



Unit V – Wellness, Fitness and First Aid

Chapter 10 - First Aid for Emergency and Nonemergency Situations

Section 1 – First Aid and Life-Saving



What You Will Learn to Do

Determine first aid procedures and apply them as needed



Objectives

1. Assess first aid situations
2. Demonstrate life-saving skills in emergencies



Key Terms

- First Aid -** The immediate care given to a victim of injury or sudden illness before professional medical help arrives
- Good Samaritan Law -** A law enacted in most states that protects people from lawsuits if medical complications arise after they have administered first aid correctly
- Evaluate** To determine if an act, process, or method has been attained; assess; to determine the significance by careful appraisal and study



Key Terms

Consent -

Approval for what has to be done or proposed by another

Heimlich Maneuver -

An upward push to the abdomen given to clear the airway of a person with a complete airway obstruction; procedure used to expel an object lodged in the airway of a choking victim

Rescue Breathing -

The act of forcing air into and out of the lungs of a person by another person



Introduction

At some point in their lives, most people encounter at least one situation requiring the use of **first aid**.

It could be when a friend falls and breaks an arm, or your brother cuts himself and requires stitches... someone should administer first aid until proper medical attention can be given.

You could be that someone if you acquire basic first aid knowledge of do's and don'ts in different emergency situations.





Introduction

Practice is especially important with **cardiopulmonary resuscitation (CPR)** and **mouth-to-mouth resuscitation**. Both could can be harmful if performed improperly.

CPR



Mouth-to-Mouth





The Need for First Aid / Your Response

First Aid defined:

The immediate care given to an injured or ill individual to keep him or her alive or stop further damage until qualified medical treatment can be administered.





The Need for First Aid / Your Response

First aid involves caring for people involved in **accidents**, **catastrophes** and **natural disasters** such as hurricanes, tornadoes and earthquakes.

It also includes dealing with the:

- Situation
- Person
- Injury





The Need for First Aid / Your Response



The **Good Samaritan Law** is designed to protect rescuers, and to encourage people to assist others in distress by granting the rescuers immunity against lawsuits.

The law protects a rescuer from lawsuits as long as the rescuer acts in good faith, without compensation, and administers the first aid correctly.



First Aid Kit



Administering first aid is easier with a first aid kit.

It's a good idea to keep one in your house and car. Be sure to take one along on camping trips and hikes.



First Aid Kit

A well-stocked first aid kit should contain

- Bandages and band-aids
- Tape
- Aspirin/aspirin substitutes
- Antiseptic cream, cleanser
- Safety pins
- Scissors
- Tweezers
- Cotton
- Tissues





First Aid Kit

These provide extra protection against infectious diseases:



Rubber gloves keep you from coming into contact with blood and bodily fluids.

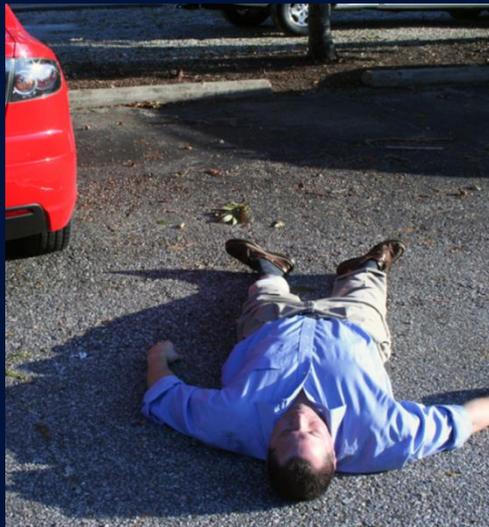


Face shields allow you to give mouth-to-mouth resuscitation and CPR without direct contact with the victim.



Evaluating the Victim

When you encounter an injured person, you must **evaluate** that person to determine what kind of first aid, if any, is needed.



This preliminary check follows a series of steps designed to pinpoint and correct the **most serious health risks first...** then continue with less life-threatening problems.



