

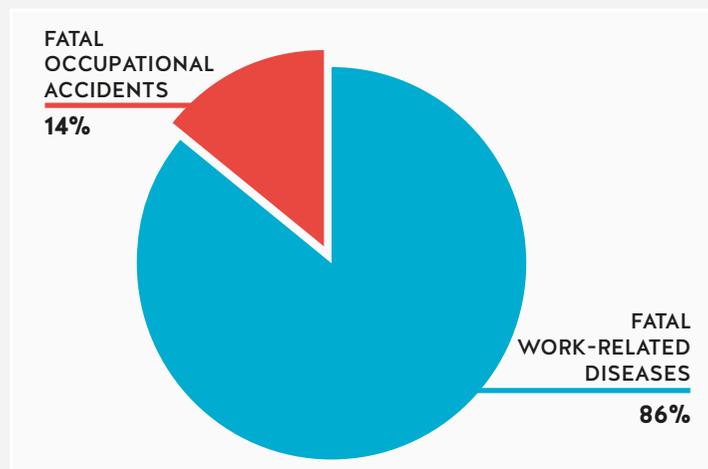


GLOBAL TRENDS ON OCCUPATIONAL ACCIDENTS AND DISEASES

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The overall costs of occupational accidents and diseases are often much greater than immediately perceived. Conversely, investing in occupational safety and health (OSH) reduces both direct and indirect costs, decreasing insurance premiums while also improving performance and productivity. It also reduces absenteeism and increases worker morale. Nationally, reduced social security and health care costs means lower taxes, better economic performance and enhanced social benefits.

FIGURE 1
OCCUPATIONAL FATAL ACCIDENTS AND DISEASES (2008)



According to the ILO estimates, every year over 2.3 million women and men die at work from an occupational injury or disease. Over 350,000 deaths are due to fatal accidents and almost 2 million deaths are due to fatal work-related diseases. In addition, over 313 million workers are involved in non-fatal occupational accidents causing serious injuries and absences from work. The ILO also estimates that 160 million cases of non-fatal work-related diseases occur annually. These estimates imply that that every day approximately 6,400 people die from occupational accidents or diseases and that 860,000 people are injured on the job. Furthermore, as estimates show, work-related diseases represent the main cause of death at work, killing almost six times more workers than occupational accidents. This should highlight the need for a new paradigm of prevention: one that also focuses on work-related diseases, not only on occupational injuries.

The devastating effects on workers and their families cannot be fully calculated; however, the ILO has estimated the great economic burden of not investing in OSH so as to prevent occupational accidents and diseases. The total costs amount to approximately four per cent of the world's GDP per year (roughly 2.8 trillion US dollars). Further to the economic



constraints, the human costs are unacceptable; a global society has a moral obligation to reduce the human and economic costs.

WHY DO WE NEED TO IMPROVE THE RECORDING AND NOTIFICATION OF ACCIDENTS AND DISEASES?

The ILO estimates of occupational accidents and diseases are based on the information available from national statistics, which often are heterogeneous in terms of definitions, data collection methodologies, and quality. As such, they provide more of an approximation of the burden of work-related accidents and diseases than an accurate assessment. Many countries still lack the expertise and the resources to collect statistics that would allow a satisfactory and reliable evaluation of the magnitude of work-related accidents and diseases. 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 and analysis difficult. As data on work-related accidents and diseases are essential for prevention, there is a strong need in these countries to improve recording and notification systems and data analysis. This would provide countries with more reliable indicators of the effectiveness of national OSH systems and help them in prioritizing which OSH issues should receive the sometimes scarce resources needed to resolve them. Furthermore the harmonization of national recording

and notification systems would allow for global data collection and analysis.

Good quality data on occupational accidents and diseases are not only useful for compensation purposes, but essential to design an effective prevention strategy on OSH, both at the national and enterprise levels. Reliable data are indispensable for:

- Identifying hazardous sectors and occupations which require prioritizing and formulating effective legislation, policies and programmes, as well as monitoring the implementation of these programmes at the national level; and
- Identifying priorities for setting the right targets towards reducing occupational accidents and diseases, which in turn contribute to the productivity and economic growth of the enterprises.

Unfortunately, data on occupational accidents and diseases are not available from all countries in the world and under-reporting still represents a widespread problem. As mentioned before, available data are gathered from a wide variety of different sources: social security and insurance institutions, labour inspectorates, occupational health services, or other authorities and bodies. Furthermore, official reporting requirements frequently do not cover all categories of workers. Rural workers, workers in small and medium-sized enterprises (SMEs), and those in the informal economy - representing the vast majority of the global workforce - tend to be outside of the systems that prevent, report, and compensate



occupational diseases. Moreover, the intensification of migration flows, the ageing of the workforce and the increasing numbers of workers in temporary, casual, or part-time work and precarious employment, do not only increase their disposition to accept unsafe working conditions but also makes them invisible to adequate health surveillance, and recording and notification of occupational diseases, all of which are required for the effective implementation of preventive strategies.

