# **First Aid Merit Badge**

Troop 344 and 9344 Pemberville, OH

- 1. Demonstrate to your counselor that you have current knowledge of all first-aid requirements for Tenderfoot, Second Class, and First Class ranks.
- 2. Explain how you would obtain emergency medical assistance from:
  - a. Your home.
  - b. A remote location on a wilderness camping trip.
- 3. Define the term *triage*. Explain the steps necessary to assess and handle a medical emergency until help arrives.
- 4. Explain the precautions you must take to reduce the risk of transmitting an infection between you and the victim while administering first aid.



- 5. Do the following:
  - a. Prepare a first-aid kit for your home. Display and discuss its contents with your counselor.
  - b. With an adult leader. Inspect your troop's first-aid kit. Evaluate it for completeness. Report your findings to your counselor and Scout leader.
- 6. Describe the early signs and symptoms of each of the following and explain what actions you should take:
  - a. Shock
  - b. Heart attack
  - c. Stroke



- 7. Do the following:
  - a. Describe the conditions that must exist before performing CPR on a person.
  - b. Demonstrate proper CPR technique using a training device approved by your counselor.
  - c. Explain the use of an automated external defibrillator (AED).
  - d. Demonstrate or simulate the proper use of an automated external defibrillator (AED), using an AED training device if available.
  - e. Identify the location of the AED at your school, place of worship, and troop meeting place, if one is present.





- 8. Do the following:
  - a. Show the steps that need to be taken for someone who has a large open wound or cut that is not bleeding severely.
  - b. Show the steps that need to be taken for someone who has a large open wound or cut that is severely bleeding.
  - c. Explain when it is appropriate and not appropriate to use a tourniquet. List some of the benefits and dangers of the use of a tourniquet.
  - d. Demonstrate the application of a tourniquet without tightening it.
- 9. Explain when a bee sting could be life threatening and what action should be taken for prevention and for first aid.



- 10. Describe the signs, symptoms, and potential complications of a fracture and dislocation.
- 11. Demonstrate the proper procedures for handling and immobilizing suspected closed or open fractures or dislocations of the:
  - a. Finger
  - b. Forearm
  - c. Wrist
  - d. Upper leg
  - e. Lower leg
  - f. Ankle
- 12. Describe the signs, symptoms, and possible complications and demonstrate care for someone with a suspected injury to the neck or back.



- 13. Describe the symptoms, proper first-aid procedures, and possible prevention measures for the following conditions:
  - a. Concussion
  - b. Anaphylaxis/allergic reactions
  - c. Asthmatic attack
  - d. Bruises
  - e. Sprains or strains
  - f. Hypothermia
  - g. Frostbite
  - h. Burns first, second, and third degree
  - i. Convulsions/seizures
  - j. Dehydration
  - k. Muscle cramps
  - I. Heat exhaustion
  - m. Heat stroke
  - n. Abdominal pain
  - o. Broken, chipped, or loosened tooth



- 14. Do the following:
  - a. Describe the conditions under which an injured person should be moved.
  - b. If a sick or an injured person must be moved, tell how you would determine the best method. Demonstrate this method.
  - c. With helpers under your supervision, improvise a stretcher and move a presumably unconscious person.
- 15. Describe the following:
  - a. The indications that someone might be a danger to themselves or others.
  - b. What action you should take if you suspect that someone might be a danger to themselves or others.
- 16. Teach another Scout a first-aid skill selected by your counselor.





## **Requirement #1**

Demonstrate to your counselor that you have current knowledge of all first-aid requirements for Tenderfoot, Second Class, and First Class ranks.



#### What is First Aid?

- First aid is caring for injured or ill persons until they can receive professional medical care.
- It is an important skill for every Scout.
- With knowledge of first aid, a Scout can provide immediate care and help to someone who is hurt or becomes ill.





### **Tenderfoot First Aid Requirements**

#### • Show first aid for the following:

- Simple cuts and scrapes.
- Blisters on the hand and foot.
- Minor (thermal/heat) burns or scalds (superficial, or first degree)
- Bites or stings of insects or ticks.
- Venomous snakebite.
- Nosebleed.
- Frostbite and sunburn.
- Choking.
- Show what to do for hurry cases of stopped breathing, stroke, severe bleeding, and ingested poisoning.





### 2<sup>nd</sup> Class First Aid Requirements

#### • Show first aid for the following:

- Object in the eye
- Bite of a warm-blooded animal
- Puncture wounds from a splinter, nail, and fishhook
- Serious burns (partial thickness, or seconddegree)
- Heat exhaustion
- Shock
- Heatstroke, dehydration, hypothermia, and hyperventilation





## 1<sup>st</sup> Class First Aid Requirements

- Show first aid for the following:
  - Demonstrate bandages for a sprained ankle and for injuries on the head, the upper arm, and the collarbone.
  - By yourself and with a partner, show how to:
    - Transport a person from a smoke-filled room.
    - Transport for at least 25 yards a person with a sprained ankle.
  - Tell the five most common signals of a heart attack. Explain the steps (procedures) in cardiopulmonary resuscitation (CPR).







## **Requirement #2**

Explain how you would obtain emergency medical assistance from:

- a. Your home.
- b. A remote location on a wilderness camping trip.



#### **Obtaining Medical Assistance from Home**



- Call 911 immediately for a life threatening injury or illness.
  - Do not try to transport a critical victim to the emergency room yourself.
- Ask a neighbor for help, or flag down a passing car.



#### **Calling for Help in a Wilderness Emergency**

- Always have a plan for how to get emergency help.
- If a cell phone is available and has service, use it to call 911.
- Send two people back to the vehicles and have them drive to the nearest phone or the nearest location with cell service.
  - Be able to describe the location and directions to get there.
- Use three loud noises to signal rescuers (whistle blasts).

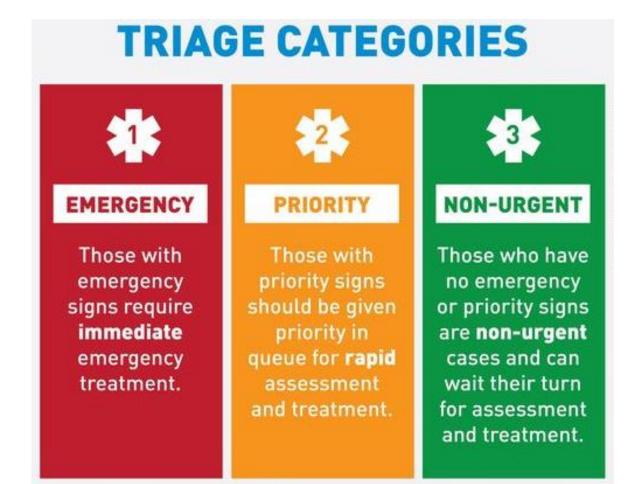






## **Requirement #3**

Define the term *triage*. Explain the steps necessary to assess and handle a medical emergency until help arrives.



#### Is It Safe?

- Take care of yourself, then your helpers, finally the victim.
- Is the scene safe?
- What caused this?
- Is there anything here that can hurt me?





#### Your Steps at an Emergency

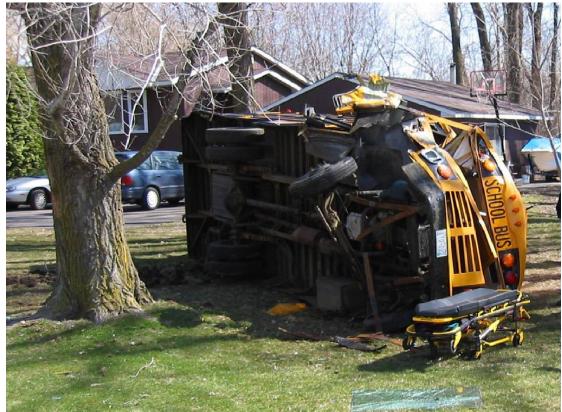
- 1. Decide to be helpful and prepared before an accident happens.
- 2. Recognize the emergency.
- 3. Call EMS if required.
- 4. Assess the victim.
- 5. Provide care.

Everyone of any age can render assistance. Your actions in the first few minutes will make a difference.



### **Multiple Victims**

- You must first decide who needs care the most and who can wait until help arrives or others can help.
- This process of setting priorities is called "Triage".





#### **Actions for Multiple Victims Situations**

- Call 911 immediately.
- Tell dispatcher there are multiple victims.
- Ask any victims who can walk to move to one side.
  - These victims do not have immediate lifethreatening problems.



