## Population Trends

In this issue
In Brief ..... 3
Demographic indicators ..... 6
The demographic situation in the European Union7Describes the recent demographic situation in the European Union, comparing it with the worldsituationDavid Pearce and Francois-Carlos Bovagnet
Replacement fertility, what has it been and what does it mean?16
Discusses the concept of replacement fertility, presents calculations of past replacement fertilitylevels in England and Wales and looks at the effect of below replacement fertility andpostponement of fertility on the population
Steve Smallwood and Jessica Chamberlain
The creation of 'Consistent Areas Through Time’ (CATTs) in Scotland, 1981-2001
Page

A new set of geographical areas have been developed for Scotland, which enable reliable comparisons of census data over time
Daniel J Exeter, Paul Boyle, Zhiqiang Feng, Robin Flowerdew and Nick Schierloh

## Tables

## List of tables

Tables I.I-9.3 38

## Notes to tables

## Reports:

Cohabitation population estimates for England and Wales, 2003
Marriages in England and Wales, 2003

## Annual Update:

## About the Office for National Statistics

The Office for National Statistics (ONS) is the Government Agency responsible for compiling, analysing and disseminating many of the United Kingdom's economic, social and demographic statistics, including the retail prices index, trade figures and labour market data, as well as the periodic census of the population and health statistics. It is also the agency that administers the statutory registration of births, marriages and deaths in England and Wales. The Director of ONS is also the National Statistician and the Registrar General for England and Wales.

## A National Statistics publication

National Statistics are produced to high professional standards set out in the National Statistics Code of Practice. They undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political influence.

## About Health Statistics Quarterly and Population Trends

Health Statistics Quarterly and Population Trends are journals of the Office for National Statistics. Each is published four times a year in February, May, August and November and March, June, September and December, respectively. In addition to bringing together articles on a wide range of population and health topics, Health Statistics Quarterly and Population Trends contain regular series of tables on a wide range of subjects for which ONS is responsible, including the most recently available statistics.

## Subscription

Annual subscription, including postage, is $£ 80$; single issues are $£ 25$.

## Online

Health Statistics Quarterly and Population Trends can be viewed or downloaded as Adobe Acrobat PDF files from the National Statistics website www.statistics.gov.uk/products/p6725.asp (Health Statistics Quarterly) or www.statistics.gov.uk/products/ p6303.asp (Population Trends).

## Editorial board

Peter Goldblatt (editor)
Roma Chappell (editor)
Angela Dale
Paul Hyatt
Judith Jones
Azeem Majeed
Jil Matheson
lan R Scott

## Contributions

Articles: 5,000 words max.

## Dates for submissions

| $\qquad$ <br> Title | Sが |  | $p^{v^{2}}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Health Statistics Quarterly | by II Sept | by II Dec | by 22 Mar | by 21 June |
| Population Trends | by 23 Oct | by 2 Feb | by 4 May | by 26 July |

## Please send to:

Ian Thurman, executive secretary
Population Trends
Office for National Statistics
Zone B6/04
I Drummond Gate
London SWIV 2QQ
Tel: 02075335125
E-mail: ian. thurman@ons.gsi.gov.uk

## Contact points at ONS

People with enquiries about the statistics published regularly in Health Statistics Quarterly and Population Trends can contact the following enquiry points.

## Topic enquiries

Abortions: 02079725537 (Department of Health) E-mail:abortion.statistics@doh.gsi.gov.uk
Births: 01329813758 E-mail: vsob@ons.gsi.gov.uk
Conceptions: 01329-813758 E-mail: vsob@ons.gsi.gov.uk
Expectation of life: 02072 II 2622 (Government Actuary's Department)
Marriages and divorces: 01329813758
E-mail: vsob@ons.gsi.gov.uk
Migration: 01329 813872/813255
Mortality: 01329813758 E-mail: vsob@ons.gsi.gov.uk
Population estimates: 01329 813318 E-mail: pop.info@ons.gsi.gov.uk
Population projections:
National - 020 721I 2622 (Government Actuary's Department)
Subnational - 01329 8I3474/8I3865

## General enquiries

National Statistics Customer Contact Centre
Room IOI5 Government Buildings
Cardiff Road
Newport NPIO 8XG
Tel: 0845 601 3034
E-mail: info@statistics.gsi.gov.uk
Website: www.statistics.gov.uk
© Crown copyright 2005. Published with the permission of the Controller of Her Majesty's Stationery Office (HMSO).
This publication, excluding logos, may be reproduced free of charge, in any format or medium for research or private study subject to it being reproduced accurately and not used in a misleading context. The material must be acknowledged as crown copyright and the title of the publication specified. This publication can also be accessed at the National Statistics website: www.statistics.gov.uk
For any other use of this material please apply for a free ClickUse Licence on the HMSO website: www.hmso.gov.uk/click-use-home.htm or write to HMSO at The Licensing Division, St Clement's House, 2-16 Colegate, Norwich, NR3 IBQ. Fax 01603 723000 or e-mail: hmsolicensing@cabinetoffice.x.gsi.gov.uk
ISBN I-4039-909I-I
ISSN 0307-4463


## Population estimates by Primary Care Organisation (PCO): mid-200I to mid-2003

On 10 February 2005, the Office for National Statistics (ONS) published mid-2001, mid-2002 and mid-2003 population estimates for England by Primary Care Organisation. PCOs are the smallest area of health care administration, and are made up of 300 Primary Care Trusts (PCTs - first introduced April 2000) and three Care Trusts (CTs - first introduced April 2002).

These estimates are based on the 2001 Census, and include adjustments made in light of the Local Authority Population Studies. They use the cohort component methodology, as used in the mid-year estimates for England and Wales by Local Authority. These PCO estimates are fully consistent with the latest mid-2001 to mid2003 Local Authority estimates.

For all three years the PCO with the largest population was Sutton and Merton, with a population of 369,900 in mid-2003. The PCO with the smallest population was Central Derby, with a population of 64,200 in mid-2003.

Nationally, the population at pensionable age has increased by 1.5 per cent between mid-2001 and mid-2003. Compared to the total population increase of 0.8 per cent, this reflects increases
in life expectancy. In mid-2003 Bexhill \& Rother PCO has the greatest proportion of the population at pensionable age ( 31.9 per cent). This proportion has only increased slightly, from 31.7 per cent in mid-2001. Conversely, Newham PCO has the smallest proportion of the population at pensionable age ( 10.0 per cent in mid-2003). Newham has experienced a decrease in pensionable age population, of 3.0 per cent between mid-2001 and mid-2003.

Bexhill \& Rother PCO also has the greatest proportion of the population aged 85 and over (4.4 per cent in mid-2003). This proportion has fallen slightly since mid-2001, where people aged 85 and over accounted for 4.6 per cent of the population. Nationally the proportion of the population aged 85 and over ( 1.9 per cent) has not changed over this period.

Bradford City Teaching PCO has the greatest proportion of the population under 16 (28.2 per cent) in mid-2003. This proportion has not changed from the mid-2001 estimate. Conversely, Westminster PCO has the smallest proportion of the population under the age of 16 (13.2 per cent). The equivalent national average is 19.7 per cent.

The national sex ratio (males/females) was 0.96 in mid-2003. Tower Hamlets PCO has the highest sex ratio in mid-2003, at 1.05. This has not changed since mid-2001. Eastbourne Downs has the lowest sex ratio in mid-2003, at 0.88 . This has only increased slightly from 0.87 in mid-2001. The low sex ratio in this PCO is influenced by the high proportion of the population aged 85 and over ( 4.0 per cent in mid-2003), and reflects the greater life expectancy for females compared to males.

The PCO data, and population estimates on other geographies, can be found from the population estimates homepage at http: //www.statistics.gov.uk/popest.

## New marital status projections for England and Wales

The Government Actuary's Department (GAD) published new marital status projections for England and Wales (combined) on 10 March 2005. These cover both legal marital status and the population cohabiting. The projections are 2003-based. So they are based on the ONS mid-2003 (legal) marital status estimates for England and Wales (see Report in Population Trends 118) and the ONS mid-2003 cohabitation estimates for England and Wales (see page 67). They are also consistent with GAD's interim 2003-based national population projections (see article in Population Trends 118). Details are available from the GAD website at http://www.gad.gov.uk/marital_ status_projections/2003/index_principal.htm and there will also be a report on the new marital status projections in the June issue of Population Trends (120). The previous set of marital status projections were 1996-based (see Population Trends 95 for details).

## Ten years on top for Jack

Jack and Emily were the most popular names given to babies in England and Wales in 2004. Jack has now been the top boys' name for ten years while Emily has been most popular for two years.

Chloe, the most popular girls' name for seven years until 2002 dropped to number five, behind Ellie, Jessica and Sophie.

Parents of baby boys have remained consistent in their choices, with the top five of Jack, Joshua, Thomas, James and Daniel unchanged since 2002. Looking at the top 50 names for boys, Henry jumped six places to enter at 48 , followed by Toby, up one place to 50. David and Reece dropped out of the top 50 Last year's big climber Alfie was less popular this year, down nine places to 27, while Charlie went up nine places to 16 . Mohammed went up again to enter the top 20 for the first time.

Evie was the highest new entry in the girls' top 50 , up 22 places to 39 . Other new entries for girls were Madison (up 30 to 43), Maddison also featured in the top 100 and Niamh (up seven to 48). Rachel, Sarah and Shannon all dropped out of the top 50. Other leading girls’ names increasing in 2004 were Lily (up eight to number 16), Isabelle (up 12 to 30) and Ruby (up 19 to 31).

In Wales, the top boys' name was Joshua ahead of Jack with Dylan, Ethan, Rhys and Morgan also making the top 10. Megan was most popular for girls in Wales with Emily in fourth and Ffion and Caitlin also making the top ten.

Some up-and-coming girls' names that didn't make this year's top 50 were Keira (up 100 places to 51 ) and Kiera (up 30 to 92). If the two spellings were added together they would have been 30th most popular. Scarlett jumped 53 places to 72 .

Leo showed a big increase for boys (up 22 places to 59), as did Louie (up 21 to 91 ) and Freddie (up 23 to 96).

Less common boys' names that showed noticeable increases in popularity in 2004 but are not high enough to rank in the top 100 include Bobby, Ashton and Jenson. The girls' names Maya, Sienna and Abi all showed big increases in popularity, although numbers remain relatively low.

A further look at this year's popular names can be seen on the National Statistics website: http: //www.statistics.gov.uk/CCI/nugget.asp?ID=184

## Top 50 boys' and girls' names in England and Wales in 2004

Boys
Girls

1. Jack
2. Emily
3. Joshua
. Jessica $(+1)$
4. Thomas
5. James
6. Sophie $(+1)$
7. Daniel
8. Chloe $(-2)$
9. Samuel (+2)
10. Oliver $(-1)$
11. Lucy $(+1)$
12. William (+1)
. Olivia (+1)
13. Benjamin ( -2 )
14. Charlotte $(+1)$

Benjamin (-2) 9. Katie (+2)
10. Joseph
11. Harry
10. Megan (-4)

Harry 11. Grace (+2)
12. Matthew 12. Hannah (-2)
13. Lewis 13. Amy $(+2)$
14. Ethan $(+1)$
14. Ella (-2)
15. Luke ( -1 )
15. Mia (-1)
16. Charlie $(+9) \quad$ 16. Lily $(+8)$
17. George $(-1)$ 17. Abigail (+3)
18. Callum $(+1) \quad$ 18. Emma
19. Alexander $(+1)$ 19. Amelia ( +3 )
20. Mohammed (+2) 20. Molly ( -1 )
21. Ryan
22. Dylan (+6
22. Millie (+6)
23. Holly (-7)
24. Adam $(-7)$ 24. Leah $(+3)$
25. Ben $(+1)$ 25. Caitlin $(-4)$
26. Jake $(+5)$ 26. Rebecca ( -1 )
27. Alfie $(-9)$ 27. Georgia (-1)
28. Connor (-4) 28. Bethany ( -5 )
29. Cameron (-6)
30. Liam (-1)
29. Eleanor
30. Isabelle ( +12 )
31. Nathan $(-1)$ 31. Ruby (+19)
32. Harvey $(+4)$ 32. Daisy ( -1 )
33. Jamie $(-1)$ 33. Freya $(+8)$
34. Owen $(-1)$ 34. Isabella (+3)
35. Tyler
35. Elizabeth (-3)
36. Max (-2) 36. Jasmine (-6)
37. Louis $(+5)$ 37. Erin (-1)
38. Kyle (+1)
39. Michael (-1)
38. Alice $(-5)$
39. Evie New (+22)
40. Kieran (-3) 40. Amber
41. Aaron $(+2)$ 41. Paige $(+3)$
42. Bradley (+2) 42. Abbie (-4)
43. Edward ( +2 ) 43. Madison New ( +30 )
44. Brandon ( -4 ) 44. Phoebe ( +1 )
45. Alex $(-4)$
46. Archie (+4)
47. Harrison
45. Poppy ( -2 )
46. Aimee (+3)
47. Courtney $(-13)$
48. Henry New (+6) 48. Niamh New (+7)
49. Charles (-1) 49. Anna (-10)
50. Toby New (+1)
50. Isabel (-3)

Top 10 boys' and girls' names in Wales in 2004

## Boys

1. Joshua
2. Jack
3. Thomas
4. Dylan $(+1)$
5. Ethan $(-1)$
6. Rhys ( +1 )
7. Daniel ( -1 )
8. Morgan
9. James
10. Benjamin (+3)

## Girls

1. Megan
2. Ellie $(+1)$
3. Chloe ( -1 )
4. Emily
5. Sophie (+2)
6. Ffion $(-1)$
7. Katie (+1)
8. Jessica $(+1)$
9. Caitlin ( -3 )
10. Caitlin (-3)
11. Lucy (+6)

## Recent Publications

Annual Abstract of Statistics 2005 (Palgrave Macmillan, £41, March, ISBN 1-4039-9073-5)

Atkinson Review: final report. Measurement of Government Output and Productivity for the National Accounts (Palgrave Macmillan, $£ 50$ January, ISBN 1-4039-9646-6)

Health Statistics Quarterly 25 (Palgrave Macmillan, £25, February, ISBN 1-4039-9086-7)

Marriage, divorce and adoption statistics 2002 (FM2 no. 30) (March, available on the National Statistics website at
http://www.statistics.gov.uk/statbase/product.asp?vlnk=581)

Mortality statistics, childhood, infant and perinatal 2003 (DH3 no. 36) (March, available on the National Statistics website at http://www.statistics.gov.uk/statbase/product.asp?vlnk=6305)

Social Trends 2005 (Palgrave Macmillan, £41, March, ISBN 1-4039-9070-0)

All of the above Palgrave Macmillan titles can be ordered on 01256 302611 or online at www.palgrave.com/ons. All publications listed can be downloaded free of charge from the National Statistics website.

## Demographic indicators



## Figure B

Total period fertility rate

TFR (average number of children per woman)


## Figure C

Live births outside marriage

Percentage of all live births


## Figure D

Infant mortality (under I year)

Rate per $\mathbf{1 , 0 0 0}$ live births


## The demographic situation in the European <br> Union

## Introduction

This article describes the recent demographic situation in the European Union (EU), comparing it with the world situation. It also includes some limited comparisons between the current 25 country European Union and the EU before the most recent enlargement in May 2004 to include an additional ten countries. The statistics are taken from a variety of different sources, principally Eurostat's annual report, Population Statistics $2004^{3}$ and 'First results of the demographic data collection for 2003 in Europe'4 published in Statistics in Focus, 13/2004. More detail is available from both these sources. Some data also comes from the US Census Bureau website, Eurostat's New Cronos database and their estimates which are known as Nowcasts.

## The World Picture

## Population change

The estimated population of the 25 countries of the EU was 456.9 million at the beginning of 2004 , an increase of 2.1 million or 0.5 per cent during 2003. Most of this increase was accounted for by net inward migration with only 200 thousand resulting from natural increase (an excess in the number of births over the number of deaths).

The EU share of the world population has been declining for many years. In 1960 it was 12.4 per cent, but by 2004 it had fallen to 7.2 per cent. Thus in 1960 about one in eight people lived in the EU. By 2004 this proportion had dropped to one in 14 . Table 1 provides a summary of the population growth since 1960 for selected regions and countries.

Over the last 44 years the population of the world has more than doubled, from three to 6.4 billion people. Over 90 per cent of this increase has

## David Pearce

Office for National Statistics and Francois-Carlos Bovagnet Eurostat

This article is an update of a similar article published in Population Trends $104^{1}$ and complements the article on European-wide issues in population statistics, published in Population Trends II8. ${ }^{2}$ The main areas of demography are covered, namely population change, population composition, fertility and mortality. Eurostat are currently working on a new set of population projections which should be available shortly, but were not completed when this article was drafted.
been in less developed countries, constituting 70 per cent of the world population in 1960 . Over the period the population of China has doubled to 1.3 billion with the population of India reaching one billion in 2000.

In contrast the population of the European Union ( 25 countries) increased by 80 million between 1960 and 2004, contributing 2.4 per cent towards world population growth. The distribution of the population between the major regions at mid-1960 and 2004 is shown in Figure 1.

| Table I | Population change, 1960-2004* |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Millions |  |
| Area | 1960 | 1970 | 1980 | 1990 | 2000 | 2004 |
| World | 3,040 | 3,707 | 4,453 | 5,282 | 6,080 | 6,373 |
| More developed countries** Of which | 910 | 1,003 | 1,08। | 1,143 | 1,193 | 1,206 |
| European Union | 378 | 407 | 427 | 440 | 453 | 458 |
| USA | 181 | 205 | 228 | 250 | 282 | 293 |
| Less developed countries** | 2,129 | 2,704 | 3,372 | 4,139 | 4,886 | 5,166 |
| Of which |  |  |  |  |  |  |
| China | 651 | 820 | 985 | 1,148 | 1,269 | 1,299 |
| India | 446 | 555 | 687 | 842 | 1,003 | 1,065 |

* Mid year estimates. The estimates for mid 2004 are provisional.
** See Note A.
Source: See Note B.

\section*{| Figure I | $\begin{array}{l}\text { World population by major regions, } 1960 \text { and } \\ 2004\end{array}$ |
| :--- | :--- | 2004}



Source: See Note B.

## Fertility

The decline in fertility throughout the world, reported in an article in Population Trends 104 has continued. The Total Fertility Rate (TFR) or the number of children that would be born to a woman if current patterns of childbearing persisted throughout her childbearing life were 4.95 for the world based on rates for the period 1960-64. By 2002, the rate had almost halved, to 2.66 . As is to be expected, the decline has been more dramatic for less developed countries as they move through the demographic transition, from high mortality and high fertility to lower mortality and then lower fertility. Thus, for this region, the TFR has dropped from just over six children per woman for the period 1960-64 to under three in 2002 compared with, for example, a decrease from 2.66 to 1.46 for the European Union and from 3.31 to 2.06 for the United States for the same period. One of the most dramatic changes in fertility has been in China where the TFR has declined from 5.72 for the period 1960-64 to 1.65 in 2002 and 1.68 in 2003. An almost equally dramatic drop has been observed in Brazil, from 6.15 in the early 1960s to 2.05 in 2002. Table 2 shows the changes for selected areas or countries over the last 40 years while Figure 2 illustrates the range of TFRs in 2002 for selected areas or countries.

| Table 2 | Total Fertility Rates, 1960-2003 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Millions |  |
| Area | 1960-64 | 1970-74 | 1980-84 | 1990-94 | 2000 | 2004 |
| World | 4.95 | 4.48 | 3.58 | 2.93 | 2.66 | 2.65 |
| More developed countries* | 2.67 | 2.11 | 1.84 | 1.68 | 1.58 | 1.59 |
| Of which |  |  |  |  |  |  |
| European Union | 2.66 | 2.22 | 1.79 | 1.57 | 1.46 | 1.48 |
| USA | 3.31 | 2.02 | 1.82 | 2.05 | 2.06 | 2.07 |
| Less developed countries* | 6.01 | 5.43 | 4.15 | 3.27 | 2.92 | 2.9 |
| Of which |  |  |  |  |  |  |
| China | 5.72 | 4.86 | 2.55 | 1.92 | 1.65 | 1.68 |
| India | 5.81 | 5.43 | 4.47 | 3.56 | 2.98 | 2.91 |

* See Note A.

Source: See Note B.



Source: See Note B.

## Mortality

Infant mortality has also shown a marked decline, more than halving over the last 40 years for the world as a whole, from 117 deaths of babies under 1 per 1,000 live births in the early 1960s to just over 50 for the early 2000s. There has been a downward movement everywhere, though the rate of change has varied as Table 3 shows. The decline in infant mortality has been sharper in the European Union than in the United States. In the early 1960s the rate was higher in the EU, about the same in the early 1980s at 11 deaths per 1,000 live births in the United States but higher in the United States in the early 2000s. Within the European Union, however, the pattern of change has varied between countries.

| Table 3 | Infant mortality rates, 1960-2003 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Millions |  |
| Area | 1960-64 | 1970-74 | 1980-84 | 1990-94 | 2002 | 2003 |
| World | 117 | 93 | 78 | 62 | 53.5 | 52.3 |
| More developed countries* | 33 | 21 | 15 | 10 | 8.4 | 8.2 |
| Of which |  |  |  |  |  |  |
| European union | 34 | 23 | 13 | 8 | 4.8 | 4.6 |
| USA | 25 | 18 | 11 | 8 | 6.9 | 6.8 |
| Less developed countries* | 134 | 104 | 87 | 68 | 58.7 | 57.4 |
| Of which |  |  |  |  |  |  |
| China | 121 | 61 | 52 | 46 | 27.6 | 26.4 |
| India | 157 | 132 | 106 | 78 | 61.3 | 59.6 |

* See Note A.

Source: See Note B.

There were also significant variations between countries as Figure 3 shows.


Source: See Note B.

With decreasing mortality people are living longer as Figure 4 shows.


Source: See Note B.

While, for the world as a whole, life expectancy at birth has increased by some 11 years for both men and women over the last 40 years, the current world average for both sexes is still considerably lower than it was in the European Union, United States and Japan in the early 1960s. For all the areas or countries included in Figure 4, life expectancy has increased. The one exception is the Russian Federation, where for men the figure is now lower than it was 40 years ago when the expectation of life at birth was 64.0 years compared with a current level of 61.2 years, one year lower than that for the world as a whole ( 62.2 years). Changes in lifestyle and responsibilities resulting from political and social changes which have occurred in CIS and central and eastern Europe have led to
increases in male mortality from, for example, alcohol-related causes, including accidental deaths. ${ }^{5}$ For women, the expectation of life at birth in Russia has remained relatively stable over the same time period, with a slow increase to the 1980s, to just over 72 years, and a small decline in the 1990s.

## Population Structure

With more developed countries having experienced relatively low levels of fertility and mortality for many decades they tend to be categorised as ageing populations, compared with less developed countries where lower levels of fertility, in particular, as well as lower mortality rates are far more recent. The result of these differences in timing as countries go through the demographic transition is reflected in quite different age structures, as illustrated in Table 4.

The outcome of these different age structures is seen in the age dependency ratio or the ratio between the population aged under 20 or 60 years and over to the population of 'working age', taken for this measurement to be 20 to 59 years, as illustrated in Figure 5.

Figure 5 shows that in Nigeria there are some 145 dependents to every 100 people of working age. More than 130 of these dependents are children, similarly in China most of the dependents are children. By contrast in Japan there are 80 dependents for every 100 people of working age and over half of the dependents are people aged 60 or over.

## Table 4

Proportion of population aged under 20 and 60 and over, 2002

|  | Area |  |  | Percentages |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | More developed countries |  | Less developed countries |  |  |  |
|  | Total | EU-25 | USA | Total | China | India |
| Under 20 years <br> 60 years and over | 24.5 | 23.0 | 28.2 | 41.6 | 32.2 | 42.8 |

Source: See Note B.


Source: See Note B.

## The European Picture

## Population Change

The expansion of the European Union from May 2004 to include ten accession countries has increased the population by 74 million, with Poland contributing over half ( 38.2 million) and Malta, the smallest contributor, some 400 thousand. In the 1960s, 1970s and the 1980s the major component in annual population increase was natural increase or the difference between the number of births and the number of deaths. During this period the pattern of annual net international migration was variable with some years seeing a net inflow while in other years there was a net outflow. However, over the last 15 years net international migration has been the dominant factor, as Figure 6 indicates.


The figures for the five-year time periods are annual averages.
Source: See Note B.

The overall increase in the population of the European Union masks, however, some quite different patterns for individual countries with several of the new countries in Central and Eastern Europe actually experiencing annual declines in population size as shown in Table 5.

There were population decreases in the Baltic States of Estonia, Latvia and Lithuania as well as Hungary, Poland and Germany. The other interesting points to observe are:

- that the relatively high natural decrease in Germany was balanced out by a net inward movement from outside the country
- the high net inflows for Italy (partly to do with the regularisation of foreigners) Spain and Cyprus
- the relatively high levels of natural increase in Ireland, the Netherlands and France.

The crude rate of population change for EU-25 compared with EU-15 was slightly depressed by enlargement, both because of overall lower levels of net inward migration and natural increase.

| Table 5 | Population change in 2003 and size at January 2004 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Country | Natural change (per I,000 pop) | Net migration (per 1,000 pop) | Total change (per 1,000 pop) | $\begin{gathered} \text { Size } \\ (000 \mathrm{~s}) \end{gathered}$ |
| Belgium | 0.5 | 3.4 | 3.9 | 10,396 |
| Czech Republic | -1.7 | 2.5 | 0.8 | 10,212 |
| Denmark | 1.3 | 1.3 | 2.6 | 5,398 |
| Germany | -1.7 | 1.7 | -0.1 | 82,532 |
| Estonia | -3.7 | -0.3 | -4.0 | 1,351 |
| Greece | 0.0 | 3.2 | 3.1 | 11,041 |
| Spain | 1.3 | 17.7 | 18.9 | 42,345 |
| France | 3.5 | 0.9 | 4.4 | 59,901 |
| Ireland | 8.2 | 7.8 | 16.0 | 4,028 |
| Italy | -0.5 | 10.3 | 9.8 | 57,888 |
| Cyprus | 3.6 | 17.6 | 21.2 | 730 |
| Latvia | -4.9 | -0.4 | -5.3 | 2,319 |
| Lithuania | -3.0 | -1.8 | -4.8 | 3,446 |
| Luxembourg | 2.9 | 4.4 | 7.3 | 452 |
| Hungary | -4.1 | 1.5 | -2.5 | 10,117 |
| Malta | 2.3 | 4.3 | 6.5 | 400 |
| Netherlands | 3.7 | 0.4 | 4.0 | 16,258 |
| Austria | 0.0 | 4.0 | 4.0 | 8,114 |
| Poland | -0.4 | -0.4 | -0.7 | 38,191 |
| Portugal | 0.4 | 6.1 | 6.4 | 10,475 |
| Slovenia | -1.0 | 1.7 | 0.7 | 1,996 |
| Slovak Republic | -0.1 | 0.3 | 0.2 | 5,380 |
| Finland | 1.5 | 1.1 | 2.6 | 5,220 |
| Sweden | 0.7 | 3.2 | 3.9 | 8,976 |
| United Kingdom | 1.4 | 4.0 | 5.4 | 59,652 |
| European Union (25 countries) | 0.4 | 4.5 | 4.9 | 456,815 |
| European Union (I5 countries) | 0.8 | 5.3 | 6.1 | 382,673 |

Source: See Note B.


Source: See Note B.

## Population Composition

The accession of the ten new Member States has resulted in a slightly 'younger' European Union population; that is a higher proportion of young people and lower proportion of older people. Thus for example the mean age for men as at 1 January 2003 for the ten accession countries was 36.2 years compared with 38.8 years for the 15 countries. The corresponding figures for women were 39.7 and 41.7 years respectively, the higher averages for women reflecting lower mortality rates. Figure 7 shows the total age dependency ratio divided into the young age (under 20) and old age ( 60 and over) parts for each of twenty-five European Union countries. From Figure 7 it can be seen that the younger countries of the EU include Ireland and Cyprus whilst at the other extreme the older countries include Italy and Germany.

## The European Picture

## Fertility

Over the period 1960 to 2003 there were 257 million live births in the European Union, with an annual peak of 6.2 million live births in 1964 for the former 15 countries and 1.3 million in 1976 for the ten accession countries. In 2003 there were 4.73 million live births in the EU as a whole, representing a crude birth rate of 10.4 per 1,000 population. This compares with a crude birth rate of 18.7 in 1964, 14.9 in 1974, 12.8 in 1984 and 11.1 in 1994. The total fertility rate also peaked in 1964 as shown in Figure 8.

One interesting point to observe is that after an almost continuous fall in the TFR from 1964 to the late 1990s, over the last few years (the early 2000s) there has been a small recovery.

One of the outcomes of a universal decline in fertility has been that the absolute difference between the highest TFRs and the lowest TFRs for individual countries has shrunk, leading to a convergence in the rates. Figure 9 compares the total fertility rate in each Member State in 1980 and 2003, in descending order of TFRs in 2003. Table 6 gives TFRs for selected years since 1960 .

Some 40 years ago every country in the current European Union had a TFR above replacement level or the fertility rate at that time at a level of around 2.1 to $2.2^{6}$ that a population would need to experience to replace itself. For a few countries the rate was above three, with the highest
Figure 8 Total fertility rate in the EU-25, 1960-2003
rates occurring in Ireland (3.76) and Cyprus (3.51). Today, each country not only has a TFR below two, but in some instances, such as the new European Member States the rate is not much above one (1.16 in Latvia, 1.17 in the Slovak Republic and 1.18 in the Czech Republic). The TFR, as an annual rate, represents the childbearing experience of all women of childbearing age during that year or the childbearing experience of women born over a 30 to 35 year period and therefore reflects both levels and timing of fertility, of many generations. The fertility experience of women born in particular years is a more stable measurement as it removes the effect of the timing of the births that occurred.

Figure 10a provides the completed average family sizes for women born in 1930, whose childbearing years would have spanned the period from the late 1940s to around 1980. The corresponding measurement for women born in 1963 is shown in Figure 10b whose childbearing years would have started at the end of the 1970s and spanned the period to date. For the 1930 generation, data are only available for the former 15 countries that made up the EU before May 2004, while for the 1963 generation there is no information for Cyprus.

The figure shows that for the two selected generations there is less variation between the highest and lowest average family size for the more recent cohort, though in both instances Ireland has the highest figure. Fertility was above the current replacement level of 2.1 in all countries, except Luxembourg, for the 1930 generation. For the 1963 generation all countries were either at replacement level or below, except for Ireland and the Slovak Republic, closely followed by Poland and France. As the annual fertility rates have generally fallen over the last 30 years, post-1963 generations will have still smaller average family sizes, an issue that countries have had to take into account in formulating fertility assumptions for national projections.

## Figure 9 <br> Total fertility rate per EU-25 country, 1980 and 2003



Source: See Note B.

Table 6
Total fertility rate for selected years, 1960-2003

| Country | 1960 | 1970 | 1980 | 1990 | 2000 | 2002 | 2003 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Belgium | 2.56 | 2.25 | 1.68 | 1.62 | 1.66 | 1.62 | 1.61 |
| Czech Republic | 2.11 | 1.91 | 2.10 | 1.89 | 1.14 | 1.17 | 1.18 |
| Denmark | 2.57 | 1.95 | 1.55 | 1.67 | 1.77 | 1.72 | 1.76 |
| Germany | 2.37 | 2.03 | 1.56 | 1.45 | 1.38 | 1.34 | 1.34 |
| Estonia |  | 2.16 | 2.02 | 2.04 | 1.34 | 1.37 | 1.35 |
| Greece | 2.28 | 2.39 | 2.21 | 1.39 | 1.29 | 1.27 | 1.27 |
| Spain | 2.86 | 2.90 | 2.20 | 1.36 | 1.24 | 1.26 | 1.29 |
| France | 2.73 | 2.47 | 1.95 | 1.78 | 1.88 | 1.88 | 1.89 |
| Ireland | 3.76 | 3.93 | 3.25 | 2.11 | 1.90 | 1.97 | 1.98 |
| Italy | 2.41 | 2.42 | 1.64 | 1.33 | 1.24 | 1.27 | 1.29 |
| Cyprus* | 3.51 | 2.54 | 2.46 | 2.42 | 1.64 | 1.49 | 1.46 |
| Latvia |  | 2.01 | 1.90 | 2.01 | 1.24 | 1.23 | 1.29 |
| Lithuania | 2.60 | 2.40 | 2.00 | 2.03 | 1.39 | 1.24 | 1.25 |
| Luxembourg | 2.28 | 1.98 | 1.49 | 1.61 | 1.76 | 1.63 | 1.63 |
| Hungary | 2.02 | 1.98 | 1.92 | 1.87 | 1.32 | 1.30 | 1.30 |
| Malta | 3.62 | 2.02 | 1.99 | 2.05 | 1.72 | 1.46 | 1.41 |
| Netherlands | 3.12 | 2.57 | 1.60 | 1.62 | 1.72 | 1.73 | 1.75 |
| Austria | 2.69 | 2.29 | 1.65 | 1.46 | 1.36 | 1.40 | 1.39 |
| Poland | 2.98 | 2.20 | 2.28 | 2.04 | 1.34 | 1.25 | 1.24 |
| Portugal | 3.10 | 2.83 | 2.18 | 1.57 | 1.55 | 1.47 | 1.44 |
| Slovenia | 2.18 | 2.10 | 2.11 | 1.46 | 1.26 | 1.21 | 1.22 |
| Slovak Republic | 3.07 | 2.40 | 2.32 | 2.09 | 1.30 | 1.19 | 1.17 |
| Finland | 2.72 | 1.82 | 1.63 | 1.78 | 1.73 | 1.72 | 1.76 |
| Sweden | 2.20 | 1.92 | 1.68 | 2.13 | 1.54 | 1.65 | 1.71 |
| United Kingdom | 2.72 | 2.43 | 1.90 | 1.83 | 1.64 | 1.64 | 1.71 |
| European Union (25 countries) | 2.59 | 2.34 | 1.88 | 1.64 | 1.48 | 1.46 | 1.48 |
| European Union (I5 countries) | 2.59 | 2.38 | 1.82 | 1.57 | 1.46 | 1.50 | 1.50 |

[^0]Source: See Note B.

Figure IOa Completed average family sizes for women born in 1930, EU-15


## Figure IOb

Completed average family sizes for women born in 1963, EU-25


Source: See Note B.

Figure II
Highest and lowest percentages live births outside marriage in 2002 with reference to 1980


Source: See Note B.

Two other significant changes both over time and with variations between countries have been the age of childbearing and the proportion of births occurring outside marriage. Over the twenty-year period from 1960 to 1980 the mean age of childbearing in the European Union as a whole dropped from 28.0 years to 26.9 years; from 1980 to 2000 this average increased to 29.0 years, as a result of delayed childbearing. Thus the average age of women having a first birth increased from 24.7 years in 1980 to 27.8 years in 2000.The mean age of childbearing in 2002 varied from 26.9 in Lithuania, 27.0 years in the Slovak Republic, 27.5 years in Estonia and 27.6 years in Latvia to over 30 years in Sweden (30.1), Italy (30.3), Netherlands (30.4), Ireland (30.6) and Spain (30.7 in 2000, the latest year available).

One of the most dramatic changes over the last twenty years has been the proportion of births outside marriage, reflecting the prevalence of new forms of partnership, in particular consensual unions, and changing social attitudes and norms. One out of every twenty live births in the European Union in 1960 was outside marriage. In 1980 this proportion had risen to one out of 11, but in 2003 it was nearly one out of three. In general the proportion is lower in Southern European countries, as illustrated by Figure 11, which compares the proportion of births outside marriage in 1980 and 2002, the last year for which all country figures are available.

## The European Picture

## Mortality

Despite an increase in the population over the last 40 years and a population distribution that is getting older, the annual number of deaths has remained relatively stable because of decreasing mortality rates. Since 1980, the annual number of deaths has been about 4.5 million, comprising 3.7 million in the former 15 countries of the EU and 0.8 million in the 10 accession countries. A more informative way at looking at changes over time and country variations in mortality is through life expectancy, or the average number of years a person would live at a
specific exact age if he or she were subject for the rest of his or her life to the current mortality conditions or age-specific probabilities of dying. Another key measurement of mortality is the infant mortality rate or the deaths of children under one year per 1,000 live births. Table 7 provides these measurements for selected years since 1960.

Table 7 shows that over the last forty years life expectancy at birth has increased in the EU- 25 by 7.7 years for men and 8.5 years for women. Because of slightly higher mortality rates for men in some of the EU accession countries the increase for men and women in the former 15 EU Member States is almost the same ( 8.7 years for men and 9.0 years for women). Perhaps even more striking has been the fall in infant mortality,


Life expectancy at birth and infant mortality, EU-25

| Year | Life expectancy at birth |  | Deaths of children under one year |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | 1,000 s | Per I,000 live <br> births |
| 1960 | 67.1 | 72.6 | 255 | 36.5 |
| 1965 | 67.7 | 73.6 | 206 | 28.8 |
| 1970 | 68.0 | 74.4 | 162 | 24.7 |
| 1975 | 69.0 | 75.6 | 120 | 19.9 |
| 1980 | 69.8 | 76.8 | 86 | 14.6 |
| 1985 | 70.9 | 77.8 | 64 | 11.6 |
| 1990 | 71.7 | 78.8 | 50 | 9.2 |
| 1995 | 72.8 | 79.7 | 32 | 6.7 |
| 2000 | 74.4 | 80.8 | 25 | 5.2 |
| 2003 | $74.8^{*}$ | $81.1^{*}$ | 22 | 4.6 |
| 2003 | $75.8^{*}$ | $81.6^{*}$ | 17 | 4.3 |
| (EU-15) |  |  |  |  |

* 2002

Source: See Note B.

| Figure 12 | Infant mortality rate in the EU-25, 1960, 1980 |
| :--- | :--- | and 2003



* First figure for 1965; last two figures for Govt. Controlled Area. Source: See Note B.
from 36.5 deaths of infants under one in 1960 to a current level of about 4.5 , nearly an eight fold decrease over forty years. The decrease in infant mortality has been universal throughout the European Union as Figure 12 shows, in descending order of the rate in 1960.

It can be seen that Sweden has had the lowest infant mortality rate throughout the whole period, with a current figure of less than three deaths of infants aged under one per 1,000 live births. Historically infant mortality in northern Europe has generally been lower than in both eastern and southern Europe, but this picture has largely disappeared for southern Europe, with prevailing low rates in Spain (3.2), Portugal (4.0) and Italy (4.3).

There are also country variations in life expectancy as can be seen in Figure 13.

Life expectancy at birth for males is highest in Sweden at 77.9 years and lowest in the three Baltic states (Estonia, Latvia and Lithuania) at around 65-66 years. In contrast, for females, life expectancy at birth is highest in Spain at 83.7 years. Based on 2003 mortality rates, 17 out of the 25 Member States had a life expectancy at birth for women of over 80 years, including Slovenia which was 79.9 years in 2002.

Based on prevailing mortality rates, on average, a man reaching age 60 in 1960 and living in the European Union could expect to live to age 76; by the early 2000 s such a man could expect to live to about 80 years. The corresponding figures for women are 79 years and 84 years. Thus there have been increases of four years and five years in life expectancy at exact age 60 for men and women respectively over the last 40 years. This has had a significant impact on the numbers of older people and with it the demand for health and other services as well as for benefits and financial support.


* For Belgium, Estonia, EU-25, Hungary, Ireland, Luxembourg, Malta, Slovak Republic and Slovenia the data refer to 2002.
$\dagger$ For Cyprus the data refer to 2001.
Source: See Note B.


## Note A

'More Developed Countries' consist of all countries in Europe (except Turkey), plus Australia, Canada, Japan, New Zealand and USA.
'Less Developed Countries’ consist of Turkey, Africa, Latin America, Asia (excluding Japan) and Australia and Oceania (excluding Australia and New Zealand).

## Note B

Sources used for the tables and figures are principally Eurostat's annual report, Population Statistics $2004{ }^{3}$ and 'First results of the demographic data collection for 2003 in Europe' ${ }^{4}$ published in Statistics in Focus, 13/2004. Data from the US Census Bureau website, Eurostat's New Cronos database and their estimates which are known as Nowcasts, are also used.

## References

1. Pearce D and Bovagnet F-C (2001) The demographic situation in the European Union. Population Trends 104, pp 6-11.
2. Jones J and Chappell R (2004) European wide issues in population statistics. Population Trends 118, pp 17-22.
3. Eurostat (2004) Population Statistics, 2004 edition. Office for official publications of the European Communities.
4. First results of the demographic data collection for 2003 - Europe, Statistics in Focus 13/2004.
5. Leon D A, Chenet L et al (1997) Huge variations in Russian mortality rates 1984-94; artefact, alcohol or what? The Lancet, vol. 350 No. 9075.
6. Sardon J (1991) Generation replacement in Europe since 1900. Population: an English Selection Vol. 3, pp 15-32.

# Replacement fertility, what has it been and what does it mean? 

Steve Smallwood and<br>Jessica Chamberlain<br>Population and Demography<br>Division<br>Office for National Statistics

Replacement fertility is a term commonly used by demographers when referring to levels of childbearing and yet is rarely explained. It is normally presented as being around 2.1 children per woman. Continued below replacement fertility in developed countries and fertility falling in developing countries has given the concept of replacement fertility a higher profile. This article explains how replacement level is calculated and explores the concept further. Past replacement fertility levels are calculated for England and Wales.
A possible alternative definition of replacement is also presented. Simple projection scenarios are used to show the effect on population of below replacement fertility, and also of postponement of fertility. The importance and implications of below replacement fertility are discussed.

## Introduction

Replacement fertility is a term that appears to be self-explanatory and has gained a common usage in demographic literature and the media. However, it is more complex than is often assumed. This article aims to provide a clear explanation of replacement fertility, with regards to its components and calculation. Modelling work was undertaken to investigate the effect of different fertility levels and trends on population growth and structure. In particular, there is a focus on below replacement level fertility because the countries of the United Kingdom, like nearly all European countries, are experiencing below replacement fertility. The focus on fertility being below replacement level poses a number of questions such as: What is meant by 'replacement'? Does it matter demographically that fertility is below replacement? This article also shows that replacement fertility is more than a demographic curiosity. Below replacement fertility can have important demographic and social implications. However, these consequences are only likely to arise with persistent long-term below replacement fertility. The article is intended to be of interest to a wide audience and the technical sections can be omitted by the reader with a more general interest.

The concept of replacement fertility may seem relatively simple, the level of fertility required to ensure a population replaces itself in size. To replace themselves women, on average, need to have one female child, who survives long enough for a female grandchild to be born, and so on for succeeding generations. ${ }^{1}$ An average of two children will 'replace' all mothers and fathers, but only if the same number of boys as girls are born and all female children survive to the end of reproductive age. However, as explained later, mortality and the unbalanced sex ratio at birth mean that replacement level fertility is actually a little higher
than 2.0. Although migration can be a significant driver of population change for the purposes of calculating replacement fertility migration is normally ignored. The calculations are based on rates so it is only the extent to which mortality and fertility rates are changed by migrants that migration has any effect on the calculations. Note that while men are clearly important in terms of reproduction, analysis of fertility levels tend to be exclusively female-based and the effect of men on replacement fertility in this analysis is restricted to the sex ratio at birth.

The understanding of replacement fertility is made more complex by the need to consider both the period and cohort dimensions. On a period basis, replacement fertility is the level of fertility needed to exactly replace all the women in a population constructed using mortality and fertility at a particular point in time. It is a measure that represents the demographic situation of a point in time, and thus, like the TFR, is synthetic as no individual experiences the rates from which it is composed. Replacement on a cohort basis, is the level of fertility needed to ensure that a generation born at a particular point in time is replaced. We discuss both these concepts in the context of England and Wales later.

In England and Wales, as in all developed countries, a total fertility rate (TFR) or completed family size (CFS) of 2.1 is usually taken as roughly approximate to the level of replacement fertility. However, it is important to remember that this level of 2.1 children is an average across all women. Therefore, to ensure replacement fertility a substantial proportion of women have to have three or more children in order to compensate for those remain childless or have only one child. ${ }^{2}$

## Demographic factors that affect replacement FERTILITY

Two components interact with fertility to determine the level of replacement fertility; they are mortality and the sex ratio at birth. High infant, child and young adult mortality rates were the key determinants of replacement fertility levels in the past in developed countries. Mortality up to the end of a woman's fertile life is now very low in developed countries, and therefore its effect on the replacement fertility level has substantially decreased, and is now similar to or smaller than that of the sex ratio. However, mortality is still the key component in the calculation of replacement fertility levels in developing countries, especially in the context of the HIV/AIDS epidemic.

The sex ratio at birth for a population is usually around 105 males born for every 100 females. However, there are some countries where it differs, for example in China the sex ratio at birth is given in official statistics as 109 males to 100 females. ${ }^{3}$ If male births increase relative to female births, an overall rise in the number of births is needed to compensate and replace the population. ${ }^{4}$ The sex ratio is perhaps a secondary factor, in that mortality had the greater effect on calculating replacement in the past, but with low mortality it does have an effect and can change over space and time, and therefore should be considered when looking at replacement fertility levels. However, in England and Wales the sex ratio has varied between 104 and 106 over the twentieth century ${ }^{5}$ so it has not greatly affected levels of replacement fertility.

If mortality did not exist until after childbearing ages (and ignoring migration) the replacement level fertility is wholly dependent on the sex ratio. Given the stability of the sex ratio, replacement fertility will tend towards a figure of around 2.05 and would not realistically fall much below that level.

Migration further complicates the concept of replacement fertility. Calculations are based on rates derived from the vital events (births and deaths) and the population within a country in each year. These
rates may vary either upwards or downwards because of the effect of migrants. These effects are, however, likely to be marginal as, in the UK for example, the overseas-born form only one twelfth of the total population. ${ }^{6}$

However, migration is an important component of population size and composition by ethnic group. Continued net inward migration is projected for the United Kingdom. ${ }^{7}$ Therefore, population and individual cohorts are likely to be larger than they would have been in the absence of migration. It would be possible to calculate replacement level for a period or cohort given a level of actual or assumed migration, as Calot and Sardon have done for France. ${ }^{8}$ We do not do so in this article, although some of the projections presented later do include the effect of migration on the population.

## The calculation of replacement fertility in England and Wales

In the next section of the article we present calculations of replacement fertility and also some illustrative population projections. The projections are based mainly on data for England and Wales. Note that the projections show population in terms of an index with the base year equal to 100 and natural change as a proportion of the population. This is in order to avoid any confusion with population numbers in either official estimates or projections.

## Replacement fertility - the period perspective

Most demographic measurement is done in terms of a particular period of time, normally a calendar year or group of years, hence the term 'period'. Period replacement fertility uses the fertility and mortality rates in a particular year to calculate a level of fertility that would produce sufficient births that a population age distribution constructed using current mortality would remain unchanged. Although period measures are by their nature synthetic (as no group of individuals experience the fertility and mortality rates of a particular period through their life time) they are still useful in assessing the demographic situation. The level of actual fertility in a particular year is directly related to the total number of births, which in turn largely determines the size of that birth generation relative to others. Thus, as we shall see below, below replacement fertility on a period basis has a direct effect on future population size.

The detailed calculation of period replacement fertility is described in Box one. Briefly it involves the construction of a female population by assuming a set number of births (a radix) and then applying age-specific mortality rates for the period concerned. Age-specific fertility rates for the period are then applied to the population and scaled so as to produce the number of female births that match the size of the original radix. The sum of the scaled fertility rates gives a measure of the level fertility required to replace the population. This can then be compared with the actual TFR.

Figure 1 shows period replacement fertility for England and Wales, as well as calculations by the authors the chart includes an approximated calculation carried out by Sardon ${ }^{9}$ (see Box one). Our calculations have only been carried out from 1938, when age of mother became available on birth registration data. The advantage of Sardon's approximation is that he was able to calculate a longer historical series. Where the series overlap the results of both calculations are very similar.

For the latest year, 2003, period replacement fertility for England and Wales was 2.07. This compares with a figure of 2.30 for 1938 , the first year that data are available for a detailed calculation of the figure. The fall occurs because of improvements in mortality. Sardon's estimates suggest that period fertility was below replacement level between the

## Box one

## CALCULATION OF PERIOD REPLACEMENT LEVEL FERTILITY

## Period replacement

The first step is to calculate a life table using mortality data for the period. This is done by using age-specific mortality rates converted to probabilities of dying between exact ages applied to a notional group of women born at the same time. This group is known as the life table radix (often assumed to be 10,000 or 100,000 ). This produces a 'synthetic' population ( $l$ ) at each exact age ( $x$ ) that would exist if the radix group experienced the mortality of the period.

The $l x$ population is then converted at fertile ages in to a population at age last birthday ( $L x$ ) by interpolating the lx values.

The period age-specific fertility rates (ASFR) can then be applied to the Lx population to give the number of births produced at each age given current fertility rates.

In order to produce the number of female births to replace the population radix the fertility rates are multiplied by a factor, calculated by dividing the radix by the total number of female births. To determine the number of female births the actual sex ratio was used to split the births into male and female.

The sum of the adjusted fertility rates equals the replacement fertility level. The calculation for 2001 is illustrated in the table in this box.

## Cohort replacement

The calculation of cohort replacement is identical in method to the calculation of period replacement; except that instead of using age-specific mortality rates and age-specific fertility rates from a particular period, rates that apply to a particular cohort are used.

## Cohort 'reproductive capacity' replacement

In this calculation the female births are subjected to the actual and projected mortality rates that apply to them, up to the end of their fertile life. The resulting population is totalled at fertile ages (here assumed to be 14-46). The fertility rates are adjusted so that this total population equals the numbers in the original female cohort life table population aged 14-46.

## Sardon approximation for calculating replacement

Sardon calculated replacement fertility as the inverse of two factors: the product of the probability of survival to the mean age of motherhood; and, the assumed proportion of female births. For example, if the probability of survival to the mean age of motherhood was 0.8 and the proportion of female births was 0.488 replacement level would be $I /(0.80 \times 488)=2.56$.

Calculation of period replacement fertility for 2001
England and Wales

| $\begin{aligned} & \text { Age } \\ & \times \end{aligned}$ | Female $q_{x}{ }^{\prime}$ | $\begin{gathered} 1_{x} \\ I_{x}=\left.\right\|_{x}-1-1 \\ \left(l_{x-1} \times q_{x-1}\right) \end{gathered}$ | $\begin{gathered} L_{x} \\ L_{x}^{x}= \\ \left(I_{x}+I_{x+1}\right) / 2 \end{gathered}$ | ASFR <br> per <br> 1,000 | Scaled <br> ASFR <br> Scaling <br> factor= <br> 1.2653 | Number of births produced by scaled ASFRs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0.00492 | 100,000.0 |  | Actual sex | ratio, 200 |  |
| 1 | 0.00036 | 99,507.8 |  | Births | Males | 304,635 |
| 2 | 0.00020 | 99,472.3 |  |  | Females | 289,999 |
| 3 | 0.00020 | 99,452.2 |  |  |  |  |
| 4 | 0.00014 | 99,432.5 |  | Ratio |  | 1.0505 |
| 5 | 0.00013 | 99,418.9 |  |  |  |  |
| 6 | 0.00011 | 99,405.9 |  | Therefor | target bir | 205,047 |
| 7 | 0.00010 | 99,394.6 |  |  |  |  |
| 8 | 0.00013 | 99,384.4 |  |  |  |  |
| 9 | 0.00010 | 99,371.0 |  |  |  |  |
| 10 | 0.00007 | 99,360.9 |  |  |  |  |
| 11 | 0.00012 | 99,354.2 |  |  |  |  |
| 12 | 0.00009 | 99,342.7 |  |  |  |  |
| 13 | 0.00011 | 99,333.5 |  |  |  |  |
| 14 | 0.00015 | 99,322.5 | 99,315.2 | 0.9 | 1.1 | 113 |
| 15 | 0.00018 | 99,308.0 | 99,299.3 | 3.5 | 4.5 | 443 |
| 16 | 0.00022 | 99,290.5 | 99,279.5 | 11.4 | 14.5 | 1,437 |
| 17 | 0.00025 | 99,268.4 | 99,255.9 | 27.4 | 34.8 | 3,453 |
| 18 | 0.00028 | 99,243.4 | 99,229.4 | 42.7 | 54.2 | 5,380 |
| 19 | 0.00027 | 99,215.5 | 99,202.2 | 55.9 | 71.0 | 7,040 |
| 20 | 0.00027 | 99,189.0 | 99,175.8 | 62.6 | 79.4 | 7,875 |
| 21 | 0.00031 | 99,162.5 | 99,147.0 | 66.3 | 84.1 | 8,335 |
| 22 | 0.00030 | 99,131.4 | 99,116.3 | 69.4 | 88.1 | 8,732 |
| 23 | 0.00034 | 99,101. 3 | 99,084.6 | 72.1 | 91.5 | 9,063 |
| 24 | 0.00026 | 99,067.9 | 99,055.1 | 75.1 | 95.3 | 9,441 |
| 25 | 0.00027 | 99,042.2 | 99,028.8 | 81.4 | 103.3 | 10,233 |
| 26 | 0.00038 | 99,015.3 | 98,996.6 | 87.3 | 110.8 | 10,966 |
| 27 | 0.00036 | 98,977.9 | 98,960.2 | 92.9 | 117.9 | 11,663 |
| 28 | 0.00033 | 98,942.6 | 98,926.5 | 95.5 | 121.1 | 11,983 |
| 29 | 0.00037 | 98,910.4 | 98,892.0 | 99.1 | 125.7 | 12,429 |
| 30 | 0.00037 | 98,873.6 | 98,855.4 | 101.1 | 128.3 | 12,678 |
| 31 | 0.00048 | 98,837.3 | 98,813.6 | 98.2 | 124.5 | 12,307 |
| 32 | 0.00051 | 98,789.8 | 98,764.4 | 90.8 | 115.2 | 11,375 |
| 33 | 0.00049 | 98,739.0 | 98,714.7 | 80.6 | 102.2 | 10,090 |
| 34 | 0.00058 | 98,690.3 | 98,661.5 | 70.5 | 89.5 | 8,826 |
| 35 | 0.00072 | 98,632.7 | 98,597.2 | 61.7 | 78.3 | 7,720 |
| 36 | 0.00068 | 98,561.8 | 98,528.5 | 50.9 | 64.5 | 6,357 |
| 37 | 0.00070 | 98,495.2 | 98,460.8 | 40.6 | 51.6 | 5,076 |
| 38 | 0.00079 | 98,426.3 | 98,387.2 | 30.6 | 38.8 | 3,815 |
| 39 | 0.00085 | 98,348.1 | 98,306.1 | 22.9 | 29.0 | 2,851 |
| 40 | 0.00093 | 98,264.1 | 98,218.6 | 16.9 | 21.4 | 2,101 |
| 41 | 0.00107 | 98,173.0 | 98,120.4 | 11.0 | 13.9 | 1,368 |
| 42 | 0.00117 | 98,067.7 | 98,010.2 | 7.0 | 8.9 | 872 |
| 43 | 0.00143 | 97,952.7 | 97,882.6 | 3.9 | 5.0 | 490 |
| 44 | 0.00139 | 97,812.5 | 97,744.3 | 2.1 | 2.6 | 259 |
| 45 | 0.00160 | 97,676.1 | 97,598.2 | 2.2 | 2.8 | 276 |
| 46 | 0.00179 | 97,520.3 |  |  |  |  |
| TFR |  |  |  | 1.63 |  |  |
| Replacement TFR |  |  |  |  | 2.07 |  |
| Total births |  |  |  |  |  | 205,047 |

I Source: GAD mortality database - available from Government Actuary's Department

mid-1920s and the mid-1940s. There then followed the post World War II (WWII) baby boom and the more sustained 1960s baby boom where the TFR was up to 0.8 children higher than the replacement level at 2.9 children per woman. Since the early 1970s the TFR has been below
replacement level, and from the mid-1970s it has been around 1.7 to 1.8 , 0.3 to 0.4 children per woman lower than replacement.

Just because period fertility is below replacement level does not mean that a population will immediately see natural decline (more deaths occurring than births). The age structure of the population and changes in mortality will determine when natural decline occurs. In England and Wales, even though fertility has been below replacement level since the 1973, births have exceeded deaths (except in the exceptionally low fertility year of 1976), normally by around 10 to 20 per cent each year. This is almost certain to continue in the very near future, as can be illustrated by running a simple population projection using the current population structure, current fertility rates and current mortality rates and assuming no migration. Box two further describes the data and assumptions used in all of our modelling scenarios. Figure 2 shows that, under these assumptions, the population of England and Wales would increase for the next few years and would start to decrease very gradually within a decade. Scenarios 2 and 3 show that, even without increased fertility, with net inward migration or improving mortality population increase will continue further into the future. Both improving mortality and net inward migration are assumed in official population projections. ${ }^{7}$ However, if below replacement fertility continues for many generations then a 'reverse compound interest' effect operates as successively smaller generations fail to replace themselves. Although it must be noted that is is difficult to project the childbearing behaviour of women who are themselves not yet born. If we run our first projection scenario (constant fertility, no mortality improvement and nil migration) forward 70 years the population is only around 77 per cent of the starting population and by 100 years 63 per cent. Figure 3 shows the age distributions resulting from the three population projection scenarios. In all three the populations age, with fewer aged under 16 and more aged 65 and over.

## Box two

## DATA AND ASSUMPTIONS USED IN PROJECTION SCENARIOS

## All data from England and Wales

| Scenario | Base population | Fertility | Mortality | Migration |
| :--- | :--- | :--- | :--- | :--- | :--- |
| I. Constant fertility, constant, <br> mortality no migration | Mid-2003 population | Actual fertility <br> Calendar year 2003 | Mid-2003 to mid-2004 <br> rates from 2003-based <br> principal projection | None |

## Figure 2

Constant current fertility projections, change in population size under three scenarios


- Constant fertility (TFR=1.73) Constant mortality Nil Migration (Scenario I)
- Constant fertility (TFR=1.73) Improving mortality Nil Migration (Scenario 2)
- Constant fertility (TFR=1.73) Improving mortality Migration (Scenario 3)


## Figure 3

Constant current fertility projections, percentage under 16 and 65 and over under three scenarios


[^1]Figure 4 Replacement fertility projections, change in population size under three scenarios


- Replacement fertility Constant mortality Nil Migration (Scenario 4)
- Replacement fertility Improving mortality Nil Migration (Scenario 5)
- Replacement fertility Improving Migration (Scenario 6)


## Figure 5

Replacement fertility projections, percentage under 16 and 65 and over under three scenarios


- Replacement fertility Constant mortality Nil Migration (Scenario 4)
- Replacement fertility Improving mortality Nil Migration (Scenario 5)
- Replacement fertility Improving mortality Migration (Scenario 6)

Let us now take our first three scenarios and instead of assuming constant fertility at current rates, assume an immediate increase to replacement level. Figure 4 shows that a rise to replacement level fertility would result in population increase in all of our three scenarios, the population being around four per cent higher than the base year after thirty years, assuming no migration or mortality improvement. This rise may seem smaller than might be expected, however without such a rise in fertility the population falls by around four per cent (Figure 2). Assuming improving mortality and then the addition of net inward migration produces a larger rise in the population.

An immediate increase to replacement fertility produces a clear effect on the age distribution of the population (Figure 5). All three replacement scenarios show that the proportion under 16 remains fairly constant rather than falling, as in the previous scenarios, and under all three scenarios the proportion over 65 still continues to increase. However, compared with scenarios 1 to 3 , the point at which the under 16 lines and the 65 and over lines cross over is delayed for around a decade and the proportion of the population aged 65 and over is lower.

Thus from a period perspective it is clear that future population size is affected by whether fertility is below replacement level, however the direction and amount of population change is dependent on the current age distribution of the population, as well as migration and mortality. Even an immediate return to replacement level fertility would not halt population ageing, although it would attenuate it. In the short-term it would actually increase the overall dependency ratio as there would be a greater proportion of the population aged under 16 or over 65 . The scenarios here have only been shown for a relatively short projection period of 30 years. Previous work by Shaw has shown that fertility would have to rise substantially above replacement level for pension age dependency ratios at the end of this century to be near those at the start of this century. ${ }^{10}$

## Replacement fertility - the cohort perspective

As mentioned previously, period measures of fertility are synthetic, as they are derived from a series of rates that no individual woman will experience. However, by looking at age-specific rates that would apply to a group of women born at a particular time (a cohort) we can produce a measure that is much less synthetic, since these are the rates that women born in a particular year would experience through their childbearing life.

Thus, using the appropriate fertility and mortality rates, a cohort replacement level of fertility can be calculated. Box one describes the calculations involved and Figure 6 shows the result for cohorts born, in England and Wales, between 1924 and 1960. Again, we see a gradual fall in the replacement fertility level because of improving mortality, that is, for successive cohorts more women have survived to childbearing ages. Again the chart shows some approximate calculations by Sardon ${ }^{9}$ which match our more detailed estimates. The chart shows that for cohorts of women born in the mid to late 1920s their fertility was below replacement level. Women born from around 1930 to the end of WWII experienced above replacement level fertility whilst women born since then who have completed, or are close to completing, their childbearing being only around 0.1 of a child below replacement level.

