

CPR/FIRST AID

REVIEW

**This is a review
course ONLY.**

**This is NOT a
certification!!**

Adult

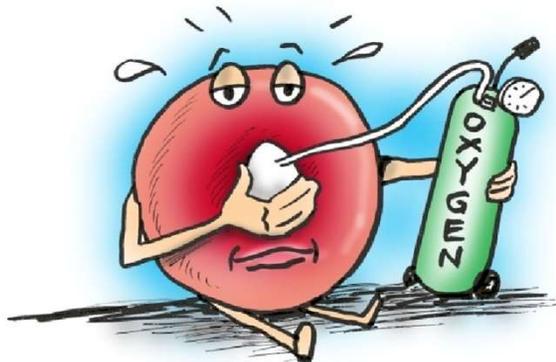
CPR

CPR CAN MEAN LIFE!

Did you know that over million-and-a-half heart attacks happens every year, and more than 20% of people die before even reaching a hospital? Latest data shows that cardiac arrest is becoming the number one cause of death.

When the heart stops, the absence of oxygenated blood can cause permanent brain damage in only a few minutes. Death will occur within approximately 8-10 minutes.

Statistics show that the earlier CPR is initiated, the greater the chances of survival. In fact, chances of survival are doubled if help is provided within four minutes. These few minutes can be the difference between life and death.



- **0 - 4 minutes:** brain damage unlikely
- **4 - 6 minutes:** brain damage possible
- **6 - 10 minutes:** brain damage probable
- **over 10 minutes:** probable brain death

The AHA guidelines "strongly recommend" **that untrained / lay responders** perform "**compression-only**" CPR, sometimes known as CCR. However, **medical professionals and trained lay people** are still urged to give the victim two "**rescue breaths**" in between each series of **30 chest compressions**.

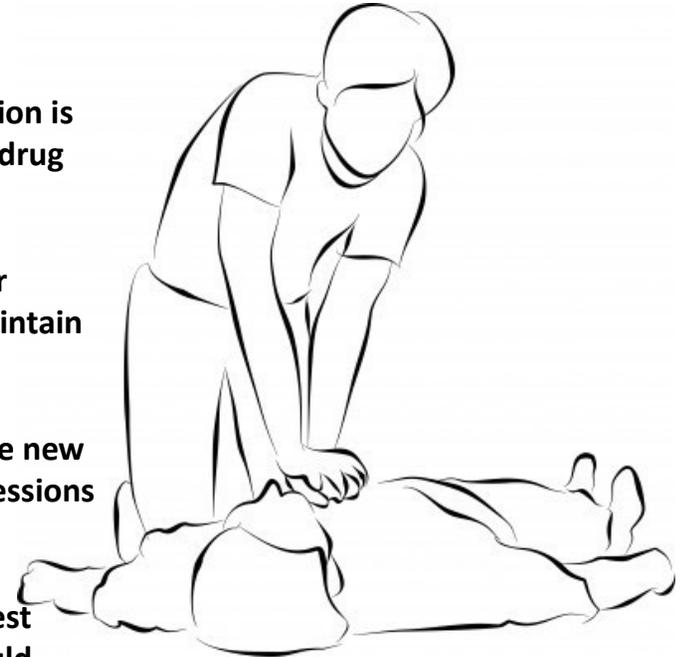
All the changes apply only to adult victims who collapse of cardiac arrest; artificial respiration is still recommended for children and for adults in a few cases, including near-drowning and drug overdose.

The science behind the changes is simple. In an adult who has been breathing normally, for several minutes even after cardiac arrest there is enough oxygen in the bloodstream to maintain the heart and brain, as long as compressions circulate that oxygen.

The new guidelines also call for faster and more forceful compressions than in the past. The new standard is to compress the chest at least two inches on each push, at a rate of 100 compressions per minute. The AHA says the perfect pace is that of the Bee Gees' "Staying Alive."

There has been a change in the recommended sequence for the lone rescuer to initiate chest compressions before giving rescue breaths (C-A-B rather than A-B-C) The lone rescuer should begin CPR with 30 compressions rather than ventilation to reduce delay to first compression.

Increase the depth of chest compressions to 2 inches for adults & children and 1.5 inches for infants.



During cardiac arrest, there is no blood flow. Chest compressions create a small amount of blood flow to the vital organs such as the brain and heart - the more effective the chest compressions, the more blood flow is produced. Chest compressions that are too shallow or too slow or chest compressions that are interrupted frequently do not deliver as much blood flow to the brain and heart as effective chest compressions. Every time chest compressions are restarted following an interruption, the first few compressions are not as effective as later compressions. Frequent or prolonged interruptions in chest compressions decrease blood flow and the victim's chance of survival.