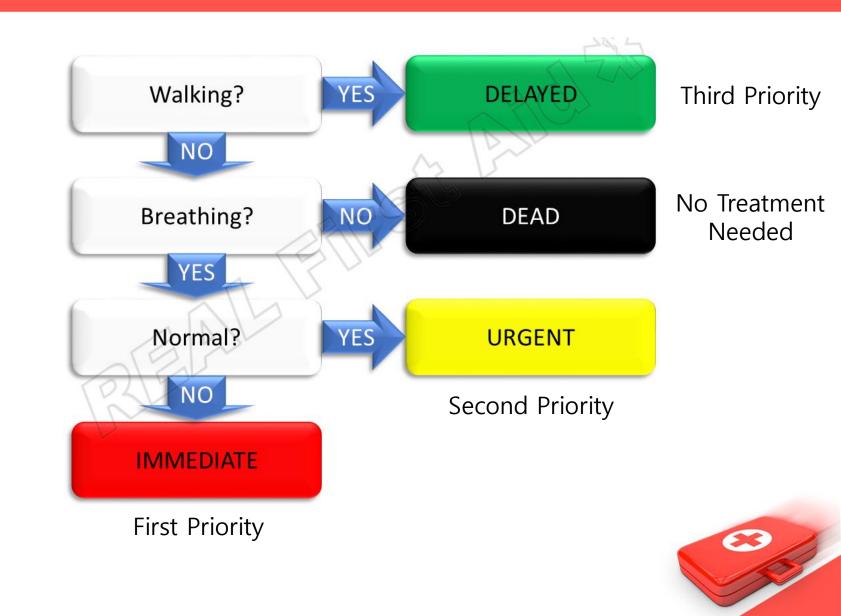


#### **Actions for Multiple-Victim Situations**

- With remaining victims, start checking for normal breathing with unresponsive victims and look for life-threatening injuries.
- Spend 1 minute or less with each victim and do not start giving care until you have checked all victims.
- Give care to top priority victims first.
- Move to less serious victims only when first priority victims are stable.
- When help arrives, quickly tell EMS professionals about victims.



#### **Decision Tree for Multiple-Victim Situations**





## **Requirement #4**

Explain the precautions you must take to reduce the risk of transmitting an infection between you and the victim while administering first aid.



#### **Blood-borne Disease**

- Anyone can carry a blood-borne disease.
- Don't think that just because a cut is small your are less at risk.
- You don't want to be contaminated by bacteria or viruses present in blood and other body fluids.





#### **Bloodborne Diseases**

The best way to keep yourself safe is to avoid contact with all blood and body fluids.





#### **Use Gloves!!**

- Use nonlatex medical exam gloves if you can.
- Improvise if you do not have medical exam gloves (plastic trash bag, etc.)
- Unbroken skin can be an effective barrier, but, a small break in your skin can be a way for disease to enter your body.
- Wash your hands before and after.
- Cover any cuts/scrapes.
- Do not touch your mouth, nose, or eyes when providing first aid.





#### **Barrier Devices**

Use a pocket face mask or face shield if available if you have to do CPR.







## **Requirement #5**

Do the following:

- a. Prepare a first-aid kit for your home. Display and discuss its contents with your counselor.
- b. With an adult leader. Inspect your troop's first-aid kit. Evaluate it for completeness. Report your findings to your counselor and Scout leader.



#### **First Aid Kits and Training**



- Your first aid kit should be suited to the expected use and your training level.
- First aid kits need to be convenient to use and in a place where they can be reached easily.



#### Family/Troop First Aid Kits

#### At a minimum, the Family/Troop kit should contain the following:

- □ Roller bandage, 2-inch (1)
- □ Roller bandage, 1-inch (2)
- □ Adhesive tape, 1-inch (1 roll)
- □ Alcohol swabs (24)
- □ Assorted adhesive bandages (1 box)
- Elastic bandages, 3-inch-wide (2)
- Sterile gauze pads, 3-by-3-inch (12)
- □ Moleskin, 3-by-6-inch (4)
- Gel pads for blisters and burns (2 packets)
- Triple antibiotic ointment (1 tube)
- □ Triangular bandages (4)

#### Check the kit regularly.

Check expiration dates and replace any used or out-of-date contents.

- Soap (1 small bar) or alcohol-based hand sanitizing gel (1 travel size bottle)
- □ Scissors (1 pair)
- □ Tweezers (1 pair)
- □ Safety pins (12)
- □ Nonlatex disposable gloves (6 pairs)
- Protective goggles/safety glasses (1 pair)
- □ CPR breathing barrier (1)
- Pencil and paper
- Emergency First Aid instructions

#### **First Aid Supplies**

- There are many first aid supply sources on the web.
- Some items can be purchased cheaply at local stores.
- Making your own first aid kit is usually the best option, commercial kits often are missing basic bandages or have too few of critical items.



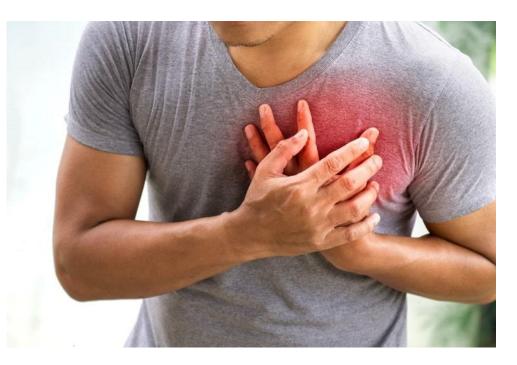




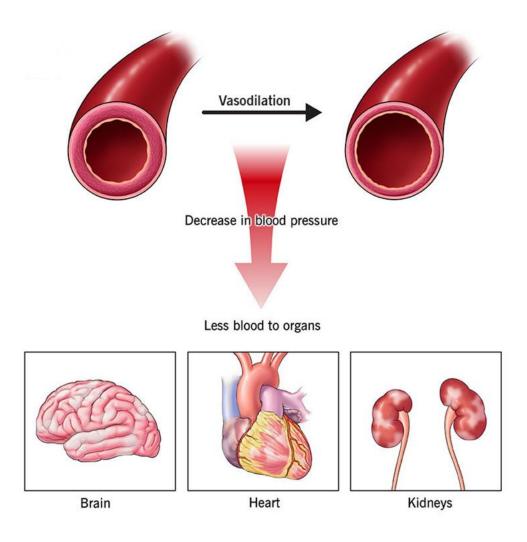
## **Requirement #6**

Describe the early signs and symptoms of each of the following and explain what actions you should take:

- a. Shock
- b. Heart attack
- c. Stroke



#### What is Shock?

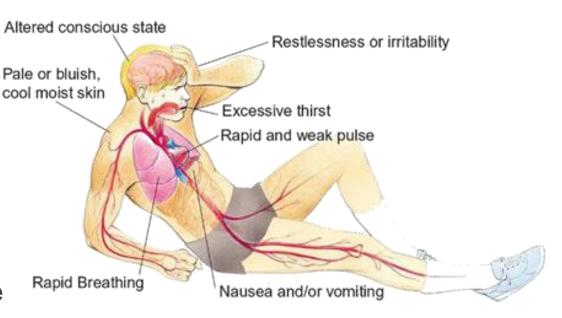


- Not enough blood is getting to the right places around the body.
- Can be caused by all kinds of things...both illness and injury.
- Untreated it can lead to death.



## **Symptoms of Shock**

- Dizziness
- Pale, cool, moist skin
- Rapid, shallow breathing
- Nausea/vomiting
- Extreme thirst
- Rapid, weak pulse
- Decreased blood pressure
- Mental status changes
- Restlessness, anxiety



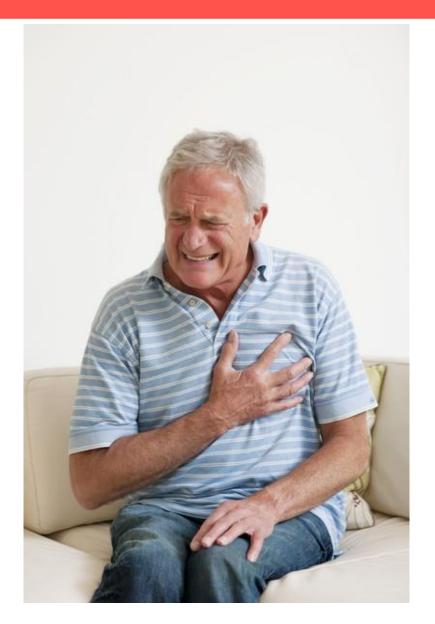
#### **First Aid for Shock**

- Place the victim in shock position.
- Keep the person warm and comfortable.
- Turn the victim's head to one side if neck injury is not suspected.





### **Heart Attack**





### What is a Heart Attack?

- Sudden reduced blood flow to the heart muscle due to blockage of an artery.
- Signs and symptoms vary considerably.
- May have no signs or symptoms before collapsing suddenly or victim may have mild symptoms that come and go for hours or days prior to the attack.





### **Signs and Symptoms**

### What A <mark>Heart Attack</mark> Feels Like Man or Woman



### **First Aid for a Heart Attack**

If you think someone is having a heart attack:

- Call 911
  - Many experts recommend the victim chewing and swallowing a full dose aspirin (325 mg), after calling 911.
- Have the person sit down, rest, and try to keep calm.
- Loosen any tight clothing.
- Ask if the person takes any chest pain medicine, such as nitroglycerin for a known heart condition, and help them take it.
- If the person is unconscious and unresponsive, and not breathing or does not have a pulse, begin CPR.
- If an automated external defibrillator (AED) is immediately available follow the instructions on the AED device.



### Stroke

- Stroke is a brain injury blood supply to part of the brain is interrupted.
- Headache, dizzy, unusual behavior, passes out, forgets things, slurred speech, weak on one side.
- Monitor victim and be prepared to give CPR.
- Have victim lie down with head and shoulders slightly raised.







