# **CPR -** [**Cardiopulmonary resuscitation**](https://www.google.com/search?sca_esv=53913c89c8493d98&rlz=1C1RXQR_enUS985US985&sxsrf=ADLYWIK0x3BfGKWAKdXnc3vVQ5Cv7BWZgg:1731419881998&q=Cardiopulmonary+resuscitation&stick=H4sIAAAAAAAAAONgFuLQz9U3yMg2KlCCsx4xGnMLvPxxT1hKa9Kak9cYVbi4gjPyy13zSjJLKoXEuNigLB4pLi64Jp5FrLLOiUUpmfkFpTm5-XmJRZUKRanFpcXJmSWJJZn5eQBhRDK9bAAAAA&sa=X&ved=2ahUKEwiP65fY-daJAxUfJNAFHc1VNeQQ_coHKAB6BAgkEAI)

(If the person becomes unresponsive and is not breathing, begin CPR)

**AED -** [**Automated External Defibrillator**](https://www.google.com/search?sca_esv=53913c89c8493d98&rlz=1C1RXQR_enUS985US985&sxsrf=ADLYWIJV5MDsoNOByuQhzVMdqQyW-cPlsg:1731419907893&q=Automated+External+Defibrillator&stick=H4sIAAAAAAAAAONgFuLUz9U3MCw0MshSQjAfMZpwC7z8cU9YSnvSmpPXGFW5uIIz8std80oySyqFxLnYoCxeKW4uhC6eRawKjqUl-bmJJakpCq4VJalFeYk5Ci6paZlJRZk5OYkl-UUAbzU5AnIAAAA&sa=X&sqi=2&ved=2ahUKEwiqr8Tk-daJAxVc4ckDHabpAqcQ_coHKAB6BAgoEAI)

# **2 Steps for Hands-Only CPR**

There are 2 simple steps to provide Hands-Only CPR:

* Phone 9-1-1
* Push hard and fast in the center of the chest

What does it mean to push hard and fast?

## **Push Hard**

To a depth of at least 2 inches

## **Push Fast**

At a rate of 100 to 120 compressions per minute

# **High-Quality Compressions**

To perform high-quality compressions, you need to do 4 things:

* Provide compressions that are deep enough (at least 2 inches)
* Provide compressions that are fast enough (100 to 120 compressions per minute)
* Allow the chest to return to its normal position after each compression
* Don’t interrupt compressions for more than 10 seconds

**Misconception**

Survival rates drop by as much as 10% for every minute that a person does not receive CPR.

You can hurt someone by giving CPR. False.

These steps apply in all situations and for everyone, including pregnant women.

Switch rescuers about every 2 minutes, or sooner if you get tired.

* Humans only exhale carbon dioxide.

False. Actually, humans exhale both carbon dioxide and oxygen.

* You can be sued for performing CPR.

False. All 50 US states have Good Samaritan laws in place to protect people who try to help save a life.

* AEDs should be used only by healthcare professionals.

False. AEDs are safe and easy to use by anyone. To operate an AED, you simply turn it on and follow the prompts. An AED will only provide a shock if the person needs it.

**Breaths CPR**

* Infants
* Children
* Anyone in cardiac arrest due to
  + Choking
  + Drowning
  + Drug overdose
  + Any other respiratory cause
* Put one hand on the forehead and the fingers of your other hand on the bony part of the chin
* Tilt the head back and lift the chin
* Hold the airway open, pinch the nose closed, and take a normal breath
* Cover the person’s mouth with your mouth
* Give 2 breaths
* Blow 1 second for each breath
* Watch for the chest to rise
* Give sets of 30 compressions and 2 breaths
* Don’t interrupt compressions for more than 10 seconds to give 2 breaths

**AED** - AED is a device that analyzes the heart rhythm and can deliver a shock to the heart of a person in cardiac arrest, if needed. The shock from an AED resets the heart’s rhythm so it can pump blood again.

Even though you may be in the midst of providing CPR, once the AED arrives, use it immediately.

# **Actions to Take: Choking Adult Who Becomes Unresponsive**

* Shout for help
* Phone or have someone else phone 9-1-1 and get an AED
* Provide CPR, starting with compressions
* After 30 compressions, open the airway and quickly look in the mouth
  + If you see an object in the mouth, take it out
  + Do not attempt to reach in and pull anything out that you can’t clearly see—this is known as a *blind finger sweep*
  + Doing a blind finger sweep may cause the object to become lodged farther back in the airway
* After checking the mouth, give 2 breaths
* Repeat the sets of 30 compressions and 2 breaths
* Look for the object in the back of the throat each time you open the airway to give breaths
* Continue CPR until the person speaks, breathes, or moves, or until someone with more advanced training arrives and takes over.

