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PROJECT "PREVENTION OF RISK FOR SUSTAINABLE DEVELOPMENT OF THE REGION "

**DISASTERS HAVE NO BOUNDARIES!** 

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Ön kapak

Arka kapak

# Radioactivity



# **Description**:

lonizing radiation that can pass through any matter, and as a result can change and damages it. Has no taste, color and smell and can't be recognized.

# Where can be found?

Radioactive sources can be natural (native) or man-made (produced as a result of human activity). Natural radioactive sources can be found anywhere, they form a natural radiation background, which has no negative effect on the health of living organisms when it is within the range of 0.06 to  $0.40 \mu Sv/h$ (micro sievert per hour). The most common representative of natural radioactivity is a radon - gas, naturally found in the earth's crust and can always be found around us, even in our homes and buildings. In order not to reach dangerous levels don't forget to ventilate the rooms well, especially in winter, when its quantity is higher than in the summer. Man-made radioactive sources are those which are produced through human intervention. It is important to remember, that all objects containing radioactive sources must be labeled either with the text "Radioactive" or with the following symbol:

#### What to do if?

The further you are from the radioactive danger and the less time you have been exposed to its impact, the less dose you have received.

If you are outdoors and have a "Radioactive Danger" signal, immediately hide in a building and stay away from windows and balconies. If you can't do this, cover your body as much of as you can, with your available clothes, so you can restrict the access of radioactive particles to you. Put a wet towel on your mouth to prevent the ingestion of radioactive dust. Once you get into a safe place, remove all clothes and underwear and keep them away from you. Wash your body thoroughly with a lot of water to remove any radioactive particles and take an iodine tablet that you get from authorized authorities to control the accumulation of radioactive iodine in your body. Use packaged products and bottled liquids.

In case of suspicion of radioactive contamination - nausea, vomiting, loss of consciousness, nasal bleeding, general weakness and dizziness, look for medical care. These are the symptoms of the Radiated Disease, which are is provoked after exposure to hazardous quantities of radioactive load. Take lots of vitamins and antioxidants.

For more information: http://risknowcomes.net/

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# **Fire**

## **Description**:

Fire is a process of uncontrolled combustion. To occur a fire, it is necessary to have a <u>oxidant</u> - environment wherein the process is going on; <u>ignition source</u> – spark, flame or other heat source and the <u>combustible substance</u>. If one of these factors is removed of the combustion triangle, it will extinguish the fire.

# Released products in case of fire:

The most often emission is  $CO_2$  (carbon dioxide), it can lead to death at levels higher of 20%.



As a result of thermal decomposition, chlorine, hydrogen chloride, hydrogen cyanide, halogen cyanides, nitrogen and sulfur oxides are released.

#### What to do if?

Remember, that in such cases people die more often because of suffocating, than the flames. The emitted carbon dioxide and carbon monoxide are light and rise in the upper parts of the premises, so you must goes out of the room crawking or creeping. Put on your mouth a moistened with water cloth to avoid inhalation of smoke and gas. Wet a blanket or sheet and wrap your body, especially your hair. Remove all artificial fabrics clothes from your body, they melt and if they are on your body, they can damage the skin further.

Close the windows and hide in the bathroom, take the shower head and start the water heavily - pouring water acts as an aspirator for the released gases of the fire, pack any slit - gases can enter the rooms, where you are hiding in.

**Remember:** Do not use water to extinguish fires in an electrical installation, because the water conducts electricity. Do not use it for extinguishing gasoline and heavy fuel oil as well as for some metals (sodium, potassium, etc.). If there is a fire in a production facility, stop the power supply and follow the instructions that everyone should be familiar. Do not start fires the stubble. In the case of a fire in a stubble or forest area - immediately call the emergency phone number. On a burning car, help the injured to get out of the car as quickly as possible and go away from the fire. When using a fire extinguisher, first look for an escape route (door, window) and direct the jet of the fire extinguisher to the base of the flame, because after the extinguisher use, the room is filled with dust or foam and you will not have a clear visibility.

When plastic products burn, they emit poisonous gases - phosgene, hydrogen cyanide and others. If you can help, bring the injured to fresh air and remove their thick clothing, because they may be soaked with poisonous gases.

As soon as you can do this, call the emergency phone number to alert for the fire.

# **Chemical substances**

#### **Description:**

The dangerous chemicals are used everywhere around us, in households and in production, and when they are released in the environment, depending on their type and concentration, can cause negative effects on humans, animals and the environment, can lead to death, damage and material loss. They can penetrate in the human body in three ways: by inhalation, through the skin and through swallowing. Their action can occur immediately, after they enter the body, after a certain time - latency period or after a longer period of time when it comes to so-called carcinogenic substances (asbestos, arsenic, pesticides, etc). Unfortunately, some of the negative effects of poisonous substances may occur in a period of 10-30 years after contact with the human organism, others have a cumulative effect.

