

NATIONAL SAFETY COUNCIL

First Aid Quick Guide

Medical Emergency Information

EMERGENCY TELEPHONE NUMBERS*	
Emergency Medical Care:	Call 9-1-1 or your local number
Outside United States:	
Poison Control Center (United States):	(800) 222-1222
Local, Building or Campus-Specific Emergency Number:	
Other Important Numbers:	

EMERGENCY EQUIPMENT*	
Location of nearest AED:	
Location of nearest first aid kit:	

IN ANY EMERGENCY, FOLLOW THESE 6 STEPS:

- 1. Recognize the emergency.
- 2. Check the scene for safety.
- 3. Obtain consent, then check the person.
- 4. Call 9-1-1 when appropriate.
- 5. Care for the person.
- 6. Have the person seek medical attention when appropriate.

^{*} Be sure to check this information periodically to ensure it is current.



NATIONAL SAFETY COUNCIL

First Aid Quick Guide

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NATIONAL SAFETY COUNCIL MISSION STATEMENT

The National Safety Council saves lives by preventing injuries and deaths at work, in homes and communities, and on the roads through leadership, research, education and advocacy.

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Welcome...

to a training course of the National Safety Council

The nation's leading safety advocate for more than 100 years, the National Safety Council is a nonprofit organization with the mission to save lives by preventing injuries and deaths at work, in homes and communities, and on the road through leadership, research, education and advocacy. Working to make the world measurably safer, NSC advances this mission by engaging businesses, government agencies, elected officials and the public to help prevent the fourth leading cause of death in the U.S. – unintentional injuries. The Council is data driven, relying on research to inform best practice solutions to safety issues. To make the greatest impact, NSC focuses on where the most preventable injuries and deaths occur – cell phone use while driving, teen driving, workplace safety, prescription painkiller use and safety in the community. As a catalyst for behavior change, NSC promotes April as Distracted Driving Awareness Month and June as National Safety Month.

Acknowledged as the go-to source for safety, NSC provides a variety of educational opportunities – many through NSC University – including First Aid, Workplace Safety and Driver Safety courses, and is a leading source of occupational safety information through Safety+Health® magazine. The NSC Congress & Expo brings together the world's largest annual gathering of safety professionals. Through the Safe Communities America program, NSC certifies communities with rigorous safety initiatives.

The Campbell Institute at NSC is the global center of excellence for environmental, health and safety and collaborates with top performing organizations to share research and best practices widely across industries. The Council recognizes organizations that have focused on safety as a critical part of their operations with the prestigious Robert W. Campbell Award®.

Celebrating significant safety achievements, NSC presents the Green Cross for Safety® award for safety excellence, innovation and advocacy. The highest safety recognition for individuals is the Council's Distinguished Service to Safety Awards, given annually.

NSC uses the concept of the Journey to Safety Excellence® as a roadmap for organizations to continuously improve their safety practice to ensure zero harm. A 501c3 nonprofit, chartered by Congress with local Chapters and global networks, and more than 50,000 members, NSC is committed to helping keep people safe wherever they are.

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Table of Contents

Abdominal Injuries – Open and Closed	1
Abdominal Injury – Closed	1
Abdominal Injury – Open	1
Abdominal Pain	2
Alcohol Overdose	3
Allergic Reaction (Severe)	3
Amputation	4
Angina	5
Asthma	5
Bee or Wasp Sting	6
Bite - Animal or Human	7
Bleeding	7
Pressure Bandage to Control Bleeding	9
Tourniquet to Control Limb Bleeding	9
To Use an Improvised Tourniquet	10
Bleeding – Internal	
Breathing Difficulty	
Broken Bones and Dislocations	12
Splinting	
Splinting an Arm	13
Arm Sling and Binder	
Splinting a Leg	14
Broken Ribs	14
Bruises	14
Burns - Heat	15
First-and Second-Degree Burns	
Third-Degree Burn	
Chemical Burns	
Chest Wound - Open	17
Choking - Responsive Adult or Child	18
Choking - Responsive Infant	19
Concussion	20

CPR	20
CPR (adult, child, and infant)	20
CPR - Hands - Only	22
CPR - Using an AED	23
Crush Injuries	24
Diabetic Emergencies	24
Diabetes: Low Blood Sugar	24
Diabetes: High Blood Sugar	25
Drug Overdose	25
Opioid Drug Overdose	26
Ear Injuries	28
Electrical Shock or Burns	28
Exertional Dehydration	28
Eye Injuries	29
Blow to the Eye	29
Chemical or Other Substance Splashed in the Eye	29
Large Object Embedded in the Eye	30
Small Particle in the Eye	30
Fainting	31
Frostbite	31
Genitals Injury	32
Head and Face Injuries	32
Cheek Wound: Impaled Object	33
Head Wound (No Skull Fracture)	33
Skull Fracture	34
Heart Attack	34
Heat Cramps	35
Heat Stroke or Heat Exhaustion	36
Heat Exhaustion	36
Heat Stroke	37
Hip Injury	37
Hypothermia	38
Impaled Object in Wound	39
Jellyfish Sting	39

Table of Contents continued

Mouth Injuries	40
Muscle Cramp	40
Muscle Strain	41
Nosebleed or Injury	42
Poison Ivy, Oak, Sumac	43
Poisoning - Inhaled	43
Poisoning - Swallowed	44
Pregnancy Problems	45
Vaginal Bleeding	45
Other Problems in Pregnancy	45
Puncture Wound	45
Recovery Position – Adult or Child	46
Recovery Position - Infant	46
Scorpion Sting	47
Seizure	48
Shock	48
Snake Bite	49
Spider Bite	50
Spinal Injury	50
Splinters	51
Sprain	52
Bandaging a Sprain	52
Stroke	53
Sudden Illness	54
Tick Bite	55
Tooth Knocked Out	55
Wound Care	56

Abdominal Injuries – Open and Closed

IMMEDIATE MEDICAL HELP IS NEEDED!

Abdominal Injury – Closed

SIGNS AND SYMPTOMS:

Severe pain or tenderness in area, victim protecting the abdomen, bruising, swollen or rigid abdomen, rapid shallow breathing, nausea or vomiting.

- Carefully position the victim on his or her back. Loosen tight clothing.
- 2. Call 9-1-1.
- 3. Treat for **Shock** (p. 48), monitor the victim's breathing and be ready to give **CPR** (p. 20) if needed.

Abdominal Injury – Open

- 1. Position the victim on his or her back and loosen any tight clothing.
- 2. Do not push protruding organs back inside the abdomen. Cover the wound with a moist, sterile dressing or a dry. nonadherent dressing. Do not apply direct pressure on the wound.
- 3. Cover the dressing with a large occlusive dressing or plastic wrap taped loosely in place. Then cover the area with a blanket or towel to help maintain warmth.
- 4. Call 9-1-1.
- 5. Treat the victim for **Shock** (p. 48). Monitor the victim's breathing and be ready to give CPR (p. 20) if needed.



Abdominal Pain

- Always Call 9-1-1 for an abdominal injury (see previous page).
- Seek urgent medical attention for any severe abdominal pain in the following situations.

In adults:

- Sudden, severe, intolerable pain or pain that causes awakening from sleep.
- Pain that begins in general area of central abdomen and later moves to lower right.
- Pain accompanied by fever, sweating, black or bloody stool or blood in urine.
- Pain in pregnancy or accompanying abnormal vaginal bleeding.
- Pain accompanied by dry mouth, dizziness on standing, or decreased urination.
- · Pain accompanied by difficulty breathing.
- Pain accompanied by vomiting blood or greenish-brown fluid.

In young children:

- Pain that occurs suddenly, stops and then returns without warning.
- Pain accompanied by red or purple jellylike stool or by blood or mucus in stool.
- Pain accompanied by greenish-brown vomit.
- Pain with a swollen abdomen that feels hard.
- Pain with a hard lump in lower abdomen or groin area.

Alcohol Overdose

 Check for injuries or illness. Do not assume alcohol is the factor involved. Note that victims with uncontrolled diabetes may seem intoxicated.

2. For a responsive intoxicated person:

- Stay with the person and protect him or her from injury (take away car keys).
- b. Do not let the victim lie down on his or her back.

3. For an unresponsive intoxicated person:

- a. Put an unresponsive, breathing victim (if no evidence of trauma) in the **Recovery Position** (p. 46). Be prepared for vomiting.
- Monitor the victim's breathing and give CPR (p. 20) if needed.
- Call 9-1-1 if the victim's breathing is irregular, if seizures occur or if the victim cannot be roused (coma).
- d. Protect an intoxicated person from **Hypothermia** (p. 38).

