Update

The Red Plan

LUCIANA ROTARU¹, C. CIULU²

¹ Department of Emergency Medicine, UMF Craiova, emergency medicine consultant ED - SMURD
Emergency Clinical Hospital Craiova; ² General Inspectorate for Emergency Situations

ABSTRACT: “Emergency situation is an nonmilitary exceptional event who’s proportions and intensity is threatening for the population’s health, environment, cultural and material values. To reestablish normality are necessary urgent actions and measures, supplementary resources and unitary management of implicated forces[11].” At the same time, Emergency Medical System is itself an in hospital and outside of hospital complex gearing, with an unitary call center, build from professional and voluntary teams, framework on the idea of developing successive competence levels in emergency response and to adapt itself to certain crisis needs.

KEYWORDS: medical emergency systems, disasters, mass accidents, red plan

INTRODUCTION

Accidents with multiple victims are events that through their large volume and severity of particular outcomes for victims, require intervention resources whose volume and complexity of intervention exceeds the current capacity of the daily system.

That is why it is necessary to mobilize additional local or regional human and material resources of as well as corresponding changes in the work method so that it responds to each situation individually, finding - the best way to negotiate, in - a dynamic management between needs and resources. Related with the activation of the red plan, it is also set forth a plan of alarm to the hospitals in this region so that they can prepare to receive a large influx of victims (White Plan).

DEFINITION

The Red Plan is the document that stipulates the manner of unitary response of the emergency services in case of collective accidents or disaster customized according to the established or estimated number of victims, the seriousness of their condition, the capacity of intervention available during normal working hours, also depending on the degree of continuity of services involved.

RED PLAN FUNCTIONS

• to ensure a coordinated response of all structures with intervention attributies e in the event of multiple casualties and / or calamities, with especially quick manifestation and limited time effect, resulting in multiple victims or having the potential to cause multiple casualties.
• to establish rules and measures to mobilize additional resources in the county, region or beyond, when the local / regional medical intervention capacity is exceeded.

 Fundamental Principles

• Speed of reaction and of setting the means at the scene of the event
• Command organization
• Adequate and sufficient resources
• Coordination
• Medical Management

LEGAL FRAMEWORK


TASKS AND RESPONSIBILITIES

In starting and running the red plan we can distinguish some operational and decisional levels as well as several types of forces involved. The fundamental roles of those who intervene are related to:

• securing the area
• organizing the medical area
  -Locating, extracting, collecting the wounded
  -Triage
  -Initial treatment and stabilization
  -Evacuation
For each of these, there are specific duties and responsibilities that are put into practice at different times during the development of the plan. Institutions with responsibilities in the management of emergencies [3,4,5] arising from the occurrence of casualties, disasters and calamities and in the implementation of the red intervention plan are:

- the Ministry of Administration and Interior and through: the Prefecture, the police, the gendarmerie, Inspectorate for Emergency Situations, the Border Police, the General Inspectorate of Aviation
- the Ministry of Health through - UPU - SMURD, Public Health Department, public ambulance services
- Special Telecommunication Service
- NGO - s
- Red Cross
- Other specialized structures
- Local governments
- Ministry of Administration and Interior

The Inspectorate for Emergency Situations

- Proposes through the chief inspector the triggering of the red plan if the conditions for activation exist
- performs the duties of commander for security operations (COS)
- installs advanced medical posts (PMA)
- provides the triage, the first aid and emergency qualified assistance in collaboration with other specialized structures
- performs the triage and participates in the evacuation of the patients from the event area
- logistic support for these activities,
- transport of medical personnel,
- communicating with the media, Prefecture, cooperation
- psychological support

The advanced medical post (PMA) Class I is composed of a tent and a triage treatment, adequate to simultaneously treat more than 10 victims. Tents are transported in a trailer towed by an extrication truck. The advanced medical post Category I includes medical drugs and medical materials necessary for the care of 15-20 patients, out of which, at least five in critical condition.

