

# EMERGENCY PREPAREDNESS & FIRST AID

## 1.0 INTRODUCTION

Every employee engaged in field activities should know the basics of emergency first aid because these activities are often conducted in remote, inaccessible areas. If an illness or injury occurs in these circumstances, employees have to depend on their own training until medical help arrived. All field team should be certified in basic first aid and cardiopulmonary resuscitation (CPR), to the extent possible, and capable of responding to field medical emergencies.

In addition, each employee engaged in field activities should carry a wallet card with important medical information such as blood type, allergies, current medications, or problem physical conditions. This information will be critical in the event of an emergency.

This module discusses medical emergencies that may occur during field activities and describes the general course of action. **The information in this unit is very basic and does not take the place of a first aid or CPR course.** The information is intended to provide field team members with an overview of the steps involved in providing first aid and give instructions for executing emergency notification.

It is recommended that all field team members obtain additional information regarding emergency first aid and receive training from a certified source, such as the American Red Cross. Additional information can be found in the following workbooks, "American Red Cross: Adult CPR," "American Red Cross: Multimedia Standard First Aid," and "American Red Cross: Community First Aid and Safety."

### Learning Objective

At the end of this module, you will be able to:

- Identify the actions that should be taken to prepare for field medical emergencies
- List the five steps involved in responding to medical emergencies
- Identify signs or signals of a medical emergency
- List information that must be provided to emergency response personnel
- List the responsibilities of a first aid provider.

## 2.0 PLANNING FOR FIELD MEDICAL EMERGENCIES

While conducting field activities, emergency first aid may be needed for a wide range of medical problems. To ensure that field personnel are adequately prepared to respond to emergencies, each team should complete a Medical Emergency Planning Checklist before engaging in field work.

This checklist should be developed as follows:

- Determine the location of the nearest medical facility
- Determine what emergency communication and transportation is available
- Determine the risks involved in the field activities
- Identify the exact location of the field activity in case medical assistance must be requested
- Ensure that a first aid manual is available in a readily accessible location
- Ensure that each crew member has completed (and carries with them) a medical information card
- Ensure that field teams have basic first aid kits that include standard equipment, such as gauze, disinfectant, scissors, and latex gloves.

### **3.0 EMERGENCY ACTION STEPS**

For the purposes of this module, responding to medical emergencies means providing first aid until professional medical help arrives. This includes the following steps:

- Recognize that an emergency exists
- Decide to act
- Check the scene
- Call the local emergency telephone number(s) and provide all necessary information
- Provide care until help arrives.

The sections below provide guidance for executing the first four emergency action steps. Information on providing basic first aid can be found in Section 4 of this module.

#### **3.1 Recognizing Emergencies**

The first critical step to ensuring that proper emergency first aid and medical treatment is obtained is recognizing that an emergency exists. As such, field team members must be alert and aware to the activities around them and pay close attention to possible signals that indicate an illness or injury has occurred. These signals may include the following:

- Unusual noises
  - Screams, moans, or calls for help
  - Breaking glass, screeching tires
  - Changes in machinery sounds
  - Sudden loud noises (e.g., the sound of a car crashing)
- Unusually strong odors (e.g., chemical fumes, gasoline)
- Changes in a person's behavior
  - Clutching the chest or throat
  - Slurred or confused speech
  - Unusual skin color
  - Unexplainable drowsiness.

Other signals of an emergency may be more obvious and easier to spot; for instance, an unconscious person, an overturned car or a collapsed ladder or other construct. In all cases, however, field personnel should learn to recognize these signals to ensure timely assistance can be provided.

### **3.2 Deciding to Act/Good Samaritan Laws**

Once a medical emergency is recognized, field workers must make a timely decision to act, and should not be hesitant to provide assistance. The most common factors that can affect response time include the potential for liability, uncertainty about the type of injury/illness, and the presence of other people.

Field personnel should note that, regardless of whether they have received first aid training, there are laws that protect them when they assist in emergency situations. These "Good Samaritan Laws" apply when a person responds to an emergency in a reasonable and prudent manner. For example, it is expected that any reasonable person would move a victim only if the victim's life was endangered and would continue to provide care until trained personnel arrived. Therefore, field personnel should not be discouraged by potential liability, and should use common sense and their best judgement to save a life or prevent further injury.

When discovering an emergency, field personnel should also not assume that other bystanders are handling the situation. In all cases, workers should act quickly, assess the situation and offer as much help as needed.

