



XVIIII World Congress on Safety and Health at Work

Prevention in a Globalized World - Success through Partnerships

Introductory Report: Decent Work – Safe Work

by

Dr. J. Takala, Director, SafeWork International Labour Office, Geneva

XVIIth World Congress on Safety and Health at Work (Orlando, 18-22 Sep. 2005)

Contributors:

G. Albracht, P.Baichoo, I.Christensen, J. Caborn, I. Fedotov, V.Forastieri, M.Gifford, D. Gold, W.Husberg, T.Kawakami, W.Kim, A.Lopez-Valcarcel, S.Machida, F.Muchiri, M.Nahmias, S.Niu, A. Rice, B. Treichel, N.Watfa.

"... All too often lives are shattered unnecessarily because of poor working conditions and inadequate safety systems... Let me encourage everyone to join the International Labour Organization in promoting safety and health at work. It is not only sound economic policy, it is a basic human right...".

(Kofi Annan, Secretary-General of the United Nations)

"... Prevention is paying not only in human terms but also in better performance by businesses and national economic strength. Together we can make sure that decent work is safe work ...".

(Thaksin Shinawatra, Prime Minister of Thailand)

"...Promoting a Safety Culture is the theme of this year's World Day for Safety and Health at Work. This promotional initiative is an important complement to the normative foundation of OSH at work... [We will] work with other nations to implement the Global Occupational Safety and Health Strategy adopted at the 2003 International Labour Conference...".

(Tarja Halonen, President of Finland)

(Extracts from video messages and speeches delivered on World Days for Safety and Health at Work, 2003-2005)

Copyright © International Labour Organization 2005

First published (2005)

Publications of the International Labour Office enjoy copyright under Protocol 2 of the Universal Copyright Convention. Nevertheless, short excerpts from them may be reproduced without authorization, on condition that the source is indicated. For rights of reproduction or translation, application should be made to the Publications Bureau (Rights and Permissions), International Labour Office, CH-1211 Geneva 22, Switzerland. The International Labour Office welcomes such applications.

Libraries, institutions and other users registered in the United Kingdom with the Copyright Licensing Agency, 90 Tottenham Court Road, London W1T 4LP [Fax: (+44) (0)20 7631 5500; email: cla@cla.co.uk], in the United States with the Copyright Clearance Centre, 222 Rosewood Drive, Danvers, MA 01923 [Fax: (+1) (978) 750 4470; email: info@copyright.com] or in other countries with associated Reproduction Rights Organizations, may make photocopies in accordance with the licences issued to them for this purpose.

Introductory Report: Decent Work – Safe Work

Geneva, International Labour Office, 2005

ISBN 92-2-117750-5 (print) ISBN 92-2-117751-3 (web pdf)

The designations employed in ILO publications, which are in conformity with United Nations practice, and the presentation of material therein do not imply the expression of any opinion whatsoever on the part of the International Labour Office concerning the legal status of any country, area or territory or of its authorities, or concerning the delimitation of its frontiers.

The responsibility for opinions expressed in signed articles, studies and other contributions rests solely with their authors, and publication does not constitute an endorsement by the International Labour Office of the opinions expressed in them.

Reference to names of firms and commercial products and processes does not imply their endorsement by the International Labour Office, and any failure to mention a particular firm, commercial product or process is not a sign of disapproval.

ILO publications can be obtained through major booksellers or ILO local offices in many countries, or direct from ILO Publications, International Labour Office, CH-1211 Geneva 22, Switzerland. Catalogues or lists of new publications are available free of charge from the above address, or by email: pubvente@ilo.org

Visit our website: www.ilo.org/publns

Printed in Italy TUR

Introduction

Throughout the world, there is growing acceptance that accidents and ill-health at work impact not only on the lives of individual workers, their families and their potential for future work, but also the productivity and profitability of their enterprises and ultimately the welfare of the society in which they live. In short, safety and health at work makes good business sense, and maintaining acceptable standards is seen as an integral and key component of societal development, poverty alleviation and of 'decent work'.

The ILO firmly believes that work-related accidents and ill-health can and indeed must be prevented, and that action is needed at international, regional, national and enterprise levels to achieve this. Yet, globally, the statistics appear to show an increasing trend in occupational accidents and diseases. As the ILO Director-General said when referring to the Decent Work Agenda, "Decent Work must be Safe Work, and we are a long way from achieving that goal".

The protection of workers against injury and disease has always been a key issue for the ILO since it was founded in 1919, and many of its activities have been directed to that end. Many Conventions, Recommendations and other instruments on occupational safety and health (OSH) have been adopted over the years, and these have helped to improve working conditions throughout the world. This impetus has been maintained, and recent years have seen both the adoption of a Global Strategy for OSH¹, which seeks to integrate and enhance the ILO's activities in this area, and the development of a new promotional framework for OSH, intended for adoption as a Convention in 2006.

This report provides an overview of the most recent estimates of occupational and work-related accidents and diseases, world-wide, some of the causes for recent changes and what the ILO and its member States are doing to improve conditions in the workplace for the millions who are at risk from injury.

¹ ILO: Global strategy for occupational safety and health - Conclusions adopted by the International Labour Conference, 91st Session, 2003.

The global picture: latest estimates of occupational accidents and work-related diseases

The impact of occupational accidents and diseases (which are 100% work-related and often compensatable) and other work-related diseases (which are only partly caused by work) can be measured using several different indicators. Reported accident and diseases statistics provide perhaps the most direct indicator, but such data are often very incomplete since under-reporting is common and official reporting requirements frequently do not cover all categories of workers anyway – those in the informal economy for example. Other indicators need to be used as well to obtain a fuller picture, such as compensation data, disability pensions and absentee-ism rates, although these too provide incomplete data. For example, no country records and compensates all occupational accidents and diseases, although data for occupational accidents are more comprehensive than those for occupational diseases. These indicators may be linked together, as, for example, when estimating Disability Adjusted Life Years (DALYs).

The latest global estimates of the numbers of work-related accidents and diseases have therefore been based on official statistics from all Regions of the world for 2001, particularly from countries that record such data reasonably well, and extrapolated using a number of indicators as mentioned above. The year of 2001 was chosen, since this is the latest year for which internationally comparable data on occupational accidents and estimates of mortality from the WHO were available. Earlier estimates were based on data from the year 1998.

According to the latest ILO estimates for accidents and diseases, there are globally about

2.2 million work-related deaths annually

which represents about a 10% increase on the estimate given in the Introductory Report to the XVIth World Congress on Safety and Health at Work in Vienna, 2002². The following tables, and Annex 3, give more details, comparing estimates for 2001 with those for 1998 and providing a breakdown by different world regions.

See http://www.ilo.org/public/english/protection/safework/wdcongrs/ilo_rep.pdf

Table 1. Progress of estimated and reported fatal and non fatal accidents, 1998- 2001 (legend, see Table 2 below)

Region	Economically active population (2001)	Economically active population (1998)	Fatal accidents reported to the ILO (2001)	Accidents causing 3+ days' absence reported to the ILO (2001)	Fatal accidents reported to the ILO (1998)	Accidents causing 3 days' (+) absence reported to the ILO (1998)	ILO Global Estimates on Fatal Accidents 2001	ILO Global Estimates on Fatal Accidents 1998	Accidents causing 3+ days' absence Average (2001)
EME	419,732,002	409,141,496	14,316	7,527,083	14,608	7,631,977	15,879	16,170	12,118,393
FSE	183,089,714	184,717,127	7,853	343,004	8,665	582,287	17,416	21,425	13,291,068
IND	443,860,000	458,720,000	222	928	211	0	40,133	48,176	30,627,865
CHN	740,703,800	708,218,102	12,736	61,329	17,804	75,773	90,295	73,615	68,909,715
OAI	415,527,598	404,487,050	3,051	141,349	5,631	252,499	76,886	83,048	58,676,113
SSA	279,680,390	260,725,947	145	27,015	1,675	47,105	53,292	54,705	40,670,012
LAC	219,083,179	193,426,602	2,009	776,938	6,998	1,699,107	39,372	29,594	30,046,941
MEC	135,220,721	112,906,300	1,416	153,785	1,876	191,164	17,977	18,986	13,719,565
WORLD	2,836,897,404	2,732,342,624	41,748	9,031,431	57,468	10,479,912	351,251	345,719	268,059,671

Table 2. Latest Estimates on Work-related Fatalities, caused by both occupational accidents and work-related diseases.

Region	Economically active population (2001)	ILO Global Estimates on Fatal Accidents 2001	Fatal work-related diseases calculated using age structures	Work-related mortality calculated using age structures (accidents and diseases)	Deaths caused by dangerous substances (age)	Fatal work-related diseases calculated using gender structures	Work-related mortality calculated using gender structures (accidents and diseases)
EME	419,732,002	15,879	281,364	297,243	64,019	286,998	302,877
FSE	183,089,714	17,416	148,194	165,610	35,512	153,564	170,980
IND	443,860,000	40,133	261,891	302,024	64,894	325,350	365,483
CHN	740,703,800	90,295	386,645	476,940	102,606	414,024	504,319
OAI	415,527,598	76,886	178,786	255,672	54,811	208,402	285,288
SSA	279,680,390	53,292	211,262	264,554	55,811	387,721	441,013
LAC	219,083,179	39,372	108,195	147,567	31,571	116,135	155,507
MEC	135,220,721	17,977	120,725	138,702	29,817	140,941	158,918
WORLD	2,836,897,404	351,251	1,697,061	2,048,312	438,480	2,033,135	2,384,385

World Bank Regions: EME - Established Market Economies; FSE - Former Socialist Economies; IND - India; CHN - China; OAI - Other Asia and Islands; SSA - Sub-Saharan Africa; LAC - Latin-America and Caribbean; MEC - Middle Eastern Crescent

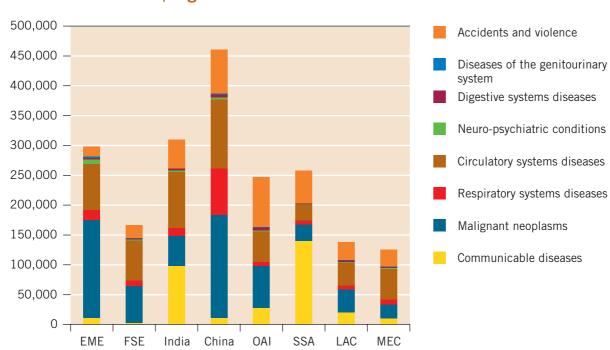


Table 3. Global Estimated Work-Related Fatalities by Region , absolute numbers, legend see table 2

The methodology

Global estimates of *work-related deaths caused by diseases* have been made using attributable fractions for work-related mortality due to specific disease categories and injuries. Calculations were made using two methods: one used the attributable fractions for different age structures and the second those for different sexes separately. An attributable fraction can be "interpreted as the fraction of a disease [or injury] which would not have occurred had the factor been nonexistent in the population in question"³. These attributable fractions or percentage figures for different disease categories are based on data about existing exposures to known factors of work-related diseases and their proven impact on exposure - outcome relationship and morbidity to these diseases, in particular, in industrialized countries.

Such studies have been carried out only to a limited extent, if at all, in developing countries. However, the exposure/disease relationship is expected to be largely consistent with that in industrialized countries, although a few exceptions may exist (see ILO Introductory Report to the World Congress in Vienna in 2002⁴).

The number of *fatal occupational accidents* was estimated firstly using reported frequency rates of fatal accidents (fatals/100 000 workers) obtained from ILO member States that report their accident data most reliably, in three economic sectors:

1. agriculture/fishing/forestry

Nurminen M, Karjalainen A.: Epidemiologic estimate of the proportion of fatalities related to occupational factors in Finland. Scand J., Work Environment Health 2001; 27(3):161-213

www.ilo.org/public/english/protection/safework/wdcongrs/ilo_rep.pdf - ibid

- 2. manufacturing industries and construction
- 3. service industries

These rates were complemented by country data when available and then applied to the total employment figures obtaining the fatality figures by the three economic sectors and by country⁵, see Annex 3.

Non-fatal occupational accidents were estimated using the reasonably stable ratio of fatal accidents to non-fatal accidents that cause an absence of 3 days or more. This accident pyramid ratio is roughly 1/1000, or every thousandth accident leads to a fatality when high quality and reliable recording and notification systems are used. Three different estimates were used:

- 1. the highest estimate was based on the average reporting rates of Finland, France, Germany and Luxembourg,
- 2. the lowest estimate was 50% of the above
- 3. the average estimate, shown in the tables above, was 75 % of the country rates between fatal and non-fatal accidents.

Reported and estimated numbers are shown next to each other. Major factors influencing the work-related death figures were listed in the Introductory Report to the World Congress in 2002.

A commentary

These figures represent a small but significant increase in the numbers of work-related accidents and diseases since the previous study. There appear to be several reasons for the increases from previous estimates, the main ones being:

- 1. The total number of workers (economically active population) has increased.
- 2. The gender disaggregated results for work-related diseases were clearly higher (2.38 million deaths) than those calculated by both sexes together for specific age groups (2.03 million). These age groups were 15- 29, 30-44, 45-59, 60-69 and 70+. Most workers in the older age groups had already retired and estimates were only made for those suffering from diseases with long latency periods. The age groups calculations are expected to be more accurate while the average value has been taken for the global estimate: 2.2 million.
- 3. Global figures for fatal accidents were fairly stable and increased only slightly, increasing in developing and decreasing in industrialised countries. Changes, for example in Latin America, reflect new data on both fatal accident rates, better coverage and larger manpower, while the decrease in Indian figures, for example, is largely based on improvements in reference countries as very limited information was available for India itself.
- 4. According to latest data, accidents account for the biggest share of work-related mortality in Other Asia and Island and China (Table 4). However, work-re-

Hämäläinen P., Takala J., Saarela K: Global Estimate of Occupational Accidents, *Safety Science*, accepted for publication in 2005.

- lated communicable diseases, such as work-related malaria and other infectious diseases create the greatest burden in Sub-Saharan Africa and India as well as in other sub-regions. Furthermore, accident victims on average are much younger than those suffering from work-related diseases and the potential loss of working life is longer.
- 5. Although exposure to toxic substances in the workplace are now generally better controlled in industrialized countries than they were, many such countries are now witnessing a significant increase in the rate of fatalities from past exposures to certain substances because of the latency of some diseases. This is especially so for asbestos. For example, the UK estimates that at least 3500 people in Great Britain die each year from mesothelioma and asbestos-related lung cancer and that annual deaths are predicted to go on rising into the next decade. There is a big lesson here for those countries that still continue to use asbestos in manufacturing processes.

It is a well-known fact that certain sectors are more dangerous than others. One of the key reasons for the favourable declining fatal accident trend in industrialized countries is the gradual change in patterns of employment: fewer people now work in hazardous sectors, such as steel mills, shipbuilding and ship breaking, agriculture, forestry and mining, and more are employed in the relatively safe service sectors. Conversely, the industrialization of developing countries is often accompanied by a rapid increase in numbers of fatal and non-fatal accident rates, with the growth of new factories and the development of the infrastructure, the construction of new buildings and roads, all of which may employ untrained (and migrant) workers in new environments, exposed to risks hitherto unknown to them. If the experience of industrialized countries is to be repeated, fatal and major accidents and disease will continue to increase until a plateau is reached, as prevention policies and programmes gradually gain momentum, enforcement of legislation begins to take effect and workplace risks become properly managed.

This rapid increase of accidents in industrializing countries may be partly explained by improved recording and compensation systems, which will tend to increase official statistics, although rural and informal economy working populations continue to be outside such systems. This applies to both legal and compensation coverage as well as to that of the inspection and occupational health services. Industrial and service sectors are better covered and thus recording systems produce more realistic figures.

Work-related non-fatal diseases

The causes of work-related diseases are complex⁶. In some cases a work-related factor may be the only cause of the disease, but it is much more common for work-related factors to increase the risk of disease together with other factors. Work-related factors also often aggravate an already established disease. Although the ILO recently established a new list of occupational diseases⁷, the concept of occupational diseases and recording them depends on administrative decisions in each member

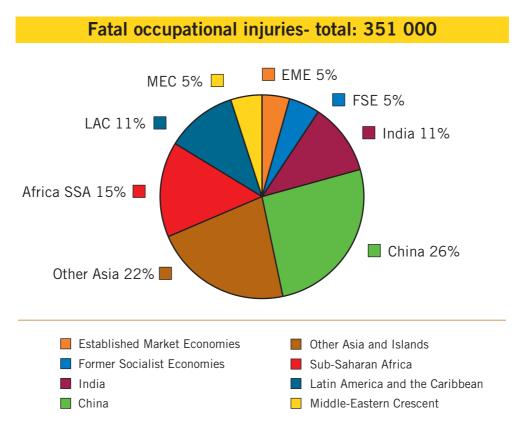
See, for example, Chapter 3 of Work and Health in the EU, a statistical portrait – Eurostat, European Commission, 2004 (contact eurostat@mail.europa.eu.int)

The List of Occupational Diseases Recommendation, 2002 (No. 194) – see http://www.ilo.org/ilolex/english/recdisp1.htm

State. It also appears that the member States that report most occupational diseases are those with the best systems of protection, including the recording and compensation of such diseases.

Work-related diseases are a wider concept than occupational diseases and cover all diseases where work is a contributory cause. As a hypothetical example, one could have 10 cases of diseases for which a work-related factor is estimated to have contributed a 30 % increase in risk in each case, the remaining 70 % being due to causes not related to work. Epidemiologically, 10 cases of a disease each with a 30 % contribution from a harmful occupational exposure would equate to 3 cases of the same disease that could have been wholly prevented by avoiding the harmful occupational exposure. The way to identify these diseases is to carry out labour force surveys that take into account the self-reported diseases (and injuries). When these are well done and when the population surveyed is aware of the possible causes of work-related diseases they may provide a good estimate of the magnitude of the problem.

