Module 6: Roadside Assistance
Topic 1 Content: First Aid Steps: Secondary Procedures

Administering First Aid

Here is a list of the types of emergencies you may experience:

- Open wounds or cuts;
- Burns;
- Poisoning;
- Muscle, bone, or joint injuries;
- Breathing emergencies;
- Cardiac emergencies;
- Fainting;
- Head, neck, or back injuries;
- Weather-related illnesses.

In order to help a person who may be a victim of any of these emergencies, you will need to learn the secondary first-aid procedures.

Open Wounds

Open wounds are categorized into four types.

Abrasions are shallow breaks in the skin. This is usually caused by scrapes. Generally, there is very little to no bleeding involved.

A laceration is also known as a cut. Lacerations can occur from sharp objects or a forceful blow from a blunt object.

A puncture is the most likely to become infected because there is little to no bleeding and it is a deeper wound than an abrasion. A puncture is the result of a pointed object penetrating the body in and out of the same small wound. Because the wound is so deep, there may be a chance of internal bleeding.

An avulsion is a partial or complete separation of the body part. Generally, this occurs with the appendages such as fingers and toes, but it can happen anywhere on the body. In many cases, the body part can be re-attached, so the piece should be placed in ice or ice water and kept with the victim.

Care of Open Wounds

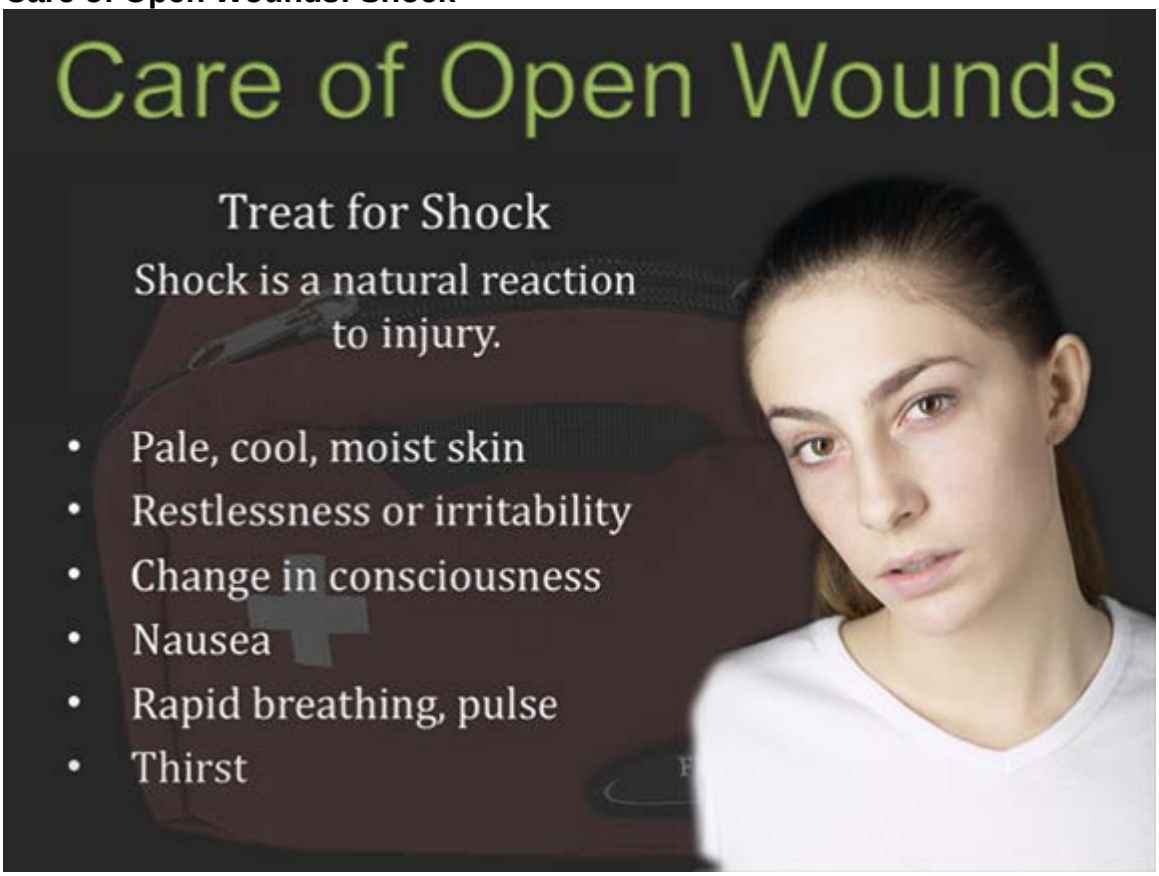
The first thing you should do for first aid on a wound is protect yourself. Put a barrier, such as latex gloves, between your skin and the blood from the victim. Blood-born pathogens may be present. Next, stop the bleeding. Cover the wound with a clean cloth, preferably sterile gauze, and apply direct pressure on the wound. It may hurt the victim a bit, but this is the best way to stop the bleeding.

Care of Open Wounds: Minor and Major Wounds

If the wound is minor or small, help the victim wash it with soap and water, then rinse the wound for about five minutes. Cover the wound with a triple-antibiotic ointment and a clean sterile cloth or adhesive bandage.

If the wound is severe or major, continue to apply direct pressure, then wrap a cloth around it and tie it directly over the wound. Seek medical help.

Care of Open Wounds: Shock



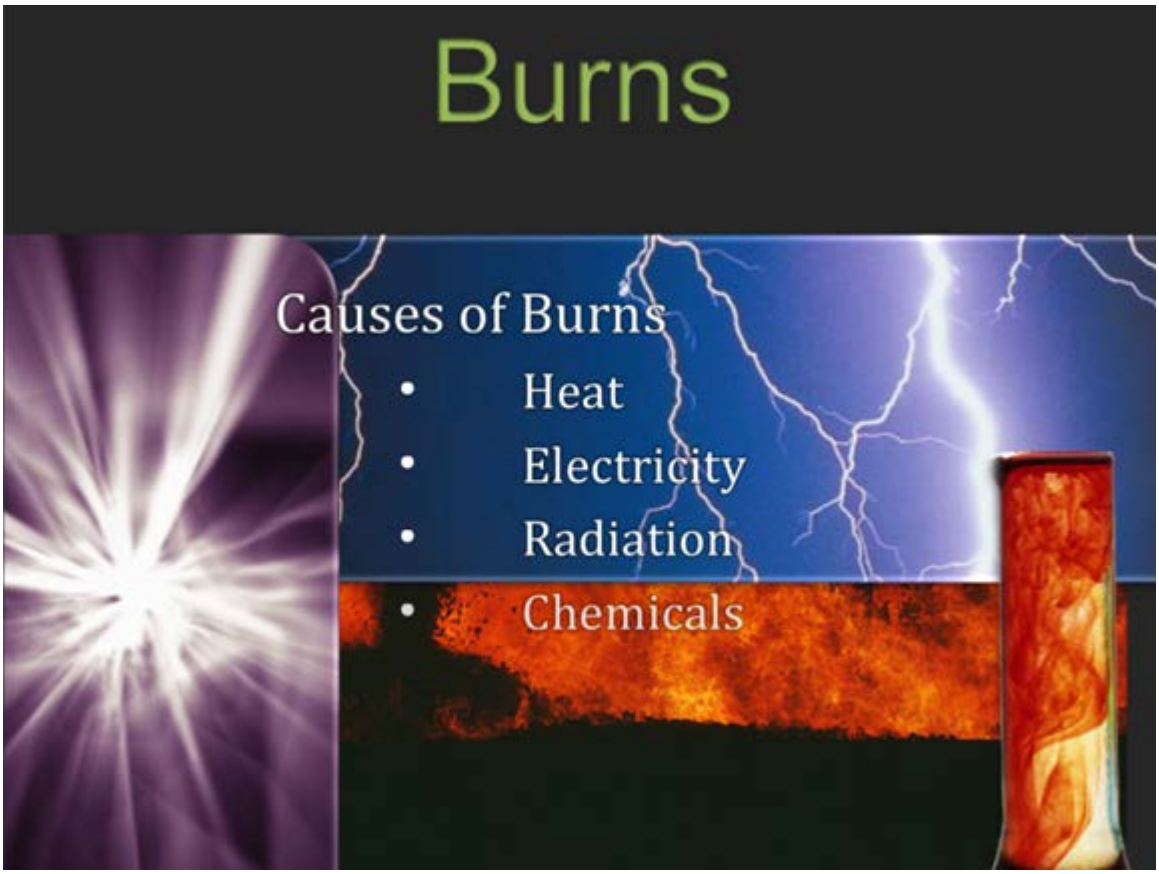
Once the bleeding has stopped, monitor the victim and treat for shock. Shock is a natural bodily response to injury. How do you know if someone is in shock? Some symptoms are pale, cool, moist skin; restlessness and irritability; a change in consciousness; nausea; rapid breathing and pulse; and/or thirst.

As you continue to treat the victim for shock, monitor the victim's ABCs and keep the person warm or cool depending on the situation. If there is no head, neck, or back injury; or broken bones, then assist the victim in lying down and elevating the feet above the head.

Care of Open Wounds: Get Help

Get help. Make sure someone has summoned 911. If you are alone, stabilize the victim, and leave the victim to get help.

Burns



There are four causes of burns: heat, electricity, radiation, and chemicals.

First-Degree Burns

Burns are classified into three degrees. First degree is the least severe. First-degree burns are fairly superficial, which means the top layer of skin is damaged and appears red. An example of this is a minor sunburn where the skin merely turns red. It normally heals within five to six days.

