

THE **PREVENTION** OF **OCCUPATIONAL DISEASES**



International
Labour
Organization

2 million
workers
killed
every
year



**World Day for safety
and health at work**
28 April 2013


SafeWork

 **issa**

SUPPORTED BY THE INTERNATIONAL
SOCIAL SECURITY ASSOCIATION

THE PREVENTION_{OF} OCCUPATIONAL DISEASES

World Day for safety
and health at work
28 April 2013

Copyright © International Labour Organization 2013
First published 2013

ISBN 978-92-2-127446-9 (print)
ISBN 978-92-2-127447-6 (web)

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 ILO Publications (Rights and Permissions), International Labour Office, CH-1211 Geneva 22, Switzerland, or by email: pubdroit@ilo.org. The International Labour Office welcomes such applications.

Libraries, institutions and other users registered with reproduction rights organizations may make copies in accordance with the licences issued to them for this purpose. Visit www.ifro.org to find the reproduction rights organization in your country.

Also available in French: *La prévention des maladies professionnelles*, ISBN: 978-92-2-227446-8 (print), ISBN 978-92-2-227447-5 (web) Geneva, 2013; and in Spanish: *La prevención de enfermedades profesionales*, ISBN: 978-92-2-327446-7 (print), ISBN 978-92-2-327447-4 (web) Geneva, 2013.

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 and electronic products 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

Designed in Switzerland
Photocomposed in Switzerland
Printed in Switzerland

DTP/ILO
SCR
ATA



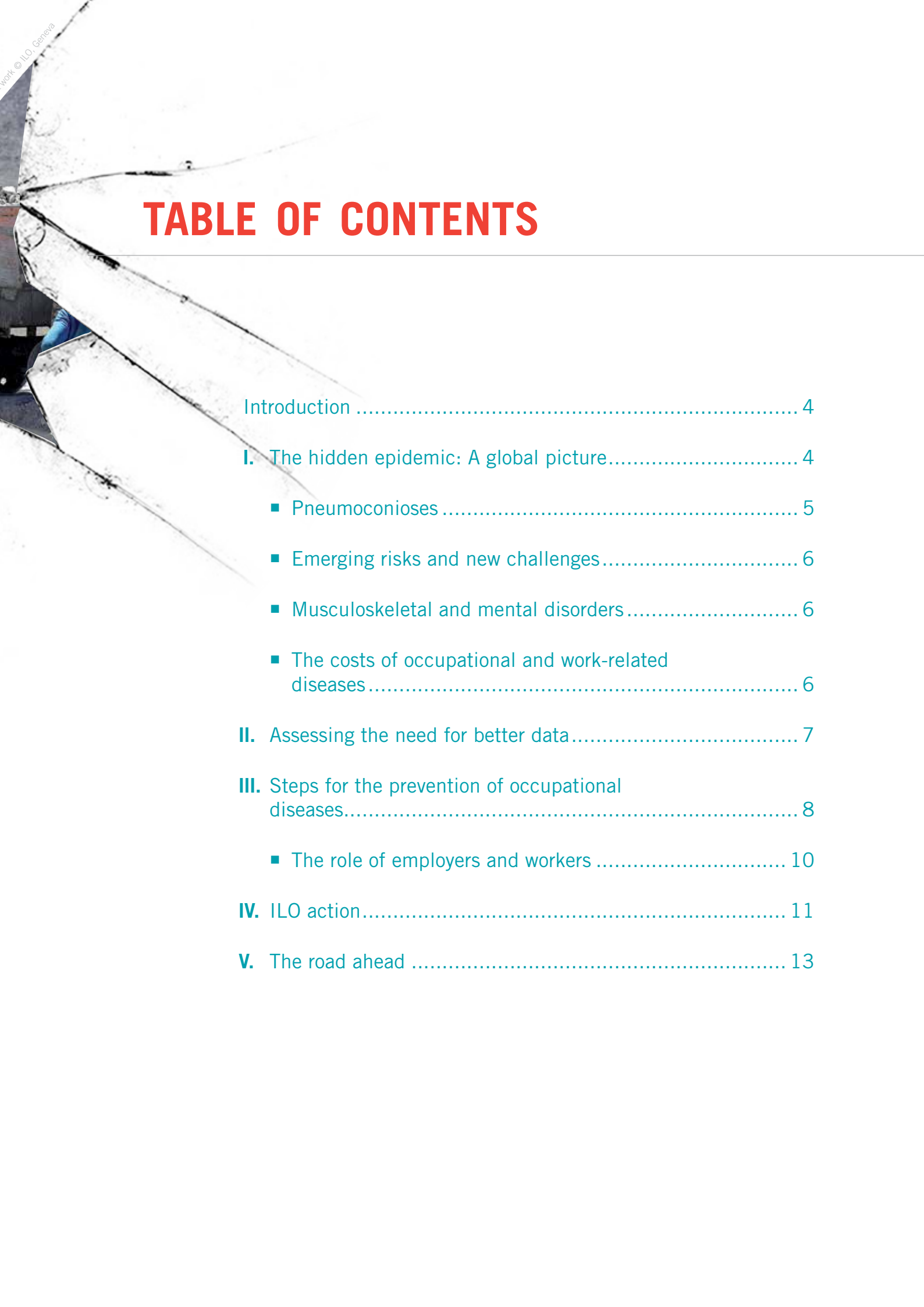


TABLE OF CONTENTS

- Introduction 4
- I. The hidden epidemic: A global picture..... 4
 - Pneumoconioses 5
 - Emerging risks and new challenges..... 6
 - Musculoskeletal and mental disorders 6
 - The costs of occupational and work-related diseases..... 6
- II. Assessing the need for better data 7
- III. Steps for the prevention of occupational diseases..... 8
 - The role of employers and workers 10
- IV. ILO action..... 11
- V. The road ahead 13

INTRODUCTION

Occupational diseases cause huge suffering and loss in the world of work. Yet, occupational or work-related diseases remain largely invisible in comparison to industrial accidents, even though they kill six times as many people each year. Furthermore, the nature of occupational diseases is altering rapidly: technological and social changes, along with global economic conditions, are aggravating existing health hazards and creating new ones. Well-known occupational diseases, such as pneumoconioses, remain widespread, while relatively new occupational diseases, such as mental and musculoskeletal disorders (MSDs), are on the rise.

