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Fire Safety is the set of practices intended protection of life, health, property and environment before fire, natural disaster or any local threat by:

- prevent fire, natural disaster or any local threat,
- assure forces to fight against fire, natural disaster or any local threat;
- leading rescue operations.

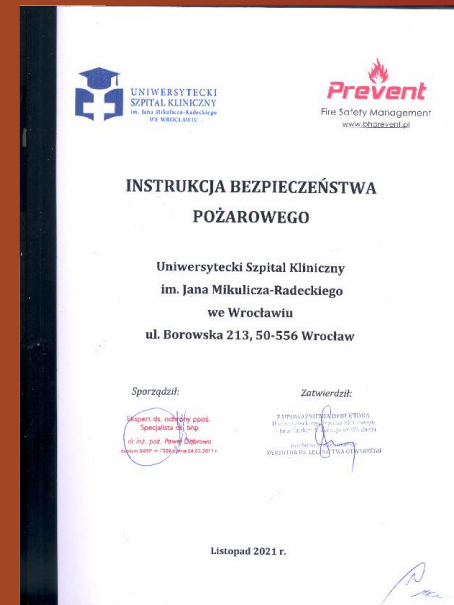
Act of Fire Safety

Responsibilities for owners and users of buildings and areas:

- **Guard from fire or any local threat,**
- **Obey the fire safety regulations,**
- **Equip building with fire fighting devices and fire extinguishers,**
- **Maintenance fire fighting devices and fire extinguishers,**
- **Assure possibility of safety evacuation,**
- **Prepare building and area to lead rescue operation,**
- **Familiarize workers with fire safety regulations,**
- **Determine regulations in case of fire, natural disaster or any local threat.**

Fire Safety Manual

- Fire Safety Manual is a casebook with fire safety regulations for specific building.
- Requirement of possession Fire Safety Manual is given by Act of Fire Safety for some of public buildings – offices, hospitals, shopping centres, manufactures etc.
- Everyone must obey Fire Safety Manual.
- **Every worker must familiarize with Fire Safety Manual!**

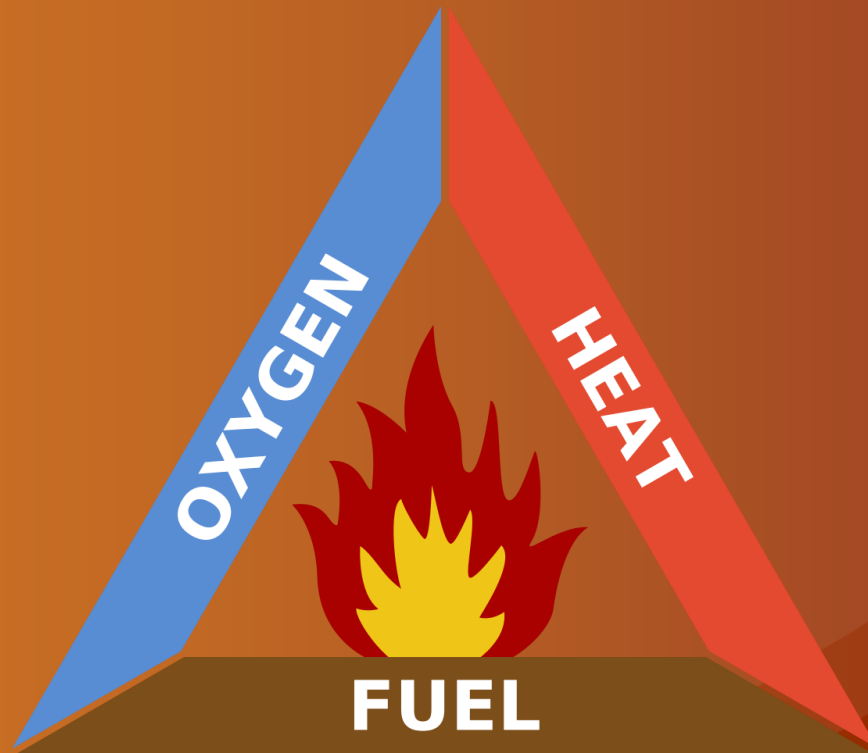


DON'T SMOKE!
at all hospital's area



Combustion – rapid chemical reaction of a material with oxygen accompanied by the evolution of light and heat. Three basic requirements are essential to combustion:

- the presence of a fuel or combustible substance,
- the presence of oxygen (usually as air) or other supporter of combustion,
- the attainment and maintenance of a certain minimum temperature (heat).



