

# Before Providing Care and Victim Assessment



A lifeguard is a professional rescuer—a key link of the emergency medical services (EMS) system. While on duty, a lifeguard is legally obligated, within the bounds of training, to respond and provide care in an emergency

As a professional rescuer, a lifeguard must be able to—

- Support personal, fellow team member and bystander safety.
- Respond in an emergency.
- Take precautions to prevent disease transmission.
- Gain safe access to the victim.
- Get consent before providing care.
- Determine whether any life-threatening conditions are present.
- Provide needed care to the victim.
- Summon more help when needed.
- Use techniques learned in training.

## BEFORE PROVIDING CARE

To help prevent disease transmission, a lifeguard needs to understand how infections occur, how diseases are spread from one person to another and what precautions can be taken. Infectious diseases are spread from infected people and from animals, insects or objects that have been in contact with them. Lifeguards must protect themselves and others from infectious diseases.

## BLOODBORNE PATHOGENS

*Bloodborne pathogens* are bacteria and viruses present in blood and body fluids that can cause disease in humans. Bacteria and viruses are the most common forms of pathogens. They are found almost everywhere in our environment. Bacteria can live outside the body and commonly do not depend on other organisms for life. If a person is infected by bacteria, antibiotics and other medications often are used to treat the infection. Viruses depend on other organisms to live. Once viruses are in the body, they are difficult to kill. That is why prevention is so critical. The bloodborne pathogens of primary concern to a professional rescuer are the hepatitis B virus, hepatitis C virus and human immunodeficiency virus (HIV) (Table 6-1).

### Hepatitis B

*Hepatitis B* is a liver infection caused by the hepatitis B virus. Hepatitis B may be severe or even fatal, and it can be in the body for up to 6 months before symptoms ap-

pear. These may include flu-like symptoms such as fatigue, abdominal pain, loss of appetite, nausea, vomiting and joint pain. Later-stage symptoms include jaundice (a yellowing of the skin and eyes).

Medications are available to treat chronic hepatitis B infection, but they do not work for everyone. The most effective means of prevention is the hepatitis B vaccine. This vaccine, which is given in a series of three doses, provides immunity to the disease. Scientific data show that hepatitis B vaccines are very safe for adults, children and infants. There is no confirmed evidence indicating that hepatitis B vaccine causes chronic illnesses.

The hepatitis B vaccination series must be made available to all employees, including lifeguards, who have occupational exposure. It must be made available within 10 working days of initial assignment, after appropriate training has been completed. However, employees may decide not to have the vaccination. If an employee decides not to be vaccinated, he or she must sign a form affirming this decision.

### Hepatitis C

*Hepatitis C* is a liver disease caused by the hepatitis C virus. It is the most common chronic bloodborne infection in the United States. Its symptoms are similar to hepatitis B infection, including fatigue, abdominal pain, loss of appetite, nausea, vomiting and jaundice. There is no vaccine against hepatitis C and no treatment available to prevent infection after exposure. Hepatitis C is the leading cause of liver transplants. For these reasons, hepatitis C is more serious than hepatitis B.

**TABLE 6-1 HOW BLOODBORNE PATHOGENS ARE TRANSMITTED**

Disease	Signs and Symptoms	Mode of Transmission	Infective Material
<b>Hepatitis B</b>	Jaundice, fatigue, abdominal pain, loss of appetite, nausea, vomiting, joint pain	Direct and indirect contact	Blood, semen
<b>Hepatitis C</b>	Jaundice, fatigue, dark urine, abdominal pain, loss of appetite, nausea	Direct and indirect contact	Blood, semen
<b>HIV</b>	May or may not be signs and symptoms in early stage. Late-contact-stage symptoms may include fever, fatigue, diarrhea, skin rashes, night sweats, loss of appetite, swollen lymph glands, significant weight loss, white spots in the mouth or vaginal discharge (signs of yeast infection) and memory or movement problems.	Direct and possibly indirect contact	Blood, semen, vaginal fluid, breast milk

**HIV**

The *human immunodeficiency virus (HIV)* is the virus that causes acquired immunodeficiency syndrome (AIDS). HIV attacks white blood cells and destroys the body’s ability to fight infection. This weakens the body’s immune system. The infections that strike people whose immune systems are weakened by HIV are called *opportunistic infections*. Some opportunistic infections include severe pneumonia, tuberculosis, Kaposi’s sarcoma and other unusual cancers.

People infected with HIV may not feel or look sick. A blood test, however, can detect the HIV antibody. When an infected person has a significant drop in a certain type of white blood cells or shows signs of having certain infections or cancers, he or she may be diagnosed as having AIDS. These infections can cause fever, fatigue, diarrhea, skin rashes, night sweats, loss of appetite, swollen lymph glands and significant weight loss. In the advanced stages, AIDS is a very serious condition. People with AIDS eventually develop life-threatening infections and can die from these infections. Currently, there is no vaccine against HIV.

