

Manual on HSW
(Health and Safety at Work)
Training



**ZÁPADOČESKÁ
UNIVERZITA
V PLZNI**

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Part I

1. HSW STRATEGY

The European social model is based on a functioning economy, a high level of social security and education and on social dialogue, which requires improving the quality of employment, especially occupational safety and health (OSH). That means, above all, introducing measures to improve HSW at these key points:

prevention

steady improvement

safety and health

employer's responsibility

employees' participation

1.1 What to Do

- Reduce the number of occupational accidents and work-related illnesses
- Increase prevention of occupational illnesses, especially those associated with exposure to hazardous substances or repeated overloading.
- Increase efforts to prevent social risks leading to stress and risks associated with dependence on alcohol, drugs and medicines.

1.2 HSW Importance and its Place in Management

HSW is part of personnel management – human resources management. HSW is a complex of legal, organizational, technological, health, sanitation and education measures aimed at achieving such a state of workplaces, working environments and work where there will be no work accidents, occupational diseases or other threats to health or damage to property. On the contrary, improvement of working life will be achieved.

1.3 Basic HSW Rules

- Employers have a basic obligation – to ensure occupational safety and health with regard to the possible risk to employees' lives and health that relate to work.
- This obligation extends to all persons who reside at their workplace with the knowledge of the employer.
- **Senior employees at all levels of management** are responsible for carrying out the responsibilities assigned by the employer in the care of health and safety, and these responsibilities are an equal and integral part of their work duties. If a senior employee fails to carry out these obligations, they violate labour discipline.

1.4 Employer's Obligations

- Act no. 262/2006 Coll. – Labour Code

- Act no. 258/2000 Coll. – Act on Public Health Protection
- Law no 174/1968 Coll. – Law on State Supervision of Work Safety
- Act no. 251/2005 Coll. – Work Inspection
- Employers' options:
- HSW rules infringement can result not only in the responsibility of the employer or the employee for the damage caused to other participants of the labour contract, but also special kinds of labour legal liability may apply.
- The essential approach to HSW emphasizes the duty of the employer to reduce the risks of labour and formulate employees' duties at work so as to ensure their own safety.

1.5 Employees' Obligations

Each employee is **obliged** to care, according to their abilities, for their own safety and health, and the safety and health of individuals whom their actions or omissions at work directly affect. Knowledge of basic obligations arising from legal and other regulations and requirements of employers to provide HSW is an **integral and permanent part of employees' qualifications**.

Neglecting HSW has the following consequences:

A higher sickness rate and a greater amount of wasted time, which leads to loss of productivity; low morale which leads to reduced productivity; wasting the skills and experience of staff; lower utilization of corporate investments in training, and difficulties in attracting qualified employees; payment of compensation to injured and ill workers or family members if the work injuries and occupational diseases result in the death of workers; increased costs incurred in resolving disputes; payment of compensation for difficult working conditions and environments. Other consequences include: a higher rate of premiums that insurers require; a higher degree of damage to machinery, equipment and facilities due to accidents; fines imposed by inspection authorities; disputes with trade unions and public authorities; loss of reputation; disruption of relationships with suppliers and, in the case of major violations or serious consequences, even closure of operations or withdrawal of authorization to operate.

1.6 Safety Management

5 steps to safety:

1st step – determine the strategy

2nd step – involve the staff

3rd step – plan and set standards

4th step – monitor performance

5th step – learn from experience, check and evaluate

Step 1 – Determine strategy

- Get all the causes of threats to security under control.
- It is necessary to identify and evaluate risks, and then decide on necessary security measures.

Step 2 – Involve staff

- Ensure adequate resources for mentoring, provide information events for the public and your own employees.
- Define responsibilities, make sure everyone knows what they should do, by whom they are monitored, and to whom they are obliged to be responsible.
- Consult with your employees, involve them in planning activities, performance evaluations and solving problems.
- Provide information on hazards, risks and precautionary measures.

Step 3 – Plan and set standards

- Identify hazards and determine how they could be eliminated, reduced or monitored.
- Obey the laws, ordinances, regulations, and meet an agreement on targets.

Step 4 – monitor performance

- Actively monitor (before a situation gets worse), observe the standards that you have set yourselves.

Step 5 – learn from experience, check and evaluate

- Checks carried out by your employees or other persons complement the monitoring of the activities that assess whether your strategy, organizational activities and systems currently achieve good results.

2. LABOUR CODE

2.1 What the Labour Code includes about HSW

Part 4	Title III	§ 88-89	Work breaks and safety breaks
	Title IV	§ 90-92	Rest period
	Title V	§ 93	Overtime
	Title VI	§ 94	Night work
Part 5	Title I	§ 101-102	Prevention of threats to life and health at work
	Title II	§ 103-106	Employer's obligations; rights and responsibilities of employees
	Title III	§ 107-108	Common provisions
Part 10	Title IV	§ 237-247	Caring for employees
Part 14	Title I	§ 366-393	Compensation for damage

2.2 Health and Security at Work

2.2.1 § 81

The employer is obliged to ensure that the schedule of working hours is not inconsistent with considerations of safe and health-friendly work.

2.2.2 § 101

- The employer is obliged to ensure the occupational health and safety of employees with regard to possible risks to their life and health (the "risks").
- Care for HSW is an integral and equal part of job responsibilities of managers at all levels of management.
- The obligation of employers to ensure occupational health and safety applies to all persons who visit the workplace with the knowledge of the employer.

