First Aid

Order Priority for Emergencies | Airway Obstructions | Heart Attack | Bleeding | Shock | Burns | Eye Injuries | Nose Injuries | Animal/Insect Bites | Fractures | Poisoning | Diabetic Emergencies | Stroke | Seizure | Heat Emergencies | Cold Emergencies | Legality | 1st Aid Kit

First Aid Documents

Covers All First Aid Requirements for Tenderfoot, Second Class and First Class and Requirement #1 for the First Aid Merit Badge

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ALWAYS dial 911 first if possible.

- This document is meant for informational purposes only. Troop 780 presents this information solely as a guideline to
understand what should be accomplished by qualified personnel ONLY.

- The first aid and/or medical information recommended and provided in this website are based upon responsible medical sources.
- BSA Troop 780 or its Members does not assume responsibility for any adverse consequences or reactions resulting from the use of any products or procedures suggested herein.
- Each person is urged to consult a physician, when circumstances permit, before using any medications or employing any of the recommendations provided herein.

What should EVERY Scouter Have?
A First Aid Kit!

And a great understanding of First Aid Procedures!

Order of Priority in an Emergency

1. In EVERY emergency situation, there is a logical order to be followed. First, it is important to carefully assess the scene of an emergency BEFORE any further steps are taken. The purpose of this assessment is to assure it is safe to provide first aid care. For example, an unconscious victim might be lying on a live power line. If a rescuer were to touch the victim before the power could be shut off, the rescuer would become a victim as well! Always be sure it is safe before you attempt to help a victim!
2. Once you determine it is safe for you to help a victim, you should immediately determine if the victim has any life threatening conditions.

3. Begin by checking to see if the victim is responsive. Kneel and ask, “IS YOU OK?” If there is no response, you must immediately summon an ambulance! Recent studies have conclusively shown that victims who are not breathing and do not have a heartbeat have a substantially greater chance for survival if they receive prompt advanced medical care in a hospital or by trained paramedics.

4. Only after a call is placed for emergency medical services does a volunteer attempt to further help an unconscious victim.

5. If there are bystanders on the scene, summon someone to your side to provide assistance.

6. If the victim is on his stomach, first place the victim's arm closest to you above his head. Then turn him over by placing one hand on the victim's hip and the other hand at the victim's shoulder. Turn the body in a smooth, even straight line so as to not cause further injury in the event of existing spinal cord injury.

7. With the victim now on his back, OPEN THE VICTIM'S AIRWAY by placing the heel of your hand on the victim's forehead and the tips of your fingers under the bony part of the jaw.

8. Push down on the forehead while lifting up the chin until the jaw is pointing straight up. Now place your ear over the victim's mouth and LOOK, LISTEN & FEEL for breathing for 3 to 5 seconds. LOOK at the chest to see if it is rising, LISTEN for sounds of breathing and FEEL for air coming from the victim.

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IF THE VICTIM IS NOT BREATHING, RESCUE BREATHING IS REQUIRED IMMEDIATELY!

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IMPORTANT
While this tutorial identifies life threatening conditions requiring rescue breathing or CPR, these skills require intensive classroom skill, development and practice and cannot be effectively presented or taught in this tutorial. Troop 780 leadership strongly encourages everyone to enroll in a CPR course

Rescue breathing will provide vital oxygen to a victim who cannot breathe on their own. After giving a victim two breaths, the pulse is checked at the Carotid Artery to ascertain if the victim has a heartbeat. This artery is located on the side of the neck and is found by first positioning the fingers on the victim's Adam's Apple, then sliding the fingers
down into the soft groove on the side of the neck. The pulse is checked for 5 to 10 seconds.

If the victim has a heartbeat, but is not breathing, **RESCUE BREATHING** is required. If the victim is **NOT** breathing **AND** does **NOT** have a **HEARTBEAT**, **CPR** is required without delay!

These initial steps of checking the **AIRWAY**, **BREATHING** and **CIRCULATION** (pulse), together with a check for major **BLEEDING**, constitute **THE PRIMARY SURVEY**, which looks for life-threatening conditions!

In every instance where first aid is to be provided, it is important to always ask a conscious victim for permission to help them. If a victim is unconscious, it is presumed they have provided consent for you to assist them.