Allergic Reaction (Severe)

IMMEDIATE MEDICAL HELP IS NEEDED!

A severe allergic reaction is life-threatening. **Common causes** include certain drugs such as penicillin, certain foods such as peanuts and shellfish, certain substances such as latex, and insect stings and bites.

SIGNS AND SYMPTOMS:

Difficulty breathing, wheezing, tightness in throat or chest, swelling of the face and neck, puffy eyes, anxiety or agitation, nausea, vomiting or changing levels of responsiveness.

1. Call 9-1-1.

- Help a responsive victim use his or her emergency epinephrine auto-injector. If the victim cannot use the prescribed autoinjector, you may administer it yourself if permitted by state law. Always follow the directions on the auto-injector.
- 3. Take the auto-injector out of its case and remove the cap or protective cover.
- 4. To administer the medication, press the autoinjector firmly against the outer thigh and hold it there while the medication is injected (follow the product instructions for how long). You should feel a "click" when the injection starts.
 - a. The medication should provide relief for 15-20 minutes.
 - If symptoms continue after the first dose of epinephrine has been given, and if EMS personnel are not expected to arrive within 5-10 minutes, administer a second dose of epinephrine, using a second auto-injector.
- 5. Monitor the victim's breathing and be ready to give **CPR** (p. 20) if needed.
- Help a responsive victim sit up in a position of easiest breathing. Put an unresponsive victim who is breathing in the **Recovery Position** (p. 46).

Amputation

Call 9-1-1. Control bleeding and care for the victim's wound first, then recover and care for amputated part:

- Wrap the severed part in a dry sterile dressing or clean cloth. Do not wash it.
- 2. Place the part in a plastic bag and seal it.



- Place the sealed bag in another bag or container with ice. Do not let the part touch ice directly or surround it with ice.
- 4. Give the severed part to emergency personnel.

Angina

The chest pain of angina usually happens after intense activity or exertion, is recognized as angina by the victim, and lasts only a few minutes.

- Ask if the person has been diagnosed with angina and if the pain is like angina pain experienced in the past. If so, help the person take his or her own medication and rest.
- If the pain persists more than 10 minutes or stops and then returns or if the victim has other heart attack symptoms not relieved by rest, give first aid for a **Heart Attack** (p 34).

Asthma

SIGNS AND SYMPTOMS:

Wheezing and difficulty breathing and speaking, dry persistent cough, fear or anxiety, gray-blue or ashen skin or changing levels of responsiveness.

- If the victim does not know he or she has asthma (first attack), Call 9-1-1 immediately.
- If the victim identifies the breathing difficulty as an asthma attack and has been prescribed medication (usually an inhaler), help the victim use the prescribed inhaler as directed by his or her health care provider.
 - · Remove the cap.
 - · Shake the inhaler several times.
 - · Connect the spacer (if needed).

- The victim places the inhaler or spacer end in mouth.
- The victim presses the applicator down while slowly inhaling.
- Remind the victim to hold his or her breath with the medication for about 10 seconds.
- 3. Help the victim rest in a position for easiest breathing (usually sitting up).
- 4. If needed, the victim may use the prescribed inhaler again as directed by his or her health care provider. If the breathing difficulty persists after use of the inhaler, Call 9-1-1.

Back Injury

See Spinal Injury (p. 50).

Bee or Wasp Sting

- Remove stinger from skin by scraping it away gently with a piece of plastic, such as a credit card (not a knife blade). Call 9-1-1 if the victim has a known allergy to stings.
- 2. Wash the area with soap and water.
- 3. Put ice or a cold pack on the sting site for up to 20 minutes (with a cloth or paper towel between the cold pack and the skin). Apply the cold for 20 minutes (or 10 minutes if it produces discomfort), then remove it for 30 minutes; reapply for 20 (or 10) minutes, then remove again for 30 minutes.
- 4. Watch the victim for 30 minutes for any signs or symptoms of severe allergic reaction (difficulty breathing, swelling in other areas, anxiety, nausea or vomiting); Call 9-1-1 and treat the Allergic Reaction (p. 3).
- Allow the victim to use an over-the-counter oral antihistamine to help reduce discomfort.





- Have the victim suck on ice for an insect sting in the mouth.
- Do not allow the victim to scratch the sting, as this increases swelling, itching and the risk for infection.

Bite – Animal or Human

- Clean the wound with large amounts of warm or room-temperature water with or without soap.
- 2. Control Bleeding (p. 7).
- 3. Cover the wound with a sterile dressing and bandage.
- 4. Seek medical attention immediately.
- Do not try to catch the animal, but note its appearance and describe it to the health care provider.

ANIMAL BITE

Bites

See Snake Bite (p. 49) and Spider Bite (p. 50)

Bleeding

If severe bleeding is occurring, shout for someone to Call 9-1-1.

- Put on medical exam gloves or keep a barrier (dressing, plastic bag) between you and the blood.
- 2. Put a sterile dressing or clean cloth on the wound.
- 3. Push on the wound with your gloved hand as hard as needed for about 5 minutes.

- 4. Reevaluate the bleeding.
 - If direct pressure does not control the bleeding and you have a hemostatic dressing, remove dressings already used and apply the hemostatic dressing directly on the wound using direct pressure.
 - b. If a hemostatic dressing is not available, continue to apply direct pressure. If blood soaks through the first dressing, put another dressing or cloth pad on top of the first and keep applying pressure.
- 5. If needed, apply a pressure bandage to keep pressure on the wound, wrapping from the end of the extremity toward the center of the body – see Pressure Bandage on next page. Use a tourniquet (if you are so trained) when direct pressure does not control severe bleeding from a limb.
- 6. If severe bleeding is occurring, treat the victim for **Shock** (p. 48).
- 7. See a health care provider immediately for:
 - Bleeding not easily controlled.
 - Deep or large wounds.
 - Significant face wounds.
 - · Possible wound infection.
 - Animal or Human Bite (p. 7).
 - · Object in the wound.
 - · Tetanus vaccination if needed.
 - Wounds that may need stitches.
- 8. Minor wounds may be cleaned, dressed and bandaged see **Wound Care** (p. 56).





Pressure Bandage to Control Bleeding

- 1. Place sterile dressing or clean cloth on wound. Start wrapping an elastic or self-adhering roller bandage below the wound dressing.
- 2. Make several circular turns, then overlap turns, by about half of previous turn.
- 3. Work up the limb to cover the dressing completely. The pressure is sufficient if the bandage is snug but a finger can be slipped under it.
- 4. Secure the bandage by tying it in place or with clips or tape.

Tourniquet to Control Limb Bleeding

A tourniquet can be used when you are unable to control bleeding in a limb with standard bleeding control (direct pressure with or without a dressing). Examples when a tourniquet may be appropriate:

- There are multiple victims to care for.
- The victim has multiple injuries requiring care.
- · The environment is unsafe and you need to evacuate the victim.
- You are unable to access the wound.

Note: Use a commercial tourniquet if available, following the manufacturer's steps for its correct use. Only apply a tourniquet if you are trained.

To Use an Improvised Tourniquet

- To make a tourniquet, use a nonstretchy material, such as terry cloth or a triangular bandage), folded lengthwise to be 1-2 inches wide.
- Tie the tourniquet around the injured arm or leg, several inches above the injury. If the injury is below the elbow or knee, you may need to tie the tourniquet above the joint. Use a common square knot (like tying your shoes without the bow).
- Above the first knot in the tourniquet, position a stick or other long object as a windlass that can be twisted to tighten the tourniquet, and tie a second square knot. Use any long object that is strong enough to hold the tourniquet and can be secured in place (a pencil, stick, spoon, pipe, etc.).
- 4. Twist the windlass to increase the pressure until the bleeding stops.
- Secure the windlass in place by tying one or both ends to the victim's arm or leg.
- If possible, mark the time the tourniquet was placed by putting a "T" on the victim's forehead with the time/day.

Bleeding – Internal

SIGNS AND SYMPTOMS:

Of **severe internal bleeding:** tender, swollen, bruised or hard abdomen; blood vomited or coughed up or present in urine; cool, clammy skin that may be pale or bluish; thirst; confusion; or lightheadedness.

- Have the victim lie down on his or her back.
- 2. Call 9-1-1.





- Be alert for vomiting. Put a breathing victim who vomits or who becomes unresponsive (if no suspected trauma, especially a neck, back, hip or pelvic injury) in the **Recovery Position** (p. 46).
- 4. Keep the victim from becoming chilled or overheated.
- 5. Do not give the victim anything to drink.
- If the victim becomes unresponsive, monitor his or her breathing and be ready to give CPR (p. 20) if needed.