There are many other illnesses, viruses and infections to which a responder may be exposed. Keep immunizations current, have regular physical check-ups and be knowledgeable about other pathogens. For more information on the illnesses listed above and other diseases and

illnesses of concern, contact the Centers for Disease Control and Prevention (CDC) at (800) 342-2437 or visit CDC’s Web site at [www.cdc.gov](http://www.cdc.gov).

**HOW PATHOGENS SPREAD**

Exposures to blood and other body fluids occur across a wide variety of occupations. Lifeguards, health-care workers, emergency response personnel, public safety personnel and other workers can be exposed to blood through injuries from needles and other sharps devices, as well as by direct and indirect contact with skin and mucous membranes. For any disease to be spread, including bloodborne diseases, all four of the following conditions must be met:

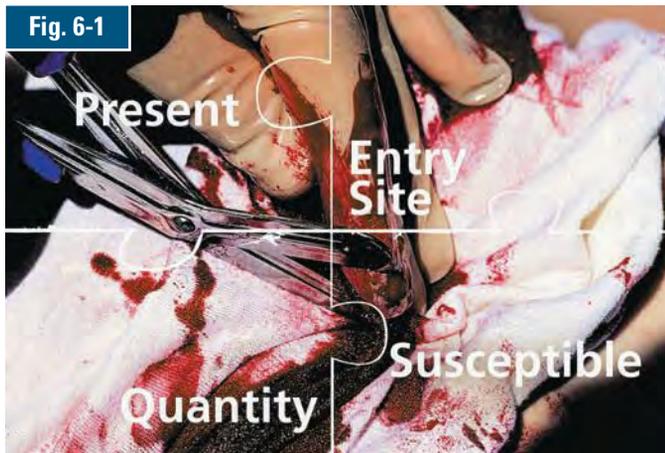
- A pathogen is present.
- A sufficient quantity of the pathogen is present to cause disease.
- A person is susceptible to the pathogen.
- The pathogen passes through the correct entry site (e.g., eyes, mouth and other mucous membranes; non-intact skin or skin pierced by needlesticks, human bites, cuts, abrasions and other means).

To understand how infections occur, think of these four conditions as pieces of a puzzle (**Fig. 6-1**). All of the

**Disease-Causing Agents**

Pathogen	Diseases and Conditions They Cause
Viruses	Hepatitis, measles, mumps, chicken pox, meningitis, rubella, influenza, warts, colds, herpes, HIV (the virus that causes AIDS), genital warts, smallpox, avian flu
Bacteria	Tetanus, meningitis, scarlet fever, strep throat, tuberculosis, gonorrhea, syphilis, chlamydia, toxic shock syndrome, Legionnaires’ disease, diphtheria, food poisoning, Lyme disease, anthrax
Fungi	Athlete’s foot, ringworm, histoplasmosis
Protozoa	Malaria, dysentery, cyclospora, giardiasis
Rickettsia	Typhus, Rocky Mountain spotted fever
Parasitic Worms	Abdominal pain, anemia, lymphatic vessel blockage, lowered antibody response, respiratory and circulatory complications
Prions	Creutzfeldt-Jakob disease (CJD) or bovine spongiform encephalopathy (mad cow disease), kuru
Yeasts	Candidiasis

For additional information on these or other diseases, visit the CDC Web site at [www.cdc.gov](http://www.cdc.gov).



pieces must be in place for the picture to be complete. If any one of these conditions is missing, an infection cannot occur.

Bloodborne pathogens, such as hepatitis B, hepatitis C and HIV, are spread primarily through direct or indirect contact with infected blood or other body fluids. While these diseases can be spread by sexual contact through infected body fluids, such as vaginal secretions and semen, these body fluids are not usually involved in occupational transmission. Hepatitis B, hepatitis C and HIV are not spread by food or water or by casual contact such as hugging or shaking hands. The highest risk of occupational transmission is unprotected direct or indirect contact with infected blood.

### Direct Contact

*Direct contact transmission* occurs when infected blood or body fluids from one person enters another person's body at a correct entry site. For example, direct contact transmission can occur through infected blood splashing in the eye or from directly touching the body fluids of an infected person and that infected blood or other body fluid enters the body through a correct entry site (Fig. 6-2).



### Indirect Contact

Some bloodborne pathogens are also transmitted by indirect contact (Fig. 6-3). *Indirect contact transmission* can occur when a person touches an object that contains the blood or other body fluid of an infected person and that infected blood or other body fluid enters the body through a correct entry site. These objects include soiled dressings, equipment and work surfaces that are contaminated with an infected person's blood or other body fluids. For example, indirect contact can occur when a person picks up blood-soaked bandages with a bare hand and the pathogens enter through a break in the skin on the hand.

