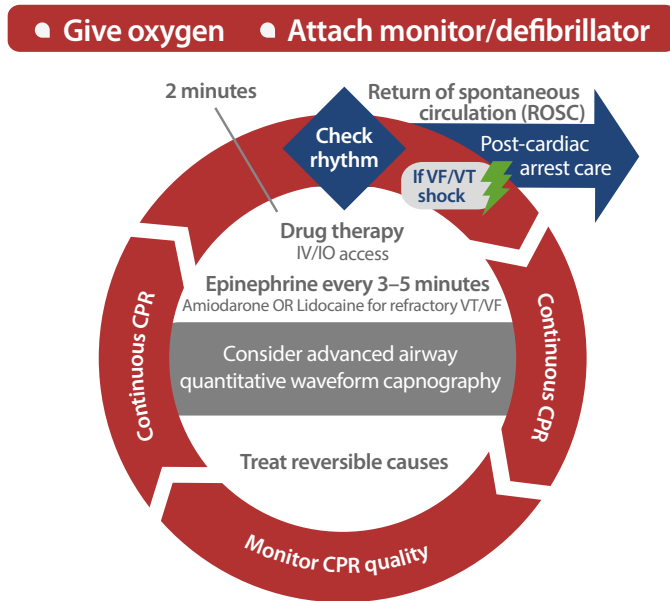


Shout for help/activate emergency response

Start CPR



Doses/details for the cardiac arrest algorithms

CPR quality

- Push at least 2" (100–120/min) and allow complete chest recoil
- Minimize interruptions in compressions**
- Avoid hypo/hyperventilation
- Rotate compressor every 2 minutes
- If no advanced airway, 30:2 compression-ventilation ratio
- Quantitative waveform capnography
- If PETCO₂ < 10 mm Hg, attempt to improve CPR quality

Drug therapy

- **Epinephrine IV/IO Dose:** 1 mg every 3–5 minutes
- **Amiodarone IV/IO Dose***:** First dose: 300 mg bolus
Second dose: 150 mg
- **Lidocaine:** First dose: 1–1.5 mg/kg
Second dose: 0.5–0.75 mg/kg

Advanced airway****

- Supraglottic advanced airway or endotracheal intubation
- 10 breaths per minute with continuous chest compressions

Indication of spontaneous circulation (ROSC)

- Pulse and blood pressure
- Abrupt sustained increase of PETCO₂ of > 25 mm Hg check perfusion status. An increase to greater than 40 mm Hg is confirmation of ROSC.
- Spontaneous arterial pressure waves with intra-arterial monitoring

Shock energy

- **Biphasic:** Manufacturer recommendation (eg. initial dose of 120–200 J); if unknown, use maximum available
- Second and subsequent doses should be equivalent, and higher doses may be considered

