

ESSENTIAL QUESTIONS

- What are basic first aid techniques and how do you properly treat injuries?
- What should be in a first aid kit?
- What is first aid?

**WHY IS IT IMPORTANT TO
KNOW FIRST AID?**

TEACHER INPUT:

- ① *What is first aid?*
 - *It is simply actions you can take for the victim before medical help arrives. You may even save a life.*

BASIC PRECAUTIONS ABOUT PROVIDING FIRST AID

- *It's vital to check out the scene and make sure it's safe to provide first aid. Otherwise, you may become another victim.*
- *Turn off any electrical power if someone has been electrically shocked, and look for other hazards, such as downed power lines, smoke, or dangerous swimming conditions in a near-drowning emergency.*
- *Coming into contact with another person's blood or other bodily fluid may increase your risk of infectious disease. Research shows the actual risk of disease transmission from providing first aid is very small. Wear disposable gloves if available. If gloves are not available, create a barrier with a plastic bag or clean cloth.*
- *Wash your hands thoroughly after you provide first aid.*
- *Never move a victim unless you have no other choice. Be especially cautious if you suspect a head, neck, or back injury.*

BLEEDING:

With all types of bleeding, it's important to stop the flow of blood as quickly as possible.

BLEEDING

- Small cuts:
 - Small cuts in the veins stop bleeding and clot within a few minutes.
 - The area should then be washed, and a bandage or gauze placed gently on top.



● Deeper cuts:

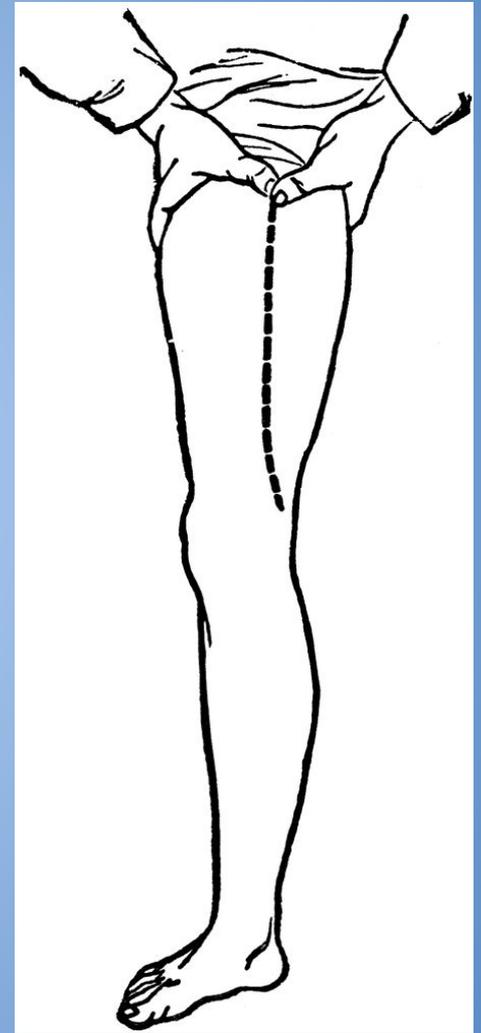
- Deeper cuts in the veins produce dark blood that seeps out slowly and steadily.
- It can be stopped by gentle pressure on the wound with a sterile or clean cloth, followed by the application of a clean or sterile bandage.
- Often, these wounds require stitches, and therefore medical treatment will be necessary after providing first aid.



⦿ Arterial bleeding:

- Bleeding from an artery can cause death within a few minutes, so urgent first aid is essential.
- This type of bleeding pulsates and squirts blood as the pulse beats.
- The blood is often a bright red color.

- To stop bleeding from an artery:
 - Apply hard pressure on the wound and continue until patient receives medical treatment.
 - Press with a sterile cloth or use your hand if nothing else is available.
 - Put a bandage on the wound if possible.
 - If the blood soaks through the bandages, press harder until the bleeding stops.
 - Do not remove the soaked bandages, but place another on top if necessary.
 - Do not attempt to clean the wound.