CPR may not save the victim even when performed properly, but if started within 4 minutes of cardiac arrest and defibrillation is provided within 10 minutes, a person has a 40% chance of survival.

CPR provides a trickle of oxygenated blood to the brain and heart and keeps these organs alive. In other words, Cardio Pulmonary Resuscitation (CPR) serves as an artificial heartbeat and an artificial respirator until defibrillation can shock the heart into a normal rhythm or emergency equipment arrives.

Remember the CAB's of CPR: Circulation, Airway and Breathing

Adult CPR

Adult CPR is to be performed on individuals 8 years of age or older

Before you begin:

The first step of CPR is to assess the victim and check responsiveness. Gently shake the victim and shout, "Are you OK?" If the person answers, CPR is not needed. If the person is unresponsive or conscious and showing signs of a stroke or heart attack, call 911 immediately and initiate the CAB's of CPR which include:

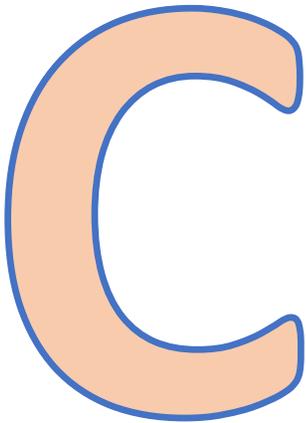
C-Circulation, A-Airway, < B-Breaths

In case of emergency DO NOT...

- leave the victim unattended.
- make the victim drink.
- throw water on the victim's face.
- put the victim into a sitting position.
- slap his/her face.

Circulation:

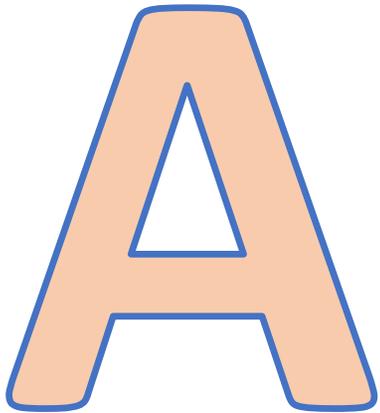
In order to determine if the victim's heart is beating, place two fingertips on his carotid artery, located in the depression between the windpipe and the neck muscles, and apply slight pressure for several seconds.



Compressions:

When performing chest compressions, proper hand placement is very important. To locate the correct hand position place two fingers at the sternum (the spot where the lower ribs meet), then put the heel of your other hand next to your fingers.

1. Place one hand on top of the other and interlace the fingers.
2. Lock your elbows and using your body's weight, compress the victim's chest. The depth of compressions should be at least 2 inches - remember: 2 hands, 2 inches.
3. Count aloud as you compress 30 times at the rate of about 3 compressions for every 2 seconds or approximately 100 compressions per minute.



Airway: Clear the airway.

- Put the person on his or her back on a firm surface.
- Kneel next to the person's neck and shoulders.
- Open the person's airway using the head tilt-chin lift.
- Put your palm on the person's forehead and gently push down.
- With the other hand, gently lift the chin forward to open the airway.
- Check for normal breathing, taking no more than 10 seconds: Look for chest motion, listen for breath sounds, and feel for the person's breath on your cheek and ear. Do not consider gasping to be normal breathing.
- If the person isn't breathing normally or you aren't sure, begin mouth-to-mouth breathing.



Breathing: Breathe for the person

- Rescue breathing can be mouth-to-mouth breathing or mouth-to-nose breathing if the mouth is seriously injured or can't be opened.
- With the airway open (using the head tilt-chin lift), pinch the nostrils shut for mouth-to-mouth breathing and cover the person's mouth with yours, making a seal.
- Prepare to give two rescue breaths. Give the first rescue breath — lasting one second — and watch to see if the chest rises. If it does rise, give the second breath. If the chest doesn't rise, repeat the head tilt-chin lift and then give the second breath.
- Begin chest compressions — go to Circulation next.

Review

Remember... *you may be the victim's only chance of survival. You can increase that chance by 40% simply by administering Cardio Pulmonary Resuscitation (CPR).*

Check the victim for unresponsiveness by shouting and shaking him/her. If there is no response, **Call 911** and return to the victim. In most locations the emergency dispatcher can assist you with CPR instructions. Pulse Location - Carotid artery (neck)

Circulation – If the victim is still not breathing normally, coughing or moving, begin chest compressions. Push down with 2 hands 2 inches 30 times right between the nipples. Pump at the rate of 100/minute, faster than once per second.

