The exceptional situation is applied according to the following criteria:

MEDICINE OF CATASTROPHES & DISASTERS

The Catastrophe medicine is a field of medicine studying the organization of Medical Help & the treatment of wounded people appearing during catastrophes.

It has 2 aspects:

- 1\textsuperscript{st} aspect: \textit{Management of Catastrophe}: it studies the forms & methods of organizing medical support.

- 2\textsuperscript{nd} aspect: \textit{Treatment}: It studies the harmful factors (chemical, mechanical...), the pathology that appeared as a result of action of these factors; as well as the forms & methods of treatment, medical rehabilitation & medical expertise.

The medicine of catastrophes is an \textit{emergency medicine}; because of this, each country has its medical emergency service that is a public service (of state) in order to give the necessary medical aid to the injured.

Under the word "\textit{Catastrophe}"$, we understand in the medical aspect of view:

- \textit{Exceptional situation} appearing as a result of catastrophes & concomitant masses of injured people with specific pathologies as well as the releasing of function of the medical staff because of architectural destroying.. For the stopping of consequences we usually need: Forces & Medical staff from outside the affected area!

- \textit{Exceptional situation}: is a situation that appeared as a result of disasters in which appear a sudden disproportion between the necessity of giving medical help & the local possibilities of curing.
  1- Number of injured and sick is of 15 persons from which 2-4 are dead;

  2- Number of sick from dangerous infectious diseases (Cholera, plague, brucellosis...) is of 15 & more persons;

  3- Number of sick from an unknown etiological disease is of 20 & more persons;
The exceptional situation is applied according to the following criteria:

4- Number of patients with unknown fever are of 15 & more persons;

5- Morbidity & mortality from a certain zone increases 3 times more than the previous year for a specific period;

6- Grade of contamination with a radioactive, chemical or bacterial substances increases 100 times more than the allowed level;

Those criteria are temporary. They can be modified depending on the type of disaster, amplitude of disaster & concrete situation of the affected zone.

Classification of catastrophe:

1- By origin:

a. Natural catastrophes:
   i. Earthquakes
   ii. Inundations
   iii. Hurricanes
   iv. Volcano eruption

b. Technogenic (appear after human activities):
   i. Fire
   ii. Mine avalanche
   iii. Leaking of radioactive & chemical substances
   iv. Transport accidents: ground, air, naval

c. Social catastrophes:
   i. War
   ii. Terrorism •
   iii. Chaos
   iv. Famine

- By WHO: 4 groups:
a. **Meteorological:** all catastrophes with meteorological character

b. **Topological:**
   i. Ground collapse
   ii. Snow avalanche
   iii. Catastrophic inundations

c. **Telluric & tectonic:**
   i. Volcano eruption
   ii. Earthquakes

d. **Accidents:**
   i. Air
   ii. Ground
   iii. Naval

- **By number of sick & injured:**

  a. **Minor catastrophes:**
     i. Number of wounded is until 100 persons & <25 need hospitalization

  b. **Medium catastrophes:**
     i. Number of injured is between 100 - 1000 & until 250 need hospitalization.

  c. **Major catastrophes:**
     i. Number of injured is more than 1000 & more than 250 need hospitalization.

4- **By amplitude of spreading of consequences:**

  a. **Catastrophes with local character:**
     i. Consequences are spread in the limits of 1 lab. or 1 section of factory

  b. **Catastrophes with an object character:**
     i. Consequences are spread in the limits of factories, industries or in educational institutes; the exceptional situation is applied to the whole factory or institution.

  c. **Catastrophes with municipal character:**
     i. Consequences are spread in all town; the exceptional situation is spread in all city.
        a. For example: quarantine
d. **Catastrophes with regional character:**
   
i. Consequences involve 1 or many states (ex: Chernobyl).


d. **Catastrophes with continental or global character:**
   
i. Ozone hole
   
ii. Meteorite bombarding
   
iii. Global warming

### Specific Peculiarities of Catastrophes

- Unpredictability of appearing of catastrophes in time & space:
  
  o This necessitates from the Chief of State to be permanently ready to give a fast response according to saving & giving medical help.

