

Table 1
Summary of Key BLS Components for Adults, Children, and Infants*

Component	Recommendations		
	Adults	Children	Infants
Recognition	Unresponsive (for all ages)		
	No breathing or no normal breathing (ie, only gasping)	No breathing or only gasping	
	No pulse palpated within 10 seconds for all ages (HCP only)		
CPR sequence	C-A-B		
Compression rate	At least 100/min		
Compression depth	At least 2 inches (5 cm)	At least 1/3 AP diameter About 2 inches (5 cm)	At least 1/3 AP diameter About 1 1/2 inches (4 cm)
Chest wall recoil	Allow complete recoil between compressions HCPs rotate compressors every 2 minutes		
Compression interruptions	Minimize interruptions in chest compressions Attempt to limit interruptions to <10 seconds		
Airway	Head tilt–chin lift (HCP suspected trauma: jaw thrust)		
Compression-to-ventilation ratio (until advanced airway placed)	30:2 1 or 2 rescuers		30:2 Single rescuer 15:2 2 HCP rescuers
Ventilations: when rescuer untrained or trained and not proficient	Compressions only		
Ventilations with advanced airway (HCP)	1 breath every 6-8 seconds (8-10 breaths/min) Asynchronous with chest compressions About 1 second per breath Visible chest rise		
Defibrillation	Attach and use AED as soon as available. Minimize interruptions in chest compressions before and after shock; resume CPR beginning with compressions immediately after each shock.		

Abbreviations: AED, automated external defibrillator; AP, anterior-posterior; CPR, cardiopulmonary resuscitation; HCP, healthcare provider.
*Excluding the newly born, in whom the etiology of an arrest is nearly always asphyxial.

Team Resuscitation

2010 (New): The steps in the BLS algorithm have traditionally been presented as a sequence to help a single rescuer prioritize actions. There is increased focus on providing CPR as a team because resuscitations in most EMS and healthcare systems involve teams of rescuers, with rescuers performing several actions simultaneously. For example, one rescuer activates the emergency response system while a second begins chest compressions, a third is either providing ventilations or retrieving the bag-mask for rescue breathing, and a fourth is retrieving and setting up a defibrillator.

2005 (Old): The steps of BLS consist of a series of sequential assessments and actions. The intent of the algorithm is to present the steps in a logical and concise manner that will be easy for each rescuer to learn, remember, and perform.

Why: Some resuscitations start with a lone rescuer who calls for help, whereas other resuscitations begin with several willing rescuers. Training should focus on building a team as each rescuer arrives, or on designating a team leader if multiple rescuers are present. As additional personnel arrive, responsibilities for tasks that would ordinarily be performed sequentially by fewer rescuers may now be delegated to a team of providers who perform them simultaneously. For this reason, BLS healthcare provider training should not only teach individual skills but should also teach rescuers to work in effective teams.

Comparison of Key Elements of Adult, Child, and Infant BLS

As in the 2005 AHA Guidelines for CPR and ECC, the 2010 AHA Guidelines for CPR and ECC contain a comparison table that lists the key elements of adult, child, and infant BLS (excluding CPR for newly born infants). These key elements are included in Table 1.