Fire Classifications



There are 5 main classifications of fire. Below we will look at the different types.



Class A fires involve free burning solid substances. This is often burning organic matter such as wood or paper. They are best dealt with using water, foam or multipurpose powders extinguishers.



Class B fires are liquid or liquefiable substances solids. They are fuelled by liquids like petrol, paints or fats that are solid at room temperature and melt when heated. Dry powder extinguishers, carbon dioxide, foam (including the AFFF type) are suitable for this class of fire.



Class C fires are gas fires. These should **not** be tackled. However, if you are able to stop without any risk to yourself, like knowing how to turn off the gas, you should do so.



Class D fires involve flammable metals. These should not be tackled. They must be dealt with by specially trained personnel. Metals that are usually at risk are; aluminium, magnesium, sodium, and potassium



Class F fires are fires fuelled by cooking oils and fats. According to statistics, cooking appliance fires make up 25% of all fires in the work place. With a large proportion of those are related to cooking oil. Because this hazard is so great, a whole new classification of fire was introduced. Class F fires can be fought using a fire blanket or a special Class F fire extinguisher. **BE AWARE:** Do not tackle Class F fires without special training.



Electrical fires. When dealing with these types of fire you should avoid using water based extinguishers, which could cause electrocution



5 COMMON CAUSES OF FIRE INCIDENTS

AND

WAYS HOW TO PREVENT THEM



ELECTRICAL WIRING

- ✓INSPECT ELECTRICAL CORDS AND PLUGS FOR DAMAGES.
- ✓DO NOT RUN ELECTRICAL CORDS UNDER RUGS OR HEAVY FURNITURE.
- ✓KEEP THE CORDS AND PLUGS OUT OF REACH OF CHILDREN AND PETS.
- ✓HAVE A CERTIFIED ELECTRICIAN EXAMINE THE HOUSE'S ELECTRICAL SYSTEM.



ELECTRICAL APPLIANCES AND DEVICES

- ✓AVOID OCTOPUS CONNECTION.
- ✓USE ORIGINAL BATTERIES AND CHARGERS FOR MOBILE DEVICES.
- ✓DO NOT OVERCHARGE YOUR MOBILE DEVICES.
- ✓UNPLUG APPLIANCES OR TURN OFF THE MAIN POWER SOURCE WHEN LEAVING HOME.



COOKING EQUIPMENT

- ✓PAY ATTENTION TO WHAT YOU ARE COOKING.
- ✓KEEP COMBUSTIBLES AWAY FROM STOVE AND OTHER HEAT SOURCES.
- ✓ALWAYS CHECK LPG TANK'S HOSE AND CYLINDER FOR LEAKS.
- ✓MAKE SURE YOUR COOKING AREA IS WELL VENTILATED.
- ✓KEEP YOUR STOVE AND LPG TANK OUT OF REACH OF CHILDREN AND PETS.



LIGHTED CIGARETTE BUTT

- ✓DO NOT SMOKE IN BED.
- ✓SMOKE IN ASSIGNED AREAS.
- ✓USE BIG, DEEP ASHTRAY TO DISPOSE CIGARETTE BUTTS.
- ✓NEVER PLACE AN ASHTRAY ON OR NEAR ANYTHING THAT WILL BURN.