Table 4. Share of absolute figures of fatal occupational injuries, world 2001



The annual number of non-fatal work-related diseases has earlier been estimated to be 160 million. The British (1998) and Finnish (2000) surveys on self-reported work-related illnesses came to the conclusion that 7.3% and 8.3% respectively of those employed report annually one or more work-related illnesses that caused absence from work. This would mean in the world population – provided that workers are not health-

Work and Health in the EU, a statistical portrait – ibid.

ier in other parts of the world – that between 184 and 208 million workers suffer from work-related diseases. About 2.3% or 58 million of those suffer from illnesses that cause 4 days or more absence from work. The EU Labor force survey identified a prevalence rate of 5372 cases per 100 000 persons a year. In Nigeria a much higher percentage was found, probably due to the perception that in the informal economy and in agriculture, people work for a much higher proportion of the day. In the UK, the latest (2003-2004) prevalence rate of all self-reported work-related illness was estimated to be about 4750 per 100,000 workers, with musculo-skeletal disorders and stress, depression and anxiety being the most commonly reported.

Taking into account the under-employment in a number of countries and the increased manpower the earlier estimate of *160 million* work-related diseases is reasonable for the 2.8 billion work force, if also taking into account non-recorded, part-time, child and other informal sector workers.

Occupational injuries

Although fatal occupational injuries caused by accidents are placed third when looking at the main reasons for deaths at work, there are two main aspects that must be kept in mind:

- (a) Fatal accidents usually occur to workers who could still have had a long working career ahead of them and some occur to young and inexperienced workers. A new estimate of 22,000 fatalities among working children has been made in using the number of child workers that are in hazardous occupations, 178 million and the overall fatal accident frequency rate. These deaths thus cause the loss of a large number of lives and working years. In contrast both work-related cancer and work-related circulatory diseases tend to occur quite late in working life, often after retirement.
- (b) While some factors that contribute to work-related diseases are difficult to eliminate, such as genetic and inherited sensitivities, occupational accidents are all caused by preventable factors at the work place. This has been demonstrated by continuously reduced accident rates in industrialized countries. Many companies and some governments have already adopted *zero accident* targets. This means that practically all accidents can be eliminated by a set of known measures. If all ILO member States used the best accident prevention strategies and practices that are already in place and easily available, some 300,000 deaths (out of total 360,000) and 200 million accidents (out of 270 million) could be prevented, not to mention the savings in compensation payments and other economic benefits.

Injuries caused by accidents lead to fatalities only when a number of contributing factors co-exist simultaneously. Fatal accidents are just the tip of the iceberg. Depending on the type of job some 500-2,000 smaller injuries take place for each fatality. The accident pyramid illustrates the issue (data from R. Skiba, Germany)¹⁰.

See Health and Safety Statistics highlights 2003-2004, Health and Safety Executive, UK - http://www.hse.gov.uk/statistics/overall/hssh0304.pdf

R.Skiba: Taschenbuch Arbeitsicherheit 10, new edition, p 37, also in Training Material of Steinbruchs-Berufsgenossenschaft (StBG), 30853 Langenhagen, Germany

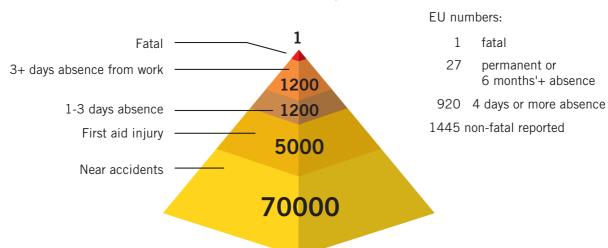
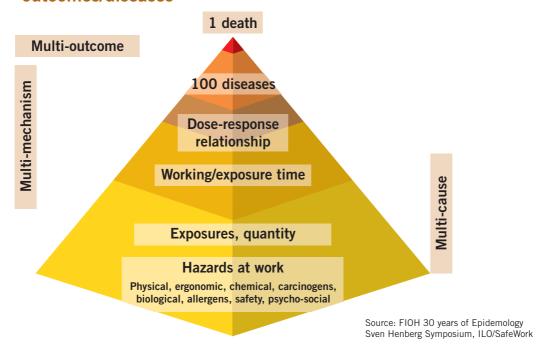


Table 5. The relation of fatal accidents, other accidents and incidents

Table 6. Links between hazards, exposures and work-related negative outcomes/diseases



Costs of occupational injuries and diseases

The European Union has recently estimated that the costs of occupational accidents in EU15 in the year 2000 was 55 billion euro a year and believes that is likely to be an underestimate. It does not cover costs of work-related diseases that cause 1.6 to 2.2 times more days of temporary incapacity than accidents, while there are 2.4 times more people reporting long-standing health problems at work. It further states that the costs of problems and disability due to work-related diseases may cause at least two times more temporary and permanent incapacity as compared to accidents at work. The ILO has estimated that there are 120.000 (116.000 –124.000 annual deaths in EU15 caused by work related diseases as compared to

some 6000 fatal occupational accidents (see Annex 3 of this report or www.ilo.org/safework). This may indicate that the above costs figures are still radically small if all work-related diseases and problems are taken into account.

WHO has estimated that 37 % of low back pain, 16% of hearing loss, 13% of chronic obstructive pulmonary disease, 11% of asthma, and 8% of injuries are related to work. The ILO has estimated that the attributable fractions are as follows, while in ILO calculations some adjustments were made to compensate different exposure conditions in selected regions:

Table 7. The attributable fractions related work of various diseases.

Fractions (%) are based on largely industrial country
conditions while application of these fractions was adapted to
conditions in selected developing countries

Causes	Attributable fraction	Attributable fraction, men	Attributable fraction, women
Communicable diseases	8.8	4.8	32.5
Malignant neoplasms	8.4	13.8	2.2
Respiratory systems diseases	4.1	6.8	1.1
Circulatory systems diseases	12.4	14.4	6.7
Neuro-psychiatric conditions	3.4	6.6	1.8
Digestive systems diseases	2.1	2.3	1.5
Diseases of the genitourinary system	1.3	3.0	0.4

Furthermore, based on Australian studies related to the work-related attributable fractions of hazardous substances present such fractions listed in Annex 5. The table shows that hazardous substances are a cause of some 20 % of all work-related fatalities and equally a sizeable component of other non-fatal consequences.

All of these attributable fractions give an indication of the magnitude of the costs of work-related problems. Schulte has summarized these studies of the Global Burden and attributable fractions in his analysis listing the attributable fractions (attributable risk) from leukemia (2%) to pneumoconiosis (100%), injuries fraction for occupational injuries (of all injuries) was listed as 10%.

The Global Burden of Disease and Injury by Murray and Lopez (WHO/World Bank) estimated that 5 % of the burden is attributed to work in established market economies. This may be also close to the loss of global GDP caused by work-related factors that the ILO earlier estimated to be 4%. Table 8 shows the difference of work-related mortality and the work related Global Burden caused by all diseases and injuries. The share of work related burden increases with the industrial development and reflect the success in eliminating communicable diseases and increasing the role of work-related, usually non-communicable diseases. Accidents are well represented in this calculation while work-related diseases may not have been properly covered. One fatal accident appears to cause an average loss of 14 life years (Murray and Lopez).

13

Schulte P.A.: Characterizing the Burden of Occupational Injury and Disease. JOEM, Vol. 47, No. 6, June 2005, pp. 607-622

Table 8: Global Burden of Disease estimates 1996 (being revised)

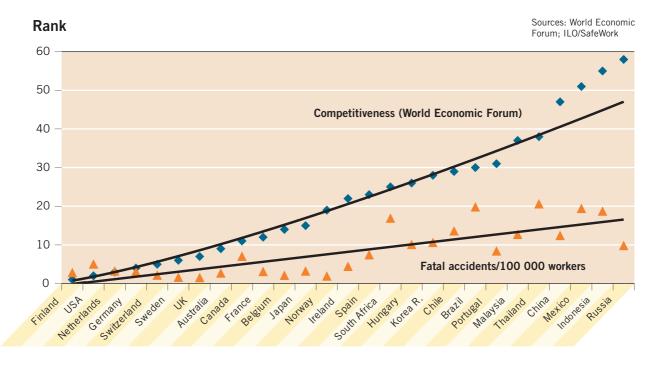
Work as	EME	FSE	IND	CHN	OAI	SSA	LAC	MEC	World
% of total deaths	2.2	2.0	2.0	2.8	2.7	1.4	3.2	2.4	2.2
% of DALY's	5.0	3.8	2.0	3.9	2.8	1.3	3.7	2.6	2.7

DALY's: Disability Adjusted Life Years. For 'EME' etc, see footnote Table 2

Productivity and competitiveness

An often-heard argument is that poor countries and poor companies cannot afford safety and health measures. There is no evidence that any country or company in the long run would have benefited from a low level of safety and health. On the contrary, recent studies by the World Economic Forum and the Lausanne Institute of Management IMD demonstrate that the most competitive countries are also the safest. Selecting a low-safety, low-health and low-income survival strategy may not lead to high competitiveness or sustainability.

Table 9. Competitiveness and Safety



Employability

A large number of unemployed workers have impaired working capacity, even though their impairment may not be enough for them to be entitled to a personal disability pension or compensation. However, the loss of working ability can be of such magnitude that it can seriously reduce his or her re-employability. A construc-

tion worker whose back does not tolerate carrying normal loads, for example, or a painter who has asthmatic or allergic reactions caused by exposure to solvent-based paints are difficult to employ in the job for which they have been trained. The health of the unemployed is clearly worse than that of the actively employed. An average of one third of the unemployed have such complications. A recent study on ill-health retirement demonstrated that only one third of construction workers reach a normal retirement age while two thirds were placed on ill-health disability pension¹². An average of 2% of construction workers were *hit annually* by ill-health disability that forced them to retire, the more the longer the work exposure.

Gender aspects

Men occupy a large majority of hazardous jobs and therefore they suffer some 80% of occupational deaths. In high-income countries this figure is 86 %. In low-income countries, where communicable diseases are much more common, the division is likely to be balanced.

Recent household surveys carried out in several countries point out that in traditional agriculture the accident and disease rates are more evenly distributed between the twogenders. In particular, those outcomes that are causing long-term disabilities and absences from work, such as musculo-skeletal disorders, are more common for female workers than males. These jobs are often linked to low salary levels.

Age-related aspects

Although the above estimates do not show this, there is evidence that younger workers (aged 15-24) are more likely to suffer non-fatal occupational accidents than their older colleagues, while workers over the age of 55 appear to be more likely to suffer fatal accidents and ill-health at work than others. The causes for the increase amongst young workers are various, including their lack of work experience and understanding of work-place hazards, and better training, supervision and awareness and providing risk education while still at school can address these causes.

For older workers, the causes are probably more psychosocial and stress-related, but musculo-skeletal and other ageing factors may play a role too. In industrialized countries, about 40% of all working age retirements or about 1% of the total employment annually are caused by disability that could shorten working life by some 10 years. An average lowering of retirement age is about 5 years e.g. from 65 to 60, which is 14% of the lifetime working capacity of the employed labour force. Certainly, as the age of retirement increases in some countries and experienced workers are being encouraged to continue in their jobs, issues relating to their safety and health at work are now being actively addressed – as they are, for example, in the USA and the EU¹³.

Arndt V., Rothenbacher D., Daniel U a.o.: Construction work and risk of disability: a ten year follow up of 14 474 male workers. Occ.Env. Medicine, pp. 559-566

See, for example, the Conclusions of the Eurogip Workshop 'Ageing and occupational risks: how to protect workers throughout their lives', 2004 – www.eurogip.fr/pdf/DW%20Eurogip%20Ageing-cqui.pdf

Absenteeism

With increasing pressures to improve business efficiency and productivity, many employers are becoming increasingly concerned about worker absenteeism arising from accidents and, more especially, chronic ill-health. An average of 5% of the work force is absent from work every day. This may vary from 2% to 10% depending on the sector, type of work and management culture. The occupational safety and health management (OSH) system of the enterprise is in a key position and can radically reduce these absences caused by accidents, occupational and work-related diseases as well as stress and lack of motivation.

Workers' health promotion and well-being at work

Stress can be a major factor in the causes of work-related accidents and ill-health. It may be also linked to the misuse of alcohol and drugs or have links to work place violence, as well as with factors outside the workplace. In many parts of the world there may also be a link with HIV/AIDS.

Smoking is clearly a newly recognized major problem at work and methods to prevent its harmful effects are basically the same as for any other hazards at work. According to one estimate, mortality from occupational exposure to environmental tobacco smoke (passive smoking at work) causes 2.8% of all lung cancers. The attributable fraction of deaths from passive smoking were 1.1% for chronic pulmonary disease, 4.5% for asthma, 3.4% of ischemic heart disease, and 9.4% for cerebrovascular stroke. This totals about 14 % of all work-related deaths caused by disease or 200,000 fatalities. Many of these are people in the restaurant, entertainment and service sectors while the problem can exist in any occupation.

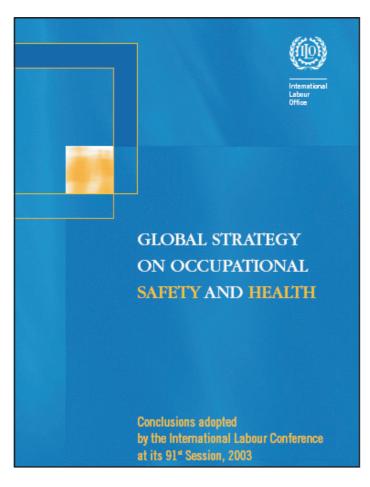
Active smoking causes ill-health figures that are a magnitude higher. Although it may be difficult to influence individual behaviour directly at a work place, the management system has a key role in establishing smoke-free, stress-free, violence-free work places, etc. Similarly, both legal and health promotion measures as well as labour inspection have key roles in such preventive and control measures.

These facts have been the starting point for the preparation of a new training manual for the psycho-social factors at work, called SOLVE, which is considered later.

Meeting the challenges

A Global Occupational Safety and Health Strategy

The International Labour Conference in June 2003 gave fresh impetus and direction to the global cause of occupational safety and health (OSH). It recognised the good work done by the ILO and its constituents over many years, but resolved to promote greater international and national effort to raising standards and reducing work-related accidents and disease worldwide. The Conference Conclusions were widely circulated ¹⁴.



The Conference representing all 178 governments and workers and employers organisations adopted a new Global Strategy for Occupational Safety and Health¹⁵, which aims to promote more of a preventive approach to reducing work-related accidents and diseases and to do so through the wider promotion of a preventative safety and health culture and better management of OSH at national and at enterprise levels. The Strategy contains a structure for future action under 5 broad headings, and, using the same structure, this report summarises the activities that have been undertaken so far.

Further details of recent national and international outputs and activities are given in Annex 1, 2 and 4.

See http://www.ilo.org/public/english/standards/relm/ilc/ilc91/pdf/pr-22.pdf

See http://www.ilo.org/public/english/protection/safework/integrap/survindex.htm http://www.ilo.org/public/english/protection/safework/globstrat_e.pdf

1 Promotion, awareness raising and advocacy

The ILO Conference Conclusions underlined the importance of the ILO's advocacy role in promoting OSH and endorsed the establishment of an annual international safety and health event.

The World Day for Safety and Health at Work – held on 28 April every year – has now become one of the most important international events for promoting OSH. The World Day builds on the success of the Workers Memorial Day instituted by the International Confederation of Free Trade Unions in 2001, and it was first held under this heading in 2003 and again in 2004 and 2005. The main theme for each year has been on promoting a preventative safety and health culture in the workplace, with different sub-themes. In 2005, for example, sub-themes were the construction sector and both younger (aged 15-24) and older (aged 55+) workers.

Table 10. World Day Poster – and other documentation – is available in many languages



In 2004, 111 countries reported a wide range of activities related to the World Day, while in 2005 the figure rose to 115 countries. In both years, Governments, employers and workers committed themselves to various kinds of events. with Government Ministers and other senior officials, Executive Heads of employers' and workers' organizations playing an active role. There has been considerable enthusiasm for improving OSH, all of which served further to publicise the human and the economic costs of accidents and diseases at work. The occasion was also used to launch some new publications. such as a new two-volume Russian OSH Encyclopaedia by the Minister of Labour.

National TV, radio and newspapers covered World Day activities across the globe, and ILO field offices reported at least 30 media reports on events in 2005, including front-page news articles.

International broadcasting organisations, such as the BBC and CNN, also covered the World Day in their global broadcasts. The Prime Minister of Thailand provided a video message to mark the occasion, while the ILO Director General referred to the

World Day at the China Employment Forum on 28 April, underlining of the importance of OSH as a key component of Decent Work, and a video message from him was also widely distributed and used, both on large screens and on national television, to publicize the World Day. Further details of what took place during the World Day 2005 can be found at www.ilo.org/public/english/protection/safework/worldday/index.htm

This XVIIth World Congress on Safety and Health at Work in Orlando is another key promotional event for safety and health at work, and the ILO is proud to be one of the three organizers of the event, along with the U.S. National Safety Council and the International Social Security Association. Another key event was the Xth International Conference on Occupational Respiratory Diseases that was attended by some 500 participants in April 2005 in Beijing. This major meeting, like others, has served as a forum for the exchange of technical and practical experience as well placing OSH higher on international and national agendas and attracting media attention.

