

## **17. MEDICAL**

### **1. Medical support and casualty evacuation**

Appropriate medical support and a workable casualty evacuation procedure is one of the principles of all field clearance operations and will always be a compulsory requirement for mine clearance. No field operations will commence without an acceptable medical support and casualty evacuation plan that is fully understood by everyone involved, and has been practiced.

Both mine accidents and mine incidents will be reported and documented as soon as possible. The difference between the two is as follows:

- a) A mine incident is an accident involving a mine/UXO, and which is not caused by a demining or EOD operation;
- b) A mine accident is an accident involving a mine/UXO, and which is caused by a demining or EOD operation.

Every demining and EOD activity will make provision for adequate medical cover and casualty evacuation. While submitting applications, contracting organizations will have to state clearly the level of medical support, which will be provided for their teams.

As a guideline:

- a) All teams are to be trained to conduct first aid;
- b) It is compulsory that one trained Paramedic with all medical equipment is sited within fifteen (15) minutes of every clearing/survey team. Every Paramedic must have immediate access to an ambulance, which is capable to carry a stretcher/stretchers. Under no circumstances ambulance and stretchers can be used for other than medical purposes;
- c) The medical services to be provided must be sufficient to stabilize large-scale shrapnel injury or traumatic amputation within 15 minutes, and to provide surgery/stabilization in a properly equipped hospital within one hour;
- d) Supervisors are responsible for ensuring that a qualified medical doctor is available within 60 minutes traveling time from any operational site.

*If such medical support is removed or unavailable, operations will cease immediately until it has been restored*

The method of evacuation in the event of an accident must always be specified and understood by all. The primary method of evacuation is by road. It should be remembered that the comfort and safety of the injured person being transported is more important than speed.

### **2. Preparations before commencement of mine clearance activities**

Before commencement of any clearance activity, a Senior Paramedic will be nominated and will be responsible, in conjunction with the supervisor, for all preparations related to the medical support and evacuation plan. The responsibilities are as follows:

- a) Ensure that all deployed personnel have attended at least a basic first aid course. If necessary, arrange refresher courses for personnel;
- b) Locate, visit and establish the necessary contacts and agreements with the most suitable hospital in the vicinity. Any casualty must be at the hospital within 60 minutes from the beginning of evacuation;

- c) Establish agreements for onward evacuation from the local hospital to a suitable hospital for long-term treatment;
- d) Select and mark helicopter-landing site (HELIPAD), when applicable, making coordinates and exact location details available to aviation service, providing helicopter support;
- e) Ensure that communication lines are always functional and that every mine clearance operation site has communications with its headquarters and medical support.

### **3. Casualty evacuation procedures**

Responsibilities: Although the medical evacuation procedure may differ for every project, the responsibilities of personnel within the operation remain the same. The following responsibilities apply in the event of an accident:

#### a) Deminers

1. Stop demining immediately;
2. Pack up all equipment and await the order to evacuate the task area;
3. The nominated members of the nearest section assist in the evacuation of the casualty, accompany him to the medical facility and act as the Paramedic's assistant.

#### b) Section Leaders

1. The Section Leader, who has sustained a casualty under his control, goes to fetch the stretcher and simultaneously informs the Team Leader/Deputy Team Leader. After returning to the casualty with the stretcher, he takes command of the uninjured members of the section and together with them transports the casualty to the Paramedic in the Admin. Area;
2. The other Section Leaders ensure that the deminers under their control have ceased work and packed up their equipment, and then they are to report to the Team Leader/Deputy Team Leader and await further instructions.

#### c) Team Leader/Deputy Team Leader

1. Immediately takes command of the situation and assesses the scene of the accident, including the location and condition of the casualty and possible presence of other mines/UXO, and if necessary organizes deminers to clear lanes to the casualty;
2. Ensures that the Section Leader, in whose section the accident has happened, is carrying out his duties and simultaneously ensures that the other Section Leaders have reported to him and are awaiting further orders. Maintains contact with the Paramedic and, if possible, provides information on the condition of the casualty;
3. Maintains overall responsibility for the safety of all personnel during the medical evacuation procedure.