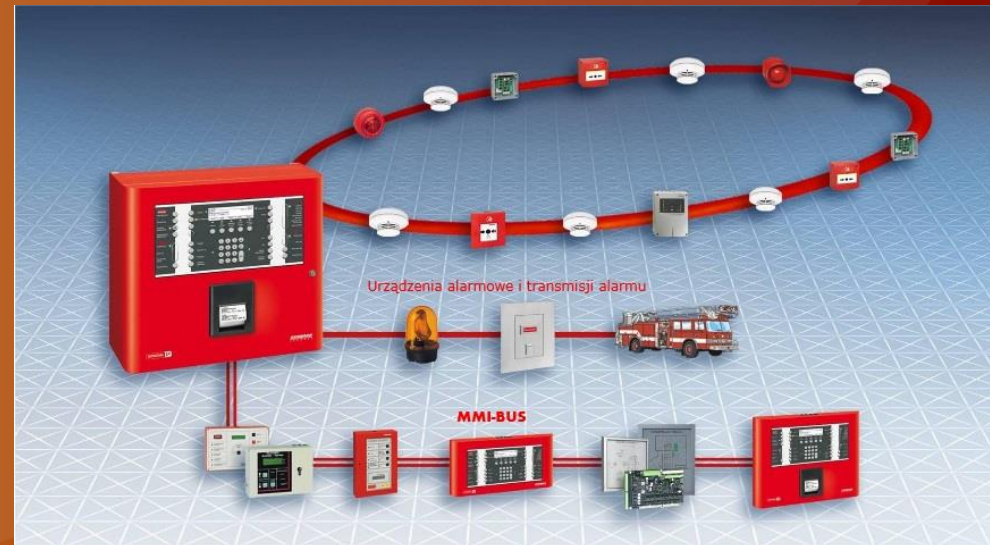


FLAMMABLE SUBSTANCES AND CHEMICALS

- ✓NEVER PLACE THEM NEAR HEAT SOURCES.
- ✓STORE THEM IN A COOL VENTILATED AREA IN TIGHTLY SEALED CONTAINERS.
- ✓KEEP THEM OUT OF REACH OF CHILDREN AND PETS.

Fire protection systems in hospital

- Fire alarm system - automatic fire detectors in all hospital's buildings with automatic call transmission to fire service
- Emergency Audio System to announce warning or evacuation order
- Smoke vents opening during fire alarm
- Fire doors closing during fire alarm
- Evacuation lights and signs
- Indoor fire hydrants at corridors
- Fire extinguisher at corridors
- Fire sprinklers in J building



Emergency Calls

• Local Centre of
Monitoring

tel. 71 733 17 70

mobile 662 232

549

• Emergency

Number 112

or

Push the button of

Manual Call Point

IN CASE OF FIRE

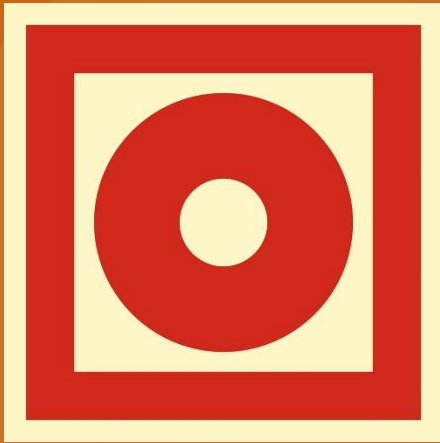


S35P

www.nationalmarker.com

NMC

Manual Call Points



In case of emergency
push the button!

What to do when a fire breaks out



Escape to
a safe place



Shout for help
and call Fire Service



If trapped, find a
safe passage to
exit the building



Use the staircase if
you are trapped in
a high rise building



Grab a blanket (wet it
if possible), wrap your
body around it and
crawl out



If doors are on fire, wet
some clothes and place
them under the door - it
will stop smoke from
entering the room



Do not run if your body
catches on fire as
running increases
oxygen, thus enlarging
the fire



Stop, drop and roll to
put out the fire



Avoid using
remedies such
as toothpaste
to treat burns
on the body



Wash with
tap water for
10 minutes



Seek
medical help

IN CASE OF A FIRE

Remember the R.A.C.E. acronym

R

RESCUE

Assist anyone in immediate danger and help get them to a safe area as fast as possible.



A

ALARM

Alert others by activating any available alarm system. Contact 911 to report location of fire and alert on-site personnel.



C

CONTAIN

Confine the fire as much as possible by closing doors and windows behind you during evacuation.



