

A written record is available at: <https://www.mff.cuni.cz/en/students/forms>

Address: **Univerzita Karlova v Praze - Matematicko-fyzikální fakulta**

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## **Written record and training texts on fire protection and safety for students at the Faculty of Mathematics and Physics**

(Records will be kept in students' files at the Study Department.)

### **Introduction**

Training texts are to be studied and signed by students after introductory and subsequent training on Fire Protection (FP) and occupational safety and health (OSH).

### **Fire protection**

The Fire Protection Act no. 133/85 Coll. in its later amendments creates the conditions for the effective protection of the life and health of citizens and property from fires and for the giving assistance during natural disasters and other emergencies.

### **Basic responsibilities of individuals**

- to behave in such a manner so as not to cause fire or to endanger the life and health of people, animals and property,
- to provide appropriate personal assistance when fighting fires, natural disasters, and other emergencies provided that the individual or people nearby are not exposed to serious danger or threat,
- in case of injury to provide first aid and call for emergency help,
- to take necessary measures to limit the spread of fire while ensuring their own safety and that of people nearby,
- to notify the local fire brigade (the number is provided in the fire alarm directive), the operator will call the fire brigade (FB),
- to provide personal assistance or necessary material aid when asked by the FB commander .

### **Individuals are forbidden**

- to wilfully and unreasonably call the fire brigade or otherwise misuse the emergency number, thereby reporting a false alarm.
- to damage, misuse or otherwise prevent the use of fire extinguishers or other means of fire protection and fire safety equipment.

### **Danger of fire in university buildings**

The danger of fire in university buildings is heightened by the presence of combustible materials and various sources of ignition (mostly in research laboratory centres). Combustible materials include solid state materials, flammable liquids, and cylinders with flammable or oxidizing gases. If there are increased fire safety requirements in the workplace, additional information is posted in the area. **Possible sources of ignition include: open flames, burning materials (lit cigarettes!), electrical sparks, arc welding, electrical contact resistance, mechanical sparks, friction, and very hot surfaces and the heat that radiates from them.**

### **Students are required to:**

- familiarize themselves with the evacuation plan posted on bulletin boards in buildings at entrances to individual floors;
- respect the ban on smoking in all buildings; there are no smoking safety signs marked NO SMOKING at entrances to buildings, and this measure applies to the entire building;
- act in such a way that will not cause a fire, and in the event of a fire, extinguish it; if this is not possible to immediately summon assistance as specified in the fire alarm directives, and to report each fire, including those extinguished, to their department head;
- follow Dean's Directive 2/2004 for building guidelines of the Faculty of Mathematics and Physics;
- maintain order at their workplace (auditoriums, classrooms, laboratories, gyms, etc.), remove or report any defective equipment, in particular defects in the electrical system, to teaching staff or senior employees;
- not to tamper with or use flammable liquids if their use is not required in their work, and never without proper training or the supervision of a teacher; if a flammable liquid spills, immediately dispose of it in a safe manner in accordance with the instructions of a teacher (beware of liquids which spontaneously

combust!);

- not engage in, without proper qualifications or following teacher's instructions, activities that could lead to a fire;
- handle cylinders only under the supervision of a teacher;
- keep escape routes and exits free of obstacles;
- in case of fire, cooperate in the evacuation of the building;
- in the case of a fire drill, leave the building and assemble at the area designated for this purpose.

### **Teaching takes place principally in the following buildings:**

Praha 2 – Nové Město, Ke Karlovu 3, Ke Karlovu 5

Praha 8 – Karlín, Sokolovská 83

Praha 8 – Troja, V Holešovičkách 2

Praha 1 – Malá Strana, Malostranské nám. 25

Praha 10 – Hostivař, Bruslařská 10, Department of Physical Education (this area is not under the supervision of the Faculty of Mathematics and Physics).

### **Evacuation of people**

For each building there are special conditions for the evacuation of people which all students and employees of MFF are obliged to become familiar with:

- fire alarm instructions;
- fire regulations, if they exist for that building;
- escape routes – fire exit door keys are generally placed in a break glass key box; in an emergency these keys can be used to open the exit door.

Fire alarm instructions and a graphic representation of escape routes are placed on notice boards on each floor of the buildings listed above.

Escape routes are marked with luminescent signs that indicate the direction of escape.

If you know of someone who has remained in a building threatened by fire, immediately notify those who are managing the evacuation, or the FB unit.

**In case of fire, lifts/elevators must not be used in an evacuation. Lift cabins are not safe during a fire.**

### **Method of sounding fire alarm**

- V Holešovičkách 2 (area Troja): local radio, facility is secured by electronic fire signalization (EFS);
- Ke Karlovu 3 and Ke Karlovu 5: signal (internal siren) of 30s from the fire registration - concierge office;
- Sokolovská 83: signal (internal siren) of 30s from the fire registration - concierge office;
- Malostranské nám. 25: local radio, facility is secured by the electronic fire signalization (EFS).

