







MANUAL

Introduction to emergency response activities

Adult stress management project

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CONTENTS

Introduction …… 3

1.Definition of the concept of an emergency..... 5

2.Regulatory framework.....5

3.Institutions responsible for protecting the population from disasters.....9

4.Possible Disasters.....14

5.Actions in emergency situations.....18

5.1.Fire..... 18

5.2. Flood.....22

5.3.Earthquakes.....24

5.4. Terrorist attacks.....27

5.5. Chemical and biological risks, radioactive contamination.....30

Conclusion..... 32

Introduction

The modern world provides a number of opportunities for the modern man in terms of education, work and travel, but along with this, the challenges and problems before him are increasing, which inevitably creates conditions for increasing the levels of stress and tension in today's society.

Emergency situations have become an increasingly common phenomenon in recent years ,as the negative consequences of fires, floods, earthquakes, terrorist attacks, etc., affect both the infrastructural, material and resource state of society, as well as the mental and social situation to the people in it. The overall goal of Stress Management for Adults is to create and promote an innovative educational toolkit, especially for adults with a low level of skills, knowledge and competences, corresponding to their needs to acquire strategies to cope with crises, emergencies and stress and to increase the general awareness of post-Covid-19 physical and mental health problems and stress provoked by the various emergencies and crises (such as the war in Ukraine). This necessitates and the need to take measures that, on the one hand, inform what actions to take in the event of a sudden emergency situation, and on the other hand, create conditions for easier and less stressful passage through it. In this regard, this present guide is being developed. The guide aims to offer methods of recovery and resilience for older adults, which refers to a person's ability to adapt well to disasters, tragedies, threats, emergencies or major sources of stress. It has an informative nature and aims to make the organization of actions in the event of an emergency situation clearer, thereby helping to preserve people's lives and health.

Structurally, the manual defines the essence of the concept of an emergency situation, outlines the current legal framework related to the protection of the

population in the event of disasters and accidents, and also highlights specific actions that can be taken by the population in the event of an emergency from them. In this way, the aim is to ensure the most adequate possible reaction on the part of people in case they find themselves in a situation of fire, flood, earthquake, etc. and limit panic, anxiety and stress as much as possible.

1. Definition of the concept of emergency situation

In essence, an emergency situation is defined as *«a sudden or expected change in the established state of life, caused by human activity or natural phenomena, disasters, fires, technological and radiological accidents or environmental catastrophes, acts of terrorism, as well as other circumstances of social and of a political nature, which has or may have an adverse impact on people, the environment or property, including cultural heritage, and requiring the application of special measures to reduce losses and overcome its consequences».*[1]

The emergency situation is refracted through the prism of a disaster according to the Disaster Protection Law, where in Article 2 it is stated that " *a disaster is a significant disruption of the normal functioning of society, caused by natural phenomena and/or by human activity and leading to negative consequences for the life or health of the population, property, economy and the environment, the prevention, control and overcoming of which exceeds the capacity of the service system for the usual activities of public protection.»*

2. Regulatory framework

It is a leading priority, obligation and responsibility of each country to develop and implement a unified policy in the field of protection, prevention and liquidation of disasters and accidents. Policy should be understood as the activity of the bodies of state power and management, whose powers are related to the

[1]Rules for the organization of the activity of the Ministry of Internal Affairs in emergency situations, Ministry of Internal Affairs, 15.02.2012 .

protection of the population and the territory of our country. The main legal act regulating the protection of the life and health of the Bulgarian population, as well as the protection of the environment and property, is the Disaster Protection Act. Apart from it, the Law on the Ministry of Internal Affairs, the Law on Defense and the Armed Forces, etc., also play a key role.

Specifically, in this guide, I emphasize several basic normative documents that can be defined as key in the field of population protection during disasters.

The first document of strategic importance in this area is ***the National Strategy for Disaster Risk Reduction 2018-2030,*** which was developed pursuant to Art. 6a, para. 2, item 1 of the Disaster Protection Act and outlines the vision for reducing the risk of disasters on the territory of the Republic of Bulgaria. It sets the course for action until 2030, outlining a coherent framework for adequately reducing existing risks and preventing the emergence of new ones, increasing preparedness and response capabilities and rapid recovery after disasters, respecting the principle of "build back, but -good'.