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**Obstructions in the Airway**

**NOTE:** Emergency treatment of airway obstructions is taught as part of CPR training and only through classroom practice can the necessary skills be mastered. The mechanics of handling airway obstructions are presented in this tutorial are for background insight only.

If an individual is choking - but can speak or cough forcibly - there is an exchange of air (although it might be diminished) and you should encourage the victim to continue coughing while you just stand by! On the other hand, if a victim is choking, but CANNOT speak or cough, an airway obstruction exists which must be treated immediately!

The treatment for an obstructed airway in a conscious victim involves use of the **HEIMLICH MANEUVER** which is performed as follows:

1. Stand behind the victim.
2. Wrap your arms around the victim's waist.
3. Make a fist with one hand and place the thumb side of the fist against the victim's abdomen just above the navel and well below the lower tip of the breast bone.
4. Grasp your fist with your other hand, with elbows out, and press your fist into the victim's abdomen with quick, upward thrusts.
5. Each thrust is a distinct, separate attempt to dislodge the foreign object.
6. Repeat thrusts until foreign object is cleared or the victim becomes unconscious.
Emergency treatment of airway obstructions in an unconscious victim is taught in CPR classes.

Heart Attack

Heart attacks are among the leading cause of death in the United States. A heart attack happens when one or more of the blood vessels that supply blood to the heart become blocked. When this occurs, cells in the heart begin to die when they cannot get blood for vital nourishment. If a large part of the heart is deprived of blood, the heart stops beating and the victim suffers CARDIAC ARREST!

When a victim's heart stops beating, they require CARDIOPULMONARY RESUSCITATION (CPR) which provides vital oxygen through rescue breathing and which maintains circulation through chest compressions.

Proper training is required to perform CPR, however any heart attack can lead to cardiac arrest and it is therefore vital for first aiders to be able to recognize the early warning signs of a heart attack so the victim can receive prompt professional attention!

A heart attack victim whose heart is still beating has a much better chance of survival than a victim whose heart has stopped! Most heart attack victims who die succumb within 2 hours after having their heart attack. Many of these victims could be saved if bystanders recognize the symptoms of a heart attack and get the victim to a hospital quickly! Indeed, many victims of heart attacks think they are experiencing HEARTBURN or other minor discomfort when in fact their life is in jeopardy!

The most significant sign of a heart attack is chest pain. The victim may describe it as pressure, a feeling of tightness in the chest, aching, crushing, fullness or tightness, constricting or heavy pain. The pain may be located in the center of the chest although it is not uncommon for the pain to radiate to one or both shoulders or arms or to the neck, jaw or back.

In addition to pain, victims may experience sweating, nausea or shortness of breath. Many victims deny they may be having a heart attack. Others may have their condition worsened by fear of dying.

With all victims of heart attacks - and with all victims receiving first aid for any condition - it is important for the rescuer to constantly reassure the victim and keep them as calm and relaxed as possible.

The psychological value of reassurance is as important in first aid as any treatments!
**FIRST AID FOR A HEART ATTACK:**

- Recognize the signs and symptoms of a heart attack
- Comfort and reassure the victim
- Have the victim stop whatever they were doing and sit or lie in a comfortable position
- Summon emergency medical help quickly
- If the victim become unconscious, be prepared to perform CPR [IF YOU ARE TRAINED TO DO SO]

All of us can reduce the risk of heart attack by controlling high blood pressure, limiting cholesterol in the diet, watching weight, exercising, giving up smoking and minimizing stress.

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**Bleeding**

Major bleeding may be a life-threatening condition requiring immediate attention. Bleeding may be external or internal. Bleeding may be from an ARTERY, a major blood vessel which carries oxygen-rich blood from the heart throughout the body. It may be from a VEIN, which carries blood back to the heart to be oxygenated or bleeding may be from a CAPILLARY, the smallest of our body’s blood vessels.

**ARTERIAL** bleeding is characterized by spurts with each beat of the heart, is bright red in color (although blood darkens when it meets the air) and is usually severe and hard to control. ARTERIAL bleeding requires immediate attention!

**VENUS** bleeding is characterized by a steady flow and the blood is dark, almost maroon in shade. Venus bleeding is easier to control than Arterial bleeding.

**CAPILLARY** bleeding is usually slow, oozing in nature and this type of bleeding usually has a higher risk of infection than other types of bleeding.

