 660	(2 320 - 7 000)	15.8	(8.5 - 23.1)
<b>Total</b>	Low	46 300	(39 300 - 53 200)	71.3	(65.2 - 77.4)
	Moderate	7 760	(4 800 - 10 800)	12.0	(7.6 - 16.4)
	High	10 900	(7 300 - 14 400)	16.7	(11.7 - 21.8)

Continued....



**TABLE B.5 (continued): NON-ABORIGINAL CHILDREN AGED 4–17 YEARS IN WA — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, BY AGE GROUP AND POSTCODE DERIVED QUINTILES OF INDEX OF ECONOMIC RESOURCES**

Age Group	Risk of clinically significant emotional or behavioural difficulties	Number	95% CI	%	95% CI
<b>Index of economic resources — 3rd quintile</b>					
4–11 years	Low	29 200	(23 500 - 34 800)	72.9	(65.2 - 80.5)
	Moderate	4 970	(2 550 - 7 380)	12.4	(6.7 - 18.1)
	High	5 900	(3 270 - 8 530)	14.7	(8.6 - 20.8)
12–17 years	Low	19 200	(14 600 - 23 900)	79.5	(70.5 - 88.4)
	Moderate	1 860	(380 - 3 350)	7.7	(1.8 - 13.6)
	High	3 100	(1 190 - 5 020)	12.8	(5.4 - 20.2)
<b>Total</b>	Low	48 400	(41 400 - 55 500)	75.4	(69.5 - 81.2)
	Moderate	6 830	(4 000 - 9 660)	10.6	(6.4 - 14.8)
	High	9 000	(5 800 - 12 200)	14.0	(9.3 - 18.7)
<b>Index of economic resources — 4th quintile</b>					
4–11 years	Low	32 600	(26 600 - 38 500)	72.4	(65.1 - 79.7)
	Moderate	4 970	(2 550 - 7 380)	11.0	(5.9 - 16.1)
	High	7 450	(4 500 - 10 400)	16.6	(10.5 - 22.6)
12–17 years	Low	27 900	(22 400 - 33 500)	78.9	(71.5 - 86.4)
	Moderate	3 410	(1 410 - 5 420)	9.6	(4.2 - 15.1)
	High	4 040	(1 850 - 6 220)	11.4	(5.6 - 17.2)
<b>Total</b>	Low	60 500	(52 800 - 68 300)	75.3	(70.0 - 80.5)
	Moderate	8 380	(5 300 - 11 500)	10.4	(6.7 - 14.1)
	High	11 500	(7 800 - 15 100)	14.3	(10.0 - 18.5)
<b>Index of economic resources — Top 20%</b>					
4–11 years	Low	27 900	(22 400 - 33 500)	69.8	(61.8 - 77.7)
	Moderate	5 590	(3 030 - 8 150)	14.0	(8.0 - 19.9)
	High	6 520	(3 760 - 9 280)	16.3	(9.9 - 22.6)
12–17 years	Low	28 600	(23 000 - 34 200)	85.2	(78.5 - 91.9)
	Moderate	1 550	(190 - 2 910)	4.6	(0.7 - 8.6)
	High	3 410	(1 410 - 5 420)	10.2	(4.5 - 15.9)
<b>Total</b>	Low	56 500	(49 000 - 64 000)	76.8	(71.4 - 82.2)
	Moderate	7 140	(4 300 - 10 000)	9.7	(5.9 - 13.5)
	High	9 930	(6 500 - 13 300)	13.5	(9.2 - 17.9)
<b>Total</b>					
4–11 years	Low	144 000	(134 000 - 154 000)	70.5	(67.0 - 74.0)
	Moderate	25 800	(20 400 - 31 100)	12.6	(10.1 - 15.2)
	High	34 500	(28 400 - 40 600)	16.9	(14.0 - 19.8)
12–17 years	Low	128 000	(118 000 - 138 000)	80.5	(77.1 - 83.9)
	Moderate	11 200	(7 600 - 14 800)	7.0	(4.8 - 9.2)
	High	19 900	(15 100 - 24 600)	12.5	(9.6 - 15.3)
<b>Total</b>	Low	272 000	(263 000 - 281 000)	74.9	(72.4 - 77.4)
	Moderate	36 900	(30 700 - 43 200)	10.2	(8.4 - 11.9)
	High	54 300	(46 900 - 61 700)	15.0	(12.9 - 17.0)

To test the relationship between age and sex of child, socio-economic status and place of residence, a multivariate logistic regression model was fitted to the CATI data. The results of this model are shown in Table B.6. After adjusting for age, sex and place of residence, a strong association was found between the Index of Education and Occupation and risk of clinically significant emotional or behavioural difficulties. Children living in postcodes in the bottom 20 per cent of the Index of Education and Occupation were more than twice as likely to be at high risk of clinically significant



emotional or behavioural difficulties than children living in postcodes in the top 20 per cent of the Index of Education and Occupation (Odds Ratio 2.29; CI: 1.26–4.16). No association was found between either sex or place of residence and emotional or behavioural difficulties in non-Aboriginal children. Children aged 8–11 years were at most likely to be at high risk of clinically significant emotional or behavioural difficulties, with children in this age range 1.6 times more likely (Odds Ratio 1.64; CI: 1.09–2.49) than children aged 4–11 years to be at high risk of clinically significant emotional or behavioural difficulties.

**TABLE B.6:** NON-ABORIGINAL CHILDREN AGED 4–17 YEARS — LIKELIHOOD OF BEING AT HIGH RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES, ASSOCIATED WITH AGE GROUP, SEX, PART OF STATE AND SEIFA

Parameter	Significance (p value)	Odds Ratio	95% CI
Sex			
Male	0.395	1.15	(0.83 - 1.60)
Female		1.00	
Age group (years)			
4–7		1.00	
8–11	0.019	1.64	(1.09 - 2.49)
12–14	0.791	0.94	(0.59 - 1.49)
15–17	0.584	0.87	(0.53 - 1.43)
Part of state			
Perth Statistical Division		1.00	
Remainder of WA	0.836	0.96	(0.66 - 1.42)
Quintiles of Index of Education and Occupation (a)			
Bottom 20%	0.007	2.29	(1.26 - 4.16)
2nd quintile	0.040	1.65	(0.93 - 2.93)
3rd quintile	0.048	1.80	(1.00 - 3.22)
4th quintile	0.089	1.83	(1.03 - 3.26)
Top 20%		1.00	

(a) Of the four indexes in SEIFA, the Index of Education and Occupation was the only one that was significantly associated with emotional or behavioural difficulties.

## ABORIGINAL CHILDREN

Only 30 children were identified as being of Aboriginal or Torres Strait Islander origin in the CATI survey. Based on this small sample, an estimated one-third of Aboriginal children were at high risk of clinically significant emotional or behavioural difficulties (33.3 per cent; CI: 15.4%–51.2%) (Table B.7). Taking into account the small sample size and wide confidence interval on these estimates, the results of the CATI survey are supportive of the findings from the WAACHS survey, which was conducted by face-to-face interview.



**TABLE B.7:** ABORIGINAL CHILDREN AGED 4–17 YEARS IN WA — RISK OF CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIOURAL DIFFICULTIES

<i>Risk of clinically significant emotional or behavioural difficulties</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Low	13 700	(9 500 - 18 000)	60.0	(41.4 - 78.6)
Moderate	1 530	(0 - 3 700)	6.7	(0.0 - 16.1)
High	7 630	(3 500 - 11 700)	33.3	(15.4 - 51.2)
<b>Total</b>	<b>22 900</b>	<b>(22 800 - 22 900)</b>	<b>100.0</b>	

## ENDNOTES

1. Australian Bureau of Statistics. *Population distribution Aboriginal and Torres Strait Islander Australians 2001*. Canberra: Australian Bureau of Statistics (Catalogue 4705.0); 2002.
2. Australian Bureau of Statistics. *Population by age and sex Australian States and Territories June 2001*. Canberra: Australian Bureau of Statistics (Catalogue 3201.0); 2002.
3. Zubrick SR, Lawrence DM, Silburn SR, Blair E, Milroy H, Wilkes T, Eades S, D'Antoine H, Read A, Ishiguchi P, Doyle S. *The Western Australian Aboriginal Child Health Survey: The health of Aboriginal children and young people*. Perth: Telethon Institute for Child Health Research; 2004.
4. Australian Bureau of Statistics. *Information paper Census of Population and Housing Socio-economic Indexes for Areas Australia 2001*. Canberra: Australian Bureau of Statistics (Catalogue 2039.0); 2003.



## APPENDIX C: MEASURES DERIVED FROM MULTIPLE RESPONSES AND SCALES

The WAACHS survey questionnaires included several sets of questions that were designed to be analysed by grouping them together to form summary measures. For instance, the Strengths and Difficulties Questionnaire (SDQ), which has produced the main measure of risk of clinically significant emotional or behavioural difficulties (used throughout this volume and described in detail in Chapter 2), produces a single measure of risk from a set of 25 questions.

Several other summary measures have been used in this publication, and details of their derivation are included in this appendix. These are:

- ◆ Number of life stress events
- ◆ Family functioning
- ◆ Youth self-esteem
- ◆ Youth derived parenting style
- ◆ Carer derived quality of parenting.

### LIFE STRESS EVENTS

This question was included on the primary carer form. Carers were asked:

‘Have any of these things happened in your family in the past 12 months?’

- a A close family member had a serious medical problem (illness or accident) and was in hospital.
- b A close family member was badly hurt or sick.
- c A close family member was arrested or in gaol/prison.
- d Your child/children were involved in or upset by family arguments.
- e A parent/caregiver lost his/her job or became unemployed.
- f A close family member had an alcohol or drug problem.
- g Your family didn’t have enough money to buy food, for bus fares or to pay bills.
- h A close family member has a physical handicap.
- i An important family member passed away.
- j Parents or carers left because of family split-up.
- k You have felt too crowded where you lived.
- l Your child/children had to take care of others in the family.
- m Your child/children have been in a foster home.
- n Your child/children were badly scared by other people’s behaviour.
- o Other (please specify).’

Less than 5 per cent of carers reported an ‘other’ type of life stress event (3.4 per cent; CI: 2.6%–4.5%), and the specified events covered such a diverse set of circumstances that the ‘other’ item was excluded from the analysis of life stress events. This left a



set of 14 events that could be combined to produce a score in the range 0–14. The frequency of occurrence of each of these life stress events in the previous 12 months is shown in Table C.1.