### Droplet and Vector-Borne Transmission

Other pathogens, such as the flu virus, can enter the body through *droplet transmission*. This occurs when a person inhales droplets from an infected person's cough or sneeze (Fig. 6-4). *Vector-borne transmission* of diseases, such as malaria and West Nile virus, occurs when the body's skin is penetrated by an infectious



Fig. 6-5



source, such as an animal or insect bite or sting (Fig. 6-5).

### Risk of Transmission

Hepatitis B, hepatitis C and HIV share a common mode of transmission—direct or indirect contact with infected blood or body fluids—but they differ in the risk of transmission. Workers who have received the hepatitis B vaccine and have developed immunity to the virus are at vir-

tually no risk for infection by the hepatitis B virus. For an unvaccinated person, the risk for infection from hepatitis B-infected blood from a needlestick or cut exposure can be as high as 30 percent, depending on several factors. In contrast, the risk for infection from hepatitis C-infected blood after a needlestick or cut exposure is about 2 percent and the risk of infection from HIV-infected blood after a needlestick or cut exposure is less than 1 percent.

## PREVENTING THE SPREAD OF BLOODBORNE PATHOGENS

### OSHA Regulations

The federal Occupational Safety and Health Administration (OSHA) has issued regulations about on-the-job exposure to bloodborne pathogens. OSHA determined that employees are at risk when they are exposed to blood or other body fluids. OSHA therefore requires employers to reduce or remove hazards from the workplace that may place employees in contact with infectious materials.

OSHA regulations and guidelines apply to employees who may come into contact with blood or other body sub-

### Employers' Responsibilities

OSHA's regulations on bloodborne pathogens have placed specific responsibilities on employers for protection of employees that include—

- Identifying positions or tasks covered by the standard.
- Creating an exposure control plan to minimize the possibility of exposure and making the plan easily accessible to employees.
- Developing and putting into action a written schedule for cleaning and decontaminating the workplace.
- Creating a system for easy identification of soiled material and its proper disposal.
- Developing a system of annual training for all covered employees.
- Offering the opportunity for employees to get the hepatitis B vaccination at no cost to them.
- Establishing clear procedures to follow for reporting an exposure.
- Creating a system of recordkeeping.
- In workplaces where there is potential exposure to injuries from contaminated sharps, soliciting input from non-managerial employees with potential exposure regarding the identification, evaluation and selection of effective engineering and work-practice controls.
- If a needlestick injury occurs, recording the appropriate information in the sharps injury log, including—
  - Type and brand of device involved in the incident.
  - Location of the incident.
  - Description of the incident.
- Maintaining a sharps injury log in such a way that protects the privacy of employees.
- Ensuring confidentiality of employees' medical records and exposure incidents.

stances that could cause an infection. These regulations apply to lifeguards, as professional rescuers, because lifeguards are expected to provide emergency care as part of their job. OSHA has revised its regulations to include the requirements of the federal Needlestick Safety and Prevention Act. These guidelines can help lifeguards and their employer meet the OSHA bloodborne pathogens standard to prevent transmission of serious diseases. For more information about the OSHA Bloodborne Pathogens Standard 29 CFR 1910.1030, visit OSHA's Web site at [www.osha.gov](http://www.osha.gov).

### Exposure Control Plan

OSHA regulations require employers to have an exposure control plan. This is a written program outlining the protective measures that employers will take to eliminate or minimize employee exposure incidents. The exposure control plan should include exposure determination, methods for implementing other parts of the OSHA standard (e.g., ways of meeting the requirements and record-keeping) and procedures for evaluating details of an exposure incident. The exposure control plan guidelines should be made available to lifeguards and should specifically explain what they need to do to prevent the spread of infectious diseases.

### Universal, Standard and BSI Precautions

*Universal precautions* are OSHA-required practices of infection control to protect employees from exposure to blood and other potentially infectious materials. These precautions require that all human blood and certain substances be treated as if known to be infectious for hepatitis B, hepatitis C, HIV or other bloodborne pathogens. Other approaches to infection control are called *standard precautions* and *body substance isolation (BSI) precautions*. These precautions mean that the lifeguard should consider all body fluids and substances as infectious and precautions can be taken through the use of personal protective equipment, good hand hygiene, engineering controls, work practice controls, proper equipment cleaning and spill clean-up procedures.

### Personal Protective Equipment

Personal protective equipment that is appropriate for an individual's job duties should be available at any workplace and should be identified in the exposure control plan. Personal protective equipment includes all specialized clothing, equipment and supplies that prevent direct contact with infected materials. These include, but are not limited to, breathing barriers (Fig. 6-6), nonlatex disposable (single-use) gloves, gowns, masks, shields and protective eyewear (Table 6-2).



