

***BLS for Healthcare Providers Student Manual***  
**Comparison Sheet**  
**Based on 2010 AHA Guidelines for CPR and ECC**



<b>BLS Changes</b>			
	<b>New</b>	<b>Old</b>	<b>Rationale</b>
<b>CPR</b>	Chest compressions, Airway, Breathing (C-A-B)  New science indicates the following order: <ol style="list-style-type: none"> <li>1. Check the patient for responsiveness and no breathing.</li> <li>2. Call for help and get the AED</li> <li>3. Check the pulse.</li> <li>4. Give 30 compressions.</li> <li>5. Open the airway and give 2 breaths.</li> <li>6. Resume compressions.</li> </ol>	Airway, Breathing, Chest compressions (A-B-C)  Previously, after responsiveness was assessed, a call for help was made, the airway was opened, the patient was checked for breathing, and 2 breaths were given, followed by a pulse check and compressions.	Although ventilations are an important part of resuscitation, evidence shows that compressions are the critical element in adult resuscitation. In the A-B-C sequence, compressions are often delayed. By changing the sequence to C-A-B, rescuers can start chest compressions sooner.
	Compressions should be initiated within 10 seconds of recognition of the arrest.	Compressions were to be given after airway and breathing were assessed, ventilations were given, and pulses were checked.	Although ventilations are an important part of resuscitation, evidence shows that compressions are the critical element in adult resuscitation. Compressions are often delayed while providers open the airway and deliver breaths.
	Compressions should be given at a rate of at least 100/min. Each set of 30 compressions should take approximately 18 seconds or less.	Compressions were to be given at a rate of about 100/min. Each cycle of 30 compressions was to be completed in 23 seconds or less.	Faster compressions are required to generate the pressures necessary to perfuse the coronary and cerebral arteries.
	Compression depths are as follows: <ul style="list-style-type: none"> <li>• Adults: <b>at least</b> 2 inches (5 cm)</li> <li>• Children: <b>at least</b> one third the depth of the chest, approximately 2 inches (5 cm)</li> <li>• Infants: <b>at least</b> one third the depth of the chest, approximately 1½ inches (4 cm)</li> </ul>	Compression depths were as follows: <ul style="list-style-type: none"> <li>• Adults: 1½ to 2 inches</li> <li>• Children: one third to one half the diameter of the chest</li> <li>• Infants: one third to one half the diameter of the chest</li> </ul>	Deeper compressions are required to generate the pressures necessary to perfuse the coronary and cerebral arteries.

<b>Airway and Breathing</b>	Cricoid pressure is no longer routinely recommended for use with ventilations.	If an adequate number of rescuers was available, one could apply cricoid pressure.	Randomized studies have demonstrated that cricoid pressure still allows for aspiration. It is also difficult to properly train providers to perform the maneuver correctly.
	“Look, listen, and feel for breathing” has been removed from the sequence for assessment of breathing after opening the airway. Healthcare providers briefly check for breathing when checking responsiveness to detect signs of cardiac arrest. After delivery of 30 compressions, lone rescuers open the victim’s airway and deliver 2 breaths.	“Look, listen, and feel for breathing” was used to assess breathing after the airway was opened.	With the new chest compression–first sequence, CPR is performed if the adult victim is unresponsive and not breathing or not breathing normally (ie, not breathing or only gasping) and begins with compressions (C-A-B sequence). Therefore, breathing is briefly checked as part of a check for cardiac arrest. After the first set of chest compressions, the airway is opened and the rescuer delivers 2 breaths.
<b>AED Use</b>	For children from 1 to 8 years of age, an AED with a pediatric dose-attenuator system should be used if available. If an AED with a dose attenuator is not available, a standard AED may be used.  For infants (<1 year of age), a manual defibrillator is preferred. If a manual defibrillator is not available, an AED with a pediatric dose attenuator is desirable. If neither is available, an AED without a dose attenuator may be used.	This does not represent a change for children. In 2005 there was not sufficient evidence to recommend for or against the use of an AED in infants.	The lowest energy dose for effective defibrillation in infants and children is not known. The upper limit for safe defibrillation is also not known, but doses >4 J/kg (as high as 9 J/kg) have provided effective defibrillation in children and animal models of pediatric arrest, with no significant adverse effects.  AEDs with relatively high energy doses have been used successfully in infants in cardiac arrest, with no clear adverse effects.