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## **Evacuation of victims in mass events and disasters**

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### **Abstract**

The tasks of health in mass events, disasters and emergency Situations ensue from the specific nature of each event, which determines the scale of the needs and difficulties needed to refrain.

Emergency medical procedures at the mass event and disasters called the doctrine of conduct mass loss, requires a complete change in thinking and withdrawal from the Generally Accepted Principles of treatment

From the efficient organization of the rescue operation depends on the success of the entire treatment process. The aid time and providing the victims of the accident to the hospital usually we decides about the fate of the victim.

The article presents the medical rescue activities used during mass accidents and disasters and discusses the Principles of evacuation.

**Keywords:** Evacuation; medical rescue operations; disaster, mass accidents

## **Introduction**

Generally accepted definitions - "accident mass - any sudden event giving rise to a sufficiently large number of victims, to disrupt the normal operation of emergency services and hospitals" and "disaster - an event that causes so much damage and casualties, that efforts and measures covered by her community not enough to master it, you need help from outside "- do not define the precise nature of the event and the number of victims [1]. In contrast, they highlight the disparity between the emerging needs on the part of the victims, and the possibilities of helping the local rescue system [2,3].

Assistance in the field of mass accident and disaster results from the cooperation of law enforcement, technical, medical, administrative, and many others. Emergency medical services is only a small part of the national rescue system. Medical services will be helpless in the absence of access to the victims of the incident and help them, and when access will not be protected by other departments involved in the rescue operation. [4]

The tasks of health care in mass events, disasters and emergency situations due to the specific nature of each event, which determines the scale of needs and necessary to overcome the difficulties. However, in each of these events, there are some common features, which include mainly: the massive losses sanitation, multiple injury to victims, emotional reactions of victims of disasters, delays in treatment and transport of victims of accidents and mass disasters, losses among emergency services personnel damage to health facilities, transport infrastructure, water, sewerage, energy and others, the threat of epidemic, migration of the population [5].

The problems faced by emergency services at the scene of mass and disasters, among others: a limited number of staff, working under the conditions of quarantine, the need for continuous medical segregation victims, a limited amount of material resources, lack of a common radio communications of rescue services, the need to evacuate the hospital, transportation difficulties, the need to change the rules of treatment.

Emergency medical procedures at the scene of mass disasters and called the doctrine of conduct mass loss requires a complete change in ways of thinking and withdrawal from the generally accepted principles of treatment. There are no conditions for the implementation of emergency medical activities required in each case the unit. For example, you need to relieve an aseptic, refrain from performing allergic tests, store massive external bleeding instead of dressing - band compression, because the resulting complications are less serious consequences than any delay in saving the greatest number of victims.

Due to the limited forces and means of rescue services at the scene of mass disasters, and there is no possibility of providing medical assistance at the same time all the victims. Some of them will be forced to wait for assistance. There is a constant need for medical segregation victims, to give her the first, which is essential at a time. This aid must be effective. To ensure maximum benefit to the greatest number of people in the given circumstances.

The loss of mass treatment strategies should be based on negotiations. You have to bring relief to the dying and desperately wounded, but the whole rescue activities must be directed at those who have the greatest chance of survival. According to this principle do not receive medical aid wounded promising unsuccessful. In the case of persons recognized as so as highly unlikely survival restriction fruitless efforts under the disaster rescue is performed by giving priority to the secondary and medical evacuation. At the crash site to help adequately injuries do not get too promising successfully victims who require long-term, labor-intensive treatments. In the event of loss of mass it is necessary to reduce medical cases to less time-consuming. It is a logical procedure, but there will always be aroused ethical resistance. Limited range of forces and means of rescue services dictates the need to do what is best for the greatest number of wounded and sick, at the right time and the right place.

Pre-qualified first aid activities should be performed in a place where there are victims. If this place is dangerous, you cannot protect it and prevent assistance, victims must be transported to a safe zone. In this zone, depending on the type of disaster and present at the scene of forces and means of rescue services will be made Triage, and the victims will receive assistance specialist or will be evacuated to medical assistance organized points. Victims will be thoroughly investigated and receive appropriate assistance specialist. Lit and heated tents will protect them from the weather. Victims will be waiting to evacuate them to the appropriate hospital [6].

### **Medical rescue activities in mass accidents and disasters**

Under the Law on State Medical Rescue - "medical rescue activities are the provision of healthcare within the meaning of provisions on health care services financed from public funds provided by the system in outpatient, in order to save a person in a state of sudden health threat" [7] . Action conducting emergency medical activities begins at the moment of arrival in the emergency medical team event. The first arrived on the scene the team is obliged to assess the situation, the organization and coordination of activities at the site and start

medical segregation. A specific feature is the presence of Polish rescue doctors. This enables implementation of the above. Tasks at the highest professional level [7].

In cases of mass disasters and arrived first at the scene team commander should cover the duties of director of emergency medical activities and perform them until the arrival of a person having the right to take charge or to the completion of the activities at the event.

In the initial phase, conduct medical rescue operations are: establish communication with the steering operation of the emergency and assess the situation, to evaluate the safety event space, recognition of the number of victims, the preliminary assessment of the type of injury victims, Triage victims, provide the dispatcher with the medical preliminary information about the size of the event and the necessary mobilization additional forces and resources.