# **Requirement #7**

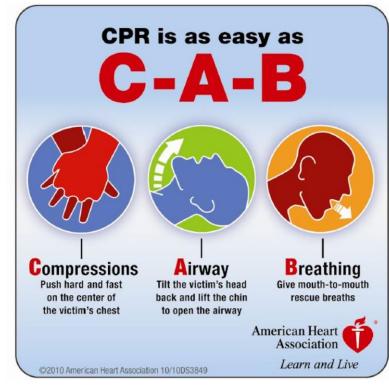
Do the following:

- a. Describe the conditions that must exist before performing CPR on a person.
- b. Demonstrate proper CPR technique using a training device approved by your counselor.
- c. Explain the use of an automated external defibrillator (AED).
- d. Demonstrate or simulate the proper use of an automated external defibrillator (AED), using an AED training device if available.
- e. Identify the location of the AED at your school, place of worship, and troop meeting place, if one is present.



### **CPR Protocols**

- The A-B-C order for CPR (Airway-Breathing-Circulation) has been changed to C-A-B (Compressions-Airway-Breathing)
- This is based on medical research that shows CPR is more effective if done first and promptly.
- Volunteers will no longer check for a pulse or Look-Listen-Feel for breathing.





### **New CPR Protocols**

- 1. Are you OK? Check responsiveness.
- Unresponsive? Assess breathing by looking at the victim (DO NOT open airway yet by tilting head...DO NOT Look-Listen-Feel).
- 3. Not breathing? Call 911 and send for AED if available.
- 4. Start with 30 compressions and then two breaths.
- 5. Continue with CPR 30 compressions, then 2 breaths.





## **CPR Technique**

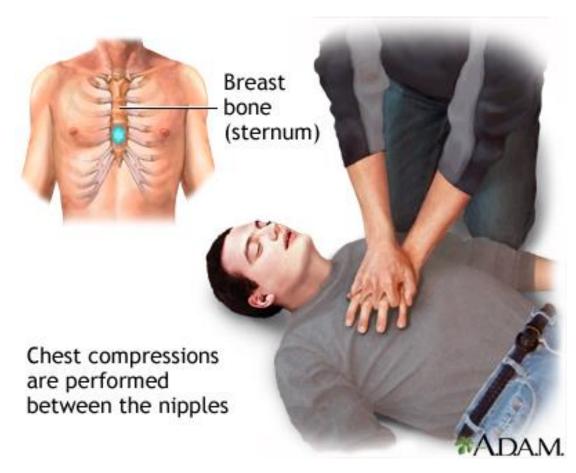
### 1. Position on their back.

- If victim appears to be not breathing or is gasping call 911, get AED, and start CPR.
- 3. Use a barrier device if you have one.





### **CPR Technique**

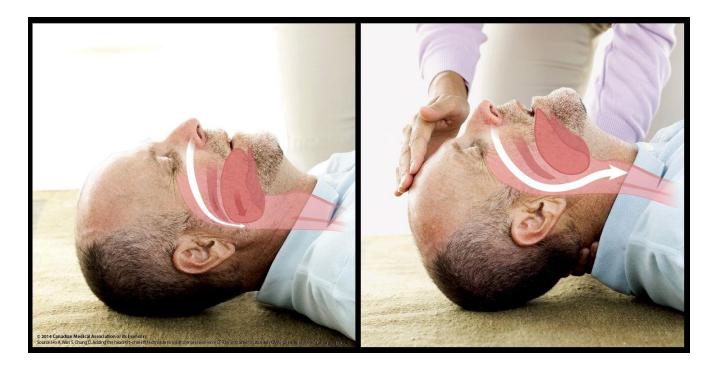


### **30 compressions**



### **CPR Technique**

#### **Open the airway**



#### Use the head-tilt-chin-lift technique



### **Rescue Breathing**

### **Two breaths**







- If you don't remember how to do breaths then just do continuous chest compressions.
- If you don't want to do breaths then just do continuous compressions.

## **Check Airway**

- If victim may have been choking, check for object before giving rescue breaths.
   If you see obstruction, remove it.
- Then continue CPR.



### Continue CPR until...

Victim moves. AED arrives and is ready to use. Help arrives. You are too tired to continue.

## What happens if I don't remember?

- If you don't exactly remember the steps of CPR, do the best you can!
- If you can't figure out the breaths, then perform continuous chest compressions.
- With a heart in trouble, it is always better to try some kind of CPR than do nothing.
- Always call for help quickly.



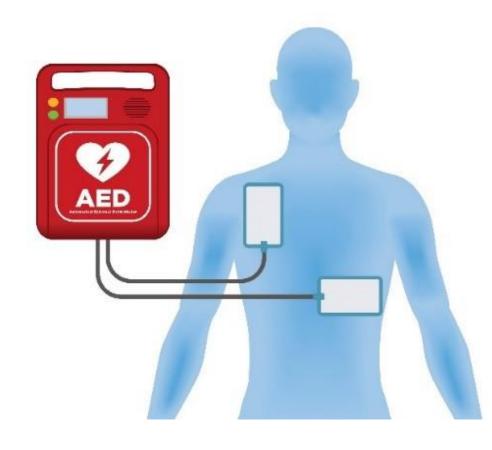


# Practice CPR





### **Automated External Defibrillator**









- Portable.
- Pads placed on the victim's chest.
- Unit analyzes victim's heart and advises whether to give a shock.
- All AED's work the same.

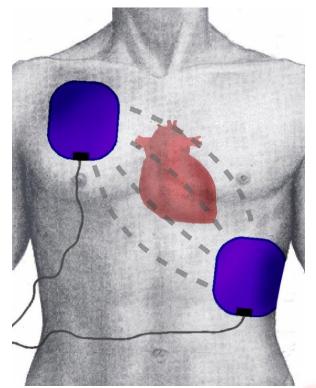
## **Clothing Removal**



- It may be necessary to open/remove the shirt to find the nipples.
- It is always necessary to open/remove the shirt to deploy the AED.
- Put arms back at sides for CPR/AED.

### **How AEDs Work**

- Heart's electrical system keeps chambers of the heart synchronized and working together.
- With heart attack or other heart problems, this rhythmic electrical system may be disrupted.
- Sometimes an AED shock restores regular heart rhythm – this is "defibrillation".





- Whenever a victim suddenly collapses or is found unresponsive consider possibility of cardiac arrest.
- Send someone to get an AED immediately.
- It is better to have it right away and not need it, than to need it and have to wait for it.

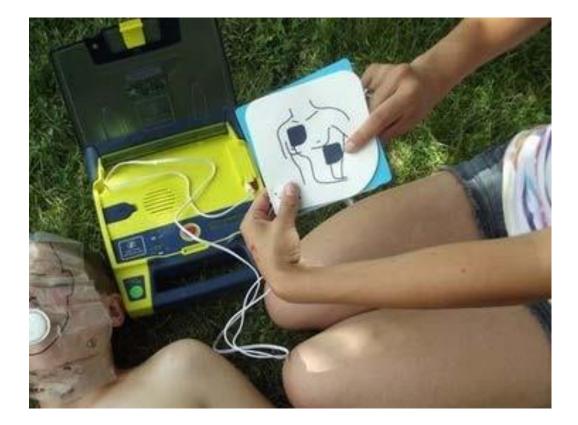


- Turn the AED on and follow the voice prompts.
- Keep CPR going while AED is being set up.





- Check the pictures on the pads.
- Some are interchangeable placement, others are not.





 Follow placement diagram on the pads.





#### Follow placement diagram on the pads.



If the AED advises shock say: "Everyone Clear!" and make sure they are at least 6" away.

Give shock (push button) when AED says so

Start CPR after the shock. Leave AED on and pads attached.

### **AED Use in Children**

- If pediatric pads are available use them on children (not adults).
- If there are no pediatric pads you can use adult pads on children.
- Use pediatric pads on infants (put front and back). Use adult pads on infants if nothing else is available.





# AED

# Demonstration



### **Near Drowning**





### Be Safe – Do It Smart

- Use "safe swim" procedures around any water activity.
- If you are involved with the rescue, use "reach, throw, row, go".
  - Do not attempt a swimming rescue unless you are a trained lifeguard.
- Remember, you can start rescue breathing in the water.
  Compressions can only be done out of the water.
- Start CPR if victim is not breathing.
- If victim is breathing and their heart is beating, roll on left side and monitor airway. They may vomit!





# **Requirement #8**

Do the following:

- a. Show the steps that need to be taken for someone who has a large open wound or cut that is not bleeding severely.
- b. Show the steps that need to be taken for someone who has a large open wound or cut that is severely bleeding.
- c. Explain when it is appropriate and not appropriate to use a tourniquet. List some of the benefits and dangers of the use of a tourniquet.
- d. Demonstrate the application of a tourniquet without tightening it.

### **Nonbleeding Wounds**

- If the cut is not bleeding or you were able to stop the bleeding:
  - Wash your hands first and wear gloves if available.
  - Rinse the cut well with water to clean out dirt and debris.
  - Wash the skin around the cut with a mild soap and rinse well.
  - Cover the wound with a clean bandage or clean gauze and tape.
  - Change the bandage each day or any time it gets wet.





### **Bleeding Control**

- The best method to control bleeding is direct pressure.
- Elevation above the heart will also help slow bleeding.





### **Direct Pressure**

Apply pressure directly to the wound.

#### **Puncture Wounds and Lacerations**

- If an object is embedded, don't pull it out. Bandage in place.
- If the object has already been removed wash thoroughly – infection is more likely because germs have been pushed deeper in the body.
- May still need a doctor's care you can't see how deep it went or what is going on inside the body.





## Bandaging





#### **Bandaging Techniques**

- There are different techniques for different types of bandages and locations of the wound.
- Even small wounds need cleaning and bandaging.