- Simultaneous appearing of big number of injured persons

  Some disasters may provoke the appearing of other chain disasters that will complicate the situation *(For ex. : earthquake in region of atomic power-station)*

In order to take a decision concerning the giving of medical help, the chiefs of medical institutes must know the concrete situation created by the catastrophe. In this scope, we need to give medico-tactical characteristics of the focus *(specific area)* including the following elements:

1- Type of catastrophe & its amplitude

2- Possible number & structure of sanitary losses (the structure means where in the human organism)

3- Level of destruction of medical institutes & staff

4- Presence or absence of infection in the affected region: to protect ourselves!

5- Anti-epidemiological & sanitary-hygienic state: if person dies and decompose, rats may transport infections...
Medico-tactical characteristics of earthquakes:

Can be horizontal & vertical

Earthquakes present some tectonic movements of ground parts; depending on the causes that produce earthquake they can be of:

1- Volcanic nature
2- When we take ores from ground, we have holes & > They are limited & with small collapse in intensity
3- Tectonic nature: by deepness it may be:
   - **Superficial**: focus is until 70km deep
   - **Intermediate**: focus is until 350km deep
   - **Deep**: focus is more than 700 km deep

One of the specific characteristic of the earthquake is that until nowadays we don't have the instruments to determine the location & time of the appearing of earthquakes. Nowadays, science can determine only & only the zones with high seismological actions are determined plus the periodicity of appearing of the earthquakes.

In this way, in many countries, biological labs are constituted where permanent observers are studying the behavior of wild & domestic animals that can perceive the electromagnetic waves that humans can't perceive with 5-10 min before the earthquake or even more time. Depending on the power of emitted energy with earthquake, we classify them by **Richter scale** (12 levels):

- **Weak**: until scale 4
- **Medium**: until scale 6-7
- **Powerful**: until scale 9
- **Catastrophic**: scale 10-12

Depending on the distance from the **epicenter**, we determine **4 zones** from the periphery:

- **1st zone**: **Zone of mild destruction**: The number of injured as well as dead is small. Small number of the hospitalized persons.

- **2nd zone**: **Number increases**: is a zone of medium destruction: Also number of dead people increases.
- **3\textsuperscript{rd} zone**: Big destruction.

- **4\textsuperscript{th} zone**: Epicenter or catastrophic zone. In this zone, about 60% of population is affected. Until 15-20% of them die because of their severe lesions & big number of injured because of hospitalization because of their severe lesions.

### Dependence of human losses:

1. From scale of earthquake
2. By duration of earthquake
3. Time of appearing (day or night)
4. Density of population
5. Type of population
6. Type of building or construction: urban or rural regions
7. Level of population preparing: If the behavior of population is coned plus according 1\textsuperscript{st} aid to himself & to others.

In almost all Cases, the status of hygiene + epidemic is suddenly worsening. As a result of deterioration of water supply + canalization + electric systems... Contamination with chemical & radioactive substances can take place when in this territory are industries, factories where are produced or deposited radioactive substances that can go out or leak.

1\textsuperscript{st} aid is accorded in modality of self-help & reciprocal help using improvised medical material or from the 1\textsuperscript{st} kit at home. If an earthquake happens during day, in factories & industries, educational institutes, we form sanitary groups that are doted with 1\textsuperscript{st} aid kit.

Injured & sick are pulled away from residues (debris) by the savers that should give them 1\textsuperscript{st} aid; they can be real savers or firemen that should give 1\textsuperscript{st} help; after which the patients are carried to a meeting point & there, nurses give them pre-medical help & they are evacuated to medical units or sanitary institutions that can be in the limits of focus or outside the focus & given 1\textsuperscript{st} medical help by doctors & then specialized medical help by surgeons & therapeutics.

### Harmful factors of earthquakes:
1. *Mechanical factors*: Contusions

2. *Thermal factors*: Fire appears bums of 4 grades

3. *Physical factors*: Electrical shock because wires are destroyed

4. *Radiological factors*: They can give actinic diseases

5. *Chemical factors*: Can result in intoxications

6. *biological or bacteriological factor*: That can directly or indirectly lead to infection

7. *Psycho- emotional factor*: That leads to reactive state.