### **Calling for help**

Methods for notifying the authorities may vary for each building. Directions are in the **Fire Alarm Instructions** posted on bulletin boards in individual buildings. Additional requirements and measures can be found in the **Fire Control Order** and the **Fire Evacuation Plan**. It is necessary to become familiar with all the information displayed in the building. Electronic fire signals automatically report a fire to the local fire reporting office (usually the gatehouse, reception desk or control room facility) via sensors located usually near ceilings. A fire may also be reported by a person who becomes aware of it by pressing a manual fire call button.

**Pressing the fire call button generally results in an immediate fire alarm in the building/area and possibly the triggering of other devices (e.g. fire dampers in the air conditioning system, forced ventilation of escape routes, etc.).**

If these procedures fail to immediately extinguish the fire, the Fire and Rescue Service must be called.

An extinguished fire must immediately be reported to the Fire Brigade.

### **Important telephone numbers**

**Fire Brigade ..... 150**

**Rescue Services ..... 155      Emergency Call ..... 112**

**Police of the Czech Republic ..... 158**

### **Use and types of fire extinguishers:**

**All portable fire extinguishers have a simple trigger mechanism. However, it is always necessary to remove the pin lock of the trigger mechanism. This lock is clearly visible and the initial procedure is indicated by pictograms on the instrument. Everyone should have training before using them.**

## **Powder extinguisher**

Dry powder extinguishers are the most widely used type of fire extinguisher. These can be used immediately, without the need to turn off the electricity. The required distance from electrical devices, when the electricity is on, is 1 metre. Most types of combustible material (solid, liquid) are extinguishable.

**ATTENTION: burning gas must never be extinguished until the gas leak has been sealed!** The extinguishing range is 6 metres and the operational duration is about 30 seconds. Extinguishing powder should be first targeted on the fire directly and then on the surface of the burning solid fuels.

## **CO2 fire extinguisher - extinguisher with carbon dioxide (formerly known as “snow”)**

CO2 extinguishers are usually located in technical areas, close to electric utility devices, servers, etc. They can be used immediately, without turning off the electricity. They are designed specifically for extinguishing liquid and gaseous chemicals. Solid combustible materials may be extinguished if the fire is limited – i.e. to cable insulation, combustible parts of electrical equipment etc., but not furniture etc. **ATTENTION: burning gas must never be extinguished until the gas leak has been sealed!** The extinguishing range is 2.5 to 3 metres and the operational duration is about 30 seconds. CO2 extinguishers operate by directly targeting the flame.

## **Fire hydrants**

Fire hydrants are not recommended to be used at the beginning of the extinguishing process. Before use, the FB commander must order the electricity to be switched off centrally.

## **Occupational safety and health (OSH)**

Fundamental rights are included as part of social rights and are specified in detail by laws, particularly the Labour Code and the law on public health care. Fundamental rights and freedoms are protected by the judiciary. In connection with these laws, everyone is obliged to take care of their own safety and health, and of the lives and health of other people.

## **Student obligations and rights**

- to comply with regulations pertaining to those activities involving the use of devices (computer equipment) or laboratory equipment (both physical and chemical), to become familiar with any existing **Local Operating Safety Regulations** in the course of these activities, and to follow the instructions of teachers and senior students assisting e.g. with computer technology in laboratories;
- to observe the principles of safe and proper behaviour in the classroom and at physical education facilities;
- when studying, to use personal protective equipment and protective devices prescribed by the teacher;
- not to drink alcohol or misuse addictive substances at the workplace, nor to come to school, work, or sports activities under their influence, nor enter under their influence any building or area of Charles University, Prague – Faculty of Mathematics and Physics;
- to undergo medical testing for alcohol or other addictive substances when a member of staff has a reasonable suspicion that a student is under the influence of one of these substances. The use of alcohol or other addictive substances when studying at the faculty may be considered by faculty administration as a breach of the duties of study, which can lead to expulsion;
- to respect the prohibition of smoking in all areas of the faculty;
- to undergo medical examinations that may be required by faculty administration;
- to notify members of staff of deficiencies or defects that could threaten work safety;
- students are entitled to refuse an activity which could threaten their life or health, or the lives or health of other individuals – such a refusal cannot be regarded as a breach of the student’s obligations;
- to notify the school management of failures or deficiencies in the school building which endanger or directly and seriously threaten the safety or health of other people, and, in particular, which may result in the imminent outbreak of an emergency or lack of organizational safeguards;
- to notify the school administration of the failure or malfunction of technical equipment or of the protective systems originally intended to avoid these failures;
- not to change or disable protective equipment;
- to immediately notify members of staff of personal injury, injury of other students, or injury of other people.
- the right to participate in solving issues related to safety and protection of health during their studies through student organizations or representatives responsible for safety;
- to participate in creating a safe and healthy environment, applying a set of measures adopted by the school and participating in issues of health and safety.