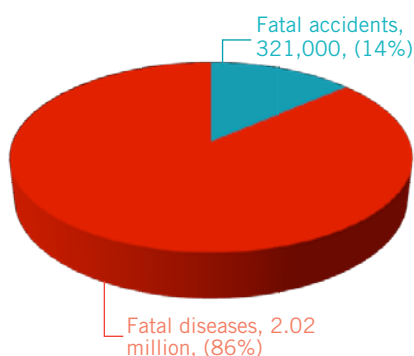
WHAT CONSTITUTES AN OCCUPATIONAL DISEASE?

An occupational disease is a disease contracted as a result of an exposure to risk factors arising from work. Recognition of the occupational origin of a disease, at the individual level, requires the establishment of a causal relationship between the disease and the exposure of the worker to certain hazardous agents at the workplace. This relationship is normally established on the basis of clinical and pathological data, occupational history (anamnesis) and job analysis, identification and evaluation of occupational hazards as well as exposure verification. When a disease is clinically diagnosed and a causal link is established, the disease is then recognized as occupational.

While much progress has been made in addressing the challenges of occupational diseases, there is an urgent need to strengthen the capacity for their prevention in national OSH systems. With the collaborative effort of governments and employers' and workers' organizations, the fight against this hidden epidemic will have to feature prominently in new global and national agendas for safety and health. This report for the World Day for Safety and Health at Work outlines the current situation concerning occupational diseases and presents proposals for addressing this serious Decent Work deficit.

I. THE HIDDEN EPIDEMIC: A GLOBAL PICTURE

FATAL ACCIDENTS AND DISEASES (2008)



Total number of fatalities: 2.34 million

An estimated 2.34 million people die each year from work-related accidents and diseases. Of these, the vast majority -an estimated 2.02 million- die from a wide range of work-related diseases. Of the estimated 6,300 work-related deaths that occur every day, 5,500 are caused by various types of work-related diseases. The ILO also estimates that 160 million cases of non-fatal work-related diseases occur annually.¹

The types and trends of reported diseases vary widely. For example, in 2010, China reported a total of 27,240 cases of occupational diseases, including 23,812 caused by exposure to workplace dusts.² In the same year, 22,013 cases of occupational diseases were reported in Argentina, with musculoskeletal disorders (MSDs) and respiratory diseases among the most frequent conditions.³ In 2011, Japan reported a total of 7,779 cases of occupational diseases mainly related to low-back disorders and pneumoconioses⁴ and compensated 325 cases of mental disorders.⁵ In the United Kingdom, 5,920 cases of occupational diseases were compensated



in 2011, with pneumoconiosis, diffuse mesothelioma and osteoarthritis as the three most common diseases.⁶ The US Bureau of Labor Statistics reported that 207,500 workers experienced non-fatal occupational diseases in 2011; skin diseases, hearing loss and respiratory conditions were the three most prevalent health impairments.⁷

Pneumoconioses

Millions of workers continue to be at risk of pneumoconioses (especially silicosis, coal-worker's pneumoconiosis, and asbestos-related diseases) due to widespread exposures to silica, coal, asbestos and various mineral dusts in mining, quarrying, construction and other manufacturing processes. Pneumoconioses have long latency periods and can often go undiagnosed and unreported. Their associated illnesses (chronic obstructive pulmonary disease, silico-tuberculosis,

silica- and asbestos-related cancers) often cause permanent disability or premature death. In China, pneumoconioses make up more than 80% of all cases; in recent years, between 10,000 and 23,000 new cases have been registered annually. In India, about 10 million workers employed in mining, construction and various industries are exposed to silica dusts; some studies show that silicosis prevalence rates are 54.6% among slate pencil workers and 35.2% among stonecutters, while the coal-worker's pneumoconiosis (CWP) prevalence rate is 18.8%. In Viet Nam, pneumoconioses account for 75.7% of all compensated occupational diseases. Brazil estimates that 6.6 million of its workers are exposed to silica dusts. Studies in Latin America revealed a 37% prevalence rate of silicosis among miners and 50% among miners over the age of 50. Epidemiological studies in developing countries show that between 30% and 50% of workers in primary industries and high-risk sectors may suffer from silicosis and other pneumoconioses.⁸

Even a brief listing of reported cases of occupational diseases, as the one above, provides a stark picture of the magnitude of the problem. Nevertheless, increases in occupational disease statistics do not necessarily imply a real increase in cases. The rise in numbers could also be due to several positive factors, such as better systems for recording and notification, improved health surveillance, recognition and compensation mechanisms, changes in work processes and organization, growing workers' and employers' awareness of occupational diseases, broadening of the definition of occupational diseases and manifestation of long-latency diseases.

ASBESTOS-RELATED DISEASES

Until the 1970s, asbestos was widely used in many industries across different countries to insulate pipes, boilers and ships, make brakes, strengthen cement and fireproof many materials. People who worked with asbestos during that time are now at risk of developing an asbestos-related disease (ARD), such as asbestosis, asbestos-related lung cancer and mesothelioma. It generally takes from ten to 40 years for ARDs to develop after exposure. Thus, even in countries where a prohibition on the use of asbestos is already in force, people will still be developing ARDs for decades to come.