### **3.3 Checking the Scene**

To provide adequate care, field personnel must evaluate the scene of the emergency to ensure that the area is safe and to obtain any information that may assist medical professionals. When responding to an emergency, personnel should first:

- Check for hazards or potential hazards (e.g., chemical spills, fire, downed electrical lines). If the scene is unsafe:
  - Do not attempt to remove or eliminate hazards.
  - Stay at a safe distance
  - Call local emergency number(s) immediately (see Section 3.4).
- If the scene is safe, look for clues as to what may have caused the accident (i.e., look for objects such as fallen ladders, broken glass, etc.)
- Look for any additional victims
- Do not move the victim, unless there is an immediate danger (e.g., fire)
- When reaching the victim, try to determine the nature and extent of the injuries
- Look for signs of a life-threatening condition (e.g., unconsciousness, severe bleeding, no breathing). If injuries are life-threatening, call for professional help immediately (see Section 3.4)
- Question bystanders, if feasible. If victim is conscious, reassure him or her; try and find out as much information as possible

- Look for the employee's medical information card
- Call for help or have a bystander call for help (see Section 3.4).

Checking the scene is a critical step in emergency medical response, and should be done prior to administering assistance.

### **3.4 Calling for Help**

Calling for help is often the most essential step in emergency response because it ensures that professional help is on the way as fast as possible.

Whenever possible, ask a bystander or co-worker to call for help, or shout for help if persons are nearby. If you are the only person available, stabilize or control the injury as much as possible, and then find the nearest telephone. After placing the call, return immediately to the victim, and continue assistance.

Always call the local emergency number for life-threatening injuries or condition, such as when the victim:

- Is unconscious
- Is not breathing or is having trouble breathing
- Has chest pain or pressure
- Is bleeding severely
- Has seizures, severe headache, or slurred speech
- Has injuries to the head, neck, or back
- Has possible broken bones
- Appears to have been poisoned
- Has severe pressure or pain in the abdomen that will not go away
- Is vomiting or passing blood.

Emergency personnel should also be called immediately for situations involving special hazards that would require trained and properly equipped personnel, such as:

- Fire or explosion
- Downed electrical wires
- Presence of poisonous gas or hazardous chemicals
- Vehicle collisions.

When calling for emergency medical assistance, make sure to provide the following information to the dispatcher:

- Your name or the caller's name
- The exact location and directions to the location
- If communication is by telephone, give the telephone number from which the call is being made

- The type of accident (e.g., a fall, a collision)
- The number of persons involved/injured
- The condition of the victim(s) (e.g., bleeding, unconscious, not breathing)
- The emergency first aid being provided.

It is important that the caller does not disconnect the communication first. Let the person you called end the conversation. Not only does this ensure that the person has all the necessary information, but also the dispatcher may also be able to give information on how to care for the victim.

The information above is not intended to cover all possible situations that may occur in the field. Field workers should use their best judgment in the event of an emergency, but when in doubt, should call emergency personnel immediately.

## **4.0 PROVIDING EMERGENCY CARE**

Once the scene has been checked and emergency personnel have been contacted, the responder may need to initiate or continue general first aid. Field personnel should first provide basic care while evaluating the extent and nature of the injuries, and then should administer specific first aid based on the results of this evaluation.

### **4.1 Basic Care**

In general, to ensure that proper and effective care is provided, the first aid responder should first:

- Ensure that the victim is breathing and has a pulse
- Check and see if the victim is conscious. If the victim is conscious, ask him/her for permission to help
- Control severe bleeding, if any. Then, keep the victim in the position best suited to his or her condition or injuries; do not let him or her get up or walk about
- Protect the victim from unnecessary manipulation and disturbance
- Avoid or overcome chilling by using blankets or covers, if available. If the victim is exposed to cold or dampness, place blankets or additional clothing over and under him or her
- Check the victim methodically, keeping in mind the kind of accident or sudden illness and the needs of the situation. Do only what is necessary; for example:
  - Loosen constricting clothing, but do not pull on the victim's belt in case spinal injuries are present
  - Open or remove clothing, if necessary, to make a more accurate check for injuries. Use caution to prevent added injury. Do not expose the victim unduly without protective cover, and use discretion if clothing must be removed
  - Note the victim's general appearance, including skin discoloration, and check all symptoms that may give a clue to the injury or sudden illness
  - If the victim is unconscious, look for evidence of head injury
  - In a conscious person, look for paralysis of one side of the face or body

- Check for evidence of a recent convulsion. (He or she may have bitten his/her tongue, producing a laceration.)
- Check the expression of the victim's eyes and the size of the pupils
- Examine the victim's trunk and limbs for open and closed wounds or for signs of fractures
- If poisoning is suspected, check for stains or burns about the victim's mouth and a source of poisoning nearby, such as pills, medicine bottles, household chemicals, or pesticides.