2.2.3 Risk prevention – excerpt from § 102

- The employer is obliged to create a safe and healthy working environment and working conditions by suitably organizing SHW and taking action to prevent risks.
- Risk prevention means any measures resulting from legal and other regulations to ensure HSW, and the measures of the employer whose goal is to prevent risks, eliminate them or minimize effects of unavoidable risks.
- Other employers' obligations in preventing risks are set out in § 102, paragraph 2-7 LC.

2.2.4 Employers' obligations – excerpt from § 103

The employer shall:

- not allow employees to perform prohibited work, or work whose intensity does not match their abilities and/or medical fitness;
- inform employees about what category the work they perform has been included in;
- provide employees with medical services at work; compensate employees for a potential loss of earnings due to a doctor's examination;
- inform female employees when at work-exposure to risk factors damaging the unborn are under consideration; inform mothers, pregnant employees or those who are breastfeeding, and female employees – mothers up to nine months after childbirth

The employer is also obliged to acquaint employees with the risks and their possible effects on pregnancy, breastfeeding or their health;

- ensure employees first aid;
- ensure compliance with the ban on smoking in the workplace.
- The employer is obliged to provide employees with training on legal and other HSW regulations – see 4.1.3.

2.2.5 Personal protective equipment - § 104; Government Regulation No. 495/2001 Coll. – see 4.2

- If the employer can not eliminate risks or sufficiently reduce risks by collective protection measures or through the organization of work, the employer is obliged to provide employees with personal protective equipment.
- The employer is obliged to provide employees with detergents, cleaners and disinfectants according to the extent of contamination of skin and clothing; they shall also provide protective beverages in workplaces with unsatisfactory microclimate conditions, to the extent and under the conditions laid down by the implementing legislation.

2.2.6 Occupational injury: § 105 + Government Regulation No. 201/2010 Sb. - see 4.1.7

2.2.7 Further duties of the Employer: Government Regulation No. 101/2005 Coll. + Government Regulation No. 378/2001 Coll.

- The employer is obliged to ensure that machinery, technical equipment, vehicles, tools and equipment are, in terms of health and safety, suitable for the job for which they are used. Machinery, technical equipment, transport equipment, instruments and tools must be
 1. fitted with protective devices that protect the life and health of employees,
 2. equipped or designed so that employees are not exposed to, among others, uncomfortable working positions or undesirable effects of noise and vibration,
 3. regularly and properly maintained, inspected and reviewed.
- Workplaces must be equipped with safety signs (Government Regulation No. 11/2002 Coll.).

2.2.8 The rights and obligations of employees – excerpt from § 106

- The employee is entitled to HSW, information about the risks of their work and information on measures to protect against their effects.
- The employee is entitled to refuse to perform work which is reasonably considered to directly and seriously endanger life or health.
- Each employee is obliged to care, according to their abilities, for their own safety and health, as well as the safety and health of individuals who are directly affected by their actions.
- The employee is obliged to:
 - participate in training provided by the employer, including verification of the employees' knowledge;
 - undergo prescribed preventive medical examinations;
 - comply with legal and other regulations and instructions of the employer to ensure health and safety, with which they were well acquainted;
 - observe workflows when working, using established working equipment, transport equipment, personal protective equipment and safety devices;
 - refrain from drinking alcoholic beverages and using other addictive substances at the employer's workplaces, or smoking in workplaces and other areas where nonsmokers are also exposed to the effects of smoking;
 - report flaws and defects in their work to their superior;
 - promptly notify their superior about a work-related injury
 - on the instructions of the authorized senior employee designated in writing by the employer, undergo an examination to see whether they are or are not under the influence of alcohol or other addictive substances;
 - comply with the conditions laid down for traffic on all roads in the area and at the employer's workplaces
 - when handling chemicals, follow established "Guidance for the Safe Use of Chemicals", and "Safety Data Sheet";
 - carry out work at heights (over 1.5 meters) with protective aids only;
 - ensure safe storage of material; it must not endanger anybody by its fall, sharp edges, etc.

2.2.9 Senior employees are also required to – excerpt from § 302

- manage and supervise the work of subordinate employees, and assess their work performance and work results;
- create favorable working conditions and ensure HSW;
- ensure compliance with laws and internal regulations;

2.3 Liability for Damage Caused by Work Accidents and Occupational Diseases

2.3.1 Damages – § 366 and § 369

- The employer is responsible for damage caused to employees due to work injury or occupational disease, and is obliged to provide compensation for loss of earnings, for pain and loss of amenity, and for reasonable costs associated with treatment and material damage.

2.3.1 § 367

- The employer is completely relieved of liability if s/he proves that the damage was caused by the affected employee through their fault, violation of the law, other regulations or guidelines to ensure HSW; that the damage was caused due to their drunkenness or abuse of other addictive substances, and that these were the only cause of damage.
- The employer is relieved of liability in part, if s/he proves that the employee has violated legal or professional regulations, or one of the causes was drunkenness, or the employee acted in a manner contrary to the usual behaviour: s/he acted recklessly and must have been aware, due to their experience and qualifications, that it could be detrimental to health. Ordinary carelessness can not be considered reckless conduct

3. GOVERNMENT REGULATION

3.1 Government regulation No. 361/2007 Coll. Setting HSW conditions

3.1.1 Subject of Amendment

This regulation governs working conditions, risk factors, their classification, hygienic limits and methods of their detection, methods for assessing risk factors in terms of employees' occupational health and safety, the minimum range of measures to protect the health of employees, conditions for the provision of personal protective equipment and additional health requirements for the workplace and working environment.