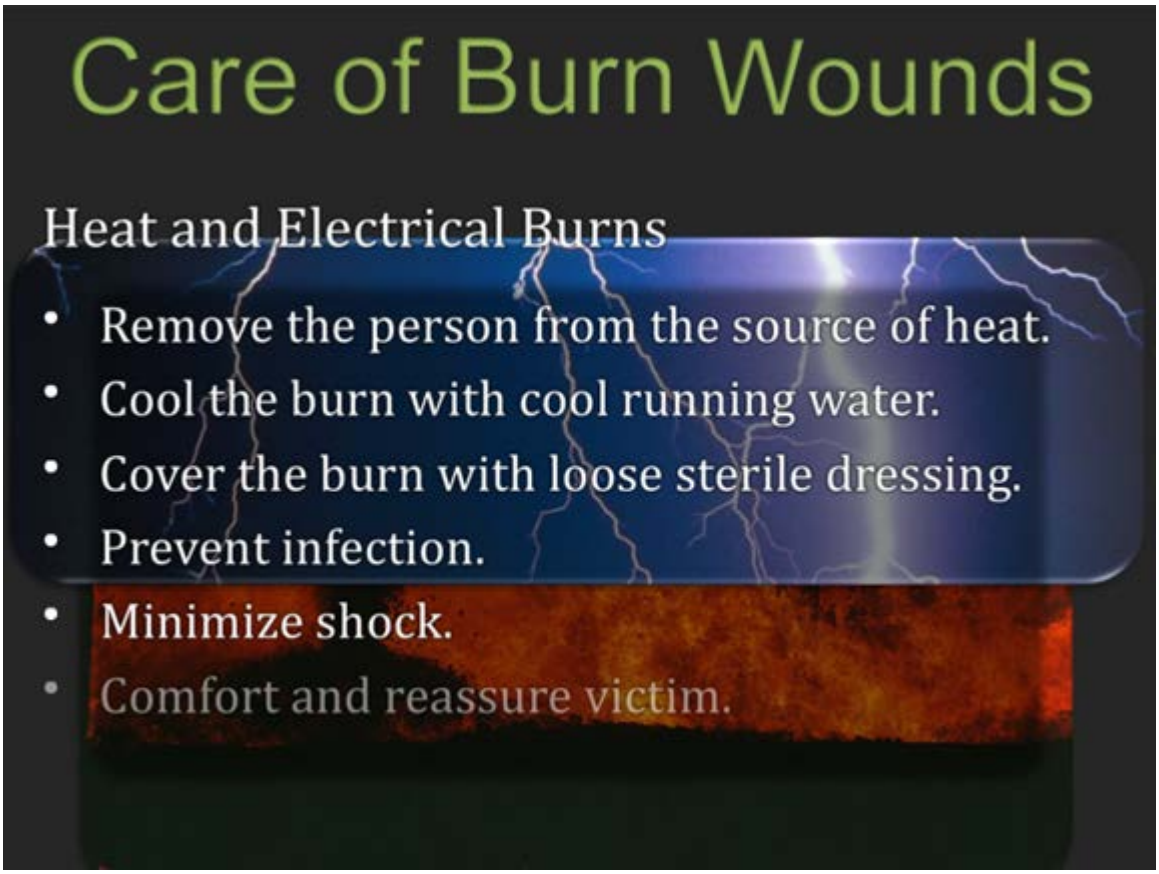
Second-Degree Burns

Second-degree burns encompass the top several layers of skin. Blisters form, and the skin appears blotchy. You can also get second-degree burns from the sun. Second-degree burns take a little longer to heal than first degree, up to three or four weeks.

Third-Degree Burns

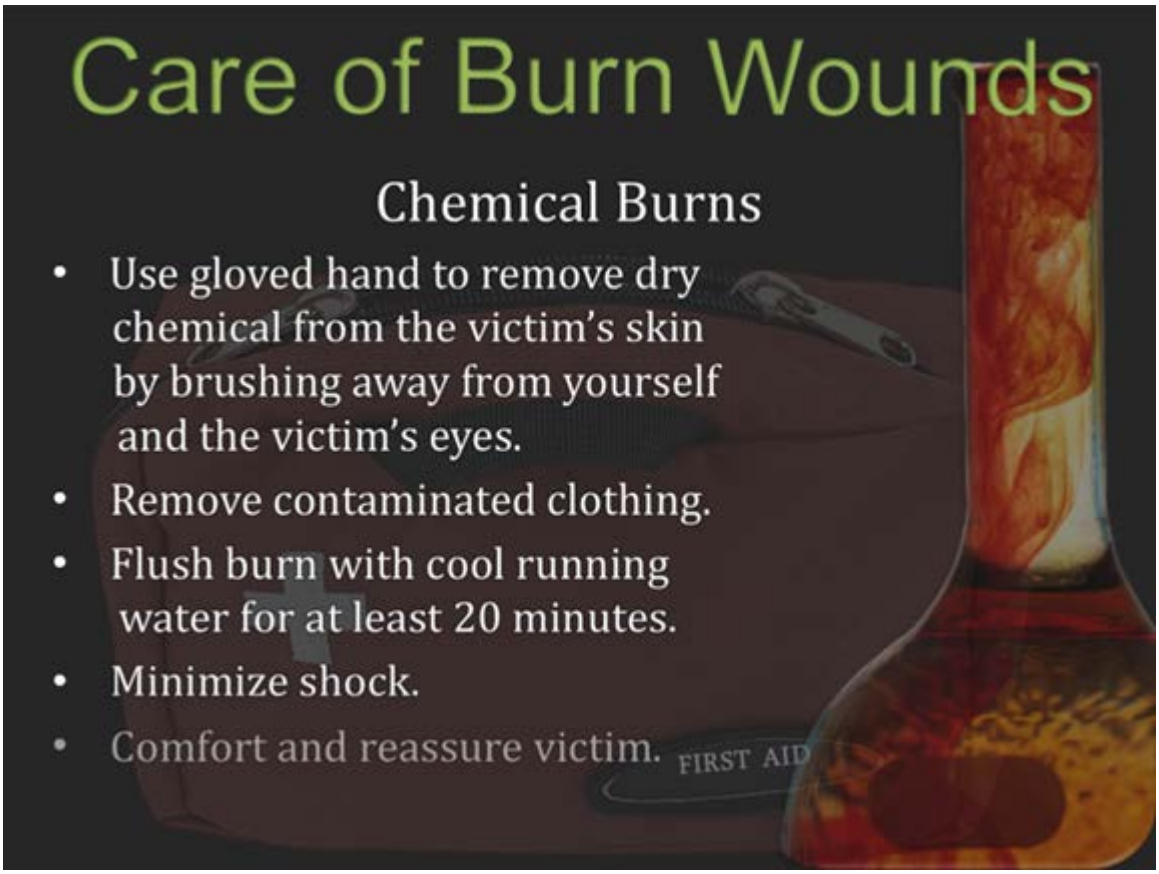
Third-degree burns are the most severe. These burns go beyond the skin into other body tissues and nerves. The burn is charred and looks brown or black.

Care of Heat and Electrical Burns



In the case of heat or electrical burns, remove the victim from the heat source and cool the burn with cool running water. Cover the burn with a loose sterile dressing to prevent infection. Minimize shock and keep the victim comfortable.

Care of a Chemical Burn

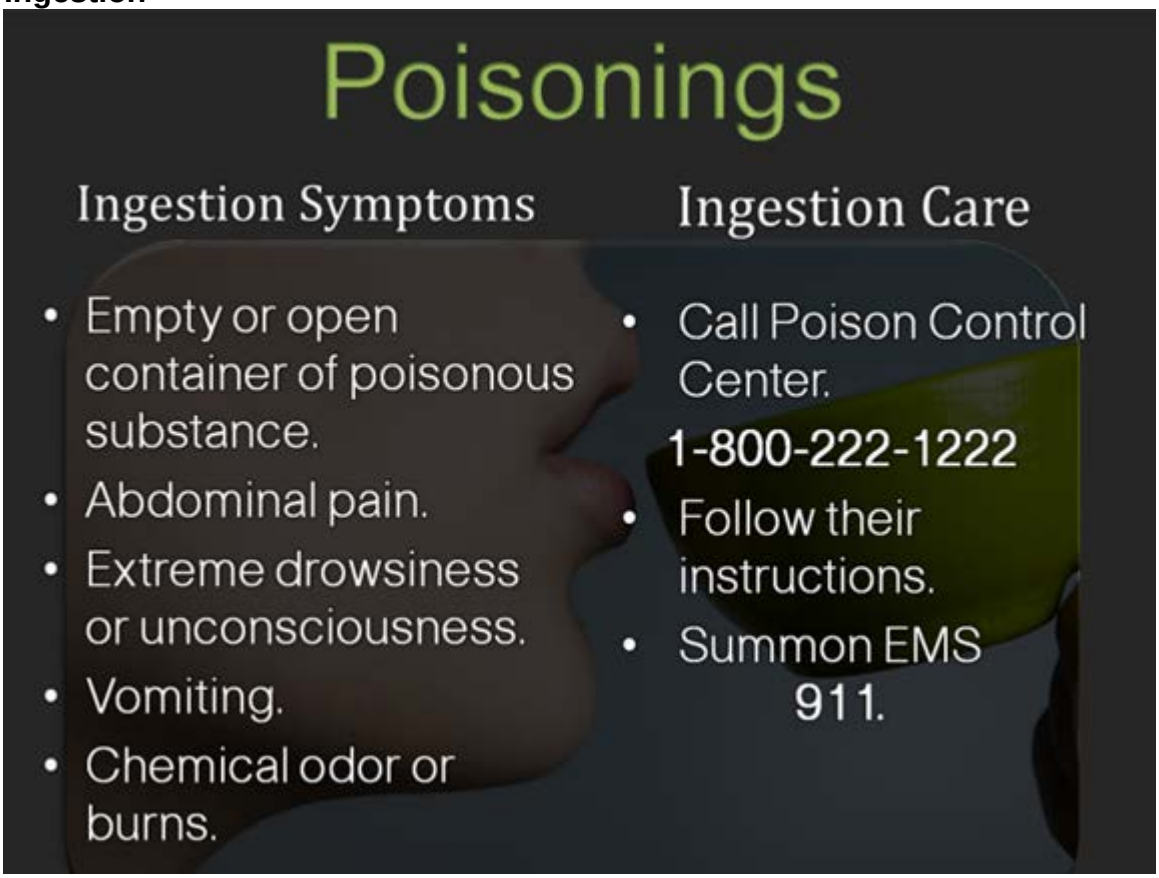


If there is a chemical burn, you, the rescuer, need to be careful not to get the chemical on you. Put a glove on, or cover your own skin, and remove the dry chemical from the victim's skin by brushing it away from yourself and the victim, especially away from your and the victim's eyes. Remove any contaminated clothing, and flush the burn with cool running water for at least twenty minutes. Minimize shock, and comfort the victim until help arrives.