#### **Band-Aids – Use them correctly!**





#### **Technique for Roller Bandage**

- Use gauze pad if you have one.
- Hold end in place for first turn of bandage.
- Unroll gauze as you bandage (don't unroll first.)





#### **Technique for Roller Bandage**

- Cover the cut with a crisscross pattern (figure 8).
- Make a loop in final turn to tie off.





#### **Technique for Roller Bandage**

• Use the ends of the bandage to tie a bow knot over the cut.





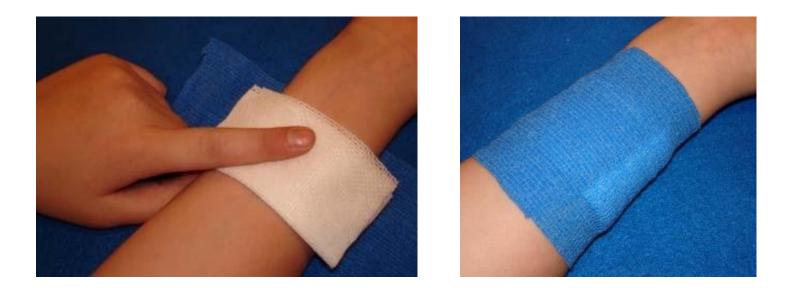
#### **Technique for a Triangular Bandage**



- Triangular bandages can also be a dressing.
- It is more than just a sling!



#### **Technique for a Self-Adherent Dressing**



• Use a gauze pad underneath to cover the wound.



#### Bandage a cut on a forearm.

# Practice Bandage





### **Tourniquets**

- Tourniquets should be used when the bleeding cannot be stopped by the use of direct pressure alone.
- Tourniquets should only be applied to treat limb injuries.
- Do not apply a tourniquet to the joint.
  - Depending on the location of the wound and its proximity to the joint, it may need to be placed just above the joint.
- The tourniquet should be tight enough to stop the bright red bleeding.
- A tourniquet should only be used in an emergency until you're able to receive immediate medical attention.
  - It can be applied for approximately two hours before neurovascular injury occurs.
- Do not remove a tourniquet yourself. A medical professional should do it for you.



#### How to Apply a Tourniquet

- 1. Place the tourniquet between the wound and the heart.
- 2. Wrap the material around the limb.
  - a. The material should sit as flatly as possible against the skin to prevent damage.
- 3. When using fabric, knot a stick or other rigid object, like a pen, on the outside layer of the tourniquet to create a torsion device.
- 4. Twist the stick to tighten the tourniquet until the pulse below the tourniquet cannot be felt.
- 5. Knot it again to keep it in place.
- 6. Immobilize the injured area and note the time the tourniquet was applied.

#### Applying a tourniquet with a windlass device

Apply direct pressure to the wound for at least 15 minutes.

Use a tourniquet only when bleeding cannot be stopped and is life threatening.  Place a 2-3" strip of material about 2" from the edge of the wound over a long bone between the wound and the heart.

 Insert a stick or other strong, straight item into the knot to act as a windlass.

) Turn stick to tighten tourniquet until pulse below the tourniquet cannot be felt.

> Secure windlass in place with a second piece of material.

Keep tourniquet visible and monitor wound for bleeding. Note time and watch for swelling below tourniquet.

- BUCHER



### **Requirement #9**

Explain when a bee sting could be life threatening and what action should be taken for prevention and for first aid.



### **Preventing Bee and Wasp Stings**

- Avoid flowering plants, gardens, and trees with ripe fruit, where bees spend their time.
- Never slap at a bee or wasp.
- Remain calm and still if a single stinging insect is flying around.
  - Swatting at an insect may cause it to sting.
- If you are attacked by several bees at once, run to get away from them.
  - Bees release a chemical when they sting, which may attract other bees.
- Wearing light-colored clothing and avoiding wearing floral or brightly colored clothing.
- Avoid perfumes, scented soaps, shampoos, and deodorants.



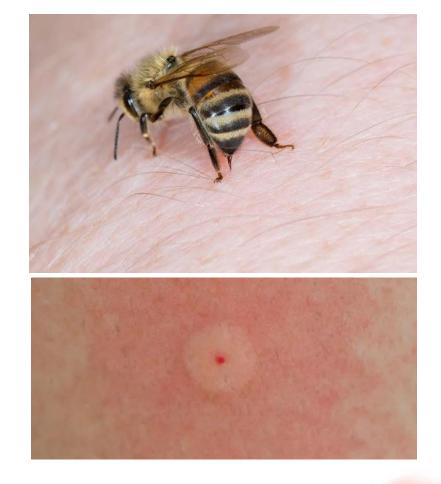


HONEY BEES STING TO DEFEND THEIR HIVES DO NOT PASS THIS POINT



#### **Bee and Wasp Stings**

- Insect stings can cause lifethreatening allergic reactions in sensitive victims.
- Pain, burning, or itching at sting site.
- Redness, swelling.
- Remove stinger if still in skin.





#### First Aid for Bee and Wasp Stings

- Remove stinger from skin by scraping it away gently with a credit card or edge.
- Wash area with soap and water.
- Put ice pack on sting site.
- Watch victim for any signs or symptoms of allergic reactions.
- If symptoms occur, call 911 and treat for shock.



### **Symptoms of Allergic Reactions**

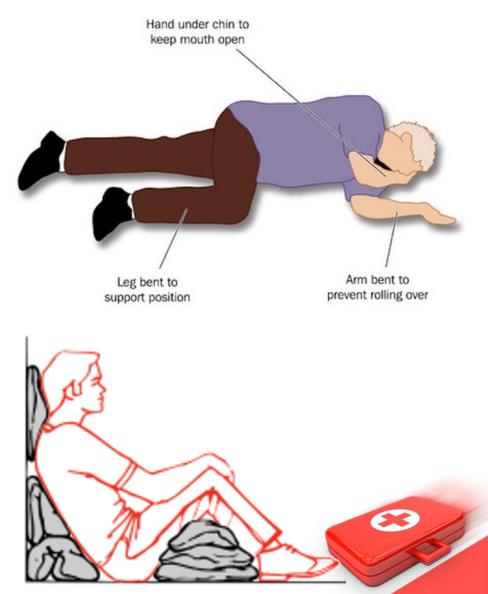
- Difficulty breathing, wheezing.
- Tightness in throat or chest.
- Swelling of the face and neck, puffy eyes.





#### First Aid for Anaphylaxis (Severe Allergic Reactions)

- Call 911.
- Lay person flat do not allow them to stand or walk.
  - If unconscious, place in recovery position.
  - If breathing is difficult allow them to sit up.
- Give adrenaline autoinjector (EpiPen).
- Monitor the victim's breathing and be prepared to give CPR.



#### First Aid for Anaphylaxis (Severe Allergic Reactions)

- Emergency Epinephrine Kit (EpiPen)
- May be carried by people with severe allergies.
- Help the victim open and use the kit as needed.







### **Requirement #10**

Describe the signs, symptoms, and potential complications of a fracture and dislocation.



#### Fracture



Dislocation

#### Fractures and Joint Injuries





#### **Fractures**

- Types of fracture include:
  - Closed (simple) fracture the broken bone has not pierced the skin.
  - Open (compound) fracture the broken bone juts out through the skin, or a wound leads to the fracture site. Infection and external bleeding are more likely.





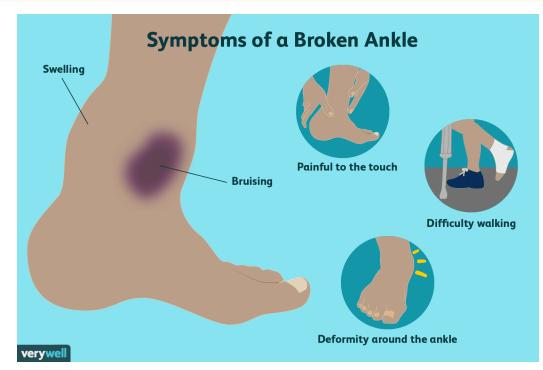
Open fracture

Closed fracture



#### **Fractures**

- Symptoms of a fracture depend on the particular bone and the severity of the injury, but may include:
  - pain
  - swelling
  - bruising
  - deformity
  - inability to use the limb.



- Complications of bone fractures:
  - Blood loss bones have a rich blood supply. A bad break can make you lose a large amount of blood.
  - Injuries to organs, tissues or surrounding structures.
  - Stunted growth of the bone if a child's long bone breaks close to the joint where the growth plates are found.



#### **Dislocations**

Signs of a dislocation:

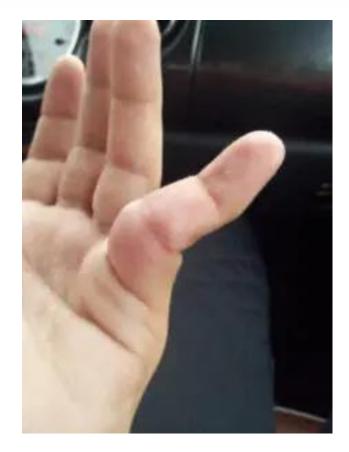
 Joint is visibly deformed or out of place.

Symptoms of a dislocation:

- Numbness or tingling at the joint.
- Swollen or discolored.
- Limited ability to move.
- Intense pain.

Complications of a dislocation:

 Complications (such as blood vessel and nerve damage and infections) can occur during the first hours or days after the injury.