## **HAZARD PICTOGRAMS:**



#### Where can we find them?

Dangerous substances are widely used in the household and in industry, in the contents of cleaning and bleaching abstergents, disinfection, pesticides, etc. Some of them may can be of a result of a fire. The danger increases during accidents in chemical and other industrial plants.

#### What to do if?

In the case of a spill and chemical outbreak, the emergency authorities will inform the citizens for the type and severity of the danger. You must to know the hazard pictograms.

Some of the most common dangerous chemicals are the so called Suffocant substances:

**Chlorine** — yellow-green gas with sharp, specific, suffocating odor. Heavier than air. You should move to the upper parts of the building or room, make a solution of one liter of water and two full tablespoons of baking soda, with this mixture you can treat wounds, wet a towel or cloth with this mixture to breathe through it and inhalate;

**Ammonia** - colorless gas with a sharp, specific odor. Flammable and explosive. This gas is lighter than air, so you should be in the lower parts of the room or building. For inhalations, treatment of skin burn make a solution of water and vinegar (one large tablespoon in a glass of water).

# **Flooding**

## **Description:**

Flooding is a disaster, when a large volume of water can not be controlled and overpowered and can contribute to damage and loss to human casualties. In the world, it is the disaster that has caused the greatest number of casualties.

# **How can it happen?**

As a result of heavy rainfall - overflowing dams and raising water levels in rivers and getting out of their beds;

With a strong wind or a tide - these are floods, around large water basins;

In case of destruction of hydro-technical facilities - dams and dykes;

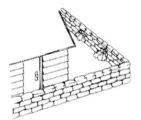
After other disasters - tsunami, tornado, etc.

If it rains a lot for a few days, there is a hight risk of flooding. If you live at the endangered area:

Fill solid bags with sand or soil (2/3 of the total bag volume) so you can stack them around the entrances or around the house.

around the house.

They will keep the high waters outside the house.



#### If there's a flood:

- 1. Switch off the electricity, close the water taps, lock the doors of the house.
- 2. Get the necessary clothes, food, water, documents, medications, bright clothes will help to rescuers to find you.
  - 3. Let go the domestic animals and pets.
- 4. Leave the home together with family members and evacuate to a safe place.
- 5. If you are unable to evacuate in a safe place, go to the roof of the building and wait there to rescue you, if the water in the building rises quickly, think about what to do like a float board, if there is a strong headwind, fasten to stable parts such as stacks.
- 6. If you are on the road, it is advisable for the driver to stop and wait for the high water passage.

After the flood, animal carcasses can cause an epidemic, so do not consume food and water from open sources. Pay attention to any open wounds to which dirty water has come - they may be infected.

Excessive rainfall can cause landslides! The landslide and rock masses are difficult to predict and dangerous. Do not cross an apparent landslide area.

# **Earthquake**

#### **Description:**

The earthquake is a natural disaster where a great deal of energy is released from the earth's bowels and parts of the earth crust are shifted. It happens all of a sudden! The seismic waves are body waves - those that pass through the interior of the Earth and surface waves! - those that move on the surface of the earth. Surface waves are more dangerous, because they can generate greater displacement and destruction.

# How can it happen?

In many cases earthquakes start with rumble, which can last up to 1-2 minutes, then the body waves are felt for 2-5 minutes, and then the first surface waves arrive.

# If you live in an earthquake area:

- 1. Do not put heavy objects on high place;
- 2. If you are using chemical reagents store them in tightly closed containers;
- 3. Prepare an evacuation bag with documents, medicaments, water, whistle to indicate your location, water, warm clothes, matches, dry food, radio, flashlight, towel;
- 4. Be informed at advance how to stop electricity or gas if it is necessary;

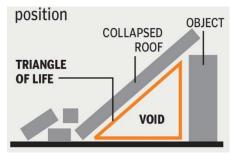
# If there is an earthquake:

## The safest places are:

- 1. On the top floor of the building;
- 2. Outdoors, away from other buildings and electricity wires;
- 3. In a vessel in open water;

## The safest places in the room are:

1. Close to high and stable objects - refrigerator, massive wardrobe, or cupboard (without glass), etc. in the so-called triangle of life, in which a man is concealed in a natural hiding place;



- 2. Sit with your knees next to your body and cover your head and face with your hands;
- 3. Do not use a lift and stay away from glasses

## After an earthquake:

Do not use match or lighter; Breathe through a wet cloth if it is dusty; If you are beried, try to signal by tapping metal parts, save your strength and do not scream.