Poisoning

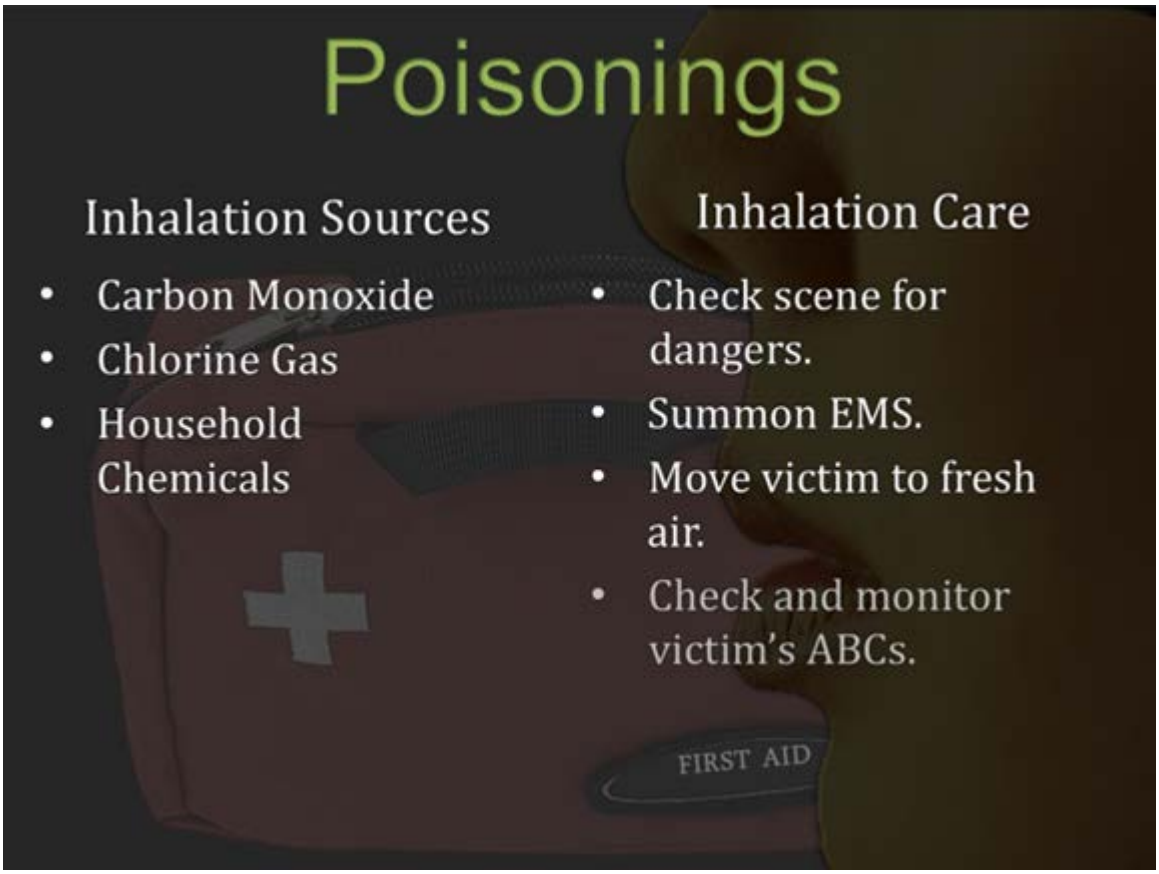
A poison is any substance that can cause injury, illness, or even death. Poisons can be swallowed or ingested, inhaled, or can come from direct skin contact from plants, animals, or chemicals.

Ingestion



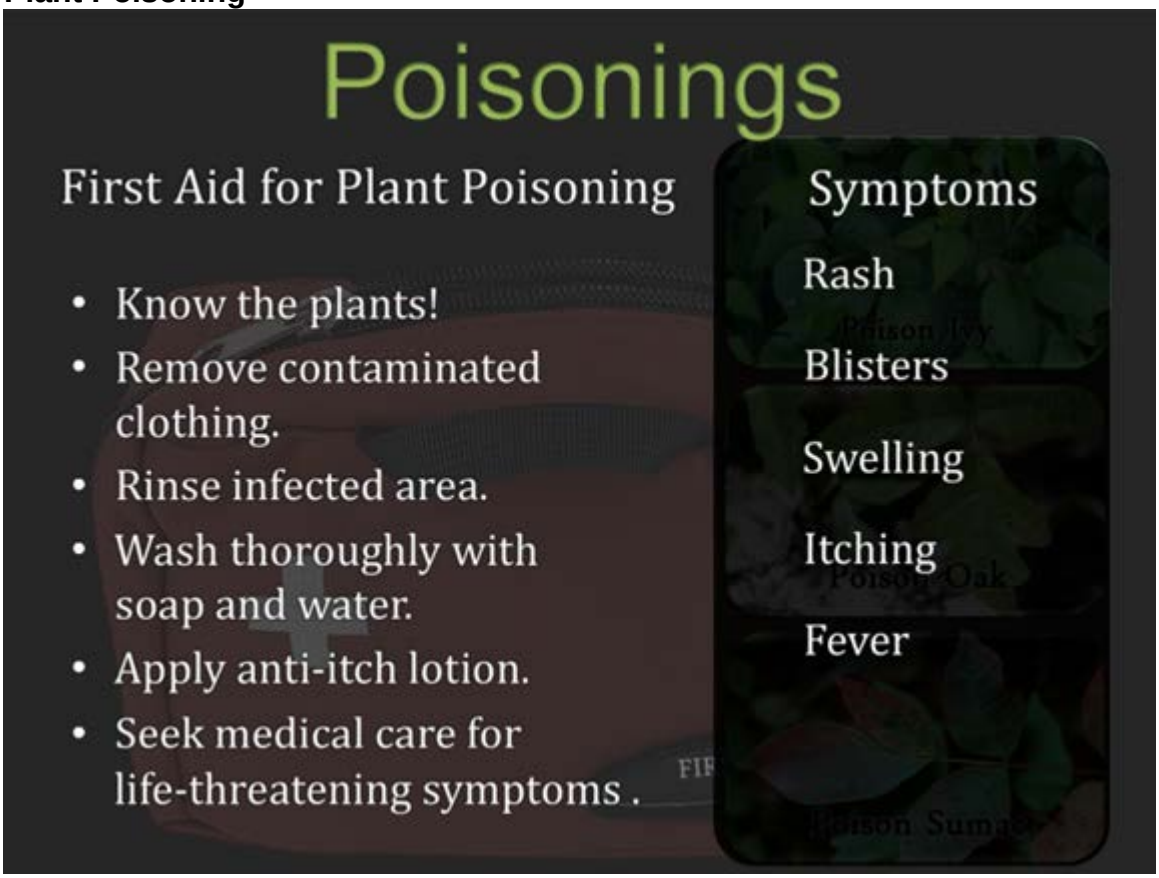
You may suspect poisoning by ingestion if you see an empty or open container of a poisonous substance near the victim, and if the victim exhibits abdominal pain, drowsiness, unconsciousness, vomiting, or noticeable chemical burn or odor. If there is a poisoning, call the Poison Control Center immediately at 1-800-222-1222. There are special instructions to help a poison victim. Do not try to treat the person on your own as you may cause more harm. If EMS has not been called, do so following the directions from the Poison Control Center.