Evaluating the Victim



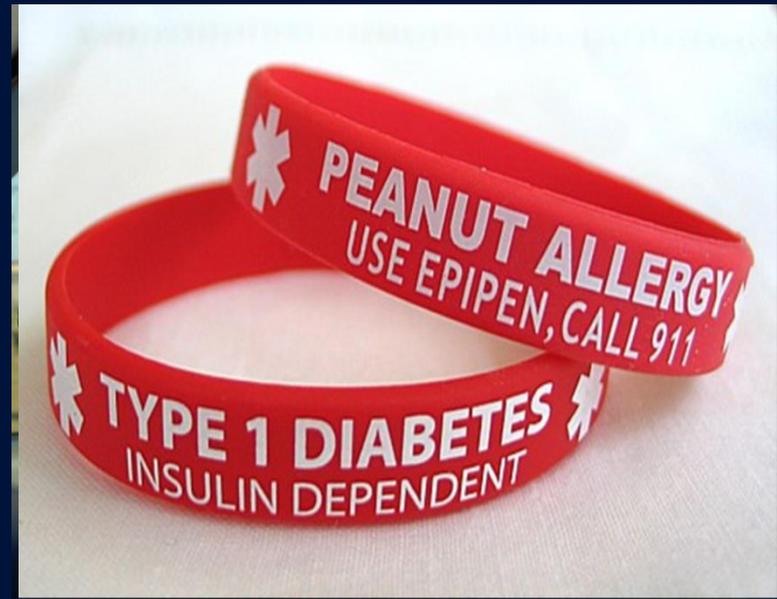
When evaluating a **conscious** victim:

1. Ask him/her if you can help
2. Get **consent** to provide first aid
3. Get as much information as possible about the situation and how the victim feels



Evaluating the Victim

When evaluating an **unconscious victim**, get as much information as possible from any available witnesses to the accident.



Check the victim for **medical alert identification** that can give you a clue to any medical conditions they may have.



Evaluating the Victim

Have someone at the scene dial **911** for emergency medical service (EMS). If you are alone and the victim's condition is life-threatening, **give first aid first**, then call 911.

On reaching 911, calmly **state the following**:

- Your name, location and telephone number
- Details of what happened
- Condition of victim or victims

A 911 dispatcher will route your call to the appropriate service (EMS, police/fire departments, all if needed).



Evaluating the Victim

Other important rules to follow at the scene of an accident:

- **Remain calm, but act quickly.** This will reassure the victim and help keep him/her calm too.
- **Do not move an injured person.** The exception is when there is potential danger at the accident site. If you must move him/her, pull by the shoulders in a straight line.
- If there is more than one victim, evaluate all quickly and **help the most seriously injured first.**





Life-Saving Steps

STEP ONE: Check to see if the victim is conscious.



- a) Ask “are you okay?”
- b) Tap victim on shoulder and watch for response
- c) If no response, go to **STEP TWO**.
- d) If victim conscious, ask “where do you hurt?” and go to **STEP THREE**.
- e) If victim conscious but choking, begin treatment for clearing airway.



Life-Saving Steps

STEP TWO: Check for breathing and heartbeat.



- a) Look for rise and fall of victim's chest.
- b) Listen and feel for breathing.
- c) Check for a pulse in victim's neck.
- d) If there is a pulse but no breathing, begin treatment to restore breathing.
- e) If there is no pulse, begin CPR.



Life-Saving Steps

STEP THREE: Check for bleeding.



- a) Look for spurts of blood and blood-soaked clothing.
- b) Look for entry and exit wounds.
- c) If bleeding is present, begin treatment for stopping the bleeding.



Life-Saving Steps

STEP FOUR: Check for the following signs of shock. If any of these signs are present, discontinue the evaluation and treat for shock.