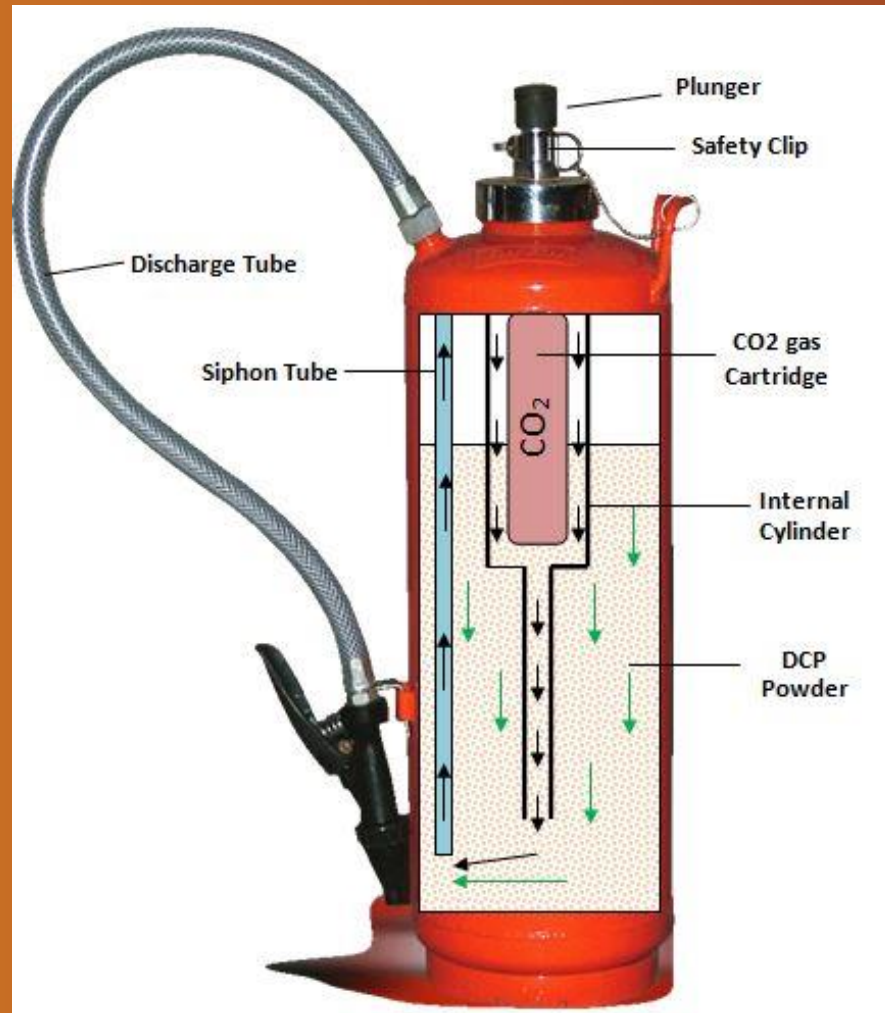
E

EXTINGUISH

Only attempt to put out the fire if it is small, you have proper equipment and it is safe to do so yourself.



Fire extinguisher construction



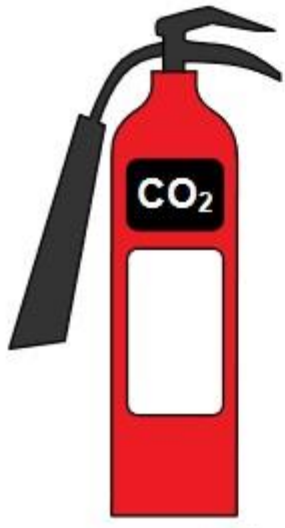
Types of fire extinguishers in hospital



Dry Powder Extinguishers are safe to use on most fires involving solid, gas and liquid fuels. There are two types of powder extinguisher, Standard and Multi-Purpose. **Multi-Purpose** work best on solid burning fires. **Standard powders** work best on burning liquids.

How to use: Aim the jet at the base of the flames and move it from side to side.

How does it work: Dry Powder extinguishers work by smothering the fire. This doesn't cool the fire so fires that seem to be out can re ignite.



Carbon Dioxide Extinguishers can be used on most fires. They are particularly good on fires involving electrical equipment.

How to use: Aim the horn at the base of the flames, use it in short bursts, and keep it moving over the area of the fire.

DO NOT touch the nozzle as the gas is freezing cold.

How does it work: Carbon Dioxide extinguishers work by displacing the oxygen in the fire. It is for this reason that they shouldn't be used in confined spaces.

How to use fire extinguisher








INDOOR FIRE HYDRANTS

How to use:

- 1. Open the box.
- 2. Remove hose and hold nozzle.
- 3. Turn valve.
- 4. Shoot to the fire.



Extinguishing agents for fire classes

Extinguishing agent	Fire classes (UNE EN 23.010)				
					
Pulverised water	Ideal	Recommended	NO	NO	NO
Water jet	Highly Recommended	NO	NO	NO	NO
Powder ABC (conventional)	Highly Recommended	Ideal	Highly Recommended	NO	NO
Powder ABC (polyvalent)	Highly Recommended	Highly Recommended	Highly Recommended	NO	NO
Powder for metals	NO	NO	NO	Ideal	NO
Foam	Highly Recommended	Highly Recommended	NO	NO	NO
Carbon dioxide	Recommended	Recommended	NO	NO	NO
Halogenated hydrocarbons	Recommended	Highly Recommended	NO	NO	NO
Potassium Acetate	NO	NO	NO	NO	Ideal

EVACUATION

Act of moving people from a dangerous place to somewhere safe

The Headmaster of Hospital is in charge of evacuation or the person indicated by him – Evacuation Leader.