Fig. 6-6

Use nonlatex disposable gloves made of material such as nitrile or vinyl. Wear disposable gloves when providing care to injured or ill people, particularly if there is a risk of coming into contact with blood or body fluids. To remove gloves properly—

1. Partially remove the first glove.
  - Pinch the glove at the wrist, being careful to touch only the glove's outside surface (Fig. 6-7, A).
  - Pull the glove inside-out toward the fingertips without completely removing it (Fig. 6-7, B).
  - The glove is now partly inside out.
2. Remove the second glove.
  - With a partially gloved hand, pinch the outside surface of the second glove.
  - Pull the second glove toward the fingertips until it is inside out, and then remove it completely (Fig. 6-7, C).
3. Finish removing both gloves (Fig. 6-7, D).
  - Grasp both gloves with the free hand.
  - Touching only the clean interior surface of the partially removed glove, with the free hand pull the glove off completely.
4. After removing both gloves—
  - Discard the gloves in an appropriate container.
  - Wash hands thoroughly.

Breathing barriers include resuscitation masks, face shields and bag-valve-mask resuscitators (BVMs). Breathing barriers help protect rescuers against disease transmission when giving rescue breaths to a victim.

To prevent infection, follow these guidelines:

- Avoid contact with blood and other body fluids.
- Use breathing barriers, such as resuscitation masks, face shields and BVMs, when giving rescue breaths to a victim.
- Wear disposable gloves whenever providing care, particularly if there is a risk of coming into contact with blood or body fluids.

**TABLE 6-2 RECOMMENDED PROTECTIVE EQUIPMENT AGAINST HEPATITIS B, HEPATITIS C AND HIV TRANSMISSION IN PREHOSPITAL SETTINGS**

Task or Activity	Disposable Gloves	Gown	Mask	Protective Eyewear
Bleeding control with spurting blood	Yes	Yes	Yes	Yes
Bleeding control with minimal bleeding	Yes	No	No	No
Emergency childbirth	Yes	Yes	Yes	Yes
Oral/nasal suctioning; manually clearing airway	Yes	No	No, unless splashing is likely	No, unless splashing is likely
Handling and cleaning contaminated equipment and clothing	Yes	No, unless soiling is likely	No	No

U.S. Department of Health and Human Services, Public Health Services (1989, February). *A curriculum guide for public safety and emergency response workers: Prevention of transmission of acquired immunodeficiency virus and hepatitis B virus*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, with modifications from Nixon, Robert G. (2000). *Communicable diseases and infection control for EMS*. Upper Saddle River, New Jersey: Prentice Hall.

Fig. 6-7



- Use gloves that are appropriate to the task and provide an adequate barrier.
- Remove jewelry, including rings, before wearing disposable gloves.
- Keep any cuts, scrapes or sores covered before putting on protective clothing.
- Do not use disposable gloves that are discolored, torn or punctured.
- Do not clean or reuse disposable gloves.
- Avoid handling items such as pens, combs or radios when wearing soiled gloves.
- Change gloves before providing care to a different victim.
- In addition to gloves, wear protective coverings, such as a mask, eyewear and gown, whenever there is a likelihood of coming in contact with blood or other body fluids that may splash.
- Do not wear gloves and other personal protective equipment away from the workplace.
- Remove disposable gloves without contacting the soiled part of the gloves and dispose of them in a proper container.

### Hand Hygiene

Lifeguards should wash their hands before providing care, if possible, so that they do not pass pathogens to the victim. Wash hands frequently and every time after providing care (Fig. 6-8). Hand washing is an effective way to help prevent illness. By washing hands often, disease-causing germs that have been picked up from other people, animals or contaminated surfaces are washed away. In addition, jewelry, including rings, should not be worn where the potential for risk of exposure exists.

To ensure correct hand washing, follow these steps:

1. Wet hands with warm water.
2. Apply liquid soap to hands.
3. Rub hands vigorously for at least 15 seconds, covering all surfaces of the hands and fingers. Use soap and

warm running water. Scrub nails by rubbing them against the palms.

4. Rinse hands with water.
5. Dry hands thoroughly with a paper towel.
6. Turn off the faucet using the paper towel.

Alcohol-based hand sanitizers and lotions allow hands to be cleansed when soap and water are not readily available. In addition to washing hands frequently, keep fingernails less than ¼-inch long and avoid wearing artificial nails.

### Engineering Controls and Work Practice Controls

*Engineering controls* are control measures that isolate or remove a hazard from the workplace. In other words, engineering controls are **the things used** in the workplace to help reduce the risk of an exposure incident. Examples of engineering controls include—

- Sharps disposal containers (Fig. 6-9).
- Self-sheathing needles.
- Safer medical devices, such as sharps with engineered injury protections or needleless systems.
- Biohazard bags and labels.
- Personal protective equipment.