Airways – Tilt the head back and listen for breathing.

Breathing – If not breathing normally, pinch nose and cover the mouth with yours and blow until you see the chest rise. Give 2 breaths. Each breath should take 1 second.

Child

CPR

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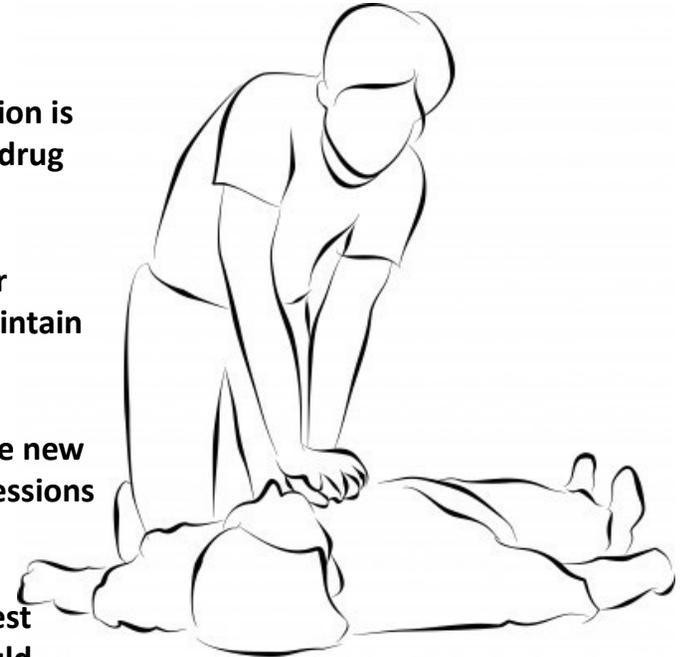
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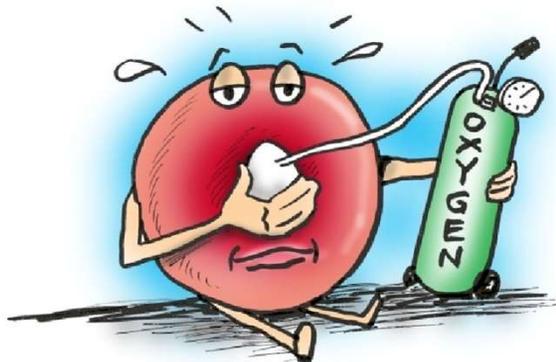


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Child CPR

Child CPR is to be performed on individuals 8 years of age or younger

The most common reasons that children stop breathing and their heart stops beating are the following:

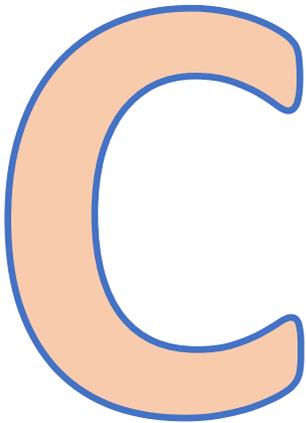
- Choking, suffocation, and strangulation.
- Drowning.
- Injuries.
- Poisoning.
- Infection.
- Heart disease, brain disease or medical conditions that affect breathing.

Before you begin:

Check for responsiveness. Shake or tap the child gently. See if the child moves or makes a noise. Shout, "Are you OK?" **If there is no response, shout for help.** Send someone to call 911. Do not leave the child alone to call 911 until you have given about 1-2 minutes of CPR.

Circulation:

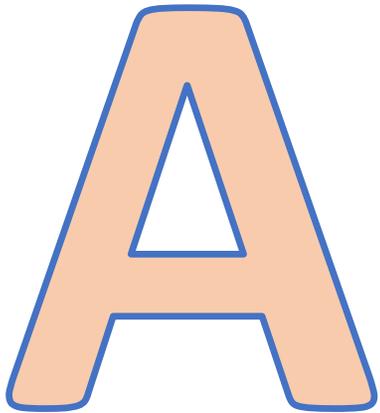
Restore blood circulation. Check if the child's heart is beating. In order to do that, find carotid artery. Place two fingertips on it and apply slight pressure for several seconds. If no circulation is detected, begin chest compressions.