- ① The person must be made to lie down, preferably with head lower than rest of the body. This will ensure that enough oxygen gets to the brain.
- ① If possible, position the wounded area higher than the rest of the body so that the pressure, and therefore the bleeding, will be reduced.

BURNS

There are many different types of burns.

They can be thermal burns, chemical burns, electrical burns or contact burns.

Each of the burns can occur in a different way, but treatment for them is very similar.

THERMAL, CHEMICAL OR CONTACT BURNS

- ① The first step is to run cold water over the burn for a minimum of 30 minutes. If the burn is small enough, keep it completely under water. Flushing the burn takes priority over calling for help. Flush the burn FIRST.
- ② If the victim's clothing is stuck to the burn, don't try to remove it. Remove clothing that is not stuck to the burn by cutting or tearing it.
- ③ Cover the burn with a clean, cotton material. If you do not have clean, cotton material, do not cover the burn with anything.
- ④ Do not scrub the burn and do not apply any soap, ointment, or home remedies.
- ⑤ Don't offer the burn victim anything to drink or eat, but keep victim covered with a blanket to maintain a normal body temperature until medical help arrives.

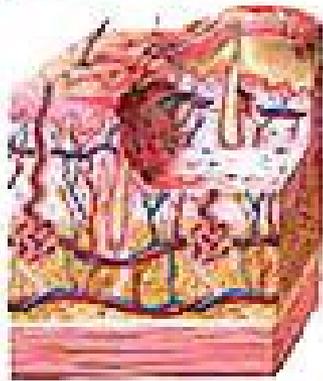
1ST DEGREE BURN

- Flush the burned area with cold water for least 20 minutes
- Loosely wrap with a clean dressing
- Sunburns are an example



2ND DEGREE BURN

- Burned area has blisters
- Flush with cold water
- Elevate burned area
- Loosely wrap the burn
- Do NOT pop blisters



Partial thickness
(second degree)
burn



3RD DEGREE BURN

- All layers of the skin are damaged
- Usually from chemical, fire, electricity
- Require immediate medical attention
- Do NOT remove burned clothing



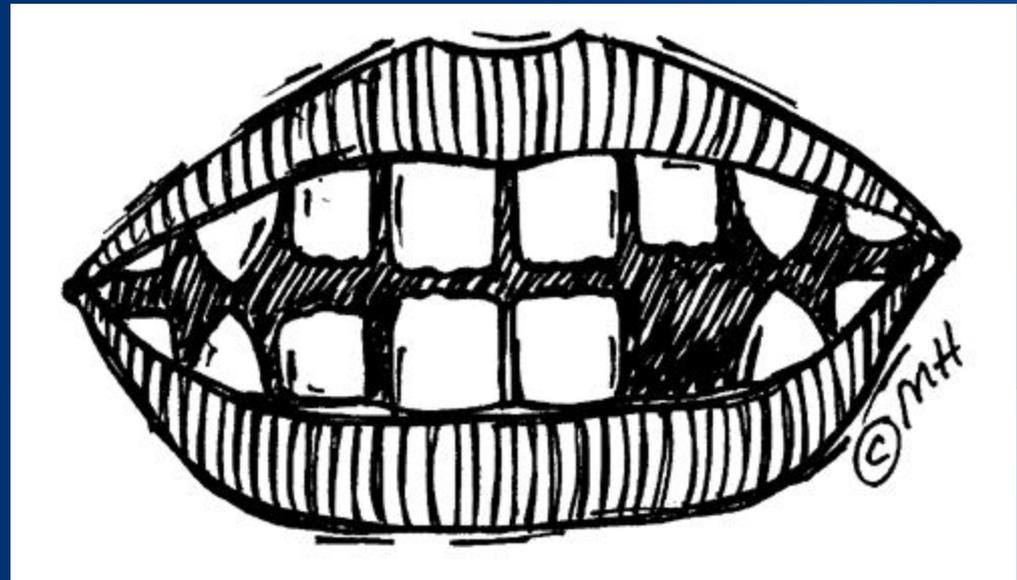
Full thickness
(third degree)
burn



RULE OF THUMB FOR INJURIES

- ① Do not move victim, and call for emergency care if:
 - The victim may have seriously injured the head, neck, or back
 - A broken bone comes through the skin (apply constant pressure with a clean gauze pad or thick cloth, and keep the victim lying down until help arrives; do not wash the wound or push in any part of the bone that is sticking out)

