



# Basic Life Support

Provider Manual



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# Unit One: General Concepts of Basic Life Support

Basic Life Support (BLS) has changed dramatically over the years to make it more accessible to the general public and more effective for the victim of cardiac arrest. Cardiac arrest is the leading cause of death in the world; individuals with a knowledge of BLS can intervene early and possibly prevent a death associated with sudden cardiac arrest. This training provides you with the knowledge to:

- Initiate the chain of survival as soon as a possible problem is identified
- Initiate immediate high-quality chest compressions for any victim
- Provide early defibrillation with an Automated External Defibrillator (AED) as soon as one is available
- Initiate rescue breathing when respiration is inadequate
- Perform BLS as a team
- Relieve a choking episode.

## Delivering the Most Up-to-Date Guidelines Available

The International Liaison Committee on Resuscitation (ILCOR) has been the definitive source for resuscitation guidelines for decades. ILCOR recommendations are based on cutting edge biomedical and clinical research. Organizations such as the American Heart Association (AHA) and the European Resuscitation Council (ERC) contribute to Consensus on Science and Treatment Recommendations (CoSTR) and then publish their findings in the journals *Circulation* and *Resuscitation*, respectively.

## BLS Manual Updates At-A-Glance: 2020 to 2025

Current Recommendations – Guideline Updates
Dispatchers should provide chest compression-only CPR instructions to callers for adults with suspected out-of-hospital cardiac arrest (OHCA)
Bystanders should perform chest compressions for all patients in cardiac arrest
Bystanders who are trained, able, and willing to give rescue breaths and chest compressions should do so for all adult patients in cardiac arrest
Bystanders should provide CPR with ventilation for infants and children less than 18 years of age with OHCA
Bystanders who cannot provide rescue breaths as part of CPR for infants and children less than 18 years of age with OHCA, should at least provide chest compressions
EMS Dispatchers should offer dispatcher-assisted CPR instructions for presumed pediatric cardiac arrest
EMS Dispatchers should offer dispatcher-assisted CPR instructions for pediatric cardiac arrest when no bystander CPR is in progress
For EMS systems, a reasonable alternative to conventional CPR for witnessed shockable OHCA is minimally interrupted cardiac resuscitation
Before placement of an advanced airway (supraglottic airway or tracheal tube), EMS providers should perform CPR with cycles of 30 compressions and 2 breaths
EMS providers should perform CPR with 30 compressions to 2 ventilations or continuous chest compressions with positive-pressure ventilation (PPV) without pausing chest compressions until a tracheal tube or supraglottic device is placed
Whenever an advanced airway (tracheal tube or supraglottic device) is inserted during CPR, it may be reasonable for providers to perform continuous compressions with PPV delivered without pausing chest compressions
After placement of an advanced airway in adults, it may be reasonable for the provider to deliver 1 breath every 6 s (10 breaths per min) while continuous chest compressions are being performed
For infants and children receiving CPR with an advanced airway or who have a pulse but are undergoing rescue breathing, the recommended respiratory rate has been increased to 20 to 30 breaths per minute (1 breath every 2 to 3 seconds). Previously 1 breath every 6 to 8 seconds with advanced airway or 3 to 5 seconds during CPR without advanced airway.
For pediatric patients with cardiac arrest due to pulseless electrical activity or asystole, the initial dose of epinephrine should be given as soon as possible during CPR to improve the chance of survival.
For pediatric patients with suspected opioid overdose, naloxone administration is reasonable in addition to BLS/PALS; however, resuscitative measures for cardiac arrest (e.g., high quality CPR) should take priority over naloxone administration
The Suspected Opioid Poisoning algorithm has been updated

**Table 1: BLS Manual Updates At-A-Glance: 2020 to 2025**