As the establishment of mechanisms for the recording and notification of occupational accidents and diseases and the regular publication of collected statistics are essential for setting priorities for implementing preventive and protective measures, the ILO provides guidance through a number of instruments to support member States in improving their recording and notification systems of occupational accidents and diseases. The [Occupational Safety and Health Convention, 1981 \(No. 155\)](#), and its accompanying [Recommendation \(No. 164\)](#) provide guidance on a national system of recording and notification of occupational accidents and diseases; the Convention is complemented by the [Protocol of 2002 \(No. 155\)](#) and the [List of Occupational Diseases Recommendation, 2002 \(No. 194\)](#). The Protocol incorporates further provisions on the establishment and periodic review of requirements and procedures for the recording and notification of occupational accidents and diseases, and for the publication of related annual statistics. The

Recommendation provides for the regular review and update through tripartite meetings of experts of the ILO list of occupational diseases included in the Annex of the Recommendation. The list of occupational diseases¹, which is reviewed periodically, reflects the latest knowledge in the identification and recognition of occupational diseases, and is used by member States to develop their own national lists. The [Code of practice for Recording and notification of occupational accidents and diseases](#) provides for the basic requirements of a system of recording and notification of occupational accidents and diseases, giving prominence to the effective use of collected, recorded and notified data for preventive action. It has been developed through international consultation and can be used by countries as models for building their systems.

THE NEED FOR A NEW PARADIGM OF PREVENTION

Analysing the features of work-related fatalities, as well as of non-fatal occupational injuries and diseases, is critical to define priorities and design effective preventive strategies on OSH. If underreporting of occupational accidents is a serious problem, the situation is even more dramatic concerning occupational diseases. Occupational and work-related diseases remain largely invisible in comparison to occupational accidents. In most countries only

¹ The latest update of the list took place in 2010.



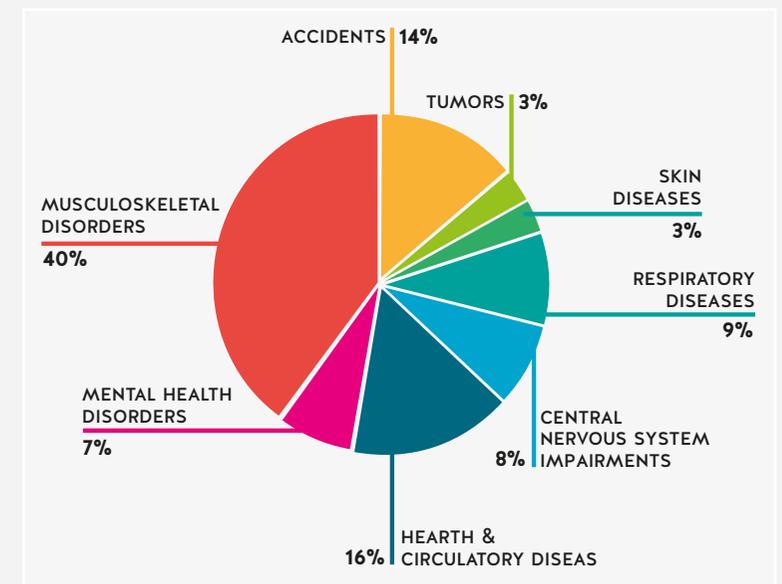
a fraction of the real cases are diagnosed and reported. Diseases are diagnosed by physicians and their attribution to work has to be assessed for recognition of their occupational origin. Therefore, diagnosis of occupational diseases requires specific knowledge and experience that are not always adequately available in many developing countries. This limits 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 and analysis difficult. Furthermore, many occupational diseases, such as occupational 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, their exposure to various agents during their working life, along with non-workplace factors associated with the emergence of a disease, can make it difficult to determine the occupational origin. Additionally, some workers may contract a disease in jobs involving exposure to substances that have not yet been identified as hazardous.

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; epidemiological studies in

developing countries show that between 30 per cent and 50 per cent of workers in primary industries and high-risk sectors may suffer from silicosis and other pneumoconioses. At the same time, relatively new occupational diseases, such as musculoskeletal disorders (MSDs) and mental health disorder, are on the rise.

The increase in sedentary work, prolonged standing at work, the growing use of computers and automated systems, and poor ergonomic conditions in workstations, have led to a global rise of MSDs. As Figure 2 shows, MSDs represent 40 per cent of global compensation costs of occupational and work-related injuries and diseases. In 2005, MSDs were the most common work-related health disorders, representing

FIGURE 2
GLOBAL COMPENSATION COSTS OF OCCUPATIONAL AND WORK-RELATED ACCIDENTS AND DISEASES





59 per cent of all recognized diseases across the 27 European Union Member States, according to the European Occupational Diseases Statistics.