The last two decades have seen a rise in the average age at which women bear children. It is likely that in part the rise in mean age reflects a postponement of childbearing. The effect of postponement is to make period measures of fertility, like the TFR, unrepresentative of the final fertility of particular cohorts of women. ${ }^{11}$

Figure 6
Cohort actual and replacement level fertility 1924-1960


The effect of postponing births in a population is also to reduce population size. Thus even a population in which each cohort is replacing itself will, other things being equal, decline in size if postponement is occurring. Although in such a population each person is replaced, the population gets 'stretched' into the future meaning fewer people alive at any one time. A simple demographic model demonstrates this effect. We start with a 'stationary population', where mortality is unchanging and there are sufficient births for the population to be replaced. To make the model of fertility change as realistic as possible we used an age distribution for replacement close to that of the 1949 cohort, the last cohort to replace itself in England and Wales. We then assumed that women begin to postpone births, but that they still have sufficient births to replace their generation. The postponement was constructed to produce the current assumed age pattern of fertility in the national population projections ${ }^{12}$ and takes place over 30 cohorts. Within the model the effect will be a rise in mean age of childbearing as well as the total fertility rate being below replacement level for around 60 years (see Figure 7).

The results of this model in term of population size and population ageing are shown in Figures 8 and 9. Figure 8 shows that the population is still declining slightly even 100 years on from the start of the postponement, as the successively smaller cohorts replace themselves, and is around 12 per cent lower than the base. In fact a recent short paper by Schoen, ${ }^{13}$ pointed out that it is theoretically possible for a population to decrease, even if each cohort has above replacement level fertility, if the level of postponement is sufficient. The effect on the age distribution, shown in Figure 9, might initially seem unexpected in that by the time 100 years has passed the proportions of the population aged under 16 and 65 or over are almost the same as in the base stationary population. In fact what eventually develops is a new stationary population, which, because mortality is constant in this model, will be similar to the original stationary population at the start of the projection.

| Figure 7 | Assumptions for cohort replacement fertility |
| :--- | :--- | with childbearing postponement scenario

(a) Age specific fertility rates

(b) Total fertility rate and completed family size in the model

(c) Mean age at childbearing for cohorts in model, and actual/projected' mean age of cohorts born from 1949 to 1978 in England and Wales


Figure 8 Cohort replacement with postponement, change in population size



## Further thoughts on the concept of cohort REPLACEMENT

Traditionally replacement fertility is thought of in terms of replacing the numbers of the cohort born. Thus if we return to the actual cohort replacement shown in Figure 6 the level of fertility shown is that which would produce a sufficient number of births to replace each cohort, given the mortality that each cohort experienced. However, mortality has been improving for many years (hence the declining replacement level trend in Figure 6) and is projected to continue to improve. Therefore the calculation of replacement of births gives an inflated measure of a cohort replacing itself, as a greater proportion of children are likely survive through to adulthood and old age than in the cohort bearing the children.

Sardon made this point in his paper in 1993, ${ }^{9}$ and in a paper with Calot ${ }^{8}$ presented some calculations for French fertility to take account of mortality improvement. We have carried out a calculation to consider this

aspect for England and Wales cohort replacement fertility. We call this calculation 'reproductive capacity', and we calculate replacement, not of the numbers of the cohort at birth, but the fertility required to replace the number of person years of women of fertile age, given actual and projected future mortality improvement (projected mortality from the 2002-based national population projections). This seems an intuitively more plausible form of replacement, as it results in the same number of women at ages exposed to having children as there are in the cohort being considered. The results are shown in Figure 10.

For England and Wales the interpretation that 1920s born cohorts had below replacement fertility changes when the definition of replacement changes. The improved mortality of this cohort's female children, from birth to the completion of childbearing age, removes the higher fertility needed to counteract the cohort's own higher mortality. However, mortality at ages below the end of childbearing ages is now very low therefore the redefinition of replacement tends towards the current period level of replacement, because even large improvements in mortality will have little further effect.

Of course mortality continues to improve at ages beyond the cessation of childbearing. To take this into account one could calculate a level of fertility that would produce an equivalent number of years lived in total to the number of years lived by the cohort producing the children, i.e. replacing the person years lived for the cohort. If large improvements in mortality were to continue to occur ${ }^{14}$ such a measure would have 'replacement' fertility levels of below 2.0.

## Global Variation in replacement fertility Level

## World fertility

Espenshade et al recently criticised the tendency for the level of replacement fertility to be presented to the public by the media, and even some demographers, as 2.1 children per woman, 'frozen' once and for all, valid for all times and places ${ }^{15}$, including developing countries. For example, from the 2002 Revision of the official United Nations population estimates and projections, 'the United Nations Population Division projects that future fertility levels in the majority of developing countries will likely fall below 2.1 children per woman, the level needed to ensure the long-term replacement of the population, at some point in the twenty-first century'. ${ }^{16}$ If the improved mortality assumed in the UN
projections comes to pass then replacement level will approach 2.1 in developing countries. The statement could be seen, however, as implying that 2.1 is always the level of replacement fertility.

Replacement fertility values are highly country and region specific, primarily due to differing mortality levels. Work by Espenshade et al ${ }^{15}$ shows that recent period replacement level fertility, across the world, ranges from a low of 2.05 in Réunion to a high of 3.43 in Sierra Leone. Table 1 shows the TFRs and the TFR value for replacement fertility for different regions of the world. Box three demonstrates how misleading using 2.1 as replacement can be.

| Table I | TFR and replacement level TFR (TFRr) for the <br> world and major regions, I995-2000 |  |
| :--- | :---: | :---: |
|  |  |  |
|  |  |  |
|  | TFR | TFRr |
| World | 2.82 | 2.34 |
| More developed regions | 1.57 | 2.09 |
| Less developed regions | 3.10 | 2.37 |
| Least developed regions | 5.47 | 2.75 |
|  |  |  |
| Northern America | 2.00 | 2.09 |
| Europe | 1.41 | 2.10 |
| Oceania | 2.41 | 2.18 |
| Latin America/Caribbean | 2.69 | 2.17 |
| Africa | 5.27 | 2.70 |
| Asia | 2.70 | 2.32 |

Source: Espenshade et al's

Wilson and Pison recently estimated that in 2003 the world population crossed the threshold of 50 per cent of the world's people living in a country or region in which fertility is below replacement level (using 2.1 as the measure of replacement). ${ }^{17}$ They recognised, however, that in some areas of the world replacement will be higher than 2.1 , therefore, it is likely that even more than half of the world's population are in areas with below replacement fertility.

## European Fertility

For developed countries assuming a replacement level of around 2.1 is less contentious. Table 2 shows for 33 European countries the year in which their TFR was last at 2.1 children per woman or above, in order of the year of occurrence. All of the European Union (EU25) countries have below replacement fertility on a period basis, with some, such as Germany having had fertility well below replacement for several decades. ${ }^{18}$ In some countries, such as Spain and Italy, fertility has now even fallen to what are classed as 'lowest low' fertility levels (a TFR of below $1.3^{19}$ ). A table showing the EU25 total fertility rates for selected years can be found in the article by Pearce and Bovagnet (Table 6) in this issue of Population Trends. ${ }^{20}$ England and Wales has experienced below replacement fertility on a period basis since 1973. However, as we have seen, this is not a new phenomenon; fertility was also below replacement in England and Wales for most of the period between the two World Wars.

Turning to cohort fertility, Table 2 also shows the year of birth of the last generation to achieve fertility of an average of 2.1 children, or more, per woman. By the 1960 cohort only four of the 23 countries of the EU25, for which data are available, had above replacement fertility (France, Ireland, Poland and the Slovak Republic), as well as Norway, Serbia Montenegro and Romania. However, many other countries had cohort fertility only a little below 2.1 children per woman. Two graphs showing the EU25 completed family size for cohorts born in 1930 and 1963 can be found in the article by Pearce and Bovagnet (Figure 10) in this issue of Population Trends. ${ }^{20}$ For the 1963 cohort the lowest cohort fertility was in Italy and Germany, with 1.57 and 1.58 children per woman respectively.

## Box three

## ACTUAL REPLACEMENT VERSUS 2.1

The values in Table I for replacement fertility in North America, Europe and more developed regions equate, as expected, to a TFR of 2.I. The TFR required for replacement fertility in Oceania and Latin America/Caribbean is also very close to 2.I. However, in Africa, Asia, the less developed regions and least developed regions replacement fertility levels are higher than 2.I. Therefore, globally the fertility needed for replacement is higher than the often assumed TFR of 2.I.

The table below shows the percentage differences between actual TFR, replacement level TFR and 2.1 for different regions of the world. The first column shows the difference between the actual TFR in 1995-2000 and a TFR of 2.I, and the second column shows the difference between the actual TFR and the region specific replacement level TFR in 1995-2000. They show that if a TFR of 2.1 was assumed to be replacement level then fertility in the least developed regions was 160 per cent above replacement level, but when the correct replacement level fertility is shown to actually have been 99 per cent above replacement level. The problems associated with assuming replacement level fertility is always 2.1 are further highlighted in the third column, which shows the gap between a TFR of 2.1 and the actual TFR required for replacement. This shows on a global scale a TFR of 2 . I would actually result in fertility 10 per cent below replacement level. Furthermore, if fertility in the least developed regions fell to 2 . I then fertility would actually be 24 per cent below replacement, since the replacement fertility level for the least developed regions is actually a TFR of 2.75. Where demographic literature talks about fertility in developing countries falling to a replacement level of 2.1 there is an implicit assumption that mortality is at least around developed country levels of the 1960s and 1970s. In particular, with the threat of the HIV/AIDS maintaining or even raising mortality rates, there is the possibility that the level of world replacement fertility will remain well above 2.I. The problem of increased mortality from HIV/AIDS is also compounded by the fact that HIV-positive women have reduced fertility. Studies have shown their fertility rate to be 20 to 30 per cent below those of their uninfected counterparts. ${ }^{15}$

Percentage gap between actual fertility, replacement fertility and a TFR of 2.I, for the world and major regions, 1995-2000

|  | TFR/2.1 | TFR/TFRr | $2.1 / T F R r$ |
| :--- | :---: | :---: | :---: |
| World | 34 | 21 | -10 |
| More developed regions | -25 | -25 | 0 |
| Less developed regions | 48 | 31 | -11 |
| Least developed regions | 161 | 99 | -24 |
| Northern America | -5 | -4 |  |
| Europe | -33 | -33 | 1 |
| Oceania | 15 | 11 | -4 |
| Latin America/Caribbean | 28 | 24 | -3 |
| Africa | 25 | 95 | -22 |
| Asia | 13 | 16 | -10 |

Source: Espenshade et al' ${ }^{15}$

Table 2 must be interpreted with caution as it does not show how far below replacement level fertility has fallen. However, it demonstrates that cohort fertility falls below replacement fertility for cohorts born around 20-30 years before the point when period fertility falls below replacement level. Of the five EU countries where fertility was last at replacement level in the 1960s, only Germany experienced natural population decline (more deaths occurring than births) in 2003. ${ }^{20}$

Table 2
Last year TFR was 2.1 or above and last birth year cohort fertility was 2.1 or above, 33 European countries

| Countries | Year TFR <br> last at 2.1 <br> or more | Last birth cohort year completed fertility was 2.1 or more |
| :---: | :---: | :---: |
| (Bold = in European Union) |  |  |
| Croatia | 1966 | pre 1944 |
| Sweden | 1967 | 1937 |
| Luxembourg (Grand-Duché) | 1968 | pre 1935 |
| Finland | 1968 | 1939 |
| Denmark | 1968 | 1944 |
| Germany (including ex-GDR from 1991) | 1969 | 1937 |
| Switzerland | 1970 | 1939 |
| Austria | 1971 | 1940 |
| Belgium | 1971 | 1941 |
| Netherlands | 1972 | 1942 |
| United Kingdom' | 1972 | 1949 |
| Norway | 1974 | 1961 |
| Italy | 1976 | 1943 |
| Hungary | 1977 | pre 1944 |
| Bosnia and Herzegovina | pre 1979 | 1951 |
| Bulgaria | 1979* | 1952 |
| Slovenia | 1980 | pre 1945 |
| Greece | 1980 | pre 1935 |
| Czech Republic | 1980 | 1951 |
| Spain | 1980 | 1952 |
| Portugal | 1981 | 1951 |
| France | 1984 | 1961 |
| Lithuania | 1987 | pre 1960 |
| Latvia | 1988 | pre 1960 |
| Poland | 1988 | 1962 |
| Slovak Republic | 1988 | 1963 |
| Serbia and Montenegro | 1988 | 1966 |
| Estonia | 1989 | pre 1945 |
| Romania | 1989 | 1961 |
| Ireland | 1990 | yet to be $<2.1$ |
| Macedonia, the former Yugoslav Republic of | 1993 | yet to be <2.l |
| Cyprus | 1995 | n/a |
| Malta | 1996 | pre 1945 |
| Iceland | 1996 | yet to be <2.l |
| Albania | currently $2.1{ }^{\dagger}$ | n/a |

Notes:

* Data for 1980 not available, below 2.1 in 1981
$\dagger$ data to 1999 only
Source Eurostat ${ }^{18}$


## The impact of below replacement fertility

## Population ageing

Sustained below replacement fertility has two important demographic effects, population ageing and population decline. Fertility is the principal determinant of age composition; continued low fertility produces a population with relatively few young people and relatively many old people. Improvements in mortality at older ages also lead to population ageing. The potential consequences of population ageing and decline have been widely discussed in demographic literature and population ageing has even been labelled a 'demographic timebomb'. There have been many fears expressed about the consequences of an ageing population. In particular, concerns have been expressed about providing pensions and the shortage of new entrants into the labour force. As a population ages, each person of working age will have to support more aged dependants. Not only could this put a strain on the pension and health systems, but it has also been hypothesised to potentially have many other negative effects on the economy and productivity. Other concerns regarding an ageing population include housing and care. At least some of these concerns may be met by changes in life course patterns, topics which are outside the remit of this article.

## Population decline

Below replacement fertility will eventually lead to natural decline (more deaths occurring than births), and therefore in the absence of net in-migration, the population will decline. Of 191 UN countries 43 are projected to have population decrease between 2000 and 2050. ${ }^{21}$ However, the effects of migration and mortality are difficult to disentangle. For example, in Western and Northern Europe some of the countries with the lowest fertility in the world are also those that are in the majority attracting international migrants.

The effect of below replacement fertility on the size of the population is quite long term as 'population momentum' can delay the effect. If there are large cohorts in their childbearing years, even if fertility declines, the number of births may still remain high or even increase. In many parts of the world, age structures are still adjusting to the relatively new low fertility levels and in most cases will not fully adjust for decades. ${ }^{22}$ So fertility that is only a little below replacement has a small effect on the population size or age structure in the short run, but in the long run has a cumulative, multiplicative effect. ${ }^{23}$ The Government Actuary's Department (GAD) has projected that the UK population will only start to decline from around 2050, despite fertility being assumed to continue being below replacment. ${ }^{7}$ Population decline is associated with many of the same economic, productivity and social concerns as population ageing.

Concerns about below replacement fertility and consequent population decline were experienced in the 1930s, when Western societies were experiencing unprecedented low fertility. ${ }^{24}$ However, nowadays there are some who are not convinced that low or negative levels of population growth are harmful. ${ }^{22}$ Some argue that low or negative population growth is beneficial as it would help protect the environment and ensure longterm environment and resource sustainability. Others would argue that while the world population as a whole continues to grow it would be inappropriate to argue for higher fertility. ${ }^{22}$

## Will below replacement fertility continue?

When fertility started to decline in European countries it was initially assumed that below replacement fertility would be transitory and limited, and that there would be a return to replacement level fertility (or above). This was reflected in population projections, which Westhoff ${ }^{25}$ said showed a 'a magnetic force' toward replacement level fertility. This was in part recognition of the unavoidable necessity of two children per women, on average, in very long-term projections to avoid eventual population extinction. It was only as recently as their 1998-based projections that UN population projections no longer assume a return to replacement level fertility in the long-term in Europe. ${ }^{26}$ It is now believed by many demographers that below replacement fertility is likely to be a sustained and widespread experience. Cliquet stated in 1991 that 'given present cultural and economic conditions, fertility will remain considerably below replacement level, and that, granted, that cultural and economic conditions don't change fundamentally, a spontaneous reversal is very improbable. ${ }^{2}$. Although low fertility on a period basis may be partly a transient phenomenon as it may not be a true indication of fertility on a cohort basis, where women are postponing births to later ages. ${ }^{27}$ In England and Wales the trend in cohort fertility has been gradually downward, with the 1958 cohort being the first to have a completed family size of less than two children per woman (1.99).

However, Vishnevsky has proposed an alternative scenario, in which below replacement fertility is an aberration. He hypothesises that fertility levels are the result of 'homeostatic demographic systems' that aim at their own inherent goals of self-maintenance and survival. Therefore, below replacement level fertility in his theory is an 'overshoot' of demographic systems readjusting themselves to lower mortality, and
inevitably will be reversed in the future. ${ }^{28}$ Although this hypothesis is not specific enough to be tested empirically, it remains very influential partly because fertility intention surveys consistently show the two-child family is still a strong normative goal. ${ }^{23}$ However, recently there was a Eurobarometer survey which suggested that the average ideal family size in Germany had fallen to well below two. ${ }^{29}$ Easterlin also proposed, in his cyclical theory of fertility rates, that below replacement fertility is a temporary experience. ${ }^{30}$

## How low can fertility go?

Most research regarding fertility assumes that a certain level of fertility will occur, however, sustained very low fertility has caused demographers to look at this assumption. Researchers have started to look at: why people have children; if the reasons for having children can be fulfilled with just one child; and, if there are biosocial mechanisms that underlie fertility and mean that there is a level below which fertility will not fall. ${ }^{31}$ These concerns led Coleman to state that 'the really fundamental problem is not the level of fertility and trends over time but the basic question of whether we will have any children at all, and if we do whether there is any imaginable reason why the average should be two. ${ }^{32}$

As mentioned previously, studies have shown that men and women desire two children, ${ }^{33}$ however this is not reflected in actual fertility levels. This gap between fertility desires and achieved fertility shows there may be the possibility of increases in fertility or at least lend support to some of the recent reductions in fertility being the result of postponement. There is also discussion across Europe about whether governments should introduce policies to try and increase fertility, and, if so, what, if anything would work. The approach of the UK is summed up in part of the statement on population policy presented to the UN Conference on Population in Mexico in 1984 and Population and Development in Cairo in 1994. ${ }^{34}$
'... The prevailing view is that decisions about fertility and childbearing are for people themselves to make, but that it is proper for government to provide individuals with the information and the means necessary to make their decisions effective...,

Below replacement fertility is also linked to postponement of fertility. Postponement has become one of the most prominent features of fertility patterns in developed countries. Most countries in Europe have experienced significant increases in the mean age at first birth. ${ }^{35}$ Mean age may also rise as childlessness increases, which has been happening in England and Wales. It is hard to distinguish between voluntary and involuntary childlessness, but it is likely that a proportion of the increase in childless, and smaller completed family size, is due to postponement of births to such an age where women find it more difficult to achieve their fertility desires. ${ }^{36}$ Many factors have been posited as to why postponement of fertility is occurring. Sobotka sums these up by saying 'the shift towards late timing of parenthood is an outcome of fundamental social, economic and cultural transformation, which altered the norms related to parenthood as well as the nature of decision-making of the timing of childbearing, ${ }^{37}$

## Conclusion

The common number used by demographers to define replacement fertility level is 2.1 children per woman. The analyses in this article demonstrate that while the traditional concept of replacement fertility is useful we need to be careful in taking replacement fertility of 2.1 as a constant figure in all places and for all time. Replacement fertility provides a useful concept for thinking about population dynamics since, eventually, below replacement fertility is likely to lead to a decline in population size. However, this decline may be delayed long into the
future by: the current population structure; improvements in mortality; and, inward migration. Furthermore below replacement fertility contributes to the ageing of the population.

In the developed world the concern is about fertility rates being below replacement level. Lutz ${ }^{38}$ recently described Europe's population as being at a turning point in history, as below replacement fertility had operated for such a time that natural decrease in the population was about to occur. He also concluded that postponement of births may contribute to population decline, a finding confirmed in this article.

However, the interaction of fertility, mortality and migration means that replacement fertility does not necessarily maintain a constant population size. Thus taking replacement fertility as some kind of target or ideal level of fertility in the short term is misplaced. Nevertheless it is clear that the further fertility falls below replacement the greater likelihood of more rapid population decline and population ageing. Countries with severe and sustained reductions of fertility to 'lowest low' levels, such as the Mediterranean and former Eastern Bloc countries may have cause for concern, even if their current low period fertility rates may in part be the result of postponement of fertility. Even then, whether the population declines will depend on whether population momentum, mortality improvements and migration outweigh the effect of below replacement fertility.

Fertility levels in England and Wales are such that, even in the absence of future inward migration and having already experienced below replacement fertility for 30 years, the population will not dramatically rise or fall over the next 30 years. Very long-term below replacement fertility affecting many generations would however lead to a more rapid population decline later in the century. Population ageing is inevitable unless fertility rises substantially, with consequential increases in population size. Increases in fertility would have some effect on the pace and overall level of ageing, but the population will still age. Therefore we should not be overly obsessed in this country, in terms of population size, by fertility being below replacement level and births being delayed. Higher fertility would delay population ageing and increase population growth.

## Key findings

- Replacement fertility is not a fixed level. It has varied through time and differs between countries. In particular, as traditionally defined, it has declined in developed countries, and is continuing to decline in developing countries, because of improving mortality.
- Based on 2003 fertility and mortality rates the replacement fertility rate in England and Wales is 2.07 children per woman.
- Using period fertility rates, fertility in England and Wales has been below replacement level since 1973.
- Using the 'traditional' definition of cohort replacement, the 1950 cohort was the first cohort in England and Wales not to replace itself since the major reductions in infant and child mortality. Cohort born in the 1920s also had fertility below replacement level.
- Cohort replacement fertility in the 20th century was higher than 2 .I until the 1950 cohort, but if mortality improvements for the children born are taken into account then replacement level has been around 2.I for all cohorts born since 1920.


## Acknowledgements

The authors wish to acknowledge to helpful comments received from referees and the editor of Population Trends.

## Notes and references

1. Craig J (1994) Replacement level fertility and future population growth. Population Trends 78, pp 20-22.
2. Cliquet R L (1991) Desirabilities and possibilities of a fertility recovery at replacement level in Europe. Netherlands Interuniversity Demographic Institute and the Population Family Study Centre Vol. 21.
3. UN (1997) Future expectations for below-replacement fertility. Population Division http://www.un.org/esa/population/pubsarchive/ belowrep/belowrep.htm
4. Caselli G and Vallin J (2001) Demographic trends: Beyond the limits? Population: An English Selection, Vol 13 (1), pp 41-71.
5. Shaw C (1989) The sex ratio at birth in England and Wales. Population Trends 57, pp 26-29.
6. Rendall M and Ball D (2004) Immigration, emigration and the ageing of the overseas-born population in the United Kingdom. Population Trends 116, pp 18-27.
7. Shaw C (2004) Interim 2003-based national population projections for the United Kingdom and constituent countries. Population Trends 118, pp 6-16.
8. Calot G and Sardon J-P (2001) Fécondité, reproduction et remplacement. Population 56, pp 337-370.
9. Sardon J (1991) Generation replacement in Europe Since 1900. Population: an English Selection Vol. 3, pp 15-32.
10. Shaw C (2001) United Kingdom population trends in the 21 st century. Population Trends 103, pp 37-46.
11. Smallwood S (2002) The effect of changes in timing of childbearing on measuring fertility in England and Wales. Population Trends 109, pp 36-45.
12. Chandola T, Coleman D and Hoirns R (2002) Distinctive features of age-specific fertility profiles in the English speaking world: Common patterns in Australia, Canada, New Zealand and the United States, 1970-98. Population Studies 56, pp 181-200.
13. Schoen R and Jonsson S (2003) A diminishing population whose every cohort more than replaces itself. Demographic Research Vol. 9(6), http://www.demographic-research.org/.
14. Oppen J and Vaupel J W. (2002) Broken limits to life expectancy Science Vol. 296, pp 1029-1031.
15. Espendshade T, Guzman J and Westoff C (2003) The surprising global variation in replacement fertility. Population Research and Policy Review 22, pp 575-583.
16. United Nations (2004) World population prospects The 2002 revision Volume III: Analytical report. United Nations: New York.
17. Wilson C and Pison G (2004) More than half of the global population lives where fertility is below replacement level. Population \& Societies No. 405 INED: Paris. http://www.ined.fr/englishversion/ publications/pop_et_soc/pesa405.pdf
Note that in their analysis Wilson and Pison Divide China and India down into their constituent regions.
18. Eurostat New Cronos database, http://epp.eurostat.cec.eu.int/portal/ page?_pageid=1090,1137397\&_dad=portal\&_schema=PORTAL. Data extracted 14 December 2004.
19. Kohler H P, Billari F and Ortega J A (2002) The emergence of lowest-low fertility in Europe during the 1990s. Population and Development Review 28(4), pp 641-681.
20. Pearce D and Bovagnet F (2005) The demographic situation in the European Union Population Trends 119 pp 7-15.
21. United Nations (2003) World population prospects The 2002 revision Volume I: Comprehensive tables. United Nations: New York
22. Caldwell J, Caldwell P and McDonald (2002) Policy responses to low fertility and its consequences: a global survey. Journal of Population Research Vol. 19(1), pp 1-24.
23. Chesnais J (1998) Below-replacement fertility in the European Union (EU-15): facts and policies, 1960-1997. Review of Population and Social Policy Vol. 7, pp 83-101.
24. Rowland D (2003) Demographic methods and concepts. Oxford University Press: Oxford.
25. Westhoff C (1991) The return to replacement fertility: a magnetic force? In Lutz W (ed) Future demographic trends in Europe and North America. Academic Press: London.
26. United Nations (1999) World population prospects 1998 revision volume III Analytical report. United Nations: New York.
27. Bongaarts J and Feeney G (1998) On the Quantum and Tempo of Fertility. Population and Development Review 24(2), pp 271-291.
28. Vishnevsky A (1991) Demographic revolution and the future of fertility: a systems approach. In Lutz W (ed) Future demographic trends in Europe and North America. Academic Press: London.
29. Goldstein J, Lutz W and Testa M (2003) The emergence of subreplacement family size ideals in Europe. Population Research and Policy Review Vol 22(5), pp 479-496.
30 Easterlin R A (1980) Birth and Fortune New York Basic Books
30. Foster C (2000) The limits to low fertility: A biosocial approach. Population and Development Review 29(2), pp 9-34.
31. Coleman D (1998) Reproduction and survival in an unknown world: what drives today's industrial populations, and to what future? NIDI Hofstee Lecture Series (5). NIDI: The Hague.
32. Smallwood S and Jeffries J (2003) Family building intentions in England and Wales: trends, outcomes and interpretations. Population Trends 112, pp 15-28.
33. Dunnell K (2001) Policy responses to population ageing and population decline in the United Kingdom. Population Trends 103, pp 47-52.
34. Mean age at first birth is a better indication of changes in fertility timing than mean age at childbearing, because mean age at childbearing may be high due to women having large families over a long time period (for example, in 1920s).
35. Kohler H and Ortega J (2002) Tempo-Adjusted Period Parity Progression Measures, Fertility Postponement and Completed Cohort Fertility. Demographic Research Vol. 6, article 6, http: //www.demographic-research.org/.
36. Sobotka T (2004) Postponement of Childbearing and Low Fertility in Europe. Dutch University Press: Amsterdam.
37. Lutz W, O'Neill B and Scherbov S (2003) Europe's Population at a Turning Point. Science 28 March 2003; 299, pp 1991-1992.

# The creation of <br> 'Consistent Areas <br> Through Time' (CATTs) <br> in Scotland, |98|-200 | 

Daniel J Exeter, Paul Boyle<br>Zhiqiang Feng and Robin Flowerdew<br>School of Geography \& Geosciences,<br>University of St Andrews<br>Nick Schierloh<br>Census and Population Statistics Division,<br>General Register Office for Scotland

Small area analysis of sociodemographic change over time is often impeded by the changing configuration of census zones for each decennial UK census. Approaches for matching zone configurations exist, but these typically require population estimation techniques, which inevitably involve some error. Because of the postcode-based geographical zoning system used in Scottish censuses, it is possible to create a local-area geography which is consistent for recent censuses. Here we present a methodology used to create three sets of consistent areas through time (CATTs) that can be used for analysing comparable small area data output from the 1981, I991 and 2001 Censuses.

## Introduction

The decennial collection of national census data is a costly and lengthy process. To justify the exercise it is essential that good use is made of the various outputs and the evidence suggests that it is good value for money. ${ }^{1}$ However, while much use is made of the census, most studies use the data cross-sectionally and only relatively rarely are attempts made to analyse change through time by comparing the outputs from consecutive censuses. There are perhaps two main reasons for this. First, questions can change or disappear between censuses, making it impossible to investigate change through time. Second, and the focus of this article, boundaries change between censuses, making it difficult to compare data from two or more censuses for small geographical areas. Those studies that have investigated changes in population health and socio-demographics through time have therefore usually been restricted to large spatial units, such as Standard Regions or Parliamentary Constituencies. ${ }^{2,3}$ Such analyses are aided by the fact that the most detailed tabulations are usually provided for larger areas ${ }^{4}$ and because these areas are less susceptible to significant boundary changes between censuses than smaller areas such as Output Areas (OAs), Enumeration Districts (EDs), Wards or Pseudo Postcode Sectors. While the use of higher geographies may be useful for reporting changing demographic, socio-economic and health patterns through time, they can mask important local variations.

Of course, a number of methods exist that enable two or more geographies to be combined into a common geography. ${ }^{5-8}$ Most approaches use an areal interpolation process that involves the proportional redistribution of information from the source geographies to the target geography, based on a pre-defined weighting scheme. Necessarily, however, these techniques introduce error, which varies depending on the procedure that is used. ${ }^{8}$

Here we present an alternative approach, which uses 1981 EDs in Scotland as the base geography from which 'Consistent Areas Through Time’ (CATTs) can be derived. It is possible to extract small area census data outputs from 1981, 1991 and 2001 for these areas without the need for areal interpolation methods. The method presented here is only possible because the General Register Office for Scotland (GROS) has endeavoured to maintain comparability between census areas since 1981. For the first time in Scotland, therefore, CATTs are available which allow for the reliable analysis of changing demographic, social and economic circumstances at the local level.

## Existing approaches for creating ‘consistent’ geographies

Various approaches exist for creating consistent geographies through time. Norman et al. ${ }^{8}$ define four different approaches: freezing geographical history; updating historic data to contemporary zones; creating designer zones; and the aggregation of individual data to the geography that is best suited to the research question.

The simplest areal interpolation approach ${ }^{5,9}$ relies upon areal weighting, which assumes that the variable of interest (for example, population) is uniformly distributed within the source zone. If the proportion of the source zone that is in the target zone is known, it is simple to calculate the estimated value for the area of intersection, and then to sum the values to achieve a target zone estimate.

The problem with such areal interpolation is that variables are usually not distributed evenly over geographic space, and hence the error may be substantial. If part of the source area is known to be uninhabited (perhaps because it is under water, or predominantly industrial), dasymetric mapping techniques can be used to adjust the estimates. More generally, Flowerdew and Green ${ }^{5}$ have developed techniques for 'intelligent' areal interpolation, which can take into account any additional information relating to the source zones, which may provide further clues about the distribution of the variable of interest within the source zones.

Another approach is to 'remove' the boundaries and use the grid references of each areal unit to construct a smoothed population surface. Tobler's pycnophylactic interpolation ${ }^{10}$ is one method, but there are a number of other weighting methods such as inverse distance, kernel estimation and kriging. Bracken and Martin ${ }^{6}$ used surface modelling techniques to link 1981 and 1991 ED data for England and Wales. The 1991 ED data were left unchanged, but the 1981 ED data were remodelled to the 1991 geography. Although the boundaries for some EDs did not change between 1981 and 1991, the boundaries for many others did change. In these cases the 1981 ED grid references were allocated to a 1991 grid reference that was within 100 metres of the 1981 ED grid reference. If no match was possible, the 1981 data were reapportioned to the nearest 1991 EDs, and a distance function was used so that the population and variable totals were preserved. This approach provided a 'best fit' solution to matching the 1981 and 1991 geographies but, as with all these methods, it inevitably introduces error that will vary geographically.

An alternative strategy, which does not rely on areal interpolation, was introduced in the 1980s to allow results from the 1971 and 1981 Censuses to be analysed and compared in England and Wales. Approximately 48,300 Census Tracts were created in urban areas and each Census Tract comprised one or more EDs from 1971 and 1981 that nested within unchanged boundaries. These 48,300 Census Tracts allowed for comparisons between the 81,000 EDs from 1971 and 82,500 EDs from 1981 that fell in these urban areas, and they accounted for 76 per cent of the total population in $1981 .{ }^{11}$ In rural areas, the Office of Population Censuses and Surveys (OPCS) used Civil Parishes as their
consistent geography. These areas covered 28,350 EDs from 1971 and 29,800 1981 EDs. However, although Morgan and Denham ${ }^{11}$ envisaged that the Census Tracts and Parishes would be a convenient geography to which future Small Area Statistics (SAS) datasets could be linked, the OPCS did not publish lookup tables to link the 1991 Census data to the Census Tracts and the zones have rarely been used.

In this article, we present a method for creating consistent geographical areas in Scotland, which is similar in concept to the Census Tracts, but which allows for consistent comparisons of data from the three censuses conducted in 1981, 1991 and 2001.

## Constructing consistent areas through time (CATTs) in Scotland

The General Register Office for Scotland (GROS) is responsible for the preparation, collection and outputs of Scotland's Census. For each census, the GROS constructs Enumeration Districts (EDs) to manage the workloads of the enumerators who collect census returns. Unlike in England and Wales, the 1981 Scottish EDs were constructed from aggregations of one or more whole unit postcodes. There were 17,767 Scottish EDs in 1981, which were also used for census outputs. In 1991, the GROS defined 38,254 OAs, based on aggregations of postcodes, which were used to distribute census outputs. These generally nested neatly within 1981 EDs. In 2001 the GROS developed 42,604 OAs from postcodes for the small area output of census results with the aim that they would nest within the boundaries of other administrative units as much as possible. However, a consultation exercise was conducted which informed the decisions about which geographies the 2001 OAs should nest within; Box 1 provides the preferred ranking. Each 2001 OA was assigned a 'master' postcode, which was used by the GROS to allocate the OAs to all of the 'higher' geographies. With the exception of Council Areas (into which 2001 OAs fit exactly), all higher geographies are bestfit approximations. ${ }^{12}$ Because less weighting was given to the structure of the 1991 OAs, the relationship between 1991 and 2001 is far from perfect. Consequently, it is not simple to analyse change through time at the local level using data from these two censuses. This is addressed here.

In 1981 the 17,767 Scottish EDs were not digitised, but were represented geographically by population-weighted grid centroids. In 1991 there were 38,098 OAs with digitised boundaries (the other 156 OAs were large communal establishments and were geographically represented as points rather than polygons). In most cases, the 1991 OAs were simply neat subdivisions of 1981 EDS and the naming convention made it relatively easy to identify these cases; 1991 OAs tended to have the same name, except with an alphabetical suffix added. For example, the 1991 OAs $5601 \mathrm{AB} 03 \mathrm{~A}, 5601 \mathrm{AB} 03 \mathrm{~B}$ and 5601 AB 03 C were subdivisions of the 1981 ED 5601AB03. By aggregating the three 1991 OAs together, small area census data outputs for 1991 and 1981 can be accurately compared for the same geographical areas (Figure 1a). The majority of 1981 EDs were split into two $(6,015)$ or three $(6,109) 1991$ OAs, but the 1981 ED 6018AA01 was divided into 221991 OAs because of significant population growth in the area (Portlethen, Aberdeenshire). Thus, for 16,096 of the 1981 EDs, directly equivalent combinations of 1991 OAs could be produced. However, this left 1,670 1981 EDs which could not be reconstructed from 1991 OAs in the same manner.

Despite the fact that there were significantly more 1991 OAs than 1981 EDs, the confidentiality requirements introduced for the 1991 Census meant that a relatively small number of 1981 EDs were too small to be retained as distinct 1991 OAs and these had to be increased in size. No 1991 OA could contain less than 50 people, or 16 households (in 1981 the comparable rule was that no ED could contain less than 25 people or eight households ${ }^{13}$ ). In cases where the 1981 ED did not meet both of these rules in 1991, the zone was increased in size by allocating one

Figure I
Creating the '1981/1991 merged zones'
a)

b)


1981 EDs constructed from 1991 OAs


1991 OAs

'1981/1991 Merged Zones'

- = postcodes belonging to same 1991 OA
.........- 1981 ED boundary
or more postcodes from a neighbouring 1981 ED. In these cases, the boundaries of 1991 OAs did not fit neatly within the boundaries of the 1981 EDs, as a 1991 OA could overlap with two or more 1981 EDs.

Fortunately, a lookup table was created by GROS, which identified each of these cases, linking all postcodes which were allocated to a different 1991 OA than might have been expected, and providing a reason for this decision. Most of these anomalies occurred because there were too few persons or too few households for the 1981 ED to become a distinct 1991 OA. Other reasons included postcodes that were in special (suppressed) 1981 EDs that became ordinary (unsuppressed) 1991 OAs; the deletion of postcodes between censuses; administrative boundary changes of
larger zones such as wards; and zone re-labelling between the 1981 and 1991 Censuses.

For the creation of CATTs, these problems needed to be resolved. Where 1991 OAs included postcodes that fell in more than one 1981 ED the two 1981 EDs were merged (Figure 1b). There were some instances where three or more EDs needed to be aggregated. This resulted in a total of 15,921 '1981/1991 merged zones' which encompassed all of Scotland.

Manual checking of the '1981/1991 merged zones' highlighted a small number of occasions where two non-neighbouring 1981 EDs were combined into a single '1981/1991 merged zones'. In these instances
we merged all of the 1981 EDs that fell between non-adjacent '1981/ 1991 merged zones'. In addition we found a small number of errors in the GROS lookup table that created non-adjacent zones that were very distant from each other. These generally arose from typographic errors, and were rectified using the postcode information in the Central Postcode Directory (CPD). These manual modifications decreased the number of '1981/1991 merged zones' from 15,921 to 15,739 unique zones for which reliable comparisons can be made between 1981 and 1991 Census data.

The final step was to account for the 2001 Census geography. The GROS attempted to maintain consistency between the 1991 and 2001 Census geography, but the consultation exercise suggested that maintenance of settlement or locality boundaries was more important than retaining consistency with 1991 OAs (Box 1). ${ }^{12,14}$ In addition, the dramatic increase of approximately 30,000 postcodes in the 1990s, and increased confidentiality thresholds, meant that inconsistencies were inevitable at the OA level. Some 2001 OAs were created by sub-dividing 1991 OAs, but because the naming convention used to label OAs changed between 1991 and 2001 it was more difficult to identify these occurrences without using Geographical Information Systems (GIS).

It was possible that some '1981/1991 merged zones' and 2001 OAs comprised more than one polygon. This might have occurred when a particular zone spanned a water body, or when two or more islands were aggregated into one zone to maintain confidentiality thresholds. Thus, the '1981/1991 merged zones' and 2001 OA polygon files contained more polygons than the total number of zones in each file. We therefore overlaid the 42,747 polygons representing the 42,6042001 OAs onto the 16,260 polygons representing the 15,739 ' $1981 / 1991$ merged zones', within a GIS, to create a new polygon file, which contained 112,415

## Box one

The hierarchy of zones that the 2001 OAs in Scotland were designed to nest within

| (Ranking | Aggregation |
| :--- | :--- |
| 1 (most important) | 2001 Council Area |
| 2 | 2001 Locality ${ }^{\text {15 }}$ |
| 3 | 1991 OA |
| 4 | 2001 Postcode Sector |
| 5 (least important) | 2001 Electoral Ward |

Source: ${ }^{12}$
polygons (see Figure 2i-iii). This large number of polygons demonstrates that there were some substantial differences between the '1981/1991 merged zones' and the 2001 OA boundaries. The key issue was to distinguish deliberately redrawn boundaries, where households were moved between areas, from the sliver polygons that were created by merging the two polygon files. ${ }^{16}$ Thus, were areas B1 and B5 in Figure 2iii slivers, or intentional boundary changes designed to reallocate people between different areas, perhaps because of confidentiality requirements.

In order to identify and remove the sliver polygons that did not include any households the GROS performed a point-in-polygon overlay of each residential address in Scotland derived from ADDRESS-POINT ${ }^{\mathrm{TM}}$

Figure 2
Combining the '1981/1991 merged zones' with 2001 OAs

which is a point coverage containing 2,378,170 addresses. The number of residential addresses that fell within a single polygon ranged from 0 to 1,739 . There were 57,639 polygons that contained at least one residential address and the mean number of addresses in a polygon was 41 .

In Figure $2 v$ area B1 was identified as a genuine boundary change designed to reallocate people between areas (this may have occurred because the households in B1 were in the same postcode as households in 2001 OA 1, rather than 2001 OA 4). On the other hand, area B5 did not include any addresses, and hence could be ignored as a 'sliver' in our intersection of the '1981/1991 merged zones' and the 2001 OAs. Thus, in Figure 2vii polygon B5 was eliminated since it contained no addresses. Note that the elimination of polygons, such as B5 in Figure 2vii, was controlled so that the 2001 OA boundaries were retained.

Eliminating all polygons within the '1981/1991/2001 merged zones' file that did not contain any addresses resulted in a boundary file with 58,030 polygons. This file included all 42,747 of the 2001 OAs termed '1981/ 1991/2001 merged zones', but there were 47 ' $1981 / 1991$ merged zones' missing. These were in the urban areas of Dundee, Edinburgh, Glasgow and Renfrewshire and resulted from estate demolition since 1991. These areas had been merged with neighbouring zones in 2001.

The majority $(31,286)$ of the 2001 OAs fell within a single '1981/1991 merged zone', but some large 2001 OAs overlapped up to 10 '1981/1991 merged zones'. To ensure consistency through time, whenever a 2001 OA overlapped more than one '1981/1991 merged zone', the affected zones were aggregated. For example, in Figure 2vi one 2001 OA (' 1 ') overlaps '1981/1991 merged zones' 'A' and 'B'. Thus, these '1981/1991 merged zones' were aggregated to create one of the CATTs shown in Figure 2vii. Aggregating all the necessary polygons reduced the number of zones considerably to 5,741 . These zones are unique CATTs (referred to as 'CATT0') for which census data from 1981, 1991 and 2001 can be reliably compared.

Unfortunately, while these CATTs are genuinely consistent, their size and shape varies considerably. A number of large, unusually shaped zones were created (Figure 3a), a problem which also occurred in the development of Census Tracts. ${ }^{11}$

Bearing in mind that previous attempts to integrate different geographies had usually relied on postcodes to decide whether boundary changes were significant, ${ }^{7,8,17}$ our approach was extremely conservative. We had used the strict criteria that any polygon with at least one address point should be treated as an intentional sliver and this usually resulted in the merger of neighbouring zones. We therefore created two further sets of CATTs that were slightly less conservative. First, the construction of CATT1s relaxed the rule so that a sliver polygon that contained less than two addresses was eliminated. This resulted in 8,588 CATT1s, (Figure 3b). Second, CATT2 relaxed the rule slightly more, so that slivers with two or less addresses were eliminated, resulting in 10,058 CATTs (Figure 3c). Thus, three sets of CATTs have been created (CATT0, CATT1 and CATT2). Given that 2001 OAs contained a minimum of 20 households, removing polygons containing one or two points was not considered too significant. Indeed, only 102 of the 42,604 OAs in 2001 contained as few as 20 households.

## Case study: The population and size of CATTs in Fife

As the number of CATTs increases, so too does the similarity between the CATTs and the 2001 OAs. There were 2,9242001 census OAs in Fife, with populations ranging from 50 to 562 , with a mean of 119 . There were 247 CATT0s in Fife, with 2001 populations ranging from 58 to 143,868 , with a mean population of 1,614 . There was one CATT0 zone

Table I
Population summary statistics for the three sets of CATTs and, for comparison, 2001 OAs and Census Area Statistics (CAS) Sectors

|  | 2001 OA | 2001 Sector | CATT0 | CATTI | CATT2 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Min | 50 | 51 | 50 | 50 | 50 |
| Max | 2,357 | 20,512 | 143,868 | 36,283 | 18,510 |
| Mean | 119 | 5,011 | 882 | 589 | 503 |
| Std. Dev. | 45 | 3,441 | 3,907 | 1,274 | 831 |
| Total | $\mathbf{4 2 , 6 0 4}$ | $\mathbf{1 , 0 1 0}$ | $\mathbf{5 , 7 4 1}$ | $\mathbf{8 , 5 8 8}$ | $\mathbf{1 0 , 0 5 8}$ |

that included a considerable proportion of Fife and this is a good example of the daisy-chain effect that can occur in the creation of CATTs, because the strategy of aggregating two or more '1981/1991 merged zones' to accommodate 2001 OAs was a recursive process (Figure 4a). Therefore, while the CATT0 configuration is the most reliable, because any sliver with a single address was treated as a 'genuine' boundary change, the zones are not particularly practical in some parts of Scotland.

Relaxing the rule so that slivers were ignored if they included zero or one residential address increased the number of CATTs to 485 in Fife (Figure $4 \mathrm{~b})$. The large CATT0 polygon was split into 107 individual zones. The maximum 2001 population dropped considerably to 36,283 , and the mean population reduced to 778 . The number of zones increased again to 616 with the CATT2 generation (Figure 4c). These had a maximum 2001 population of only 18,510 and a mean of 605 . Furthermore, the large CATT0 zone that covered most of Fife was split into 167 smaller CATTs in the CATT2 generation. Many of the small settlements that were initially absorbed into rural zones in the CATT0 version have been retained and are more clearly defined in Figure 4c.

Table 1 provides a list of summary statistics for the total populations from the 2001 census populations for OAs and the CATTs. One of the 'costs' of creating a consistent geography through time was that there was no control over the maximum population within a particular CATT. The minimum population threshold for OAs in 2001 was 50 and only one or two CATTs (depending on the generation) had a population of exactly 50. Between 15 (CATT2) and 54 (CATT0) CATTs have a population greater than 10,000 , which is comparable in size to a typical 2001 Census Area Statistic Postcode Sector (Table 1).

Note also that one outcome of the construction of the CATTs (in each generation) was the creation of 'mainland islands', which are small CATT zones surrounded by larger CATT zones. These mainland islands are scattered throughout Scotland, but tend to be located in rural or suburban areas. The islands represent towns/villages whose boundaries did not change through time.

The creation of consistent areas through time means that changes in census variables can also be examined. In 1981, there were 326,627 residents in Fife. The population of each CATT2 in Fife ranged from 52 to 12,569 , with a mean of 540 . While the total Scottish population declined between 1981 and 2001, the total population of Fife increased by eight per cent to 353,181 . In 2001, the population in the CATT2s ranged from 58 to 18,510 , with a mean of 584 .

Between 1981 and 2001, the CATT2-level population change in Fife ranged from a decrease of 64 per cent to an increase of $1,067.50$ per cent, with a mean growth of 4.9 per cent. As Figure 5 demonstrates, the areas of population growth were typically the geographically larger, more rural CATT2s, while the population in the more urban or suburban areas tended to decline over time.


ONS would usually recommend that count data are displayed in proportional symbol maps. In this case the author has chosen choropeth maps to illustrate the specific points that are being made in this article.

Figure 4
The 2001 total populations for the three difierent generations of CATTs in the Fife Pseudo Council Area

a) CATTO


ONS would usually recommend that count data are displayed in proportional symbol maps. In this case the author has chosen choropeth maps to illustrate the specific points that are being made in this article.

Figure 5
Percentage population change (198I-200I) for CATT2s in the Fife Pseudo Council Area


## Linking I98I, I99I and 200I data to CATTs

Nine geographical conversion tables (GCTs) have been constructed to link 1981 EDs and OAs from 1991 and 2001 to each set of CATTs. Each GCT consists of three fields: the source zone (for example, 1981 ED ), the target zone (for example, CATT2), and the population for the target zone and the particular census year (for example, 1981 total population). Unlike traditional GCTs, there is no need for a weight as each of our CATTs is constructed from one or more complete 1981 EDs, 1991 OAs and 2001 OAs, and therefore no further data manipulation is required.

Population weighted grid references derived from 2001 OA centroids have been created for each generation of the CATTs, which can be used to create approximations of higher geographies, such as Postcode Sectors, Wards, and Parliamentary Constituencies, using point-inpolygon queries. Note that when aggregating from CATTs to Postcode Sectors and Wards, it is possible that there will be fewer zones than in the official data sets, because some CATTs may overlap more than one of the target zones.

## Conclusion and future research

A number of approaches exist for creating consistent geographies through time. However, these approaches usually involve estimation and hence some error results. Here, we present a method for creating 'Consistent Areas Through Time' (CATTs) where the basic rule was that each CATT should be created from one or more complete 1981 ED, 1991 OA or 2001 OA. This approach is more accurate than interpolation
techniques because the populations derived for each area are based on data from complete census zones (barring, at most in CATT2, two residential addresses).

Three sets of CATTs have been produced. The first, CATT0, consists of 5,741 zones and is the most conservative as it involved the strictest criteria for aggregating zones together. The configuration of zones is compromised to some extent due to the merging processes used to create them, and many of the CATT0 zones are very large. The least conservative set of zones, CATT2, contains 10,058 zones, and is recommended by the authors for use in most analyses. We envisage the CATTs being appropriate for a wide range of data analyses that are pertinent to the health and well being of the Scottish population.

Undoubtedly, the configuration of the OAs (or their equivalent) for the 2011 Census will differ from those from the 2001 Census in order to reflect the population distribution. However, the CATT2s could be modified to accommodate the 2011 Census OAs, by adopting the same approach that was used for integrating the 2001 Census geography with the '1981/1991 merged zones'. Thus, the 2011 OA zones could be overlain upon the CATT2 zones while ADDRESS-POINT ${ }^{\text {TM }}$ data would be used to distinguish between deliberate boundary changes and sliver polygons. In this case, the CATT2s would be used as the target geography, and whenever the 2011 OA zone overlapped more than one CATT2 zone, the affected CATT2s would be merged.

It is not possible to adopt the methodology presented in this article to create a consistent small area geography between 1981 and 2001

## Key findings

- Because Scottish census zones have been constructed from postcodes since 1981, it is possible to create a local area geography that is consistent over this period
- Existing methods for creating consistent geographies usually depend on the proportional allocation of data from source zones to target zones, which inevitably incurs error
- We present an alternative method for creating three sets of 'Consistent Areas Through Time' (CATTs), which uses a 'merging' strategy. If a source zone overlaps more than one target zone, then the affected zones were merged
- Three sets of CATTs have been produced, which are based on more or less strict rules about when zones should be merged
- The CATTs provide a local-area Scottish geography which allows 1981, 1991 and 2001 census data to be compared reliably through time
for England and Wales, as the EDs in England and Wales were not constructed using postcodes as the base geography. However, the recently developed Super OAs in England, Wales and Northern Ireland will allow the methodology presented here to be used for comparing small areas from the 2001 and 2011 Censuses.

The lookup tables required to aggregate the 1981 EDs and OAs from 1991 and 2001 to the CATT2 level have been made available from UKBORDERS: http://www.edina.ac.uk/ukborders and MIMAS: http://www.census.ac.uk/cdu.

## Contact

Daniel Exeter, School of Geography \& Geosciences, University of St Andrews, KY16 9AL, Fife, Scotland.

E-mail: d.exeter@st-andrews.ac.uk

## Acknowledgements

Daniel Exeter's PhD was funded by an Overseas Research Student Award and a University of St Andrews Lapsed bursary.

Census output is Crown Copyright and is reproduced with the permission of the Controller of HMSO and the Queen's Printer for Scotland. Census boundary data for 1991 and 2001 were supplied by The General Register for Scotland. © Crown Copyright.

## Notes and references

1. Boyle P J and Dorling D (2004) The 2001 UK Census: Remarkable resource or bygone relic of the 'pencil and paper era'? Area 36, pp 101-110.
2. Mitchell R, Dorling D, and Shaw M (2000) Inequalities in Life and Death: What if Britain were more equal? The Policy Press: Bristol.
3. Shaw M, Dorling D, Gordon D, and Davey Smith G. (1999) The Widening Gap: Health Inequalities and Policy in Britain. The Policy Press: Bristol.
4. Norris P and Mounsey H M (1983) Analysing Change Through Time. In Rhind D W (Ed.) A Census User's Handbook. Methuen: London.
5. Flowerdew R and Green M. (1994) Areal Interpolation and Types of Data. In Fotheringham A S and Rogerson P (Ed.) Spatial Analysis and GIS. Taylor \& Francis: London.
6. Bracken I and Martin D (1995) Linkage of the 1981 and 1991 UK

Censuses Using Surface Modeling Concepts. Environment and Planning A 27, pp 379-390
7. Simpson L (2002) Geography Conversion Tables: A framework for conversion of data between geographical units. International Journal of Population Geography 8, pp 69-82.
8. Norman P, Rees P, and Boyle P (2003) Achieving Compatibility Over Space and Time: Creating Consistent Geographical Zones. International Journal of Population Geography 9, pp 365-386.
9. Goodchild M F, Anselin L, and Deichmann U (1993) A Framework for the Areal Interpolation of Socioeconomic Data. Environment and Planning A 25, pp 383-397.
10. Tobler W (1979) Smooth Pycnophylactic Interpolation for Geographical Regions. Journal of the American Statistical Association 74, pp 519-530.
11. Morgan C and Denham C (1982) Census Small Area Statistics (SAS): Measuring Change and Spatial Variation. Population Trends 28, pp 12-17.
12. General Register Office for Scotland (2004) Scotland's Census: A guide to the results and how to obtain them. GROS: Edinburgh.
13. Dewdney J C (1983) Censuses Past and Present. In Rhind D W (Ed.) A Census User's Handbook. Methuen: London.
14. General Register Office for Scotland (2004) 2001 Census: Geography Classifications. http://www.gro-scotland.gov.uk/ grosweb/grosweb.nsf/pages/scotcen25\#w2. Last accessed 25 October 2004.
15. There were 587 localities in 2001, which ranged in population from 443 to 629,501 , and had an average population of 7,742 . In 2001, localities were based on the boundaries of the 1991 localities, and were subdivisions of Settlements, which were groups of neighbouring urban postcodes, with a minimum population of 500 residents.
16. In 2001 boundaries may have been 'improved' from 1991 so that they fell more neatly along the middle of a road, for example. However, when comparing the two coverages this would have created a sliver, which did not involve the redistribution of any households between the two zones.
17. Wilson T and Rees P (1999) Linking 1991 Population Statistics to the 1998 Local Government Geography of Great Britain. Population Trends 97, pp 37-45.

## Tables

Table*

## Population

| 1.1 (1) | International.. | Selected countries |
| :---: | :---: | :---: |
| 1.2 (2) | National | Constituent countries of the United Kingdom |
| 1.3 (4) | Subnational | Government Office Regions of England |
| 1.4 (6) | Age and sex | Constituent countries of the United Kingdom |
| 1.5 (7) | Age, sex and | England and Wales |

Components of population change England and Wales46

Constituent countries of the United Kingdom

Vital statistics
2.2 (new) Key demographic and health indicators

Summary.............................................................................. Constituent countries of
Summary............................................................................... Constituent countries

Constituent countries of the United Kingdom

## Live births

3.1 (9)

Age of mother
England and Wales
Outside of marriage: age of mother and type of registration. England and Wales 53
3.3 (II) Within marriage, within marriage to remarried women, age of mother and birth order.