**Characteristics for health losses in disasters**

1) *Notion of human losses in health, - their classification*
2) *Volume & structure of sanitary losses*

1) By general human losses we understand all the losses that appeared as a result of direct or indirect action of the lesion factors on human organism.

The losses are divided into 2 groups:

1. **Non-refundable losses**: in this group we surround: *dead & missing persons (in war: also prisoners)*:

2. **Sanitary losses**: Alive humans: They are persons which by direct or indirect action of harmful factors lost their *work capacity* for at least 1 day *24h*, they were brought to medical units *(if slight injured, they come alone...)* {Medical units, hospitals} where they were in registered & received medical care.

**Classification of sanitary losses: 1.**

by lesion factors:

a) *Mechanical lesions*: as fractures, contusions, dislocations;
b) Thermal lesions: increase and decrease of temperature

c) Chemical lesions: which appear as a result of toxic & non-toxic substances *(that can spread in organism by inhalation, contact, digestive way...)*

d) Actinic lesions: can lead to appearing of radioactive diseases

e) Bacteriological lesions: are provoked by bacteriological factors that can have direct or indirect actions & provoke infectious diseases.

f) Reactive states: provoked by psychological factors *(short or long duration)* depending on action of factor + state of CNS

a) Mild lesions  
b) Medium lesions  
c) Severe lesions  
d) Extreme-severe lesions *(injuries incompatible)*

3. by modality of action of lesion factors:

a) Combined lesions: that are provoked as a result of action of 2 or more lesion factors on human organism. For ex.: person has trauma + intoxication + combustion. The diagnosis will be put on gravity.

b) Multi-injury lesions: that are provoked as a result of action of many elements of the same & unique lesion factors on the human organism where many anatomical regions are affected *(ex.: grenade in all body)*

c) Associated lesions: appear as a result of action of one element of lesion factor & many anatomical regions are affected, *(ex.: Thoracic-abdominal lesion: bullet 5,45 mm [Ml 6 plus kalash])*  

2) Volume & structure of sanitary losses

By the volume of sanitary losses, we understand the total number of injured patients that appeared in a definite period of time of the disaster, expressed in Absolute numbers.

The structure of sanitary losses expresses the percentage between different categories of injured & their total number: For ex.: From 1000 injured
200 have mechanical lesions
100 have "thermal" lesions
500 have "Actinic " lesions

This structure can be effectuated also by localization of injury:
For ex.: From 1000 injured
30% have cranial trauma 10%
have thoracic trauma 10% have
abdominal trauma *. 50% have
injured limbs

Sanitary recognition in focus of disaster

It represents a complex of measures oriented towards acquiring information about the medical situation that is concretely created in focus of disaster.

Depending on missions we distinguish the following recognition:

1) Medico tactical recognition that has the following tasks:
   
a) to determine the socio-economical state of focus (state of roads to evacuate, state of sanitary institutions & medical body, presence of medical deposits & their states, presence of drinkable water...)

2) Sanitarian-epidemiological recognition: has as scope to determine the morbidity amongst the affected population, sanitarian-hygienic state, presence of infectious diseases in focus, presence of vectors for infections diseases, presence of sanitarian institutes for prophylaxis as the epidemiological center, Hygienic & epidemiological labs, specialists in prophylaxis to determine quality of drinkable water.

3) Chemical-sanitary recognition: has a scope to determine the presence of contamination of region with toxic substances & to determine the limits of the infected zone & to trace measures of protection of population & medical units working in affected zone in order not to be infected.

4) Sanitary-radiological recognition: has a scope to determine the presence of radioactive substances in territory, to determine limits of contamination & of course to take measures of protection for population & medical units.
5) **Psychological-Psychiatric recognition:** has as scope to determine the level of affection of population psychologically in the affected disaster zone & to trace prophylactic measures + treatment for those in active states.

**Methods of acquiring information:**

1. to study the medico-geographical conditions of affected region: climate, topography, temperature, morbidity, network of health institutions, active or latent focus of infectious disease, existence of medical unit in region.

2. obtaining information from the major chiefs of civil protection, from commissions of the exceptional situations, from the chiefs of medical institutions that are there and from the population.