Furthermore, due to changes in work organization and labour relations, flexible and precarious employment, and increased pressures to meet the demands of modern working life, the number of cases of mental health disorders, associated with work-related stress, burnout, and work-related violence also has been increasing. Work-related stress is the second most frequently reported work-related health problem in Europe (after MSD), representing the cause of between 50 and 60 per cent of all lost working days. In 2013–14, the cases of work-related stress, depression and anxiety represented 39 per cent of all work-related illnesses in the UK.² In addition work-related stress can also contribute to MSDs and other health disorders, such as hypertension, peptic ulcers, and cardiovascular diseases.

Concerted efforts are needed at national and international levels to tackle the “invisibility” of occupational diseases and to correct this Decent Work deficit. Their effective prevention requires 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. Greater efforts to compile relevant data to improve preventive strategies for occupational diseases through collaboration between OSH institutions and

social security systems at national and international levels are also necessary. Effective prevention of occupational diseases also requires the continuous improvement of national OSH systems, prevention programmes and compensation systems through the collaborative effort of government and employers’ and workers’ organizations in ILO member States.

THE IMPACT OF THE GLOBAL RECESSION ON OSH

The ongoing globalization of the world economy has undoubtedly been a major driver for change in the world of work, with both positive and negative impacts on levels of compliance and good practice. However, efforts to tackle OSH problems are often dispersed and fragmented and do not seem to reach the level of cohesion necessary to achieve a progressive reduction of work-related fatalities, accidents, and diseases. Traditional tools for the prevention and control of hazards and risk are still effective, but need to be complemented by strategies designed to address the consequences of the continuous adaptation of workplaces to a rapidly changing world of work. In particular, many countries need to devote greater resources to OSH research, knowledge management and dissemination, and consistent law enforcement.

In the past 20 years, globalization brought technological, social and organizational changes in workplaces which have been accompanied by emerging risks; these may arise from:

² HSE - [Stress-related and psychological disorders in Great Britain 2014](#)





- New and more complex technologies, such as nanotechnologies, biotechnologies, etc.;
- New forms of work organization, including work intensification, working time arrangements, the fragmentation of production processes, and organizational restructuring;
- Emerging forms of employment, with the prevalence of temporary, part-time and home-based work, outsourcing, and self-employment;
- Job insecurity, higher demands, and precarious employment which have intensified in developed countries with the crisis and recession;
- Demographic and political changes in the workforce composition due to migration, the ageing of the workforce, lack of access to employment of young workers and an increasing number of workers in the informal economy.

The trends in a changing world and workforce are expected to continue and be aggravated by the global recessions. The evidence from other crises shows that such events put working conditions and quality of production at risk. They cause uncertainty and antagonisms at all levels of the organization and society. The organizational changes associated to restructuring, such as outsourcing, increased part-time work, and subcontracting, complicate the management of safety and health at work. This creates uncertainty and misunderstandings about the respective responsibilities and can lead to:

- increased exposure to hazardous agents and poor working conditions;
- no safety and health training for these workers;
- less autonomy over their work;
- less opportunity to participate in workplace decision making.

Management changes during a period of recession may lead to decreased investments in prevention and control of traditional risks, under the argument of a necessary reduction in costs. This is often the case in small-scale enterprises which traditionally lack the resources and the know-how to manage occupational safety and health and may consider it a cost rather than an investment.

The impact of the crisis and recession on the health of workers goes beyond the victims of downsizing and the remaining workers. It also affects their families, and the communities in which the restructuring occurs. A number of workplace accidents and diseases due to restructuring and unemployment may rise in light of the present recession, as some companies and governments may be tempted to ignore occupational safety and health standards. A decrease in public spending can also compromise the capacities of labour inspectorates and other OSH services.

With the pace of change in patterns of employment and in developing technologies over recent years, it has become ever more important to anticipate different, often new, and sometimes emerging, work-



related risks if they are to be effectively managed. Foresight processes emerged in recent years, mostly in Europe³, aiming to identify today's research and innovation priorities on the basis of scenarios of future developments in science and technology, society, and the economy. Forecasting, technology assessment, future studies and other foresight processes try to identify long-term trends and thus guide decision-making. The recent application of the foresight methodology to OSH enables potential hazards and risks to be determined in advance, so that effective preventive actions are taken. This approach is a powerful tool for anticipating emerging risks sooner than traditional methods based on accident and disease statistics and epidemiological data. Moreover, many long-standing OSH concerns are being reconsidered in the light of changing patterns of work and technologies. The health effects from traditional workplace exposure are known and documented; what changes is the fact that emerging risks are now increasingly linked to new technologies developed and implemented without enough consideration given to OSH aspects, to new types of workplaces, and to social and organizational changes. Due to the effects of the globalization of economies, these problems can also be observed in many emerging countries facing rapid industrialization.

³ After the European Union decision to apply this foresight or forecasting process to the identification of emerging risks in the OSH field, European Risk Observatory was established by the European Agency for Safety and Health at Work (EU-OSHA), which defines an "emerging OSH risk" as any occupational risk that is both "new" and "increasing".

TO LEARN MORE

- [Q Prevention of Occupational Diseases](#)
- [Q Emerging risks and new patterns of prevention in a changing world of work](#)