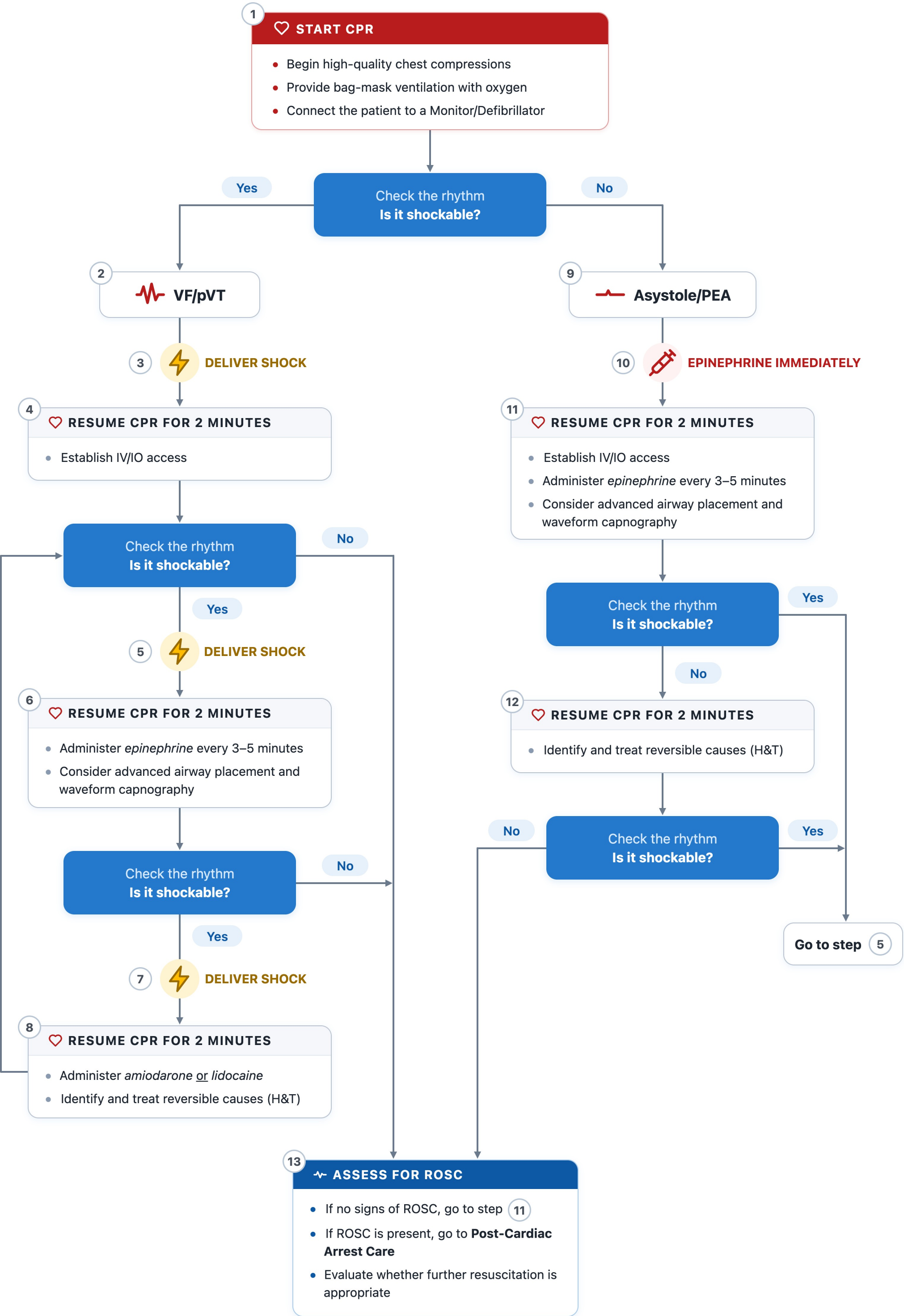


Pediatric Cardiac Arrest Algorithm (VF/pVT/Asystole/PEA)



♥ HIGH-QUALITY CPR

- **Depth:** compress at least one-third of the chest depth: about 1.5 inches (4 cm) in infants, 2 inches (5 cm) in children
- **Rate:** deliver 100–120 compressions/min, allowing full chest recoil after each compression
- Minimize chest compression interruptions
- Switch the rescuer performing compressions every 2 minutes (or earlier if tired)
- Avoid excessive ventilation: do not give breaths too frequently or use excessive tidal volumes
- **Without an advanced airway:**
 - 2 rescuers, before puberty: **15:2**
 - 2 rescuers, after puberty begins: **30:2**
 - 1 rescuer, any age: **30:2**
- **With an advanced airway:** provide 1 breath every 2–3 seconds (20–30 breaths/min) without pausing chest compressions
- Use continuous waveform capnography (and arterial pressure monitoring, if available). If ETCO₂ is low or falling, reassess CPR quality

🔧 ADVANCED AIRWAY MANAGEMENT

- **Airway options:** Endotracheal intubation (ETI) or a Supraglottic airway (SGA)
- Confirm correct ET tube placement and monitor its position using continuous waveform capnography or capnometry

⚡ DEFIBRILLATION ENERGY SETTINGS

- **First shock:** 2 J/kg
- **Second shock:** 4 J/kg
- **Subsequent shocks:** at least 4 J/kg, up to a maximum of 10 J/kg or the adult dose

💉 MEDICATION DOSING

- **Epinephrine IV/IO:**
0.01 mg/kg (0.1 mL/kg of 0.1 mg/mL); max 1 mg per dose. Repeat every 3–5 minutes
- **Amiodarone IV/IO:**
 - First dose: 5 mg/kg bolus (max 300 mg)
 - May repeat up to 3 total doses for refractory VF/pVT (max 150 mg per repeat dose)
- **Lidocaine IV/IO:**
 - First dose: 1 mg/kg

🔍 REVERSIBLE CAUSES (H'S & T'S)

- H's**
- Hypovolemia
 - Hypoxia
 - Hydrogen ion (acidosis)
 - Hypoglycemia
 - Hypo- or Hyperkalemia
 - Hypothermia
- T's**
- Tension pneumothorax
 - Tamponade (cardiac)
 - Toxins
 - Thrombosis (pulmonary)
 - Thrombosis (coronary)