*Work practice controls* reduce the likelihood of exposure by changing the way a task is carried out. These are **the things done** to help reduce the risk of an exposure incident. Examples of work practice controls include—

- Placing sharp items (e.g., needles, scalpel blades) in puncture-resistant, leak-proof and labeled containers and having the containers at the point of use.
- Avoiding splashing, spraying and splattering droplets of blood or other potentially infectious materials when performing all procedures.
- Removing and disposing of soiled protective clothing as soon as possible.



Fig. 6-8



Fig. 6-9

- Cleaning and disinfecting all equipment and work surfaces possibly soiled by blood or other body fluids.
- Washing hands thoroughly with soap and warm water immediately after providing care, using a utility or restroom sink (not one in a food preparation area).
- Not eating, drinking, smoking, applying cosmetics or lip balm, handling contact lenses or touching the eyes, mouth or nose when in an area where exposure to infectious materials is possible.
- Using alcohol-based sanitizers or lotions where hand-washing facilities are not available.
- If the spill is mixed with sharp objects, such as broken glass and needles, do not pick these up with the hands. Use tongs, a broom and dustpan or two pieces of cardboard.

Be aware of any areas, equipment or containers that may be contaminated. Biohazard warning labels are required on any container holding contaminated materials, such as used gloves, bandages or trauma dressings. Signs should be posted at entrances to work areas where infectious materials may be present.

### Equipment Cleaning and Spill Clean-Up

After providing care, always clean and disinfect the equipment and surfaces that were used (Fig. 6-10). Handle all soiled equipment, supplies and other materials with care until they are properly cleaned and disinfected. Place all used disposable items in labeled containers. Place all soiled clothing in marked plastic bags for disposal or washing (Fig. 6-11). Take the following steps to clean up spills:

- Wear disposable gloves and other personal protective equipment when cleaning up spills.
- Clean up spills immediately or as soon as possible after the spill occurs.

Fig. 6-10



Fig. 6-11



## The Needlestick Safety and Prevention Act

Blood and other potentially infectious materials have long been recognized as potential threats to the health of employees who are exposed to these materials through penetration of the skin. Injuries from contaminated needles and other sharps have been associated with an increased risk of disease from more than 20 infectious agents. The most serious pathogens are hepatitis B, hepatitis C and HIV. Needlesticks and other sharps injuries resulting in exposure to blood or other potentially infectious materials are a concern because they happen frequently and can have serious health effects.

In 2001, in response to the federal Needlestick Safety and Prevention Act, OSHA revised the Bloodborne Pathogens Standard 29 CFR 1910.1030. The revised standard clarifies the need for employers to select safer needle devices and to involve employees in identifying and choosing these devices. The updated standard also requires employers to maintain a log of injuries from contaminated sharps.

For information on the Needlestick Safety and Prevention Act, visit OSHA's Web site at [www.osha.gov](http://www.osha.gov).

- Dispose of the absorbent material used to collect the spill in a labeled biohazard container.
- Flood the area with a fresh disinfectant solution of approximately 1½ cups of liquid chlorine bleach to 1 gallon of water (1 part bleach per 10 parts water), and allow it to stand for at least 10 minutes.
- Use appropriate material to absorb the solution, and dispose of it in a labeled biohazard container.
- Scrub soiled boots, leather shoes and other leather goods, such as belts, with soap, a brush and hot water. If a uniform is worn to work, wash and dry it according to the manufacturer's instructions.

## IF EXPOSED TO INFECTIOUS MATERIAL

Exposure incidents involve contact with blood or other potentially infectious materials through a needlestick, broken or scraped skin or the mucous membranes of the eyes, mouth or nose. Take these steps immediately:

- Wash needlestick injuries, cuts and exposed skin with soap and warm running water.
- Flush splashes of blood or other potentially infectious materials to the mouth and nose with water.
- Irrigate eyes with clean water, saline or sterile irrigants.

Take the following steps after any exposure incident:

- Report the exposure incident, or have someone else report the incident, to a supervisor immediately. Immediately reporting an exposure incident can be critical to the success of post-exposure treatment.
- Write down what happened.
- Get immediate medical attention. Follow the steps in the exposure control plan for confidential medical evaluation, and follow up with a health-care professional.

## GENERAL PROCEDURES FOR INJURY OR SUDDEN ILLNESS ON LAND

When someone suddenly becomes injured or ill, activate the facility's emergency action plan (EAP). Use appropriate first aid equipment and supplies and follow these general procedures:

### 1. Size up the scene.

- Determine if the scene is safe for lifeguards, other rescuers, the victim(s) and any bystanders.
  - Look for dangers, such as traffic, unstable structures, downed power lines, swift-moving water, violence, explosions or toxic gas exposure.
- Put on the appropriate personal protective equipment.

## Call First or Care First?

If alone when responding to someone who is ill, decide whether to *Call First* or *Care First*.