Compressions:

- Count aloud as you compress 30 times, followed by 2 breaths. Perform this cycle 20 times - 30 chest compressions followed by 2 breaths - after which remember to check the victim's carotid artery for pulse as well as any signs of consciousness. **DO NOT FORGET TO DIAL 911.**
- Check the child's carotid artery for pulse by placing two fingertips and applying slight pressure on his carotid artery for 5 to 10 seconds.
- A child's smaller and more fragile body requires less pressure when performing compressions. The rule to remember is 1 hand, 1 inch. If you feel or hear slight cracking sound, you may be pressing too hard. Apply less pressure as you continue.
- When performing chest compressions on a child proper hand placement is even more crucial than with adults. Place two fingers at the sternum (the bottom of the rib cage where the lower ribs meet) and then put the heel of your other hand directly on top of your fingers.

Airway: Clear the airway.



- **Open the airway.** Lift up the chin with one hand. At the same time, push down on the forehead with the other hand.
- **Look, listen, and feel for breathing.** Place your ear close to the child's mouth and nose. Watch for chest movement. Feel for breath on your cheek. If there is none, check for tongue. It can obstruct the airways and prevent the child from breathing on his own.

Breathing: Breathe for the child

Keep in mind that children's lungs are much smaller and be sure to use shallower breaths. Watch victim's chest to prevent stomach distention.



If the child is not breathing:

- Cover the child's mouth tightly with your mouth
- Pinch the nose closed
- Keep the chin lifted and head tilted
- Give two slow breaths. Do **NOT** give large, full, forceful breaths.
- If the chest does NOT rise, try the chin lift-head tilt again, and give two more breaths.
- If the chest still doesn't rise, check to see if something is blocking the airway and try to remove it.

Review

Remember... Children's CPR is given to children under the age of 8. The procedure is similar to that for adults with some minor but important differences:

Check the child for unresponsiveness by shouting and shaking the victim. Give **2 minutes** of CPR **BEFORE** calling **911**

Circulation – If the victim is still not breathing normally, coughing or moving, begin chest compressions. Push down with 1 hand 1 inch 30 times right between the nipples. Pump at the rate of 100/minute, faster than once per second. Pulse Location - Carotid artery (neck)

Airways – Tilt the head back and listen for breathing.

Breathing – If not breathing normally, pinch nose and cover the mouth with yours and blow until you see the chest rise. Give 2 breaths. Each breath should take 1 second.

AED

Review

AED Guidelines

AEDs (Automatic External Defibrillators), when used swiftly-in the first 3-5 minutes of a person collapsing-have been shown to dramatically increase the survival rate of people suffering from cardiac arrest. An AED will automatically determine the heart rhythm of a pulseless victim and, if the victim is in ventricular fibrillation (v-fib), shock the victim's heart in an attempt to restore its rhythm to normal.

When a heart is in v-fib, it is still receiving nerve impulses from the brain. These impulses are simply firing so chaotically that the heart cannot produce a "beat;" it cannot expel enough blood to keep the circulatory system (and thus oxygen) flowing through the body. Brain cells begin to die after 4-6 minutes of oxygen deprivation. The heart will continue its uncoordinated twitching until it is no longer receiving electrical impulses from the brain (and thus stops all together), or until the heart is shocked back into a normal rhythm, which is where an AED comes in. An AED stops the heart from its spasm by shocking it. This allows the nerve impulses a chance to resume their normal pattern, which, in turn, allows the heart to resume beating at its normal pace. AEDs can be found in many public areas including most malls, stadiums and airports. They are straightforward and easy to use. Since time is the most important factor in a cardiac emergency, it is important for the general public to understand how to use an AED.

Note: AEDs are NOT for use on trauma patients, children under the age of 1, or victims that HAVE a pulse. Call 911. If you see someone collapse, immediately call 911 and get the medics en route.

If there are other people around, choose someone specific and instruct him to call 911 and explain the situation. This decreases confusion about who should do what and ensures that the call is being placed.

Check the victim's respirations and airway. If someone has collapsed, you should immediately determine whether he or she is breathing. If the victim is breathing, you know that he has pulse. If the victim is not breathing, begin rescue breathing and chest compressions as described in How To Perform CPR. Locate an AED. If there is an AED nearby, ask a bystander to take over CPR while you apply the AED to the victim.