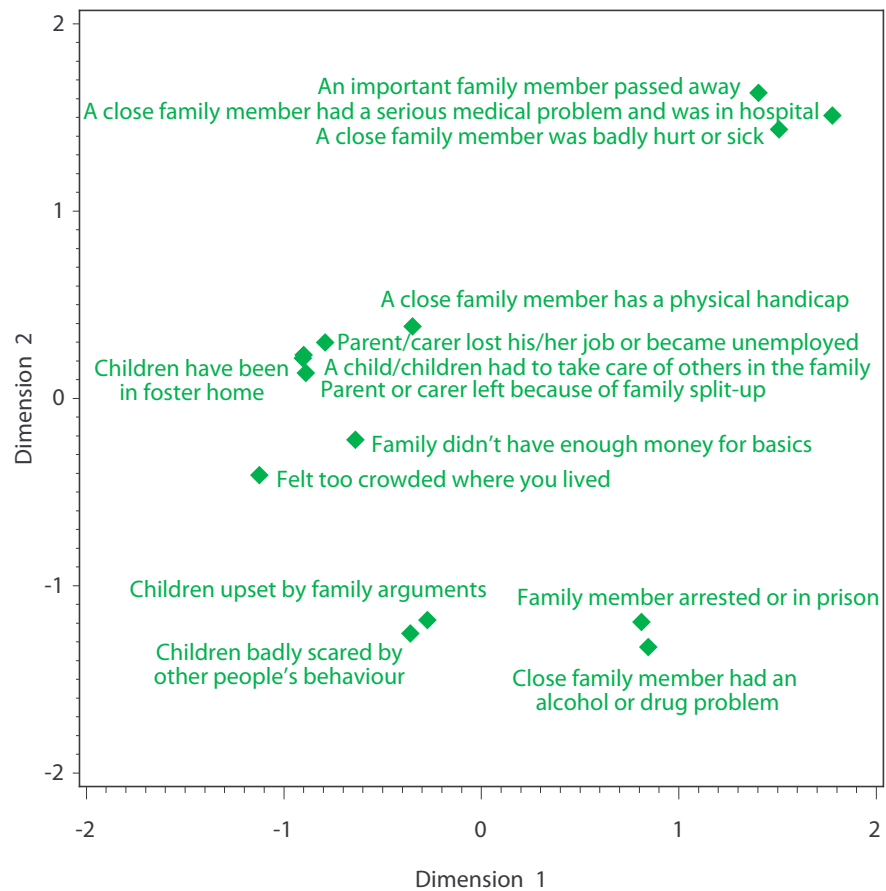
**TABLE C.1: PRIMARY CARERS — FREQUENCY OF LIFE STRESS EVENTS IN THE LAST 12 MONTHS**

<i>Life stress event</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
A close family member had a serious medical problem (illness or accident) and was in hospital	7 090	(6 790 - 7 390)	56.4	(54.0 - 58.8)
A close family member was badly hurt or sick	6 490	(6 190 - 6 790)	51.7	(49.3 - 54.1)
A close family member was arrested or in gaol/prison	4 640	(4 340 - 4 940)	36.9	(34.6 - 39.3)
Your child/children were involved in or upset by family arguments	4 120	(3 830 - 4 410)	32.8	(30.5 - 35.1)
A parent/carer lost his/her job or became unemployed	1 590	(1 400 - 1 810)	12.7	(11.1 - 14.4)
A close family member had an alcohol or drug problem	5 320	(5 010 - 5 620)	42.3	(39.9 - 44.7)
Your family didn't have enough money to buy food, for bus fares or to pay bills	3 710	(3 440 - 4 000)	29.6	(27.4 - 31.8)
A close family member has a physical handicap	2 600	(2 360 - 2 870)	20.7	(18.8 - 22.8)
An important family member passed away	6 290	(5 980 - 6 600)	50.0	(47.6 - 52.6)
Parents or carer left because of family split-up	1 480	(1 310 - 1 680)	11.8	(10.4 - 13.4)
You have felt too crowded where you lived	3 230	(2 970 - 3 510)	25.7	(23.6 - 27.9)
Your child/children had to take care of others in the family	1 930	(1 720 - 2 150)	15.4	(13.7 - 17.1)
Your child/children have been in a foster home	210	(140 - 300)	1.6	(1.1 - 2.4)
Your child/children were badly scared by other peoples behaviour	4 060	(3 780 - 4 350)	32.3	(30.1 - 34.7)
Other	430	(330 - 560)	3.4	(2.6 - 4.5)
<b>Total Primary Carers</b>	<b>12 600</b>	<b>(12 500 - 12 600)</b>	<b>100.0</b>	

The relationship between these life stress events was explored by fitting a Euclidean distance model which is shown in Figure C.1. The purpose of this type of analysis is to graphically depict the correlation between various life stress events. Rather than looking at the correlation between all possible pairs of events, the life stress events are placed into a two-dimensional space, using a dimension reduction algorithm that represents the best placement of the events within two dimensions. The dimensions are arbitrary and do not necessarily have any specific meaning. However, the location of two items close together on the graph shows that carers who reported one event were likely to report the other. The closeness of the items is a representation of the degree of correlation between them. Figure C.1 shows, for instance, that a family member being badly hurt or sick was strongly correlated with a family member being admitted to hospital for a serious medical problem, and strongly correlated with the death of an important family member.



**FIGURE C.1** RELATIONSHIP BETWEEN LIFE STRESS EVENTS



**FIGURE C.2: PRIMARY CARERS — NUMBER OF LIFE STRESS EVENTS REPORTED IN LAST 12 MONTHS**



Figure C.2 shows the frequency distribution of the number of life stress events reported by carers. Based on the distribution of the number of life stress events experienced by carers over the preceding 12 months, and with no specific reason to classify them in any other way, quartiles were imposed. The ranges used were 0–2





events, 3–4 events, 5–6 events, 7–14 events. Because the data item is discrete, it is not possible to get exact quartile divisions. As seen in Table C.2, some 30.5 per cent of primary carers (CI: 28.3%–32.8%) fell in the bottom quartile reporting 2 life stress events or less, while only 21.2 per cent of primary carers (CI: 19.3%–23.1%) fell in the top quartile reporting 7 life stress events or more. These quartile ranges have been used in the analysis of life stress events in this volume.

**TABLE C.2: PRIMARY CARERS — NUMBER OF LIFE STRESS EVENTS IN THE PREVIOUS 12 MONTHS**

<i>Number of life stress events</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
0–2	3 840	(3 560 - 4 120)	30.5	(28.3 - 32.8)
3–4	3 270	(3 020 - 3 540)	26.1	(24.0 - 28.2)
5–6	2 800	(2 540 - 3 070)	22.3	(20.2 - 24.4)
7–14	2 660	(2 420 - 2 900)	21.2	(19.3 - 23.1)
<b>Total</b>	<b>12 600</b>	<b>(12 500 - 12 600)</b>	<b>100.0</b>	

## FAMILY FUNCTIONING

Family functioning was measured by means of a nine-item scale specifically developed for the survey. The items were based on items from the McMaster Family Assessment Device,<sup>1</sup> and were designed to measure the extent to which families have established a climate of co-operation, emotional support and good communication. The question was included on the primary carer form. Carers were asked:

‘Here are some statements about families. How well do these match the way things are done in your family?’

- (i) The way we get on together helps us to cope with hard times.
- (ii) We like to remember people’s birthdays and celebrate other special events.
- (iii) We find it easy to talk with each other about things that really matter.
- (iv) We are always there for each other and know that the family will survive no matter what.
- (v) When it comes to managing money we are careful and make good decisions.
- (vi) Our family has a lot in common in the interests we share and the things we do.
- (vii) People in our family are accepted for who they are.
- (viii) We have good support from our in-laws, relatives and friends.
- (ix) We have family traditions and customs we would like to pass on to our children.’

Carers were shown a prompt card to assist them in answering the question. The prompt card included the following response scale:

- 1 Not at all
- 2 A little
- 3 Some
- 4 Quite a lot
- 5 Very much



**TABLE C.3: PRIMARY CARERS — RESPONSES TO FAMILY FUNCTIONING ITEMS**

<i>Response</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>The way we get on together helps us cope with hard times</b>				
Not at all	230	(150 - 340)	1.8	(1.2 - 2.7)
A little	410	(330 - 510)	3.3	(2.6 - 4.1)
Some	1 730	(1 530 - 1 930)	13.7	(12.2 - 15.4)
Quite a lot	4 070	(3 790 - 4 360)	32.4	(30.1 - 34.7)
Very much	6 130	(5 820 - 6 440)	48.8	(46.3 - 51.3)
<b>We like to remember people's birthdays and celebrate other special events</b>				
Not at all	470	(380 - 580)	3.8	(3.0 - 4.6)
A little	600	(460 - 750)	4.8	(3.7 - 6.0)
Some	1 850	(1 650 - 2 080)	14.8	(13.1 - 16.5)
Quite a lot	3 070	(2 810 - 3 330)	24.4	(22.4 - 26.5)
Very much	6 570	(6 250 - 6 880)	52.3	(49.8 - 54.8)
<b>We find it easy to talk with each other about things that really matter</b>				
Not at all	270	(200 - 360)	2.2	(1.6 - 2.9)
A little	860	(710 - 1 030)	6.9	(5.7 - 8.2)
Some	2 070	(1 850 - 2 290)	16.4	(14.7 - 18.2)
Quite a lot	3 850	(3 580 - 4 130)	30.6	(28.5 - 32.9)
Very much	5 520	(5 190 - 5 830)	43.9	(41.3 - 46.4)
<b>We are always there for each other and know the family will survive no matter what</b>				
Not at all	130	(90 - 200)	1.1	(0.7 - 1.6)
A little	270	(200 - 350)	2.1	(1.6 - 2.8)
Some	710	(590 - 840)	5.7	(4.7 - 6.7)
Quite a lot	2 810	(2 570 - 3 060)	22.4	(20.4 - 24.4)
Very much	8 640	(8 370 - 8 910)	68.8	(66.6 - 70.9)
<b>When it comes to managing money we are careful and make good decisions</b>				
Not at all	240	(150 - 360)	1.9	(1.2 - 2.9)
A little	850	(710 - 1 020)	6.8	(5.6 - 8.1)
Some	3 520	(3 250 - 3 810)	28.1	(25.9 - 30.3)
Quite a lot	3 910	(3 640 - 4 200)	31.1	(28.9 - 33.4)
Very much	4 030	(3 750 - 4 320)	32.1	(29.9 - 34.4)
<b>Our family has a lot in common in the interests we share and the things we do</b>				
Not at all	300	(220 - 410)	2.4	(1.7 - 3.3)
A little	570	(460 - 680)	4.5	(3.7 - 5.4)
Some	1 850	(1 650 - 2 060)	14.7	(13.1 - 16.4)
Quite a lot	4 230	(3 960 - 4 520)	33.7	(31.5 - 35.9)
Very much	5 610	(5 310 - 5 920)	44.7	(42.3 - 47.1)
<b>People in our family are accepted for who they are</b>				
Not at all	80	(40 - 150)	0.6	(0.3 - 1.2)
A little	210	(140 - 290)	1.7	(1.1 - 2.3)
Some	750	(630 - 890)	6.0	(5.0 - 7.1)
Quite a lot	2 480	(2 250 - 2 720)	19.7	(17.9 - 21.6)
Very much	9 050	(8 780 - 9 300)	72.0	(69.9 - 74.0)
<b>We have good support from our in-laws, relatives and friends</b>				
Not at all	640	(520 - 760)	5.1	(4.2 - 6.1)
A little	860	(720 - 1 010)	6.8	(5.8 - 8.0)
Some	1 860	(1 660 - 2 080)	14.8	(13.2 - 16.6)
Quite a lot	2 590	(2 340 - 2 840)	20.6	(18.6 - 22.6)
Very much	6 620	(6 320 - 6 920)	52.7	(50.3 - 55.1)