Inhalation



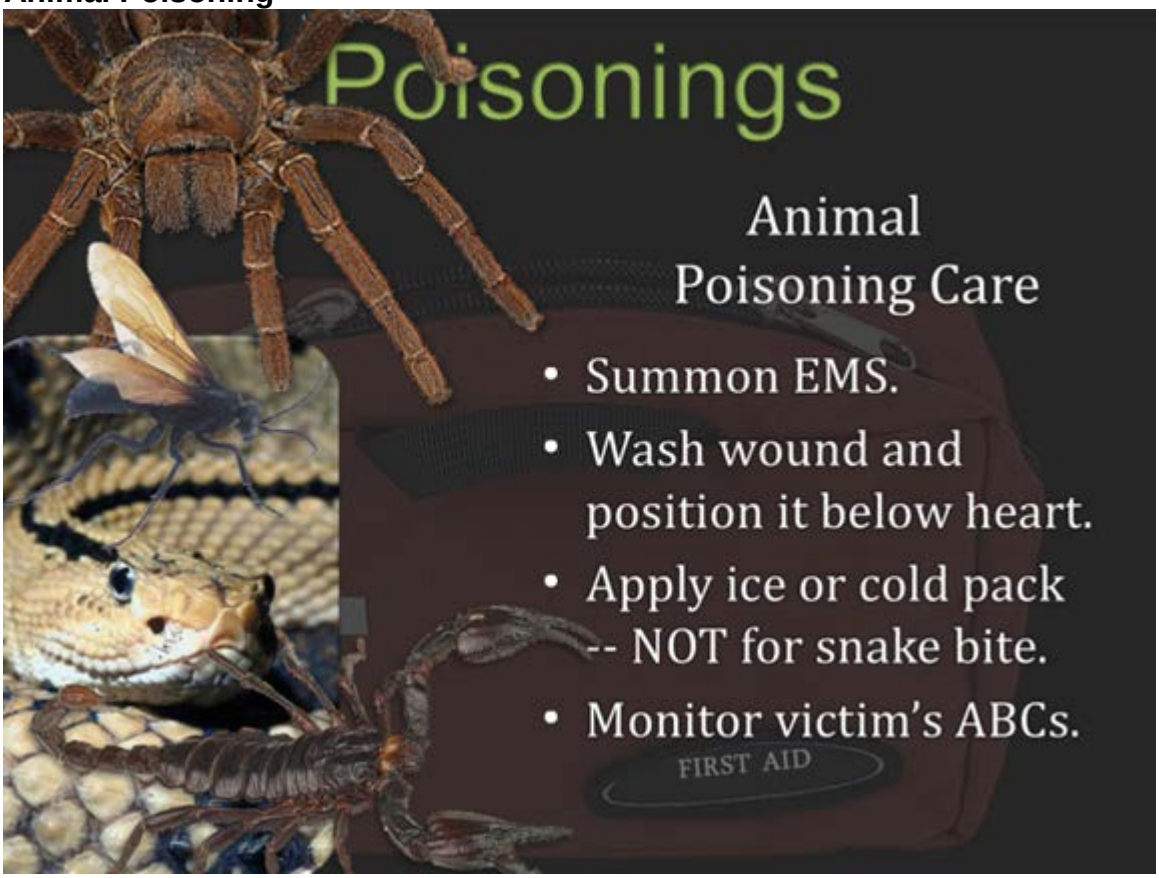
Inhaled sources of poisonings are readily available at home. Carbon monoxide is the exhaust from burning anything: gasoline, wood, propane, or natural gas. Chlorine gas is released from substances containing chlorine, such as chemicals used in swimming pools, and must be handled and applied by professionals. Household chemicals such as paint, aerosol sprays, glue, markers, and nail polish expel poisonous gasses that can lead to poisoning. These are the same chemicals that people use as recreational drugs called inhalants. If you suspect a poisoning, check the area for your own safety, call 911 to summon EMS, then remove the victim from the gas source and into fresh air. Check and monitor the victim's ABCs, and keep the victim comfortable.

Plant Poisoning



You may already know of some poisonous plants, such as poison ivy, poison oak, and poison sumac. Most poisonous plants cause discomfort, but some people are extremely sensitive, and the reactions may lead to life-threatening symptoms and conditions. Symptoms include rash, blisters, swelling, itching, or fever. The best defense against plant poisoning is to know and recognize the plants. If you or someone else touches a poisonous plant, remove any contaminated clothing and rinse the infected area with running water. Wash thoroughly with soap and water, and apply an anti-itch lotion for comfort. If symptoms become severe, then seek medical attention.

Animal Poisoning

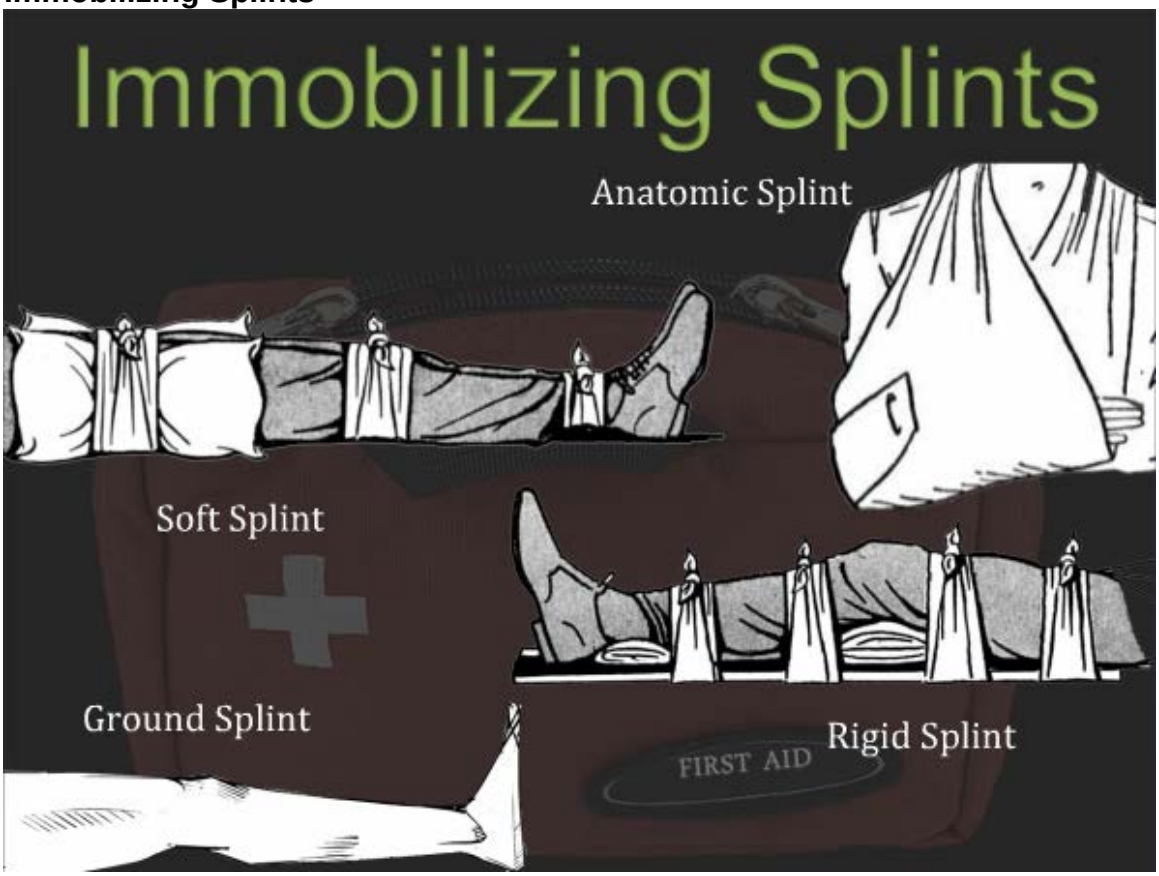


Animal poisonings range from insect stings to spider bites. In any case, the first thing you should do, depending on the severity of the wound, is summon EMS. The more poisonous the animal, the quicker you should react. Wash the wound, and position it below the victim's heart to discourage rapid blood flow to the area. Apply ice, but NOT to a snake bite. Monitor the ABCs until medical services arrive.

Muscle, Bone, and Joint Injuries

Injuries of muscle, bone, and joints are common, especially when related to physical activity, and can range from mild to severe. A fracture is a crack, chip, or complete break in a bone. A dislocation occurs with the misalignment of one or more bones at a joint. With a sprain, the muscle tissue around a joint is injured. A strain occurs from overworked muscles.

Immobilizing Splints



When splinting an injury, you should avoid moving the area as much as possible. Allow the victim to hold the part, then splint it in that position. There are many useful items for splinting. Be creative; nothing has to look perfect. It merely has to support the injury.

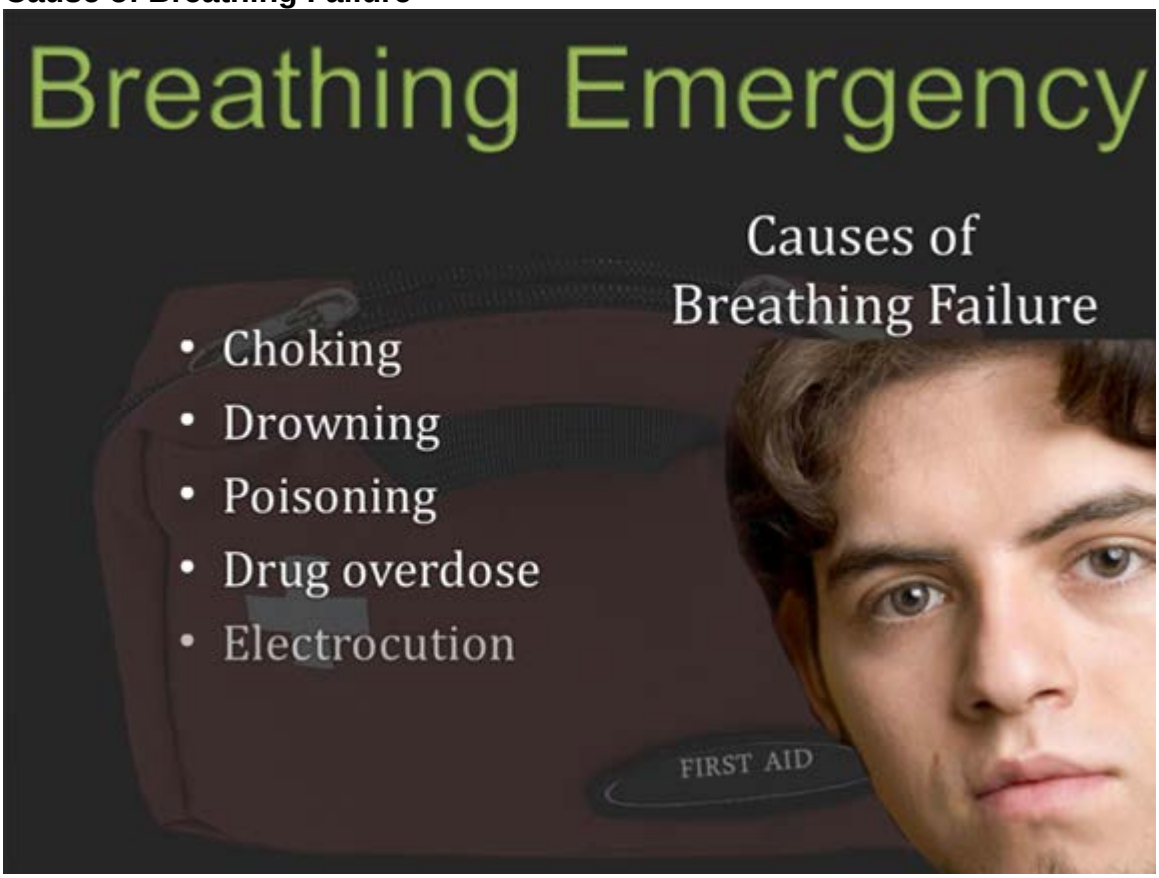
An anatomic splint is the use of another body part to hold the injured body part still. Generally this occurs by securing one leg to another, or tying an arm against the abdomen.

