

# CURRICULUM

## Introduction to First Aid Wounds

- Abrasion
- Incision
- Laceration
- Puncture
- Avulsion

## Shock

## Burns

- First Degree
- Second Degree
- Third Degree
- Chemical
- Electrical

## Heat Injuries

- Heat Stroke
- Heat Exhaustion

## Hypothermia

## Frost Bite

## Head Injury

## Seizures

## Imbedded Object Eye, Ear, or Nose

## Removal of Splinter

## Nosebleed

## Poisoning

## Blisters

## Insect Stings

## Tick Bite

## Poisonous Plants/Oak, Ivy, Sumac

## Human/Animal Bite

## Strain

## Sprain

## Fracture

## Dislocation

## Choking

## INTRODUCTION TO FIRST AID

First Aid is the immediate care given to a person who has been injured or suddenly becomes ill. First aid knowledge and skill can mean the difference between life and death, temporary and permanent disability, rapid recovery and long hospitalization.

### First Aid Priorities:

1. Effect a rescue (from water, fire, etc.).
2. Control severe bleeding.
3. Ensure airway and give CPR as necessary.
4. Treat poisoning or ingestion of harmful chemicals.
5. Call 911 if life threatening situation occurs.

### After the situation is under control:

1. Notify legal representative or supervisor.
2. Complete an "Accident or Incident Report".

## WOUNDS

**ABRASION** - the outer layers of protective skin are damaged, usually results when skin is scraped against a hard surface. Bleeding is limited. Danger of contamination and infection exists.

### First Aid:

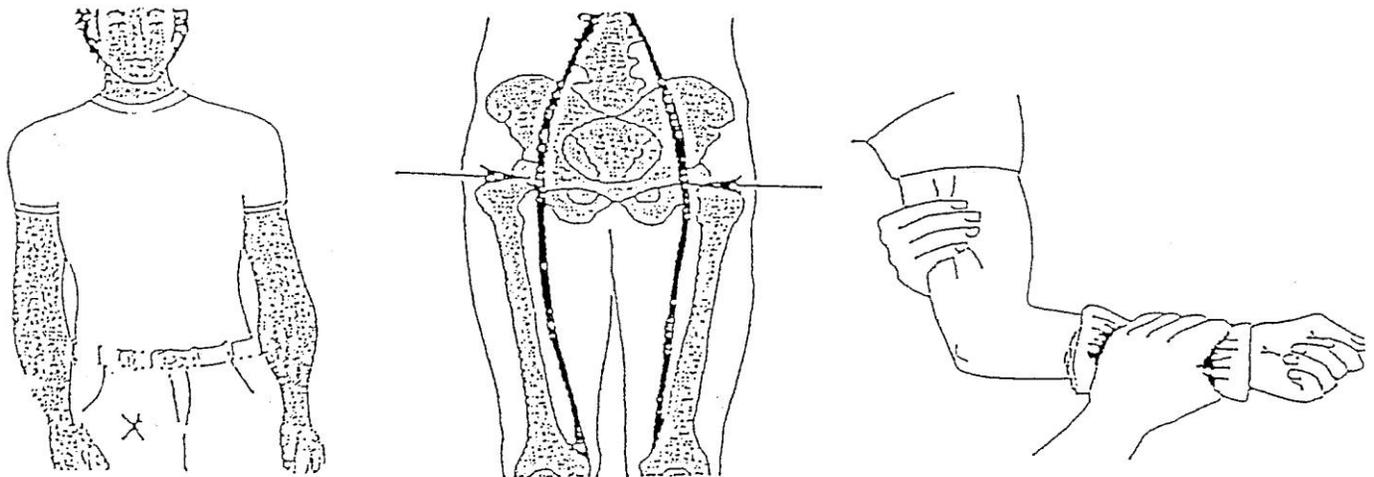
1. Wash your hands and clean the area with soap and water. Wear gloves if possible.
2. Cleanse the area with hydrogen peroxide [germicide with oxidizing (bubbling) action.]
3. Apply antibacterial ointment next. Bacitracin is standing order medication in the Group Homes.
4. Cover with clean dressing. Change at least daily, more often if soiled. Leave open to air if able to keep clean and prevent re-injury. Try at night when sleeping.
5. Monitor for signs of infection:
  - redness of area
  - swelling
  - temperature – increased body temperature or area feels warm
  - pus
  - pain, throbbing – tenderness at site
  - red streak following vein
  - swollen lymph nodes