For less serious internal bleeding, such as bruising in the arm or leg, apply cold to the area. Place a plastic bag or damp cloth with an icewater mix on the injured area to reduce swelling and pain; put a barrier, such as a cloth, between the plastic bag and the skin. A cold pack also can be used. Apply the cold for 20 minutes (or 10 minutes if it produces discomfort), then remove it for 30 minutes; reapply for 20 (or 10) minutes, then remove again for 30 minutes.

See also **Abdominal Injury — Closed** (p. 1).

Breathing Difficulty

IMMEDIATE MEDICAL HELP IS NEEDED!

SIGNS AND SYMPTOMS:

Gasping or unable to catch one's breath, speaking in shortened sentences, very fast or very slow breathing, very deep or shallow breathing, wheezing or gurgling with breathing, dizziness or lightheadedness, or pale or ashen skin.

- Call 9-1-1 for sudden unexplained breathing problems.
- 2. Help the victim rest in a position of easiest breathing. Calm and reassure the victim.
- 3. If the victim is hyperventilating, ask him or her to breathe slowly.

- Ask the victim about any prescribed medicine he or she may have and help the victim take it if needed.
- 5. Stay with the victim and be prepared to give **CPR** (p. 20) if breathing stops.

Broken Bones and Dislocations

Call 9-1-1 for a large bone fracture or any dislocation (except in the hand or finger).

Use the **RICE** acronym for fractures, sprains, and dislocations:

R	Rest the injured area. Support and do not move the injured area.
I	Ice. Place a plastic bag or damp cloth with an ice-water mix on the injured area to reduce swelling and pain; put a barrier, such as a cloth, between the plastic bag and the skin. A cold pack also can be used. Apply the cold for 20 minutes (or 10 minutes if it produces discomfort), then remove it for 30 minutes. Repeat the process for 24 to 48 hours or until the victim receives medical help.
С	Compress the injury in an extremity with an elastic roller bandage. The bandage can be placed over the ice-water bag.
Е	Elevate an injured extremity. (A sling may be used for arm injuries.)

Splinting

Splint an injury if help will be delayed and there is a risk of the injured area moving. Splint an injury of the hand or foot if the victim is to be transported to the hospital in a personal vehicle.

- Dress open wounds before splinting.
- Splint only if it does not cause more pain for the victim.



- Splint the injury in the position found. Do not move or try to straighten an injured extremity.
- Immobilize the entire area. Splint the joints above and below the injured area.

See the next sections for splinting an arm or leg and for making an arm sling.

SPLINTING AN ARM

- 1. Support the arm above and below the injury.
- Pad a rigid splint and position the arm on it. If available, add a roller bandage under the fingers.
- 3. Secure the splint.
- Check circulation. Look for tingling, numbness, swelling or cold skin. Remove the splint if circulation is cut off.

ARM SLING AND BINDER

- Secure the point of the bandage at the elbow.
 Use a safety pin or tie the point at the elbow.
- 2. Position the triangular bandage while the victim supports the arm.
- 3. Bring up the lower end of the bandage to the opposite side of the neck.
- 4. Tie the ends. Pad under the knot.
- 5. Tie a binder over the sling and around the chest to help prevent movement.



SECURE THE SPLINT









SPLINTING A LEG

- Gently slide 4 or 5 bandages or strips of cloth under both legs. Do not put a bandage over the injury site.
- 2. Put padding between the legs. Do not move the injured leg.
- Gently slide the uninjured leg next to the injured leg. Tie the bandages (snug but not tight), starting in the middle, then at the lower leg and at the top.



Broken Ribs

- 1. Help the victim into a position for easiest breathing.
- Support the ribs with a pillow or soft padding loosely bandaged over the area and under the arm.
- 3. Call 9-1-1.
- Monitor the victim's breathing while waiting for help.
- If helpful, immobilize the arm with an Arm Sling and Binder (p. 13) to prevent movement and ease pain.



Bruises

A bruise is a discoloration resulting from internal bleeding, such as from an abdominal injury, joint sprain, or other injury. It may be painful.

 First, treat the injury that caused the bruising. See Abdominal Injury - Closed (p. 1) or Sprain (p. 52) if suspected. 2. For pain relief, apply cold to the bruised area. Place a plastic bag or damp cloth with an ice-water mix on the injured area to reduce swelling and pain; put a barrier, such as a cloth, between the plastic bag and the skin. A cold pack also can be used. Apply the cold for 20 minutes (or 10 minutes if it produces discomfort), then remove it for 30 minutes; reapply for 20 (or 10) minutes, then remove again for 30 minutes.

Burns (Chemical)

See Chemical Burns (p. 17).

Burns (Electrical)

See Electrical Shock or Burns (p. 28).

Burns - Heat

First- and Second-Degree Burns

SIGNS & SYMPTOMS:

First-degree burns: skin is red, dry and painful; swelling; skin is not broken.

Second-degree burns: skin is swollen and red; skin may be blotchy or streaked; blisters are present and possibly weeping clear fluid; pain is significant.

- 1. Stop the burning by removing the heat source.
- Immediately cool the burn with running cool or cold potable water, such as tap water, for at least 10 minutes. (Do not put ice on a burn, which could cause tissue injury.)
- 3. Remove constricting items, such as clothing and jewelry.
- 4. For large second-degree burns, Call 9-1-1.





- Protect the burn area from friction or pressure. Put a sterile, dry dressing over the burn to protect the area, but keep it loose and do not tape it to the skin.
- Keep burn blisters intact. This reduces pain and improves healing by preventing infection. Natural remedies, such as honey or potato peel dressings, should not be applied to a burn.
- Seek medical attention for burns on the face, neck, genitals, hands, or feet and for burns involving blistering or broken skin, difficulty breathing, a large surface area, or other causes for concern.

Third-Degree Burns

SIGNS AND SYMPTOMS:

Damaged, charred or white leathery skin. Watch also for signs and symptoms of shock: clammy, pale or ashen skin; nausea and vomiting; fast breathing.

- 1. Stop the burning by removing the heat source.
- 2. Immediately cool the burn with running cool or cold potable water, such as tap water, for at least 10 minutes. (Do not put ice on a burn, which could cause tissue injury.) Do not attempt to cool the burn with cool or cold water if it is larger than 20% of the body (e.g., one whole leg or torso from neck to waist) or 10% for child because of the risk of hypothermia and shock. With a large burn, monitor the victim for hypothermia.
- 3. Remove clothing and jewelry before the area swells.
- 4. Call 9-1-1.
- Treat for shock: have victim lie on back, elevate legs if trauma is not suspected, and maintain normal body temperature.



- Carefully cover the burn with a sterile, dry dressing; keep it loose and do not tape to skin; do not apply cream or ointment.
- 7. Do not give the victim anything to drink.
- 8. Watch the victim's breathing and be ready to give CPR (p. 20), if needed.

Chemical Burns

See also Eve Injuries: Chemical or Other Substances Splashed in the Eye (p. 29).

- Check the Safety Data Sheet (SDS) for the chemical involved.
- 2. Move the victim away from fumes or ventilate the area.
- 3. With a gloved hand or piece of cloth, brush off any dry chemical.
- 4. Remove clothing and jewelry from the burn area.
- 5. Flush the entire area as quickly as possible with large amounts of running water. Flush until EMS personnel arrive to give definitive care or until a toxic-specific solution is available.
- 6. Call 9-1-1.

Chest Wound – Open

- 1. Keep the victim still in the position found.
- 2. Cover an open wound with a sterile dressing and bandage. If an object is impaled in the wound, stabilize the object with bulky dressings. If you note air moving in or out of a penetrating chest wound, do not block the airflow with a dressing.
- 3. Call 9-1-1.

Choking – Responsive Adult or Child

- If the victim is coughing forcefully, encourage continued coughing to clear the object. If not coughing, ask the victim if he or she is choking. A person who cannot cough, speak or breathe is choking and needs help immediately. Have someone Call 9-1-1.
- Ask if you can help. Tell the victim you will use abdominal thrusts (the Heimlich maneuver).
- Stand behind the victim with 1 leg forward between the victim's legs. For a child, move down to the child's level.
- 4. Reach around the abdomen and locate the person's navel with a finger from 1 hand.
- Make a fist with the other hand and place the thumb side of the fist against the person's abdomen just above the navel.
- Grasp your fist with your other hand and thrust inward and upward into the victim's abdomen with quick jerks. Continue abdominal thrusts until the victim expels the object or becomes unresponsive.
- 7. If the victim becomes unresponsive, lower the person to the ground, expose the chest and start CPR (p. 20) by pumping the chest 30 times hard and fast. Look inside the mouth when opening the airway to give breaths and remove any object.
- 8. For a responsive pregnant victim or any victim you cannot get your arms around or cannot effectively give abdominal thrusts to, give chest thrusts instead of abdominal thrusts. Avoid squeezing the ribs with your arms.