Despite bans on the use of asbestos in more than 50 countries, including all Member States of the EU, 2 million metric tons of asbestos are produced every year. Today, asbestos is mainly used in the developing world where preventive capacities, health surveillance, and compensation mechanisms are inadequate, and ARDs are poorly recognized and rarely reported. As an indication of the magnitude of the problem, estimates from six countries in western Europe (France, Germany, Italy, Netherlands, Switzerland, the United Kingdom), show a cumulative figure of 200,000 mesothelioma deaths to be expected over the period 1995–2029.¹ When these figures are extrapolated to the whole of Western Europe and expected deaths from asbestos-related lung cancer are added, around 500,000 deaths will be caused by asbestos by 2029.²

¹Peto, J. et al. 1999.

"The European mesothelioma epidemic", *British Journal of Cancer*, Vol. 79, No. 3/4, pp. 666-672.

²Huré P. Respiratory diseases linked to exposure to products such as asbestos: Are preventive measures sufficient? P.4 <http://www.issa.int/pdf/prevention/2hure.pdf> [accessed 24 Jan. 2013]

Emerging risks and new challenges

Technological, social and organizational changes in the workplace brought about by rapid globalization have been accompanied by emerging risks and new challenges. Though some traditional risks have declined due to improved safety, technological advances and better regulation, they continue to take an unacceptably heavy toll on workers' health. In parallel, new forms of occupational disease are increasing without adequate preventive, protective and control measures; for example, new technologies, such as nanotechnologies and certain biotechnologies pose new and unidentified hazards in the workplace. Emerging risks include poor ergonomic conditions, exposure to electromagnetic radiation, and psychosocial risks.⁹

Musculoskeletal and mental disorders

Across the 27 EU Member States, MSDs represent the most common work-related health disorders.¹⁰ MSDs including carpal tunnel syndrome represented 59% of all recognized diseases covered by the European Occupational Diseases Statistics in 2005.¹¹ In 2009, the World Health Organization (WHO) reported that MSDs accounted for more than 10% of all years lost to disability.¹² In the Republic of Korea, MSDs sharply increased from 1,634 cases in 2001 to 5,502 in 2010.¹³ In Great Britain, MSDs made up about 40% of all cases of work-related diseases for the period 2011–12.¹⁴

Work-related stress and its health consequences have emerged as a matter of great concern. Enterprises are increasingly confronted with psychological harassment, mobbing, bullying, sexual harassment and other forms of violence. Workers may turn to unhealthy behaviours, such as the abuse of alcohol and drugs, in an attempt to cope with stress. Links have been found between stress and musculoskeletal, heart and digestive conditions. If prolonged, work-related stress can contribute to serious cardiovascular disorders. Moreover, the economic crisis and recession have led to an increase in work-related stress, anxiety, depression and other mental disorders, even bringing people to the extreme of suicide.

The costs of occupational and work-related diseases

Occupational diseases also impose enormous costs. They can impoverish workers and their families, reduce productivity and work capacity and dramatically increase health care expenditures. The ILO estimates that work-related accidents and diseases result in an annual 4% loss in global gross domestic product (GDP), or about US\$2.8 trillion, in direct and indirect costs of injuries and diseases.¹⁵ The cost of work-related diseases in the EU has been estimated to be at least €145 billion per year.¹⁶ The French government estimates that compensation for ARD for the period 2001–20 will be between €27 and 37 billion, which is equivalent to €1.3 and €1.9 billion per year. In



the United States, insurance companies reportedly paid US\$21.6 billion for asbestos-exposure cases for the period 1990–2000, in addition to the US\$32 billion paid out by prosecuted enterprises.¹⁷ In the Republic of Korea, the total economic cost of MSDs was \$6.89 billion, representing 0.7% of the country's GDP in 2011.¹⁸ MSDs are estimated to cost New Zealand's health-care system over \$4.71 billion per year and constitute about a quarter of the total annual health-care costs.¹⁹

II. ASSESSING THE NEED FOR BETTER DATA

Good data provide a basis for designing an effective prevention strategy. Data are mainly obtained through three channels: reporting by employers to labour ministries in accordance with legal requirements, claims accepted by employment injury compensation schemes, and information from medical practitioners. The regular monitoring of the working environment and health surveillance of workers enables employers to prevent and report cases of occupational diseases.

Yet, globally, more than half of all countries still do not collect adequate statistics for occupational diseases. Available data concern mainly injuries and fatalities. Furthermore, only a few countries collect sex-disaggregated data. This does not only make the identification of the specific type of occupational injuries and diseases of men and women more difficult but also hinders the development of effective preventive measures for all.

Official national statistics are based on reported data on occupational accidents and diseases. Many countries in the world have social security systems that include employment injury benefit schemes. However, their coverage is limited to workers in the formal economy; even there, an effective coverage on employment injury benefits is lacking due to inadequate recording and notification systems. Therefore, only a certain number of occupational accidents are reported, treated, and compensated. The situation concerning occupational diseases is even more complicated: in most countries, in fact, only a fraction of the actual cases are covered, which reflects the challenges of defining, recognizing and reporting them.

Meanwhile, rural workers, workers in small and medium-sized enterprises (SMEs) and in the informal economy – representing the vast majority of the global workforce – are likely to face high levels of risk because they tend to be outside of the systems that prevent, report and compensate occupational diseases. The intensification of migration flows, the ageing of the workforce and the increasing numbers of workers in temporary, casual or part-time work, do not only increase the willingness to accept unsafe working conditions but also impede adequate health surveillance, monitoring of the working environment, recording and notification of occupational diseases, which are required for the effective implementation of preventive strategies.