Fig.1a, 1b. PMA II class – exterior

Fig.2a, 2b. PMA II class – interior
The PMA class II consists of three tents, one for triage and two for treatment (major emergency, ordinary emergency), suitable to simultaneously treat at least 30 victims. Tents are transported by a specific means of transport that allows access to remote areas having the travel capabilities of a land vehicle. The advanced medical post Category II includes heating and lighting of the tent outside and inside, drugs, medical supplies and equipment needed for emergency medical assistance to an advanced level of at least 50 victims. It also includes ventilation and monitoring equipment for at least three patients simultaneously;

The Gendarmerie
Ensures public order and safety measures, communication and psychological support in collaboration with other specialized structures in this direction, protection of the scene of the event, transport of the personnel and equipment at the request of the commander of security operations and other support actions.

The Police
Ensures public order and safety measures, communication and psychological support in collaboration with other forces, support at the COS request, protection of the area of the event, directing the traffic, participates with criminalist specialists in identifying the victims.

The Border Police
Support in coordinating COS support, participates in search, rescue and evacuation of people in the area of competence, provides transport of some type of forces and means of intervention, supervisions and monitors the border crossings.

The General Inspectorate of Aviation
At the request of COS, it participates with technical and specialized forces in the assessment of air transport, transportation of the personnel and of the appliances in situations of difficult access by land, primary and secondary evacuation of the victims to and between the medical centers.

The Local governments
Participate in the assistance of the survivors and victims, to provide temporary accommodation capacities and together with the utility providers (electricity grids, water, gas, sewerage, roads administrations) specific activities of transmission of information on infrastructure damage and repair activities, as well as insuring at the request of the COS, actions to support its own field of activity.

Medical structures

The Public Health Department
Through the Executive Director it initiates the white plane and fulfills specific responsibilities in the County Committee for Emergency Situations[4], mobilizes licensed psychologists for the establishment and functioning of the psychological support cell structures and through the Sanitary Antiepidemic Police in specific activities to limit the risk of pest outbreaks, setting the quarantine conditions, of sanitation, vaccination, etc[5].

Hospitals
In the case of emergency hospitals whose emergency units participate with mobile units in the pre-hospital (SMURD)[14], they assume through the SMURD county or regional chief physician the medical command of the entire operation (DSM-medical director of security)[15]. Following the red plan, once alerted the hospitals in the region participate in different levels of competence (according to the hospital classification)[7,17] in receiving patients in the intervention area following own profiles or related pathology profiles.

The Public ambulance services
Join forces and its own resources of qualified medical assistance in the intervention area, participating in medical evacuation, they reorganize their own operations and redeploy crews to fill their own district deployment of SMURD intervention crews in other locations (in the regional support)[13].

The Private ambulance services
At the request of COS, it participates with specific resources on the level of competence that are authorized to provide emergency medical assistance and medical evacuation.
• Non-governmental organizations
At the request of COS, it participates under the coordination of specialized professional structures to conduct activities in their specific field (search and rescue, field triage, amateur radio-transmission, psychological support, communication, humanitarian action in the fields of distressed)

The ,,RED CROSS”
At the request of COS, it is engaged in humanitarian assistance for victims and distressed, under the coordination of medical structures it may be involved in the field triage transporting victims to the advanced medical point, the first-aid.
Special Telecommunication Service

Provides communication between the dispatches of the search and rescue operational units and the data protection in the area of emergency communications. Provides GIS services compatible with GIS software of the single dispatch centers of taking calls in a standardized format and emergency phone list that can remain functional in case of a phone network collapse, ensures the communication networks, organizes temporary communications devices at the request of COS and supports the operation of the communication system for management situation.

Other specialized structures

The Railway Transport Police, the air traffic coordination center, the information services, participating with their own means, at the request of COS, when the situation requires particular measures that are part of the specific attributions of these services (events on rail or air traffic, suspected deliberate act, etc.).