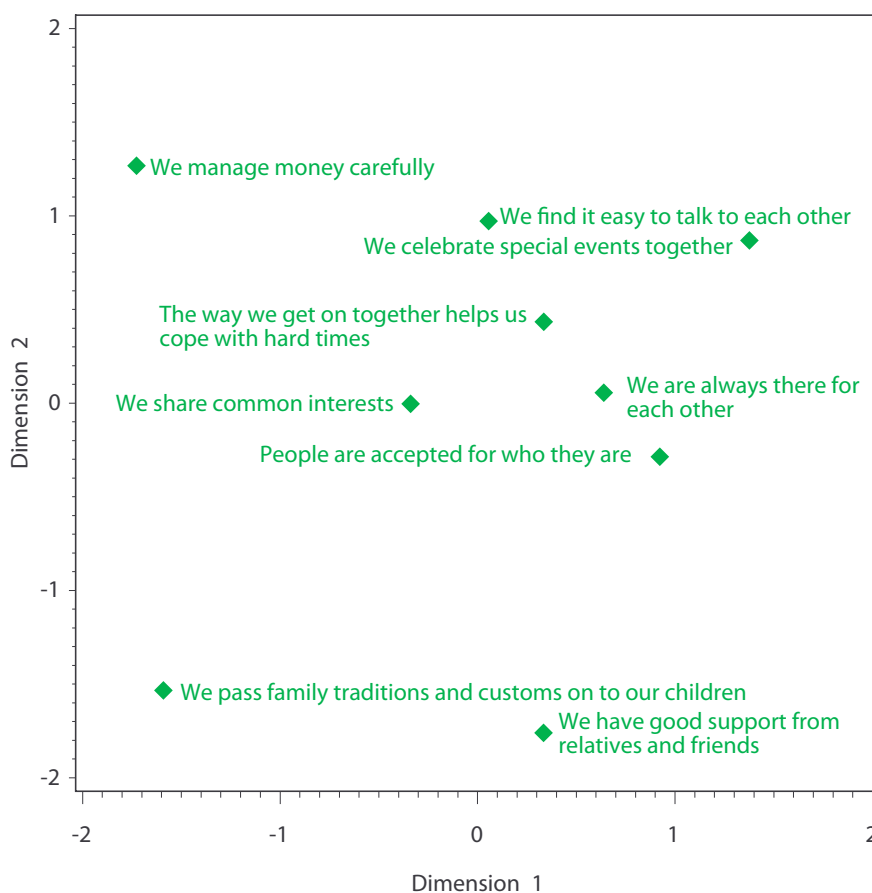
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**TABLE C.3 (continued): PRIMARY CARERS — RESPONSES TO FAMILY FUNCTIONING ITEMS**

Response	Number	95% CI	%	95% CI
We have family traditions and customs we would like to pass on to our children				
Not at all	940	(810 - 1 090)	7.5	(6.4 - 8.7)
A little	950	(770 - 1 150)	7.5	(6.1 - 9.1)
Some	2 140	(1 920 - 2 390)	17.0	(15.3 - 19.0)
Quite a lot	2 410	(2 180 - 2 650)	19.2	(17.4 - 21.1)
Very much	6 130	(5 800 - 6 450)	48.8	(46.2 - 51.4)

Table C.3 shows the distribution of responses to each of the nine items. The most positive responses were reported for item (vii) ‘People in our family are accepted for who they are’, while the least positive responses were reported for item (v) ‘When it comes to managing money we are careful and make good decisions.’

**FIGURE C.3: RELATIONSHIP BETWEEN FAMILY FUNCTIONING ITEMS**

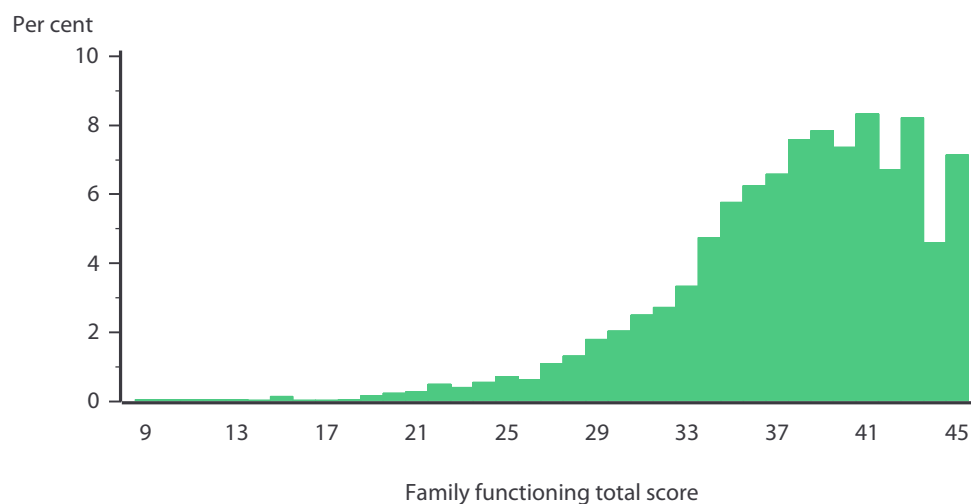


To examine the relationship between the items two approaches were used — fitting a Euclidean distance model, and factor analysis. Figure C.3 shows the results of the Euclidean distance model applying a multidimensional scaling algorithm to place the items on a two dimensional grid. The dimensions are arbitrary and do not have any specific meaning, but the closeness of items on the grid indicates the degree of commonality between them. The placement of items on the grid shows a reasonably homogenous spread of the items with no clear factor structure emerging. A factor analysis of these data failed to extract more than one factor, confirming the lack of an underlying factor structure in these data.



As a result of these analyses, it was decided to sum the nine family functioning items to produce a family functioning total score, in the range 9–45. A score of 9 occurs for carers who responded ‘not at all’ to all nine items, while 45 would be scored for carers responding ‘very much’ to all nine items. The distribution of family functioning total scores is shown in Figure C.4. It can be seen that the distribution has a strong negative skew, with the majority of carers scoring highly.

**FIGURE C.4:** PRIMARY CARERS — FAMILY FUNCTIONING TOTAL SCORE



With no independent information available to set cut-off points, quartiles were imposed on the score. These have been, somewhat arbitrarily, labelled poor, fair, good and very good for the purposes of this publication. The quartile ranges and the number of carers in each range are shown in Table C.4. Because this is a discrete data item, it is not possible to get exactly 25 per cent of carers in each quartile range, but the deviations from this are small. These quartiles have been used in all analyses involving family functioning in this publication. In some instances the categories ‘fair’ to ‘very good’ have been combined.

**TABLE C.4:** PRIMARY CARERS — QUARTILES OF FAMILY FUNCTIONING

Family functioning quartiles	Number	95% CI	%	95% CI
Poor (9–34)	2 960	(2 720 - 3 220)	23.6	(21.6 - 25.6)
Fair (35–38)	3 290	(3 030 - 3 560)	26.2	(24.1 - 28.4)
Good (39–41)	2 960	(2 700 - 3 230)	23.5	(21.5 - 25.7)
Very good (42–45)	3 350	(3 080 - 3 630)	26.7	(24.5 - 28.9)
<b>Total</b>	<b>12 600</b>	<b>(12 500 - 12 600)</b>	<b>100.0</b>	

## YOUTH SELF-ESTEEM

Young people were asked to respond to a series of items designed to measure their level of self-esteem. The items were specifically designed for use in the WAACHS survey and were included on the Youth Self Report (YSR) form. The majority of young people filled in this form in their own time, but for 20 per cent of young people, the questionnaire was administered by an interviewer.



Young people aged 12–17 years were asked:

‘How much do these statements sound like you?’

- (i) I find it easy to make friends.
- (ii) I like most things about myself.
- (iii) I feel proud of how I am.
- (iv) I can usually sort out my own problems.
- (v) I wish I had more respect for myself.
- (vi) When I try, I can make good things happen for me.
- (vii) No matter how bad I feel I know that I will feel better eventually.’

Young people were asked to rate each of these items on the following scale:

- 1 Not at all
- 2 A little
- 3 Some
- 4 Quite a lot
- 5 Very much

Table C.5 shows the distribution of responses to each of these seven items. All but one of these items are phrased as positive statements. Item (v) ‘I wish I had more respect for myself’ has been reversed coded for the remainder of the analysis of youth self-esteem, so as to align it with the other positive statements used in this measure.

The relationship between the individual self-esteem items was explored by two methods—by fitting a Euclidean distance model, and by factor analysis. The results of the Euclidean distance model are shown in Figure C.5. It can be seen that item (v) ‘I wish I had more respect for myself’ stands out in the first dimension while all other items have similar values for this dimension. This suggests that there could be a strong relationship between the remaining six items excluding the item on self-respect. Factor analysis confirmed this association, extracting a single factor from the six other items excluding self-respect. On the basis of this result, item (v) was excluded from the composite scale on self-esteem. The remaining six items were summed to produce a self-esteem score in the range of 6–30, with a score of 6 being given to young people who responded ‘not at all’ to all six items and a score of 36 being given to young people who responded ‘Very much’ to all six items.



**TABLE C.5:** YOUNG PEOPLE AGED 12–17 YEARS — RESPONSES TO SELF-ESTEEM ITEMS

<i>Response</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>I find it easy to make friends</b>				
Not at all	210	(140 - 300)	2.3	(1.6 - 3.3)
A little	750	(580 - 950)	8.2	(6.4 - 10.4)
Some	1 980	(1 740 - 2 230)	21.7	(19.1 - 24.5)
Quite a lot	2 780	(2 490 - 3 080)	30.6	(27.4 - 33.8)
Very much	3 390	(3 090 - 3 700)	37.2	(33.9 - 40.6)
<b>I like most things about myself</b>				
Not at all	330	(240 - 430)	3.6	(2.7 - 4.8)
A little	940	(760 - 1 150)	10.4	(8.4 - 12.7)
Some	2 670	(2 390 - 2 950)	29.3	(26.3 - 32.4)
Quite a lot	2 310	(2 040 - 2 620)	25.4	(22.4 - 28.8)
Very much	2 850	(2 560 - 3 150)	31.3	(28.2 - 34.6)
<b>I feel proud of how I am</b>				
Not at all	220	(140 - 320)	2.4	(1.5 - 3.5)
A little	880	(720 - 1 070)	9.7	(7.9 - 11.8)
Some	1 730	(1 480 - 2 020)	19.0	(16.3 - 22.2)
Quite a lot	2 060	(1 780 - 2 360)	22.6	(19.6 - 25.9)
Very much	4 210	(3 900 - 4 530)	46.3	(42.8 - 49.8)
<b>I can usually sort out my own problems</b>				
Not at all	260	(160 - 400)	2.9	(1.8 - 4.4)
A little	850	(690 - 1 040)	9.3	(7.6 - 11.4)
Some	2 490	(2 220 - 2 780)	27.3	(24.4 - 30.5)
Quite a lot	2 760	(2 460 - 3 080)	30.3	(27.0 - 33.8)
Very much	2 750	(2 470 - 3 040)	30.2	(27.2 - 33.4)
<b>I wish I had more respect for myself</b>				
Not at all	2 050	(1 790 - 2 320)	22.6	(19.7 - 25.5)
A little	1 540	(1 310 - 1 800)	17.0	(14.3 - 19.8)
Some	2 410	(2 140 - 2 700)	26.4	(23.5 - 29.6)
Quite a lot	1 380	(1 150 - 1 640)	15.1	(12.7 - 18.0)
Very much	1 720	(1 480 - 1 980)	18.9	(16.3 - 21.7)
<b>When I try, I can make good things happen for me</b>				
Not at all	180	(120 - 270)	2.0	(1.3 - 3.0)
A little	600	(460 - 760)	6.5	(5.1 - 8.4)
Some	2 240	(1 980 - 2 520)	24.6	(21.8 - 27.7)
Quite a lot	2 780	(2 490 - 3 100)	30.6	(27.4 - 34.0)
Very much	3 300	(3 010 - 3 600)	36.2	(33.0 - 39.6)
<b>No matter how bad I feel I know that I will feel better eventually</b>				
Not at all	210	(140 - 300)	2.3	(1.5 - 3.3)
A little	600	(460 - 780)	6.6	(5.0 - 8.6)
Some	2 140	(1 900 - 2 410)	23.6	(20.8 - 26.5)
Quite a lot	2 750	(2 460 - 3 060)	30.2	(27.0 - 33.6)
Very much	3 400	(3 110 - 3 700)	37.4	(34.2 - 40.6)

