American Heart Association.

Hands-Only CPR Frequently Asked Questions

Q: What is the Hands-Only CPR messaging based on?

A: The American Heart Association works with some of the world's leading CPR scientists and medical professionals. Their continuous review of published research studies on CPR resulted in the following American Heart Association Science Advisory, published in April 2008 in the medical journal Circulation: "Hands-Only (Compression-Only) Cardiopulmonary Resuscitation: A Call to Action for Bystander Response to Adults Who Experience Out-of-Hospital Sudden Cardiac Arrest."

Q: Who should receive Hands-Only CPR?

A: Hands-Only CPR is recommended for use on teens or adults whom you see suddenly collapse.

Q: Are there times when I should use conventional CPR with breaths?

A: Yes. There are many medical emergencies that cause a person to be unresponsive and to stop breathing normally. In those emergencies, conventional CPR that includes mouth-to-mouth breathing may provide more benefit than Hands-Only CPR. The American Heart Association recommends CPR with a combination of breaths and compressions for:

- All infants (up to age 1)
- Children (up to puberty)
- Anyone found already unresponsive and not breathing normally
- Anyone who has experienced drowning, drug overdose, collapse due to breathing problems or prolonged cardiac arrest

Q: Why don't teens or adults who suddenly collapse need mouth-to-mouth breathing in the first few minutes after their cardiac arrest?

A: When a teen or adult suddenly collapses from cardiac arrest, they usually have enough oxygen to keep vital organs healthy for the first few minutes. Providing chest compressions that are hard and fast enough will help pump blood to the heart and brain. Studies have shown that Hands-Only CPR is just as effective as conventional CPR with breaths when given in the first few minutes of a cardiac arrest.

AHA recommends that those that know how to give conventional CPR do so, but Hands-Only CPR is an effective alternative if the rescuer is unable or unwilling to provide breaths (due to not having protective barrier devices or not knowing how). The AHA still recommends CPR with compressions and breaths for infants, children, people who have experienced drowning or drug overdose, or people who collapse due to breathing problems.

Q: In Hands-Only CPR, why don't I check the person's carotid pulse before I start compressions?

A: The purpose of the Hands-Only CPR instruction is to provide a lay responder with the basic tools needed to save a life. Recognition of cardiac arrest can be done in two simple steps when the collapse is witnessed. AHA's new Hands-Only CPR videos showcase Hands-Only CPR and how to properly use an AED (automated external defibrillator) if it is available. These videos empower the rescuer with the knowledge of what to do, regardless of the rescuer's experience with healthcare-related emergencies. In these videos, the teaching opportunity is for the learner to recognize that someone has collapsed and is in cardiac arrest and then provide the two-steps to save a live that they can take right away.

These steps include activating the emergency response system, providing immediate chest compressions and using an automated external defibrillator if it is available. Our science guidelines state that checking for a pulse is often inaccurate and delays the start of vital chest compressions in lay populations. Therefore, it is not recommended for those that are not healthcare professionals to take the time to check for a pulse.

Healthcare providers also may take too long to check for a pulse. The lay rescuer should not check for a pulse and should assume that cardiac arrest is present if an adult suddenly collapses or an unresponsive person is not breathing normally.

Q: In Hands-Only CPR, why don't I have to check the breathing first before I begin compressions?

A: Use Hands-Only CPR when you witness someone collapse so you can provide life-saving chest compressions immediately. If you witness a sudden collapse, cardiac arrest is likely the cause and compressions are needed immediately.

Q: Now that I know about Hands-Only CPR, do I still need to learn CPR with breaths?

A: CPR is a skill that can be improved with practice. The American Heart Association continues to recommend that you take a CPR course to practice and learn the skills of CPR, including giving high-quality chest compressions. People who have had CPR training are more likely to give high-quality chest compressions and are more confident about their skills than are those who have not been trained (or have not been trained in the past five years).

Even a short CPR training program that you can do at home or workplace, such as the 20-minute CPR Anytime® program, provides skills training and practice that can prepare you to perform high-quality chest compressions.

Taking a Family & Friends® CPR with facilitator or Heartsaver® CPR AED training course with an AHA instructor can also teach the full array of skills needed to help save a life. To find a class near you, visit Atlas.