In addition to promoting OSH through such publicity, the ILO also seeks to raise the visibility of its own instruments. It is therefore encouraging to note that many Conventions on OSH and related topics, such as labour inspection, have been ratified in recent years. In 2004-2005, for example, 28 new ratifications of Conventions were received from 17 member States. Many more member States (35 in 2004/05) have updated their legislation on OSH, strengthening their inspection systems, and developed national OSH programmes and systems for carrying the programmes into effect. A special promotional conference on Labour Inspection was jointly organised by the Government of Luxembourg holding the presidency of the European Union in 2005.

Table 11. ILO/EU - Luxembourg Labour Inspection Conference Conclusions

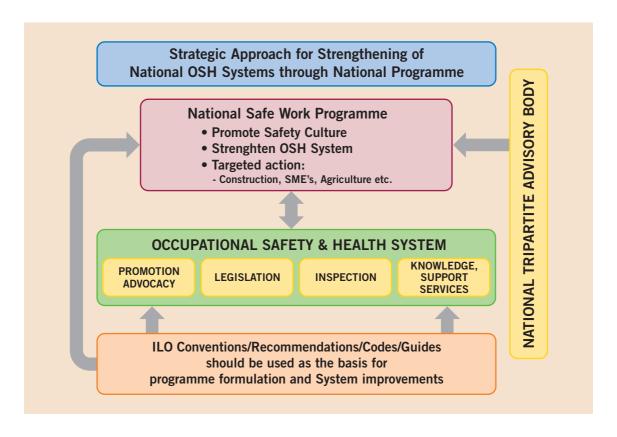


National OSH policies and programmes have been agreed and adopted in many countries. and tripartite groups established to help discuss and formulate sector-specific measures. For example, tripartite national construction safety committees have been set up both in Argentina and Colombia, with the purpose of discussing and formulating respective national policies programmes for that sector. The ILO has also been actively supporting initiatives in some countries for developing national policies and programmes, while in others, it has been working closely with governments to establish national tripartite advisory bodies for OSH.

2 Development of new instruments and related guidance

Progress has been made toward adopting new ILO instruments on several topics. In particular, the ILO Conference in 2003 called for the development of a new instrument establishing a promotional framework for OSH, and a first discussion on this took place at the International Labour Conference in June 2005. Two Reports IV (1) and IV (2) were published for discussion at the Conference, both of which are entitled "Promotional framework for occupational safety and health" and are available on the ILO website, as is the Provisional Record of the Conference This will be an important new ILO instrument for promoting OSH at national and enterprise levels, and a second discussion on it is scheduled to take place in June 2006.

Table 12. Strategic Approach on Occupational Safety and Health



The three main components of the proposed Promotional Framework Convention as explained in the Table 12 include:

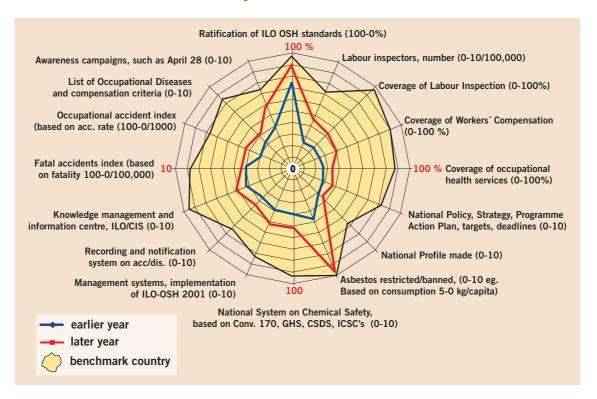
1. Promotion, ratification, adaptation into the national system and implementation of existing ILO instruments, that is Conventions, Recommendations and Codes of Practice and Guidelines;

See See http://www.ilo.org/public/english/protection/safework/promoframe.htm www.ilo.org/public/english/standards/relm/ilc/ilc93/reports.htm

See www.ilo.org/public/english/standards/relm/ilc/ilc93/pdf/pr-18.pdf

- 2. Strengthening of the national occupational safety system: legal provisions, enforcement, compliance and labour inspection capacity and capability, at least basic occupational health services, knowledge management, information exchange, research, and support services. Such a system must be based on tripartite collaboration;
- 3. Establishing a national programme and strategy 18¹⁸, that has time-bound targets and indicators to continuously follow up and measure progress through selected indicators. It should be endorsed by highest possible authorities. A starting point for a programme is a national profile, a review of the existing occupational safety and health situation, see Table 13.

Table 13. National profile is a review of existing safety and health conditions in a country



Systematic and continuous progress is vital both at the national level as well as at the enterprise level following the same principles as those expressed in the ILO Guidelines on Occupational Safety and Health Management Systems, ILO-OSH 2001.

The objective is to establish an maintain a preventative safety and health culture based on the workers' right to safe and healthy work environment and the principle of prevention.

A new (brown) report on the Promotional Framework Convention was released in August 2005, which contains a draft Convention and Recommendation for the ILO Conference discussions in June 2006¹⁹.

A good model for a national strategy, see: http://www.nohsc.gov.au/nationalstrategy/

http://www.ilo.org/public/english/standards/relm/ilc/ilc95/reports.htm

Other topics raised at the 2003 Conference included new instruments on ergonomics and machinery safety, and work has begun on both of these topics. A new study on ergonomics, for example, has been carried out in collaboration with the International Ergonomics Association. The ILO was also requested to convene the first tripartite meeting of experts to update the List of Occupational Diseases Recommendation, 2002 (No.194) and this will take place in December 2005. Scientific and technical developments over the last decade will be further examined to help in the identification and diagnosis of diseases due to work, and in collecting national lists of occupational diseases.

New guidance has been published on several topics, such occupational radiation protection in mining and processing of raw materials and on ship breaking in Asian countries and Turkey. Other guidance has included working papers on smoking at work and on infectious and other communicable diseases, following a request from ASEAN countries for guidance on SARS

Promotion of existing OSH instruments

The need to apply international OSH instruments and other standards in practice has been widely advocated. It was encouraging to note, therefore, that in 2004-2005, 38 new ratifications were received from 19 member States of OSH-related Conventions, reflecting the efforts of constituents and the ILO in previous years. A number of OSH instruments have helped to guide the revision of national legislation, while technical assistance has been provided to member States where ratification of OSH-related Conventions is being seriously considered.

Annex 6 contains further details of selected Conventions ratified by particular countries and other guidance that has been implemented.

3 Technical assistance and cooperation

National OSH Policy and Programmes

The Conference endorsed the importance of launching national OSH programmes by the highest government authorities, for example by Heads of State or parliaments, to help place OSH at the tops of national agendas. The ILO has been working closely with member States in creating tripartite consensus towards the formulation of national OSH programmes as well as the eventual development of the programmes for continual improvements in national OSH mechanisms and performance. Initial steps have included advisory discussions with constituents and the development of national OSH profiles documenting national OSH systems and circumstances as the basis for the identification of priorities.

National OSH policies and programmes have been agreed and adopted in many countries, and tripartite groups established to help discuss and formulate sector-specific measures. The ILO has also been actively supporting initiatives in some countries for developing national policies and programmes, while in others, it has been working closely with governments to establish national tripartite advisory bodies for OSH.

Decent Work programmes

In order to ensure that national OSH issues are addressed at the policy level, the ILO has promoted the inclusion of OSH aspects in the National Plans of Action for Decent Work or Decent Work Country Programmes in several countries. Further information is given in Annex 4.

Technical Cooperation Projects

Several projects are underway in the construction sector, such as ones funded by the Republic of Korea taking place in Cambodia, Laos, Mongolia, Thailand and Vietnam. Another, funded by Spain, covers MERCOSUR countries and Chile and aims to promote tripartite discussion and the formulation on national policies and field programmes. In the agriculture sector, a project was launched in Vietnam with funding from Japan to support the elaboration of a national OSH programme and to promote practical safety measures at local level (WIND).

Several projects have targeted the need to strengthen and modernise labour inspectorates, to ensure that they are technically competent and focus more on prevention. The ILO and its partners have managed a US-funded project aimed at developing a modern labour inspection service in Serbia, for example, and a similar project in Costa Rica was launched with funding from Canada. Another project linked to the UN Global Compact and funded by Germany is being undertaken in partnership with Volkswagen and its suppliers in Brazil, Mexico and South Africa, training labour inspectorates and developing mechanisms to improve OSH as an integral part of corporate social responsibility.

Another important area has been the development and implementation of SOLVE, a training programme addressing psychosocial problems at work, which has continued with financial support from Italy. As at August 2005, 1000 course directors and delegates have been trained from 40 countries, including ten French-speaking African countries. SOLVE has been translated into Italian, Spanish, Russian, Thai, Bulgarian and Portuguese with translations into Chinese and German planned. The second edition of SOLVE is currently under preparation, which involves expanding the programme to cover 6 new subject areas to better meet constituents' needs. The new subject areas are: nutrition, exercise, sleep, gambling, addition to new technologies and economic stress.

4 Knowledge development, management and dissemination

The ILO's International Occupational Safety and Health Information Centre (CIS) continues to play a key role in the international exchange of OSH information through its own information products, through its network of focal points and through its support of ILO projects and experts in the field. Links to Centres' web sites are provided by the CIS through its own pages and through a dedicated portal. Combined web access is estimated to be about 1 million hits per month.

The ILO Encyclopaedia of Occupational Health and Safety has now been made freely accessible via the CIS website²⁰ and also as hard copy in six languages (En/Fr/Sp/Ru/Chi/Jap). A new version of the Encyclopaedia CD-ROM within the "SafeWork Bookshelf" also contains the English International Chemical Safety Cards. CIS's bibliographic database, which is a guide to world literature on OSH, was opened for free Internet access by the end of 2004²¹. The database is fully bilingual English-French, and an exchange of letters with the CIS National Centre for Spain will permit the expansion of its Spanish content.

In 2004, the CIS exhausted the technical cooperation resources provided by the Government of Finland over 10 years ago. As well as contributing to the publication of the African and Asian-Pacific Newsletters²² in collaboration with the Finnish Institute of Occupational Health, CIS used the remaining funds to contribute to producing WIND materials, which help local facilitators carry OSH information to workers who are not served by conventional information channels. From its own resources, CIS also continued to provide literature searches and documentation to ILO experts in regional and sub-regional offices.

Following extensive collaboration with the Arab Labour Organization (ALO) Institute of Occupational Health and Safety, the Institute was named a Regional CIS Centre, an initiative that is expected to initiate more exchange of OSH experience between ILO and ALO. Several CIS Centres in the Arab world helped to translate the International Chemical Safety Cards into Arabic. Training on OSH information management was provided to the staff of CIS National Centre in Morocco.

French, German and Portuguese editions of the ILO International Classification of Radiographs of Pneumoconioses have been prepared in order to help promote the use of this universally recognised ILO standard. Training events have also been organised for occupational physicians in developing countries to upgrade their skills in using this tool in workers health surveillance. Five member States have launched a national programme on the Elimination of Silicosis, which means the national commitment and adaptation of the ILO/WHO Global programme targeted to eliminate gradually this fatal and incurable disease altogether. Evidence in many countries show that it is feasible to do so.

5 International Collaboration

The International Labour Conference 2003 highlighted the importance of international collaboration. One of the ILO's most important partners in this context is the WHO, and the Joint ILO/WHO Committee on Occupational Health met in December 2003 to discuss ways of reinforcing collaboration between the agencies on topics such as the promotion of integrated approaches to OSH, OSH management systems and priority fields for action in occupational health. The Committee recommended

See www.ilo.org/public/english/protection/safework/cis/products/encyclo/index.htm www.ilo.org/encyclopaedia/

See www.ilo.org/public/english/protection/safework/cis/index.htm

See http://www.ttl.fi/Internet/English/Information/Electronic+journals/

that collaboration should focus on: 1) guidance and support for national OSH programmes, 2) enhancing regional collaboration and coordination, 3) coordination and enhancement of information and educational programmes and materials, and 4) awareness-raising activities and instruments through campaigns, events and special days.

ILO/WHO collaboration at the regional and country levels has continued, focusing on the development of national OSH programmes, preparation of country OSH profiles, silicosis elimination, updating national lists of occupational diseases, ratification of OSH conventions, extending OSH services to agriculture, SMEs and informal sector. The WHO/ILO African Joint Effort also gained new momentum when the regional directors of both agencies signed statement of intent and wrote jointly to ministers of labour and health in all their member states to mobilize political support for their joint efforts in improving OSH in Africa. Activities have been organized for information sharing, training and capacity building, and launching of national OSH programmes.

In Latin America, discussions have been held between PAHO, IDB and OEA on OSH policy making at regional level, and a workshop on indicators was organized by PAHO for Latin America and the Caribbean with support from the ILO.

In the field of chemical safety international collaboration is extensive: the International Programme on Chemical Safety, IPCS, an ILO/WHO/UNEP Programme, prepares the International Chemical Safety Cards²³ that have been very popular and are accessed through web and CD-ROMs hundreds of thousands of times, or perhaps close to million times a month. Other products of the IPCS, such as the Environmental Health Criteria supplement this array of information.

The Inter-Organisation Programme for the Sound Management of Chemicals, IOMC²⁴, coordinates the efforts on chemical safety of seven international organizations: ILO,WHO, UNEP, FAO, UNIDO, UNITAR, OECD and World Bank and UNDP as observers. One key part of the collaboration relates to the Strategic Approach on International Chemicals Managament, SAICM²⁵, a UN led process that also collaborates with the Intergovernmental Forum for Chemical Safety, IFCS. The Process is expected to have its 3rd UN Preparatory Committee (PrepCom3) in Vienna simultaneously during the World Congress in Orlando, and the final Conference in early 2006. The results will be reported to the ILO Conference – the ILO's highest decision making body of some 4000 delegates and 7000 participants through the Committee on Occupational Safety and Health in June 2006.

International collaboration to reduce exposure to asbestos has also continued. Of note, the International Confederation of Free Trade Unions and Global Union Federations, together with the ILO and WHO participated in consultations during the International Labour Conference in 2005 to intensify action towards the world ban on asbestos. Japan has just decided to ratify the ILO Convention on Asbestos (No. 162)

http://www.ilo.org/public/english/protection/safework/cis/products/icsc/index.htm http://www.ilo.org/public/english/protection/safework/chemsfty/index.htm

http://www.who.int/iomc/en/

See: http://www.chem.unep.ch/saicm/

and about to be the 35th country to ban asbestos altogether. The ILO has co-arranged a number of meetings and conferences to this end.

The ILO has been collaborating with several international organizations, such as ISSA, ICOH, IOHA, IEA and IALI. For example, collaboration with IALI (the International Association of Labour Inspection) has focused on promoting the global OSH strategy through joint conferences, including ones in South-East Asia and in Africa, targeting the construction sector and the role of labour inspection respectively. One new joint area of work has been on hazardous child labour, for which the ILO is sponsoring IALI to prepare a report on national guidance and practice on this topic.

Collaboration with other international agencies, such as the International Atomic Energy Agency, the International Maritime Organisation and the UN Institute for Training and Research (UNITAR) has continued in their respective fields. For example, the ILO and 7 other international organizations, employers and workers, have collaborated to produce the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). The GHS is now available in English, French, Chinese, Russian, Spanish and Arabic from the UN Economic Commission for Europe; other language and web versions will follow. The ILO and UNITAR jointly implement a capacity building programme on GHS, which was successfully piloted in Zambia and South Africa and is now being piloted in 6 others (Senegal, Nigeria, the Philippines, Thailand and the Gambia). Collaboration with the International Occupational Hygiene Association, WHO, the UK Health and Safety Executive and the US National Institute for Occupational Safety and Health, is also underway to finalise a simple and easy-to-use chemical control toolkit²⁶.

Many Regional OSH conferences and similar events have also taken place, sponsored by the ILO as well as national partners. Some events have been entirely devoted to OSH, while others have covered wider aspects of 'Decent work', as with, for example, a major international conference in Melbourne in April 2005, attended by delegates from the Pacific Island Countries as well as Australia and New Zealand. It is hoped that such international events helps to share positive messages about how workplace conditions can be improved and work-related accidents and ill-health reduced.

Finally, the ILO has made formal agreements with some international and national organisations to improve the exchange of data and to assist technical cooperation. For example, an agreement was reached with the World Bank on the exchange of labour inspection data and the creation of a database on systems, structures and performance indicators for labour inspection and OSH.

| | | | |

Conclusions

The Global Strategy adopted in 2003 has already had a profound impact on OSH policies and programmes at both international and national levels, and the ILO's present Programme and Budget are based on this strategy. The ILO's own performance against the targets set down in this Programme is summarized in Annex 4. Within the ILO itself, there is greater collaboration between the SafeWork programme and others such as those on HIV/AIDS, migrant workers and on the elimination of child labour and forced labour, to ensure coordinated approaches across the ILO.

The systems approach and national programming for OSH are also gaining momentum at the national level, and national profiles including a set of indicators of progress are being progressively developed. Continuous and stepwise improvement of both national OSH systems and national OSH programmes, which have measurable targets and are governed by tripartite dialogue, will also help to achieve better OSH outcomes in reality.