Uninterrupted CPR is an important factor in increasing the recovery rate of cardiac arrest patients. Always ensure that someone is providing CPR for the victim unless the AED machine is actively analyzing or shocking the victim. Attach the AED. First ensure that the adhesive AED pads are attached to a cable, which is plugged into the AED machine. Then bare the victim's chest and attach the adhesive AED pads in the appropriate locations. The AED should include a diagram (typically on the adhesive pads themselves) indicating where each pad goes. Always follow the instructions on the AED. Typically the negative pad is placed on the victim's right upper chest wall (above the nipple and to the right-from the victim's perspective-of the sternum). The positive electrode is placed on the victim's left chest/side (axillary line) just below the nipple and pectoral muscle.

Note: CPR should not be interrupted while the adhesive pads are being applied.

Turn on the AED. Stop CPR and say, "CLEAR!" Ensure that nobody is touching the victim and push the "analyze" button on the AED machine.

The AED will not be able to analyze the victim's heart rhythm accurately during CPR. Analyze the victim's heart rhythm. The AED will automatically analyze the heart rhythm of the victim and inform you, the rescuer, whether shocks are indicated. A shock is only indicated if the victim's heart is in ventricular fibrillation.

If you get a "no shock" message from the AED it can mean one of three things: the victim that you thought was pulseless does indeed have a pulse, the victim has now regained a pulse, or the victim is pulseless but is not in a "shockable" rhythm (i.e. not ventricular fibrillation). In this case proceed to step 11. Shock the victim. If the AED indicates that a shock is required, make sure that everyone is clear of the victim. Tell everyone assisting you to stay clear of the victim and ensure that you are clear of the victim as well. Then press the shock button on the AED machine to deliver the first shock. Immediately following the shock, begin CPR for 5 cycles (or approximately 2 minutes). Begin CPR for 2 minutes (5 cycles). Perform CPR for 5 cycles of 30 compressions to 2 breaths.

Note: Do not remove the AED pads to perform CPR. Leave them in place.

Check the victim's rhythm. Use the AED to analyze the victim's rhythm after 2 minutes of CPR. Revert to step 7.

If indicated by the AED, provide the victim with another shock. If the machine gives a "no shock" message after any analysis, check the victim's pulse and breathing. If a pulse is present, monitor the victim's airway and provide rescue breathing as needed.

There are many different AED designs, but all are created with simplicity in mind. Many models will audibly instruct the rescuer about exactly what to do during each step of the process (i.e. "stand back" and "check breathing and pulse"). Some will even deliver the shocks automatically. As long as you understand the general principles behind an AED, you may be able to save someone's life.

Remember: Do NOT use an AED on a trauma patient. Do NOT use an AED on a child under 1 year of age. Do NOT use an AED on a victim with a PULSE.

First Aid

B

First-degree burns are red and painful. They swell a little. They turn white when you press on the skin. The skin over the burn may peel off after 1 or 2 days.

Treatment. Soak the burn in cool water. Then treat it with a skin care product like aloe vera cream or an antibiotic ointment. To protect the burned area, you can put a dry gauze bandage over the burn. Take an over-the-counter pain reliever, such as acetaminophen (one brand name: Tylenol), ibuprofen (some brand names: Advil, Motrin) or naproxen (brand name: Aleve), to help with the pain.

U

Second-degree burns is a thicker burns, have blisters and are painful. The skin is very red or splotchy, and it may swell a lot.

Treatment. Soak the burn in cool water for 15 minutes. If the burned area is small, put cool, clean, wet cloths on the burn for a few minutes every day. Then put on an antibiotic cream, or other creams or ointments prescribed by your doctor. Cover the burn with a dry nonstick dressing (for example, Telfa) held in place with gauze or tape. Check with your doctor's office to make sure you are up-to-date on tetanus shots. Change the dressing every day. First, wash your hands with soap and water. Then gently wash the burn and put antibiotic ointment on it. If the burn area is small, a dressing may not be needed during the day. Check the burn every day for signs of infection, such as increased pain, redness, swelling or pus. If you see any of these signs, see your doctor right away. To prevent infection, avoid breaking any blisters that form. Burned skin itches as it heals. Keep your fingernails cut short and don't scratch the burned skin. The burned area will be sensitive to sunlight for up to one year.

R

N

Third-degree burns cause damage to all layers of the skin. The burned skin looks white or charred. These burns may cause little or no pain because the nerves in the skin are damaged.

Treatment. For third-degree burns, go to the hospital right away. Don't take off any clothing that is stuck to the burn. Don't soak the burn in water or apply any ointment. You can cover the burn with a sterile bandage or clean cloth until you receive medical assistance.