There are a number of other factors that contribute to this situation. Many occupational diseases, such as occupational or work-related cancers, are

characterized by long latency periods and are, therefore, difficult to recognize until the clinical manifestation of their symptoms. The increased movement of workers to different jobs with various levels of exposure, along with the occurrence of workplace and non-workplace factors in the emergence of a disease, can make it hard to determine an occupational origin. Additionally, some workers may contract a disease in jobs involving exposure to substances that have not yet been identified as hazardous. Diseases are diagnosed by medical doctors and their attribution to work has to be assessed for recognition of their occupational origin. Diagnosis of occupational diseases requires specific knowledge and experience that are not adequately available in many developing countries. This constrains data collection and national capacity in occupational health surveillance. Moreover, in some countries, responsibility for health and safety at work may be split between labour and health ministries and social security institutions, rendering data collection difficult.

As an alternative to obtain data on occupational diseases, some countries use surveys. For example, according to the 2007 Labour Force Survey (LFS) carried out in the 27 EU countries, 8.6% of the persons aged 15 to 64 that work or worked previously reported a work-related health problem in the past 12 months. This corresponded to approximately 23 million persons. Furthermore, 2.1% of the respondents had two or more work-related health problems in 2007.²⁰ Data from the UK Health and Safety Executive for 2011–12 showed that in Great Britain a total of 1,073,000 cases of self-reported diseases were caused or made worse by work; of these, 439,000 were cases of MSDs and 428,000 were related to stress, depression and anxiety.²¹

III. STEPS FOR THE PREVENTION OF OCCUPATIONAL DISEASES

Many governments and employers' and workers' organizations are placing now greater emphasis on the prevention of occupational diseases. Even so, prevention is not receiving the priority warranted by the scale and severity of the occupational disease epidemic.

Concerted efforts are needed at international and national levels to tackle the "invisibility" of occupational diseases and to correct this Decent Work deficit. Effective prevention of occupational diseases requires the continuous improvement of national OSH systems, inspection and prevention programmes and compensation systems in all ILO member States, preferably as a collaborative effort of government and employers' and workers' organizations. This should feed into awareness and advocacy programmes, including global and national campaigns, for an improved understanding of the magnitude of the problem and the need for urgent action by all stakeholders, including decision-makers, high-level officials of government authorities, social security institutions, employers and workers and their organizations, labour inspectors and OSH professionals. Greater efforts are also required to compile relevant data to improve preventive strategies for occupational diseases. Their effective prevention requires collaboration at the national level between OSH institutions



and employment compensation schemes within social security systems. Where preventive capacity is weak, especially in developing countries, the ILO has the tools and the experience to help forge a response. Where we know the risks, we can act. Where we need to know more about risks, we can improve our competences.

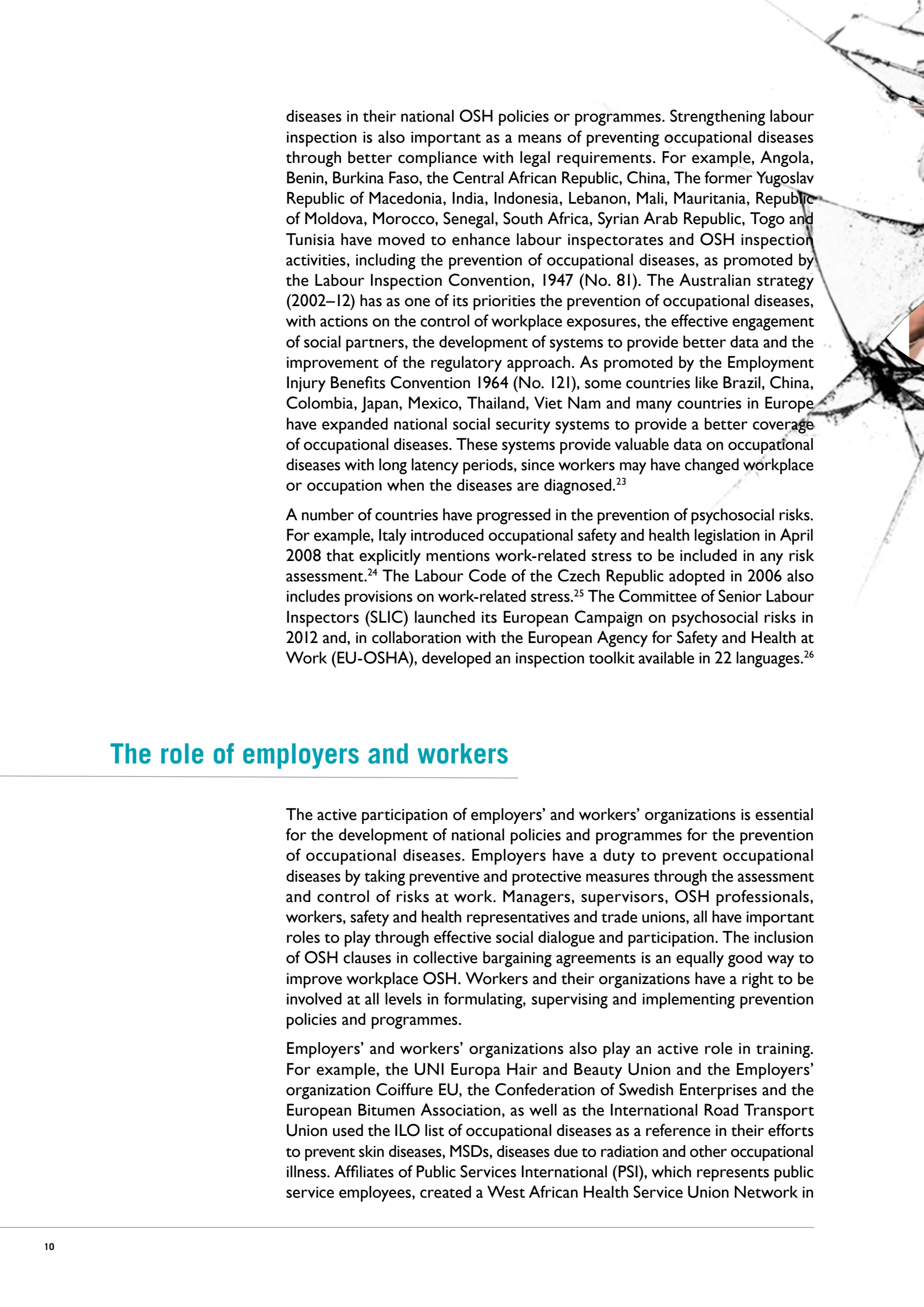
A good national OSH system is critical for the effective implementation of national policies and programmes to strengthen the prevention of occupational diseases; it should include:

