International Labour Office

MY LIFE...
MY WORK...
MY SAFE WORK

MANAGING RISK IN THE WORK ENVIRONMENT

issa
Supported by the INTERNATIONAL SOCIAL SECURITY ASSOCIATION

WORLD DAY FOR SAFETY AND HEALTH AT WORK 28 APRIL 2008

Copyright © International Labour Organization 2008
First published 2008

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.ifrro.org to find the reproduction rights organization in your country.

ISBN 978-92-2-121138-9 (print)
ISBN 978-92-2-121139-6 (pdf web)

Also available in French: *Ma vie, mon travail, mon travail en sécurité - Gestion du risque en milieu de travail* [ISBN 978-92-2-221138-8 (print), 978-92-2-221139-5 (web pdf)] , Geneva, 2008 ; and in Spanish: *Mi vida, mi trabajo, mi trabajo en seguridad - Gestión del riesgo en el medio laboral* [978-92-2-321138-7 (print), 978-92-2-321139-4 (web pdf)], Geneva, 2008.

ILO Cataloguing in Publication Data

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

Printed in France NOU

World Day for Safety and Health at Work
28 April 2008

The Daily W

Thursday, 24 April 2008

My life, My Work, My Safe

Managing Risk in the Work Environment

"Last week's tragedy in which our town lost four brave coal miners showed us all how important the problem of risks at work can be. Events such as these force us to examine the risks related to our own jobs. For this article, I intended to profile some of the risks facing local workers, but I need look no further than my own work to find many opportunities to reduce risk..."

4 MINERS DIE IN EXPLOSION!

Were these risks avoidable?

Was there another way to work that would have reduced, if not eliminated, the problems that led to this tragedy?

What can be done to make sure that such a tragedy doesn't happen again?

Despite the positive efforts to reduce accidents and ill health in mining as in other sectors, injuries and diseases are still all too common in the world of work today.

This document describes some basic steps for managing risks in the workplace.

RISKS AT WORK

WHO?

People everywhere are exposed to safety and health risks from their work.

In 2005, the International Labour Office (ILO) estimated that globally 2.2 million people die annually from work-related accidents and diseases. And occupationally related deaths appear to be on the rise. Moreover, each year there are an estimated 270 million non-fatal work-related accidents (each resulting in at least three days' absence from work) as well as 160 million new cases of work-related diseases.

Occupational safety and health is of worldwide concern to governments, employers, workers and their families. While some industries are inherently more hazardous than others, groups such as migrant or other marginalized workers are often more at risk of experiencing work-related accidents and ill health, since poverty frequently forces them into unsafe occupations.

Miriam is an experienced journalist at a small town daily newspaper. One day, her Editor-in-Chief assigned her to cover a speech by the Minister of Labour scheduled for the World Day for Safety and Health at Work on 28 April. The Editor wanted Miriam to follow up a previous article about the death of the four coal miners. Miriam asked the Minister of Labour some pointed questions about the government's role in the inspection and the promotion of in-house management systems that identified, prevented and minimized risks at the local mine, so that these tragedies were not simply a blueprint for the next disaster.

>>>

WHAT?

All managers and workers need to think about how to control and reduce risks in their own workplaces, to prevent injury and protect their own safety and health.

Accidents and diseases at work often have several contributory causes; organizational, physical and human factors can all play a part. Risks can be classified in several ways, such as:
according to generic type, for example:

- mechanical
- chemical
- ergonomic and
- psychosocial risks

or according to the resultant harm, for example:

- hearing damage from high noise levels
- lacerations from dangerous machinery and
- upper limb disorders from repetitive strain.

Some industries entail a wide range of risks. For example, in mining, workers may operate fast-moving equipment in poorly lit environments, they may often be exposed to hazardous dusts and fumes and may face risks of explosion or spontaneous combustion.

WHY?

Managing risks in the work environment reduces both the human and the economic burdens of work-related accidents and ill health.

Work-related accidents and ill-health place intolerable human and economic burdens on workers and their families as well as on enterprises and on society as a whole. The ILO recently estimated that the global economic costs of work-related accidents and diseases amount to the equivalent of 4% of the world's gross domestic product - more than 20 times that of official development assistance. Conversely, there is clear evidence that healthy workforces both enhance business productivity and benefit enterprises and national economies by reducing the number of accidents and diseases and lowering the number of insurance and compensation claims.

HOW?

Risk management techniques identify, anticipate and assess hazards and risks and take positive action to control and reduce them.

The first step in the process is to identify hazards in the work environment and to assess related risks of injury, either of accidents or ill-health. To do this, it is often necessary to check reliable sources of information, such as manufacturers' instructions and other sources of good advice. It is then important to assess whether or not existing arrangements and precautions are adequate to control and reduce risks. If they are not, further steps should then be taken to do so, in order of priority, as follows.