This information is very useful to make a correct decision to give medical help, evacuating the injured, making anti-epidemiological & hygienic measures.

Depending on type of catastrophe, its amplitude & on the concrete situation created in focus, the medical recognition can be effectuated completely only when we obtain ALL the information that we care about.

It can be *partial medical recognition* when we obtain only a part of information that arrives to us.

*Sometimes* the medical recognition is not needed because it makes no sense (*Kursk*).

In general & normal mode, the medical recognition is realized & made by *specialized formations* of civil protection (Ministry) that have for this specialists & competent groups.

But, when information obtained from these institutions are not enough, the chief of medical institutions can organize by his own initiative the medical recognition in the focus of disaster. In this case, the chiefs of health institutions should respect the following steps of activities:

1- Determine the mission of acknowledgement (*what is in center of interest: drinkable water...*)

2- Determine groups of acknowledgement & supply them with the needed material

3- Determine the way until the focus and the mission during the road

4- Modality of report concerning the obtained information during the trip and in the end
5- Stabilize the duration in time

6- Final report (may be oral or written): time and place.

Organization of measures of treatment & evacuation in the process of liquidation of medical consequences in disasters

Measures of treatment & evacuation in disasters contain the following activities:

- Searching for wounded
- Extricating the wounded
- According 1st help
- Removing from focus & evacuation toward the medical units
- Reception in the medical units + registration
- Health treatment
- Medical sorting
- Giving necessary Medical help
- Specific treatment
- Medical rehabilitation
- Medical expertise of vitalities (work capacity of injured)

The essence of the system of treatment and evacuation consists in the organization & performing some complexes of measures to give medical help on time in a consecutive mode with the respecting of succession in 2 medical steps with evacuation of the injured outside the focus towards health institutions.

This system has the following basic principles:

1- **Give medical help on time**: the fastest we give medical help, the best prognosis will be;

2- **Give medical help in a consecutive mode**: all medical help which is necessary for injured is cut & medical help is given from simple to complex & in each segment of medical unit we have some medical doctors with specific material.

3- **Respecting succession**: All medical units must have only 1 medical doctrine concerning the pathological forms & methods of treating; detailed registration in medical files for the doctor of the further step in order to know what the
previous doctor has done so not to repeat what has already been done & to complete the treatment.

4- **Maximal possible reducing of medical steps:** if helicopter is available, take directly to hospital;

5- **Maximal possible neighboring of medical staff:** in order to decrease the distance;

**Types of medical help:**

In the process of according Medical help to injured in time of disasters, we give the following types of medical help:

1- 1\textsuperscript{st} help
2- Pre-medical help
3- 1\textsuperscript{st} medical help
4- Qualified medical help (therapeutic & surgical)
5- Specialized medical help

1\textsuperscript{st} help: Presents a complex of medical measures that are the simplest & are oriented to save lives & fight severe complications that might threaten life. We give this help in self-help modalities, reciprocal help & by sanitary guards & safe-guards. We give this help using improvised medical material (when we give self-help or reciprocal help) or medical material present with saving-groups and life-savers. In some cases, if disaster can be seen before, the population can be supplied with medical material of individual protection. Also soldiers have it in period of war; these are: bandages, *individual kit* containing analgesics, antidotes, radio-protective substances, wide spectrum Antibiotics & anti-vomiting substances; *anti-chemical kit* for special treatment in case of infection with chemicals; *Panthocides* to disinfect water or to use filter tubes.

1\textsuperscript{st} help:

- Interrupt the action of lesion factors on organism (fire, electricity...)
- Temporary hemostasis with the help of improvised material;
- Immobilize fractures with improvised material;
- Calming the pain;
- Administrate antidotes in case of poisoning, then use radioprotectors;
* all those measures are anti-shock measures.
The optimal time in order to give 1st help are the first 30 minutes.

2- **Pre-medical help:** is accorded by nurses & assistants who are formed in medical help brigade. The scope of giving pre-medical help is to correct & complete 1st help.