- laws and regulations and, where appropriate, collective agreements incorporating the prevention of occupational diseases;
- law compliance mechanisms, including effective OSH inspection systems;
- cooperation between management and workers and their representatives in the implementation of OSH measures;
- provision of occupational health services;
- adequate mechanisms for the collection and analysis of data on occupational diseases;
- OSH information and training; and
- collaboration between ministries of labour, ministries of health and social security schemes covering occupational injuries and diseases.

Linking *health surveillance* to the monitoring of the working environment helps determine workers' exposure to health hazards and whether a particular disease contracted by workers is related to the work they perform; it also contributes to preventing recurrence of the disease among other workers. Although the primary purpose of health surveillance is the early detection of the health impact and triggering action for prevention, it also facilitates the recognition of occupational diseases with long latency. According to the Occupational Health Services Convention, 1985 (No. 161), a good national system of occupational health services is crucial to assist employers in organizing proper health surveillance for their workers. A requirement for physicians to inform OSH inspectorates or other responsible authorities about suspected occupational diseases enables the adequate collection of information complementing the channels mentioned above.

As it takes time before there is sufficient knowledge and experience to set up well-defined diagnostic criteria for new diseases and to conclude on their aetiology, a system to monitor diseases suspected of being occupational in origin (sentinel events) provides a major contribution to developing awareness of the risks involved in work and stimulating preventive strategies. A number of countries, such as Denmark, Finland, Germany, New Zealand, South Africa and the United States, collect information on suspected occupational diseases. Recording of disorders suspected of being occupational in origin is particularly meaningful in light of the changing patterns of work and technologies. Recognition that a disease is occupational in origin (whether wholly or in part) strengthens health surveillance provisions and raises awareness of appropriate preventive measures.²²

Argentina, China, Finland, Malaysia, Portugal, Thailand, the United Kingdom and Viet Nam have established national OSH programmes with prevention of occupational diseases as a priority. India, Lao PDR, Papua New Guinea and South Africa have gone a step further by including the prevention of occupational



diseases in their national OSH policies or programmes. Strengthening labour inspection is also important as a means of preventing occupational diseases through better compliance with legal requirements. For example, Angola, Benin, Burkina Faso, the Central African Republic, China, The former Yugoslav Republic of Macedonia, India, Indonesia, Lebanon, Mali, Mauritania, Republic of Moldova, Morocco, Senegal, South Africa, Syrian Arab Republic, Togo and Tunisia have moved to enhance labour inspectorates and OSH inspection activities, including the prevention of occupational diseases, as promoted by the Labour Inspection Convention, 1947 (No. 81). The Australian strategy (2002–12) has as one of its priorities the prevention of occupational diseases, with actions on the control of workplace exposures, the effective engagement of social partners, the development of systems to provide better data and the improvement of the regulatory approach. As promoted by the Employment Injury Benefits Convention 1964 (No. 121), some countries like Brazil, China, Colombia, Japan, Mexico, Thailand, Viet Nam and many countries in Europe have expanded national social security systems to provide a better coverage of occupational diseases. These systems provide valuable data on occupational diseases with long latency periods, since workers may have changed workplace or occupation when the diseases are diagnosed.²³

A number of countries have progressed in the prevention of psychosocial risks. For example, Italy introduced occupational safety and health legislation in April 2008 that explicitly mentions work-related stress to be included in any risk assessment.²⁴ The Labour Code of the Czech Republic adopted in 2006 also includes provisions on work-related stress.²⁵ The Committee of Senior Labour Inspectors (SLIC) launched its European Campaign on psychosocial risks in 2012 and, in collaboration with the European Agency for Safety and Health at Work (EU-OSHA), developed an inspection toolkit available in 22 languages.²⁶

The role of employers and workers

The active participation of employers' and workers' organizations is essential for the development of national policies and programmes for the prevention of occupational diseases. Employers have a duty to prevent occupational diseases by taking preventive and protective measures through the assessment and control of risks at work. Managers, supervisors, OSH professionals, workers, safety and health representatives and trade unions, all have important roles to play through effective social dialogue and participation. The inclusion of OSH clauses in collective bargaining agreements is an equally good way to improve workplace OSH. Workers and their organizations have a right to be involved at all levels in formulating, supervising and implementing prevention policies and programmes.

