



UNIwersYTECKIE CENTRUM KLINICZNE
IM. PROF. K. GIBIŃSKIEGO
Śląskiego Uniwersytetu Medycznego
w Katowicach



Fire Safety Training Materials

Facilities of University Clinical Center prof. K. Gibiński of the Medical University of Silesia
Medyków 14 St. and Ceglana 35 St.

Piotr Kulik – fire protection inspector, Wojciech Urbańczyk – fire protection inspector

Main legal acts:

USTAWA

z dnia 24 sierpnia 1991 r.

o ochronie przeciwpożarowej

(t.j. Dz. U. z 2022r. poz. 2057 ze zm.).

USTAWA

z dnia 24 sierpnia 1991 r.

o Państwowej Straży Pożarnej

(t. j. Dz.U. 1991 nr 88 poz. 400 ze zm.).

Rozporządzenie Ministra Spraw Wewnętrznych i Administracji z dnia 7 czerwca 2010 roku, w sprawie ochrony przeciwpożarowej budynków, innych obiektów budowlanych i terenów (Dz. U. Nr 109 poz. 719).

Rozporządzenie Ministra Infrastruktury z dnia 12 kwietnia 2002 roku, w sprawie warunków technicznych jakim powinny odpowiadać budynki i ich usytuowanie (tj. Dz. U. z 2022 r. poz. 1225 z późn. zm.).

Rozporządzenie Ministra Spraw Wewnętrznych i Administracji z dnia 24 lipca 2009 r. w sprawie przeciwpożarowego zaopatrzenia w wodę oraz dróg pożarowych (Dz. U. Nr 124 poz. 1030).

Duties of the property owner

(Art. 4 ustawy z dnia 24 sierpnia 1991 o ochronie przeciwpożarowej Dz. U. z 2022r. poz. 2057 ze zm.)

The owner of a building or property, ensuring fire protection, should:

- **Adhere to fire safety requirements specified by law.**
- **Equip the building with required fire protection devices and extinguishers.**
- **Ensure maintenance and repairs of these devices to keep them functional.**
- **Provide safety and evacuation possibilities for individuals inside the building.**
- **Prepare the building for rescue operations.**
- **Familiarize employees with fire safety regulations.**
- **Establish procedures in case of fire or other local hazards.**
- **Develop, update, implement, and acquaint employees and users with the fire safety instruction manual.**

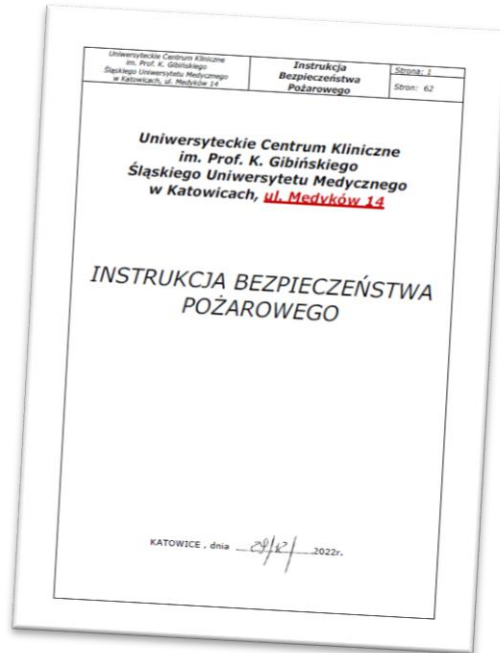
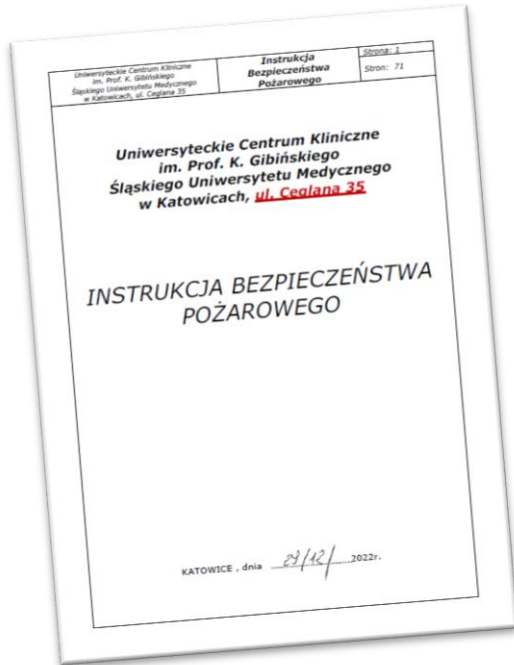
Duties of employees

