

Overhaul of CPR Guidelines Stresses Chest Compressions

Associated Press

"Push hard, push fast" next time you give cardiopulmonary resuscitation to someone having cardiac arrest, say new, simpler guidelines in a radical departure from past advice.

Putting the emphasis on chest compressions instead of mouth-to-mouth resuscitation, the American Heart Association now urges people to give 30 compressions—instead of 15—for every two rescue breaths.

"Basically, the more times someone pushes on the chest, the better off the patient is," said Michael Sayre, an Ohio State University emergency-medicine professor who helped develop the guidelines.

"We have made things simpler," he said. "Push hard on the person's chest and push fast."

The streamlined guidelines should make it easier for people to learn CPR. Earlier rules were different for adults and for children and called on untrained rescuers to stop pushing the chest periodically to check for signs of circulation. Now, the advice is the same for all ages—30 compressions—and you don't have to stop to check for improvement. What is important is to keep the blood flowing.

Studies have shown that blood circulation increases with each chest compression and it must be built back up after an interruption.

"When you're doing 30 of those compressions, then you're giving more circulation throughout the body and the brain," said Jennifer Khonsari of Texas CPR Training. She said the new advice makes sense.

Sudden cardiac arrest—when the heart suddenly stops beating—can occur after a heart attack or as a result of an electric shock or nearly drowning. It is most often caused by an abnormal heart rhythm. The person experiencing it collapses, is unresponsive to gentle shaking and stops normal breathing.

More than 300,000 Americans die from it each year. About 75% to 80% of all cardiac arrests outside a hospital happen at home, and effective CPR can double a victim's chance of survival.

"The most common reason many people die from cardiac arrest is no one nearby knows CPR," Dr. Sayre said. "For the bystander that witnesses a collapse, the main danger is inaction."

More than 9 out of 10 cardiac arrest victims die before they get to the hospital, the heart association estimates.

"The bottom line is we think more people need to learn CPR," said Mary Fran Hazinski, a clinical nurse specialist at Vanderbilt University Medical Center who worked on the guidelines. "We have more and more evidence that good CPR works. We're doing our best to increase the number of bystanders that learn CPR."

About nine million Americans a year are trained in CPR, the heart association says, but it has a goal of more than doubling that number in the next five years to 20 million.

The new guidelines call for 911 operators to be trained to provide easy-to-follow CPR instructions by telephone.

The heart association offers new guidance to professionals, calling for cooling down cardiac arrest patients to about 90 degrees Fahrenheit for 12 to 24 hours. Two significant studies have shown that practice can improve survival and brain function for those who are comatose after initial resuscitation.

There are a variety of methods—both internal and external—for cooling a person down, but the guidelines don't recommend a specific approach.

The new guidelines advise just one shock from a defibrillator before beginning chest compressions instead of giving up to three shocks first. Studies show that the first shock works more than 85% of the time.

Defibrillators have been popping up in public places such as airports and businesses, but the heart association says that more public places need to install the devices. Survival rates have been as high as 49% to 74% for lay rescuer programs when defibrillators are placed in casinos, airports or used by police.

The new guidelines provide an opportunity for those who have taken CPR in the past to take a refresher course, said Ahamed Idris, professor of surgery and medicine at the University of Texas Southwestern Medical Center.

"I think it's a good idea for people to take CPR lessons at least every couple of years," said Dr. Idris, who was involved in creating the guidelines.

He led a study presented at the American Heart Association meeting this month that showed CPR can be effectively taught in little more than 20 minutes. The study found that just five minutes of training on defibrillator use and 20 minutes of instruction in CPR was as effective as the standard four-hour course.