# THE ADMINISTRATION OF THE RISK FACTORS IN EMERGENCY SITUATIONS – INTERVENTION PLAN

Carmen Radu\* Dalea Atanasie\*\* Gabriela Radu\*\*\*

\* University of Oradea, Faculty of Medicine and Farmacy, 10 P-ta Independentei St., 410073, Oradea, Romania e-mail: raducarmencorina@yahoo.com

\*\* University of Oradea, Faculty of Environmental Protection, 26 Gen. Magheru St., 410048 Oradea; Romania,

#### Abstract

Disasters may be defined as any event that could cause the wounding or death of a great number of persons, the distraction of goods, and the lack of balance of the surroundings or could affect the local community. It is important for this plan to be the result of the plans of all the emergency situations, because the operation's success depends on the reaction of the emergency services, local authorities and other organizations. It is important to add that in our country there is no single institution to bear the responsibility of the reaction to collective accidents, and there is no "recipe" on how to intervene. Due to this fact I will try to come up with a detailed plan, hoping the existence of some flexible, efficient plans, tested by means of some specific scenarios there will be a reaction's quality increase in emergency situations.

Key words: risk factors, emergency situations

#### **I.GENERAL NOTIONS**

The emergency service, the ambulance and the local authorities cannot cope with these situations by themselves and there need to be organized and mobilized some special services and some particular work methodologies. Therefore, special work teams will be organized, teams that will include specialists from the police, legal medicine, radiology, toxicology, stomatology, molecular genetics departments, etc.

The forensic takes part from the very first moments to the event, having specific obligations, which we presented them in detail within the paperwork. The cooperation between the forensic and the specialist is very important, the forensic having the role of a catalyses in planning and implementing the actions in crises.

Due to the unpredictability of these incidents and their relatively high frequency, we consider that it is imperative for the doctor and especially the forensic to have basic knowledge regarding the specific methodology of such complex investigations.

Considering the great number of collective accidents, disasters, catastrophies which took place in our country lately in an alarming rate, we considered that it would be necessary to elaborate an *intervention plan* 

tailored for such situations in the hope that planning and preparing these interventions would be very useful. Therefore we proposed a plan in which we specified the tasks for each person, starting with doctors, prosecutors, medical assistants, autopsists and the administrative personnel. We have to mention that the team know their tasks and are ready to act in crisis situations.

It is important for this plan to be the result of the plans of all the emergency situations, because the operation's success depends on the reaction of the emergency services, local authorities and other organizations. It is important to add that in our country there is no single institution to bear the responsibility of the reaction to collective accidents, and there is no "recipe" on how to intervene. Due to this fact I will try to come up with a detailed plan, hoping the existence of some flexible, efficient plans, tested by means of some specific scenarios there will be a reaction's quality increase in emergency situations.

#### **II. THE CONTENT OF THE PLAN**

The plan will contain:

- **the necessary materials** for a quick intervention, the so-called "intervention kit", will be complete, sealed and placed in a location known by all the members of the team;
- the intervention stages.

### **III.THE INTERVENTION PHASES**

### 1. ASSESSING THE ACCIDENT'S SITE

For a better operability one may need a list containing the names and telephone numbers of the mixed intervention team's members. This will be given to the prosecutor, who leads the team, but he has to be appointed before the accident and his telephone number is to be known by all the officers of the surveillance services.

### 2. SALVATION OPERATIONS DETECTING AND REMOVING THE VICTIMS

It has to be done by the medical personnel and the first aid units by various means: echo sounders and acoustic detection devices, dog teams, infrared detection devices, optical fibre detection systems;

#### **3. ON SITE RESEARCH**

### **3.1. Securing the area**

The accident site must be surrounded with a security cord by the police; entries and exits are to be registered and each member of the team

must present an I.D. card for access. It is necessary for the examination to be made on the site as soon as possible because in time the traces and evidences cam modify or dissapear.

#### 3.2. Organising a work camp

The work camp represents a place of work on the site where the team acts under suppervision of a "chief" with the following obligations: provides the salvation and first aid operations of the victims, provides the operations of recovery and collects the victims, makes contact with the superiors and asks for backup when needed. The place of the work camp varies according to the nature, place of accident (plain, mountain, public roads). It will be endowed with containers for evidence and personal effects, a table on which the corpus delicti will be labelled and sealed and it will contain:

- Meeting point for the survivors
- Victims' triage and evacuation point
- An area to deposit the bodies and the corpus delicti
- An area for mass-media
- According to the situation one can establish the traffic route and landing site for the helicopters.

In case the accident implies contamination risks (physical, chemical, biological) all those involved in recovering the bodies will wear protection equipment.

#### 3.3. Registering and sectors

Once the place has been secured (secondary explosions, fires, crashes) the team will begin the identification of the bodies, human remains, personal effects, other evidence. Therefore, it is necessary to register as accurate as possible the exact position of the victims and to video record or to take photos for each stage of body removal.

Waterproof labels will be used in more copies and they will be attached to each body or fragment, to the places they had been picked up from, on the outside of the bag and on the documents illustrating the accident site, ex. 1 la, lb, lc, ld.