England and Wales
Conceptions and abortions
Age of women at conception $\qquad$ (residents)

## Expectation of life


(In years) at birth and selected age.
Constituent countries of

## Deaths

6.1 (14)

Age and sex the United Kingdom56

Subnational
of England

England and Wales58
International migration
7.1 (18)
7.2 (19) Country of last residence ............................................................... United Kingdom
United Kingdom
7.3 (20) Citizenship United Kingdom
Internal migration
8.I (2I) Movements within the United Kingdom United Kingdom ..... 62
Marriage and divorce Age and sex England and Wales
England and Wales596061
$9.1(22)$
$9.2(23)$
$9.1(22)$
$9.2(23)$
9.3 (24)63Remarriages: age, sex and previous marital status64
Divorces: age and sex England and Wales

[^2]Population Trends tables are also available in XLS or CSV formats via our website http://www.statistics.gov.uk

## Symbols

.. not available

- nil or less than half the final digit shown
: not applicable
p provisional

Table I.I
Population and vital rates: international

| Selected countries |  |  |  |  |  |  |  |  |  | Numbers (thousands)/Rates per thousand |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | United Kingdom | Austria | Belgium | Cyprus ${ }^{\prime}$ | Czech Republic | Denmark | Estonia | Finland | France | Germany ${ }^{2}$ | Greece | Hungary | Irish Republic |
| Population (thousands) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1971 | 55,928 | 7,501 | 9,673 | . | 9,810 | 4,963 | 1,369 | 4,612 | 51,251 | 78,313 | 8,831 | 10,370 | 2,992 |
| 1976 | 56,216 | 7,566 | 9,818 | 498 | 10,094 | 5,073 | 1,435 | 4,726 | 52,909 | 78,337 | 9,167 | 10,590 | 3,238 |
| 1981 | 56,357 | 7,569 | 9,859 | 515 | 10,293 | 5,121 | 1,482 | 4,800 | 54,182 | 78,408 | 9,729 | 10,712 | 3,443 |
| 1986 | 56,684 | 7,588 | 9,862 | 545 | 10,340 | 5,120 | 1,534 | 4,918 | 55,547 | 77,720 | 9,967 | 10,631 | 3,543 |
| 1991 | 57,439 | 7,813 | 9,979 | 587 | 10,309 | 5,154 | 1,566 | 5,014 | 57,055 | 79,984 | 10,247 | 10,346 | 3,526 |
| 1996 | 58,164 ${ }^{10}$ | 8,059 | 10,157 | 656 | 10,315 | 5,262 | 1,469 | 5,125 | 58,376 | 81,896 | 10,476 | 10,193 | 3,626 |
| 1997 | 58,314 ${ }^{10}$ | 8,072 | 10,181 | 666 | 10,304 | 5,284 | 1,458 | 5,140 | 58,809 | 82,052 | 10,499 | 10,155 | 3,661 |
| 1998 | 58,475 ${ }^{10}$ | 8,092 | 10,214 | 675 | 10,295 | 5,301 | 1,450 | 5,153 | 58,853 | 82,029 | 10,520 | 10,114 | 3,705 |
| 1999 | 58,684 ${ }^{10}$ | 8,093 | 10,226 | 683 | 10,283 | 5,330 | 1,442 | 5,165 | 59,099 | 82,057 | 10,534 | 10,068 | 3,745 |
| 2000 | $58,886^{10}$ | 8,103 | 10,239 | 690 | 10,273 | 5,330 | 1,370 | 5,176 | 58,749 | 82,164 | 10,554 | 10,024 | 3,777 |
| 2001 | $59,113^{10}$ | 8,121 | 10,263 | 698 | 10,220 | 5,349 | 1,360 ${ }^{\text {p }}$ | 5,190 | 59,037 ${ }^{\text {P }}$ | 82,260 | $10,565{ }^{\text {P }}$ | 10,190 | $3,826^{\text {P }}$ |
| 2002 | $59,322{ }^{10}$ | $8,140{ }^{\text {P }}$ | $10,307^{\text {P }}$ | $710^{p}$ | $10,200{ }^{\text {P }}$ | 5,368 | .. | 5,210 | 59,344 ${ }^{\text {P }}$ | $82,431^{\text {p }}$ | $10,598{ }^{\text {P }}$ | $10,160^{p}$ | 3,884 ${ }^{\text {P }}$ |
| 2003 | 59,554 |  |  |  |  |  |  |  |  |  |  |  |  |


| Population | ges (p | per |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1971-76 | 1.0 | 1.7 | 3.0 | .. | 5.8 | 4.4 | 9.6 | 4.9 | 6.5 | 0.1 | 7.6 | 4.2 | 16.4 |
| 1976-81 | 0.5 | 0.1 | 0.8 | 6.8 | 3.9 | 1.9 | 6.6 | 3.1 | 4.8 | 0.2 | 12.3 | 2.3 | 12.7 |
| 1981-86 | 1.2 | 0.5 | 0.1 | 11.7 | 0.9 | 0.0 | 7.0 | 4.9 | 5.0 | -1.8 | 4.9 | -1.5 | 5.8 |
| 1986-91 | 2.6 | 5.9 | 2.4 | 15.4 | -0.6 | 1.3 | 4.2 | 3.9 | 5.4 | 5.8 | 5.6 | -5.4 | -1.0 |
| 1991-96 | $2.5{ }^{10}$ | 6.3 | 3.6 | 23.5 | 0.1 | 4.2 | -12.4 | 3.8 | 4.6 | 4.8 | 4.5 | -3.0 | 4.3 |
| 1997-98 | $2.8{ }^{10}$ | 2.5 | 3.2 | 13.5 | -0.9 | 3.2 | -5.5 | 2.5 | 0.7 | -0.3 | 2.0 | -4.0 | 12.0 |
| 1998-99 | $3.6{ }^{10}$ | 0.1 | 1.2 | 11.9 | -1.2 | 5.5 | -5.5 | 2.3 | 4.2 | 0.3 | 1.3 | -4.5 | 10.8 |
| 1999-2000 | $3.4{ }^{10}$ | 1.2 | 1.3 | 10.2 | -1.0 | 0.0 | -49.9 | 2.1 | -5.9 | 1.3 | 1.9 | -4.4 | 8.5 |
| 2000-01 | $3.9{ }^{10}$ | 2.2 | 2.3 | 11.6 | -5.2 | 3.6 | -7.3 ${ }^{\text {P }}$ | 2.7 | $4.9{ }^{\text {P }}$ | 1.2 | 1.0 | 16.6 | $13.0{ }^{\text {P }}$ |
| 2001-02 | $3.5{ }^{10}$ | $2.3{ }^{\text {P }}$ | $4.3{ }^{\text {P }}$ | $17.2{ }^{\text {p }}$ | -2.0 | $3.6{ }^{\text {p }}$ | .. | 3.9 | $5.2{ }^{\text {P }}$ | $2.1{ }^{\text {P }}$ | $3.1{ }^{\text {P }}$ | $-2.9{ }^{\text {P }}$ | $15.2{ }^{\text {P }}$ |
| 2002-03 | $3.9{ }^{10}$ | .. | .. | .. | .. | .. | . | .. | .. | .. | .. | .. | .. |
| Live birth | (per I, | $r$ annu |  |  |  |  |  |  |  |  |  |  |  |
| 1971-75 | 14.1 | 13.3 | 13.4 | 17.7 | 17.8 | 14.6 | 15.4 | 13.1 | 16.0 | 10.5 | 15.8 | 16.1 | 22.2 |
| 1976-80 | 12.5 | 11.5 | 12.5 | 19.0 | 17.1 | 12.0 | 15.0 | 13.6 | 14.1 | 10.5 | 15.6 | 15.8 | 21.3 |
| 1981-85 | 12.9 | 12.0 | 12.0 | 20.2 | 13.5 | 10.2 | 15.6 | 13.4 | 14.2 | 10.7 | 13.3 | 12.3 | 19.2 |
| 1986-90 | 13.7 | 11.6 | 12.1 | 18.8 | 12.7 | 11.5 | 15.5 | 12.7 | 13.8 | 9.8 | 10.6 | 11.8 | 15.8 |
| 1991-95 | 13.2 | 11.8 | 12.0 | 16.9 | 11.1 | 13.1 | 10.7 | 12.9 | 12.7 | 10.9 | 9.9 | 11.7 | 14.0 |
| 1996 | 12.6 | 11.0 | 11.5 | 14.5 | 8.8 | 12.9 | 9.0 | 11.8 | 12.6 | 9.7 | 9.6 | 10.3 | 13.9 |
| 1997 | 12.5 | 10.4 | 11.4 | 13.9 | 8.8 | 12.8 | 8.7 | 11.5 | 12.4 | 9.9 | 9.7 | 9.9 | 14.4 |
| 1998 | 12.3 | 10.1 | 11.2 | 13.1 | 8.8 | 12.5 | 8.4 | 11.1 | 12.6 | 9.7 | 9.6 | 9.6 | 14.5 |
| 1999 | 11.9 | 9.7 | 11.1 | 12.4 | 8.7 | 12.4 | 8.7 | 11.1 | 12.6 | 9.4 | 11.0 | 9.4 | 14.2 |
| 2000 | 11.5 | 9.7 | 11.2 | 12.2 | . | 12.6 | 9.5 | 11.0 | 13.2 | 9.3 | 11.7 | 9.7 | 14.3 |
| 2001 | 11.3 | 9.3 | 11.1 | 11.6 | .. | 12.2 | . | 10.8 | 13.1 | 9.0 | 10.2 | . | 15.1 |
| 2002 | 11.3 | .. | .. | 11.1 | . | .. | . | 10.7 | .. | .. | .. | .. | 15.5 |
| 2003 | 11.7 | . | . | .. | . | . | . | 10.9 | . | .. | .. | .. | .. |

Death rate (per I,000 per annum)

| 1971-75 | 11.8 | 12.6 | 12.1 | 9.9 | 12.4 | 10.1 | 11.1 | 9.5 | 10.7 | 12.3 | 8.6 | 11.9 | 11.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1976-80 | 11.9 | 12.3 | 11.6 | 10.4 | 12.5 | 10.5 | 12.1 | 9.3 | 10.2 | 12.2 | 8.8 | 12.9 | 10.2 |
| 1981-85 | 11.7 | 12.0 | 11.4 | 10.0 | 12.8 | 11.1 | 12.3 | 9.3 | 10.1 | 12.0 | 9.0 | 13.7 | 9.4 |
| 1986-90 | 11.4 | 11.1 | 10.8 | 10.2 | 12.4 | 11.5 | 11.9 | 9.8 | 9.5 | 11.6 | 9.3 | 13.5 | 9.1 |
| 1991-95 | II.I | 10.4 | 10.4 | 9.0 | 11.6 | 11.9 | 13.9 | 9.8 | 9.1 | 10.8 | 9.5 | 14.3 | 8.8 |
| 1996 | 10.9 | 10.0 | 10.3 | 8.5 | 10.9 | 11.6 | 12.9 | 9.6 | 9.2 | 10.8 | 9.6 | 14.0 | 8.7 |
| 1997 | 10.8 | 9.8 | 10.2 | 8.8 | 10.9 | 11.3 | 12.7 | 9.6 | 9.0 | 10.5 | 9.5 | 13.7 | 8.6 |
| 1998 | 10.8 | 9.7 | 10.3 | 8.0 | 10.6 | 11.0 | 13.4 | 9.6 | 9.2 | 10.4 | 9.8 | 13.9 | 8.5 |
| 1999 | 10.8 | 9.7 | 10.3 | 7.4 | 10.7 | 11.1 | 12.8 | 9.5 | 9.2 | 10.4 | 9.9 | 14.2 | 8.5 |
| 2000 | 10.3 | 9.5 | 10.2 | 7.7 | .. | 10.9 | 13.4 | 9.5 | 9.1 | 10.2 | 10.5 | 13.5 | 8.2 |
| 2001 | 10.2 | 9.2 | 10.1 | 6.9 | . | 10.9 | . | 9.3 | 8.9 | 10.0 | 10.2 | . | 7.8 |
| 2002 | 10.2 | . | . | 7.3 | . | .. | . | 9.4 | . | .. | .. | . | 7.5 |
| 2003 | 10.3 |  |  |  |  |  |  | 9.4 |  |  |  |  |  |

Note:
Estimated population, live birth and death rates up to the latest available date, as given in the United Nations Monthly Bulletin of Statistics (April 2004), the United Nations Demographic Yearbook (2000 Edn), Eurostat Yearbook 2003 and the New Cronos database (Eurostat).

Government-controlled area only.
2 Including former GDR throughout.
3 The European Union consists of 25 member countries (EU25). The live birth and death rates have been estimated by Eurostat, the statistical office of the EU.
4 Including the Indian held part of Jammu and Kashmir, the final status of which has not yet been determined.

[^3]P Provisional

Table I.I
Population and vital rates: international
continued

| Selected countries |  |  |  |  |  |  |  |  |  |  | Numbers (thousands)/Rates per thousand |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | United Kingdom | Italy | Latvia | Lithuania | Luxembourg | Malta | Netherlands | Poland | Portugal | Slovakia | Slovenia | Spain | Sweden | EU-25 ${ }^{3}$ |
| Population (thousands) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1971 | 55,928 | 54,073 | 2,366 | 3,160 | 342 | 330 | 13,194 | 32,800 | 8,644 | 4,540 | 1,732 | 34,216 | 8,098 |  |
| 1976 | 56,216 | 55,718 | 2,465 | 3,315 | 361 | 330 | 13,774 | 34,360 | 9,356 | 4,764 | 1,809 | 36,118 | 8,222 | 420,258 |
| 1981 | 56,357 | 56,502 | 2,515 | 3,422 | 365 | 322 | 14,247 | 35,902 | 9,851 | 4,996 | 1,910 | 37,741 | 8,320 | 428,563 |
| 1986 | 56,684 | 56,596 | 2,588 | 3,560 | 368 | 344 | 14,572 | 37,456 | 10,011 | 5,179 | 1,975 | 38,536 | 8,370 | 433,555 |
| 1991 | 57,439 | 56,751 | 2,662 | 3,742 | 387 | 358 | 15,070 | 38,245 | 9,871 | 5,283 | 2,002 | 38,920 | 8,617 | 440,927 |
| 1996 | 58,164 ${ }^{10}$ | 57,380 | 2,491 | 3,710 | 416 | 373 | 15,53\| | 38,618 | 9,927 | 5,374 | 1,991 | 39,280 | 8,841 | 447,706 |
| 1997 | 58,314 ${ }^{10}$ | 57,523 | 2,469 | 3,706 | 421 | 376 | 15,611 | 38,650 | 9,946 | 5,383 | 1,987 | 39,350 | 8,846 | 448,863 |
| 1998 | 58,475 ${ }^{10}$ | 57,588 | 2,449 | 3,702 | 426 | 377 | 15,707 | 38,666 | 9,968 | 5,391 | 1,983 | 39,450 | 8,851 | 449,434 |
| 1999 | 58,684 ${ }^{10}$ | 57,646 | 2,432 | 3,700 | 432 | 379 | 15,812 | 38,654 | 9,990 | 5,395 | 1,986 | 39,630 | 8,861 | 450,326 |
| 2000 | $58,886{ }^{10}$ | 57,680 | 2,370 | 3,500 | 436 | 390 | 15,864 | 38,646 | 10,198 | 5,400 | 1,988 | 39,733 | 8,861 | 450,401 |
| 2001 | $59,113^{10}$ | 57,844 | 2,360 | 3,480 | 441 | 390 | 15,987 | 38,640 | 10,263 | 5,380 | 1,990 | 40,122 | 8,883 | 451,972 |
| 2002 | $59,322{ }^{10}$ | 58,018 ${ }^{\text { }}$ | 2,340 ${ }^{\text {P }}$ | 3,470 ${ }^{\text {P }}$ | $446{ }^{\text {P }}$ | .. | $16,100^{P}$ | $38,620^{p}$ | $10,336{ }^{\text {P }}$ | 5,380 ${ }^{\text {P }}$ | 2,000 ${ }^{\text {P }}$ | 40,409 ${ }^{\text {P }}$ | 8,909 |  |
| 2003 | 59,554 |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Population changes (per 1,000 per annum) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1971-76 | 1.0 | 6.1 | 8.4 | 9.8 | 10.7 | 0.0 | 8.8 | 9.5 | 16.5 | 9.9 | 8.9 | 11.1 | 3.1 |  |
| 1976-81 | 0.5 | 2.8 | 4.1 | 6.5 | 2.5 | -4.8 | 6.9 | 9.0 | 10.6 | 9.7 | 11.2 | 9.0 | 2.4 | 4.0 |
| 1981-86 | 1.2 | 0.3 | 5.8 | 8.1 | 1.8 | 13.7 | 4.6 | 8.7 | 3.2 | 7.3 | 6.8 | 4.2 | 1.2 | 2.3 |
| 1986-91 | 2.6 | 0.5 | 5.7 | 10.2 | 10.2 | 8.1 | 6.8 | 4.2 | -2.8 | 4.0 | 2.7 | 2.0 | 5.9 | 3.4 |
| 1991-96 | $2.5{ }^{10}$ | 2.2 | -12.8 | -1.7 | 14.9 | 8.4 | 6.1 | 2.0 | 1.1 | 3.4 | -1.1 | 1.8 | 5.2 | 3.1 |
| 1997-98 | $2.8{ }^{10}$ | 1.1 | -8.1 | -1.1 | 11.9 | 2.7 | 6.1 | 0.4 | 2.2 | 1.5 | -2.0 | 2.5 | 0.6 | 1.3 |
| 1998-99 | $3.6{ }^{10}$ | 1.0 | -6.9 | -0.5 | 14.1 | 5.3 | 6.7 | -0.3 | 2.2 | 0.7 | 1.5 | 4.6 | 1.1 | 2.0 |
| 1999-2000 | $3.4{ }^{10}$ | 0.6 | -25.5 | -54.1 | 9.3 | 29.0 | 3.3 | -0.2 | 20.8 | 0.9 | 1.0 | 2.6 | 0.0 | 0.1 |
| 2000-01 | $3.9{ }^{10}$ | 2.8 | -4.2 | -5.7 | 11.5 | 0.0 | 7.8 | -0.2 | 6.4 | -3.7 | 1.0 | 9.8 | 2.5 | 3.5 |
| 2001-02 | $3.5{ }^{10}$ | $3.0{ }^{p}$ | $-8.5{ }^{\text {p }}$ | -2.9 ${ }^{\text {P }}$ | $11.3{ }^{p}$ | .. | $7.1{ }^{\text {P }}$ | $-0.5{ }^{\text {p }}$ | $7.1{ }^{\text {p }}$ | $0.0{ }^{\text {p }}$ | $5.0{ }^{p}$ | $7.2{ }^{\text {p }}$ | 2.9 |  |
| 2002-03 | $3.9{ }^{10}$ |  | .. | .. |  | . | .. |  | .. | .. | .. | .. | .. |  |


| Live birth rate (per 1,000 per annum) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1971-75 | 14.1 | 16.0 | 14.4 | 16.4 | 11.6 | 17.5 | 14.9 | 17.9 | 20.3 | 19.7 | 16.4 | 19.2 | 13.5 | . |
| 1976-80 | 12.5 | 12.6 | 13.9 | 15.4 | 11.2 | 17.0 | 12.6 | 19.3 | 17.9 | 20.3 | 16.3 | 17.1 | 11.6 |  |
| 1981-85 | 12.9 | 10.6 | 15.2 | 16.0 | 11.6 | 15.3 | 12.2 | 19.0 | 14.5 | 18.0 | 14.2 | 12.8 | 11.3 |  |
| 1986-90 | 13.7 | 9.8 | 15.3 | 15.8 | 12.2 | 16.0 | 12.8 | 15.5 | 11.9 | 15.8 | 12.3 | 10.8 | 13.2 | . |
| 1991-95 | 13.2 | 9.6 | 10.8 | 13.1 | 13.3 | 14.0 | 12.8 | 12.9 | 11.4 | 13.3 | 10.0 | 9.8 | 13.3 | . |
| 1996 | 12.6 | 9.2 | 7.9 | 10.5 | 13.7 | 13.5 | 12.2 | 11.1 | 11.1 | 11.2 | 9.4 | 9.2 | 10.8 | 10.8 |
| 1997 | 12.5 | 9.4 | 7.6 | 10.2 | 13.1 | 13.1 | 12.3 | 10.7 | 11.4 | 11.0 | 9.1 | 9.4 | 10.2 | 10.7 |
| 1998 | 12.3 | 9.3 | 7.5 | 10.0 | 12.6 | 12.2 | 12.7 | 10.2 | 11.4 | 10.7 | 9.0 | 9.3 | 10.1 | 10.5 |
| 1999 | 11.9 | 9.3 | 8.0 | 9.8 | 13.0 | 11.4 | 12.7 | 9.9 | 11.6 | 10.4 | 8.8 | 9.6 | 10.0 | 10.5 |
| 2000 | 11.5 | 9.4 | .. | 9.3 | 13.1 | 10.8 | 13.0 | 9.8 | 11.8 | 10.2 | . | 9.8 | 10.2 | 10.6 |
| 2001 | 11.3 | 9.3 | .. | .. | 12.4 | .. | 12.6 | .. | 10.8 | .. | .. |  | 10.3 | 10.4 |
| 2002 | 11.3 | 9.3 | .. | .. | 12.1 | .. | 12.6 | . | . | .. | .. | . |  | 10.3 |
| 2003 | 11.7 | . | . | . | .. | .. | 12.4 | . | . | . | . | . |  | .. |


| Death | 1,0 | annu |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1971-75 | 11.8 | 9.8 | 11.6 | 9.0 | 12.2 | 9.0 | 8.3 | 8.4 | 11.0 | 9.4 | 10.0 | 8.5 | 10.5 | .. |
| 1976-80 | 11.9 | 9.7 | 12.6 | 10.1 | 11.5 | 9.0 | 8.1 | 9.2 | 10.1 | 9.8 | 9.8 | 8.0 | 10.9 |  |
| 1981-85 | 11.7 | 9.5 | 12.8 | 10.6 | 11.2 | 8.2 | 8.3 | 9.6 | 9.6 | 10.1 | 10.3 | 7.7 | 11.0 |  |
| 1986-90 | 11.4 | 9.4 | 12.4 | 10.3 | 10.5 | 7.4 | 8.5 | 10.0 | 9.6 | 10.1 | 9.6 | 8.2 | 11.1 |  |
| 1991-95 | 11.1 | 9.7 | 14.8 | 12.0 | 9.8 | 7.6 | 8.8 | 10.2 | 10.4 | 9.9 | 9.7 | 8.7 | 10.9 | .. |
| 1996 | 10.9 | 9.6 | 13.8 | 11.6 | 9.4 | 7.4 | 8.9 | 10.0 | 10.8 | 9.8 | 9.4 | 8.9 | 10.6 | 10.1 |
| 1997 | 10.8 | 9.8 | 13.6 | 11.1 | 9.4 | 7.7 | 8.7 | 9.8 | 10.6 | 9.5 | 9.5 | 8.9 | 10.5 | 10.0 |
| 1998 | 10.8 | 10.0 | 14.0 | 11.0 | 9.1 | 8.1 | 8.8 | 9.7 | 10.7 | 9.7 | 9.6 | 9.2 | 10.5 | 10.0 |
| 1999 | 10.8 | 9.9 | 13.5 | 10.8 | 8.8 | 8.2 | 8.9 | 9.9 | 10.8 | 9.9 | 9.5 | 9.1 | 10.7 | 10.0 |
| 2000 | 10.3 | 9.7 | . | 10.5 | 8.6 | 7.6 | 8.8 | 9.5 | 10.6 | 9.7 | . | 9.1 | 10.5 | 9.8 |
| 2001 | 10.2 | 9.6 | .. | .. | 7.2 | .. | 8.8 | .. | 10.4 | 9.8 | .. | 8.9 | 10.5 | 9.7 |
| 2002 | 10.2 | . | .. | . | 8.5 | .. | 8.9 | .. | .. | . | . |  |  | 9.8 |
| 2003 | 10.3 | . | . | . | . | . | 8.7 | . | . | . | . | .. | . | . |

[^4]Table I.I
continued
Selected countries Numbers (thousands)/Rates per thousand

| Year | United Kingdom | EU-25 ${ }^{3}$ | Russian Federation | Australia | Canada | New <br> Zealand | China | India ${ }^{4}$ | Japan ${ }^{5}$ | USA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Population (thousands) |  |  |  |  |  |  |  |  |  |  |
| 1971 | 55,928 |  | 130,934 | 13,067 | 22,026 | 2,899 | 852,290 | 551,311 | 105,145 | 207,661 |
| 1976 | 56,216 | 420,258 | 135,027 | 14,033 | 23,517 | 3,163 | 937,170 | 617,248 | 113,094 | 218,035 |
| 1981 | 56,357 | 428,563 | 139,225 | 14,923 | 24,900 | 3,195 | 1,008,460 | 675,185 | 117,902 | 229,958 |
| 1986 | 56,684 | 433,555 | 144,154 | 16,018 | 26,204 | 3,317 | 1,086,733 | 767,199 | 121,672 | 240,680 |
| 1991 | 57,439 | 440,927 | 148,245 | 17,284 | 28,03I | 3,477 | I, 170,100 | 851,897 | 123,964 | 252,639 |
| 1996 | 58,164 ${ }^{10}$ | 447,706 | 147,739 | 18,311 | 29,610 | 3,714 | 1,223,890 | 939,540 | 125,761 | 265,463 |
| 1997 | 58,314 ${ }^{10}$ | 448,863 | 147,105 | 18,524 | 29,910 | 3,761 | 1,236,260 | 955,220 | 126,065 | 268,008 |
| 1998 | 58,475 ${ }^{10}$ | 449,434 | 146,540 | 18,730 | 30,160 | 3,792 | 1,248,100 | 970,933 | 126,400 | 270,300 |
| 1999 | 58,684 ${ }^{10}$ | 450,326 | 145,940 | 18,940 | 30,400 | 3,811 | 1,259,090 ${ }^{6}$ | 986,611 | 126,630 | 272,691 |
| 2000 | 58,886 ${ }^{10}$ | 450,401 | 145,560 | 19,160 | 30,690 | 3,831 | $\mathrm{I}, 275,130^{7.8, \mathrm{P}}$ | 1,002,142 | 126,840 | 275,260 |
| 2001 | $59,113^{10}$ | 451,972 | 143,950 | 19,390 | 31,020 | $3,850{ }^{\text {P }}$ | 1,285,230 7 7., ${ }^{\text {P }}$ | 1,017,540 ${ }^{\text {P }}$ | $127,130^{\text {P }}$ | 284,800 |
| 2002 | 59,322 ${ }^{10}$ | .. | 144,080 ${ }^{\text {P }}$ | 19,710 ${ }^{\text {P }}$ | 31,360 | $3,940{ }^{\text {P }}$ | 1,294,870 ${ }^{\text {7.8.P }}$ | $1,033,000{ }^{\text {P }}$ | 127,400 ${ }^{\text {P }}$ | 291,0407p |
| 2003 | 59,554 | .. |  | .. | .. | .. | .. |  |  | .. |

Population changes (per 1,000 per annum)

| 1971-76 | 1.0 |  | 6.3 | 14.8 | 13.5 | 18.2 | 19.9 | 6 | 23.9 | 15.1 | 10.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1976-8\| | 0.5 | 4.0 | 6.2 | 12.7 | 11.8 | 2.0 | 15.2 | 6 | 18.8 | 8.5 | 10.9 |
| 1981-86 | 1.2 | 2.3 | 7.1 | 14.7 | 10.5 | 7.6 | 15.5 | 6 | 27.3 | 6.4 | 9.3 |
| 1986-91 | 2.6 | 3.4 | 5.7 | 15.8 | 13.9 | 9.6 | 15.3 | 6 | 22.1 | 3.8 | 9.9 |
| 1991-96 | $2.5{ }^{10}$ | 3.1 | -0.7 | 11.9 | 11.3 | 13.6 | 9.2 | 6 | 20.6 | 2.9 | 10.2 |
| 1997-98 | $2.8{ }^{10}$ | 1.3 | -3.8 | 11.1 | 8.4 | 8.2 | 9.6 | 6 | 16.4 | 2.7 | 8.6 |
| 1998-99 | $3.6{ }^{10}$ | 2.0 | -4.1 | 11.2 | 8.0 | 5.0 | 8.8 | 6 | 16.1 | 1.8 | 8.8 |
| 1999-2000 | $3.4{ }^{10}$ | 0.1 | -2.6 | 11.6 | 9.5 | 5.2 | 12.7 | ${ }^{8 P}$ | 15.7 | 1.7 | 9.4 |
| 2000-01 | $3.9{ }^{10}$ | 3.5 | -11.1 | 12.0 | 10.8 | $5.0{ }^{\text {P }}$ | 7.9 | ${ }^{8 P}$ | $15.4{ }^{\text {P }}$ | $2.3{ }^{\text {p }}$ | 34.7 |
| 2001-02 | $3.5{ }^{10}$ | .. | $0.9{ }^{\text {P }}$ | $16.5{ }^{\text {P }}$ | 11.0 | $23.4{ }^{\text {P }}$ | 7.5 | ${ }^{8 P}$ | $15.2{ }^{\text {P }}$ | $2.1{ }^{\text {P }}$ | $21.9{ }^{\text {P }}$ |
| 2002-03 | $3.9{ }^{10}$ | .. |  |  |  |  |  |  |  | .. | .. |


| Live birt | er |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1971-75 | 14.1 | . | . | 18.8 | 15.9 | 20.4 | 27.2 | 6 | 35.6 | 18.6 | 15.3 |
| 1976-80 | 12.5 | .. | .. | 15.7 | 15.5 | 16.8 | 18.6 | 6 | 33.4 | 14.9 | 15.2 |
| 1981-85 | 12.9 | . | .. | 15.6 | 15.1 | 15.8 | 19.2 | 6 | .. | 12.6 | 15.7 |
| 1986-90 | 13.7 | .. | .. | 15.1 | 14.8 | 17.1 |  |  | . | 10.6 | 16.0 |
| 1991-95 | 13.2 | . | 10.2 | .. | . | .. | 18.5 | 6,9 | . | .. | . |
| 1996 | 12.6 | 10.8 | 8.8 | 13.9 | 12.3 | 15.4 | 9.8 | 6 | 27.3 | 9.6 | 14.7 |
| 1997 | 12.5 | 10.7 | 8.6 | 13.6 | 11.6 | 15.4 | 9.1 | 8 | .. | 9.5 | 14.5 |
| 1998 | 12.3 | 10.5 | 8.8 | 13.3 | 11.3 | 14.6 | 8.1 | 8 | 26.2 | 9.5 | 14.6 |
| 1999 | 11.9 | 10.5 | 8.3 | 13.1 | 11.0 | 15.0 | 7.8 | ${ }^{8}$ | .. | 9.3 | 14.5 |
| 2000 | 11.5 | 10.6 | 6.7 | 13.0 | 10.8 | 14.8 | 8.1 | 8 | . | 9.4 | 14.7 |
| 2001 | 11.3 | 10.4 | 9.1 | 12.7 | . | .. | 7.2 | ${ }^{8}$ | .. | 9.4 | 14.1 |
| 2002 | 11.3 | 10.3 | .. | 12.7 | . | . | 7.1 | 8 | . | .. | .. |
| 2003 | 11.7 | .. | . | .. | . | . | . |  | . | . | . |


| Death r | nnu |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1971-75 | 11.8 | . | . | 8.2 | 7.4 | 8.4 | 7.3 | 6 | 15.5 | 6.4 | 9.1 |
| 1976-80 | 11.9 | . | . | 7.6 | 7.2 | 8.2 | 6.6 | 6 | 13.8 | 6.1 | 8.7 |
| 1981-85 | 11.7 | .. | . | 7.3 | 7.0 | 8.1 | 6.7 | 6 | .. | 6.1 | 8.6 |
| 1986-90 | 11.4 | . | .. | 7.2 | 7.3 | 8.2 | .. |  | . | 6.4 | 8.7 |
| 1991-95 | 11.1 | . | 13.7 | . | . | . | . |  | . | .. | .. |
| 1996 | 10.9 | 10.1 | 14.1 | 7.0 | 7.2 | 7.6 | 5.0 | 6 | 8.9 | 7.1 | 8.7 |
| 1997 | 10.8 | 10.0 | 13.7 | 7.0 | 7.2 | 7.3 | 4.9 | 8 | . | 7.2 | 8.6 |
| 1998 | 10.8 | 10.0 | 13.6 | 6.8 | 7.2 | 6.9 | 5.0 | 8 | 9.0 | 7.4 | 8.6 |
| 1999 | 10.8 | 10.0 | 14.7 | 6.8 | 7.4 | 7.4 | 5.0 | 8 | .. | 7.8 | 8.8 |
| 2000 | 10.3 | 9.8 | 15.3 | 6.7 | 7.5 | 7.0 | 5.1 | 8 | . | 7.6 | 8.7 |
| 2001 | 10.2 | 9.7 | 15.6 | 6.6 | .. | .. | 5.0 | 8 | .. | 7.6 | 8.5 |
| 2002 | 10.2 | 9.8 | .. | 6.8 | .. | .. | 5.0 | 8 | . | .. | .. |
| 2003 | 10.3 | .. | . | . | . | . | . |  | .. | . | . |

[^5]

Note: Figures may not add exactly due to rounding.
I National projections based on mid-2003 population estimates.
2 Between 2010 and 2020, state retirement age will change from 65 years for men and 60 years for women to 65 years for both sexes.
3 These revised population estimates were published on 9 September 2004 (for mid-2001 and mid-2002) and 7 October 2004 (for mid-1992 to mid-2000), following the local authority population studies, and replace all earlier versions. All figures shown on this table are now therefore on a consistent basis.

Tel no. for all queries relating to population estimates - 01329813318

Table I. 3
Population: subnational

| Government Office Regions of England ${ }^{\prime}$ |  |  |  |  |  | Numbers (thousands) and percentage age distribution |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mid-year | North | North | Yorkshire | East | West | East | London | South | South |
|  | East | West | and the Humber | Midlands | Midlands |  |  | East | West |
| Estimates |  |  |  |  |  |  |  |  |  |
| 1971 | 2,679 | 7,108 | 4,902 | 3,652 | 5,146 | 4,454 | 7,529 | 6,830 | 4,112 |
| 1976 | 2,671 | 7,043 | 4,924 | 3,774 | 5,178 | 4,672 | 7,089 | 7,029 | 4,280 |
| 1981 | 2,636 | 6,940 | 4,918 | 3,853 | 5,187 | 4,854 | 6,806 | 7,245 | 4,381 |
| 1986 | 2,594 | 6,833 | 4,884 | 3,908 | 5,180 | 4,999 | 6,774 | 7,468 | 4,548 |
| 1991 | 2,587 | 6,843 | 4,936 | 4,011 | 5,230 | 5,121 | 6,829 | 7,629 | 4,688 |
| $1993{ }^{4}$ | 2,594 | 6,847 | 4,954 | 4,056 | 5,246 | 5,154 | 6,844 | 7,673 | 4,734 |
| $1994{ }^{4}$ | 2,589 | 6,839 | 4,960 | 4,072 | 5,249 | 5,178 | 6,874 | 7,712 | 4,757 |
| $1995{ }^{4}$ | 2,583 | 6,828 | 4,961 | 4,092 | 5,257 | 5,206 | 6,913 | 7,763 | 4,782 |
| 19964 | 2,576 | 6,810 | 4,961 | 4,108 | 5,263 | 5,233 | 6,974 | 7,800 | 4,793 |
| 19974 | 2,568 | 6,794 | 4,958 | 4,120 | 5,262 | 5,267 | 7,015 | 7,853 | 4,827 |
| $1998{ }^{4}$ | 2,561 | 6,792 | 4,958 | 4,133 | 5,271 | 5,302 | 7,065 | 7,889 | 4,849 |
| 19994 | 2,550 | 6,773 | 4,956 | 4,152 | 5,272 | 5,339 | 7,154 | 7,955 | 4,881 |
| $2000^{4}$ | 2,543 | 6,774 | 4,959 | 4,168 | 5,270 | 5,375 | 7,237 | 7,991 | 4,917 |
| 20014 | 2,540 | 6,773 | 4,977 | 4,190 | 5,281 | 5,400 | 7,322 | 8,023 | 4,943 |
| $2002{ }^{4}$ | 2,538 | 6,783 | 4,993 | 4,223 | 5,304 | 5,422 | 7,371 | 8,044 | 4,968 |
| 2003 | 2,539 | 6,805 | 5,009 | 4,252 | 5,320 | 5,463 | 7,388 | 8,080 | 4,999 |
| of which (percentages) |  |  |  |  |  |  |  |  |  |
| 0-4 | 5.3 | 5.6 | 5.6 | 5.5 | 5.8 | 5.7 | 6.4 | 5.7 | 5.2 |
| 5-15 | 13.9 | 14.4 | 14.3 | 14.1 | 14.5 | 14.0 | 13.1 | 14.0 | 13.5 |
| 16-44 | 39.1 | 39.4 | 39.6 | 39.3 | 39.3 | 38.7 | 48.5 | 39.3 | 36.9 |
| 45-64M/59F | 22.4 | 21.8 | 21.8 | 22.4 | 21.7 | 22.3 | 17.9 | 22.1 | 22.9 |
| 65M/60F-74 | 11.8 | 11.2 | 11.1 | 11.1 | 11.2 | 11.3 | 8.3 | 10.9 | 12.2 |
| 75 and over | 7.6 | 7.5 | 7.6 | 7.6 | 7.5 | 8.0 | 5.8 | 8.1 | 9.3 |
| Projections ${ }^{2}$ |  |  |  |  |  |  |  |  |  |
| 2004 | 2,535 | 6,811 | 5,022 | 4,275 | 5,330 | 5,499 | 7,431 | 8,122 | 5,031 |
| 2008 | 2,525 | 6,852 | 5,079 | 4,366 | 5,380 | 5,646 | 7,614 | 8,300 | 5,163 |
| 2013 | 2,516 | 6,914 | 5,154 | 4,479 | 5,451 | 5,833 | 7,858 | 8,527 | 5,328 |
| 2018 | 2,510 | 6,987 | 5,234 | 4,594 | 5,531 | 6,025 | 8,105 | 8,765 | 5,498 |
| 2023 | 2,502 | 7,057 | 5,313 | 4,706 | 5,609 | 6,212 | 8,331 | 9,005 | 5,668 |
| 2028 | 2,489 | 7,107 | 5,379 | 4,804 | 5,672 | 6,380 | 8,523 | 9,222 | 5,823 |
| of which (percentages) |  |  |  |  |  |  |  |  |  |
| 0-4 | 4.7 | 5.3 | 5.4 | 5.1 | 5.6 | 5.4 | 6.3 | 5.4 | 4.8 |
| 5-15 | 11.2 | 12.1 | 12.1 | 11.9 | 12.5 | 12.3 | 11.7 | 12.1 | 11.3 |
| 16-44 | 33.7 | 35.4 | 35.7 | 33.9 | 34.7 | 34.0 | 43.8 | 35.0 | 32.8 |
| 45-643 | 25.3 | 24.9 | 24.6 | 25.6 | 25.1 | 25.0 | 24.2 | 25.1 | 25.3 |
| 65-74 ${ }^{3}$ | 12.7 | 11.1 | 11.0 | 11.5 | 10.7 | 11.2 | 7.4 | 10.8 | 12.1 |
| 75 and over | 12.3 | 11.2 | 11.3 | 12.1 | 11.4 | 12.2 | 6.6 | 11.7 | 13.7 |

Note: Figures may not add exactly due to rounding.
I From I April 2002 there are four Directorates of Health and Social Care (DHSCs) within the Department of Health. The GORs sit within the DHSCs as follows: North East, North West, Yorkshire and the Humber GORs are within North DHSC, East Midlands, West Midlands and East GORs are within Midlands and Eastern DHSC, London GOR equates to London DHSC and South East and South West GORs are within South DHSC. See 'In brief' Health Statistics Quarterly I5 for further details of changes to Health Areas.
2 These projections are based on the mid-2003 population estimates and are consistent with the 2003 -based national projections produced by the Government Actuary's Department and presented in Table 1.2
3 Between 2010 and 2020, state retirement age will change from 65 years for men and 60 years for women to 65 years for both sexes.
4 These revised population estimates were published on 9 September 2004 (for mid-2001 and mid-2002) and 7 October 2004 (for mid-1992 to mid-2000), following the local authority population studies, and replace all earlier versions. All figures shown on this table are now therefore on a consistent basis.

Table I.4 Population: age and sex

| Constituent countries of the United Kingdom |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Numbers (thousands) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | Age group |  |  |  |  |  |  |  |
| Mid-year | All ages | Under I | I-4 | 5-14 | 15-24 | 25-34 | 35-44 | 45-59 | 60-64 | 65-74 | 75-84 | 85-89 | 90 and over | Under 16 | $\begin{gathered} 16- \\ 64 / 59 \end{gathered}$ | $\begin{gathered} 65 / 60 \\ \text { and over } \end{gathered}$ |
| United Kingdom Persons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 | 56,216 | 677 | 3,043 | 9.176 | 8.126 | 7,868 | 6,361 | 9,836 | 3,131 | 5,112 | 2,348 | 390 | 147 | 13,797 | 32,757 | 9,663 |
| 1981 | 56,357 | 730 | 2,726 | 8,147 | 9,019 | 8,010 | 6,774 | 9,540 | 2,935 | 5,195 | 2,677 |  | .. | 12,543 | 33,780 | 10,035 |
| 1986 | 56,684 | 748 | 2,886 | 7,143 | 9,200 | 8,007 | 7,711 | 9,212 | 3,069 | 5,020 | 2,971 | 716 |  | 11,645 | 34,725 | 10,313 |
| 1991 | 57,439 | 790 | 3,077 | 7,141 | 8,168 | 8,898 | 7,918 | 9,500 | 2,888 | 5,067 | 3,119 | 626 | 248 | 11,685 | 35,197 | 10,557 |
| 1996 | 58,164 | 719 | 3,019 | 7,544 | 7,231 | 9,131 | 7,958 | 10,553 | 2,785 | 5,066 | 3,129 | 711 | 317 | 12,018 | 35,498 | 10,649 |
| $1998{ }^{1}$ | 58,475 | 713 | 2,930 | 7,649 | 7,079 | 8,948 | 8,285 | 10,767 | 2,835 | 4,979 | 3,211 | 736 | 344 | 12,013 | 35,746 | 10,717 |
| 19991 | 58,684 | 704 | 2,896 | 7,684 | 7,090 | 8,795 | 8,474 | 10,887 | 2,877 | 4,948 | 3,230 | 746 | 354 | 12,011 | 35,928 | 10,745 |
| 20001 | 58,886 | 682 | 2,869 | 7,652 | 7,139 | 8,646 | 8,678 | 11,011 | 2,900 | 4,940 | 3,249 | 755 | 364 | 11,959 | 36,138 | 10,788 |
| 20011 | 59,113 | 663 | 2,819 | 7,624 | 7,261 | 8,475 | 8,846 | 11,168 | 2,884 | 4,947 | 3,296 | 753 | 377 | 11,863 | 36,406 | 10,845 |
| $2002{ }^{1}$ | 59,322 | 661 | 2,753 | 7,601 | 7,403 | 8,256 | 9,002 | 11,316 | 2,890 | 4,969 | 3,345 | 739 | 388 | 11,783 | 36,622 | 10,916 |
| 2003 | 59,554 | 679 | 2,703 | 7,542 | 7,575 | 8,070 | 9,108 | 11,424 | 2,943 | 5,005 | 3,401 | 706 | 399 | 11,712 | 36,828 | 11,014 |
| Males |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 | 27,360 | 348 | 1,564 | 4,711 | 4,145 | 3,981 | 3,214 | 4,820 | 1,466 | 2,204 | 775 | 101 | 31 | 7,083 | 17.167 | 3,111 |
| 1981 | 27.412 | 374 | 1,400 | 4,184 | 4,596 | 4,035 | 3,409 | 4,711 | 1,376 | 2,264 | 922 |  |  | 6,439 | 17,646 | 3,327 |
| 1986 | 27,542 | 384 | 1,478 | 3,664 | 4,663 | 4,022 | 3,864 | 4,572 | 1,463 | 2,206 | 1,060 | 166 |  | 5,968 | 18,142 | 3,432 |
| 1991 | 27,909 | 403 | 1,572 | 3,655 | 4,146 | 4,432 | 3,949 | 4,732 | 1,390 | 2,272 | 1,146 | 166 | 46 | 5,976 | 18,303 | 3,630 |
| $1996{ }^{1}$ | 28,287 | 369 | 1,547 | 3,857 | 3,652 | 4,540 | 3,954 | 5,244 | 1,360 | 2,311 | 1,187 | 201 | 65 | 6,148 | 18,375 | 3,764 |
| $1998{ }^{1}$ | 28,458 | 365 | 1,503 | 3,916 | 3,570 | 4,444 | 4,109 | 5,342 | 1,388 | 2,293 | 1,240 | 215 | 73 | 6,151 | 18,486 | 3,821 |
| 19991 | 28,578 | 361 | 1,485 | 3,934 | 3,577 | 4,367 | 4,200 | 5,400 | 1,409 | 2,289 | 1,259 | 221 | 77 | 6,152 | 18,582 | 3,845 |
| $200{ }^{\prime}$ | 28,690 | 350 | 1,469 | 3,920 | 3,606 | 4,292 | 4,298 | 5,457 | 1,420 | 2,294 | 1,278 | 225 | 81 | 6,128 | 18,685 | 3,878 |
| 20011 | 28,832 | 338 | 1,445 | 3,906 | 3,672 | 4,215 | 4,382 | 5,534 | 1,412 | 2,308 | 1,308 | 227 | 85 | 6,077 | 18,827 | 3,928 |
| $2002{ }^{\prime}$ | 28,963 | 339 | 1,409 | 3,895 | 3,754 | 4,107 | 4,460 | 5,604 | 1,414 | 2,327 | 1,339 | 226 | 89 | 6,037 | 18,945 | 3,982 |
| 2003 | 29,108 | 349 | 1,384 | 3,864 | 3,850 | 4,018 | 4,514 | 5,653 | 1,439 | 2,354 | 1,371 | 219 | 94 | 6,002 | 19,068 | 4,038 |
| Females |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 | 28,856 | 330 | 1,479 | 4,465 | 3,980 | 3,887 | 3,147 | 5,015 | 1,665 | 2,908 | 1,573 | 289 | 116 | 6,714 | 15,590 | 6,552 |
| 1981 | 28,946 | 356 | 1,327 | 3,963 | 4,423 | 3,975 | 3,365 | 4,829 | 1,559 | 2,931 | 1,756 |  |  | 6,104 | 16,134 | 6,708 |
| 1986 | 29,142 | 364 | 1,408 | 3,480 | 4,538 | 3,985 | 3,847 | 4,639 | 1,606 | 2,814 | 1,911 | 550 |  | 5,678 | 16,583 | 6,881 |
| 1991 | 29,530 | 387 | 1,505 | 3,487 | 4,021 | 4,466 | 3,968 | 4,769 | 1,498 | 2,795 | 1,972 | 460 | 202 | 5,709 | 16,894 | 6,927 |
| 1996 | 29,877 | 350 | 1,472 | 3,687 | 3,579 | 4,591 | 4,005 | 5,309 | 1,426 | 2,755 | 1,942 | 509 | 252 | 5,870 | 17,123 | 6,885 |
| $1998{ }^{1}$ | 30,017 | 348 | 1,427 | 3,733 | 3,509 | 4,504 | 4,176 | 5,425 | 1,447 | 2,686 | 1,971 | 521 | 271 | 5,861 | 17,260 | 6,895 |
| 19991 | 30,106 | 343 | 1,412 | 3,750 | 3,513 | 4,428 | 4,273 | 5,487 | 1,468 | 2,659 | 1,971 | 525 | 277 | 5,859 | 17,346 | 6,900 |
| $200{ }^{\prime}$ | 30,196 | 333 | 1,399 | 3,732 | 3,533 | 4,353 | 4,380 | 5,554 | 1,481 | 2,646 | 1,971 | 530 | 283 | 5,832 | 17,453 | 6,911 |
| $2001{ }^{1}$ | 30,281 | 324 | 1,375 | 3,718 | 3,589 | 4,260 | 4,465 | 5,634 | 1,473 | 2,640 | 1,987 | 526 | 292 | 5,786 | 17,579 | 6,917 |
| 2002 | 30,359 | 323 | 1,344 | 3,706 | 3,649 | 4,149 | 4,542 | 5,712 | 1,476 | 2,641 | 2,006 | 512 | 299 | 5,747 | 17,677 | 6,934 |
| 2003 | 30,446 | 331 | 1,319 | 3,677 | 3,725 | 4,052 | 4,594 | 5,771 | 1,504 | 2,651 | 2,030 | 486 | 305 | 5,710 | 17,760 | 6,976 |
| England and Wales Persons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 | 49,459 | 585 | 2,642 | 7,967 | 7,077 | 6,979 | 5,608 | 8,707 | 2,777 | 4,540 | 2,093 | 351 | 135 | 11,973 | 28,894 | 8,593 |
| 1981 | 49,634 | 634 | 2,372 | 7,085 | 7,873 | 7,086 | 5,996 | 8,433 | 2,607 | 4,619 | 2,388 | 383 | 157 | 10,910 | 29,796 | 8,928 |
| 1986 | 49,999 | 654 | 2,522 | 6,226 | 8,061 | 7,052 | 6,856 | 8,136 | 2,725 | 4,470 | 2,655 | 461 | 182 | 10,161 | 30,647 | 9,190 |
| 1991 | 50,748 | 698 | 2,713 | 6,248 | 7,165 | 7,862 | 7,022 | 8,407 | 2,553 | 4,506 | 2,790 | 561 | 223 | 10,247 | 31,100 | 9,400 |
| $1996{ }^{1}$ | 51,410 | 637 | 2,668 | 6,636 | 6,336 | 8,076 | 7,017 | 9,363 | 2,457 | 4,496 | 2,801 | 639 | 285 | 10,584 | 31,353 | 9,474 |
| $1998{ }^{1}$ | 51,720 | 631 | 2,594 | 6,740 | 6,212 | 7,925 | 7,304 | 9,552 | 2,503 | 4,411 | 2,875 | 661 | 311 | 10,599 | 31,591 | 9,530 |
| 19991 | 51,933 | 625 | 2,566 | 6,779 | 6,228 | 7,800 | 7,475 | 9,656 | 2,542 | 4,381 | 2,891 | 671 | 319 | 10,608 | 31,771 | 9,554 |
| 20001 | 52,140 | 607 | 2,544 | 6,757 | 6,275 | 7,682 | 7,661 | 9,764 | 2,564 | 4,372 | 2,907 | 680 | 328 | 10,572 | 31,977 | 9,591 |
| 20011 | 52,360 | 589 | 2,502 | 6,740 | 6,387 | 7,536 | 7,816 | 9,898 | 2,549 | 4,377 | 2,947 | 677 | 340 | 10,495 | 32,226 | 9,639 |
| 2002 | 52,570 | 589 | 2,445 | 6,726 | 6,520 | 7,349 | 7,962 | 10,027 | 2,553 | 4,395 | 2,990 | 664 | 351 | 10,435 | 32,435 | 9,700 |
| 2003 | 52,794 | 606 | 2,402 | 6,677 | 6,681 | 7,190 | 8,062 | 10,116 | 2,599 | 4,427 | 3,039 | 634 | 360 | 10,381 | 32,627 | 9,786 |
| Males |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 | 24,089 | 300 | 1,358 | 4,091 | 3,610 | 3,532 | 2,843 | 4,280 | 1,304 | 1,963 | 690 | 91 | 29 | 6,148 | 15,169 | 2,773 |
| 1981 | 24,160 | 324 | 1,218 | 3,639 | 4,011 | 3,569 | 3,024 | 4,178 | 1,227 | 2,020 | 825 | 94 | 32 | 5,601 | 15,589 | 2,970 |
| 1986 | 24,311 | 335 | 1,292 | 3,194 | 4,083 | 3,542 | 3,438 | 4,053 | 1,302 | 1,972 | 951 | 115 | 35 | 5,208 | 16,031 | 3,072 |
| 1991 | 24,681 | 356 | 1,385 | 3,198 | 3,638 | 3,920 | 3,504 | 4,199 | 1,234 | 2,027 | 1,029 | 150 | 42 | 5,240 | 16,193 | 3,248 |
| $1996{ }^{1}$ | 25,030 | 327 | 1,368 | 3,393 | 3,202 | 4,020 | 3,489 | 4,659 | 1,205 | 2,059 | 1,067 | 182 | 59 | 5,416 | 16,247 | 3,367 |
| $1998{ }^{1}$ | 25,201 | 323 | 1,331 | 3,451 | 3,135 | 3,942 | 3,627 | 4,744 | 1,230 | 2,041 | 1,115 | 194 | 66 | 5,428 | 16,355 | 3,417 |
| 19991 | 25,323 | 321 | 1,315 | 3,471 | 3,144 | 3,880 | 3,711 | 4,793 | 1,250 | 2,036 | 1,132 | 200 | 70 | 5,434 | 16,452 | 3,437 |
| 20001 | 25,438 | 311 | 1,303 | 3,462 | 3,172 | 3,823 | 3,802 | 4,842 | 1,259 | 2,040 | 1,148 | 204 | 73 | 5,416 | 16,556 | 3,466 |
| 20011 | 25,574 | 301 | 1,281 | 3,453 | 3,231 | 3,758 | 3,881 | 4,907 | 1,252 | 2,052 | I,175 | 206 | 77 | 5,376 | 16,688 | 3,510 |
| $2002{ }^{1}$ | 25,702 | 302 | 1,251 | 3,446 | 3,307 | 3,664 | 3,955 | 4,967 | 1,253 | 2,069 | 1,203 | 205 | 81 | 5,346 | 16,799 | 3,557 |
| 2003 | 25,841 | 311 | 1,230 | 3,422 | 3,394 | 3,588 | 4,006 | 5,008 | 1,274 | 2,092 | 1,231 | 199 | 85 | 5,320 | 16,914 | 3,607 |
| Females |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 | 25,370 | 285 | 1,284 | 3,876 | 3,467 | 3,447 | 2,765 | 4,428 | 1,473 | 2,577 | 1,403 | 261 | 106 | 5,826 | 13,725 | 5,820 |
| 1981 | 25,474 | 310 | 1,154 | 3,446 | 3,863 | 3,517 | 2,972 | 4,255 | 1,380 | 2,599 | 1,564 | 289 | 126 | 5,309 | 14,207 | 5,958 |
| 1986 | 25,687 | 319 | 1,231 | 3,032 | 3,978 | 3,509 | 3,418 | 4,083 | 1,422 | 2,498 | 1,704 | 346 | 148 | 4,953 | 14,616 | 6,118 |
| 1991 | 26,067 | 342 | 1,328 | 3,050 | 3,527 | 3,943 | 3,517 | 4,208 | 1,319 | 2,479 | 1,761 | 411 | 181 | 5,007 | 14,908 | 6,152 |
| $1996{ }^{1}$ | 26,381 | 310 | 1,300 | 3,243 | 3,134 | 4,056 | 3,528 | 4,704 | 1,252 | 2,437 | 1,734 | 457 | 227 | 5,168 | 15,106 | 6,107 |
| $1998{ }^{1}$ | 26,519 | 308 | 1,264 | 3,289 | 3,077 | 3,983 | 3,677 | 4,808 | 1,272 | 2,370 | 1,760 | 467 | 244 | 5,171 | 15,235 | 6,113 |
| 19991 | 26,610 | 305 | 1,251 | 3,308 | 3,083 | 3,920 | 3,763 | 4,863 | 1,292 | 2,345 | 1,759 | 472 | 249 | 5,175 | 15,318 | 6,117 |
| $200{ }^{\prime}$ | 26,702 | 296 | 1,24I | 3,296 | 3,103 | 3,859 | 3,859 | 4,923 | 1,304 | 2,332 | 1,758 | 476 | 255 | 5,155 | 15,42\| | 6,126 |
| 20011 | 26,786 | 288 | 1,220 | 3,287 | 3,156 | 3,778 | 3,935 | 4,992 | 1,297 | 2,326 | 1,771 | 471 | 263 | 5,119 | 15,538 | 6,129 |
| $2002{ }^{\prime}$ | 26,868 | 287 | 1,194 | 3,280 | 3,214 | 3,684 | 4,007 | 5,059 | 1,300 | 2,326 | 1,787 | 460 | 270 | 5,090 | 15,635 | 6,143 |
| 2003 | 26,953 | 295 | 1,172 | 3,256 | 3,287 | 3,602 | 4,056 | 5,108 | 1,325 | 2,335 | 1,808 | 436 | 275 | 5,061 | 15,714 | 6,179 |

[^6] population studies, and replace all earlier versions. All figures shown on this table are now therefore on a consistent basis.
Tel no. for all enquiries relating to population estimates:- 01329813318

Table I. 4
continued
Constituent countries of the United Kingdom

|  |  | Age group |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mid-year | All ages | Under I | 1-4 | 5-14 | 15-24 | 25-34 | 35-44 | 45-59 | 60-64 | 65-74 | 75-84 | 85-89 | 90 and over | Under 16 | $\begin{aligned} & 16- \\ & 64 / 59 \end{aligned}$ | $\begin{gathered} 65 / 60 \\ \text { and over } \end{gathered}$ |


| England Persons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1976 | 46,660 | 551 | 2,491 | 7,513 | 6,688 | 6,599 | 5,298 | 8,199 | 2,616 | 4,274 | 1,972 | 332 | 127 | 11,293 | 27,275 | 8,092 |
| 1981 | 46,821 | 598 | 2,235 | 6,678 | 7,440 | 6,703 | 5,663 | 7,948 | 2,449 | 4,347 | 2,249 | 362 | 149 | 10,285 | 28,133 | 8,403 |
| 1986 | 47,188 | 618 | 2,380 | 5,869 | 7,623 | 6,682 | 6,478 | 7,672 | 2,559 | 4,199 | 2,501 | 435 | 172 | 9,583 | 28,962 | 8,643 |
| 1991 | 47,875 | 660 | 2,560 | 5,885 | 6,772 | 7,460 | 6,633 | 7,920 | 2,399 | 4,222 | 2,626 | 529 | 210 | 9,658 | 29,390 | 8,827 |
| $1996{ }^{1}$ | 48,519 | 603 | 2,523 | 6,255 | 5,985 | 7,667 | 6,638 | 8,822 | 2,310 | 4,217 | 2,631 | 602 | 269 | 9,985 | 29,639 | 8,895 |
| $1998{ }^{1}$ | 48,821 | 598 | 2,453 | 6,356 | 5,869 | 7,524 | 6,915 | 8,999 | 2,353 | 4,140 | 2,698 | 623 | 293 | 10,003 | 29,868 | 8,950 |
| 19991 | 49,033 | 592 | 2,427 | 6,394 | 5,881 | 7,412 | 7,079 | 9,097 | 2,391 | 4,114 | 2,713 | 632 | 301 | 10,014 | 30,044 | 8,975 |
| $2000^{\prime}$ | 49,233 | 575 | 2,406 | 6,375 | 5,923 | 7,304 | 7,257 | 9,199 | 2,411 | 4,107 | 2,727 | 641 | 309 | 9,980 | 30,243 | 9,010 |
| 20011 | 49,450 | 558 | 2,366 | 6,359 | 6,032 | 7,171 | 7,407 | 9,327 | 2,395 | 4,113 | 2,764 | 638 | 321 | 9,908 | 30,487 | 9,055 |
| $2002{ }^{1}$ | 49,647 | 558 | 2,312 | 6,345 | 6,155 | 6,993 | 7,548 | 9,448 | 2,397 | 4,130 | 2,804 | 625 | 331 | 9,853 | 30,683 | 9,111 |
| 2003 | 49,856 | 575 | 2,273 | 6,300 | 6,304 | 6,843 | 7,643 | 9,533 | 2,438 | 4,159 | 2,852 | 596 | 340 | 9,804 | 30,862 | 9,190 |
| Males |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 | 22,728 | 283 | 1,280 | 3,858 | 3,413 | 3,339 | 2,686 | 4,031 | 1,228 | 1,849 | 649 | 85 | 27 | 5,798 | 14,320 | 2,610 |
| 1981 | 22,795 | 306 | 1,147 | 3,430 | 3,790 | 3,377 | 2,856 | 3,938 | 1,154 | 1,902 | 777 | 89 | 30 | 5,280 | 14,717 | 2,798 |
| 1986 | 22,949 | 317 | 1,219 | 3,010 | 3,862 | 3,357 | 3,249 | 3,822 | 1,224 | 1,853 | 897 | 108 | 33 | 4,911 | 15,147 | 2,891 |
| 1991 | 23,291 | 336 | 1,307 | 3,011 | 3,439 | 3,721 | 3,311 | 3,957 | 1,159 | 1,900 | 970 | 141 | 39 | 4,938 | 15,302 | 3,050 |
| 19961 | 23,629 | 309 | 1,294 | 3,198 | 3,023 | 3,818 | 3,302 | 4,390 | I,133 | 1,932 | 1,003 | 172 | 55 | 5,110 | 15,358 | 3,161 |
| $1998{ }^{1}$ | 23,794 | 306 | 1,258 | 3,254 | 2,960 | 3,743 | 3,436 | 4,470 | 1,157 | 1,916 | 1,047 | 183 | 62 | 5,123 | 15,462 | 3,209 |
| 19991 | 23,916 | 304 | 1,243 | 3,274 | 2,969 | 3,689 | 3,517 | 4,516 | 1,176 | 1,913 | 1,063 | 188 | 66 | 5,129 | 15,558 | 3,229 |
| $2000{ }^{\prime}$ | 24,030 | 294 | 1,232 | 3,266 | 2,995 | 3,638 | 3,604 | 4,562 | I,184 | 1,917 | 1,078 | 192 | 69 | 5,113 | 15,66\| | 3,256 |
| 20011 | 24,166 | 285 | 1,212 | 3,257 | 3,053 | 3,580 | 3,681 | 4,624 | I,176 | 1,928 | 1,103 | 194 | 73 | 5,075 | 15,793 | 3,298 |
| $2002{ }^{1}$ | 24,288 | 286 | 1,183 | 3,251 | 3,123 | 3,492 | 3,753 | 4,682 | 1,176 | 1,944 | 1,128 | 193 | 77 | 5,047 | 15,899 | 3,342 |
| 2003 | 24,415 | 295 | 1,164 | 3,228 | 3,204 | 3,418 | 3,802 | 4,721 | 1,195 | 1,965 | 1,156 | 187 | 80 | 5,024 | 16,003 | 3,388 |
| Females |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 | 23,932 | 269 | 1,211 | 3,656 | 3,275 | 3,260 | 2,612 | 4,168 | 1,387 | 2,425 | 1,323 | 246 | 100 | 5,495 | 14,968 | 5,481 |
| 1981 | 24,026 | 292 | 1,088 | 3,248 | 3,650 | 3,327 | 2,807 | 4,009 | 1,295 | 2,445 | 1,472 | 273 | 119 | 5,004 | 13,416 | 5,605 |
| 1986 | 24,239 | 301 | 1,161 | 2,859 | 3,761 | 3,325 | 3,229 | 3,850 | 1,335 | 2,346 | 1,604 | 326 | 140 | 4,672 | 13,815 | 5,752 |
| 1991 | 24,584 | 324 | 1,253 | 2,873 | 3,333 | 3,739 | 3,322 | 3,964 | 1,239 | 2,323 | 1,656 | 388 | 171 | 4,720 | 14,088 | 5,777 |
| 19961 | 24,890 | 293 | 1,229 | 3,056 | 2,961 | 3,849 | 3,336 | 4,432 | 1,177 | 2,286 | 1,628 | 430 | 214 | 4,876 | 14,281 | 5,734 |
| $1998{ }^{1}$ | 25,027 | 292 | 1,195 | 3,102 | 2,908 | 3,781 | 3,479 | 4,529 | 1,196 | 2,224 | 1,651 | 440 | 230 | 4,880 | 14,406 | 5,741 |
| 19991 | 25,177 | 288 | I,183 | 3,121 | 2,912 | 3,724 | 3,562 | 4,581 | 1,215 | 2,201 | 1,650 | 444 | 235 | 4,885 | 14,486 | 5,746 |
| 2000 | 25,203 | 281 | 1,174 | 3,109 | 2,928 | 3,667 | 3,653 | 4,637 | 1,227 | 2,190 | 1,649 | 448 | 240 | 4,867 | 14,582 | 5,755 |
| $2001{ }^{1}$ | 25,284 | 273 | I,154 | 3,102 | 2,979 | 3,591 | 3,726 | 4,702 | 1,219 | 2,185 | 1,661 | 444 | 248 | 4,834 | 14,694 | 5,757 |
| 2002 ${ }^{\prime}$ | 25,358 | 272 | 1,129 | 3,095 | 3,031 | 3,501 | 3,795 | 4,766 | 1,220 | 2,186 | 1,676 | 433 | 254 | 4,806 | 14,783 | 5,769 |
| 2003 | 25,441 | 280 | 1,109 | 3,072 | 3,100 | 3,424 | 3,841 | 4,812 | 1,243 | 2,194 | 1,696 | 409 | 260 | 4,780 | 14,859 | 5,802 |