ILO SafeWork September 2005



Key recent ILO outputs include: www.ilo.org/safework

- Global Strategy on Occupational Safety and Health, Conclusions adopted by the International Labour Conference, 91st Session, 2003
- Protocol No. 155 on Recording and Notification of Occupational Accidents and Diseases, and Recommendation No. 194 on the List of Occupational Diseases, adopted almost unanimously by the International Labour Conference in June 2002
- 64 ratifications by member States of ILO Conventions on safety and health (of a total of 345 ratifications of any ILO Convention)
- Code of Practice on Shipbreaking, 2004
- Guidelines of Occupational Safety and Health Management Systems, ILO-OSH 2001, translated into some 22 languages, adopted by several member States
- Globally Harmonized System for Classification and Labelling of Chemicals, a joint product of employers, workers and 8 international organizations, UNCED/Agenda 21, available in several languages and adopted by several countries
- SARS Practical and administrative responses to an infectious disease in the workplace
- Workplace Smoking. Working Paper on a Review of National and Local Practical and Regulatory Measures
- World Day Reports on 2003,2004 and 2005
- Labour Inspection Booklet, in English, French, Spanish, Portuguese, Russian
- ILO-OSH Guidelines on Occupational Safety and Health Management Systems translated into 21 languages
- SOLVE Manuals and action on psycho-social issues in English, French, Spanish, Bulgarian and German
- Labour Inspection, a guide to the profession" translated to several languages: Russian, Ukrainian, Polish, Vietnamese, Chinese, Serbian
- A Training package on psycho-social factors at work called SOLVE on stress, work-place violence, alcohol and drugs, tobacco and HIV/AIDS at work
- A new ILO-AIDS Programme established and launched and linked to UNAIDS
- 1, 491 Chemical Safety Cards available electronically and as printed into some 20 languages
- ILO Encyclopaedia on Occupational Health and Safety, translations and various versions (electronic CD-ROMs and Web, and printed) in Spanish, Chinese, Russian, French, Japanese, and large components in Korean, on web and CD-ROMs
- 12 ILO/CIS Bulletins in English and French on world safety and health literature, laws, regulations, training materials, data sheets. Spanish version made in Spain
- 9 issues of both the *Asian-Pacific Newsletter on Occupational Health and Safety* and the *African Newsletter on Occupational Health and Safety*, in collaboration with the Finnish Institute of Occupational Health
- 136 National and Collaboration ILO/CIS Centres
- National SafeWork Programmes established in several member States and tools and methods developed for establishing such Programmes based on a National Profile



References (numbers do not relate to footnotes above)

International and national OSH statistics

- 1. ILO estimates of occupational accidents and work-related diseases www.ilo.org/public/english/protection/safework/accidis/index.htm
- 2. Nurminen M, Karjalainen A.: Epidemiologic estimate of the proportion of fatalities related to occupational factors in Finland. Scand J., Work Environment Health 2001; 27(3):161-213
- 3. Health and Safety Statistics highlights 2003-2004, Health and Safety Executive, UK, HM Stationery Office, Norwich, UK.
- 4. Work and Health in the EU, a statistical portrait Eurostat, European Commission, 2004 (contact eurostat@mail.europa.eu.int)
- 5. A statistical analysis of socio-economic costs of accidents at work in the European Union - Eurostat, European Commission, 2004 (contact eurostat@mail.europa.eu.int).

OSH Encyclopaedia and database

- 6. The Encyclopaedia of Occupational Health and Safety, Fourth Edition, available as hard copies in English, Spanish, Chinese, Russian, French, Japanese, also CD-ROMs, from ILO Publications, Geneva, and website: www.ilo.org/public/english/protection/safework/cis/products/encyclo/index.htm and http://www.ilo.org/encyclopaedia/
- 7. CISDOC database, English, French and Spanish, www.ilo.org/dyn/cisdoc/index_html
- 8. African and Asian-Pacific Newsletters on Occupational Safety and Health: http://www.ttl.fi/Internet/English/Information/Electronic+journals/

Occupational health

- 9. Murray C., Lopez A.: Global Burden of Disease. WHO/Harvard School of Public Health., Geneva 1996
- 10. Takala J.: Indicators of death, disability and disease. African and Asian Pacific Newsletters on Occupational Health and Safety, 2000 www.occuphealth.fi/NR/rdonlyres/7B710A9E-941B-4134-A680-65A9137DB409/ 0/apn_2000_1.pdf
- 11. Papers for the 13th Session of the Joint ILO/WHO Committee on Occupational
 - www.ilo.org/public/english/protection/safework/health/session13/index.htm
- 12. Working paper on SARS: practical and administrative responses to an infectious disease in the workplace, 2004 www.ilo.org/public/english/protection/safework/accidis/sars.pdf
- 13. Workplace smoking. A review of national and local practical and regulatory measures, 2004
 - www.ilo.org/public/english/protection/safework/tobacco/tobacco_report.pdf

- 14. The SOLVE Homepage www.ilo.org/public/english/protection/safework/whpwb/solve/index.htm
- 15. Arndt V., Rothenbacher D., Daniel U a.o.: Construction work and risk of disability: a ten year follow up of 14 474 male workers. Occ.Env. Medicine, pp. 559-566

Chemical safety

- 16. Globally Harmonized System of Classification and Labeling of Chemicals www.ilo.org/public/english/protection/safework/chemsfty/ghs.htm
- 17. International Chemical Safety Cards, www.ilo.org/public/english/protection/safework/cis/products/icsc/index.htm

The 'business case' for OSH

- 18. World Economic Forum Global Competitiveness Report 2001-2004, www.weforum.org/gcp and http://www.weforum.org/site/homepublic.nsf/Content/Global+Competitiveness+Programme%5CGlobal+Competitiveness+Report
- 19. IMD World Competitiveness Yearbook, http://www02.imd.ch/documents/wcy/content/ranking.pdf
- 20. Schulte P.A.: Characterizing the Burden of Occupational Injury and Disease. JOEM, Vol. 47, No. 6, June 2005, pp. 607-622

Inspection systems - guidance

- 21. Labour Inspection a guide to the profession, ILO. 2002 ILO publication, available in English, Chinese, Vietnamese, Russian, Ukrainian. See also www.ilo.org/public/english/protection/safework/labinsp/guide.pdf
- 22. Combating child labour: a handbook for labour inspectors, ILO, 2002
- 23. Labour Inspection brochure, published by the ILO and the Government of Luxembourg, 2005 www.ilo.org/public/english/protection/safework/labinsp/li_brochure_text.pdf
- 24. A handbook on HIV/AIDS for labour and factory inspectors ILO, 2005

Committee on Safety and Health, International Labour Conferences 2003 and 2005 - documents and reports

- 25. ILO OSH Survey Responses and Background Documents, 2003 www.ilo.org/public/english/protection/safework/integrap/docs/docs.htm
- 26. Report VI ILO standards-related activities in the area of occupational safety and health, 2003 www.ilo.org/public/english/standards/relm/ilc/ilc91/pdf/rep-vi.pdf
- 27. Global strategy for occupational safety and health, ILO, 2003 http://www.ilo.org/public/english/protection/safework/globstrat_e.pdf
- 28. Progress in the implementation of the Global Occupational Safety and Health Strategy 2003 paper to ILO Governing Body, November 2004 www.ilo.org/public/english/standards/relm/gb/docs/gb291/pdf/esp-4.pdf
- 29. Report IV (1) Promotional framework for occupational safety and health, 2004 www.ilo.org/public/english/standards/relm/ilc/ilc93/pdf/rep-iv-1.pdf
- 30. Report IV (2) Promotional framework for occupational safety and health, 2005 -http://www.ilo.org/public/english/standards/relm/ilc/ilc93/pdf/rep-iv-2.pdf

World Day for Safety and Health at Work - reports

- 31. World Day for Safety and Health at Work, 2003, 2004 and 2005, homepages www.ilo.org/public/english/protection/safework/worldday/index.htm
- 32. Safety in Numbers pointers for a global safety culture at work, 2003 www.ilo.org/public/english/protection/safework/worldday/report_eng.pdf

Other useful references

- 33. Paananen S.: Dangers at Work Perceived occupational diseases, accidents and violence at work in 1999. Statistics Finland 2000:15, Helsinki, Finland, 2000
- 34. Catalogue of ILO Publications on Occupational Safety and Health, Edition 2000, http://www.ilo.org/public/english/protection/safework/publicat/index.htm
- 35. ILO-OSH 2001 Guidelines on Occupational Safety and Health Management Systems, ILO Geneva, 2001, www.ilo.org/public/english/protection/safework/managmnt/index.htm
- 36. International and National Standards on occupational safety and health, ILO Standards and Codes of Practice and national legislation data sources, CD-ROM, Geneva 2002, and www.ilo.org/safework
- 37. ILO programme implementation 2002-03, March 2004 http://www.ilo.org/public/english/standards/relm/gb/docs/gb289/pdf/pfa-10.pdf
- 38. A model national occupational safety and health strategy from Australia: http://www.nohsc.gov.au/nationalstrategy/
- 39. Hämäläinen P., Takala J., Saarela K.: Global Estimates of Occupational Accidents. *Safety Science*. Accepted for publication 2005

ANNEX 3

Global Estimates of Fatalities Caused by Work-related Diseases and Accidents, 2002 Occupational accident and work-related disease figures by World Bank divisions

Table 1a. World-wide occupational accident and work-relatd disease figures

	Economically active population (2001)	Economically active population (1998)	Total employment (2001)	Fatal accidents reported to the ILO (2001)	Accident causing 3 days' absence reported to the ILO (2001)	Fatal accidents reported to the ILO (1998)	Accidents causing 3 days' (+) absence reported to the ILO (1998)	ILO Global Estimates on Fatal Accidents 2001	ILO Global Estimates on Fatal Accidents 1998	Accidents causing 3 days' (+) absence Lower limit (2001)	Accidents causing 3 days' (+) absence Upper limit (2001)	Accidents causing 3 days! (+) absence Average (2001)	Average (1998)	Fatal work-relate d diseases calculated using age structures	Work-related mortality calculated using age structures (accidents and diseases)	Deaths caused by dangerous substances (age)	Fatal work-related diseases calculated using gender structures	Work-related mortality calculated using gender structures (accidents and diseases)
EME	419,732,002	409,141,496	394,720,947	14,316	14,316 7,527,083	14,608	7,631,977	15,879	16,170	8,357,512	15,879,274	12,118,393	12,340,216	281,364	297,243	64,019	286,998	
FSE	183,089,714	184,717,127	161,762,008	7,853	343,004	8,665	582,287	17,416	21,425	9,166,254	17,415,882	13,291,068	16,350,868	148,194	165,610	35,512	153,564	
IND	443,860,000	458,720,000	402,510,000	222	928	211	0	40,133	48,176	21,122,666	40,133,065	30,627,865	36,765,877	261,891	302,024	64,894	325,350	
CHN	740,703,800	740,703,800 708,218,102	733,705,100	12,736	61,329	17,804	75,773	90,295	73,615	47,523,941	90,295,489	68,909,715	56,179,742	386,645	476,940	102,606	414,024	
OAI	415,527,598	404,487,050	344,569,424	3,051	141,349	5,631	252,499	76,886	83,048	40,466,285	76,885,941	58,676,113	63,378,830	178,786	255,672	54,811	208,402	
SSA	279,680,390	260,725,947	19,347,698	145	27,015	1,675	47,105	53,292	54,705	28,048,284	53,291,739	40,670,012	41,748,723	211,262	264,554	55,811	387,721	
LAC	219,083,179	193,426,602	192,033,807	2,009	776,938	866'9	1,699,107	39,372	29,594	20,722,028	39,371,853	30,046,941	22,584,726	108,195	147,567	31,571	116,135	
MEC	135,220,721	112,906,300	76,443,255	1,416	153,785	1,876	191,164	17,977	18,986	9,461,769	17,977,361	13,719,565	14,489,130	120,725	138,702	29,817	140,941	
WORLD 2	,836,897,404	WORLD 2,836,897,404 2,732,342,624 2,325,092,239	2,325,092,239	41,748	41,748 9,031,431	57,468	57,468 10,479,912	351,251	345,719		351,250,604	184,868,738 351,250,604 268,059,671	263,838,111 1,697,061	1,697,061	2,048,312	438,480	2,033,135	5

Legend, see: Introductory Report, Table

Table 1b. Occupational accident and work-related disease figures for Established Market Economies, EME (2001)

Country	Economically active population	active	Total employment		Labour structure					Acciden	Accident causing 3+ days' absence	bsence	Work-related diseases	Work-related mortality	Deaths caused by dangerous substances
	number	percent	number	Agriculture	Industry	Service	Fatal accidents reported to the ILO (2001)	Accidents causing 3+ days' absence reported to the ILO (2001)	ILO Estimate Fatal accidents	ILO Estimate Lower limit (0,19%)	ILO Estimate Upper limit (0,10 %)	ILO Estimate Average	deaths (age)	deaths (age)	number (age)
Andorra	33,000	55	27,000	270	5,670	21,060	,	•					19	19	4
Australia	9,796,300	64	9,123,900	456,195	2,007,258	6,660,447	210	122,930	236	124,453	236,460	180,456	6,504	6,740	1,452
Canada	16,246,200	99	15,076,800	452,304	3,467,664	11,156,832	919	373,216	1,035	544,628	1,034,794	789,711	10,747	11,782	2,538
Gibraltar	14,800	46	13,931	0	5,572	8,359	1	ı					10	10	2
Iceland	162,700	57	159,000	56,286	21,624	94,605	1	1,318	1	593	1,126	859	113	114	25
Japan	67,520,000	53	64,120,000	3,206,000	16,030,000	44,884,000	1,790	132,287	2,016	1,060,811	2,015,540	1,538,175	45,706	47,721	10,278
Malta	155,751	40	145,587	7,279	34,941	103,367	9	5,114	7	3,556	6,756	5,156	104	111	24
New Zealand	1,925,700	20	1,823,400	182,340	455,850	1,185,210	69	21,633	78	40,892	77,694	59,293	1,300	1,377	297
Norway	2,361,000	52	2,278,000	91,120	501,160	1,685,720	37	28,683	45	21,927	41,662	31,795	1,624	1,665	359
San Marino	19,626	68	11,404	114	4,790	6,500	0	864	1	526	1,000	763	∞	6	2
Switzerland	4,038,734	99	4,156,000	191,176	1,093,028	2,871,796	72	91,217	81	42,669	81,072	61,871	2,962	3,044	656
United States	141,815,000	20	135,073,000	3,376,825	33,227,958	98,468,217	5,900	2,409,400	6,643	3,496,526	6,643,400	5,069,963	96,282	102,926	22,168
Austria	3,940,300	58	3,799,600	151,984	1,101,884	2,545,732	122	1	137	72,301	137,372	104,837	2,708	2,846	613
Belgium	4,400,720	43	4,051,200	81,024	1,012,800	2,957,376	69	96,321	78	40,892	77,694	59,293	2,888	2,965	629
Denmark	2,862,015	78	2,725,100	109,004	463,267	2,152,829	20	43,644	26	29,632	56,300	42,966	1,942	1,999	430
Finland	2,626,000	51	2,388,000	191,040	661,476	1,535,484	64	58,276	64	33,684	64,000	48,842	1,702	1,766	380
France		44	24,113,225	964,529	6,028,306	17,120,390	730	743,435	730	384,211	730,000	557,105	17,188	17,918	3,859
Germany	39,966,000	49	36,816,000	1,030,848	12,296,544	23,488,608	1,107	1,394,485	1,107	582,632	1,107,000	844,816	26,243	27,350	5,891
Greece	4,362,210	42	3,917,500	783,500	822,675	2,311,325	80	16,742	06	47,411	90,080	68,745	2,792	2,883	621
Ireland	1,781,900	46	1,716,500	137,320	480,620	1,098,560	99	26,200	74	39,114	74,316	56,715	1,224	1,298	280
Italy	23,901,000	42	21,634,000	1,081,700	6,922,880	13,629,420	1,241	615,405	1,397	735,456	1,397,366	1,066,411	15,421	16,818	3,622
Luxempourg	189,218	44	277,000	5,540	22,160	249,300	16	21,605	16	8,421	16,000	12,211	197	213	46
Netherlands	8,150,000	63	7,865,000	314,600	1,808,950	5,741,450	103	1	116	61,041	115,978	88,510	5,606	5,722	1,232
Portugal	5,211,285	52	4,999,800	499,980	1,499,940	2,999,880	368	179,867	414	218,088	414,368	316,228	3,564	3,978	857
Spain	17,814,600	45	15,945,600	956,736	4,624,224	10,205,184	1,030	945,570	1,160	610,411	1,159,780	885,095	11,366	12,526	2,698
Sweden	4,415,000	49	4,239,000	84,780	1,017,360	3,136,860	99	37,405	63	33,187	63,056	48,122	3,022	3,085	664
United Kingdom	29,638,272	50	28,225,400	282,254	7,056,350	20,886,796	210	161,466	236	124,453	236,460	180,456	20,120	20,356	4,384
Total	419,732,002		394,720,947	14,694,748	102,674,951	277,205,306	14,316	7,527,083	15,879	8,357,512	15,879,274	12,118,393	281,364	297,243	64,019
EU-15	175,643,191		162,712,925	6,674,839	45,819,436	110,059,194	5,312	4,340,421	5,740	3,020,932	5,739,770	4,380,351	115,985	121,724	26,217
EU-12	138,727,904		127,523,425	6,198,801	37,282,459	83,882,709	4,996	4,097,906	5,385	2,833,660	5,383,954	4,108,807	90,901	96,286	20,738

The latest information from year 2000

Table 1c. Occupational accident and work-related disease figures for Formely Socialist Economies, FSE (2001)