First aid for bleeding is intended to:

- STOP THE BLEEDING
- PREVENT INFECTION
- PREVENT SHOCK

**How to control bleeding**
Apply DIRECT PRESSURE on the wound. Use a dressing, if available. If a dressing is not available, use a rag, towel, piece of clothing or your hand alone.

**Important:**
Once pressure is applied, keep it in place. If dressings become soaked with blood, apply new dressings over the old dressings. DO NOT remove the old dressing. The less a bleeding wound is disturbed; the easier it will be to stop the bleeding!

If bleeding continues, and you do not suspect a fracture, ELEVATE the wound above the level of the heart and continue to apply direct pressure.

If the bleeding still cannot be controlled, the next step is to apply PRESSURE AT A PRESSURE POINT. For wounds of the arms or hands, pressure points are located on the inside of the wrist (radial artery—where a pulse is checked) or on the inside of the upper arm (brachial artery). For wounds of the legs, the pressure point is at the crease in the groin (femoral artery). Steps 1 and 2 should be continued with use of the pressure points.

The final step to control bleeding is to apply a PRESSURE BANDAGE over the wound. Note the distinction between a dressing and a bandage. A dressing may be a gauze square applied directly to a wound, while a bandage, such as roll gauze, is used to hold a dressing in place. Pressure should be used in applying the bandage. After the bandage is in place, it is important to check the pulse to make sure circulation is not interrupted. When faced with the need to control major bleeding, it is not important that the dressings you will use are sterile! Use whatever you have at hand and work fast!

A slow pulse rate, or bluish fingertips or toes, signal a bandage may be impeding circulation.

Signs and symptoms of INTERNAL BLEEDING are:

- bruised, swollen, tender or rigid abdomen
- bruises on chest or signs of fractured ribs
- blood in vomit
- wounds that have penetrated the chest or abdomen
- bleeding from the rectum or vagina
- abnormal pulse and difficulty breathing
- cool, moist skin

First aid in the field for internal bleeding is limited. If the injury appears to be a simple bruise, apply cold packs to slow bleeding, relieve pain and reduce swelling. If you suspect more severe internal bleeding, carefully monitor the patient and be prepared to administer CPR if required (and you are trained to do so). You should also reassure the victim, control external bleeding, care for shock (covered in next section), loosen tight-fitting clothing and place victim on side so fluids can drain from the mouth.
Shock

SHOCK is common with many injuries, regardless of their severity. The first hour after an injury is most important because it is during this period that symptoms of shock appear.

IF SHOCK IS NOT TREATED, IT CAN PROGRESS TO CAUSE DEATH!
ANY TYPE OF INJURY CAN CAUSE SHOCK.

Shock is failure of the cardiovascular system to keep adequate blood circulating to the vital organs of the body, namely the heart, lungs and brain.

SIGNS AND SYMPTOMS OF SHOCK INCLUDE: confused behavior, very fast or very slow pulse rate, very fast or very slow breathing, trembling and weakness in the arms or legs, cool and moist skin, pale or bluish skin, lips and fingernails and enlarged pupils.

Treatment for Shock

A good rule to follow is to anticipate that shock will follow an injury and to take measures to prevent it before it happens.

- Putting a victim in a lying-down position improves circulation.
- If the victim is not suspected of having head or neck injuries, or leg fractures, elevate the legs.
- If you suspect head or neck injuries, keep the victim lying flat. If the victim vomits, turn on their side.
- If victim is experiencing trouble breathing, place them in a semi-reclining position. Maintain the victim’s body temperature, but do not overheat.

Burns
The severity of a burn depends upon its size, depth and location. Burns are most severe when located on the face, neck, hands, feet and genitals. Also, when they are spread over large parts of the body or when they are combined with other injuries.

Burns result in pain, infection and shock. They are most serious when the victims are very young or very old.

**Types of Burns**

**FIRST DEGREE**
The first-degree burn usually produces a pink to reddish color on the burned skin. Mild swelling, tenderness and pain are also symptoms of a first-degree burn. This is the least serious type of burn and involves only the upper layer of skin, the epidermis.

For these minor burns, the victim should cool with plain water and use non-prescription antibiotic creams. These burns usually heal on their own within a few days with little or no scarring. However, if a first-degree burn is over a large area of the body, seek emergency medical attention. Also, if an infant or elderly person suffers any type of burn, even minor, obtain medical assistance promptly.

