Ministry of Health of Ukraine Ukrainian Medical Stomatological Academy

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Head of Department

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Methodical instructions for independent work of students during preparation for a practical (seminar) lesson and in class

Academic discipline	Training of reserve officers
Module № 2	Essentials of Civil and Combat Medical Support
Topic of the lesson	Organization civil defense of hospitals and pharmaceutical establishments.
Course	2
Faculty	foreign students training specialty "Medicine", "Stomatology".

1. Relevance of the topic:

Fundamentals of stability of objects, psychological readiness of management, specialists and the population to act in extreme conditions, training of management of the facility and the population to properly perform a set of civil protection measures, scale and extent of the impact of natural disasters, industrial accidents, catastrophes and readiness of the object for stability of work is its ability in emergency situations to let out production in the planned volume, necessary nomenclature and the corresponding quality, and in case of influence on the object of damaging factors, natural disasters and industrial accidents - to resume the production in the shortest possible time. . It depends on the following main factors: the location of the object in relatively large cities, nuclear power plants, chemical industry, large hydraulic structures, military facilities, etc.; natural and climatic conditions, production technologies; reliability of protection of workers, the population from the impact of damaging factors, the consequences of natural disasters and industrial accidents, catastrophes; reliability of the system of supply of the object with everything necessary for production (fuel, lubricants, electricity, gas, water, chemical plant protection products, veterinary means, mineral fertilizers, spare parts, equipment, etc.); the ability of the engineering complex to withstand emergencies; sustainability of production management, rescue and other urgent work to restore the disrupted production.

2. Specific objectives:

- -Study the stability of the medical institution in emergencies.
- -Know the medical and technical support of sustainable operation of the medical institution in emergencies.
- -Learn to plan civil protection measures for medical and pharmaceutical institutions.
- Learn to organize medical care for non-transportable patients.

Competences and learning outcomes, the formation of which is facilitated by the discipline (the relationship with the normative content of training of higher education, formulated in terms of learning outcomes in the Standard).

In accordance with the requirements of the standard, the discipline provides students with the acquisition of competencies:

-integral: The ability to solve typical and complex specialized problems and practical problems in professional activities in the field of health care, or in the learning process, which involves research and / or innovation and is characterized by complexity and uncertainty of conditions and requirements. The ability of the

individual to organize an integrated humanitarian educational space, the formation of a single image of culture or a holistic picture of the world.

-general: The ability to apply knowledge in practical situations. Ability to exercise self-regulation, lead a healthy lifestyle, ability to adapt and act in a new situation. Ability to choose a communication strategy; ability to work in a team; interpersonal skills. Ability to abstract thinking, analysis and synthesis, the ability to learn and be modernly trained. Definiteness and perseverance in terms of tasks and responsibilities.

-special (professional, subject): Ability to carry out medical and evacuation measures. Ability to determine the tactics of emergency medical care. Emergency care skills. Skills to perform medical manipulations.

3. Basic knowledge, abilities, skills necessary for studying the topic (interdisciplinary integration):

Name of previous disciplines	Acquired skills
1. The history of medicine.	1. Know the role of domestic scientists
	in the development and organization of
	emergency medicine.
2. Civil protection.	2. Basic measures to protect the
2. Civil protection.	population and territories in case of
2 The begins of laws	emergency.
3. The basics of law.	
	3. To be able to use general legal
	principles to explain the actions and
	actions of a doctor in the event of an
4. Human anatomy, normal	emergency.
physiology.	
	4. The structure and physiological basis
	of the functioning of human organs and
	systems. Determine the severity and
	location of the lesion.
5. General hygiene and ecology.	location of the resion.
3. General hygicale and ecology.	5. To justify the need for entimal
	5. To justify the need for optimal
	interaction between humans and the
	environment in order to maintain health.
6. Internal diseases.	
	6. To be able to assess the general
	condition of the patient, to examine and
	sort the victims according to severity.

4. Tasks for independent work in preparation for the lesson and in the lesson.

- 1. The stability of the hospital in emergency situations, the main elements.
- 2. Assessment of the sustainability of the work of a medical institution, depending on the features of its location and activities, and the main directions and necessary measures to increase it.
- 3. Medical and technical support for the stable operation of a medical institution in emergency situations.
- 4. Ensuring the stable operation of the medical institution in emergency situations.
- 5. Planning of civil protection measures for medical and pharmaceutical institutions.
- 6. Formation of civil protection of medical and pharmaceutical institutions, their purpose, application and actions by warning signals.
- 7. System of emergency evacuation.
- 8. Organization of medical support for non-transportable patients. 9. Organization of evacuation of a medical institution and a pharmaceutical institution.