KNOCKED OUT TOOTH



KNOCKED-OUT TOOTH:

- A knocked-out tooth is a dental emergency. Baby teeth do not need to be put back in, but quickly putting a permanent tooth back in its socket is key to preserving the tooth. Every minute a tooth is out of its socket means the less chance that it will survive. A tooth has its best chance of survival if replaced within 30 minutes.
- Find the knocked-out permanent tooth. If you are not sure if it's a baby or permanent tooth (a baby tooth has a smooth edge), call a dentist or a doctor or emergency room immediately.
- Handle the tooth only by its crown (the part normally exposed), never by the root.
- Gently rinse (don't scrub) the tooth immediately with saline solution or milk. (Tap water should only be used as a last resort; it contains chlorine, which may damage the root.)
- Keep the tooth from drying out until you see the dentist by:
 - Inserting tooth back into its socket if person is old enough to hold it in place
 - Storing the tooth in milk (not water), or
 - Placing the tooth between your cheek and lower gum
 - See your dentist or go to your local emergency room right away.

NOSEBLEEDS

NOSEBLEEDS:

- ⦿ Nosebleeds occur when one of the small blood vessels in the mucous membranes of the nose bursts.
- ⦿ Do not bend the head backwards or lie down, because this increases blood pressure in the head and so increases the bleeding.
- ⦿ Blood may also run into the stomach.
- ⦿ To limit the bleeding:
 - pinch the nostrils shut with the index and middle finger for 10 minutes. This way, the vein is pressed together, which is often enough to stem the flow.
 - while the nostrils are shut, the person must breathe through the mouth.
 - if the bleeding continues beyond 10 minutes, it is important to contact a doctor.

POISONING OR OVERDOSE

POISONING OR OVERDOSE:

- ⦿ After checking area first for your safety, remove the victim and take to fresh air.
- ⦿ Provide treatment appropriate to the form of the poisoning. If the poison is in solid form, such as pills, remove it from the victim's mouth using a clean cloth wrapped around your finger. Don't try this with infants because it could force the poison further down their throat.
- ⦿ If the poison is corrosive to the skin, remove the clothing from the affected area and flush with water for 30 minutes.
- ⦿ Take the poison container or label with you when you call for medical help because you will need to be able to answer questions about the poison.
- ⦿ Try to stay calm and follow the instructions you are given. If the poison is in contact with the eyes, flush the victim's eyes for a minimum of 15 minutes with clean water.
- ⦿ National Poison Control Center (800-222-1222)

SHOCK AND FAINTING:

Shock and fainting occur when only a small amount of blood circulates to the brain. This means that the brain is not receiving enough oxygen, which leads to a feeling of faintness, disorientation and dizziness.

SHOCK MAY ALSO OCCUR:

- ⦿ after an accident involving loss of blood
- ⦿ after a serious infection with loss of fluids
- ⦿ after a serious burn
- ⦿ after other accidents that cause loss of fluids or blood.
- ⦿ When the flow of blood in the body is too slow, the blood pressure drops and too little oxygen is circulated through the body.

