

## Emergencies

Emergencies have distinctive characteristics. They are:

- Dangerous—people's lives, well-being, or property are threatened.
- Unusual and rare events—the average person will probably encounter fewer than a half a dozen serious emergencies in a lifetime.
- Different from one another—each presents a different set of problems.
- Unforeseen—they happen suddenly and without warning.
- Urgent—if the emergency is not dealt with immediately, the situation will escalate.

## What Should Be Done?

Victims would benefit if bystanders could quickly and reliably do the following:

- 1. Recognize the emergency.
- 2. Decide to help.
- 3. Call 9-1-1 if emergency medical service is needed.
- 4. Check the victim.
- **5.** Give first aid.

# chapter at a glance

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- ► What Should Be Done?
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- ► Scene Size-up
- Disease Precautions



#### Recognize the Emergency

To help in an emergency, the bystander first has to notice that something is wrong. Noticing that something is wrong is related to four factors Figure 1:

- Severity. Severe, catastrophic emergencies such as a motor vehicle crash involving an overturned car or several vehicles attract attention.
- Physical distance. The closer a bystander is to an emergency situation, the more likely he or she will notice it.
- Relationship. Knowing the victim increases
  the likelihood of noticing an emergency. For
  example, you would notice your child's injuries before you might notice the same
  injuries on a stranger.
- Time exposed. Evidence indicates that the longer a bystander is aware of the situation, the more likely he or she will notice it as an emergency.

## Decide to Help

At some time, everyone will have to decide whether to help another person. Unless the decision to act in an emergency is considered well in advance of an actual emergency, the many obstacles that make it difficult or unpleasant for a bystander to help a stranger are almost certain to impede action. One important strategy that people use to avoid action is to refuse (consciously or unconsciously) to acknowledge the emergency. Many emergencies do not look like the

ones portrayed on television, and the uncertainty of the real event can make it easier for the bystander to avoid acknowledging the emergency.

Making a quick decision to get involved at the time of an emergency is more likely to occur if the bystander has previously considered the possibility of helping others. Thus, the most important time to make the decision to help is before you ever encounter an emergency. Deciding to help is an attitude about emergencies and about one's ability to deal with emergencies. It is an attitude that takes time to develop and is affected by a number of factors.

#### Call 9-1-1 if EMS Is Needed

Wrong decisions about calling 9-1-1 can be made. Examples include a delay in calling 9-1-1 until callers are absolutely sure that an emergency exists, or deciding to bypass EMS and to transport the victim to medical care in a private vehicle. Such actions can endanger a victim. Fortunately, most injuries and sudden illnesses do not require medical care—only first aid.

#### Check the Victim

You must decide whether life-threatening conditions exist and what kind of help a victim needs. See the chapter entitled Finding Out What's Wrong for details.

#### **Give First Aid**

Often the most critical life support measures are effective only if started immediately by the nearest available person. That person usually will be a layperson—a bystander.

# **▶** Seeking Medical Care

Knowing when to call 9-1-1 for help from EMS is important. To know when to call, you must be able to tell the difference between a minor injury or illness and a life-threatening one. For example, upper abdominal pain can be indigestion, ulcers, or an early sign of a heart attack. Wheezing could be related to a person's asthma, for which the person can use his or her prescribed inhaler for quick relief, or it can be as serious as a severe allergic reaction from a bee sting.

Not every cut needs stitches, nor does every burn require medical care. It is, however, always best to err on the side of caution. According to the American College of Emergency Physicians (ACEP), if the answer to any of the following questions is "yes," or if you are unsure, call 9-1-1 for help.

- Is the victim's condition life threatening?
- Could the condition get worse and become life threatening on the way to the hospital?
- Does the victim need the skills or equipment of EMS?
- Could the distance or traffic conditions cause a delay in getting the victim to the hospital?
- Is a spinal injury suspected?