Along with the National Strategy for Disaster Risk Reduction 2018-2030, the ***National Program for Disaster Risk Reduction 2021-2025,*** adopted by Decision of the Council of Ministers No. 865 of 26.11.2020, is also important. Its purpose is to support the implementation of the National Strategy and leading in it are several basic principles that will contribute to achieving the strategic goals in the field of protecting the population from disasters. These principles are:

- responsibility and preparedness of every citizen;
- a transparent approach to disaster risk management;
- comprehensive and integrated disaster risk management;
- disaster response;
- making the best use of information, expertise, science and technology.

The implementation of the National Disaster Risk Reduction Program is carried out through the relevant annual plans and is reported with reports on the state of disaster protection, which contain information on the implemented measures and identified challenges.

The Law on Defense and the Armed Forces of the Republic of Bulgaria , adopted in 2009 and which has undergone a number of amendments over time, the latest of which is from 2021, cannot be overlooked, and provides for the Ministry of Defense to ensure, among other things, the maintenance and use of the armed forces in disasters, as well as participation in overcoming and/or removing the consequences of disasters. The Minister of Defense makes decisions on the participation of military formations based on a request from a relevant state body, specified in the plans for the implementation of rehabilitation and emergency restoration works. The Minister coordinates these activities with the state authorities, local authorities and relevant organizations.

The Ordinance on the Conditions, Procedures and Authorities for Analyzing, Assessing and Mapping Disaster Risks is also noteworthy as it defines the disaster risks subject to analysis, assessment and mapping. They are:

- seismic risk;
- flood risk;
- risk of a nuclear or radiation accident;
- geological risk (landslides, collapses, active faults and other geological processes);
- risk of forest fires.

Analysis, assessment and mapping of disaster risks are carried out every 6 years by the relevant competent authorities, namely:

- Ministry of Regional Development and Public Works - for seismic (including earthquakes) and geological risk (including landslides, collapses and mudslides);
- Ministry of Environment and Water - for the risk of floods;
- Ministry of Agriculture, Food and Forestry - on the risk of forest fires;
- Nuclear Regulatory Agency - for nuclear and radiation emergency risks.

The Ordinance stipulates that the methodologies be approved by the responsible ministers and revised when the consequences of disasters differ from those initially Adaptation to Climate Change Disaster Risk Management expected in terms of their severity and scope, based on the lessons learned from previous such events.

Emphasis should also be placed on the ***Counter-Terrorism Act*** , which has been in force since 2016 and regulates the counter-terrorism, which is defined as a comprehensive, nationwide activity with unified leadership, planning, financial and resource provision and decentralized implementation at permanent and effective coordination between state and local bodies and structures.

The main goal of countering terrorism, according to the law, is the protection of the rights of citizens, legal entities, the state and society from terrorism. The implementation of prevention by establishing and eliminating the causes and conditions contributing to the commission of terrorism, as well as the development of mechanisms and indicators for identifying, monitoring and evaluating risks and preventing the harmful consequences of terrorism.

According to Article 2 of the Counter-Terrorism Act, the counter-terrorism must be carried out and in compliance with certain principles, refer to:

- compliance with the Constitution, laws and international treaties to which the Republic of Bulgaria is a party, as well as the law of the European Union;

- respecting and guaranteeing human rights and fundamental freedoms;

- priority of saving human life and health over other activities;

- cooperation with citizens and their organizations;

- openness and transparency in the implementation of counter-terrorism policies;

- centralized management and control of counter-terrorism activities;

- timely exchange of information on competence between state and local bodies and administrations;

- coordinated implementation of counter-terrorism activities.

The Anti-Terrorism Act also addresses the issue of preventive action, stating that it is carried out by the competent authorities in order to reduce the risk of committing terrorism and includes: analysis and assessment of risks, including assessment of the threat of a terrorist act and information activity; cooperation and exchange of information with the competent authorities of other countries and international organizations;. preparation of counter-terrorism plans; application of different types of preventive measures.

3. Institutions responsible for protecting the population from disasters

According to the Law on Disaster Protection, entities with disaster protection functions include: ministries and departments, regional and municipal administrations, emergency medical centers, other medical and health facilities, legal entities and legal entities with limited liability, voluntary formations and the armed forces .

Law stipulates that all activities for the protection of the population in the event of danger or the occurrence of a disaster are to be performed by the ***unified rescue system*** , which includes units of: ministries and agencies, municipalities, commercial companies and sole traders, emergency medical centers aid, other

medical and health facilities, non-profit legal entities, including voluntary units and the armed forces.

The main components of the system are : Main Directorate "Fire Safety and Population Protection" at the Ministry of Internal Affairs (coordinator of the system), the regional directorates of the Ministry of Internal Affairs, the Bulgarian Red Cross and the centers for emergency medical assistance.