WHEN THIS OCCURS A PERSON WILL:

- go pale
- turn sweaty, clammy and cold
- become dizzy
- have a weak, fast pulse
- have low blood pressure
- have slow, weak breathing
- lose consciousness
- become anxious or restless

WHAT TO DO IF SOMEONE IS IN SHOCK OR HAS FAINTED:

- ⦿ The person must lie on his/her back - preferably with feet raised - to ensure enough blood gets to the brain.
- ⦿ Make sure the person is warm, comfortable and covered by a blanket if necessary to maintain normal body temperature.
- ⦿ Do not give victim anything to eat or drink due to the risk of choking. Food/drink will also impair advanced medical care, such as surgery, if required.
- ⦿ If the person vomits or bleeds from the mouth, he/she must be placed on his or her side to prevent choking.
- ⦿ Call for an ambulance. A person in shock must always be treated by a doctor. Stay with the person until medical help arrives.

INJURIES TO MUSCLES, BONE, OR JOINTS

INJURIES TO MUSCLES, BONE, OR JOINTS:

- Always suspect a serious injury when any of the following signals are present:
 - Significant deformity
 - Bruising and swelling
 - It's painful to bear weight on the injured area or to move it
 - Bone fragments sticking out of a wound
 - Person feels bones grating; person felt or heard a snap or pop at the time of injury
 - Cause of the injury suggests that the injury may be severe

WHAT TO DO:

- Remove clothing from the injured part.
- Apply a cold compress or ice pack wrapped in cloth.
- Place a splint on the injured part by:
 - keeping the injured limb in the position you find it
 - placing soft padding around the injured part
 - placing something firm (like a board or rolled-up newspapers), next to the injured part, making sure it's long enough to go past the joints above and below the injury
 - keeping the splint in place with first aid tape
- Splint only if the person must be moved or transported by someone other than emergency medical personnel
- Splint only if you can do so without causing more pain.
- Check for circulation (feeling, warmth, and color) before and after splinting
- Seek medical care, and do not allow victim to eat in case surgery is needed.

SPRAINS AND STRAINS

SPRAINS AND STRAINS:

- Common causes for sprains and strains are falls, twisting a limb, sports injuries and over-exertion.
- A sprain results from overstretching or tearing a ligament (fibrous tissue that connects bones), a tendon (tissue that attaches a muscle to a bone) or a muscle.
- A strain occurs when a muscle or tendon is overstretched or overexerted. Both sprains and strains result in pain and swelling.

GENERAL CARE FOR THESE TYPES OF INJURIES INCLUDE FOLLOWING RICE:

- ⦿ Rest- do not move or straighten the injured area.
- ⦿ Immobilize- Stabilize the injured area in the position it was found. Splint the injured part only if the person must be moved and it does not cause more pain.
- ⦿ Cold- Fill a plastic bag or wrap ice with a damp cloth and apply ice to the injured area for periods of 20 minutes. If continued icing is needed, remove the pack for 20 minutes, and then replace it. Place a thin barrier between the ice and bare skin.
- ⦿ Elevate- Do NOT elevate the injured part if it causes more pain.

GUIDED PRACTICE:

- ① Utilizing small groups, provide each student with Appendix 3, Emergency Scenes, What Would You Do? For each of these scenarios, groups are to decide upon a care strategy. A first aid kit or materials should be available as a reference for group members. If resources are sufficient, each group may be provided with first aid materials.
- ② As a class, read each scenario. Groups will take turns demonstrating the proper care their designated emergency requires. Lead the class in a discussion offering comments, feedback, and correction, if necessary about appropriate first aid care for each demonstration. Use the Teacher Key for Emergency Scenes, What Would You Do? as a check of students' responses (Appendix 4).



Emergency Scenes: What Would You Do?

Situation #1 One of your friends cuts his leg and it begins to bleed.

Steps for proper care:

When would calling 911 or seeking additional medical treatment be necessary?

Situation #2: Your sister suffers a steam burn while draining cooked pasta.

Steps for proper care:

When would calling 911 or seeking additional medical treatment be necessary?

Situation #3: A neighbor, while playing outside, is stung by a bee.

Steps for proper care:

When would calling 911 or seeking additional medical treatment be necessary?