### The principles of first aid in cases of electric shock

Remove the victim from the source of the electrical current without endangering yourself!

Because of muscle spasm, affected individuals cannot release the object through which current is flowing. It is therefore absolutely necessary to first:

- a) turn off the electricity by removing the cable from the power outlet;
- b) move away the wire using a nonconductive material – wood, rope, cloth;
- c) do not touch the victim with your bare hands, and use only one hand;
- d) if the victim is not breathing, immediately begin indirect heart massage.

**Immediately call the Rescue Services, tel. .... 155**

### Traumatology plan

#### Emergency procedures for cardiopulmonary resuscitation and trauma

**In case of a serious accident, it is necessary to determine health status and life functions (breathing, heartbeat) and then call an ambulance; if possible, send someone for help while providing first aid.**

- 1) **Check breathing for 10 seconds – put your hand on the chest of the injured person and, listening, determine whether they are breathing; in case of cardiac arrest, begin to perform cardiac massage;**
- 2) **Stop severe venous or arterial bleeding;**
- 3) **If the victim is unconscious, let them lie on their back and monitor their vital signs; when more people are injured, put those who are unconscious into the recovery position and check their vital signs continuously.**

#### Cardiopulmonary resuscitation (indirect heart massage)

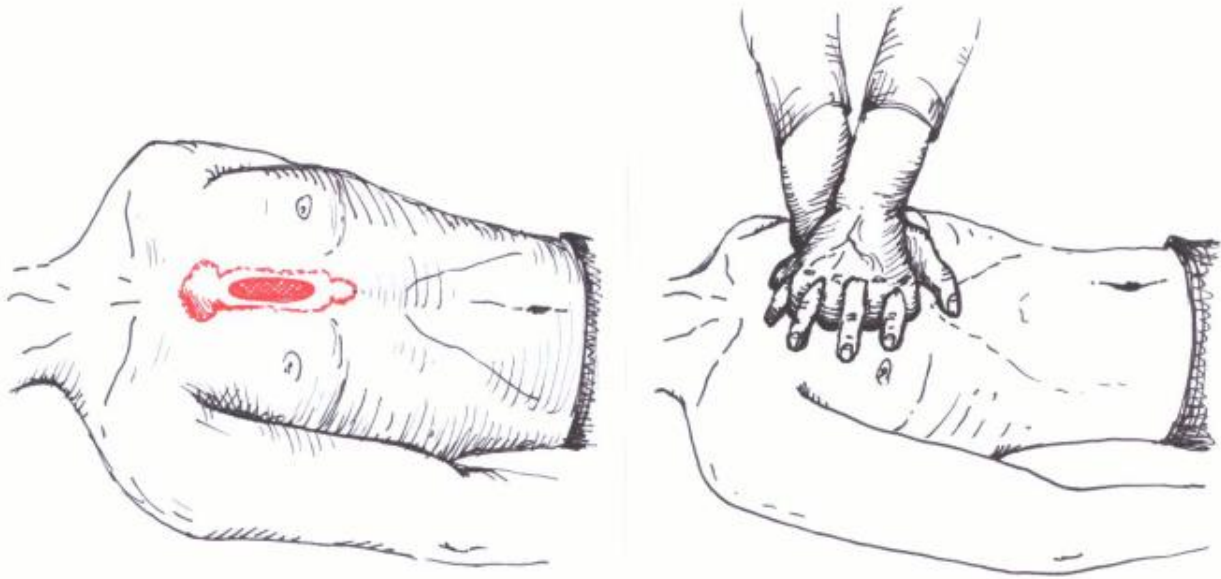
- 1) Check the state of the victim's consciousness and their vital functions (respiration, heart activity on the carotid artery - **if you cannot feel a pulse, do not seek it out any further, as it could lead to deterioration in the victim's health**).
- 2) If the victim is not breathing and there is no heart function, call the emergency number or ambulance, and try to get help.
- 3) Lay the victim on a hard floor, relax the airways by leaning the head back, and clear the oral cavity (vomit, blood, foreign bodies). For elderly victims, bend the head only slightly back so as to avoid damage to their health.



- 4) If the victim does not begin to breathe, **IMMEDIATELY** begin indirect heart massage. The rescuer puts the palm of their hand onto the middle of the sternum of the victim and then places the other hand on top of the first one. The fingers should point horizontally along the sternum, not close to the chest. During massage the rescuer should not move his/her hands away from the victim's chest. The rescuer's upper limbs should be stretched out at the elbows and perpendicular to the axis of the body.