Employers' and workers' organizations also play an active role in training. For example, the UNI Europa Hair and Beauty Union and the Employers' organization Coiffure EU, the Confederation of Swedish Enterprises and the European Bitumen Association, as well as the International Road Transport Union used the ILO list of occupational diseases as a reference in their efforts to prevent skin diseases, MSDs, diseases due to radiation and other occupational illness. Affiliates of Public Services International (PSI), which represents public service employees, created a West African Health Service Union Network in



Nigeria, Ghana, Liberia and Sierra Leone that has successfully promoted some 50 OSH workplace policies in the region. A number of employers' organizations arrange training for their affiliates on the prevention of occupational diseases. Some workers' organizations prepare and distribute training materials. PSI has created a user-friendly database of labour standards on OSH issues.²⁷

IV. ILO ACTION

Guidance for integrating prevention into national OSH programmes and strategies can be found in the Occupational Safety and Health Convention, 1981 (No. 155), the Occupational Health Services Convention, 1985 (No. 161), and the Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187). A 2009 ILO General Survey on Convention No. 155 showed that a significant number of countries, particularly in the developing world, were updating national OSH policies, as well as improving regulatory and enforcement systems, which are key for the prevention of occupational diseases. Others were targeting emerging issues, such as work-related stress and MSDs, providing assistance to SMEs and engaging in the promotion of best practices on OSH that can also support prevention strategies.²⁸

The increasing number of ratifications of these ILO Conventions provides a good indicator of this growing commitment. Since 2000, a total of 13 countries (Antigua and Barbuda, Belgium, Bulgaria, Colombia, Luxembourg, Montenegro, Niger, Poland, Serbia, Seychelles, Turkey, Ukraine and Zimbabwe) have ratified Convention No. 161, representing more than a third of all ratifications since it was adopted in 1985. Since the ILO's Governing Body adopted a Plan of Action to promote the effective implementation and ratification of OSH instruments in 2010,²⁹ an additional 17 countries have ratified Convention No. 155 as well as its 2002 Protocol, 25 countries have ratified Convention No. 187 and 18 countries have ratified other up-to-date OSH Conventions.

Most ILO member States have signed on to the Decent Work Agenda and are implementing Decent Work Country Programmes, many of which emphasize the need for enhancing occupational safety and health. To support them in this area, the ILO has developed many technical tools to strengthen national health surveillance systems, improve diagnostic criteria the recording and reporting of occupational diseases and working conditions through preventive and control measures. Some of these include, the ILO Code of practice on *Recording and notification of occupational accidents and diseases*,³⁰ the *Technical and ethical guidelines for workers' health surveillance*,³¹ the *Guidelines for the use of the ILO International Classification of Radiographs of Pneumoconioses*,³² the *Approaches to attribution of detrimental health effects to occupational ionizing radiation exposure and their application in compensation programmes for cancer*,³³ the manual on *stress prevention at work checkpoints*³⁴ and the training package *SOLVE: Integrating health promotion into workplace OSH policies*.³⁵ Guidelines on diagnostic criteria and on recording and reporting of occupational diseases are also being developed in collaboration with the WHO, professional bodies and employers' and workers' organizations.

As part of the efforts by the ILO to implement the Global Programme on Elimination of Silicosis, training with the ILO Classification of Radiographs of Pneumoconioses has been organized in Brazil, Chile, India, Indonesia, Malaysia, Peru, Thailand, Turkey and Viet Nam to increase the knowledge and skills of specialists in the early detection and recognition of pneumoconioses. The ILO Classification was first published in 1930 and has been revised several times, providing an up-to-date global reference in the classification of pneumoconioses. Special emphasis has been placed on national programmes for the elimination of silicosis and ARDs.

A national list of occupational diseases together with a set of well-established diagnostic criteria can facilitate the recognition and compensation of occupational diseases. To keep abreast with international development and meet the increased demand for an international reference reflecting the situation of today's world of work, the ILO revises periodically its list of occupational diseases annexed to the Recommendation on the list of occupational diseases No. 194. This list facilitates the identification of suspected occupational diseases and helps countries in preventing, reporting, recording and compensating affected workers. A regular review and update process is of particular value. The "open items" in the list, which provide for recognition of new diseases, rely on an active contribution of hygienists and physicians as well as employers, workers and government authorities. The 2010 list includes mental and behavioural disorders, including post-traumatic stress disorders, which gives for the first time the possibility for other such diseases to be recognized as occupational if a direct link is established scientifically, or determined by methods appropriate to national conditions and practice between the exposure to risk factors at the workplace and mental disorders.

The ILO has provided assistance in shaping and updating national lists of occupational diseases to governments and employers' and workers' organizations in Belgium, Canada, China, Egypt, Germany, Grenada, India, Italy, Mexico and the United Kingdom, and at the regional level to the EU and the Caribbean Community, through technical advisory and consultation services.

To support member States meet the new challenges of a changing world of work, the ILO designed the SOLVE training package for the prevention of psychosocial risks and the promotion of health and well-being at work with the aim of integrating workplace health promotion into OSH policies. SOLVE advocates for a comprehensive OSH management system which ensures the assessment and control of psychosocial risks as part of risk management.

In order to tackle this Decent Work deficit the ILO will continue to:

- promote the ratification and implementation of ILO Conventions related to occupational diseases;
- strengthen international alliances for the prevention of occupational diseases with other institutions, such as WHO, the International Commission on Occupational Health, the International Association of Labour Inspection and the International Social Security Association;
- support member States' efforts to strengthen their capacities for the prevention and recognition of occupational diseases; and
- encourage the exchange of good practices for the prevention of occupational diseases at national and international levels.

V. THE ROAD AHEAD

The fight against occupational diseases is at a critical point. Though important steps have been taken at national and international levels to address occupational diseases, new hazards are constantly emerging, driven by both technological and social changes, and exacerbated by the global economic crisis. In addition to existing hazards, today's world of work is fraught with new threats, such as increasing mental health disorders and MSDs. Millions of workers are exposed to hazardous working conditions without recourse to any system of protection. As awareness grows, more urgent and vigorous action is needed to identify the extent of the challenge of occupational diseases and prevent them from taking their toll. What is needed is a comprehensive "paradigm of prevention" that focuses on occupational diseases and not only on injuries. This new paradigm must underscore a set of principles: that just because the problem is difficult to tackle, it cannot be ignored; that the recognition, prevention and treatment of occupational diseases as well as the improvement of recording and notification systems must be high priorities; that enhancing national safety and health programmes is essential to the health of both individuals and the societies they live in.