**INCISION** - usually caused by sharp knife, broken glass, etc. Bleeding may be rapid and heavy. Deep cuts may damage muscles, tendons, and nerves.

- LACERATION** - jagged, irregular, or blunt breaking or tearing of soft tissue. Bleeding may be rapid and extensive. Deep contamination is possible and increased chance of infection.
- PUNCTURE** - object pierces skin layers (nail, tack, etc.). Bleeding is limited usually. Danger of infection is great because the flushing action of external bleeding is limited. Tetanus may develop, so check date of last tetanus shot. Tetanus shots need to be given every 10 years.

First Aid for incision, laceration, and puncture wound:

1. Stop bleeding immediately. If severe bleeding, use direct pressure with a thick, clean pad of cloth or bare hand applying pressure directly over the wound until bleeding stops. Wear gloves if available.
2. Pressure points can be used only if direct pressure doesn't stop bleeding. Use in conjunction with direct pressure. If arm wound, squeeze the brachial artery (the underside of arm, between the elbow and shoulder) with fingers straight – not fingertips. If leg wound, apply pressure to femoral artery located in the groin area. Release pressure point when bleeding stops, but continue direct pressure.



3. Elevate the wound if you don't suspect broken bones, and no pain results from elevation.
4. Clean a small wound with soap and water after washing your hands. Do not clean a serious wound that has finally stopped bleeding. It may restart.
5. Apply a clean dressing. Use Bacitracin if not seeking medical attention.
6. Get medical help if needed. \*\*\*
7. Monitor for signs of infection.

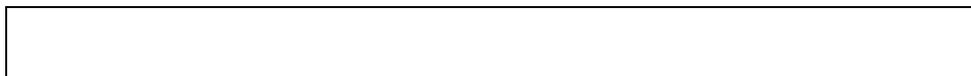
\*\*\*Some incisions may not require medical attention. Lacerations more often do. Guidelines include: Size and depth of wound (wide, gaping), whether it is on movable body part (knee, finger, etc.) where movement can impair healing, cosmetic

(face) sutured wound heals with less scar. Scalp wounds bleed freely because blood vessels are close to the surface, but often they don't need stitches. Apply ice to reduce swelling and apply direct pressure.

**AVULSION** - results when a portion of skin or other soft tissue is partially or completely torn away. A violent force may completely tear away a body part, such as a finger. Because an avulsion often damages deeper tissues, bleeding is often significant. (An avulsed part may be reattached by a surgeon. Place the body part in a plastic bag (wrap in sterile gauze if available), place on ice and send it with the victim).

First Aid:

1. Call 911 or transport to hospital as needed.
2. Wear gloves. Stop the bleeding by placing a clean cloth over the area, using direct pressure and pressure points as needed.
3. If possible, elevate the wound, raising the injured area above the level of the heart.
4. Treat for shock.



**SHOCK** - results from depression of body functions, causing heart, lungs and other organs from working normally.

Signs:

- |           |  |
|-----------|--|
| Skin      | - pale or bluish, cold, may be moist and clammy  |
| Pulse     | - rapid (over 100 usually)   |
| Breathing | - rapid, shallow and irregular usually, but may be deep                                      |
| Behavior  | - restless, anxious, expressionless face, may complain of severe thirst, nausea and vomiting |

As condition deteriorates, person may become unresponsive with dilated pupils. If untreated, the victim loses consciousness, body temperature falls, and death may result.