4.1. The list of basic terms, parameters, characteristics that a student must learn in preparation for the lesson:

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Term	Definition		
Ensuring the sustainability of	this is the creation of a reserve of energy		
the fuel and energy complex	capacities due to autonomous mobile power		
and water supply.	plants, as well as local sources of electricity;		
	preparation of autonomous power plants for work under a special regime (schedule) to ensure production processes for which long interruptions in power supply are impossible.		
Evacuation	it is an orderly withdrawal or removal of people from objects and settlements, staying in which becomes life threatening. ensuring the safety of every person.		
The main purpose of the evacuation	Evacuation is subject to values, documentation and archival materials.		

4.2. Theoretical questions to the lesson:

- 1. Vitality medical institution in emergencies, main elements.
- 2. Evaluation of the stability of a medical institution, depending on the characteristics of its location and activities and the main directions and necessary measures for its improvement.
- 3.Medico-technical support stable operation of medical institutions in emergency situations.
- 4. Ensuring the stable operation of medical institutions in emergency situations.

- 5. Work breakdown structure for activities of civil defense medical and pharmaceutical institutions.
- 6. The formation of civil defense medical and pharmaceutical institutions, their purpose, application, and action alerts.
- 7. System emergency evacuation.
- 8.Organization of medical support of non-transportable patients. 9.The evacuation of medical institutions and pharmaceutical institutions.

4.3. Practical work (tasks) that run in class:

- 1. Medico-technical support stable operation of medical institutions in emergency situations.
- 2. System emergency evacuation.
- 3. The formation of civil defense medical and pharmaceutical institutions, their purpose, application, and action alerts.

The contents of the topic:

The main elements of the stability of medical and pharmaceutical institutions in emergency situations

The Foundation for sustainability of the facilities, psychological preparedness of the management team, professionals and the public to take action in extreme conditions, learning disabilities management team GZ of the object and of the population to correctly perform a set of activities of civil protection, the scope and extent of the damaging effect of natural disasters, industrial accidents, disaster, and preparedness of the facility to resiliency is the ability in emergency situations to produce products in the planned volume, necessary items and appropriate quality, and in the case of impact on the object of damaging factors, natural disasters and industrial accidents - in the shortest possible time to restore their production. It depends on these main factors: the location of the object relative to large cities, nuclear power facilities, chemical industry, large hydraulic structures, military facilities, etc.; climatic conditions, production technology, reliability of protection of workers, population from exposure to damaging factors, natural disasters and industrial accidents; reliability of supply system facility with all the necessary for the manufacture of products (fuel, oil, electricity, gas, water, chemical means of protection of plants, veterinary tools, mineral fertilizers, spare parts, appliances, etc.); the ability of engineering complex to confront emergency situations; sustainability of production management, maintenance of rescue and other urgent works for the restoration of damaged production. These factors determine the basic requirements of stability of objects in emergency situations and ways to improve it. More prepared for the sustainable operation will be those items that will really estimate factors, their adverse influence on production and develop appropriate measures. Advance organizational, agrochemical, engineering, veterinary-sanitary, forestry, forestry, land reclamation and other activities will minimize the effects of factors affecting peace and war time and create favorable conditions for rapid elimination of consequences of emergency situations. The work of the project in

General consists of individual industries, it is therefore necessary to consider stability in extreme conditions of individual industries. Based on the study of factors affecting the stability of objects and assessment of sustainability elements and industries against the damaging effects of nuclear, chemical and biological weapons, natural disasters and industrial accidents, you must organize and carry out organizational, technical and technological measures to improve sustainability.

The implementation of organizational measures provide for advance preparation of all civil protection services and units to emergency situations. The introduction of technological measures increases the stability of objects through the modification of processes, modes, possible in emergency situations. Engineering measures should ensure a greater sustainability of production facilities, technological lines, equipment, communications facility to influence of damaging factors at emergency situations. When conducting these measures should take into account the specific conditions of the object of the national economy, however, there are General organizational engineering activities that should be performed on all objects.

