Summary of High-Quality CPR Components for BLS Providers

American Heart Association.

Component	Adults (puberty and beyond)	Children (1 year of age to puberty)	Infants (younger than 1 year, excluding newborns)
Verifying scene safety	Make sure the scene is safe for rescuers and the person who needs help.		
Recognizing cardiac arrest	Check for responsiveness Shout for nearby help No breathing or only gasping (ie, no normal breathing) No definite pulse felt within 10 seconds (Breathing and pulse check should be performed simultaneously for at least 5 but no more than 10 seconds.)		
Activating emergency response system	**If a mobile device is available, call the local emergency response number.**		
	If you are alone with no mobile device, leave the person to activate the emergency response system and get the AED/defibrillator before beginning CPR. Otherwise, send someone else and begin CPR immediately; use the AED/defibrillator as soon as it is available.	**Witnessed collapse, single rescuer** If you **are alone** and **witnessed** the sudden collapse and do not have a mobile device, leave the child or infant to activate the emergency response system and get the AED before beginning CPR. **Unwitnessed collapse, single rescuer** If you **are alone** and **did not witness** the sudden collapse of the child or infant, perform 5 cycles, or 2 minutes, of 30 compressions and 2 breaths before you leave to activate the emergency response system and get an AED/defibrillator. Use the AED/defibrillator as soon as it is available.	
Compression-to-ventilation ratio *without advanced airway*	**1 or 2 rescuers** 30:2	**1 rescuer** 30:2 **2 or more rescuers** 15:2	
Compression-to-ventilation ratio *with advanced airway*	Continuous compressions at a rate of 100-120/min Give 1 breath every 6 seconds (10 breaths/min).	Continuous compressions at a rate of 100-120/min Give 1 breath every 2-3 seconds (20-30 breaths/min).	
Compression rate	100-120/min		
Compression depth	At least 5 cm*	At least one third the AP diameter of the chest Approximately 5 cm	At least one third the AP diameter of the chest Approximately 4 cm
Hand placement	2 hands in the center of the chest, on the lower half of the sternum	1 or 2 hands in the center of the chest, on the lower half of the sternum	Use the heel of one hand or the 2 thumb–encircling hands technique
Chest recoil	Allow complete recoil of the chest after each compression; do not lean on the chest after each compression.		
Minimizing interruptions	Limit interruptions in chest compressions to less than 10 seconds with a CCF goal of at least 60%.		

*Compression depth should be no more than 6 cm.
Abbreviations: AED, automated external defibrillator; AP, anteroposterior; CCF, chest compression fraction; CPR, cardiopulmonary resuscitation.

© 2025 American Heart Association