*Call First* means to summon emergency medical services (EMS) personnel before providing care. Always *Call First* if a cardiac emergency is suspected—a situation in which time is critical. Examples include sudden cardiac arrest or a witnessed sudden collapse of a child. Next, obtain an automated external defibrillator (AED), if available, and then return to the victim to use the AED or begin cardiopulmonary resuscitation (CPR) if an AED is not available. Also, *Call First* for—

- An unconscious adult (12 years or older).
- An unconscious child or infant known to be at high risk for heart problems.

*Care First* situations are likely to be related to breathing emergencies rather than cardiac emergencies. In these situations, provide support for airway, breathing and circulation (ABCs) through rescue breaths and chest compressions, as appropriate. *Care First*, that is, provide 2 minutes of care, and then summon EMS personnel for—

- An unconscious infant or child (younger than 12 years old).
- Any victim of a drowning or nonfatal submersion.
- Any victim who has suffered cardiac arrest associated with trauma.
- Any victim who has taken a drug overdose.

- Determine the mechanism of injury or the nature of the illness. Try to find out what happened and what caused the injury or illness.
  - Determine the number of victims.
  - Determine what additional help may be needed.
- 2. Perform an initial assessment.** This is done to identify any life-threatening conditions.
- Check the victim for consciousness and obtain consent if the victim is conscious.
  - Check for signs of life (movement and breathing).
  - Check for a pulse.
  - Check for severe bleeding.
- 3. Summon emergency medical services (EMS) personnel.** Summon EMS personnel by calling 9-1-1 or the local emergency number if any of the following conditions are found:
- Unconsciousness or disorientation
  - Breathing problems (difficulty breathing or no breathing)
  - Chest discomfort, pain or pressure lasting more than 3 to 5 minutes or that goes away and comes back
  - No pulse
  - Severe bleeding
  - Persistent abdominal pain or pressure
  - Suspected head, neck or back injuries
  - Severe allergic reactions
  - Stroke (weakness on one side of the face, weakness or numbness in one arm, slurred speech or trouble getting words out)
  - Seizures that occur in the water
  - Seizures that last more than 5 minutes or cause injury
  - Repeated seizures (one after another)
  - Seizures involving a victim who is pregnant, diabetic or who does not regain consciousness
  - Vomiting blood or passing blood
  - Severe (critical) burns
  - Suspected broken bones
  - Suspected poisoning
  - Sudden severe headache
- 4. Perform a secondary assessment.** Perform a secondary assessment to identify additional conditions. A lifeguard should perform a secondary assessment only if he or she is sure that the victim does not have any life-threatening conditions. The secondary assessment is a method of gathering additional information about injuries or conditions that may need care. These injuries or conditions may not be life threatening, but could become so if not cared for. See Chapter 9 for more information on performing a secondary assessment.

## Obtaining Consent

Before providing care to a conscious victim, obtain his or her consent. If the victim is a minor, get consent from a parent or guardian. To get consent, lifeguards should—

- State their name.
- Tell the victim they are trained to help.
- Ask the victim if they may help.
- Explain what may be wrong.
- Explain what they plan to do.

When the victim gives consent, provide care. If the victim does not give consent, do not provide care, but summon EMS personnel. A victim who is unconscious, confused or seriously ill may not be able to give consent. Consent is then implied. Implied consent also applies to a minor whose parents or guardians are not present. This means that the victim would agree to the care if he or she could, so the lifeguard should provide care. Refer to Chapter 1, page 6 for more information on legal considerations.

**LIFEGUARDING TIP: Remember to document any refusal of care by the victim(s). If a witness is available, have him or her listen to, and document in writing, any refusal of care.**

## Initial Assessment

During the initial assessment, check the victim for consciousness, signs of life (movement and breathing), a pulse and severe bleeding. Then provide care based on the conditions found. To conduct an initial assessment—

- 1.** Tap the victim's shoulder and shout, "Are you okay?" (**Fig. 6-12, A**).
  - For an infant, gently tap the shoulder or flick the foot (**Fig. 6-12, B**).
- 2.** If no response, summon EMS personnel.
- 3.** Check for signs of life (movement and normal breathing) (**Fig. 6-12, C**).
  - If the victim is face-down, roll the victim onto his or her back, while supporting the head and neck (**Fig. 6-12, D**).
  - Tilt the head back and lift the chin to open the airway.
    - Do not tilt a child or infant's head back as far as an adult's. Tilt an infant's head to the neutral position and a child's head slightly past the neutral position.
    - If a head, neck or back injury is suspected, try the jaw-thrust maneuver to open the airway (see p. 109-110).

