

Book Review
OSH for Development,
Edited by Kaj Elgstrand and Nils F. Petersson

Royal Institute of Technology, Stockholm. 2009; 798 pages

In this useful, worthwhile, and comprehensive work, the authors take an applied approach to the question of occupational health and safety (OHS) in development. They focus on practical methods of action to prevent work from causing harm. The book provides a useful tool for OHS professionals working across a broad arc of international aid and national development programs, whether through nongovernmental organizations, trade unions, or more directly, as consultants or specialists in United Nations and World Bank Projects. The book will be particularly useful for professionals tasked with establishing OHS systems that contribute to increased productivity and improvements in the standard of living and the quality of life.

The book is divided into thirteen sections. In **Section One**, the editors explain the basic concepts of OHS and highlight the empirical evidence for the link between safety and productivity. Gerhardson provides a historical overview of the development of the risk concept in **Section Two**, and Dwyer and Elgstrand follow up with a piece that highlights the development of the industrial OHS paradigm and how it has been contested in the modern era. Using relevant theorists, they argue for the development of a new social paradigm for OHS to address shortfalls of the current system, focusing on spreading the reach of OHS to the unregulated workplaces of the developing world in order to achieve justice.

Sections Three to Seven turn from theory and background to focus on practical aspects of workplace health and safety hazards and on how to eliminate or reduce them. The sections in sum provide an encyclopaedic coverage at an introductory level on many workplace hazards and issues. They will be of the most practical use to professionals in the developing world seeking to implement national or enterprise level OHS programs. Each chapter throughout the work provides useful suggestions for further reading.

Tornqvist provides a basic overview of work physiology, including the factors affecting physical work performance and work efficiency, in **Section Three**. Hambræus continues by examining food, nutrition, and work, highlighting the nutritional components of various food sources. Hambræus is a nutritionist with many years' impressive experience working in developing countries. His chapter is most rewarding to the careful and dedicated reader. While he examines the change in dietary habits in Sweden to support his work, the chapter's content is germane to a wide range of developing country conditions. Key concepts such as the body mass index (BMI), metabolic rate, and physical activity levels are discussed and the principles surrounding malnutrition are examined, making this a very relevant chapter given the present concerns about food security and access to potable water.

Vingard follows this with a clear and concise examination of musculoskeletal disorders, and the chapter concludes with a useful appendix outlining models for the

assessment of work postures, manual handling, and repetitive work environments. Kadefors examines workplace design and evaluation as a key factor in achieving safer workplaces, setting out a useful series of checklists and processes focusing on workstations and manual lifting.

Section Four focuses on the prevention of physical risks at work. Harms-Ringdahl clarifies nuance in usage of the term risk and proceeds to discuss accident causation, risk control, risk analysis, and OHS insurance. Sundström-Frisk looks at accidents and accident prevention in the workplace. She discusses safety management and the identification and monitoring of hazards as key elements in contributing to safer work places. Holmer specifically examines stress caused by temperature extremes and outlines methods for management and preventive strategy to countervail these harms. Sundbäck looks at the effect of noise and provides a useful background on principles of occupational noise pollution and methods to reduce or ameliorate occupational noise pollution. His article has some especially good advice on improving machine and other industrial noise from workplaces. Pääkkönen covers vibration hazards, looking at their sources, effects, and prevention, as well as monitoring, education, and training. Hansson and Bäverstam provide interesting background on the impact of radiation, once again focusing on the health effects and prevention for both electromagnetic fields and ionizing radiation. Two further essays follow—one on electrical safety by Barrico de Souza and another on fire safety by Hakan Frantzich—which add to the completeness of the work, providing valuable background information on electrical shock and key factors to consider in an occupational setting. An examination is also made of preventive actions that can be employed in the workplace. Frantzich concludes with an examination of fire safety focusing on causes and preventative measures that should be employed in the workplace.

A collection of useful introductory articles addressing the prevention of chemical risks is provided in **Section Five**. Nise and Wesseling contribute an examination of risk assessment and control in relation to working with chemicals with chapters on pesticides risks and risk-reduction strategies (Wesseling) and solvents and gases (Nise). Chapters on dusts and metals (Lillienberg and Sjögren) and skin disorders (Liden and Boman) round out the coverage in this section.