All employees are required to adhere to fire protection regulations, and specifically, each individual should:

- Familiarize themselves with the fire safety instructions.
- Participate in fire protection training.
- Take part in evacuation drills.
- Know evacuation procedures.
- Report any identified deficiencies in fire protection to supervisors.
- Understand fire alarm procedures, the location of evacuation routes, and how to use fire extinguishers and hydrants.
- Observe the prohibition of smoking and the use of open flames in unauthorized areas.

Fire Safety Instructions

(§ 6 rozporządzenia MSWiA z dnia 7 czerwca 2010 r. w sprawie ochrony przeciwpożarowej budynków, innych obiektów budowlanych i terenów (Dz. U. z 2010 r. Nr 109 poz. 719)



Electronic versions of the Fire Safety Instructions are available on the hospital's internal network (INTRANET).

Paper versions of the Fire Safety Instructions are located:

- at the main porter's lodge (Medyków)
- at the information point (Ceglana) (near the main entrances to the hospitals)



These are available for the firefighter in charge of any rescue and firefighting operations.

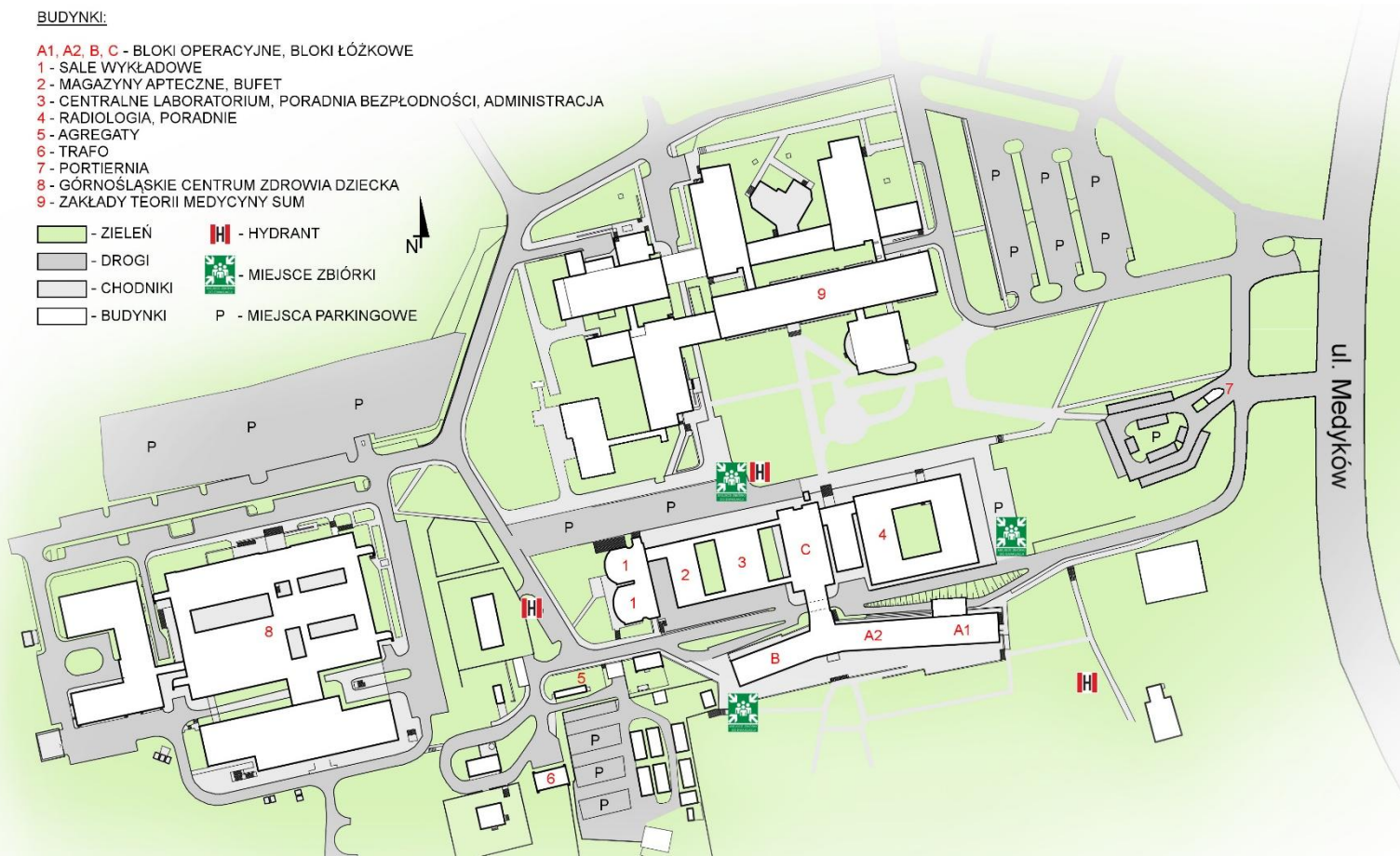
**Detailed fire protection information regarding facilities of University
Clinical Center prof. K. Gibiński of the Medical University of Silesia**