Fig. 6-12



- Look for movement and look, listen and feel for normal breathing for no more than 10 seconds.
  - Irregular, gasping or shallow breathing is not normal breathing.
- 4. If there is no movement or breathing, give 2 rescue breaths (**Fig. 6-12, E**).
  - Assemble and position the resuscitation mask.
    - Use a pediatric resuscitation mask for a child or infant, if available.
  - Tilt the head back and lift the chin to open the airway.
  - Each rescue breath should last about 1 second and make the chest clearly rise.
- 5. If the chest clearly rises, check for a pulse for no more than 10 seconds.
  - For a hypothermia victim, check for a pulse for up to 30 to 45 seconds.
  - **Adult and child:** Feel for a pulse at the carotid artery. With one hand on the victim's forehead, the lifeguard should take his or her other hand and place 2 fingers on the front of the neck. Then, slide the fingers down into the groove at the side of the neck (**Fig. 6-12, F**).
  - **Infant:** With one hand on the infant's forehead, use the other hand to find the brachial pulse on the inside of the upper arm, between the infant's elbow and shoulder (**Fig. 6-12, G**).
- 6. Quickly scan the victim for severe bleeding (**Fig. 6-12, H**).
- 7. Care for the conditions found.
  - If there is movement, breathing and a pulse—
    - Place the victim in a recovery position (or a modified H.A.IN.E.S. [High Arm in Endangered Spine] recovery position if spinal injury is suspected) and continue to monitor the airway, breathing and circulation (ABCs). For an infant, maintain an open airway and continue to monitor the infant's ABCs.
    - Administer emergency oxygen, if available and trained to do so.
  - If the first 2 rescue breaths do not make the chest clearly rise, provide care for an unconscious choking victim (see Chapter 7).
  - If there is a pulse, but no movement or breathing, perform rescue breathing (see Chapter 7).
  - If there is no movement, breathing or pulse, perform cardiopulmonary resuscitation (CPR) (see Chapter 8).
  - If there is severe bleeding, follow the steps for providing care for a major wound (see Chapter 9).

### Recovery Position

If, during the initial assessment, the lifeguard is alone and must leave the victim to summon EMS personnel or finds the victim is moving, breathing and has a pulse but is unconscious, the lifeguard should place the victim in a re-



covery position if a head, neck or back injury is not suspected. This position is used to maintain an open airway for a breathing victim with a decreased level of consciousness (**Fig. 6-13**). To place the victim in a recovery position, the lifeguard should—

1. Kneel at the victim's side.
2. Take the victim's arm farthest away and move it up next to the victim's head and take the victim's other arm and cross it over the chest.
3. Grasp the closest leg and bend it up.
4. Hold the victim's shoulder and hip and gently roll the victim's body as a unit away from the lifeguard, keeping the head, neck and back in a straight line.
5. Carefully angle the victim's head toward the ground, allowing any fluids to drain away from the victim's throat.

Monitor the victim's ABCs. Roll the victim to the opposite side every 30 minutes or if the victim's skin on the lower arm becomes pale, ashen or grayish or is cool to the touch.

### Modified H.A.IN.E.S. Recovery Position

If a head, neck or back injury is suspected and a clear, open airway can be maintained, do not move the victim unnecessarily. If the victim must be left to get help, or if a clear airway cannot be maintained, the lifeguard should move the victim to his or her side while keeping the head, neck and back in a straight line by placing the victim in a modified H.A.IN.E.S. recovery position (**Fig. 6-14**). To place a victim in the modified H.A.IN.E.S. recovery position, the lifeguard should—

1. Kneel at the victim's side.
2. Reach across the victim's body and lift the far arm up next to the victim's head with the victim's palm facing up.
3. Then take the victim's nearest arm and place it next to the victim's side.
4. Grasp the victim's leg furthest away and bend it up.
5. Using the lifeguard's hand nearest the victim's head, cup the base of the victim's skull in the palm of the hand

Fig. 6-14



and carefully slide a forearm under the victim's near shoulder. Do not lift or push the victim's head or neck.

6. Place his or her other hand under the victim's closest arm and hip.
7. With a smooth motion, the lifeguard should roll the victim away from him or herself by lifting with his or her hand and forearm. The victim's head must remain in contact with the victim's extended arm. The lifeguard should be sure to support the head and neck with his or her hand.
8. Stop all movement when the victim is on his or her side.
9. Bend the victim's closest knee and place it on top of the victim's other knee. Make sure the victim's arm on top is in line with the upper body.
10. Monitor the victim's ABCs and care for the conditions found.

## EMERGENCY MOVES

For emergencies that occur in the water, the victim must be removed from the water for care to be provided. For emergencies on land, lifeguards care for the victim where he or she is found. Do not move the victim unless it is necessary. Moving a victim needlessly can lead to further pain and injury. Move an injured victim on land only if—

- The scene is unsafe or becoming unsafe (e.g., fire, risk of explosion, a hazardous chemical leak or collapsing structure).
- Another victim must be reached who may have a more serious injury or illness.
- To provide proper care (e.g., someone has collapsed on a stairway and needs CPR, which must be performed on a firm, flat surface).