4 KEY STEPS TO REDUCE RISKS

1. ELIMINATE OR MINIMIZE RISKS AT SOURCE

This important first step aims to remove or minimize risks before they enter the workplace. Manufacturers and suppliers of work equipment and substances may be able to provide innovative approaches to solving these problems. For example, it may be possible to substitute a hazardous chemical with a less hazardous one that achieves the same purpose. Asbestos is a very hazardous substance, whose use has been banned in many countries, but it can be often replaced with much safer substitutes. As another example, noise and vibration emissions from work equipment can be much reduced through good design at the manufacturing stages.

2. REDUCE RISKS THROUGH ENGINEERING CONTROLS OR OTHER PHYSICAL SAFEGUARDS

Whether or not risks can be eliminated or minimized at source, they may often be further reduced through effective physical safeguards. These can be relatively simple – such as guardrails protecting against falls from scaffolding or protective covers for electrical equipment. Good ventilation also provides protection against risks from harmful substances, for example, as in a hospital operating room, where nurses and physicians should be protected from waste anesthetic gases. Such engineering controls need to be properly maintained if they are to remain effective, and it is important that maintenance procedures form part of the overall safety and health management system.

>>>

Miriam called the mines inspectorate with questions regarding the government's role in prevention. The Inspector told her that although life was full of risks, many things could be done to eliminate or reduce the possibility of harm.

During the interview with the inspector, Miriam learned about the "hierarchy of controls" for managing risks at work in the form of a four-stage process:

1. **Eliminate or minimize risks at source;**
2. **Reduce risks through engineering controls or other physical safeguards;**
3. **Provide safe working procedures to reduce risks further, and**
4. **Provide, wear and maintain personal protective equipment.**

She discovered that these well-honed principles had already been codified in many national laws and international standards, reflecting the commitment of many countries to improve safety and health for all workers.

>>>

3. PROVIDE SAFE WORKING PROCEDURES TO REDUCE RISKS FURTHER.

Good planning and organization is always important but particularly so for some activities. For example, maintenance work or clearing blockages in machines requires safe isolation procedures to prevent accidental start-up; many workers have been injured during such operations. Work with ionizing radiation also needs careful planning and organization, with radiation badges or monitors worn by those who have to carry out such work and use of appropriate physical barriers. Warning signs and signals can be effective preventive measures, but they need to be supported by other precautions and are only useful when they are visible, clearly written or audible and in a language that everyone understands.

4. PROVIDE,WEAR AND MAINTAIN PERSONAL PROTECTIVE EQUIPMENT

Providing personal protective equipment, such as dust masks and hearing protectors, is the least reliable form of protection since its effectiveness relies on proper selection, training, use and maintenance. Therefore, **personal protective equipment should be used only as a last resort.**
However, such equipment is required for some operations. For example, no ventilation system can protect fire fighters in an emergency. Likewise, hearing protectors may have to be worn by those working in noisy environments, even though all other means have been successfully used to reduce noise exposure as far as practicable. All personal protective equipment needs to be suitable for the workers concerned and properly maintained so that it remains effective

>>>

Miriam learned that the Minister of Labour was committed to taking action to ratify the ILO Promotional Framework for Occupational Safety and Health Convention, 2006. This Convention offers one approach for creating a national framework for improving the performance of a national occupational safety and health system. As a first step, the Minister had instructed the Occupational Safety and Health Department to work on the preparation of national occupational safety and health profile in collaboration with other government departments and social partners.

The Minister was also participating in the Safety and Health Summit at the World Congress for Safety and Health at Work in June 2008 (see below). This was to be the first high level and global gathering of Ministers, CEOs and trade unions on occupational safety and health.

Examining information about preventing risks in mining changed Miriam's perception of workplace safety and heath. She began to question her own situation and started to investigate methods to reduce her own risks. She explored WebPages from employer organizations such as the World Association of Newspapers, broadcasting associations, trade unions and governments in a quest to discover occupational health protection as a journalist.

>>>

MANAGING RISKS AT WORK

Successful management of safety and health requires a well-supported organization with clear safety and health responsibilities and procedures for dealing with risks. This includes providing good training and information and supervising new or young workers. Since working conditions can change daily, safety and health require constant vigilance. Indicators such as levels of injury, illness and absenteeism demonstrate whether or not safety and health is being well managed in practice. More information about how to manage safety and health at work is given in *Guidelines on occupational safety and health management systems,* ILO, 2001.

Shared Roles... worker, employer, governments and society

Everyone has a role to play in making workplaces as safe and healthy as possible.

EMPLOYERS AND WORKERS

The ILO Occupational Safety and Health Convention, 1981 (No. 155) states that employers are required to ensure that, so far as is reasonably practicable, workplaces, equipment and substances are safe and without risks to health. Thus all workplace risks, whether physical, chemical or biological in origin, should be properly managed. All workers should be given the information and training they need. When protective clothing and equipment is needed, this too should be provided free of charge.

Workers should always be provided with:

- Training about protective measures
- Information, on a regular basis, about specific dangers at their jobs
- Access to information about general hazards at their workplaces

about:

- Physical hazards such as noise, inappropriate temperature or poor lighting
- Dangerous chemical and biological substances and their potential adverse health effects
- Psychosocial factors.