	роршацоп		employment		Labour structure		Work-related fatal accidents by sector	sector	fg sa				Accident o	Accident causing 3+ days' absence	s' absence	Work-related diseases	work-related mortality	Deaths caused by dangerous substances
	number	percent	number	Agriculture	Industry	Service	Agriculture	Industry	Service	Fatal accidents reported to the ILO (2001)	Accidents causing 3+ days' absence reported to the ILO (2001)	ILO Estimate Fatal accidents	ILO Estimate Lower Iimit (0,19 %)	ILO Estimate Upper limit (0,10 %)	ILO Estimate Average	deaths (age)	deaths (age)	number (age)
Albania	1,347,281	44	1,063,000	531,500	265,750	265,750	26	54	15			125	65,878	125,168	95,523	952	1,077	231
Armenia	1,411,700	38	1,264,900	569,205	316,225	379,470	09	64	22	16	63	146	76,826	145,969	111,398	1,133	1,279	274
Azerbaijan	3,748,200	46	3,715,000	1,523,150	260,050	1,931,800	160	53	112	27	88	325	170,929	324,765	247,847	3,326	3,651	783
Belarus	4,519,500	45	4,417,400	839,306	1,369,394	2,208,700	88	278	128	234	6,973	494	260,115	494,219	377,167	3,955	4,450	954
Bosnia and Herzegovina	1,900,000	48	'	76,000	000'696	855,000	00	197	20			254	133,830	254,277	194,054	1,503	1,757	377
Bulgaria	3,412,800	20	2,751,500	715,390	852,965	1,183,145	75	173	69	138	5,778	317	166,784	316,890	241,837	2,464	2,781	596
Croatia	1,952,619	44	1,469,500	195,444	617,190	655,397	21	125	38	32	21,705	184	96,750	183,824	140,287	1,316	1,500	322
the Czech Republic (1)	5,172,000	09	4,728,000	236,400	1,654,800	2,836,800	25	336	165	231	93,049	525	276,464	525,281	400,872	4,233	4,759	1,020
Estonia (1)	008'099	48	577,700	63,547	115,540	398,613	7	23	23	36	3,257	53	28,025	53,247	40,636	517	571	122
Georgia	2,113,000	99	1,877,600	751,040	375,520	751,040	79	92	44			199	104,553	198,650	151,601	1,681	1,880	403
Hungary (1)	4,010,700	52	3,859,500	308,760	1,042,065	2,508,675	32	212	146	124	25,412	389	204,980	389,462	297,221	3,456	3,845	825
Kazakhstan	7,052,600	47	008,869,9	1,339,760	2,009,640	3,349,400	141	408	194			743	390,998	742,897	566,948	5,998	6,741	1,445
Kyrgyzstan	1	1	1,764,300	970,365	264,645	529,290	102	54	31			186	98,058	186,310	142,184	1,580	1,766	379
Latvia (1)	1,105,500	47	1,037,000	155,550	259,250	622,200	16	53	36	72	1,349	105	55,288	105,048	80,168	929	1,034	222
Lithuania (1)	1,793,800	49	1,521,800	304,360	456,540	760,900	32	93	44	81	2,475	169	88,825	168,768	128,796	1,363	1,531	328
Makedonia, the former Yogoslav Republic of Macedonia	862,505	40	599,308	47,945	263,696	287,668	വ	54	17		1,547	75	39,605	75,249	57,427	537	612	131
Moldova	1,616,700	45	1,499,000	299,600	209,860	689,540	63	43	40	39	603	146	76,607	145,553	111,080	1,342	1,488	319
Poland (1)	17,376,000	45	14,207,000	3,906,925	3,139,747	7,160,328	410	637	415	554	80,743	1,463	769,945	1,462,895	1,116,420	12,721	14,184	3,041
Romania	11,446,909	51	10,696,900	4,278,760	2,674,225	3,743,915	449	543	217	440	6,287	1,209	636,466	1,209,285	922,875	9,578	10,787	2,313
the Russian Federation	69,731,000	48	64,710,000	7,765,200	14,883,300	42,061,500	815	3,021	2,440	4,370		6,276	3,303,275	6,276,223	4,789,749	57,941	64,217	13,770
Slovakia (1)	2,634,100	49	2,123,700	191,133	785,769	1,337,931	20	160	78	100	20,789	257	135,358	257,180	196,269	1,902	2,159	463
Slovenia (1)	927,000	49	914,000	27,420	466,140	420,440	က	95	24	34	40,270	122	64,153	121,891	93,022	818	940	202
Tajikistan	2,500,000	30	1,143,000	765,810	91,440	285,750	80	19	17			116	60,814	115,546	88,180	1,023	1,139	244
Turkmenistan	2,340,000	1	1	1,123,200	351,000	865,800	118	71	20			239	126,003	239,405	182,704	1,851	2,090	448
Ukraine	22,755,000	47	20,238,100	4,857,144	6,476,192	8,904,764	510	1,315	516	1,325	32,616	2,341	1,232,181	2,341,143	1,786,662	18,121	20,462	4,388
Uzbekistan	10,700,000	37	8,885,000	3,909,400	1,777,000	3,198,600	410	361	186			957	503,546	956,737	730,141	7,956	8,912	1,911
Total 1	Total 183,089,714	1	161,762,008	36,052,313	41,946,943	88,192,416	3,785	8,515	5,115	7,853	343,004	17,416	9,166,254	17,415,882	13,291,068	148,194	165 610	35 512

Table 1d. Occupational accident and work-related disease figures for India and China (2001)

Deaths caused by dangerous substances	number (age)	64,894				102,606
Work-relate d mortality	deaths (age)	302,024				476,940
Work-relate d diseases	deaths (age)	261,891				386,645
absence	ILO Estimate Average	30,627,865	68,692,311	199,505	17,899	68,909,715
Accident causing 3+ days' absence	Estimate Upper limit (0,10 %)	40,133 21,122,666 40,133,065 30,627,865	90,011 47,374,008 90,010,615 68,692,311	261,420	23,454	90,295 47,523,941 90,295,489 68,909,715
Accident o	Estimate Lower limit (0,19 %)	21,122,666	47,374,008	137,589	12,344	47,523,941
	ILO Estimate Fatal accidents		90,011	261	23	
	Accidents causing 3+ days' absence reported to the ILO (2001)	928	4,141	53,543	3,645	61,329
	Fatal accidents reported to the ILO (2001)	222	12,554	176	9	12,736
s by sector	Service	4,709	12,882	182	00	13,072
Work-related fatal accidents by sector	Industry	12,529	35,505	79	15	35,599
Work-related	Agriculture	22,895	41,624	0	0	41,624
	Service	90,564,750	204,470,000	2,894,547	133,848	733,705,100 365,127,028 161,079,677 207,498,395
Labour structure	Industry	68,426,700	160,655,000	357,753	66,924	161,079,677
- ·	Agriculture	241,506,000	365,125,000	0	2,028	365,127,028
Total employment	number	43 402,510,000 241,506,000 68,426,700 90,564,750	58 730,250,000 365,125,000 160,655,000 204,470,000	3,252,300	202,800	733,705,100
y active ion	percent	43	58	51	51	
Economically active population	number	India 443,860,000	China 737,060,000	3,427,100	216,700	China total 740,703,800
Country		India	China	Hong Kong	Macao	China total

Table 1e. Occupational accident and work-related disease figures for Other Asia and Islands, OAI (2001)

Country	Economically active population	ly active tion	Total employment	_	Labour structure		Work-related fatal accidents by sector	ıtal accident	s by sector				Accident ca	Accident causing 3+ days' absence	absence	Work-related diseases	Work-related mortality	Deaths caused by dangerous substances
	number	percent	number	Agriculture	Industry	Service	Agriculture	Industry	Service	Fatal accidents reported to the ILO (2001)	Accidents causing 3+ days' absence reported to the ILO (2001)	ILO Estimate Fatal accidents	ILO Estimate Lower limit (0,19 %)	ILO Estimate Upper limit (0,10 %)	ILO Estimate Average	deaths (age)	deaths (age)	number (age)
Afghanistan	10,000,000	37	1	8,000,000	1,000,000	1,000,000	2,488	120	70			2,678	1,409,474	2,678,000	2,043,737	3,939	6,617	1,419
Bangladesh			51,764,000	32,611,320	5,694,040	13,458,640	10,142	683	942			11,768	6,193,426	11,767,510	8,980,468	24,588	36,356	7,794
Bhutan																		
Brunei				14,340	60,228	68,832	4	7	S			17	8,687	16,505	12,596	99	73	16
Cambodia	6,500,000	45	6,243,329	4,620,063	437,033	1,186,233	1,437	52	83			1,572	827,537	1,572,320	1,199,928	2,966	4,538	973
Comoros	252,000	37	1	201,600	25,200	25,200	63	m	2			29	35,519	67,486	51,502	66	167	36
Cook Islands	6,820	46	1	1,978	1,023	3,819	1	0	0			1	529	1,005	767	က	4	1
	298,000	38	114,300	50,292	9,144	54,864	16	П	4			21	10,831	20,579	15,705	54	75	16
French Polynesia	75,000	40	58,149	7,559	11,048	39,541	2	1	Ю			9	3,392	6,445	4,918	28	34	7
Indonesia	95,793,161	45	90,807,000	40,863,150	14,529,120	35,414,730	12,708	1,743	2,479			16,931	8,911,034	16,930,965	12,921,000	43,134	60,065	12,877
Kiribati	33,000	45	1	23,430	066	7,920	7	0	1			00	4,189	7,960	6,075	13	21	4
Laos	2,600,000	47	1	1,976,000	182,000	442,000	615	22	31			299	351,219	667,316	509,267	1,024	1,691	363
Malaysia	9,616,100		9,535,000	1,525,600	3,432,600	4,576,800	474	412	320	958	84,911	1,207	635,131	1,206,750	920,940	4,529	5,736	1,230
Maldives	87,987			21,562	13,799	50,885	7	2	4			12	6,276	11,924	9,100	41	53	11
Mongolia	840,877	37	832,300	332,920	174,783	324,597	104	21	23			147	77,492	147,234	112,363	395	543	116
Myanmar (Burma)	23,700,000	54	18,359,000	12,851,300	1,285,130	4,222,570	3,997	154	296	15	400	4,447	2,340,289	4,446,550	3,393,420	8,721	13,167	2,823
Nepal	11,000,000	50	,	8,910,000	330,000	1,760,000	2,771	40	123			2,934	1,544,111	2,933,810	2,238,960	4,333	7,267	1,558
Pakistan	39,974,000	29	36,847,000	16,212,680	6,263,990	14,370,330	5,042	752	1,006	104	20	008'9	3,578,813	6,799,745	5,189,279	17,502	24,302	5,210
Papua New Guinea	2,600,000	44	,	1,976,000	260,000	364,000	615	31	25			671	353,272	671,216	512,244	1,024	1,695	363
Philippines	33,354,000	41	30,085,000	13,538,250	4,512,750	12,034,000	4,210	542	842			5,594	2,944,371	5,594,306	4,269,339	14,291	19,885	4,263
Korea, Democratic People's Republic of (North Korea)	11,700,000	51	,	4,212,000	3,744,000	3,744,000	1,310	449	262			2,021	1,063,838	2,021,292	1,542,565	4,609	6,630	1,421
Korea, Republic of (South Korea	22,181,000	47	21,068,000	2,106,800	4,634,960	14,326,240	655	556	1,003	1,298		2,214	1,165,393	2,214,247	1,689,820	10,007	12,222	2,620
Singapore	2,119,700	51	2,046,700	20,467	593,543	1,432,690	9	71	100	52	3,738	178	93,620	177,879	135,750	972	1,150	247
Solomon Islands	30,000	14	33,000	24,750	1,650	009'9	00	0	0			00	4,399	8,357	6,378	16	24	5
Sri Lanka	6,708,620	42	6,212,400	2,360,712	1,056,108	2,795,580	734	127	196	27	2,157	1,057	556,108	1,056,605	806,356	2,951	4,008	859
Thailand	34,487,900	55	33,484,000	18,081,360	5,022,600	10,380,040	5,623	603	727	597	50,093	6,953	3,659,273	6,952,618	5,305,945	15,905	22,858	4,900
Tonga				18,918	1,401	17,867	9	0	1			7	3,843	7,302	5,573	14	21	5
Vietnam	41,100,000	20	36,994,000	25,155,920	4,439,280	7,768,740	7,823	533	244			8,900	4,684,219	8,900,017	6,792,118	17,572	26,472	5,675
Total	Total 415,527,598		344,569,424 195,718,971	195,718,971	57,716,421	129,876,718	698'09	6,926	9,091	3,051	141,349	76,886	40,466,285	76,885,941	58,676,113	178,786	255,672	54,811

Comoros and North-Korea, labour structure in industry and service sector are not known, non-agriculture employment by percent divided 50/50%

Table 1f. Occupational accident and work-related disease figures for Sub-Saharan Africa, SSA (2001)

	population		employment													related diseases	related mortality	caused by dangerous
																		substances
	number	percent	number	Agriculture	Industry	Service	Agriculture	Industry	Service	Fatal accidents reported to the ILO (2001)	Accidents causing 3 + days' absence reported to the ILO (2001)	ILO Estimate Fatal accidents	ILO Estimate Lower limit (0,19 %)	ILO Estimate Upper limit (0,10 %)	ILO Estimate Average	deaths (age)	deaths (age)	number (age)
Angola	6,200,000	20	,	4,278,000	620,000	1,054,000	834	98	183			1,103	580,614	1,103,166	841,890	4,501	5,604	1,208
Benin	2,900,000	43	'	2,030,000	203,000	000'299	396	28	116			540	284,169	539,922	412,046	2,105	2,645	570
Botswana	256,890	35	483,432	239,463	27,845	289,583	47	4	20			101	53,119	100,925	77,022	404	202	109
Burkina Faso	5,700,000	47	1	4,959,000	228,000	513,000	296	31	88			1,088	572,490	1,087,731	830,111	4,138	5,226	1,126
Burundi	3,800,000	64	1	3,534,000	76,000	190,000	689	10	33		6,078	733	385,620	732,678	559,149	2,759	3,491	753
Cameroon	6,200,000	42	1	4,588,000	310,000	1,302,000	895	43	227			1,164	612,625	1,163,988	888,307	4,501	5,665	1,221
Cape Verde	121,000	35	1	62,920	27,830	30,250	12	4	D.			21	11,249	21,373	16,311	88	109	24
the Central African Republic	1,800,000	48	1	1,512,000	54,000	234,000	295	7	41			343	180,531	343,008	261,769	1,307	1,650	356
Chad	3,800,000	35	14,522	3,154,000	190,000	456,000	615	26	79			721	379,260	720,594	549,927	2,759	3,479	750
Comoros	252,000	37	1	209,160	15,120	27,720	41	2	2			48	25,103	47,696	36,400	183	231	50
Congo (Brazzaville)	1,300,000	30	1	806,000	156,000	338,000	157	22	59			238	125,005	237,510	181,258	944	1,181	255
Côte d'Ivoire	1,850,000	1	1	1,202,500	148,000	499,500	234	20	87			342	179,908	341,825	260,866	1,343	1,685	363
the Democratic Republic	21,600,000	41	1	15,552,000	2,808,000	3,240,000	3,033	388	564			3,984	2,096,792	3,983,904	3,040,348	15,680	19,664	4,239
Oi une congo	396.000	67	1	304.920	35.640	59.400	59	гc	10			75	39,323	74.713	57.018	287	362	78
Equatorial Guinea	103,000	39	148,000	67.980	11,330	23,690	13	2	4			19	696'6	18.942	14,456	75	94	20
Guinea	3.600,000	39	'	0	0	0	0	0	0			0	0	0	0	2.613	2,613	563
Eritrea	2.100,000	'	,	1.680.000	210,000	210,000	328	29	37			393	206,905	393.120	300.013	1.524	1.918	413
Ethiopia	28,300,000	20	1	22,640,000	2,264,000	3,396,000	4,415	312	591			5,318	2,799,019	5,318,136	4,058,577	20,544	25,862	5,575
Gabon	000'009	44	1	450,000	000'99	84,000	88	6	15	20	1,112	111	58,671	111,474	85,072	436	547	118
Gambia	700,000	47	1	588,000	49,000	63,000	115	7	11			132	69,676	132,384	101,030	508	641	138
Ghana	9,400,000	47	1	5,546,000	1,034,000	2,820,000	1,081	143	491			1,715	902,548	1,714,842	1,308,695	6,824	8,539	1,840
Guinea	3,600,000	39	1	2,484,000	360,000	756,000	484	20	132			999	350,318	665,604	507,961	2,613	3,279	707
Guinea-Bissau	000'009	46	1	492,000	24,000	84,000	96	m i	15			114	59,931		86,899	436	549	118
Kenya	15,900,000	52	1,647,400	12,879,000	1,113,000	1,908,000	2,511	154	332			2,997	1,577,364	7	2,287,177	11,543	14,540	3,134
Lesotho	300,000	32	1	207,000	130,000	396,000	188	14	98			150	79,082	150,255	184,668	653	1 185	1/3
Madagascar	7,500,000	47		6 156 000	456,000	988,000	1 200	10	172			1 435	755 400	1 435 260	1 095 330	5 517	6 952	1 499
Malawi	5,100,000	45	1	4,182,000	153,000	765,000	815	21	133			970	510,376	969,233	740.045	3,702	4.672	1.007
Mali	5,400,000	47	1	4,644,000	108,000	702,000	906	15	122			1,043	548,754	1,042,632	795,693	3,920	4,963	1,070
Mauritania	1,300,000	31	1	897,000	117,000	286,000	175	16	20			241	126,750	240,825	183,788	944	1,185	255
Mauritius	538,500	45	490,800	102,315	166,935	269,250	20	23	47	4	4,268	06	47,283		68,561	391	481	104
Mozambique	9,400,000	53	1	7,990,000	658,000	752,000	1,558	91	131			1,780	936,685	1,779,702	1,358,194	6,824	8,604	1,854
Namibia	700,000	35	431,849	308,000	154,000	238,000	09	21	41	10	618	123	64,592	122,724	93,658	508	631	136
Niger	5,300,000	20	1	4,505,000	159,000	636,000	878	22	111			1,011	532,148	1,011,081	771,614	3,848	4,859	1,047
Nigeria	000,000,000	45	1	4 271 000	2,064,000 26,316,000	100,000	4,528	C87	4,5/9			9,392	4,943,008	9,391,716	7,167,362	37,459	46,851	10,098
Sao Tome and Principe	35,000	30	49.000	18.900	2.100	14.000	4	0	2			9	3,374	6.411	4.893	2,412	4,310	200
Senegal	4,400,000	44	1	3,564,000	264,000	572,000	695	36	100			831	437,337	830,940	634,138	3,194	4,025	898
Seychelles	28,000	39	33,110	2,800	5,320	19,880	1	1	m	0	135	5	2,494		3,617	20	25	Δ,
Sierra Leone	1,900,000	37	1	1,330,000	266,000	304,000	259	37	53			349	183,660	348,954	266,307	1,379	1,728	373
Somalia	3,900,000	39	1	2,964,000	312,000	624,000	578	43	109			730	384,006	729,612	556,809	2,831	3,561	768
South Africa		' :	11,335,000	1,586,900	2,720,400	7,027,700	309	375	1,223			1,908	1,004,042	1,907,681	1,455,861	8,229	10,137	2,117
Sudan	12,700,000	39	1	8,001,000	508,000	4,191,000	1,560	70	729			2,360	1,241,859	2,359,533	1,800,696	9,220	11,579	2,496
Swaziland	400,000	42	1	296,000		68,000	58	0 0	12			75	39,221	74,520	56,871	290	365	75
Tanzania	17,700,000	20	1 (0	14,160,000		1,770,000	2,761	244	308	(C L	3,313	1,743,916	3,313,440	2,528,678	12,849	16,163	3,484
Togo	1,900,000	39	49,136	1,216,000		570,000	237	16	99	10	850	352	185,280	352,032	268,656	1,379	1,731	373
Oganda	11,200,000	84 8	1	9,632,000	352,000	000,021,1	1,8/8	70	195			2,135	1,123,655	788 040	1,629,299	8,131	3 082	2,213
Zimbabwe	5,900,000	42	4,665,449	3,835,000	295,000	295,000 1,770,000	748	41	308	101	13,954	1,097	577,113	1,096,515	836,814	4,283	5,380	1,160
Total	Total 279 680 390		19 347 698	195 081 858	21 727 520 70 415 973	70 415 973	38 041	2 998	12 252	145	27.015	53 292	28 048 284	53 291 739	40 670 012	211 262	264 554	55.250