ACEP also recommends immediate transport to the hospital emergency department, by EMS or by private vehicle, for the following conditions that are warning signs of more serious conditions:

- Chest pain lasting 2 minutes or more
- Uncontrolled bleeding (see the following list of wounds needing immediate medical care)
- Any sudden or severe pain
- Coughing or vomiting blood
- Difficulty breathing, shortness of breath
- Sudden dizziness, weakness, fainting
- Changes in vision
- Difficulty speaking
- Severe or persistent vomiting or diarrhea
- Change in mental status (for example, confusion, difficulty arousing)
- Suicidal or homicidal feelings
- Wounds needing immediate medical care include (see the chapter entitled Wounds for additional wounds needing medical care) those in which:
  - Bleeding from a cut does not slow during the first 15 minutes of steady direct pressure.
  - Signs of shock occur.
  - Breathing is difficult because of a cut to the neck or chest.
  - A deep cut to the abdomen causes moderate to severe pain.
  - There is a cut to the eyeball.
  - A cut amputates or partially amputates an extremity.

When a serious situation occurs, call 9-1-1 first. Do not call your doctor, the hospital, a friend, relatives, or neighbors for help before you call 9-1-1. Calling anyone else first only wastes time.

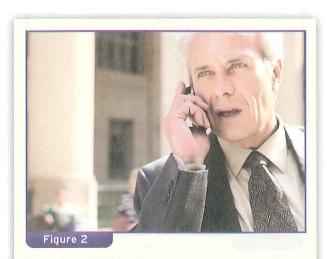
If the situation is not an emergency, call your doctor. However, if you have any doubt about whether the situation is an emergency, call 9-1-1.

### ► How to Call EMS

In most communities, to receive emergency assistance of any kind, call 9-1-1 Figure 2. Check to see if this is true in your community. Emergency telephone numbers are usually listed on the inside front cover of telephone directories. Keep these numbers near or on every telephone. Dial 0 (the operator) if you do not know the emergency number.

When you call 9-1-1, speak slowly and clearly. Be ready to give the dispatcher the following information:

- 1. The victim's location. Give the address, names of intersecting roads, and other landmarks, if possible. This information is the most important thing you can give. Also, tell the specific location of the victim. (For example, "in the basement" or "in the backyard.")
- 2. The phone number you are calling from and your name. This allows dispatchers to detect false reports, thus minimizing their frequency, and it allows a dispatch center without the enhanced 9-1-1 system to call back if disconnected or for additional information if needed.
- **3.** What happened. State the nature of the emergency. (For example, "My husband fell off a ladder and is not moving.")
- **4.** Number of persons needing help and any special conditions. (For example, "There was



For help, call 9-1-1 or the local emergency number.

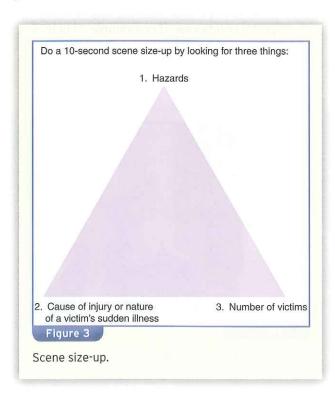
- a car crash involving two cars. Three people are trapped.")
- **5.** Victim's condition. (For example, "My husband's head is bleeding.") List any first aid you have tried (such as pressing on the site of the bleeding).

Do *not* hang up the phone unless the dispatcher instructs you to do so. Enhanced 9-1-1 systems can track a call, but some communities lack this technology. Also, the EMS dispatcher could tell you how best to care for the victim. If you send someone else to call, have the person report back to you so you can be sure the call was made.

# Scene Size-up

If you are at the scene of an emergency situation, do a 10-second scene size-up Figure 3, looking for three things: (1) hazards that could be dangerous to you, the victim(s), or bystanders; (2) the cause of the injury or illness; and (3) the number of victims. As you approach an emergency scene, scan the area for immediate dangers to yourself or to the victim Figure 4.