General plan of hospital buildings – Medyków

BUDYNKI:

- A1, A2, B, C - BLOKI OPERACYJNE, BLOKI ŁÓŻKOWE
- 1 - SALE WYKŁADOWE
- 2 - MAGAZYNY APTECZNE, BUFET
- 3 - CENTRALNE LABORATORIUM, PORADNIA BEZPŁODNOŚCI, ADMINISTRACJA
- 4 - RADIOLOGIA, PORADNIE
- 5 - AGREGATY
- 6 - TRAFO
- 7 - PORTIERNIA
- 8 - GÓRNOŚLĄSKIE CENTRUM ZDROWIA DZIECKA
- 9 - ZAKŁADY TEORII MEDYCyny SUM

-  - ZIELEŃ
-  - DROGI
-  - CHODNIKI
-  - BUDYNKI
-  - HYDRANT
-  - MIEJSCE ZBIÓRKI
-  - MIEJSCA PARKINGOWE



Fire Alarm System - Medyków

Some of the buildings have been partially equipped with a fire alarm system.

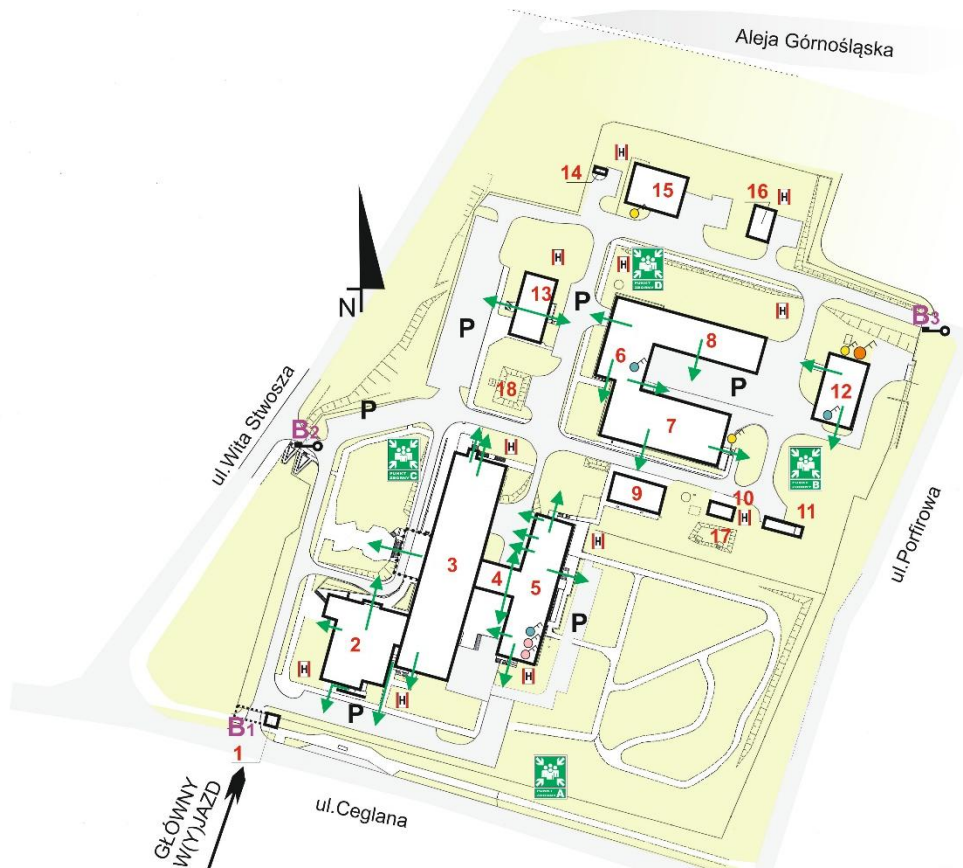
Protected areas include spaces within the high-rise sections A, B, and C, excluding level -1, as well as partially in zones within the low-rise sections.