Wales
Persons
Person

| Persons |  |  |
| :--- | :--- | :--- |
| 1976 | 2,799 | 33 |
| 1981 | 2,813 | 36 |
| 1986 | 2,811 | 37 |
| 1991 | 2,873 | 38 |
| $1996^{\prime}$ | 2,891 | 34 |
|  |  |  |
| $1998^{\prime}$ | 2,900 | 34 |
| $1999^{\prime}$ | 2,901 | 33 |
| $2000^{\prime}$ | 2,907 | 32 |
| $2001^{\prime \prime}$ | 2,910 | 32 |
| $2002^{\prime}$ | 2,923 | 30 |
|  |  | 2,938 |
| 2003 |  | 31 |


| 151 | 453 | 388 | 379 | 309 | 509 | 161 | 267 | 121 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 136 | 407 | 434 | 383 | 333 | 485 | 158 | 272 | 139 |
| 143 | 357 | 438 | 369 | 378 | 464 | 166 | 271 | 154 |
| 153 | 363 | 393 | 402 | 389 | 486 | 154 | 284 | 164 |
| 146 | 381 | 352 | 409 | 379 | 541 | 147 | 279 | 170 |
| 141 | 384 | 343 | 401 | 390 | 553 | 150 | 271 | 177 |
| 139 | 385 | 347 | 388 | 395 | 559 | 151 | 267 | 178 |
| 138 | 383 | 352 | 378 | 403 | 565 | 152 | 265 | 180 |
| 136 | 382 | 356 | 365 | 409 | 572 | 154 | 264 | 183 |
| 132 | 380 | 366 | 356 | 415 | 579 | 156 | 265 | 185 |
| 129 | 377 | 377 | 347 | 418 | 583 | 161 | 268 | 187 |


| 19 | 7 | 680 | 1,618 | 501 |
| :--- | ---: | :--- | :--- | :--- |
| 21 | 8 | 626 | 1,663 | 525 |
| 26 | 10 | 578 | 1,686 | 547 |
| 32 | 13 | 589 | 1,711 | 573 |
| 37 | 17 | 598 | 1,714 | 578 |
| 38 | 18 | 596 | 1,723 | 581 |
| 39 | 18 | 594 | 1,727 | 580 |
| 39 | 19 | 591 | 1,734 | 581 |
| 39 | 20 | 587 | 1,739 | 584 |
| 39 | 20 | 582 | 1,752 | 589 |
| 38 |  |  |  |  |
|  |  | 577 | 1,765 | 596 |


| Males |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1976 | 1,36\| | 17 | 78 | 233 | 197 | 193 | 157 | 249 | 75 | 114 | 41 | 5 | 2 | 350 | 849 | 162 |
| 1981 | 1,365 | 18 | 70 | 209 | 221 | 193 | 168 | 240 | 73 | 118 | 48 | 5 | 2 | 321 | 871 | 173 |
| 1986 | 1,362 | 19 | 73 | 184 | 221 | 186 | 190 | 231 | 79 | 119 | 54 | 7 | 2 | 297 | 885 | 181 |
| 1991 | 1,391 | 20 | 78 | 186 | 199 | 199 | 194 | 242 | 74 | 128 | 60 | 8 | 2 | 302 | 891 | 198 |
| $1996{ }^{1}$ | 1,401 | 17 | 74 | 195 | 179 | 203 | 187 | 269 | 72 | 128 | 64 | 10 | 3 | 306 | 890 | 206 |
| $1998{ }^{1}$ | 1,407 | 17 | 72 | 197 | 174 | 199 | 192 | 274 | 73 | 125 | 68 | 11 | 4 | 305 | 894 | 208 |
| 19991 | 1,408 | 17 | 72 | 198 | 176 | 192 | 194 | 277 | 74 | 124 | 69 | 11 | 4 | 305 | 895 | 208 |
| $2000^{\prime}$ | 1,408 | 16 | 71 | 196 | 177 | 185 | 198 | 280 | 75 | 124 | 71 | 12 | 4 | 303 | 895 | 210 |
| 20011 | 1,409 | 16 | 69 | 196 | 179 | 178 | 200 | 283 | 75 | 124 | 73 | 12 | 4 | 301 | 895 | 212 |
| $2002{ }^{1}$ | 1,414 | 16 | 68 | 195 | 183 | 172 | 202 | 286 | 77 | 125 | 74 | 12 | 5 | 299 | 900 | 215 |
| 2003 | 1,426 | 16 | 66 | 194 | 191 | 170 | 204 | 287 | 79 | 127 | 75 | 12 | 5 | 297 | 911 | 219 |
| Females |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 | 1,438 | 16 | 73 | 220 | 191 | 187 | 153 | 260 | 86 | 152 | 80 | 14 | 6 | 330 | 770 | 339 |
| 1981 | 1,448 | 18 | 66 | 199 | 213 | 190 | 165 | 246 | 85 | 154 | 91 | 16 | 6 | 305 | 791 | 352 |
| 1986 | 1,449 | 18 | 70 | 173 | 217 | 184 | 188 | 233 | 87 | 152 | 100 | 20 | 8 | 282 | 801 | 366 |
| 1991 | 1,482 | 19 | 75 | 177 | 194 | 203 | 195 | 244 | 80 | 156 | 104 | 24 | 10 | 288 | 820 | 375 |
| $1996{ }^{1}$ | 1,490 | 16 | 71 | 186 | 173 | 206 | 192 | 272 | 75 | 151 | 106 | 27 | 13 | 293 | 825 | 373 |
| $1998{ }^{1}$ | 1,492 | 16 | 69 | 187 | 169 | 202 | 198 | 278 | 76 | 146 | 109 | 27 | 14 | 290 | 829 | 373 |
| 19991 | 1,493 | 16 | 68 | 187 | 171 | 196 | 201 | 282 | 77 | 144 | 109 | 27 | 15 | 289 | 832 | 371 |
| $2000^{\prime}$ | 1,499 | 15 | 67 | 186 | 175 | 192 | 206 | 285 | 77 | 142 | 109 | 28 | 15 | 288 | 840 | 371 |
| 2001 ${ }^{1}$ | 1,502 | 15 | 66 | 186 | 177 | 187 | 209 | 289 | 78 | 141 | 110 | 27 | 15 | 286 | 844 | 372 |
| $2002{ }^{1}$ | 1,509 | 15 | 65 | 185 | 182 | 183 | 212 | 293 | 80 | 140 | 111 | 27 | 16 | 283 | 852 | 374 |
| 2003 | 1,512 | 15 | 63 | 184 | 186 | 178 | 214 | 296 | 82 | 141 | 112 | 26 | 16 | 281 | 855 | 377 |

Table I. 4
Population: age and sex
continued


## Scotland

Persons
Perso
1976
1981

| 1981 |
| :--- |
| 1986 |

1986
1991

| 1998 | 5,077 | 58 |
| :--- | :--- | :--- |
| 1999 | 5,072 | 56 |
| 2000 | 5,063 | 53 |
| 2001 | 5,064 | 52 |
| 2002 | 5,055 | 51 |
| 2003 | 5,057 | 52 |


| 291 | 904 | 806 |
| :--- | :--- | :--- |
| 249 | 780 | 875 |
| 257 | 656 | 863 |
| 258 | 634 | 746 |
| 252 | 643 | 651 |
| 239 | 644 | 628 |
| 234 | 643 | 625 |
| 230 | 636 | 628 |
| 224 | 629 | 633 |
| 217 | 622 | 639 |
| 212 | 614 | 648 |


| 692 | 591 |
| :--- | :--- |
| 724 | 603 |
| 739 | 665 |
| 795 | 696 |
| 798 | 722 |
|  |  |
| 766 | 749 |
| 743 | 762 |
| 717 | 774 |
| 696 | 782 |
| 669 | 788 |
| 648 | 793 |


| 897 | 282 | 460 |
| :--- | :--- | :--- |
| 880 | 260 | 460 |
| 849 | 273 | 435 |
| 853 | 265 | 441 |
| 925 | 259 | 448 |
|  |  |  |
| 941 | 261 | 445 |
| 951 | 262 | 444 |
| 962 | 263 | 445 |
| 979 | 262 | 447 |
| 993 | 262 | 449 |
| 1,008 | 265 | 452 |

202
232
252
259
256
262
265
267
272
276

281 31
35
42
51
57
59
59
59
59
58
55

| 11 | 1,352 |
| :--- | :--- |
| 14 | 1,188 |
| 15 | 1,061 |
| 19 | 1,021 |
| 24 | 1,019 |
| 26 | 1,003 |
| 27 | 995 |
| 28 | 985 |
| 29 | 970 |
| 30 | 955 |
| 31 | 943 |


| 1,352 | 3,023 | 858 |
| ---: | :--- | :--- |
| 1,188 | 3,110 | 882 |
| 1,061 | 3,161 | 890 |
| 1,021 | 3,151 | 912 |
| 1,019 | 3,151 | 922 |
| 1,003 | 3,145 | 929 |
| 995 | 3,144 | 933 |
| 985 | 3,141 | 937 |
| 970 | 3,150 | 944 |
| 955 | 3,150 | 950 |
|  |  |  |
| 943 | 3,156 | 958 |


| Males |  |  |
| :--- | :--- | :--- |
| 1976 | 2,517 | 34 |
| 1981 | 2,495 | 35 |
| 1986 | 2,462 | 34 |
| 1991 | 2,445 | 34 |
| 1996 | 2,447 | 30 |
|  |  |  |
| 1998 | 2,439 | 30 |
| 1999 | 2,437 | 29 |
| 2000 | 2,432 | 28 |
| 2001 | 2,434 | 26 |
| 2002 | 2,435 | 26 |
|  |  | 26 |


| 149 | 463 |
| :--- | :--- |
| 128 | 400 |
| 131 | 336 |
| 132 | 324 |
| 128 | 328 |
|  |  |
| 122 | 329 |
| 120 | 329 |
| 118 | 326 |
| 115 | 322 |
| 111 | 319 |
| 108 | 314 |


| 408 | 347 | 290 |
| :--- | :--- | :--- |
| 445 | 364 | 298 |
| 438 | 371 | 331 |
| 377 | 394 | 345 |
| 327 | 392 | 355 |
|  |  |  |
| 315 | 374 | 367 |
| 313 | 362 | 372 |
| 315 | 347 | 377 |
| 319 | 337 | 379 |
| 324 | 325 | 382 |
|  |  |  |
| 329 | 315 | 383 |


| 429 | 128 | 193 | 65 |
| :--- | :--- | :--- | :--- |
| 424 | 118 | 194 | 77 |
| 410 | 127 | 184 | 86 |
| 415 | 124 | 192 | 91 |
| 454 | 122 | 198 | 93 |
|  |  |  |  |
| 463 | 124 | 198 | 96 |
| 469 | 125 | 198 | 98 |
| 474 | 125 | 199 | 100 |
| 483 | 125 | 200 | 103 |
| 490 | 125 | 202 | 106 |
|  |  |  |  |
| 496 | 126 | 204 | 108 |

8
8
10
13
15
16
16
17
17
17
16

| $\checkmark$ | vaのau | cowmwn |
| :---: | :---: | :---: |
| $\stackrel{\text { ¢ }}{\text { + }}$ | 웅 우응흔 |  |


| 693 | 1,556 | 269 |
| :--- | :--- | :--- |
| 610 | 1,603 | 282 |
| 543 | 1,636 | 283 |
| 522 | 1,623 | 299 |
| 521 | 1,616 | 310 |
| 513 | 1,610 | 316 |
| 510 | 1,609 | 318 |
| 505 | 1,606 | 322 |
| 497 | 1,610 | 327 |
| 489 | 1,612 | 331 |
|  |  |  |
| 483 | 1,616 | 336 |

Females
1976
1981
1986
1991
1996
1998
1999
1999
2000
2001
2003

Northern Ireland

| Persons |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| 1976 | 1,524 | 26 | 111 | 306 |

1976
1981
1986
1991
1998
1998
1999
2000
2001

2003

| Males |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1976 | 754 | 13 | 58 | 157 | 127 | 102 | 81 | 111 | 34 | 47 | 19 | 3 | - | 242 | 442 | 70 |
| 1981 | 757 | 14 | 54 | 145 | 140 | 102 | 87 | 109 | 32 | 50 | 21 |  | . | 228 | 454 | 75 |
| 1986 | 768 | 14 | 55 | 134 | 142 | 109 | 95 | 110 | 33 | 50 | 23 | 4 |  | 217 | 474 | 77 |
| 1991 | 783 | 13 | 54 | 133 | 131 | 119 | 100 | 118 | 32 | 53 | 26 | 4 | I | 213 | 487 | 83 |
| 1996 | 810 | 12 | 51 | 136 | 124 | 128 | 109 | 131 | 33 | 54 | 27 | 4 | I | 212 | 511 | 87 |
| 1998 | 819 | 12 | 50 | 135 | 121 | 128 | 114 | 135 | 34 | 54 | 28 | 5 | 2 | 211 | 520 | 89 |
| 1999 | 818 | 12 | 49 | 134 | 119 | 125 | 117 | 138 | 35 | 54 | 29 | 5 | 2 | 209 | 521 | 89 |
| 2000 | 820 | 11 | 49 | 133 | 120 | 122 | 119 | 141 | 35 | 55 | 29 | 5 | 2 | 207 | 524 | 90 |
| 2001 | 824 | 11 | 48 | 131 | 122 | 120 | 122 | 144 | 35 | 56 | 30 | 5 | 2 | 204 | 529 | 92 |
| 2002 | 829 | 11 | 47 | 130 | 124 | 117 | 123 | 147 | 36 | 56 | 31 | 5 | 2 | 202 | 534 | 94 |
| 2003 | 833 | 11 | 46 | 129 | 126 | 115 | 124 | 149 | 38 | 58 | 31 | 5 | 2 | 199 | 538 | 95 |
| Females |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 | 769 | 13 | 53 | 149 | 116 | 96 | 81 | 120 | 38 | 64 | 33 | 6 | 2 | 229 | 398 | 143 |
| 1981 | 786 | 13 | 52 | 137 | 130 | 98 | 88 | 118 | 37 | 66 | 37 |  | .. | 216 | 420 | 150 |
| 1986 | 805 | 13 | 52 | 127 | 135 | 107 | 96 | 118 | 38 | 65 | 41 | 12 |  | 206 | 442 | 157 |
| 1991 | 824 | 13 | 52 | 127 | 125 | 121 | 100 | 123 | 38 | 67 | 44 | 10 | 4 | 203 | 458 | 163 |
| 1996 | 851 | 11 | 49 | 130 | 120 | 129 | 110 | 135 | 37 | 69 | 45 | 11 | 6 | 203 | 482 | 167 |
| 1998 | 859 | 12 | 47 | 129 | 118 | 129 | 117 | 139 | 37 | 68 | 46 | 11 | 6 | 201 | 490 | 168 |
| 1999 | 861 | 11 | 47 | 128 | 117 | 127 | 120 | 141 | 38 | 68 | 46 | 11 | 6 | 199 | 493 | 169 |
| 2000 | 862 | 11 | 46 | 126 | 118 | 125 | 124 | 143 | 38 | 68 | 46 | 11 | 6 | 196 | 497 | 169 |
| 2001 | 865 | 10 | 45 | 124 | 119 | 123 | 126 | 146 | 38 | 68 | 47 | 11 | 6 | 193 | 501 | 170 |
| 2002 | 868 | 11 | 44 | 123 | 119 | 120 | 128 | 149 | 39 | 68 | 48 | 11 | 6 | 191 | 504 | 173 |
| 2003 | 870 | 10 | 43 | 122 | 120 | 118 | 129 | 152 | 40 | 68 | 49 | 11 | 6 | 189 | 506 | 175 |

## Table I. 5 <br> Population: age, sex and legal marital status

| England and Wales |  |  |  |  |  |  |  |  |  | Num | ousands) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total population | Males |  |  |  |  | Females |  |  |  |  |
| Mid-year |  | Single | Married | Divorced | Widowed | Total | Single | Married | Divorced | Widowed | Total |

Aged

| 16 and over |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1971 | 36,818 | 4,173 | 12,522 | 187 | 682 | 17,563 | 3,583 | 12,566 | 296 | 2,810 | 19,255 |
| 1976 | 37,486 | 4,369 | 12,511 | 376 | 686 | 17,941 | 3,597 | 12,538 | 533 | 2,877 | 19,545 |
| 1981 | 38,724 | 5,013 | 12,238 | 611 | 698 | 18,559 | 4,114 | 12,284 | 828 | 2,939 | 20,165 |
| 19861 | 39,837 | 5,625 | 11,867 | 917 | 695 | 19,103 | 4,617 | 12,000 | 1,165 | 2,953 | 20,734 |
| 1991 | 40,501 | 5,891 | 11,636 | I,187 | 727 | 19,44\| | 4,817 | 11,833 | 1,459 | 2,95 I | 21,060 |
| 1996 | 40,827 | 6,225 | 11,310 | 1,346 | 733 | 19,614 | 5,168 | 11,433 | 1,730 | 2,881 | 21,212 |
| 1997 | 40,966 | 6,337 | 11,240 | 1,379 | 734 | 19,690 | 5,288 | 11,353 | 1,781 | 2,855 | 21,276 |
| 1998 | 41,121 | 6,450 | 11,183 | 1,405 | 735 | 19,773 | 5,406 | 11,284 | 1,827 | 2,832 | 21,349 |
| 1999 | 41,325 | 6,582 | 11,143 | 1,433 | 732 | 19,890 | 5,526 | 11,235 | 1,875 | 2,800 | 21,435 |
| 2000 | 41,569 | 6,721 | 11,113 | 1,456 | 731 | 20,022 | 5,650 | 11,199 | 1,927 | 2,772 | 21,547 |
| 2001 | 41,865 | 6,894 | 11,090 | 1,482 | 733 | 20,198 | 5,798 | 11,150 | 1,975 | 2,745 | 21,667 |
| 2002 | 42,135 | 7,076 | 11,015 | 1,535 | 731 | 20,357 | 5,961 | 11,073 | 2,035 | 2,709 | 21,778 |
| 2003 | 42,413 | 7,261 | 10,940 | 1,590 | 728 | 20,520 | 6,128 | 11,000 | 2,096 | 2,668 | 21,892 |
| 16-19 |  |  |  |  |  |  |  |  |  |  |  |
| 1971 | 2,666 | 1,327 | 34 | 0 | 0 | 1,362 | 1,163 | 142 | 0 | 0 | 1,305 |
| 1976 | 2,901 | 1,454 | 28 | 0 | 0 | 1,482 | 1,289 | 129 | 0 | 0 | 1,419 |
| 1981 | 3,310 | 1,675 | 20 | 0 | 0 | 1,694 | 1,523 | 93 | 0 | 0 | 1,616 |
| 19861 | 3,131 | 1,587 | 10 | 0 | 0 | 1,596 | 1,484 | 49 | 1 | 0 | 1,535 |
| 1991 | 2,665 | 1,358 | 8 | 0 | 0 | 1,366 | 1,267 | 32 | 0 | 0 | 1,300 |
| 1996 | 2,402 | 1,209 | 6 | 0 | 0 | 1,216 | 1,164 | 21 | 0 | 0 | 1,186 |
| 1997 | 2,478 | 1,246 | 6 | 0 | 0 | 1,253 | 1,203 | 20 | 1 | 1 | 1,225 |
| 1998 | 2,532 | 1,274 | 6 | 1 | 0 | 1,281 | 1,230 | 20 | 1 | 1 | 1,251 |
| 1999 | 2,543 | 1,280 | 6 | 1 | 1 | 1,288 | 1,234 | 20 | 1 | 1 | 1,255 |
| 2000 | 2,523 | 1,276 | 6 | 1 | 1 | 1,283 | 1,22I | 18 | 1 | 1 | 1,240 |
| 2001 | 2,567 | 1,304 | 5 | I | 1 | 1,312 | 1,237 | 16 | 1 | I | 1,255 |
| 2002 | 2,633 | 1,347 | 4 | I | 1 | 1,353 | 1,266 | 13 | 1 | I | 1,280 |
| 2003 | 2,702 | 1,386 | 4 | 1 | 1 | 1,391 | 1,299 | 12 | 0 | 1 | 1,311 |
| 20-24 |  |  |  |  |  |  |  |  |  |  |  |
| 1971 | 3,773 | 1,211 | 689 | 3 | 0 | 1,904 | 745 | 1,113 | 9 | 2 | 1,869 |
| 1976 | 3,395 | 1,167 | 557 | 4 | 0 | 1,728 | 725 | 925 | 16 | 2 | 1,667 |
| 1981 | 3,744 | 1,420 | 466 | 10 | 1 | 1,896 | 1,007 | 811 | 27 | 2 | 1,847 |
| 19861 | 4,171 | 1,768 | 317 | 14 | 0 | 2,099 | 1,383 | 657 | 32 | 1 | 2,072 |
| 1991 | 3,911 | 1,717 | 242 | 12 | 0 | 1,971 | 1,42I | 490 | 29 | 1 | 1,941 |
| 1996 | 3,291 | 1,538 | 117 | 3 | 0 | 1,658 | 1,361 | 260 | 11 | 1 | 1,633 |
| 1997 | 3,141 | 1,479 | 99 | 3 | 0 | 1,580 | 1,325 | 225 | 9 | 1 | 1,561 |
| 1998 | 3,047 | 1,442 | 86 | 2 | 0 | 1,530 | 1,306 | 201 | 8 | 1 | 1,517 |
| 1999 | 3,047 | 1,449 | 78 | 2 | 0 | 1,530 | 1,320 | 188 | 8 | 1 | 1,517 |
| 2000 | 3,088 | 1,470 | 74 | 3 | 0 | 1,548 | 1,352 | 180 | 8 | 1 | 1,540 |
| 2001 | 3,157 | 1,501 | 74 | 3 | I | 1,579 | 1,390 | 178 | 8 | I | 1,578 |
| 2002 | 3,211 | 1,534 | 69 | 3 | I | 1,607 | 1,428 | 166 | 8 | I | 1,604 |
| 2003 | 3,283 | 1,573 | 69 | 3 | 1 | 1,646 | 1,466 | 161 | 8 | 1 | 1,637 |
| 25-29 |  |  |  |  |  |  |  |  |  |  |  |
| 1971 | 3,267 | 431 | 1,206 | 16 | 1 | 1,654 | 215 | 1,367 | 29 | 4 | 1,614 |
| 1976 | 3,758 | 533 | 1,326 | 39 | 2 | 1,900 | 267 | 1,522 | 65 | 5 | 1,859 |
| 1981 | 3,372 | 588 | 1,057 | 54 | I | 1,700 | 331 | 1,247 | 89 | 4 | 1,671 |
| 19861 | 3,713 | 835 | 949 | 79 | I | 1,863 | 527 | 1,207 | 113 | 4 | 1,850 |
| 1991 | 4,154 | 1,132 | 856 | 82 | 1 | 2,071 | 800 | 1,158 | 123 | 2 | 2,083 |
| 1996 | 3,950 | 1,273 | 650 | 46 | 1 | 1,970 | 977 | 906 | 93 | 3 | 1,980 |
| 1997 | 3,877 | 1,294 | 595 | 42 | 1 | 1,932 | 1,012 | 844 | 85 | 3 | 1,945 |
| 1998 | 3,789 | 1,304 | 544 | 38 | 1 | 1,887 | 1,039 | 783 | 77 | 3 | 1,902 |
| 1999 | 3,687 | 1,304 | 497 | 34 | 1 | 1,836 | 1,051 | 725 | 72 | 3 | 1,851 |
| 2000 | 3,605 | 1,305 | 459 | 31 | 1 | 1,796 | 1,065 | 677 | 65 | 3 | 1,810 |
| 2001 | 3,487 | 1,293 | 420 | 28 | I | 1,742 | 1,059 | 625 | 58 | 3 | 1,745 |
| 2002 | 3,348 | 1,276 | 371 | 26 | 1 | 1,674 | 1,052 | 567 | 52 | 3 | 1,674 |
| 2003 | 3,262 | 1,271 | 337 | 25 | 1 | 1,634 | 1,053 | 524 | 49 | 2 | 1,628 |

[^7]I Following evidence from the 2001 Census, estimates of under-enumeration were revised for 1991 estimates and a revised population estimate back series by age and sex issued for 1982-1990.These revisions have yet to be taken account of in the marital status estimates for 1986.

See 'Notes to tables'.

Table I. 5
continued
Population: age, sex and legal marital status
England


|  | Total population | Males |  |  |  |  | Females |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mid-year |  | Single | Married | Divorced | Widowed | Total | Single | Married | Divorced | Widowed | Total |


| 30-34 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1971 | 2,897 | 206 | 1,244 | 23 | 3 | 1,475 | 111 | 1,269 | 34 | 8 | 1,422 |
| 1976 | 3,220 | 236 | 1,338 | 55 | 3 | 1,632 | 118 | 1,388 | 75 | 8 | 1,588 |
| 1981 | 3,715 | 318 | 1,451 | 97 | 3 | 1,869 | 165 | 1,544 | 129 | 9 | 1,846 |
| 1986 ${ }^{1}$ | 3,338 | 355 | 1,197 | 124 | 2 | 1,679 | 206 | 1,293 | 154 | 6 | 1,660 |
| 1991 | 3,708 | 520 | I,172 | 155 | 2 | 1,849 | 335 | 1,330 | 189 | 5 | 1,859 |
| 1996 | 4,126 | 776 | 1,135 | 138 | 2 | 2,050 | 551 | 1,316 | 201 | 7 | 2,076 |
| 1997 | 4,151 | 817 | I, III | 133 | 2 | 2,064 | 589 | 1,293 | 198 | 7 | 2,088 |
| 1998 | 4,136 | 848 | 1,078 | 127 | 3 | 2,056 | 621 | 1,259 | 193 | 7 | 2,081 |
| 1999 | 4,113 | 877 | 1,043 | 121 | 3 | 2,044 | 651 | 1,223 | 188 | 7 | 2,069 |
| 2000 | 4,076 | 904 | 1,007 | 114 | 2 | 2,027 | 679 | 1,182 | 181 | 7 | 2,049 |
| 2001 | 4,050 | 934 | 971 | 108 | 2 | 2,016 | 711 | I,142 | 174 | 7 | 2,033 |
| 2002 | 4,000 | 961 | 921 | 105 | 2 | 1,990 | 743 | 1,094 | 167 | 6 | 2,010 |
| 2003 | 3,928 | 981 | 868 | 102 | 2 | 1,954 | 767 | 1,043 | 159 | 6 | 1,974 |
| 35-44 |  |  |  |  |  |  |  |  |  |  |  |
| 1971 | 5,736 | 317 | 2,513 | 48 | 13 | 2,891 | 201 | 2,529 | 66 | 48 | 2,845 |
| 1976 | 5,608 | 286 | 2,442 | 104 | 12 | 2,843 | 167 | 2,427 | 129 | 42 | 2,765 |
| 1981 | 5,996 | 316 | 2,519 | 178 | 12 | 3,024 | 170 | 2,540 | 222 | 41 | 2,972 |
| $1986{ }^{1}$ | 6,856 | 396 | 2,738 | 293 | 12 | 3,438 | 213 | 2,815 | 350 | 39 | 3,418 |
| 1991 | 7,022 | 477 | 2,632 | 384 | 11 | 3,504 | 280 | 2,760 | 444 | 34 | 3,517 |
| 1996 | 7,017 | 653 | 2,426 | 398 | 12 | 3,489 | 427 | 2,568 | 497 | 36 | 3,528 |
| 1997 | 7,155 | 708 | 2,433 | 403 | 12 | 3,556 | 472 | 2,580 | 511 | 36 | 3,599 |
| 1998 | 7,304 | 768 | 2,442 | 405 | 13 | 3,627 | 522 | 2,596 | 523 | 36 | 3,677 |
| 1999 | 7,475 | 832 | 2,459 | 408 | 13 | 3,711 | 577 | 2,617 | 533 | 37 | 3,763 |
| 2000 | 7,661 | 899 | 2,481 | 410 | 12 | 3,802 | 635 | 2,640 | 547 | 37 | 3,859 |
| 2001 | 7,816 | 963 | 2,494 | 411 | 12 | 3,881 | 692 | 2,649 | 558 | 36 | 3,935 |
| 2002 | 7,962 | 1,031 | 2,489 | 424 | 12 | 3,955 | 751 | 2,650 | 571 | 35 | 4,007 |
| 2003 | 8,062 | 1,089 | 2,471 | 435 | 12 | 4,006 | 805 | 2,634 | 583 | 34 | 4,056 |
| 45-64 |  |  |  |  |  |  |  |  |  |  |  |
| 1971 | 11,887 | 502 | 4,995 | 81 | 173 | 5,751 | 569 | 4,709 | 125 | 733 | 6,136 |
| 1976 | 11,484 | 496 | 4,787 | 141 | 160 | 5,583 | 462 | 4,568 | 188 | 683 | 5,901 |
| 1981 | 11,040 | 480 | 4,560 | 218 | 147 | 5,405 | 386 | 4,358 | 271 | 620 | 5,635 |
| 1986 | 10,860 | 461 | 4,422 | 331 | 141 | 5,355 | 327 | 4,220 | 388 | 570 | 5,505 |
| 1991 | 10,960 | 456 | 4,394 | 456 | 127 | 5,433 | 292 | 4,211 | 521 | 503 | 5,527 |
| 1996 | 11,820 | 528 | 4,587 | 628 | 121 | 5,864 | 318 | 4,466 | 732 | 440 | 5,956 |
| 1997 | 11,927 | 545 | 4,593 | 656 | 120 | 5,914 | 328 | 4,486 | 770 | 430 | 6,014 |
| 1998 | 12,055 | 565 | 4,608 | 681 | 121 | 5,974 | 340 | 4,512 | 807 | 422 | 6,080 |
| 1999 | 12,198 | 589 | 4,627 | 706 | 121 | 6,043 | 355 | 4,541 | 844 | 415 | 6,155 |
| 2000 | 12,328 | 615 | 4,638 | 727 | 121 | 6,101 | 372 | 4,564 | 881 | 410 | 6,227 |
| 2001 | 12,447 | 644 | 4,647 | 747 | 121 | 6,159 | 391 | 4,578 | 918 | 401 | 6,289 |
| 2002 | 12,580 | 671 | 4,649 | 780 | 120 | 6,220 | 413 | 4,596 | 960 | 391 | 6,359 |
| 2003 | 12,715 | 702 | 4,647 | 815 | 118 | 6,283 | 437 | 4,613 | 1,002 | 380 | 6,433 |
| 65 and |  |  |  |  |  |  |  |  |  |  |  |
| 1971 | 6,592 | 179 | 1,840 | 17 | 492 | 2,527 | 580 | 1,437 | 32 | 2,016 | 4,065 |
| 1976 | 7,119 | 197 | 2,033 | 33 | 510 | 2,773 | 569 | 1,579 | 60 | 2,138 | 4,347 |
| 1981 | 7,548 | 216 | 2,167 | 54 | 534 | 2,971 | 533 | 1,692 | 90 | 2,263 | 4,578 |
| $1986{ }^{1}$ | 7,768 | 223 | 2,234 | 76 | 539 | 3,072 | 477 | 1,759 | 127 | 2,333 | 4,696 |
| 1991 | 8,080 | 231 | 2,332 | 99 | 586 | 3,248 | 422 | 1,853 | 152 | 2,405 | 4,832 |
| 1996 | 8,22I | 247 | 2,390 | 134 | 597 | 3,367 | 369 | 1,897 | 196 | 2,393 | 4,854 |
| 1997 | 8,237 | 248 | 2,404 | 143 | 597 | 3,391 | 358 | 1,904 | 207 | 2,377 | 4,845 |
| 1998 | 8,258 | 250 | 2,418 | 152 | 597 | 3,417 | 348 | 1,913 | 218 | 2,362 | 4,84I |
| 1999 | 8,262 | 251 | 2,431 | 161 | 594 | 3,437 | 338 | 1,922 | 230 | 2,336 | 4,825 |
| 2000 | 8,287 | 252 | 2,449 | 171 | 593 | 3,466 | 327 | 1,938 | 243 | 2,313 | 4,821 |
| 2001 | 8,342 | 254 | 2,478 | 183 | 595 | 3,510 | 318 | 1,960 | 259 | 2,295 | 4,832 |
| 2002 | 8,400 | 256 | 2,511 | 197 | 595 | 3,557 | 308 | 1,987 | 276 | 2,272 | 4,843 |
| 2003 | 8,461 | 258 | 2,544 | 211 | 594 | 3,607 | 301 | 2,015 | 294 | 2,244 | 4,854 |

[^8]| Table I.6 C | Components of population change |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Constituent countries of the United Kingdom |  |  |  |  |  |  |  |  |  |  | umbers (thousands) |
| Mid-year to mid-year | Population at start of period | Total annual change | Components of change (mid-year to mid-year or annual averages) |  |  |  |  |  |  |  | Population at end of period |
|  |  |  | Live births | Deaths | Natural change (Live births deaths) | Net civilian migration |  |  |  | Other changes |  |
|  |  |  |  |  |  | Total ${ }^{1}$ | To/from rest of UK | To/from Irish Republic | To/from rest of the world |  |  |
| $\begin{aligned} & \text { United Kingdom } \\ & 1971-76 \\ & 1976-81 \\ & 1981-86 \\ & 1986-91 \end{aligned}$ | $\begin{aligned} & 55,928 \\ & 56,216 \\ & 56,537 \\ & 56,684 \end{aligned}$ | $\begin{aligned} & +58 \\ & +27 \\ & +65 \\ & +148 \end{aligned}$ | $\begin{aligned} & 766 \\ & 705 \\ & 733 \\ & 782 \end{aligned}$ | $\begin{aligned} & 670 \\ & 662 \\ & 662 \\ & 647 \end{aligned}$ | $\begin{aligned} & +96 \\ & +42 \\ & +70 \\ & +135 \end{aligned}$ | $\begin{aligned} & -55 \\ & -\quad 33 \\ & -\quad 5 \\ & +\quad 13 \end{aligned}$ | - | - |  | $\begin{aligned} & +16 \\ & +\quad 18 \end{aligned}$ | $\begin{aligned} & 56,216 \\ & 56,352 \\ & 56,684 \\ & 57,439 \end{aligned}$ |
| $1995-96^{2}$ $1996-97^{2}$ $1997-98^{2}$ $1998-99^{2}$ $1999-2000^{2}$ $2000-01^{2}$ $2001-02^{2}$ $2002-03^{2}$ | 58,025 58,164 58,314 58,475 58,684 58,886 59,113 59,322 | +140 +150 +161 +209 +202 +227 +208 +232 | $\begin{aligned} & 722 \\ & 740 \\ & 718 \\ & 713 \\ & 688 \\ & 684 \\ & 663 \\ & 688 \end{aligned}$ | $\begin{aligned} & 645 \\ & 637 \\ & 677 \\ & 634 \\ & 626 \\ & 599 \\ & 601 \\ & 605 \end{aligned}$ | +77 +103 +100 +77 +62 +74 +62 +77 | +62 +47 +60 +133 +139 +153 +146 +155 | - - - |  |  | . . . . . . . . | 58,164 58,314 58,475 58,684 58,886 59.113 59,322 59,554 |
| England and Wales $1971-76$ $1976-81$ $1981-86$ $1986-91$ | 49,152 49,459 49,634 49,999 | +61 +35 +73 +150 | $\begin{aligned} & 644 \\ & 612 \\ & 639 \\ & 689 \end{aligned}$ | $\begin{aligned} & 588 \\ & 582 \\ & 582 \\ & 569 \end{aligned}$ | $\begin{aligned} & +76 \\ & +30 \\ & +57 \\ & +120 \end{aligned}$ | -28 $-\quad 9$ $+\quad 16$ +30 | +10 +11 | -9 -3 | -29 -17 | +13 +14 | $\begin{aligned} & 49,459 \\ & 49,634 \\ & 49,9,99 \\ & 50,748 \end{aligned}$ |
| $1995-96^{2}$ $196-97^{2}$ $1997-98^{2}$ $1989-99^{2}$ $1999-2000^{2}$ $2000-01^{2}$ $2001-02^{2}$ $2002-03^{2}$ | 51,272 51,410 51,560 51,720 51,933 52,140 52,360 52,570 | +138 +149 +160 +213 +207 +220 +210 +223 | 640 655 636 630 612 599 591 608 | 569 562 544 558 550 528 530 532 | +71 $+\quad 93$ +992 +721 +661 +71 +61 +76 | +67 +56 +688 +141 +146 +149 +149 +147 | .. .. .. .. .. .. | .. .. .. .. .. .. . | .. .. . . . . . . | . | 51,410 51,560 51,720 51,933 52,140 52,360 52,570 52,794 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| $1995-96^{2}$ $1996-97^{2}$ $1997-98^{2}$ $1998-99^{2}$ $1999-2000^{2}$ $2000-01^{2}$ $2001-02^{2}$ $2002-03^{2}$ | 48,383 48,519 48,665 48,821 48,033 49,233 49,450 49,647 | +136 +146 +156 +212 +200 +216 +197 +209 | 606 620 602 598 580 568 560 578 | $\begin{aligned} & 533 \\ & 527 \\ & 510 \\ & 523 \\ & 516 \\ & 495 \\ & 497 \\ & 498 \end{aligned}$ | + + +93 +99 +74 +64 +73 +63 +79 | +63 +53 +64 +138 +136 +144 +134 +130 | .. <br> .. <br> .. <br> .. <br> .. <br> .. <br> .. | .. .. .. .. .. .. . | . . . . . . . . . | . | 48,519 48,665 48,821 49,033 49,233 49,450 49,47 49,856 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| $1995-96^{2}$ $1969-97^{2}$ $1997-98^{2}$ $1998-99^{2}$ $1999-2000^{2}$ $2000-01^{2}$ $2001-02^{2}$ $2002-03^{2}$ | 2,889 2,891 2,895 2,900 2,901 2,907 2,910 2,923 | $+\quad 3$ $+\quad 4$ $+\quad 5$ +1 $+\quad 6$ $+\quad 3$ +13 +15 | $\begin{aligned} & 34 \\ & 35 \\ & 34 \\ & 33 \\ & 31 \\ & 31 \\ & 30 \\ & 31 \end{aligned}$ | $\begin{aligned} & 35 \\ & 35 \\ & 34 \\ & 35 \\ & 34 \\ & 33 \\ & 33 \\ & 33 \end{aligned}$ | -1 <br> - <br> - | +8 $+\quad 3$ $+\quad 4$ $+\quad 3$ $+\quad 9$ $+\quad 5$ +16 +17 | .. <br> .. <br> .. <br> .. <br> .. <br> .. <br> .. | . <br> . <br> . <br> . <br> . <br> . <br> . <br> . <br> . | .. <br> . <br> . <br> . <br> . <br> . <br> . <br> . | . . . . | 2,891 2,891 2,895 2,900 2,901 2,907 2,910 2,923 2,938 |
| Scotland $1971-76$ $1976-81$ $1981-86$ $1986-91$ | $\begin{aligned} & 5,236 \\ & 5,233 \\ & 5,180 \\ & 5,112 \end{aligned}$ | $\begin{aligned} & =11 \\ & =14 \\ & =\quad 6 \end{aligned}$ | $\begin{aligned} & 73 \\ & 66 \\ & 66 \\ & 66 \end{aligned}$ | $\begin{aligned} & 64 \\ & 64 \\ & 64 \\ & 62 \end{aligned}$ | $\begin{aligned} & +9 \\ & +\quad 2 \\ & +\quad 2 \\ & +\quad 3 \end{aligned}$ | $\begin{aligned} & -14 \\ & -\quad 16 \\ & -\quad 16 \\ & -\quad 9 \end{aligned}$ | $\begin{aligned} & -4 \\ & -7 \\ & -7 \end{aligned}$ | - | 0 0 7 | +4 $+\quad 4$ $+\quad 1$ | $\begin{aligned} & 5,233 \\ & 5,180 \\ & 5,112 \\ & 5,083 \end{aligned}$ |
| $1995-96$ $1996-97$ $1997-98$ $1998-99$ $1999-2000$ 200001 $2001-02$ $2002-03$ | $\begin{aligned} & 5,104 \\ & 5,092 \\ & 5,083 \\ & 5,077 \\ & 5,072 \\ & 5,063 \\ & 5,064 \\ & 5,055 \end{aligned}$ | $\begin{array}{r} \\ -12 \\ -\quad 9 \\ -\quad 6 \\ -\quad 5 \\ \hline+9 \\ \hline\end{array}$ | 59 60 58 57 54 53 51 52 | $\begin{aligned} & 61 \\ & 60 \\ & 59 \\ & 60 \\ & 60 \\ & 57 \\ & 57 \\ & 58 \end{aligned}$ | $\begin{aligned} & -2 \\ & - \\ & - \\ & = \\ & = \\ & - \\ & = \\ & - \\ & - \end{aligned}$ | $\begin{aligned} & -9 \\ & - \\ & - \\ & \hline \end{aligned}$ | .. .. .. .. .. .. .. |  | .. .. .. .. . .. . | .. . . . . . . | $\begin{aligned} & 5,092 \\ & 5,083 \\ & 5,077 \\ & 5,072 \\ & 5,063 \\ & 5,064 \\ & 5,055 \\ & 5,057 \end{aligned}$ |
| $\begin{aligned} & \text { Northern Ireland } \\ & 1971-76 \\ & 1976-81 \\ & 1981-86 \\ & 1986-91 \end{aligned}$ | $\begin{aligned} & 1,540 \\ & 1,524 \\ & 1,543 \\ & 1,574 \end{aligned}$ | $\quad 3$ <br> $+\quad 3$ <br> $+\quad 6$ <br> $+\quad 7$ | $\begin{aligned} & 28 \\ & 27 \\ & 28 \\ & 27 \end{aligned}$ | $\begin{aligned} & 17 \\ & 17 \\ & 16 \\ & 16 \end{aligned}$ | $\begin{aligned} & +11 \\ & +10 \\ & +12 \\ & +12 \end{aligned}$ | $\begin{aligned} & -\quad 14 \\ & -\quad 8 \\ & -\quad 5 \\ & -\quad 5 \end{aligned}$ | $\begin{aligned} & -7 \\ & -4 \\ & -3 \\ & -3 \end{aligned}$ | - <br> - <br> - | $\begin{aligned} & 7 \\ & 3 \\ & 1 \\ & 1 \end{aligned}$ | - <br> +17 <br> - <br> - | $\begin{aligned} & 1,524 \\ & 1,543 \\ & 1,574 \\ & 1,607 \end{aligned}$ |
| $1995-96$ $1996-97$ $1997-98$ $1998-99$ $1999-2000$ $2000-01$ $2001-02$ $2002-03$ | 1,649 1,662 1,671 1,678 1,679 1,683 1,689 1,697 | $\begin{aligned} & +13 \\ & +10 \\ & +\quad 7 \\ & +\quad 1 \\ & +4 \\ & +\quad 6 \\ & +\quad 7 \\ & +\quad 6 \end{aligned}$ | $\begin{aligned} & 24 \\ & 25 \\ & 24 \\ & 23 \\ & 22 \\ & 22 \\ & 21 \\ & 21 \end{aligned}$ | 16 15 15 15 15 16 14 14 15 | $\begin{aligned} & +8 \\ & +\quad 10 \\ & +\quad 9 \\ & +\quad 8 \\ & +7 \\ & +7 \\ & +\quad 7 \\ & +\quad 7 \end{aligned}$ | $\begin{array}{ll} + & 5 \\ - & 1 \\ - & 2 \\ - & 5 \\ - & 2 \\ - & 2 \\ - & T \end{array}$ | .. <br> .. <br> .. <br> .. <br> .. <br> .. <br> .. |  |  | $\begin{array}{r}-1 \\ + \\ - \\ \hline\end{array}$ | 1,662 1,671 1,678 1,679 1,683 1,689 1,697 1,703 |

[^9]| Tab | le 2.1 | Vital statistics summary |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Constituent countries of the United Kingdom Numbers (thousands) and rates |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Year and quarter |  | All live births |  | Live births outside marriage |  | Marriages |  | Divorces |  | Deaths |  | Infant mortality ${ }^{5}$ |  | Neonatal mortality ${ }^{6}$ |  | Perinatal mortality ${ }^{7}$ |  |
|  |  | Number | Rate ${ }^{1}$ | Number | Rate ${ }^{2}$ | Number | Rate ${ }^{3}$ | Number | Rate ${ }^{4}$ | Number | Rate ${ }^{1}$ | Number | Rate ${ }^{2}$ | Number | Rate ${ }^{2}$ | Number | Rate ${ }^{8}$ |
| United Kingdom |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 |  | 675.5 | 12.0 | 61.1 | 90 | 406.0 | .. | 135.4 | .. | 680.8 | 12.1 | 9.79 | 14.5 | 6.68 | 9.9 | 12.25 | 18.0 |
| 1981 |  | 730.7 | 13.0 | 91.3 | 125 | 397.8 | 49.4 | 156.4 | 11.3 | 658.0 | 11.7 | 8.16 | 11.2 | 4.93 | 6.7 | 8.79 | 12.0 |
| 1986 |  | 754.8 | 13.3 | 154.3 | 204 | 393.9 | .. | 168.2 | .. | 660.7 | 11.7 | 7.18 | 9.5 | 4.00 | 5.3 | 7.31 | 9.6 |
| 1991 |  | 792.3 | 13.8 | 236.1 | 298 | 349.7 | .. | 173.5 | .. | 646.2 | 11.2 | 5.82 | 7.4 | 3.46 | 4.4 | 6.45 | 8.1 |
| 1996 |  | 733.2 | 12.6 | 260.4 | 355 | 317.5 | .. | 171.7 | . | 636.0 | 10.9 | 4.50 | 6.1 | 3.00 | 4.1 | 6.41 | 8.7 |
| 1999 |  | 700.0 | 11.9 | 271.6 | 388 | 301.1 | . | 158.7 | . | 632.1 | 10.8 | 4.05 | 5.8 | 2.73 | 3.9 | 5.79 | 8.2 |
| 2000 |  | 679.0 | 11.5 | 268.1 | 395 | 305.9 | .. | 154.6 | .. | 608.4 | 10.3 | 3.79 | 5.6 | 2.63 | 3.9 | 5.56 | 8.1 |
| 2001 |  | 669.1 | 11.3 | 268.0 | 401 | 286.1 | .. | 156.8 | .. | 602.3 | 10.2 | 3.66 | 5.5 | 2.43 | 3.6 | 5.39 | 8.0 |
| 2002 |  | 668.8 | 11.3 | 271.7 | 406 | 293.0 | .. | 160.5 | .. | 606.2 | 10.2 | 3.50 | 5.2 | 2.36 | 3.5 | 5.57 | 8.3 |
| 2003 |  | 695.6 | 11.7 | 288.5 | 415 | $306.0^{\circ}$ | .. | $166.7^{\text {P }}$ | .. | 612.0 | 10.3 | 3.69 | 5.3 | 2.53 | 3.6 | 5.94 | 8.5 |
| 2002 | Sept | 173.8 | 11.7 | 71.0 | 409 | 120.8 | .. | 41.1 | .. | 139.8 | 9.3 | 0.83 | 4.8 | 0.56 | 3.2 | 1.37 | 7.8 |
|  | Dec | 168.9 | 11.4 | 69.9 | 414 | 54.4 | .. | 39.8 | .. | 157.0 | 10.5 | 0.92 | 5.4 | 0.62 | 3.7 | 1.41 | 8.3 |
| 2003 | March | 165.6 | 11.3 | 68.7 | 415 | 38.0 | .. | $42.6{ }^{\text {p }}$ | .. | 162.5 | 11.1 | 0.96 | 5.8 | 0.65 | 3.9 | 1.45 | 8.7 |
|  | June | 173.4 | 11.7 | 70.3 | 405 | $85.0{ }^{\text {P }}$ | .. | $42.0{ }^{\text {P }}$ | .. | 145.8 | 9.8 | 0.88 | 5.0 | 0.60 | 3.4 | 1.49 | 8.5 |
|  | Sept | 182.2 | 12.2 | 75.7 | 415 | $127.0{ }^{\text {p }}$ | .. | 41.3P | .. | 140.7 | 9.4 | 0.89 | 4.9 | 0.62 | 3.4 | 1.52 | 8.3 |
|  | Dec | 174.3 | 11.6 | 73.6 | 423 | $56.0{ }^{\text {P }}$ | . | $40.8{ }^{\text {P }}$ | . | 162.2 | 10.8 | 0.96 | 5.5 | 0.66 | 3.8 | 1.49 | 8.5 |
| 2004 | March | $174.3{ }^{\text {P }}$ | $11.7{ }^{\text {P }}$ | $73.6{ }^{\text {P }}$ | $422^{\text {P }}$ | .. | . | . | . | $161.1{ }^{\text {P }}$ | $10.9{ }^{\text {P }}$ | $0.96{ }^{\text {P }}$ | $5.5{ }^{\text {P }}$ | $0.64{ }^{\text {P }}$ | $3.7{ }^{\text {P }}$ | $1.46{ }^{\text {P }}$ | $8.3{ }^{\text {P }}$ |
|  | June | $176.2^{\text {p }}$ | $11.9{ }^{\text {P }}$ | $73.1{ }^{\text {P }}$ | 415 | .. | .. | .. | .. | $139.7^{\text {P }}$ | $9.4{ }^{\text {P }}$ | $0.88{ }^{\text {P }}$ | $5.0^{\text {P }}$ | $0.60^{\text {P }}$ | $3.4{ }^{\text {P }}$ | $1.40^{\text {P }}$ | $7.9{ }^{\text {p }}$ |
|  | Sept | $184.7^{\text {P }}$ | $12.4{ }^{\text {P }}$ | $78.2^{\text {p }}$ | $423{ }^{\text {P }}$ | .. | .. | .. | .. | $135.5^{\text {P }}$ | $9.1{ }^{\text {P }}$ | $0.92^{\text {P }}$ | $5.0^{\text {P }}$ | $0.64{ }^{\text {P }}$ | $3.5{ }^{\text {P }}$ | $1.45{ }^{\text {P }}$ | $7.8{ }^{\text {P }}$ |
| England and Wales |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 |  | 584.3 | 11.8 | 53.8 | 92 | 358.6 | 57.7 | 126.7 | 10.1 | 598.5 | 12.1 | 8.34 | 14.3 | 5.66 | 9.7 | 10.45 | 17.7 |
| 1981 |  | 634.5 | 12.8 | 81.0 | 128 | 352.0 | 49.6 | 145.7 | 11.9 | 577.9 | 11.6 | 7.02 | 11.1 | 4.23 | 6.7 | 7.56 | 11.8 |
| 1986 |  | 661.0 | 13.2 | 141.3 | 214 | 347.9 | 43.6 | 153.9 | 12.9 | 581.2 | 11.6 | 6.31 | 9.6 | 3.49 | 5.3 | 6.37 | 9.6 |
| 1991 |  | 699.2 | 13.8 | 211.3 | 302 | 306.8 | 36.0 | 158.7 | 13.5 | 570.0 | 11.2 | 5.16 | 7.4 | 3.05 | 4.4 | 5.65 | 8.0 |
| 1996 |  | 649.5 | 12.6 | 232.7 | 358 | 279.0 | 30.9 | 157.1 | 13.8 | 560.1 | 10.9 | 3.99 | 6.1 | 2.68 | 4.1 | 5.62 | 8.6 |
| 1999 |  | 621.9 | 12.0 | 241.9 | 389 | 263.5 | 27.8 | 144.6 | 12.9 | 556.1 | 10.7 | 3.62 | 5.8 | 2.44 | 3.9 | 5.14 | 8.2 |
| 2000 |  | 604.4 | 11.6 | 238.6 | 395 | 268.0 | 27.8 | 141.1 | 12.7 | 535.7 | 10.3 | 3.38 | 5.6 | 2.34 | 3.9 | 4.96 | 8.2 |
| 2001 |  | 594.6 | 11.4 | 238.1 | 400 | 249.2 | 25.4 | 143.8 | 12.9 | 530.4 | 10.1 | 3.24 | 5.4 | 2.14 | 3.6 | 4.76 | 8.0 |
| 2002 |  | 596.1 | 11.3 | 242.0 | 406 | 255.6 | 25.6 | 147.7 | 13.4 | 533.5 | 10.1 | 3.13 | 5.2 | 2.13 | 3.6 | 4.99 | 8.3 |
| 2003 |  | 621.5 | 11.8 | 257.2 | 414 | $268.0^{\text {P }}$ | $26.1{ }^{\text {P }}$ | $153.5{ }^{\text {p }}$ | $14.0{ }^{\text {P }}$ | 538.3 | 10.2 | 3.31 | 5.3 | 2.26 | 3.6 | 5.34 | 8.5 |
| 2002 | Sept | 155.0 | 11.7 | 63.5 | 409 | 105.7 | 42.0 | 38.0 | 13.6 | 122.7 | 9.3 | 0.82 | 4.7 | 0.50 | 3.2 | 1.23 | 7.9 |
|  | Dec | 150.6 | 11.4 | 62.3 | 414 | 46.9 | 18.6 | 36.6 | 13.1 | 138.2 | 10.4 | 0.83 | 5.5 | 0.55 | 3.7 | 1.26 | 8.3 |
| 2003 |  | 147.4 | 11.3 | 61.0 | 414 |  |  | $39.4{ }^{\text {p }}$ |  | 143.0 | 11.0 | 0.86 | 5.9 | 0.60 | 3.9 | 1.32 | 8.9 |
|  | June | 155.1 | 11.8 | 62.8 | 405 | $75.0{ }^{\text {P }}$ | $29.2{ }^{\text {p }}$ | $38.6{ }^{\text {P }}$ | $14.1{ }^{\text {P }}$ | 128.3 | 9.7 | 0.80 | 5.1 | 0.55 | 3.5 | 1.34 | 8.6 |
|  | Set | 162.9 | 12.2 | 67.6 | 415 | $111.0^{\text {P }}$ | $43.0{ }^{\text {P }}$ | 37.9 p | $13.7{ }^{\text {p }}$ | 123.9 | 9.3 | 0.79 | 4.8 | 0.55 | 3.4 | 1.36 | 8.3 |
|  | Dec | 156.0 | 11.7 | 65.8 | 422 | $48.0{ }^{\text {p }}$ | $18.7^{\text {P }}$ | $37.6{ }^{\text {P }}$ | $13.6{ }^{\text {P }}$ | 143.1 | 10.8 | 0.86 | 5.5 | 0.59 | 3.7 | 1.32 | 8.4 |
| 2004 |  |  |  |  |  | . |  | $39.4{ }^{\text {p }}$ |  |  |  |  |  |  |  |  |  |
|  | June | $157.4^{\text {p }}$ | $11.9^{p}$ | $65.2^{p}$ | $414{ }^{\text {p }}$ | .. | .. | $38.0{ }^{\text {p }}$ | $13.9{ }^{\text {p }}$ | $122.5{ }^{\text {P }}$ | $9.3{ }^{\text {P }}$ | $0.78{ }^{\text {P }}$ | $5.0^{\text {P }}$ | $0.53{ }^{\text {P }}$ | $3.4{ }^{\text {P }}$ | $1.24^{\text {p }}$ | $7.9{ }^{\text {p }}$ |
|  | Sept | $165.4^{\text {P }}$ | $12.5{ }^{\text {p }}$ | $70.1{ }^{\text {p }}$ | $424^{\text {p }}$ | .. | .. |  |  | $119.0^{\text {P }}$ | $9.0^{\text {P }}$ | $0.8 \mathrm{I}^{\text {P }}$ | $4.9{ }^{\text {P }}$ | $0.57^{\text {P }}$ | $3.5{ }^{\text {P }}$ | $1.30^{\text {P }}$ | $7.8{ }^{\text {p }}$ |
| England |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 |  | 550.4 | 11.8 | 50.8 | 92 | 339.0 | .. | .. | .. | 560.3 | 12.0 | 7.83 | 14.2 | 5.32 | 9.7 | 9.81 | 17.6 |
| 1981 |  | 598.2 | 12.8 | 76.9 | 129 | 332.2 | .. | . | .. | 541.0 | 11.6 | 6.50 | 10.9 | 3.93 | 6.6 | 7.04 | 11.7 |
| 1986 |  | 623.6 | 13.2 | 133.5 | 214 | 328.4 | .. | 146.0 | .. | 544.5 | 11.6 | 5.92 | 9.5 | 3.27 | 5.2 | 5.98 | 9.5 |
| 1991 |  | 660.8 | 13.7 | 198.9 | 301 | 290.1 | .. | 150.1 | .. | 534.0 | 11.2 | 4.86 | 7.3 | 2.87 | 4.3 | 5.33 | 8.0 |
| 1996 |  | 614.2 | 12.7 | 218.2 | 355 | 264.2 | . | 148.7 | .. | 524.0 | 10.8 | 3.74 | 6.1 | 2.53 | 4.1 | 5.36 | 8.7 |
| 1999 |  | 589.5 | 12.0 | 226.7 | 385 | 249.5 | . | 137.0 | .. | 519.6 | 10.8 | 3.38 | 5.7 | 2.29 | 3.9 | 4.86 | 8.2 |
| 2000 |  | 572.8 | 11.7 | 223.8 | 391 | 253.8 | .. | 133.9 | .. | 501.0 | 10.2 | 3.18 | 5.6 | 2.21 | 3.9 | 4.69 | 8.2 |
| 2001 |  | 563.7 | 11.4 | 223.3 | 396 | 236.2 | .. | 136.4 | .. | 496.1 | 10.0 | 3.04 | 5.4 | 2.02 | 3.6 | 4.51 | 8.0 |
| 2002 |  | 565.7 | 11.4 | 227.0 | 401 | 242.1 | .. | 140.2 | .. | 499.1 | 10.1 | 2.97 | 5.2 | 2.02 | 3.6 | 4.75 | 8.3 |
| 2003 |  | 589.9 | 11.8 | 241.4 | 409 | $253.0^{\text {p }}$ | . | $145.8{ }^{\text {p }}$ | .. | 503.4 | 10.1 | 3.14 | 5.3 | 2.15 | 3.7 | 5.01 | 8.5 |
| 2002 | Sept | 147.1 | 11.8 | 59.5 | 404 | 99.9 |  | 36.1 | . | 114.6 | 8.6 | 0.69 | 4.7 | 0.47 | 3.2 | 1.15 | 7.8 |
|  | Dec | 142.9 | 11.4 | 58.4 | 409 | 44.5 | . | 34.7 | .. | 129.3 | 9.8 | 0.79 | 5.5 | 0.53 | 3.7 | 1.19 | 8.3 |
| 2003 | March | 139.9 | 11.4 | 57.2 | 409 | $32.0{ }^{\text {p }}$ | . | $37.5{ }^{\text {P }}$ | .. | 133.8 | 10.9 | 0.83 | 5.9 | 0.55 | 3.9 | 1.25 | 8.9 |
|  | June | 147.3 | 11.8 | 58.9 | 400 | $71.0{ }^{\text {P }}$ | .. | $36.6{ }^{\text {P }}$ | .. | 119.6 | 9.1 | 0.76 | 5.1 | 0.52 | 3.6 | 1.28 | 8.6 |
|  | Sept | 154.5 | 12.3 | 63.4 | 411 | $105.0^{\text {P }}$ | .. | $36.0{ }^{\text {P }}$ | .. | 116.0 | 8.7 | 0.74 | 4.8 | 0.52 | 3.3 | 1.28 | 8.3 |
|  | Dec | 148.2 | 11.8 | 61.8 | 417 | $46.0^{\text {P }}$ | . | $35.7{ }^{\text {P }}$ | . | 134.0 | 10.1 | 0.82 | 5.5 | 0.56 | 3.8 | 1.26 | 8.4 |
| 2004 |  | $147.3^{P}$ | $11.8^{p}$ | $61.2^{p}$ | $416^{p}$ |  |  | $37.4 \mathrm{p}$ |  | $132.8^{p}$ | $10.7^{p}$ | $0.82^{\mathrm{P}}$ | $5.6^{P}$ | $0.55^{P}$ | $3.8^{P}$ | $1.22^{\text {P }}$ | $8.2^{p}$ |
|  | June | $149.6{ }^{\text {P }}$ | $12.0{ }^{\text {P }}$ | $61.3^{\text {p }}$ | $410^{\circ}$ | .. | .. | $36.0^{p}$ | .. | $\\| \mid 4.6^{P}$ | $9.2^{p}$ | $0.73{ }^{\text {P }}$ | $4.9{ }^{\text {P }}$ | $0.51{ }^{\text {P }}$ | $3.4{ }^{\text {P }}$ | $1.17{ }^{\text {p }}$ | $7.9{ }^{\text {p }}$ |
|  | Sept | $156.9{ }^{\text {P }}$ | $11.9{ }^{\text {P }}$ | $65.8{ }^{\text {p }}$ | $419{ }^{\text {p }}$ | . | .. |  |  | $111.1{ }^{\text {P }}$ | $8.9{ }^{\text {p }}$ | $0.76{ }^{\text {P }}$ | $4.8{ }^{\text {P }}$ | $0.54{ }^{\text {P }}$ | $3.4{ }^{\text {P }}$ | $1.23{ }^{\text {P }}$ | $7.8{ }^{\text {p }}$ |

Notes: Rates for the most recent quarters will be particularly subject to revision, even when standard detail is given, as they are based on provisional numbers or on estimates derived from events registered in the period.
Figures for England and Wales represent the numbers of deaths registered in each
year up to 1992, and the number of deaths occurring in each year from 1993 to 2003 Provisional figures for 2004 relate to registrations. Death rates for 2004 are based on the mid-2003 population estimates.
Birth and death figures for England and also for Wales each exclude events for persons usually resident outside England and Wales. These events are, however, included in the totals figures for Northern Ireland, and for the United Kingdom.

Birth rates for 2004 are based on the 2003-based population projections for 2004.