3.2 Risk factors of working conditions, their classification, detection; evaluation of health risks and other conditions of health protection at work

3.2.1 Classification of risk factors of working conditions, their detection and evaluation

- Risk factors arise as a result of unfavorable microclimate conditions, chemical factors, biological factors, physical exertion, postures and manual handling of loads.
- Physical factors such as noise, vibration, non-ionizing radiation and ionizing radiation, their hygienic limits, methods of their identification and evaluation of a minimum range of measures to protect the health of employees who are exposed to these physical factors are regulated by special laws.

3.2.2 Conditions of health protection at work with risk factors which are the consequence of unfavorable microclimate conditions

3.2.3 Conditions of health protection at work with chemical factors and dust, lead, chemical carcinogens and asbestos (excerpt from §§ 9-21)

3.2.3.1 General procedures and protection against excessive exposure – assessment of health risks

- Assessment of health risks for employees includes determining the presence of chemicals or dust in the workplace, determining the level, type and duration of exposure, assessing the effect of measures taken for HSW, PPE equipment, ensuring effective ventilation.
- When working with lead, which could lead to the absorption of lead into the body, the method and level of exposure must be assessed, and the consequent health risks must be evaluated; employees must be provided with satisfactory working clothes.
- For work with chemical carcinogens, it is necessary to limit the number of employees exposed to a minimum, customize workflow and reduce or eliminate these substances from the workplace, provide PPE, ensure the safe storage of chemicals, monitor the health of employees.
- Evaluated health risks in work with asbestos include the work period, changes of technological processes, regular staff training on the properties of asbestos, safe working practices and adequate scope of preventive care.

3.2.4 Conditions of health protection when working under physical stress

3.2.4.1 Total physical stress (§ 22-23)

Overall physical strain is considered load of physical work, performed by the large muscle groups in which more than 50% of the muscle mass is loaded

3.2.4.2 Local muscular load (§ 24 - 25)

local muscular load is a strain of small muscle groups while working with limbs

3.2.4.3 Working position (§ 26 - 27)

Unacceptable positions include: bending the trunk more than 60°, distinctive slant or rotation of the trunk exceeding 20°, bending the head more than 25°, inclination and rotation of the head more than 15 degrees, backward bending of arms, extreme external rotation of arms, extreme position of the joints of the upper limbs, raising arms more than 60 degrees, extreme knee flexion.

3.2.4.4 Manual handling of load (§ 28 - 30)

- Manual handling of a load is lifting, pulling, or moving in which, due to the characteristics of the load, a back injury may occur.
- Hygienic limit for the weight of a load manually handled by **males**:

occasional lifting and carrying – 50 kg

frequent lifting and moving – 30 kg

hygienic limit during an eight-hour shift – 10,000 kg

hygienic limit for the weight of a load manually handled in a sitting position – 5 kg

• hygienic limit for the weight of a load manually handled by **females**:

occasional lifting and carrying – 20 kg

frequent lifting and moving – 15 kg

hygienic limit during an eight-hour shift – 6,500 kg

hygiene limit for the weight of a load manually handled in a sitting position – 3 kg

3.2.5 Conditions of health protection when working with mental stress (§ 31-33)

Work with mental stress means work associated with monotonous repetitive work, unnatural biological rhythms in three-shift service or continuous operation, or work performed only during night time.

3.2.6 Conditions of health protection when working with a visual load (§ 34-35)

- Work with visual strain is associated with intensive work on resolution of details, performed under special lighting conditions associated with the use of magnifying devices, monitors or display units associated with permanent glare.
- Work with visual strain must be, in order to reduce its dangerous effect on the health of the employee, interrupted by safety breaks lasting 5 to 10 minutes after every two hours of continuous work, or alternating the activities or employees must be ensured.

3.2.7 Conditions of health protection when working with biological agents (§ 36-38)

- Biological agents are classified according to the degree of risk of infection into 4 groups; health risk assessments must be based on information about the classification of biological agents into groups, potential effects that may occur to employees, and occupational illnesses
- Minimal HSW measures include a ban on eating, drinking and smoking at the workplace, providing PPE, effective vaccination; the workplace must be equipped with written instructions which include procedures in case of emergencies.

3.2.8 Safety breaks when working with risk factors (§ 39)

- if the work is consistently ranked as risky, safety breaks have to be included during which the employee may remove the personal protective garment. The first safety break is included after 2 hours of continuous work at the latest and it lasts at least 15 minutes; the last break lasts at least 10 minutes and is no later than one hour before the end of the shift. For the duration of safety breaks, employees must not be exposed to risk factors exceeding health limits.

3.3 Further detailed hygienic requirements for the workplace and working environment

3.3.1 Hygienic requirements for climatic conditions in the workplace – ventilation

(§ 40-44)

- In the workplace, in order to protect health, sufficient air exchange through natural or mechanical ventilation must be ensured. The amount of air exchanged is determined with respect to work performed and its physical demands. Forced ventilation must always be provided if natural ventilation is not sufficient to ensure health protection.

- The minimal amount of air entering the workplace must be:

- a) 50 m³/h per employee performing work classified within Classes I or IIa (see 3.2.2.4)

- b) 70 m³/h per employee performing work classified within Classes IIb, IIIa or IIIb

3.3.2 Detailed hygienic requirements for workplace lighting (§ 45)

- In a workplace with natural light, light apertures must be fitted with a screening device.