The protection of people and their vital activity:

- Creation of a reliable system object alert about the threat of enemy attack, radioactive contamination, chemical, and biological contamination, the threat of natural disasters and industrial accidents.
- Organization of reconnaissance and surveillance for radioactive contamination, chemical, and biological contamination; hydrometeorological monitoring water level, direction and speed of wind, movement and spread of a cloud of radioactive contamination, sdyav and S.
- The establishment of the Fund protective structures of public procurement and stocks of personal protective equipment and ensure timely deliveries to their population.
- Early preparation for mass sanitation of the population and decontamination of clothes, interaction with healthcare institutions for medical care in emergencies.
- Preparing for evacuation of the population located in the zones of possible destruction and catastrophic flooding. Advance preparation of evacuation sites, reception of evacuees on the territory of settlements.
- Services supply the population of food, drinking water, daily Essentials, household service of the population in terms of evacuation, protection of food stocks.
- Teaching people how to protect themselves against the first aid, action in emergencies, morally-psychological preparation of the population for survival.
- Provide clear information about the setting and rules of action and behavior of the population in emergency situations.

Protection of valuable and unique equipment.

To protect valuable and unique equipment by carrying out engineering-technical measures to reduce the risk of damage to and destruction of valuable and unique equipment, CNC machine, grinding, lathes, boring, gear hobbing, press tools,

automatic Assembly lines and other equipment. Options for this protection is the placement of the equipment in advanced areas, as well as the use of special protective devices, fixing tanks on the foundations, the use of buttresses to increase the stability for the transfer of equipment.

The resiliency of the fuel and energy complex and water is the creation of a reserve energy capacity through Autonomous generators and local energy sources; preparation of stand-alone power plants to work according to the special mode (graphics) to ensure technological production processes, for which no long breaks in power supply.

With the aim of preventing accidents in electrical networks it is necessary to establish a system of automatic shutoff occurs, over - voltage, overhead lines, replace underground cable. You need to create the necessary reserves (reserves) of fuel and lubricants and other fuels, and arrange them in safe storing.

To prevent the stop of the enterprise because of the fuel shortage, you must be prepared to work on a variety of fuels: oil, coal, gas. To improve the sustainability of water supply have to create primary and backup water supply sources. As a backup source it is better to have artesian wells, which must be connected to the water system. In addition, water can be taken from a natural pond or build an artificial pond or tanks with equipment of devices for collecting and pumping water. All parts of the supply needs to be deepened into the soil with equipment fire hydrants and devices for disabling the damaged areas. The local network of the supply of individual large enterprises should be connected with the city water system in a single ring.

Sustained provision of water contributes to the water supply directly to the network outside of the water tower, the construction of bypass lines for the water supply is not damaged facilities. It is important early intervention for the protection of water sources, water supply facilities, wells and wells from contamination by radioactive substances, contamination, chemical and biological means, as well as preparation of reclamation, hydraulic and irrigation facilities and systems for operation in extreme conditions.

Stability of work vehicles and other equipment, technological equipment and machinery:

- Organization of timely notification of garage technology Park, their officers, drivers, machine operators about the threat of an emergency.
- Preparing motor vehicles to conduct in conditions of radioactive contamination, chemical, biological contamination and blackouts.
- Fit and use of all types of vehicles for the evacuation and transportation of victims.
- Development of actions to accommodate vehicles and other equipment to perform tasks of GBS.

- Develop fixtures and processes for the PTO of tractors and cars with the aim of activating generators and process equipment, pumps for supplying water to the place of consumption from boreholes, open reservoirs and wells.
- Preparation of all equipment for rescue and other emergency operations in emergency situations in peacetime and wartime.

Ensuring the sustainable supply of objects.

To ensure the production of required electricity, fuel, lubricants, plant protection products, fertilizers, prophylactic and therapeutic drugs, veterinary medicine, spare parts, raw materials and other material and technical means. The provision of these resources will produce desired products in an emergency peacetime and wartime. Therefore, should be such activities that would ensure sustainability of supply and increased protection of mains electricity, water, gas, transport, communications and sources all necessary for the functioning of agriculture in extreme conditions. With the aim of preventing accidents in electrical networks it is necessary to establish a system of automatic disconnection of the surge. Overhead power lines should be replaced by underground cable. The gas is used as fuel and chemical plants in the process. For uninterrupted gas supply to the gas network must be supplied to the object from two directions, which should be connected in a single ring with equipment for remote automatic control and, if necessary, disabling the damaged areas. In large enterprises, it is necessary to have underground tanks with injected backup gas. In enterprises where steam is used, it is necessary to protect the sources of its supply, to deepen the steam supply communications into the soil and to install locking devices. The stock of reserve materials must be counted on for the following business hours for which regular supply can be restored. It is necessary to provide for the case of interruptions in the supply of related enterprises, the creation of local materials, raw materials for the manufacture of components and tools by the forces of your enterprise.