[^10]Table 2.1 Vital statistics summary
continued
Constituent countries of the United Kingdom Numbers (thousands) and rates

| Year and quarter |  | All live births |  | Live births outside marriage |  | Marriages |  | Divorces |  | Deaths |  | Infant mortality ${ }^{5}$ |  | Neonatal mortality ${ }^{6}$ |  | Perinatal mortality ${ }^{7}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number | Rate ${ }^{1}$ | Number | Rate ${ }^{2}$ | Number | Rate ${ }^{3}$ | Number | Rate ${ }^{4}$ | Number | Rate ${ }^{\prime}$ | Number | Rate ${ }^{2}$ | Number | Rate ${ }^{2}$ | Number | Rate ${ }^{8}$ |
| Wales |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 |  | 33.4 | 11.9 | 2.9 | 86 | 19.5 | .. | .. | . | 36.3 | 13.0 | 0.46 | 13.7 | 0.32 | 9.6 | 0.64 | 19.0 |
| 1981 |  | 35.8 | 12.7 | 4.0 | 112 | 19.8 | .. |  | .. | 35.0 | 12.4 | 0.45 | 12.6 | 0.29 | 8.1 | 0.51 | 14.1 |
| 1986 |  | 37.0 | 13.1 | 7.8 | 211 | 19.5 | .. | 7.9 | . | 34.7 | 12.3 | 0.35 | 9.5 | 0.21 | 5.6 | 0.38 | 10.3 |
| 1991 |  | 38.1 | 13.3 | 12.3 | 323 | 16.6 | . | 8.6 | . | 34.1 | 11.9 | 0.25 | 6.6 | 0.16 | 4.1 | 0.30 | 7.9 |
| 1996 |  | 34.9 | 12.1 | 14.4 | 412 | 14.8 | . | 8.4 | . | 34.6 | 12.0 | 0.20 | 5.6 | 0.13 | 3.6 | 0.26 | 7.5 |
| 1999 |  | 32.1 | 11.1 | 14.8 | 461 | 14.0 | . | 7.5 | . | 35.0 | 12.1 | 0.20 | 6.1 | 0.13 | 4.0 | 0.25 | 7.7 |
| 2000 |  | 31.3 | 10.8 | 14.8 | 472 | 14.1 | .. | 7.2 |  | 33.3 | 11.5 | 0.17 | 5.3 | 0.11 | 3.5 | 0.23 | 7.2 |
| 2001 |  | 30.6 | 10.5 | 14.8 | 483 | 13.0 | * | 7.4 | . | 33.0 | 11.3 | 0.16 | 5.4 | 0.11 | 3.5 | 0.23 | 7.5 |
| 2002 |  | 30.2 | 10.3 | 15.0 | 497 | 13.5 | .. | 7.6 | .. | 33.2 | 11.3 | 0.14 | 4.5 | 0.10 | 3.2 | 0.24 | 7.7 |
| 2003 |  | 31.4 | 10.7 | 15.8 | 503 | $14.4{ }^{\text {P }}$ | . | $7.7{ }^{\text {p }}$ | . | 33.7 | 11.5 | 0.13 | 4.3 | 0.10 | 3.1 | 0.24 | 7.5 |
| 2002 | Sept | 7.9 | 10.7 | 4.0 | 505 | 5.8 | . | 1.9 | . | 7.7 | 10.5 | 0.04 | 4.6 | 0.03 | 3.7 | 0.07 | 8.7 |
|  | Dec | 7.7 | 10.4 | 3.9 | 513 | 2.4 | . | 1.9 | . | 8.5 | 11.6 | 0.03 | 4.0 | 0.02 | 3.1 | 0.06 | 8.0 |
| 2003 | March | 7.5 | 10.3 | 3.8 | 505 | $1.7{ }^{\text {p }}$ | . | $2.0{ }^{\text {p }}$ | .. | 8.9 | 12.3 | 0.04 | 4.7 | 0.03 | 3.8 | 0.06 | 7.7 |
|  | June | 7.8 | 10.7 | 3.9 | 494 | $4.0{ }^{\circ}$ | . | $2.0{ }^{\text {P }}$ | . | 8.3 | 11.4 | 0.03 | 4.0 | 0.02 | 2.7 | 0.06 | 7.3 |
|  | Sept | 8.3 | 11.2 | 4.2 | 503 | $6.2{ }^{\text {p }}$ | . | $1.9{ }^{\text {p }}$ | . | 7.6 | 10.2 | 0.04 | 4.6 | 0.03 | 3.5 | 0.07 | 8.2 |
|  | Dec | 7.8 | 10.5 | 4.0 | 511 | $2.5{ }^{\text {P }}$ | . | 1.98 | . | 8.8 | 11.9 | 0.03 | 3.8 | 0.02 | 2.3 | 0.05 | 6.9 |
| 2004 | March | $7.8{ }^{\text {p }}$ | $10.6{ }^{\text {P }}$ | $4.0{ }^{\text {P }}$ | $514^{\text {P }}$ | . | .. | $2.0{ }^{\text {p }}$ | . | $8.9{ }^{\text {P }}$ | $12.2{ }^{\text {P }}$ | $0.05^{\text {P }}$ | $5.8{ }^{\text {P }}$ | $0.03{ }^{\text {P }}$ | $4.1{ }^{\text {P }}$ | $0.07^{\text {P }}$ | $9.2^{\text {P }}$ |
|  | June | $7.8{ }^{\text {p }}$ | $10.6{ }^{\text {p }}$ | $3.9{ }^{\text {p }}$ | $500^{\text {P }}$ | .. | . | $2.0^{\text {P }}$ | .. | $7.7{ }^{\text {P }}$ | $10.5{ }^{\text {p }}$ | $0.04{ }^{\text {P }}$ | $4.6{ }^{\text {P }}$ | $0.03^{\text {P }}$ | $3.0{ }^{\text {P }}$ | $0.06^{\text {P }}$ | $7.3{ }^{\text {P }}$ |
|  | Sept | $8.4{ }^{\text {P }}$ | $11.5{ }^{\text {P }}$ | $4.3{ }^{\text {P }}$ | $512^{\text {P }}$ | .. | .. | .. | . | $7.5^{\text {P }}$ | $10.2^{\text {P }}$ | $0.05^{\text {P }}$ | $6.2^{\text {P }}$ | $0.03{ }^{\text {P }}$ | $4.0^{\text {P }}$ | $0.06{ }^{\text {P }}$ | $7.6^{\text {P }}$ |
| Scotland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 |  | 64.9 | 12.5 | 6.0 | 93 | 37.5 | 53.8 | 8.1 | 6.5 | 65.3 | 12.5 | 0.96 | 14.8 | 0.67 | 10.3 | 1.20 | 18.3 |
| 1981 |  | 69.1 | 13.4 | 8.5 | 122 | 36.2 | 47.5 | 9.9 | 8.0 | 63.8 | 12.3 | 0.78 | 11.3 | 0.47 | 6.9 | 0.81 | 11.6 |
| 1986 |  | 65.8 | 12.9 | 13.6 | 206 | 35.8 | 42.9 | 12.8 | 10.7 | 63.5 | 12.4 | 0.58 | 8.8 | 0.34 | 5.2 | 0.67 | 10.2 |
| 1991 |  | 67.0 | 13.2 | 19.5 | 291 | 33.8 | 39.0 | 12.4 | 10.6 | 61.0 | 12.0 | 0.47 | 7.1 | 0.29 | 4.6 | 0.58 | 8.6 |
| 1996 |  | 59.3 | 11.6 | 21.4 | 360 | 30.2 | 33.2 | 12.3 | 10.9 | 60.7 | 11.9 | 0.37 | 6.2 | 0.23 | 3.9 | 0.55 | 9.2 |
| 1999 |  | 55.1 | 10.9 | 22.7 | 412 | 29.9 | 31.5 | 11.9 | 10.9 | 60.3 | 11.9 | 0.28 | 5.0 | 0.18 | 3.3 | 0.42 | 7.6 |
| 2000 |  | 53.1 | 10.5 | 22.6 | 426 | 30.4 | 31.6 | 11.1 | 10.3 | 57.8 | 11.4 | 0.31 | 5.7 | 0.21 | 4.0 | 0.45 | 8.4 |
| 2001 |  | 52.5 | 10.4 | 22.8 | 433 | 29.6 | 31.0 | 10.6 | 9.7 | 57.4 | 11.3 | 0.29 | 5.5 | 0.20 | 3.8 | 0.45 | 8.5 |
| 2002 |  | 51.3 | 10.1 | 22.5 | 440 | 29.8 | 30.8 | 10.8 | 10.0 | 58.1 | 11.5 | 0.27 | 5.3 | 0.16 | 3.2 | 0.39 | 7.6 |
| 2003 |  | 52.4 | 10.4 | 23.9 | 455 | $30.7{ }^{\text {P }}$ | $31.3{ }^{\text {P }}$ | $10.1{ }^{\text {P }}$ | $10.2^{\text {p }}$ | 58.5 | 11.6 | 0.27 | 5.1 | 0.18 | 3.4 | 0.42 | 8.0 |
| 2002 | Sept | 13.2 | 10.4 | 5.7 | 431 | 11.9 | 48.9 | 2.6 | 9.6 | 13.6 | 10.7 | 0.07 | 5.2 | 0.05 | 3.7 | 0.10 | 7.3 |
|  | Dec | 13.1 | 10.2 | 5.9 | 450 | 6.2 | 25.3 | 2.7 | 10.0 | 15.2 | 11.9 | 0.07 | 5.1 | 0.04 | 3.4 | 0.10 | 7.9 |
| 2003 | March | 12.8 | 10.3 | 5.9 | 462 | 3.78 | $15.2^{\text {p }}$ | $2.5{ }^{\text {P }}$ | $9.4{ }^{\text {P }}$ | 15.7 | 12.6 | 0.07 | 5.5 | 0.05 | 3.8 | 0.09 | 6.9 |
|  | June | 12.9 | 10.3 | 5.8 | 447 | $8.4{ }^{\text {p }}$ | $34.2{ }^{\text {p }}$ | $3.0{ }^{\text {p }}$ | $11.1{ }^{\text {P }}$ | 14.1 | 11.2 | 0.06 | 4.3 | 0.03 | 2.5 | 0.11 | 8.2 |
|  | Sept | 13.8 | 10.8 | 6.2 | 448 | $12.3{ }^{\text {P }}$ | $49.7{ }^{\text {P }}$ | $2.6{ }^{\text {P }}$ | $9.7{ }^{\text {P }}$ | 13.3 | 10.4 | 0.07 | 4.9 | 0.05 | 3.4 | 0.11 | 8.1 |
|  | Dec | 13.0 | 10.2 | 6.0 | 464 | $6.3{ }^{\text {P }}$ | $25.5{ }^{\text {P }}$ | $2.7{ }^{\text {P }}$ | $10.1{ }^{\text {P }}$ | 15.4 | 12.1 | 0.07 | 5.6 | 0.05 | 3.8 | 0.12 | 8.9 |
| 2004 | March | $13.4{ }^{\text {p }}$ | $10.7{ }^{\text {P }}$ | $6.3{ }^{\text {P }}$ | $472^{\text {P }}$ | $3.9{ }^{\text {p }}$ | $15.8{ }^{\text {P }}$ | $2.7{ }^{\text {P }}$ | $10.0{ }^{\text {P }}$ | $15.3{ }^{\text {P }}$ | $12.2{ }^{\text {p }}$ | $0.06{ }^{\text {P }}$ | $4.6{ }^{\text {P }}$ | $0.04{ }^{\text {P }}$ | $2.8{ }^{\text {p }}$ | $0.12^{\text {P }}$ | $9.2^{\text {P }}$ |
|  | June | $13.3{ }^{\text {P }}$ | $10.6{ }^{\text {P }}$ | $6.1{ }^{\text {P }}$ | $459{ }^{\text {P }}$ | $8.7^{p}$ | $35.7^{\text {P }}$ | $2.7{ }^{\text {P }}$ | $10.2^{\text {P }}$ | $13.6{ }^{\text {P }}$ | $10.8{ }^{\text {p }}$ | $0.07^{P}$ | $5.1{ }^{\text {P }}$ | $0.05^{\text {P }}$ | $3.6{ }^{\text {P }}$ | $0.11{ }^{\text {P }}$ | $8.3{ }^{\text {P }}$ |
|  | Sept | $13.8{ }^{\text {P }}$ | $11.0{ }^{\text {P }}$ | $6.4{ }^{\text {P }}$ | $462^{\text {P }}$ | $12.7{ }^{\text {P }}$ | $51.5^{\text {P }}$ | $2.7{ }^{p}$ | $9.9{ }^{\text {P }}$ | $13.1{ }^{\text {P }}$ | $10.3{ }^{\text {p }}$ | $0.07^{\text {P }}$ | $5.3{ }^{\text {P }}$ | $0.05{ }^{\text {P }}$ | $3.5{ }^{\text {P }}$ | $0.11^{\text {P }}$ | $7.7{ }^{\text {P }}$ |
| Northern Ireland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 |  | 26.4 | 17.3 | 1.3 | 50 | 9.9 |  | 0.6 |  | 17.0 | 11.2 | 0.48 | 18.3 | 0.35 | 13.3 | 0.59 | 22.3 |
| 1981 |  | 27.2 | 17.0 | 1.9 | 69 | 9.6 | 45.4 | 1.4 | 4.2 | 16.3 | 10.6 | 0.36 | 13.2 | 0.23 | 8.3 | 0.42 | 15.3 |
| 1986 |  | 28.0 | 17.8 | 3.6 | 127 | 10.2 | . | 1.5 | . | 16.1 | 10.3 | 0.36 | 13.2 | 0.23 | 8.3 | 0.42 | 15.3 |
| 1991 |  | 26.0 | 16.2 | 5.3 | 203 | 9.2 | . | 2.3 | . | 15.1 | 9.4 | 0.19 | 7.4 | 0.12 | 4.6 | 0.22 | 8.4 |
| 1996 |  | 24.4 | 14.7 | 6.3 | 260 | 8.3 | . | 2.3 | . | 15.2 | 9.2 | 0.14 | 5.8 | 0.09 | 3.7 | 0.23 | 9.4 |
| 1999 |  | 23.0 | 13.7 | 7.0 | 303 | 7.6 | . | 2.3 | . | 15.7 | 9.3 | 0.15 | 6.4 | 0.11 | 4.8 | 0.23 | 10.0 |
| 2000 |  | 21.5 | 12.8 | 6.8 | 318 | 7.6 | .. | 2.4 | .. | 14.9 | 8.9 | 0.11 | 5.1 | 0.82 | 3.8 | 0.15 | 7.3 |
| 2001 |  | 22.0 | 13.0 | 7.1 | 325 | 7.3 | . | 2.4 | . | 14.5 | 8.6 | 0.13 | 6.1 | 0.98 | 4.5 | 0.19 | 8.5 |
| 2002 |  | 21.4 | 12.6 | 7.2 | 335 | 7.6 | .. | 2.2 | .. | 14.6 | 8.6 | 0.10 | 4.7 | 0.74 | 3.5 | 0.19 | 8.9 |
| 2003 |  | 21.6 | 12.7 | 7.4 | 344 | 7.8 ${ }^{\text {p }}$ | .. | $2.3{ }^{\text {p }}$ | . | 14.5 | 8.5 | 0.12 | 5.3 | 0.87 | 4.0 | 0.18 | 8.1 |
| 2002 | Sept | 5.5 | 13.0 | 1.9 | 335 | 3.3 | .. | 4.9 | . | 3.5 | 8.2 | 0.02 | 4.2 | 0.02 | 2.9 | 0.05 | 8.6 |
|  | Dec | 5.2 | 12.2 | 1.7 | 336 | 1.3 | . | 4.9 | . | 3.7 | 8.6 | 0.03 | 5.2 | 0.02 | 3.8 | 0.05 | 10.1 |
| 2003 | March | 5.4 | 12.7 | 1.8 | 344 | $0.8{ }^{\text {p }}$ | .. | $6.6{ }^{\text {P }}$ | . | 3.9 | 9.2 | 0.03 | 5.0 | 0.02 | 3.7 | 0.04 | 7.8 |
|  | June | 5.4 | 12.7 | 1.8 | 331 | $2.2{ }^{\text {P }}$ | . | $5.4{ }^{\text {p }}$ | .. | 3.4 | 8.1 | 0.02 | 4.3 | 0.02 | 3.0 | 0.04 | 7.2 |
|  | Sept | 5.6 | 13.0 | 1.9 | 341 | $3.3{ }^{\text {p }}$ | . | $5.6{ }^{\text {P }}$ |  | 3.5 | 8.1 | 0.04 | 6.3 | 0.03 | 4.5 | 0.04 | 7.8 |
|  | Dec | 5.3 | 12.4 | 1.9 | 359 | $1.4{ }^{\text {P }}$ | . | $5.6{ }^{\text {P }}$ | . | 3.7 | 8.6 | 0.03 | 5.6 | 0.03 | 4.9 | 0.05 | 9.7 |
| 2004 | March | $5.7{ }^{\text {P }}$ | $13.4{ }^{\text {P }}$ | $2.0{ }^{\text {p }}$ | $352^{\text {p }}$ | .. | . | . | . | $3.9{ }^{\text {p }}$ | $9.2{ }^{\text {p }}$ | $0.03{ }^{\text {P }}$ | $5.5{ }^{\text {P }}$ | $0.02^{\text {P }}$ | $3.5{ }^{\text {p }}$ | $0.05^{\text {P }}$ | $7.9{ }^{\text {P }}$ |
|  | June | $5.4{ }^{\text {P }}$ | $12.8{ }^{\text {p }}$ | $1.8{ }^{\text {p }}$ | $337{ }^{\text {P }}$ | .. | . | .. | .. | $3.6{ }^{\text {P }}$ | $8.4{ }^{\text {P }}$ | $0.03^{P}$ | $5.9{ }^{\text {P }}$ | $0.02^{\text {P }}$ | $4.4{ }^{\text {P }}$ | $0.05{ }^{\text {P }}$ | $9.5{ }^{\text {P }}$ |
|  | Sept | $5.8{ }^{\text {P }}$ | $13.4{ }^{\text {P }}$ | $2.0^{\text {P }}$ | $339^{\text {p }}$ | . | . | . | .. | $3.4{ }^{\text {P }}$ | $8.1{ }^{\text {P }}$ | $0.04{ }^{\text {P }}$ | $6.0^{\circ}$ | $0.02^{\text {P }}$ | $4.1{ }^{\text {P }}$ | $0.05^{\text {P }}$ | $8.3{ }^{\text {P }}$ |

See notes opposite.

## Per 1,000 population of all ages.

Per 1,000 live births.
Persons marrying per 1,000 unmarried population 16 and over.
Persons divorcing per 1,000 married population.
Deaths under I year.
6 Deaths under 4 weeks.

7 Stillbirths and deaths under I week. In October 1992 the legal definition of a stillbirth was changed, from baby born dead after 28 completed weeks of gestation or more, to one born dead after 24 completed weeks of gestation or more.
8 Per I,000 live births and stillbirths.
p Provisional.

[^11]
## Table 2.2 <br> Key demographic and health indicators

| Constituent countries of the United Kingdom |  |  |  |  |  |  |  |  |  | Numbers (thousands), rates, percentages, mean age |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Dependency ratio |  | Live births |  |  |  |  | Expectation of life (in years) at birth |  |  |
|  | Population | Live births | Deaths | Children' | Elderly ${ }^{2}$ | TFR ${ }^{3}$ | Standardised mean age of mother at birth (years) ${ }^{4}$ | Unstandardised mean age of mother at birth (years) ${ }^{5}$ | Outside marriage as percentage of total live births | Agestandardised mortality rate ${ }^{6}$ | Males | Females | Infant mortality rate ${ }^{7}$ |
| United Kingdom |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 | 56,216.1 | 675.5 | 680.8 | 42.1 | 29.5 | 1.74 |  | 26.4 | 9.0 | 10,486 |  |  | 14.5 |
| 1981 | 56,357.5 | 730.7 | 658.0 | 37.1 | 29.7 | 1.82 | 27.0 | 26.8 | 12.5 | 9,506 | 70.8 | 76.8 | 11.2 |
| 1986 | 56,683.8 | 754.8 | 660.7 | 33.5 | 29.7 | 1.78 | 27.4 | 27.0 | 21.4 | 8,914 | 71.9 | 77.7 | 9.5 |
| 1991 | 57,438.7 | 792.3 | 646.2 | 33.2 | 30.0 | 1.82 | 27.7 | 27.7 | 29.8 | 8,168 | 73.2 | 78.7 | 7.4 |
| 1996 | $58,164.4{ }^{8}$ | 733.2 | 636.0 | 33.9 | 30.0 | 1.73 | 28.2 | 28.6 | 35.5 | 7,584 | 74.3 | 79.4 | 6.1 |
| 1999 | $58,684.4{ }^{8}$ | 700.0 | 632.1 | 33.4 | 29.9 | 1.69 | 28.4 | 28.9 | 38.8 | 7,318 | 75.0 | 79.9 | 5.8 |
| 2000 | 58,886.18 | 679.0 | 608.4 | 33.1 | 29.9 | 1.64 | 28.5 | 29.1 | 39.5 | 6,974 | 75.4 | 80.2 | 5.6 |
| 2001 | $59,113.5^{8}$ | 669.1 | 602.3 | 32.6 | 29.8 | 1.63 | 28.6 | 29.2 | 40.1 | 6,807 | 75.7 | 80.4 | 5.5 |
| 2002 | $59,321.7^{8}$ | 668.8 | 606.2 | 32.2 | 29.8 | 1.64 | 28.7 | 29.3 | 40.6 | 6,765 | 75.9 | 80.5 | 5.2 |
| 2003 | 59,553.8 | 695.6 | 612.0 | 31.8 | 29.9 | 1.71 | 28.8 | 29.4 | 41.5 | 6,757 | .. | .. | 5.3 |
| England |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 | 46,659.9 | 550.4 | 560.3 | 41.4 | 29.7 | 1.70 | . | 26.4 | 9.2 | 10,271 |  |  | 14.2 |
| 1981 | 46,820.8 | 598.2 | 541.0 | 36.4 | 29.9 | 1.79 |  | 26.8 | 12.9 | 9,298 | 71.1 | 77.0 | 10.9 |
| 1986 | 47,187.6 | 623.6 | 544.5 | 33.1 | 29.8 | 1.76 | 27.4 | 27.0 | 21.4 | 8,725 | 72.2 | 77.9 | 9.5 |
| 1991 | 47,875.0 | 660.8 | 534.0 | 32.9 | 30.0 | 1.81 | 27.7 | 27.7 | 30.1 | 8,017 | 73.4 | 78.9 | 7.3 |
| 1996 | $48,519.1{ }^{8}$ | 614.2 | 524.0 | 33.7 | 30.0 | 1.73 | 28.2 | 28.7 | 35.5 | 7,414 | 74.5 | 79.6 | 6.1 |
| 1999 | 49,032.9 ${ }^{8}$ | 589.5 | 519.6 | 33.3 | 29.9 | 1.69 | 28.4 | 29.0 | 38.5 | 7,138 | 75.3 | 80.1 | 5.7 |
| 2000 | 49,233.3 ${ }^{8}$ | 572.8 | 501.0 | 33.0 | 29.8 | 1.65 | 28.5 | 29.2 | 39.1 | 6,821 | 75.7 | 80.4 | 5.6 |
| 2001 | 49,449.7 ${ }^{8}$ | 563.7 | 496.1 | 32.5 | 29.7 | 1.63 | 28.6 | 29.3 | 39.6 | 6,650 | 76.0 | 80.6 | 5.4 |
| 2002 | 49,646.9 ${ }^{8}$ | 565.7 | 499.1 | 32.1 | 29.7 | 1.65 | 28.7 | 29.4 | 40.1 | 6,603 | 76.2 | 80.7 | 5.2 |
| 2003 | 49,855.7 | 589.9 | 503.4 | 31.8 | 29.8 | 1.73 | 28.9 | 29.4 | 40.9 | 6,602 | .. | .. | 5.3 |
| Wales |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 | 2,799.3 | 33.4 | 36.3 | 42.0 | 30.9 | 1.78 | . | 26.0 | 8.7 | 10,858 |  |  | 13.7 |
| 1981 | 2,813.5 | 35.8 | 35.0 | 37.6 | 31.6 | 1.86 |  | 26.6 | 11.2 | 9,846 | 70.4 | 76.4 | 12.6 |
| 1986 | 2,810.9 | 37.0 | 34.7 | 34.3 | 32.5 | 1.86 | 26.9 | 26.5 | 21.1 | 9,043 | 71.6 | 77.5 | 9.5 |
| 1991 | 2,873.0 | 38.1 | 34.1 | 34.4 | 33.5 | 1.88 | 27.1 | 27.0 | 32.3 | 8,149 | 73.1 | 78.8 | 6.6 |
| 1996 | 2,891.38 | 34.9 | 34.6 | 34.9 | 33.7 | 1.81 | 27.5 | 27.8 | 41.2 | 7,758 | 73.9 | 79.1 | 5.6 |
| 1999 | 2,900.6 ${ }^{8}$ | 32.1 | 35.0 | 34.4 | 33.6 | 1.72 | 27.6 | 28.1 | 46.1 | 7,637 | 74.7 | 79.6 | 6.1 |
| 2000 | 2,906.9 ${ }^{8}$ | 31.3 | 33.3 | 34.1 | 33.5 | 1.68 | 27.7 | 28.2 | 47.2 | 7,180 | 74.9 | 79.8 | 5.3 |
| 2001 | 2,910.2 ${ }^{8}$ | 30.6 | 33.0 | 33.7 | 33.6 | 1.66 | 27.8 | 28.3 | 48.3 | 7,017 | 75.4 | 80.1 | 5.4 |
| 2002 | 2,923.4 ${ }^{8}$ | 30.2 | 33.2 | 33.2 | 33.6 | 1.63 | 28.0 | 28.4 | 49.7 | 6,951 | 75.7 | 80.2 | 4.5 |
| 2003 | 2,938.0 | 31.4 | 33.7 | 32.7 | 33.7 | 1.71 | 28.1 | 28.5 | 50.3 | 6,980 | .. | .. | 4.3 |
| Scotland |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 | 5,233.4 | 64.9 | 65.3 | 44.7 | 28.4 | 1.80 | . | 26.0 | 9.3 | 11,675 |  |  | 14.8 |
| 1981 | 5,180.2 | 69.1 | 63.8 | 38.2 | 28.4 | 1.84 | ... | 26.3 | 12.2 | 10,849 | 69.1 | 75.3 | 11.3 |
| 1986 | 5,111.8 | 65.8 | 63.5 | 33.6 | 28.1 | 1.67 | 27.1 | 26.6 | 20.6 | 10,120 | 70.2 | 76.2 | 8.8 |
| 1991 | 5,083.3 | 67.0 | 61.0 | 32.4 | 28.9 | 1.69 | 27.5 | 27.4 | 29.1 | 9,216 | 71.4 | 77.1 | 7.1 |
| 1996 | 5,092.2 | 59.3 | 60.7 | 32.3 | 29.2 | 1.56 | 28.0 | 28.5 | 36.0 | 8,791 | 72.2 | 77.9 | 6.2 |
| 1999 | 5,072.0 | 55.1 | 60.3 | 31.7 | 29.7 | 1.51 | 28.3 | 28.9 | 41.2 | 8,493 | 72.8 | 78.4 | 5.0 |
| 2000 | 5,062.9 | 53.1 | 57.8 | 31.4 | 29.8 | 1.48 | 28.4 | 29.0 | 42.6 | 8,082 | 73.1 | 78.6 | 5.7 |
| 2001 | 5,064.2 | 52.5 | 57.4 | 30.8 | 30.0 | 1.49 | 28.5 | 29.2 | 43.3 | 7,930 | 73.3 | 78.8 | 5.5 |
| 2002 | 5,054.8 | 51.3 | 58.1 | 30.3 | 30.2 | 1.48 | 28.6 | 29.2 | 44.0 | 7,955 | 73.5 | 78.9 | 5.3 |
| 2003 | 5,057.4 | 52.4 | 58.5 | 29.9 | 30.3 | 1.54 | 28.8 | 29.3 | 45.5 | 7,922 | .. | .. | 5.1 |
| Northern Ireland |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 | 1,523.5 | 26.4 | 17.0 | 56.1 | 25.3 | 2.70 |  | 27.4 | 5.0 | 11,746 |  |  | 18.3 |
| 1981 | 1,543.0 | 27.2 | 16.3 | 50.6 | 25.3 | 2.59 | 28.1 | 27.5 | 7.0 | 10,567 | 69.2 | 75.5 | 13.2 |
| 1986 | 1,573.5 | 28.0 | 16.1 | 46.1 | 25.5 | 2.45 | 28.1 | 27.5 | 12.8 | 10,071 | 70.9 | 77.1 | 10.2 |
| 1991 | 1,607.3 | 26.0 | 15.1 | 44.1 | 26.1 | 2.16 | 28.3 | 28.0 | 20.3 | 8,303 | 72.6 | 78.4 | 7.4 |
| 1996 | 1,661.8 | 24.4 | 15.2 | 41.8 | 25.5 | 1.96 | 28.7 | 28.8 | 26.0 | 7,742 | 73.8 | 79.2 | 5.8 |
| 1999 | 1,679.0 | 23.0 | 15.7 | 40.2 | 25.5 | 1.86 | 28.8 | 29.0 | 30.3 | 7,699 | 74.5 | 79.6 | 6.4 |
| 2000 | 1,682.9 | 21.5 | 14.9 | 39.5 | 25.4 | 1.75 | 29.0 | 29.2 | 31.8 | 7,279 | 74.8 | 79.8 | 5.1 |
| 2001 | 1,689.3 | 22.0 | 14.5 | 38.6 | 25.5 | 1.80 | 29.1 | 29.4 | 32.5 | 6,976 | 75.2 | 80.1 | 6.1 |
| 2002 | 1,696.6 | 21.4 | 14.6 | 37.9 | 25.7 | 1.77 | 29.2 | 29.5 | 33.5 | 6,930 | 75.6 | 80.4 | 4.7 |
| 2003 | 1,702.6 | 21.6 | 14.5 | 37.2 | 25.9 | 1.81 | 29.3 | 29.5 | 34.4 | 6,744 | .. | .. | 5.3 |

Notes: Some of these indicators are also in other tables. They are brought together to make comparison easier.
Figures for England and Wales represent the number of deaths registered in each
year up to 1992, and the number of deaths occurring in each year from 1993 to 2003. Births and death figures for England and also for Wales exclude events for persons usually resident outside England and Wales. These events are, however, included in totals for England and Wales combined, and for the United Kingdom.
From 1981 births to non-resident mothers in Northern Ireland are excluded from the figures for Northern Ireland, and the United Kingdom.
Percentage of children under 16 to working population (males 16-64 and females 16-59)
Percentage of males 65 and over and females 60 and over to working population (males 16-64 and females 16-59).
3 TFR (total fertility rate) is the number of children that would be born to a woman if current patterns of fertility persisted throughout her childbearing life. It is sometimes called the TPFR (total period fertility rate).
4 Standardised to take account of the age structure of the population.
5 Unstandardised and therefore takes no account of the age structure of the population.

6 Per million population. The age-standardised mortality rate makes allowances for changes in the age structure of the population. See Notes to tables.
7 Deaths under one year per 1,000 live births.
8 These revised population estimates were published on 9 September 2004 (for mid-2001 and mid-2002) and 7 October 2004 (for mid-1992 to mid-2000), following the local authority population studies, and replace all earlier versions. All figures shown on this table are now therefore on a consistent basis.

|  | Age of mother at birth |  |  |  |  |  |  | $\begin{aligned} & \text { Mean' } \\ & \text { age } \\ & \text { (years) } \end{aligned}$ | Age of mother at birth ${ }^{3,4}$ |  |  |  |  |  |  | $\begin{aligned} & \text { Mean }^{2} \\ & \text { age } \\ & \text { (years) } \end{aligned}$ | TFR ${ }^{5}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year and quarter | All <br> ages | Under 20 | 20-24 | 25-29 | 30-34 | 35-39 | 40 and over |  | $\begin{gathered} \text { All } \\ \text { ages } \end{gathered}$ | Under 20 | 20-24 | 25-29 | 30-34 | 35-39 | 40 and over |  |  |
|  | Total live births (numbers) |  |  |  |  |  |  | 27.6 | Age-specific fertility rates ${ }^{3.4}$ |  |  |  |  |  |  | 27.4 | 2.77 |
| 1961 | 811.3 | 59.8 | 249.8 | 248.5 | 152.3 | 77.5 | 23.3 |  | 89.2 | 37.3 | 172.6 | 176.9 | 103.1 | 48.1 | 15.0 |  |  |
| 1964(max) ${ }^{5}$ | 876.0 | 76.7 | 276.1 | 270.7 | 153.5 | 75.4 | 23.6 | 27.2 | 92.9 | 42.5 | 181.6 | 187.3 | 107.7 | 49.8 | 13.7 | 27.3 | 2.93 |
| 1966 | 849.8 | 86.7 | 285.8 | 253.7 | 136.4 | 67.0 | 20.1 | 26.8 | 90.5 | 47.7 | 176.0 | 174.0 | 97.3 | 45.3 | 12.5 | 27.1 | 2.75 |
| 1971 | 783.2 | 82.6 | 285.7 | 247.2 | 109.6 | 45.2 | 12.7 | 26.2 | 83.5 | 50.6 | 152.9 | 153.2 | 77.1 | 32.8 | 8.7 | 26.6 | 2.37 |
| 1976 | 584.3 | 57.9 | 182.2 | 220.7 | 90.8 | 26.1 | 6.5 | 26.4 | 60.4 | 32.2 | 109.3 | 118.7 | 57.2 | 18.6 | 4.8 | 26.5 | 1.71 |
| 1977(min) ${ }^{5}$ | 569.3 | 54.5 | 174.5 | 207.9 | 100.8 | 25.5 | 6.0 | 26.5 | 58.1 | 29.4 | 103.7 | 117.5 | 58.6 | 18.2 | 4.4 | 26.6 | 1.66 |
| 1981 | 634.5 | 56.6 | 194.5 | 215.8 | 126.6 | 34.2 | 6.9 | 26.8 | 61.3 | 28.1 | 105.3 | 129.1 | 68.6 | 21.7 | 4.9 | 27.0 | 1.80 |
| 1986 | 661.0 | 57.4 | 192.1 | 229.0 | 129.5 | 45.5 | 7.6 | 27.0 | 60.6 | 30.1 | 92.7 | 123.8 | 78.0 | 24.6 | 4.8 | 27.4 | 1.77 |
| 1991 | 699.2 | 52.4 | 173.4 | 248.7 | 161.3 | 53.6 | 9.8 | 27.7 | 63.6 | 33.0 | 89.3 | 119.4 | 86.7 | 32.1 | 5.3 | 27.7 | 1.82 |
| 1992 | 689.7 | 47.9 | 163.3 | 244.8 | 166.8 | 56.7 | 10.2 | 27.9 | 63.6 | 31.7 | 86.1 | 117.6 | 87.4 | 33.4 | 5.8 | 27.8 | 1.80 |
| 1993 | 673.5 | 45.1 | 152.0 | 236.0 | 171.1 | 58.8 | 10.5 | 28.0 | 62.7 | 30.9 | 82.5 | 114.4 | 87.4 | 34.1 | 6.2 | 27.9 | 1.76 |
| 1994 | 664.7 | 42.0 | 140.2 | 229.1 | 179.6 | 63.1 | 10.7 | 28.4 | 62.0 | 28.9 | 79.0 | 112.2 | 89.4 | 35.8 | 6.4 | 28.1 | 1.75 |
| 1995 | 648.1 | 41.9 | 130.7 | 217.4 | 181.2 | 65.5 | 11.3 | 28.5 | 60.5 | 28.5 | 76.4 | 108.4 | 88.3 | 36.3 | 6.8 | 28.2 | 1.72 |
| 1996 | 649.5 | 44.7 | 125.7 | 211.1 | 186.4 | 69.5 | 12.1 | 28.6 | 60.6 | 29.7 | 77.0 | 106.6 | 89.8 | 37.5 | 7.2 | 28.2 | 1.74 |
| 1997 | 643.1 | 46.4 | 118.6 | 202.8 | 187.5 | 74.9 | 12.9 | 28.8 | 60.0 | 30.2 | 76.0 | 104.3 | 89.8 | 39.4 | 7.6 | 28.3 | 1.73 |
| 1998 | 635.9 | 48.3 | 113.5 | 193.1 | 188.5 | 78.9 | 13.6 | 28.9 | 59.2 | 30.9 | 74.9 | 101.5 | 90.6 | 40.4 | 7.9 | 28.3 | 1.72 |
| 1999 | 621.9 | 48.4 | 110.7 | 181.9 | 185.3 | 81.3 | 14.3 | 29.0 | 57.8 | 30.9 | 73.0 | 98.3 | 89.6 | 40.6 | 8.1 | 28.4 | 1.70 |
| 2000 | 604.4 | 45.8 | 107.7 | 170.7 | 180.1 | 85.0 | 15.1 | 29.1 | 55.9 | 29.3 | 70.0 | 94.3 | 87.9 | 41.4 | 8.3 | 28.5 | 1.65 |
| 2001 | 594.6 | 44.2 | 108.8 | 159.9 | 178.9 | 86.5 | 16.3 | 29.2 | 54.7 | 28.0 | 69.0 | 91.7 | 88.0 | 41.5 | 8.8 | 28.6 | 1.63 |
| 2002 | 596.1 | 43.5 | 110.9 | 153.4 | 180.5 | 90.5 | 17.3 | 29.3 | 54.7 | 27.0 | 69.2 | 91.6 | 89.8 | 43.0 | 9.1 | 28.7 | 1.65 |
| 2003 | 621.5 | 44.2 | 116.6 | 156.9 | 187.2 | 97.4 | 19.1 | 29.4 | 56.8 | 26.8 | 71.2 | 96.4 | 94.8 | 46.4 | 9.8 | 28.8 | 1.73 |
| 2000 March | 148.7 | 11.4 | 26.4 | 42.5 | 44.1 | 20.6 | 3.6 | 29.1 | 55.3 | 29 | 69 | 95 | 87 | 40 | 8 | 28.5 | 1.64 |
| June | 150.7 | 11.1 | 26.0 | 42.8 | 45.7 | 21.4 | 3.7 | 29.2 | 56.0 | 29 | 68 | 95 | 90 | 42 | 8 | 28.6 | 1.66 |
| Sept | 155.0 | 11.8 | 27.8 | 43.6 | 46.2 | 21.7 | 3.9 | 29.1 | 57.0 | 30 | 72 | 96 | 90 | 42 | 9 | 28.5 | 1.69 |
| Dec | 150.1 | 11.5 | 27.5 | 41.8 | 44.1 | 21.4 | 3.9 | 29.1 | 55.2 | 29 | 71 | 92 | 86 | 41 | 9 | 28.5 | 1.64 |
| 2001 March | 145.5 | 11.0 | 26.5 | 39.8 | 43.3 | 21.0 | 4.0 | 29.2 | 54.3 | 28 | 68 | 93 | 86 | 41 | 9 | 28.6 | 1.62 |
| June | 148.8 | 10.8 | 26.4 | 40.3 | 45.5 | 21.7 | 4.0 | 29.3 | 54.9 | 27 | 67 | 93 | 90 | 42 | 9 | 28.7 | 1.64 |
| Sept | 153.0 | 11.4 | 28.1 | 41.0 | 46.4 | 22.0 | 4.1 | 29.2 | 55.8 | 29 | 71 | 93 | 91 | 42 | 9 | 28.6 | 1.67 |
| Dec | 147.4 | 11.1 | 27.8 | 38.9 | 43.7 | 21.8 | 4.2 | 29.2 | 53.8 | 28 | 70 | 88 | 85 | 42 | 9 | 28.6 | 1.61 |
| 2002 March | 143.3 | 10.5 | 26.5 | 37.4 | 43.2 | 21.6 | 4.1 | 29.3 | 53.3 | 26 | 67 | 91 | 87 | 42 | 9 | 28.7 | 1.61 |
| June | 147.2 | 10.4 | 26.7 | 37.9 | 45.5 | 22.4 | 4.3 | 29.4 | 54.1 | 26 | 67 | 91 | 91 | 43 | 9 | 28.8 | 1.63 |
| Sept | 155.0 | 11.4 | 28.9 | 39.9 | 46.9 | 23.4 | 4.5 | 29.3 | 56.4 | 28 | 72 | 95 | 93 | 44 | 9 | 28.7 | 1.70 |
| Dec | 150.6 | 11.2 | 28.8 | 38.2 | 45.0 | 23.0 | 4.5 | 29.3 | 54.8 | 28 | 71 | 91 | 89 | 44 | 9 | 28.7 | 1.65 |
| 2003 March | 147.4 | 10.9 | 27.9 | 37.5 | 44.0 | 22.6 | 4.6 | 29.3 | 54.6 | 27 | 69 | 93 | 90 | 44 | 10 | 28.8 | 1.66 |
| June | 155.1 | 10.7 | 28.5 | 39.3 | 47.4 | 24.5 | 4.7 | 29.5 | 56.9 | 26 | 70 | 97 | 96 | 47 | 10 | 28.9 | 1.73 |
| Sept | 162.8 | 11.5 | 30.5 | 41.0 | 49.3 | 25.6 | 5.0 | 29.4 | 59.0 | 28 | 74 | 100 | 99 | 48 | 10 | 28.9 | 1.79 |
| Dec | 156.0 | 11.2 | 29.7 | 39.1 | 46.5 | 24.6 | 4.8 | 29.4 | 56.6 | 27 | 72 | 95 | 94 | 47 | 10 | 28.8 | 1.72 |
| 2004March ${ }^{\text {P }}$ | 155.2 | 11.0 | 29.3 | 38.7 | 46.5 | 24.7 | 4.9 | 29.4 | 56.9 | 26 | 71 | 95 | 100 | 48 | 10 | 28.9 | 1.75 |
| June ${ }^{\text {P }}$ | 157.4 | 10.7 | 29.3 | 39.3 | 47.7 | 25.3 | 5.0 | 29.5 | 57.7 | 26 | 71 | 97 | 103 | 49 | 10 | 29.0 | 1.77 |
| Sept ${ }^{\text {p }}$ | 165.4 | 11.7 | 31.4 | 41.6 | 49.0 | 26.3 | 5.4 | 29.3 | 59.9 | 28 | 75 | 102 | 102 | 50 | 11 | 28.9 | 1.84 |

Notes: The rates for women of all ages, under 20 , and 40 and over are based upon the populations of women aged 15-44, 15-19, and 40-44 respectively.
I Unstandardised and therefore takes no account of the age structure of the population.
2 Standardised to take account of the age structure of the population. This measure is more appropriate for use when analysing trends or making comparisons between different geographies.
3 Births per 1,000 women in the age-group; all quarterly age-specific fertility rates are adjusted for days in the quarter. They are not adjusted for seasonality
4 Birth rates for 2004 are based on the 2003-based population projections for 2004.
5 TFR (total fertility rate) is the number of children that would be born to a woman if current patterns of fertility persisted throughout her childbearing life. It is sometimes called the TPFR (total period fertility rate). During the post Second World War period the TFR reached a maximum in 1964 and a minimum in 1977.
P Provisional

| Table 3.2 | Live births outside marriage: age of mother and type of registration |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| England and Wales |  |  |  |  |  |  |  |  | Numbers (thousands), mean age and percentages |  |  |  |  |  |  |  |  |  |
|  | Age of mother at birth |  |  |  |  |  |  |  | Age of mother at birth |  |  |  |  |  |  | Registration ${ }^{2}$ |  |  |
| Year and quarter | All ages | Under$20$ | 20-24 | 25-29 | 30-34 | 35-39 | 40 and over | $\begin{gathered} \text { Mean' } \\ \text { age } \\ \text { (years) } \end{gathered}$ | $\begin{gathered} \text { All } \\ \text { ages } \end{gathered}$ | Under 20 | 20-24 | 25-29 | 30-34 | 35-39 | 40 and over | Joint |  | Sole |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Same ${ }^{3}$ address | Different ${ }^{3}$ address |  |
|  | Live births outside marriage (numbers) |  |  |  |  |  |  |  | Percentage of total live births in age-group |  |  |  |  |  |  | As a percentage of all births outside marriage |  |  |
| 1971 | 65.7 | 21.6 | 22.0 | 11.5 | 6.2 | 3.2 | 1.1 | 23.7 | 8.4 | 26.1 | 7.7 | 4.7 | 5.7 | 7.0 | 9.0 | 45 | 5.5 | 54.5 |
| 1976 | 53.8 | 19.8 | 16.6 | 9.7 | 4.7 | 2.3 | 0.7 | 23.3 | 9.2 | 34.2 | 9.1 | 4.4 | 5.2 | 8.6 | 10.1 | 51 | 1.0 | 49.0 |
| 1981 | 81.0 | 26.4 | 28.8 | 14.3 | 7.9 | 1.3 | 0.9 | 23.4 | 12.8 | 46.7 | 14.8 | 6.6 | 6.2 | 3.9 | 12.5 | 58 | 8. 2 | 41.8 |
| 1986 | 141.3 | 39.6 | 54.1 | 27.7 | 13.1 | 5.7 | 1.1 | 23.8 | 21.4 | 69.0 | 28.2 | 12.1 | 10.1 | 12.6 | 14.7 | 46.6 | 19.6 | 33.8 |
| 1991 | 211.3 | 43.4 | 77.8 | 52.4 | 25.7 | 9.8 | 2.1 | 24.8 | 30.2 | 82.9 | 44.9 | 21.1 | 16.0 | 18.3 | 21.3 | 54.6 | 19.8 | 25.6 |
| 1992 | 215.2 | 40.1 | 77.1 | 55.9 | 28.9 | 10.9 | 2.3 | 25.2 | 31.2 | 83.7 | 47.2 | 22.8 | 17.3 | 19.3 | 22.9 | 55.4 | 20.7 | 23.9 |
| 1993 | 216.5 | 38.2 | 75.0 | 57.5 | 31.4 | 11.9 | 2.5 | 25.5 | 32.2 | 84.8 | 49.4 | 24.4 | 18.4 | 20.2 | 23.5 | 54.8 | 22.0 | 23.2 |
| 1994 | 215.5 | 35.9 | 71.0 | 58.5 | 34.0 | 13.4 | 2.7 | 25.8 | 32.4 | 85.5 | 50.6 | 25.5 | 18.9 | 21.2 | 25.2 | 57.5 | 19.8 | 22.7 |
| 1995 | 219.9 | 36.3 | 69.7 | 59.6 | 37.0 | 14.4 | 3.0 | 26.0 | 33.9 | 86.6 | 53.3 | 27.4 | 20.4 | 22.0 | 26.2 | 58.1 | 20.1 | 21.8 |
| 1996 | 232.7 | 39.3 | 71.1 | 62.3 | 40.5 | 16.2 | 3.2 | 26.1 | 35.8 | 88.0 | 56.5 | 29.5 | 21.7 | 23.4 | 26.7 | 58.1 | 19.9 | 21.9 |
| 1997 | 238.2 | 41.1 | 69.5 | 63.4 | 42.2 | 18.2 | 3.7 | 26.2 | 37.0 | 88.7 | 58.6 | 31.3 | 22.5 | 24.3 | 28.6 | 59.5 | 19.3 | 21.2 |
| 1998 | 240.6 | 43.0 | 67.8 | 62.4 | 43.9 | 19.6 | 3.9 | 26.3 | 37.8 | 89.1 | 59.7 | 32.3 | 23.3 | 24.8 | 29.0 | 60.9 | 18.3 | 20.8 |
| 1999 | 241.9 | 43.0 | 67.5 | 61.2 | 45.0 | 20.8 | 4.3 | 26.4 | 38.9 | 89.0 | 61.0 | 33.6 | 24.3 | 25.6 | 30.2 | 61.8 | 18.2 | 19.9 |
| 2000 | 238.6 | 41.1 | 67.5 | 59.1 | 43.9 | 22.3 | 4.7 | 26.5 | 39.5 | 89.7 | 62.6 | 34.6 | 24.4 | 26.2 | 31.0 | 62.7 | 18.2 | 19.2 |
| 2001 | 238.1 | 39.5 | 68.1 | 56.8 | 45.2 | 23.3 | 5.1 | 26.7 | 40.0 | 89.5 | 62.6 | 35.5 | 25.3 | 26.9 | 31.6 | 63.2 | 18.4 | 18.4 |
| 2002 | 242.0 | 38.9 | 70.2 | 55.8 | 46.4 | 25.1 | 5.6 | 26.8 | 40.6 | 89.5 | 63.3 | 36.4 | 25.7 | 27.7 | 32.2 | 63.7 | 18.5 | 17.8 |
| 2003 | 257.2 | 39.9 | 75.7 | 58.2 | 49.2 | 27.8 | 6.4 | 26.9 | 41.4 | 90.2 | 64.9 | 37.1 | 26.3 | 28.5 | 33.3 | 63.5 | 19.0 | 17.4 |
| 1997 March | 58.6 | 10.2 | 17.4 | 15.7 | 10.2 | 4.2 | 0.9 | 26.1 | 37.0 | 88.7 | 58.4 | 31.1 | 22.4 | 23.9 | 28.7 | 58.4 | 19.5 | 22.0 |
| June | 58.9 | 10.1 | 17.1 | 15.5 | 10.6 | 4.7 | 0.9 | 26.3 | 36.1 | 89.1 | 58.0 | 30.1 | 22.0 | 24.3 | 28.4 | 59.6 | 19.4 | 21.0 |
| Sept | 61.4 | 10.5 | 17.9 | 16.5 | 10.9 | 4.7 | 0.9 | 26.2 | 37.3 | 88.8 | 58.9 | 31.8 | 22.7 | 24.4 | 27.8 | 59.9 | 18.9 | 21.2 |
| Dec | 59.3 | 10.4 | 17.2 | 15.7 | 10.4 | 4.6 | 0.9 | 26.2 | 37.8 | 88.3 | 59.2 | 32.2 | 23.0 | 24.8 | 29.3 | 60.0 | 19.2 | 20.7 |
| 1998 March | 58.5 | 10.4 | 16.5 | 15.3 | 10.7 | 4.6 | 1.0 | 26.3 | 37.5 | 89.0 | 59.5 | 31.9 | 23.1 | 24.4 | 29.6 | 60.5 | 18.4 | 21.1 |
| June | 58.4 | 10.3 | 16.2 | 15.4 | 10.8 | 4.7 | 0.9 | 26.3 | 36.8 | 89.6 | 59.1 | 31.8 | 22.5 | 24.0 | 28.3 | 61.0 | 18.2 | 20.8 |
| Sept | 63.2 | 11.3 | 17.9 | 16.3 | 11.5 | 5.2 | 1.0 | 26.3 | 38.1 | 89.2 | 60.0 | 32.3 | 23.6 | 25.2 | 28.5 | 60.9 | 18.4 | 20.7 |
| Dec | 60.5 | 11.0 | 17.2 | 15.4 | 10.9 | 5.0 | 1.0 | 26.3 | 38.9 | 88.5 | 60.4 | 33.3 | 24.0 | 25.7 | 29.7 | 61.2 | 18.4 | 20.4 |
| 1999 March | 59.0 | 10.8 | 16.4 | 15.0 | 10.9 | 5.0 | 1.0 | 26.3 | 38.8 | 89.7 | 60.5 | 33.4 | 24.1 | 25.4 | 29.5 | 61.4 | 18.2 | 20.4 |
| June | 59.8 | 10.5 | 16.5 | 15.3 | 11.2 | 5.2 | 1.1 | 26.5 | 38.0 | 89.2 | 60.6 | 33.0 | 23.4 | 25.3 | 31.3 | 61.6 | 18.2 | 20.1 |
| Sept | 62.9 | 11.1 | 17.7 | 16.0 | 11.7 | 5.4 | 1.1 | 26.4 | 39.3 | 88.7 | 61.7 | 34.1 | 24.7 | 25.6 | 29.3 | 62.2 | 18.1 | 19.6 |
| Dec | 60.2 | 10.6 | 17.0 | 14.9 | 11.1 | 5.3 | 1.1 | 26.4 | 39.5 | 88.4 | 61.2 | 34.0 | 24.8 | 26.2 | 30.8 | 62.0 | 18.4 | 19.5 |
| 2000 March | 59.0 | 10.2 | 16.5 | 14.8 | 10.9 | 5.4 | 1.2 | 26.5 | 39.7 | 89.7 | 62.6 | 34.8 | 24.7 | 26.1 | 31.7 | 62.5 | 18.1 | 19.5 |
| June | 57.9 | 10.0 | 16.1 | 14.4 | 10.9 | 5.5 | 1.1 | 26.6 | 38.5 | 89.7 | 61.9 | 33.5 | 23.8 | 25.7 | 30.6 | 62.9 | 17.8 | 19.2 |
| Sept | 61.7 | 10.6 | 17.6 | 15.3 | 11.3 | 5.7 | 1.2 | 26.5 | 39.8 | 89.7 | 63.3 | 35.0 | 24.5 | 26.5 | 30.4 | 62.7 | 18.1 | 19.2 |
| Dec | 60.1 | 10.3 | 17.3 | 14.7 | 10.9 | 5.7 | 1.2 | 26.5 | 40.0 | 89.5 | 62.8 | 35.2 | 24.7 | 26.6 | 31.4 | 62.6 | 18.6 | 18.8 |
| 2001 March | $58.0$ | $9.9$ | $16.7$ | 13.9 | $10.8$ | $5.7$ |  | $26.5$ | $39.8$ |  | $63.0$ |  | $24.8$ | $26.9$ | 28.0 | $62.5$ | $18.7$ | 18.8 |
| June | 58.1 | 9.6 | 16.3 | 14.1 | 11.2 | 5.7 | 1.3 | 26.7 | 39.1 | 89.0 | $61.5$ | 34.9 | 24.5 | 26.4 | $32.2$ | 63.3 | 18.6 | 18.6 |
| Sept | 61.8 | 10.2 | 17.6 | 14.7 | 12.0 | 6.0 | 1.3 | 26.7 | 40.4 | 89.5 | 62.6 | 35.9 | 25.8 | 27.2 | 32.2 | 63.5 | 18.4 | 18.2 |
| Dec | 60.2 | 9.9 | 17.5 | 14.1 | 11.3 | 5.9 | 1.4 | 26.7 | 40.9 | 89.2 | 63.1 | 36.4 | 25.9 | 27.2 | 33.9 | 63.4 | 18.6 | 18.0 |
| 2002 March | 58.0 | 9.4 | 16.7 | 13.6 | 10.9 | 6.0 | 1.3 | 26.8 | 40.5 | 89.4 | 63.0 | 36.4 | 25.4 | 27.7 | 31.5 | 63.2 | 18.5 | 18.3 |
| June | 58.3 | 9.3 | 16.6 | 13.5 | 11.4 | 6.1 | 1.4 | 26.8 | 39.6 | 89.4 | 62.2 | 35.6 | 25.0 | 27.2 | 31.7 | 64.2 | 18.2 | 17.7 |
| Sept | 63.4 | 10.2 | 18.4 | 14.6 | 12.3 | 6.5 | 1.5 | 26.8 | 40.9 | 89.3 | 63.8 | 36.6 | 26.1 | 27.9 | 32.7 | 63.9 | 18.5 | 17.5 |
| Dec | 62.3 | 10.0 | 18.4 | 14.1 | 11.9 | 6.5 | 1.5 | 26.8 | 41.4 | 89.7 | 64.1 | 36.9 | 26.4 | 28.0 | 32.8 | 63.3 | 18.9 | 17.8 |
| 2003 March | 61.0 | 9.8 | 18.0 | 13.9 | 11.6 | 6.3 | 1.5 | 26.8 | 41.4 | 90.1 | 64.5 | 37.0 | 26.9 | 29.1 | 33.3 | 63.0 | 18.9 | 18.1 |
| June | 62.8 | 9.6 | 18.3 | 14.2 | 12.2 | 6.9 | 1.6 | 27.0 | 40.5 | 90.0 | 64.0 | 36.2 | 25.7 | 28.3 | 33.7 | 64.0 | 18.5 | 17.4 |
| Sept | 67.6 | 10.3 | 20.0 | 15.3 | 13.0 | 7.3 | 1.7 | 26.9 | 41.5 | 90.2 | 65.6 | 38.3 | 26.4 | 28.6 | 33.3 | 63.7 | 19.3 | 18.0 |
| Dec | 65.8 | 10.2 | 19.5 | 14.9 | 12.5 | 7.3 | 1.6 | 26.9 | 42.2 | 90.4 | 65.6 | 38.0 | 27.7 | 29.5 | 32.9 | 63.3 | 19.4 | 17.4 |
| 2004 March $^{\text {P }}$ | 65.2 | 10.1 | 19.3 | 14.8 | 12.5 | 7.0 | 1.7 | 26.9 | 42.0 | 91.3 | 65.8 | 38.1 | 26.9 | 28.3 | 34.1 | 63.1 | 19.4 | 17.4 |
| June ${ }^{\text {P }}$ | 65.2 | 9.8 | 19.1 | 14.8 | 12.6 | 7.3 | 1.7 | 27.0 | 41.4 | 91.3 | 65.0 | 37.7 | 26.3 | 28.8 | 34.1 | 63.9 | 19.5 | 16.7 |
| Sept ${ }^{\text {p }}$ | 70.1 | 10.7 | 20.7 | 16.1 | 13.0 | 7.9 | 1.8 | 26.9 | 42.4 | 91.3 | 66.0 | 38.7 | 26.5 | 29.9 | 33.1 | 63.7 | 19.7 | 16.6 |

[^12]Table 3.3
Live births: within marriage, within marriage to remarried women, age of mother and birth order ${ }^{1}$


I Birth order is based on all live births within marriage to the mother by her present or any former husband.
2 The mean ages shown in this table are unstandardised and therefore take no account of changes in the structure of the population by age, marital status or parity.
3 Mean age at birth refers to fourth births only.
p Provisional.