If the scene is dangerous, stay away and call 9-1-1. You are not being cowardly, merely realistic. Never attempt a rescue that you have not been specifically trained to do. You cannot help another person if you also become a victim.





The scene size-up includes evaluating the scene for hazardous conditions.

The second step is to try to determine the cause of the injury. For example, if the emergency department physician knows that a victim was thrown against a steering wheel, he or she will check for liver, spleen, and cardiac injuries. Be sure to tell EMS personnel about your findings so they can identify the extent of any injuries. Finally, determine how many people are involved. There could be more than one victim, so look around and ask about others involved.

## **Disease Precautions**

First aiders must understand the risks from infectious diseases, which can range in severity from mild to life threatening. First aiders should know how to reduce the risk of contamination to themselves and to others.

An <u>infectious disease</u> is a medical condition caused by the growth and spread of small, harmful organisms within the body. A <u>communicable disease</u> is a disease that can spread from one person to another. Immunizations, protective techniques, and handwashing can minimize the risk of infection. Because there are so many different infectious diseases to be concerned about, the Centers for Disease Control and Prevention (CDC) developed a set of <u>standard precautions</u>, which advise you to assume that all victims are infected and can spread an organism that poses a risk for transmission of infectious diseases. These protective measures are designed to prevent first aiders from coming into direct contact with infectious agents.

#### Handwashing

Handwashing is one of the simplest yet most effective ways to control disease transmission. Even if you are wearing gloves, you should wash your hands before, if possible, and definitely after every victim contact. The longer the germs remain with you, the greater their chance of infecting you.

The proper procedure for washing your hands is as follows:

- **1.** Use soap and warm water, if possible. All types of soap are acceptable when washing with water.
- 2. Rub your hands together for 15 to 20 seconds to work up a lather. Wash all surfaces well, including wrists, palms, backs of hands, and fingers. Clean the dirt from under your fingernails.
- 3. Rinse the soap from your hands.
- **4.** Dry your hands completely with a clean towel if possible (this helps remove the germs). If towels are not available, however, it is okay to allow your hands to air dry.

If soap and water are not available, use an alcohol-based hand sanitizer to clean your hands Figure 5. Apply the gel to one hand and rub hands together, covering all surfaces of hands and fingers, until the hands are dry. If your mucous membranes (for example, your eyes, nose, or mouth) are splashed by a bloody fluid, immediately flush the area with clean water.

### Personal Protective Equipment

Personal protective equipment (PPE) includes exam gloves, mouth-to-barrier devices, eye protection, and gowns. PPE provides a barrier between the first aider and infectious diseases.

#### Exam Gloves

Exam gloves are the most common type of PPE and should always be worn when there is any possibility of exposure to blood or body fluids. All first aid kits should contain several pairs of gloves. Because some rescuers have allergic reactions to latex, latex-free gloves should also be available. You might consider putting on a second pair of gloves over the first if there is major, significant external bleeding or body fluid. If the gloves are cut or torn, replace them.

#### Mouth-to-Barrier Devices

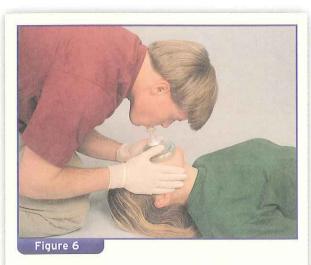
Mouth-to-barrier devices are recommended Figure 6. Although there are no documented cases of disease transmission to rescuers as a result of performing unprotected mouth-to-mouth resuscitation on a victim with an infection, you should use a barrier device such as a pocket mask when providing CPR.

#### Other Personal Protective Equipment

Other PPE includes eye protection and gowns and aprons. OSHA requires these to be available in some workplaces, especially for health care workers. These are not required for first aiders and usually will not be available.



Use a waterless handwashing solution if there is no running water available.



Pocket face mask, one-way valve.