The lifeguard's safety is of the utmost importance. However, if leaving a scene to ensure personal safety, the lifeguard should attempt to move the victim to safety as

## One Age Does Not Fit All

Lifeguards may have to provide care to adults, children and infants. When responding to life-threatening emergencies, the specific care a lifeguard provides may be different depending upon the victim's age. For the purpose of the skills presented in this manual, an adult is considered anyone 12 years old or older. A child is considered anyone between 1 and about 12 years old and an infant is anyone under 1 year old. These age categories are used because the recommendations for care differ according to the victim's age and the cause of the emergency.

These age ranges change when operating an AED. For the purpose of operating an AED, a child is considered anyone 1 to 8 years old (or less than 55 pounds) and an adult is considered anyone 9 years old and older.

well. When moving a victim, a lifeguard should consider the following:

- The victim's height and weight
- Physical strength of the lifeguard
- Obstacles, such as stairs and narrow passages
- Distance to be moved
- Whether others are available to assist
- The victim's condition
- Whether aids to transport the victim are readily available

To improve the chances of successfully moving an injured or ill victim without the lifeguard injuring him or herself or the victim—

- Use the legs, not the back, when bending.
- Bend at the knees and hips and avoid twisting the body.
- Walk forward when possible, taking small steps and watching where walking.
- Avoid twisting or bending anyone with a possible head, neck or back injury.
- Do not move a victim who is too large to move comfortably.

There are several ways to move a victim from an unsafe scene or to provide proper care. Use any of the following techniques if it is necessary to move a victim.

## Clothes Drag

To move a clothed victim who may have a head, neck or back injury, the lifeguard should—

1. Stand behind the victim's head and gather the victim's clothing behind the victim's neck (Fig. 6-15).
2. Pull the victim to safety, cradling the victim's head with the victim's clothes and the lifeguard's hands.

## Two-Person Seat Carry

To carry a conscious victim who cannot walk and has no suspected head, neck or back injury, the lifeguard should—

1. Ask for help from another lifeguard or bystander.
2. Put one arm under the victim's thighs and the other across the victim's back.
3. Interlock his or her arms with those of a second rescuer under the victim's legs and across the victim's back (Fig. 6-16).
4. Carry the victim to safety.

## Walking Assist

To help a victim who needs assistance walking to safety, the lifeguard should—

1. Stand at one side of the victim and place the victim's arm across the lifeguard's shoulders and hold onto the victim's forearm.
2. Support the victim's waist with the lifeguard's other hand (Fig. 6-17).

3. Walk the victim to safety. (If the victim begins to fall, this approach will give more control.)

## Pack-Strap Carry

The pack-strap carry can be used with conscious and unconscious victims. Using it with an unconscious victim requires a second lifeguard to help position the injured or ill victim on another lifeguard's back.

To move either a conscious or unconscious victim with no suspected head, neck or back injury, the lifeguard should—

1. Have the victim stand or have a second lifeguard support the victim.
2. Position him or herself with his or her back to the victim. The lifeguard should keep his or her back straight and knees bent so that his or her shoulders fit into the victim's armpits.
3. Cross the victim's arms in front of him or herself and grasp the victim's wrists.
4. Lean forward slightly and pull the victim up and onto his or her back.
5. Stand up and walk to safety (Fig. 6-18). Depending on the size of the victim, the lifeguard may be able to hold both of the victim's wrists with one hand, leaving the other hand free to help maintain balance, open doors and remove obstructions.

Fig. 6-15



Fig. 6-16



Fig. 6-17



Fig. 6-18





### Blanket Drag

To move an unconscious victim in an emergency situation when equipment is limited, the lifeguard should—

1. Keep the victim between him or herself and the blanket.
2. Gather half of the blanket and place it against the victim's side.
3. Roll the victim as a unit toward him or herself.
4. Reach over and place the blanket so that it will be positioned under the victim.
5. Roll the victim onto the blanket.
6. Gather the blanket at the head and drag the victim (Fig. 6-19).



### Foot Drag

To move a victim too large to carry or move otherwise, the lifeguard should—

1. Stand at the victim's feet and firmly grasp the victim's ankles and move backward (Fig. 6-20).
2. Pull the victim in a straight line, being careful not to bump the victim's head.

## PUTTING IT ALL TOGETHER

As professional rescuers, lifeguards are an important link in the EMS system and have a duty to act and to meet professional standards. Lifeguards should follow the general procedures for injury or sudden illness on land: size up the scene, perform an initial assessment, summon EMS personnel by calling 9-1-1 or the local emergency number, and, after caring for any life-threatening injuries, perform a secondary assessment. Lifeguards should use standard precautions to protect themselves against disease transmission. Recognizing and caring for emergencies are among the most important skills lifeguards will learn.