**SECOND DEGREE**
Second-degree burns involve the epidermis and the second skin layer, the dermis. The epidermis is destroyed and burned-through in a second-degree burn. There are the same symptoms of pain and swelling but the skin color is usually a bright red and blisters are produced. Usually second-degree burns produce scarring.

Second degree burns may take from one to three weeks to heal but are considered minor if they cover no more than 15% of the total body area in adults and 10% body area in children. These burns require medical attention and medication to heal properly.

Call for immediate medical help as soon as the burn occurs and do not apply any type of butter or greasy substance to the burn. This can hamper cooling of the burn area and also do further damage. Consult medical personnel about whether or not to administer fluids to victim before arriving at a hospital.

**THIRD DEGREE**
The third-degree burn may appear charred or have patches which appear white, brown or black. Both the dermis and epidermis are destroyed and other organs, tissues and bones may also be involved. Third-degree burns are considered the most serious. They produce deep scars that many times require cosmetic or reconstructive surgery and skin grafts. Pain may or may not be present since usually nerve endings which transmit pain have been destroyed in this type burn.

Possible complications from burns include infection, tetanus, scarring, pneumonia and shock. Shock may set in due to the fluid and electrolyte loss in a serious burn.

If present when a victim suffers an electrical burn, turn off the source of power as soon as possible. Do not touch the victim with bare hands. Try to move the victim with some non-conductive material like a wooden chair or board. Check for breathing and start mouth-to-mouth resuscitation if necessary. Call for immediate emergency help.
Eye Injuries

Be extremely careful and gentle when treating eye injuries.

Floating objects in the eye which can be visualized may be flushed from the eye with water. If the object cannot be removed in this manner, the victim should seek medical attention.

**NEVER ATTEMPT TO REMOVE OBJECTS EMBEDDED IN THE EYE!**

First Aid care for these injuries consists of bandaging BOTH eyes and seeking professional care promptly! An inverted paper cup covered with a bandage is appropriate for serious eye injuries while the victim is transported to the hospital.

For chemical burns of the eye, wash the eye with copious (A LOT) amounts of water for 15 to 30 minutes. Then wrap a bandage around both eyes and seek professional help.

Eyes are delicate and sight is precious! Prompt professional attention to eye injuries is required to preserve sight!

Nose Injuries
Severe nosebleed can be most frightening. It can also lead to shock if enough blood is lost! Many cases of nosebleed can be controlled simply by having the victim sit down, pinch the nostrils shut and lean forward (to prevent blood from running into the throat).

Once the bleeding has been stopped, talking, walking and blowing the nose may disturb blood clots and allow the bleeding to resume. The victim should rest quietly until it appears the bleeding remains stopped.

If it is suspected that the victim has suffered head, neck or back injuries DO NOT attempt to control the blood flow as they may cause increased pressure on injured tissue. All uncontrolled nosebleeds require prompt medical attention!

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**Animal/Insect Bites**

**Animal Bites**

Animal bites carry a high risk of infection and require professional attention promptly!

Infection may develop hours, or days, after an animal bite. Signs and symptoms of infection are pain and tenderness at the wound site, redness, heat, swelling, pus at the wound site, red streaks in the skin around the wound and possible swollen glands closest to the wound.

First aid care for animal bites includes washing the wound well with soap and water, if there is no heavy bleeding. Then cover the wound and seek professional attention. A serious wound should be cleaned only by trained medical personnel.

**Insect Bites**

Insect bites and stings can be life-threatening to people with severe allergy to the insect's venom!

Signs and symptoms of allergic reaction include pain, swelling of the throat, redness or discoloration at the site of the bite, itching, hives, decreased consciousness and difficult or noisy breathing.

First aid calls for being alert for signs of allergic reaction or shock and seeking medical attention as quickly as possible for these victims!
If a stinger remains in the victim, you may try to remove it carefully with a tweezers or by scraping with the edge of a credit card. Be careful not to squeeze the stinger as this will inject more venom.

Once a stinger has been removed, the wound should be washed well with soap and water. Cold compresses will help relieve pain and swelling. The stung area should be kept lower than the heart to slow circulation of the venom.

Remember, in all cases of insect bites, watch for signs of allergic reaction and if they appear, seek professional medical attention without delay!

Fractures, Sprains, Strains & Dislocations

Fractures, sprains, strains and dislocations may be hard for the lay person to tell apart. For this reason, first aid treatment of any of these conditions is handled as though the injury was a fracture.