A Council of Ministers is the body responsible for allocating emergency expenses in the event of a disaster. The Directorate-General for Fire Safety and Population Protection is the main national authority for disaster risk management, while regional governors and mayors have the primary responsibility for disaster protection at the regional and municipal level. In general, the responsibilities of the regional governor and mayor include activities in all phases of governance, not just emergency planning and emergency response.

The individual institutions that make up the unified rescue system have the following basic powers:

- ***The General Directorate "Fire Safety and Protection of the Population"*** is a specialized state structure under the Ministry of Internal Affairs and the main body responsible for disaster risk management at the national level.
- ***The National Council for Disaster Risk Reduction*** is a body that acts as a national platform for disaster risk reduction in accordance with the Hyogo Framework for Action and the Sendai Framework for Disaster Risk Reduction. It assists the Council of Ministers in the formation and implementation of sectoral policies related to disaster risk reduction. Its membership includes representatives of ministries, agencies, the Bulgarian Academy of Sciences, the National Association of Municipalities in Bulgaria, the Bulgarian Red Cross,

the Bulgarian Chamber of Commerce and Industry and the Bulgarian Chamber of Commerce, as well as representatives from universities, research institutes, non-governmental organizations and legal entities .

- ***Bulgarian Red Cross*** is the only national organization that supports the state in terms of: increasing health knowledge of the population; training citizens to provide first aid; prevention and assistance in case of accidents in mountain areas and water basins; support for victims of armed conflicts and natural disasters. The Bulgarian Red Cross has a four-level organizational structure with 28 regional organizations. The main executive and governing bodies are the General Assembly and the National Council. In the Republic of Serbia, the Red Cross as a voluntary organization also plays an essential role in emergency and disaster relief.
- ***The National Association of Volunteers in the Republic of Bulgaria*** is an institution established in 2014. Its members are: 1) Voluntary formations for protection in the event of disasters, fires and other emergency situations, registered with the municipalities; 2) Physical and legal associations of persons (sports clubs, social groups and others). For the Republic of Serbia, these are DVD-volunteer firefighting units .
- ***Minister of the Interior*** - another body in the system that is related to the protection of the population during disasters, and its duties are in the following directions: conducts operational protection in case of floods; organizes and controls the implementation of preventive activities to prevent or limit the impact of risk factors causing floods; organizes the development of Part II "Flood

Protection" of the National Disaster Protection Plan; creates by order a departmental headquarters to fulfill the duties of the ministry under the National Disaster Protection Plan and to interact with the national headquarters; and others.

- ***Minister of Defense*** , who develops a plan for disaster protection of the Ministry of Defense for the fulfillment of its obligations provided for in the National Plan for Protection against Disasters, and ensures its implementation; created by order of a departmental headquarters for the fulfillment of the ministry's obligations under the National Disaster Protection Plan and for interaction with the national headquarters; keeps military formations in readiness for participation in the conduct of rescue and urgent emergency recovery works within the existing capabilities, according to the developed plans, etc.
- ***Minister of Transport, Information Technologies and Communications,*** carries out preventive activities to remove or limit the impact of risk factors that could increase the damage to transport and communication infrastructures in the event of a flood; creates an organization for the normal functioning of land, air and sea transport, electronic communication networks (ECM), communication and information systems in the country and, if necessary, submits to the Council of Ministers drafts of normative acts for the maintenance and use of the types of transport, communication networks and systems in case of flooding; organizes the elimination of accidents and critical situations that have arisen on railway transport, as a result of flooding; organizes the activity of monitoring the level, the ice regime and the condition of the Danube River, etc.

- ***Minister of Environment and Water,*** assesses the risk of flooding, compiles the maps of areas at risk of flooding and the maps of areas at risk of flooding; proposes for adoption a flood risk management plan; monitor compliance with the flood risk management plan; updates the information about the forces and means of the ministry, their tasks and possibilities for conducting rescue and urgent emergency restoration activities in the electronic database for the components of the unified rescue system; and others.
- ***The Chairman of the DA "State Reserve and Wartime Stocks",*** which is responsible for maintaining reserves for providing assistance to the distressed population and providing rescue and emergency restoration works in case of flooding; to ensure the functioning of the country's economy in the event of a flood, etc.
- ***District governors*** who organize and control the implementation of preventive measures to prevent or reduce the consequences of flooding; organize and manage flood protection in the district; organize the development and approve the regional disaster protection plan, which necessarily contains the "Flood Protection" part; establish by order a headquarters for the implementation of the regional disaster protection plan and for interaction with the national headquarters; and others.
- ***Mayors of municipalities*** organize, coordinate and carry out preventive measures to prevent or reduce the consequences of flooding; organize and lead disaster protection, create a headquarters, etc.

