7. Occupational safety and health

Improved occupational safety and health enhances productivity by reducing the number of interruptions in the manufacturing process, reducing absences, decreasing the number of accidents and improving work efficiency. Employers and workers both have responsibilities and rights in relation to occupational safety and health (OSH). A preventative approach to OSH is the best strategy to eliminate most workplace accidents, injuries, and diseases.

7.1 OSH Management Systems

Employers must ensure that the workplaces, machinery, equipment and processes under their control are safe and without risk to health. Employers should perform and record regular workplace assessments to identify potential hazards. These assessments should be developed in consultation with workers, who should be informed of the outcome. The employer should take subsequent action to eliminate or control risks to workers.

Employers also should encourage workers to report all accidents and injuries and use this information to prevent similar occurrences in future. All work-related accidents and diseases should be recorded and reported as required under national law.

A written OSH policy should be developed in consultation with workers and their representatives to clarify the different rights and responsibilities of management, supervisors and workers. In the policy, the employer should commit to preventing work-related accidents and illnesses, and to complying with legal requirements concerning OSH.

Workers should be given the opportunity to discuss OSH issues with management and to participate in decisions about their own health and safety. This may be done through worker safety delegates, worker safety and health committees, and/or joint worker/management safety and health committees. Employers must give worker representatives the information they need to participate actively in committees.

7.2 Chemicals and Hazardous Substances

Workers’ exposure to chemical hazards should be monitored and recorded. The employer should install exhaust ventilation in areas where chemicals are used and should provide washing facilities and cleaning materials for workers in the event of emergencies. The employer also should keep an inventory of chemicals and chemical safety data sheets that are accessible to workers and their representatives. Chemicals must be stored properly and substances should be accurately labelled in a way that is easy for workers to understand. Where possible, the employer should use substances and processes that eliminate or reduce risk to workers.

7.3 Worker Protection

Employers should ensure the workplace is arranged to prevent injury to workers. Materials, tools, and controls should be within easy reach. Seated workers should have suitable chairs, and standing workers should be provided shock absorbing mats to stand on and/or chairs so they can rest at regular intervals. Measures should be in place to avoid heavy lifting by workers. Proper guards should be installed on all dangerous parts of machines and equipment, and workers should be effectively trained to use machines and equipment safely.
Personal protective equipment (PPE) should be provided to protect workers from workplace hazards (e.g., hazardous chemicals or high noise levels). However, PPE is a last resort and should be used only when a hazard cannot be eliminated or controlled. Workers must be trained in the use of PPE.

Employers should ensure that employees take reasonable care for their own safety, follow instructions, use safety devices and PPE correctly, and report hazards, accidents and injuries. Workers must receive the supervision, information and training required to work safely, and they should have the right to remove themselves from a work situation if they believe it presents an imminent and serious risk to their life or health.

7.4 Working Environment
The working environment should be comfortable. The temperature should be acceptable, and the workplace should be adequately ventilated, sufficiently lit, and not excessively noisy.

7.5 Health Services and First Aid
The employer should arrange for prompt first-aid treatment. Appropriate first aid supplies should be readily accessible, and workers should be trained in first aid. National law may require onsite medical staff and medical facilities.

Workers should undergo pre-employment and periodic medical checks. Additionally, workers who may be exposed to work-related hazards caused by hazardous chemicals, air pollution, noise or vibration should have medical checks provided at no cost. The workers should have access to their results. Safety and health risks to pregnant or nursing workers should be considered and addressed.

7.6 Welfare Facilities
The workplace should be clean and tidy, and should have a sufficient number of accessible toilets, and hand washing facilities with soap. The employer also must provide workers with enough free safe drinking water. National law may specify requirements related to drinking water supplies, as well as sanitary, washing, changing, personal storage or other facilities.

7.7 Worker Accommodation
If the employer provides overnight accommodation for workers, the accommodation should have adequate space, hygiene, ventilation, storage and cooking facilities, lighting, privacy, fire protection, emergency preparedness measures, and protection from heat, cold and dampness. National law may specify minimum standards.

7.8 Emergency Preparedness
Employers should inform and prepare workers for emergencies (e.g., fire, chemical spill) before they arise, so that workers are ready to respond quickly and safely. For example, the employer should conduct emergency drills and ensure that an adequate number of workers have been trained to use fire-fighting equipment. There should be fire detectors and a fire alarm system, as well as a sufficient number of emergency exits that are clearly marked, accessible, unobstructed and unlocked during work hours.
Types of employer action that can lead to non-compliance

- Failing to assess health and safety in the workplace, or to take steps to address risks.
- Lack of a workplace OSH policy.
- Not informing or training workers on OSH issues.
- Failing to put adequate mechanisms in place to ensure co-operation between workers and managers on OSH.
- Not recording and/or reporting work-related accidents, injuries and diseases.
- Failing to provide adequate personal protective equipment (PPE) and/or training on its use.
- Failing to keep an inventory, or to properly label or store chemicals or hazardous substances.
- Not installing or maintaining guards on dangerous machinery.
- Failing to ensure that the workplace meets standards for temperature, ventilation, noise and lighting.
- Not providing adequate first aid and/or health services.
- Failing to provide adequate toilets, hand-washing facilities or free drinking water.
- Providing worker accommodation that does not meet minimum standards.
- Failing to prepare adequately for emergencies.

Key action points for employers

- Develop a written OSH policy to make sure that everyone is aware of their rights and responsibilities in relation to health and safety.
- Carry out regular OSH assessments as required by national law, and follow up on risks identified during the assessment.
- Encourage workers to discuss concerns about health and safety and make sure that there are avenues for them to do so. Check national law for requirements on worker consultation.
- Investigate and record accidents and injuries, and use the information to put measures in place to avoid similar occurrences. Report accidents and injuries as required by national law.
- Check national law for chemical safety requirements. Keep inventories of chemicals and chemical safety data sheets, and ensure that chemicals are correctly labelled and stored.
- Make sure that all workers receive the supervision, information and training they need to do their jobs safely.
- Ensure that workers are not punished if they remove themselves from work situations when they reasonably believe there is an imminent and serious threat to their health or life.
- Install guards on dangerous moving parts of machines.
- Ensure that electrical wires, switches and plugs are properly installed, grounded and maintained.
- Put measures in place to avoid heavy lifting, e.g., trolleys or carts to move heavy or bulky loads.
- Provide suitable chairs for sitting workers and provide standing workers shock absorbing mats to stand on and regular breaks to sit down.
- Where necessary, provide PPE, and train and encourage workers to use it correctly.
- Ensure that temperature, ventilation, noise and lighting are at acceptable levels.
- Provide health services and first aid that are appropriate for the workplace.
- Provide adequate facilities for workers (toilets, washing facilities, eating area, personal storage, and other legally required facilities).
Ensure that any accommodation provided meets all relevant requirements.

- Ensure that emergency exits are clearly marked, unlocked and accessible.
- Install fire detectors, fire alarms, and fire fighting equipment in the workplace.
- Inform and prepare workers for possible emergencies in the workplace, including conducting periodic emergency evacuation drills.

Key references
ILO Conventions 148 on Working Environment (Air Pollution, Noise and Vibration), 155 on Occupational Safety and Health, 170 on Chemicals, 187 on Promotional Framework for Occupational Safety and Health; Protocol 155 to the Occupational Safety and Health Convention; ILO Recommendations 97 on Protection of Workers' Health, 115 on Worker Housing, 156 on Working Environment (Air Pollution, Noise and Vibration), 164 on Occupational Safety and Health, and 177 on Chemicals.