Choking – Responsive Infant

Give choking care only if the infant cannot cry, cough or breathe.

- Support the infant face down by holding the head in 1 hand, with the torso on your forearm against your thigh. Give up to 5 back blows (slaps) between the shoulder blades with the heel of your other hand.
- If the object is not expelled, roll the infant face up supporting the back of the infant's head with your hand.
- Place 2 fingers on the breastbone, just below the nipple line (same position as for CPR chest compressions).
- 4. Give 5 chest thrusts, about 1 per second. Each thrust should be 1½ inches deep.
- 5. Continue cycles of 5 back blows (slaps) and 5 chest thrusts until the object is expelled or the infant becomes unresponsive. If alone, Call 9-1-1 after 2 minutes if no one has yet done so.
- If the infant becomes unresponsive (or for any nonbreathing choking infant found unresponsive), give CPR (p. 20). Look inside the mouth when opening it to give breaths, and remove any object.

Closed Abdominal Injury

See Abdominal Injury - Closed (p. 1).

Cold Emergencies

See Frostbite (p. 31) or Hypothermia (p. 38).





Concussion

Concussion is a brain injury that can result from a blow to the head or from sudden, violent movement of the head, such as in whiplash.

SIGNS AND SYMPTOMS:

Headache or head pressure, feeling stunned or dazed, nausea, dizziness, visual disturbances, sensitivity to light and noise, confusion, difficulty remembering, and change in level of consciousness. Note that most concussions do not involve a loss of consciousness.

- Encourage the victim to rest and avoid physical activity or activities that could cause additional head trauma.
- The victim should not take any pain reliever unless directed by a health care provider.
- The victim should be evaluated by a health care provider before resuming physical activity.
- If the victim's symptoms are severe or become worse, Call 9-1-1 or seek medical attention immediately.

Convulsions

See Seizure (p. 47).

CPR

CPR (adult, child, and infant)

For an unresponsive victim who is not breathing or only gasps occasionally, send someone to Call 9-1-1 (or your local emergency number) and get an AED. If alone with an adult, first Call 9-1-1 and get an AED if available nearby. If alone with a child, first give 2 minutes of CPR and then Call 9-1-1 and get an AED if available.



- 2. Expose the chest. Place hands in correct position for chest compressions.
 - a. For adults: in center of chest, with 1 hand on top of the other.
 - For children: in center of chest with 1 or 2 hands.
 - c. For infants: two middle fingers of 1 hand just below the nipple line.

Do not give compressions over the bottom tip of the breastbone. For an adult or child, keep fingers off the chest and do not lean on the chest. Keep your elbows straight and keep your hands in contact with the chest at all times.

- Give 30 chest compressions at a rate of 100-120 per minute. Count aloud for a steady fast rate: "1, 2, 3"
 - a. For adults: to a depth of at least 2 inches but not more than 2.4 inches.
 - For children (age 1 to puberty): to a depth of ¹/₃ the depth of the chest, or about 2 inches.
 - c. For infants (to age 1): to a depth of ¹/₃ the depth of the chest, or about 1 ½ inches.

Do not lean on the chest in between compressions but let the chest rise completely after each compression.

4. Tilt the head and lift the chin to open the airway. Give 2 rescue breaths, each lasting 1 second. (If the first breath does not go in, reposition the head and try again; if the second breath still does not go in, look in the mouth and remove any object seen.)

Note: If you are unable or unwilling to provide rescue breaths to an unresponsive victim who is not breathing, perform Hands-Only CPR (also known as compression-only CPR) by compressing the chest hard and fast (100-120 per minute). Note that conventional CPR is preferred for pediatric victims.



- 5. Continue cycles of 30 compressions and 2 breaths.
- 6. Continue CPR (p. 20) until:
 - Victim wakes up.
 - An AED is brought to the scene and is ready to use.
 - Professional help arrives and takes over.
 - If the victim starts breathing normally but is unresponsive, put the victim in the Recovery Position (p. 46) and monitor breathing.
- 7. When an AED arrives, start the AED sequence. (see **CPR Using an AED** next page).

CPR - Hands - Only

If you are unable or unwilling to provide rescue breaths to an unresponsive victim who is not breathing, perform Hands-Only CPR (also known as compression-only CPR) Note that conventional CPR is preferred for pediatric victims."

- Send someone to Call 9-1-1 and to bring an AED. If alone, Call 9-1-1 and get an AED if available nearby.
- Expose chest. Pump hard and fast in the center of the chest to a depth of at least 2 inches but not more than 2.4 inches.
 Let chest fully rise after each compression.
- 3. Continue until:
 - · Victim wakes up.
 - An AED is brought to the scene and is ready to use.
 - · Professional help arrives and takes over.
 - If the victim starts breathing normally but is unresponsive, put the victim in the Recovery Position (p. 46) and monitor breathing.



CPR – Using an AED

Give CPR until an AED (automated external defibrillator) is brought to the scene and is ready to use. When the AED is ready, follow the steps below.

- If you arrive with an AED at a victim who is not breathing or breathing normally (gasping), use the AED immediately before starting CPR.
- For an infant or child under age 8, use pediatric pads if available, applied as directed by the unit. If unavailable, use adult pads.
- 1. Place the unit by the victim's shoulder and turn it on.
- Expose the victim's chest and quickly dry or shave the pad placement area if necessary.
- 3. Apply pads to the victim's chest. If needed, plug the cables into the unit.
- 4. Stand clear during rhythm analysis.
- Follow prompts from the AED unit to take one of three actions:
 - Press the shock button.
 - b. Stay clear while the AED automatically delivers a shock.
 - Do not shock but immediately give CPR with the pads remaining in place, starting with chest compressions.
- Stand clear when AED prompts to analyze the rhythm again after 5 cycles of CPR (about 2 minutes).
- Continue steps 5 and 6 until the victim wakes up or professional rescuers arrive and take over.
- 8. If the victim starts breathing normally but is unresponsive, put the victim in the **Recovery Position** (p. 46) (with pads remaining in place) and continue to monitor the breathing.









Cramps

See **Heat Cramps** (p. 35) or **Muscle Cramp** (p. 40).

Crush Injuries

A crush injury is caused when strong pressure is exerted against the body. Depending on the force involved, a crushing injury can result in muscle, bone, nerve and tissue damage, shock, and internal and/or external bleeding.

- 1. Call 9-1-1.
- 2. Provide care for the injuries you find.

Diabetic Emergencies

Diabetes: Low Blood Sugar

SIGNS AND SYMPTOMS:

Sudden dizziness, shakiness or mood change (even combativeness), headache, confusion, difficulty paying attention, pale skin, sweating, hunger, clumsy, jerky movements, possible seizure.

- 1. Confirm the victim has diabetes. Talk to the victim; look for a medical ID tag.
- Give the victim glucose tablets if available.
 If not available, give another sugar
 source, such as candy or orange
 juice. Only give the victim sugar if he
 or she is conscious, can follow simple
 commands, and is able to swallow.
- If the victim still feels ill or has signs and symptoms after 15 minutes, give more sugar.
- Call 9-1-1 if the victim becomes unresponsive or continues to have significant signs and symptoms.

Diabetes: High Blood Sugar

SIGNS AND SYMPTOMS:

Frequent urination, drowsiness, dry mouth, thirst, shortness of breath, deep rapid breathing, breath that smells fruity, nausea, vomiting, eventual unresponsiveness.

- High blood sugar is a medical emergency If you suspect high blood sugar, Call 9-1-1. immediately and monitor the person.
- If you are unsure whether the victim suffers from high or low blood sugar, it is okay to give sugar.
- Call 9-1-1 if the victim becomes unresponsive or continues to have significant signs and symptoms.

Dislocations

See Broken Bones and Dislocations (p. 12).

Drug Overdose

IMMEDIATE MEDICAL HELP IS NEEDED

for any suspected drug overdose!

See next page for an opioid drug overdose.

- Put a breathing, unresponsive victim in the Recovery Position (p. 46) (if no suspected trauma, especially a neck, back, hip or pelvic injury) and be ready to give CPR (p. 20) if needed. Call 9-1-1.
- 2. Try to find out what drug was taken. If you see evidence of an overdose, Call 9-1-1.
- If symptoms are minor and you know what substance was taken, call the Poison Control Center (800-222-1222) and follow its instructions.