- **In the Republic of Serbia, at** the state level, a Republican Headquarters and a Department for Emergency Situations have been formed, and at the local level, there is a City Headquarters for Emergency Situations and the competent services of the Ministry of Internal Affairs from the Department for Emergency Situations.

All these bodies and institutions work together in exchanging information and complying with certain procedures and rules.

4. Possible disasters

In recent years, various disasters/emergencies have been registered on the territory of Bulgaria, which take human lives and cause significant damage, as well as to the infrastructure in the field of energy, water resources, telecommunications, transport, public health, education, cultural heritage and protected natural areas, as well as industry, agriculture, livelihood and property of the population.

On the territory of the Republic of Bulgaria, it is possible for disasters to occur, which are caused by natural phenomena and they include: fire, flood, earthquake, snow storms, strong and hurricane winds, hail, landslides, etc. The disasters caused by these phenomena have adverse economic impacts on the country.

According to data from the National Statistical Institute (NSI), in Bulgaria, natural disasters and fires have caused damages of nearly 1 billion USD. from 2010 to 2016. Within this period, more than US$600 million was spent on recovery, and another more than US$100 million. have gone for rescue and emergency operations. The disaster risks facing the country are expected to increase given increasing urbanization, industrial development and climate change.

Disasters can also occur as a result of severe industrial accidents and fires in facilities dealing with nuclear, explosive and flammable materials, radioactive substances, industrial poisons and toxic gases.

Each one of these disasters can be defined as an emergency situation, and terrorist attacks can also be added here, which are not an isolated phenomenon and Bulgaria can also be potentially threatened by them. Bulgaria's membership in the EU, in NATO, in the global anti-terrorist coalition and the presence of Bulgarian contingents in various crisis points around the world inevitably turns our country into a target for terrorist acts.

In addition to the state authorities, it is extremely important to prepare the population and specifically for families in such emergency situations. Therefore, it is necessary to follow some general recommendations such as:

- To prepare a preliminary plan in the family for actions in emergency situations.
- Each family member should know the telephone numbers and addresses of the most important institutions.
- Designate meeting places for family members in emergency situations.
- Always be oriented where the spare exits of the premises are located.
- To free the corridors and exits from unnecessary objects that make it difficult to evacuate.
- To show a vigilant attitude to the condition of the approaches to the homes / general condition, lighting, doors, objects located there, persons having access, entrances and stairs / where one lives or works.
- In case of evacuation, take with you a set of essential items, medicines, money and documents.

For this purpose, it is recommended that every home has a pre-prepared backpack with the most important components for survival in extreme situations. The following can serve as an example of such a backpack:

SURVIVAL BACKPACK

in disasters, accidents and catastrophes in urban conditions

Survival backpack

The survival backpack is designed to take the necessary load of survival accessories. It should have an ergonomic design with 5cm wide padded shoulder straps, two large zip pockets and several mesh pockets, one front zip pocket with additional compartments. To secure the luggage, it can be equipped with side belts with different attachment points and an adjustable waist belt. The backpack is padded at the back for back support. A survival backpack must be tear and abrasion resistant and allow for dynamic movements.

Recommended backpack contents:

1. Protein Waffle

Main food substitute. It is high in protein and low in sugar. It provides the temporarily necessary minimum of proteins, vitamins and minerals for the normal functioning of the body.

2. Water jug

It is intended for drinking water from open water sources and allows to prepare a hot drink or food.

3. Knife

Foldable, it can be used in all conditions and in extreme situations.

4. Flashlight

It provides the necessary light for traffic and signaling.

5. Water tank

Provides easy access to water during extreme conditions. The special film on the inner surface preserves water for days and even weeks without changing the taste and the system is hygienic and easy to clean. The mouthpiece has a cover and a system for regulating the amount of incoming liquid. The tank must always be kept full of water. It can be filled with unpurified water by placing the water purification tablets inside.

6. Sound signal /Whistle/

Sound alarm in the absence of direct visibility, for giving a continuous sound signal in all crisis situations.

7. Tablets for water purification

They are intended for obtaining sterile and safe drinking water. They kill bacteria, bacterial spores, cysts, algae, fungi, protozoa and viruses.