**The rescuer compresses the victim's ribcage by the weight of their body – an adult chest is compressed by about 4 to 5 cm.**

**The frequency of regular compressing should be 100 compressions per minute.**



**When more rescuers are at the scene, they should take turns, each working for 2 minutes until emergency medical help arrives.**

### **School accidents**

If a student's health is damaged during schooling or school events (*school injury*), the school is responsible for any damages. The school may be exempt from this liability (fully or partially) according to the degree of culpability of the student. Reasons for exemption from liability on the part of schools are violations by the student of laws or other regulations, including intoxication, the use of drugs, or hazardous behaviour. If the school is partially exempt from its responsibility, the degree of damage caused by the student must be specified.

Injury is considered to be a *school injury* in cases where a student's health is damaged during activities associated with studying in school buildings or school activities organized by and under the supervision of a teacher. In principle there can be no *school injury* if the buildings and areas where students eat or are accommodated (e.g. on campus), lie on the way to or from school and do not belong to the Faculty of Mathematics and Physics, or during activities that are performed despite the express prohibition of the school. Deciding when a school accident is a *school injury* lies within the competence of the school; in case of any disagreement, the dispute will be decided in court.

### **Documentation of a school injury and compensation of an injured student of Charles University, Prague – Faculty of Mathematics and Physics**

#### **Documents necessary for one-off compensation of a student injured at school:**

- 1) "Record of a school injury of a university student," completed together with a teacher.
- 2) "Medical opinion" and quantification of injuries (compensation for injuries) – carried out by a doctor.
- 3) Receipts for medical administration – filled in and signed by a doctor.
- 4) Fees - confirmation of payment of fees at the doctor's office, hospital, and pharmacy.
- 5) Confirmation of additional payments for medicaments from the pharmacy and an attached copy of doctor's prescriptions.
- 6) Fares for transportation to a doctor – a ticket or other documents for transporting the victim to the doctor, specifying the number of kilometres, addresses, and a copy of the car registration if a private car was used, attached. The purpose of the transportation must be confirmed by the treating physician.
- 7) Damage to property.

**Forms sub (1) and (2)** are available at the secretariats of the departments where the accident occurred and in the internal faculty forms - section health security and safety during work.

**Information:** Submit the completed forms to the appropriate department or registry at Charles University, Prague – Faculty of Mathematics and Physics, Ke Karlovu 3. They can be also sent by registered post to:

Section BOZP [= OSH], Charles University, Prague - Faculty of Mathematics and Physics, Ke Karlovu 3, 121 16 Prague 2. Alternatively they may be taken to OSH in person (after making an appointment). **It is not possible to compensate an injury without submitting the properly completed forms.**

**Compensation of a school injury**

The school will transmit completed forms to an OSH reviewer who will analyse and evaluate the injury. Compensation is disposable and should not be confused with health insurance or private accident insurance. The total amount of monetary compensation will be collected by the student at the cashier (Dean's Office, Ke Karlovu 3, Prague 2).

**Heavy, massive and fatal accidents**

Subject to immediate reporting (e.g. telephone, fax). Such injuries must be reported to: Czech Police, Inspectorate of OSH, Rectorate of Charles University in Prague, the Ministry of Education, and the Faculty of Mathematics and Physics.

**Liability for damages** (digest of law no. 262/2006 Coll., The Labour Code, § 391)

The faculty is responsible for damages occurring during the process of teaching in the school or in direct connection with this process; if the damages occurred during practical training at a legal entity and individuals were responsible for this damage, the responsibility for compensation is on the side of the legal entity and individuals responsible for the training.

University students are responsible for damages they have caused to the school during theoretical or practical training or in direct connection with it. If the damages occurred during courses taking place outside the classroom in a different school or in direct connection with it, the student is responsible for damages to the school facility.

The university is responsible for damages that a university student suffers and does not cause during theoretical and practical teaching in the school or in direct connection with it.

**Students will be required to re-read this record when advancing to the next grade. During studies that include activities in other workplaces this training is insufficient and must be accompanied by training carried out by a competent leader of the workplace in question.**

**A written record of fire protection (FP) and occupational safety and health (OSH) must be made on the enclosed form, which forms part of organizational regulations as an annexe. Each student must sign the documents by their own hand and dates must be accurately stated on the record.**

**If you do not understand the text or a part thereof, you should ask the Study Department to provide you with training by a professionally competent person.**

**A written record is published at: <http://www.mff.cuni.cz/studium/formulare/>**

**I declare that I have read and understood the above text.**

**First name and surname (legibly): .....**

**Year: \_\_\_\_\_ Field of study: \_\_\_\_\_ Study group: \_\_\_\_\_**

**Signature: .....**

**Day: .....**