ACTIVATION OF THE RED INTERVENTION PLAN

The Red Intervention Plan is activated by the Prefect at the request of the chief inspector of the Inspectorate for Emergency Situations on the basis of the information obtained:

a) from the integrated dispatcher Inspectorate for Emergency Situations - S.M.U.R.D. or medical dispatcher through the unique number 112;

b) from the first intervention crews arrived at the site of the operation;

c) from the monitoring systems connected to the medical dispatcher, Inspectorate For Emergency Situation dispatcher, police dispatcher and gendarmerie or other dispatchers involved in this field.

When reporting an event with major destructions, a large number of victims (depending on the current capacity of the service intervention), or evolutionary potential for this situation or the possibility of rapid deterioration is expected, the dispatcher first alerts the Chief Inspector and chief physician SMURD. If the information is not likely to clarify this issue, the dispatch will announce the nearest crew available and wait for its report from the field to carry the announcement to the chief inspector. Once announced, the chief inspector of the Inspectorate for Emergency Situations will immediately report to the prefect on the situation, who will initiate the red plan.

Events that can cause emergencies requiring the implementation of the Red Plan are:

- floods
- emergency situations caused by an earthquake production;
- traffic collective accidents on underground transportation routes, over ground aviation, rail accidents
- technological accidents;
- large fires;
- emergency situations produced during social events and large gatherings of people (fairs, festivals, concerts).

The first medical or first aid crew arrived at the operative site, depending on the magnitude of the event, can suggest the activation of the red plan. Directly, it has the task of identifying the location and nature of the event, the risks arising from the event and the nature and extent of intervention needs.

Since the onset of the red plan, the Ambulance Service is under the coordination of the Inspectorate for Emergency Situations in whose area of jurisdiction the event occurs.

The Chief Inspector of the Inspectorate for Emergency Situations in whose area of jurisdiction the event occurs, may request through the County Ambulance Service, for a limited time, the private ambulance services, that are under contract with the National House of Health Insurance and are in their dispatcher, if the situation requires.

COMMAND AND CONTROL IN CASE OF RED PLAN ACTIVATION

Interventions are performed by applying the red plan and are ordered by the Inspectorate For Emergency Situation chief inspector in whose area of jurisdiction the event occurs or his substitute, who is appointed commander of security operations (COS). This one fulfills the commander duties (during the management of the intervention actions, the commander follows the situation changes, reorganizes the cooperation and forwards the new missions to the intervention structures) and has as his deputy, the SMURD chief physician or his substitute, who is appointed director of medical rescue (DSM).

It is essential that at the setting of the medical device, there is a direct collaboration between DSM and COS, that must consider both the best ways to ensure the security of the entire intervention device and a judicious distribution of the intervention forces in the direction of optimal illumination of the workspace, of
tracking and rapidly extracting all victims in areas of risk and the optimal placement of the PMA and of the other medical facilities at the scene and of the access ways.

Thus the triage within the risk areas as well as the carrying of the victims are tasks for the firefighters and possibly their first aid crews, properly equipped. Organizing field triage implies officer designation tasks assignment, establishing sectors and indicating work modules.

For the allocation to these categories, the criteria followed in the field triage are (START TRIAGE[1,9]):

- obvious obstruction of air,
- obvious acute respiratory distress,
- obvious shock

Immediate saving gestures (placing in the safety position, external digital control of major bleeding, covering an open pneumothorax) are made on the spot, followed by transport at the PMA. Patients that are considered delayed emergencies and that can move themselves are accompanied at PMA. Functional Emergencies (hands, eyes, face, ears) are initially sorted as deferred emergency. The field triage procedure must be found in the Annexes of the red plan.

The presence of a doctor at the stage of the wounded collection can be decided by the DSM only punctually to provide medicine for a difficult release, provided an acceptable safety, and the existence of sufficient medical resources for this. In general, however, doctors will be concentrated in the PMA and the escape sequence.