- a) Sweaty but cool skin
- b) Paleness
- c) Restlessness or nervousness
- d) Thirst
- e) Loss of blood
- f) Confusion
- g) Faster than normal breathing rate
- h) Blotchy or bluish skin
- i) Vomiting or nausea



Life-Saving Steps

STEP FIVE: Check for fractures (broken bones):

- a) Check for the following signs of neck or back injury:
 - Pain or tenderness of neck or back
 - Wounds of neck or back
 - Paralysis
- b) Ask the victim if he/she can move
- c) Touch the victim's arms and legs and ask if he/she can feel it





Life-Saving Steps

STEP FIVE: Check for fractures (broken bones):

d) If you suspect a neck or back injury, immobilize the victim by doing the following:

- Tell victim not to move
- For a suspected back injury, place padding under the natural arch of the lower back.
- For a suspected neck injury, place padding under victim's neck and place objects such as rocks or shoes on both sides of head.





Life-Saving Steps

STEP FIVE: Check for fractures (broken bones):

- e) Check the victim's arms or legs for fractures or broken bones, which are:
- Swelling
 - Discoloration
 - Unusual angle or position of arm or leg
 - Bones sticking through skin

If you suspect a fracture, stop the evaluation and begin treatment for fractures.



Life-Saving Steps

STEP SIX: Check for burns.

If you find burns, cover them with a clean dry cloth.





Life-Saving Steps

STEP SEVEN: Check for head injury. Look for the following:

- a) Fluid from ear(s), nose, or mouth or wounds to head or face
- b) Slurred speech
- c) Confusion
- d) Sleepiness
- e) Loss of memory or consciousness
- f) Staggering when walking
- g) Headache
- h) Dizziness
- i) Vomiting
- j) Paralysis
- k) Convulsion or twitching



If a head injury is suspected, keep the person awake and watch for shock or breathing distress.



Life-Saving Steps

Often calling for professional medical help is the most important thing you can do in an emergency situation.

In many communities, calling **911** will connect you to your local police or sheriff's department for help. Follow these steps when calling for help...





Calling 911

- Speak slowly and clearly.
- Identify yourself and the phone number from which you are calling.
- Give exact location of the accident including town, street name and number. Describe the building if it's at night.
- Describe what's happened, giving essential details about victims, situation and any treatments you've given
- Let the person on the other end ask you questions and tell you what to do until help arrives.
- Don't hang up first. The technician will probably have more questions and may ask you to stay on the line until help arrives.



When to Call 911

You should call for an ambulance or emergency assistance if the victim:

- Is or becomes unconscious
- Has trouble breathing
- Has persistent chest pain/pressure
- Is vomiting
- Has seizures, slurred speech or persistent severe headache
- Appears to have been poisoned
- Has injuries to head, neck or back
- Has possible broken bones

You should also call if there is:

- A fire or explosion
- A downed electrical wire
- Swiftly moving or rapidly rising water
- Poisonous gas present
- A vehicle collision



First Life-Saving Steps

During an emergency situation, use the ABC steps:

A = Airway

Is the victim's airway blocked? If so, clear the airway.

B = Breathing

Is the victim breathing? If not, restore breathing.

C = Circulation

Is the victim's heart beating? If not, restore the heartbeat.



Clearing the Airway of a Conscious Victim

Choking occurs when a person inhales something into the airway leading to the lungs, blocking off the airway and preventing breathing.



If **completely blocked**, he/she will be unable to make any sounds because no air is getting to the vocal cords. But if the person **can speak or cough**, you should try to let him/her clear the airway on their own.



Clearing the Airway of a Conscious Victim

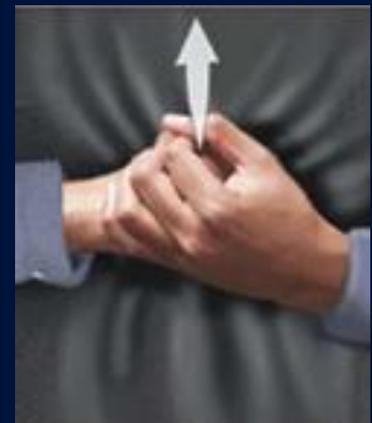


If the person can make no sound and indicates choking by grabbing the throat, the best method for clearing the airway is the **Heimlich maneuver**.