8. Lightstick

It is used in the absence of light, in case of danger of explosion, in case of gas leak accidents and for signaling in order to indicate the location point.

9. Medical package

It was created to provide medical self- and mutual help. It contains essentials for dealing with minor and more serious injuries, but does not contain sterile medical equipment.

Package Contents:

- leaflet with first aid instructions;
- medical gloves;
- 1 pc. bandage 7.5 cm x 5 m;
- 1 pc. elastic bandage 5cm x 4.5m;
- 3 pcs. disposable mask;
- 1 pc. band-aid;

- gauzes for closing wounds;
- rivanol.

10. Thermal foil

A lightweight, compact blanket made of thermofoil that wraps around the body and reflects more than 80% of body heat to provide personal protection in case of accident, trauma or unexpected exposure to extreme cold.

11. Climbing rope.

One of the basic must-have accessories for survival. Used to attach to a stationary body to protect against injury in earthquakes or floods, to attach equipment to clothing, and to secure small and important items to prevent them from being lost. It can be used as a makeshift meter to measure a given distance.

12. Raincoat

Waterproof clothing designed to protect against rain, snow, aerosols and radioactive particles.

13. Ferrol

Magnesium lighter. Gives a very high temperature spark even when wet and in high wind. The dense bundle of sparks easily ignites paper, dry grass or other kindling.

14. Flashlight with LEDs /headlight/ - is placed on the head/forehead and provides hand mobility when performing various activities.

All these emergency situations are beyond human control and can cause a number of adverse consequences related to material losses and human casualties, environmental pollution, destruction of valuable plant and animal species. Therefore, more information is needed about the actions that everyone can take in the event that one of these occurs.

5. Actions in emergency situations

5.1. Fire

A fire is an emergency situation that can occur for various reasons and cannot be predicted.

They most often occur when improperly handling electrical appliances, using open flames, working with dangerous chemical substances, etc. An additional risk of fire also exists when a fire occurs in the neighborhood of the specific object or room, which is not extinguished or controlled in time. In this situation, there is a danger of its transfer and unpleasant consequences of this.

Fires also occur as a result of prolonged droughts in summer and autumn and cause large-scale field and forest fires that can affect human health and environmental pollution. The country's territory is dominated by mountainous and forested areas. Especially critical for the occurrence of forest fires are the Strandzha-Sakar mountain ranges, the Rilo-Rhodope massif, Sredna Gora and the southern parts of Stara Planina, where forest plantations of the 1st and 2nd degree of fire danger predominate, which is a basic prerequisite for occurrence of large forest fires.

Also, thunderstorms and lightning, which can also be the cause of fires, should not be overlooked.

The main principle of action in the event of a fire is the prevention of human casualties, the saving of material values and property.

In this regard, in the event of a fire, it is necessary to take the following **actions:**

- Call 112 immediately to report the fire, indicating the exact location of the object (city, district, district, street, number of the object), the nature, amount and type of the materials that are

burning, as well as whether there are any injured in the place where the fire occurred.

- The power supply is turned off from the central panel of the site where the fire occurred or is located near a fire.
- Access to the source of the fire and the water sources of the specialized equipment is provided.
- If there are injured people at the place where the fire started, call, in a loud voice, immediately for help or give first aid to the victims if they know about it.
- A fire extinguisher or other means of extinguishing the fire at hand - buckets of water, blankets, pumps, etc. - can be used until the arrival of the fire department, without taking any risk.
- It is necessary to close the doors and windows of the room in which the fire occurred, in order to stop the access of air and reduce the intensity of burning. Immediately leave the burning room.
- It is necessary to close the windows and doors of objects located near a fire.
- Evacuation should be carried out as quickly as possible outside, without thinking about valuables.
- Documents, the most necessary personal belongings and money are taken.
- If it is noticed that the fire starts to spread to the upper part of the room or in the direction of the exit, stop extinguishing the fire and immediately run outside.
- If during the evacuation the evacuation routes are smoky, the movement is carried out as low as possible (in a bent, crouching

position) , because the temperature is lower there and there is better visibility.