On entering the PMA, if any available staff resources, a medical triage may be performed, to allocate the patients brought by land from the major emergencies area or into the area of the ordinary and deferred emergencies. The DSM appoints the medical officer of the PMA. The installation procedure and the functional stage of the advanced medical point must also be included in Annexes of the red plan.

The evacuation decision, whether taken by the evacuation medical center (installed if there is a large number of victims or if the intervention area is very large and requires more PMA locations) or directly by the PMA must include: time, destination, type of transport and the level of the crew. The evacuation is preceded by an evacuation triage, at which there are taken into consideration both the initial injury and the response to initial therapy applied, as well as further intervention possibilities for each patient versus the need for surgical management. The DSM designates a medical responsible for the coordination of the medical evacuation, who can cooperate with a fireman designated by COS to maintain management of the evacuation means and the colligation with the medical decision. The manner of organizing the medical evacuation must be reflected in the form of procedures or instructions in red plan.

Inspectorate for Emergency Situation also provides the location and operation at the accident scene of the Commissioned Mobile
Command Point that remains on site until the intervention is finished. The heads of the structures or their substitutes involved in the implementation of the Red Plan, during the intervention activities will be found in the vicinity of Commissioned Mobile command Point.

The Red Plan must provide the intervention method for the situation in which two interventions occur at the same time, both requiring the application of the red plan intervention. For example, if the SMURD chief physician acts as DSM at the first event and estimates that the second event is even more serious, it will give DSM function at the first event to another representative of SMURD and he will move to the place of the second event.

COMMUNICATIONS. COOPERATION.

Security Operations Commander maintains the direct connection with the Prefect and the crew commanders for action.

COS, DSM and management representatives of agencies they cooperate with, must possess two stations, one for communication from the command echelon of the action, the other for communicating with its own intervention forces.

Cooperation is carried out on a special channel so that it can be accessed by all those engaged in that task, in all structures (in Romania using TETRA channel COOP - 112)

The management of their own forces is made through a channel that is specific to each agency separately.

COS forwards the provisions to the device elements on this channel, they are received by the scene commanders of each agency and disclosed to its forces through its own communication channel.

Reporting dates and events will be made through hierarchically on its own channel of communication, and this will communicate with the COS or DSM, the channel of cooperation. For situations when the TETRA duplex system - does not work, the communication takes place in the TETRA - simplex system channels specified in the plan.

In case of failure of the TETRA system, for communication, each agency will use the analog stations under its own simplex and representatives of all agencies will report directly to COS or DSM.

Alarming the personnel who is not on duty is made by fixed or mobile telephony systems, TETRA communication system and National Paging System.

STS can provide the resources to stage their own communication systems, which will be set into operation according to the pre-established plans at the COS request, in case the standard ones fail.

INFORMING THE PUBLIC AND THE MEDIA

On the implementation of the Red Intervention Plan, the person / structure empowered to maintain relations with the media and the public itself, is the spokesman / information structure and public relations of the Inspectorate For Emergency Situation, together with the Prefect, if he participates.

Once the activation order of the Red Intervention Plan, the appointed Inspectorate For Emergency Situation spokesman will be informed by the emergency dispatch unit that will also communicate the reason by sending a complete information of the data known up to that time, which will include the causes and severity of the accident, the site.

The spokesperson for the operation will be informed by the dispatch unit, as often as possible before his arrival on the spot, when, he in turn, will report the dispatcher about it.

Also, other institutions involved have established ways of their spokespersons announcement, at the same time with the notification of activation of the Plan. From that moment on, the spokesmen for the institutions involved will be supported, taking urgent steps to establish telephone contact with the spokesman of the operation, that is, the Inspectorate For Emergency Situation[1,9].