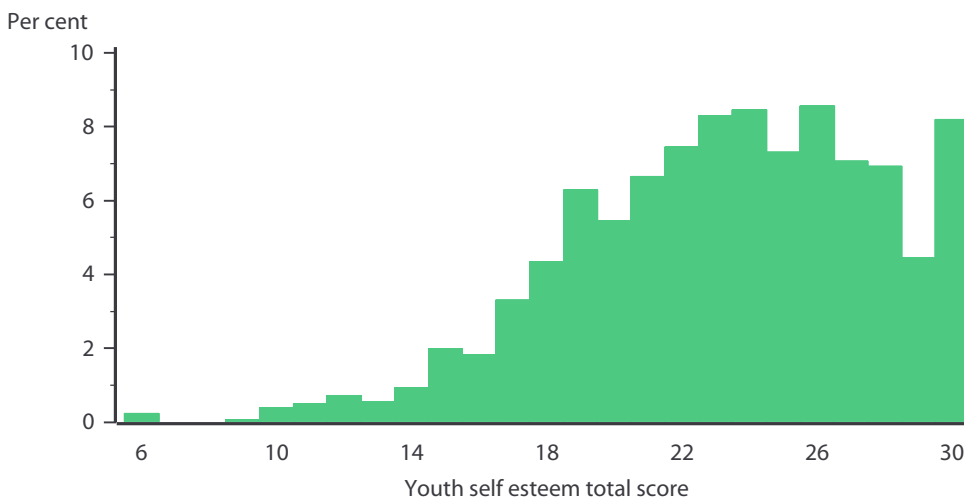


**FIGURE C.5:** RELATIONSHIP BETWEEN YOUTH SELF-ESTEEM ITEMS



The distribution of the self-esteem total scores is shown in Figure C.6. It can be seen that the distribution has a strong negative skew. In the absence of any independent measure of self-esteem on which to base cut-off scores, the self-esteem scores were ranked and split into quartiles. Because only integer values are possible for the self-esteem total score, it is not possible to obtain exact quartiles. Table C.6 shows the cut-off values used for each quartile and the percentage of young people falling into each quartile. These quartiles have been used in all analyses of youth self-esteem in this volume.

**FIGURE C.6:** YOUNG PEOPLE 12–17 YEARS — SELF-ESTEEM TOTAL SCORE



**TABLE C.6:** YOUNG PEOPLE AGED 12–17 YEARS — QUARTILES OF SELF-ESTEEM TOTAL SCORE

<i>Self-esteem total score</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
Lowest quartile (0–20)	2 420	(2 160 - 2 700)	26.6	(23.7 - 29.7)
2nd quartile (21–23)	2 040	(1 770 - 2 320)	22.4	(19.5 - 25.5)
3rd quartile (24–26)	2 210	(1 940 - 2 510)	24.3	(21.3 - 27.5)
Highest quartile (27–30)	2 430	(2 170 - 2 700)	26.6	(23.9 - 29.7)
<b>Total</b>	<b>9 100</b>	<b>(9 050 - 9 100)</b>	<b>100.0</b>	

### YOUTH DERIVED PARENTING STYLE

Two measures of parenting style were included in the WAACHS questionnaires. The first was based on questions asked of young people aged 12–17 years on the Youth Self Report form.

Young people were asked the following series of questions aimed at assessing their perceptions of their carers' parenting style:

'How often do these things happen to you?'

- (i) Your parents smile at you.
- (ii) Your parents want to know exactly where you are and what you are doing.
- (iii) Your parents soon forget a rule they have made.
- (iv) Your parents threaten punishment more than they use it.
- (v) Your parents praise you for the good things you do.
- (vi) Your parents let you go out any night you want.
- (vii) Your parents only keep rules when it suits them.
- (viii) Your parents hit you or threaten to do so.
- (ix) Your parents seem proud of the things you do.
- (x) Your parents give you lots of help when something is worrying you.'

Young people were asked to rate each of these items on the following scale:

- 1 Never
- 2 Sometimes
- 3 Often
- 4 Very often

Nine of the ten items used in this scale were taken from the work of Lempers, Clark-Lempers and Simons,<sup>2</sup> whose parenting scale contains 29 items. For the WAACHS, the number of items included needed to be reduced to limit respondent burden, and there were some slight changes to wording to make items more culturally appropriate.

Table C.7 shows the distribution of responses to each of the 10 items used in the WAACHS youth report parenting scale.





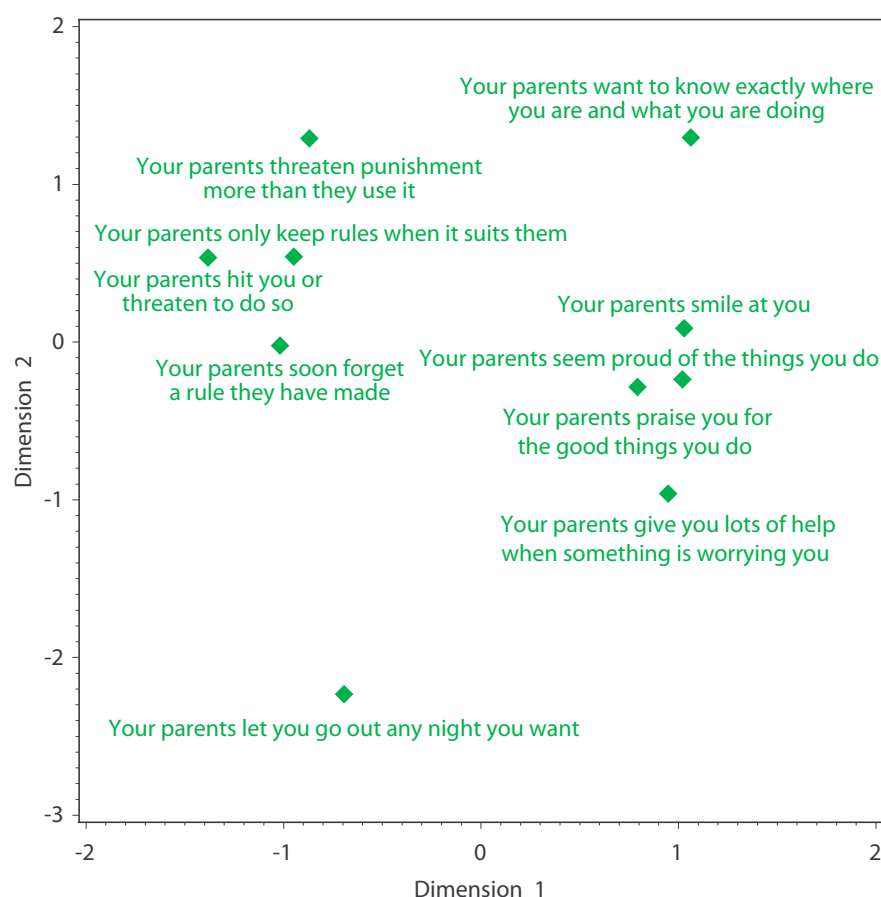
**TABLE C.7: YOUNG PEOPLE AGED 12–17 YEARS — RESPONSES TO PARENTING SCALE ITEMS**

<i>Response</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Your parents smile at you</b>				
Never	330	(250 - 430)	3.7	(2.8 - 4.7)
Sometimes	2 180	(1 910 - 2 470)	23.9	(21.0 - 27.1)
Often	2 500	(2 230 - 2 800)	27.5	(24.5 - 30.7)
Very often	4 090	(3 780 - 4 410)	44.9	(41.5 - 48.4)
<b>Your parents want to know exactly where you are and what you are doing</b>				
Never	450	(300 - 670)	4.9	(3.3 - 7.4)
Sometimes	1 780	(1 550 - 2 030)	19.6	(17.0 - 22.3)
Often	2 320	(2 050 - 2 600)	25.5	(22.5 - 28.6)
Very often	4 550	(4 230 - 4 870)	50.0	(46.5 - 53.5)
<b>Your parents soon forget a rule they have made</b>				
Never	3 240	(2 940 - 3 570)	35.6	(32.3 - 39.2)
Sometimes	3 640	(3 330 - 3 960)	40.0	(36.6 - 43.5)
Often	1 490	(1 280 - 1 720)	16.3	(14.0 - 18.9)
Very often	730	(550 - 940)	8.0	(6.1 - 10.4)
<b>Your parents threaten punishment more than they use it</b>				
Never	3 060	(2 750 - 3 380)	33.6	(30.2 - 37.2)
Sometimes	2 960	(2 660 - 3 270)	32.5	(29.3 - 35.9)
Often	1 870	(1 640 - 2 110)	20.5	(18.0 - 23.2)
Very often	1 220	(1 020 - 1 440)	13.4	(11.2 - 15.8)
<b>Your parents praise you for the good things you do</b>				
Never	520	(400 - 670)	5.8	(4.4 - 7.4)
Sometimes	2 410	(2 130 - 2 710)	26.5	(23.4 - 29.8)
Often	2 400	(2 120 - 2 700)	26.4	(23.2 - 29.7)
Very often	3 770	(3 450 - 4 080)	41.4	(37.9 - 44.9)
<b>Your parents let you go out any night you want</b>				
Never	2 890	(2 580 - 3 210)	31.7	(28.3 - 35.3)
Sometimes	3 710	(3 390 - 4 030)	40.8	(37.3 - 44.3)
Often	1 100	(890 - 1 330)	12.0	(9.8 - 14.6)
Very often	1 410	(1 180 - 1 660)	15.4	(12.9 - 18.3)
<b>Your parents only keep rules when it suits them</b>				
Never	3 040	(2 730 - 3 380)	33.4	(30.0 - 37.1)
Sometimes	3 410	(3 100 - 3 750)	37.5	(34.1 - 41.1)
Often	1 540	(1 320 - 1 760)	16.9	(14.6 - 19.4)
Very often	1 110	(920 - 1 340)	12.2	(10.1 - 14.7)
<b>Your parents hit you or threaten to do so</b>				
Never	5 390	(5 070 - 5 690)	59.2	(55.7 - 62.5)
Sometimes	2 950	(2 660 - 3 250)	32.4	(29.2 - 35.7)
Often	430	(330 - 560)	4.8	(3.6 - 6.1)
Very often	330	(230 - 480)	3.6	(2.5 - 5.2)
<b>Your parents seem proud of the things you do</b>				
Never	320	(230 - 430)	3.5	(2.5 - 4.7)
Sometimes	2 170	(1 910 - 2 430)	23.8	(21.0 - 26.7)
Often	2 250	(1 970 - 2 540)	24.7	(21.6 - 28.0)
Very often	4 370	(4 040 - 4 690)	48.0	(44.4 - 51.5)
<b>Your parents give you lots of help when something is worrying you</b>				
Never	800	(640 - 990)	8.8	(7.0 - 10.9)
Sometimes	2 030	(1 760 - 2 330)	22.4	(19.3 - 25.6)
Often	2 310	(2 030 - 2 610)	25.4	(22.2 - 28.7)
Very often	3 950	(3 630 - 4 270)	43.4	(39.9 - 46.9)



To examine the relationship between the items two approaches were used — fitting a Euclidean distance model, and factor analysis. Figure C.7 shows the results of the Euclidean distance model applying a multidimensional scaling algorithm to place the items on a two dimensional grid. The dimensions are arbitrary and do not have any specific meaning, but the closeness of items on the grid indicates the degree of commonality between them. The distribution of items on the grid suggests the possibility of an underlying factor structure, with two groups of four items each clustering quite closely together, while two additional items stand out on their own.