- Lighting must not cause glare.

- Lighting systems must be cleaned regularly at intervals corresponding to minimum standard values, and maintained in such a condition that illumination properties are preserved.

- Workplaces where employees are, in case of failure of artificial lighting, increasingly exposed to the possibility of injury or other damage to health, must be provided with sufficient emergency lighting.

3.3.3 Additional hygiene requirements applicable to work areas (§ 47-49)

- Volumetric space designed for work must be for each employee:

- a) 12 m³ for work in Classes I and IIa (see 3.2.2.4)

- b) 15 m³ for work included in Classes IIb, IIIa or IIIb

- For each employee, in the workplace there must be an unobstructed floor area of at least 2 m² apart from facilities and connecting corridors; the width of open areas for movement of persons may in no case be narrowed down below 1 m.

3.3.4 Conditions of health protection for work with display units (§ 50)

- The screen may not contain defects such as oscillation, swimming or skipping of characters, lines, changing brightness and so on. Brightness and contrast must be easily adjustable. The screen must, through its construction, permit displacement, turning and tilting according to the needs of the employee. It must be positioned so that it avoids reflections of lights or other sources, such as window openings, light walls, furniture and the like. The distance from the eyes to the screen for usual office work may not be less than 400 mm; the brightness of the screen may not be less than 35 cd/ m².

- The keyboard must be separated from the screen to allow employees to choose the most suitable working position and movements. The free space between the front edge of the table top and the bottom edge of the keyboard must allow resting one's hands and wrists. The keyboard surface must be matte. The letters and numbers on the keys must be legible, contrasting with the background.
- The dimensions of the table top must be chosen so as to allow a flexible arrangement of the screen, keyboard and other devices. The workbench or other devices must be dim to avoid reflections on them. Rest for lower limbs must be given to anyone who requires it.

3.3.5 Hygienic requirements for water supply (§ 53)

- The area intended for the work has to be supplied with drinking water and warm running water for the hygiene of employees.

3.3.6 Dimensions, design and equipment of sanitary and ancillary facilities (§ 54-55)

- A dressing room must be provided for employees who must wear work clothes; changing rooms must be equipped with lockers, the ambient temperature is 20° C.
- The number of employees per one washbasin is 10; the number of employees per one shower (if provided) is 25 (when contamination of the skin of the employees and work clothes does not occur), 15 (where contamination occurs).
- The minimum number of toilets is determined by the most numerous shift as follows:
 - a) 1 seat per 10 women
 - b) 2 seats per 11 to 30 women
 - c) 3 seats per 31 to 50 women
 - d) for each additional 30 women, one more seat
 - e) 1 seat per 10 men
 - f) 2 seats per 11 to 50 men
 - g) for each additional 50 men, one more seat

4. RECTOR'S DIRECTIVE

4.1 Rector's Directive No. 22R/2011 – Health and Safety at Work

4.1.1 Basic provisions

- Senior managers of UWB at all levels of management are responsible for carrying out HSW tasks within the scope of their functions.
- The obligation to comply with occupational health and safety applies to all persons who, with knowledge of UWB, are staying in their workplace.

4.1.2 HSW organisation at UWB

- Coordinations of HSW professional activities are carried out by the HR Department – Department of Occupational Safety and Specific Tasks (the HSW Department).
- Functions of HSW technicians of departments and offices are established; these employees are appointed to their positions by the bursar on recommendation from the head of the department; the inherent responsibility of managers is not affected.
- The Department of Occupational Safety ensures in particular:
 - record keeping and registration of occupational accidents, injuries of students, compensation for injuries and negotiations on compensations for damages with the health insurance company, participation in dealing with serious, multiple and fatal injuries;
 - coordination of the implementation of public HSW audits, keeping of relevant documentation including a timetable for follow-up measures;
 - participation in initial, preliminary and periodic training sessions;
 - methodical management of HSW technicians in the departments and other workplaces;
 - drafting the directive on the provision of PPE.
- the main duties of HSW technicians of departments and other offices are:
 - perform daily inspections of the condition of HSW care, discuss the results of inspections, including the date of removal of possible defects, with the managers;
 - carry out initial training of new employees, provide periodic HSW training once in two years (unless otherwise specified), ensure that workers whose work requires special training participate in these training sessions in the given terms;
 - keep records of PPE and ensure its efficient use;
 - ensure that a record of a work or school injury is written down within 5 working days.

4.1.3 Duties of managerial staff, employees and students

Duties of managerial staff:

- inform employees (or students) about risks of work; train them in safety regulations for work which they will perform;
- allocate employees appropriate personal protective equipment (hereinafter PPE), washing, cleaning and disinfectant liquids and protective ointments, and make them acquainted with their use;
- check whether the HSW regulations (orders, instructions) and established working practices are complied with in their workplaces;
- not permit violations of safety and health rules and consumption of alcohol or addictive substances in the workplace, and during working hours also outside the workplace;
- properly investigate occupational accidents, occupational diseases and injuries of students;
- submit to the superior, if they are not themselves entitled to do so, proposals for the imposition of measures against those who violate HSW legislation (breach of work discipline);
- participate in HSW training of managers once every 2 years; ensure HSW training for subordinates at least once every 2 years and, when a new employee arrives, immediately;
- provide operational elimination of HSW defects at the workplace;
- in the event of a change in the post of HSW technician in the department or workplace, ask the HSW department immediately for a new appointment.