In subsequent phases conduct medical rescue activities are: designation of a point or area of medical segregation, area aid and preparation for transport, including point of medical assistance, evacuation area, storage space bodies; determining the number of required personnel, equipment and means of transport; notice of these needs medical dispatcher; Record-keeping records of evacuation; coordination of medical rescue operations and assist the coordinator in command at the scene, directing in the field of qualified first aid rescuers units cooperating with the system, managing segregation medical guiding the work of medical facility, directing the evacuation of the injured from the scene to hospitals based on information from the dispatcher medical ; appoint coordinators sections medical rescue activities,

Medical rescue activities in mass accidents and disasters are carried out under conditions of considerable emotional strain. Participating in the rescue operation should talk about their experiences. It is very important for their mental state - allows the discharge of overwhelming emotions and prevent the development of PTSD (Posttraumatic stress disorder).

In the final phase, conduct medical rescue operations are: the decision to gradually reducing the amount of teams at the scene, balancing the total number of victims in the event mass, filling medical documentation concerning the deaths of victims, ensuring disposal of medical waste, the final search of the scene in order to check whether all victims were evacuated, as well as collect the equipment used during an emergency [13].

The dynamics of events and unique developments in mass accidents and disasters requires not only great consistency in the organization of rescue operations, but above all to preserve the coherence between the type of events, the forecast of its development, the risks that this situation is for the people, and accepted methods to respond. Effective conducting emergency

medical activities in the event of mass depends on: the proper organization and coordination of rescue operations; training and experience of the staff of emergency services; the quality and efficiency of technical rescue equipment; access to reliable information through modern communications technology and information systems; the number of victims and the nature of the injuries suffered by them; the number and capabilities of involved forces and means of rescue services [14].

### **Victims evacuate**

Emergency action outside the place of the event co-ordinate emergency center and coordinator of the emergency medical doctor. The Center should maintain a permanent analysis of the possibility of granting aid by the competent hospital emergency departments, organizational units of hospitals specialized in the field of healthcare services necessary for emergency medical services, which were included in the provincial action plan and rescue system units cooperating with the system.

Evacuation of victims from the scene to hospitals should be carried out based on information from the competent medical dispatcher. The key events for mass rescue information concerning: the number of operating rooms and surgical teams ready to assist immediately and the mobilization of relevant personnel; the amount of vacancies in hospitals; the amount of respiration; the number of available hospital beds for patients not requiring immediate surgical treatment; the possibility of granting aid ambulatory [15].

In the event of natural disasters or technical failures, or if in the opinion of LKRM effects of events can cause an acute health hazard significant number of people - the doctor this shall immediately inform the provincial governor about the need to bring in a state of high alert all or some health care facilities operating in the given region [16,17,18].

Voivode may impose on health care - an administrative decision to authorize or appropriate medical coordinator for issuing this decision - to remain in a heightened state of readiness for the adoption of persons in a state of sudden health threat. Decision referred to above shall be immediately feasibility [19,20,21].

The implementation of the principle of the "golden hour" in mass events is particularly difficult. One of the main tasks of health care in securing mass accidents and disasters is to organize a well-functioning system of evacuation of victims. To increase the chance to save lives and reduce the time of treatment, among other things: perform life-saving treatments at the scene, before deciding to transport victims to develop point of medical care in the

immediate vicinity of the crash, outside the danger zone, to evacuate injured according to the degree of urgency of treatment, immediately evacuate victims to hospitals senior, used air medical rescue teams, to evacuate the injured to the previously notified and prepared to receive the injured appropriate health care facilities, life support to continue treatment during transport, perform medical segregation injured during transport, transport of victims to qualify Always mention: order and evacuation; transport position; modes of transport; transport speed; type of care during transport [16].

The team of emergency medical person in a state of sudden health threat should be transported to the nearest in terms of time to reach the hospital emergency department or hospital designated by the dispatcher or the medical doctor's medical coordinator. Refusal to accept a person capable of sudden health threat by the above. Using the units results in a contractual penalty specified in the contract for the provision of health care or immediate solution to this agreement.

When a person able to sudden health threat condition is determined, which, in accordance with the standards of conduct required evacuation directly to the organizational unit of the hospital specialized in the field of healthcare services necessary for medical emergency or if so decided by the doctor system present at the event, such person emergency medical team transported directly to the designated unit. If you need to evacuate the injured outside the area of operation disposer unit transportation coordinator coordinates emergency medical doctor [16].

At the time of arrival of rescuers to a hospital following the transfer of the injured personnel to a hospital emergency department. The team leader tells the doctor on duty hospital is all about character of the event, injuries suffered by the victim, his general condition and made emergency medical activities. Gather information and receive documentation segregated victim starts rescue phase of the hospital. The hospital takes place early diagnosis and stabilization of the general condition of the victim, then the victim is transferred to hospital organizational unit specialized in the field of healthcare services necessary for emergency medical services [17].

## **Conclusions**

Regardless of progress in the field of medicine the most effective methods of resuscitation and efficient diagnostic methods, especially methods of imaging, the main weapon remains the health speed, organization support, experience and selection of optimal

treatment tactics. From the efficient organization of the rescue operation very much depends on the success of the treatment process.

Start time of the first aid and to provide the victims of the accident, accident and mass disasters to the hospital usually decides about the fate wounded. This so important prognostic factor D. Trunkey concluded the rule "three Rs" - right patients in the right time to the right hospital - the right patient at the right time and the right place. This rule is the basis for the proper functioning of emergency medical systems around the world.

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