The optimal time for giving pre-medical help are the first 2-3 hours. **Measure:**
- Control of applying hemostatics (tourniquet). If we have a wounded with more than 1.5 hours tourniquet, we take it off & we press on the major vessels in order to activate collateral vascularization until the distal part of the limb will be red, then put back the tourniquet. Always put a ticket with the time of applying of tourniquet. In case there is venous bleeding, just put *compressive bandages*.
- Control of applying and replacing of immobilization with some acquired material.
- Supplementary administration of analgesics, antidotes.

3- **1 medical help:** is made by generalized doctors in medical units of the affected zone (*brigades to give 1st medical help*). The scope is to prevent & fight traumatic shock, intoxications, & to maintain the activities of main organs and systems.

The optimal time is the first 4-6 hours from the beginning of the injury. 9

All measures of 1st medical help are imparted into 2 groups:

**a) Emergency measures:** which include the following:
- Temporary & definitive hemostasis
- Prevent & fight *asphyxia* (toilet of oral cavity, aspiration of respiratory ways, 02 inhalation, tracheotomy in case of obstruction, pleural punction in case of respiratory insufficiency : pneumothorax with valves).
  In case of *open pneumothorax* we apply hermetic bandages.
  In case of fracture of limbs or in close trauma of thorax & abdomen, we perform Novocain blockade.
- Amputation of destroyed limbs (crushed limb is a limb that has major blood vessels lesions + nerve trunks + massive injuries of soft tissues + bones are crushed). We perform primary amputation.
To perform this amputation we need to create a medical council of 2 doctors in which 2 problems should be resolved:

i- Indications for amputation
ii-The level of amputation

- Punction of urinary bladder in case of urine retention & lesion of urethra. If urethra is not affected, we perform catheterization.

- Recuperation of blood volume: we give blood substitutes (polyglucine, rheopolyglucine)

b) Measures which can be delayed: are those which if they are done in the first 4-6 hours will prevent complications or death.

1<sup>st</sup> help
Pre-medical help are given in the focus of disaster in the pre-hospital stage
1<sup>st</sup> medical help

4- Qualified medical help:
Surgical & therapeutic is accorded in health institutions: hospitals (military and civil) by surgeons & generalists.

The optimal time is first 10-12 hours.

5- Specialized medical help: is given in specialized medical institutions or in specialized sections.

- Specialities of surgical profile:
  . Neurosurgery
  . Ophtalmology
  . ORL
  . Oro-Maxillo-facial surgery
  . Traumatology
  . Abdominal surgery
  . Thoracic surgery
  . Vascular surgery
  . Urology
  . ObGyn...

- Specialities of therapeutic profile:
In order to give specialized medical help, we need 3 conditions:

1- Presence of specialized doctor
2- Instruments
3- Surgical room

The optimal time to give specialized medical help is the 1st 24 hours.

**MEDICAL SORTING**

It represents a repartition of injured, sick and infected in groups depending on homogenous necessities, of treatment, prophylaxis and evacuation. Medical sorting is from one side a measure of treatment, but from another side is an administrative measure; it gives the possibilities for the injured, contaminated... to be given help on time as well as being evacuated on time.

**Medical sorting is divided into 2 groups:**

1- **Sorting of formation staff:** which has as scope to impart sick persons & to classify them in the functional section of this step (medical help).

The execution of medical sorting is made by the most experienced doctor.

- We examine injured & we put diagnosis
- Stabilize severity of affection
- Decide in which section to send injured
- Decide in which order: 1st - 2nd

2- **Sorting of evacuation & transport:**

- Stabilize diagnosis after surgery
- Grade of severity
- Stabilize in which hospital to send him depending on injury
- Stabilize with which transport to evacuate him
- Stabilize in which position to send him
- Stabilize if injured or sick needs medical assistance because during transportation his state may aggravate & might need nurses
- Stabilize in which order: 1<sup>st</sup>, 2<sup>n</sup>

**Medical sorting** is permanent and the basis of sorting is the diagnosis & prognosis. This is made in all steps & in all functional sections:

- Primary sorting: that is executed in the entrance of medical unit or hospital & serves to spread all the sick into 2 groups:
  - 1<sup>st</sup> group: injured or wounded that present a danger to those around them; in this category we have:
    - Injured or wounded with toxic substances
    - Contaminated with radioactive substances
    - Those with signs of infectious diseases
    - Those with reactive states
  - 2 group: Injured or wounded which do not represent risks for those around them