## Table 4.1 <br> Conceptions: age of women at conception

England and Wales (residents)

|  | Age of woman at conception |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year and quarter | All ages | Under 16 | Under 18 | Under 20 | 20-24 | 25-29 | 30-34 | 35-39 | 40 and over |


| 1991 |  | 853.7 | 7.5 | 40.1 | 101.6 | 233.3 | 281.5 | 167.5 | 57.6 | 12.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1996 |  | 816.9 | 8.9 | 43.5 | 94.9 | 179.8 | 252.6 | 200.0 | 75.5 | 14.1 |
| 1998 |  | 797.0 | 8.5 | 44.1 | 101.6 | 163.3 | 232.4 | 201.4 | 82.9 | 15.4 |
| 1999 |  | 774.0 | 7.9 | 42.0 | 98.8 | 157.6 | 218.5 | 197.1 | 86.0 | 16.0 |
| 2000 |  | 767.0 | 8.1 | 41.3 | 97.7 | 159.0 | 209.3 | 195.3 | 88.7 | 17.0 |
| 2001 |  | 763.7 | 7.9 | 41.0 | 96.0 | 161.6 | 199.3 | 196.7 | 92.2 | 17.8 |
| $2002^{\text {P }}$ |  | 787.0 | 7.9 | 42.0 | 97.1 | 167.8 | 199.4 | 204.3 | 98.9 | 19.6 |
| $2003{ }^{\text {P }}$ |  | - | - | 42.2 | - | - | - | - | - | - |
| 2000 | March | 193.1 | 2.0 | 10.5 | 25.1 | 40.4 | 53.2 | 48.3 | 21.9 | 4.2 |
|  | June | 188.7 | 2.1 | 10.4 | 24.3 | 39.3 | 51.5 | 47.5 | 21.8 | 4.3 |
|  | Sept | 190.0 | 2.1 | 10.0 | 23.5 | 38.4 | 52.0 | 49.7 | 22.2 | 4.2 |
|  | Dec | 195.2 | 2.0 | 10.4 | 24.7 | 40.9 | 52.7 | 49.8 | 22.7 | 4.3 |
| 2001 | March | 189.2 | 1.9 | 10.2 | 24.3 | 40.4 | 50.0 | 47.8 | 22.3 | 4.4 |
|  | June | 187.4 | 2.1 | 10.2 | 24.0 | 39.8 | 48.8 | 47.7 | 22.8 | 4.4 |
|  | Sept | 189.3 | 1.9 | 10.0 | 23.1 | 39.2 | 49.5 | 49.9 | 23.2 | 4.4 |
|  | Dec | 197.9 | 2.0 | 10.6 | 24.6 | 42.3 | 51.1 | 51.3 | 23.9 | 4.7 |
| 2002 | March ${ }^{\text {P }}$ | 191.6 | 1.9 | 10.3 | 24.1 | 41.3 | 48.8 | 49.0 | 23.7 | 4.6 |
|  | June ${ }^{\text {P }}$ | 190.4 | 2.0 | 10.5 | 24.2 | 40.7 | 48.2 | 48.8 | 23.8 | 4.8 |
|  | Sept ${ }^{\text {P }}$ | 197.4 | 2.0 | 10.2 | 23.4 | 41.4 | 50.2 | 52.4 | 25.2 | 4.9 |
|  | Dec ${ }^{\text {P }}$ | 207.6 | 2.0 | 11.0 | 25.4 | 44.4 | 52.3 | 54.2 | 26.2 | 5.2 |
|  |  | rates (co | per | women | oup) ${ }^{1}$ |  |  |  |  |  |
| 1991 |  | 77.7 | 8.9 | 44.6 | 64.1 | 120.2 | 135.1 | 90.1 | 34.4 | 6.6 |
| 1996 |  | 76.2 | 9.5 | 46.3 | 63.2 | 110.1 | 127.6 | 96.3 | 40.7 | 8.4 |
| 1998 |  | 74.2 | 9.0 | 47.1 | 65.1 | 107.7 | 122.2 | 96.8 | 42.4 | 8.9 |
| 1999 |  | 71.9 | 8.3 | 45.1 | 63.1 | 103.9 | 118.0 | 95.3 | 42.9 | 9.1 |
| 2000 |  | 70.9 | 8.3 | 43.9 | 62.5 | 103.2 | 115.7 | 95.3 | 43.2 | 9.4 |
| 2001 |  | 70.3 | 8.0 | 42.7 | 60.8 | 102.5 | 114.2 | 96.7 | 44.3 | 9.6 |
| $2002^{\text {P }}$ |  | 72.2 | 7.9 | 42.8 | 60.3 | 104.6 | 119.1 | 101.6 | 47.0 | 10.3 |
| $2003^{\text {P }}$ |  | - | - | 42.3 | - | - | - | - |  |  |
| 2000 | March | 71.9 | 8.5 | 45.2 | 64.6 | 106.0 | 117.1 | 94.5 | 43.4 | 9.4 |
|  | June | 70.2 | 8.5 | 44.5 | 62.5 | 102.9 | 114.0 | 93.1 | 42.9 | 9.6 |
|  | Sept | 69.8 | 8.4 | 42.0 | 59.9 | 98.8 | 114.9 | 96.5 | 42.9 | 9.3 |
|  | Dec | 71.6 | 8.0 | 43.6 | 62.6 | 104.8 | 117.4 | 97.0 | 43.8 | 9.4 |
| 2001 | March | 70.7 | 7.8 | 43.3 | 62.7 | 104.8 | 114.5 | 95.0 | 43.7 | 9.7 |
|  | June | 69.2 | 8.4 | 42.8 | 61.0 | 101.4 | 111.6 | 94.0 | 44.0 | 9.5 |
|  | Sept | 69.1 | 7.7 | 41.1 | 57.8 | 98.4 | 113.1 | 97.6 | 44.2 | 9.3 |
|  | Dec | 72.1 | 8.1 | 43.5 | 61.4 | 105.6 | 118.0 | 100.5 | 45.4 | 10.0 |
| 2002 | March ${ }^{\text {P }}$ | 71.3 | 7.7 | 42.9 | 61.3 | 105.1 | 116.4 | 98.4 | 45.8 | 9.9 |
|  | June ${ }^{\text {P }}$ | 70.1 | 8.1 | 42.9 | 60.4 | 101.9 | 114.8 | 97.1 | 45.5 | 10.2 |
|  | Sept ${ }^{\text {P }}$ | 71.8 | 7.7 | 41.2 | 57.5 | 102.1 | 119.4 | 103.5 | 47.6 | 10.2 |
|  | Dec ${ }^{\text {P }}$ | 75.4 | 8.0 | 44.1 | 62.1 | 108.9 | 125.1 | 107.6 | 49.4 | 10.7 |
|  |  | ercenta | nated |  |  |  |  |  |  |  |
| 1991 |  | 19.4 | 51.1 | 39.9 | 34.5 | 22.2 | 13.4 | 13.7 | 22.0 | 41.6 |
| 1996 |  | 20.8 | 49.2 | 40.0 | 36.2 | 25.7 | 15.6 | 14.1 | 21.2 | 37.6 |
| 1998 |  | 22.3 | 52.4 | 42.0 | 37.8 | 27.8 | 17.1 | 14.9 | 21.5 | 37.9 |
| 1999 |  | 22.6 | 52.6 | 43.0 | 38.6 | 28.5 | 17.5 | 14.7 | 21.2 | 37.0 |
| 2000 |  | 22.7 | 54.0 | 44.2 | 39.3 | 29.2 | 17.7 | 14.5 | 20.5 | 35.4 |
| 2001 |  | 23.2 | 55.8 | 45.7 | 40.4 | 29.7 | 18.4 | 14.6 | 20.4 | 34.6 |
| $2002^{\text {P }}$ |  | 22.5 | 55.6 | 45.3 | 39.9 | 28.8 | 17.9 | 13.9 | 19.5 | 34.6 |
| $2003^{\text {P }}$ |  | - | - | 45.6 | - | - | - | - | - | - |
| 2000 | March | 22.9 | 53.8 | 44.3 | 39.6 | 29.6 | 17.7 | 14.5 | 20.4 | 35.3 |
|  | June | 23.2 | 55.1 | 44.4 | 39.2 | 29.7 | 18.1 | 15.1 | 20.9 | 35.1 |
|  | Sept | 22.0 | 53.2 | 43.8 | 38.7 | 28.2 | 17.4 | 14.0 | 19.8 | 35.4 |
|  | Dec | 22.8 | 54.0 | 44.1 | 39.8 | 29.2 | 17.5 | 14.4 | 20.8 | 35.9 |
| 2001 | March | 23.4 | 54.4 | 44.9 | 40.2 | 29.8 | 18.6 | 14.8 | 20.7 | 34.9 |
|  | June | 23.8 | 58.8 | 47.0 | 41.1 | 30.3 | 18.6 | 15.3 | 21.0 | 36.0 |
|  | Sept | 22.5 | 55.0 | 45.7 | 40.1 | 29.2 | 18.1 | 13.8 | 19.9 | 33.5 |
|  | Dec | 22.9 | 54.9 | 45.2 | 40.0 | 29.5 | 18.1 | 14.4 | 20.2 | 34.1 |
| 2002 | March ${ }^{\text {P }}$ | 22.9 | 54.3 | 44.9 | 40.2 | 29.4 | 18.1 | 14.1 | 19.8 | 35.1 |
|  | June ${ }^{\text {P }}$ | 22.9 | 55.5 | 45.0 | 39.4 | 28.9 | 18.4 | 14.5 | 20.1 | 34.8 |
|  | Sept ${ }^{\text {p }}$ | 21.6 | 56.1 | 45.0 | 39.4 | 27.8 | 17.3 | 13.2 | 18.7 | 34.2 |
|  | Dec ${ }^{\text {P }}$ | 22.6 | 56.4 | 46.3 | 40.7 | 29.0 | 17.8 | 13.9 | 19.4 | 34.5 |

[^13]For a quarterly analysis of conceptions under 18 for local authority areas see the National Statistics website, www.statistics.gov.uk.
I Rates for 1992 to 2000 are based on the revised mid-year population estimates released on 7 October 2004. Rates for 2001 and 2002 are based on the revised mid-year estimates released on 9 September 2004.
${ }^{\mathrm{p}}$ Provisional

| Table 5.1 | Expectation of life at birth and selected age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Constituent countries of the United Kingdom Years |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Males |  |  |  |  |  |  |  | Year | Females |  |  |  |  |  |  |  |
| Year | Atbirth | At age |  |  |  |  |  |  |  | At birth | At age |  |  |  |  |  |  |
|  |  | 5 | 20 | 30 | 50 | 60 | 70 | 80 |  |  | 5 | 20 | 30 | 50 | 60 | 70 | 80 |
| United Kingdom |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | 70.8 | 66.9 | 52.3 | 42.7 | 24.1 | 16.3 | 10.1 | 5.8 | 1981 | 76.8 | 72.7 | 57.9 | 48.2 | 29.2 | 20.8 | 13.3 | 7.5 |
| 1986 | 71.9 | 67.8 | 53.2 | 43.6 | 24.9 | 16.8 | 10.5 | 6.0 | 1986 | 77.7 | 73.4 | 58.6 | 48.8 | 29.8 | 21.2 | 13.8 | 7.8 |
| 1991 | 73.2 | 68.9 | 54.2 | 44.7 | 26.0 | 17.7 | 11.1 | 6.4 | 1991 | 78.7 | 74.3 | 59.5 | 49.7 | 30.6 | 21.9 | 14.3 | 8.2 |
| 1996 | 74.3 | 69.8 | 55.1 | 45.6 | 26.9 | 18.5 | 11.6 | 6.6 | 1996 | 79.4 | 74.9 | 60.1 | 50.3 | 31.2 | 22.3 | 14.5 | 8.3 |
| 1997 | 74.5 | 70.1 | 55.4 | 45.9 | 27.2 | 18.8 | 11.7 | 6.7 | 1997 | 79.6 | 75.1 | 60.2 | 50.4 | 31.3 | 22.5 | 14.6 | 8.4 |
| 1998 | 74.8 | 70.3 | 55.6 | 46.1 | 27.4 | 18.9 | 11.9 | 6.7 | 1998 | 79.7 | 75.2 | 60.4 | 50.5 | 31.4 | 22.6 | 14.7 | 8.4 |
| 1999 | 75.0 | 70.6 | 55.9 | 46.3 | 27.6 | 19.2 | 12.0 | 6.8 | 1999 | 79.9 | 75.4 | 60.5 | 50.7 | 31.6 | 22.8 | 14.8 | 8.5 |
| 2000 | 75.4 | 70.9 | 56.2 | 46.6 | 28.0 | 19.5 | 12.3 | 7.0 | 2000 | 80.2 | 75.6 | 60.8 | 51.0 | 31.9 | 23.0 | 15.0 | 8.6 |
| 2001 | 75.7 | 71.2 | 56.5 | 46.9 | 28.3 | 19.8 | 12.5 | 7.1 | 2001 | 80.4 | 75.9 | 61.0 | 51.2 | 32.1 | 23.2 | 15.2 | 8.7 |
| 2002 | 75.9 | 71.5 | 56.7 | 47.2 | 28.5 | 20.0 | 12.6 | 7.2 | 2002 | 80.5 | 76.0 | 61.1 | 51.3 | 32.2 | 23.3 | 15.2 | 8.7 |
| England and Wales |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | 71.0 | 67.1 | 52.5 | 42.9 | 24.3 | 16.4 | 10.1 | 5.8 | 1981 | 77.0 | 72.9 | 58.1 | 48.3 | 29.4 | 20.9 | 13.4 | 7.5 |
| 1986 | 72.1 | 68.0 | 53.4 | 43.8 | 25.0 | 16.9 | 10.5 | 6.1 | 1986 | 77.9 | 73.6 | 58.8 | 49.0 | 30.0 | 21.4 | 13.9 | 7.9 |
| 1991 | 73.4 | 69.1 | 54.4 | 44.8 | 26.1 | 17.8 | 11.2 | 6.4 | 1991 | 78.9 | 74.5 | 59.7 | 49.9 | 30.8 | 22.0 | 14.4 | 8.3 |
| 1996 | 74.5 | 70.1 | 55.4 | 45.8 | 27.1 | 18.7 | 11.6 | 6.6 | 1996 | 79.6 | 75.1 | 60.2 | 50.4 | 31.3 | 22.5 | 14.6 | 8.4 |
| 1997 | 74.8 | 70.3 | 55.6 | 46.1 | 27.4 | 18.9 | 11.8 | 6.7 | 1997 | 79.7 | 75.2 | 60.4 | 50.6 | 31.5 | 22.6 | 14.7 | 8.4 |
| 1998 | 75.0 | 70.6 | 55.8 | 46.3 | 27.6 | 19.1 | 11.9 | 6.8 | 1998 | 79.9 | 75.4 | 60.5 | 50.7 | 31.6 | 22.7 | 14.8 | 8.4 |
| 1999 | 75.3 | 70.8 | 56.1 | 46.5 | 27.8 | 19.3 | 12.1 | 6.9 | 1999 | 80.1 | 75.6 | 60.7 | 50.9 | 31.8 | 22.9 | 14.9 | 8.5 |
| 2000 | 75.6 | 71.2 | 56.4 | 46.9 | 28.1 | 19.6 | 12.3 | 7.0 | 2000 | 80.3 | 75.8 | 61.0 | 51.1 | 32.0 | 23.1 | 15.1 | 8.6 |
| 2001 | 76.0 | 71.5 | 56.7 | 47.2 | 28.5 | 19.9 | 12.6 | 7.1 | 2001 | 80.6 | 76.0 | 61.2 | 51.4 | 32.2 | 23.3 | 15.2 | 8.7 |
| 2002 | 76.2 | 71.7 | 57.0 | 47.4 | 28.7 | 20.1 | 12.7 | 7.2 | 2002 | 80.7 | 76.1 | 61.3 | 51.5 | 32.3 | 23.4 | 15.3 | 8.7 |
| England |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | 71.1 | 67.1 | 52.5 | 42.9 | 24.3 | 16.4 | 10.1 | 5.8 | 1981 | 77.0 | 72.9 | 58.2 | 48.4 | 29.4 | 20.9 | 13.4 | 7.5 |
| 1986 | 72.2 | 68.1 | 53.4 | 43.8 | 25.1 | 17.0 | 10.6 | 6.1 | 1986 | 77.9 | 73.6 | 58.8 | 49.0 | 30.0 | 21.4 | 13.9 | 7.9 |
| 1991 | 73.4 | 69.1 | 54.4 | 44.9 | 26.2 | 17.8 | 11.2 | 6.4 | 1991 | 78.9 | 74.5 | 59.7 | 49.9 | 30.8 | 22.0 | 14.4 | 8.3 |
| 1996 | 74.5 | 70.1 | 55.4 | 45.9 | 27.1 | 18.7 | 11.7 | 6.6 | 1996 | 79.6 | 75.1 | 60.3 | 50.5 | 31.3 | 22.5 | 14.6 | 8.4 |
| 1997 | 74.8 | 70.4 | 55.6 | 46.1 | 27.4 | 18.9 | 11.8 | 6.7 | 1997 | 79.8 | 75.3 | 60.4 | 50.6 | 31.5 | 22.6 | 14.7 | 8.4 |
| 1998 | 75.0 | 70.6 | 55.9 | 46.3 | 27.6 | 19.1 | 12.0 | 6.8 | 1998 | 79.9 | 75.4 | 60.6 | 50.7 | 31.6 | 22.7 | 14.8 | 8.5 |
| 1999 | 75.3 | 70.9 | 56.1 | 46.6 | 27.9 | 19.4 | 12.1 | 6.9 | 1999 | 80.1 | 75.6 | 60.8 | 50.9 | 31.8 | 22.9 | 14.9 | 8.5 |
| 2000 | 75.7 | 71.2 | 56.5 | 46.9 | 28.2 | 19.6 | 12.4 | 7.0 | 2000 | 80.4 | 75.8 | 61.0 | 51.2 | 32.0 | 23.1 | 15.1 | 8.6 |
| 2001 | 76.0 | 71.5 | 56.8 | 47.2 | 28.5 | 19.9 | 12.6 | 7.1 | 2001 | 80.6 | 76.1 | 61.2 | 51.4 | 32.3 | 23.4 | 15.3 | 8.7 |
| 2002 | 76.2 | 71.8 | 57.0 | 47.4 | 28.7 | 20.1 | 12.8 | 7.2 | 2002 | 80.7 | 76.2 | 61.3 | 51.5 | 32.4 | 23.4 | 15.3 | 8.7 |
| Wales |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | 70.4 | 66.5 | 51.9 | 42.2 | 23.6 | 15.8 | 9.7 | 5.6 | 1981 | 76.4 | 72.3 | 57.5 | 47.7 | 28.9 | 20.5 | 13.1 | 7.4 |
| 1986 | 71.6 | 67.5 | 52.8 | 43.2 | 24.6 | 16.6 | 10.3 | 6.0 | 1986 | 77.5 | 73.3 | 58.5 | 48.7 | 29.7 | 21.1 | 13.7 | 7.8 |
| 1991 | 73.1 | 68.8 | 54.1 | 44.6 | 25.8 | 17.6 | 11.0 | 6.4 | 1991 | 78.8 | 74.3 | 59.5 | 49.7 | 30.6 | 21.8 | 14.3 | 8.3 |
| 1996 | 73.9 | 69.4 | 54.7 | 45.3 | 26.6 | 18.2 | 11.3 | 6.4 | 1996 | 79.1 | 74.6 | 59.7 | 49.9 | 30.9 | 22.1 | 14.4 | 8.3 |
| 1997 | 74.3 | 69.8 | 55.1 | 45.6 | 26.9 | 18.5 | 11.6 | 6.6 | 1997 | 79.3 | 74.8 | 60.0 | 50.2 | 31.1 | 22.3 | 14.5 | 8.4 |
| 1998 | 74.4 | 70.0 | 55.2 | 45.8 | 27.1 | 18.6 | 11.6 | 6.6 | 1998 | 79.4 | 74.9 | 60.0 | 50.2 | 31.1 | 22.3 | 14.5 | 8.3 |
| 1999 | 74.7 | 70.2 | 55.5 | 46.1 | 27.4 | 18.9 | 11.9 | 6.8 | 1999 | 79.6 | 75.1 | 60.2 | 50.4 | 31.3 | 22.5 | 14.6 | 8.4 |
| 2000 | 74.9 | 70.5 | 55.8 | 46.3 | 27.6 | 19.1 | 12.0 | 6.8 | 2000 | 79.8 | 75.3 | 60.4 | 50.6 | 31.5 | 22.6 | 14.7 | 8.4 |
| 2001 | 75.4 | 70.9 | 56.2 | 46.7 | 28.0 | 19.5 | 12.3 | 7.1 | 2001 | 80.1 | 75.5 | 60.6 | 50.8 | 31.8 | 22.9 | 14.9 | 8.5 |
| 2002 | 75.7 | 71.1 | 56.3 | 46.9 | 28.2 | 19.7 | 12.4 | 7.1 | 2002 | 80.2 | 75.6 | 60.7 | 50.9 | 31.8 | 22.9 | 15.0 | 8.6 |
| Scotland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | 69.1 | 65.2 | 50.6 | 41.1 | 22.9 | 15.4 | 9.6 | 5.5 | 1981 | 75.3 | 71.2 | 56.4 | 46.7 | 27.9 | 19.7 | 12.7 | 7.2 |
| 1986 | 70.2 | 66.0 | 51.4 | 41.9 | 23.5 | 15.8 | 9.9 | 5.7 | 1986 | 76.2 | 71.9 | 57.1 | 47.3 | 28.4 | 20.1 | 13.0 | 7.5 |
| 1991 | 71.4 | 67.1 | 52.5 | 43.0 | 24.6 | 16.6 | 10.4 | 6.1 | 1991 | 77.1 | 72.7 | 57.9 | 48.1 | 29.2 | 20.7 | 13.5 | 7.9 |
| 1996 | 72.2 | 67.8 | 53.1 | 43.7 | 25.3 | 17.3 | 10.9 | 6.3 | 1996 | 77.9 | 73.3 | 58.5 | 48.8 | 29.8 | 21.2 | 13.8 | 8.0 |
| 1997 | 72.4 | 68.0 | 53.3 | 43.9 | 25.6 | 17.5 | 11.0 | 6.4 | 1997 | 78.0 | 73.5 | 58.7 | 48.9 | 30.0 | 21.4 | 13.9 | 8.0 |
| 1998 | 72.6 | 68.2 | 53.5 | 44.2 | 25.8 | 17.8 | 11.1 | 6.5 | 1998 | 78.2 | 73.6 | 58.8 | 49.0 | 30.1 | 21.4 | 13.9 | 8.0 |
| 1999 | 72.8 | 68.4 | 53.7 | 44.4 | 26.0 | 18.0 | 11.3 | 6.6 | 1999 | 78.4 | 73.8 | 59.0 | 49.2 | 30.3 | 21.6 | 14.0 | 8.1 |
| 2000 | 73.1 | 68.6 | 53.9 | 44.6 | 26.3 | 18.2 | 11.5 | 6.6 | 2000 | 78.6 | 74.0 | 59.2 | 49.4 | 30.5 | 21.8 | 14.1 | 8.1 |
| 2001 | 73.3 | 68.8 | 54.2 | 44.8 | 26.6 | 18.4 | 11.7 | 6.8 | 2001 | 78.8 | 74.2 | 59.4 | 49.6 | 30.7 | 22.0 | 14.3 | 8.2 |
| 2002 | 73.5 | 69.0 | 54.3 | 45.0 | 26.7 | 18.6 | 11.8 | 6.8 | 2002 | 78.9 | 74.3 | 59.5 | 49.7 | 30.8 | 22.1 | 14.4 | 8.2 |
| Northern Ireland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | 69.2 | 65.4 | 50.9 | 41.5 | 23.2 | 15.6 | 9.7 | 5.8 | 1981 | 75.5 | 71.6 | 56.8 | 47.1 | 28.3 | 20.0 | 12.8 | 7.3 |
| 1986 | 70.9 | 66.8 | 52.2 | 42.7 | 24.2 | 16.4 | 10.4 | 6.2 | 1986 | 77.1 | 72.9 | 58.1 | 48.3 | 29.3 | 20.8 | 13.4 | 7.8 |
| 1991 | 72.6 | 68.2 | 53.6 | 44.1 | 25.5 | 17.3 | 11.0 | 6.4 | 1991 | 78.4 | 74.0 | 59.2 | 49.4 | 30.3 | 21.6 | 14.2 | 8.3 |
| 1996 | 73.8 | 69.4 | 54.7 | 45.3 | 26.6 | 18.2 | 11.4 | 6.6 | 1996 | 79.2 | 74.7 | 59.9 | 50.0 | 30.9 | 22.1 | 14.4 | 8.4 |
| 1997 | 74.2 | 69.7 | 55.0 | 45.5 | 26.8 | 18.4 | 11.5 | 6.6 | 1997 | 79.5 | 75.0 | 60.2 | 50.3 | 31.2 | 22.4 | 14.5 | 8.4 |
| 1998 | 74.3 | 69.8 | 55.2 | 45.7 | 27.0 | 18.6 | 11.6 | 6.6 | 1998 | 79.5 | 75.0 | 60.2 | 50.4 | 31.2 | 22.4 | 14.5 | 8.2 |
| 1999 | 74.5 | 70.0 | 55.4 | 45.9 | 27.2 | 18.8 | 11.7 | 6.6 | 1999 | 79.6 | 75.1 | 60.2 | 50.4 | 31.3 | 22.5 | 14.6 | 8.2 |
| 2000 | 74.8 | 70.4 | 55.7 | 46.2 | 27.6 | 19.1 | 11.9 | 6.6 | 2000 | 79.8 | 75.2 | 60.4 | 50.6 | 31.5 | 22.6 | 14.6 | 8.2 |
| 2001 | 75.2 | 70.7 | 56.1 | 46.6 | 27.9 | 19.4 | 12.3 | 6.9 | 2001 | 80.1 | 75.6 | 60.7 | 50.9 | 31.8 | 22.9 | 14.9 | 8.4 |
| 2002 | 75.6 | 71.1 | 56.4 | 46.9 | 28.2 | 19.7 | 12.4 | 7.0 | 2002 | 80.4 | 75.9 | 61.0 | 51.2 | 32.0 | 23.1 | 15.1 | 8.5 |

[^14]| Table 6.1 | Deaths: age and sex |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| England and Wales |  |  |  |  |  |  |  |  |  |  |  | Numbers (thousands) and rates |  |  |
|  |  | Age group |  |  |  |  |  |  |  |  |  |  |  |  |
| Year and quarter | All ages | Under I' | 1-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65-74 | 75-84 | 85 and over |

Numbers (thousands)

| Males |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1976 | 300.1 | 4.88 | 0.88 | 0.68 | 0.64 | 1.66 | 1.66 | 3.24 | 5.93 | 20.4 | 52.0 | 98.7 | 80.3 | 29.0 |
| 1981 | 289.0 | 4.12 | 0.65 | 0.45 | 0.57 | 1.73 | 1.58 | 3.18 | 5.54 | 16.9 | 46.9 | 92.2 | 86.8 | 28.5 |
| 1986 | 287.9 | 3.72 | 0.57 | 0.33 | 0.38 | 1.43 | 1.75 | 3.10 | 5.77 | 14.4 | 43.6 | 84.4 | 96.2 | 32.2 |
| 1991 | 277.6 | 2.97 | 0.55 | 0.34 | 0.35 | 1.21 | 1.76 | 3.69 | 6.16 | 13.3 | 34.9 | 77.2 | 95.8 | 39.3 |
| 1996 | 268.7 | 2.27 | 0.44 | 0.24 | 0.29 | 0.93 | 1.41 | 4.06 | 5.84 | 13.6 | 30.1 | 71.0 | 90.7 | 47.8 |
| 1999 | 264.3 | 2.08 | 0.41 | 0.22 | 0.28 | 0.90 | 1.27 | 3.85 | 5.93 | 13.6 | 28.7 | 64.3 | 90.4 | 52.3 |
| 2000 | 255.5 | 1.89 | 0.34 | 0.22 | 0.28 | 0.87 | 1.22 | 3.76 | 6.05 | 13.4 | 27.9 | 60.6 | 87.1 | 51.9 |
| 2001 | 252.4 | 1.81 | 0.32 | 0.19 | 0.28 | 0.88 | 1.27 | 3.63 | 6.07 | 13.3 | 27.5 | 57.5 | 87.0 | 52.7 |
| 2002 | 253.1 | 1.81 | 0.32 | 0.20 | 0.28 | 0.83 | 1.24 | 3.47 | 6.20 | 12.9 | 27.7 | 56.3 | 88.3 | 53.6 |
| 2003 | 253.9 | 1.81 | 0.31 | 0.19 | 0.24 | 0.81 | 1.23 | 3.26 | 6.32 | 12.7 | 28.2 | 55.1 | 89.6 | 54.0 |
| Females |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 | 298.5 | 3.46 | 0.59 | 0.45 | 0.42 | 0.62 | 0.67 | 1.94 | 4.04 | 12.8 | 29.6 | 67.1 | 104.7 | 72.1 |
| 1981 | 288.9 | 2.90 | 0.53 | 0.30 | 0.37 | 0.65 | 0.64 | 1.82 | 3.74 | 10.5 | 27.2 | 62.8 | 103.6 | 73.9 |
| 1986 | 293.3 | 2.59 | 0.49 | 0.25 | 0.27 | 0.56 | 0.67 | 1.65 | 3.83 | 8.8 | 25.8 | 58.4 | 106.5 | 83.6 |
| 1991 | 292.5 | 2.19 | 0.44 | 0.25 | 0.22 | 0.46 | 0.64 | 1.73 | 3.70 | 8.4 | 21.3 | 54.2 | 103.3 | 95.7 |
| 1996 | 291.5 | 1.69 | 0.32 | 0.18 | 0.20 | 0.43 | 0.51 | 1.85 | 3.66 | 8.9 | 18.2 | 50.2 | 96.7 | 108.7 |
| 1999 | 291.8 | 1.55 | 0.30 | 0.17 | 0.22 | 0.39 | 0.47 | 1.67 | 3.79 | 9.0 | 18.0 | 45.1 | 93.9 | 117.2 |
| 2000 | 280.1 | 1.49 | 0.25 | 0.16 | 0.18 | 0.38 | 0.47 | 1.69 | 3.87 | 9.1 | 17.6 | 42.2 | 89.3 | 113.4 |
| 2001 | 277.9 | 1.43 | 0.27 | 0.19 | 0.18 | 0.38 | 0.47 | 1.59 | 3.77 | 8.9 | 17.6 | 40.5 | 88.8 | 113.9 |
| 2002 | 280.4 | 1.31 | 0.24 | 0.16 | 0.19 | 0.38 | 0.43 | 1.61 | 3.77 | 8.7 | 17.7 | 39.6 | 90.0 | 116.3 |
| 2003 | 284.4 | 1.50 | 0.28 | 0.15 | 0.19 | 0.35 | 0.46 | 1.57 | 3.86 | 8.5 | 18.0 | 39.0 | 92.7 | 117.9 |

Rates (deaths per 1,000 population in each age group)

| Males |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1976 |  | 12.5 | 16.2 | 0.65 | 0.34 | 0.31 | 0.88 | 0.96 | 0.92 | 2.09 | 6.97 | 19.6 | 50.3 | 116.4 | 243.2 |
| 1981 |  | 12.0 | 12.6 | 0.53 | 0.27 | 0.29 | 0.82 | 0.83 | 0.89 | 1.83 | 6.11 | 17.7 | 45.6 | 105.2 | 226.5 |
| 1986 |  | 11.8 | 11.0 | 0.44 | 0.21 | 0.23 | 0.72 | 0.83 | 0.88 | 1.68 | 5.27 | 16.6 | 42.8 | 101.2 | 215.4 |
| 1991 |  | 11.2 | 8.3 | 0.40 | 0.21 | 0.23 | 0.72 | 0.89 | 0.94 | 1.76 | 4.56 | 13.9 | 38.1 | 93.1 | 205.6 |
| 1996 |  | 10.7 | 6.8 | 0.32 | 0.14 | 0.18 | 0.60 | 0.85 | 1.01 | 1.67 | 4.06 | 11.9 | 34.5 | 85.0 | 198.8 |
| 1999 |  | 10.4 | 6.5 | 0.31 | 0.12 | 0.16 | 0.56 | 0.83 | 0.99 | 1.60 | 3.99 | 10.9 | 31.6 | 79.9 | 194.4 |
| 2000 |  | 10.0 | 6.1 | 0.26 | 0.13 | 0.16 | 0.54 | 0.79 | 0.98 | 1.59 | 3.92 | 10.4 | 29.7 | 75.9 | 187.5 |
| 2001 |  | 9.9 | 5.9 | 0.25 | 0.11 | 0.16 | 0.53 | 0.80 | 0.97 | 1.56 | 3.89 | 10.0 | 28.0 | 74.0 | 186.4 |
| 2002 |  | 9.8 | 5.9 | 0.25 | 0.12 | 0.16 | 0.49 | 0.77 | 0.95 | 1.57 | 3.85 | 9.7 | 27.2 | 73.4 | 187.5 |
| 2003 |  | 9.8 | 5.7 | 0.25 | 0.11 | 0.14 | 0.46 | 0.95 | 0.91 | 1.58 | 3.81 | 9.6 | 26.3 | 72.8 | 190.4 |
| 2002 | March | 10.8 | 6.7 | 0.35 | 0.14 | 0.19 | 0.52 | 0.77 | 0.94 | 1.59 | 4.04 | 10.1 | 29.5 | 80.9 | 216.3 |
|  | June | 9.5 | 5.7 | 0.22 | 0.13 | 0.14 | 0.50 | 0.78 | 0.96 | 1.51 | 3.77 | 9.4 | 26.7 | 70.2 | 177.7 |
|  | Sept | 9.0 | 5.3 | 0.22 | 0.10 | 0.15 | 0.49 | 0.80 | 1.00 | 1.60 | 3.72 | 9.2 | 25.1 | 66.7 | 163.4 |
|  | Dec | 10.1 | 6.0 | 0.22 | 0.10 | 0.15 | 0.46 | 0.74 | 0.88 | 1.56 | 3.86 | 10.0 | 27.6 | 75.9 | 193.2 |
| 2003 | March | 10.5 | 6.4 | 0.27 | 0.12 | 0.16 | 0.48 | 0.77 | 0.94 | 1.62 | 3.94 | 10.0 | 27.8 | 72.8 | 214.3 |
|  | June | 9.4 | 5.5 | 0.24 | 0.09 | 0.12 | 0.45 | 0.74 | 0.92 | 1.60 | 3.78 | 9.2 | 25.4 | 70.2 | 179.1 |
|  | Sept | 9.0 | 5.2 | 0.19 | 0.11 | 0.14 | 0.52 | 0.79 | 0.93 | 1.57 | 3.63 | 9.1 | 24.6 | 66.1 | 165.9 |
|  | Dec | 10.3 | 5.8 | 0.29 | 0.13 | 0.13 | 0.39 | 0.69 | 0.84 | 1.52 | 3.91 | 10.0 | 27.7 | 77.0 | 202.8 |
| $2004{ }^{2}$ | March ${ }^{\text {P }}$ | 10.5 | 5.7 | 0.29 | 0.11 | 0.15 | 0.52 | 0.78 | 1.03 | 1.65 | 3.92 | 9.7 | 27.4 | 79.3 | 210.1 |
|  | June ${ }^{\text {P }}$ | 9.1 | 5.4 | 0.24 | 0.13 | 0.13 | 0.41 | 0.71 | 0.99 | 1.60 | 3.70 | 9.0 | 24.7 | 68.0 | 168.4 |
|  | Sept ${ }^{\text {p }}$ | 8.8 | 5.3 | 0.20 | 0.10 | 0.15 | 0.42 | 0.75 | 0.94 | 1.46 | 3.65 | 8.8 | 23.5 | 65.6 | 160.3 |
| Females |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 |  | 11.8 | 12.2 | 0.46 | 0.24 | 0.21 | 0.35 | 0.40 | 0.56 | 1.46 | 4.30 | 10.1 | 26.0 | 74.6 | 196.6 |
| 1981 |  | 11.3 | 9.4 | 0.46 | 0.19 | 0.19 | 0.32 | 0.35 | 0.52 | 1.26 | 3.80 | 9.5 | 24.1 | 66.2 | 178.2 |
| 1986 |  | 11.4 | 8.0 | 0.40 | 0.17 | 0.17 | 0.29 | 0.33 | 0.47 | 1.12 | 3.24 | 9.2 | 23.4 | 62.5 | 169.4 |
| 1991 |  | 11.2 | 6.4 | 0.33 | 0.16 | 0.15 | 0.29 | 0.33 | 0.44 | 1.05 | 2.87 | 8.2 | 21.8 | 58.7 | 161.6 |
| 1996 |  | 11.0 | 5.3 | 0.25 | 0.10 | 0.12 | 0.29 | 0.31 | 0.46 | 1.04 | 2.63 | 7.1 | 20.6 | 55.8 | 158.9 |
| 1999 |  | 11.0 | 5.1 | 0.24 | 0.10 | 0.13 | 0.25 | 0.31 | 0.43 | 1.01 | 2.61 | 6.7 | 19.2 | 53.4 | 162.6 |
| 2000 |  | 10.5 | 5.1 | 0.20 | 0.10 | 0.11 | 0.25 | 0.30 | 0.44 | 1.00 | 2.62 | 6.4 | 18.1 | 50.8 | 155.2 |
| 2001 |  | 10.4 | 4.9 | 0.22 | 0.12 | 0.11 | 0.24 | 0.30 | 0.42 | 0.96 | 2.57 | 6.3 | 17.4 | 50.1 | 155.0 |
| 2002 |  | 10.4 | 4.5 | 0.20 | 0.10 | 0.11 | 0.24 | 0.27 | 0.44 | 0.94 | 2.54 | 6.0 | 17.0 | 50.4 | 159.4 |
| 2003 |  | 10.6 | 4.9 | 0.24 | 0.10 | 0.12 | 0.21 | 0.28 | 0.44 | 0.95 | 2.51 | 5.9 | 16.7 | 51.3 | 165.8 |
| 2002 | March | 11.7 | 4.7 | 0.21 | 0.11 | 0.12 | 0.29 | 0.26 | 0.44 | 1.01 | 2.59 | 6.2 | 18.4 | 55.8 | 185.2 |
|  | June | 9.9 | 4.4 | 0.18 | 0.07 | 0.14 | 0.20 | 0.31 | 0.44 | 0.91 | 2.54 | 5.9 | 16.6 | 47.9 | 147.1 |
|  | Sept | 9.5 | 4.1 | 0.19 | 0.10 | 0.12 | 0.22 | 0.23 | 0.47 | 0.91 | 2.41 | 5.8 | 15.9 | 45.6 | 140.3 |
|  | Dec | 10.8 | 4.9 | 0.21 | 0.12 | 0.08 | 0.24 | 0.27 | 0.40 | 0.94 | 2.62 | 6.2 | 17.0 | 52.4 | 165.6 |
| 2003 | March | 11.4 | 5.3 | 0.26 | 0.09 | 0.09 | 0.19 | 0.33 | 0.48 | 1.00 | 2.59 | 6.1 | 17.6 | 54.8 | 184.6 |
|  | June | 10.0 | 4.8 | 0.24 | 0.09 | 0.17 | 0.22 | 0.25 | 0.43 | 0.90 | 2.58 | 5.8 | 16.1 | 49.3 | 153.6 |
|  | Sept | 9.6 | 4.5 | 0.20 | 0.12 | 0.10 | 0.21 | 0.30 | 0.43 | 0.97 | 2.38 | 5.6 | 15.3 | 46.8 | 147.6 |
|  | Dec | 11.2 | 5.2 | 0.26 | 0.09 | 0.10 | 0.24 | 0.25 | 0.40 | 0.94 | 2.49 | 6.2 | 17.8 | 54.3 | 177.5 |
| $2004{ }^{2}$ | March ${ }^{\text {P }}$ | 11.3 | 5.4 | 0.24 | 0.10 | 0.09 | 0.28 | 0.33 | 0.42 | 0.96 | 2.49 | 6.2 | 17.6 | 55.1 | 180.1 |
|  | June ${ }^{\text {p }}$ | 9.5 | 4.5 | 0.19 | 0.10 | 0.11 | 0.20 | 0.28 | 0.43 | 0.96 | 2.42 | 5.6 | 15.0 | 46.8 | 142.2 |
|  | Sept ${ }^{\text {P }}$ | 9.1 | 4.5 | 0.20 | 0.07 | 0.11 | 0.26 | 0.28 | 0.42 | 0.92 | 2.33 | 5.5 | 14.9 | 44.7 | 136.7 |

Note: Figures represent the numbers of deaths registered in each year up to 1992 and the numbers of deaths occurring in each year from 1993 to 2003 . Provisional figures for 2004 relate to registrations.
1 Rates per 1,000 live births.
I Rates per 1,000 live births.
2 Based on the mid-2003 population estimates published on 9 September 2004.
P Provisional

Table 6.2
Deaths: subnational

| Government Office Regions of England' ${ }^{\text {R }}$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year and quarter | North East | North West | Yorkshire and the Humber | East Midlands | West Midlands | East | London | South East | South West |

Total deaths (deaths per 1,000 population of all ages)

| 1996 |  | 11.7 | 11.7 | 11.2 |
| :---: | :---: | :---: | :---: | :---: |
| $1997$ |  | 11.6 | 11.6 | 11.1 |
| $1998$ |  | 11.9 | 11.7 | 11.2 |
| $1999$ |  | 11.6 | 11.5 | 10.9 |
|  |  | 10.8 | 10.7 | 10.3 |
| 2001 |  | 11.1 | 11.0 | 10.4 |
| 2002 |  | 11.2 | 11.0 | 10.5 |
| 2003 |  | 11.3 | 11.0 | 10.5 |
| 2002 | March | 12.6 | 12.3 | 11.6 |
|  | June | 10.7 | 10.6 | 10.0 |
|  | Sept | 9.9 | 9.8 | 9.7 |
|  | Dec | 11.5 | 11.3 | 10.8 |
| 2003 | March | 12.1 | 11.8 | 11.2 |
|  | June | 10.6 | 10.6 | 9.9 |
|  | Sept | 10.2 | 9.9 | 9.5 |
|  | Dec | 12.1 | 11.7 | 11.3 |
| $2004{ }^{2}$ | March ${ }^{\text {P }}$ | 12.2 | 11.8 | 11.4 |
|  | June ${ }^{\text {P }}$ | 10.7 | 10.0 | 9.7 |
|  | Sept ${ }^{\text {P }}$ | 9.9 | 9.8 | 9.3 |

Infant mortality (deaths under I year per 1,000 live births)

| 1996 |  | 6.2 | 6.3 | 6.5 |
| :---: | :---: | :---: | :---: | :---: |
| 1997 |  | 5.8 | 6.7 | 6.5 |
| 1998 |  | 5.0 | 6.3 | 6.9 |
| 1999 |  | 5.6 | 6.5 | 6.3 |
| 2000 |  | 6.5 | 6.2 | 7.3 |
| 2001 |  | 5.4 | 5.8 | 5.5 |
| 2002 |  | 4.8 | 5.4 | 6.1 |
| 2003 |  | 4.9 | 5.9 | 5.7 |
| 2002 | March | 3.9 | 6.7 | 7.0 |
|  | June | 5.4 | 5.2 | 5.2 |
|  | Sept | 5.2 | 4.3 | 5.5 |
|  | Dec | 4.5 | 5.5 | 6.9 |
| 2003 | March | 6.2 | 5.9 | 6.9 |
|  | June | 4.2 | 6.1 | 5.4 |
|  | Sept | 4.3 | 5.2 | 4.1 |
|  | Dec | 5.0 | 6.3 | 6.6 |
| 2004 | March ${ }^{\text {P }}$ | 6.6 | 5.6 | 5.7 |
|  | June ${ }^{\text {P }}$ | 4.1 | 5.1 | 6.2 |
|  | Sept ${ }^{\text {p }}$ | 3.2 | 5.7 | 4.9 |

Neonatal mortality (deaths under 4 weeks per 1,000 live births)

| 1996 |  | 4.1 | 4.0 | 4.2 | 4.2 | 4.9 | 3.5 | 4.4 | 3.5 | 3.8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1997 |  | 3.7 | 4.3 | 4.4 | 3.7 | 5.0 | 3.3 | 3.7 | 3.4 | 3.9 |
| 1998 |  | 3.1 | 4.1 | 4.5 | 3.7 | 4.8 | 3.4 | 4.1 | 2.9 | 3.3 |
| 1999 |  | 4.1 | 4.4 | 4.1 | 4.3 | 4.8 | 3.0 | 4.1 | 3.2 | 3.2 |
| 2000 |  | 4.4 | 4.3 | 5.0 | 4.1 | 5.0 | 3.0 | 3.7 | 3.1 | 3.0 |
| 2001 |  | 3.5 | 3.8 | 3.2 | 3.4 | 4.4 | 2.9 | 4.1 | 2.9 | 3.7 |
| 2002 |  | 3.2 | 3.6 | 4.0 | 4.0 | 4.8 | 2.9 | 3.6 | 2.9 | 3.1 |
| 2003 |  | 3.2 | 4.1 | 4.0 | 4.2 | 5.1 | 3.0 | 3.7 | 2.8 | 2.9 |
| 2002 | March | 2.8 | 4.3 | 4.6 | 5.1 | 5.0 | 3.2 | 3.8 | 3.2 | 3.2 |
|  | June | 4.1 | 3.8 | 3.1 | 4.1 | 4.4 | 3.3 | 3.6 | 2.9 | 3.2 |
|  | Sept | 2.6 | 2.7 | 3.7 | 3.5 | 4.9 | 2.4 | 3.5 | 2.5 | 2.5 |
|  | Dec | 3.4 | 3.8 | 4.6 | 3.2 | 5.0 | 2.6 | 3.7 | 3.1 | 3.6 |
| 2003 | March | 3.5 | 4.1 | 4.5 | 4.1 | 5.8 | 3.3 | 4.1 | 2.9 | 3.1 |
|  | June | 3.1 | 4.1 | 3.6 | 4.2 | 4.6 | 2.8 | 4.1 | 2.5 | 2.8 |
|  | Sept | 2.3 | 3.5 | 2.9 | 3.9 | 5.5 | 2.5 | 3.4 | 3.0 | 2.5 |
|  | Dec | 4.0 | 4.5 | 4.9 | 4.7 | 4.6 | 3.3 | 3.2 | 2.9 | 3.1 |
| 2004 | March ${ }^{\text {P }}$ June ${ }^{P}$ Sept ${ }^{p}$ | 4.1 | 3.5 | 3.7 | 3.8 | 5.6 | 3.2 | 3.9 | 2.8 | 3.5 |
|  |  | 2.9 | 3.5 | 4.0 | 3.9 | 4.4 | 3.4 | 3.3 | 2.5 | 3.0 |
|  |  | 1.5 | 3.8 | 3.3 | 3.2 | 5.2 | 2.9 | 3.5 | 2.8 | 3.1 |
| Perinatal mortality (stillbirths and deaths under I week per 1,000 total births) ${ }^{\mathbf{3}}$ |  |  |  |  |  |  |  |  |  |  |
| 1996 |  |  |  |  | 8.7 | 10.2 | 7.5 | 9.6 | 7.8 | 7.5 |
| 1997 |  | 8.0 | 8.9 | 8.3 | 7.7 | 9.6 | 7.3 | 9.0 | 7.3 | 8.7 |
| 1998 |  | 8.2 | 8.7 | 9.2 | 8.0 | 9.3 | 7.4 | 9.0 | 6.8 | 7.3 |
| 1999 |  | 8.2 | 8.7 | 8.3 | 7.8 | 9.9 | 7.0 | 9.0 | 6.9 | 7.8 |
| 2000 |  | 8.5 | 8.6 | 9.6 | 7.8 | 9.6 | 7.1 | 9.0 | 6.6 | 6.6 |
| 2001 |  | 7.8 | 8.7 | 7.5 | 7.9 | 9.1 | 7.1 | 8.9 | 6.9 | 7.2 |
| 2002 |  | 8.1 | 8.5 | 9.0 | 8.5 | 10.0 | 7.5 | 9.3 | 6.9 | 6.8 |
| 2003 |  | 7.8 | 9.0 | 9.0 | 9.5 | 10.2 | 7.3 | 9.5 | 7.0 | 7.0 |
| 2002 | March | 7.1 | 8.8 | 10.6 | 9.5 | 11.1 | 7.3 | 9.3 | 7.7 | 6.8 |
|  | June | 8.1 | 8.6 | 9.4 | 8.8 | 9.7 | 7.4 | 10.0 | 6.9 | 7.2 |
|  | Sept | 7.8 | 8.3 | 7.6 | 7.7 | 9.5 | 7.4 | 8.7 | 6.3 | 6.5 |
|  | Dec | 9.6 | 8.4 | 8.5 | 8.0 | 9.8 | 7.9 | 9.1 | 6.6 | 6.9 |
| 2003 | March | 9.3 | 8.5 | 10.9 | 10.1 | 9.8 | 7.7 | 10.1 | 6.9 | 6.9 |
|  | June | 7.9 | 8.9 | 7.6 | 10.5 | 11.6 | 6.6 | 10.0 | 6.5 | 7.8 |
|  | Sept | 6.9 | 9.0 | 7.6 | 8.2 | 10.9 | 7.2 | 9.1 | 7.4 | 6.3 |
|  | Dec | 7.5 | 9.5 | 9.8 | 9.5 | 8.4 | 7.8 | 8.8 | 7.1 | 6.9 |
| 2004 | March ${ }^{\text {P }}$ | 9.9 | 7.9 | 8.4 | 8.6 | 10.2 | 7.8 | 8.6 | 7.0 | 6.3 |
|  | June ${ }^{\text {P }}$ | 8.5 | 7.7 | 8.6 | 8.7 | 8.9 | 7.5 | 8.1 | 6.5 | 7.0 |
|  | Sept ${ }^{\text {p }}$ | 6.2 | 7.7 | 9.1 | 7.9 | 9.7 | 7.2 | 8.6 | 6.9 | 7.6 |

Note: Figures represent the numbers of deaths occurring in each year with the exception of provisional figures which relate to registrations.
I The regions presented in this table have changed from the Regional Offices of the Department of Health to the Government Office Regions. See 'In brief' Health Statistics Quarterly I5 for details.

In October 1992 the legal definition of a stillbirth was changed, from a baby born dead after 28 completed weeks of gestation or more, to one born dead after 24 completed weeks of gestation or more.
Provisional.

## Table 7.1

International migration: age and sex
United Kingdom

|  | All ages |  |  | 0-14 |  |  | 15-24 |  |  | 25-44 |  |  | 45 and over |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year and quarter | Persons | Males | Females | Persons | Males | Females | Persons | Males | Females | Persons | Males | Females | Persons | Males | Females |


| Inflow |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1971 |  | 200 | 103 | 97 | 33 | 17 | 17 | 65 | 28 | 37 | 81 | 48 | 33 | 21 | 10 | 11 |
| 1976 |  | 191 | 100 | 91 | 32 | 16 | 17 | 64 | 32 | 32 | 77 | 43 | 34 | 18 | 9 | 9 |
| 1981 |  | 153 | 83 | 71 | 30 | 16 | 14 | 48 | 24 | 24 | 60 | 34 | 26 | 15 | 9 | 7 |
| 1986 |  | 250 | 120 | 130 | 45 | 22 | 23 | 79 | 34 | 45 | 101 | 49 | 51 | 25 | 16 | 10 |
| 1991 |  | 328 | 157 | 171 | 53 | 23 | 30 | 106 | 47 | 59 | 139 | 73 | 66 | 31 | 14 | 17 |
| 1994 |  | 314 | 162 | 153 | 38 | 23 | 15 | 101 | 42 | 59 | 148 | 80 | 68 | 28 | 17 | 11 |
| 1995 |  | 312 | 170 | 142 | 33 | 22 | 11 | 111 | 52 | 59 | 141 | 80 | 61 | 27 | 16 | 11 |
| 1996 |  | 318 | 157 | 161 | 33 | 14 | 19 | 114 | 49 | 65 | 142 | 77 | 65 | 29 | 17 | 12 |
| 1997 |  | 326 | 169 | 157 | 43 | 22 | 21 | 126 | 57 | 68 | 131 | 76 | 55 | 27 | 15 | 12 |
| 1998 |  | 390 | 207 | 184 | 37 | 18 | 19 | 134 | 65 | 69 | 194 | 109 | 84 | 26 | 15 | 11 |
| 1999 |  | 454 | 250 | 204 | 42 | 24 | 18 | 158 | 79 | 80 | 224 | 130 | 94 | 30 | 18 | 13 |
| 2000 |  | 483 | 275 | 209 | 36 | 18 | 18 | 161 | 82 | 79 | 244 | 149 | 95 | 43 | 26 | 17 |
| 2001 |  | 480 | 260 | 219 | 46 | 25 | 21 | 158 | 77 | 81 | 239 | 135 | 103 | 37 | 22 | 14 |
| 2002 |  | 513 | 284 | 229 | 38 | 20 | 17 | 185 | 100 | 85 | 256 | 148 | 108 | 35 | 16 | 19 |
| 2001 | March | 100 113 | 56 | 44 46 | 10 | 5 | 5 4 | 29 31 | 17 | 12 | 55 | 29 35 | 26 | 12 | 4 | 2 |
|  | Sept | 178 | 90 | 88 | 16 | 9 | 8 | 71 | 30 | 41 | 82 | 47 | 34 | 9 | 4 | 5 |
|  | Dec | 89 | 49 | 40 | 8 | 4 | 4 | 25 | 13 | 12 | 45 | 26 | 19 | 11 | 6 | 6 |
| 2002 | March June | 105 117 | 59 68 | 46 | 7 10 | 4 | 3 4 | 37 39 | 20 19 | 17 19 | 53 | 31 37 | 22 | 8 | 4 | 3 4 |
|  | Sept | 197 | 103 | 93 | 14 | 7 | 7 | 75 | 39 | 36 | 96 | 53 | 43 | 11 | 4 | 7 |
|  | Dec | 95 | 54 | 41 | 6 | 4 | 3 | 34 | 21 | 13 | 48 | 27 | 21 | 7 | 3 | 4 |
| Outflow |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1971 |  | 240 | 124 | 116 | 51 | 26 | 24 | 64 | 28 | 36 | 99 | 57 | 42 | 27 | 12 | 15 |
| 1976 |  | 210 | 118 | 93 | 40 | 20 | 21 | 52 | 26 | 25 | 97 | 59 | 38 | 21 | 12 | 9 |
| 1981 |  | 233 | 133 | 100 | 49 | 25 | 24 | 51 | 29 | 22 | 108 | 64 | 44 | 25 | 14 | 11 |
| 1986 |  | 213 | 107 | 106 | 37 | 17 | 20 | 47 | 19 | 28 | 98 | 55 | 43 | 32 | 17 | 15 |
| 1991 |  | 285 | 146 | 139 | 44 | 19 | 25 | 76 | 39 | 37 | 131 | 69 | 62 | 33 | 18 | 15 |
| 1994 |  | 238 | 120 | 118 | 30 | 17 | 13 | 62 | 27 | 35 | 117 | 63 | 54 | 29 | 13 | 16 |
| 1995 |  | 236 | 127 | 109 | 33 | 16 | 17 | 69 | 31 | 38 | 107 | 64 | 42 | 28 | 16 | 12 |
| 1996 |  | 264 | 134 | 130 | 38 | 16 | 22 | 63 | 24 | 39 | 140 | 79 | 60 | 23 | 15 | 9 |
| 1997 |  | 279 | 153 | 126 | 29 | 15 | 13 | 86 | 45 | 41 | 138 | 77 | 61 | 27 | 16 | 11 |
| 1998 |  | 251 | 131 | 121 | 24 | 15 | 10 | 70 | 31 | 39 | 130 | 71 | 59 | 27 | 14 | 13 |
| 1999 |  | 291 | 158 | 133 | 27 | 19 | 8 | 87 | 42 | 45 | 143 | 79 | 64 | 34 | 18 | 16 |
| 2000 |  | 321 | 178 | 142 | 26 | 11 | 15 | 84 | 45 | 39 | 175 | 102 | 73 | 36 | 20 | 16 |
| 2001 |  | 308 | 173 | 135 | 25 | 14 | 11 | 84 | 41 | 43 | 155 | 89 | 65 | 45 | 29 | 16 |
| 2002 |  | 359 | 195 | 165 | 25 | 15 | 10 | 92 | 44 | 48 | 186 | 107 | 80 | 56 | 28 | 28 |
| 2001 | March | 60 | 32 | 28 | 5 | 3 | 2 | 14 | 6 | 8 | 34 | 18 | 15 | 8 | 5 | 3 |
|  | June | 65 | 34 | 30 | 7 | 3 | 4 | 15 | 8 | 8 | 34 | 19 | 15 | 9 | 5 | 4 |
|  | Sept | 103 | 61 | 42 | 7 | 5 | 2 | 28 | 13 | 14 | 52 | 32 | 20 | 16 | 10 | 6 |
|  | Dec | 81 | 44 | 36 | 7 | 4 | 3 | 26 | 12 | 14 | 36 | 20 | 16 | 12 | 9 | 3 |
| 2002 | March | 75 | 45 | 30 | 8 | 7 | 2 | 19 | 8 | 11 | 34 | 21 | 13 | 13 | 9 | 4 |
|  | June | 81 | 45 | 36 | 5 | 3 | 2 | 22 | 9 | 13 | 43 | 26 | 17 | 10 | 6 | 4 |
|  | Sept | 124 | 64 | 59 | 9 | 5 | 4 | 33 | 17 | 16 | 64 | 35 | 29 | 18 | 7 | 11 |
|  | Dec | 80 | 41 | 39 | 4 | 1 | 2 | 18 | 10 | 8 | 45 | 24 | 21 | 15 | 6 | 9 |
| Balance |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1971 |  | -40 | - 22 | - 19 | - 17 | - 10 | -8 | +1 | - | +1 | - 18 | - 10 | -9 | -6 | -2 | -4 |
| 1976 |  | - 19 | - 18 | -1 | -8 | -4 | -4 | + 12 | + 6 | + 7 | -20 | - 16 | -4 | - 3 | - 3 | - |
| 1981 |  | - 79 | - 50 | -29 | - 19 | -9 | - 10 | -2 | -5 | + 2 | -48 | -31 | - 18 | - 10 | - 5 | -4 |
| 1986 |  | + 37 | $+13$ | +24 | +8 | + 5 | + 3 | + 32 | + 15 | $+18$ | + 3 | -5 | + 8 | - 7 | - 1 | -6 |
| 1991 |  | +43 | + 12 | + 32 | +8 | + 3 | + 5 | + 30 | +9 | + 22 | + 7 | +4 | + 4 | -2 | -4 | + 2 |
| 1994 |  | + 77 | $+42$ | + 35 | + 8 | + 5 | + 3 | + 38 | $+15$ | + 24 | + 31 | $+17$ | $+14$ | - | + 5 | - 5 |
| 1995 |  | + 75 | + 43 | + 33 | - | + 6 | -6 | + 42 | +21 | +21 | + 34 | + 15 | + 19 | - 1 | - | -1 |
| 1996 |  | + 54 | +23 | +31 | -5 | -2 | - 3 | +51 | +25 | +26 | + 2 | -2 | + 5 | + 5 | + 2 | $+3$ |
| 1997 |  | +47 | +16 | +31 | + 14 | +6 | +8 | $+40$ | + 12 | +28 | -7 | -1 | -6 | - | - 1 | +1 |
| 1998 |  | +139 | + 76 | + 63 | + 13 | + 3 | + 10 | + 64 | + 34 | + 30 | + 64 | + 38 | + 25 | - I | - | -2 |
| 1999 |  | $+163$ | +92 | + 71 | + 15 | + 5 | + 10 | + 71 | + 37 | + 34 | +81 | + 51 | + 30 | -4 | - 1 | - 3 |
| 2000 |  | $+163$ | +96 | + 66 | + 10 | + 7 | + 3 | + 77 | + 37 | + 40 | + 69 | + 47 | + 23 | + 7 | + 6 | +1 |
| 2001 |  | +172 | +88 | +84 | +21 | + 11 | + 10 | + 74 | +36 | + 38 | +84 | +46 | + 38 | -8 | -6 | -2 |
| 2002 |  | + 153 | +89 | + 64 | $+13$ | + 5 | +8 | +93 | + 56 | + 37 | + 69 | +4I | + 28 | -22 | - 13 | -9 |
| 2001 | March | + 40 | + 24 | + 16 | + 5 | + 3 | + 3 | $+15$ | + 11 | + 4 | +21 | + 11 | + 11 | -2 | - | - 1 |
|  | June | +48 | + 32 | + 16 | + 4 | +4 | - | $+16$ | +9 | + 7 | +26 | $+16$ | $+10$ | + 3 | + 4 | -1 |
|  | Sept | + 75 | + 29 | + 46 | +9 | + 3 | +6 | + 44 | + 17 | + 27 | + 30 | + 15 | + 14 | - 7 | -6 | -1 |
|  | Dec | +8 | +4 | + 4 | + 2 | + I | + 1 | - I | + I | -2 | +9 | $+6$ | + 3 | -1 | -3 | + 2 |
| 2002 | March | + 30 | $+14$ | $+16$ | - 1 | -3 | + 2 | $+18$ | $+12$ | $+6$ | $+19$ | $+10$ | +9 | - 5 | -4 | -1 |
|  | June | +36 | + 23 | +13 | + 5 | + 3 | + 2 | $+16$ | + 10 | $+6$ | + 15 | + 11 | + 4 | - 1 | - 1 | $+1$ |
|  | Sept | + 73 | + 39 | + 34 | + 6 | +2 | +4 | + 43 | + 23 | + 20 | + 32 | + 17 | $+15$ | -7 | - 3 | -4 |
|  | Dec | + 14 | +13 | + I | + 3 | +2 | - | $+16$ | + 11 | + 5 | + 3 | + 3 | - | -8 | -4 | -4 |

Note: Figures in this table are derived from the International Passenger Survey and other sources - see Notes to Tables. Prior to 1991 they exclude certain categories of migration such as migrants between the UK and the Irish Republic, persons seeking asylum after entering the country and other short-term visitors granted extensions of stay. From I99I, the figures in this table include all categories of migrants and therefore represent total international migration. For adjustments required to pre-1991 figures, see Notes to Tables.

The table shows final revised Total International Migration estimates for 1991-200I. See 'Report: Revised International Migration Estimates I99I to 2001' in Population Trends II3.

