

M7-EN.1 GENERAL INTRODUCTION TO THE MODULE

M7-EN.1.1 Introduction

M7-EN.1.2 Occupational injuries

M7-EN.1.3 Prevention of occupational injuries

M7-EN.1.4 Duties and responsibility

M7-EN.1.5 Prevention in practice

M7-EN.1.1 Introduction

In this chapter, some concepts and methods in the prevention of occupational injuries are introduced.

The aim of the chapter is to provide a general understanding of the concepts of occupational injuries and work-related diseases as well as occupational accidents and injuries due to long-term impact. In the chapter, the responsibility of employers and employees is also stated related to the safety and health of the workplace.

It is also the aim of this chapter to introduce the methods provided for workplace assessment and accident analysis with a view to preventing occupational injuries and work-related diseases.

This chapter provides an overview, whereas the following chapters, chapters 2-5, give detailed descriptions of the risks in road works and rescue work. These chapters examine more closely what safety measures can be taken to prevent accidents and injuries. Serious accidents that involve the vehicles that are in the road are of main concern for the road workers.

(M7-EN1-1.jpg)

Building projects in connection with road works also imply a number of other hazards such as injuries from lifting, poisoning by inhalation of hazardous substances, cauterization/corrosion, burns and being worn-out after long-term impact. These hazards have not been included in this module. Instead, we refer to the modules directly relating to this type of work such as Module 7 on construction work.

The provisions for traffic regulation and marking of road works are to be found in the Road Traffic Act as well as consolidation acts and circulars pertaining to it.

M7-EN.1.2 Occupational injuries – definitions

Occupational injuries, is a generic term referred to the injuries incurred during work, as well as diseases directly related to the work environment

An occupational accident means a sudden, unexpected accident causing injury. The accident must take place during work and cause bodily injury, e.g. a fall from a roof. It is of no importance what type of work it is and how the injury has happened.

An occupational disease means an illness, which has arisen after long-term impact of the specific job or the conditions of the job, e.g. cancer resulting from working with asbestos.

In certain cases, it is difficult to draw a sharp line between what is an accident and

what is an occupational disease.

Examples

- Road accidents where the injured person is at work is an occupational accident
- A hearing impairment caused by an explosion is an occupational accident whereas a hearing impairment resulting from long-term work in an environment of loud noise is an occupational disease
- A back injury resulting from a fall is an accident whereas a back injury caused by long-term work in the wrong working position is an occupational disease

M7-EN.1.3 Prevention of occupational injuries

Generally, both accidents and occupational diseases can be prevented by encouraging good attitudes to the work environment. If an accident or an occupational disease has occurred, it is important that you learn from it so that in future similar injuries can be avoided. This can happen if the company systematically investigates and analyses the accidents and occupational diseases, which occur.

When an accident occurs, the injured person often blames himself. Even more often, others blame him for the accident. People then are content with these conclusions and do not take any further action.

However, if you want to assist in safety, you have to adopt a different attitude. You have to look for the causes of the accident and find the conditions that need to be changed. You have to look at the conditions that affect people's behaviour and the way in which their work is organised, including technical arrangements, work procedures, etc.

Please note that the purpose of analysing the causes for injuries arising is not to find the guilty or responsible parties, but to find and change the conditions causing the accidents or occupational diseases!

The following three-point model is suitable for the prevention of occupational accidents.

Mapping the facts

- Gather information about factual incidents in connection with the accident
- If possible, take photos or draw sketches
- Do it as fast as possible after the accident

Clear up the accident

- Carry out a step-by-step analysis of the events leading to the accident
- Base the analysis solely on the facts collected during the mapping

Find safe solutions that are preventive

- Go through each step of the analysis for possible preventive measures
- Estimate the sequence of preventive measures and decide what should be carried out immediately and what should be carried out later
- Agree on deadlines and determine who is responsible that the measures are

implemented

M7-EN.1.4 Duties and responsibilities in the work environment

As a principal rule, the employer is responsible for workplace safety and for compliance with the legislation. Thus, it is also the employer's duty to take on an active role in safety and health on the job.

The employer does not however bear full responsibility. Also managers and supervisors at various levels, the employees and suppliers of machines, equipments and aids bear their share of responsibility.

The employer's responsibility

- The work – including work with machines, technical aids, chemicals, other substances and equipments – must be planned and executed in complete accordance with safety and health regulations
- The workplace must be arranged securely in relation to ventilation, cold and draught, dangers of crash or collapse, etc.
- The employees should have the necessary training in a safe manner of working
- There should be supervision that the work is carried out according to given instructions

Managers and supervisors act as the employer's representatives and have – each one at his/her own level – the same responsibility as the employer.

The employees' responsibility

- Assist in working conditions being in complete accordance with safety and health regulations
- Use the personal appliances for protection distributed to them
- Report flaws and defects to the supervisor if they cannot repair them immediately

Suppliers

- Machines must be supplied with the necessary protective equipment and simple instructions
- Scaffolds must be suited for the work they have been ordered for, and they should be set up in a safe manner according to regulations

Furthermore, the builder and the constructors are also responsible that the work is carried out in the most appropriate way regarding health and safety during work.

M7-EN.1.5 Prevention in practice

Workplace assessment is one of the best tools for systematising the work on the occupational environment and the prevention of injuries. Workplace assessment must cover the entire work environment of the company or the building site. I.e., the estimate should comprise as a minimum:

- Physical impacts (e.g. light, noise, cold and draught)
- Chemical impacts

- Biological impacts (e.g. risks of infection)
- Ergonomic impacts (e.g. work positions and heavy lifting)
- Mental impacts (job satisfaction)
- Risks of accidents

The workplace assessment must be revised when there are changes in the work environment, e.g. when introducing new working procedures, new machines, or when new risks or dangers occur which have not yet been taken into account. This may occur if there is an accident or a missed accident.

In a construction site, the conditions of the workplace change from day-to-day, or even from hour-to-hour. As a result, there is a need for good planning and co-ordination, as well as cooperation between the different sub-contractors and the main contractor, in order the working environment to remain safe.