



PREVENTION OF MAN-MADE AND NATURAL EMERGENCIES AND ELIMINATION OF THEIR CONSEQUENCES.

Madaminova Shahloxon Sharifjon qizi

Andijan State Technical Institute

Email: shahlomadaminova84@gmail.com

<https://doi.org/10.5281/zenodo.14730647>

Abstract: Natural and man-made emergencies are situations that arise as a result of dangerous circumstances that cause serious harm to human life and health, the environment or material assets. They are caused by natural or human activity. The article examines the causes of these natural and man-made emergencies, as well as information aimed at preventing them.

Keywords: Emergencies of natural and man-made nature, accidents and disasters, fire, explosion, toxic and harmful substances, radioactive substances.

Introduction: An emergency situation is an accident that may result in or has resulted in human casualties, damage to human health or the environment, significant material damage to human life and disruption of their life in a certain area. , a situation that has arisen as a result of a catastrophe, natural disaster, catastrophe, epidemic or epizootic.

1. Transport accidents and fatalities:

aviation accidents resulting in the death of crew members and passengers, complete destruction or serious damage to the aircraft and requiring search and rescue operations;



Picture 1- Man-made emergencies

Accidents and disasters in railway transport, including fires, explosions, damage to rolling stock, emissions of toxic substances, resulting in the death of railway workers and people (KTKZM) in station buildings and city buildings in the area where the accident occurred (accidents), which led to pollution of the territory adjacent to the site of the incident;

Destruction, accidents and fires at metro stations and tunnels, resulting in death, injury and poisoning of people, as well as breakdowns of metro trains;

accidents on main pipelines leading to the release of gas, oil and oil products (in the event of an accident), as well as the ignition of open fountains of oil and gas.

2. Accidents at chemically hazardous facilities:

Maximum permissible concentrations are concentrations that can lead to the release of toxic substances (in case of an accident) and damaging factors that have a strong impact on the environment, and are capable of causing or have caused significant harm to people, animals and plants. Accidents, fires and explosions at chemically hazardous facilities that lead to the release of a significant amount of hazardous substances outside the sanitary protection zone.

3. Accidents at facilities with a risk of fire and explosion: accidents at facilities where explosive, flammable and other fire hazardous substances and materials are used or stored in the technological process, resulting in mechanical and thermal injuries, poisoning and death of people. fires and explosions leading to the destruction of fixed production assets, disruption of the production cycle and life activity of the population in emergency zones;

4. Accidents in the energy and utilities sector: accidents at hydroelectric power plants, state district power plants, thermal power plants, district heating plants, power grids, steam boiler houses, leading to the loss of power supply to important industrial and agricultural consumers and disruption of the daily life of the population. due to accidents. accidents and fires at compressor and gas distribution stations and other energy supply facilities;

Accidents on gas pipelines, water pipes, sewerage and other public utility facilities that have resulted in disruption of life and created a threat to public health;

Accidents on gas purification facilities, biological and other treatment facilities that have resulted in pollution of the atmospheric air, soil, groundwater and surface water with harmful substances in concentrations that pose a danger to human health.

5. Schools, hospitals, cinemas and other social facilities that are associated with loss of life and require immediate emergency rescue operations and emergency medical care for victims, as well as sudden collapses of residential buildings, fires, gas explosions and other incidents.

6. Accidents related to the use or storage of radioactive and other hazardous and environmentally harmful substances:

accidents at facilities using radioactive substances in technological processes, where, as a result of emissions outside the sanitary protection zone,

high levels of radioactivity arose, resulting in an excess of permissible levels of radiation exposure to people; accidents during the transportation of radioactive materials;

situations involving the release or loss of biological agents into the environment in research and other institutions involved in the preparation, storage and transportation of biological agents and preparations obtained from them.

Damage to reservoirs, rivers and canals, discharge of water from high-mountain lakes, which led to the death of people in flooded areas, disruption of industrial and agricultural



facilities, urgent evacuation of the population, catastrophic floods requiring emergency measures.



Picture 2- Hydraulic accidents and incidents:

II. Natural emergencies

1. Geological hazards:

loss of life, varying degrees of damage to administrative and industrial buildings, technological equipment, power supply systems, transport communications and infrastructure, social buildings and housing, disruption of production activities and people's lives due to earthquakes, resulting in:

Landslides, avalanches and other dangerous geological phenomena that have resulted or may result in loss of life and require temporary evacuation of people from the danger zone or permanent relocation to safe places

.2. Hydrometeorological hazards:

Floods resulting in loss of life, flooding of populated areas, individual industrial and agricultural facilities, disruption of infrastructure and transport communications, production and life of the population and requiring urgent measures for evacuation, accumulation and flooding;

Avalanches, strong winds (hurricanes), hail and other dangerous hydrometeorological phenomena that have caused or may cause injuries and deaths of people, tourists and athletes in populated areas, sanatoriums, rest homes and recreation centers.

3. Emergency epidemiological, epizootic and epiphytotic situations:

Particularly dangerous infections that cause rare diseases such as plague, cholera and yellow fever;

Infectious diseases of humans caused by rickettsia are epidemic typhus, Briel's disease, Cooley fever;

zoonotic infections - anthrax, rabies;

viral infections - AIDS;

epidemic - a group of people with a single source of infection or the same pathogen of an infectious disease that is not classified as a particularly dangerous infection, in one locality - 50 people or more;

group infection of unknown etiology - 20 people or more;

undiagnosed malaria - 15 people or more;

a situation where the mortality or morbidity rate is 3 or more times higher than the average;

Poisoning with toxic substances - the number of victims is 10 people, the number of deaths is 2 people or more:

mass food poisoning - the number of victims is 10 people, the number of deaths is 2 people or more;

epizootic - mass disease or death of animals;

Epiphytoty - mass death of plants.

Conclusion. Natural and man-made emergencies can have serious consequences. They cause serious harm to human life and health, the environment and the economy. Therefore, preparing for them and taking preventive measures are an important task for the state and society.

References:

1. Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated August 26, 2020 No. 515 "On further improvement of the state system for preventing emergency situations and actions in them in the Republic of Uzbekistan."
2. Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated October 27, 1998 No. 455 "On the classification of emergency situations of man-made, natural and environmental nature."