The entire system is controlled by fire alarm panels housed in the security room on the ground floor.

Functions performed by the fire alarm system include:

- Audible and visual signaling of conditions at the control panel,
- Activation of the audible warning system (AWS),
- Control of elevator operations within the central stairwell,
- Control and monitoring of ventilation units,
- Control and monitoring of door hold-open devices,
- Transmission of fire alarms to the Fire Department.

General plan of hospital buildings - Ceglana



LEGENDA :

- 1 - BUDYNEK: PORTIERNIA
- 2 - BUDYNEK: DYDAKTYKA
- 3 - BUDYNEK: INSTYTUT
- 4 - BUDYNEK: WIEŻA KOMUNIKACYJNA
- 5 - BUDYNEK: KLINIKA
- 6 - BUDYNEK: CHIRURGIA ONKOL.
- 7 - BUDYNEK: „KUCHNIA”/ CENTRALNA STERYLIZATORNIA
- 8 - BUDYNEK: WARSZTATY
- 9 - BUDYNEK: TRAFI
- 10 - BUDYNEK: HYDROFORNIA
- 11 - BUDYNEK: TLENOWNIA
- 12 - BUDYNEK: KOTŁOWNIA
- 13 - BUDYNEK: „HOTEL”
- 14 - PRZEPOMPOWNIA ŚCIEKÓW
- 15 - BUDYNEK: AGREGAT/ MAGAZYN/GARAŻ
- 16 - BUDYNEK: MAG.CHEM.
- 17 - ZBIORNIK: WODY PITNEJ
- 18 - ZBIORNIK: POŻAROWY

OZNACZENIA GRAFICZNE:

- HYDRANT
 - GAZ Ø 80
 - GAZ Ø 300
 - PARA
 - C.O. PEC
 - WYJŚCIA EWAKUACYJNE
 - MIEJSCA ZBIÓRKI
 - ZIELEŃ
 - DROGI
 - CHODNIKI
 - MIEJSCA PARKINGOWE
 - B1,2,3 BRAMA W(Y)JAZDOWA
 - BRAMA W(Y)JAZDOWA ZAMYKANA NA KLUCZ
- /klucz w portierni - brama B1/