Heimlich Maneuver Steps

1. Stand behind the victim and wrap your arms around the victim's waist.
2. Make a fist with one hand, place the thumb side of the fist against the victim's abdomen slightly above the navel, well below the breastbone. Grasp the fist with other hand.
3. Give 6-10 quick backward and upward thrusts, repeating until the airway is clear. **Don't slap the victim's back**, which could make matters worse.





Heimlich Maneuver

For exceptionally overweight victims or pregnant women, use the same procedure, except place the fist in the middle of the breastbone.

If you are alone and choking, you can perform the maneuver on yourself.

Lean forward over a railing, sink, or the back of a chair, and thrust yourself down until you dislodge the obstruction.





Clearing the Airway of an Unconscious Victim

Verify that the victim is both **unconscious** and has an **obstructed airway**. Then, with the victim lying on his back:



1. Kneel astride the victim's thighs. Place the heel of one hand against the victim's abdomen, slightly above the navel, but well below the breastbone, with your fingers pointing toward the victim's head.



Clearing the Airway of an Unconscious Victim

Verify that the victim is both **unconscious** and has an **obstructed airway**. Then, with the victim lying on his back:



2. Place your other hand on top of your first hand, and press into the abdomen with a quick forward and upward thrust. Repeat this 6 to 10 times.



Clearing the Airway of an Unconscious Victim



3. Open the victim's mouth and sweep out any foreign matter using a hooked finger. Be careful not to push anything down the throat.

The procedure is different for an obese individual or pregnant woman....



Clearing the Airway of an **Obese** or **Pregnant** Unconscious Victim

1. Kneel to the side of the victim's body. Locate the lower edge of the victim's ribs and run the fingers up along the rib cage to the notch where ribs meet breastbone.
2. Place heel of the hand two finger widths above the notch and place the other hand over the first, interlocking fingers.





Clearing the Airway of an **Obese** or **Pregnant** Unconscious Victim

3. Position your shoulders over your hands with elbows locked. Press down 1 ½ to 2 inches, 6-10 times.
4. Open the victim's mouth and sweep out any foreign matter using a hooked finger, careful not to push it down the throat.



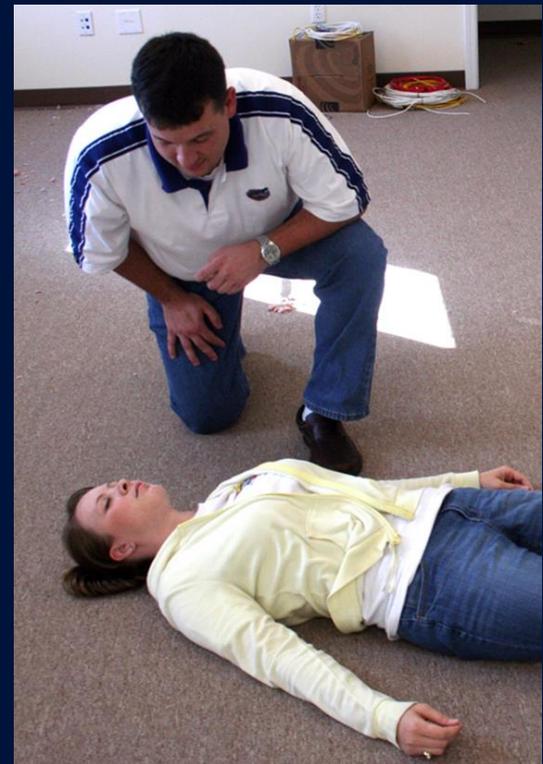


Restoring the Breathing

If you discover a victim who is not breathing, it is necessary to start breathing for the victim by forcing oxygen into his/her lungs as soon as possible.

This is called **rescue breathing**, or **mouth-to-mouth resuscitation**.

It's important in preventing brain damage and death.