- 4. Check the victim for any injuries requiring care.
- Do not try to induce vomiting, which may cause further harm and is unlikely to help the victim.

Opioid Drug Overdose

Opioid drugs include heroin, morphine, oxycodone (Oxycontin), methadone, hydrocodone (Vicodin), codeine, and some other prescription pain medications.

SIGNS AND SYMPTOMS:

Pinpoint pupils, unresponsiveness, slow shallow breathing; in severe cases, victim's lips and nail beds may turn bluish or ashen, seizures may occur.

- If a person is unresponsive despite efforts to wake him or her, consider opioid overdose a possible cause, especially when the person is known to use a prescription pain medication or recreational opioid drugs.
- 2. Try to find out what drug was taken and Call 9-1-1.
- Ask others at the scene if they know if an emergency overdose kit is available (naloxone or Narcan®) – or you may have such a kit (either nasal administration or auto-injector).
- If state law permits, administer the emergency overdose medication to the victim, following the manufacturer's directions on the kit.
- Put a breathing, unresponsive victim in the **Recovery Position** (p. 46) (if no suspected trauma, especially a neck, back, hip or pelvic injury) and be ready to give **CPR** (p. 20) if needed.

Following are the general steps for using an autoinjector for an opioid drug overdose. Be sure to follow the instructions on the specific product.

- Prepare the auto-injector for use. Remove it from its case and remove the safety guard.
- To administer the medication, press the autoinjector firmly against the victim's outer thigh. Follow the manufacturer's instructions for how long to hold the device in place to ensure all of the medication has been delivered.
- Ensure 9-1-1 has been called. Monitor the victim's symptoms and be prepared to give CPR (p. 20).
- 4. If the victim's symptoms continue or return after the first dose, administer a second dose using a second auto-injector if EMS personnel have not arrived. Follow the instructions on the package.

Following are the steps for CPR and AED in opioid drug overdose:

- 1. For an unresponsive victim who is not breathing or only gasps occasionally, send someone to Call 9-1-1 (or your local emergency number) and get an AED and naloxone. If alone with the victim, first give 2 minutes of CPR (p. 20) and then Call 9-1-1 and get naloxone and an AED if available.
- Administer naloxone as soon as available; may repeat after 4 minutes.
- If the victim does not respond or begin breathing regularly, continue CPR and use the AED as soon as available.
- 4. Continue to check responsiveness and for normal breathing until EMS personnel arrive. If the victim responds or begins breathing regularly, continue to monitor and be prepared to renew CPR and repeat naloxone if the victim stops responding.

Ear Injuries

- Call 9-1-1 if you see clear fluid or watery blood coming from the ear.
- Help the victim sit up and tilt the affected ear lower to let any fluid drain out.
- 3. Apply a loose sterile dressing. Do not apply pressure. Do not plug the ear closed.
- 4. Seek medical attention if 9-1-1 was not called.

Electrical Shock or Burns

An electrical shock can be life-threatening. Check the victim first for responsiveness and normal breathing, and begin **CPR** (p. 20) if needed.

- Do not touch the victim until the area is safe. Unplug or turn off power.
- 2. Call 9-1-1.
- 3. Care for the **Burn** (p. 15).
- 4. Treat for **Shock** (p. 48).
- Put an unresponsive victim who is breathing in the **Recovery Position** (p. 46).
- 6. Monitor breathing. Be ready to give **CPR** and use an **AED** (p. 23), if needed.

Exertional Dehydration

Exertional dehydration occurs when the body loses more fluid than it takes in due to excessive sweating. Vigorous physical activity can lead to dehydration, especially in hot and humid weather.

SIGNS AND SYMPTOMS:

Dry mouth, increased thirst, headache, muscle cramps, lightheadedness, or fatigue.

 Have the victim rest, in a cool environment if possible. Give the victim a carbohydrate-electrolyte drink, such as a sports drink, to promote rehydration. (Other beverages, such as 2% milk and coconut water, are also effective.) If a carbohydrate-electrolyte drink is not available, give the victim water.

Eye Injuries

Blow to the Eye

- If the eye is bleeding or leaking fluid, Call 9-1-1 or get the victim to the emergency department immediately.
- Put a cold pack over the eye for 15 minutes to ease pain and reduce swelling, but do not put pressure on the eye. If the victim is wearing a contact lens, do not remove it.
- Have the victim lie still; cover the uninjured eye. Movement of the uninjured eye causes movement of the injured one.
- Seek medical attention if pain persists or vision is affected in any way.

Chemical or Other Substance Splashed in the Eye

- Continuously flush the victim's eye with large amounts of clean running water for at least 15 minutes or until EMS arrives. If tap water is not available, use normal saline or a commercial eye irrigation solution.
- 2. Have a victim wearing contact lenses remove them.
- 3. Tilt the victim's head so the water does not run into the unaffected eve.

 For a responsive victim, call the Poison Control Center (800-222-1222) immediately and follow its instructions.
 For an Control Center is not available, Call 9-1-1 or seek help from a medical provider.

Large Object Embedded in the Eye

- Do not remove the object. Stabilize it in place with dressings or bulky cloth.
- Cover both eyes. Movement of the uninjured eye causes movement of the injured one.
- 3. Call 9-1-1 or get the victim to the emergency department immediately.

Small Particle in the Eye

- 1. Do not let the victim rub the eye.
- 2. Gently pull the upper eyelid out and down over the lower eyelid.
- 3. If the particle remains, gently flush the eye with water from a medicine dropper or water glass. To keep water from flowing into the unaffected eye, position the victim's head so the affected eye is lower than the other eye.
- If the particle remains and is visible, carefully try to brush it out with a sterile dressing. Lift the upper eyelid and swab its underside if you see the particle.
- 5. If the particle still remains or if the victim has any vision problems or pain, cover the eye with a sterile dressing and seek medical attention. Also cover the uninjured eye. Movement of the uninjured eye causes movement of the injured one.



Facial Injury

See Head and Face Injuries (p. 32).

Fainting

- Check the victim's breathing and be ready to give CPR (p. 20) if needed.
- Lay the victim down on his or her back and raise the legs 6 to 12 inches. Loosen constricting clothing.
- 3. Check for injuries.
- Call 9-1-1 if the victim does not regain responsiveness soon or faints repeatedly.
 Also Call 9-1-1 for all older adults, people with heart disease, and pregnant women.

Fracture

See Broken Bones and Dislocations (p. 12).

Frostbite

SIGNS AND SYMPTOMS:

Skin looks waxy and white, gray, yellow, or bluish; feels numb, tingly, or aching; when severe, the area feels hard, may become painless, and after warming, becomes swollen and may blister.

Note: Minor or superficial frostbite (frostnip) can be treated with simple, rapid rewarming using skin-to-skin contact, such as a warm hand.

- 1. Move the victim out of the cold and into a warm place.
- 2. Remove wet clothing and constricting items.
- 3. Protect between fingers and toes with dry gauze.
- 4. Seek medical attention as soon as possible.



- 5. Warm the frostbitten area in lukewarm water (99-104° F or 37-40° C) for 20 to 30 minutes only if medical care will be delayed and if there is no danger of the skin refreezing. Do not use chemical warmers directly on frostbitten tissue.
- 6. Protect and elevate the area.

Genitals Injury

- · Provide privacy for the victim.
- Use direct pressure to control external bleeding.
- For injured testicles, provide support with a towel positioned between the legs like a diaper.
- For vaginal bleeding, have the woman press a sanitary pad or clean folded towel to the area.
- Call 9-1-1 for severe or continuing bleeding, significant pain or swelling or the possibility of sexual abuse.

Head and Face Injuries

See also Concussion (p. 20), Ear Injuries (p. 28), Eye Injuries (p. 29), or Mouth Injuries (p. 40).

For any painful head injury and any head trauma in a child older than age 2, suspect a spinal injury and restrict movement of the head and spine.

See Spinal Injury (p. 50).

Cheek Wound: Impaled Object

- 1. Check inside the mouth to see if the object has penetrated through.
- If you can see both sides of the object and can remove it safely, gently pull the object out in the direction from which it penetrated the cheek, taking care with a sharp object not to cut the cheek further.
- Place a dressing inside the mouth between the cheek wound and teeth; ensure the dressing does not come loose and block the airway.
- Apply another dressing to the outside of the wound, applying pressure to control bleeding.
- Position an unresponsive victim with the head turned to the side so blood and other fluid will run out of the mouth.

Head Wound (No Skull Fracture)

- Replace any skin flaps and cover the wound with a sterile dressing.
- 2. Use direct pressure to control bleeding.
- 3. Put a roller or triangle bandage around the victim's head to secure the dressing.
- Seek medical attention if the victim later experiences nausea and vomiting, persistent headache, drowsiness or disorientation, stumbling or lack of coordination or problems with speech or vision.