Table 1g. Occupational accident and work-related disease figures for Latin America and the Caribbean, LAC (2001)

Economically active Total Infants Agriculture Industry Service Agriculture Indust											
American Simos Infinity Spectrant number Agriculture Industry Services Agriculture Industry Services Agriculture Industry Services Agriculture Industry Services Industry Services Industry Services Industry Services Industry Industry Services Industry Indu	Labour structure	Work-related fatal accide	nts by sector			Acci	Accident causing 3+ days' absence	days' absence	Work- related diseases	Work- related mortality	Deaths caused by dangerous
14000 33 5,644 4,820 4,750 4,820 11 11 11 11 12 12 13 13	Industry Service		Service	Fatal Accidents accidents causing reported to absence (2001) reported to the (2001) reported to the lLO (2001)	lLO causing Estimate 3 + days' Fatal absence accidents orted to the	Estimate Lower limit (0,19 %)	ILO Estimate mit Upper limit (0,10 %)	Estimate it Average	deaths (age)	deaths (age)	number (age)
6,049 53 5,644 226 1,637 3,781 0 0,000 45 5,644 226 1,637 3,781 0 1,22,28,81 42 8,143,400 1,68,42 7,085 2,100 24,600 1 41,501 47 8,143,400 1,68,42 7,085 2,100 24,600 1 1,502,00 34 7,785 21,002 14,001 42,786 6 3 1,502,00 34 7,785 21,002 14,001 42,786 6 3 3,403,00 48 1,280,00 365,120 3,4031 2 2 1,502,00 34 7,785 21,002 14,001 42,786 3 3,504,306 48 1,407 3,323,334 4,114,346 4,144 3,144 1,504,000 48 30,000 3,144 3,144 3,144 3,144 1,504,000 49 30,000 3,144 3,144 3,144 3,144	4,760	1				3 1,	1,589 3,019	19 2,304	7	10	2
3,000 45	1,637	0	0 1			1	525	998 761	က	4	1
9.722.581 42 8.143,400 1.058,642 2.788,756 4316,002 295 590 1.45,1001 48 1.43.60 1.058,642 2.788,759 4.031 0 2 1.45,500 48 1.18.80 1.218 1.920 4.031 0 2 1.35,730 68 1.18.80 1.280 19.320 96.600 4 4 3.4,000 56 3.759 7.218 1.929,94 4 4 3.4,000 56 3.759 7.28 1.564 4 4 3.4,000 56 3.759 7.28 1.059,94 4 4 3.4,000 56 3.757 1.404,94 3.22.846 4.143,656 4.83 4 1.548 6 6 6 4.83 4 1.548 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	2,100	1	4			2	2,727 5,181	81 3,954	15	20	4
154,500 44	2,768,756		699 06		1.	1,554 817,940	940 1,554,086	86 1,186,013	4,588	6,142	1,314
154,500 48 144,360 7,218 9,224 2 2 2 155,730 24 37,537 25,600 12,880 19,320 35,537 25,600 25,880 13,537 25,600 25,60	7,055	0	2 5			7 3.	3,628 6,893	93 5,261	20	27	9
135,730 68 128,800 12,880 19,320 95,600 4 4 4 4 34,000 56 37,595 21,002 14,001 47,282 6 33,410 33,4100 56 37,595 21,002 14,001 47,282 6 38,533 46 2,095,000 985,120 15,041 40,143,666 4,885 3,889 19,563,333 48, 2,095,000 310,585 19,593,330 257 24,439 2,542,300 310,585 2,562,000 310,585 2,562,000 45,644,959 15,652,724 1,552,320 310,585 2,544,959 3,544	7,218	2							81	105	22
76,000 34 77,785 21,002 14,001 42,782 6 3 38,223,323 46 2,096,000 98,120 14,001 42,784 6 3 38,223,323 46 2,096,000 98,120 14,001 77,12640 275 86 5,948,323 49 7,548,000 17,407,788 17,868,396 1,381 843 1,653,321 1,165,290 310,880 32,224,328 87 73 1,663,321 1,163,290 310,880 32,224 7,588,396 1,381 843 1,663,321 1,101,980 93,22,320 960,482 1,562,724 1,26 137 1,663,300 34,210 4,24,366 1,562,724 1,26 137 1,381 1,643,600 36,210 34,210 64,4,36 1,566,724 1,26 137 2,600 36,210 36,210 36,210 36,210 36,210 36,210 36,210 36,210 36,210 36,210 36,210 3	19,320	4	1	0	300				73	95	20
34,000 56 3,597 762 1,504 712,540	14,001	9							44	29	13
8.3.243.299 49 75,458.000 17,430.788 17,883.646 40,143.656 4,863 3,809 16,548.830 38 5,479.400 767,116 1,479.438 1,528.846 1,141.356 4,863 3,809 16,548.830 38 4,779.400 767,116 1,479.438 1,588.344 7,588.896 1,381 343 1,653.310 42 1,565.200 450,480 644,436 1,556,724 126 137 2600,000 38 44,21,185 50,0682 450,840 644,436 1,556,724 126 137 4,121,185 50 3,673,200 1,101,960 918,300 1,652,940 305 36 36 2,444,985 4,511,600 2,45,340 6,754 1,556,724 126 144 2,880 4,511,600 2,45,340 6,754 1,556,724 126 144 2,880 4,511,600 2,256,800 6,674,40 1,596,320 2,144 2,880 4,511,600 2,256,800 <td< th=""><th>1,504</th><th></th><th>110</th><th></th><th></th><th>470 247 438</th><th>3,162 6,008</th><th>33 358 786</th><th>1 181</th><th>1 651</th><th>353</th></td<>	1,504		110			470 247 438	3,162 6,008	33 358 786	1 181	1 651	353
5,948,830 38 5,479,400 767,116 1,479,438 3,223,846 1,214 3,15 1,653,321 42 16,497,600 4949,280 3,994,24 7,588,896 1,381 843 1,653,321 42 16,497,600 4949,280 3,994,24 7,588,896 1,381 843 2,600,000 38 3,673,200 110,400 8,322 7,280 25 20 4,121,185 50 3,673,200 1,101,960 918,300 1,652,940 307 196 2,441,995 40 2,481,300 40 2,481,300 1,01,960 918,300 1,652,940 307 196 3,88,800 40 2,481,300 4,511,600 2,481,300 1,652,940 307 196 3,88,800 40 2,481,300 1,01,84 1,254,60 2,4186 3,746 2,4186 3,746 3,746 3,746 3,746 3,746 3,746 3,746 3,746 3,746 3,746 3,746 3,746 3,746 <th>17 883 546</th> <th></th> <th>U</th> <th></th> <th>71</th> <th>7</th> <th>7</th> <th>=</th> <th>101,101</th> <th>57 409</th> <th>12.282</th>	17 883 546		U		71	7	7	=	101,101	57 409	12.282
19,516,166 47 16,497,600 4,949,280 3,959,424 7,588,896 1,381 843 1,663,331 42 1,562,900 310,580 341,638 900,682 87 73 2,600,000 38 3,843,000 922,320 96,0750 1,262,920 20 3,594,308 44 2,652,000 450,840 644,436 1,556,724 125 137 4,121,185 50 3,673,200 1,101,960 918,300 1,622,940 307 196 2,444,959 40 2,451,300 735,390 367,695 1,348,215 205 78 8,800 - - 1,01,960 2,241,80 30 37 196 8,800 - - 2,451,300 72,580 134,812 205 144 2,44,956 - - 2,451,300 197,833 132,600 52,4180 30 30 30 30 30 30 30 30 30 30 30	1,479,438		0	302	195.888				3.087	4.117	12,202
1,653,321 42 1,552,900 310,580 341,638 900,682 87 73 2,600,000 45 3,843,000 922,320 960,750 1,556,724 126 205 2,600,000 45 3,843,000 922,320 960,750 1,556,724 126 137 2,600,000 36 44,436 1,556,724 126 136 137 4,121,185 50 3,673,200 1,101,960 918,300 1,655,74 126 136 58,800 40 2,451,300 2,56,800 1,0584 12,348,215 205 136 58,800 40 2,451,300 2,56,800 1,0584 1,2348,215 205 144 2,800 40 2,451,300 2,5600 72,280 1,5060 224,180 3	3.959.424		-			1		2	9.295	12.696	2.716
5,600,000 45 3,843,000 922,320 960,750 1,959,930 257 2,60,000 38 - 10,400 8,320 7,280 3 3,594,308 44 2,652,000 450,840 644,436 1,556,724 126 4,121,185 50 3,673,200 1,101,960 918,300 1,652,940 307 4,121,185 50 3,673,200 1,101,960 918,300 1,652,940 307 2,444,959 40 2,451,300 735,390 367,695 1,348,215 205 3,981,983 35 4,511,600 2,256,800 670,740 1,579,060 629 2,780,000 - 75,060 72,280 130,600 221 3,981,983 35 4,511,600 2,25,600 67,91 1,579,060 22,138 3,981,900 3 2,334,600 7,877,200 9,452,640 2,452,640 2,452,640 2,452,640 2,452,640 2,452,640 2,452,640 2,452,640 2,452,640 2,452,640	341,638			74	110,101				875	1,174	251
26,000 38 - 10,400 8,320 7,280 3 3,594,308 44 2,652,000 450,840 644,436 1,556,724 126 11 4,121,185 50 3,673,200 1,101,960 918,300 1,656,724 126 11 2,444,959 40 2,451,300 735,390 367,695 1,348,215 205 2,444,959 40 2,451,600 2,255,300 367,695 1,348,215 205 2,444,959 40 2,451,600 2,255,300 676,740 1,59,660 629 3,900 3 4,511,600 2,255,300 676,740 1,59,660 629 1,287,000 3 2,334,600 72,784 490,266 10,506 221 1,128,700 44 942,300 197,884 195,660 22,196 22,198 2.0 1,128,700 44 942,300 147,14 255,255 731,731 199 1,190,422 44 942,300 74,744 177,	960,750		304			766 403,030	030 765,756	56 584,393	2,165	2,931	627
3,594,308 44 2,652,000 450,840 644,436 1,556,724 126 4,121,185 50 3,673,200 1,101,960 918,300 1,552,940 307 1 2,444,559 40 2,451,300 735,390 367,695 1,348,215 205 38,800 40 2,451,300 735,390 367,695 1,348,215 205 3,800 40 2,451,300 75,600 72,280 150,600 629 3,800 39 4,511,600 75,600 72,280 150,600 221 2,437,997 39 2,334,600 733,764 490,266 1,050,570 221 1,128,700 44 94,300 7,817,200 945,640 2,056,160 2,198 1,130,043 37 1,701,700 714,714 255,255 731,731 199 1,136,532 30 1,150,000 2,666,965 914,388 4,038,547 744 1,165,532 30 1,150,000 2,666,965 914,386 </th <th>8,320</th> <th>က</th> <th>2 1</th> <th></th> <th></th> <th>9</th> <th>3,054 5,802</th> <th>02 4,428</th> <th>13</th> <th>19</th> <th>4</th>	8,320	က	2 1			9	3,054 5,802	02 4,428	13	19	4
4.121.185 50 3,673.200 1,101,960 918,300 1,652,940 307 11 2.444,959 40 2,451,300 735,390 367,695 1,348.215 205 5.8800 - - - 0,584 12,348 35,868 3 3.981,983 35 4,511,600 2,255,800 676,740 1,579,060 221 2.78,000 - - 2,376,000 72,800 1,579,060 221 3,981,983 35 4,511,600 2,255,800 676,740 1,579,060 221 3,981,983 35 4,511,600 2,237,000 665,300 221 1 1,128,700 44 39,386,000 7,877,200 9,452,640 22,056,160 2,198 2,0 1,1900,442 37 1,701,00 714,714 255,255 731,731 199 1,1980,402 - 984,200 2,666,965 914,388 4,038,647 744 1 1,1980,402 - -	644,436		37 241			504 265,443	443 504,341	41 384,892	1,494	1,999	428
2,444,959 40 2,451,300 735,390 367,695 1,348,215 205 58,800 - - 9,360 5,460 24,180 35,868 3 3,900 40 - - 9,360 66,740 1,579,060 629 1 278,000 - - 2,376,000 324,000 900,000 663 21 2,437,997 - - 2,376,000 324,000 900,000 663 22 1,128,700 - - 2,376,000 324,000 900,000 663 22 1,128,700 - - 2,376,000 324,000 900,000 663 22 1,128,700 - - 2,376,000 324,000 900,000 663 22 1,128,700 - - - 197,222 31 44,924 0 1,128,700 - - - - - - - - - - -	918.300		36 256			399,605	605 759,250	50 579,428	2.070	2.829	605
58,800 - 10,584 12,348 35,868 3 39,000 40 - 9,360 5,460 24,180 3 278,000 39 4,511,600 2,255,800 667,740 1,579,660 629 1 278,000 - 2,334,600 793,760 324,000 900,000 663 2 1,128,700 - 2,334,600 793,764 490,266 1,050,570 221 1 1,128,700 - 44 942,300 197,883 179,037 565,380 55 1,128,700 44 942,300 197,883 179,037 565,380 56 60,765 44 92,237 313 6,791 44,924 0 1,1900,434 37 1,701,700 714,714 255,255 731,731 199 1,1900,434 37 1,701,700 74,714 255,255 731,731 199 2,000,000 - 984,200 200,4714 177,156 602,330 </th <th>367,695</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>1,381</th> <th>1,874</th> <th>401</th>	367,695								1,381	1,874	401
39,000 40 9,360 5,460 24,180 629 1 2,780,000 3,981,983 35 4,511,600 2,255,800 676,740 1,579,060 629 1 2,780,000 - 2,376,000 324,000 324,600 2231,600 663 2,437,997 - 2,334,600 793,764 490,266 1,090,570 221 1,128,700 - 942,300 197,883 179,037 565,380 55 39,682,845 - 942,300 197,883 179,037 565,380 56 60,765 - 942,300 7,877,200 9452,640 22,056,160 2,198 1,989,422 - 984,200 204,714 177,156 602,330 57 2,000,000 - - 960,000 420,000 620,000 268 2,000,000 - - 1,150,000 34,560 11,390 2,488 1,156,532 30 1,150,000 34,500 230,	12,348		3 6			11 5.			29	40	6
3.981,983 35 4,511,600 2,255,800 676,740 1,579,060 629 1 2.780,000 39 - - 75,060 324,000 663 1 2.437,997 39 2,334,600 793,764 490,266 1,050,570 221 1 1,128,700 44 942,300 197,883 179,037 565,380 55 39,682,845 40 39,386,000 7,877,200 9,452,640 22,056,160 2,198 2,0 1,190,422 40 39,386,000 7,877,200 9,452,640 22,056,160 2,198 2,0 1,009,422 44 52,237 313 6,791 44,924 0 1,009,422 9 74,714 255,255 731,731 199 1,089,422 9 9,40,714 177,156 602,330 57 2,000,000 9 7,619,900 2,666,965 914,388 4,038,547 744 1 1,156,532 30 1,150,000 <t< th=""><th>5,460</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>19</th><th>27</th><th>9</th></t<>	5,460								19	27	9
2.78,000 39 - 75,060 72,280 130,660 21 2.487,097 3,600,000 - 2,75,000 324,000 900,000 663 2.487,097 39 2,334,600 793,764 490,266 1,056,570 221 1,128,700 44 942,300 197,883 179,037 565,380 55 39,682,845 40 52,237 313 6,791 44,924 0 60,765 44 52,237 714,714 255,255 731,731 199 1,090,434 37 1,701,700 714,714 255,255 731,731 199 1,089,422 - 984,200 204,714 177,156 602,330 57 2,000,000 - 984,200 204,714 177,156 602,330 57 8,271,366 48 7,619,900 2,666,965 914,388 4,038,547 744 11 11,56,532 30 1,150,000 34,500 230,000 885,500 10	676,740		(V		ĺ	ш)	1,0	-	2,542	3,560	762
2,437,902 39 2,334,600 7,376,000 324,000 20,300,000 2,437,907 39 2,334,600 7,387,64 9,450,66 1,050,570 221 1 1,128,700 44 942,300 7,877,200 9,452,640 2,056,160 2,198 2,0 1,900,434 40 52,237 313 6,791 44,924 0 2,0 1,900,434 37 1,701,700 714,714 255,255 731,731 199 2,0 2,000,000 - 984,200 204,714 177,156 602,330 57 2,000,000 - 984,200 204,714 177,156 602,330 57 2,000,000 - 984,200 226,714 177,156 602,330 57 8,271,366 48 7,619,900 2,666,965 914,388 4,038,547 744 1 11,156,532 3 1,150,000 34,500 230,000 88,550 10 67,000 - 1,72,23	72,280					Ì			137	194	41
1,128,700 39 2,534,000 7,93,004 490,000 1,000,007 221 1,1128,700 1,237,000 1,238,000 2,534,000 7,877,200 9,495,600 2,005,300 5,55,380 5,55,380 5,55,380 5,55,380 5,55,380 5,55,380 5,55,380 5,55,380 5,21,398 2,000,000	324,000	-	160			8/1 458,640		16 665,028	1,778	2,649	200
39,682,845 40 39,386,000 7,877,200 9,45,640 22,056,160 2,198 2,198 1,900,442 37 1,701,700 714,714 255,255 731,731 199 1,900,422 - 984,200 204,714 177,156 602,330 57 2,000,000 - 960,000 420,000 620,000 268 8,271,366 48 7,619,900 2,666,965 914,388 4,038,547 744 1 1,156,532 30 1,150,000 34,500 230,000 885,500 10 2 1,18,172 - 9,636 10,950 23,652 3 2 2 43,800 - 1,150,000 34,500 23,652 3 2 2 67,000 - 1,150,000 34,500 23,652 3 2 2 67,000 - 1,150,000 34,500 23,652 3 3 3 67,000 - 1,174,20 11,36	179 037					181 QE	97,729 180,978		1,315	1,804	152
60,765 44 52,237 313 6,791 44,924 0 1,900,422 - 984,200 204,714 177,156 602,330 57 2,000,000 - 984,200 204,714 177,156 602,330 57 2,000,000 - 984,200 204,714 177,156 602,330 568 8,271,366 - 960,000 420,000 620,000 268 1,156,532 30 1,150,000 34,500 230,000 885,500 10 1,186,532 - 9,636 4,307 5,488 2 2 43,800 - 9,636 10,950 23,652 3 3 67,000 - 17,420 11,390 38,190 5 4 85,878 35 72,834 14,567 14,567 43,700 4 1269,500 - 514,100 48,840 105,391 359,870 14 11,104,777 46 17,20,608	9,452,640	2,0	3,4	1,502	413,748 7.	4.0	7.	5.	22,191	29.821	6,380
1,900,434 37 1,701,700 714,714 255,255 731,731 199 1,089,422 - 984,200 204,714 177,156 602,330 57 2,000,000 - 984,200 204,714 177,156 602,330 57 8,21,366 - - 960,000 420,000 620,000 268 1,156,532 30 1,150,000 34,500 230,000 885,500 10 1,18,72 - 8,359 4,307 5,488 2 43,800 - 17,420 11,390 38,190 5 67,000 - 17,420 11,390 38,190 5 85,878 35 72,834 14,567 14,567 43,700 4 1,269,500 - 514,100 48,840 105,391 359,870 14 1,1,104,779 45 9,404,600 1,222,598 2,163,058 6,018,944 341 4	6.791								29	38	00
1.0894,22 984,200 274,714 177,156 602,330 57 2.000,000 - 968,420 224,714 177,156 662,330 56 8,271,366 48 7,619,900 2,666,965 914,388 4,038,547 744 1 1,156,532 30 1,150,000 34,500 230,000 885,500 10 1,186,532 - - 9,636 10,950 23,652 3 43,800 - - 9,636 10,950 23,652 3 67,000 - - 17,420 11,390 38,190 5 85,878 35 72,834 14,567 14,567 43,700 4 1,269,500 47 1,076,200 150,668 172,192 753,340 42 11,104,779 45 9,404,600 1,222,598 2,163,058 6,018,944 341 4	250 250		113	3.0	11 002	103	102 250 267 102	900 080	000	1 226	Vac
2,000,000 - - 960,000 420,000 620,000 268 8,271,366 48 7,619,900 2,666,965 914,388 4,038,547 744 1 11,156,532 30 1,150,000 34,500 230,000 885,500 10 11,166,532 - 8,359 4,307 5,488 2 43,800 - 9,636 10,950 23,652 3 67,000 - 17,420 11,390 38,190 5 85,878 35 72,834 14,567 14,567 43,700 4 572,900 - 514,100 48,840 105,391 359,870 14 11,104,779 45 9,404,600 1,222,598 2,163,058 6,018,944 31 4 4000 47,567 126,068 1,126,968 6,018,944 34 4	177 156			51	13.816				555	743	159
8,271,366 48 7,619,900 2,666,965 914,388 4,038,547 744 1 1,156,532 30 1,150,000 34,500 230,000 885,500 10 18,172 - 8,359 4,307 5,488 2 43,800 - 9,636 10,950 23,652 3 67,000 - 17,420 11,390 38,190 5 85,878 35 72,834 14,567 14,567 43,700 4 1,269,500 47 1,076,200 150,668 172,192 753,340 42 11,104,779 45 9,404,600 1,222,598 2,163,058 6,018,944 341 4	420,000								988	1,441	308
1,156,532 30 1,156,000 34,500 230,000 885,500 10 4 18,172 - - - 8,359 4,307 5,488 2 2 43,800 - - 9,636 10,950 23,652 3 3 67,000 - 17,420 11,390 38,190 5 3 572,900 - 514,100 48,840 105,391 359,870 14 2 1,269,500 47 1,076,200 150,668 172,192 753,340 42 3 11,104,779 45 9,404,600 1,222,598 2,163,058 6,018,944 341 46	914,388		95 626		1,	1,565 823,591	591 1,564,823	23 1,194,207	4,293	5,858	1,253
18,172 - 8,359 4,307 5,488 2 43,800 - - 9,636 10,950 23,652 3 67,000 - - 17,420 11,390 38,190 5 85,878 35 72,834 14,567 14,167 43,700 4 572,900 - 514,100 48,840 105,391 359,870 14 2 1,269,500 47 1,076,200 150,668 172,192 753,340 42 3 11,104,779 45 9,404,600 1,222,598 2,163,058 6,018,944 341 46	230,000		137		27,329	196 103,088	088 195,868	68 149,478	648	844	181
43,800 - 9,636 10,950 23,652 3 67,000 - 17,420 11,390 38,190 5 85,878 35 72,834 14,567 14,567 43,700 4 572,900 - 514,100 48,840 105,391 359,870 14 2 11,269,500 47 1,076,200 150,668 172,192 753,340 42 3 11,104,779 45 9,404,600 1,222,598 2,163,088 6,018,344 341 46 49 40 40 8,510 33,315 0 46	4,307	2	1 1			4	2,158 4,100	3,129	6	13	3
67,000 - - 17,420 11,390 38,190 5 85,878 35 72,834 14,567 14,667 43,700 4 572,900 - 514,100 48,840 105,391 359,870 14 2 1,269,500 47 1,076,200 150,668 172,192 753,340 42 3 11,104,779 45 9,404,600 1,222,598 2,163,088 6,018,394 341 46 49 40 40 1,075,000 1,08,304 33,315 0	10,950	8	2 4			9	4,572 8,687	87 6,629	22	30	9
85,878 35 72,834 14,567 14,567 43,700 4 572,900 - 514,100 48,840 105,391 359,870 14 1,269,500 47 1,076,200 150,668 172,192 753,340 42 3 11,104,779 45 9,404,600 1,222,598 2,163,058 6,018,944 341 46	11,390	Ŋ	5		204	13 6	6,950 13,206	06 10,078	33	46	10
572,900 - 514,100 48,840 105,391 359,870 14 1,269,500 47 1,076,200 150,668 172,192 753,340 42 11,104,779 45 9,404,600 1,222,598 2,163,058 6,018,944 341 4	14,567	4	3 7			14 7	7,337 13,940	40 10,639	41	55	12
1.269,500 47 1,076,200 150,668 172,192 753,340 42 11,104,779 45 9,404,600 1,222,598 2,163,058 6,018,944 341 4 40,000 42,550 42,550 8,610 33,615 0 0	105,391		56	т	487	92 48	48,344 91,854	54 70,099	290	382	82
11,104,779 45 9,404,600 1,222,598 2,163,058 6,018,944 341 4	172,192		117			195	102.885 195.481	81 149 183	909	802	172
49 000 J 42 550 426 8 510 33 615 0	2,163,058 6,	4		45	3,163 1,		1,	1,	5,299	7,033	1,505
0 010,00 016,0 024	426 8,510 33,615	0	2 5			7	3,759 7,142	42 5,450	24	31	7
Total 219 083 179 192 033 807 48 422 229 45 494 863 104 333 199 13 510 9 690 11			16.172	2.009	776 938	39.372 20.722.028	028 39.371.853	53 30.046.941	108.195	147.567	31.571