- If it is impossible to leave the site where there is a fire due to high temperature or smoke, the toilet or bathroom can be used as a hiding place by closing the doors, placing wet towels under the door and waiting for the fire department personnel.
- In the event that part of their clothing catches fire, they need to quickly take off the burning clothing, and if it turns out that this is impossible, extinguishing is carried out by means of another clothing or blanket, with which the burning one is wrapped. Extinguishing the burning garment can also be done by rolling on the floor.
- Evacuation from the fire room is carried out without moving and bumping other people.
- After evacuation, returning to the site where the fire started is prohibited until it is established that it is safe and there is no danger of a new fire.
- After staying in the object or the place where there was a fire, a medical examination must be done.
- In case of carbon monoxide poisoning, as a result of the fire, first aid is given to the victims, which may include providing access to fresh air, loosening clothes, leaving them at rest. Also, victims can be given warm milk, mineral water, bicarbonate of soda solution and transported to a hospital.
- The possibility of backup water use must be ensured.
- If necessary, more information is given to the competent authorities about the fire that occurred. These are employees of

fire and emergency safety, authorities of the Ministry of Internal Affairs.

5.2. Flood

Flooding is another type of emergency that has often hit the country's territory in recent years. They affect populated areas, industrial areas and fertile agricultural lands. Water destroys bridges, buildings and communication facilities.

A characteristic feature of floods is that part of the land is temporarily covered with water, as a result of river overflows caused by intense rainfall or snowmelt, from blocking the flow of the river bed, as a result of the accumulation of waste, rock materials, trees etc.. Floods can also be caused by other types of influences such as damage to hydrotechnical facilities and reduction of the capacity of drainage and sewerage facilities. At the local level, i.e. in the person's place of residence, flooding can also occur as a result of a breach in the plumbing system.

Regardless of the cause of the flood, its consequences are extremely unpleasant for every household, as it can lead to the destruction of infrastructure, material damage related to the destruction of valuable objects, furniture, furnishings, etc.

The main principle of action in the event of a flood is the prevention of human casualties, the saving of material values and property.

In this regard, in the event of a flood, it is necessary to take the following **actions:**

- The water supply is immediately cut off in the area where the accident occurred.
- On phone 112, a signal about the flood that has occurred is sent immediately, indicating the exact location of the object (city,

district, district, street, object number), the cause of the flood, whether there are any injured people at the place where the flood occurred.

- The power supply is turned off from the central switchboard of the site where the flood occurred.
- Neighbors are notified so that they can stop flooding in their homes if the object of the flood is located in a block of flats.
- Assistance is sought from competent persons to take action to repair the breach in the water system.
- If possible, actions are immediately taken to drain the affected object, by using a pump, scooping the water with buckets, etc.
- If necessary, exit the flooded premises using an evacuation route and exits.
- Documents, most necessary personal belongings, money can be taken.
- Returning to the flood site is prohibited until the safety of the site is established.
- Sandbags can be prepared and stacked on top of each other to create a barrier and limit the ingress of water in case flooding is caused by heavy rains or overflowing rivers.
- It is necessary to clean the rain shafts located near the site in advance to ensure the smooth drainage of water in case of heavy and prolonged rains.
- It is necessary to provide backup water use.
- If necessary, more information is given to the competent authorities about the flood that occurred. These are employees of

fire and emergency safety, authorities of the Ministry of Internal Affairs, ambulance.

5.3. Earthquakes

Earthquakes are another type of emergency that occurs suddenly and carry with them a series of risks, as they cause secondary negative phenomena such as landslides, collapses, subsidence, floods, liquefaction of water-saturated sediments and other additional destructions. For Bulgaria, the seismic hazard is of primary importance. Almost every month, more than 100 weak local earthquakes are registered on the territory of the country, with 1-2 being felt earthquakes (i.e. with an intensity above III degree MSK). Seismic hazard is associated with local and external outbreaks. Among the external outbreaks with great activity and impact over the territory of the country, the outbreaks in Northern Greece, Vranca (Romania), Negotinska Kraina, Kopaonik and Dolna Morava (Serbia), Edirne and the Sea of Marmara (Turkey) are distinguished. High seismicity characterizes the Upper Thrace Lowland, the Sofia Valley, the Struma and Mesta rivers, the Veliko Tarnovo-Gorna Oryahovitsa area and the Dobrudja Black Sea coast in the area of Shabla, Kaliakra. Strong earthquakes lead to tearing of the earth's surface - seismogenic deformations of the terrain.

As for the seismic impact, according to expert seismologists, Bulgaria falls under a seismic impact with an intensity of the 7th degree and higher, of which with an intensity of the 7th degree - 51%, with an 8th degree - 28%, with the 9th degree and higher - 19% of the territory. In these areas fall settlements with about 80% of the country's population and may be partially or completely destroyed - 26% of the building stock. About 74% of the country's population falls in areas with intensity of the 8th and 9th degrees on the Medvedev-Sponhoer-Karnik scale.