The conservation and restoration of buildings and structures:

• Assessment of possible degrees of destruction of buildings and structures of the economy of the settlement.

In determining the scope of urgent repairs, needs in building materials.

- Calculation of forces and means for carrying out urgent repairs and other works, as well as disinfection of premises, production areas and territory.
- Creating and training special units for repair and rehabilitation, construction and other works on the subject.
- The construction of new buildings and protective structures requirements of GBS.
- Development of complex fire prevention measures, which would exclude the possibility of mass fires.

The system safety management and communication:

- Organization of secure point of control, providing means of communication, which would give an opportunity quickly to bring the signals GZ to all operating divisions and population in places of residence.
- Development of documents governing clear personnel actions to ensure sustainable operation of the facility in emergency conditions.
- Preparation of the necessary cadre of specialists, machine operators and managers to change those that will be mobilized.
- Planning of data collection about the situation, sending commands and instructions in terms of impact on the object of damaging factors.
- Organizing the use of radio equipment, telephones, and messengers to communicate with remote settlements, production units and columns of evacuees in transit, and responsible persons, accompanying persons during the evacuation.
- To ensure the duplication of lines and communication channels. To maintain at a high level, the GB should conduct frequent training of population specialists, conduct of on-site training and team training.

System emergency evacuation.

In cities and other settlements, where there is a high risk in case of incomplete provision of protective structures, the main method of protection is evacuation and placing it in areas safe for people and animals.

Evacuation subject population, living in settlements located in areas of probable catastrophic inundation, dangerous radioactive pollution, chemical destruction, natural disasters, accidents and catastrophes. Given the situation that prevailed at the time of emergency, can be carried out total or partial evacuation of a temporary or irreversible character.

A total evacuation is carried out by decision of the Cabinet of Ministers of Ukraine for all categories of the population and are planned in case of possible hazardous radioactive contamination areas (under the threat of life and health of people); the emergence of the threat of catastrophic flooding.

A partial evacuation is carried out by decision of the Cabinet of Ministers of Ukraine in case of threat or emergency. The evacuation is carried out by the Council of Ministers of the Autonomous Republic of Crimea, local bodies of Executive power, bodies of local self-government. When conducting a partial evacuation in advance is taken out of the unemployed in the production and maintenance of the population: children, pupils of educational institutions, orphanages, together with teachers and educators, students, pensioners and persons with disabilities who are in nursing homes, along with staff and members of their families.

Evacuation plan in the event of:

accident at a nuclear power plant with possible radioactive contamination of the territory, all kinds of accident with emission of highly toxic substances, the threat of flooding of terrain, forest fires, earthquakes, landslides and other geophysical and meteorological phenomena with serious consequences.

In time of war - from the damaging factors of weapons of mass destruction, conventional weapons.

To arrange the evacuation, to prevent panic and loss of life, it is necessary: to plan the evacuation of the population, to identify areas suitable for placement of evacuated from dangerous areas, to organize the notification of heads of the enterprises and the population about the beginning of the evacuation, to manage evacuations to worry about life support in the locations of the evacuated population, to provide training to children.

Evacuation is an organized withdrawal or removal of people from objects and localities, which becomes life-threatening. The main goal of an evacuation, the security of each person. Evacuation is subject to the values, documentation and archival materials. The scale of evacuation will depend upon the magnitude of the spread of injury or emergency. The success of evacuation depends on the readiness of the management objects, settlements, administrative areas, leaders, population, energy and resources.

The following types of evacuation:

- total evacuation of the building or the settlement is fully exempt;
- partial evacuation -exempt part of the premises, locality or administrative area; when partial evacuation is necessary to limit economic and industrial activities and increase chances of survival; such evacuation at any moment can outgrow in the General evacuation;
- immediate evacuation is the urgent event if an emergency (fire, explosion, accident, etc.) have already occurred or may occur in a limited period of time; each of these types of evacuation under the influence of climate change can escalate into immediate evacuation;
- temporary evacuation is carried out at a relatively small, temporary threat (raising the water level, chemical accident to removal, etc.).