### **Requirement #11**

Demonstrate the proper procedures for handling and immobilizing suspected closed or open fractures or dislocations of the:

- a. Finger
- b. Forearm
- c. Wrist
- d. Upper leg
- e. Lower leg
- f. Ankle



#### **First Aid for Fracture**



- With open fracture, cover wound with dressing and apply gentle pressure around the site if needed to control bleeding.
- If help may be delayed or if victim is to be transported, immobilize with a splint.

### Splinting

Splint the extremity if:

- The victim is at risk for moving injured area (unless help is coming soon).
- Before transporting victim to healthcare provider.

It prevents further injury, reduces pain, and minimizes bleeding and swelling.









### **Types of Splints**

**Rigid Splints** – made from a board, plastic, rolled newspaper, or thick cardboard.

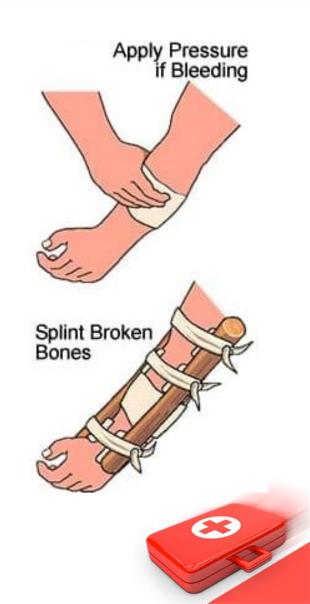
**Soft Splints** – made from a pillow, folded blanket, towel, or a triangular bandage.

Anatomic Splints – bandage an injured leg to the uninjured leg, taping fingers together.



#### **Guidelines for Splinting**

- Put a dressing on any open wound before splinting area.
- Put padding between splint and skin.
- Put splints on both sides of a fractured bone if possible.
- Apply cold packet to injury around splint.
- With splinted extremity, check the fingers or toes to make sure circulation is not cut off.



### **Securing Splints**

- Use bandages, strips of cloth, tape, or straps around splint and extremity.
- Use knots that can be untied.
- Do not secure with tape directly on skin or if it will cut off circulation.





### **Arm Sling**



- Sling keeps arm from moving.
- A good sling keeps the hand higher than the elbow.
- Tie the knot on the side of the neck for comfort.







#### Finger Splint





#### Forearm Splint



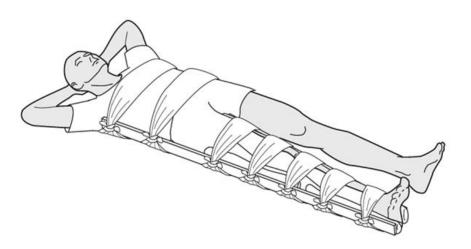




#### Wrist Splint



Upper Leg Splint







#### Lower Leg Splint



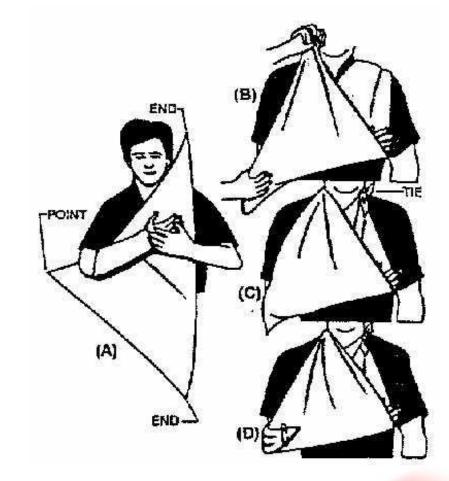
#### Ankle Splint





#### **Arm Splint and Arm Sling**

# Practice







### **Requirement #12**

Describe the signs, symptoms, and possible complications and demonstrate care for someone with a suspected injury to the neck or back.



# Signs of a Head/Neck/Back Injury

Assume a neck injury with any head injuries.



- Inability to move.
- Lack of sensation or tingling in hands.
- Deformed neck or back.
- Breathing problems.
- Headache.
- Signs of blow to head or back.



#### Head/Neck/Back Injuries

- May be life threatening and can cause permanent paralysis.
- Call 911.
- Do not move the victim any more than necessary.
- Keep victim still and support the head and neck to prevent worsening the injury.
- DON'T move head if performing CPR.







# **Requirement #13**

Describe the symptoms, proper first-aid procedures, and possible prevention measures for the following conditions:

- a. Concussion
- b. Anaphylaxis/allergic reactions
- c. Asthmatic attack
- d. Bruises
- e. Sprains or strains
- f. Hypothermia
- g. Frostbite
- h. Burns first, second, and third degree
- i. Convulsions/seizures
- j. Dehydration
- k. Muscle cramps
- I. Heat exhaustion
- m. Heat stroke
- n. Abdominal pain
- o. Broken, chipped, or loosened tooth

#### **Concussion Symptoms**

- Concussion is the sudden but short-lived loss of mental function that occurs after a blow or other injury to the head.
- Symptoms of concussion include brief:
  - loss of consciousness after the head injury.
  - periods of memory loss.
  - disturbances in vision, such as "seeing stars" or blurry vision.
  - a period of confusion, a blank expression, or a delay in answering questions immediately after the head injury.

#### Common signs of concussion:







leadaches



Light Sensitivity



Confusion



Dizziness

Nausea

Headaches

#### **Concussion First Aid**

- Call 911
- Administer the following first-aid steps while waiting for emergency medical help to arrive:
  - Keep the person still. The injured person should lie down with the head and shoulders slightly elevated. Don't move the person unless necessary. Avoid moving the person's neck. If the person is wearing a helmet, don't remove it.
  - Stop any bleeding. Apply firm pressure to the wound with sterile gauze or a clean cloth. But don't apply direct pressure to the wound if you suspect a skull fracture.
  - Watch for changes in breathing and alertness. If the person shows no signs of circulation — no breathing, coughing or movement — begin CPR.



#### **Concussion Prevention**

- Wear a seat belt when riding in a vehicle.
- Wear a helmet, or appropriate headgear, when you:
  - Ride a bike, motorcycle, snowmobile, or use an all-terrain vehicle;
  - Play a contact sport, such as football, ice hockey, or boxing;
  - Use in-line skates or ride a skateboard;
  - Bat and run bases in baseball or softball;
  - Ride a horse; or
  - Ski or snowboard.





#### Allergies

- Allergic reactions (hypersensitivity reactions) are inappropriate responses of the immune system to a normally harmless substance.
- Symptoms of allergies are:
  - Sneezing.
  - Watery and itchy eyes.
  - A runny nose.
  - Itchy skin.
  - Rash.
- Treatment
  - Over-the-counter antihistamines are a great first step in relieving seasonal allergies.
  - They work by blocking "histamine," which is a chemical released by your immune system when your body detects something harmful.

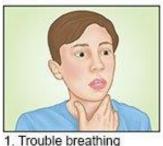




#### Anaphylaxis

- Anaphylaxis is a severe, life-threatening allergic reaction that can happen seconds or minutes after you've been exposed to something you're allergic to.
- Symptoms:
  - Swelling of your throat and tongue.
  - Difficulty breathing or breathing very fast.
  - Difficulty swallowing, tightness in your throat or a hoarse voice.
  - Wheezing, coughing or noisy breathing.
  - Feeling tired or confused.
  - Feeling faint, dizzy or fainting.
  - Skin that feels cold to the touch.
  - Blue, grey or pale skin, lips or tongue.
  - A rash that's swollen, raised or itchy.
  - Nausea or vomiting.

#### Signs and Symptoms of Anaphylaxis





2. Facial swelling



3. Hives

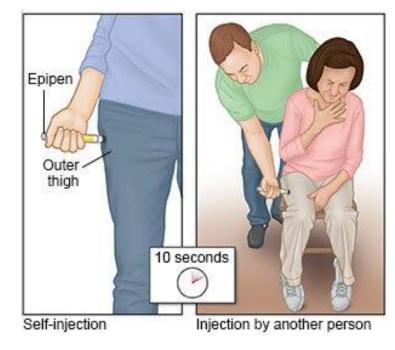
4. Nausea or vomiting



#### **Anaphylaxis First Aid**

#### Anaphylaxis First Aid:

- Immediately call 911.
- Ask if the person is carrying an EpiPen to treat an allergic attack.
- If the person needs to use an autoinjector, ask whether you should help inject the medication.
- Have the person lie face up and be still.
- Loosen tight clothing and cover the person with a blanket. Don't give the person anything to drink.
- If there's vomiting or bleeding from the mouth, turn the person to the side to prevent choking.
- If there are no signs of breathing, coughing or movement, begin CPR.
- Get emergency treatment even if symptoms start to improve (it's possible for symptoms to start again).





#### **Anaphylaxis/Allergic Reaction Prevention**

# Preventing Allergic Reactions and Managing Allergies.

- Avoid your allergens.
- Take your medicines as prescribed.
- If you are at risk for anaphylaxis, keep your epinephrine autoinjectors with you at all times.
- Wear a medical alert bracelet (or necklace) to let others know about your allergies.
- Know what to do during an allergic reaction.