Table 1h. Occupational accident and work-related disease figures for Middle Eastern Crescent, MEC (2001)

Country	Economically active population	y active on	Total employment		Labour structure		Work-related	Work-related fatal accidents by sector	s by sector				Accident ca	Accident causing 3+ days' absence		Work-related diseases	Work-related mortality	Deaths caused by dangerous substances
	num ber	percent	number	Agriculture	Industry	Service	Agriculture	Industry	Service	Fatal accidents reported to the ILO (2001)	Accidents causing 3 + days' absence reported to the ILO (2001)	ILO Estimate Fatal accidents	Estimate Lower limit (0,19 %)	Estimate Upper limit (0,10 %)	ILO Estimate Average	deaths (age)	deaths (age)	number (age)
Algeria	9,400,000	'	6,228,772	872,028	685,165	4,671,579	229	130	472			831	437,555	831,354	634,455	7,954	8,786	1,889
Bahrain	308,341	47	157,400	4,722	55,090	97,588	1	10	10	10	1,682	22	11,350	21,565	16,458	201	223	48
Cyprus (Greek)	315,395	48	309,500	15,475	060'89	225,935	4	13	23	0	2,357	40	20,961	39,826	30,394	395	435	94
Egypt	19,253,000	30	17,556,700	5,091,443	3,862,474	8,602,783	1,339	734	869	130	32,649	2,942	1,548,316	2,941,801	2,245,058	22,421	25,362	5,452
Iran	21,000,000	'	•	6,300,000	5,250,000	9,450,000	1,657	866	954			3,609	1,899,395	3,608,850	2,754,122	15,161	18,770	4,035
Iraq	6,500,000	'	•	780,000	520,000	5,200,000	205	66	525			829	436,389	829,140	632,765	4,693	5,522	1,187
Israel	2,503,300	'	2,422,300	72,669	678,244	1,671,387	19	129	169	100	280'69	317	166,731	316,788	241,760	3,093	3,410	733
Jordan	1,360,000	•	1	68,000	176,800	1,115,200	18	34	113			164	86,374	164,111	125,243	982	1,146	246
Kuwait	23,363,000	41	1,243,126	12,431	111,881	1,118,813	c	21	113			138	72,383	137,527	104,955	1,588	1,725	371
Lebanon	1,362,231	34	•	190,712	367,802	790,094	50	70	80			200	105,179	199,839	152,509	983	1,183	254
the Libyan Arab Jamahiriya	1,500,000	29	,	255,000	435,000	810,000	67	83	82			232	121,855	231,525	176,690	1,083	1,314	283
Morocco	10,604,734	36	9,329,755	4,664,878	1,399,463	3,265,414	1,227	266	330			1,823	959,246	1,822,568	1,390,907	11,914	13,737	2,953
Oman	365,889	20	70,486	35,243	15,507	20,441	6	c	2			14	7,516	14,280	10,898	06	104	22
Qatar	280,122	54	,	8,404	78,434	193,284	2	15	20			37	19,281	36,634	27,958	202	239	51
Saudi Arabia	1	'	5,808,617	697,034	1,452,154	3,659,429	183	276	370			829	436,227	828,832	632,529	7,418	8,247	1,773
the Syrian Arab Republic	5,457,375	33	4,844,020	1,937,608	968,804	1,937,608	510	184	196			889	468,085	889,362	678,724	6,186	7,075	1,521
Tunisia	2,978,334	32	2,704,900	595,078	622,127	1,487,695	157	118	150	159	45,827	425	223,667	424,967	324,317	3,454	3,879	834
Turkey	22,269,000	'	20,367,000	8,146,800	4,480,740	7,739,460	2,143	851	782	1,008	2,183	3,776	1,987,176	3,775,634	2,881,405	26,009	29,785	6,403
the United Arab Emirates	1,400,000	28	1,779,000	124,530	266,850	1,387,620	33	51	140			224	117,686	223,603	170,644	2,272	2,495	536
Yemen	5,000,000	29	3,621,679	1,448,672	434,601	1,738,406	381	83	176			639	336,397	639,154	487,775	4,625	5,264	1,132
Total	Total 135,220,721		76,443,255	31,320,726	76,443,255 31,320,726 21,929,228 55,182,736	55,182,736	8,237	4,167	5,573	1,416	153,785	17,977	9,461,769	17,977,361 13,719,565	13,719,565	120,725	138,702	29,817
•																		



Some national and international OSH development and activities, 2004-2005

Major progress in the development of national OSH and inspection policies

18 countries have developed national OSH profiles based on ILO guidance, namely Azerbaijan, Benin, China, Egypt, Georgia, Guatemala, Iraq, Kazakhstan, Kenya, Kuwait, Kyrgyzstan, Mexico, Mongolia, Pakistan, Uganda, United Republic of Tanzania, Uzbekistan and Yemen while national OSH profiles are being prepared in others: Algeria, Costa Rica, Croatia, Iran, Malaysia, Mozambique, Nicaragua, Panama, Seychelles, Sri Lanka, Tajikistan, Vietnam.

9 countries included OSH aspects in their national plans of action for Decent Work: Bangladesh, Ethiopia, Guatemala, India, Morocco, Nepal, Nicaragua, Panama, Sri Lanka, while Panama, Nicaragua and Guatemala are developing the OSH component of the Decent work national programmes.

35 countries made progress in this area, including:

- the adoption of a new OSH Act or revision of present legislation in Ethiopia, Ireland, Kazakhstan, Kenya, Kyrgyzstan, Lebanon, Morocco, Nigeria, Saudi Arabia, Uganda, United Arab Emirates, United Republic of Tanzania
- setting up a National Safety and Health Committees: Algeria has set up a new NIOSH and revitalized its tripartite Conseil supérieur de la Prévention, Argentina, Botswana and Columbia, in the United Arab Emirates, the OSH Unit of the Ministry of Labour is being restructured. Serbia is revitalising its National Council on OSH.
- Signing agreements/accords with a key component on OSH Azerbaijan, Kazakhstan, Russia, South Africa, Tajikistan, and Uzbekistan. An agreement signed with the Gulf Cooperation Council resulted with ILO assistance in the revision of legislation in the field of OSH and the preparation of OSH guides for the oil and petrochemical industries. A collaboration agreement signed by the IAPRP (Inter-Africaine de Prévention des risques Professionnels) with particular focus on the development of a specialised university degree for occupational physicians. Protocols of Cooperation have been signed between the Polish National Labour Inspection and counterparts in Bulgaria, Serbia and Ukraine
- implementation of legislative reform on integrated labour inspection: Armenia, Bulgaria, Chile, Costa Rica, Vietnam, Serbia. Laos included the development of an integrated labour inspection into their 5-year national action plan.

Elsewhere, projects to strengthen the capacity of labour inspectorates have been sponsored by the ILO, its partners and donor organisations. In the Republic of Serbia, for example, a 2-year long project to improve the effectiveness of the labour inspectorate and social partners has almost been finished.

The Nordic countries (Finland, Island, Norway, Sweden, and Denmark) developed the so-called "scoreboard", a tool to measure and compare performances of their labour inspectorates but intended for use in other EU countries as well. The idea has been taken up in Africa, where Ministers in ARLAC approved an action plan for strengthening labour inspection and an integrated system, with an African version of the Scoreboard.