Administering Rescue Breathing

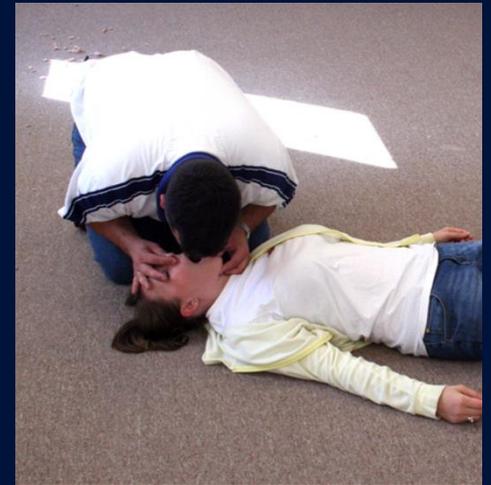
The following steps should be followed to administer **rescue breathing** to adults.

Procedures that are different for infants and small children...those procedures will follow.



Administering Rescue Breathing to Adults

1. Roll the victim gently over if he/she is not already facing up. Using a hooked finger, sweep out anything in the mouth, being careful not to push anything down the throat.
2. Tilt the victim's head back sharply by pressing down on the forehead and lifting on the jaw. This straightens the passageway to the victim's lungs.





Administering Rescue Breathing to **Adults**

3. Keeping the victim's head back, pinch the nose closed. Then cover the victim's mouth with your mouth, and give two full breaths lasting 1 to 1 ½ seconds. Pause between breaths to let the air come out of the victim and to breathe in yourself.





Administering Rescue Breathing to **Adults**

4. A - If the victim's chest does not rise when you breathe into the lungs, reposition the head slightly and further back and repeat the breaths.

B - If the victim's chest still does not rise after the above step, perform abdominal thrusts to clear the airway, then repeat breaths.





Administering Rescue Breathing to **Adults**

5. After the two breaths, listen and feel for breathing by placing your cheek close to the victim's mouth. At the same time, check the victim's pulse by placing two fingers in the groove of the neck on the carotid artery, next to the Adam's apple.





Administering Rescue Breathing to **Adults**

6. If there is no pulse, start CPR immediately.
7. If there is a pulse but no breathing, continue rescue breathing at the rate of one breath every five seconds (12 times/minute).





Administering Rescue Breathing to **Adults**

8. If the victim starts, stop the rescue breathing and let victim breathe on his/her own. Check for and treat other injuries. Observe the victim closely until medical help arrives.





Administering Rescue Breathing to **Young Children and Infants**

1. Roll the victim gently over if he/she is not already facing up. Using a hooked finger, sweep out anything in the mouth, being careful not to push anything down the throat.
2. Instead of tilting the head back, *place a finger under the chin and lift it slightly*. This straightens the passageway to the victim's lungs.
3. Keeping the victim's head back, *instead of pinching the nose closed, cover both mouth and nose with your mouth and give small, slow, gentle breaths, each lasting 1 to 1 ½ seconds*. Pause between breaths to let the air come out of the victim and to breathe in yourself.





Administering Rescue Breathing to **Young Children and Infants**

3. A - If the victim's chest does not rise when you breathe into the lungs, reposition the head slightly and further back and repeat the breaths.

B - If the victim's chest still does not rise after the above step, perform abdominal thrusts to clear the airway, then repeat breaths.

4. After the two breaths, listen and feel for breathing by placing your cheek close to the victim's mouth. At the same time, check the victim's pulse by placing two fingers in the groove of the neck on the carotid artery, next to the Adam's apple.





Administering Rescue Breathing to **Young Children and Infants**

5. If there is no pulse, start CPR immediately.
6. If there is a pulse but no breathing, continue rescue breathing at the rate of *one slow breath every three seconds*.
7. If the victim starts breathing, stop the rescue breathing and let victim breathe on his/her own. Check for and treat other injuries. Observe the victim closely until medical help arrives.





Questions?