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Bruises

Also called: Contusion, Ecchymoses, Hematoma

A bruise is a mark on your skin caused by blood trapped under the surface. It happens when an injury crushes small blood vessels but does not break the skin. Those vessels break open and leak blood under the skin.

Bruises are often painful and swollen. You can get skin, muscle and bone bruises. Bone bruises are the most serious.

It can take months for a bruise to fade, but most last about two weeks. They start off a reddish color, and then turn bluish-purple and greenish-yellow before returning to normal. To reduce bruising, ice the injured area and elevate it above your heart. See your healthcare provider if you seem to bruise for no reason, or if the bruise appears to be infected.

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CHOKING



Heimlich with Adult

Heimlich with Child

Food or small objects can cause choking if they get caught in your throat and block your airway. This keeps oxygen from getting to your lungs and brain. If your brain goes without oxygen for more than four minutes, you could have brain damage or die. Young children are at an especially high risk of choking. They can choke on foods like hot dogs, nuts and grapes, and on small objects like toy pieces and coins. Keep hazards out of their reach and supervise them when they eat.

To perform the Heimlich maneuver:

Stand behind him or her. Form a fist with one hand and place your fist, thumb side in, just below the person's rib cage in the front. Grab your fist with your other hand. Keeping your arms off the person's rib cage, give four quick inward and upward thrusts. You may have to repeat this several times until the obstructing object is coughed out.

Heimlich maneuver on an unconscious person:

If the person is lying down or unconscious, straddle him or her and place the heel of your hand just above the waistline. Place your other hand on top of this hand. Keeping your elbows straight, give four quick upward thrusts. You may have to repeat this procedure several times until the obstructing object is coughed out.

Heimlich maneuver on a child:

Stand behind the child. With your arms around his or her waist, form a fist with one hand and place it, thumb side in, between the ribs and waistline. Grab your fist with your other hand. Keeping your arms off the child's rib cage, give four quick inward and upward thrusts. You may have to repeat this several times until the obstructing object is coughed out.

If you're the only rescuer, perform the Heimlich maneuver before calling 911 for help. If another person is available, have that person call for help while you perform the Heimlich maneuver.

Cuts and Scrapes

Stop the bleeding.

Minor cuts and scrapes usually stop bleeding on their own. If they don't, apply gentle pressure with a clean cloth or bandage. Hold the pressure continuously for 20 to 30 minutes. Don't keep checking to see if the bleeding has stopped because this may damage or dislodge the fresh clot that's forming and cause bleeding to resume. If the blood spurts or continues to flow after continuous pressure, seek medical assistance.

Clean the wound.

Rinse out the wound with clear water. Soap can irritate the wound, so try to keep it out of the actual wound. If dirt or debris remains in the wound after washing, use tweezers cleaned with alcohol to remove the particles. If debris remains embedded in the wound after cleaning, see your doctor. Thorough wound cleaning reduces the risk of tetanus. To clean the area around the wound, use soap and a washcloth. There's no need to use hydrogen peroxide, iodine or an iodine-containing cleanser. These substances irritate living cells. If you choose to use them, don't apply them directly on the wound.

Apply an antibiotic.

After you clean the wound, apply a thin layer of an antibiotic cream or ointment such as Neosporin or Polysporin to help keep the surface moist. The products don't make the wound heal faster, but they can discourage infection and allow your body's healing process to close the wound more efficiently. Certain ingredients in some ointments can cause a mild rash in some people. If a rash appears, stop using the ointment.

Cover the wound.

Bandages can help keep the wound clean and keep harmful bacteria out. After the wound has healed enough to make infection unlikely, exposure to the air will speed wound healing.

Change the dressing.

Change the dressing at least daily or whenever it becomes wet or dirty. If you're allergic to the adhesive used in most bandages, switch to adhesive-free dressings or sterile gauze held in place with paper tape, gauze roll or a loosely applied elastic bandage. These supplies generally are available at pharmacies.

Get stitches for deep wounds.

A wound that cuts deeply through the skin or is gaping or jagged-edged and has fat or muscle protruding usually requires stitches. A strip or two of surgical tape may hold a minor cut together, but if you can't easily close the mouth of the wound, see your doctor as soon as possible. Proper closure within a few hours minimizes the risk of infection.

Watch for signs of infection.

See your doctor if the wound isn't healing or you notice any redness, drainage, warmth or swelling.

Get a tetanus shot.