***Naloxone* is a medication used to reverse the overdose effects of an opioid and help the person to survive.**

# **Actions to Take: Adult With an Opioid-Associated Emergency**

If the person is unresponsive but still breathing

* Shout for help
* Phone 9-1-1
* Give naloxone if it's available
* Stay with the person until someone with advanced training arrives

If the person is unresponsive and not breathing normally

* Phone 9-1-1
* Get an AED and naloxone if they’re available
* Start CPR and use the AED
* Give the naloxone as soon as you can, but do not delay CPR to give naloxone

If the person is unresponsive and not breathing normally and naloxone is unavailable or you suspect that the person has had a nonopioid drug overdose

* Phone 9-1-1 and get an AED if one is nearby
* Start CPR and use the AED

**WATER Safety**

For beginning swimmers, the supervising adult should provide touch supervision. This means they will stay within arm’s reach of the child so they can pull the child out of the water if the child’s head becomes submerged.

**First Aid Medical**

* [Breathing Problems](https://elearning.heart.org/elearning/scorm_content/1164/2.0_20220916142150/HSTotalAdult/10/0.html)
* [Allergic Reactions](https://elearning.heart.org/elearning/scorm_content/1164/2.0_20220916142150/HSTotalAdult/11/0.html)
* [Heart Attac](https://elearning.heart.org/elearning/scorm_content/1164/2.0_20220916142150/HSTotalAdult/12/0.html)k - In the United States, someone has a heart attack about every 40 seconds.
  + **Cardiac Arrest - Abnormal heart rhythm, Heart can no longer pump blood, Person becomes unresponsive and is not breathing.**
  + **Heart Attack - Blood flow to part of the heart muscle is blocked, The longer the person goes without treatment, the greater the possible damage to the heart muscle**
    - **Chest Pain**
    - **Discomfort in Area like Arms, Back, Neck, Jaw, Stomach**
    - **Shortness of breath (with or without chest discomfort)**
    - **Breaking out in a cold sweat**
    - **Nausea**
    - **Light-headedness**

# **Actions to Take: Heart Attack**

* Make sure the person stays calm and rests
* Phone 9-1-1
* Get the first aid kit and an AED
* Have the person chew and swallow 1 adult or 2 low-dose **aspirins** as long as they don’t have an aspirin allergy, serious bleeding, or signs of a stroke
* Provide CPR and use the AED if the person becomes unresponsive
* Unresponsive + Not breathing or only gasping = Provide CPR

[**Fainting**](https://elearning.heart.org/elearning/scorm_content/1164/2.0_20220916142150/HSTotalAdult/13/0.html)-

* Fainting is when a person briefly stops responding, typically for less than a minute, and then seems fine. This is usually caused by not enough blood going to the brain, resulting in a loss of consciousness.
* If they’re sitting, ask them to put their head between their knees
* If they’re lying down, have them cross one leg over the other and tense their leg, abdominal, and buttocks muscles

[**Diabetes and Low Blood Sugar**](https://elearning.heart.org/elearning/scorm_content/1164/2.0_20220916142150/HSTotalAdult/14/0.html)

* Diabetes is a disease that affects the levels of sugar in the blood. Too much or too little sugar causes problems. Some people with diabetes take medication, such as insulin, to maintain the proper sugar levels.
* Too much insulin can cause low blood sugar in diabetics.
* Orange juice is rich in sugar and will help raise their blood sugar level. Chocolate and diet cola do not contain enough sugar.

[**Stroke**](https://elearning.heart.org/elearning/scorm_content/1164/2.0_20220916142150/HSTotalAdult/15/0.html)**eted**

Strokes can occur when blood flow to part of the brain stops. This can happen if a blood vessel in the brain is blocked or leaks.

After phoning 9-1-1, you should note the time when the signs of a stroke first appeared.

**FAST**

**F:** Face drooping

**A:** Arm weakness

**S:** Speech difficulty

**T:** Time to phone 9-1-1

Additional symptoms of stroke include

* Sudden confusion
* Sudden trouble seeing in 1 or both eyes
* Sudden trouble walking, or loss of balance or coordination
* Sudden severe headache with no known cause
* [Seizures](https://elearning.heart.org/elearning/scorm_content/1164/2.0_20220916142150/HSTotalAdult/16/0.html)

A seizure is an abnormal electrical activity in the brain. Seizures are often caused by a medical condition called epilepsy, and they usually stop within a few minutes.

Some people who are having a seizure may

* Lose muscle control
* Fall to the ground
* Stop responding
* Have jerking movements of the arms, legs, or other parts of the body

After a seizure, immediately roll the person onto their side.

**Bleeding**

* To help stop non–life-threatening bleeding that you can see, you should put firm pressure on a dressing over the bleeding area.
* When providing first aid for life-threatening extremity bleeding, you should apply a tourniquet 2 to 3 inches above the bleeding site, on the side of the wound that's closer to the heart.
* A hemostatic dressin**g** is a wound dressing that contains an active ingredient that promotes blood clotting.
* If the person continues to bleed after you have applied a **manufactured tourniquet**, apply a second manufactured tourniquet above the first – closer to the heart.