Reversible causes

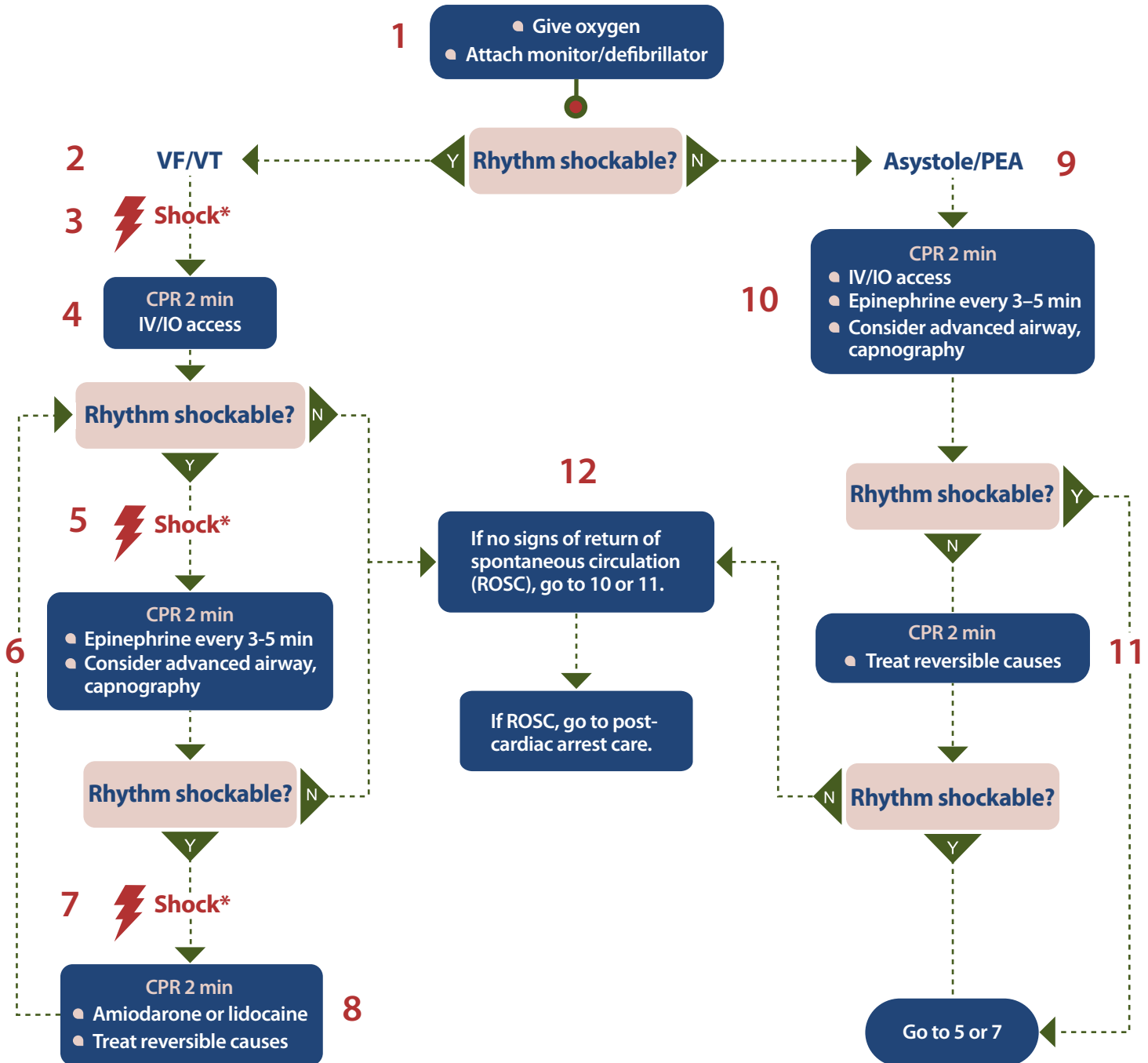
- Hypovolemia
- Hypoxia
- Hydrogen ion (acidosis)
- Hypo-/Hyperkalemia
- Hypothermia
- Tension pneumothorax
- Tamponade, cardiac
- Toxins
- Thrombosis, pulmonary
- Thrombosis, coronary

* Link MS, Berkow LC, Kudenchuk PJ, Halperin HR, Hess EP, Moitra VK, Neumar RW, O'Neil BJ, Paxton JH, Silvers SM, White RD, Yannopoulos D, Donnino MW. Part 7: Adult advanced cardiac life support. 2015 AHA Guidelines Update for CPR and ECC. *Circulation*. 2015;132(Suppl 2):S444–S464. ** Bobrow BJ, Clark LL, Ewy GA, Chikani V, Sanders AB, Berg RA, Richman PB. Minimally interrupted cardiac resuscitation for out-of-hospital cardiac arrest. *JAMA*. 2008;299:1158–1165. *** Dorian P, Cass D, Schwartz B, Cooper R, Gelaznikas R, Barr A. Amiodarone vs. lidocaine for shock-resistant VF. *N Engl J Med*. 2002;346:884–890. **** Dorges V, Wenzel V, Knacke P, Gerlach K. Comparison of airway management strategies in apneic, non-preoxygenated patients. *Crit Care Med*. 2003;31:800–804. AHA. (2025). BLS Provider Manual; BLS Blended Learning Student Workbook.



Shout for help/activate emergency response

Start CPR



* Link MS, Atkins DL, Plassman RS, Halperin HR, Samson RA, White RD, Cudnik MT, Berg MD, Kudenchuk PJ, Kerber RE. "Part 6: electrical therapies: automated external defibrillators, defibrillation, cardioversion, and pacing: 2010 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care". *Circulation*. 2010;122(suppl 3): S706-S719. http://circ.ahajournals.org/content/122/18_suppl_3/S706. American Heart Association. (2025). BLS Provider Manual (eBook edition, ISBN 978-1-68472-319-5). AHA (2025) BLS Provider Manual; BLS Blended Learning Student Workbook.