The evacuation of people from dangerous areas and zones (except the zones of quarantine) is carried out in case of threat to life and health of people. Evacuation is subject to all of the district's population at risk. Evacuazione actions can have widespread and implemented in a short time, involving all types of transport or gradually, depending on the situation. The reason for planning machaeropterus is the target levels and doses of radiation degree of radioactive contamination, the concentration or density of chemical contamination in excess of allowable dose and can lead to long-term or irreversible consequences for life and health of people.

The basis for the practical implementation of machaeropterus are the actual indicators of the situation in case of emergency, the government's decision on holding machaeropterus; in urgent cases the decision of the head of local representative and Executive authorities of the area where disaster struck. Recovery activities include pre-development of evacuation plans, training areas and deployment areas for the normal life of evacuees; the preparation of all types

of transport; creation of necessary structures and controls for the period of evacuation; conducting of complex of measures on protection of a public order and maintenance of discipline among the population.

Practical evacuation occurs:

- total accident at a nuclear power plant;
- all types of accidents with sdyav, the consequences of which threaten the life and health of the people living in the zone of possible destruction;
- the threat of catastrophic flooding areas;
- a massive forest and peat fires that threaten human settlements;
- catastrophic earthquakes and other geophysical and hydrometeology with serious consequences;
- from the combat areas.

Evacuated reside in the country until further notice.

Suburban area - an area located outside of the possible destruction in the cities . In an atmosphere of threat to the population of particular importance is the period of evacuation of people from the danger zones. Under these conditions, in the shortest time evacuation can be realized combined method, which consists in the fact that the mass withdrawal of the population from the danger zone on foot, combined with the export of certain categories of the population with all types of available transport. Transport take out rescue teams, shifts of the enterprises continuing industrial activity in a hazardous area, the population that can not move. The rest of the population organized derive on foot.

The evacuation of the working population and family members is held on the production principle, i.e. through the national economy. Evacuation of the population, is not associated with the production, carried out by the territorial principle - by place of residence, through housing management, housing maintenance authorities.

Children are evacuated with their parents, but can export with schools and kindergartens. Conduct evacuation measures are undertaken by the management bodies of civil protection, heads of households and housing authorities, as well as city and district emergency Commission. The main document that defines the scope, content, duration of the evacuation is the plan of civil protection on protection section of the population. On the basis of the evacuation plan in cities, districts and objects of national economy (enterprises, organizations and educational institutions) are created by the evacuation Commission, and in rural areas - makopane Commission.

The responsibilities of city and district emergency Commission of the city area included:

- population, institutions and organizations, to be evacuated;
- accounting for the potential settlements of the suburban zone for the reception and accommodation of the population, establishments and organizations;

- the distribution of areas of the settlements of the suburban zone between the districts of the city, enterprises, institutions and organizations;
- accounting of vehicles and fixing them with objects for the transport of persons;
- determination of the foot of the columns and routes of their movement;
- preparation measures, material, technical and other types of support, and evacuation;
- determine the duration of the evacuation.

The decision of the chief of the object is created the object recovery Commission. It is composed of representatives of trade unions, personnel Department, Department heads and other production units. The Commission is headed by one Deputy facility Manager. Duties of the emergency Commission is taking into account workers and members of their families, to be evacuated, determining the composition of the foot of the columns and to clarify the routes of their movement, the issues of transportation, preparation intermediate points evacuation areas, evacuation, embarkation and disembarkation; organization of communication and interaction with the regional emergency Commission and the emergency rallying point, linking up with makopano by the Commission and adopted evacuation centres and the decision together with them questions of accommodation, employment, financial security, medical and consumer services to the evacuated population.