**Shock**

* Shock happens when the body’s tissues and organs aren’t getting enough blood.
* Shock can also be caused by a heart attack, severe allergic reaction, or loss of fluids due to illness.
* Help the person lie on their back. Cover them with a blanket to keep them warm

# **Bleeding From the Nose**

* Anyone with a nosebleed should always lean forward.
* Some people with a nosebleed will tilt their head back instead, thinking that will stop the bleeding.
* But leaning backward causes blood to drain down the throat, which can lead to vomiting.

**You should put the tooth in an oral rehydration salt solution or wrap the tooth in cling film. As a last resort, you can store the tooth in cow’s milk or the injured person’s saliva.**

# **Penetrating and Puncturing Injuries - If the object is stuck in the body, leave it there**

**If a sharp stick or knife is stuck in someone’s body, you should leave it in and get help. You should always leave penetrating objects in the wound. Taking them out may cause more damage.**

[**Amputation**](https://elearning.heart.org/elearning/scorm_content/1164/2.0_20220916142150/HSTotalAdult/21/0.html) **- You should place it in a watertight plastic bag inside another container with ice or ice and water. Do not place the amputated body part directly on ice because extreme cold can injure it.**

**Internal Bleeding - You should check the person for signs of shock and provide CPR if needed.**

# **Concussions - If you suspect someone has a concussion, they should be evaluated by a healthcare provider as soon as possible. They should not play sports, drive a car, ride a bike, or work with heavy machinery until a healthcare provider says it’s OK to do so.**

# **Possible Head, Neck, and Spine Injury - Have the person remain still, and don’t twist or turn the person’s head or neck unless absolutely necessary**

**A splint is used to keep an injured body part from moving.** **When providing first aid for a sprained ankle, apply a bag filled with ice and water over the injured area, with a towel between the ice bag and the skin, for up to 20 minutes to help with the swelling. If a broken bone has come through the skin or is bent, do not straighten it.**

**Burns** are injuries that can be caused by contact with heat, electricity, or chemicals. Specifically, heat burns are caused when a person comes in contact with a hot surface, hot liquids, steam, or fire. The only thing you should put on a **burn** is **cool water** and **clean dressings**. You should never use ice. It can actually damage a burned area.

Before you give first aid to a person with electrical injuries, you should protect yourself by waiting for the power to be turned off. You can turn off the power yourself only if you are trained to do so.

Someone who has been bitten by an insect or stung by a bee should be watched for at least 30 minutes for signs of an allergic reaction.

People who have had severe allergic reactions to an insect bite or sting usually have an **epinephrine pen** and know how to use it.

**Bites from spiders such as the brown recluse or black widow should be treated as life-threatening.**

**If the sting is from a jellyfish, rinse the injured area for at least 30 seconds with lots of vinegar. If you don’t have vinegar, use a baking soda–and–water solution instead. Put the part of the body that was stung in hot water. You can also have the person take a shower with water as hot as they can bear for at least 20 minutes or as long as pain persists**

**This person is experiencing heat exhaustion. Common signs of heat exhaustion include dizziness, vomiting, muscle cramps, feeling faint or fatigued, and heavy sweating.**

**Heat stroke is a dangerous, life-threatening condition. It’s important to begin cooling the person immediately—every minute counts. Submerge them up to the neck in cool water and phone 9-1-1.**

**Cold-related emergencies include frostbite and hypothermia**

**Frostbite most often affects parts of the body that are exposed to the cold, such as the fingers, toes, nose, and ears**

**After finding a person wet, cold, and disoriented - This person has hypothermia. You should phone 9-1-1, dry the person, and cover them in warm clothes and blankets. Stay with them until advanced help arrives.**

**American Association of Poison Control Centers: 1-800-222-1222**

**Kids**

**CPR - less than 8 years of age**

* **5 sets of (30 Compressions and 2 Breaths)**
* **Use one hand or both hands while doing CPR**

**Chocking**

* **Abdominal Thrusts above the Navel**

**Infant - less than 1 year of age**

**CPR**

* **With two finger or with thumb fingers - 1.5 inches or 4cms depth**
* **Cover mouth and nose while giving breaths**
* **Dont give a gap of 10 secs in total between turns**
* **Take turns for every 10 mins**

**Chocking**

**Give only back slaps and chest thrusts to an infant who is choking. Never use abdominal thrusts on an infant.**

* **Hold the infant facedown on your forearm**
* **Support the infant’s head and jaw with your hand**
  + **You may want to sit and use your lap to support your arms**
  + **Keep the infant’s head down vertically to allow gravity to help dislodge the object**

# **Severe Airway Block in an Infant**

* **Using the heel of your hand, give up to 5 back slaps between the infant’s shoulder blades**
* **If the object does not come out after 5 back slaps, turn the infant onto their back while supporting their head**
* **Give up to 5 chest thrusts by using 2 fingers of your other hand to push on the chest in the same place you push during CPR**
* **Repeat giving 5 back slaps and 5 chest thrusts until the infant can breathe, cough, or cry or until they become unresponsive**