Duties of employees and students:

- observe the regulations and guidelines to ensure health and safety and the principles of safe behavior in the workplace;
- use the prescribed PPE at work;
- attend training sessions implemented by the organization;
- notify their supervisors about shortcomings and defects that could endanger HSW.

4.1.4 HSW regulations training

- The obligation to inform employees and students about legal and other HSW regulations in the form of regular briefings and examinations of safety regulations is enshrined in § 103 and §106 LC. Knowledge of these laws must be checked regularly. This obligation applies both to the period before employees start work and when students enter the first year, and to the whole duration of employment or study. When organizing any form of physical education, the Head of the Department ensures demonstrable information for students about the principles and rules of safety training
- Kinds of HSW training:

- **Initial** training of newly hired UWB employees are performed by the HR Department in collaboration with the Department of Work Safety. The Study Department, in cooperation with the Department of Occupational Safety, implements training of newly admitted students during their registration. The training mainly includes explanations of essential duties in compliance with HSW regulations.
- The Head of Department or their delegate (HSW technician) implements the **initial** training (upon entering the workplace). Its content is primarily a briefing on HSW principles, which the employee must observe in their work on the jobsite, warnings about an increased danger of accidents, information about the main valves, main switches, etc., as well as, in particular, the obligations of the employer and the employees according to LC: reporting work-related injuries, ensuring prescribed PPE, first aid in case of injury.
- The Head of the department or their delegate (HSW technician) conducts **periodic** trainings on HSW at individual workplaces at least once every 2 years; the training content is identical to the initial training and focuses on a more detailed explanation of the dangers that are characteristic of the respective employees' departments.
- The HSW department provides **periodic training for managers** which takes place once every 2 years; the training includes familiarization with HSW organizations of UWB in Pilsen and with HSW rules as amended by generally applicable legislation.
- Training of **special professions** (metal workers, wood workers, crane operators, binders, operators of lifting devices, drivers, clerks, operators of pressure vessels, laser equipment, etc.) are ensured by the HSW department in collaboration with heads of individual departments and workplaces or their authorized personnel (HSW technicians) in terms given by the relevant standards, decrees or directives.
- All training must be clearly documented for inspection authorities (attendance list or entry in the Diary of Work Safety, which is available in the HSW department).

Note – information on what **initial** training should include (roughly):

- information on the use of PPE
- familiarization with rules and guidelines relating to work performed and the workplace
- familiarization with the location of means of first aid
- information about the correct handling of loads, including weight limits
- familiarization with the rules of operating electrical appliances, instructions for operating machines

- familiarization with work safety in special jobs, e.g. when working at heights
- familiarization with hazardous substances including their negative effects on the body, information on safe handling and first aid

4.1.5 Public screening

For proper implementation of the screening, heads of departments (heads of divisions and directors of other parts of UWB) establish committees that will review and process reports of findings and defects which they shall send to the HSW department. Based on the comments of departments and workplaces, the HSW department drafts the schedule for troubleshooting.

4.1.6 Risky work and workplaces

- It is necessary to pay increased attention, with respect to HSW, to dangerous workplaces (laboratories, workshops, testing) and risk workplaces.
- Employees at these workplaces regularly undergo established medical examinations. In the case of health deterioration, the employee must be transferred to a workplace where there is no permanent damage to health.
- Risk factors are mainly physical factors (noise, vibration, etc.), chemical (carcinogens, etc.), biological (viruses, bacteria, fungi) and unfavorable climatic conditions (e.g. extreme cold, heat and humidity).

4.1.7 Occupational and school injuries, occupational diseases

- The employer is obliged to report any occupational injury and send a report of the accident to relevant institutions (insurance companies, Regional Labour Inspection, etc.). Accidents at work also include an injury suffered by the employee in the workplace or on the premises of the organization in activities that are not related to performing the job, or an injury of another person who, with knowledge of the organization, is visiting their workplace or premises that are not otherwise publicly available.
- For providing first aid, a first aid kit is available, where a minor injuries book is stored in which the treatment is registered. The HSW technician of the department or workplace checks and replenishes the contents of the medicine cabinet.
- Any injury or death caused to an employee or student beyond their control, through brief, sudden and violent external influences in their work or in direct connection with work is considered a work (school) accident. This does not include travel to and from work, a canteen or a medical examination in a medical facility or the way there and back if it is not provided on the premises of the employer.
- Registration is required for accidents which caused death or incapacity of more than three calendar days. A record is required for occupational injuries which did not cause incapacity

or incapacity for work exceeding three calendar days. Employees are, in their own interest, obliged to make an entry in the book of minor injuries, which is stored so that it can be used as a basis for establishing the necessary measures for a subsequent description of an accident in case the injury turns out to affect health only later.

- Report of work and school injuries:

- The injured person, if able, or another employee who witnessed the accident at work, shall immediately notify the superior/manager. They (or the workplace HSW technician) is obliged to make a record of the accident together with the injured person, not later than five days after the injury. The completed injury report is then sent immediately to the HSW department.

- A similar process applies to school injuries.

- A record of the accident at work (see Annex No. 1 of the Rector's Directive) is sent in five copies, a record of a school injury (see Annex No. 2) in 2 copies.

- A case report forms for accidents are available at the HSW department and on www.per.zcu.cz

- www.olp.zcu.cz

4.1.8 Prohibited work

- Prohibited kinds of work are listed in § 8 of Act No. 309/2006 Coll. (prohibition of performance of some work) – e.g. work with asbestos
- Decree No. 288/2003 Coll. stipulates work and workplaces that are prohibited for pregnant women, nursing mothers, mothers until the end of the ninth month after giving birth, and juveniles.