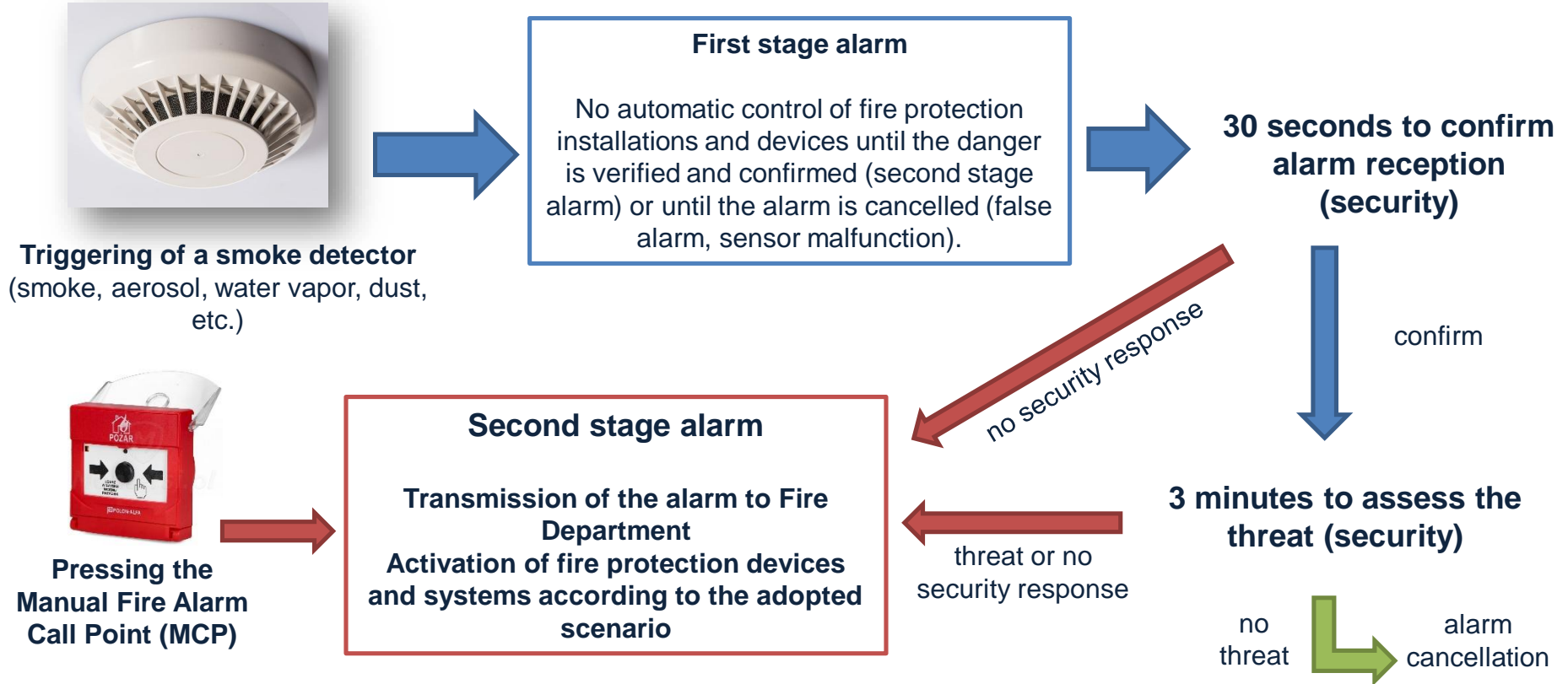
Fire Alarm System - Ceglana

Some hospital facilities have been fully protected. Optical and ionization smoke detectors are used as primary detection elements, supplemented by heat detectors and manual fire alarm call points (MCP). An alarm triggered by the FACP immediately activates the alarm system.

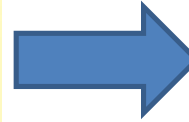
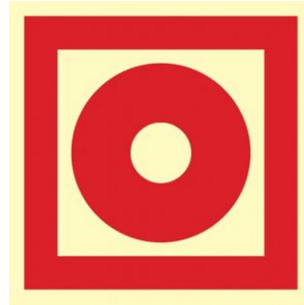
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Fire Alarm System - operating principle



Fire protection devices: MANUAL FIRE ALARM CALL POINT (MCP)