Doctors recommend you get a tetanus shot every 10 years. If your wound is deep or dirty and your last shot was more than five years ago, your doctor may recommend a tetanus shot booster. Get the booster within 48 hours of the injury.

Electrocution

The danger from an electrical shock depends on how high the voltage is, how the current traveled through the body, the person's overall health, and how quickly the person is treated.

Call 911 immediately if any of these signs or symptoms occur:

- Cardiac arrest
- Heart rhythm problems (arrhythmias)
- Respiratory failure
- Muscle pain and contractions
- Seizures
- Numbness and tingling
- Unconsciousness

While waiting for medical help, follow these steps:

- **Look first. Don't touch.** The person may still be in contact with the electrical source. Touching the person may pass the current through you.
- **Turn off the source of electricity if possible.** If not, move the source away from you and the affected person, using a nonconducting object made of cardboard, plastic or wood.
- **Check for signs of circulation (breathing, coughing or movement).** If absent, begin cardiopulmonary resuscitation (CPR) immediately.
- **Prevent shock.** Lay the person down and, if possible, position the head slightly lower than the trunk, with the legs elevated.

Fractures

A fracture is a broken bone. It requires medical attention.

If the broken bone is the result of a major trauma or injury, **call 911 or your local emergency number. Also call for emergency help if:**

- The person is unresponsive, isn't breathing or isn't moving. Begin cardiopulmonary resuscitation (CPR) if there's no respiration or heartbeat.
- There is heavy bleeding.
- Even gentle pressure or movement causes pain.
- The limb or joint appears deformed.
- The bone has pierced the skin.
- The extremity of the injured arm or leg, such as a toe or finger, is numb or bluish at the tip.
- You suspect a bone is broken in the neck, head or back.
- You suspect a bone is broken in the hip, pelvis or upper leg (for example, the leg and foot turn outward abnormally, compared with the uninjured leg).

- Out-of-place or misshapen limb or joint
- Swelling, bruising or bleeding
- Intense pain
- Numbness and tingling
- Limited mobility or inability to move a limb

Take these actions immediately while waiting for medical help:

Stop any bleeding.

Apply pressure to the wound with a sterile bandage, a clean cloth or a clean piece of clothing.

Immobilize the injured area.

Don't try to realign the bone.

Apply ice packs to limit swelling and help relieve pain until emergency personnel arrive.

Don't apply ice directly to the skin — wrap the ice in a towel, piece of cloth or some other material. Treat for shock. If the person feels faint or is breathing in short, rapid breaths, lay the person down with the head slightly lower than the trunk and, if possible, elevate the legs.

Remember ICE:

"I" is for ice - if possible apply an ice pack or ice cubes to the injured area. This will keep down the swelling and reduce pain.

"C" is for compression - if the wound is bleeding, apply direct pressure with a clean cloth to reduce blood flow.

"E" is for elevation - try to keep the injured area as high above heart level as possible. This will reduce blood flow to the injury and minimize swelling.

Head Injuries

Every year, millions of people in the U.S. sustain head and brain injuries. Some are minor because the skull is quite good at protecting the brain. More than half are bad enough that people must go to the hospital. Serious head injuries can lead to permanent brain damage or death. Symptoms of minor head injuries usually go away without treatment. **Serious head injuries need emergency treatment.**

Dial 911 or call for emergency medical assistance if any of the following signs are apparent:

- **A headache that gets worse or does not go away**
- **Repeated vomiting or nausea**
- **Convulsions or seizures**
- **An inability to awaken from sleep**
- **Dilation of one or both pupils of the eyes**
- **Slurred speech**
- **Weakness or numbness in the arms or legs**
- **Loss of coordination**
- **Increased confusion, restlessness or agitation**

Stop any bleeding. Apply firm pressure to the wound with sterile gauze or a clean cloth. Don't apply direct pressure to the wound if you suspect a skull fracture.

Watch for changes in breathing and alertness. If the person shows no signs of circulation (breathing, coughing or movement), begin CPR.

If severe head trauma occurs: Keep the person still. Until medical help arrives, keep the person who sustained the injury lying down and quiet in a darkened room, with the head and shoulders slightly elevated. Don't move the person unless necessary and avoid moving the person's neck.

Nosebleeds

Nosebleeds are common. Most often they are a nuisance and not a true medical problem. But they can be both. Why do they start, and how can they be stopped?

Among children and young adults, nosebleeds usually originate from the septum, just inside the nose. The septum separates your nasal chambers.