**FIGURE C.7:** RELATIONSHIP BETWEEN YOUTH REPORTED PARENTING STYLE ITEMS



A factor analysis was undertaken on these items. This analysis confirmed the existence of two strong factors, with the remainder of the items being largely independent. The factor structure identified is shown in Table C.8.

**TABLE C.8:** FACTOR STRUCTURE FOR YOUTH REPORTED PARENTING STYLE

Factor	Items
Responsiveness	(i) Your parents smile at you (v) Your parents praise you for the good things you do (ix) Your parents seem proud of the things you do (x) Your parents give you lots of help when something is worrying you
Harshness	(iv) Your parents threaten punishment more than they use it. (viii) Your parents hit you or threaten to do so.
Consistency	(vii) Your parents only keep rules when it suits them
Laxness	(vi) Your parents let you go out any night you want



Two items (items (ii) and (iii)) were found to load on multiple factors, and were excluded from the construction of the parenting style indicator. For each of the four identified factors separate indicators were derived, labelled responsiveness, harshness, consistency and laxness. For responsiveness, this indicator was derived by summing the responses to each of the four items ((i), (v), (ix) and (x)), resulting in scores in the range 4–16. For harshness, it was considered that item (viii) was a more direct measure of parental harshness than item (iv), and it was given a higher weight in deriving the harshness indicator. It was decided to identify harsh parenting as cases where the youth responded ‘often’ or ‘very often’ to item (viii) ‘Your parents hit you or threaten to do so’, or responded ‘very often’ to item (iv) ‘Your parents threaten punishment more than they use it’, or both. Both the consistency and laxness factors contained only one item. Parenting style was considered to be inconsistent if the youth responded ‘often’ or ‘very often’ to item (vii) ‘Your parents only keep rules when it suits them’. Parenting style was considered to be lax where youth responded ‘often’ or ‘very often’ to item (vi) ‘Your parents let you go out any night you want’.

Table C.9 shows the distribution of young people by each of the factors identified as components of parenting style. In addition, an overall summary measure of parenting quality was derived. Laxness was excluded from overall parenting quality since it was based on the question about whether your parents let you go out any night you want and appropriate response to this item varies with age. Overall parenting quality was defined based on harshness, responsiveness and consistency. Where parents were rated as not harsh, responsive and consistent, parenting style was considered to be adequate. Where parents were rated as harsh, with or without either responsiveness or consistency, parenting style was considered to be poor. Otherwise parenting style was considered to be sub-optimal. These three components and the overall measure of parenting quality have been used in the analysis of parenting style in this volume.

**TABLE C.9: YOUNG PEOPLE AGED 12–17 YEARS — PARENTING STYLE FACTORS**

Category	Number	95% CI	%	95% CI
Harshness				
Harsh	1 690	(1 460 - 1 920)	18.5	(16.0 - 21.1)
Not harsh	7 420	(7 180 - 7 640)	81.5	(78.9 - 84.0)
Responsiveness				
Not responsive	2 450	(2 190 - 2 740)	26.9	(24.0 - 30.1)
Responsive	6 650	(6 360 - 6 910)	73.1	(69.9 - 76.0)
Consistency				
Inconsistent	2 650	(2 370 - 2 940)	29.1	(26.1 - 32.3)
Consistent	6 460	(6 160 - 6 730)	70.9	(67.7 - 73.9)
Laxness				
Lax	2 500	(2 210 - 2 810)	27.5	(24.3 - 30.9)
Not lax	6 600	(6 290 - 6 890)	72.5	(69.1 - 75.7)
Quality of parenting				
Poor	1 020	(850 - 1 220)	11.2	(9.3 - 13.4)
Sub-optimal	4 010	(3 710 - 4 310)	44.0	(40.8 - 47.4)
Adequate	4 070	(3 760 - 4 400)	44.7	(41.3 - 48.3)



## CARER DERIVED QUALITY OF PARENTING

The second measure of parenting style was derived from data obtained from carers of children aged 4–17 years. This measure was developed specifically for use in the WAACHS.

In respect of each survey child, carers were asked:

‘In bringing up your child, over the past 6 months, how often would you say that you have:

- (i) reminded him/her about how he/she should behave
- (ii) asked where he/she was going when he/she left the house
- (iii) known what he/she was doing with his/her free time
- (iv) told him/her off when he/she did something wrong
- (v) made sure that he/she did what you told him/her to do
- (vi) praised him/her for doing something good
- (vii) hit or smacked him/her for doing something wrong
- (viii) laughed together’

Carers were asked to respond on the following scale:

- 1 Never
- 2 Hardly Ever
- 3 Once in a while
- 4 Quite often
- 5 Almost always

Carers were also given the opportunity to say that their child was too young for a particular item to be applicable to them. Table C.10 shows the distribution of children aged 4–17 years by their carer’s responses to each of these parenting scale items.

**TABLE C.10: CHILDREN AGED 4–17 YEARS — CARER RESPONSES TO PARENTING SCALE ITEMS**

Response	Number	95% CI	%	95% CI
Reminded child about how he/she should behave				
Never	960	(750 - 1 210)	4.2	(3.3 - 5.3)
Hardly ever	2 590	(2 260 - 2 950)	11.3	(9.9 - 12.9)
Once in a while	6 530	(6 020 - 7 060)	28.5	(26.3 - 30.8)
Quite often	7 110	(6 590 - 7 640)	31.1	(28.8 - 33.4)
Almost always	5 710	(5 230 - 6 220)	24.9	(22.8 - 27.1)
Too young	0	(0 - 10)	0.0	(0.0 - 0.0)
Asked where child was going when he/she left the house				
Never	3 140	(2 710 - 3 600)	13.7	(11.8 - 15.7)
Hardly ever	2 840	(2 510 - 3 190)	12.4	(11.0 - 13.9)
Once in a while	3 570	(3 180 - 3 970)	15.6	(13.9 - 17.3)
Quite often	3 130	(2 790 - 3 510)	13.7	(12.2 - 15.3)
Almost always	10 100	(9 500 - 10 700)	44.1	(41.4 - 46.9)
Too young	110	(50 - 220)	0.5	(0.2 - 1.0)

Continued...



**TABLE C.10 (continued): CHILDREN AGED 4–17 YEARS — CARER RESPONSES TO PARENTING SCALE ITEMS**

<i>Response</i>	<i>Number</i>	<i>95% CI</i>	<i>%</i>	<i>95% CI</i>
<b>Known what child was doing with his/her free time</b>				
Never	700	(530 - 910)	3.0	(2.3 - 4.0)
Hardly ever	1 250	(1 030 - 1 490)	5.4	(4.5 - 6.5)
Once in a while	3 140	(2 760 - 3 540)	13.7	(12.1 - 15.5)
Quite often	5 290	(4 830 - 5 770)	23.1	(21.1 - 25.2)
Almost always	12 500	(11 900 - 13 100)	54.7	(52.2 - 57.1)
Too young	10	(0 - 20)	0.0	(0.0 - 0.1)
<b>Told him/her off when he/she did something wrong</b>				
Never	460	(330 - 630)	2.0	(1.4 - 2.8)
Hardly ever	1 730	(1 410 - 2 080)	7.6	(6.2 - 9.1)
Once in a while	5 370	(4 900 - 5 840)	23.4	(21.4 - 25.5)
Quite often	5 670	(5 190 - 6 170)	24.8	(22.7 - 26.9)
Almost always	9 680	(9 100 - 10 300)	42.2	(39.6 - 45.0)
Too young	0	(0 - 10)	0.0	(0.0 - 0.0)
<b>Made sure that he/she did what you told him/her to do</b>				
Never	500	(380 - 650)	2.2	(1.6 - 2.9)
Hardly ever	1 630	(1 350 - 1 930)	7.1	(5.9 - 8.4)
Once in a while	4 680	(4 270 - 5 110)	20.4	(18.7 - 22.3)
Quite often	6 640	(6 160 - 7 140)	29.0	(26.9 - 31.2)
Almost always	9 460	(8 900 - 10 100)	41.3	(38.7 - 44.0)
Too young	0	(0 - 10)	0.0	(0.0 - 0.0)
<b>Praised him/her for doing something good</b>				
Never	180	(110 - 300)	0.8	(0.5 - 1.3)
Hardly ever	300	(190 - 460)	1.3	(0.8 - 2.0)
Once in a while	2 780	(2 370 - 3 210)	12.1	(10.3 - 14.0)
Quite often	5 200	(4 730 - 5 690)	22.7	(20.6 - 24.8)
Almost always	14 400	(13 900 - 15 000)	63.0	(60.5 - 65.5)
Too young	10	(0 - 20)	0.0	(0.0 - 0.1)
<b>Hit or smacked him/her for doing something wrong</b>				
Never	6 810	(6 320 - 7 320)	29.7	(27.6 - 32.0)
Hardly ever	5 430	(4 990 - 5 900)	23.7	(21.8 - 25.8)
Once in a while	7 270	(6 770 - 7 790)	31.7	(29.6 - 34.0)
Quite often	1 820	(1 560 - 2 110)	8.0	(6.8 - 9.2)
Almost always	1 560	(1 290 - 1 860)	6.8	(5.6 - 8.1)
Too young	0	(0 - 10)	0.0	(0.0 - 0.0)
<b>Laughed together</b>				
Never	110	(50 - 220)	0.5	(0.2 - 1.0)
Hardly ever	80	(40 - 150)	0.4	(0.2 - 0.7)
Once in a while	1 590	(1 330 - 1 870)	6.9	(5.8 - 8.2)
Quite often	4 970	(4 510 - 5 470)	21.7	(19.7 - 23.9)
Almost always	16 100	(15 600 - 16 700)	70.5	(68.1 - 72.8)
Too young	0	(0 - 10)	0.0	(0.0 - 0.0)

Initial attempts to derive a measure of quality of parenting using all eight items were unsuccessful. Analysis of the data items suggested that the first five items were unsuccessful in discriminating between differing parenting styles. These items can't be considered to range on a scale of 'good' to 'bad'. A response of 'never' or 'hardly ever' to each of these items might be considered as lax parenting while a response of 'quite often' or 'almost always' might be considered as overbearing or intrusive parenting. This makes it difficult to label the parenting style as either 'good' or 'bad'. The most desirable responses would also be expected to vary by age and the nature of the child's behaviour. A five-item response scale does not seem able to distinguish concepts where



a moderate amount might be considered the most appropriate response. The subtlety of the questions has been defeated by the coarseness of the scale used to measure them.

As a result, it was necessary to drop the first five items from the development of the carer reported measure of quality of parenting. With only three items remaining, a simple scoring procedure was used. Item (vii) 'how often would you say you have hit or smacked your child for doing something wrong' was reverse coded. Then the three items were added producing a score on a scale of 3–15. Approximate quartiles were applied, and the quartiles have been labelled, somewhat arbitrarily, 'poor', 'fair', 'good' and 'very good'.

As a result, the measure of quality of parenting derived from carer responses is limited to the two concepts of parental warmth and harshness, measured by only three items.

## ENDNOTES

1. Epstein NB, Baldwin LM, Bishop DS. The McMaster Family Assessment Device. *Journal of Marital and Family Therapy* 1983;9:171-80.
2. Lempers JD, Clark-Lempers D, Simons RL. Economic hardship, parenting, and distress in adolescence. *Child Development* 1989;60:25-39.