Fire protection devices: Fire extinguishers



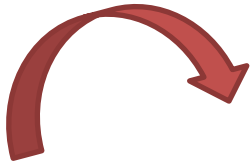
Dry powder
extingusiher



CO₂ extingusiher



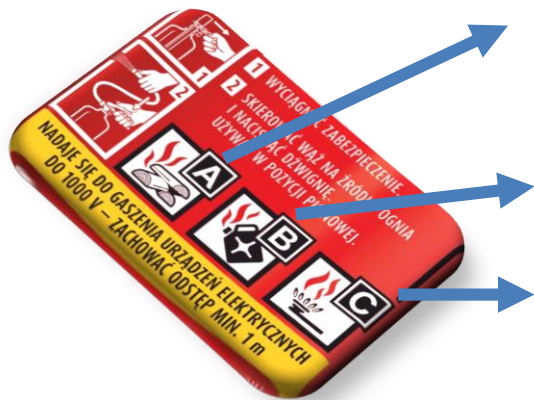
Fire protection devices: Fire extinguishers – user manual



1. Remove the safety pin
2. Press the lever

It is suitable for extinguishing devices under voltage up to 1000V while maintaining a minimum distance of 1 meter.

Fire extinguishers – fire classes



Class	The type of burning material:	The type of extinguisher:
A	Fires involving solid materials such as wood, paper, fabrics	water, foam extinguisher, powder extinguisher, carbon dioxide
B	Fires involving flammable liquids such as oils, gasoline, solvents	foam extinguisher, powder extinguisher, carbon dioxide, halon substitutes
C	Fires involving gases such as propane, methane, butane	powder extinguisher, carbon dioxide, halon substitutes
D	Fires involving metals such as magnesium, titanium, aluminum	powder extinguisher
F	Fires involving vegetable oils and kitchen fats	Aqueous Film Forming Foam (AFFF)

Fire protection devices : INTERNAL FIRE HYDRANT



(FIRE HYDRANT WITH SEMI-RIGID HOSE)

Break the glass behind which the key is located, e.g., with a pen or elbow.

Use the key to unlock.

Turn the hydrant valve counterclockwise (left).

Unroll the hose to the fire location.

Turn on the nozzle and direct the water stream onto the fire.



(FIRE HYDRANT WITH FLAT-FOLDED HOSE)

First, fully extend the hose before turning on the hydrant valve.

It's crucial not to confuse the sequence with this hydrant.

Opening the valve without extending the hose could cause the hose to jam in the basket!!!

Fire protection devices : HYDRANT VALVES (for firefighters)



Fire protection devices : EXTERNAL HYDRANTS



Fire protection devices : Emergency exits



Fire protection devices : Emergency lighting



FIRE EMERGENCY PROCEDURE **(in case of fire)**

FIRE EMERGENCY PROCEDURE

I. INTERNAL ALARMING

Anyone who notices a fire must immediately notify individuals in the danger zone by loudly announcing:

"FIRE – FIRE!"

To initiate alarm, rescue, and evacuation actions, use the internal alarm systems to perform the following actions:

- **Press the Manual Fire Alarm Call Point (MCP).**



- **Notify the porter's lodge:** internal **4181-2** or **32-789-4181** → **(MEDYKÓW)**
248 or **32-358-12-48** → **(CEGLANA)**

II. ALARMOWANIE STRAŻY POŻARNEJ

☎ 998 or 112 FIRE SERVICE

- ◆ ***After making a phone call, provide the following information:***
 - *address, location of the fire, building, department, floor,*
 - *what is burning?*
 - *is there a threat to human life?*
 - *personal details and the phone number you are calling from.*
- ◆ ***Provide assistance to injured or endangered persons***
- ◆ ***If possible, secure the evacuated property from unauthorized persons, but do not endanger your health or life to save it.***

If necessary, notify other emergency services::

☎ No. 999 *Emergency Medical Services*

☎ No. 997 *Police*

☎ No. 992 *Gas Emergency Service*

☎ No. 991 *Power Emergency Service*

NOTIFY THE HOSPITAL MANAGEMENT

Since September 9, 2021, residents of the Silesian Voivodeship who dial 998 are connected directly to the 112 emergency number operator on duty at the Emergency Notification Center.