### Cleaning Up After an Emergency

When cleaning up blood or other body fluids, protect yourself and others against disease transmission by following these steps:

- **1.** Wear heavier gloves than lightweight latex or vinyl.
- 2. If you have been trained in the correct procedures, use absorbent barriers to soak up blood or other infectious materials. Clean the spill area using soap and water. After cleaning, disinfect with a bleach and water solution at a 1:10 dilution. Isopropyl alcohol also can be used to disinfect. These solutions can corrode or discolor certain fabrics, leathers, vinyl, or other synthetic materials.
- Discard contaminated materials in an appropriate waste disposal container.

If you have been exposed to blood or body fluids:

- **1.** Use soap and water to wash the parts of your body that have been contaminated.
- 2. If the exposure happened at work, report the incident to your supervisor. Otherwise, contact your personal physician. If the exposure was significant, seek medical care. Early action can prevent the development of certain infections.

The best protection against disease is using the safeguards described here. By following these guidelines, first aiders can decrease their chances of contracting bloodborne illnesses.

# Ready for Review

- Emergencies are dangerous, unusual, rare, unforeseen, and must be dealt with before the situation becomes worse.
- A bystander is a vital link between EMS and the victim.
- Victims would benefit if bystanders could quickly and reliably do the following:
  - Recognize the emergency.
  - Decide to help.
  - Call 9-1-1 if EMS is needed.
  - Check the victim.
  - Give first aid.
- Knowing when to call 9-1-1 is important. To do so, you must be able to tell the difference between a minor injury or illness and a life-threatening one.
- In most communities, call 9-1-1 to receive emergency assistance.
- The sight of blood and the cries of victims can be upsetting, but it is essential that first aiders remain alert and working at an injury scene.
- If you are at the scene of an emergency situation, do a 10-second scene size-up looking for hazards, the cause of the injury or illness, and the number of victims.
- First aiders should take precautions to protect against infectious diseases.
- There are few incidents that involve emotional stress like the life-and-death situations that you might face.

# prep kit

# Vital Vocabulary

- <u>communicable disease</u> A disease that can spread from person to person, or from animal to person.
- <u>infectious disease</u> A medical condition caused by the growth of small, harmful organisms within the body.
- personal protective equipment (PPE) Equipment, such as exam gloves, used to block the entry of an organism into the body.
- scene size-up Steps taken when approaching an emergency scene. Steps include checking for hazards, noting the cause of the injury or illness, and determining the number of victims.
- standard precautions Protective measures that have traditionally been developed by the Centers for Disease Control and Prevention (CDC) for use in dealing with objects, blood, body fluids, or other potential exposure risks of communicable disease.

# prep kit

## **▶** Assessment in Action

You are walking from house to house in an unfamiliar neighborhood collecting donated clothing for a local charitable organization. You find no one home at a particular house but hear a loud explosion in the garage. You decide to see what happened. Upon entering the garage you find a teenage boy lying on the ground.

There is a strong gasoline odor. You have a cellular telephone with you.

*Directions:* Circle Yes if you agree with the statement; circle No if you disagree.

- Yes No 1. This scene could be dangerous.
- Yes No **2.** You should not be concerned about other possible victims.
- Yes No **3.** In most communities, 9-1-1 can be used to contact EMS.
- Yes No **4.** If you do not know the exact address of the emergency, be prepared to give a description of the location as best as you can.

## Check Your Knowledge

*Directions*: Circle Yes if you agree with the statement; circle No if you disagree.

- Yes No 1. A scene survey should be done before giving first aid to an injured victim.
- Yes No **2.** For a severely injured victim, call the victim's doctor before calling for an ambulance.
- Yes No **3.** Dial 0 (for the telephone operator) if you do not know the emergency telephone number.
- Yes No **4.** First aiders should assume that blood and all body fluids are infectious.
- Yes No **5.** If you are exposed to blood while on the job, report it to your supervisor, and if off the job, to your personal physician.
- Yes No **6.** First aid kits should contain exam gloves.
- Yes No **7.** Wash your hands with soap and water after giving first aid.
- Yes No 8. Exam gloves can be made of almost any material as long as they fit the hand well.