## APPENDIX D: LEVELS OF FAMILY AND YOUTH PARTICIPATION

This appendix describes the characteristics of the families and individuals that refused to participate in the survey. The survey was voluntary, but community acceptance of the survey was high, and the overall response rate was very good. However, non-response is an inevitable fact of any survey. Within the WAACHS, non-response could occur at three levels:

- ◆ at the family level if the family refused to participate or could not be contacted
- ◆ at the person level if a particular individual within a participating family refused to participate (this occurred mostly with secondary carers and with the youth self-report forms)
- ◆ at the item level where individuals did not answer particular questions, or survey processes failed to collect required or usable information.

Because of the large number of questions asked in the survey most forms returned contained at least one question where the respondent didn't know or did not provide the answer.

Non-response can have an impact on the validity of the survey results if the non-respondents are systematically different from the respondents in some way. As far as possible, characteristics of the non-respondents have been compared with respondents to test for possible biases.

### FAMILY AND PERSON LEVEL NON-RESPONSE

A total of 2,386 families were selected to participate in the survey, of which 1,999 (83.8 per cent) participated. To count as a participating family, at least one substantially completed child form had to be received. A few families consented to participate in the survey but then, for one reason or another, completed only a small number of questions, and these have not been counted as participating families.

Table D.1 shows the person level response rates within the 1,999 participating families. Note that the number of participating primary carers (2,113) is greater than the number of participating families because of the number of families with complex structures that contain children with separate primary carers. For families that participated in the survey, information on the primary carer and child level information as reported by the primary carer was almost always obtained. However where separate contact was required with other household members (i.e. the secondary carer or youths) the response rate was considerably lower.

**TABLE D.1** PERSON LEVEL RESPONSE RATE BY FORM TYPE AMONG PARTICIPATING FAMILIES

<i>Form</i>	<i>Number within participating families</i>	<i>Number of respondents</i>	<i>Response rate (%)</i>
Primary carer	2 225	2 113	95.0
Secondary carer	1 259	1 040	82.6
Child Health Questionnaire for children aged 0–3 years	1 340	1 296	96.7
Child Health Questionnaire for children aged 4–17 years	4 173	3 993	95.7
Youth self report for young people aged 12–17 years	1 480	1 073	72.5



Non-response at the family and person level was dealt with by means of weighting adjustments. The weighting procedure used in the survey was described in *Appendix B* — *Sample Design* in Volume One.<sup>1</sup>

## COMPARISON OF RESPONDENTS AND NON-RESPONDENTS

It was possible to collect some rudimentary information about non-respondents in the survey. Of the 387 families that did not participate in the survey, 245 families (64 per cent) had a Household Record Form (HRF) that was fully completed at the time of initial screening. The HRF provides a list of all the residents of the household, their ages, indigenous status and relationships within the household. Of the remaining 142 families refused to participate in the survey, the interviewer was able to obtain a basic age breakdown of the number of in-scope children living in the household in 92 cases. There were 50 families who refused to participate in the survey, and refused to give any indication of the number of in-scope children resident.

From this data it is possible to compare the respondents and non-respondents by basic demographic characteristics, where provided, and also by characteristics of the Census Collection Districts (CDs) where they live.

### Carer reports

Carer reports about the children and young people in the sample were obtained on the Child Health Questionnaire forms. In the 245 non-participating families where HRF information was obtained, there were 651 in-scope children listed. Among participating families there were an additional 224 children for whom forms were not received (180 children aged 4–17 years and 44 children aged 0–3 years) (Table D.1). This group of 875 non-responding children were compared with the 5,289 children for whom responses were received by demographic characteristics collected on the HRF.

Table D.2 compares the responding children with the known non-respondents by selected characteristics. There were significant associations found with region, age and socio-economic status. Age and region are factors that have been incorporated into the weighting design.

### Youth self-report

For each young person aged 12–17 years, in addition to collecting information from the primary carer on the Child Health Questionnaire, information was collected directly from the young person via the Youth Self Report questionnaire. This could either be administered by the interviewer, or the form could be left with the young person for self-completion and later collection, at the convenience of the family.

As noted in Table D.1, only 73 per cent of young people in participating families completed the youth self-report. For many of the non-responding young people, some information was available on the Child Health Questionnaire as reported by the primary carer. Thus it was possible to compare characteristics of respondents and non-respondents to the youth form, by information collected from their carers.





In addition to standard demographics, the following variables were examined:

- ◆ whether the youth was still in school
- ◆ presence of mental health problems
- ◆ contact with police or juvenile justice agencies
- ◆ contact with Family and Children’s Services
- ◆ number of houses lived in
- ◆ whether the primary carer is the child’s natural mother.

**TABLE D.2:** RESPONSE RATES TO CHILD HEALTH QUESTIONNAIRE, BY SELECTED CHARACTERISTICS

	Response rate (%)	Significance (p-value) (a)
Sex—		
Male	85.7	0.58
Female	86.2	
Age—		
0–3	86.6	<0.001
4–11	87.6	
12–14	84.6	
15	80.3	
16	79.2	
17	75.1	
Region—		
Perth metropolitan area	82.1	< 0.001
South West	80.9	
Midwest and Goldfields	90.9	
Kimberley and Pilbara	89.8	
Index of relative socioeconomic disadvantage—		
Bottom 5%	84.5	< 0.001
5%–10%	85.9	
10%–25%	84.1	
25%–50%	87.2	
Top 50%	90.8	
Household size—		
3 members or less	87.6	0.24
4	85.3	
5	86.2	
6	86.8	
7 or more	84.7	

(a) Significance of association between response rates, assessed using  $\chi^2$  test

As can be seen from Table D.3, young people responding to the youth self-report were more likely to be aged between 13–15 years and to be living in the Perth metropolitan region, while non-respondents were more likely to live in census collection districts classified to the bottom 5 per cent of socioeconomic disadvantage, to have had contact with police, juvenile justice or courts, or to be at high risk of clinically significant emotional or behavioural difficulties.



**TABLE D.3:** RESPONSE RATES TO YOUTH SELF-REPORT, BY SELECTED CHARACTERISTICS FROM CARER REPORTS

	<i>Response rate (%)</i>	<i>Significance (p-value) (a)</i>
Sex—		
Male	69.7	
Female	78.0	<0.001
Age (years)—		
12	63.8	
13	78.5	
14	77.5	
15	80.1	
16	72.9	
17	70.6	<0.001
Region—		
Perth metropolitan area	79.7	
South West	73.5	
Midwest and Goldfields	71.6	
Kimberley and Pilbara	69.1	0.005
Index of relative socioeconomic disadvantage—		
Bottom 5%	66.4	
5%–10%	79.8	
10%–25%	75.5	
25%–50%	74.8	
Top 50%	79.1	0.003
Still at school—		
Yes	71.8	
No	74.5	0.335
Primary carer—		
Birth mother	71.9	
Someone else	74.7	0.275
Contact with police—		
No	74.9	
Yes	67.7	0.033
Contact with juvenile justice officer—		
No	74.8	
Yes	63.4	0.008
Contact with children's court—		
No	75.0	
Yes	59.8	<0.001
Contact with Family and Children's Services—		
No	73.7	
Yes	76.4	0.507
Number of homes lives in—		
1	65.9	
2	68.5	
3	76.5	
4–6	77.1	
7 or more	75.8	0.010
Risk of clinically significant emotional or behavioural difficulties—		
Low	74.4	
Moderate	80.6	
High	69.2	0.038

(a) Significance of association between response rates, assessed using  $\chi^2$  test

These results suggest that young people at high risk of clinically significant emotional or behavioural difficulties and other behavioural problems are slightly under-represented among respondents to the Youth Self Report. While the weights have been designed to compensate for the differential response rates by age and region, it is not



possible to adjust for the lower representation of young people at high risk of clinically significant emotional or behavioural difficulties as no population benchmarks are available at this level.

### IMPUTATION FOR ITEM-LEVEL NON-RESPONSE

Almost all of the items collected in the survey have some level of item non-response. Very few survey questionnaires were complete for every item. Item level non-response often arose in cases where the respondent did not know the answer to a particular question. While each survey form contained hundreds of data items, most forms only had missing or unknown responses for a handful of data items. In these cases it would be wasteful to exclude entire forms because of the lack of a small number of data items. For most of the data items there was only a small amount of item level non-response.

Table D.4 presents a summary of the item level non-response for the forms in the WAACHS. There were significant issues with a small number of questions, which as a result have had to be excluded from the analysis. A combination of a printing error and an error in the data entry system resulted in large quantities of missing data for the questions asking if carers smoked in the house and the number of people who smoke inside the house. Regrettably it was not possible to analyse these items. On the Child Health Questionnaires there were issues in cases where the primary carer was not the natural mother of the child and then not knowing about substance use during pregnancy, breastfeeding etc. These ‘don’t know’ responses are included as a separate category in the analysis.

The youth self-report was mostly filled in by young people without assistance from the interviewer and a higher rate of item-level non-response has been recorded. Questions about problems at school, diet, medicines taken, severity of any emotional or behavioural difficulties and bullying were not well answered.

**TABLE D.4:** ITEM LEVEL NON-RESPONSE ON WAACHS HOUSEHOLD SURVEY FORMS

Form type	Number of items	Number of missing items		Number of items not imputed (a)	Most frequently missed items
		Range	Median		
Carer 1	302	0–174	2	5	Whether carer smoked in house, Number of people who smoke in house
Carer 2	101	0–39	1	2	Whether carer smoked in house, Number of people who smoke in house
Child Health Questionnaire for children 4–17 years	256	0–168	2	25	Months breastfed, Smoking alcohol and drug use during pregnancy if carer not natural mother, Age of first day-care, Likes and dislikes about school
Child Health Questionnaire for children 0–3 years	116	0–53	0	10	Names of antibiotics taken, Asthma medications, Why immunisations not up to date
Youth self report	241	0–204	5	46	Use of asthma medicines, Fruit eaten, Severity of emotional or behavioural difficulties, Victim of bullying, Bullying behaviour, Problems at school

(a) Imputation for item level non-response was not performed if the number of records with missing values exceeded 10% of the number of respondents eligible to answer the question.



For variables with low levels of non-response, it was decided to impute values as in general the low level of non-response has minimal substantive effect on the analysis, whereas the inclusion of a 'not stated' category in each table would complicate the presentation or results, particularly when calculating ratios and percentages.

Random hot-deck imputation was used for imputing non-response at the item level. Imputation classes were formed based on age, sex and remoteness. Then within each imputation class, a donor was chosen at random for each non-respondent. The donor's response was then used to impute the value for the non-respondent.

This procedure doesn't add extra information about the non-respondents, but serves to fill out the data set to make analysis and interpretation of the results more straightforward. To prevent imputed values affecting the analysis in any substantive way, a cut-off of 10 per cent of the applicable responses was set as a limit. If the level of non-response for any item exceeded this limit, no imputation for that item took place, and the categories 'don't know' and 'not stated' were maintained and are presented in the published results. As sequencing of the questionnaires limits the sub-population answering some items on the survey forms, this cut-off was applied at the sub-population level. For instance, suppose that question one asks 'are you the natural mother of the child?' and question two asks the natural mothers 'How long did you breastfeed this child?'. If more than 10% of the natural mothers either answered 'Don't know' or didn't provide an answer no imputation would take place for this item. There were only a small number of items where this limit was exceeded, as seen in Table D.4.