Section Six examines the prevention of biological risks. It provides a good introduction to the wide variety of occupational settings that contain such risks and discusses various workplace control measures. Adding to the comprehensiveness of this book, **Section Seven** contains an essay by Marklund that focuses on the prevention of psychosocial risks and work. This essay complements a useful chapter by Härenstram on the improvement of psychosocial conditions in the workplace.

Section Eight, entitled Development of Work and Enterprise Survival, examines work organization and strategies for change within the organization. Broms and Döös examine the challenges of and strategies for enterprise survival in a globally competitive environment. This is followed by a thoughtful essay by Nilsson on new principles of work organization, which provides a basic introduction to key constructs such as total quality management, continuous improvement, lean production, and time-based management. Döös then examines some basic principles of workplace learning. Sandberg and Targama focus on the leadership challenge of managing knowledge and understanding in the workplace, and in managing change and

development within an organization. Blomqvist briefly examines gender integration in organizational development while Broms examines strategies for change and team work. The chapter concludes with a case study from India by Mahendru demonstrating how successful change can be implemented in a developing country enterprise.

Practical issues related to child labour, gender, and work and migration are examined in **Section Nine**. Lotfy provides an introduction to child labour in its many forms, and looks at its particular drivers as well as the susceptibility of children to workplace hazards. The article also devotes considerable attention to actions to help eliminate child labour. Westberg looks at gender and work, exploring the global gender gap and the link between gender and health. Johansson concludes by examining issues specific to migrant workers, those related to migration and its impact on development, and the consequences for receiving countries, enterprises, and individuals. The essay concludes with a series of recommended measures that can be implemented at the national, enterprise, and individual level.

Section Ten deals with the organization of OHS at an enterprise level. Hasle and Antonsson scrutinize small enterprises and the particular problems they face in relation to OHS before going on to examine possible preventative strategies. Included is a useful checklist for safety inspections. Petersson then details the fundamentals of OHS management and establishes that participation by individuals in the safety management process is an essential ingredient of robust safety culture. Elgstrand examines occupational health services and their role in the prevention of injury.

Section Eleven turns its attention to national level issues, examining the role of social partners, education, and training and supervision and control. Herzfeld-Olsson and Ahlberg examine the right of workers to organize, freely join, and establish associations of their own choosing within a workplace. Elgstrand's cogent and relevant chapter on education and training in OHS emphasizes, among other things, the need for specific training for different target groups. Finally Nilsson looks at labour inspection systems as well as various policies and methods for priority setting, enforcement, and training and inspection at the national level.

A global perspective on OHS is presented in **Section Twelve**. Hogstedt and Kjellstrom provide an overview of globalization and examine its impact on working life. They then look at the global situation concerning work-related injuries and diseases. The section concludes with an examination of international governance and partnerships for the improvement of OHS and the need to strengthen national policies. The essay also provides a wide range of recommendations to consider.

Finally, **Section Thirteen** concludes the collection by looking at strategies for change and the implementation of project guidelines. Its articles contain a helpful summary of practical actions for the prevention of risks and the attainment of increased productivity through safe and decent work.

This book fulfils the OHS communication and information gap identified by the editors. Its contributors provide a handy, cogent, and highly relevant collection of articles for practitioners and communicators, policy makers, and students of OHS in the developing world. Throughout the work, at the end of most essays and chapters, there are ample guides to further reading and this reinforces the utility of the book as a general introductory and encyclopaedic text about OHS in and for developing

countries. The work would also form a most helpful reference guide for readers everywhere seeking a robust and trustworthy introduction to the many domains that make up the complex field of OHS in society.

Overall, this work is a helpful guide to formal and workplace learning, as well as onsite applications of OSH methodologies. It is a clever and effective work. The editors have made an excellent choice of authors, and the writing is clear and sensitive. Each chapter remains true to its topic and technical content. Collectively, the work reminds us that implementation of OHS systems can, when involving the wider community, bring considerable safety and civil society benefits. That such potential might be realized highlights the important role OHS might play in the just transition to sustainable development.

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