**Brigade of sorting**: is composed of a doctor, 2 medical nurses, 2 registers & a team of carriers

**Medical evacuation**: presents a complex of measures which is oriented to the transport of injured from the focus, or during the war from the battlefield to the backfield. Medical evacuation contains: searching, carrying injured by hand from the battlefield, and transportation till medical unit. Roads from which injured are evacuated are called "roads of evacuation"; they should be filled with indicators in order to know where medical unit is. Medical evacuation is a submitted measure, but only medical evacuation gives the possibility to the injured to be given the help they need.

Evacuation + according medical help are 2 parts of one & the system which is called: system of treatment in steps, with evacuation by destination.

To evacuate the wounded we use: air transport, ground transport (*sanitary transport, sanitarian trains & others), & naval transport. The best is air transport, giving the possibility to transport severe injured that are usually classified non-transportable.

All types of medical help except 1<sup>st</sup> help are given in the steps of treatment and evacuation;

*By steps of treatment & evacuation we understand:*
 Forces & means of medical service that are installed in evacuation ways having as mission to receive, register, treat, sort, give necessary medical help, give a final treatment or to prepare for further evacuation.

**2 groups of medical steps:**

- **Pre-hospital stage:** medical units which are situated in focus; here we give pre-medical help and 1st medical help;

- **Hospital stage:**
  - We may have civil hospitals;
  - Military hospitals in which we give qualified and specialized medical help;

_Each medical stage has its own structure depending on mission; but all medical steps should have the following compartments:_

1- Receiving & sorting
2- Giving medical help
3- Health treating
4- Isolation of infected patient
5- Labs & pharmacy
6- Place for specific treatment
7- Place for specific medical staff
8- Logistics (deposits for food, instruments...)
9- Section of evacuation
10- Administration

It is necessary if possible to prepare a field for helicopter landing.

**ACTIONS TO TAKE IN CASE OF NATURAL DISASTERS, ACCIDENTS & CATASTROPHES**

**In case of earthquake:**

- Protect yourself & be careful from the falling of fundaments, ceiling, closets...
- Be as far as you can from windows, mirrors, abat-jour...
- Place yourself near internal walls, in the opening of doors...
- Immediately after ceasing of quakes - leave the building
- Do not use the lift
- Being in the street, place yourself in its middle, in the center square as far as possible from buildings, high voltage electrical lines.
In case of inundations:
- Announce on time the inhabitants of affected areas;
- Transfer to the upper floors the material values
- Disconnect water, gaz, electricity;
- Take with you the primary necessary things & go to the meeting point;
- If you are in the street, place yourself in a more elevated place;
- Be careful of transformers and electrical wires.

In case of fire:
- Be aware of high temperature, smoke & gases, of building collapses, of explosions of technological & instrumental apparatus, of tree falls...
- It is dangerous to enter in a zone with smoke if the vision field is smaller than 10m;
- During saving victims, before entering in burning indoors, cover your head with a wet tissue before;
- Open very carefully the door of indoor fire in order to prevent spreading of flames because of abundant aeration;
- In smoky areas, move yourself by crawling;
- To protect yourself from CO breathe through a wet tissue.

In case of hurricanes: When receiving a briefing concerning the approach of a hurricane, make the following:
- Prepare all shelters (basements)
- Close doors, windows, aeration holes, front doors...
- Take all moving objects from balconies & roofs which may be taken by wind;
- Disconnect gaz & electricity;
- If hurricane caught you in the street - go in the nearest shelter;
- Beware of lightening, don't hide under trees, don't get close to high voltage electrical lines.

In case of landslide:
- Get out immediately from building
- Announce the neighbors & help the children, sick or elderly to leave the building;
- If necessary call the EMS, police or firemen;
- Perform the necessary measures to ensure security of men + material values.