He will decide about details of evacuation (command of evacuation certain units/floors, indicate evacuation routes and assembly point for evacuation)

After fire service arrival fire commander is in charge of rescue operation and evacuation, but he will cooperate with Evacuation Leader and other workers, who know the building.

Process of evacuation



- The announcement of danger and command to evacuate will be announced by emergency audio system. The speakers are in all buildings. Follow announcement.
- Every floor at every building is separate fire zone (it's means that after closing fire doors the fire could not be able to spread in certain time)
- In case of evacuation go upstairs, downstairs, to the next building or outside to the assembly point for evacuation (if the Evacuation Leader do not make any commands).

EVACUATION PLAN (SAMPLE)



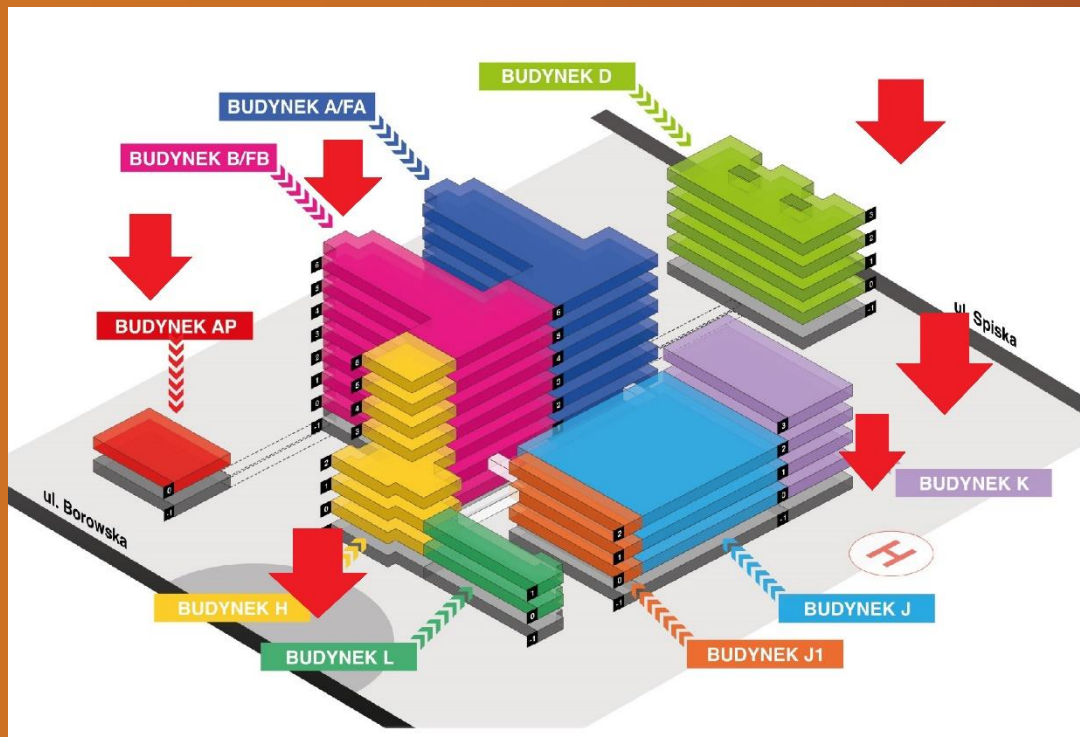
The evacuation plans are at corridors.

Total hospital evacuation

Red arrows – assembly points for evacuation.

There are 6 in all hospital's area.

Choose the nearest or indicated by Leader Evacuation.



Sign for
assembly point
for evacuations

Evacuation signs follow them in emergency green arrow indicates evacuation route



Direction arrow
emergency exit



Direction arrow
emergency exit
downward



Direction arrow
emergency exit
upward



E001
Emergency exit
(left hand)



E002
Emergency exit
(right hand)



E002
Emergency exit direction



E002
Emergency exit direction
downward



E003
First aid



E004
Emergency telephone



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WE WROCLAWIU

Thanks for attention

Feel free to contact me with any „fire“ problem

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