4.1.9 Personal protective equipment (PPE)

- Provision of personal protective equipment at UWB, including a list of occupations, professions and workplaces for their provision, is set out in Rector's Directive No. 23R/2011.

4.2 Rector's Directive No. 23R / 2011 – Providing personal protective equipment

4.2.1 Basic provisions

UWB must equip its employees, in order for them to carry out their work, with PPE which UWB is obliged to provide:

- against the danger of exceeding the permissible concentrations of harmful substances in the working environment;

- in danger of immediate contact with substances irritating and damaging the skin or mucosa, or with toxic substances;

- against physical pollutants, given the nature of the effects of these pollutants, particularly where there is a danger of exceeding the maximum permitted levels of such pollutants;
- against the danger of injury (mechanical hazard, fall of persons and materials, chemical burns, burns, electric current, etc.);
- against threats of excessive heat, cold, moisture or extreme temperature changes and adverse weather;
- if protection, due to hygienic and anti-epidemic measures, is required, including protection of the wholesomeness of foodstuffs and pharmaceuticals – in the case of the sale of food and public catering.

4.2.2 Providing PPE

- A list of the PPE provided by UWB is given in Annex 1 to this Directive, and on the Web.

4.2.3 Duties of managers

- Senior employees are obliged to provide PPE at the workplace and ensure their adequate storage. They are obliged to require employees to use the prescribed PPE and maintain the PPE in usable condition; they monitor their professional and economical handling.
- At least once a year, and always in carrying out HSW audits, the use and maintenance level of PPE is evaluated in the context of assessing the level of risk at the workplace and activities connected with provision and management of PPE. According to the development of work activities, requirements for PPE are added or changed.
- Senior management delegate a responsible employee of the department or workplace (HSW technician) who keeps a record of borrowed PPE on personal cards or PC.
- PPE is also provided for visitors and students during practical education where the protection of life and health requires it, or for hygienic reasons.
- PPE is provided free of charge and may not be replaced by financial compensation.
- Senior employees apply sanctions against employees who violate this directive.

4.2.4 Duties of employees

- Employees must use personal protective equipment in the performance of work tasks, or in direct connection with them, for which PPE is allocated. Employees perform minor daily maintenance of PPE themselves, and their organizations provide the necessary means.
- If conditions for providing PPE terminate, employees are required to return it in a condition corresponding to reasonable wear.

- The employee is responsible for the loss of personal protective equipment with which they were entrusted by the organization, which the employee confirmed in writing at the time they were given it.

Part II

Important Rules for Providing First Aid

5. Instructions for exceptional events

5.1 Initial provisions

- First aid safety concerns all conditions threatening life and health.
- A first aid box must be located in the workplace; it must be equipped according to the risks of activities performed. The senior employee is responsible for the content and equipment of the first aid box.
- Timely and correct (as for quantity and quality) provision of first aid can not only reduce the consequences of accidents, but also prevent imminent danger to life.

5.2 Activities forbidden when giving first aid

- undressing the injured (except for burns with alkalis and acids)
- pressing protruding bone fragments (in open fractures) into the wound
- removing protruding foreign bodies from wounds
- forcibly changing the position of the injured
- pouring powder with antibiotics into the wound or burn site, applying ointments or sprinkling the wound with disinfectant solutions
- investigating the depth of wounds
- leaving the injured person unsupervised

5.3 Instructions for providing first aid to the unconscious

- **causes** – brain damage, loss of blood, oxygen deficiency, chemical changes in blood or drug overdose
- **dangers** – The main danger to the unconscious person is the closure of the airways, since the limp tongue can slip into the throat, or because the unconscious victim is unable to cough out and expel a foreign body or vomit from the throat.
- **first aid** – For basic resuscitation, **the rescuer – a layperson** – proceeds as follows: the rescuer monitors vital signs of the victim, shakes them gently and addresses them loudly. If the victim is unresponsive, the rescuer leans their head backwards, which frees the airways; then the rescuer monitors the breathing. If the breathing is normal, the rescuer puts the victim in the recovery position, **calls 112 or 155**, and, until the arrival of EMS, watches to make sure breathing is not worsening.
- If the affected person is not breathing normally or not breathing at all, the rescuer calls 112 or 155 and immediately begins the **resuscitation (CPR): s/he puts both hands in the**

middle of the chest and performs 30 chest compressions, compressing at least 5 cm deep at a frequency of at least 100 times per minute. In children, the compression is performed to 1/3 the depth of the chest. Massage must not be interrupted. After compressing, the lifesaver must always release the chest compression.

- If the **rescuer is trained in resuscitation (paramedics or medical personnel)**, they perform two artificial breaths. They breathe into the victim so they can see that the victim's chest rises. Before they breathe into the victim again, they await a lowering of the chest. Then they continue compressions and breathing in the ratio of 30: 2.
- If a trained or untrained rescuer has a defibrillator, they follow its voice instructions after opening the device. They apply self-adhesive electrodes according to its instructions. If there are two rescuers, CPR is not interrupted even during these operations. When the device is analyzing the heart rhythm, and at the time of the shock, nobody is allowed to touch the victim.
- **If the victim is waking up – moving**, opening their eyes and breathing normally, stop the resuscitation. If the victim remains unconscious (although breathing), keep them in the recovery position. Where possible, slip a blanket under them and cover them with another blanket. Try not to leave the patient without supervision until the arrival of medical aid.
- **Note:** If unconsciousness follows a fall or a car accident and it is possible that there are spinal injuries, do not place the affected person in the recovery position, except in case of vomiting. In such cases, try not to bend the spine of the affected person.