## **4.2 Specific Treatment**

Once the victim has been checked, the first aid provider must quickly assess the type of emergency care needed, and the priority that it should be provided. As a rule, always care for life-threatening emergencies (e.g., no breathing) before those that are not life-threatening (e.g., small lacerations/cuts).

It is extremely important that field personnel do not attempt to provide special first aid unless properly trained and/or certified. For example, emergency CPR should only be administered by persons who have been instructed in a certified program. In addition, specific training may be required for the following situations:

- Severe bleeding and shock
- Injuries to the head, neck, and back
- Chemical splashes and chemical burns
- Inhalation of toxic gas
- Poisonings and allergic reactions
- Drowning
- Heat and cold stress.

All agency personnel should know the limits of their capabilities and should make every effort to avoid further injury to the victim in the attempt to provide the best possible emergency first aid care. When in doubt about providing care, always wait for trained professional to arrive on the scene.

## **5.0 SUMMARY**

This module presented information about general emergency preparedness and emergency notification. It covered medical emergency planning as well as guidelines for evaluating emergency situations.

Key concepts presented in this module are:

- Field employees may be involved in activities in remote, inaccessible areas. The basics of emergency first aid are essential knowledge for these employees

- Before engaging in a field activity, complete a Medical Emergency Planning Checklist
- When working on a site, be alert to signs or signals that may indicate a medical emergency
- Always check a scene before providing first aid to ensure that the area is safe and to obtain as much information about what happened as possible
- Call emergency response professionals immediately for life-threatening injuries or conditions, or when in doubt about the condition of the victim
- Provide first aid only if properly trained. Otherwise, keep the victim comfortable until help arrives.

## EXERCISE

1. List three pieces of information that should be obtained prior to working at a site, in order to prepare for medical emergencies:
  - a.
  - b.
  - c.
  
2. Field personnel are not required to have any first aid training and can rely on outside assistance at all times: (Circle One)

True

False

3. List the five emergency action steps that should be followed when responding to medical emergencies:
  - a.
  - b.
  - c.
  - d.
  - e.
  
4. Of the following, which are signs or signals that a person may be in need of medical assistance:
  - a. Unusual odors
  - b. Breaking glass
  - c. Screams
  - d. All of the above
  
5. If you provide prudent and reasonable assistance in a medical emergency, you can be held liable if the victim does not survive or recover: (Circle One)

True

False

6. Name three types of life-threatening conditions that require immediate medical attention:
  - a.
  - b.
  - c.
  
7. If you are alone at a scene, you should not leave the victim under any circumstances: (Circle One)



True

False

8. When calling for emergency assistance, it is critical that the following information is provided to the dispatcher: (Circle all that apply)

- a. Your exact location
- b. The name of your employer
- c. The type and nature of the accident
- d. The number of people at the scene

9. If a person has stopped breathing, you should administer CPR regardless of the training that you have received: (Circle One)

True

False

## EXERCISE KEY

1. List three pieces of information that should be obtained prior to working at a site, in order to prepare for medical emergencies:

*See Section 2*

2. Field personnel are not required to have any first aid training and can rely on outside assistance at all times: (Circle One)

True

*False*

3. List the five emergency action steps that should be followed when responding to medical emergencies:

*a. Recognize the emergency*

*b. Decide to act*

*c. Check the scene*

*d. Call for assistance*

*e. Provide care*

4. Of the following, which are signs or signals that a person may be in need of medical assistance:

a. Unusual odors

b. Breaking glass

c. Screams

*d. All of the above*

5. If you provide prudent and reasonable assistance in a medical emergency, you are still liable if the victim does not survive or recover: (Circle One)

True

*False*

6. Name three types of life-threatening conditions that require immediate medical attention:

*See Section 3.4*

7. If you are alone at a scene, you should not leave the victim under any circumstances: (Circle One)

True

*False*

8. When calling for emergency assistance, it is critical that the following information is provided to the dispatcher: (Circle all that apply)

- a. *Your exact location*
  - b. The name of your employer
  - c. *The type and nature of the accident*
  - d. The number of people at the scene
9. If a person has stopped breathing, you should administer CPR regardless of the training that you have received: (Circle One)

True

*False*