First Aid Guide

Be calm, don't panic. Check and make sure airway is open, breathing restored and circulation maintained. Check for bleeding, signs of shock and broken bones. Check for emergency medical identification on the victim. Loosen any clothing that may restrict victim's breathing or interfere with circulation. Do not move injured persons unless situation is life threatening. Get professional medical help immediately!

Emergency	Symptoms	Treatment
Asphyxiation	Breathing stopped, lips and ear lobes blue; unconscious	Move to fresh air; administer CPR
Bleeding (from the Arteries)	Spurting bright red blood from wounds	Cover with pressure bandage. Apply hand pressure to nearest pressure point (brachial or femoral). Use tourniquet only when other methods fail to stop blood.
Bleeding (from the Veins)	Steady flow; dark red blood	Apply sterile compress firmly over wound to aid clotting.
Bleeding (internal)	Pale face; faintness; thirsty; sighing; weak, rapid pulse	Apply cold packs to area you think is bleeding. Seek medical attention immediately.
Burns (Thermal)	Redness; pain; blisters; charred or cooked tissue.	Apply cool, wet cloths; DO NOT use ice; Apply clean dry dressing; Treat for shock if needed.
Burns (Chemical)	Redness; pain.	Wash eyes or skin thoroughly with clean water for 10 to 15 minutes; Apply clean dry dressings to burn areas.
Drowning	Unconscious, not breathing	Remove any water from mouth; loosen clothing; administer CPR; elevate feet and keep warm.
Dislocations	Severe pain; swelling; loss of movement; protruding bone.	Do not move. Treat breathing/bleeding/shock first. Immobilize injured area before moving.
Electric Shock	Unconscious; breathing is difficult; burns at contact point; muscle spasms.	Break contact with electric source using nonmetal object; If no pulse or breathing, begin CPR; Seek medical attention immediately.
Fainting	Temporary unconscious; sometimes blurred vision; nausea; paleness; sweating.	Lay on back; elevate feet; keep warm; loosen clothing.

Fractures (Simple)	Pain; swelling; deformity; inability to move limb.	Support above and below fracture; apply well-padded splints.
Fractures (Compound)	Open wound; possibly bone protruding; bleeding.	Compress to wound; apply splints; leave bone setting to the doctor.
Fractures (Skull)	Possible bleeding eyes, nose, and mouth; serum from ears in basal fracture.	Raise head; dress wound; no stimulants; Seek help immediately.
Frost Bite	Affected part becomes red, then gray, then white; numbness.	Thaw slowly with lukewarm (not hot) water or by gently wrapping warm blanket or clothes; Do not rub limbs; If conscious, give warm drink; Seek medical attention.
Gas Poisoning (Carbon Monoxide)	Yawning; giddiness; weariness; throbbing heart.	Move to fresh air; administer CPR.
Heat Exhaustion	Fatigue; pale face; rapid pulse; shallow breathing; cold sweat; clammy skin	Lie down; massage legs and limbs toward heart; give cool water or electrolyte solution.
Shock	Pale face; chills; nausea; dazed condition; partly or totally unconscious.	Lay with head low; keep warm; rub limbs; DO NOT give anything by mouth.
Stings	Pain; itching; swelling (red); Allergic reactions- difficulty breathing or swallowing	Remove stinger with fingernail (Do not squeeze); Apply cold compress, then calamine lotion.
Sunstroke	Extremely high body temperature; hot, red, dry skin; absence of sweating; rapid pulse; convulsions.	Raise head; reduce temperature by wrapping victim in cool, wet sheets. Do not give any stimulants.

[Note: Several first aid emergencies are covered in other objectives at other grade levels. This guide includes them so a complete guide can be placed in the students' first aid kits.]

United Streaming

Safety
and First
Aid

First
Response:
Head and
Spinal
Injuries and
Muscles,
Bone and
Joint

CLOSURE:

- *Always be ready to handle an emergency situation until medical help arrives. You have done an outstanding job with demonstrating proper first aid techniques. I am hopeful that today's lesson has better prepared you to administer first aid if necessary.*