A soft splint utilizes a soft material, like a towel, to immobilize a body part. Once rolled, a soft material will provide plenty of support for transportation to a medical facility.

A rigid splint is something hard, but not sharp, that can hold an injured body part still. If nothing is available, then leave the injury rested on the ground, but do not move the victim. Wait until help arrives with splinting materials.

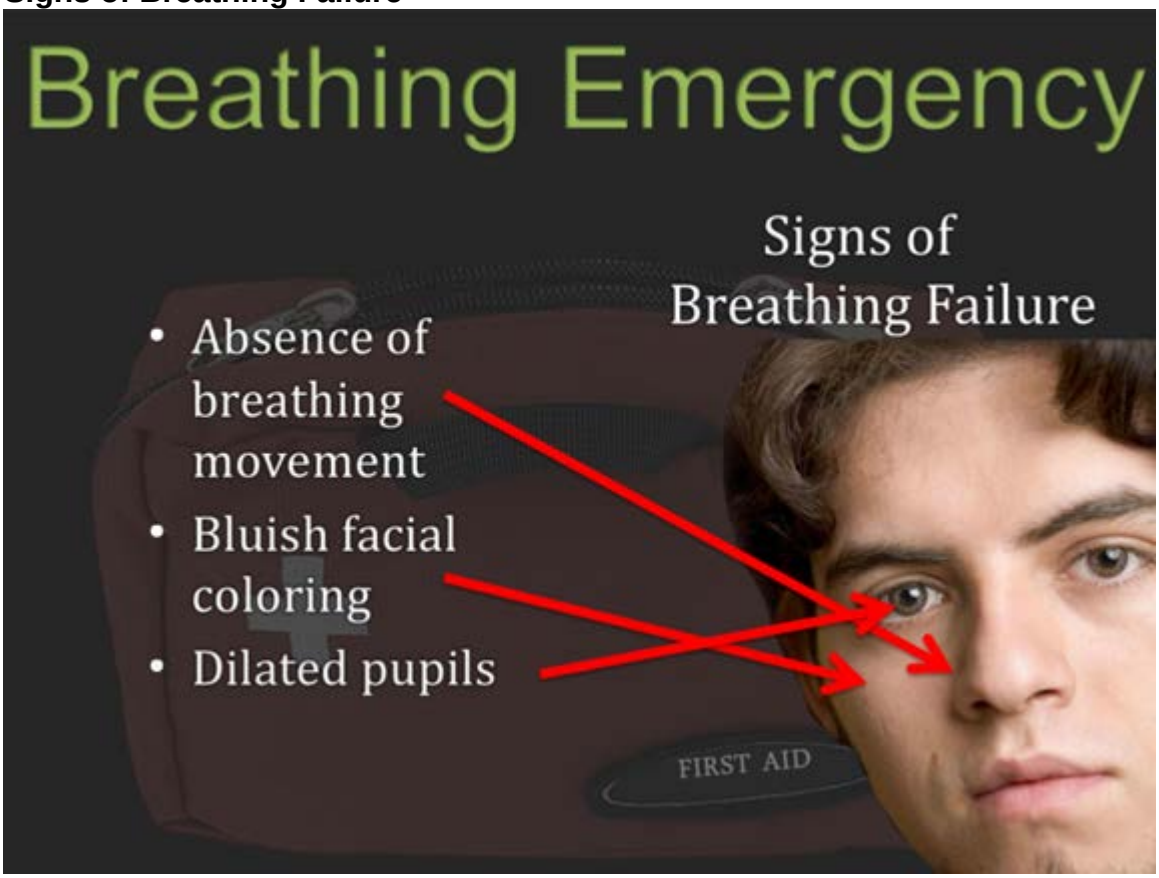
In a ground splint, rest the injured body part on the ground or floor to inhibit movement.

Cause of Breathing Failure



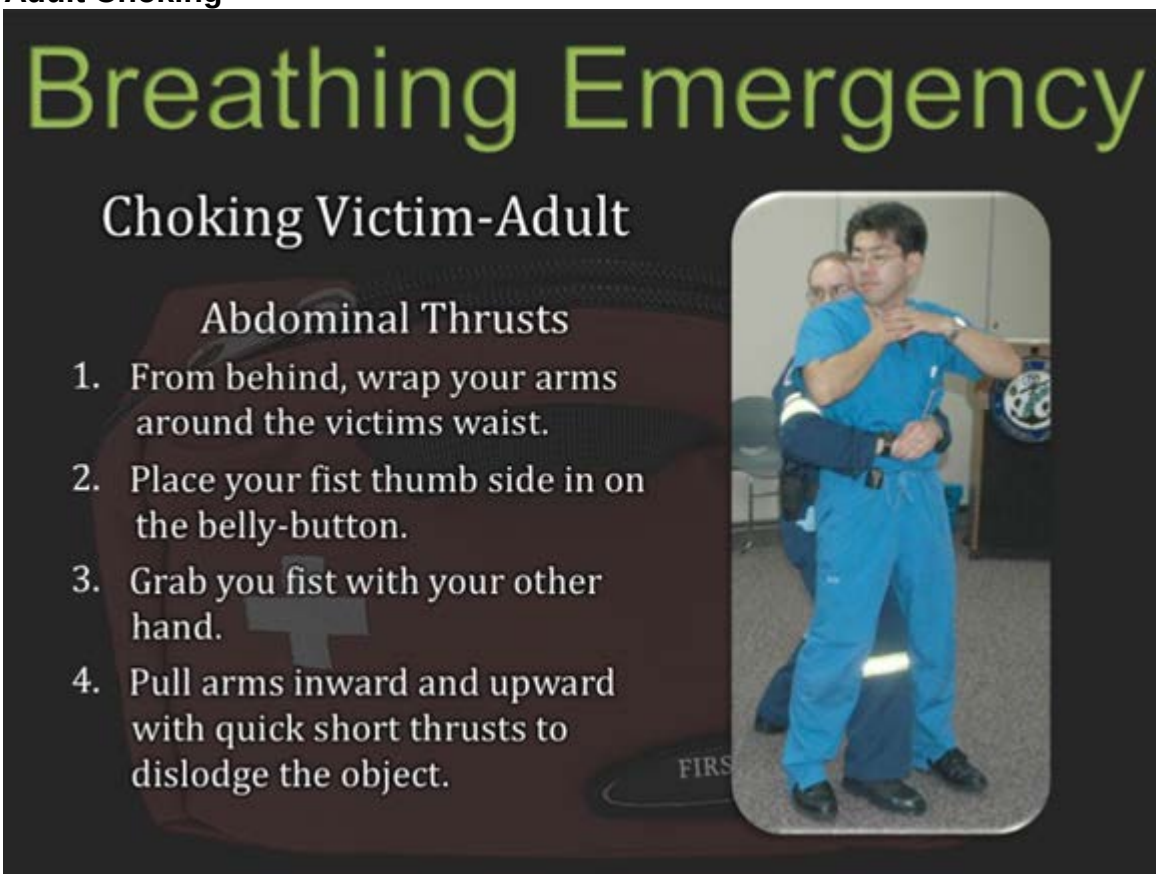
A person can stop breathing for a number of reasons. The victim could be choking on an object, like food or a toy, or could have been just rescued from near drowning and have fluid in the lungs. The person could have been poisoned or could have just experienced a drug overdose or electrocution. The possibilities are numerous.

