

It is important you learn hands-only CPR.

What is hands-only CPR?

Hands-only CPR (cardiopulmonary resuscitation) is using chest compressions without mouth-to-mouth breathing to help someone survive if their heart stops beating (called **cardiac arrest**). It is simple to learn, and it can make the difference between life and death.

What are the signs of cardiac arrest?

These are some possible signs that someone is experiencing cardiac arrest:

- They collapse (fall down) and lose consciousness (faint or pass out).
- They do not respond when tapped on the shoulder and asked if they are OK.
- They are not breathing normally (for example, they're gasping or making snoring sounds).
- They have seizure-like activity. This includes jerking or shaking movements of the body, arms, legs, and face. Their eyes may be open.

If you see someone experiencing these signs of cardiac arrest, follow the steps below to perform hands-only CPR — you may save a life!

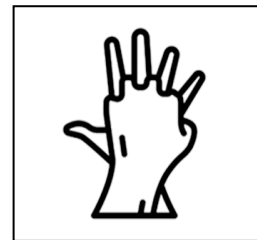
You will need to change how you do CPR based on whether you're helping an adult, a child, or a baby. Steps for each are included below.

Steps for hands-only CPR (for adults and teenagers)

Before starting hands-only CPR, check to make sure the scene is safe. This means that there is nothing in the area that could harm you or the person

you're helping. Check if the person is breathing, or if they respond when you tap them on the shoulder and ask if they are OK. If they are not breathing normally and they do not respond, immediately **call 911** and send someone for an AED (automated external defibrillator) if available. Then, follow these steps to start hands-only CPR:

1. Try to move the person onto the ground or a flat surface. They should be lying on their back with their face pointed up.
2. Position yourself so that you are kneeling close to one side of their chest.
3. Place the heel of your hand in the center of their chest.
4. Place the heel of your other hand directly on top of your first hand, and lace your fingers together.
5. Position your shoulders directly over your hands and keep your arms straight.
6. Push hard, straight down, using your upper body weight to **compress** the chest (push the chest down) at least 2 inches.
7. Push fast, at a rate of 100-120 compressions per minute.
 - After each compression, allow the chest to fully rise back up by lifting your weight off the person's chest.
 - To help you with the right compression rate, pick a song from the American Heart Association's "Don't Drop the Beat" playlist (available online at: tinyurl.com/dontdropthebeat). These are all 100-120 beats per minute, the perfect compression rate for hands-only CPR.
8. Push hard and fast until emergency help arrives and takes over.



Tip: When you call 911, put your phone on speaker. Listen and follow the 911 telecommunicator instructions. They can help you perform hands-only CPR.

Steps for CPR (for children and babies)

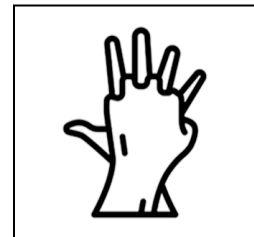
For children and babies, CPR is done using both hand compressions and breaths. We recommend that you watch a video or take a class for child and baby CPR. Learn more online at: cpr.heart.org/en/training-programs/community-programs/community-resources/infant-cpr

If a child or baby seems unresponsive, you can first see if they will respond using a method called **shout-tap-shout**.

- For a child (1 year or older), shout to get the child's attention, using the child's name (if you know it). If the child does not respond, tap the child's shoulder and shout again while checking for breathing.
- For a baby (less than 1 year old), shout to get the baby's attention, using the baby's name (if you know it). If the baby does not respond, tap the bottom of the baby's foot and shout again while checking for breathing.

Check for breathing for no more than 10 seconds. If the child or baby is not breathing, start regular CPR (compressions with breaths). Follow these steps:

1. Place the child or baby on their back on a firm, flat surface.
 - For a child, kneel next to the child.
 - For a baby, stand or kneel next to the baby.
2. Give the child or baby 30 chest compressions.
 - **For a child, use a 2-handed method:**
 - Place the heel of your hand in the center of their chest.
 - Place the heel of your other hand directly on top of your first hand, and lace your fingers together.
 - Position your shoulders directly over your hands and keep your arms straight.