See also Concussion (p. 20).

Skull Fracture

SIGNS AND SYMPTOMS:

Deformed area of the skull; depressed area in bone felt by touch; blood or fluid coming from ears or nose.

- Put a breathing, unresponsive victim in the Recovery Position (p. 46) unless there may be a neck, back, hip or pelvic injury. Monitor breathing and be ready to give CPR (p. 20) if needed.
- 2. *Do not* clean the wound, press on it, or remove an impaled object.
- 3. Cover the wound with a sterile dressing.
- 4. If there is significant bleeding, apply pressure only around the edges of the wound, not on the wound itself. Do not apply pressure if you feel bone fragments move.
- 5 Do not move the victim unnecessarily because there may also be a spinal injury.
- 6. Call 9-1-1 and stay with the victim.

Heart Attack

IMMEDIATE MEDICAL HELP IS NEEDED!

SIGNS AND SYMPTOMS:

Persistent discomfort; pain or pressure in chest; pain that may spread to neck, jaw, shoulder or arm; shortness of breath; dizziness, lightheadedness, feeling of impending doom; pale skin; sweating. Victims having a heart attack may not have all these signs and symptoms. Women especially may experience other symptoms, including shortness of breath, indigestion, nausea or vomiting, and back or jaw pain.

- Call 9-1-1 for any victim experiencing chest discomfort, even if the victim says it's not serious.
- Help the victim rest in a comfortable position. Loosen constricting clothing.
- Ask the victim if he or she is taking heart medication and help obtain the medication. Follow the directions on the medication.
- 4. Encourage the victim to chew and swallow 1 adult aspirin (325 mg) or 2 to 4 low-dose "baby" aspirin (81 mg each) unless he or she is allergic to aspirin or cannot take aspirin for any other reason.
- 5. Stay with the victim and be reassuring and calming.
- 6. Be ready to give CPR (p. 20) if needed.
- Do not let the victim eat or drink anything (including water).

Heat Cramps

SIGNS AND SYMPTOMS:

Muscle pain, cramping, spasms; heavy sweating.

- 1. Have the person stop the activity and sit quietly in a cool place.
- Give the victim a carbohydrate-electrolyte drink, such as a sports drink, to promote rehydration. (Other beverages, such as 2% milk and coconut water, are also effective.) If a carbohydrate-electrolyte drink is not available, give the victim water.
- Have the person avoid strenuous activity for a few hours to prevent progression to heat exhaustion or heat stroke.
- For abdominal cramps, continue to keep the person resting in a comfortable position.

- For leg cramps, stretch the muscle by extending the leg and flexing the ankle. Massage and ice the muscle.
- Seek medical attention for a person who has heart problems or is on a low-sodium diet or if cramps do not subside within an hour.

Heat Stroke or Heat Exhaustion

Heat exhaustion will develop into heat stroke if the victim is not cooled and given water. When sweating stops, heat stroke is occurring – a lifethreatening emergency.

Heat Exhaustion

SIGNS AND SYMPTOMS:

Heavy sweating, thirst, fatigue, heat cramps; later, headache, dizziness, nausea or vomiting; may develop into heat stroke.

- Move the victim out of the heat to lie down in a cool place, and loosen or remove outer clothing.
- 2. Cool the victim with a cool water spray or wet cloths on the forehead and body.
- Give the victim a carbohydrate-electrolyte drink, such as a sports drink, to promote rehydration. (Other beverages, such as 2% milk and coconut water, are also effective.) If a carbohydrate-electrolyte drink is not available, give the victim water.



Heat Stroke

IMMEDIATE MEDICAL HELP IS NEEDED!

SIGNS AND SYMPTOMS:

Skin is flushed and very hot to the touch; sweating has usually stopped; fast breathing; headache, dizziness, confusion, irrational behavior; possible convulsions or unresponsiveness.

- 1. Call 9-1-1.
- 2. Move the victim to a cool place.
- 3. Remove outer clothing.
- 4. Immediately cool the victim with any means at hand, preferably by immersing the victim up to the neck in cold water (with the help of a second rescuer). If immersion in cold water is not possible, place the victim in a cold shower or move to a cool area and cover as much of the body as possible with cold, wet towels.
- 5. Do not try to force the victim to drink liquids.
- Monitor the victim's breathing and be ready to give CPR (p. 20) if needed.

Hip Injury

- 1. Call 9-1-1.
- If help may be delayed, immobilize the victim's legs by padding and bandaging them together, unless this causes more pain.
- 3. Treat for **Shock** (p. 48). Monitor the victim's breathing and be ready to give **CPR** (p. 20) if needed.

Hyperventilation

See Breathing Difficulty (p. 11).



Hypothermia

IMMEDIATE MEDICAL HELP IS NEEDED!

Hypothermia can occur whenever and wherever the victim feels cold, including indoors. It can occur gradually or quickly, and can become life-threatening.

SIGNS AND SYMPTOMS:

Uncontrollable shivering (may have stopped in severe cases); lethargy, confusion, drowsiness, irrational behavior; clumsy movements; pale or ashen, cool skin (even under clothing); slow breathing; changing levels of responsiveness.

- Check responsiveness and breathing, and Call 9-1-1. Except in mild cases, the victim needs immediate medical care.
- 2. Provide **CPR** (p. 20) if unresponsive and not breathing normally.
- 3. Quickly move the victim out of the cold. Remove any wet clothing.
- 4. Warm the victim with blankets or warm clothing.
- Only if the victim is far from medical care, use active rewarming by putting the victim near a heat source and putting warm (but not hot) water in containers against the skin.
- Do not rub or massage the victim's skin.Be very gentle when handling the victim.
- Give warm (not hot) drinks to an alert victim who can easily swallow, but do not give alcohol or caffeine.
- 8. Monitor breathing and be ready to give **CPR** (p. 20) if needed.

Impaled Object in Wound

- Do not remove the object, which could cause more bleeding and injury. Control bleeding by applying direct pressure around the edges of the object.
- 2. Dress the wound around the object.
- 3. Stabilize the object in place with large dressings or folded cloths.
- 4. Support the object while bandaging the dressings in place.
- 5. Keep the victim still and seek medical attention.



Jellyfish Sting

- Wash the sting area with lots of vinegar (4% to 6% acetic acid) as soon as possible, for at least 30 seconds or longer, to inactivate the venom. Remove any remaining tentacles with a gloved hand.
- 2 If vinegar is unavailable, use a mix of baking soda and water.
- 3. To reduce pain, immerse the area in water as hot as can be tolerated (113 degrees F or 45 degrees C) for at least 20 minutes or as long as pain is felt. If pain returns on removal from the hot water, immerse the area again.
- 4. If hot water is unavailable, use a dry hot pack preferably, or a dry cold pack to reduce pain.
- Do not use meat tenderizer, a fresh water wash, commercial aerosol products or a pressure bandage.
- 6. Call 9-1-1 if:
 - · The victim is very young or very old.
 - A sting near the mouth is causing swelling.
 - The sting involves a large area of the body, the face or genitals.

- The victim experiences serious signs and symptoms, such as difficulty breathing or swallowing, or chest pain.
- The sting is from a box jellyfish (rare in United States).

Mouth Injuries

- Have the victim sit with the head tilted forward to let blood drain.
- For a wound penetrating the lip: Put a rolled dressing between the lip and gum. Hold a second dressing against the outside lip.
- 3. **For a bleeding tongue:** Put a dressing on the wound and apply pressure.
- 4. Do not repeatedly rinse the mouth (this may prevent clotting).
- 5. Do not let the victim swallow blood (this may cause vomiting).
- 6. When the bleeding stops, tell the victim to not drink anything warm for several hours.
- Seek medical attention if the bleeding is severe or does not stop.

Muscle Cramp

- 1. Have the victim stop the activity.
- 2. Gently stretch out the muscle, if possible.
- 3. Massage the muscle after active cramping stops, then ice the muscle.
- 4. Give the victim a carbohydrate-electrolyte drink, such as a sports drink, to promote rehydration. (Other beverages, such as 2% milk and coconut water, are also effective.) If a carbohydrate-electrolyte drink is not available, give the victim water.



Muscle Strain

SIGNS AND SYMPTOMS:

Dull or sharp pain when muscle is used, stiffness of the area, weakness or inability to use the muscle normally.