The city Commission create emergency teams evacuation points (EPS). Each BOT is assigned a state registration number. Are EPAS in public buildings - schools, houses of culture etc. Items collected population, register it, arrange the embarkation of persons on a transport or form a Hiking columns and send them to the countryside area, the area of evacuation. About the beginning of the evacuation of the population misleading in enterprises, institutions, educational institutions, and broadcasting networks and local television. Learning about the beginning of the evacuation, people should immediately prepare for the exit (the exit), take essential items, personal protective equipment, medicines, products, documents and money. In the house, the apartment to remove items that can easily ignite. Things to take with you only the essential: clothes, shoes, linen. In the set of clothes it is advisable to have a raincoat and a tracksuit, shoes (rubber or rubber-based). Definitely need to take warm clothes, even if evacuation is carried out in the summer. Products (2-3 days) need to take those that are easy to store and do not require long cooking: canned food, concentrates, etc. Water it is advisable to pour in a flask. It is important not to forget the passport, military card, employment record book or pension certificate, a diploma (certificate of graduation), marriage certificate and children's birth. All goods must be Packed in backpacks, bags, totes, suitcases or tied into knots. During the evacuation on foot they should be in backpacks and duffel bags, convenient for carrying. When calculating the number of things and food take into account that the person will have to carry them (during the evacuation transport, the total mass in an adult should not exceed 50 kg). Each place must attach a label indicating the surname, name and patronymics, address of permanent residence and the final destination of evakuatsii. Accordingly, you must

prepare to evacuate the children. Picking up clothes and shoes, you should consider their protective properties and the time of year. For children under 3 years of age also need to take stock of required products. Children of preschool age in the inside pocket of clothing they use, to attach a card with the specified surname, name and patronymic of the child, birth year, home address and place of work of parents. Better yet, write this data on a piece of white fabric and sew it from the inside of the baby clothes, for example, under the collar. After all the necessary things, food and medicines prepared just before leaving the house or apartment you need to check whether to disable the gas, electrical appliances, lighting, covering faucets, closed Windows and doors. At a set time should arrive with everything you need on BOT.

Arrived on precast evacuation point are recorded, distributed on modes of transport, trains, convoys, and those that walk - on the columns. For the removal of the population use rail, bus and water transport. Used not only passenger rail trains, ship, but also boxcars and gondola cars, cargo ships, barges and platforms adapted for transportation, trucks, dump trucks, trailers. Hiking evacuated column is formed near the BOT.

For a better organization of the transition are formed of columns for departments, faculties (in schools), teams and other production units. The head of a column, one of the leaders of the unit. Hiking columns needs to move on roads not occupied by troops and evacuated transport. For people include halts: small-10-15 mins every 1-1. 5 hours of traffic, large-1-2 hours., at the beginning of the second half of the transition outside the danger zone. To provide medical assistance on the way to each train level, convoy or foot convoy, a health worker is allocated, mainly from evacuated ones. For pedestrian evacuated, if their areas of location are far away, intermediate evacuation points (PES) can be organized. They are arranged outside of dangerous zones, in settlements located on the evacuation route, near roads. If possible, evacuees are transplanted to transport. On the routes of pedestrian convoys, medical assistance is provided in the medical centers of the settlements through which the route passes, or organized with convoys. The number of foot columns from 500 to 1000 people. For the convenience of managing the column, it is advisable to break the column into groups of 50-100 people and appoint elders at the head of the group. Particular attention is paid to children, not allowing them to be separated from adults. On the road, people must strictly adhere to established rules, discipline, follow the instructions of representatives of the civil protection department, who is senior in a carriage, on a ship or in a car, and do not leave vehicles without their permission.

When evacuating on foot, you must perform all the commands and signals of the head of the column adhere to the specified pace and distance, to be ready to defend with the introduction of signals of civil defense. In the road need to support each other, especially the sick and those who are left behind. If you feel unwell you need to contact a health care professional who accompanies the column. People need to clarify what these difficulties are inevitable, that to tolerate them is necessary for the preservation of life and therefore the duty of every citizen to

abide by the rules of conduct to comply with the requirements of officials and to assist them in carrying out these complex activities. Service radiation and chemical protection is available anti-radiation and anti-chemical security in terms of evacuation and monitoring of radiation and chemical situation. Evacuation in conditions of radioactive contamination or contamination by hazardous chemical substances is carried out by a closed transport. Choose the most simple routes with the lowest radiation levels, concentrations of toxic or poisonous substances. To leave the premises until the arrival of transport desirable. Should strictly observe the regime of radiation protection.