Launching of national OSH programmes

National OSH programmes were launched in several countries:

- Brazil and South Africa: a National Programme for the Elimination of Silicosis was launched - for Brazil on the occasion of the World Safety Day 2004
- Kazakhstan: a new national OSH programme was approved
- Kyrgyzstan: the present OSH programme updated, implementing a programme on OSH in agriculture
- Mongolia: launched a national OSH programme in 2005
- Russia: the national OSH programme 2003-2015 was adopted by the Russian Academy of Medical Science & the Ministry of Health.
- Thailand: a National OSH programme was launched in 2003
- Brazil, Mexico and South Africa launched action programmes for OSH and supply chain management, driven by national authorities.
- Moldova: a national programme on labour protection in the agricultural sector was adopted by Parliamentary Resolution in 2003, detailing actions, responsible agencies and a time frame.

Ratification of ILO Conventions and application of code of practices, guides etc

The ILO has received 29 notifications of ratifications from 18 member States for the following Conventions: **No. 81**: Albania, Armenia, Estonia, Indonesia, Ukraine; **No. 129**: Estonia, Ukraine, **No. 148**: Poland, Lebanon **No. 152**: Lebanon, Russian Federation, Turkey, **No 155**: Albania (and P 155), Australia, Finland (P 155), Sao Tome and Principe, Turkey, El Salvador (P 155); **No. 161**: Poland, Turkey; **No.162**: Japan; **No. 167**: Uruguay, **No. 170**: Poland No. **174**: Belgium, Lebanon; **No. 184**: Kyrgyzstan, Sao Tome and Principe, Sweden, Uruguay.

The European Union adopted the EU "Common principles" which are based on ILO Convention 81 and valid for 25 EU Member/ Accession States. The Minister of Labour of Luxembourg officially declared to ratify 21 OSH conventions as a result of an ILO Labour Inspection Audit.

The 10th International Conference on Occupational Respiratory Diseases (10th ICORD), organized jointly with the government of China (April 2005) paved the way for future ratifications of Conventions No. 139, 161, 162 and 170. It also provided a new impetus for national, regional and international action and strengthened cooperation with WHO, ICOH and IOHA.

OSH Management Systems

The 2003 Conference Conclusions emphasised the promotion and implementation of a systems approach to the management of OSH, using the guidance provided by the ILO Guidelines on Occupational Safety and Health Management Systems (ILO-OSH 2001). Promotion and dissemination of ILO-OSH 2001 continues with the guidelines now available in 21 languages (Arabic, Bulgarian, Chinese, Czech, English, Finnish, French, Georgian, German, Hebrew, Hindi, Japanese, Korean, Malay, Polish, Portuguese, Russian, Spanish, Thai, Urdu and Vietnamese). SafeWork has expanded its website to include the translated versions for downloading as well as providing links to other sites.

Many countries, such as Argentina, Ireland and Israel, have officially adopted ILO-OSH 2001 as the national basis for their own OSH management systems, while others, such as Japan, China and Malaysia, adopted their own standard based on Guidelines. France

Introductory Report: Decent Work - Safe Work

adopted the Guidelines by means of a tripartite resolution by its national standards organisation, AFNOR. Indonesia adopted new legislation requiring every enterprise to apply an equivalent national standard. China promoted their national guidelines and have so far certified 4,000 enterprises and registered 47,000 auditors.

Work Improvement in Neighbourhood Development (WIND) methodology used to improve working and living conditions, safety and health in rural communities:

WIND activities took place in Ethiopia, where the programme is being introduced into the Decent Work Country Programme targeting the reduction of vulnerability of rural communities. In Ethiopia and Kenya, case studies with good practices on workers' nutrition were established to be part of an international publication on workers' nutrition

The WIND methodology was adapted to small-scale rural informal sector in Kyrgyzstan, and a WIND manual is ready in Kyrgyz and Russian. Projects are under development in Moldova and Senegal.

Specific hazards and risks

Asbestos

See also the main body of text on this subject. Several more countries have introduced a partial or complete ban on the use of Asbestos, including Argentina, Australia, Egypt, Gabon and Lithuania. Brazil is in the process of letting it phase out, which will increase the number of countries who have banned and restricted use of asbestos to 34.

Psychosocial issues

In 2004, 20 countries adopted an action programme based on psychosocial issues (SOLVE): Burkina Faso, Belgium, Benin, Brazil, Cameroon, Canada, Cote d'Ivoire, India, Italy, Malaysia, Namibia, Philippines, Senegal, South Africa, Sri Lanka, Swaziland, Switzerland and Thailand, USA, Zambia.

In 2005, 7 additional countries have engaged in programmes related to SOLVE including Bulgaria, Cyprus, India, Ireland, Nepal, Spain and the United Kingdom. In addition, two major North American Trade Unions, the International Association of Machinists and Aerospace Workers and the Quebec Federation of Labour have adopted the SOLVE Programme. Also a number of employers are using SOLVE to address psychosocial problems at work.

HIV/AIDS strategies

Much more information about HIV/AIDS programmes in the workplace is available elsewhere. Here it may be noted that several Regions have been taking positive action to integrate policies and programmes on HIV/AIDS and labour inspection. For example, Jordan, Lebanon and Syria prepared a Regional Strategy for HIV/AIDS prevention, care and reduction of vulnerability in priority areas of action, and labour inspectors have been fully trained on HIV/AIDS using ILO materials.

In 2005, the ILO produced a publication entitled "A handbook on HIV/AIDS for labour and factory inspectors".

Hazardous child labour

Collaboration to combat hazardous child labour has continued at international and national levels. The ILO has given assistance to several countries in the preparation of lists of hazardous work, in developing training manuals on combating hazardous child labour and in setting up child labour monitoring units.

Annex 5

Estimated annual average number of deaths attributable to occupational exposure to hazardous substances by condition, world

Causes of death	No. of	deaths	Estimated perce to hazardous	•	No. of deaths attributed to hazardous substances
	Men	Women	Men	Women	
Cancer (Total)					314,939
Lung cancer and mesothelioma	996,000	333,000	15%	5%	166,050
Liver cancer	509,000	188,000	4%	1%	22,240
Bladder cancer	128,000	42,000	10%	5%	14,900
Leukemia	117,000	98,000	10%	5%	16,600
Prostate cancer	253,000		1%		2,530
Cancer of mouth	250,000	127,000	1%	0.50%	3,135
Cancer of oesophagus	336,000	157,000	1%	0.50%	3,517
Stomach cancer	649,000	360,000	1 %	0.5 %	8,290
Colorectal cancer	308,000	282,000	1%	0.50%	4,490
Skin cancer	30,000	28,000	10%	2%	3,560
Pancreas cancer	129,000	99,000	1%	0.50%	1,785
Other and unspecified cancer	819,000	1,350,000	6.80%	1.20%	71,892
Cardiovascular disease, 15 - 60 years	3,074	1,000	1%	1%	30,740
Nervous system disorders, 15 + years	658,	000	1%	1%	6,580
Renal disorders, 15 + years	710,	000	1%	1%	7,100
Chronic respiratory disease, 15 + years	3,550	0,000	1%	1%	35,500
Pneumoconiosis, estimate	36,0	000	100%	100%	36,000
Asthma, 15 + years	179,	000	2%	2%	3,580
				TOTAL	438,489

Annex 6

P155 (2002) **P81** (1995) **C184** (2001) **C176** (1995) Ratifications of ILO Occupational Safety and Health Conventions and Protocols **C174** (1993) **C170** (1990) **C167** (1988) **C162** (1986) **C161** (1985) **C155** (1981) **C148** (1977) **C139** (1971) **C136** (1971) **C129** (1969) **C127** (1967) **C120** (1964) **C119** (1963) **C115** (1960) **C81** (1947) **C45** (1935) 1966^{2} 1946^{3} **C13** (1921) ILO member countries Antigua and Barbuda the Central African Burkina Faso the Bahamas the Comoros Afghanistan Herzegovina Bosnia and Bangladesh Cape Verde Azerbaijan Cambodia Cameroon Argentina Barbados Botswana Republic Colombia Australia Bulgaria Bahrain Belgium Burundi Belarus Bolivia Austria Brazil Belize Benin

P155 (2002)														2004						2003																			
P81 (1995)						2000														1997												1998							
C184 (2001)																				2003																			
C176 (1995)							2000													1997					1998														
C174 (1993)																	2000																						
C170 (1990)																																							
C167 (1988)							1993	1995			1998									1997					1993				1991						1989				
C162 (1986)				1991		1992						1990								1988					1993				1989										
C161 (1985)				1991			1993													1987					1994				1989						1988				
C155 (1981)				1991	1982	1989	1993	1995						2000				1991		1985															1994	1991			
C148 (1977)				1991	1980		1993	1988				1978	1988							1979	1985				1993	1986			1996	1982					1994				
C139 (1971)				1991			1993	1978				1975	1982							1977	1994				1976					1976		1983			1975	1991			
C136 (1971)			1973	1991	1972		1993					1975								1976	1972				1973		1977			1977		1983			1972		1991		
C129 (1969)			1987	1991				1972					2003	1995			2005			1974	1972				1973				1994			1971			1994				
C127 (1967)												1969									1973								1983						1994				
C120 (1964)		1967			1971		1993	1970	1978			1969								1968	1972				1973	1966			1975	1966								1969	
C119 (1963)	1964	1967		1991		1965		1989			1965	1969								1969						1965			1964	1966									
C115 (1960)							1993	1974	1978			1970	1964							1978	1971				1973	1961	1982			1966		1966			1968		1975		
C81 (1947)	1999	1968	1987	1991	1954	1960		1958	1978	1983	1953	1975	1956	1995			2002			1950	1950	1972			1955	1959	1955	1976	1952	1959	1977	1966	1952	1983	1994		1949	2004	
C45 (1935)			1961	1991	1936	1960	1993		1978		1957	1954	1947				1937		1974	1938 ³	1938	1961			1954	1957	1936		1960	1966	1977	1966	1960	1960	1938		1938	1950	
C13 (1921)	1960		1960	1991	1928		1993		1978								1922			1929	1926	1960					1926		1990	1959					1956				
ILO member countries	the Congo	the Democratic Republic of the Congo	Côte d'Ivoire	Croatia	Cuba	Cyprus	the Czech Republic	Denmark	Djibouti	Dominica	the Dominican Republic	Ecuador	Egypt	El Salvador	Equatorial Guinea	Eritrea	Estonia	Ethiopia	Fiji	Finland	France	Gabon	the Gambia	Georgia	Germany	Ghana	Greece	Grenada	Guatemala	Guinea	Guinea-Bissau	Guyana	Haiti	Honduras	Hungary	Iceland	India	Indonesia	Iran

ILO member countries	C13 (1921) (1	C45 (1935) (3	C81 (1947) (3	C115 (1960) (3	C119 (1963) (1	C120 (1964) (1	C127 C (1967) (1	C129 C136 (1969) (1971)		C139 C148 (1977)	18 C155 77) (1981)	5 C161 (1985)	C162 (1986)	C167 (1988)	C170 (1990)	C174 (1993)	C176 (1995)	C184 (2001)	P81 (1995) (P155 (2002)
Iraq				_	_	_		_			_	_				_	_		_	
pu		19631									1995	95					1998		1998	
Israel			1955					19	1979											
Italy	1952	1952		1971	1971	1971	1971 1	1981 19		1981 19	1985			2003	2002					
Jamaica			1962																	
Japan		1956	1953	1973		1993			15	1977			2005							
Jordan			1969		1964	1965														
Kazakhstan			2001				2	2001		19	1996 1996	96								
Kenya		1964	1964				1	1979												
Kiribati																				
the Republic of Korea			1992												2003					
Kuwait			1964		1964			19	1974											
Kyrgyzstan		1992	2000	1992	1992	1992				19	1992							2004		
the Lao People's Democratic Republic	1964																			
Latvia	1924		1994	1993	1993	1993	1	1994		19	1993 1994	94								
Lebanon		1962	1962	1977		1977	1977	20	2000 20	2000 20	2005					2005	2000			
Lesotho		1966	2001								2001	11		1998						
Liberia			2003																	
the Libyan Arab Jamahiriya			1971																	
Lithuania			1994			-	1994													
Luxembourg	1928 1	1958 ¹	1958								2001	01								
the former Yugoslav Republic of Macedonia	1991	1991	1991		1991		1	1991 19	1991 19	1991 19	1991 1991	1991	1991							
Madagascar	1960		1971		1964	1966	1971 1	1971												
Malawi		1965	1965				1	1971												
Malaysia		1957	1963		1974															
Mali	1960		1964																	
Malta	1988	1988	1965		1988		1988 1	1988 19	1990	19	1988									
Mauritania	1961		1963																	
Mauritius			1969																	
Mexico	1938	1938		1983		1968					1984	34 1987	7	1990	1992					
the Republic of Moldova			1996		2003	1	1997	1997			2000	00						2002	2000	
Mongolia											1998	86								
Morocco	1956	1956	1958		1974		1	1979 19	1974											
Mozambique			1977																	
Myanmar	1										_									
Namibia																				
Nepal																				

4 P81 P155 (2002)						1999												1998)5							20					
C176 C184 (1995) (2001)						1999							1998	2001	2002									2005							1998 2002				2000	1997
C174 C1 (1993) (19	1997					1							13	2	2										2001						13				2	1
C170 (1990) (1993								2005																						
C167 (1988)						1991																									1993					
C162 (1986)	1999					1992								4	1999			2000					œ				2000				3	2 1992				1990
55 C161 31) (1985)	91				94	82								2004	35			98					1988	25			00 2000				93 1993	92 1992			03	35
C148 C155 (1977) (1981)	1991			1993	1994	1979 1982								2004	1981 1985			1988 1998					1988	2005			2000 2000	1999			1993 1993	1992 1992			2003	1980 1985
C139 C1 (1971) (19			1981	15		1977 19						1976		2(1999 19			13					15				2000	15			1993 19	1992 19				
C136 (1971) (1			1981														1975										2000				1993	1992				1973
C129 (1969)	1973					1971								1995	1983		1975										2000					1992				1971
C127 (1967)	_		1976						1970		_			1973	1985		1975	_								10										1969
C120 (1964)	_		1	4		9 1966			1 1970		7 1967			7 1968	1983			9 1967					8			1966	0		4		1993	2				1 1970
15 C119 50) (1963)			81 1981	1964		61 1969			1971		67 1967			64 1977	94			67 1969					1988				2000		1964		93	1992				1962 1971
C81 (1947) (1960)	_		1981	1979	1960	1949 1961		1953	1958		1967 1967	1960		1995 1964	1962 1994	1976	1973	1998 1967	1980			1998		1982	1978	1962	2000		1961	1965	1993	1992	1985			1960 19
C45 C (1935) (19	1937 ⁴ 19		1976	1	1960 19	1		1938 19	1959 19	1976	1	1945 ³ 19		1957 19	1937 19	1	1	1961	1			1		1	1978 19	1	2000		1961	1965 19	1993	1992 19	1985 19	1960	1936	1958 10
C13 (1921) (1			1934	1961		1929			1970			1		1924			1925	1991								1960	2000				1993	1992				1924
ILO member countries	the Netherlands	New Zealand	Nicaragua	the Niger	Nigeria	Norway	Oman	Pakistan	Panama	Papua New Guinea	Paraguay	Peru	the Philippines	Poland	Portugal	Qatar	Romania	the Russia Federation	Rwanda	Saint Kitts and Nevis	Saint Lucia	Saint Vincent and the Grenadines	San Marino	Sao Tome and Principe	Saudi Arabia	Senegal	Serbia and Montenegro	Seychelles	Sierra Leone	Singapore	Slovakia	Slovenia	Solomon Islands	Somalia	South Africa	Spain

ILO member countries	C13 (1921)	C45 (1935)	C81 (1947)	C115 (1960)	C119 (1963)	C120 (1964)	C127 (1967)	C129 (1969)	C136 (1971) (C139 (1971) (C148 (1977) (C155 (1981) (C161 (1985) (C162 (1986) (C167 (1988) (C170 (1990) (C174 (1993)	C176 (1995)	C184 (2001)	P81 (1995)	P155 (2002)
			1970																		
	1976		1976																		
		1981	1981																		
	1923	1936^6	1949	1961	1964	1965		1970		1975	1978	1982	1986	1987	1991	1992	1994	1997	2004	1997	
Switzerland		1940	1949	1963	1992	1966			1975	1976				1992							
the Syrian Arab Republic		1960	1960	1964	1965	1965		1972	1977	1979											
		1993		1993	1993	1993					1993										
the United Republic of Tanzania		1962	1962								1983					1999				1999	
							1969														
Timor-Leste																					
	1960																				
Trinidad and Tobago																					
	1956	1957	1957		1970	1970	1970														
		1938	1951	1968	1967		1975					2005	2005								
Turkmenistan																					
		1963	1963											1990							
		1961	2004	1968	1970	1968		2004													
the United Arab Emirates			1982																		
the United Kingdom		1936^{1}	1949	1962		1967					1979										
the United States																		2001			
	1933	1954 ²	1973	1992	1977	1995		1973	1977	1980	1988	1988	1988	1995	2005				2005		
Uzbekistan																					
Venezuela	1933	1944	1967			1971	1984			1983		1984									
		1994	1994			1994						1994									
			1976																		
		19644							1973		1980							1999			
Zimbabwe		1980	1993					1993				2003	2003	2003		1998	2003	2003			
Number of Countries ratified Convention or Protocol	62	97	129	47	20	49	25	41	36	35	41	40	22	27	17	11	6	20	ო	10	ю
10000																					

http://www.ilo.org/ilolex/english/newratframeE.htm

1) denounced in 1988 2) in 1978 3) in 1997 4) 1998 5) in 1987 6) in 1967

This report can be accessed through web at: www.ilo.org/public/english/protection/safework/wdcongrs17/intrep.pdf www.ilo.org/safework

