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: Will Hands-Only CPR increase the chance of someone near the victim taking action in a cardiac emergency?
A: Yes. In U.S. surveys*, Americans who had not been trained in CPR within the past five years said they would be more likely to perform Hands-Only CPR on a teen or adult who collapses suddenly. Also, Hands-Only CPR is an easy-to-remember and effective option for people who have been trained in CPR before but are afraid to help because they are not confident that they can remember and perform the steps of conventional CPR.

*2007 national survey in which Americans who were trained within the past five years were almost twice as likely as those not trained or not trained in the past five years (45% vs. 24%) to say they’d begin CPR immediately in a real emergency. And a 2014 national survey in which more than half of all (US) respondents asserted they were extremely or very likely to give Hands-Only CPR in an emergency.

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
- Any victims of 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 with cardiac arrest, his or her lungs and blood contain enough oxygen to keep vital organs healthy for the first few minutes, as long as someone provides high-quality chest compressions with minimal interruption to pump blood to the heart and brain.
The cause is usually an abrupt onset of an abnormal heart rhythm, often ventricular fibrillation (VF). VF causes the heart to quiver so it doesn’t pump blood adequately to vital organs. Before a sudden collapse, the teen or adult was probably breathing normally. This means there may be enough oxygen in the person’s blood for the first several minutes after cardiac arrest.

Many cardiac arrest victims have gasping, which could bring some oxygen into the lungs. If the victim’s airway is open, allowing the chest to expand back to its normal position after each compression may also bring some oxygen into the lungs.

For these reasons, the most important thing someone near the victim can do for a person in sudden cardiac arrest is to pump blood to the brain and to the heart muscle, delivering the oxygen that still remains in the lungs and blood. Do this by giving high-quality chest compressions with minimal interruptions. Interruptions in compressions to give mouth-to-mouth breaths may bring some additional oxygen into the lungs, but the benefit of that oxygen can be offset if you stop the blood flow to the brain and heart muscle for more than a few seconds (especially in the first few minutes after a sudden cardiac arrest when there is still plenty of oxygen in the lungs and blood).

**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, 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 or Heartsaver® CPR AED training course with an AHA instructor can also teach the full array of skills needed to help save a life. Visit the Global Class Connector to find a class near you: http://www.international.heart.org.

Besides, 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 victims of 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 victims, though, such as infants and children, teens or adults who are found in cardiac arrest (whom you did not see collapse) or victims of 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 breathing (30 compressions to 2 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 victim.

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 victim.

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. The American Heart Association continues to recommend that you take a CPR course at least every 2 years. These courses provide skills training and practice that can prepare you to perform high-quality chest compressions. Also, 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).**

**Data on skills performance are from the 2005 CPR Anytime study using an “untrained” control group. Data about confidence/willingness to act are from a 2007 national survey in which Americans who were trained within the past five years were almost twice as likely as those not trained or not trained in the past five years (45% vs. 24%) to say they’d begin CPR immediately in a real emergency.

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 victim.

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 victim and whether the victim is responsive and breathing normally. They may ask if you know CPR and may tell you how to help the victim 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 breathing, should I give just chest compressions?  
A: Follow the directions provided by the AED and minimize any interruptions to chest compressions.
Remember, all victims of 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.

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

**A:** Continuing pushing hard and fast in the center of the chest until help arrives. If the victim 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 and are not responsive are likely to have sudden cardiac arrest, and their chance of survival is nearly 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 sudden cardiac arrest is the cause of the collapse, Hands-Only CPR is an easy, effective way to double or triple the victim’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 EMS providers arrive.

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

**A:** Yes. 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. In a related study of people who had received such injuries from CPR, the fractures did not cause any serious internal bleeding or death. The chance of surviving an out-of-hospital cardiac arrest is near zero for a victim 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 EMS personnel).


**Hoke RS, Chamberlain D. Skeletal chest injuries secondary to cardiopulmonary resuscitation. Resuscitation. 2004;63:327-338.**

**Q: Is there a danger in jumping in and giving CPR without being trained?**

**A:** On average, any attempt to provide CPR to a victim 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: Every five years, 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. 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.

When interviewed, bystanders said panic was the major obstacle to performing CPR. The simpler Hands-Only technique may help overcome panic and hesitation to act.

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: All CPR training courses that include skills practice will teach you to perform the essential skill of Hands-Only CPR, that is, high-quality chest compressions. The American Heart Association’s Family & Friends CPR or Heartsaver CPR AED program teaches the skills of CPR and how to use an AED. It’s led by an instructor who can answer questions and offer real-time feedback on our skills. You can also find information about this course or other AHA lifesaving courses by going to www.international.heart.org. Click on the “Resources” section and locate a training center near you in the Global Connector. Talk to them about about which course is right for you.