In case of accidents at chemical plants evacuated it is necessary to provide individual means of protection. To organize reception and accommodation of evacuated population, as well as to ensure that it creates all the necessary admissions and emergency evacuation centers in rural areas. Foster evacuation of the Commission shall work together with the staffs and services of civil protection. In the composition of the selection Commission evacuation of a village or agricultural sites include the responsible employees of the state administration, representatives of trade, public nutrition, education, medical, living and other organizations. Each of the evacuation Committee of the district, the village, the object communicates with the evacuation Commission, and clarifies the question of reception and accommodation of the population, the schedule of trains and truck convoys, the number of people. For the reception of the incoming population are satisfied with receiving evacuation points (PEP) in schools, kindergartens, clubs and other public buildings, preferably near the points of arrival of evacuees. At the PEP meet evacuees, distributed by settlements, provide first aid, to settle people. Evacuees are housed in homes and local residents (in order of intrusion), hostels, clubs, boarding houses and other habitable spaces. Local residents need to be prepared to share with newcomers with food, especially in the first days of arrival, before they organized their supplies. The local authorities of rural settlements, agricultural and forestry facilities must maintain constant care of the evacuated population, promote employment and ensure everything necessary for living. Providing evacuees with food and necessities can be arranged through local trade organizations, public catering and consumer services.

Communal service of evacuees rests with the local municipal offices, workshops, hairdressers, laundries, baths. To expand them due to evacuees. Medical care of evacuees is active in the field hospitals, clinics, health centres rural areas who can be additionally equipped with evacuated health workers and funded sanitary treatment and disinfection.

In places of resettlement of the evacuated population must strictly comply with the orders of the local administration, bodies of civil protection. He is attracted to work in agriculture, forestry production, local enterprises and the enterprises, evacuated from the danger zone, who continue to work in rural area.

The evaluation of the stability of the object against the influence of damaging factors for the development of measures to improve and ensure the sustainability of the facilities in emergency situations, it is necessary to assess the stability of the

object against the influence of damaging factors. The output for calculations of the resistance of an object to defeat is the maximum value of the parameters of the possible damaging factors and characteristics of the elements of the object. The parameters of damaging factors you can get in Department or control of GP or to define a calculation method. The destruction of houses, industrial buildings, livestock facilities, facilities of different production purposes it can be in time of war from

the blast, in peacetime from accidents of various nature, hurricanes and earthquakes.

The action of the shock wave on the object is characterized by a complex set of loads: pressure, pressure, reflection, pressure, velocity head, pressure, flow, load from seismic waves. All this will depend on the type and power of the explosion, the distance to the object, design and dimensions of the elements of the object orientation relative to the explosion, the placement of buildings and structures, terrain, nature of accident, force of earthquake or storm. To consider them together for each object impossible. Therefore, it is customary to characterize the resistance of structures of the action of the shock wave to excessive pressure in the front of the shock wave ($P\Phi$), which leads to weak, medium, and strong fractures.

Materials for self study:

- 1. What refers to the means of individual medical protection?
- * A. Radioprotective drugs, antidotes, antibacterial means, PPI, IPP, AIMS;
- B. Radioprotectors, antidotes, vaccines, serum, PPI, IPP, AIMS;
- V. Radioprotectors, antidotes, antibiotics, painkillers;
- G. Radioprotective drugs, antidotes, antibiotics, PPI, IPP, AIS, AI-2.
- 2. You know what types materialnet reserve?
- * A. State, operational, departmental, regional, facility. B. State, strategic, operational, regional, facility.
- V. Territorial, departmental, regional, facility.
- G. Local, regional, departmental, operational, state.
- 3. As klassificeret medical assets on a functional purpose?
- * A. Medical, sanitary, economic, special.
- B. Medical personnel, metabelian.
- V. Medical General purpose, special purpose.
- G. Medical, surgical, specific, complete.
- 4. As klassificeret medical assets by account basis?
- * A. Inventory, costly.
- B. Supplies, inventory, General.
- V. Inventory, special.
- G. Cost, expense.
- 5. What do You know principles of creation of the forces of the state service of disaster medicine (GSMK)?
- * A. territorial-production, universalism, the main driving functionality.
- B. clusters, universality, timeliness of assistance.

- V. Territorial and production, the provision of free medical care, timeliness of medical care.
- G. Territorial and production, the provision of free medical care, universalism.
- 6. Which institutions are part of GCOS at the state level?
- * A. Scientific-practical center, medical units, medical institutions of Ministry of health of Ukraine, specialized brigades of permanent readiness.
- B. Scientific and practical center, medical units, hospitals, brigades of permanent readiness.
- V. Scientific and practical centers, medical clinics, ambulance teams, medical units.
- G. Scientific-practical centers, medical units, medical institutions of Ministry of health of Ukraine, specialized brigades of permanent readiness of the I and II stages.

Literature

Basic references

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