1. Apply the RICE acronym:

R	Rest the muscle.
I	Ice. Place a plastic bag or damp cloth with an ice-water mix on the injured area to reduce swelling and pain; put a barrier, such as a cloth, between the plastic bag and the skin. A cold pack also can be used. Apply the cold for 20 minutes (or 10 minutes if it produces discomfort), then remove it for 30 minutes. Repeat the process for 24 to 48 hours or until the victim receives medical help.
С	Compress the injury in an extremity with an elastic roller bandage. The bandage can be placed over the ice-water bag.
E	Elevate the extremity unless it is injured.

Seek medical attention if the pain is severe or persists, or if there is a significant or prolonged (3 days or more) impairment of function.

Neck Injury

See Spinal Injury (p. 50).

Nosebleed or Injury

- Have the victim sit and tilt his or her head slightly forward with the mouth open. Do not let the victim lie down. Carefully remove any object you see protruding from the nose, but do not probe inside the nose.
- 2. Have the victim pinch the nostrils together just below the bridge of the nose for 10 minutes. Ask the victim to breathe through the mouth and to not speak, swallow, cough or sniff.
- 3. If the victim is gasping or choking on blood in the throat. Call 9-1-1.
- 4. Place a cold compress on the bridge of the nose.
- After 10 minutes, release the pressure slowly. Pinch the nostrils again for 10 minutes if bleeding continues.
- 6. Seek medical attention if:
 - Bleeding continues after 2 attempts to control it.
 - · You suspect the nose is broken.
 - A foreign object is in the nose.
- 7. Have the victim rest for a few hours and avoid rubbing or blowing the nose.

Open Abdominal Injury

See **Abdominal Injury – Open** (p. 1).

Overdose

See Alcohol Overdose (p. 3) or Drug Overdose (p. 25).

Pelvic Injury

See Hip Injury (p. 37).



Poison Ivy, Oak, Sumac

- 1. Wash the area thoroughly with soap and water as soon as possible after contact.
- 2. For severe reactions or swelling on the face or genitals, seek medical attention.
- Treat itching with colloid oatmeal baths; a paste made of baking soda and water, calamine lotion, or topical hydrocortisone cream; and an oral antihistamine (e.g., Benadryl).
- Do not burn these poisonous plants to get rid of them, as the smoke also spreads the poisonous resin.
- To prevent further spread, wash the victim's hands, clothing and shoes (and pets) that came in contact with the plants.



Poisoning - Inhaled

IMMEDIATE MEDICAL HELP IS NEEDED!

SIGNS AND SYMPTOMS:

Of carbon monoxide or other inhaled poison: Headache, dizziness, lightheadedness, confusion, weakness; nausea, vomiting, chest pain, convulsions; changing levels of responsiveness.

- 1. Immediately move the victim into fresh air.
- 2. Call 9-1-1 even if the victim starts to recover.
- 3. Monitor the victim's breathing and be ready to give **CPR** (p. 20) if needed.
- 4. Put an unresponsive, breathing victim in the **Recovery Position** (p. 46).
- 5. Loosen tight clothing around the neck or chest.

Poisoning – Swallowed

IMMEDIATE MEDICAL HELP IS NEEDED!

SIGNS AND SYMPTOMS:

Nausea and vomiting, abdominal pain or cramps; drowsiness, dizziness, disorientation; changing levels of responsiveness.

- 1. Determine what was swallowed, when, and how much.
- For a responsive victim, call the Poison Control Center (800) 222-1222 immediately and follow its instructions.
- 3. For a victim with signs of a life-threatening condition (including sleepiness, seizures, difficulty breathing, vomiting) and for any unresponsive victim, Call 9-1-1.
- Put an unresponsive breathing victim in the Recovery Position (p. 46). Be prepared for vomiting. Monitor the victim's breathing and be ready to give CPR (p. 20) if needed.
- Do not give the victim any substance to eat or drink unless instructed by the Poison Control Center. Do not follow first aid instructions present on some household product labels; follow the Poison Control Center's instructions.
- If a responsive victim's mouth or lips are burned by a corrosive chemical, rinse the mouth with cold water (but do not allow the victim to swallow).

Pregnancy Problems

Vaginal Bleeding

- 1. Call 9-1-1 for heavy bleeding.
- Help the woman into a comfortable position and give her a towel or sanitary napkins to absorb the blood, but do not try to pack the vagina.
- 3. Save the blood and any expelled material to give to arriving medical personnel.
- 4. Take steps to minimize Shock (p. 48).

Other Problems in Pregnancy

Have the pregnant woman see a health care provider immediately for any of the following signs and symptoms:

- Abdominal pain
- · Persistent or severe headache
- · Sudden leaking of water from the vagina
- · Persistent vomiting
- · Chills and fever
- Convulsions
- · Difficulty breathing

Puncture Wound

- Irrigate the wound with large amounts of warm or room-temperature water with or without soap to remove foreign matter.
- Gently press on wound edges to promote bleeding.
- 3. Dry the area. Do not put any medication inside or over the puncture wound.
- 4. Cover the wound with a sterile dressing and bandage.
- Seek medical attention.

Recovery Position – Adult or Child

Leave a breathing, responsive victim in the position found or a position of comfort, unless you must move the victim to be safe.

Put an unresponsive victim who is breathing and who has not experienced trauma (especially a neck, back, hip or pelvic injury) in the recovery position. The recovery position helps keep the airway open, allows fluids to drain from the mouth, and helps prevent the inhalation of stomach contents if the victim vomits.

- 1. Extend one of the victim's arms above the victim's head.
- Carefully roll the victim's body onto its side so that the victim's head is supported on the extended arm.
- 3. Bend both legs so the victim's position is stabilized.
- 4 With victim now in position, open the mouth to allow drainage and monitor breathing.

Recovery Position - Infant

- Hold the infant face down on your arm with the head slightly lower than the body.
- 2. Support the head and neck with your hand, keeping the mouth and nose clear.









Respiratory Distress

See Breathing Difficulty (p. 11).

Scalp Wound

See Head and Face Injuries (p. 32).

Scorpion Sting

Severe, burning pain; later, numbness, tingling; possible nausea, vomiting; hyperactivity in a child; possible signs of **Shock** (p. 48), breathing difficulty.

- 1. Call 9-1-1 if the victim has a problem breathing or if symptoms are severe.
- Monitor the victim's breathing and be ready to give CPR (p. 20) if needed.
- 3. Carefully wash the sting area.
- 4. Put ice or a cold pack on the area for up to 20 minutes (with a cloth or paper towel between the cold pack and the skin). Apply the cold for 20 minutes (or 10 minutes if it produces discomfort), then remove it for 30 minutes; reapply for 20 (or 10) minutes, then remove again for 30 minutes. Keep the victim still.
- 5. Seek urgent medical attention unless the symptoms are very mild.

Seizure

- Do not try to stop the person's movements or restrain the person. Do not place any objects in the person's mouth.
- Prevent injury during a seizure by moving away dangerous objects and putting soft padding, such as a jacket, under the person's head. Remove eyeglasses.

- 3. Loosen tight clothing around the neck to ease breathing.
- 4. After the seizure, the victim may be unresponsive or confused for a short time. Ensure the victim's airway remains open with the **Recovery Position** (p. 46) or head tilt if needed. Gently turn the person onto one side if vomiting occurs.
- 5. Call 9-1-1 if the seizure lasts more than 5 minutes; if the person is not known to have epilepsy; if the person recovers very slowly, or has trouble breathing or has another seizure; if the person is pregnant; is wearing a medical ID bracelet; or if the person is injured.

Shock

IMMEDIATE MEDICAL HELP IS NEEDED!

SIGNS AND SYMPTOMS:

Anxiety, confusion, agitation, or restlessness; dizziness, lightheadedness; cool, clammy, or sweating skin, pale, bluish, or ashen in color; rapid, shallow breathing; thirst, nausea, vomiting; changing levels of responsiveness.

- Check for responsiveness, normal breathing, and severe bleeding or injuries.
- 2. Call 9-1-1 and care first for life-threatening conditions, such as severe bleeding.
- 3. Be ready to give **CPR** (p. 20) if needed.
- 4a. If there is no evidence of trauma, position a responsive victim on his or her back using a blanket or coat as a pad. If the movement or position does not cause the victim pain, raise the legs such that the feet are 6-12 inches above the ground.
- 4b. Put a breathing, unresponsive victim (if no suspected trauma, especially a neck, back, hip or pelvic injury) in the **Recovery Position** (p. 46).

- 5. Loosen any tight clothing.
- 6. Be alert for the possibility of vomiting; turn the victim's head to drain the mouth.
- Try to maintain the victim's normal body temperature. If necessary, maintain the victim's body heat with a blanket or coat over the victim.
- 8. Do not let a shock victim eat, drink, or smoke.
- Stay with the victim and offer reassurance and comfort.