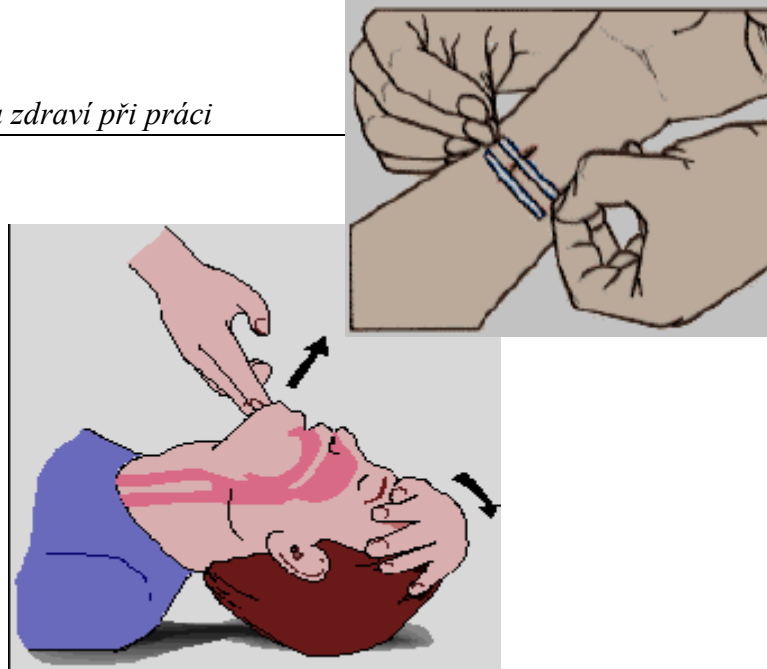
STABILIZED POSITION

5.4 Respiratory arrest

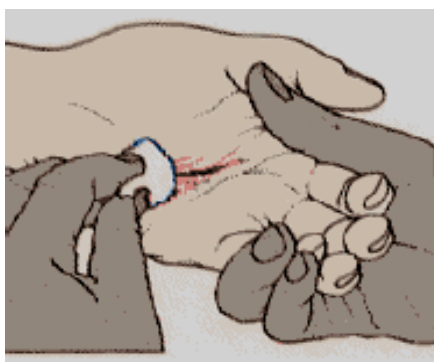
Causes – Respiratory arrest can occur after a fall, electric shock or ingestion of poison.

- **Reviving bigger children or adults**

Place the affected person on their back on a hard surface, support their neck from the back with one hand and tilt the affected person's head backwards. Explore his/her mouth with a finger and remove any obstacles blocking the airway.



- 5.5 Bleeding** – Bleeding always makes a distressing impression, whether it is a cut or other wounds. It should be treated promptly and calmly. Consider as serious bleeding:
- when blood squirts heavily from wounds
 - when the loss is estimated at greater than 250 ml (1/4 liter)
 - when the bleeding lasts longer than 5 minutes
- **Heavy bleeding** – In a minor injury, bleeding stops itself in a short time. In a severe injury, blood flows so freely that it cannot coagulate. The main goal is to slow the flow of blood so that it can coagulate and seal the damaged blood vessels in the wound. The slowdown is achieved by pressure on the wound site and by raising an injured limb above the level of the heart. Do not try to wash the wound with water and disinfectant. Immediately after first aid, seek medical treatment.
 - **How to stop heavy bleeding**
 1. Lay the injured person down and raise the affected body part.
 2. Remove easily accessible small foreign bodies, such as fragments of glass, but do not try to remove jammed foreign bodies.
 3. Firmly press a gauze pad over the wound, holding the gaping edges together. If there is a tightly adhering object in the wound, do not press straight on it.
 4. Keep pressure on the wound by tightly tying the pad bandage or a strip of cloth.
 5. When blood is seeping through the bandage, do not remove the bandage; bind other swabs or bandages so firmly that they stick to the first dressing.



- **Cuts – punctures**
- A deep wound caused by a contaminated object, e.g. a rusty nail or a tooth of an animal, carries a high risk of infection because the dirt entered deep into the tissue, and the wound bleeds too weakly to flush the dirt away. If a deep injury is accompanied by apathy, tingling or weakness in the injured limb, nerves or tendons can be damaged. For all deep wounds, a tetanus shot and antibiotics are necessary unless the patient is vaccinated against tetanus.
- **Shock** – Shock is a life-threatening condition caused by severe trauma, blood loss, burns or extensive infections. Its main feature is a dramatic drop in blood pressure. Suspected shock arises when the affected person is pale, sweaty and sometimes dazed or confused immediately after an injury. People in shock require prompt medical attention. Do not give food and drink.
- **First aid** – Lay the patient in shock on their back with legs raised. Loosen tight clothes and cover the patient to keep them warm. Try to calm them down.



5.6 Electric shock

Electric shock can lead to unconsciousness and respiratory arrest. Where electric current has penetrated the body, deep burns arise. There may be internal damage. Always seek medical treatment, even if it seems that the victim suffered only minor burns.

- **First aid**
- First turn off the power or interrupt the contact between the victim and the electrical wire.
- Do not try to pull the victim yourself because you could get an electric shock yourself. Instead, try to remove the wire with a tool such as a wooden broom handle.