Signs and symptoms of the above conditions may include a "grating" sensation of bones rubbing together, pain, tenderness, swelling, bruising and an inability to move the injured part.

First Aid for any of these conditions consists of:

- Control bleeding, if present.
- Care for shock.
- Splint affected area to prevent further movement, but do so only if possible without causing further pain to victim.
- Cold packs may help reduce pain and swelling.

Victims with traumatic injuries, such as those caused by automobile accidents, falls etc. should not be moved except by trained rescue workers. Head, neck and back injuries are serious and require special care for movement and transport of victims with these conditions. In exceptional circumstances, such as when a victim is at risk of further injury unless moved, the victim's head and neck should be stabilized and the body moved with minimal flexing of the head, neck or spinal cord.

All victims with fractures, dislocations, sprains and strains require professional medical attention.
Poisoning

Over a million cases of poisoning occur in the United States each year, most involving young children.

PREVENTION of poisoning should be the concern of every parent with young children.

Substances likely to cause poisoning should be kept away from inquiring youngsters!

Since various poisons cause different symptoms, and because treatments vary depending upon the substance ingested, the first step in the event of poisoning is to call the local POISON CONTROL CENTER!

Do not wait for symptoms to occur!

Identify the nature of the poison and receive specific care instructions from the professional staff at the center!

Have the poison control center number on hand

and

call 911 and get connected immediately.

All poisoning victims need to be monitored carefully for signs of shock or impaired consciousness.

Every household should keep ACTIVATED CHARCOAL and SYRUP OF IPECAC on hand for possible use in poisoning emergencies, however they should NOT be administered unless instructed by the Poison Control Center staff. Both of these items are readily available, without prescription, at any drug store.

Diabetic Emergencies
Sugar is required in the body for nourishment. Insulin is a hormone that helps the body use the sugar. When the body does not produce enough Insulin, body cells do not get the needed nourishment and diabetes results.

People with this condition take Insulin to keep their diabetes under control.

Diabetics are subject to two very different types of emergencies:

**Insulin Reaction (or Insulin Shock)**

This condition occurs when there is TOO MUCH INSULIN in the body.

This condition rapidly reduces the level of sugar in the blood and brain cells suffer. Insulin reaction can be caused by taking too much medication, by failing to eat, by heavy exercise and by emotional factors.

**SIGNS and SYMPTOMS:** Fast breathing, fast pulse, dizziness, weakness, change in the level of consciousness, vision difficulties, sweating, headache, numb hands or feet, and hunger.

**Diabetic Coma**

This condition occurs when there is TOO MUCH SUGAR and too little INSULIN in the blood and body cells do not get enough nourishment.

Diabetic coma can be caused by eating too much sugar, by not taking prescribed medications, by stress and by infection.

**SIGNS AND SYMPTOMS:** Diabetic coma develops more slowly than Insulin shock, sometimes over a period of days. Signs and symptoms include drowsiness, confusion, deep and fast breathing, thirst, dehydration, fever, a change in the level of consciousness and a peculiar sweet or fruity-smelling breath.

**First Aid for Insulin Reaction and Diabetic Coma**

Looking for the signs and symptoms listed above will help to distinguish the two diabetic emergencies. In addition, if the patient is conscious, you can ask two very important questions which will help determine the nature of the problem:

**ASK "HAVE YOU EATEN TODAY?"**
Someone who has eaten, but has not taken prescribed medication may be in a diabetic coma.

**ASK "HAVE YOU TAKEN YOUR MEDICATION TODAY?"**
Someone who has not eaten, but did take their medication, may be having an Insulin reaction.
Distinguishing between the two types of diabetic emergencies can be difficult.

(Always look for an identifying bracelet which may reveal a person's condition)

A person in insulin shock needs sugar, quickly! If the person is conscious, give sugar in any form: candy, fruit juice or a soft drink!

Sugar given to a person in insulin shock can be life-saving! If the person is suffering from diabetic coma, the sugar is not required but will not cause them further harm.

Monitor victims carefully. Seek professional help immediately.

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**Stroke**

Stroke occurs when the blood flow to the brain is interrupted long enough to cause damage.

This may be caused by a clot formed in an artery in the brain or carried to the brain in the bloodstream, a ruptured artery in the brain or by compression of an artery in the brain, as found with brain tumors.