First Aid:

1. Call 911
2. Give urgent necessary treatment. (CPR if not breathing, stops bleeding, etc.)
3. Keep victim lying down. Position on side to allow drainage of fluids if vomiting.
4. Only give fluids if medical help will be delayed, and only if person is conscious and not vomiting.

**BURNS** - caused by heat, chemicals, electrical, and radiation. Severity is determined by degree and amount of body surface involved.

FIRST DEGREE - mild sunburn, scalding, steam. Affects top layer of skin only, redness, mild swelling.

First Aid:

1. Immerse in cold water 2-5 minutes.
2. Cover with sterile dressing if needed.
3. Don't use ointment, cream, or salve.

SECOND DEGREE – deep sunburn, flash burns by gasoline, hot liquid. Most painful, greater depth, red, mottled, blisters, swelling over several days, wet or weeping skin surface.

First Aid:

1. Immerse in cold water until pain subsides.
2. Sterile dressing.
3. Do not break blisters.
4. No ointment, cream, or salve.
5. Notify health services professional immediately.

THIRD DEGREE – flame, ignited clothing, immersion in hot water, electricity. Deep tissue destruction (no pain due to destruction of nerve ends), may have dry, white or charred appearance.

First Aid:

1. Get medical help immediately – Call 911.
2. Do not remove clothing.
3. Cover burns with clean, preferably sterile dressing (sheet if large area).
4. Elevate body part.
5. Observe respiration, especially if burns on upper part of body – may have inhaled fumes or flames.

CHEMICAL BURNS – red, discolored, blisters.

First Aid:

1. Flush with cool water until chemical is gone – at least 5 minutes. If chemical in eye, flush at least 15 minutes.
2. Seek medical attention immediately.
3. Check respiration – may have inhaled chemical.

ELECTRICAL BURN – NEVER GO NEAR A VICTIM WHOM YOU THINK HAS BEEN INJURED BY ELECTRICITY UNTIL YOU ARE SURE THE POWER IS TURNED OFF.

First Aid:

1. If victim is unconscious or has difficulty breathing – Call 911. Seek medical attention as needed.
2. Cover area with a dry sterile dressing. May have second exit wound.
3. Observe for breathing difficulty.
4. Wound may look minor; however, the tissue below may be severally damaged.

**HEAT STROKE – MEDICAL EMERGENCY**Signs:

- Heat exhaustion followed by red skin that is dry – no perspiration.
- Change in consciousness
- Rapid, shallow breathing
- Rapid, weak pulse

First Aid:

1. Call 911.
2. Move to a cool place. Remove excess clothing.
3. Cool body quickly. Apply cool (not cold) water with cloths such as towels or sheets.
4. Do not give stimulants. If conscious, may give small sips of cool water.

**HEAT EXHAUSTION**Signs:

Usually normal body temperatures

Pale, clammy skin

Profuse perspiration

Tired, weak

Headache, maybe cramps

Nausea

Dizziness, possibly faint feeling (Lower head between knees in sitting position)

First Aid:

1. Give sips of salt water (1 tsp. salt/glass) ½ glass every 15 minutes over 1 hour period. Don't give if vomiting. Go to hospital if vomiting.
2. Have person lie down and raise feet 8-12 inches.
3. Apply cool, wet cloths.

Medications that increase heat retention: mellaril, thorazine, sulfa drugs, Ritalin, Dexedrine.

**HYPOTHERMIA** – prolonged exposure to cold, resulting in shivering, numbness, lower body temperature, drowsiness, and muscular weakness. Involves the entire body. (Prevention – call the weather line 763-512-1111 for current temperatures and dress appropriately for conditions).

First Aid:

CAUTION: Do not warm the person too quickly, such as immersing in water.

1. Move to a warm place.
2. Remove wet clothing and dry the victim.
3. Warm the body gradually by wrapping in blankets or putting on dry clothing.
4. Give warm liquids to drink providing person is alert.
5. Handle gently.
6. Call 911 if person becomes unconscious.