- See if the victim is breathing. If not, immediately start reviving them with mouth-to-mouth breathing. Continue up to half an hour.
- Once the victim begins breathing on their own, treat the burns; put the victim into a stabilized position and arrange medical treatment.

5.7 Burns – They may be caused by fire, steam from hot liquids, electricity or corrosives.

In the treatment of burns, first remove the cause, i.e. move the victim away from the fire.

Never put any ointment or cream on the burn and never puncture the blisters.

• First aid

1. Remove the part of the clothing soaked with hot grease, hot water or chemicals from the burn area before it firmly adheres to the burn. Dry burnt remains of garments are not to be removed from burns.
2. Immerse the burned body part in cold, preferably running, water for at least 10 minutes. If the burn extent is large, cover it with a clean towel or bed sheet soaked in cold water.
3. After cooling the burn, cover it with a clean dry dressing. Do not use cotton wool or other "fluffy" material. When driving the victim to the hospital, do not apply any dressing because each removal of dressing causes more pain.
4. Elevate a burned limb and give the victim sips of cold water, if they are conscious.



5.8 Poisoning

Chemical poisons (including household cleaners, paraffin, kerosene, polishes and paints)

1. If the person is conscious, have them drink one glass of water at a time.
2. Do not attempt to induce vomiting. If vomiting occurs spontaneously, hold their head bent to prevent them from inhaling the chemicals from vomit
3. If the victim loses consciousness, put them in a stable position; if breathing stops, start reviving them by giving mouth-to-mouth.

4. Seek medical attention as soon as possible.

5.8.1 First aid for carbon monoxide poisoning

Remove the victim as quickly as possible from exposure. If the victim is unconscious, lay them on their back on a hard surface. Unconsciousness is immediately life-threatening. It is necessary to ensure adequate breathing and airway patency as quickly as possible (artificial respiration or respiration associated with indirect heart massage).

Patency of the airway:

- Bend the victim's head, pull the tongue, pull the lower jaw forward.
- If the person does not start breathing, immediately begin artificial respiration.
- Always transport the victim to the hospital, even in the case of lighter poisoning, when the affected person is conscious.

5.8.2 Drugs, alcohol, poisonous plants and fruits

1. If the person is conscious, try to induce vomiting.
2. Do not give an unconscious person anything by mouth. Place the victim in the recovery position; if respiratory arrest occurs, perform mouth-to-mouth resuscitation.
3. Seek medical attention as soon as possible.

5.8.3 How to induce vomiting

Never try this on an unconscious person. Also, not when chemicals such as kerosene, paraffin or detergents have been swallowed. Do not induce vomiting through administration of saltwater or jostling a finger down the throat. In other cases, 15 ml (3 tsp) of ipecacuan syrup can be used, drunk with two glasses of water. If this does not induce vomiting within 20 minutes, it may be repeated once more. Once the victim begins to vomit, hold his/her head bowed down to prevent choking or aspiration.

5.9 Bone injuries – fractures

- All fractures require careful handling and careful treatment, in order not to cause, through rough handling, another injury of surrounding tissues and organs (muscles, vessels and nerves) of the victim.
- **Symptoms** – deformation of the limb; bone fragments in open fractures, unnatural flexibility, pain, swelling, hematoma
- **First aid**
 1. The first basic rule is absolute fixation = immobilization of the broken bones to avoid additional complications (bleeding) and significantly reduce pain.

2. Immobilize the joints above and below the fracture.
3. For treatment of open fractures, ensure sterility – always use a sterile bandage to cover the wound.
4. Fractures can be treated in an improvised way – e.g. fix the lower limbs by firmly tying them together, or fix them with a blanket.
5. Improvise splints using wooden poles, branches, clothing, etc.
6. Immobilize fractures of the upper extremity using scarves and splints.

5.10 Injuries of joints

First aid

1. Cool the injured joint in order to soothe pain and lessen the swelling.
2. Immobilize the joint in the position in which it is set.
3. Never attempt to rectify the joint.

5.11 Bites and insect stings

- **Animal bites** – When bitten by a dog, cat or horse, seek medical treatment, as the majority of these wounds are infected and must be treated quickly. A tetanus shot or stitches are usually needed for unvaccinated individuals. When bitten by an unknown animal, one must seek medical treatment; a rabies vaccination may be necessary
- **Snakebites** – The only poisonous snake in the Czech Republic is the viper. In most cases, the bite is not dangerous. But it can be dangerous to a small child. If bitten by a viper, wash the wound area, administer aspirin to relieve pain, and if the victim is a child, keep them calm. Seek medical advice.
- **Bites and stings** – Bites and stings by a biting insect, e.g. mosquito, causes local itching, redness and swelling. In case of hornet, wasp or bee sting, try first to remove the sting from the wound with a clean fingernail or knife tip. Watch for signs of anaphylactic shock.
- **Anaphylactic shock** – An individual may, rarely, be hypersensitive to certain types of bites or stings by insects, usually when having been previously bitten or stung. After repeated bites or stings by this kind of insect, a severe allergic reaction may occur, known as anaphylactic shock. Symptoms include difficulty in breathing (as a sign of narrowing of the airways), and other signs of shock. When these symptoms are present, call for emergency medical assistance immediately after the bite or sting.

5.12 Important telephone numbers

EMERGENCY MEDICAL ASSISTANCE (AMBULANCE)	155
POLICE CR	158
FIRE BRIGADE	150
INTERNATIONAL EMERGENCY LINE	112