Prevention is key since it not only protects the lives and livelihoods of workers and their families but also contributes to ensuring economic and social development. Concerted efforts are needed at international and national levels to raise awareness about occupational diseases and to tackle once and for all the Decent Work deficits that are their root causes. The establishment of a preventative safety and health culture requires social dialogue between governments, workers' and employers' organizations, increase sharing of knowledge, and adequate resources. In order to strengthen national OSH systems' capacity for dealing effectively with the prevention of occupational diseases, it is necessary to:

- improve the collaboration of OSH and social security institutions in dealing with prevention, early detection, treatment and compensation of occupational diseases;
- integrate the prevention of occupational diseases into labour inspection programmes, in particular in hazardous sectors, such as mining, construction and agriculture;
- strengthen employment compensation schemes in national social security systems to adequately deal with the recognition, treatment and compensation of occupational diseases;
- improve the capacity of occupational health services for health surveillance, monitoring of the working environment and implementation of preventive measures;
- update national lists of occupational diseases taking into account the ILO list;
- reinforce social dialogue at national, sectoral and workplace levels among governments, employers and workers and their organizations on issues related to OSH.

The burden of occupational diseases concerns everyone, everywhere, from factories to farms, from offices to oilrigs, in workplaces and communities. No

one is immune. There is consensus that prevention is more effective and less costly than treatment and rehabilitation. As highlighted above, stakeholders in the world of work should not wait any longer and take concrete steps. Now is the time to launch a major new global effort and intensify the national and international response to the occupational disease epidemic so that the health and lives of workers can be protected.

Notes

1. International Labour Office (ILO). 2011. *ILO introductory report: global trends and challenges on occupational safety and health*, Report, XIX World Congress on Safety and Health at Work, Istanbul, 2011 (Geneva). Available at: www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/publication/wcms_162662.pdf [10 Jan. 2013].
2. National Institute of Occupational Health and Poison Control of China. *Country report on occupational diseases 2010 (2011)*. Available at: 211.153.22.248/Contents/Channel_23/2011/1227/16777/content_16777.htm [24 Jan. 2013].
3. Superintendencia de Riesgos del Trabajo, Argentina. 2009. *Anuario Estadístico de Siniestralidad 2010*. Available at: www.sometracomahue.org.ar/sitio/descarga/AnuarioSRT2010/SRTanuario2010.pdf [28 Jan. 2013].
4. Ministry of Health, Labour and Welfare, Japan. 2011. Survey of work-related diseases. Available at: www.mhlw.go.jp/bunya/roudoukijun/anzeneisei11/h23.html [4 Mar. 2013].
5. Ministry of Health, Labour and Welfare, Japan. 2012. Occupational disease recognition of mental disorders. Available at: www.mhlw.go.jp/bunya/roudoukijun/gyomu.html [4 Mar. 2013].
6. Department for Work and Pension, United Kingdom. 2012. *Industrial Injury first diagnosed prescribed diseases all assessments resulting in payment in the quarter by type of disease*. Available at: statistics.dwp.gov.uk/asd/asd1/iidb/iidb_quarterly_mar12.xls [23 Jan. 2013].
7. Bureau of Labor Statistics, United States Department of Labor. 2012. *Incidence rates and numbers of nonfatal occupational illnesses by major industry sector, category of illness, and ownership, 2011*. Available at: www.bls.gov/news.release/osh.t06.htm [24 Jan. 2013].
8. Fedotov, I.; Eijkeman, G. 2013. The ILO/WHO Global Programme for the Elimination of Silicosis, in *GOHNET Newsletter*, No. 12. Available At: www.who.int/occupational_health/publications/newsletter/gohnet12eref.pdf [31 Jan. 2013].
9. For a more complete report on new forms of occupational disease see “International Labour Office (ILO). 2010. Emerging risks and new patterns of prevention in a changing world of work (Geneva, International Labour Office). Available at: www.ilo.org/safework/info/video/WCMS_123653/lang-en/index.htm” [10 Jan. 2013].
10. Eurostat. 2010. Health and safety at work in Europe (1999-2007) – A statistical portrait (Luxembourg, Office for Official Publications of the European Communities). Available at: http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-31-09-290/EN/KS-31-09-290-EN.PDF [23 Jan. 2013].
11. European Agency for Safety and Health at Work. 2010. Annex to Report: Work-related musculoskeletal disorders – Facts and figures (Luxembourg, Office for Official Publications of the European Communities). Available at: <https://osha.europa.eu/en/resources/tero09009enc-resources/europe.pdf> [28 Jan. 2013].
12. World Health Organization (WHO). 2009. *Estimated total DALYs ('000), by cause and WHO Member State, 2004 (a, m)*. Available at: http://www.who.int/entity/healthinfo/global_burden_disease/gbddeathtotalcountryestimates2004.xls [4 Feb. 2013].
13. Ministry of Employment and Labour, the Republic of Korea. *Statistics of occupational injuries and disease, 2001-2011*. Available at: <http://www.kosha.or.kr/www/boardView.do?contentId=340893&menuId=554&boardType=A2> [11 Jan. 2013].
14. Health & Safety Executive (HSE). 2012. *Musculoskeletal disorders*. Available at: www.hse.gov.uk/statistics/causdis/musculoskeletal/msd.pdf [4 Feb. 2013].
15. Based on the world GDP of 2012.
16. European Agency for Safety and Health at Work. 2009. Outlook 1 – *New and emerging risks in occupational safety and health - Annexes* (Luxembourg, Office for Official Publications of the European Communities). Available at: osha.europa.eu/en/publications/outlook/new-and-emerging-risks-in-occupational-safety-and-health-annexes [28 Jan. 2013].
17. Huré P. Respiratory diseases linked to exposure to products such as asbestos: Are preventive measures sufficient? P.4 <http://www.issa.int/pdf/prevention/2hure.pdf> [accessed 24 Jan. 2013]
18. Oh, I.; Yoon, S.; Seo, H.; Kim, E.; Kim, Y. 2011. The economic burden of musculoskeletal disease in Korea: A cross sectional study, in *BMC Musculoskeletal Disorders*, Vol. 12, No. 157, pp. 1-9. Available at: www.biomedcentral.com/content/pdf/1471-2474-12-157.pdf [4 Feb. 2013].
19. Bossley, C. J.; Miles, K. B. 2009. *Musculo-Skeletal Conditions In New Zealand 'The Crippling Burden'*. Available at: www.physiotherapy.org.nz/Folder?Action=Download&Folder_id=119&File=BJD%20Publication%202009.pdf [4 Feb. 2013].
20. Eurostat. 2010. Health and safety at work in Europe (1999-2007) – A statistical portrait (Luxembourg, Office for Official Publications of the European Communities). Available at: epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-31-09-290/EN/KS-31-09-290-EN.PDF [23 Jan. 2013].
21. Health and Safety Executive (HSE). 2012. Annual Statistics Report 2011/12. Available at: <http://www.hse.gov.uk/statistics/overall/hssh1112.pdf> [23 Jan. 2013].
22. International Labour Office (ILO). 2013. GB.317/POL/3 *Prevention of occupational diseases*, Report, 317th Session of the Governing Body, Geneva, 2013 (Geneva). Available at: www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_204755.pdf [date].