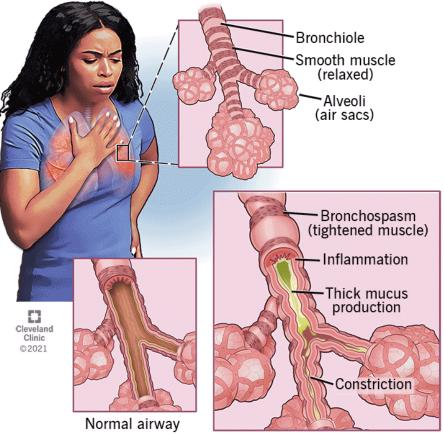




#### Asthma

- Asthma is a condition in which a person's airways become inflamed, narrow and swell, and produce extra mucus, which makes it difficult to breathe.
- Asthma can be minor or it can interfere with daily activities.
- In some cases, it may lead to a life-threatening attack.
- Symptoms:
  - Difficulty breathing.
  - Chest pain.
  - Coughing.
  - Wheezing.

#### What is an Asthma Attack?



Asthmatic airway



#### **Asthma Treatment and Prevention**

#### Treatment:

- Asthma can usually be managed with rescue inhalers to treat symptoms and controller inhalers that prevent symptoms.
- Severe cases may require longer-acting inhalers that keep the airways open, as well as oral steroids.

Prevention:

- Identify and avoid asthma triggers.
- Follow your asthma action plan.
- Get vaccinated for influenza and pneumonia.
- Identify and treat attacks early.
- Take your medication as prescribed.



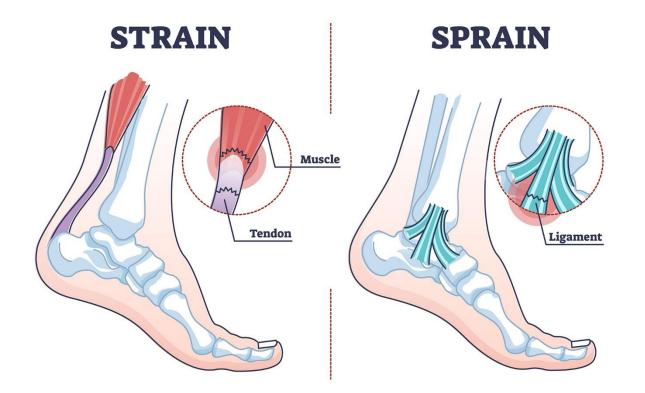


#### **Bruises**

- Caused by force damaging tissue under the skin. Usually will heal themselves.
- The discoloration is caused by blood leaking into tissue.
- You can apply cold pack in first hour.
- Warm packs after a day will help them go away faster.
- If very large or spreading, they are a sign that something serious is going on and medical care is needed.



#### **Sprains vs. Strains**



The difference between a strain and a sprain is that a sprain is an injury to ligaments and a strain is an injury to muscles and tendons.

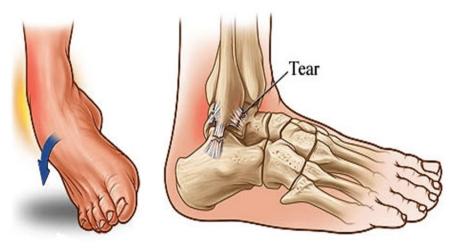
# **Sprain Symptoms**

A sprain is a stretched or torn ligament.

- Ligaments are tissues that connect bones at a joint.
- Falling, twisting, or getting hit can all cause a sprain.
- Ankle and wrist sprains are most common.

Symptoms include:

- Pain.
- Swelling.
- Bruising.
- Unable to move your joint.
- You might feel a pop or tear when the injury happens.





# **Strain Symptoms**

A strain is a stretched or torn muscle or tendon.

- Tendons are tissues that connect muscle to bone.
- Twisting or pulling these tissues can cause a strain.
- Strains can happen suddenly or develop over time.
- Back and hamstring muscle strains are most common.

#### Symptoms include:

- Pain.
- Muscle spasms.
- Swelling.
- Trouble moving the muscle.





# **Sprain or Strain Treatment**

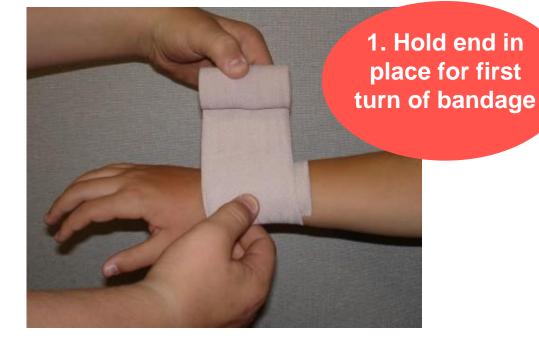
- Treat both sprains and strains with RICE.
  - Helps to relieve pain and swelling.
  - Promotes healing and flexibility.
- **RICE** stands for:
  - Rest and protect the injured or sore area.
  - Ice or a cold pack used as soon as possible.
  - Compression, or wrapping the injured or sore area with an elastic bandage.
  - Elevation (propping up) the injured or sore area.
- Aspirin or ibuprofen can help with pain and swelling.
- Seek medical attention if appropriate.





#### Wrapping a Sprain with an Elastic Bandage

2. Continue with overlapping turns (overlap by about 3/4 of previous turn





3. Fasten end of bandage with clips, tape, or safety pins





Elastic bandage will work at any joint on the limbs.



#### Elastic bandage for sprained wrist

# Practice





#### **Prevention of Sprains or Strains**

Seven Steps to Prevent Sprains and Strains:

1. Exercise consistently to maintain strength.

2. Warm up and stretch before sports.

3. Avoid exercise when tired or in pain.

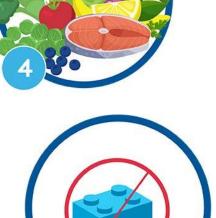


#### **Prevention of Sprains or Strains**

Seven Steps to Prevent Sprains and Strains:

4. Eat a well-balanced diet to keep muscles strong.

5. Be aware of falling hazards (dark stairways, uneven sidewalks, toys on the floor)





# **Prevention of Sprains or Strains**

Seven Steps to Prevent Sprains and Strains:

6. Keep shoes in good shape and fitting well, not worn out.

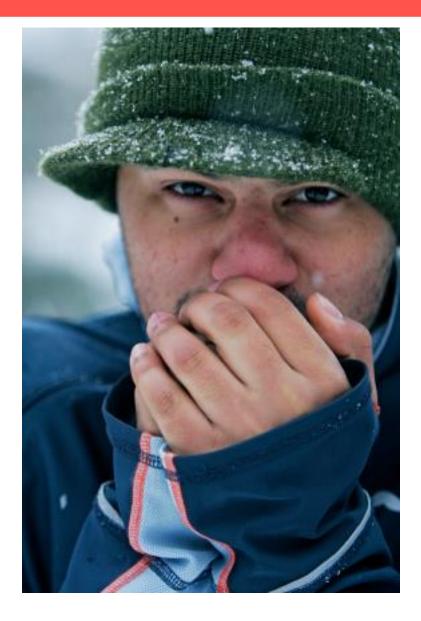


7. Wear protective equipment or braces during sports.





## **Cold Emergencies**





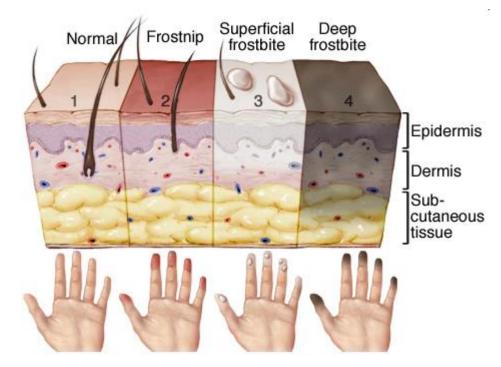
# **Frost Nip**

- **Frost nip** is an earlier and milder case of frostbite. Usually the ears, cheeks, nose, fingers and toes are affected.
- Skin white or numb.
- Don't rub hold against a warm body part.
- Change clothing and/or environment.
- Frost nip is a warning that you are not keeping warm enough!



#### **Frost Bite**

- Mild Frostbite:
  - Skin looks waxy and white, gray, yellow, or bluish.
  - Area is numb or feels tingly or aching
- Severe Frostbite:
  - Area feels hard.
  - May become painless
  - After warming, area becomes swollen and may blister.





#### **First Aid for Frostbite**

- Move victim to warm environment.
- Hold frostbitten area in hands to warm – do not rub.
- Remove any tight clothing or jewelry around area.
- Put dry gauze or fluffy cloth between frostbitten fingers or toes.
- Do not use heat lamp, campfire, or heating pad to rewarm.
- Seek medical attention immediately.





#### Hypothermia



- Occurs when body cannot make heat as fast as it loses it.
- Internal body temperature drops below 95°F.
- Can occur whenever and wherever a person feels cold, including indoors in poorly heated areas.

# First Aid for Hypothermia

- Move victim to shelter.
- Remove wet clothing and wrap victim in warm covers.
- Apply direct body heat.
- Re-warm neck, chest, abdomen, and groin first.
- Give warm, sweet drinks if conscious.
- Monitor breathing, administer CPR.
- Get medical help.







