

**2005 American Heart Association Guidelines
for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care
Comparison chart of Changes Affecting LAY RESCUERS**

2005 Recommendation	2000 Recommendation	Explanation
For unresponsive infants and children, the single rescuer should perform 5 cycles (2 minutes) of CPR before phoning 911 and for child, retrieving AED	The single lay rescuer alone with an unresponsive infant or child was taught to give about 1 minute of CPR before leaving child to phone 911.	In infants and children, hypoxic cardiac arrest is the most common type of arrest. The 5 cycles of (30:2) compressions and ventilations will deliver some oxygen to the heart, brain and other vital organs which the infant or child may respond to.
The lay rescuer should use the head tilt – chin lift to open the airway in all unresponsive victims even if victim is injured	Lay rescuers were taught to use the jaw thrust to open the airway of injured victims.	It is very difficult to open the airway with a jaw thrust. In addition, all methods of opening the airway can produce movement of an injured spine so the jaw thrust may not be any safer than the head tilt-chin lift.
If the lay rescuer finds an unresponsive adult victim, the lay rescuer should open the airway and take 5 to 10 seconds to check for <i>normal</i> breathing.	Lay rescuers checked for presence or absence of normal breathing for all victims.	Adult victims of SCA may gasp (agonal respirations) after collapse. Rescuers should treat gasping as <i>no</i> breathing. EMS dispatchers report that when they tell bystander to look for absence of “normal” breathing, the word “normal” helps bystanders to better identify adult victims who need CPR. For infants and children, lay rescuers should look for presence or absence of breathing.
All rescuers should take a normal breath (not a deep breath) before giving mouth-to-mouth or mouth-to-barrier rescue breaths.	Rescuers were instructed to take a deep breath before giving a mouth-to-mouth or mouth-to-mask rescue breath	Taking a deep breath is unnecessary. The rescuer should be able to give a breath enough to make the victim’s chest rise.
All rescuers should deliver each rescue breath over 1 second.	Rescue breaths were delivered over 1 to 2 seconds	The shorter the time needed to deliver breaths the faster rescuers can resume compressions. Longer breaths can reduce blood return to the heart so it reduces refilling of the heart with blood. This decreases blood flow with the next set of chest compressions.
When lay rescuers give 2 rescue breaths, each rescue breath should make the chest rise. If the first breath does not make the chest rise, the rescuer should perform another head tilt-chin lift before attempting to deliver the second breath.	Although rescuers were told that each breath should make the chest rise, lay rescuers were not given instructions about what to do if the rescue breath did not make the chest rise.	This change clarifies instructions for lay rescuers who note that the victim’s chest does not rise when the first breath is given. The lay rescuer should not try more than 2 times to give a rescue breath that makes the chest rise because it is important to give chest compressions.

2005 Recommendation	2000 Recommendation	Explanation
The AHA recommends a compression-to-ventilation ratio of 30:2 for all lay rescuers to use for all victims from infants (excluding newborns) through adults	For adult CPR, a 15:2 compression-to-ventilation ratio was recommended. For infant and child CPR, a 5:1 compression-to-ventilation ratio was recommended.	The experts want to simplify CPR information so that more rescuers would learn, remember and perform CPR. In addition they wanted to ensure all rescuers would deliver longer series of chest compressions.
Rescuers may use 1 or 2 hands to give chest compressions for children. Rescuers should press on the breastbone at about the nipple line. For compressions for infants, rescuers should press on the breastbone just below the nipple line.	One-hand chest compressions were recommended over the lower half of the child's sternum and 1 finger-breadth below the nipple line of the infant.	Both changes are made to simplify instruction. Rescuers and children (infants too) come in many sizes.
When using an AED, all rescuers should deliver 1 shock followed by immediate CPR. The CPR should begin with chest compressions. All rescuers should allow the AED to check the victim's rhythm again after about 5 cycles.	For treatment of SCA with a shockable rhythm, rescuers delivered up to 3 shocks without any CPR between the shocks.	When AEDs recheck the rhythm after a shock, this delays chest compressions. Most defibrillators eliminate VF after 1 shock so VF probably won't be present after first shock. Thus it is difficult to justify interruption. After a shock eliminates VF, most hearts do not pump blood efficiently. Chest compressions are needed to provide blood flow to the heart, brain and other organs.
Choking victims are now referred to as having <i>mild</i> versus <i>severe</i> airway obstructions. Rescuers should act if they see signs of severe obstruction: poor air exchange increased breathing difficulty, a silent cough, cyanosis or inability to speak or breathe. Rescuers should ask 1 question: "Are you choking?" If the victim nods yes, help is needed.	Rescuers were taught to recognize partial airway obstructions and complete airway obstructions. Rescuers were taught to ask the victims 2 questions: "Are you choking?" and "Can you speak?"	The goal of these revisions is to simplify actions lay rescuers need to take.
After delivering the first 2 rescue breathes, the lay rescuer should immediately begin cycles of 30 chest compressions and 2 rescue breaths.	After delivering 2 rescue breaths, the lay rescuer checked for signs of circulation (coughing, breathing or movement). If no signs of circulation, the rescuer began compressions.	In 2000, the AHA stopped recommending that lay rescuers check for a pulse because they could not do so reliably. There is no evidence that lay rescuers can accurately assess signs of circulation and delays chest compressions.
Immediately after delivering the first 2 rescue breaths, the lay rescuer should begin cycles of 30 chest compressions and 2 rescue breaths.	After delivery of 2 rescue breaths, the rescuer checked for signs of circulation. If victim had signs of circulation but no normal breathing, the rescuer was instructed to give rescue breathing.	The elimination of rescue breathing without chest compressions will reduce the number of CPR skills lay rescuers must learn, remember and perform.