# **Thunderstorm**

## **Description:**

Thunderstorms are natural disasters, accompanied by strong winds or lightning and thunder, which releases the electric charges, accumulated in the clouds.

# The most common lightning strikes are two types:

Linear lightning - it is vertical with a length of 2.5 to 20 km. Inside, the temperature is over  $30,000\,^{\circ}$  C, and the electrical current is  $300\,\text{kA}$ .

<u>Fireball</u> - it has a spherical shape and can range from a few inches to a few meters in diameter. It moves with air currents and parallel to the wind if it enters the room, go out and close the door gently, if you fail to, lie on the ground and cover your head with your hands, open the window widely for the fireball to come out. Do not touch it, it may explode and cause lethal damage.

If you are outdoors and start a thunderstorm: Sit on the ground in the following way:

Lightning Safety Position



At the shown way, even if the lightning has fallen on you, the lightning will cause minimal damage. If you still have something dry, sit on it using it as insulator. You should not sit on wet things or clothes because water conducts electricity.

Stay away from single trees, metal poles and jutted out rocks;

Get rid of metal objects. Do not approach metallic fences, constructions and facilities;

If you are in a water basin or on its shore, immediately move away;

If you are a group, stay (or move) 3-5 meters apart;

Do not settle at natural heights and at the end of groves;

If it is possible, hide in a lightning-protected building - most of the modern buildings have such protection.

# When you're on the road:

Stop the trip temporarily and stay in a safe place. If you're in a cabin, you better stay inside.

Retract the antenna and do not open doors and windows.

If you are using a motorcycle or bicycle, get off it and move away

# **Pesticides**





# **Description:**

Poisonous chemical compounds that are used to kill infections or harmful insects, rodents, weeds.

## Basic rules for the use of pesticides:

Use only authorized pesticides! Store them in their original packaging and well enclosed in special premises. Check the expiration date. Before using, read the label and dose properly. Select appropriate equipment and protective clothing according to the data sheet. Use a given pesticide only for the purpose for which it is intended and in the correct dosage. Make sure there is a sufficient amount of time from the time it is applied to a crop intended for food and the time it takes for it to protect consumers from ingesting unacceptable levels of residual pesticides. Do not eat, drink or smoke while using pesticides. Do not allow other workers on arable land. Keep a log, marking what pesticides are used, date and location.

Put warning signs indicating the time you should not enter the treated area. Empty packaging should never be reused but must be disposed of by companies or persons licensed to dispose of waste. Piled indiscriminately packaging or quantities of pesticides may pollute soil and water. Before eating, brush thoroughly, even soak the fruits and vegetables, remove peels - there substances accumulate in the highest quantities.

Symptoms of acute poisoning with pesticides: Abdominal pain and cramps, pupil shrinkage, dizziness, muscle shaking, sweating, vomiting, diarrhea, headache, increased saliva, feeling tired and weak.

In case of doubt about pesticide poisoning immediately visit doctor !!!



In case about information for pesticides, stored in unauthorized places, notify your local authority.

# **Biohazard**

#### Description

An infectious agent" posing a potential danger to a healthy human, animal or plant by direct impact - contamination or indirect influence - by environmental destruction.



#### Main sources:

- Dangerous biological agents, which form as a result, epidemics of infectious diseases, epizootic and epiphythmia;
- Accidents in biologically hazardous sites;
- Natural (natural) reservoirs of pathogenic microorganisms;
- Cross-border transmission of pathogenic microorganisms, through flora and fauna, ecosystems;
- · Mass migration processes;
- Ecological and sanitary epidemic environment;
- Biological Terrorism;
- Biological weapon;
- Viruses, bacteria, molds;

#### **Viruses**

## **Dangerous for people**

**Variola Causative** - Variola Virus, requires no specific treatment. Transmitted from person to person Incubation period: 12-14 days. 1-30% mortality The infection comes from body fluids or infected objects such as clothing and bedding.

# **Dangerous for people**

Hemorrhagic fevers Marburg virus and Ebola virus - Zoonotic infection - Contagious contact with an infected animal. Transmitted from person to person! There is no specific treatment: maintenance therapy. High mortality, in case of direct contact with blood or secretions from infected, or with contact with objects contaminated with infected secretions / needles /. Prevention: personal hygiene, avoidance of contact, use of disinfectants, vaccination, following the

# Dangerous for animals (rarely for humans)

instructions of the health authorities.

**Mouth disease virus** - Disease of cloven-hoofed animals in Asia, Africa and parts of South America. Available vaccine. Infections in humans are extremely rare. Malicious distribution will have a large economic effect due to the slaughter of the animals.

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