In case of radioactive contamination:
- Wear anti-gaze masks and go to protective building;
- If shelter is far & you don't possess anti-gaze mask, stay home and connect the radio to receive the communications of civil protection bodies;
- Close windows, doors covering them with consistent tissues, glue the borders of window frames;
- At the indication of civil protection bodies prepare yourself for a possible evacuation;
- At the indication of curative institutes, use tablets of iodated potassium;
- Going from home disconnect electrical machines, take with you documents, money, necessary things, wear anti-gaze mask or humid tifton mask...
- When arriving in the safe area, pass the radioactive control as well as health analysis;

**In case of accidents:**
- Do not lose your nerves
- Make all your possible to diminish the consequences or complications of accident;
- Disconnect the energetic sources, aggregates & instruments;
- Block the gaze conduct, water according to the rules of security;
- Action conforming the indications of lading.
1. Definition of catastrophies and their classification.
2. Determination of the notion of extreme situation from medical point of view and its basic criteria
3. Notion about medical - tactical characteristic of catastrophies (disastrous)
4. Medical - tactical characteristic of catastrophies floods
5. Medical - tactical characteristic of catastrophies on railway traffic
6. Medical - tactical characteristic of earthquakes
7. The characteristic feature of destroying factors of catastrophies
8. Notion of medical damages and their classification (during catastrophies)
9. The possible dimension and the structure of medical damages during earthquakes
10. Possible dimension and the structure of medical damages during catastrophies on railway traffic
11. Possible dimension and the structure of medical damages during catastrophies floods
12. Factors influencing the dimension and structure of medical damages during catastrophies
13. Notion about multiple combined damages during catastrophies
14. Definition, types and the tasks and organizing, medical scouting carried out during catastrophies
15. Tasks and organizational principles of Civil Protection in the Republic of Moldova.
16. Organizational structure of Civil Protection of Moldova. 17. Notion about the medicine of catastrophies. Task and responsibility of extreme medical assistance in extremely situations. 18. Organizational and working principles of the Extremal Service of medical assistance
19. Organizational structure of Extremal medical assistance Service in Extremal situations
20. The conditions influencing the organization and carrying out measures of evacuation and treatment during catastrophies
21. The essence and basic principles to provide evacuation and treatment of damaged persons during disasters.
22. Types and the bulk of medical assistance provided the affected during the catastrophies.
23. Purposes and contents of the first medical aid in focus of catastrophies.
26. Organization of specialized medical aid in case of catastrophies
27. Requirements concerning" the site of stages development for medical evacuation in case of extreme situations,
28. Principal draft of medical stage development evacuation in extremes situations.
29. Medical sorting out of the affected people in extreme situations. Determination, types, aims and the significance of medical sorting.
31. Organization of medical sorting of affected persons during catastrophies depending on sorting signs.
32. Groups of affected revealed as a result of medical sorting out at prehospital stages.
33. Groups of affected (revealed) detected during hospital stages.
34. Medical evacuation during catastrophies. Definition of notions, aims and organization.
35. Sources of supplying the institutions and forming of extreme medical aid service, medical auxiliary and special property.
36. Storage of medical property of extreme medical aid service in extreme situations.
37. Tasks of central and county pharmacies during extreme situations. The necessary papers to get medical property.
38. Determination of the notion and of basic principles of running the forces and means of extreme medical assistance service during extremely situations.
39. Notion and basic principles of protection of population during extremely situations in peaceful period of time.
40. General protection measures of population in extremely situations of peaceful period of time.
41. Specific (medical) measures of protection of the population during extremely situations of peaceful time.
42. The activity conditions of the medical service in extreme situation and how they influence the organization of medical supply of the affected people.
43. The place and the importance of medical hygienic and antiepidemical measures while liquidating medical consequences of the affected.
44. Specific features of zones of catastrophic floods, their influence on organization of medical assistance to affected people.
45. Notion about medicine of catastrophies. Organization of interaction of extreme medical assistance service with the services of other ministries and departments concerning the problems of medical supply of the affected.
46. The dimension of general medical damages in different zones of earthquakes.
47. Specific features of affecting factors of catastrophies.
48. Content of the first medical aid of the affected persons as a result of catastrophies.
49. Purposes and the contents of premedical assistance to affected persons in extreme situations.
50. Dimension of the first medical assistance of the affected and its dependence of the situation in the focus of catastrophe.