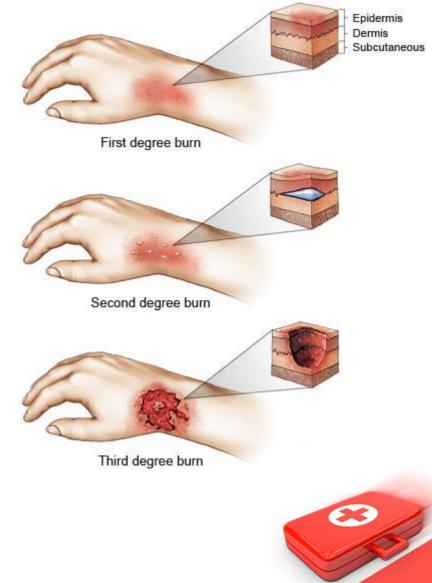


The type of burn is not based on the cause of it. Scalding, for example, can cause all three burns, depending on how hot the liquid is and how long it stays in contact with the skin.



#### How Bad Is the Burn?

- **First-degree burns** affect the epidermis and are considered mild compared to other burns.
  - Red, non-blistered skin.
- Second-degree burns (partial thickness burns) affect the epidermis and the dermis (lower layer of skin). They cause pain, redness, swelling, and blistering.
  - Blisters and some thickening of the skin.
- **Third-degree burns** (full thickness burns) go through the dermis and affect deeper tissues.
  - Widespread thickness with a white, leathery appearance.



#### **First-Degree Burns**

- Symptoms:
  - Redness.
  - Minor inflammation, or swelling.
  - Pain.
  - Dry, peeling skin occurs as the burn heals.
- Treatment:
  - Soak the wound in cool water for five minutes or longer.
  - Take acetaminophen or ibuprofen for pain relief.
  - Apply lidocaine (an anesthetic) with Aloe Vera to soothe the skin.
  - Use an antibiotic ointment and loose gauze to protect the affected area.
  - Make sure you don't use ice, as this may make the damage worse.



#### Sunburn is Usually a Type of First Degree Burn



- Severe sunburn can be a significant first aid situation.
- Sunburn is preventable with protective ointments, clothing, or staying out of the sun.
- Long term effects of sunburn has been linked to skin cancers.



#### **Second-Degree Burns**

- Symptoms:
  - Causes the skin to blister and become extremely red and sore.
  - Some blisters pop open, giving the burn a wet or weeping appearance.



- Treatment:
  - Run the skin under cool water for 15 minutes or longer.
  - Take over-the-counter pain medication (acetaminophen or ibuprofen)
  - Apply antibiotic cream to blisters.
  - Seek emergency medical treatment if the burn affects a widespread area, such as any of the following: Face, hands, buttocks, groin, feet.

# **Third-Degree Burns**

- Symptoms:
  - Waxy and white color.
  - Char.
  - Dark brown color.
  - Raised and leathery texture.
  - Blisters that do not develop.
  - May have signs and symptoms of shock.
- Treatment:
  - Never attempt to self-treat a third-degree burn.
  - Call 911 immediately.
  - While you're waiting for medical treatment, raise the injury above the heart.
  - Make sure no clothing is stuck to the burn.



#### **Chemical and Electrical Burns**

- **Call 911!** Chemical and electrical burns warrant immediate medical attention because they can affect the inside of the body, even if skin damage is minor.
- For chemical burns use gentle flushing until help arrives.



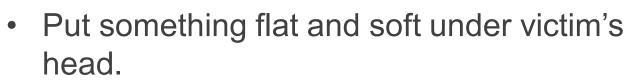
#### Chemical Burn



**Electrical Burn** 

#### **Convulsions/Seizures**

- A brain disturbance caused by epilepsy, high fever in young children, certain injuries, electric shock, and other causes.
- Can be scary for helpers.
- Move objects away and let victim have seizure – there is nothing you can do to stop it.



- Gently turn victim onto one side to help keep airway clear if vomiting occurs.
- If this is first time, call 911 otherwise do what victim wants.





## Dehydration

- When the body puts out more liquid than it is taking in.
- Ways we lose fluids:
  - Sweating.
  - Urination.
  - Vomiting.
- Signs of dehydration:
  - Thirst.
  - Yellow or dark urine.
  - Dry mouth.
  - Lightheadedness.
  - Nausea and vomiting.
  - Dry skin.
  - Cease sweating.

- Treatment:
  - Drink fluids (water, Gatorade).
  - Avoid physical activity.
  - Get inside air conditioned or cool area.





#### **Heat Cramps**

- Activity in a hot environment may cause painful cramps in lower legs or stomach muscles.
- May occur along with heat exhaustion or heatstroke.
- Signs include muscle pain, cramping spasms, heavy sweating.





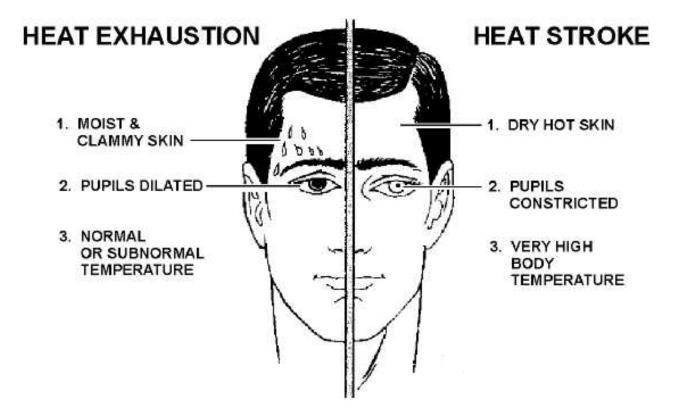
#### **First Aid for Heat Cramps**

- Have person stop activity and sit quietly in a cool place.
- Give water or a sports drink.
- Massage the cramped muscles.





## **Heat Emergencies**





#### **Heat Exhaustion Symptoms**

- Heavy sweating
- Thirst
- Fatigue
- Heat cramps
- Headache
- Dizziness
- Nausea
- Vomiting



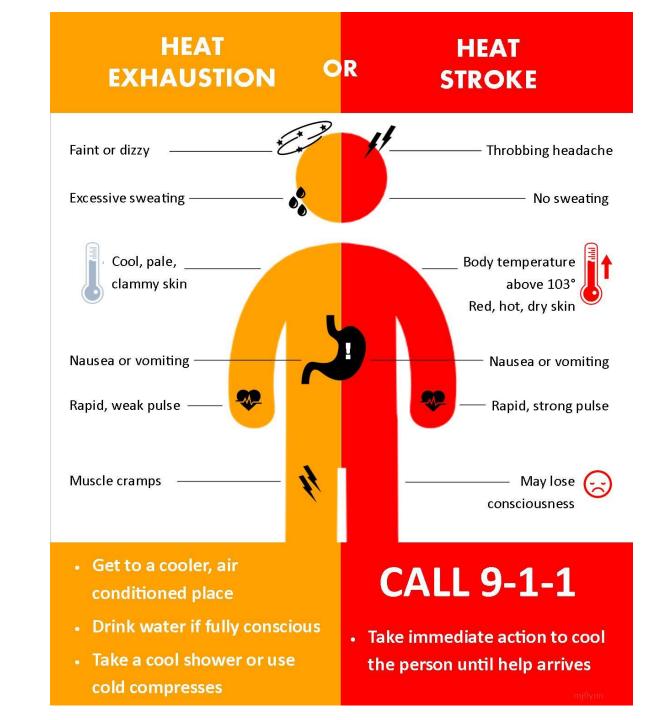


#### **First Aid for Heat Exhaustion**

- Move victim from heat to rest in a cool place.
- Loosen or remove unnecessary clothing.
- Give water or a sports drink.
- Raise feet 8-12 inches.
- Put cool, wet cloths on forehead and body – spray skin with water.
- Seek medical care if victim's condition worsens or does not improve within 30 minutes.







#### **First Aid for Heatstroke**

- Call 911
- Move victim to cool place.
- Remove outer clothing.
- Cool victim quickly.

- Use a fan to lower temperature Elevate feet Apply cold compresses Have victim lie down Have victim drink fluids
- Apply cold compresses or spray skin with water.
- Put ice bags or cold packs beside neck, armpits, and groin.



#### **Preventing Heat Related Problems**

- Drink cool water even if you are not thirsty – at least 1 cup every 20 minutes.
- Take enough time to recover from heat given the temperature, humidity, and conditions.
- Take breaks in a designated shady or cool location.
- Wear a hat and light-colored, loose-fitting, and breathable clothing if possible.





#### **Abdominal Injuries**



- Includes open and closed wounds.
- Commonly result from a blow or a fall.
- May involve internal and/or external bleeding.
- Victim needs immediate medical care even if no significant injuries can be seen.
- Internal organs may have ruptured and there may be serious internal bleeding.
- A closed abdominal injury can be life threatening.

#### **Check for Closed Abdominal Injury**



- Severe pain, tenderness.
- Bruising.
- Swollen or rigid abdomen.



#### **First Aid for Closed Abdominal Injury**

- Position victim on back and loosen clothing.
- Call 911.
- Treat for shock and monitor breathing.
- Allow the victim to bend knees slightly if this eases pain.





#### **Open Abdominal Wounds**



- May involve significant bleeding.
- Organs may be protruding from wound.