There are many medical emergencies that cause a person to be unresponsive and to stop breathing normally. In those emergencies, CPR that includes mouth-to-mouth breathing may provide more benefit than Hands-Only CPR. Some examples include: unresponsive infants and children, anyone who is found already unresponsive and not breathing normally and people who have experienced drowning, drug overdose or collapse due to breathing problems.

Q: Is Hands-Only CPR as effective as CPR with breaths?
A: Any attempt at CPR is better than no attempt. Hands-Only CPR performed by a bystander has been shown to be as effective as CPR with mouth-to-mouth breaths in the first few minutes of an out-of- hospital sudden cardiac arrest. CPR with breaths may be better than Hands-Only CPR for certain people, though, such as infants and children, teens or adults who are found in cardiac arrest (whom you did not see collapse) or people who have experienced drowning, drug overdose or collapse due to breathing problems.

Q: Has the American Heart Association changed its recommendation for healthcare providers?
A: No. The current American Heart Association recommendation for healthcare providers has not changed.

Q: If I was trained in CPR that includes breaths and I see an adult suddenly collapse, what should I do?
A: Call your emergency response number and start CPR.

If you have been trained to provide CPR that includes breaths with high-quality chest compressions with minimal interruptions, provide either the conventional CPR that you learned (CPR with a ratio of 30 compressions to 2 breaths) or Hands-Only CPR. Continue CPR until an AED arrives and is ready for use or emergency medical service or a healthcare provider take over care of the person.

If you have not been trained to provide CPR that includes breaths with high-quality chest compressions with minimal interruptions, provide Hands-Only CPR. Continue Hands-Only CPR until an AED arrives and is ready for use or emergency medical service or a healthcare provider take over care of the person.

Q: Do I need to take a training course to learn how to do Hands-Only CPR?
A: CPR is a skill that is helped by practice. However, learning Hands-Only CPR is easy and takes only two steps: call the emergency response number and push hard and fast on the chest. For more information about Hands-Only CPR, including resources and training videos, please visit international.heart.org/hands-only-cpr/.

Q: What do I do if I find a teen or adult who has collapsed but no one saw it happen?
A: Call your emergency response number and start CPR. If you learned CPR with mouth-to-mouth breathing, call your emergency response number and provide CPR as you learned it. If you know only Hands-Only CPR, call your emergency response number and give Hands-Only CPR until an AED arrives and is ready for use or advanced care providers take over care of the person

Q: When I call my emergency response number, what will they ask or tell me?
A: Emergency response systems vary greatly around the world. However, the dispatcher (operator) may ask you about the emergency. They may ask questions about the person and whether they are responsive and breathing normally. They may ask if you know CPR and may tell you how to help the person until someone with more advanced training arrives and takes over. They may also ask for details like your location. It is important to be specific, especially if you're calling from a mobile phone as that is not associated with a fixed location or address. Remember that answering the dispatcher's questions will not delay the arrival of help. You need to stay on the phone until the dispatcher tells you to hang up.

Q: If I am using an AED that prompts CPR with breaths, should I give just chest compressions?
A: Follow the directions provided by the AED and minimize any interruptions to chest compressions. If you know how to provide chest compressions and breaths, do so. If not, provide Hands-Only CPR.

Remember, someone in cardiac arrest should receive high-quality chest compressions. You should push hard and fast in the center of the chest with minimal interruption.

Q: What should I do if I am getting tired from giving chest compressions before more help arrives?

A: Performing chest compressions correctly is hard work. The more tired you become, the less effective your compressions will be. If someone else knows CPR, you can take turns providing CPR. Switch rescuers about every 2 minutes, or sooner if you get tired. Move quickly to keep any pauses in compressions as short as possible. If you are alone, do your best to keep providing CPR. In addition, we also recommend that if the rescuer can help coach another person on how to do CPR, this would provide the opportunity to have multiple rescuers giving Hands-Only CPR until help arrives.

Q: How will I know if a person's pulse has returned or they begin breathing, while I am doing Hands-Only CPR?

A: Once someone begins breathing and has a pulse, they will likely provide some level of response, such as moaning, opening of the eyes or body movements.

Q: When do I stop giving Hands-Only CPR?