## SUMMARY

Non-response in sample surveys can be a source of bias and assessing its impact is a critical step in evaluating data quality and generalisability. Fortunately the WAACHS has been well supported by the Aboriginal families of WA, and response rates were very high. This acts to minimise the impact of non-response on the generalisability of the findings. Comparison of the responding sample with Census data revealed differences in response rates by age of child (with a tailing off of participation of children from ages 12 to 17 years) and by household size. These differences have been accounted for by making adjustments to the survey weights. As a result, the weighted estimates from the survey will be representative of the population of Aboriginal children by age and household size.

There is a limit to the extent that non-response bias can be measured, because there is not a great deal known about the non-respondents. There is only a small set of variables common to both the WAACHS and the Census, and differences between respondents and non-respondents by other characteristics cannot be measured. It is never possible to completely rule out the possibility of response bias. However, the high response rate coupled with the fact that no differences in sample distribution were observed for most of the census variables considered, suggests that overall the impact of non-response at the family level will be minor.

At the person level, there were lower levels of response observed for secondary carers and for the youth self-report forms. Because a population of secondary carers cannot be defined from the census, it is very difficult to make any judgements about the responding sample of secondary carers. However, the young people responding to the youth self-report have been compared with the non-respondents according to a range of characteristics reported by the primary carer. There is some evidence of systematic



differences, suggesting that young people responding to the youth self-report are different from the non-respondents. Differences by age, sex and region have been accounted for in the weighting adjustments. However, it was not possible to make adjustments for young people with emotional or behavioural difficulties, or who have had contact with police, juvenile justice officers or children's court. This will need to be kept in mind when interpreting the results of the youth self-reports — that young people with serious emotional and behavioural problems are underrepresented in this part of the sample.

In the main, item level non-response has not significantly impacted on the survey. Most items have only a small amount of item non-response, and for convenience, these missing figures have been imputed using random hot-deck imputation. The few variables with high rates of item level non-response have been excluded from the analysis.

## ENDNOTES

1. Zubrick SR, Lawrence DM, Silburn SR, Blair E, Milroy H, Wilkes T, Eades S, D'Antoine H, Read A, Ishiguchi P, Doyle S. *The Western Australian Aboriginal Child Health Survey: The health and wellbeing of Aboriginal children and young people*. Perth: Telethon Institute for Child Health Research; 2004.



## APPENDIX E: RELIABILITY OF ESTIMATES

### MEASURING SAMPLING ERROR

Estimates from the WAACHS are based on information obtained from a sample of families, and are therefore subject to sampling variability. The figures from the sample may be different from the figures that would have been obtained had all families with Aboriginal children in Western Australia been included in the collection, just by virtue of random chance. This variability is known as sampling error. The size of the survey sample and the way the sample is designed are factors in determining the amount of sampling error.

Sampling errors can be estimated from the survey data. One measure of the sampling error is given by the 95% confidence interval. The confidence interval measures the degree to which an estimate may vary from the value that would have been obtained from a complete enumeration of the entire population. There are about nineteen chances in twenty (i.e. a 95% chance) that the population value will lie in the range indicated by the confidence interval.

For example, the proportion of Aboriginal children aged 4–17 years who were assessed as being at high risk of clinically significant emotional or behavioural difficulties based on reports from their carers was estimated to be 24.0 per cent with a 95% confidence interval of (21.9%–26.1%). This means that there is a 95% chance that if the entire population had been enumerated, and not just the sample, the population value would lie between 21.9 per cent and 26.1 per cent (a range of 4.2 percentage points).

The size of a confidence interval is a measure of the accuracy of an estimate. The smaller the confidence interval the more accurate the estimate is. As a general rule, the smaller the sample size used for calculating an estimate, the less accurate that estimate will be. For instance, the proportion of Aboriginal children aged 4–17 years living in the Perth metropolitan area who were assessed as being at high risk of clinically significant emotional or behavioural difficulties was 27.4 per cent with a 95% confidence interval of (23.5%–31.3%), a range of 7.8 percentage points. As only approximately 30 per cent of survey children live in the Perth metropolitan area this estimate is based on a smaller sample size than the estimate for WA overall. As shown above, the confidence interval for the WA estimate has a range of 4.2 percentage points, whereas when restricted to the Perth metropolitan area only, the confidence interval has a range of 7.8 percentage points.

### ASSESSING STATISTICAL SIGNIFICANCE

Confidence intervals provide a means to assess the statistical significance of differences between figures. When comparing different estimates it is possible that differences could arise by chance alone, because the data is based on a random sample. Differences between figures are said to be statistically significant when it is very unlikely that the difference could be attributed to random chance. The confidence interval gives a ready means of identifying the statistical significance of differences between figures.

For example, the proportion of Aboriginal children aged 4–17 years who were assessed as being at high risk of clinically significant emotional or behavioural difficulties was estimated to be 27.4 per cent among children living in the Perth metropolitan area, and 10.8 per cent among children living in areas of extreme relative isolation.



The respective 95% confidence intervals are (23.5%–31.3%) and (7.4%–15.0%). If two confidence intervals overlap we conclude that there is a possibility the difference could be due to chance variation. When there is no overlap, as in this example, we conclude that the difference is statistically significant. That is, it is likely to represent a real difference in the proportion of children at high risk of clinically significant emotional or behavioural problems between the two areas that cannot be explained by random chance alone. However, the proportion of Aboriginal children aged 4–17 years who were assessed as being at high risk of clinically significant emotional or behavioural difficulties was estimated to be 25.0 per cent among children living in areas of low relative isolation, with a 95% confidence interval of (21.0%–29.2%). As there is substantial overlap between this confidence interval and the confidence interval for the estimate from the Perth metropolitan area, it is possible that the difference in the estimates could be due to chance variation. The difference between the figures for the Perth metropolitan area and for areas of low relative isolation would be regarded as not statistically significant.

It is important to note that just because a difference is not statistically significant does not mean that there is no real difference between the groups being compared. Where there is a true, but small difference, it is possible that the difference is smaller than the accuracy of the estimates, as measured by the confidence interval. For instance, if there was a one per cent difference in the true population values of the proportion of children at high risk of clinically significant emotional or behavioural difficulties between the Perth metropolitan area and areas of low relative isolation, the survey could not detect this, as the confidence intervals for the estimates are wider than one per cent. This is referred to as the power of the survey. Generally speaking, the survey does not have the power to detect differences in figures less than two to three per cent, and the power of the survey is reduced for small subsets of the survey population.

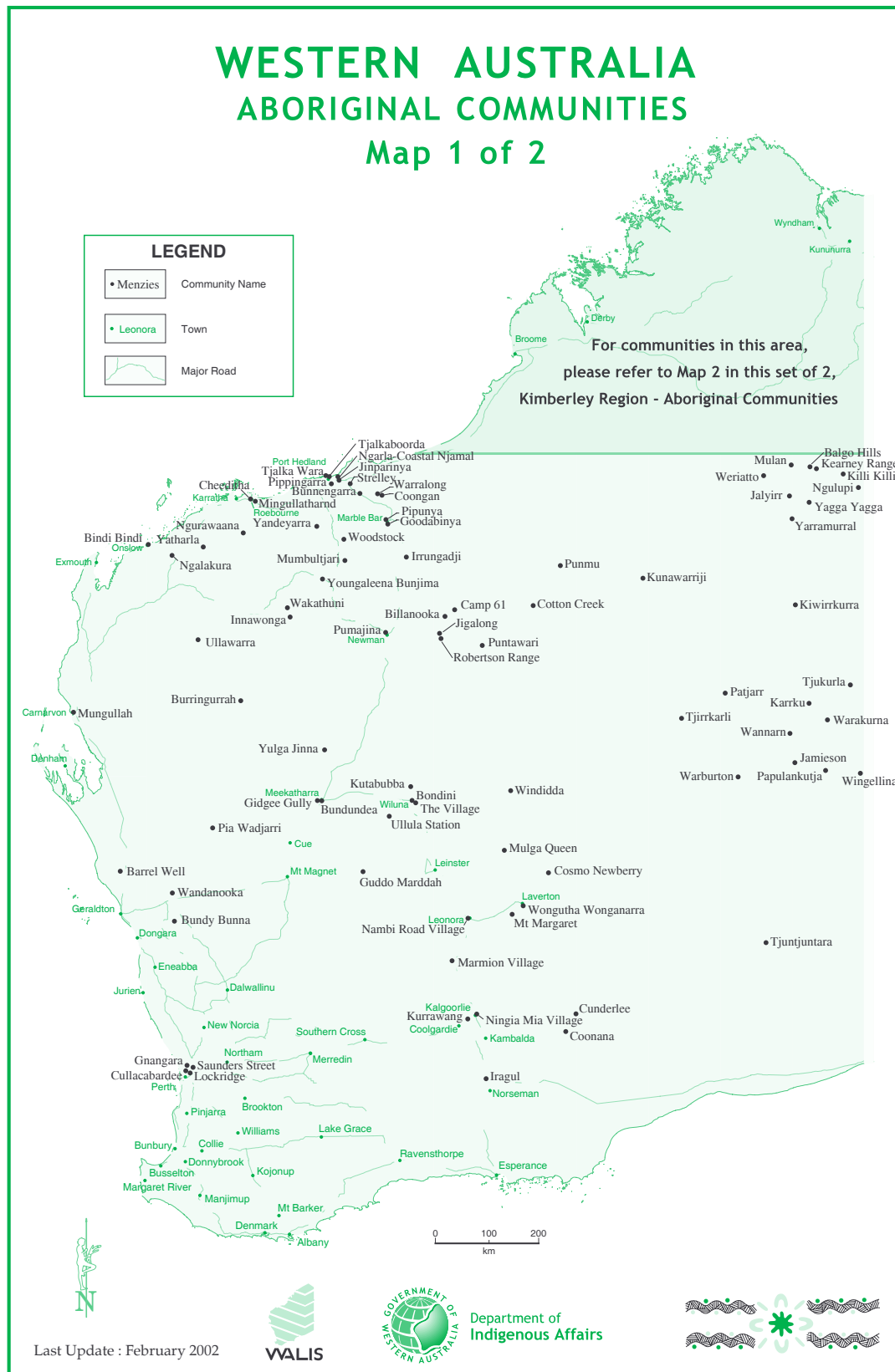
## NON-SAMPLING ERRORS

In addition to sampling error, survey estimates can be subject to other inaccuracies, which are referred to collectively as non-sampling error. Non-sampling errors can occur because of form design limitations, errors in reporting by respondents due to difficulties recalling certain data or lack of appropriate records for certain data, errors made in collection such as in recording and coding data by the interviewers, and errors in the processing of the data. Non-sampling errors may occur in any enumeration, whether it is a full census or a sample.

Every effort is made to reduce non-sampling error to a minimum by careful design and testing of questionnaires, thorough training of interviewers, efficient operating procedures including quality control procedures, editing of survey returns and use of appropriate survey methodologies.