**FROSTBITE** – freezing of a body part exposed to cold such as fingers, hands, toes, and feet. Slightly flushed skin followed by lack of feeling or is discolored (white, yellow or blue). Skin may blister.

First Aid:

1. Remove wet clothing.
2. Move to warm place.
3. Immerse in warm water (not hot) until part looks red and feels warm.
4. Do not rub affected area.
5. Loosely bandage the area with a dry sterile dressing. Do not break any blisters.
6. Place gauze or cotton between toes.
7. Seek medical attention as needed.

**HEAD INJURY** - A fall from a height such as a flight of stairs, motor vehicle accident, blunt force injury, diving injuries.

Signs:

Change in consciousness and/or change in behavior.

Breathing problems or vision changes

Inability to move a body part

Headache, nausea and vomiting

Sleepiness or inability to be aroused

Bleeding or fluid from the mouth, ears, or nose

First Aid:

1. Call 911 as appropriate.
2. If severe as in car accident or fall, keep injured head, neck, or spine from moving, bending, or twisting. Keep flat. Position on side if fluids draining.
3. Observe breathing.
4. No food or fluids.
5. Get medical help if severe. If less severe, such as small bump to head, check person every 30 minutes for 8 hours. Check pupils for abnormal size, level of orientation and consciousness, muscle tension and function.

For the next several days, observe for nausea and vomiting, blurred vision, slurred speech, difficulty walking, seizure, headache, abnormal pupil size, increased temperature, increased restlessness.

## SEIZURES

### TYPES

**TONIC CLONIC** – May be preceded by an aura (sensation of light). First phase is tonic where the person becomes rigid, respiration stop, may become cyanotic. Lasts about 15 seconds. Next phase is clonic with convulsive movements of entire body, tongue may be bitten, may be incontinent. This may be followed by sleep. Person may have a headache, confusion or nausea. (Also known as Grand Mal seizure)

**ABSENCE SEIZURE** – Sudden, momentary loss of consciousness. Can be followed by spasm (irregular movement) of the muscles of the neck or upper extremities, slight twitching of the face, or loss of muscle tone. May have a vacant facial expression and stops all voluntary activity. Consciousness returns quickly. (Also known as petit mal seizure).

**FOCAL SEIZURE** – Usually begins with spastic movements in the hand, face of foot and may spread to other muscles ending in a Tonic Clonic seizure. Seizure may be manifested by chewing, lip smacking, swallowing movements and profuse salivation. (Also known as Jacksonian seizure).

**PSYCHOMOTOR** – Periods of amnesia or loss of consciousness, changes in behavior such as loss of judgment, automatic behavior and abnormal acts. May appear drowsy, intoxicated, or violent.

**STATUS EPILEPTICUS** – **MEDICAL EMERGENCY** – Continuous seizures occurring without interruption. Call 911. Call EMS if person is having difficulty breathing, bluish coloration to the lips, nails, or skin.

**SEIZURE PRECAUTIONS:** Do not leave a person with known seizure disorder unattended in pooled water such as a hot tub or wading pool. Assure that they never swim alone and are never on a boat or near water without wearing a life jacket.

First Aid: (Know Individual's Seizure Plan. Stay calm – most seizures end by themselves).

1. Protect the resident from further injury. Stay with the resident.
2. Protect the head by lowering resident to the floor if needed move objects away that could further injure the resident. When near a stove, unmovable object, sharp corners, or furniture. Grab a pillow or coat to protect the head if there is a risk of injury. Turn resident on his/her side to keep airway clear.
3. Stay with the resident, timing the seizures. Do not stick anything in the resident's mouth.

### After Care:

1. Inform the resident of the seizure and reassure them. Some residents are dazed, allowing them to rest.
2. Help resident to change clothes as needed if incontinence occurs.
3. Record the seizure activity as it occurred.
4. Notify the parent/guardian and medical personnel if applicable.