First aid consists primarily of recognizing signs and symptoms and seeking professional attention.

Signs and symptoms of a stroke include:

- Weakness and numbness of the face, arm or leg, often on one side of the body only.
- Dizziness
- Confusion
- Headache
- Ringing in the ears
- A change of mood
- Difficulty speaking
- Unconsciousness
- Pupils of uneven size
- Difficulty in breathing and swallowing
- Loss of bowel and bladder control
If you suspect a person is having a stroke, have them stop whatever they are doing and rest.

Promptly obtain professional help. Reassure the victim and keep them comfortable. Do not give anything by mouth. If the victim vomits, allow for fluids to drain from the mouth. Observe carefully while awaiting professional help and, if trained to do so, monitor the airway, breathing and circulation and be prepared to administer rescue breathing or CPR, if required and you are trained!

Seizure

SEIZURES are fairly common occurrences, but are very misunderstood! Seizures, per se, are not a specific condition. Rather, they may be caused by many different types of conditions such as insulin shock, high fevers, viral infections of the brain, head injuries or drug reactions.

When seizures recur with no identifiable cause, the person is said to have epilepsy.

Signs and Symptoms

Many individuals have a warning AURA (or sensation) before the onset of a seizure. Many times, a person about to have a seizure will physically move themselves from danger (as from the edge of a train platform) before the seizure begins.

Seizures can range from mild to severe. Mild seizures may take place and end in a matter of seconds.

Severe seizures may involve uncontrollable muscle spasms, rigidity, loss of consciousness, loss of bladder and bowel control, and in some cases, breathing that stops temporarily. Many epileptics carry cards or bracelets which identify their condition.

First Aid

Summon professional help. Prevent the person from injuring themselves by moving furniture or equipment.

Do not attempt to restrain a person suffering a seizure and do not put anything in their mouth!
Loosen clothing. If they vomit, turn on their side to allow fluids to drain. Stay with the person until they are fully conscious. If trained, administer rescue breathing or CPR, if required.

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**Heat Emergencies**

There are three types of heat emergencies you may be required to treat.

*Heat Stroke*

This is the most serious type of heat emergency. It is LIFE-THREATENING and requires IMMEDIATE and AGGRESSIVE treatment!

Heat stroke occurs when the body's heat regulating mechanism fails. The body temperature rises so high that brain damage --and death-- may result unless the body is cooled quickly.

**SIGNS and SYMPTOMS:**

The victim's skin is HOT, RED and usually DRY. Pupils are very small. The body temperature is VERY HIGH, sometimes as high as 105 degrees.

**FIRST AID:**

Remember, Heat Stroke is a life-threatening emergency and requires prompt action! Summon professional help. Get the victim into a cool place.

**COOL THE VICTIM AS QUICKLY AS POSSIBLE IN ANY MANNER POSSIBLE!**

Place the victim into a bathtub of cool water, wrap in wet sheets, place in an air conditioned room.

Do not give victim anything by mouth. Treat for shock.

*Heat Exhaustion*

Heat exhaustion is less dangerous than heat stroke. It is caused by fluid loss which in turn causes blood flow to decrease in vital organs, resulting in a form of shock.

**SIGNS AND SYMPTOMS:**
COOL, PALE AND MOIST skin, heavy sweating, dilated pupils (wide), headache, nausea, dizziness and vomiting. Body temperature will be near normal.

FIRST AID:

Get the victim out of the heat and into a cool place. Place in the shock position, lying on the back with feet raised. Remove or loosen clothing. Cool by fanning or applying cold packs or wet towels or sheets. If conscious, give water to drink every 15 minutes.

IMPORTANT: WHILE HEAT EXHAUSTION IS NOT A LIFE-THREATENING EMERGENCY LIKE HEAT STROKE, IT CAN PROGRESS TO HEAT STROKE IF LEFT UNTREATED!

**Heat Cramps**

Heat cramps are muscular pain and spasms due to heavy exertion. They usually involve the abdominal muscles or legs. It is generally thought this condition is caused by loss of water and salt through sweating.

FIRST AID:

Get victim to a cool place. If they can tolerate it, give one-half glass of water every 15 minutes. Heat cramps can usually be avoided by increasing fluid intake when active in hot weather.