In middle aged and older adults, nosebleeds can begin from the septum, but they may also begin deeper in the nose's interior. This latter form of nosebleed is much less common. It may be caused by hardened arteries or high blood pressure. These nosebleeds begin spontaneously and are often difficult to stop. They require a specialist's help.

To take care of a nosebleed:

Sit upright. By remaining upright, you reduce blood pressure in the veins of your nose. This discourages further bleeding.

Pinch your nose. Use your thumb and index finger and breathe through your mouth. Continue the pinch for five to 10 minutes. This maneuver sends pressure to the bleeding point on the nasal septum and often stops the flow of blood.

To prevent re-bleeding after bleeding has stopped: Don't pick or blow your nose and don't bend down until several hours after the bleeding episode. Keep your head higher than the level of your heart.

If re-bleeding occurs: Sniff in forcefully to clear your nose of blood clots, spray both sides of your nose with a decongestant nasal spray containing oxymetazoline (Afrin, Dristan, others). Pinch your nose again in the technique described above and call your doctor.

Seek medical care immediately if:

- The bleeding lasts for more than 20 minutes
- The nosebleed follows an accident, a fall or an injury to your head, including a punch in the face that may have broken your nose

Puncture Wounds

A puncture wound — such as results from stepping on a nail or being stuck with a tack — can be dangerous because of the risk of infection. The object that caused the wound may carry spores of tetanus or other bacteria, especially if the object had been exposed to the soil. Puncture wounds resulting from human or animal bites, including those of domestic dogs and cats, may be especially prone to infection. Puncture wounds on the foot are also more vulnerable to infection.

If the bite was deep enough to draw blood and the bleeding persists, seek medical attention.

Otherwise, follow these steps:

- **Stop the bleeding.** Minor cuts and scrapes usually stop bleeding on their own. If they don't, apply gentle pressure with a clean cloth or bandage. If bleeding persists — if the blood spurts or continues to flow after several minutes of pressure — seek emergency assistance.
- **Clean the wound.** Rinse the wound well with clear water. A tweezers cleaned with alcohol may be used to remove small, superficial particles. If larger debris still remains more deeply embedded in the wound, see your doctor. Thorough wound cleaning reduces the risk of tetanus. To clean the area around the

wound, use soap and a clean washcloth.

- **Apply an antibiotic.** After you clean the wound, apply a thin layer of an antibiotic cream or ointment to help keep the surface moist. These products don't make the wound heal faster, but they can discourage infection and allow your body to close the wound more efficiently. Certain ingredients in some ointments can cause a mild rash in some people. If a rash appears, stop using the ointment.
- **Cover the wound.** Exposure to air speeds healing, but bandages can help keep the wound clean and keep harmful bacteria out.
- **Change the dressing regularly.** Do so at least daily or whenever it becomes wet or dirty. If you're allergic to the adhesive used in most bandages, switch to adhesive-free dressings or sterile gauze and hypoallergenic paper tape, which doesn't cause allergic reactions. These supplies are generally available at pharmacies.
- **Watch for signs of infection.** See your doctor if the wound doesn't heal or if you notice any redness, drainage, warmth or swelling.

If the puncture is deep, is in your foot, is contaminated or is the result of an animal or human bite, see your doctor.

Bite Wounds

For minor wounds: If the bite barely breaks the skin and there is no danger of rabies, treat it as a minor wound. Wash the wound thoroughly with soap and water. Apply an antibiotic cream to prevent infection and cover the bite with a clean bandage.

For deep wounds: If the animal bite creates a deep puncture of the skin or the skin is badly torn and bleeding, apply pressure with a clean, dry cloth to stop the bleeding and see your doctor.

For infection: If you notice signs of infection such as swelling, redness, increased pain or oozing, see your doctor immediately.

For suspected rabies: If you suspect the bite was caused by an animal that might carry rabies — any bite from a wild or domestic animal of unknown immunization status — see your doctor immediately.

Domestic pets cause most animal bites.

- Dogs are more likely to bite than cats.
- Cat bites, however, are more likely to cause infection.
- Bites from non-immunized domestic animals and wild animals carry the risk of rabies. Rabies is more common in raccoons, skunks, bats and foxes than in cats and dogs. Rabbits, squirrels and other rodents rarely carry rabies.

If an animal bites you or another person, you must thoroughly clean the wound by washing with soap and tap water as soon as possible. A light scrubbing should occur during the wash. Then put a clean and dry bandage over the area. **This treatment should not replace proper evaluation by a doctor.**

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