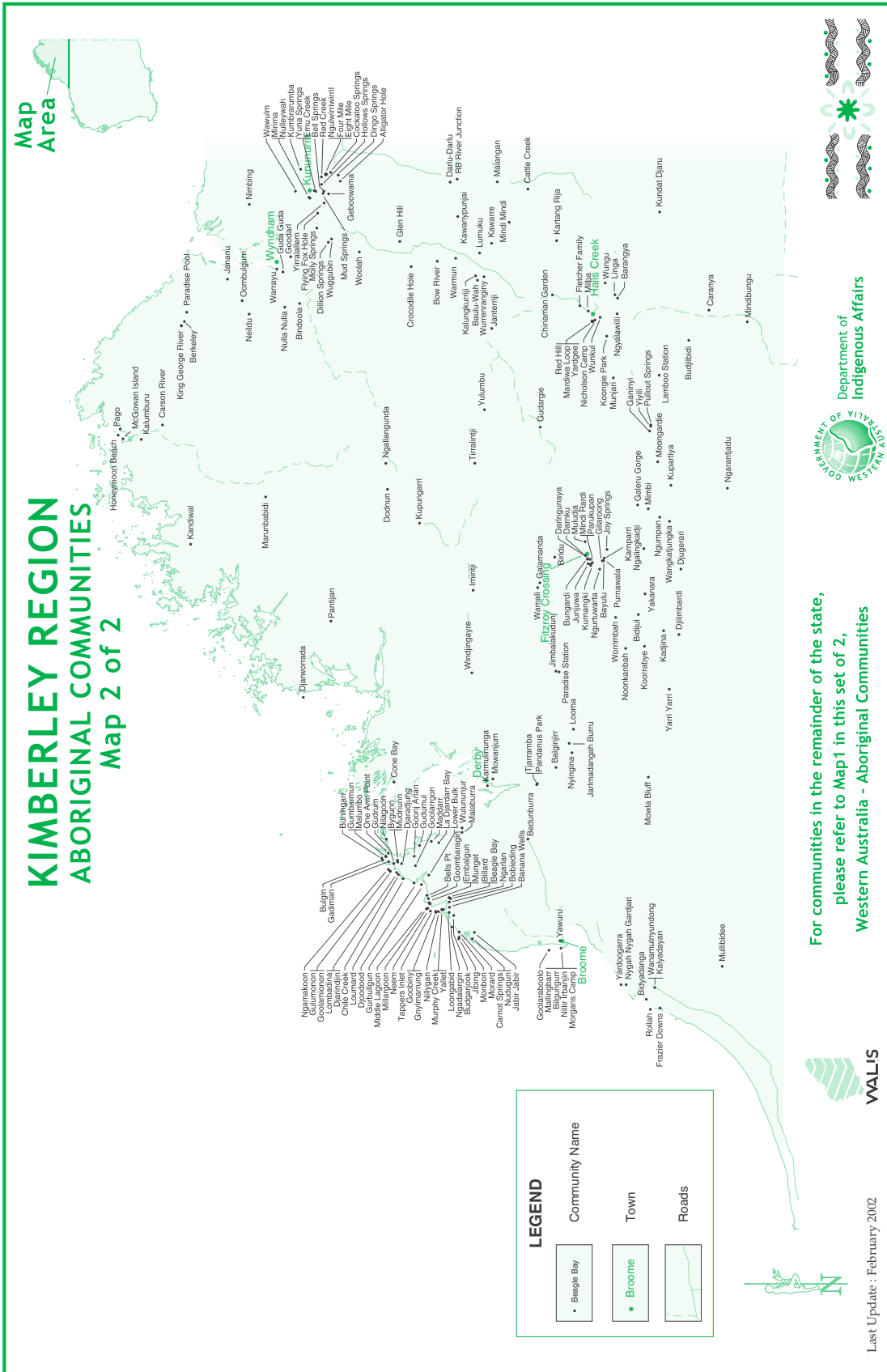
**APPENDIX F: WESTERN AUSTRALIAN ABORIGINAL COMMUNITIES MAPS**



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## GLOSSARY

### CARER EDUCATION

The level of educational attainment achieved by carers was determined from two survey questions: “What was the highest grade you finished at school?”, and “What qualifications have you received since leaving school”. Qualifications were classified as:

- ◆ Trade/apprenticeship
- ◆ Certificate from college
- ◆ Diploma (beyond year 12)
- ◆ Bachelor Degree
- ◆ Post Graduate Diploma/higher degree
- ◆ Other

Carers who had completed a diploma, bachelor degree, post graduate diploma or higher degree were classified as having 13+ years education. Otherwise educational attainment was classified by highest grade finished at school. The following categories have been used in this publication:

- ◆ Did not attend school
- ◆ 1–9 years education
- ◆ 10 years education
- ◆ 11–12 years education
- ◆ 13+ years education

Note that educational attainment refers to highest level achieved, not the number of years taken to achieve the qualification.

### DWELLINGS

In household surveys a distinction is often made between dwellings, households and families as per the Census of Population and Housing, with allowance made for the possibility of more than one household living in a single dwelling, and for a household to comprise more than one family. In the census, a dwelling is a habitable structure, a household is a group of related or unrelated people who make common provision for food, while a family is a group of people related by blood, marriage, adoption, step or fostering who usually reside within a single family. Note that in a block of flats, for example, each flat is considered to be a separate dwelling.<sup>1</sup>

In practice, the distinction between dwellings, households and families was found to have little importance in the WAACHS. Aboriginal families living together often contain extended family relationships. However, there were hardly any cases where two or more unrelated families were found to be living in the same household, and no cases were found where multiple households were residing in the same dwelling. In this volume, the terms household and family are used interchangeably, while the term dwelling is used to describe the physical structure in which a household or family is living.



## INDEX OF RELATIVE SOCIO-ECONOMIC DISADVANTAGE

The index of relative socio-economic disadvantage is one of five measures of socio-economic status calculated by the ABS in their SEIFA product.<sup>3</sup> The index is a summary measure calculated from census data which ranks the relative level of disadvantage of each census collection district (CD). As one of the factors included in the standard SEIFA product is proportion of Aboriginal and Torres Strait Islander people in each CD, the ABS produced a special version of the index for use in this survey that excluded this variable as a factor. The index is scaled to have a mean of 1,000 and a standard deviation of 100. Lower values indicate greater levels of disadvantage.

## INDIGENOUS STATUS

To be included in the survey, carers had to identify one or more of their children in their household as being of Aboriginal or Torres Strait Islander origin. Only Aboriginal or Torres Strait Islander children (under the age of 18 years) were included in the survey, even in those cases where there were both Aboriginal and non-Aboriginal children living in the same household. Note that the carers did not have to be Aboriginal for the family to be included in the survey.

Carers were also asked whether they were of Aboriginal or Torres Strait Islander descent. Approximately 17 per cent of primary carers and 21 per cent of secondary carers of Aboriginal and Torres Strait Islander children and young people were not of Aboriginal or Torres Strait Islander descent.

## LEVEL OF RELATIVE ISOLATION (LORI)

A new classification of remoteness and isolation has been designed for this survey — the Level of Relative Isolation (LORI). The LORI is based on a product from the National Key Centre for Social Application of Geographic Information Systems at Adelaide University (GISCA) called ARIA++. The ARIA++ is an extension of ARIA (the Accessibility/Remoteness Index of Australia), which was first published in 1997 and has been widely adopted as the standard classification of remoteness in Australia. Because ARIA is based on describing the entire population of Australia, it has not been specifically designed to describe the circumstances of Aboriginal people living in remote areas. The ARIA++ gives much greater discrimination among more remote areas by including more service centres, of smaller sizes, in calculating its remoteness scores.

Based on the ARIA++ scores, five categories of isolation have been defined specifically for the survey that reflect differences in access to services for Aboriginal children. To avoid confusion with the original ARIA, the five categories are referred to as Levels Of Relative Isolation (LORI) and range from None (the Perth Metropolitan area) to Low (e.g. Albany), Moderate (e.g. Broome), High (e.g. Kalumburu) and Extreme (e.g. Yiyili).

See *Level of Relative Isolation* in Chapter 1, and *Appendix C — Determination of Levels of Relative Isolation from ARIA++* of Volume One<sup>3</sup> for more details.

## LOGISTIC REGRESSION

See **MULTIVARIATE LOGISTIC REGRESSION MODELLING**



## MULTIVARIATE LOGISTIC REGRESSION MODELLING

Logistic regression is a modelling technique that is used to investigate the relationship between the probability of a certain outcome (for example, a child having a particular health condition) and a set of explanatory variables. Logistic regression is discussed in several statistical publications – see, for example, Hosmer and Lemeshow (2000).<sup>4</sup> In this publication, logistic regression models have been fitted using a weighted version of multi-level modelling which allows for community level, family level and individual level factors to be included as explanatory variables in the models (see Pfeiffermann *et al*, 1997).<sup>5</sup> This technique takes into account the survey weights and the hierarchical structure of the data with selection of children within families and communities.

Logistic regression modelling has been used in situations where multiple factors may all have an impact on an outcome of interest. If the factors themselves are inter-related, bivariate tables may not tell the full story. For each variable included in a logistic regression model, the model determines its effect on the outcome independent of the effect of all other variables included in the model.

## ODDS RATIO

The odds of a given event is the ratio of the probability of its occurrence to the probability of its non-occurrence. For instance the odds of obtaining heads in a coin toss are one to one, the odds of any given face in the roll of a die are one to five. The odds ratios used in this publication are a measure of relative risk, derived from a formula which examines the association between, in most of the survey cases, a risk factor (exposure), and an adverse health outcome. In this publication odds ratios have been estimated using logistic regression, which estimates the effect of each risk factor included in a model after adjusting for the independent effects of all other factors included in the model.

The statistical significance of an odds ratio can be judged by whether the confidence interval includes the reference value of one.

## OUTSTATIONS

Generally speaking outstations are small Aboriginal communities where families live in close connection with the natural environment. These outstation communities are often linked to a larger parent Aboriginal community for the provision and maintenance of services.

## PRIMARY CARER

For each child in the survey, the family was asked to identify the primary carer of that child. This was the person who was considered to spend the most time with the child or who had primary responsibility for the upbringing of the child. In many cases, the primary carer was the child's mother. The primary carer was then asked to provide information about each of the children in their for the survey.



## RECORD LINKAGE

Carers were asked for consent to access their hospital and medical records, as well as the birth, hospital and medical records of their children. Carers who consented were given the opportunity to opt out at any stage should they change their mind. The vast majority of carers consented to these records being accessed. Of primary carers, 96.7 per cent consented to allow access to their hospital records, while 92.8 per cent of secondary carers gave similar consent. Overall, 96.3 per cent of carers gave consent for their children's birth, hospital and medical records to be accessed.

The WA Record Linkage System is unique in Australia, and one of only a handful of similar data collections in the world. It links together birth and death registrations with administrative hospital data from several sources to give a comprehensive record of health services contacts for the population of Western Australia. As there are no unique identifying numbers, probabilistic record linkage has been used to link the files together. This operates on matching names, dates of birth, hospital names and addresses. The procedure allows for possible changes in the matching fields by calculating the probabilities of records being correct matches. Records that are potential links are clerically reviewed, and the overall error rate has been estimated to be less than one per cent.

Key components of the record linkage system used in the survey are the birth records, the Hospital Morbidity Data System and the Mental Health Information System.

## SECONDARY CARER

Each family was asked to identify the primary and secondary carer of each child. Often the secondary carer was the father of the child, but may also have been a grandparent or other relative of the child, or other person involved in the upbringing of the child.

## ENDNOTES

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3. Zubrick SR, Lawrence DM, Silburn SR, Blair E, Milroy H, Wilkes E, Eades S, D'Antoine H, Read A, Ishiguchi P, Doyle S. *The Western Australian Aboriginal Child Health Survey: The health of Aboriginal children and young people*. Perth: Telethon Institute for Child Health Research; 2004.
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5. Pfeiffermann D, Skinner CJ, Holmes DJ, Goldstein H, Rasbash J. Weighting for unequal selection probabilities in multi-level models. *Journal of the Royal Statistical Society, Series B* 1998;60:23–40.