#### d) Paramedic

1. Maintains contact with the Team Leader;
2. Once the casualty has been brought to the admin. area, takes the appropriate action to stabilize and evacuate the casualty;
3. Maintains overall medical responsibility for the execution of the evacuation procedure;
4. Accompanies the casualty and another deminer with the same blood group to the medical facility.

*Note:* In the event of several injured casualties, the Paramedic will assess, determine priorities and execute the required appropriate actions, based on the below-mentioned procedures.

#### **4. Casualty evacuation**

To ensure effective casualty evacuation in the event of an accident, the following must be accomplished before any field operation takes place:

a) Nominate a road evacuation route from the minefield to:

1. The nearest surgical facility;
2. The nearest helicopter landing site.(when applicable);
3. The nearest fixed landing strip of airport (if appropriate).

b) Clear a helicopter-landing site of vegetation to a radius of 20 meters prior to starting the demining task (when applicable);

c) Inform headquarters of the location and provide a geographical reference of the landing site. Ensure that communications with headquarters are always effective.

An ambulance must be on site at all times during operations. It should be parked so that it can be loaded with a casualty and leave the site without having to maneuver. The driver must be available at all times. Ignition key should be left in the ambulance/vehicle at all times when parked at a task site.

The Paramedic must be on site at all times during field operations.

All personnel involved in the operation will be familiar with basic first aid, casualty evacuation procedures, and with procedures for loading a stretcher into the ambulance/vehicle.

Teams will formally practice casualty evacuation at least once a month and before commencing operations on the new site. These practices will be recorded on a monthly training report to ANAMA.

#### **5. Procedures in the event of an accident**

In the event of an accident the following procedure will be adopted:

a) Everyone stops working and informs Team Leader and Paramedic that an accident has occurred;

b) Team Leader will organize team members to clear around the casualty, if he is in an uncleared area, and move him to a safe area;

c) Team leader informs his headquarters that an accident has happened;

d) Paramedic administers first aid;

e) Paramedic transports casualty to nearest medical facility, where further qualified medical assistance should be available;

f) Paramedic transfers the casualty from stabilization unit to hospital under the supervision of the doctor.

A predetermined plan from HQ with a recommended method of evacuation away from the task site should be made available to the Team Leader prior to commencement of work at any new site.

An ambulance will normally be used for evacuation. It should be driven carefully and if possible, escorted by a second vehicle.

If evacuated by aircraft, the patient should be made as comfortable as possible whilst waiting for its arrival.

The headquarters staff will organize the evacuation, alert the receiving hospital and arrange all administrative support.

### **6. Procedures following an accident**

Subsequent to an accident, the following procedure should be adopted:

- a) Account for all personnel and make sure no one else is injured;
- b) Support those personnel, who was shocked by the accident;
- c) Account for all equipment and stores;
- d) Identify and isolate all tools and stores at the accident site. Do not change the settings on a Mine Detector involved in an accident;
- e) Close off the lanes and area of the accident, and photos, if possible;
- f) List all the people, who witnessed the accident or worked in the vicinity area;
- g) Return to Base Camp (Regional Office) and prepare report for headquarters staff, who will conduct investigation;
- h) collect the injured person's belongings and equipment, and secure them.

### **7. Syllabus for first aid lessons for all deminers**

All mine clearance personnel are to receive the following training:

- a) Basic CPR (Cardiopulmonary Resuscitation):
  - One-Person CPR;
  - Two-Person CPR;
- b) Arrest of Hemorrhage:
  - Direct Pressure method;
  - Pressure Points;
  - Tourniquet application;
- c) Bandaging of wounds;
- d) Casualty transportation:
  - Fireman's lift;
  - Two-person method without stretcher;
  - Use of stretcher.

Experience has shown that this course requires at least 24 hours of instruction.