Table 7.2
International migration: country of last or next residence
United Kingdom
Numbers (thousands)

|  |  |  |  |  | Commo | wealth cou |  |  |  | oreign c |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year and quarter |  | European Union ${ }^{1}$ | Australia, New Zealand, Canada | South <br> Africa | India, Bangladesh, Sri Lanka ${ }^{2}$ | Pakistan ${ }^{2}$ | Caribbean | Other | USA | Middle East ${ }^{3}$ | Other ${ }^{3}$ |


| Inflow |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1971 |  | 200 | 21 | 52 | 8 | 24 | : | 5 | 36 | 22 | $\overline{7}$ | 31 |
| 1976 |  | 191 | 33 | 40 | 9 | 15 | 12 | 4 | 32 | 16 | 7 | 23 |
| 1981 |  | 153 | 25 | 20 | 3 | 18 | 9 |  | 19 | 17 | 11 | 27 |
| 1986 |  | 250 | 72 | 30 | 18 | 16 | 10 | 5 | 25 | 26 | 15 | 34 |
| 1991 |  | 328 | 95 | 44 | 8 | 17 | 16 | 4 | 42 | 24 | 11 | 69 |
| 1994 |  | 314 | 95 | 32 | 9 | 17 | 11 | 3 | 40 | 29 | 12 | 67 |
| 1995 |  | 312 | 89 | 36 | 5 | 17 | 10 | 3 | 40 | 27 | 13 | 72 |
| 1996 |  | 318 | 98 | 37 | 11 | 15 | 11 | 4 | 33 | 32 | 13 | 63 |
| 1997 |  | 326 | 100 | 40 | 13 | 21 | 9 | 4 | 32 | 23 | 15 | 67 |
| 1998 |  | 390 | 109 | 64 | 20 | 17 | 10 | 6 | 31 | 37 | 13 | 84 |
| 1999 |  | 454 | 99 | 63 | 29 | 25 | 12 | 6 | 37 | 29 | 15 | 138 |
| 2000 |  | 483 | 96 | 63 | 23 | 34 | 16 | 6 | 48 | 24 | 30 | 144 |
| 2001 |  | 480 | 86 | 77 | 22 | 32 | 18 | 3 | 47 | 24 | 30 | 140 |
| 2002 |  | 513 | 89 | 61 | 27 | 36 | 10 | 5 | 52 | 28 | 32 | 172 |
| 2001 | March | 100 | 16 | 18 | 3 | 8 | 3 | 1 | 9 | 6 | 6 | 29 |
|  | June | 113 | 20 | 20 | 5 | 9 | 6 | 2 | 10 | 4 | 6 | 32 |
|  | Sept | 178 | 33 | 25 | 7 | 11 | 6 | 1 | 20 | 8 | 12 | 55 |
|  | Dec | 89 | 18 | 12 | 5 | 5 | 3 | I | 9 | 5 | 6 | 23 |
| 2002 | March June | 105 117 | 17 18 | 14 19 | 7 8 | 7 | 3 2 | 1 | 11 8 | 7 | 6 | 33 38 |
|  | Sept | 197 | 31 | 17 | 5 | 12 | 2 | 3 | 26 | 12 | 14 | 74 |
|  | Dec | 95 | 24 | 11 | 7 | 5 | 3 | - | 7 | 4 | 6 | 27 |
| Outfl | fow |  |  |  |  |  |  |  |  |  |  |  |
| 1971 |  | 240 | 31 | 99 | 21 | 8 | : | 8 | 23 | 17 |  | 34 |
| 1976 |  | 210 | 39 | 63 | 21 | 4 | 2 | 3 | 17 | 21 | 6 | 33 |
| 1981 |  | 232 | 33 | 78 | 23 | 2 | 1 | 3 | 20 | 25 | 23 | 23 |
| 1986 |  | 213 | 62 | 50 | 2 | 4 | 2 | 2 | 13 | 34 | 16 | 28 |
| 1991 |  | 285 | 95 | 61 | 7 | 6 | 4 | 2 | 21 | 35 | 14 | 40 |
| 1994 |  | 238 | 76 | 47 | 4 | 4 |  | 4 | 19 | 27 | 13 | 41 |
| 1995 |  | 236 | 76 | 52 | 6 | 4 | 2 | 3 | 15 | 30 | 10 | 40 |
| 1996 |  | 264 | 94 | 58 | 5 | 5 | 1 | 1 | 23 | 26 | 8 | 42 |
| 1997 |  | 279 | 92 | 57 | 8 | 6 | 3 | 3 | 23 | 28 | 13 | 46 |
| 1998 |  | 251 | 85 | 54 | 6 | 5 | 2 | 2 | 14 | 27 | 9 | 48 |
| 1999 |  | 291 | 103 | 73 | 7 | 4 | , | 3 | 14 | 33 | 10 | 44 |
| 2000 |  | 321 | 103 | 79 | 7 | 5 | 3 | 3 | 15 | 33 | 15 | 58 |
| 2001 |  | 308 | 94 | 80 | 8 | 8 | 3 | 2 | 13 | 28 | 9 | 63 |
| 2002 |  | 359 | 125 | 84 | 10 | 7 | 4 | 2 | 16 | 37 | 12 | 62 |
| 2001 | March | 60 | 16 | 20 | 2 | 2 | - | - | 2 | 4 | 1 | 12 |
|  | June | 65 | 23 | 16 | 2 | 2 | 1 | - | 4 | 5 | I | 10 |
|  | Sept | 103 | 36 | 19 | 3 | 2 | 1 | 2 | 3 | 10 | 4 | 23 |
|  | Dec | 81 | 20 | 24 | 2 | 3 | 1 | - | 4 | 8 | 2 | 16 |
| 2002 | March | 75 | 30 | 16 | 3 | 1 | 1 | - | 3 | 7 | 1 | 13 |
|  | June | 81 | 26 | 20 | 2 | 2 | - | - | 3 | 10 | 3 | 14 |
|  | Sept | 124 | 44 | 22 | 3 | 3 | 2 | I | 6 | 14 | 6 | 23 |
|  | Dec | 80 | 24 | 26 | 3 | 1 | 1 | - | 4 | 7 | 2 | 13 |
| Balan |  |  |  |  |  |  |  |  |  |  |  |  |
| 1971 |  | -40 | - 10 | -46 | - 13 | +16 |  | -3 | +14 | + 6 |  | - 3 |
| 1981 |  | - 79 | -6 | - 58 | - 20 | +12 +15 | +10 +8 | + | $\begin{array}{r}+14 \\ +1 \\ \hline\end{array}$ | -4 | +12 | -10 +5 |
| 1986 |  | + 37 | +9 | -21 | $+16$ | +12 | +8 | + 3 | + 12 | -8 | - | +6 |
| 1991 |  | +43 | + | - 18 | $+1$ | +11 | + 12 | +2 | + 20 | -11 | -4 | + 29 |
| 1994 |  | + 77 | +19 | - 14 | + 5 | +13 | + 7 | -1 | +21 | + 2 | -1 | + 25 |
| 1995 |  | +75 | +13 | - 16 | - 1 | +13 | +8 | - | +25 | - 3 | + 3 | + 32 |
| 1996 |  | + 54 | + 5 | -21 | + 6 | $+10$ | $+10$ | + 3 | + 10 | + 6 | + 5 | +21 |
| 1997 |  | +47 | +9 | - 17 | + 5 | +15 | +6 | +1 | +9 | -5 | + 2 | +21 |
| 1998 |  | +139 | +24 | $+10$ | $+14$ | $+12$ | + 8 | + 4 | + 17 | $+10$ | +4 | +36 |
| 1999 |  | +163 | -4 | - 10 | + 22 | + 22 | +11 | + 3 | +23 | -4 | + 5 | +94 |
| 2000 |  | +163 | -8 | - 15 | +15 | +29 | $+13$ | + 4 | + 33 | -9 | + 15 | + 86 |
| 2001 |  | +172 | -7 | -2 | +13 | +24 | +14 | + 1 | +34 | -4 | +20 | + 77 |
| 2002 |  | +153 | -36 | -23 | $+17$ | +29 | + 7 | + 3 | +36 | - 10 | +20 | + 110 |
| 2001 | March | + 40 | - 1 | -2 | + 2 | + 6 | + 3 | +1 | + 7 | + 2 | + 5 | $+17$ |
|  | June | +48 | - 2 | + 3 | +4 | + 7 | + 5 | +1 | + 6 | - 1 | + 5 | + 22 |
|  | Sept | + 75 | - 3 | +6 | +4 | +9 | +5 | - | +17 | -2 | + 8 | + 32 |
|  | Dec | + 8 | -2 | - 12 | + 3 | + 3 | + 3 | $+1$ | + 5 | -2 | + 4 | + 7 |
| 2002 | March | + 30 | - 14 | -2 | +4 | +6 | + 2 | + 1 | + 8 | + 1 | + 4 | + 20 |
|  | June | + 36 | -9 | - | + 7 | + 10 | + 2 | - | + 5 | -6 | + 4 | + 24 |
|  | Sept | + 73 | - 13 | -5 | + 3 | +9 | - | + 2 | +19 | - 1 | +8 | +51 |
|  | Dec | +14 | -1 | -15 | +4 | + 4 | + 3 | - | + 3 | -3 | + 4 | $+15$ |

Note: Figures in this table are derived from the International Passenger Survey and other sources - see Notes to Tables. Prior to 1991 they exclude certain categories of migration such as migrants between the UK and the Irish Republic, persons seeking asylum after entering the country and other short-term visitors granted extensions of stay. From I99I, the figures in this table include all categories of migrants and therefore represent total international migration. For adjustments required to pre-1991 figures, see Notes to Tables.

I For 1971 the European Union figures are for the original six countries only. From 1976 onwards the European Union is as currently constituted.
2 For 1971 Pakistan is included with India, Bangladesh and Sri Lanka.
3 For 1971 Middle East is included in the Other Category of Other Foreign Countries.
The table shows final revised Total International Migration estimates for 1991-200I. See 'Report: Revised International Migration Estimates I99I to 200I' in Population Trends II3.

## Table 7.3

International migration: citizenship

| United Kingdom |  |  |  |  |  |  |  | Numbers (thousands) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Citizenship (numbers) |  |  |  |  |  |  |  | British citizens as percentage of all citizens |
| Year and quarter | All countries | British | Non-British | European Union' | Commonwealth |  |  | Other foreign |  |
|  |  |  |  |  | All | Old | New |  |  |
| Inflow |  |  |  |  |  |  |  |  |  |
| 1971 | 200 | 92 | 108 |  | 53 | 17 | 36 | 54 | 46 |
| 1976 | 191 | 87 | 104 | 19 | 57 | 17 | 40 | 28 | 45 |
| 1981 | 153 | 60 | 93 | 12 | 43 | 12 | 31 | 38 | 39 |
| 1986 | 250 | 120 | 130 | 36 | 50 | 19 | 31 | 44 | 48 |
| 1991 | 328 | 109 | 219 | 53 | 85 | 26 | 59 | 82 | 33 |
| 1995 | 312 | 84 | 228 | 61 | 85 | 27 | 58 | 82 | 27 |
| 1996 | 318 | 94 | 224 | 72 | 78 | 29 | 49 | 73 | 29 |
| 1997 | 326 | 89 | 237 | 72 | 90 | 31 | 59 | 76 | 27 |
| 1998 | 390 | 103 | 287 | 82 | 105 | 54 | 51 | 100 | 26 |
| 1999 | 454 | 116 | 337 | 67 | 121 | 54 | 66 | 150 | 26 |
| 2000 | 483 | 104 | 379 | 63 | 148 | 57 | 91 | 168 | 22 |
| 2001 | 480 | 106 | 373 | 60 | 151 | 67 | 84 | 162 | 22 |
| 2002 | 513 | 95 | 418 | 63 | 159 | 66 | 93 | 197 | 18 |
| 2003 | 513 | 106 | 407 | 64 | 166 | 63 | 103 | 177 | 21 |
| 2002 March | 105 | 16 | 89 | 12 | 35 | 16 | 19 | 42 | 16 |
| June | 117 | 25 | 91 | 12 | 39 | 18 | 21 | 41 | 22 |
| Sept | 197 | 30 | 167 | 24 | 56 | 18 | 38 | 86 | 15 |
| Dec | 95 | 23 | 72 | 15 | 29 | 13 | 15 | 28 | 24 |
| 2003 March | 109 | 26 | 83 | 14 | 31 | 15 | 17 | 38 | 24 |
| June | 104 | 22 | 83 | 14 | 37 | 16 | 21 | 32 | 21 |
| Sept | 205 | 39 | 166 | 27 | 62 | 21 | 40 | 77 | 19 |
| Dec | 94 | 19 | 75 | 10 | 36 | 11 | 25 | 30 | 20 |
| Outflow |  |  |  |  |  |  |  |  |  |
| 1971 | 240 | 171 | 69 |  | 29 | 13 | 16 | 40 | 71 |
| 1976 | 210 | 137 | 73 | 18 | 30 | 16 | 13 | 25 | 65 |
| 1981 | 232 | 164 | 68 | 16 | 29 | 14 | 15 | 24 | 71 |
| 1986 | 213 | 132 | 81 | 13 | 29 | 19 | 10 | 40 | 62 |
| 1991 | 285 | 154 | 131 | 53 | 35 | 18 | 17 | 43 | 54 |
| 1995 | 236 | 136 | 101 | 38 | 29 | 18 | 12 | 34 | 57 |
| 1996 | 264 | 156 | 108 | 44 | 32 | 17 | 14 | 32 | 59 |
| 1997 | 279 | 149 | 131 | 53 | 40 | 20 | 20 | 38 | 53 |
| 1998 | 251 | 126 | 126 | 49 | 33 | 20 | 13 | 44 | 50 |
| 1999 | 291 | 139 | 152 | 59 | 41 | 29 | 12 | 52 | 48 |
| 2000 | 321 | 161 | 160 | 57 | 47 | 32 | 15 | 55 | 50 |
| 2001 | 308 | 159 | 149 | 49 | 51 | 32 | 19 | 49 | 52 |
| 2002 | 359 | 186 | 174 | 52 | 58 | 42 | 16 | 64 | 52 |
| 2003 | 362 | 191 | 171 | 50 | 59 | 42 | 17 | 62 | 53 |
| 2002 March | 75 | 45 | 29 | 7 | 11 | 8 | 3 | 12 | 61 |
| June | 81 | 38 | 42 | 15 | 11 | 7 | 3 | 17 | 48 |
| Sept | 124 | 59 | 65 | 21 | 21 | 13 | 8 | 23 | 47 |
| Dec | 80 | 43 | 37 | 9 | 16 | 14 |  | 12 | 54 |
| 2003 March | 76 | 40 | 36 | 16 | 8 | 5 | 3 | 13 | 53 |
| June | 77 | 40 | 37 | 15 | 11 | 9 | 2 | 11 | 51 |
| Sept | 118 | 70 | 48 | 11 | 16 | 10 | 6 | 21 | 59 |
| Dec | 90 | 41 | 49 | 8 | 23 | 17 | 6 | 18 | 45 |
| Balance |  |  |  |  |  |  |  |  |  |
| 1971 | - 40 | - 79 | + 39 |  | + 24 | + 4 | + 20 | + 14 |  |
| 1976 | - 19 | - 50 | + 31 | + 1 | + 27 | + 1 | + 27 | + +15 | : |
| 1981 | - 79 | -104 | + 24 | - 4 | + 14 | - 2 | +16 | + 15 | : |
| 1986 | + 37 | - 11 | + 49 | +22 | + 21 | + 0 | + 21 | + 5 | : |
| 1991 | + 43 | - 45 | + 89 | + 0 | + 50 | + 7 | +42 | + 39 | : |
| 1995 | + 75 | - 52 | +127 | + 23 | + 56 | + 9 | +46 | + 48 | : |
| 1996 | + 54 | - 62 | +116 | +28 | + 47 | +12 | + 35 | + 41 | : |
|  | + 47 | - 60 | +107 | +18 | + 50 | +11 | + 39 | + 38 | : |
| 1998 | +139 | - 23 | +162 | + 33 | + 72 | +34 | + 38 | + 57 | : |
| 1999 | +163 | - 23 | + 186 | + 8 | + 80 | +26 | + 54 | + 98 | : |
| 2000 | +163 | - 57 | + 220 | + 6 | $+101$ | +25 | + 76 | +113 | : |
| 2001 | +172 | - 53 | + 225 | +11 | $+101$ | +35 | +65 | +113 | : |
| 2002 | +153 | - 91 | + 245 | +11 | +101 | +23 | +77 | +133 | : |
| 2003 | +151 | -85 | +236 | $+14$ | +107 | +21 | +86 | +115 | : |
| 2002 March | + 30 | - 29 |  | + 4 |  | + 8 | $+16$ |  |  |
| June | + 36 | - 13 | + 49 | - 3 | +28 | +11 | +17 | + 24 | : |
| Sept | + 73 | - 29 | +102 | + 3 | +36 | + 5 | +31 | + 63 | ! |
| Dec | + 14 | - 20 | + 35 | + 6 | +13 | - 1 | +13 | + 16 | : |
| 2003 March $\begin{aligned} & \text { June } \\ & \text { Sept } \\ & \text { Dec }\end{aligned}$ | + 33 | - 14 | + 47 | - 2 | + 23 | + 9 | $+14$ | + 25 | : |
|  | + 27 | - 18 | + 45 | - 2 | +26 | + 7 | +19 | + 21 | : |
|  | +87 | - 31 | +118 | +16 | + 45 | +11 | + 34 | + 56 | : |
|  | + 4 | - 22 | + 26 | + 1 | $+13$ | - 6 | +19 | + 12 | : |

[^15] this table include all categories of migrants and therefore represent total international migration. For adjustments required to pre-I99| figures, see Notes to Tables.

I For 1971 citizens of the European Union are included in Other Foreign Category. From 1976 onwards the European Union is as constituted. on I January I995. These do not include the 10 new member states admitted to the EU in May 1994. However, these member states will be included in the 2004 international migration estimates for the EU.

The table shows final revised Total International Migration estimates for 1991-2001. See 'Report: Revised International Migration Estimates I99I to 200I' in Population Trends II3.

| Year and quarter | England | Wales | Scotland | Northern Ireland | Government Office Regions of England |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | North East | North <br> West | Yorkshire and the Humber | East <br> Midlands | West <br> Midlands | East | London | South East | South <br> West |
| Inflow |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 | 105.4 | 52.0 | 50.4 | 9.7 | 39.2 | 93.0 | 78.2 | 84.0 | 75.7 | 146.3 | . | 215.4 | 123.8 |
| 1981 | 93.7 | 44.6 | 45.4 | 6.8 | 31.1 | 79.3 | 68.3 | 76.6 | 66.9 | 121.4 | 155.0 | 201.8 | 108.3 |
| 1986 | 115.6 | 55.2 | 43.9 | 8.8 | 36.5 | 90.0 | 78.6 | 101.9 | 87.1 | 144.6 | 182.8 | 243.3 | 148.8 |
| 1991 | 95.8 | 51.5 | 55.8 | 12.5 | 40.2 | 96.1 | 85.0 | 89.6 | 82.7 | 122.1 | 148.8 | 197.6 | 120.7 |
| 1994 | 103.4 | 52.0 | 51.7 | 10.9 | 37.1 | 99.7 | 87.6 | 96.4 | 84.8 | 130.6 | 160.4 | 215.5 | 127.7 |
| 1995 | 108.1 | 54.7 | 48.5 | 14.1 | 37.9 | 103.7 | 90.8 | 101.3 | 90.0 | 134.6 | 170.7 | 218.6 | 131.6 |
| 1996 | 111.1 | 55.3 | 47.0 | 11.4 | 38.6 | 105.0 | 90.8 | 102.1 | 90.6 | 139.5 | 168.0 | 228.0 | 138.5 |
| 1997 | 110.9 | 58.5 | 55.3 | 10.2 | 38.6 | 106.5 | 92.6 | 107.7 | 92.7 | 145.0 | 167.3 | 229.6 | 144.0 |
| 1998 | 111.2 | 56.3 | 52.6 | 11.7 | 39.0 | 104.0 | 93.0 | 107.9 | 93.4 | 142.8 | 173.9 | 226.1 | 138.7 |
| 1999 | 111.7 | 58.0 | 50.9 | 11.6 | 38.7 | 105.4 | 95.2 | 111.3 | 93.7 | 148.4 | 162.9 | 228.6 | 143.2 |
| 2000 | 108.6 | 59.5 | 48.8 | 11.2 | 39.2 | 106.2 | 96.5 | 112.1 | 94.3 | 145.8 | 163.0 | 224.2 | 140.1 |
| 2001 | 104.2 | 60.0 | 56.5 | 12.7 | 40.4 | 106.3 | 96.5 | 115.5 | 95.3 | 147.2 | 159.7 | 223.8 | 143.3 |
| 2002 | 100.9 | 64.0 | 52.7 | 10.8 | 42.7 | 108.9 | 99.7 | 119.5 | 98.6 | 150.0 | 154.8 | 228.6 | 145.9 |
| 2003 | 97.5 | 62.7 | 59.8 | 12.1 | 41.9 | 109.3 | 99.4 | 114.8 | 95.0 | 144.6 | 148.3 | 220.5 | 141.6 |
| 2003 March | 20.1 | 12.5 | 13.6 | 3.3 | 8.0 | 22.0 | 19.1 | 22.8 | 19.6 | 30.9 | 32.9 | 45.3 | 27.5 |
| June | 21.5 | 13.2 | 11.9 | 2.9 | 8.3 | 23.9 | 19.9 | 23.1 | 20.6 | 32.1 | 33.9 | 47.7 | 30.7 |
| Sept | 33.3 | 22.5 | 20.8 | 3.3 | 15.6 | 37.4 | 39.3 | 43.0 | 31.4 | 46.3 | 46.3 | 75.0 | 49.6 |
| Dec | 22.6 | 14.5 | 13.5 | 2.7 | 10.0 | 26.0 | 21.1 | 25.9 | 23.4 | 35.3 | 35.1 | 52.6 | 33.8 |
| 2004 March | 20.7 | 12.7 | 12.9 | 3.0 | 8.0 | 22.1 | 19.0 | 22.6 | 19.9 | 32.6 | 34.2 | 47.1 | 29.0 |
| Outflow |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 | 104.8 | 43.9 | 54.5 | 14.2 | 40.2 | 102.9 | 78.5 | 77.2 | 89.5 | 115.6 |  | 181.7 | 94.7 |
| 1981 | 91.5 | 41.8 | 47.7 | 9.4 | 39.1 | 98.6 | 73.3 | 71.7 | 78.4 | 104.4 | 187.0 | 166.0 | 88.0 |
| 1986 | 100.7 | 49.8 | 57.9 | 15.1 | 45.6 | 115.8 | 90.5 | 84.8 | 94.8 | 128.1 | 232.4 | 204.1 | 102.5 |
| 1991 | 112.2 | 47.4 | 46.7 | 9.3 | 40.9 | 104.9 | 85.4 | 81.4 | 87.9 | 113.0 | 202.1 | 184.6 | 98.9 |
| 1994 | 106.3 | 50.4 | 49.0 | 12.2 | 43.5 | 109.8 | 91.9 | 86.2 | 95.1 | 115.5 | 206.3 | 190.4 | 103.9 |
| 1995 | 107.9 | 53.1 | 52.0 | 12.3 | 45.6 | 115.8 | 97.6 | 91.9 | 98.1 | 118.7 | 207.6 | 195.8 | 108.0 |
| 1996 | 105.3 | 53.3 | 54.5 | 11.8 | 44.5 | 114.0 | 98.2 | 94.3 | 101.0 | 121.1 | 213.4 | 198.9 | 109.8 |
| 1997 | 114.8 | 54.4 | 53.2 | 12.6 | 44.5 | 117.5 | 100.0 | 97.4 | 103.7 | 124.8 | 221.7 | 205.7 | 112.4 |
| 1998 | 111.3 | 54.2 | 53.8 | 12.4 | 43.7 | 115.8 | 97.9 | 97.3 | 100.9 | 125.0 | 217.9 | 209.4 | 110.9 |
| 1999 | 111.6 | 53.3 | 54.9 | 12.5 | 43.8 | 114.9 | 97.0 | 96.4 | 101.8 | 125.8 | 228.3 | 208.7 | 110.7 |
| 2000 | 110.8 | 52.1 | 53.3 | 11.9 | 42.9 | 111.3 | 95.7 | 94.9 | 101.5 | 124.6 | 231.5 | 210.5 | 110.7 |
| 2001 | 120.4 | 51.5 | 50.4 | 11.1 | 42.6 | 110.4 | 95.6 | 95.6 | 101.6 | 127.1 | 244.2 | 216.4 | 110.7 |
| 2002 | 119.3 | 49.7 | 48.4 | 11.1 | 41.3 | 107.5 | 94.6 | 96.9 | 102.7 | 130.1 | 262.5 | 220.2 | 111.0 |
| 2003 | 126.0 | 48.1 | 46.4 | 11.7 | 40.1 | 104.1 | 93.0 | 96.0 | 101.7 | 127.4 | 262.6 | 211.1 | 108.0 |
| 2003 March | 27.5 | 9.6 | 10.1 | 2.2 | 8.5 | 21.2 | 18.5 | 19.2 | 20.3 | 26.2 | 57.1 | 42.8 | 21.9 |
| June | 26.2 | 10.7 | 10.5 | 2.1 | 8.8 | 22.8 | 20.9 | 21.5 | 21.7 | 25.9 | 56.2 | 44.8 | 22.5 |
| Sept | 43.6 | 16.5 | 15.0 | 4.6 | 13.6 | 36.6 | 32.3 | 33.0 | 36.3 | 45.4 | 84.6 | 73.8 | 38.4 |
| Dec | 28.7 | 11.2 | 10.7 | 2.7 | 9.1 | 23.5 | 21.3 | 22.4 | 23.3 | 29.9 | 64.7 | 49.7 | 25.2 |
| 2004 March | 26.6 | 10.1 | 10.2 | 2.3 | 7.8 | 21.2 | 18.9 | 20.1 | 20.6 | 26.7 | 58.8 | 43.9 | 22.6 |
| Balance |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1976 | + 0.6 | +8.1 | - 4.1 | -4.5 | $-1.0$ | - 9.8 | - 0.3 | + 6.8 | -13.8 | +30.7 | .. | + 33.7 | +29.1 |
| 1981 | + 2.1 | + 2.7 | - 2.3 | - 2.5 | -8.0 | -19.3 | - 5.0 | + 4.9 | -11.6 | $+17.0$ | - 32.0 | + 35.8 | +20.3 |
| 1986 | +14.9 | + 5.4 | - 14.1 | -6.3 | - 9.1 | -25.8 | - 11.9 | +17.1 | - 7.8 | $+16.5$ | - 49.6 | +39.2 | +46.4 |
| 1991 | - 16.4 | + 4.0 | + 9.2 | + 3.2 | $-0.7$ | -8.8 | - 0.4 | $+8.1$ | - 5.2 | + 9.1 | - 53.3 | + 13.0 | +21.8 |
| 1994 | - 2.9 | $+1.5$ | + 2.6 | $-1.2$ | -6.4 | -10.1 | - 4.4 | $+10.2$ | - 10.3 | +15.1 | -45.9 | +25.1 | +23.8 |
| 1995 | + 0.2 | $+1.6$ | - 3.5 | + 1.8 | - 7.7 | -12.1 | - 6.8 | + 9.4 | - 8.1 | + 15.9 | - 36.9 | + 22.7 | +23.6 |
| 1996 | + 5.8 | + 2.0 | - 7.5 | - 0.4 | - 5.9 | - 9.0 | - 7.4 | + 7.8 | - 10.4 | + 18.3 | - 45.4 | +29.1 | +28.7 |
| 1997 | - 3.8 | + 4.1 | + 2.2 | $-2.4$ | - 5.9 | -11.0 | - 7.3 | +10.3 | - 11.1 | + 20.3 | - 54.4 | +23.8 | +31.6 |
| 1998 | $-0.1$ | +2.1 | - 1.2 | - 0.8 | -4.8 | -11.8 | - 4.9 | $+10.6$ | - 7.4 | +17.7 | - 44.0 | $+16.7$ | +27.8 |
| 1999 | $+0.1$ | + 4.7 | - 4.0 | - 0.8 | - 5.1 | - 9.5 | - 1.8 | +14.9 | - 8.1 | + 22.6 | - 65.4 | +19.8 | +32.6 |
| 2000 | - 2.2 | + 7.4 | - 4.5 | -0.7 | - 3.7 | - 5.1 | + 0.8 | +17.2 | - 7.2 | +21.2 | - 68.6 | +13.8 | +29.3 |
| 2001 | -16.3 | +8.5 | + 6.1 | + 1.6 | $-2.3$ | $-4.1$ | + 0.9 | +19.9 | - 6.3 | +20.1 | - 84.5 | + 7.4 | +32.6 |
| 2002 | -18.4 | +14.3 | + 4.3 | $-0.3$ | +1.4 | $+1.4$ | + 5.0 | +22.6 | - 4.1 | +19.9 | -107.8 | + 8.4 | +34.8 |
| 2003 | -28.5 | +14.6 | +13.4 | + 0.4 | + 1.8 | + 5.2 | + 6.4 | +18.7 | - 6.7 | + 17.2 | -114.3 | + 9.4 | +33.6 |
| 2003 March | - 7.4 | + 2.9 | + 3.4 | $+1.0$ | -0.5 | + 0.8 | + 0.6 | + 3.6 | - 0.7 | + 4.8 | - 24.1 | + 2.5 | + 5.6 |
| June | - 4.7 | +2.5 | + 1.5 | + 0.8 | -0.5 | + 1.2 | - 0.9 | + 1.6 | - 1.1 | + 6.2 | - 22.3 | $\begin{array}{r} \\ +\quad 2.8 \\ \hline\end{array}$ | +8.3 |
| Sept | - 10.3 | + 5.9 | + 5.7 | - 1.3 | + 2.0 | + 0.8 | + 7.0 | +10.0 | - 4.9 | + 0.8 | - 38.3 | + 1.2 | + 11.1 |
| Dec | - 6.0 | + 3.3 | + 2.8 | $-0.0$ | + 0.9 | + 2.4 | $-0.2$ | + 3.5 | + 0.0 | + 5.4 | - 29.5 | + 2.9 | + 8.6 |
| 2004 March | - 6.0 | + 2.6 | + 2.7 | + 0.7 | + 0.2 | + 0.9 | + 0.2 | + 2.5 | - 0.7 | + 5.9 | - 24.6 | + 3.3 | + 6.4 |

Notes: Figures are derived from re-registrations recorded at the National Health Service Central Register.
See Notes to tables for effects of computerisation of National Health Service Central Register at Southport on time series data.
Figures have been adjusted for minor changes caused by database realignment during HA reorganisation. See Notes to tables.

| Table 9.1 | First marriages': age and sex |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| England and Wales |  |  | Numbers (thousands), rates, percentages, mean and median age |  |  |  |  |  |  |  |  |
|  | All ages |  | Persons marrying per 1,000 single population at ages |  |  |  |  |  | Per cent aged under 20 | Mean age ${ }^{3}$ (years) | Median age ${ }^{3}$ (years) |
| Year and quarter | Number | Rate ${ }^{2}$ | 16-19 | 20-24 | 25-29 | 30-34 | 35-44 | 45 and over |  |  |  |
| Males |  |  |  |  |  |  |  |  |  |  |  |
| 1961 | 308.8 | 74.9 | 16.6 | 159.1 | 182.8 | 91.9 | 39.8 | 9.3 | 6.9 | 25.6 | 24.0 |
| 1966 | 339.1 | 78.9 | 22.1 | 168.6 | 185.4 | 91.1 | 36.4 | 8.6 | 9.9 | 24.9 | 23.4 |
| 1971 | 343.6 | 82.3 | 26.1 | 167.7 | 167.3 | 84.6 | 33.8 | 8.0 | 10.1 | 24.6 | 23.4 |
| 1976 | 274.4 | 62.8 | 18.5 | 123.7 | 132.5 | 78.7 | 32.0 | 7.1 | 9.8 | 25.1 | 23.7 |
| 1981 | 259.1 | 51.7 | 11.1 | 94.1 | 120.8 | 70.3 | 31.1 | 5.4 | 7.2 | 25.4 | 24.1 |
| 1986 | 253.0 | 45.0 | 6.0 | 64.4 | 105.1 | 73.9 | 30.9 | 4.8 | 3.8 | 26.3 | 25.1 |
| 1991 | 222.8 | 37.8 | 3.4 | 43.3 | 81.0 | 66.5 | 29.9 | 4.8 | 2.1 | 27.5 | 26.5 |
| 1994 | 206.1 | 34.3 | 2.2 | 31.7 | 73.3 | 61.1 | 30.2 | 5.1 | 1.3 | 28.5 | 27.5 |
| 1995 | 198.2 | 32.4 | 2.0 | 28.3 | 68.2 | 59.9 | 30.2 | 5.0 | 1.2 | 28.9 | 27.9 |
| 1996 | 193.3 | 31.1 | 1.8 | 25.2 | 64.5 | 59.4 | 30.7 | 5.2 | 1.1 | 29.3 | 28.3 |
| 1997 | 188.3 | 29.7 | 1.8 | 22.8 | 61.1 | 58.0 | 30.6 | 5.2 | 1.2 | 29.6 | 28.6 |
| 1998 | 186.3 | 28.9 | 1.7 | 21.0 | 59.4 | 57.8 | 30.2 | 5.2 | 1.2 | 29.8 | 28.9 |
| 1999 | 184.3 | 28.0 | 1.7 | 18.9 | 56.9 | 57.7 | 30.4 | 5.3 | 1.2 | 30.1 | 29.2 |
| 2000 | 186.1 | 27.7 | 1.7 | 18.2 | 54.3 | 58.2 | 32.0 | 5.7 | 1.2 | 30.5 | 29.6 |
| 2001 | 175.7 | 25.5 | 1.5 | 16.2 | 50.4 | 54.5 | 29.6 | 5.3 | 1.1 | 30.6 | 29.7 |
| 2002 | 179.1 | 25.4 | 1.3 | 16.4 | 48.9 | 55.0 | 31.1 | 5.9 | 1.0 | 30.9 | 30.1 |
| $2003{ }^{\text {P }}$ | 188.0 | 25.8 | 1.3 | 16.0 | 49.3 | 57.0 | 32.4 | 6.8 | 1.0 | 31.2 | 30.3 |
| 2001 March | 18.7 | 11.0 | 1.2 | 8.3 | 19.6 | 22.0 | 13.6 | 3.1 | 2.0 | 30.7 | 29.7 |
| June | 49.9 | 29.1 | 1.5 | 18.0 | 59.1 | 61.8 | 33.0 | 6.0 | 1.0 | 30.6 | 29.7 |
| Sept | 78.1 | 45.0 | 2.0 | 27.7 | 93.2 | 97.5 | 49.4 | 7.3 | 0.8 | 30.4 | 29.6 |
| Dec | 29.0 | 16.7 | 1.3 | 10.8 | 29.2 | 36.2 | 22.1 | 4.8 | 1.5 | 31.1 | 30.2 |
| 2002 March | 20.7 | 11.9 | 1.1 | 8.8 17.4 | 21.3 | 24.1 | 15.1 | 3.5 | 1.7 | 31.0 | 30.0 |
| June | 49.7 | 28.3 | 1.3 | 17.4 | 54.9 | 61.7 | 34.9 | 6.5 | 0.9 | 31.0 | 30.1 |
| Sept | 77.8 | 43.8 | 1.8 | 27.9 | 88.3 | 95.5 | 50.8 | 8.0 | 0.8 | 30.7 | 29.9 |
| Dec | 31.0 | 17.4 | 1.1 | 11.3 | 30.5 | 37.9 | 23.3 | 5.3 | 1.3 | 31.4 | 30.4 |
| 2003 March $^{\text {P }}$ | 22.1 | 12.3 | 1.1 | 8.7 | 21.5 | 25.5 | 16.5 | 4.2 | 1.6 | 31.4 | 30.4 |
| June ${ }^{\text {P }}$ | 51.9 | 28.7 | 1.3 | 17.4 | 55.1 | 63.7 | 36.1 | 7.4 | 0.9 | 31.2 | 30.3 |
| Sept ${ }^{\text {P }}$ | 81.4 | 44.5 | 1.7 | 27.3 | 89.0 | 99.8 | 52.5 | 9.7 | 0.7 | 31.0 | 30.1 |
| Dec ${ }^{\text {p }}$ | 32.2 | 17.6 | 1.1 | 10.8 | 31.0 | 38.6 | 24.1 | 5.9 | 1.2 | 31.6 | 30.7 |
| Females |  |  |  |  |  |  |  |  |  |  |  |
| $1961$ | 312.3 | 83.0 | 77.0 | 261.1 | 162.8 | 74.6 | 29.8 | 4.6 | 28.7 | 23.1 | 21.6 |
| 1966 | 342.7 | 89.3 | 82.6 | 263.7 | 153.4 | 74.1 | 30.2 | 4.3 | 32.5 | 22.5 | 21.2 |
| 1971 | 347.4 | 97.0 | 92.9 | 246.5 | 167.0 | 75.7 | 30.3 | 4.8 | 31.1 | 22.6 | 21.4 |
| 1976 | 276.5 | 76.9 | 66.7 | 185.4 | 140.7 | 77.6 | 31.6 | 4.0 | 31.1 | 22.8 | 21.5 |
| 1981 | 263.4 | 64.0 | 41.5 | 140.8 | 120.2 | 67.0 | 28.7 | 2.8 | 24.1 | 23.1 | 21.9 |
| 1986 | 256.8 | 55.6 | 24.1 | 102.4 | 108.7 | 67.1 | 28.6 | 2.7 | 13.9 | 24.1 | 23.1 |
| 1991 | 224.8 | 46.7 | 14.0 | 73.0 | 90.6 | 62.7 | 28.1 | 2.8 | 7.9 | 25.5 | 24.6 |
| 1994 | 206.3 | 41.6 | 9.6 | 56.4 | 84.5 | 58.9 | 27.7 | 3.1 | 5.2 | 26.5 | 25.7 |
| 1995 | 198.6 | 39.3 | 9.0 | 50.8 | 80.5 | 57.1 | 27.6 | 3.1 | 5.1 | 26.8 | 26.0 |
| 1996 | 192.7 | 37.3 | 8.0 | 45.7 | 77.2 | 57.2 | 27.8 | 3.2 | 4.9 | 27.2 | 26.4 |
| 1997 | 188.5 | 35.6 | 7.4 | 42.5 | 74.1 | 56.1 | 27.2 | 3.3 | 4.7 | 27.5 | 26.7 |
| 1998 | 187.4 | 34.7 | 7.2 | 39.9 | 72.6 | 56.1 | 26.5 | 3.4 | 4.7 | 27.7 | 27.0 |
| 1999 | 185.3 | 33.5 | 6.7 | 36.7 | 70.8 | 56.0 | 26.5 | 3.5 | 4.4 | 28.0 | 27.3 |
| 2000 | 187.7 | 33.2 | 6.5 | 35.2 | 68.7 | 57.2 | 27.5 | 3.9 | 4.2 | 28.2 | 27.5 |
| 2001 | 177.5 | 30.6 | 5.5 | 31.9 | 64.3 | 53.2 | 25.5 | 3.7 | 3.9 | 28.4 | 27.7 |
| 2002 | 180.7 | 30.4 | 5.3 | 31.0 | 63.2 | 54.4 | 26.8 | 4.3 | 3.7 | 28.7 | 27.9 |
| $2003{ }^{\text {P }}$ | 189.0 | 30.9 | 5.2 | 30.9 | 63.7 | 56.8 | 28.0 | 5.1 | 3.6 | 28.9 | 28.1 |
| 2001 March | 18.6 | 13.0 | 4.0 | 14.2 | 23.8 | 21.6 | 12.3 | 2.4 | 6.5 | 28.4 | 27.5 |
| June | 50.6 | 35.0 | 5.9 | 36.3 | 75.2 | 60.4 | 28.4 | 4.2 | 3.6 | 28.4 | 27.7 |
| Sept | 79.3 | 54.3 | 7.5 | 57.9 | 120.5 | 92.7 | 40.6 | 4.8 | 3.0 | 28.2 | 27.6 |
| Dec | 29.0 | 19.8 | 4.7 | 19.0 | 37.1 | 37.7 | 20.6 | 3.5 | 5.1 | 28.9 | 28.2 |
| 2002 March | 20.6 | 14.1 | 4.0 | 14.8 | 26.1 | 24.1 | 13.7 | 2.8 | 6.0 | 28.7 | 27.9 |
| June | 50.1 | 33.8 | 5.3 | 33.7 | 71.3 | 61.0 | 30.2 | 4.7 | 3.3 | 28.8 | 28.0 |
| Sept | 78.8 | 52.6 | 7.4 | 55.5 | 115.1 | 92.3 | 41.4 | 5.8 | 3.0 | 28.5 | 27.7 |
| Dec | 31.1 | 20.7 | 4.7 | 19.5 | 39.4 | 39.5 | 21.7 | 4.0 | 4.8 | 29.2 | 28.4 |
| 2003 March ${ }^{\text {P }}$ | 30.0 | 14.5 | 4.1 | 15.6 | 25.2 | 24.9 | 15.4 | 3.6 | 6.0 | 29.0 | 28.0 |
| June ${ }^{\text {P }}$ | 52.5 | 34.4 | 5.5 | 33.6 | 72.8 | 63.2 | 31.0 | 5.8 | 3.4 | 29.0 | 28.1 |
| Sept ${ }^{P}$ | 82.6 | 53.5 | 6.8 | 54.7 | 117.1 | 97.7 | 44.2 | 6.8 | 2.7 | 28.7 | 28.1 |
| Dec ${ }^{\text {p }}$ | 32.1 | 20.8 | 4.5 | 19.6 | 39.1 | 40.7 | 21.3 | 4.4 | 4.6 | 29.3 | 28.6 |

Notes: Marriage rates for 1986 have been calculated using the interim revised marital status estimates (based on the original mid-2001 estimates) and are subject to further revision.
I Figures for all marriages can be found in Table 2.1.
2 Per I,000 single persons aged 16 and over.
3 The mean/median ages shown in this table are unstandardised and therefore take no account of changes in the structure of the population by age or marital status.
Provisional.
See 'Notes to tables'.

Table 9.2
Remarriages': age, sex, and previous marital status
England and Wales
Numbers (thousands), rates, percentages, mean and median age

|  | Remarriages of divorced persons |  |  |  |  |  |  |  |  |  | Remarriages of widowed persons |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year and quarter | All ages |  | Persons remarrying per 1,000 divorced population at ages |  |  |  |  | Per cent aged under 35 | $\begin{aligned} & \text { Mean }{ }^{3} \\ & \text { age } \\ & \text { (years) } \end{aligned}$ | $\begin{gathered} \text { Median }^{3} \\ \text { age } \\ \text { (years) } \end{gathered}$ |  |  |
|  | Number | Rate ${ }^{2}$ | 16-24 | 25-29 | 30-34 | 35-44 | 45 and over |  |  |  |  |  |


| Males |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1961 |  | 18.8 | 162.9 | 478.6 | 473.6 | 351.6 | 198.3 | 88.6 | 33.9 | 40.5 | 39.2 | 19.1 | 28.8 |
| 1966 |  | 26.7 | 192.2 | 737.8 | 522.5 | 403.1 | 244.4 | 89.4 | 40.8 | 39.3 | 37.4 | 18.7 | 28.3 |
| 1971 |  | 42.4 | 227.3 | 525.2 | 509.0 | 390.7 | 251.3 | 124.8 | 42.8 | 39.8 | 37.0 | 18.7 | 27.5 |
| 1976 |  | 67.2 | 178.8 | 656.8 | 359.7 | 266.8 | 187.9 | 94.0 | 46.7 | 38.4 | 36.0 | 16.9 | 24.7 |
| 1981 |  | 79.1 | 129.5 | 240.7 | 260.9 | 205.8 | 141.9 | 63.9 | 46.1 | 38.1 | 35.9 | 13.8 | 19.7 |
| $\begin{aligned} & 1986 \\ & 199 \mid \end{aligned}$ |  | 83.4 | 91.0 | 141.4 | 158.9 | 141.3 | 106.0 | 49.9 | 38.5 | 39.1 | 37.7 | 11.6 | 16.7 |
|  |  | 74.9 | 63.0 | 81.1 | 111.3 | 100.6 | 72.7 | 38.4 | 34.3 | 40.3 | 39.0 | 9.0 | 12.5 |
| 1994 |  | 76.6 | 60.0 | 180.6 | 131.7 | 110.2 | 71.5 | 36.1 | 31.5 | 41.1 | 39.6 | 8.4 | 11.5 |
| 1995 |  | 77.0 | 58.6 | 190.0 | 132.1 | 111.4 | 72.2 | 34.9 | 30.3 | 41.3 | 39.8 | 7.8 | 10.8 |
| 1996 |  | 78.0 | 57.9 | 166.2 | 135.2 | 111.2 | 73.8 | 35.0 | 28.2 | 41.7 | 40.2 | 7.7 | 10.6 |
| 1997 |  | 76.8 | 55.7 | 170.9 | 132.2 | 110.3 | 72.9 | 33.6 | 27.0 | 42.0 | 40.5 | 7.4 | 10.3 |
| 1998 |  | 74.0 | 52.7 | 167.0 | 124.7 | 104.1 | 71.6 | 32.0 | 24.8 | 42.4 | 40.8 | 6.9 | 9.6 |
| 1999 |  | 72.6 | 50.7 | 125.7 | 120.7 | 102.9 | 70.2 | 31.2 | 23.3 | 42.7 | 41.2 | 6.6 | 9.3 |
| 2000 |  | 75.4 | 51.8 | 97.9 | 113.2 | 103.6 | 74.4 | 32.6 | 20.8 | 43.2 | 41.8 | 6.5 | 9.1 |
| 2001 |  | 67.7 | 45.7 | 75.7 | 96.6 | 95.8 | 67.6 | 28.5 | 19.7 | 43.5 | 42.0 | 5.8 | 8.0 |
| 2002 |  | 70.5 | 46.9 | 66.5 | 92.8 | 96.6 | 70.5 | 30.3 | 17.8 | 44.1 | 42.6 | 6.0 | 8.2 |
| $2003{ }^{\text {P }}$ |  | 74.0 | 46.5 | 75.8 | 89.7 | 91.5 | 68.9 | 31.4 | 16.0 | 44.6 | 43.3 | 6.2 | 8.5 |
| 2001 | March | 9.2 | 25.3 | 56.7 | 63.0 | 49.8 | 34.9 | 16.9 | 19.7 | 44.0 | 42.7 | 0.9 | 5.1 |
|  | June | 19.2 | 52.1 | 84.7 | 103.9 | 108.3 | 76.8 | 33.0 | 19.4 | 43.5 | 42.2 | 1.7 | 9.3 |
|  | Sept | 25.3 | 67.7 | 89.0 | 143.2 | 152.9 | 104.6 | 39.1 | 20.9 | 42.9 | 41.4 | 1.9 | 10.5 |
|  | Dec | 13.9 | 37.3 | 68.0 | 75.7 | 71.3 | 53.5 | 24.8 | 18.3 | 44.1 | 42.8 | 1.3 | 6.9 |
| 2002 | March | 10.3 | 27.8 | 49.0 | 64.0 | 55.4 | 39.8 | 18.7 | 18.0 | 44.4 | 42.9 | 0.9 | 5.1 |
|  | June | 19.7 | 52.7 | 60.8 | 98.8 | 106.6 | 79.1 | 34.4 | 17.3 | 44.2 | 42.7 | 1.7 | 9.2 |
|  | Sept | 25.9 | 68.2 | 94.8 | 130.8 | 149.4 | 107.1 | 41.3 | 18.6 | 43.5 | 42.0 | 2.0 | 11.0 |
|  | Dec | 14.6 | 38.5 | 61.2 | 76.8 | 74.0 | 55.6 | 26.4 | 16.9 | 44.7 | 43.3 | 1.3 | 7.2 |
| 2003 | March ${ }^{\text {P }}$ | 10.6 | 27.1 | 59.5 | 62.9 | 51.6 | 37.0 | 19.5 | 16.3 | 45.3 | 43.9 | 1.0 | 5.7 |
|  | June ${ }^{\text {p }}$ | 20.9 | 52.8 | 74.9 | 93.5 | 104.6 | 77.0 | 36.3 | 15.8 | 44.8 | 43.5 | 1.8 | 9.9 |
|  | Sept ${ }^{\text {P }}$ | 27.6 | 68.9 | 105.9 | 132.0 | 141.4 | 108.1 | 43.4 | 16.5 | 44.0 | 42.7 | 2.0 | 11.0 |
|  | Dec ${ }^{\text {p }}$ | 14.7 | 36.9 | 62.5 | 69.8 | 67.9 | 53.1 | 26.0 | 15.1 | 45.2 | 43.8 | 1.3 | 7.3 |
| Females |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1961 |  | 18.0 | 97.1 | 542.2 | 409.6 | 250.2 | 111.5 | 35.6 | 46.8 | 37.2 | 35.9 | 16.5 | 6.5 |
| 1966 |  | 25.1 | 114.7 | 567.8 | 411.2 | 254.8 | 135.9 | 37.8 | 52.4 | 36.2 | 34.3 | 16.8 | 6.3 |
| 1971 |  | 39.6 | 134.0 | 464.4 | 359.0 | 232.7 | 139.8 | 49.3 | 57.0 | 35.7 | 33.0 | 17.7 | 6.3 |
| 1976 |  | 65.1 | 122.2 | 458.9 | 272.3 | 188.0 | 124.0 | 40.9 | 59.8 | 34.9 | 32.4 | 17.0 | 5.9 |
| 1981 |  | 75.1 | 90.7 | 257.5 | 202.1 | 142.9 | 95.5 | 29.0 | 57.9 | 35.1 | 33.4 | 13.5 | 4.6 |
| $\begin{aligned} & 1986 \\ & 199 \mid \end{aligned}$ |  | 80.0 | 68.7 | 190.9 | 155.9 | 111.6 | 75.6 | 24.4 | 51.2 | 36.0 | 34.7 | 11.2 | 3.8 |
|  |  | 73.4 | 50.3 | 111.9 | 118.1 | 89.7 | 55.3 | 20.9 | 47.4 | 37.1 | 35.7 | 8.6 | 2.9 |
| 1994 |  | 76.9 | 47.3 | 167.3 | 121.0 | 91.4 | 54.4 | 20.6 | 44.4 | 37.9 | 36.3 | 7.9 | 2.7 |
| 1995 |  | 76.9 | 45.7 | 166.5 | 118.8 | 91.9 | 54.8 | 19.8 | 42.8 | 38.1 | 36.6 | 7.5 | 2.6 |
| 1996 |  | 78.9 | 45.6 | 183.5 | 120.6 | 93.6 | 56.0 | 20.4 | 40.8 | 38.6 | 37.1 | 7.3 | 2.6 |
| 1997 |  | 77.1 | 43.3 | 188.5 | 119.4 | 90.8 | 54.6 | 19.6 | 39.0 | 38.9 | 37.4 | 7.0 | 2.5 |
| 1998 |  | 73.3 | 40.1 | 175.0 | 114.5 | 87.1 | 52.2 | 18.4 | 37.1 | 39.3 | 37.9 | 6.6 | 2.4 |
| 1999 |  | 72.0 | 38.4 | 155.0 | 107.0 | 84.8 | 52.3 | 17.8 | 34.7 | 39.7 | 38.3 | 6.2 | 2.3 |
| 2000 |  | 74.1 | 38.5 | 137.8 | 107.5 | 85.6 | 54.2 | 18.4 | 32.0 | 40.1 | 38.9 | 6.2 | 2.3 |
| 2001 |  | 66.1 | 33.5 | 104.6 | 96.9 | 79.3 | 48.5 | 15.9 | 30.7 | 40.4 | 39.2 | 5.6 | 2.0 |
| 2002 |  | 69.2 | 34.3 | 107.5 | 101.2 | 81.7 | 51.2 | 16.9 | 28.2 | 40.9 | 39.7 | 5.7 | 2.1 |
| $2003{ }^{\text {P }}$ |  | 73.0 | 34.7 | 115.7 | 100.3 | 81.9 | 51.7 | 18.2 | 26.1 | 41.5 | 40.4 | 5.8 | 2.2 |
| 2001 | March | 9.4 | 19.3 | 74.0 | 64.6 | 45.5 | 26.7 | 9.3 | 32.2 | 40.3 | 39.0 | 0.8 | 1.2 |
|  | June | 18.6 | 37.8 | 110.0 | 108.3 | 88.0 | 54.3 | 18.6 | 30.2 | 40.6 | 39.3 | 1.7 | 2.4 |
|  | Sept | 24.1 | 48.5 | 128.3 | 134.7 | 117.5 | 72.9 | 21.9 | 30.6 | 40.2 | 39.0 | 1.9 | 2.7 |
|  | Dec | 13.9 | 28.0 | 105.7 | 79.6 | 65.5 | 39.7 | 13.8 | 30.6 | 40.7 | 39.4 | 1.2 | 1.8 |
| 2002 | March | 10.4 | 20.9 | 77.7 | 72.2 | 49.6 | 30.1 | 10.3 | 29.8 | 40.8 | 39.6 | 0.9 | 1.3 |
|  | June | 19.4 | 38.6 | 111.0 | 108.7 | 90.7 | 57.5 | 19.4 | 27.6 | 41.1 | 39.8 | 1.6 | 2.4 |
|  | Sept | 24.9 | 49.0 | 139.6 | 141.4 | 120.5 | 75.0 | 22.9 | 28.6 | 40.6 | 39.5 | 1.9 | 2.8 |
|  | Dec | 14.5 | 28.6 | 101.1 | 81.7 | 65.2 | 41.7 | 14.9 | 27.4 | 41.3 | 40.0 | 1.3 | 1.8 |
| 2003 | March ${ }^{\text {P }}$ | 10.9 | 21.0 | 93.2 | 68.7 | 50.1 | 29.7 | 18.2 | 27.6 | 41.6 | 40.3 | 0.9 | 1.4 |
|  | June ${ }^{\text {P }}$ | 20.4 | 39.0 | 114.3 | 104.3 | 91.5 | 57.8 | 11.3 | 25.3 | 41.8 | 40.6 | 1.7 | 2.5 |
|  | Sept ${ }^{p}$ | 26.4 | 50.0 | 137.2 | 146.6 | 119.9 | 77.8 | 21.2 | 26.2 | 41.2 | 40.1 | 2.0 | 2.9 |
|  | Dec ${ }^{\text {P }}$ | 15.0 | 28.3 | 117.5 | 81.0 | 65.4 | 41.2 | 15.4 | 25.9 | 41.7 | 40.6 | 1.4 | 1.8 |

[^16]I Figures for all marriages can be found in Table 2.I.
2 Per I,000 divorced persons aged 16 and over.
3 The mean/median ages shown in this table are unstandardised and therefore take no account of changes in the structure of the population, by age or marital status.
4 Per 1,000 widowed persons aged 16 and over.
P Provisional.
See 'Notes to tables'.


Notes: Divorce rates for 1986 have been calculated using the interim revised marital status estimates (based on the original mid-200I estimates) and are subject to further revision.
Notes: Divorce rates for 1986 have been calculated using the interim revised marital status estimates (based on the original mid-200I estimates) and are subject to further
I The mean/median ages shown in this table are unstandardised and therefore take no account of changes in the structure of the population by age or marital status. Provisional.
See 'Notes to tables'.

|  | Divorce petitions entered by year and quarter I995-2003 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| England and Wales |  |  |  |  |  |  |  |  |  |
| Year | March Qtr | June Qtr | Sept Qtr | Dec Qtr | Year | March Qtr | June Qtr | Sept Qtr | Dec Qtr |
| 1995 | 46.8 | 41.9 | 45.7 | 40.5 | 2000 | 39.3 | 37.6 | 39.5 | 41.8 |
| 1996 | 45.5 | 44.5 | 45.3 | 43.4 | 2001 | 39.7 | 40.6 | 40.7 | 41.2 |
| 1997 | 35.6 | 43.7 | 44.0 | 40.9 | 2002 | 41.0 | 42.3 | 42.6 | 44.7 |
| 1998 | 43.0 | 40.3 | 42.1 | 41.0 | 2003 | 42.3 | 40.6 | 41.9 | 43.2 |
| 1999 | 41.4 | 39.5 | 41.3 | 40.5 | 2004 | 45.4 | 41.1 | 42.2 | 39.1 |

[^17]
# Notes to tables 

## Time Series

For most tables, years start at 1971 and then continue at five-year intervals until 1991. Individual years are shown thereafter.

## United Kingdom

The United Kingdom comprises England, Wales, Scotland and Northern Ireland. The Channel Islands and the Isle of Man are not part of the United Kingdom.

## Population

The estimated and projected populations of an area include all those usually resident in the area, whatever their nationality. Members of HM forces stationed outside the United Kingdom are excluded. Students are taken to be resident at their term-time addresses.

## Live births

For England and Wales, figures relate to numbers occurring in a period; for Scotland and Northern Ireland, figures relate to those registered in a period.

## Perinatal mortality

In October 1992 the legal definition of a stillbirth was changed, from baby born dead after 28 completed weeks of gestation or more, to one born dead after 24 completed weeks of gestation or more.

## Expectation of life

The life tables on which these expectations are based use current death rates to describe mortality levels for each year. Each individual year shown is based on a three-year period, so that for instance 1986 represents 1985-87. More details can be found in Population Trends 60, page 23.

## Deaths

Figures for England and Wales represent the numbers of deaths registered in each year up to 1992 , and the number of deaths occurring in each year from 1993, though provisional figures are registrations. Figures for both Scotland and Northern Ireland represent the number of deaths registered in each year.

## Age-standardised mortality

Directly age-standardised rates make allowances for changes in the age structure of the population. The age-standardised rate for a particular condition is that which would have occurred if the observed age-specific rates for the condition had applied in a given standard population. Table 2.2 uses the European Standard Population. This is a hypothetical population standard which is the same for both males and females allowing standardised rates to be compared for each sex, and between males and females.

## International Migration

A migrant is defined as someone who changes his or her country of usual residence for a period of at least a year, so that the country of destination effectively becomes the country of usual residence

Figures in Tables 7.1-7.3 are compiled from several main sources of migration data:

- The richest source of information on international migrants comes from the International Passenger Survey (IPS), which is a sample survey of passengers arriving at, and departing from, the main United Kingdom air and sea ports and Channel tunnel. This survey provides migration estimates based on respondents' intended length of stay in the UK or abroad and excludes most persons seeking asylum and some dependants of such asylum seekers.
- Two adjustments are made to account for people who do not realise their intended length of stay on arrival. First, visitor data from the IPS are used to estimate 'visitor switchers': those people who initially come to or leave the UK for a short period but subsequently stay for a year or longer. (For years before 2001, estimates of non-European Economic Area (non-EEA) national visitor switcher inflows are made from the Home Office database of after-entry applications to remain in the UK). Second, people who intend to be migrants, but who in reality stay in the UK or abroad for less than a year ('migrant switchers'), are estimated from IPS migrant data.
- Home Office data on asylum seekers and their dependants.
- Estimates of migration between the UK and the Irish Republic estimated using information from the Irish Quarterly National Household Survey and the National Health Service Central Register, agreed between the Central Statistics Office and the ONS.

For years prior to 1991, the figures in Tables 7.1-7.3 are based only on data from the IPS. After taking account of those groups of migrants known not to be covered by the IPS, it is estimated that the adjustment needed to net migration ranges from about 10 thousand in 1981 to just over 20 thousand in 1986. From 1991, the figures in Tables 7.1-7.3 are based on data from all the sources and represent Total International Migration.
Old Commonwealth is defined as Australia, Canada, New Zealand and South Africa;
New Commonwealth is defined as all other Commonwealth countries.

Middle East is defined as Bahrain, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, the United Arab Emirates, and Yemen.

## Internal Migration

Figures in Table 8.1 are based on the movement of NHS doctors' patients between former Health Authorities (HAs) in England and Wales, and Area Health Boards in Scotland and Northern Ireland. Yearly and quarterly figures have been adjusted to take account of differences in recorded crossborder flows between England and Wales, Scotland and Northern Ireland.
Prior to reorganisation of health authority databases from Family Health Service Authorities (FHSAs) to HAs some database boundaries were realigned. This included in a few cases transferring patients between databases to fit the new boundaries. For the most part, this movement was done outside the NHSCR system and therefore had no effect on migration data. However a small number were transferred within the system. As migration estimates derived from NHSCR are the product of an administrative system (when patients re-register with GPs) this had the effect of generating small numbers of spurious migrants where no actual change of address had taken place. We have been advised of adjustments required to data by the Department of Health and these have been made to migration data.
The NHS Central Register (NHSCR) at Southport was computerised in early 1991, prior to which a three month time lag was assumed between a person moving and their re-registration with an NHS doctor being processed onto the NHSCR. Since computerisation, estimates of internal migration are based on the date of acceptance of the new patient by the HA (not previously available), and a one month time lag assumed.

It has been established that NHSCR data underreport the migration of males aged between 16 and 36 . Currently, however, there are no suitable sources of data available to enable adjustments or revisions to be made to the estimates. Further research is planned on this topic and new data sources may become available in the future. However, for the present time, historical estimates will not be revised and future estimates will not be adjusted.

## Marriages and divorces

Marriages are tabulated according to date of solemnisation. Divorces are tabulated according to date of decree absolute, and the term 'divorces' includes decrees of nullity. The fact that a marriage or divorce has taken place in England and Wales does not mean either of the parties is resident there.

## EU Enlargement

The coverage of European countries in Table 1.1 has been updated to reflect the enlargement of the EU to 25 member countries (EU25) on 1 May 2004. The new member countries are: Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia. The main data source for these countries is the United Nations Monthly Bulletin of Statistics.

## Sources

Figures for Scotland and Northern Ireland have been provided by the General Register Office for Scotland and the Northern Ireland Statistics and Research Agency respectively, except for the projections in Table 1.2 which are provided by the Government Actuary. The International Passenger Survey (Tables 7.1-7.3) is conducted by the Surveys and Administrative Sources Directive of ONS.

## Rounding

All figures are rounded independently; constituent parts may not add to totals. Generally numbers and rates per 1,000 population are rounded to one decimal place (e.g. 123.4); where appropriate, for small figures (below 10.0), two decimal places are given (e.g. 7.62). Figures which are provisional or estimated are given in less detail (e.g. 123 or 7.6 respectively) if their reliability does not justify giving the standard amount of detail. Where figures need to be treated with particular caution, an explanation is given as a footnote.

## Latest figures

Figures for the latest quarters and years may be provisional and will be updated in future issues when later information becomes available. Where figures are not yet available, cells are left blank.

## Shaded background

A shaded background indicates figures that are or may be subject to change: the grey shading signifies that the underlying estimates relate to those originally published; the coloured shading indicates estimates that have already been revised, from the original, but will or may be subject to further revision.

# Report: <br> Cohabitation <br> population estimates for England and Wales, 2003 

## Introduction

Population estimates by legal marital status for England and Wales are produced annually by the Office for National Statistics (ONS). The Government Actuary's Department (GAD), produces projections at regular intervals. However, legal marital status does not provide a complete picture of relationships due mainly to the fact that they do not reflect the numbers cohabiting. Population estimates by de facto marital status reflect the actual status in terms of whether or not a person is coresidentially cohabiting. The categories of de facto marital status are:

- single (never married);
- married (and living with spouse);
- separated (but still legally married);
- divorced; and
- widowed.

For each category, the cohabitational status is identified, that is, single (never married) cohabiting, single (never married) not cohabiting, etc.