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**Cold Emergencies**

**Hypothermia**

Signs and symptoms of this dangerous condition which can become life-threatening are: shivering, dizziness, numbness, confusion, weakness, impaired judgment, impaired vision and drowsiness.

Hypothermia victims pass through 5 general visible stages or 3 medical recognized stages, with each stage more serious and leading to death!

**General Stages**

1. Shivering
2. Apathy
3. Loss of Consciousness
4. Decreasing Pulse and Breathing Rate
5. Death

**Medical Stages**

Stage 1:
Body temperature drops by 1°C - 2°C below normal temperature C (1.8°-3.6°F, or between 96.8°F - 95°F). Mild to strong shivering occurs. Unable to perform complex tasks with the hands; the hands become numb. Blood vessels in the outer extremities contract, lessening heat loss to the outside air. Breathing becomes quick and shallow. Goose bumps form, raising body hair on end in an attempt to create an insulating layer of air around the body (a vestigial response, but useful in other species).

Stage 2:
Body temperature drops by 2°C - 4°C (3.6°F - 7.2°F, or between 95°F - 91.4°F). Shivering becomes more violent. Muscle miscoordination becomes apparent. Movements are slow and labored, accompanied by a stumbling pace and mild confusion, although the victim may appear alert. Surface blood vessels contract further as the body focuses its remaining resources on keeping the vital organs warm. Victim becomes pale. Lips, ears, fingers and toes may become blue.

Stage 3:
Body temperature drops below approximately 32°C or 90°F (normal is 37°C or 98.6°F). Shivering usually stops below 32°C; difficulty speaking, sluggish thinking, and amnesia start to appear; inability to use hands and stumbling are also usually present. Cellular metabolic processes shut down. Below 86°F (30°C) the exposed skin becomes blue and puffy, muscle coordination very poor, walking nearly impossible, and the victim exhibits incoherent/irrational behavior including terminal burrowing behavior or even a stupor. Pulse and respiration rates decrease significantly but fast heart rates (ventricular tachycardia, atrial fibrillation) can occur. Major organs fail. Clinical death occurs. Because of decreased cellular activity in stage 3 hypothermia, the body will actually take longer to undergo brain death.

**First Aid**

1. Dial 911 or call for emergency medical assistance. While waiting for help to arrive, monitor the person's breathing. If breathing stops or seems dangerously slow or shallow, begin cardiopulmonary resuscitation (CPR) immediately.
2. Move the person out of the cold. If going indoors isn't possible, protect the person from the wind, cover his or her head, and insulate his or her body from the cold ground.
3. Remove wet clothing. Replace wet things with a warm, dry covering.
4. Don't apply direct heat. Don't use hot water, a heating pad or a heating lamp to warm the victim. Instead, apply warm compresses to the neck, chest wall and groin. Don't attempt to warm the arms and legs. Heat applied to the arms and
legs forces cold blood back toward the heart, lungs and brain, causing the core body temperature to drop. This can be fatal.

5. Don't give the person alcohol. Offer warm nonalcoholic drinks, unless the person is vomiting.

6. Don't massage or rub the person. Handle people with hypothermia gently, because they're at risk of cardiac arrest.

7. Stay with the person until medical help arrives.

In air, most heat is lost through the head; hypothermia can thus be most effectively prevented by covering the head. Having appropriate clothing for the environment is another important prevention. Fluid-retaining materials like cotton can be a hypothermia risk; if the wearer gets sweaty on a cold day, then cools down, they will have sweat-soaked clothing in the cold air. For outdoor exercise on a cold day, it is advisable to wear fabrics which can "wick" away sweat moisture. These include wool or synthetic fabrics designed specifically for rapid drying.

Heat is lost much more quickly in water. Children can die of hypothermia in as little as two hours in water as warm as 16°C (61°F, 289 K), typical of sea surface temperatures in temperate countries such as Great Britain in early summer. Many seaside safety information sources fail to quote survival times in water, as well as the consequent importance of diving suits. This is possibly because the original research into hypothermia mortality in water was carried out in wartime Germany on unwilling subjects. There is an ongoing debate as to the ethical basis of using the data thus acquired.

There is considerable evidence, however, that children who suffer near-drowning accidents in water near 0°C (32°F, 273 K) can be revived up to two hours after losing consciousness. The cold water considerably lowers metabolism, allowing the brain to withstand a much longer period of hypoxia.