The map of the accident's site is made by dividing the area in sectors and by noting the position of the human remains and other evidence mentioning that dividing into sectors represents the operation of dividing an area according the importance of the intervention, the means of intervention, the natural or artificial obstacles, access ways, evacuation roads of the victims and personnel. One of the team's members will count the evidences as simple as possible (ex: 1, 2, 3), noting the position on the map by using some coordinates. The personal effects found on the body will be left there, or placed in a plastic bag which will stay next to the body.

## 4. PICKING UP THE THE BODIES AND THE CORPUS DELICTI

Basic principles:

- No body or human fragment will not be picked up from the accident's site until its position has been registered (label, flag, waterproof marker);
- Each body or fragment will be count, labelled (the label is attached to the body, not to its personal items or clothes);
- Before being picked up each body will be placed in a rezistent plastic which will be numbered the same as the body;
- The clothes and the personal effects are put in plastic. The lost items or found nearby are not put in the same plastic because they can lead to an incorrect identification;

The carbonated human remains need special pick up and transport measures, so the cephalic extremity will be put in plastic and then the body will be put in special bags in order to prevent the dislocation or lose of the segments (dental pieces).

The packed and numebered corpus delicti are sent to the laborotories being accompanied by documents with the questions of the police. It is under police jurisdiction including the effects found on the victims.

## **5. TRANSPORTING THE BODIES**

The legislation stipulates that the transport of the bodies to be examined should be made woth special vehicles. Transporting the bodies is permitted if they have **identification bracelets** on the right hand containing the date, the identification data and the person who has written the information.

The bodies are transported in closed plastic bags, no matter the distance.

## 6. THE OPERATIONS AT THE IDENTIFICATION CENTER

## 6.1. Body reception at the morgue

It is esential that in every collective accident all the bodies to be received at the same morgue. **The identification center** can be organized in the nearest morgue from the disaster site, with the mention that one can organize a temporary morgue even in a hangar, skate ring, warehouse, military facility, etc.

At the morgue each body will be received by the reception team formed of coroners, police officers, medical students. Reception team's tasks:

- Will hold a special register where they will note the number of the body and the arrival hour at the morgue;
- Body inspection and taking picture of the head and face (2 pictures and one will be sent to the victim registration office);
- Detailed inventory of each item and putting them in plastic bearing the number of the body;
- External examination of the body, noting the general signs (according to the preservation condition of the body): waist, age, sex, various details, infirmities, scars, surgery signs, color and length of the hair, tatoos.

#### 6.2. Depositing the bodies and the corpus delicti

In case the identification center is organised in a morgue, the bodies are put in refrigerators, according to their capacities; if it is about other locations they are placed in parallel rows, with at least 1,5 m between them to ease their manipulation.

The evidence and corpus delicti will be packed, labelled and sealed.

The sealing specifies the integrity of the evidence; on the superior part of the plastic bags it is to be made 3 cm fold which is to be refolded and secured with an isolating tape. When the evidence need to be refrigerated or frosted they are put in special refrigerators, with the mention that the corpus delicti depositing belongs to the police.

#### 6.3. The body autopsy

All the data obtained during the autopsy must be discussed with other specialists and must be compared with the information referring to the conditions of the accident. Only a good collaboration between the coroner, anatomist-pathologist, toxicologist and the persons investigating the case will offer results in establishing the cause of the accident.

#### 6.4. The reception of the relatives

A team will be made containing: members of the Red Cross, social assistents, pshycologists, volunteers, priests whose assistance may be good for the relatives.

#### 6.5. Cooperating with other agencies

The need of tcollaboration with other agencies has already been indicated as being essential for a proper investigation.

*Mass-media* may be of great help in publishing some emergency telephone numbers, some photographs and in describing the deceased and unidentified persons.

In order to prevent the publishing of incorrect details it is essential for the press to have access to information. Therefore, it is important to organize a press office for each accident and assigning a person to bear the responsability of offering authentic information. We must mention the fact that the press will not have access in the working halls, waiting rooms and autopsy rooms.

The victim office must be installed early for each incident and will hold the information regarding the hospitals that had received injured people, their identity, the situation of the morgue and of the bodies received here.

#### REFERENCES

- 1. Beliș V., Tratat de medicină legală vol. I și II, Editura Medicală București, 1995
- 2. Dr. Panaitescu V.,Metode de investigație în parctica medico legală, Editura Litera, București, 1984
- Dragomirescu V. T., Tratat de medicină legală odonto-stomatologică, Editura All, Bucureşti, 1996
- 4. Matei V., Actualități în medicina legală -note de curs, Timișoara, 2001
- 5. Proceedings of the 1 st asian pacific congress on legal medicine and forensic sciences, Singapore, septembrie 1983
- 6. Revista de medicină legală nr.2 1996- identificarea victimelor în catastrofe
- Steiner N., Mănăstireanu D., Curs practic de urgențe medico chirurgicaleintroducere în medicina de dezastre. Editura Didactică şi Pedagogică, Bucureşti, 1996
- Steiner N., Mănăstireanu D., Managementul medical al dezastrelor- curs, Editura MPM Edit Consult, Bucureşti 2003