III. RESCUE AND FIRE-FIGHTING OPERATION

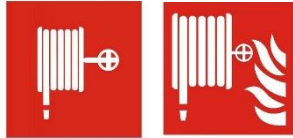
WARNING: DO NOT RISK YOUR LIFE TO SAVE PROPERTY

Simultaneously with alerting about the danger, begin extinguishing the fire using the portable fire-fighting equipment available in the building at designated locations.

- FIRE EXTINGUISHER



- INTERNAL HYDRANT



DO NOT USE WATER TO EXTINGUISH FIRES INVOLVING ELECTRICAL EQUIPMENT OR FLAMMABLE LIQUIDS

Remember to follow safety rules when using fire extinguishers!

IV.EVACUATION

In the event of a fire, after alerting and initiating rescue and firefighting actions, you must immediately:

Proceed to the nearest evacuation route leading outside the building, marked with the evacuation signs indicated below:

- EMERGENCY EXIT



- DIRECTION OF THE EVAUATION ROUTE



- EMERGENCY EXIT ROUTE



- DIRECTION FOR THE EMERGENCY EXIT (RIGHT)



EVACUATION - notes

During evacuation, avoid causing panic, stay calm and composed, refrain from using elevators, and once outside the building, proceed to a designated safe area (assembly point).

If necessary, strictly follow instructions from the rescue and firefighting services involved in the operation.

The rescue and firefighting operation, until the arrival of the State Fire Service, is directed by the Hospital Director. In their absence, the Deputy Hospital Director or the On-duty Hospital Doctor assumes command. Upon the arrival of State Fire Service units at the scene, all staff members are required to comply with the Commander of the State Fire Service units and provide any requested assistance.

Preventing fires and other local hazards

Principles of fire prevention

The scale of damage and losses caused by fire is linked to its potential for spreading. The following factors influence this:

1. **Incorrect building condition:**

- Lack of required fire resistance in vertical and horizontal fire partitions,
- Highly flammable building structures and interior decorations,
- Quantity and type of combustible materials present in the room (zone) where the fire started.

2. **Delayed alerting of the Fire Brigade about the fire due to:**

- Underestimation of the emerging threat,
- Lack of means or skills to alert the Fire Brigade.:

Principles of fire prevention

The scale of damage and losses caused by fire is linked to its potential for spreading. The following factors influence this:

3. Lack of proper and prompt response by personnel to initiate firefighting actions due to:

- Lack of employees' knowledge of fire emergency procedures,
- Lack of skills in using portable firefighting equipment,
- Lack of knowledge among staff about the locations of fire safety devices,
- Lack of proper coordination between responding units and the owner/staff of the premises.

4. Lack of adequate quantity and type of firefighting equipment at the premises, insufficient water supply, difficulties in accessing and reaching the facility.

Preventing fire hazards primarily involves **eliminating their potential sources**. This includes adhering to the following principles:

1. Buildings, rooms, and utility installations should be operated in a manner that safeguards against the occurrence of fire and its potential spread.
2. Safe use and storage of chemicals: Follow manufacturer's guidelines for storing and using chemicals, ensuring proper ventilation and containment measures.



When handling hazardous materials, adhere to the following principles:

- All activities related to the manufacturing, processing, handling, or transportation of hazardous materials should be conducted in accordance with fire safety instructions or the manufacturer's specifications.
- Store hazardous materials in a manner that prevents the occurrence of fire or explosion due to storage processes or mutual interactions.
- Maintain the quantity of hazardous material at the workplace no greater than the daily demand or production, unless specific regulations dictate otherwise. Excess material should be stored in a separate warehouse designated for such purposes.
- Liquids with a flash point below 328K (55° C) should only be stored in containers, devices, and installations made from materials that are at least difficult to ignite, capable of dissipating static electricity charges, equipped with tight closures, and protected against breakage.
- Ensure effective ventilation (3 air changes per hour) when using liquids with a flash point below 294K (21° C) in enclosed spaces.