When to call 911:

1. If the actual seizure lasts more than 5 minutes, call 911. (This does not include the pre-seizure confusion or after seizure daze).
2. The resident does not respond to verbal or physical stimulus.
3. The resident has difficulty breathing or is gasping for air.
4. The resident becomes bluish around the mouth.

If the resident is transported to the hospital, notify the parent/guardian. At BAR/SAR, notify the nurse.

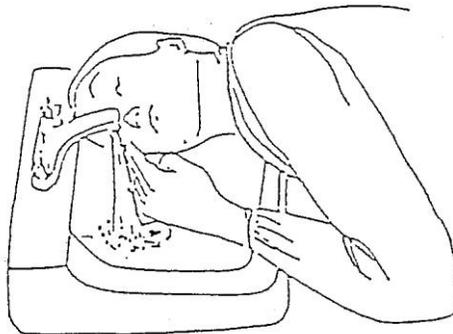
**IMBEDDED OBJECT IN EYE, EAR, OR NOSE**

## FOREIGN OBJECT IN EYE

First Aid:

When assisting another person, explain what you are going to do!

1. Wash your hands and wear gloves.
2. Keep from rubbing eye.
3. Blink to make tears.
4. Pull down on lower lid and flush with warm water (See diagram below).



5. If object is on the inside of upper lid, have the person look down and grasp upper lashes and pull lid out and down over lower lid. This may dislodge dirt. If still there, hold eye open and flush from inner eye to outer. (See diagram).
6. Never use a Q-tip or solid object or your finger to remove object.
7. If large object is imbedded in eye, don't remove it or flush the eye. Cover both eyes loosely with a dressing and seek medical attention.
8. Call 911 if severe.

## REMOVAL OF SPLINTERS

First Aid:

1. Wash hands and wear gloves.
2. Clean area with soap and water.
3. Use tweezers cleaned with alcohol if on the surface of the skin to remove small, slightly imbedded objects such as sliver of wood, gravel, glass.
4. Clean with hydrogen peroxide.

5. Apply Bacitracin and clean, dry dressing
6. If larger object and/or heavy bleeding don't do anything except to stop bleeding. Apply dressing and get medical help.

## **NOSEBLEED**

### First Aid:

1. Apply direct pressure by firmly pinching both nostrils shut with thumb and forefinger.
2. Sit down and lean forward. (Leaning back makes blood run down throat.)
3. Keep pinching for 10 minutes. Don't stop and check because it may start right up again.
4. If not stopped, it may need to be packed at the doctor or emergency room.
5. Do not blow nose or rub nose – may disturb clot and restart bleeding.

## **POISONING** – by INGESTION – INHALATION – ABSORPTION – INJECTION

### Signals:

1. Nausea
2. Vomiting
3. Chest or abdominal pain
4. Trouble breathing
5. Sweating
6. Change in consciousness
7. Seizures
8. Violent behavior and burns around the lips, tongue or skin

### First Aid:

1. Call 911 (may be directed to Poison Control) or State Wide Poison Control Center at 1-800-222-1222. **DO NOT USE SYRUP OR IPECAC OR ACTIVATED CHARCOAL BEFORE CALLING POISON CONTROL.** Do not give the victim anything to eat or drink unless directed by medical professionals.
2. If poison is swallowed, gather information such as what type of poison, how much was taken and how much the victim weighs. Look for any containers and take them with you to the telephone.
3. If poisoning is suspected check the scene to make sure it is safe to approach. Remove the victim, checking level of consciousness, breathing and circulation. If the victim is conscious, ask questions to get more information.
4. If pesticide poisoning is spilled or dusted onto the skin or clothing, wash skin immediately with water and change clothing.
5. Injection by hypodermic needle needs to be reported to 911 or Poison Control.