It is important that the information transmitted to the people and the media be correct, timely, clear and non-contradictory between different structures, addressed without discrimination to all categories of public, independent of the media preferences and non-speculative[1,9]. It should include both information messages and any general advice or instructions of conduct to be followed, regarding the development of the event or the rescue operations (eg, limiting traffic on certain roads, measures to protect people in case of spreading a toxic cloud, preparing for evacuation, etc.). If the existing information is insufficient time to formulate a relevant point of view, it will not be expressed. Information provided may be technical, if supplied by the officers from the scene, while at the level of the institution of the prefect, it must contain administrative, economic
or humanitarian messages, but the personal remarks regarding the event should be avoided.

The intervention team members do not relate directly with the mass - media.

At the request of COS, the spokesperson will inform the media through press briefings that will take place whenever an operational situation requires. The information transmitted must be authorized by the COS[1,9].

At the end of the operation or when considered appropriate, and after matching the information given to the media, the COS may decide to hold a press conference at the event, so that management and coordinating personnel may provide data regarding the operation.

Current legislation on patients' medical privacy and human rights must be respected and direct references to the victims by stating the name, initials, or illness in detail must not be made;

If injury or death among its own staff occurs, it will be indicated under COS decision when it considers appropriate, depending on the visibility of the event. Preferably, the information will be transmitted only after informing family, specifying the probable circumstances and institution to which they belong, and the psychologist /or the designated person to inform the family about the event, is obliged to mention the possibility of being contacted by the media.

The relationship with the mass - media can be ensured through periodic releases.

The access and the free traffic of the mass - media is not permitted inside the scene, the COS will designate the location of the media and all press releases will be done in that area.

ANNEXES

Red Plan must also contain a series of annexes and final provisions concerning the implementation of the measures in the plan, the procedures for locating the device and instructions for conducting the intervention of various operations (location of PMA, field triage, evacuation, establishing cell communication, psychological, etc.).

References
2. Decree no. 1489 of September, 9th,2004 on the organization and functioning of the National Committee for Emergency Situations - published in the Official Gazette Nr. 884 of 28th Sept. 2004
4. Decree no. 1491 of September 9th, 2004 for approval of the frame regulation regarding the organizational structure, functions, operation and endowment of the committees and of the emergency operational centers - published in the Official Gazette Nr. 885 of 28 September 2004
5. Decree no. 2288 of December, 9th, 2004 approving the assignment of the key functions that the ministries ensure, the other central agencies and nongovernmental organizations concerning the prevention and management of the emergency situations published in the Official Gazette Nr. 9 of January 4, 2005
6. Emergency Ordinance no. 21 of 15 April 2004 on the national management of emergencies - Updated text based on the modification of the normative acts published in the Official Gazette of Romania, Part I by March 7, 2005
7. Health Minister's Order no. 1408/2010 on the approval of the classification criteria for hospitals according to competence - published in the Official Gazette Nr. 789, November 17, 2010
8. Joint Order no 1092/ September 7, 2006 of the Public Health Minister and the Minister and Interior and Administration. No.1500 of 13 November 2006 -regarding the crew set of powers and duties of public intervention at different levels in-hospital phase - published in the Official Gazette of Romania no. 982 of December 8, 2006;
10. Law 95/2006 on healthcare reform
12. Order for the approval of the application of Article 93 of Law no. 95/2006 on healthcare reform published in the Official Gazette of Romania, Part I, nr.650/12.08. 2008

17. Public Health Ministerial Order no. 1764 / 2006 on the approval criteria for the classification of local emergency hospitals, county and regional in terms of skills, material and human resources and their ability to provide emergency care and definitive medical care of critically ill patients - published in the Official Gazette no. 63 of 26 January 2007

Corresponding author - Luciana Rotaru - emergency medicine consultant ED – SMURD Emergency Clinical Hospital Craiova, medical director SMURD region IV „Oltenia”, director for medical residency program in Emergency Medicine - Craiova Medical University - e mail lucianarotaru@yahoo.com