Shoulder Injury

See Broken Bones and Dislocations (p. 12).

Skull Injury

See Head and Face Injuries (p. 32).

Snake Bite

 Have the victim lie down and stay calm. (Do not move the victim unless absolutely necessary.) Keep the bite area immobile and below the level of the heart.

2. Call 9-1-1.

- Wash the bite wound with large amounts of warm or room-temperature water with or without soap.
- 4. Wrap the extremity with a snug but not tight elastic bandage. Wrap away from the body toward the end of the limb. The pressure is sufficient if the bandage is snug but a finger can be slipped under it.
- Do not put a tourniquet on the victim.Do not cut the wound open to try to drain the venom out or try to suck out the venom. Do not put ice on the bite.

- 6. Remove jewelry or tight clothing before swelling begins.
- Do not try to catch the snake, but note its appearance and describe it to the health care provider.
- Monitor the victim's breathing and be ready to give CPR (p. 20) if needed.

Spider Bite

- If the victim has difficulty breathing,
 Call 9-1-1 and be ready to give CPR
 (p. 20) if needed. Call 9-1-1 immediately for a brown recluse spider bite. Go to the emergency department for any other bite.
- 2. Keep the bite area below the level of the heart.
- 3. Wash the area with soap and water.
- 4. Put ice or a cold pack on the bite area (with a cloth or paper towel between the cold pack and the skin). Apply the cold for 20 minutes (or 10 minutes if it produces discomfort), then remove it for 30 minutes; reapply for 20 (or 10) minutes, then remove again for 30 minutes.
- 5. Try to safely identify the spider for the health care provider.

Spinal Injury

Suspect a spinal injury in an injured victim who has these risk factors:

- Victim is 65 or older.
- Child older than 2 with trauma to the head or neck.
- Motor vehicle or bicycle crash involving driver, passenger or pedestrian.
- Falls from more than the person's standing height.

- Victim feels tingling in hands or feet, pain in back or neck, or muscle weakness or lack of feeling in torso or arms.
- · Victim is intoxicated or not alert.
- Any painful injury, particularly to the head, neck or back.
- Ask a responsive victim what happened.
 If he or she has any of the risk factors, explain the need to hold the head still to prevent spinal movement. With an unresponsive victim, check for risk factors for suspected spinal injury.
- Hold the victim's head and neck with both hands in the position found to prevent movement of the neck and spine.
- 3. Assess the victim's breathing and be ready to give **CPR** (p. 20), if needed.
- 4. Have someone Call 9-1-1.
- Reassure a conscious victim and tell him or her not to move.
- 6. Continue to stabilize head/spine and monitor the victim's breathing until help arrives.

Splinters

- Coax out a splinter with a sterile needle, and then grasp the end with tweezers or your fingers.
- 2. Cleanse the area with soap and water.

Splinting

See Broken Bones and Dislocations (p. 12).

Sprain

SIGNS AND SYMPTOMS:

Signs of pain, swollen joint, bruising of joint area, inability to use joint.

Use the **RICE** acronym for fractures, sprains, and dislocations:

R	Rest the injured area. Support and do not move the injured area.			
ı	Ice. Place a plastic bag or damp cloth with an ice-water mix on the injured area to reduce swelling and pain; put a barrier, such as a cloth, between the plastic bag and the skin. A cold pack also can be used. Apply the cold for 20 minutes (or 10 minutes if it produces discomfort), then remove it for 30 minutes; reapply for 20 (or 10) minutes, then remove again for 30 minutes.			
С	Compress an injured extremity with an elastic roller bandage.			
Е	Elevate an injured extremity. (A sling may be used for arm injuries.) See Arm Sling and Binder (p. 13).			

Bandaging a Sprain

An elastic bandage is used to support a joint and prevent swelling. At the wrist or ankle, a figure-eight wrap is used.

- Anchor the starting end of the bandage. For the wrist, turn the bandage diagonally across the wrist and back around the hand (forming a figure eight).
- 2 Continue overlapping the figure-eight turns by about ¾ of the previous turn.
- 3. Fasten the end of the bandage using clips or tape.



Sting

See Bee or Wasp Sting (p. 6), Jellyfish Sting (p. 39), or Scorpion Sting (p. 47).

Strain

See Muscle Strain (p. 41).

Stroke

IMMEDIATE MEDICAL HELP IS NEEDED!

Use the **FAST** system to recognize whether the person may be experiencing a stroke:

F	Face Drooping – Is one side of the victim's face drooping or is it numb? If you ask the person to smile, is their smile uneven?			
A	Arm Weakness – Is one of the victim's arms weak or numb? If you ask them to raise both arms, does one drift downward?			
s	Speech Difficulty – Is the victim's speech slurred or are they having difficulty speaking or understanding? If you ask them to repeat a simple sentence, can they do it correctly?			
т	Time to Call 9-1-1 – If the victim shows any of these symptoms, Call 9-1-1 immediately and note the time when the symptoms first began.			

Other symptoms may include sudden weakness or numbness of face, arm, or leg, especially on one side of the body; drooling; and gait problems. Some stroke victims may also have sudden, severe headache; vomiting; loss of consciousness.

1. Call 9-1-1.

- 2. Monitor the victim's breathing and be ready to give **CPR** (p. 20) if needed.
- 3. Have the victim lie on his or her back with head and shoulders slightly raised.
- 4. Loosen constricting clothing.

- 5. If necessary, turn the victim's head to the side to allow drool or vomit to drain.
- 6. Keep the victim warm and quiet until help arrives.
- Put a breathing, unresponsive victim (if no suspected trauma, especially a neck, back, hip or pelvic injury) in the **Recovery Position** (p. 46).

Sudden Illness

SIGNS AND SYMPTOMS:

Feeling ill, dizzy, confused or weak; skin color changes (flushed, pale, or ashen); sweating, nausea, vomiting.

- 1. Call 9-1-1 for any unexplained sudden illness.
- 2. Help the victim rest.
- Prevent the victim from becoming chilled or overheated.
- 4. Reassure the victim.
- 5. Do not give the victim anything to eat or drink.
- 6. Watch for changes, and be prepared to give **CPR** (p. 20), if needed.

See also:

Abdominal Pain (p. 2).

Allergic Reaction (p. 3).

Asthma (p. 5).

Diabetic Emergencies (p. 24).

Fainting (p. 31).

Heart Attack (p. 34).

Pregnancy Problems (p. 45).

Seizure (p. 48).

Stroke (p. 53).

Tick Bite

- Remove the tick by grasping it close to the skin with tweezers and pulling very gently to "tent" the skin until the tick lets go. Avoid pulling hard or jerking. Keep the tick for later identification.
- 2. Wash the area with soap and water.
- Apply antiseptic, such as rubbing alcohol or antibiotic cream.
- Seek medical attention if a rash appears around the site or if the victim later experiences fever, chills, joint pain or other flu-like symptoms.

Tooth Knocked Out

See also Mouth Injuries (p. 40).

- Have the victim sit with his or her head tilted forward to let blood drain.
- 2. Rinse the wound with saline solution or tap water.
- Control bleeding by having the victim bite down for 20 to 30 minutes on a gauze pad or cotton ball placed over the tooth socket.
- Save the tooth. Place it in a solution, such as Hank's Balanced Salt Solution, a specialized tooth-preserving solution, or whole milk. Do not clean or scrub the tooth.

Unconsciousness

See Recovery Position (p. 47).

Wasp Sting

See Bee or Wasp Sting (p. 6).

Wound Care

- Wash your hands and put on gloves if available.
- Gently wash shallow wounds and abrasions with large amounts of warm or roomtemperature water with or without soap to remove dirt.
- Irrigate a deeper wound that is not severely bleeding under large amounts of running water to remove foreign matter.
- 4. Do not use alcohol, hydrogen peroxide or iodine on wound.
- 5. Pat area dry.
- Apply antibiotic ointment only to an abrasion or superficial wound and only if the victim is not allergic to the antibiotic.
- 7. Cover the wound with a sterile dressing and bandage.
- 8. Seek medical attention for these wounds:
 - If the victim's tetanus vaccination is out of date.
 - The wound may be infected.
 - A deep or puncture wound.
 - · An impaled object.
 - A wound may require stitches (cuts on the face or hands when the edges do not close together, gaping wounds and cuts longer than 1 inch).

Each year in the United States, more than 300,000 people suffer sudden cardiac arrest. In most communities fewer than 8% survive, according to the Citizen CPR Foundation. The National Safety Council estimates 40 million serious injuries occur in the U.S. every year.

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