- 23 International Labour Office (ILO). 2013. GB.317/POL/3 *Prevention of occupational diseases*, Report, 317th Session of the Governing Body, Geneva, 2013 (Geneva). Available at: www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_204755.pdf [date].
- 24 Government of Italy. 2008. Italian Legislative Decree no. 81 of 9 April 2008. Safety Consolidation Act, Implementation of Article 1 of Law no. 123 of 3 August 2007 on the protection of health and safety at work. *Official Journal of the Italian Republic*, No. 101, Ordinary Supplement. Available At: <http://www.parlamento.it/parlam/leggi/deleghe/08081dl.htm> [31 Jan. 2013].
- 25 Government of the Czech Republic. 2006. *Labour Code*, No. 262/2006 Coll „Zákoník práce“. Available at: www.mpsv.cz/files/clanky/3221/Labour_Code_2012.pdf.
- 26 International Labour Office (ILO). 2013. GB.317/POL/3 *Prevention of occupational diseases*, Report, 317th Session of the Governing Body, Geneva, 2013 (Geneva). Available at: www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_204755.pdf.
- 27 International Labour Office (ILO). 2013. GB.317/POL/3 *Prevention of occupational diseases*, Report, 317th Session of the Governing Body, Geneva, 2013 (Geneva). Available at: www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_204755.pdf.
- 28 International Labour Office (ILO). 2009. *General Survey concerning the Occupational Safety and Health Convention, 1981 (No. 155), the Occupational Safety and Health Recommendation, 1981 (No. 164), and the Protocol of 2002 to the Occupational Safety and Health Convention, 1981*, Report III (Part 1 B), 98th Session of the Governing Body, Geneva, 2009 (Geneva). Available at: www.ilo.org/ilc/ILCSessions/98thSession/ReportsubmittedtotheConference/WCMS_103485/lang--en/index.htm.
- 29 International Labour Office (ILO). 2010. *Plan of action (2010-2016) to achieve widespread ratification and effective implementation of the occupational safety and health instruments (Convention No. 155, its 2002 Protocol and Convention No. 187)*, 307th Session of the Governing Body, Geneva, 2010 (Geneva). Available at: http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---normes/documents/policy/wcms_125616.pdf.
- 30 International Labour Office (ILO). 1996. *Recording and notification of occupational accidents and diseases. An ILO code of practice* (Geneva, International Labour Office). Available at: www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/normativeinstrument/wcms_107800.pdf.
- 31 International Labour Office (ILO). 1998. *Technical and ethical guidelines for workers' health surveillance (OSH 72)* (Geneva, International Labour Office). Available at: www.ilo.org/global/publications/ilo-bookstore/order-online/books/WCMS_PUBL_9221108287_EN/lang--en/index.htm.
- 32 International Labour Office (ILO). 2011. *ILO International Classification of Radiographs of Pneumoconioses*. Available at: www.ilo.org/safework/info/WCMS_108548/lang--en/index.htm [28 Jan. 2013].
- 33 International Atomic Energy Agency; International Labour Organization; World Health Organization. 2010. *Approaches to attribution of detrimental health effects to occupational ionizing radiation exposure and their application in compensation programmes for cancer: A practical guide*, Occupational Safety and Health Series, No. 73 (Geneva, International Labour Office). Available at: www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_120131.pdf [28 Jan. 2013].
- 34 International Labour Office. 2012. *Stress prevention at work checkpoints: Practical improvements for stress prevention in the workplace* (Geneva, International Labour Office). Available at: www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_168053.pdf [28 Jan. 2013].
- 35 International Labour Office. 2012. *The new SOLVE training package: Integrating health promotion into workplace OSH policies: trainer's guide* (Geneva, International Labour Office). Available at: www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/instructionalmaterial/wcms_178397.pdf [28 Jan. 2013].



For more information contact:

International Programme on Safety and Health
at Work and the Environment (SafeWork)

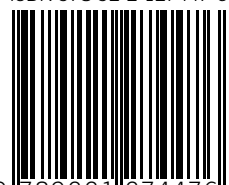
Tel: +41 22 799 67 15

Fax: +41 22 799 68 78

Email: safeday@ilo.org

www.ilo.org/safeday

ISBN 978-92-2-127447-6



9 789221 274476