The most dangerous consequences can be caused by maximum earthquakes in one of the three internal seismic regions - Northeastern Srednogorsk, Rilo-Rhodopsky.

The high potential for large earthquakes in Bulgaria, combined with the extremely vulnerable building stock, means that these relatively rare events can have devastating social, material and financial consequences.

Every earthquake brings a high dose of stress and tension to people, so the main principle of action in the event of an earthquake is to prevent human casualties.

In this regard, in the event of an earthquake, it is necessary to take the following **actions:**

- When the first tremor is felt, people should not leave the building unless they can go outdoors for about 10 seconds.
- Take the safest place in the site, namely: under the door frame; near an interior wall, column, under a stable table where there is no danger of people being hit by falling objects.
- On telephone 112, a signal is immediately sent about the earthquake that has occurred, indicating the exact location of the object (city, district, , street, number of the object), the amount of material damage, human casualtie
- After the primary shock has passed, the most necessary personal belongings, documents and money are taken and the site is left.
- The electricity and water supply in the building is stopped in order to reduce secondary damage.
- Actions are taken to evacuate the building, following an evacuation plan if the building has one. In case there is no evacuation plan, go down the stairs of the building without moving and pushing other people who also use the stairs.

- No elevator should be used.
- During evacuation from the building, if there are people in the elevator, it is necessary to stop it on the nearest floor and leave it immediately. Then it must stand under a load-bearing beam or a load-bearing wall.
- The elevator cabins are fixed on the ground floors under the control of authorized persons/security, with a view to not being used during the evacuation.
- Evacuation assistance can be provided to persons who have panicked or have health problems, to move more quickly to the exit of the building.
- After leaving the building, do not stand at a distance less than its height.
- You can stand in safe places that are away from buildings and power lines.
- Upon the arrival of the rescue teams, if possible, assistance can be provided to provide immediate assistance to the victims.
- Provision of essential products.
- Organization of backup water and drinking water.
- It is necessary to comply with the orders of fire and emergency safety officials, authorities of the Ministry of Internal Affairs, rapid assistance to overcome and reduce the consequences of the earthquake.
- If possible, take part in searching for and removing victims from under the rubble (removing victims from hard-to-pass, dangerous and inaccessible places, providing air to trapped people, lighting the area for rescue operations).

- When establishing places where it is assumed that there may be buried people, they are marked and the rescue teams are directed to them.

5.4. Terrorist attacks

In human history, terrorism is present in different forms and with different names, as the common thing between them is that they have a specific goal drawn in advance. Each of the different forms of terrorism follows a particular ideology.

According to the type of victim of the terrorist act, it can be defined as terrorism directed against the person or against property. It can also be distinguished individual terrorism, in which the terrorist act is conceived and carried out by one person, and group terrorism practiced by a certain group of like-minded people, which is directed against society. [2]

There are different types of terrorism depending on what their goals are, motives, means used, internal organization, motives, methods of action, scale of terrorist acts, their ideological basis, etc. Regardless of the variety in which terrorism manifests itself, it can be defined as a strategy based on psychological pressure. At the heart of this pressure, on the one hand, is the desire to undermine the enemy's morale by instilling a sense of fear in his ranks, and on the other hand, is the desire to strengthen confidence in oneself and one's own ranks.

Security experts identify terrorism as one of the main asymmetric risk threats, which is closely related to the socio-economic and political development

[2] Blen, A., The Many Faces of Terrorism, S., 2010, p.66

of any society. [3]Bulgaria is no exception, as our country is not isolated from the harmful influence of terrorism.

In this regard, the main **actions** that can be taken in cases of a threat of a terrorist attack are the following:

- In the case of finding suspicious objects or suspicious behavior, it is necessary to call 112, giving an exact description of the location of the object (city, district, , street, number of the object), the type of the suspicious objects, characteristics of the behavior of the person who is suspected.
- Report anything suspicious to law enforcement officials.
- Never accept items from unknown packages and bags, even for temporary storage.
- Do not leave your luggage unattended.
- Without a security threat and where possible, constant monitoring of the subject/person is provided to detect changes in characteristics or behavior.
- Do not pick up, move, open, or act on "forgotten" or accidentally found items, and notify the police immediately. Signs indicating that the found package may be explosive are:

- Presence of an unknown package or any details in the car, in the yard, on the stairs, in the corridors, etc.;
- Stretched wire, cord, wires, power sources, magnets or insulating tapes attached to or extending from or under various vehicles;
- A foreign suitcase, bag, package or any other object "abandoned" in places frequented by many people;

[3] Abadjiev, Yu., Asymmetric risk threats to security, S., 2014, p.39

- Noise from the found suspicious object /characteristic sounds for clock mechanisms/, low-frequency noises and other, uncharacteristic for the object emissions;
- Camouflage of the object / packaging of food and drinks, electrical appliances, toys/, intended for disguise in order to prevent the recognition of the object until the moment of the explosion.