Preventing fire hazards primarily involves **eliminating their potential sources. This includes adhering to the following principles:**


3. Storing flammable materials along the walls of a building related to its function, except for hazardous fire materials, is permissible under the condition that

- staying within the permissible fire zone for the given building,
- maintaining access to the building for rescue operations, i.e., at least 2 meters,
- not breaching the required fire protection minimum distance

4. Around storage yards, stockpiles near buildings, and temporary structures with flammable construction, especially warehouses for gases and flammable liquids, a protective strip of at least 2 meters wide must be maintained. This strip should have a surface made of non-flammable materials or thoroughly cleaned ground.

Preventing fire hazards primarily involves **eliminating their potential sources**. This includes adhering to the following principles:

5. Within the premises and adjacent areas, it is prohibited to perform activities that could cause a fire, its spread, hinder rescue operations, or evacuation. Specifically:

- a) using open flames and smoking in fire and explosion hazard zones, as well as in areas designated by the employer, 
- b) heating with open flames tar and other materials less than 5 meters from the object, adjacent to the repository or storage area with flammable materials,
- c) lighting fires or pouring hot ashes and slag in places enabling ignition of combustible materials or adjacent facilities, and less than 10 meters from these facilities,,
- d) Storing flammable materials less than 0.5 meters from: devices and installations whose external surfaces can heat up to temperatures exceeding 373K (100° C), cables with voltages above 1 kV, grounding conductors, lightning protection system conductors, active electrical distribution panels, power cables, and sockets with voltages above 400 V.

Preventing fire hazards primarily involves **eliminating their potential sources. This includes adhering to the following principles:**

5. continued

- e) Using electric heating devices placed directly on combustible surfaces, except devices operated in accordance with manufacturer-specified conditions,
- f) using portable heaters with exposed heating coils,
- g) operating electric heaters (only heaters with bimetallic protection are permissible),
- h) storing flammable gases and using devices powered by liquefied gas,
- i) installing lighting fixtures and electrical installation equipment such as switches, sockets directly on combustible surfaces, if their design does not protect the substrate from ignition,

Preventing fire hazards primarily involves **eliminating their potential sources. This includes adhering to the following principles:**

5. continued

- j) Storing flammable materials on public thoroughfares designated for evacuation purposes or placing objects on these roads in a manner that reduces their width or height below required values,
- k) Blocking doors that are part of fire compartmentation,
- l) Closing evacuation doors in a way that prevents their immediate use,
- m) Preventing or restricting access to:
 - fire extinguishers and firefighting equipment,
 - water sources for firefighting purposes,
 - emergency exits or windows for rescue teams,
 - electrical distribution panels,
 - main power switches.

Principles of safe work with electrical equipment



Using electrical equipment always carries some fire risk. Below are the most important safety rules for handling electrical devices:

- Unplug electrical devices that are not in use.
- Ensure that electrical devices are placed in dry locations.
- Check whether electrical wiring, plugs, and sockets are not damaged.
- Pay attention to signs of damage, discoloration, and report such faults.
- Do not overload sockets by using multiple adapters or high-power devices (such as electric heaters or kettles).
- Do not place lamps and bulbs near curtains, fabrics, or other flammable materials.
- Always read the user manual before operating newly purchased equipment.
- Remember to safely turn off electrical devices—first use the switch, then unplug the device from the electrical socket.

Fire protection issues that are not covered in this presentation are detailed in the Fire Safety Instructions.

This includes, among other things:

- Detailed rules for conducting fire hazardous work (such work should be performed after obtaining appropriate permission and preparing a protocol),
- Procedures for disconnecting power supply to electrical circuits in case of fire or electrical hazard (Appendix No. 5 of the Fire Safety Instructions),
- Alarm card (emergency contacts),
- Organization and principles of familiarizing employees with fire regulations and the content of the Fire Safety Instructions,
- Practical methods for verifying the organization and conditions of people evacuation,
- Detailed graphic plans of facilities.

Thank you for your attention

If you have any questions:

- ✓ Write an e-mail: ppoz@uck.katowice.pl (*preferred form of contact*)
- ✓ Call:
 - Ceglana: 32 3581 240 (OHS office)
 - Medyków: 32 789 40 14 (OHS office - NP015)
 - mobile: 501-105-438, 530-534-664*

Wojciech Urbańczyk – fire protection inspector

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