Under the same international standards, workers should cooperate with their employers in fulfilling the obligations placed upon them and report situations that present imminent danger. They should comply with instructions given for their own and others' safety and health.

GOVERNMENTS

Governments are responsible for setting national policy for occupational safety and health and establishing an effective system of inspection and enforcement of relevant legislation. International labour standards should be ratified and implemented to the extent feasible. Governments should also gather relevant statistical data regarding accidents and diseases at work, measure progress towards national objectives and inform future policymakers.

EDUCATIONAL, TRAINING AND RESEARCH

Educational and training institutions play an important role in raising awareness of work-related risks and how they can be effectively managed. In some countries, risk education is now part of schools' national curricula, enabling children to learn about work-related risks before they leave school. Universities and research institutes have a valuable role to play, as they review risks, provide a sound technical and scientific basis for risk evaluation and management and develop innovative ways of reducing risks (such as those arising from the introduction of new technology).

THE INTERNATIONAL COMMUNITY

Many international organizations are actively engaged in promoting occupational safety and health.

The ILO's Decent Work agenda is based on the understanding that work is a source of personal dignity, family stability, peace in the community, democracies that deliver for people and economic growth that expands opportunities for productive jobs and enterprise development. The promotion of occupational safety and health is one of the means to make Decent Work a global reality.

In particular, the ILO has adopted many international standards on the subject, which cover a wide range of sectors and generic hazards. Prevention is at the heart of these standards and is embedded in the Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187) and its accompanying Recommendation (No. 197), which seek to promote a preventative safety and health culture and management systems for safety and health through national policies, systems and programmes.

>>>

Miriam realized that journalists may risk their personal safety in order to bring us news from the scenes of ecological disasters or of industrial accidents, such as chemical spillages or mine explosions or war zones. Violence at work is another risk they face.

The Committee to Protect Journalists reports that over 660 journalists were murdered in the past 15 years, and both the International News Safety Institute and the World Association of Newspapers are committed to promoting the safety of journalists. The United Nations Security Council, Resolution 1738 (2006), agrees: "Deeply concerned at the frequency of acts of violence in many parts of the world against journalists, media professionals and associated personnel.... shall be respected and protected as such...". She was surprised to find that as long ago as 2000, the ILO held meetings to discuss the impact of information technology on journalism and in 2006, Resolution 1738 of the Security Council of the United Nations strongly condemned the murder of journalists.

Viewed through the lens of preventing and reducing her risks at work, and empowered by her knowledge of the systems in her profession, government, and international community, the journalist soon realized that many systems are in place to help keep her safe and cope with risks at work. "I knew there were problems that could affect my health at work, but I never thought that anyone else had studied them," she thought.

And so she wrote:
"Last week's tragedy in which our town lost four brave coal miners showed us all how important the problem of risks at work can be. Events such as these force us to examine the risks related to our own jobs. For this article, I intended to profile some of the risks facing local workers, but I found that I needed to look no further than my own work to find many opportunities to reduce risk..."

XVIII World Congress on Safety and Health at Work

- Global Forum for Prevention -

Safety and Health at Work : A Societal Responsibility

June 29 – July 2, 2008

COEX Convention Center, Seoul, Korea

The XVIII World Congress on Safety and Health at Work provides a unique opportunity for the exchange of information among decision-makers, safety and health professionals, employers' and workers' representatives and experts from social security from around the world.

The objectives of the Congress are:

- To provide a forum for the exchange of new information and practices with the aim of promoting safety and health at work worldwide.
- To reinforce and build networks and alliances while laying the groundwork for cooperation and strengthening relationships among all concerned.
- To provide a platform for the development of knowledge, strategies and practical ideas that can be adapted to local conditions and immediately put into use.

The four-day programme includes a Safety and Health Summit, a Plenary session, Technical sessions, Regional Meetings, Symposia, a Speakers' Corner, Poster sessions, as well as the International Film and Multimedia Festival.

The world's first Safety and Health Summit will be held on the opening day of the Congress. Selected world leaders will be invited to reflect on safety and health at work as a basic human right and as a means for economic growth and development. The ultimate goal is to raise the profile of occupational safety and health and to achieve tangible progress towards reducing occupational accidents and diseases.

Come and meet us in Seoul in 2008

www.safety2008korea.org

The World Congress is organized by the International Labour Organization (ILO), the International Social Security Association (ISSA) and the Korea Occupational Safety and Health Agency (KOSHA).

MY LIFE...
MY WORK...
MY SAFE WORK

World Day for Safety and Health at Work
28 April 2008

International Labour Office

For further information contact:
International Programme on Safety and Health at Work and the Environment (SafeWork)
Tel: +41.22.799.6715
Fax: +41.22.799.6878
E-mail: safework@ilo.org
www.ilo.org/safework/safeday

ISBN 978-92-2-121138-9