- Push hard, straight down, to **compress** the chest (push the chest down) 2 inches. Push fast, at a rate of 100-120 compressions per minute. After each compression, allow the chest to fully rise back up to its normal position.
 - **For a small child, use a 1-handed method:**
 - Place the heel of one hand in the center of their chest.
 - Push down hard and fast to compress the chest 2 inches at a rate of 100-120 compressions per minute. After each compression, allow their chest to fully rise back up to its normal position.
 - **For a baby, you can either use the 2-thumbs or 2-fingers method:**
 - For the 2-thumbs method, place both thumbs on the center of the chest and wrap around the chest (so your fingers are on the baby's back). Using both thumbs at the same time, push hard down and fast about 1½ inches at a rate of 100-120 compressions per minute. After each compression, allow their chest to fully rise back up to its normal position.
 - For the 2-fingers method, use 2 fingers placed side by side in the center of the chest. Using both fingers, push hard down and fast about 1½ inches at a rate of 100-120 compressions per minute. After each compression, allow their chest to fully rise back up to its normal position.
 - If you aren't able to push down a full 1½ inches using the 2-thumbs or 2-fingers method, you may want to use the 1-handed method instead.
3. After 30 compressions, give the child or baby 2 breaths.
- For a child, open their mouth and airway using the “head-tilt, chin-lift” method. This involves gently tilting their head backward while raising their chin slightly. For a baby, open their airway and do not tilt their head either forward or backward.

- Blow into the child or baby’s mouth for about 1 second. Make sure each breath makes their chest rise, and allow the air to leave their body before giving them the next breath.
 - If the first breath does not cause their chest to rise, make sure you have a proper seal with your mouth over theirs before giving the second breath. If the second breath does not make their chest rise, an object may be blocking their airway.
4. Continue giving the child or baby sets of 30 chest compressions and 2 breaths until:
- You notice very clear signs of life.
 - An AED is ready to use.
 - Another person is available to take over compressions and breaths.
 - Emergency help professionals arrive.
 - You have been doing about 2 minutes of CPR (about 5 sets of compressions and breaths), you are alone and caring for the child or baby, and you need to call 911.

What are other resources for CPR and hands-only CPR?

Hands-only CPR is a simple, lifesaving skill. Our team put together a few resources you can access online to learn more about CPR and hands-only CPR in the table below. Click the links or scan the QR codes for more information.

<p>Hands-Only CPR Playlist (YouTube): tinyurl.com/handcpr</p>	
<p>CPR Playlist (American Heart Association): cpr.heart.org/-/media/CPR-Files/Training-Programs/Community-Programs/Be-the-Beat/BTB-2023/new-playlists/CPR-Playlist-2.pdf</p>	

<p>How to Perform Hands-Only CPR - The Michigan Way (Michigan Medicine): youtube.com/watch?v=OLyxKFSwX5M</p>	
<p>Hands-Only CPR Instructional Video (American Heart Association): youtube.com/watch?v=M4ACYp75mjU</p>	
<p>Learn Hands-Only CPR from the American Red Cross (Spanish language): youtube.com/watch?v=PV9bTpN_KOk</p>	
<p>Lives Saved by Hands-Only CPR at University of Michigan Stadium: careguides-videos.med.umich.edu/media/1_sf55dusg</p>	
<p>CPR Classes (American Red Cross): redcross.org/take-a-class/cpr/cpr-training/cpr-classes</p>	
<p>Child & Baby CPR (American Red Cross): redcross.org/take-a-class/cpr/performing-cpr/child-baby-cpr</p>	
<p>Course Catalog: CPR & First Aid Training Classes (American Heart Association): cpr.heart.org/en/course-catalog-search</p>	

Disclaimer: This document contains information and/or instructional materials developed by University of Michigan (U-M) Health for the typical patient with your condition. It may include links to online content that was not created by U-M Health and for which U-M Health does not assume responsibility. It does not replace medical advice from your health care provider because your experience may differ from that of the typical patient. Talk to your health care provider if you have any questions about this document, your condition, or your treatment plan.

Reviewers: Theresa A. Shields, RN BSN, Bethany Lee-Lehner, RN MSN, Kristin O. Evans MSN APRN CPNP-PC, Gwen Fosse, MSA BSN RN FAHA, Jennifer Fowler, RN BSN, Debra Yake, RN

Edited by: Brittany Batell, MPH MSW CHES®

Image attribution: "[cpr hand position](#)" by [Berkah Icon](#) from [Noun Project \(CCBY3.0\)](#)

Patient Education by [U-M Health](#) is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International Public License](#). Last revised 10/2024