Signs of Breathing Failure



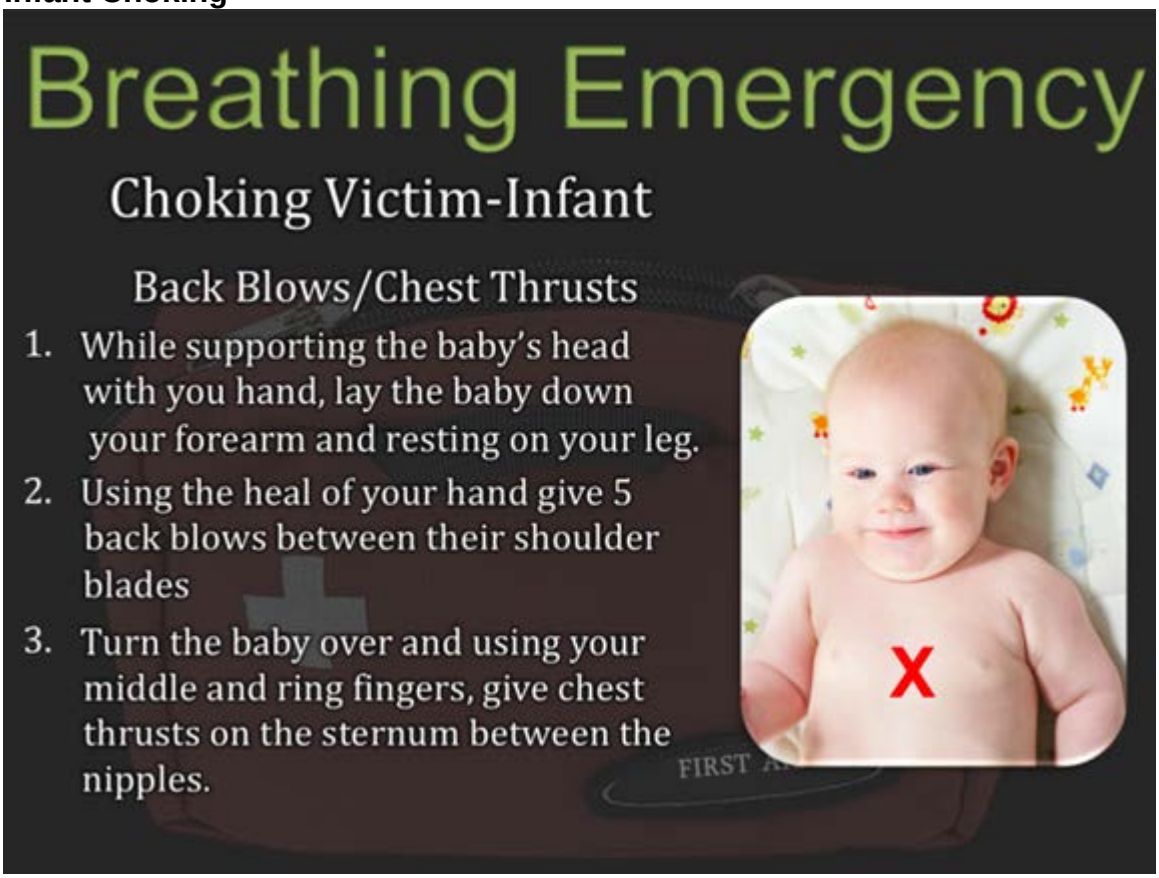
You can tell if someone is in breathing failure if the person does not have any air exiting the mouth and nose, or does not have breathing movement in the chest, seen with the chest rising and falling. The victim may have bluish facial coloring, especially the longer he or she goes without oxygen, and the pupils may be dilated or larger.

Adult Choking



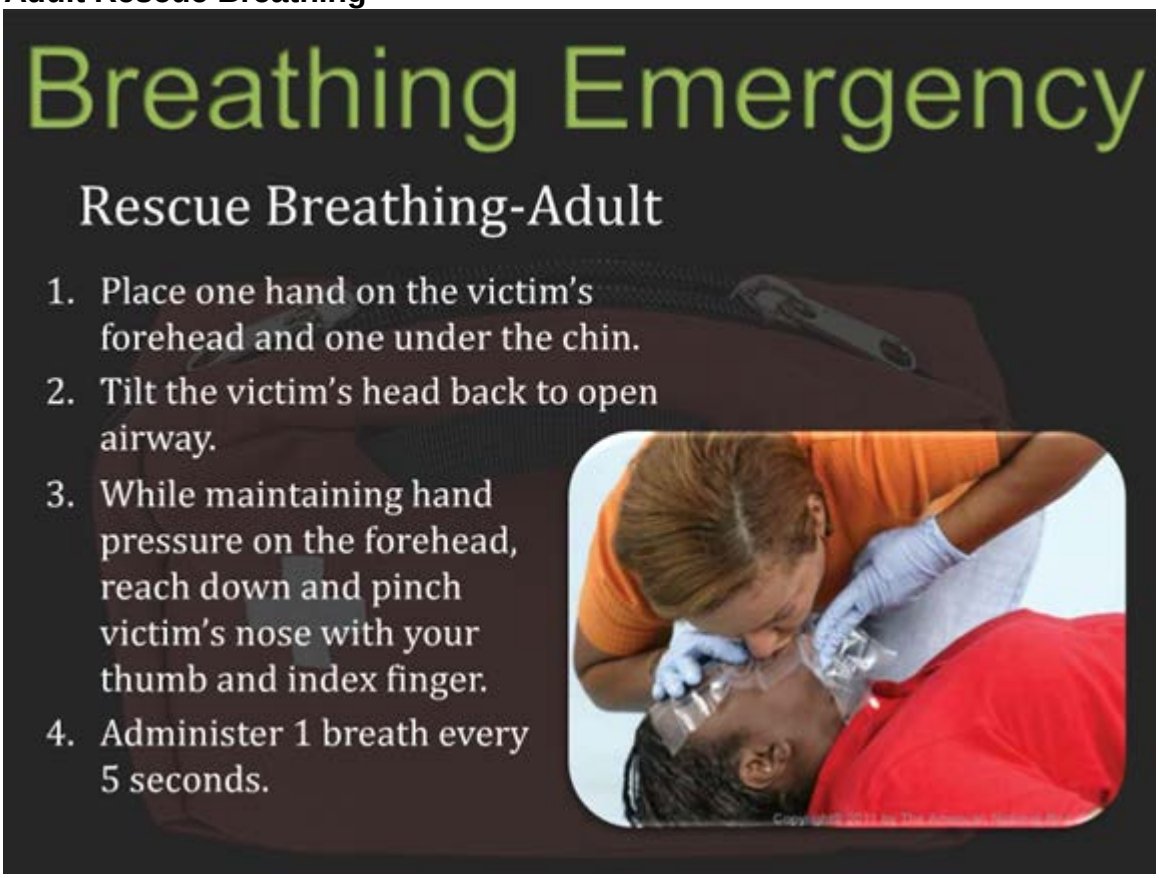
If an adult victim is choking, you need to help the victim remove the object to allow air passage to the lungs. This can be accomplished with abdominal thrusts. Standing behind the victim, wrap your arms around the victim's waist, and place your fist, thumb-side in, on the victim's belly-button. Grab your fist with your other hand. Pull your arms inward and upward with quick short thrusts to dislodge the object. This maneuver can be used on a larger child as well.

Infant Choking



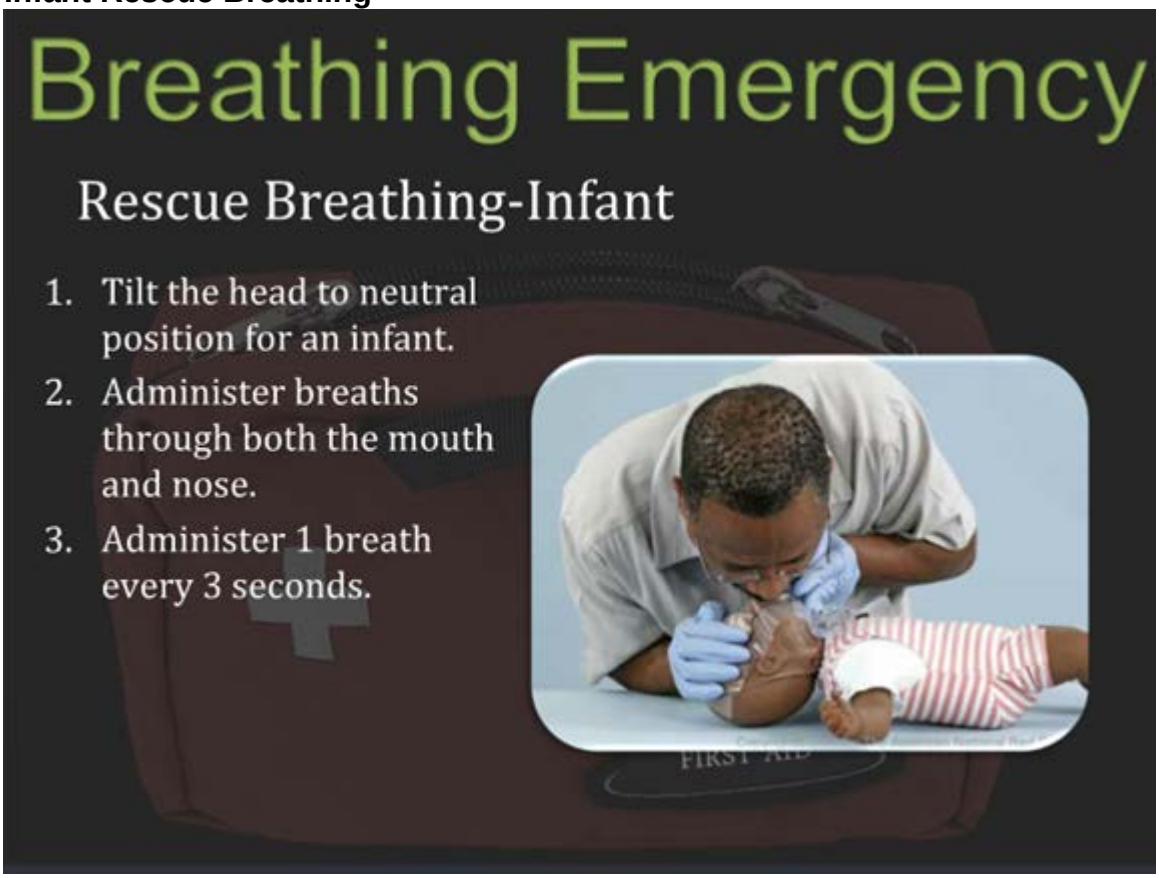
If an infant is choking, perform back blows or chest thrusts to dislodge the object that is causing the choking. Hold the baby face down across your arm, supporting the head and resting your forearm on your thigh. Using the heel of your free hand, give five back blows between the victim's shoulder blades. If the object has not dislodged, turn the baby over. Using your middle and index finders, give five chest thrusts on the sternum between the nipples.

