

# **Fundamental principles of occupational health and safety**

## **Second edition**

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### **Occupational safety and health: A global perspective**

Around 270 million people in the world fall victim to occupational injuries, fatal and non-fatal every year. A recent International Labour Organization (ILO) report estimates that approximately 2 million occupational fatalities occur across the world annually. The social and economic cost to the workplace as well as to individuals is considerable.

Occupational injuries and accidents are all caused by preventable factors which could be eliminated by implementing measures and methods that already exist. Many industrial countries have extensive and comprehensive systems of occupational safety and health (OSH) management, and this is demonstrated by consistently reduced accident rates. An increasing proportion of occupational injuries in the world are occurring in developing countries. A factory worker in Pakistan, for example, is eight times more likely to be killed at work than a factory worker in France. The degree of protection against occupational hazards varies not only by nation but also by economic sector and size of the enterprise. The highest rates of occupational accidents occur in agriculture, forestry, mining and construction, and generally, small enterprises have a worse safety record than large ones.

The economic costs of these injuries and deaths are colossal and involve individuals, enterprises and nations and indeed the entire world. Taking into account compensation, lost working time, interruption of production, training and retraining, medical expenses, and so on, estimates of these losses are routinely put at roughly 4 per cent of global GNP every year, and possibly much more.

Nobody is completely unaffected by occupational hazards and accidents. In addition to the available traditional measures and methods to protect workers, good OSH systems are those that constantly update their mechanisms to account for new risks and hazards that appear in the workplace. Over the last decade, the scope, direction and magnitude of OSH have evolved significantly both at national and international levels.

Why are there constant shifts in the nature of hazards, affected populations and people's perception of occupational safety and health? Are there different ways in which the topic of OSH is being perceived by national and international bodies and different mechanisms and methods of prevention? How is the ILO addressing these changes? *Fundamental principles of occupational health and safety* brings together comprehensive knowledge and facts on the subject at national, enterprise and global levels. The first edition, a bestseller and widely regarded as the definitive ILO work on OSH principles, has been expanded and updated to include recent workplace concerns and advances. This second edition introduces new ILO instruments promoting OSH and details national OSH policies and their implementation, as well as operational methods. It is written with the goal of addressing existing and emerging issues and concerns, such as HIV/AIDS and the world of work, and many other important developments in the field of OSH, both within and outside the ILO.

## **Globalization and OSH**

One of the most recent phenomena affecting workers is globalization of the world's economies. Its repercussions have been perceived as the greatest force for change in the world of work, and consequently in the scope of occupational safety and health, in both positive and negative ways. Liberalization of world trade, rapid technological progress, significant developments in transport and communication, shifting patterns of employment, changes in work organization practices, the different employment patterns of men and women, and the size, structure and life cycles of enterprises and of new technologies can all generate new types and patterns of hazards, exposures and risks. Demographic changes and population movements and the consequent pressures on the global environment can also affect safety and health in the world of work.

## **Promotional framework for OSH Convention**

A recent development in the field of OSH is the adoption of the Promotional Framework for Occupational Safety and Health Convention (No. 187) and its accompanying Recommendation (No. 197) by the International Labour Conference in 2006. This book recognizes the purpose of this Convention as being the integration of the ILO's fundamental strategies to promote the continuous improvement of OSH. The content of the Convention, promotional rather than prescriptive, highlights two complementary strategies, namely the development and maintenance of a preventive safety and health culture, and the application at the national level of a systems management approach to occupational safety and health.

## **National policy frameworks**

Another development presented in the book is the changing focus of national policy frameworks that countries design and implement to prevent occupational accidents and diseases. In the past, many of these frameworks were hampered by fragmented ideals and organization and could not keep up with the shifting demands of the world of work, therefore having little impact. Traditional strategies and methods for prevention and control need radical updating to respond effectively to the fast and continuous changes in the workplace. In addition, there is a perpetual need to train new generations of

workers as they replace retiring ones. Mechanisms and strategies must therefore be developed to always keep occupational safety and health at the forefront of national and enterprise priorities. Convention No. 187's focus on not only the development but also the maintenance of OSH culture addresses this need.

## **OSH management systems**

The book expands on the OSH management systems which help companies accept and administer the building and maintenance of a culture of health and safety as their prime responsibility. The new edition offers samples of how a comprehensive evaluation system would include baseline evaluations, auditing, self-inspection and self-correction, incident investigation, medical surveillance and management review activities.

## **HIV/AIDS and the world of work**

This second edition has a completely new section on HIV/AIDS in the world of work and how the ILO has responded to the epidemic, in anticipation of its first instrument dedicated to the subject, the forthcoming Recommendation on HIV and AIDS in the world of work. It is crucial to realize that the workplace plays an important role in national and global efforts to combat HIV/AIDS. Around 36 million people around the world living with the disease are of working age and 70 per cent of them are involved in formal or informal employment. How can the workplace help workers and their families and friends living with HIV/AIDS to improve their lives? This book introduces and expands on many concepts, including organizational and capacity building ideas and methods such as training and support in the workplace; ways of dealing with discrimination and maintaining confidentiality; gender equality; encouraging voluntary counselling and testing of employees; and worker assistance programmes.

## **Chemical safety**

This edition also includes a new section on international chemical safety. Amid growing concerns for human and environmental health, the prevention of exposure to hazardous chemicals in the workplace is a major focus of occupational safety and health. International Chemical Safety Cards (ICSCs), designed to serve as an international reference for chemical safety information, summarize essential safety and health information on chemical substances in a clear way and are intended for use at the shop-floor level by workers and by those responsible for workplace safety and health.

In recent years, small and medium-sized enterprises especially in emerging economies are increasingly relying on chemical production and use. In these settings, access to people with experience in assessing and controlling exposure to chemicals is limited. Therefore, a new approach to the control of chemicals, *control banding*, has been developed. It is a complementary approach to protecting workers' health by focusing resources on exposure controls and bands chemicals in different groups according to their dustiness/volatility. This method forms the basis of the ILO's International Chemical Control Toolkit (ICCT).

## **Conclusion**

This book aims to serve as a guide or reference for the development of OSH policies and programmes, including those devoted specifically to HIV/AIDS. It covers the fundamental principles of occupational safety and health, based on the ILO's philosophy of prevention and protection, which stems from the Organization's mandate in the field. The Conventions, Recommendations and codes of practice that make up the set of "core" ILO instruments on OSH embody all the principles, provisions and technical guidance necessary to establish, implement and manage OSH systems. They are presented in this edition in a form that will be useful for those involved in policy-making (governments, and employers' and workers' organizations), those within enterprises who are concerned with the practical implementation of measures to promote and protect the safety and health of workers (managers, supervisors, workers' representatives), legislators and labour inspectors as well as academic institutions.