ONS produced the 2003 population estimates for England and Wales by de facto marital status to provide the base populations for the GAD's 2003-based de facto marital status population projections. Other possible uses of population estimates by de facto marital status include provision of control totals of the number cohabiting for weighting surveys. The de facto marital status estimates are produced by age and sex and are in respect only of opposite-sex co-residential cohabiting adults (those aged 16 and over). The previous set of de facto marital status population estimates that ONS produced were for 1996, details of these are given in Population Trends $95 .{ }^{1}$

## Data Sources

Three main data sources were considered as the most important for population estimates by de facto marital status: the General Household Survey (GHS); the Labour Force Survey (LFS); and the 2001 Census. GHS 2002 data and LFS 2002 and 2003 data were used to help derive totals in each marital status (at the time of making the estimate GHS 2003 data was not available). LFS data and a three-year average of GHS
data (2000/2001/2002) were used in deriving age groups. Census data were used to produce single year of age estimates within the five-year age groups. Although the Census data referred to 2001 rather than 2003, its coverage and detail outweighed this disadvantage.

## Method used to derive 2003 de facto Marital Status Population Estimates

The method used to derive the previous, 1996-based, set of de facto marital status population estimates was followed closely. This method was written up in the Population Trends article referred to above. However, one improvement for this 2003 set of estimates is that, because weighted GHS estimates have become newly available since the 1996 set were derived, it is no longer necessary to weight GHS before their use within the method. Another improvement for the 2003 set arises from the fact that the information used to derive estimates is based on the 2001 Census. In addition, it is advantageous that 2003 is relatively close to the Census year.

## Overview of the method

Estimates of the numbers cohabiting are derived from survey data but in order to ensure consistency in total numbers between the de facto marital status estimates and other population estimates there are a number of stages in the method used to produce the de facto marital status population estimates. These stages can be summarised as follows:
(i) Derive total numbers cohabiting and not cohabiting by sex.
(ii) Disaggregate those totals by marital status (including separated).
(iii) Scale estimates to satisfy the three constraints:

- the number of men cohabiting equals the number of women cohabiting and the number of men and women cohabiting plus those not cohabiting equals the number of men and women in the population;
- the number of men and women by de facto marital status must be consistent with the legal marital status population estimates by sex; and
- the number of legally married but separated men equals the number of separated women.
(iv) Ensure estimates satisfy these constraints via a two-stage sequence of iterations.
(v) Disaggregate the estimates of the cohabiting and separated populations by age.
(vi) Divide legally married into two categories of married and living with spouse or married but separated.
More information is given below about each of these six stages.


## Stage (i)

The first stage was actually to decide the lowest level of disaggregation at which there was good agreement between the data sources in the numbers of men and women who were cohabiting. The levels investigated were:
(a) by sex (that is, for men and women);
(b) by sex and marital status; and
(c) by sex, marital status and five-year age group.

As with the previous set of de facto marital status population estimates, it was found that there was only reasonably good agreement at the highest level - that is the total numbers of men and women who were cohabiting. The estimates of the proportions cohabiting derived from weighted GHS and LFS estimates and applied to the population estimates, once averaged, gave the figures 2.02 and 1.96 million for men and women respectively. Because of the uncertainty attached to these estimates, and also to avoid giving the impression of spurious accuracy, an estimate of 2 million was chosen, rather than an estimate a little above or below that figure. The numbers of cohabiting men and women are set to be equal in this method, for reasons that are explained in the Population Trends article.

## Stage (ii)

The next stage was to disaggregate this total number cohabiting into marital status categories by sex. That is, disaggregate the total number of cohabiting men into the four categories of single, separated, widowed and divorced and then do likewise for women. This was achieved by applying the proportions in each marital status as indicated using data from the GHS and LFS. As there was little discrepancy between the corresponding estimated proportions, they were averaged and applied to the 2 million estimated totals.

Subtracting the total number of men and women cohabiting from the number of men and women in the population gives the number of men and women not cohabiting. (The numbers not cohabiting differ between
men and women, 18.5 million men and 19.9 million women.) A similar procedure was then followed to obtain the numbers not cohabiting in each marital status, but this time including the married and living with spouse category.

## Stages (iii) and (iv)

At this stage initial estimates of the numbers of men and women who were (a) cohabiting and (b) not cohabiting by marital status were available. These were based on the 2 million estimate of the numbers of men and women cohabiting, and the remainder, who were not cohabiting. However, when adding together, say the estimated number of cohabiting divorced men with the estimated number of non-cohabiting divorced men, the total did not agree with the population estimates by legal marital status of the number of divorced men. The same was true for the other legal marital statuses and for the status of married but separated the number of men did not equal the number of women, which is a requisite assumption of the method. Consequently, the initial set of estimates of the cohabiting and the non-cohabiting by marital status were revised in a two-stage operation using iterative routines.

In the first stage of the iterative process, totals of the cohabiting and non-cohabiting were made to total the marital status population estimates for each sex and marital status category. This was achieved by scaling the numbers cohabiting and not cohabiting in such a way that the ratio of the two numbers was preserved. This adjustment inevitably disturbed the total numbers (over all marital statuses) cohabiting and not cohabiting. In the next iteration therefore the estimates were all scaled such that the total numbers cohabiting and not cohabiting equalled the estimated totals of cohabiting and non-cohabiting men and women. This process was repeated until the change from one iteration to the next was very small.

The second stage of iterations was then undertaken, starting with modified estimates of the numbers of separated men and women, so that the totals (cohabiting and non-cohabiting) were equal, at a value equal to the average of the (unequal) estimates from the final estimates of the first stage. Further iterations were undertaken to ensure agreement with the estimated totals of cohabiting and non-cohabiting men and women. This two-stage operation yielded final estimates of the numbers cohabiting and not cohabiting by marital status and sex. These initial and final estimates are given in Table 1.

## Stage (v)

The next task was to disaggregate the total numbers cohabiting by sex and marital status into constituent numbers by five-year age group.

Initial and final estimates of the numbers of adults cohabiting and not cohabiting, by sex and marital status, 2003

England and Wales

|  | Males |  |  |  |  |  | Females |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Single | Married | Separated | Divorced | Widowed | Total | Single | Married | Separated | Divorced | Widowed | Total |
| Cohabiting |  |  |  |  |  |  |  |  |  |  |  |  |
| Initial estimates | 1.44 | - | 0.08 | 0.45 | 0.04 | 2.00 | 1.42 | - | 0.07 | 0.46 | 0.04 | 2.00 |
| Final estimates | 1.41 | - | 0.09 | 0.48 | 0.03 | 2.00 | 1.43 | - | 0.05 | 0.48 | 0.04 | 2.00 |
| Not cohabiting |  |  |  |  |  |  |  |  |  |  |  |  |
| Initial estimates | 5.23 | 11.35 | 0.32 | 0.91 | 0.71 | 18.52 | 4.39 | 11.06 | 0.56 | 1.46 | 2.42 | 19.89 |
| Final estimates | 5.86 | 10.46 | 0.39 | 1.11 | 0.70 | 18.52 | 4.70 | 10.52 | 0.43 | 1.62 | 2.63 | 19.89 |
| Total |  |  |  |  |  |  |  |  |  |  |  |  |
| Initial estimates | 6.67 | 11.35 | 0.40 | 1.35 | 0.75 | 20.52 | 5.82 | 11.06 | 0.63 | 1.92 | 2.46 | 21.89 |
| Final estimates | 7.26 | 10.46 | 0.48 | 1.59 | 0.73 | 20.52 | 6.13 | 10.52 | 0.48 | 2.10 | 2.67 | 21.89 |

[^18]Source: Office for National Statistics

The proportions of the total number cohabiting that were in each five-year age group were calculated from the GHS and LFS for each sex and marital status category (including separated). The age profiles of these proportions were very similar between the different data sources, although some smoothing was undertaken for the age profiles for men and women who were separated and widowed. The age profiles were averaged to produce a means of disaggregating the total number cohabiting and not cohabiting.

Having derived the numbers cohabiting and not cohabiting in each five-year age group for each sex and marital status, the numbers were compared with the corresponding GHS estimates and apart from the proportions of cohabiting men and women who were separated, the two sets of proportions agreed well.

The final stage was then to disaggregate the five-year totals of numbers cohabiting by single year of age, as this level of disaggregation was required for the projection model. This was achieved by using the Beers interpolation method and 2001 Census data by single years of age. This method ensured the five-year age group totals were preserved.

This resulted in the production of final estimates for the cohabiting population by single years of age, sex and marital status. These final estimates were then used to derive the corresponding number of the population not cohabiting. The numbers cohabiting were subtracted from the total population in each age group. For example, the number of 16-year-old single non-cohabiting men was calculated by subtracting the number of 16-year-old single cohabiting men from the total number of 16 -year-old single men as given by the population estimates. The same
calculations were carried out for women, and for divorced and widowed men and women.

## Stage (vi)

The population estimates by single year of age, sex and legal marital status do not distinguish the separated population but only give the total married population. Both the separated cohabiting and non-cohabiting populations for single years of age were calculated using the Beers interpolation method. By subtracting these from the married population, as given by the population estimates, an estimate of the number of married and living with spouse men and women by single year of age was calculated.

## Quality checks

Table 1 shows the extent to which the initial estimates derived from the surveys were modified by sex and marital status - stages (iii \& iv). This serves to act as a warning about the uncertainty surrounding these estimates.

To assess the differences between the initial and final estimates, as seen in Table 1, the figures were compared to the differences observed in 1996. It was found that, in general in 2003, the differences were smaller than those observed in 1996, and it was also noted that the direction of change was the same in both years.

Once the estimates were disaggregated by age, both the cohabiting and non-cohabiting populations were compared to equivalent 2002 GHS

| Table 2 | Estimated population cohabiting by age, sex and marital status, 2003 |
| :--- | :--- |


| England and Wales |  |  |  |  |  |  |  |  | Thousands/Percentages |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males |  |  |  |  | Females |  |  |  |  |
|  | Single (never married) | Separated (but still legally married) | Divorced | Widowed | Total nonmarried ${ }^{\prime}$ | Single (never married) | Separated (but still legally married) | Divorced | Widowed | Total nonmarried ${ }^{\prime}$ |


| Number cohabiting (thousands) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16-19 | 15 | 0 | - | 0 | 15 | 64 | - | - | 0 | 64 |
| 20-24 | 212 | - | 1 | 0 | 213 | 351 | 1 | 3 | 0 | 355 |
| 25-29 | 402 | 4 | 11 | - | 418 | 423 | 4 | 14 | - | 442 |
| 30-34 | 362 | 11 | 37 | 1 | 410 | 284 | 9 | 57 | - | 350 |
| 35-39 | 209 | 15 | 76 | I | 301 | 163 | 10 | 76 | 2 | 251 |
| 40-44 | 109 | 13 | 91 | I | 215 | 80 | 9 | 97 | 2 | 189 |
| 45-54 | 76 | 24 | 151 | 5 | 257 | 51 | 12 | 154 | 9 | 227 |
| 55-64 | 15 | 12 | 83 | 8 | 118 | 9 | 4 | 66 | 11 | 90 |
| 65-74 | 5 | 4 | 26 | 8 | 42 | 3 | 1 | 11 | 10 | 24 |
| 75 and over | I | 1 | 3 | 7 | 12 | 0 | 0 | 1 | 8 | 10 |
| All aged 16 and over | 1,406 | 85 | 478 | 31 | 2,000 | 1,427 | 50 | 480 | 43 | 2,000 |
| Percentage cohabiting ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |
| 16-19 | 1 | 0 | 8 | 0 | 1 | 5 | .. | .. | 0 | 5 |
| 20-24 | 13 | 4 | 32 | 0 | 13 | 24 | 7 | 33 | 0 | 24 |
| 25-29 | 32 | 16 | 44 | 4 | 32 | 40 | 11 | 29 | 13 | 39 |
| 30-34 | 37 | 22 | 36 | 34 | 36 | 37 | 12 | 36 | 4 | 35 |
| 35-39 | 31 | 22 | 39 | 28 | 32 | 32 | 12 | 28 | 13 | 29 |
| 40-44 | 26 | 20 | 38 | 18 | 29 | 27 | 13 | 31 | 10 | 27 |
| 45-54 | 17 | 20 | 32 | 15 | 24 | 18 | 11 | 27 | 9 | 21 |
| 55-64 | 6 | 15 | 24 | 10 | 15 | 6 | 7 | 16 | 4 | 10 |
| 65-74 | 3 | 11 | 16 | 4 | 8 | 2 | 4 | 5 | 2 | 2 |
| 75 and over | I | 4 | 6 | 2 | 2 | 0 | 0 | 1 | 0 | 1 |
| All aged 16 and over | 19 | 18 | 30 | 4 | 20 | 23 | 10 | 23 | 2 | 18 |

[^19]data (by five-year age group). All numbers agreed quite well, with the exception of the separated population and the cohabiting widowed population. This is unsurprising given the smaller sample numbers involved for these groups in the GHS and the assumption made for the separated population that the numbers of men and women are equal. The GHS suggests there are larger numbers of separated women than men.

The final estimates by single year of age were also compared to the previous set of de facto marital status estimates, which were for 1996. However, there are many sources of difference between these two sets of estimates, including the impact of the availability of the 2001 Census. The 2001 Census is reflected in the 2003 set of cohabitation estimates but not in the 1996 . As a result whilst the comparison did not give cause to doubt the validity of the 2003 set of cohabitation estimates, it was recognised that the complexities of this comparison make it difficult to use it as a quality assurance tool for the 2003 cohabitation estimates.

## The Resulting Estimates

The cohabitation estimates are summarised in Table 2. Seven out of ten cohabiting men and women are single (never married), and nearly one in four are divorced. Relatively few are separated or widowed. The age profiles of cohabiting people vary according to marital status as might be expected; the single being the youngest, followed by the separated, the divorced and the widowed. The peak age group for single men and women is 25 to 29 ; and for divorced men and women 35 to 39 .

Cohabitation is most common for men and women in their late twenties and thirties but the prevalence of cohabitation is higher amongst single women than single men at virtually every age, whilst the proportions cohabiting amongst divorced women are generally lower than amongst divorced men. Overall, the pattern of the proportions cohabiting in Table 2 forms a coherent whole and is similar to that found in estimates for earlier years.

## References

1. Shaw C and Haskey J (1999) New estimates and projections of the population cohabiting in England and Wales. Population Trends 95, pp 7-17.

## Useful Website Addresses

Mid-2003 marital status population estimates: England and Wales http://www.statistics.gov.uk/statbase/Product.asp?vlnk=13296\&image.x $=24$ \&image. $\mathrm{y}=9$

Population projections http://www.gad.gov.uk/Population_Projections/Population_projections_ background.htm

## Report:

## Marriages in England and

## Wales, 2003

This Report provides provisional summary statistics of marriages taking place in England and Wales during 2003, and compares them with figures for previous years. Final details of marriages in 2003 will be published in the annual reference volume Marriage, divorce and adoption statistics 2003 (Series FM2 No. 31) - publication date to be confirmed.

## Key observations:

- There were 267,700 marriages in England and Wales in 2003, an increase of 4.7 per cent from 255,596 in 2002. This is the second successive annual increase in the number of marriages. These increases follow the lowest annual number of marriages since 1897 in 2001 (Table 1).
- The provisional marriage rates increased for both men and women. For men, the rate increased to 27.9 men marrying per 1,000 unmarried men in 2003 from 27.4 in 2002. The rate for women increased to 24.6 women marrying per 1,000 unmarried women in 2003 from 23.9 in 2002 (Table 2).
- The average (mean) age at marriage continued to increase for both men and women in 2003. The mean age for men marrying increased to 35.6 years from 35.3 in 2002. For women, it increased to 32.9 years from 32.6 in 2002. The mean ages for first marriages in 2003 were 31.2 years for men and 28.9 for women. The figures in 2002 were 30.9 and 28.7 respectively (Table 5).
- Marriages that were the first for both parties accounted for 59 per cent of all marriages in 2003, the same proportion as in 2002. Remarriages for both parties accounted for 19 per cent of all marriages, similar to the proportion in 2002. Altogether, 81 per cent of marriages in 2003 involved a person marrying for the first time (Tables 3 and 4).
- There were more than 181,500 civil marriage ceremonies in 2003, accounting for over two-thirds ( 68 per cent) of all marriages. The proportion was 66 per cent in 2002 (Table 1). Figure 1 shows that the proportion of civil marriage ceremonies first exceeded religious ceremonies in 1992; since then the proportion of civil marriages has increased year on year, while religious ceremonies have decreased each year.
- Twenty-seven per cent of all marriages in England and Wales took place in approved premises in 2003. These marriages accounted for 40 per cent of all civil ceremonies. In 2002, 24 per cent of marriages took place in such premises, accounting for 36 per cent of civil ceremonies. In 1996, just 5 per cent of all marriages ( 9 per cent of civil marriages) took place in approved premises (Table 1). Figure 1 shows how the number of marriages in approved premises has increased since their introduction in 1995; over the same period, the number of other civil marriages, mainly in register offices, has decreased.
- In 2003, religious marriages accounted for 43 per cent of marriages that were the first for both parties; this proportion decreased to 14 per cent for marriages that were remarriages for both parties (Table 4).


England and Wales


Source: Office for National Statistics, FM2 Table 3.32

## BACKGROUND NOTES:

These statistics relate only to marriages solemnised in England and Wales. Marriages of England and Wales residents that take place outside England and Wales are not included in the figures.

Approved premises are buildings such as hotels and stately homes licensed by local authorities under the Marriage Act 1994, for the solemnisation of civil marriages. In addition, some local authorities have made accommodation available for civil marriage as approved premises in place of register offices. This provision for marriages in approved premises came into effect on 1 April 1995.

The population estimates by marital status used to calculate rates in this release are the latest available. Mid-2003 estimates were published on 4 November 2004, while revised marital status estimates for 1991 to 2002 were published on 7 October 2004.

The mean ages presented in this first release are not standardised and therefore take no account of the structure of the population by age or marital status.

## Table I <br> Summary of marriages, I98I, I99I, I996, I999-2003

England and Wales

|  | 1981 | 1991 | 1996 | 1999 | 2000 | 2001 | 2002 | 2003 1p |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total marriages | 351,973 | 306,756 | 278,975 | 263,515 | 267,961 | 249,227 | 255,596 | 267,700 |
| Quarterly totals |  |  |  |  |  |  |  |  |
| March | 63,708 | 41,488 | 36,477 | 32,461 | 31,492 | 28,836 | 31,893 | 33,730 |
| June | 98,403 | 89,538 | 80,688 | 73,152 | 74,194 | 70,876 | 71,124 | 74,620 |
| September | \| 19,758 | 121,508 | 114,018 | 109,489 | 116,695 | 105,331 | 105,671 | 111,010 |
| December | 70,104 | 54,222 | 47,792 | 48,413 | 45,580 | 44,184 | 46,908 | 48,300 |
| Previous marital status |  |  |  |  |  |  |  |  |
| First marriage for both | 227,713 | 192,238 | 160,680 | 155,027 | 156,140 | 148,642 | 151,014 | 158,560 |
| First marriage for one | 67,048 | 63,159 | 64,653 | 59,540 | 61,550 | 55,943 | 57,768 | 59,560 |
| Remarriage for both | 57,212 | 51,359 | 53,642 | 48,948 | 50,271 | 44,642 | 46,814 | 49,530 |
| Manner of solemnisation |  |  |  |  |  |  |  |  |
| Civil ceremonies | 172,514 | 151,333 | 164,158 | 162,679 | 170,800 | 160,238 | 169,210 | 181,580 |
| of which: <br> in approved premises | - | - | 15,210 | 37,709 | 45,792 | 50,149 | 61,749 | 73,340 |
| Religious ceremonies of which: | 179,459 | 155,423 | 114,817 | 100,836 | 97,161 | 88,989 | 86,386 | 86,080 |
| Church of England and Church in Wales | 118,435 | 102,840 | 75,147 | 67,219 | 65,536 | 60,878 | 58,980 | 59,850 |
| Roman Catholic | 26,097 | 19,551 | 13,989 | 12,399 | 11,312 | 10,518 | 10,044 | 9,730 |
| Nonconformist ${ }^{2}$ | 29,017 | 25,472 | 18,617 | 14,136 | 13,435 | 11,163 | 10,623 | 9,870 |
| Other Christian bodies | 4,422 | 5,597 | 4,988 | 4,554 | 4,316 | 4,047 | 4,22I | 4,170 |
| Other | 1,488 | 1,963 | 2,076 | 2,528 | 2,562 | 2,383 | 2,518 | 2,460 |

I Figures for 2003 may not add precisely due to rounding.
2 In this table Nonconformist denominations are taken as the following: Methodist, Calvanistic Methodist, United Reformed Church, Congregationalist, Baptist. p Provisional
Source: Office for National Statistics, FM2 Tables 2.I, 3.1, 3.33
Table 2
Marriage rates,' ${ }^{\text {1 }}$ 991-2003

England and Wales
Rate per thousand

| Year of marriage | All marriages |  |  | First marriages |  | Remarriages |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Persons marrying per 1,000 population of all ages | Men marrying per 1,000 unmarried men aged 16 and over | Women marrying per 1,000 unmarried women aged 16 and over | Number marrying per 1,000 single population aged 16 and over |  | Number marrying per 1,000 widowed or divorced population |  |
|  |  |  |  | Men | Women | Men | Women |
| 1991 | 12.1 | 39.3 | 33.2 | 37.8 | 46.7 | 43.8 | 18.6 |
| 1992 | 12.2 | 39.6 | 33.4 | 37.8 | 46.3 | 45.1 | 19.3 |
| 1993 | 11.7 | 37.7 | 31.8 | 35.8 | 43.8 | 43.4 | 18.7 |
| 1994 | 11.4 | 36.3 | 30.6 | 34.3 | 41.6 | 42.3 | 18.6 |
| 1995 | 11.0 | 34.7 | 29.3 | 32.4 | 39.3 | 41.4 | 18.4 |
| 1996 | 10.9 | 33.6 | 28.5 | 31.1 | 37.3 | 41.2 | 18.7 |
| 1997 | 10.6 | 32.3 | 27.5 | 29.7 | 35.6 | 39.9 | 18.1 |
| 1998 | 10.3 | 31.1 | 26.6 | 28.9 | 34.7 | 37.9 | 17.2 |
| 1999 | 10.1 | 30.1 | 25.8 | 28.0 | 33.5 | 36.6 | 16.7 |
| 2000 | 10.3 | 30.1 | 25.9 | 27.7 | 33.2 | 37.4 | 17.1 |
| 2001 | 9.5 | 27.4 | 23.7 | 25.5 | 30.6 | 33.2 | 15.2 |
| 2002 | 9.7 | 27.4 | 23.9 | 25.3 | 30.3 | 33.8 | 15.8 |
| 2003 p | 10.1 | 27.9 | 24.6 | 25.8 | 30.9 | 34.6 | 16.5 |

[^20]Table 3 Previous marital status of person marrying, 198I, 1991, 2001-2003

England and Wales

| Year of marriage | Men | Women |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total |  | Spinsters |  | Divorced women |  | Widows |  |
|  |  | Number | Per cent | Number | Per cent | Number | Per cent | Number | Per cent |
| 1981 | Total | 351,973 | 100.0 | 263,368 | 74.8 | 75,147 | 21.4 | 13,458 | 3.8 |
|  | Bachelors | 259,106 | 73.6 | 227,713 | 64.7 | 29,078 | 8.3 | 2,315 | 0.7 |
|  | Divorced men | 79,099 | 22.5 | 33,209 | 9.4 | 41,352 | 11.7 | 4,538 | 1.3 |
|  | Widowers | 13,768 | 3.9 | 2,446 | 0.7 | 4,717 | 1.3 | 6,605 | 1.9 |
| 1991 | Total | 306,756 | 100.0 | 224,812 | 73.3 | 73,408 | 23.9 | 8,536 | 2.8 |
|  | Bachelors | 222,823 | 72.6 | 192,238 | 62.7 | 29,061 | 9.5 | 1,524 | 0.5 |
|  | Divorced men | 74,860 | 24.4 | 31,085 | 10.1 | 40,551 | 13.2 | 3,224 | 1.1 |
|  | Widowers | 9,073 | 3.0 | 1,489 | 0.5 | 3,796 | 1.2 | 3,788 | 1.2 |
| 2001 | Total | 249,227 | 100.0 | 177,506 | 71.2 | 66,120 | 26.5 | 5,601 | 2.2 |
|  | Bachelors | 175,72 I | 70.5 | 148,642 | 59.6 | 25,954 | 10.4 | 1,125 | 0.5 |
|  | Divorced men | 67,678 | 27.2 | 27,874 | 11.2 | 37,268 | 15.0 | 2,536 | 1.0 |
|  | Widowers | 5,828 | 2.3 | 990 | 0.4 | 2,898 | 1.2 | 1,940 | 0.8 |
| 2002 | Total | 255,596 | 100.0 | 180,675 | 70.7 | 69,234 | 27.1 | 5,687 | 2.2 |
|  | Bachelors | 179,121 | 70.1 | 151,014 | 59.1 | 26,891 | 10.5 | 1,216 | 0.5 |
|  | Divorced men | 70,506 | 27.6 | 28,632 | 11.2 | 39,271 | 15.4 | 2,603 | 1.0 |
|  | Widowers | 5,969 | 2.3 | 1,029 | 0.4 | 3,072 | 1.2 | 1,868 | 0.7 |
| 20031 p | Total | 267,700 | 100.0 | 189,170 | 70.7 | 72,660 | 27.1 | 5,830 | 2.2 |
|  | Bachelors | 187,510 | 70.0 | 158,560 | 59.2 | 27,730 | 10.4 | 1,220 | 0.5 |
|  | Divorced men | 73,940 | 27.6 | 29,480 | 11.0 | 41,700 | 15.6 | 2,760 | 1.0 |
|  | Widowers | 6,200 | 2.3 | 1,130 | 0.4 | 3,220 | 1.2 | 1,850 | 0.7 |

I Figures for 2003 may not add precisely due to rounding.
p Provisional
Source: Office for National Statistics, FM2 Tables 3.18 and 3.19

Table 4
Marriages by previous marital status and manner of soleminisation, 1991, 2001-2003

England and Wales

| Year of marriage |  | Total marriages |  | Civil marriages |  | Religious marriages |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number | Per cent | Number | Per cent | Number | Per cent |
| 1991 | Total marriages | 306,756 | 100.0 | 151,333 | 49.3 | 155,423 | 50.7 |
|  | First marriage for both | 192,238 | 62.7 | 64,614 | 21.1 | 127,624 | 41.6 |
|  | First marriage for one | 63,159 | 20.6 | 44,643 | 14.6 | 18,516 | 6.0 |
|  | Remarriage for both | 51,359 | 16.7 | 42,076 | 13.7 | 9,283 | 3.0 |
| 2001 | Total marriages | 249,227 | 100.0 | 160,238 | 64.3 | 88,989 | 35.7 |
|  | First marriage for both | 148,642 | 59.6 | 77,048 | 30.9 | 71,594 | 28.7 |
|  | First marriage for one | 55,943 | 22.4 | 44,601 | 17.9 | 11,342 | 4.6 |
|  | Remarriage for both | 44,642 | 17.9 | 38,589 | 15.5 | 6,053 | 2.4 |
| 2002 | Total marriages | 255,596 | 100.0 | 169,210 | 66.2 | 86,386 | 33.8 |
|  | First marriage for both | 151,014 | 59.1 | 82,564 | 32.3 | 68,450 | 26.8 |
|  | First marriage for one | 57,768 | 22.6 | 46,207 | 18.1 | 11,561 | 4.5 |
|  | Remarriage for both | 46,814 | 18.3 | 40,439 | 15.8 | 6,375 | 2.5 |
| 2003 p | Total marriages | 267,700 | 100.0 | 181,580 | 67.8 | 86,080 | 32.2 |
|  | First marriage for both | 158,560 | 59.2 | 91,080 | 34.0 | 67,480 | 25.2 |
|  | First marriage for one | 59,560 | 22.2 | 47,710 | 17.8 | 11,860 | 4.4 |
|  | Remarriage for both | 49,530 | 18.5 | 42,800 | 16.0 | 6,740 | 2.5 |

I Figures for 2003 may not add precisely due to rounding.
p Provisional
Source: Office for National Statistics, FM2 Table 3.31

Table 5
Age at marriage by sex and previous marital status, 1991, 2001-2003

| England and Wales Numbers |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Age | Men |  |  |  | Women |  |  |  |
|  |  | Total | Bachelors | Divorced | Widowers | Total | Spinsters | Divorced | Widows |
| 1991 | Total | 306,756 | 222,823 | 74,860 | 9,073 | 306,756 | 224,812 | 73,408 | 8,536 |
|  | 16-19 | 4,632 | 4,630 | 2 | - | 17,738 | 17,704 | 31 | 3 |
|  | 20-24 | 75,331 | 74,378 | 935 | 18 | 107,028 | 103,689 | 3,277 | 62 |
|  | 25-29 | 100,891 | 91,675 | 9,113 | 103 | 87,244 | 72,523 | 14,481 | 240 |
|  | 30-34 | 50,403 | 34,560 | 15,626 | 217 | 38,425 | 21,000 | 16,992 | 433 |
|  | 35-39 | 25,132 | 10,252 | 14,537 | 343 | 19,591 | 5,785 | 13,272 | 534 |
|  | 40-44 | 17,88। | 3,998 | 13,350 | 533 | 14,164 | 2,075 | 11,272 | 817 |
|  | 45-49 | 11,503 | 1,520 | 9,291 | 692 | 9,587 | 911 | 7,634 | 1,042 |
|  | 50-54 | 7,426 | 778 | 5,746 | 902 | 5,304 | 447 | 3,850 | 1,007 |
|  | 55-59 | 4,938 | 429 | 3,352 | 1,157 | 2,679 | 255 | 1,525 | 899 |
|  | 60-64 | 3,414 | 302 | 1,719 | 1,393 | 2,052 | 173 | 626 | 1,253 |
|  | 65-69 | 2,463 | 185 | 761 | 1,517 | 1,455 | 129 | 272 | 1,054 |
|  | 70-74 | 1,433 | 70 | 298 | 1,065 | 858 | 63 | 123 | 672 |
|  | 75-79 | 876 | 32 | 85 | 759 | 432 | 38 | 37 | 357 |
|  | 80 AND OVER | 433 | 14 | 45 | 374 | 199 | 20 | 16 | 163 |
|  | Mean age ${ }^{\prime}$ | 31.6 | 27.5 | 40.3 | 60.5 | 29.1 | 25.5 | 37.1 | 55.1 |
|  | Median age ${ }^{1}$ | 28.4 | 26.5 | 39.0 | 62.0 | 26.3 | 24.6 | 35.7 | 55.6 |
| 2001 | Total | 249,227 | 175,721 | 67,678 | 5,828 | 249,227 | 177,506 | 66,120 | 5,601 |
|  | 16-19 | 1,945 | 1,931 | 14 | 5,828 | 6,896 | 6,841 | 55 | 5,601 |
|  | 20-24 | 24,65 I | 24,379 | 269 | 3 | 45,317 | 44,396 | 903 | 18 |
|  | 25-29 | 67,934 | 65,202 | 2,700 | 32 | 73,799 | 68,113 | 5,591 | 95 |
|  | 30-34 | 61,409 | 50,916 | 10,382 | 111 | 51,865 | 37,836 | 13,759 | 270 |
|  | 35-39 | 36,397 | 21,362 | 14,795 | 240 | 29,144 | 13,45 \| | 15,260 | 433 |
|  | 40-44 | 20,475 | 7,161 | 13,010 | 304 | 16,528 | 4,226 | 11,790 | 512 |
|  | 45-49 | 12,782 | 2,527 | 9,835 | 420 | 10,523 | 1,438 | 8,419 | 666 |
|  | 50-54 | 10,167 | 1,218 | 8,224 | 725 | 7,548 | 657 | 6,108 | 783 |
|  | 55-59 | 5,860 | 497 | 4,544 | 819 | 3,552 | 287 | 2,593 | 672 |
|  | 60-64 | 3,420 | 262 | 2,300 | 858 | 1,991 | 123 | 1,090 | 778 |
|  | 65-69 | 1,988 | 127 | 1,042 | 819 | 1,027 | 74 | 372 | 581 |
|  | 70-74 | 1,139 | 86 | 394 | 659 | 551 | 31 | 124 | 396 |
|  | 75-79 | 680 | 38 | 134 | 508 | 330 | 26 | 41 | 263 |
|  | 80 AND OVER | 380 | 15 | 35 | 330 | 156 | 7 | 15 | 134 |
|  | Mean age ${ }^{\text {I }}$ | 34.8 | 30.6 | 43.5 | 61.0 | 32.2 | 28.4 | 40.4 | 55.2 |
|  | Median age ${ }^{1}$ | 32.1 | 29.7 | 42.0 | 61.6 | 29.9 | 27.7 | 39.2 | 55.1 |
| 2002 | Total | 255,596 | 179,121 | 70,506 | 5,969 | 255,596 | 180,675 | 69,234 | 5,687 |
|  | 16-19 | 1,820 | 1,807 | 13 | 5,969 | 6,806 | 6,745 | 59 | 2 |
|  | 20-24 | 25,093 | 24,846 | 246 | 1 | 45,078 | 44,127 | 928 | 23 |
|  | 25-29 | 64,619 | 62,229 | 2,361 | 29 | 71,540 | 66,278 | 5,168 | 94 |
|  | 30-34 | 62,998 | 52,963 | 9,928 | 107 | 53,970 | 40,307 | 13,383 | 280 |
|  | 35-39 | 38,731 | 23,398 | 15,105 | 228 | 31,570 | 15,093 | 16,057 | 420 |
|  | 40-44 | 22,465 | 8,422 | 13,734 | 309 | 18,414 | 4,996 | 12,853 | 565 |
|  | 45-49 | 13,859 | 2,936 | 10,482 | 441 | 11,614 | 1,740 | 9,211 | 663 |
|  | 50-54 | 10,477 | 1,348 | 8,425 | 704 | 7,921 | 792 | 6,357 | 772 |
|  | 55-59 | 7,179 | 569 | 5,688 | 922 | 4,357 | 319 | 3,317 | 721 |
|  | 60-64 | 3,869 | 315 | 2,665 | 889 | 2,125 | 149 | 1,224 | 752 |
|  | 65-69 | 2,184 | 161 | 1,177 | 846 | 1,135 | 71 | 465 | 599 |
|  | 70-74 | 1,214 | 71 | 461 | 682 | 593 | 34 | 143 | 416 |
|  | 75-79 | 683 | 34 | 160 | 489 | 310 | 16 | 51 | 243 |
|  | 80 AND OVER | 405 | 22 | 61 | 322 | 163 | 8 | 18 | 137 |
|  | Mean age ' | 35.3 | 30.9 | 44.1 | 61.0 | 32.6 | 28.7 | 40.9 | 55.0 |
|  | Median age ${ }^{1}$ | 32.6 | 30.1 | 42.6 | 61.4 | 30.3 | 27.9 | 39.7 | 55.1 |
| $2003{ }^{28}$ | Total | 267,700 | 187,510 | 73,940 | 6,200 | 267,700 | 189,170 | 72,660 | 5,830 |
|  | 16-19 | 1,800 | 1,790 | 10 | - | 6,860 | 6,810 | 60 | - |
|  | 20-24 | 25,520 | 25,250 | 270 | - | 46,370 | 45,370 | 970 | 20 |
|  | 25-29 | 64,930 | 62,680 | 2,200 | 50 | 72,090 | 67,110 | 4,880 | 100 |
|  | 30-34 | 65,460 | 55,990 | 9,340 | 130 | 56,840 | 43,520 | 13,050 | 270 |
|  | 35-39 | 40,830 | 25,520 | 15,080 | 230 | 33,370 | 16,740 | 16,230 | 410 |
|  | 40-44 | 24,970 | 9,740 | 14,890 | 340 | 20,280 | 5,830 | 13,920 | 530 |
|  | 45-49 | 15,360 | 3,450 | 11,450 | 460 | 13,000 | 2,120 | 10,160 | 710 |
|  | 50-54 | 11,250 | 1,590 | 8,990 | 660 | 8,730 | 890 | 7,070 | 780 |
|  | 55-59 | 8,270 | 810 | 6,460 | 1,000 | 5,190 | 450 | 3,910 | 830 |
|  | 60-64 | 4,350 | 370 | 3,040 | 940 | 2,540 | 170 | 1,540 | 830 |
|  | 65-69 | 2,440 | 180 | 1,400 | 860 | 1,270 | 80 | 580 | 620 |
|  | 70-74 | 1,340 | 90 | 550 | 700 | 660 | 40 | 210 | 400 |
|  | 75-79 | 680 | 30 | 180 | 470 | 300 | 30 | 50 | 210 |
|  | 80 AND OVER | 460 | 20 | 80 | 360 | 160 | 20 | 30 | 120 |
|  | Mean age ${ }^{\prime}$ | 35.6 | 31.2 | 44.6 | 60.7 | 32.9 | 28.9 | 41.5 | 55.1 |
|  | Median age ${ }^{\text {I }}$ | 32.9 | 30.3 | 43.3 | 61.1 | 30.6 | 28.1 | 40.4 | 55.5 |

I The mean and median ages shown in this table are not standardised and therefore take no account of the structure of the population by age or marital status.
2 Figures for 2003 may not add precisely due to rounding.
p Provisional
Source: Office for National Statistics, FM2 Tables 3.15-3.19

# Annual Update: 

# Marriages and divorces during 2002, and adoptions in 2003: England and Wales 

## Introduction

This Update summarises some of the findings from the Office for National Statistics annual reference volume Marriage, divorce and adoption statistics 2002 (series FM2 no. 30), published in March 2005. It presents data and analysis on trends over the past decade in marriages and divorces up to 2002, and in adoptions up to 2003, in England and Wales. Particular attention is given to:

- the marital status of the population
- marriages by previous marital status, average age at marriage, type of ceremony and address as an indication of cohabitation
- divorces by previous marital status, average age at divorce, duration of marriage, children involved in divorce, fact proven, and interval between petition and decree absolute
- adoptions by age of child and marital status of the parents.

The annual reference volume contains more detailed information on these, and other, themes. It is available on the National Statistics website (www.statistics.gov.uk/statbase/Product.asp?vlnk=581).

## Marital Status of the Population

Declining marriage rates combined with consistently high divorce rates in the last decade have resulted in a decrease in the number of married people in the population of England and Wales.

The latest available population estimates ${ }^{1}$ show that the population of England and Wales in mid-2002 was 52.6 million people. The number of people in 2002 aged 16 or over, and so legally able to marry, was 42.1 million, 4 per cent more than in 1992. Between 1992 and 2002, the population of single people aged 16 and over increased by 20.7 per cent to 13.0 million, while the number of married people decreased by

Population aged 16 and over by marital status, I992-2002

England and Wales

| Year | Population aged 16 and over |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousands |  |  |  |  | Percentages |  |  |  |
|  | Total | Single | Married | Divorced | Widowed | Single | Married | Divorced | Widowed |
| 1992 | 40,524.2 | 10,802.1 | 23,326.7 | 2,719.3 | 3,676.1 | 26.7 | 57.6 | 6.7 | 9.1 |
| 1993 | 40,531.2 | 10,872.8 | 23,177.1 | 2,810.8 | 3,670.5 | 26.8 | 57.2 | 6.9 | 9.1 |
| 1994 | 40,563.0 | 10,973.4 | 23,032.7 | 2,902.4 | 3,654.4 | 27.1 | 56.8 | 7.2 | 9.0 |
| 1995 | 40,686.3 | II,173.0 | 22,881.2 | 2,994.7 | 3,637.3 | 27.5 | 56.2 | 7.4 | 8.9 |
| 1996 | 40,826.7 | 11,392.4 | 22,742.7 | 3,076.7 | 3,614.9 | 27.9 | 55.7 | 7.5 | 8.9 |
| 1997 | 40,965.9 | 1 1,625.0 | 22,592.7 | 3,159.5 | 3,588.7 | 28.4 | 55.1 | 7.7 | 8.8 |
| 1998 | 41,121.4 | 11,856.7 | 22,467.4 | 3,231.2 | 3,566.1 | 28.8 | 54.6 | 7.9 | 8.7 |
| 1999 | 41,325.1 | 12,107.7 | 22,377.2 | 3,308.2 | 3,532.0 | 29.3 | 54.1 | 8.0 | 8.5 |
| 2000 | 41,568.7 | 12,370.2 | 22,312.1 | 3,383.0 | 3,503.4 | 29.8 | 53.7 | 8.1 | 8.4 |
| 2001 | 41,864.8 | 12,691.7 | 22,239.5 | 3,456.2 | 3,477.3 | 30.3 | 53.1 | 8.3 | 8.3 |
| 2002 | 42,135.0 | 13,037.4 | 22,087.9 | 3,569.8 | 3,440.0 | 30.9 | 52.4 | 8.2 | 8.5 |

[^21]
5.3 per cent to 22.1 million. Single people aged 16 and over made up 30.9 per cent of the adult population in 2002, compared with 26.7 per cent in 1992, whereas married people formed 52.4 per cent in 2002 and 57.6 per cent in 1992. The number of divorced people increased by 31.3 per cent to 3.6 million in the ten years to 2002 (Table A).

Figure 1 shows the estimated mid-2002 distribution of the population in England and Wales by marital status and age. Among both men and women, the majority of people are single through to the late twenties age
group. The biggest change in the marital status of the population occurs through the thirties and early forties age groups as men and women are more likely to be married. Among people aged 40 to 44,67 per cent of men and 69 per cent of women are married, while 12 per cent of men and 16 per cent of women are divorced. After the age of 60 , a much greater proportion of women are widowed than men. This increases with age and by the age of 80 three-fifths of women are widowed, compared with just over a quarter of men.

## Marriages

There were 255,596 marriages in England and Wales in 2002, ${ }^{2}$ an increase of 2.6 per cent from 249,227 in 2001. The number in 2001 was the lowest annual figure since 1897. The number of marriages in 2002 was 18 per cent lower than in 1992 (Table B).

Marriages that were the first for both parties accounted for 59 per cent of all marriages in 2002, one percentage point less than in 2001. This proportion was 62 per cent in 1992. Altogether 82 per cent of marriages in 2002 involved a person marrying for the first time, the same proportion as in 2001 and similar to the proportion of 83 per cent in 1992. First marriage rates for men and women, irrespective of the partner's previous marital status, have fallen each year since 1992. The rates for women are higher than those for men: 30.3 women per 1,000 single women aged 16 or over married for the first time in 2002 , compared with 25.3 men. The corresponding rates in 1992 were 46.3 and 37.8 respectively.

Figure 2 shows first marriage rates by sex and age group over the period 1992 to 2002. The rate declined for both men and women in the age groups up to and including $30-34$. The first marriage rate for men aged 20-24 decreased by 60 per cent from 40.2 single men marrying per 1,000 single male population in 1992 to 16.2 in 2002. For men aged 25-29 the decrease was 39 per cent from 80.3 in 1992 to 48.8 in 2002. As a result of these falls, the first marriage rate for men aged 40-44 is now higher than for those aged 20-24, while the rate for men aged $30-34$ is higher than that for men aged 25-29. For women aged 20-24 the first

Table B Summary of marriages, divorces and adoptions, 1992-2003

England and Wales

| Year | Marriages |  |  |  | Divorces ${ }^{1}$ |  |  | Adoptions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | First marriage for both parties | Remarriage for both parties | Persons marrying per 1,000 population of all ages ${ }^{3}$ | Total | Number of couples with children ${ }^{2}$ under 16 | Persons divorcing per 1,000 married population ${ }^{3}$ | Adoptions by date of court order |
| 1992 | 311,564 | 191,732 | 53,536 | 12.2 | 160,385 | 91,425 | 13.8 | 7,466 |
| 1993 | 299,197 | 181,956 | 52,690 | 11.7 | 165,018 | 94,915 | 14.2 | 6,799 |
| 1994 | 291,069 | 174,200 | 52,860 | 11.4 | 158,175 | 88,491 | 13.7 | 6,165 |
| 1995 | 283,012 | 166,418 | 52,619 | 11.0 | 155,499 | 85,867 | 13.6 | 5,840 |
| 1996 | 278,975 | 160,680 | 53,642 | 10.9 | 157,107 | 86,933 | 13.8 | 5,741 |
| 1997 | 272,536 | 156,907 | 52,718 | 10.6 | 146,689 | 80,670 | 13.0 | 5,212 |
| 1998 | 267,303 | 156,539 | 50,122 | 10.3 | 145,214 | 80,476 | 12.9 | 4,617 |
| 1999 | 263,515 | 155,027 | 48,948 | 10.1 | 144,556 | 79,298 | 12.9 | 4,987 |
| 2000 | 267,961 | 156,140 | 50,271 | 10.3 | 141,135 | 76,776 | 12.7 | $5,086{ }^{5}$ |
| 2001 | 249,227 | 148,642 | 44,642 | 9.5 | 143,818 | 79,277 | 12.9 | 5,384 ${ }^{5}$ |
| 2002 | 255,596 ${ }^{4}$ | 151,014 ${ }^{4}$ | $46,814{ }^{4}$ | 9.7 | 147,735 | 80,997 | 13.4 | $5,485^{5}$ |
| 2003 |  |  |  |  |  |  |  | 5,354 |

I Includes decrees of nullity.
2 Children aged under 16 at the date of petition for divorce, not at decree absolute. Children are those who have been treated as 'children of the family', and may include stepchildren and adopted children.
3 All the rates in this table are different to those previously published due to revisions in the population estimates. See Background Note I.
4 These figures are different from those published as provisional in the first release of 2002 marriages data.
5 These figures have been revised from those which were previously published.



Source: FM2 no. 30 (2002) Table 3.10

## Figure 3

Marriages by type of ceremony, 1992-2002

England and Wales


[^22]marriage rate fell by 55 per cent over the same period to 30.9 single women marrying per 1,000 single female population. For those women aged 25-29 the rate fell by 31 per cent to 63.0 per 1,000 single female population. The first marriage rate for women aged 35-39 was higher than for women aged 20-24 for the first time ever in 2002.
Figure 2 shows that the rates for both men and women aged 35-39, and for women aged 40-44, have remained fairly steady between 1992 and 2002; there has been a slight increase in the rate for men aged $40-44$ over the same period.

Marriages that were remarriages for both parties accounted for 18 per cent of all marriages in 2002, the same proportion as in 2001 and one percentage point more than in 1992. Remarriage rates for widowed and divorced people, irrespective of the partner's marital status, increased for both men and women between 2001 and 2002. The number of men remarrying per 1,000 widowed and divorced males increased from 33.2 in 2001 to 33.8 in 2002. The corresponding increase for women was from 15.2 in 2001 to 15.8 in 2002. However, the long-term trend over the period 1992 to 2002 was for decreasing remarriage rates: the rate for men declined by 25 per cent from 45.1 in 1992, while that for women fell by 18 per cent from 19.3 in 1992. In contrast to first marriage rates, the remarriage rates for men are higher than those for women.

The average (mean) age at marriage for both men and women increased by more than three years in the 10 years to 2002. Men were aged, on average, 35.3 years at marriage in 2002, compared with 32.0 in 1992. The mean age for women increased from 29.5 to 32.6 over the same period. The mean ages for first marriages in 2002 were 30.9 years for men and 28.7 for women, compared with 27.9 and 25.910 years previously.

The increase in average age at marriage is primarily a reflection of falls in the proportions of people getting married among people aged under 30. Only 36 per cent of men who married in 2002 were aged under 30, compared with 57 per cent in 1992. Forty-eight per cent of women marrying in 2002 were in this age group, compared with 67 per cent in 1992.

Figure 3 shows the changes in the type of marriage ceremony between 1992 and 2002. The proportion of civil marriage ceremonies first exceeded religious ceremonies in 1992; since then the proportion of
civil marriages has increased year on year, while religious ceremonies have decreased each year. There were 169,210 civil marriages in 2002, accounting for two-thirds of all marriages. The corresponding proportion in 1992 was just over 50 per cent. The recent increase in civil marriages coincided with the introduction of approved premises in 1995. ${ }^{3}$ Twentyfour per cent of all marriages in 2002 took place in approved premises, representing 36 per cent of civil ceremonies. In 1996, just 5 per cent of all marriages took place in approved premises. The proportion of all marriages solemnised in the Church of England or the Church in Wales fell by 29 per cent between 1992 and 2002; such marriages accounted for 23 per cent of all marriages in 2002, compared with 33 per cent in 1992.

The residential addresses of the couple immediately before marriage have been shown to be good indicators of whether a couple were cohabiting prior to marriage. ${ }^{4}$ In 2002, identical residential addresses were given by 77 per cent of all couples getting married. However, this figure varied depending on the marital status of the people marrying and the type of ceremony. The proportion was 89 per cent for couples where both parties had previously been divorced and 72 per cent for marriages that were the first for both parties. Eighty-seven per cent of couples marrying with a civil ceremony gave identical residential addresses at marriage, compared with 59 per cent of couples who married with a religious ceremony. These percentages reflect the larger proportion of divorced people marrying with a civil ceremony: nearly nine out of ten couples where both parties had been previously divorced were so married, while just over half of marriages that were the first for both parties involved a civil ceremony.

## Divorces

There were 147,735 divorces granted in England and Wales in 2002, a rise of 2.7 per cent on the 2001 figure. This is the second successive increase in the annual number of divorces and is the highest figure since 1996. However, the number of divorces in 2002 was over 12,000 fewer than in 1992, a fall of 8 per cent (Table B).

Table B also shows the divorce rate increased to 13.4 divorcing people per 1,000 married population in 2002 from 12.9 in 2001. Figure 4 shows divorce rates by sex and age group over the period 1992 to 2002 . The highest divorce rates are for those aged 25-29 for both sexes. However,
Figure 4 Divorces rates by age group, I992-2002
the graph shows divorce rates for men aged under 35 and women aged under 30 have fallen between 1992 and 2002. Among men aged 20-24, the rate decreased by 8 per cent from 26.6 per 1,000 married population in 1992 to 24.4 in 2002, while for those aged 25-29 it fell by 9 per cent from 32.1 in 1992 to 29.4 in 2002. For women aged 20-24 the rate decreased by 5 per cent from 30.0 in 1992 to 28.4 in 2002, while for those aged $25-29$ it fell by 3 per cent from 31.3 in 1992 to 30.4 in 2002. In contrast, the divorce rates for the older age groups increased over this period. The largest percentage increases were for people in their fifties: for men aged 50-59 the rate increased by 24 per cent from 7.4 in 1992 to 9.2 in 2002, and for women it rose by 30 per cent from 5.2 in 1992 to 6.8 in 2002.

The average age at divorce rose by just over three years between 1992 and 2002, an increase similar to that of the average age at marriage. The average age for men divorcing was 41.9 years in 2002, compared with 41.5 in 2001. For women, the average age at divorce increased to 39.4 in 2002 from 39.1 in 2001.

The median duration of marriages ending in divorce in 2002 was 11.1 years. Between 1992 and 1996, the figure remained at 9.8 or 9.9 years; it then increased steadily to 10.9 in 2001 and 11.1 in 2002.

Seventy per cent of divorces in 2002 were to couples where the marriage had been the first for both parties. The proportion has fallen from 73 per cent in 1992 and this downward trend largely reflects the fall in the proportion of first marriages. Conversely, the proportion of divorces where one or both parties had been previously divorced was higher in 2002 than in 1992. Twenty per cent of divorces in 2002 were where one party had been previously divorced, compared with 17 per cent in 1992, while divorces where both parties had been previously divorced made up 10 per cent of all divorces, compared with 9 per cent in 1992.

Almost 81,000 couples divorcing in 2002 had at least one child ${ }^{5}$ aged under 16 at the time of petition for divorce (Table B). This represents 55 per cent of all divorcing couples, a proportion that had remained fairly constant over the previous ten years. There were 149,335 children aged under 16 in the families where the parents divorced in 2002 . This equates to an average of 1.84 children per divorced couple that had children aged under 16, the same as in 1992. Nearly a third of all divorcing couples in 2002 had no children of any age.

Seventy per cent of all divorces in 2002 were granted to the wife, compared with 72 per cent in 1992. The most common fact proven for these divorces was the husband's behaviour ( 52 per cent of cases), followed by two years' separation with consent ( 21 per cent) and adultery ( 20 per cent). In contrast, of the divorces granted to the husband, the most common fact proven was two years' separation with consent ( 31 per cent of cases), followed by behaviour ( 29 per cent) and adultery ( 26 per cent).

In 40 per cent of all divorces in 2002, the interval between petition and decree absolute was less than six months. For couples with children aged under 16 this proportion decreased to 34 per cent. Only 7 per cent of all divorces took longer than two years from petition to decree absolute. Divorces with two years' separation with consent as the fact proven were the most likely to granted quickly with 53 per cent granted within six months of petition. Divorces with behaviour as the fact proven had the lowest proportion (just under a third) granted within six months.

## Adoptions

There were 5,354 children adopted ${ }^{6}$ in England and Wales in 2003, 2.4 per cent less than in 2002 and 21.3 per cent fewer than in 1993 (Table B). The number of children adopted declined steadily from 6,799 in 1993 to 4,617 in 1998, before increasing each year to 5,485 in 2002.


Figure 5 shows the trends in adoptions by age group over this period. The number of children adopted has fallen in each age group, other than for those aged 1 to 4 . The largest decrease was for children aged 10 to 14 , where the number adopted fell by 53 per cent. The number of children adopted aged under 1 and 15 to 17 fell by 52 and 44 per cent respectively, while the number of children aged 5 to 9 fell by 33 per cent. Conversely, the number of adopted children in the 1-4 age group increased by 34 per cent over the same period.

Seventy-four per cent of children adopted in 2003 were born outside marriage, compared with 57 per cent in 1993. The proportion of adopted children who were born outside marriage has increased fairly steadily over this period.

## Key findings

- There were 255,596 marriages in 2002, 2.6 per cent more than in 200I, which was the lowest annual number since 1897.
- Marriage rates have decreased between 1992 and 2002. The most pronounced decline has been for marriages that were the first for both parties, and for those aged under 30.
- The first marriage rate for women aged 35-39 was higher than for women aged 20-24 for the first time ever in 2002.
- Two-thirds of marriages were solemnised with a civil ceremony, and just under a quarter of all marriages took place in approved premises.
- There were 147,735 divorces in 2002 , an increase of 2.7 per cent and the highest annual number since 1996. The divorce rate increased to 13.4 divorcing people per I,000 married population in 2002 from 12.9 in 2001.
- Over the period 1992 to 2002, the average age at marriage and divorce increased by over three years.
- Nearly a third of all divorcing couples in 2002 had no children of any age.
- Seventy per cent of all divorces in 2002 were granted to the wife. The most common facts proven were behaviour for divorces granted to the wife and two years' separation with consent for those granted to the husband.
- There were 5,354 adoptions in 2003, 2.4 per cent more than in 2002, but 21 per cent fewer than in 1993.


## References and Background Notes

1. The population estimates by marital status used to calculate rates in this Update are the latest available: revised estimates for 1991 to 2002 were published on 7 October 2004. Further information on population estimates can be found on the National Statistics website at www.statistics.gov.uk/popest.
2. Marriage figures relate only to marriages taking place in England and Wales. Marriages of England and Wales residents that take place outside England and Wales are not included in the figures.
3. Approved premises are buildings such as hotels and stately homes licensed by local authorities under the Marriage Act 1994 for the solemnisation of marriages. In addition, some local authorities have made accommodation available for civil marriage as approved premises in place of register offices. The provision for marriages in approved premises came into effect on 1 April 1995.
4. Haskey J (1997). Spouses with identical residential addresses before marriage: an indicator of pre-marital cohabitation. Population Trends 89, pp. 13-23.
5. In this context, 'children' are children of the family, and include both stepchildren and adopted children treated as children of the family. Their ages are as at date of petition for divorce.
6. The adoption figures in this Update are based on the date of court order, and do not include foreign adoptions.

## Other population and health articles, publications and data

Health Statistics Quarterly 26<br>Publication 26 May 2005<br>Planned - Healthy Life Expectancy; a review of sources and articles method<br>- Sex differences in mortality, a comparison of the United Kingdom and other developed countries<br>- Death certification: issues from a pilot of the Shipman Inquiry's interim proposals<br>Report: - Death registration in England and Wales, 2004: cause

## Population Trends 120

Publication 30 June 2005
Planned - Living arrangements in contemporary Britain - livingarticles: apart-together: estimated prevalence and numbers

- The age difference in England and Wales: patterns and trends
- Who cares? Geographical variation in informal caregiving in England and Wales: evidence from the 2001 Census
- The demographic characteristics of the oldest old in the UK
Report: - Marital status projections
- Eurostat projections
- Live births in England and Wales, 2003: area of residence
- Death registrations in England and Wales 2003: area of residence


## Forthcoming Annual Reference Volumes

## Title

Planned publication

Key population and vital statistics 2003, VS no. 29, PPI no. 26 April 2005
Conception statistics 2002 - supplement to Birth Statistics 2003* June 2005
Mortality statistics: injury and poisoning 2003, DH4 no. 28* June 2005

* Available through the National Statistics website only; http://www.statistics.gov.uk


[^0]:    * From 1980 the figures are for the Government-controlled area only of Cyprus.

[^1]:    - Constant fertility Constant mortality Nil Migration (Scenario I)
    - Constant fertility Improving mortality nil Migration (Scenario 2)
    - Constant fertility Improving mortality Migration (Scenario 3)

[^2]:    * Numbers in brackets indicate former table numbers in editions of Population Trends prior to spring 1999 (No 95). Former tables 16 and 17 (Deaths by selected causes, and Abortions) now appear in Health Statistics Quarterly.

[^3]:    5 Rates are based on births to or deaths of Japanese nationals only
    6 Excludes Hong Kong.
    7 Estimate prepared by the Population Division of the United Nations.
    8 Includes Hong Kong.
    9 Rate is for 1990-1995.
    10 These revised population estimates were published on 9 September 2004 (for mid-2001 and mid-2002) and 7 October 2004 (for mid-1992 to mid-2000), following the local authority population studies, and replace all earlier versions. All figures shown on this table are now therefore on a consistent basis.

[^4]:    See notes on first page of table.

[^5]:    See notes on first page of table.

[^6]:    These revised population estimates were published on 9 September 2004 (for mid-2001 and mid-2002) and 7 October 2004 (for mid-1992 to mid-2000), following the local authority

[^7]:    Note: Figures may not add exactly due to rounding.

[^8]:    See notes opposite.

[^9]:    For UK, England,Wales and Scotland from I98I onwards, this column is not an estimate of net civilian migration; it also includes "other" changes. It has been derived by subtraction using revised population estimates and natural change.
    2 These revised population estimates were published on 9 September 2004 (for mid-200I and mid-2002) and 7 October 2004 (for mid-1992 to mid-2000), following the local authority population studies, and replace all earlier versions. All figures shown on this table are now therefore on a consistent basis.

[^10]:    Marriage and divorce rates in England and Wales for 1986 have been calculated using the interim revised marital status estimates (based on the original mid2001 estimates) and are subject to further revision. Marriage and divorce rates for 2004 in Scotland are based on 2003 marital status estimates. Figures for 2003 may not add precisely due to rounding.

[^11]:    See 'Notes to tables'.

[^12]:    I The mean ages in this table are unstandardised and therefore take no account of the structure of the population by age or marital status.
    Births outside marriage can be registered by both the mother and father (joint) or by the mother alone (sole).
    3 Usual address(es) of parents.
    p Provisional.

[^13]:    Notes: Conceptions are estimates derived from birth registrations and abortion notifications.
    Rates for women of all ages, under 16, under 18, under 20 and 40 and over are based on the population of women aged 15-44, 13-15, 15-17, 15-19 and 40-44 respectively.

[^14]:    Note: Figures from 1981 are calculated from the population estimates revised in the light of the 2001 Census. All figures are based on a three-year period.

[^15]:    Note: Figures in this table are derived from the International Passenger Survey and other sources - see Notes to Tables. Prior to 1991 they exclude certain categories of migration such as

[^16]:    Notes: Marriage rates for 1986 have been calculated using the interim revised marital status estimates (based on the original mid-200I estimates) and are subject to further revision.

[^17]:    Note: The Divorce Reform Act I969 became operative on I January I971 - the Matrimonial and Family Proceedings Act came into effect on I2 October I984. Figures include petitions for nullity
    Source: The Court Service.

[^18]:    The estimates were derived from a two-stage process of iterations as described in stages (iii \& iv).
    Note: figures may not add exactly due to rounding.

[^19]:    Non-married population includes separated.
    2 Percentage cohabiting in each marital status and age group. For example, one per cent of single men aged 16 to 19 were cohabiting in 2003.

    - fewer than 1,000 on rounding
    -- denominator under 1,000
    Note: figures may not add exactly due to rounding.
    Source: Office for National Statistics

[^20]:    I The population estimates by marital status used to calculate rates in this release are the latest available. Mid-2003 estimates were published on 4 November 2004 , while revised marital status estimates for 1991 to 2002 were published on 7 October 2004.
    p Provisional
    Source: Office for National Statistics, FM2 Table 2.2

[^21]:    Source: http://www.statistics.gov.uk/popest

[^22]:    Source: FM2 no. 30 (2002) Table 3.33