## **INSECT STINGS**

### First Aid:

1. Stinger may be present. Remove the stinger by gently scraping across area with credit card.
  2. Apply ice for pain and swelling.
  3. Wash wound and cover.
  4. Watch for allergic reaction, such as red and swollen area at site, hives on the body, breathing difficulties. Call 911
- \*\*Follow person's individual plan (CSSP, CSSP-Addendum, and/or Self-Management Assessment etc.)**

## **TICK BITE**

### First Aid:

1. Remove slowly with tweezers by pulling steadily and firmly as close to the skin as possible.
2. Cleanse with soap and water.
3. Apply antiseptic ointment.
4. Observe for signs of infection such as redness, swelling, rash or fever. If occurs, seek medical attention.

## **POISONOUS PLANTS** – OAK, IVY, SUMAC

### First Aid:

1. Remove contaminated clothing.
2. Wash well with soap and water, confine to area affected to avoid spreading.
3. If rash or weeping sore develop apply Calamine lotion and administer Benadryl
4. Seek medical attention if the area worsens or affects large areas of the body or face.

## **HUMAN/ANIMAL BITE**

### First Aid:

1. If the wound is minor, wash with soap and water and apply antiseptic ointment and a dressing
2. Watch for signs of infection such as redness or swelling.
3. Consult health care provider regarding tetanus or rabies.
4. If severe injury, control bleeding (do not wash) and seek medical attention or call 911 as needed.
5. Report to animal control as needed.

## **MUSCLES, BONE OR JOINT INJURIES**

**STRAIN** – The stretching and tearing of a muscle or tendons – i.e. back strain caused from lifting. Area can be swollen and mobility is difficult.

First Aid:

1. **R.I.C.E.** – Rest, ice, compression and elevation
2. Seek medical attention if pain continues for 24 hours

**SPRAIN** – The tearing of ligaments at a joint – i.e. finger, knee, ankle, especially in sport injuries. Area can be tender, swollen, discoloration (red, black and blue), and pain with motion (See First Aid below)

## **FRACTURE – 2 TYPES**

Open Fracture – broken bone ends pierce through skin.

Closed Fracture – broken bone ends do not go through skin – signs of swelling, tenderness, pain on motion, discoloration.

First Aid for Sprain and Closed Fracture:

1. Seek medical advice to differentiate between a sprain and closed fracture.
2. R.I.C.E.
3. Immobilize area.
4. Don't move injured part if fracture is suspected.

First Aid for Open Fracture:

1. Do not push broken bone ends back together.
2. Stop severe bleeding.
3. Treat for shock.
4. Seek medical attention.

**DISLOCATION** – Separation of a bone from its position at a joint – for example, a fall or blow to the shoulder. Signs of dislocation – pain, swelling, tenderness, deformity.

First Aid:

1. Do not attempt to reduce dislocation.
2. Keep immobile.
3. Seek medical attention.

## First Aid for Choking

1. Ask the person if he is choking. If the person is coughing forcefully, encourage him to continue coughing.
2. If the person cannot cough, speak or breathe have someone call 911.
3. **GIVE ABDOMINAL THRUSTS**
  - a. Stand behind the person. Put both arms around him and give abdominal thrusts.
  - b. Place the thumb side of your fist against the middle of the victim's abdomen, just above the belly button and below the rib cage. Grasp your fist with your other hand and give quick inward and upward thrusts.
  - c. Continue abdominal thrusts until the object is dislodged and normal breathing begins.
  - d. If extreme obesity or advanced pregnancy makes it impossible, give thrusts upward and inward against the chest.
4. If the victim becomes unconscious, this situation requires training in rescue breathing and CPR.  
Call 911.

### Skill Demonstration

Demonstrated competency in assessing and treating the following: conscious choking

- a) Exhibit appropriate stance
- b) Correct positioning of hands on simulated victim

## If you are choking, give a signal

Let other people know. Give them an unmistakable signal by clutching your throat with one hand. This is the universally recognized sign of choking.

## If you are alone and choking

1. You can perform abdominal thrusts on yourself.  
**OR**
2. You can push against your abdomen by leaning over the back of a chair or other blunt object.