Adult Rescue Breathing



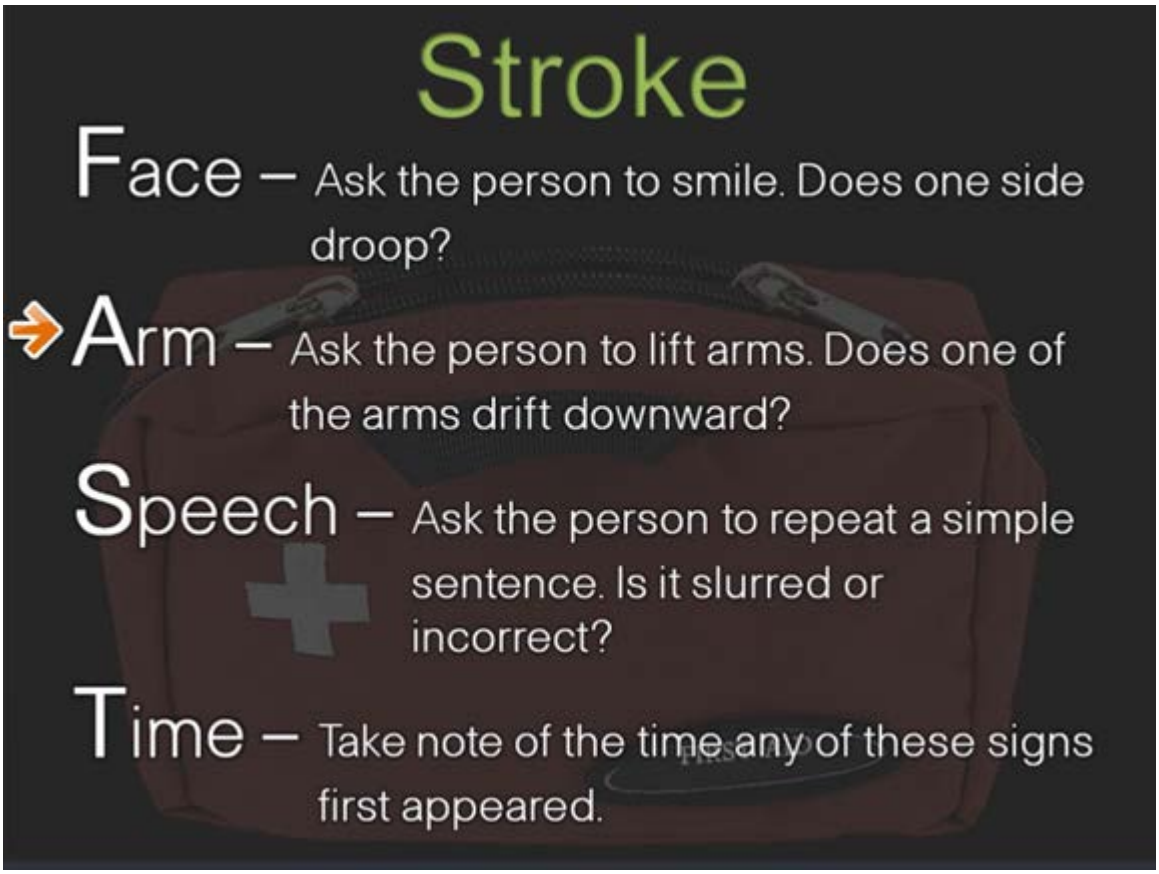
Once the airway is clear and you have determined that the person is not breathing, begin rescue breathing. For an adult, place your closest hand on the victim's forehead and the other on the chin. Tilt the head back to open the airway. Using the forehead hand, reach down and pinch the victim's nose. Administer one breath every five seconds by sealing your mouth over the victim's mouth and blowing air into the person's lungs. The same technique is used for a larger child, except the head tilt is less. In the image above, you may notice a barrier between the victim and rescuer to protect both people.

Infant Rescue Breathing



The rescue-breathing techniques are different for an infant. Once the airway is clear and you have determined that the infant is not breathing, you can begin rescue breathing. Because an infant is so small, there is not enough room to pinch the nose. An infant's neck structure is weak, so tilt the infant's head only to a neutral position. Cover the infant's mouth and nose with your mouth to administer one breath every three seconds.

Stroke



A stroke occurs when there is an interruption in the blood flow to the brain. When this occurs, a person can lose control of parts of his or her face or arms, or can have slurred speech. If someone exhibits such symptoms, the American Red Cross® says to think "F.A.S.T."

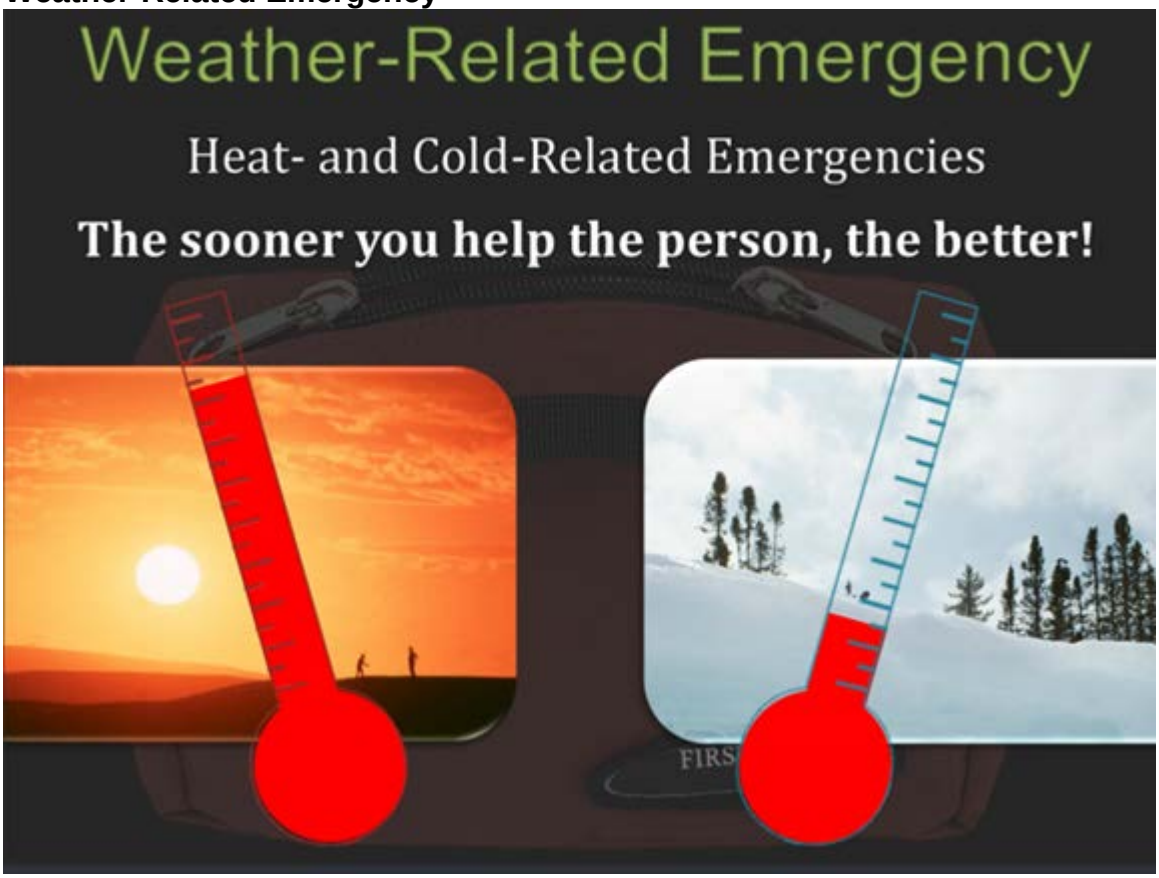
See if the person can smile when asked to do so. A person who has experienced a stroke may have one side of the face droop because he or she has lost control of that side. Call 911.

If, after being asked to raise his or her arms, one of the person's arms begins to drift downward, he or she may have experienced a stroke. Call 911.

Ask the person to repeat a simple sentence after you. If the person's speech is slurred or cannot say the sentence correctly, then call 911.