A: Continue pushing hard and fast in the center of the chest until help arrives. If the person speaks, moves or breathes normally while you're giving chest compressions, Hands-Only CPR can be stopped.

Q: Not all people who suddenly collapse are in cardiac arrest. Will CPR seriously hurt them?

A: Teens or adults who suddenly collapse are likely to have had a cardiac arrest, and their chance of survival is zero unless someone takes action immediately. You should call your emergency response number and push hard and fast in the center of the chest, with minimal interruptions. If cardiac arrest is the cause of the cardiac emergency, Hands-Only CPR is an easy, effective way to potentially double or triple the person's chance of survival. If a teen or adult has collapsed for reasons other than sudden cardiac arrest, Hands-Only CPR could still help by causing the person to respond (begin to move, breathe normally or speak). If that occurs, Hands-Only CPR can be stopped. Otherwise, chest compressions should continue until emergency services arrive.

Q: Can you break people's ribs by doing CPR?

A: Yes, however the chance of potential injury is minimal compared to the opportunity to save a life by providing chest compressions. A 2004 review of scientific literature showed that conventional CPR can cause fractures of ribs and/or the breastbone

(sternum) in at least one third of cases.[1] In a related study of people who had received such injuries from CPR, the fractures did not cause any serious internal bleeding or death.[2]

The chance of surviving an out-of-hospital cardiac arrest is zero for a person who does not immediately receive high-quality chest compressions with minimal interruptions followed by additional therapy within minutes (a defibrillating shock and/or more advanced care from emergency services personnel).

Q: Is there a danger in jumping in and giving CPR without being trained?
A: On average, any attempt to provide CPR to a person is better than no attempt to provide help.

Q: Why did the American Heart Association decide to recommend Hands-Only CPR for teens and adults who suddenly collapse?
A: The American Heart Association publishes updated Guidelines for CPR and Emergency Cardiovascular Care. These guidelines reflect a thorough review of current science by international experts. The 2010 guidelines reported that in studies of out-of-hospital cardiac arrest, adults who received Hands-Only CPR from a bystander were more likely to survive than those who didn't receive any type of CPR from a bystander.[3]

The 2015 AHA Guidelines Update for CPR and ECC confirmed this recommendation. In other studies, survival rates of adults with cardiac arrest treated by people who weren't healthcare professionals were similar with either Hands-Only CPR or CPR with breaths.[4] When interviewed, bystanders said panic was the major obstacle to performing CPR. The two steps to Hands- Only CPR may help overcome panic and hesitation to act.

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[1] Lederer W, Mair D, Rabl W, Baubin M. Frequency of rib and sternum fractures associated with out-of- hospital cardiopulmonary resuscitation is underestimated by conventional chest x-ray. Resuscitation. 2004;60:157-162.
[2] Hoke RS, Chamberlain D. Skeletal chest injuries secondary to cardiopulmonary resuscitation. Resuscitation. 2004;63:327-338.
[3] Field J, Hazinski MF, Sayre M, et al. 2010 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. Circulation. 2010;122:S640-S656.
[4] Neumar R, Shuster M, Callaway C, et al. 2015 American Heart Association Guidelines Update for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. Circulation. 2015; 132:S315-S367.

Q: Hands-Only CPR was released as a Science Advisory in 2008. What is the American Heart Association's process for releasing Scientific Statements, Guidelines and Advisories?

A: Researchers and clinicians who serve as volunteer experts for the American Heart Association continually monitor and review the scientific literature related to the diagnosis and treatment of cardiovascular disease and stroke. When experts agree that published evidence supports a new or changed recommendation, a group of experts is asked to draft a scientific statement, guideline or advisory for publication in a peer-reviewed medical journal.

Q: Does the American Heart Association offer products that teach Hands-Only CPR?

A: We have a few courses that will teach Hands-Only CPR and provide an opportunity to practice on a manikin. The Adult & Child CPR Anytime Training Kit and Family and Friends are two community-based products that provide training in Hands-Only CPR.

In addition, the AHA provides training via our Heartsaver® courses, which offer blended learning and instructor-led classroom options for those that may or may not require a course completion card for work. Use our Find a CPR Class tool to reach a network of authorized AHA Training Centers and Instructors that offer in-person classroom training and skills sessions at convenient locations. The tool is available at atlas.heart.org.