➢ Stand in a safe place that is distant from the suspicious object.

➢ The arrival of the specialized teams must be waited and information provided to them.

➢ The orders of the specialized teams regarding ensuring the safety and order of the public place are carried out.

In the event that it is an anonymous signal about the imminent activation of an explosive device, the following actions must be taken:

➢ Any anonymous report of a planted explosive device is assumed to be credible until proven otherwise.

➢ If you are the person on the receiving end of the call, you should remain calm and try to keep the conversation going as long as possible to get more information about the caller.

➢ A signal is immediately sent to tel. 112 , giving an exact description of the object's location (city, district, street, number of the object), as well as the information received from the signal.

➢ When evacuating a building identified as having an explosive device, follow the evacuation plan without pushing other people who are also leaving the site.

In case you are on public transport:

➢ Pay attention to the bags that are left, suitcases, trunks, packages and other "unowned" items.

- If you find a forgotten or misplaced item on public transport, ask those standing nearby. Try to find out whose it is and who might have left it.
- If the owner of the suspicious item has not been identified, immediately notify the driver of the vehicle, the security staff or the nearest RU of the Ministry of Internal Affairs.
- Do not open the found object, do not take it in your hands and, without causing panic, warn the people standing nearby about the possible danger.

5.5. Chemical and biological risks, radioactive contamination.

Chemical and biological risks are incidents related to the production of dangerous chemical substances, they are the result of industrial accidents, transport accidents, terrorist activity, etc., and can also arise as a result of the deterioration of sanitary and hygienic conditions and cause epidemics, the spread of nosocomial infections, etc. Radiation pollution occurs when radioactive substances are discharged into the environment, as well as during cross-border transport of radioactive substances and accidents with land and air vehicles (cars, railway wagons, airplanes) carrying radioactive materials. The biggest risk of radioactive contamination for the Republic of Bulgaria is from the Kozloduy NPP and the Cherna Voda NPP located on the territory of Romania. Based on technological or technical problems, the two plants could release radioactive vapors and radioactive particles into the atmosphere. Bulgaria may also be subject to cross-border radioactive pollution caused by accidents in nuclear power plants located in countries to the east-northeast.

In case of chemical, biological or radioactive contamination, the immediate **actions** to be taken are:

- A signal is immediately sent to tel. 112 indicating the exact location of the site (city, district, , street, number of the site), also indicating information about the pollution that has occurred.
- The doors and windows of the rooms are closed.
- Windows and doors are sealed, which includes the use of wet blankets, curtains, etc.
- Close all possible vents where contaminated air can enter.
- The water supply and electricity supply in the building is stopped in order to prevent secondary damage.
- A wet cotton gauze bandage, cloth, or towels are provided to place over the nose and mouth if a gas mask is not available. They are used when it is necessary to leave the object.
- If evacuation is necessary, follow the pre-approved evacuation plan without creating tension or pushing other people who are also subject to evacuation.
- The instructions given by the specialized teams are strictly followed.
- Basic food is provided.
- Mineral water is provided for drinking.
- Help is being provided to the injured.
- Assistance is provided to the specialized teams, if necessary.
- When reporting a past risk of infection, clothing is removed and aired before personal protective equipment is removed. They wash their mouths and eyes, wash their bodies with soap and water, and put on clean clothes.
- Ventilate the premises and wipe the furniture, floor and walls with a damp cloth and prepare for the restoration of the normal rhythm of life.

Conclusion

In today's dynamic and increasingly globalized world, emergencies are events that have significant socio-economic and environmental impacts on the economy and society of any country. Every country is exposed to a number of hazards, the negative consequences of which affect the population, industry, infrastructure, cultural heritage and the environment, therefore their management and control is necessary.

One of the ways to do this is information, that is why this guide sets a framework for action in the event of emergency situations, the most important thing, however, is to keep cool and calm in order to go through the event in the most reasonable way possible and the same not to leave lasting traces on the psyche of each of us.