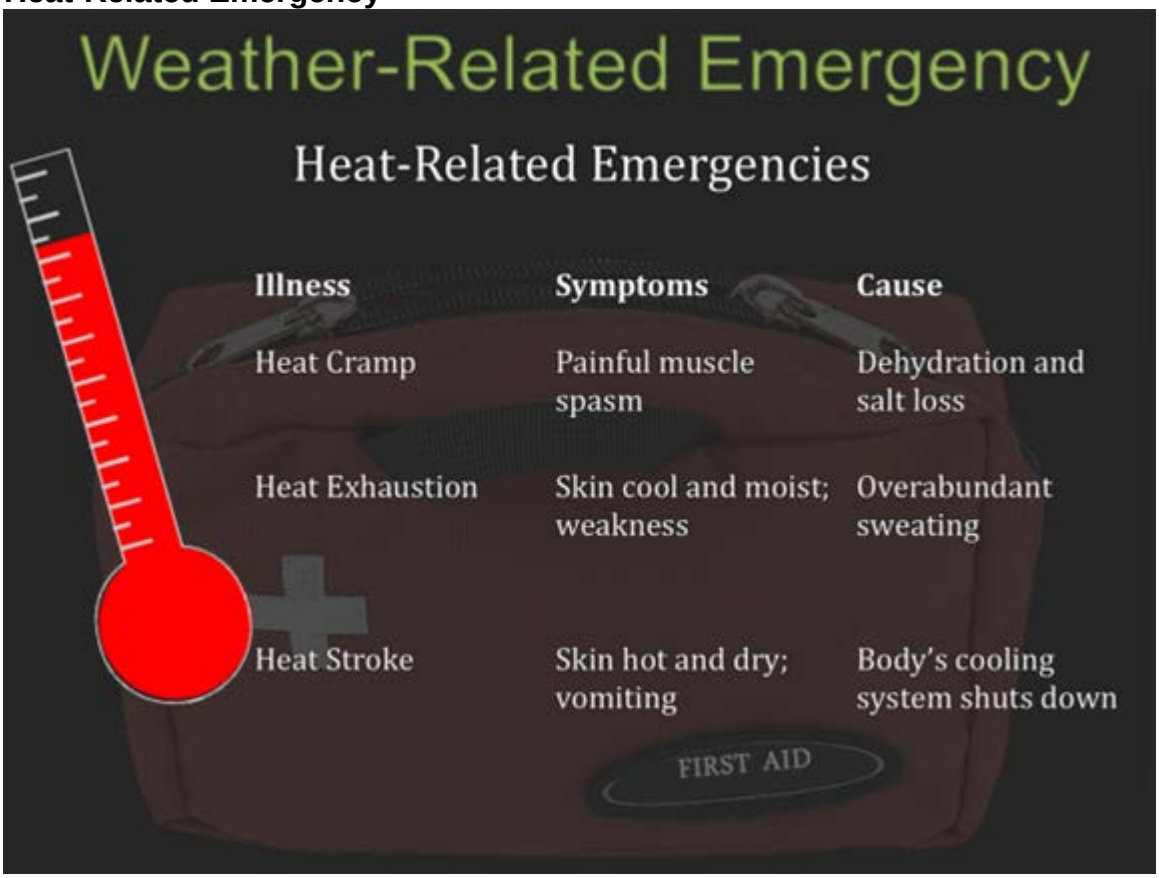
If any of these signs appear, take note of the time they first appeared and notify 911.

Weather-Related Emergency



The following weather-related emergencies are progressive. In other words, if you do not treat a victim for symptoms of one illness, it can lead to another, more serious illness. That is why it is important to treat the victim as soon as possible if the person exhibits symptoms of illness caused by heat or cold weather.

Heat-Related Emergency



Heat cramps are painful muscle spasms resulting from dehydration and salt losses.

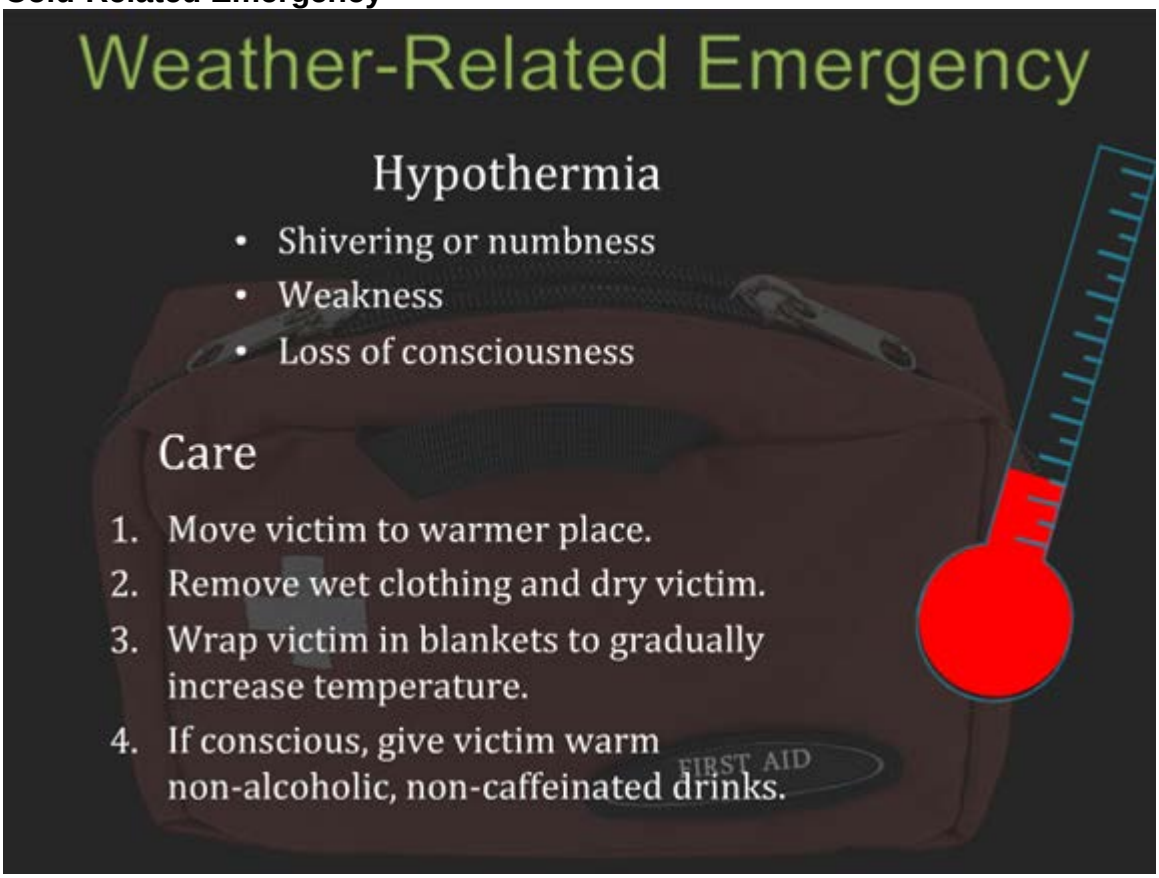
The next phase in heat-related emergencies is heat exhaustion, which shows the beginning signs of a troubled cooling system. A person's skin becomes cool and moist due to an overabundance of sweating. The victim is most likely very weak and tired.

If the victim does not get help by this stage, it could lead to heat stroke. At this stage, the body's cooling system completely shuts down, the skin becomes hot to the touch and very dry. If the victim is still conscious, vomiting may occur. Heat stroke is a life-threatening illness, and the person needs immediate medical attention.

Heat-Related Care

The first-aid objective for treating a victim of a heat-related emergency is to cool and rehydrate the victim. Move the victim to a cool place, whether into shade or an air-conditioned building. Ensure cool air is readily available. Loosen tight or constrictive clothing, and apply a cool wet cloth to the skin. Fan the victim if appropriate air circulation is not present. Only if the victim is conscious, administer small amounts of water or sports drink at a rate of no more than about four ounces within a fifteen-minute period. If the victim loses consciousness, call 911.

Cold-Related Emergency



Hypothermia, the opposite of heat-related illness, occurs when the core body temperature drops so low that the victim cannot warm up on his or her own. Signs of hypothermia are shivering, weakness, and possible loss of consciousness. As the care provider, you need to help the victim become warm. Move the victim to a warmer place, and remove any wet clothing. Dry the victim, and wrap the person in blankets to gradually increase the body temperature. Do not apply immediate heat, like a bath. Rapid temperature increase can cause an irregular heart rhythm and can lead to cardiac arrest. If the victim is conscious, give the person warm, non-alcoholic, non-caffeinated drinks.

Cold-Related Care

Frostbite is similar to burns. It is the freezing of body tissue when exposed to the cold. The affected area becomes numb and cold to the touch. It may even become discolored by turning white, yellow, or blue, and can even become blistered and scabbed. To care for a victim with frostbite, first remove the victim from the cold, while handling the injury gently. DO NOT rub the area. Re-warm the frostbitten area by soaking it in warm water. Keep affected parts, such as fingers and toes, separate with gauze or cloth, then wrap the affected area loosely with dry bandages.

Fainting

Anytime someone faints, it should be treated as a medical emergency until the person is conscious and the cause of the fainting episode is found. Call 911. If someone experiences regular or numerous fainting episodes, then the person should see a doctor.

If you feel as if you are about to faint, you should lie down, or sit down and place your head between your knees.

To help someone else who has fainted, lie the person down on his or her back and check for breathing. Make sure the person has plenty of fresh air. Raise the legs above the level of his or her heart if possible to help restore blood flow to the brain. Make sure there is nothing constricting the blood flow, such as tight clothing or accessories.

If possible, place a cold compress on the person's forehead. Some people vomit during fainting episodes, so be prepared to roll the person on his or her side if this occurs.

Anyone who has regained consciousness from fainting should get up slowly in order to not induce fainting again.

Head, Neck, & Back Injuries

Any injury to the head, neck, or back should be considered a medical emergency; therefore, you should first call 911. Next, try to reduce any chance of movement of the head, neck, or spine. Do not move the position of the person's head. Place your hands on either side of the head, and stabilize it. If the person's head is turned to one side, it can be extremely harmful if you try to move it. Calm the person as you wait for EMS to arrive.