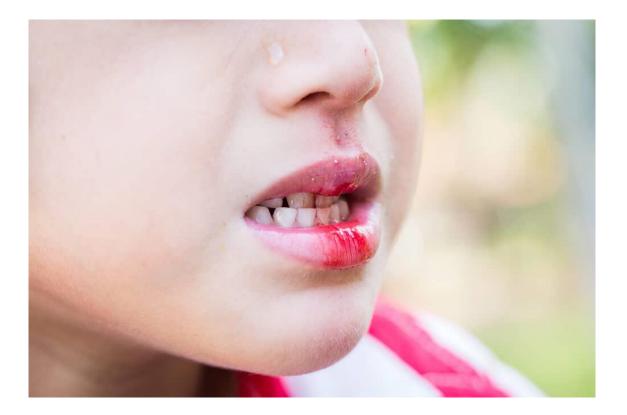
#### **First Aid for Open Abdominal Wounds**

- Cover wound with moist, sterile dressing or dry, non-adherent dressing.
- Cover dressing with large occlusive dressing or plastic wrap taped in place.
- Lay victim on back.
- Loosen any tight clothing.
- If organs are protruding through the wound opening, do not push them back in.
- Call 911 and treat for shock.
- Allow victim to bend knees slightly if this eases pain.





#### **Dental Emergencies**





#### **Dental Emergencies**

- Chipped or broken tooth.
- See a dentist.
- Bring pieces with you if possible.





#### **Knocked out Tooth**

- Have victim sit with head tilted forward to let blood drain.
- Fold gauze and place it over tooth socket.
- Have victim gently bite down for pressure for 20-30 minutes.
- Save the tooth it may be re-implanted.
- Put tooth in a container of milk, the victim's saliva, or cool water.
- Get victim and tooth to a dentist as quickly as possible.







## **Requirement #14**

Do the following:

- a. Describe the conditions under which an injured person should be moved.
- b. If a sick or an injured person must be moved, tell how you would determine the best method.
   Demonstrate this method.
- c. With helpers under your supervision, improvise a stretcher and move a presumably unconscious person.



#### When to Move an Injured Person

- Typically, don't move an injured person.
  - You can do more damage moving them, so in most cases wait for the paramedics.
- You may have to move the victim if:
  - They are in immediate danger, such as near a fire, rising water, or with severe weather approaching.
  - When help is not on the way, and the patient cannot be treated for their problem at their present location.
- Before deciding whether to transport, a patient must be stabilized as much as possible.
  - This means assuring open airways, controlling bleeding, splinting orthopedic injuries, treating hypothermia, and more.



#### **Shoulder Drag**



- Support the head.
- Use for short distances.



#### **Ankle Drag**



Use for short distances.



#### **Blanket Drag**

- Support victim's head.
- Use for longer distances.





#### **Packstrap Carry**



#### For victim who cannot be dragged safely.



#### **Fireman's Carry**



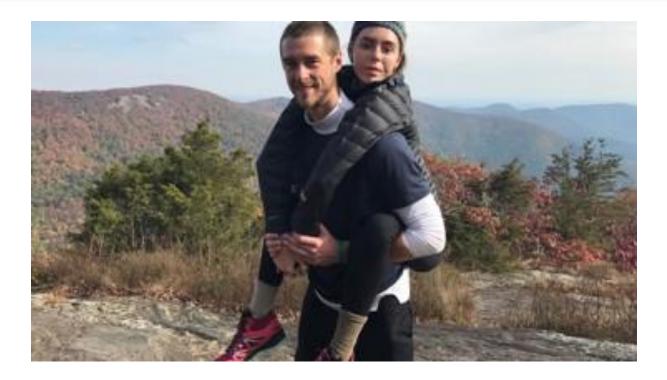




#### Note: Wrist lock.



#### **Piggyback Carry**



For a lighter victim.



#### **One Person WalkingAssist**



Responsive victim who can walk with help.



#### **Two Person Walking Assist**



#### Responsive victim who can walk with help.



#### **Two-Handed Seat Carry**

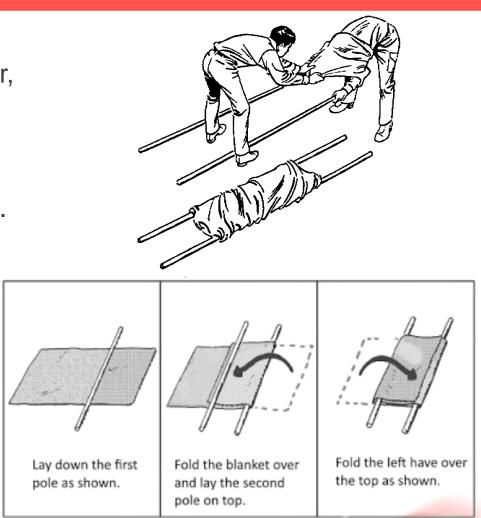
#### Use with two rescuers.





#### **Improvised Stretcher**

- 1. To move a victim onto a stretcher, position the stretcher next to the victim.
- 2. The victim should be on their back with their arms at their side.
- 3. Support the head in alignment with the spine throughout.
- 4. Place the victims arms across their chest.
- 5. Logroll the patient on their side. Slide the stretcher underneath.
- 6. Roll the patient back onto the stretcher.



#### **Moving Victims**

# Practice









## **Requirement #15**

Describe the following:

- a. The indications that someone might be a danger to themselves or others.
- b. What action you should take if you suspect that someone might be a danger to themselves or others.



#### **Gravely Disabled**

- Gravely disabled means a condition in which persons, as a result of a behavioral health disorder are a danger to themselves or others.
- It is important to recognize people in extreme psychological distress and try to get them the help they need.





## **Danger to Self**

#### Ways people self-harm can include:

- 1. Cutting themselves.
- 2. Poisoning themselves.
- 3. Over-eating or under-eating.
- 4. Exercising excessively.
- 5. Biting themselves.
- 6. Picking or scratching at their skin.
- 7. Burning their skin.
- 8. Inserting objects into their body.
- 9. Hitting themselves or walls.
- 10. Misusing alcohol, prescription and recreational drugs.
- 11. Pulling their hair.
- 12. Having unsafe sex.
- 13. Getting into fights where they know they will get hurt.





## **Danger to Self**

#### Common suicide warning signs:

- 1. Being sad or moody: Depression is a major risk factor for suicide.
- 2. Sudden calmness: The person suddenly becomes calm after a period of depression or moodiness.
- **3. Withdrawing from others:** The person chooses to be alone and avoids friends or social activities. They also lose of interest or pleasure in activities they previously enjoyed.
- 4. Changes in personality, appearance, sleep pattern: The person's attitude or behavior changes. Also, they suddenly become less concerned about their personal appearance. They sleep much more or much less than typical for that person.
- 5. Showing dangerous or self-harmful behavior: The person engages in potentially dangerous behavior, such as driving recklessly or increase their use of drugs and/or alcohol.



## **Danger to Self**

#### **Common suicide warning signs (continued):**

- 6. Experiencing recent trauma or life crisis: Examples of crises include the death of a loved one or pet, divorce or break-up of a relationship, diagnosis of a major illness, loss of a job or serious financial problems.
- 7. Being in a state of deep despair: The person talks about feeling hopeless, having no reason to live, being a burden to others, feeling trapped or being in severe emotional pain.
- 8. Making preparations: The person begins to put their personal business in order. This might include visiting friends and family members, giving away personal possessions, making a will and cleaning up their room or home. Often the person will search online for ways to die or buy a gun. Some people will write a note before attempting suicide.
- 9. Threatening suicide or talking about wanting to die: Not everyone who is considering suicide will say so, and not everyone who threatens suicide will follow through with it. However, every threat of suicide should be taken seriously.

#### **Danger to Others**

#### Warning signs a person is a danger to others:

- 1. Serious physical fighting with peers or family members.
- 2. Severe destruction of property.
- 3. Severe rage for seemingly minor reasons.
- 4. Other self-injurious behaviors or threats of suicide.
- 5. Threats of lethal violence.
- 6. A detailed plan (time, place, and method) to harm or kill others, particularly if the person has a history of aggression or has attempted to carry out threats in the past.
- 7. Possession and/or use of firearms and other weapons.



## **Helping the Gravely Disabled**

- Inform a responsible adult.
- Call 911 and explain to the dispatcher that you are concerned that a person is mentally ill and at risk of harming themselves or others.
- Call 988 (formerly known as the National Suicide Prevention Lifeline).
  - Calls are routed to the closest crisis center based on area code, with the goal of connecting callers to crisis counselors in their own area.
  - Local crisis counselors at crisis centers are familiar with community mental health resources, and can therefore provide referrals to local services.
- Let trained professionals address the issue.

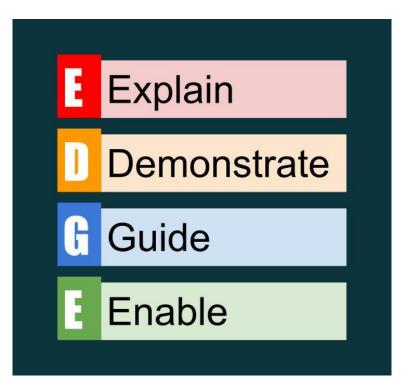






## **Requirement #16**

Teach another Scout a first-aid skill selected by your counselor.



#### The BSA EDGE Method

- The **EDGE** method is a four step method for teaching a skill:
  - Explain
  - **D**emonstrate
  - Guide
  - Enable
- **Explain –** First explain what you will be doing. Tell them the steps involved. Visual aids might be helpful for this step. Use questions to gauge their understanding.
- **Demonstrate –** Show them how to do the skill. Demonstrate the steps using the actual materials. Describe what you are doing.
- **Guide –** Let them practice the skill. Guide and coach them as they try to do it themselves. This step will take the most time.
- Enable Enable them by letting them do the skill themselves without any intervention.