

Summary of High-Quality CPR Components for BLS Providers



| Component | Adults and adolescents | Children (age 1 year to puberty) | Infants (age less than 1 year, excluding newborns) |
|--|---|--|---|
| Verifying scene safety | Make sure the environment is safe for rescuers and victim | | |
| Recognizing cardiac arrest | Check for responsiveness No breathing or only gasping (i.e., no normal breathing) No definite pulse felt within 10 seconds (Breathing and pulse check can be performed simultaneously in less than 10 seconds) | | |
| Activating emergency response system | <i>If a mobile device is available, phone emergency medical services (9-1-1)</i> | | |
| | If you are alone with no mobile phone, leave the victim to activate the emergency response system and get the AED before beginning CPR Otherwise, send someone and begin CPR immediately; use the AED as soon as it is available | <i>Witnessed collapse</i> Follow steps for adults and adolescents on the left <i>Unwitnessed collapse</i> Give 2 minutes of CPR Leave the victim to activate the emergency response system and get the AED Return to the child or infant and resume CPR; use the AED as soon as it is available | |
| Compression-ventilation ratio <i>without advanced airway</i> | <i>1 or 2 rescuers</i> 30:2 | <i>1 rescuer</i> 30:2 <i>2 or more rescuers</i> 15:2 | |
| Compression-ventilation ratio <i>with advanced airway</i> | 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 (2 inches)* | At least one third AP diameter of chest Approximately 5 cm (2 inches) | At least one third AP diameter of chest Approximately 4 cm (1½ inches) |
| Hand placement | 2 hands on the lower half of the breastbone (sternum) | 2 hands or 1 hand (optional for very small child) on the lower half of the breastbone (sternum) | <i>1 rescuer</i> 2 fingers or 2 thumbs in the centre of the chest, just below the nipple line <i>2 or more rescuers</i> 2 thumb-encircling hands in the centre of the chest, just below the nipple line If the rescuer is unable to achieve the recommended depth, it may be reasonable to use the heel of one hand |
| Chest recoil | Allow complete recoil of 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 greater than 80% | | |

*Compression depth should be no more than 6 cm (2.4 inches).

Abbreviations: AED, automated external defibrillator; AP, anteroposterior; CCF, chest compression fraction; CPR, cardiopulmonary resuscitation.