Legal and Ethical Considerations

DUTY TO ACT

No one is required to render first aid under normal circumstances. Even a physician could ignore a stranger suffering a heart attack if he chose to do so.

Exceptions include situations where a person's employment designates the rendering of first aid as a part of described job duties. Examples include lifeguards, law enforcement officers, park rangers and safety officers in industry.
A duty to provide first aid also exists where an individual has presumed responsibility for another person's safety, as in the case of a parent-child or driver-passenger relationship.

While in most cases there is no legal responsibility to provide first aid care to another person, there is a very clear responsibility to continue care once you start. You cannot start first aid and then stop unless the victim no longer needs your attention, other first aiders take over the responsibility from you or you are physically unable to continue care.

**NEED FOR CONSENT**

In every instance where first aid is to be provided, the victim's consent is required. It should be obtained from every conscious, mentally-competent adult. The consent may be either oral or written.

Permission to render first aid to an unconscious victim is implied and a first aider should not hesitate to treat an unconscious victim.

Consent of a parent or guardian is required to treat a child, however emergency first aid necessary to maintain life may be provided without such consent.

It is important to remember that a victim has the right to refuse first aid care and in these instances you must respect the victim's decision. You cannot force care on a person who does not want it ... Regardless of their condition!

**LEGAL CONCERNS**

Some well-meaning people hesitate to provide first aid because they are concerned about being sued.

This need not be a concern!

Legislators in almost every state in the country have passed GOOD SAMARITAN LAWS which are intended to protect good people who offer first aid help to others.

Most of the Good Samaritan Acts are very similar in their content and usually provide two basic requirements which must be met in order for the first aider to be protected by their provisions:

- The first aider must not deliberately cause harm to the victim.
- The first aider must provide the level & type of care expected of a reasonable person with the same amount of training & in similar circumstances.
There should be little, if any, concern about legal consequences inherent in providing first aid. You need only have the victim's consent and then offer the level of care for which you are qualified.

Do not attempt things you are not qualified for and ALWAYS dial 911.

Troop First Aid Kit

Everyone should have a well-stocked first aid kit handy at camp, on hikes, at troop and patrol meetings, Scouty activities, home, in the car and in the workplace.

The contents of your kit will vary depending upon the number of people it is designed to protect as well as special circumstances where it will be used.

For example, a first aid kit in a factory where there may be danger of flying debris getting into the eye should certainly have a sterile eyewash solution in its kit. If a family member is a known diabetic, your kit at home should have a glucose or sugar solution.

When assembling your first aid kit, whether for use in the home, car or at work, you should consider possible injuries you are likely to encounter and then select kit contents to treat those conditions.

It's also important to check your kit periodically to restock items that have been used and to replace items that are out-of-date. This is the responsibility of the Assistant Senior Patrol Leader working with the Quartermaster.

It's also advisable at home and at work to have both a stationary kit, stored in a cabinet or drawer, as well as a compact portable kit that can be taken quickly to the site of an emergency.

Recommended Contents for a First Aid Kit

[Modify to suit your particular needs, Example is for Troop]

- Activated Charcoal (for poisoning emergencies)
- Adhesive strip bandages - assorted sizes
- Adhesive tape
- Alcohol - rubbing 70%
- Alcohol wipes
- Antacid
- Antibiotic ointment
- Baking soda
- Calamine lotion
- Chemical ice packs
- Chemical hot packs
- Cotton balls
- Cotton swabs
- Decongestant tablets & spray
- Diarrhea medication
- Disposable latex or vinyl gloves
- Elastic bandages
- Face mask for CPR
- First aid guide Flashlight
- Gauze pads - various sizes
- Hot-water bottle
- Household ammonia
- Hydrocortisone cream .5%
- Hydrogen Peroxide
- Hypoallergenic tape
- Ice bag
- Insect repellent
- Insect sting swabs
- Matches
- Meat tenderizer (for insect bites)
- Moleskin
- Needles
- Non-adhering dressings [Telfa]
- Oil of Cloves
- Over-the-counter pain medication [aspirin]
- Paper & pencil
- Paper drinking cups
- Roller guaze - self adhering
- Safety pins
- Salt
- Scissors
- Soap
- Space blanket
- Sam splint
- Sugar or glucose solution
- Syrup of Ipecac
- Thermometer - oral & rectal
- Tongue blades
- Triangular bandages
- Tweezers
- Waterproof tape