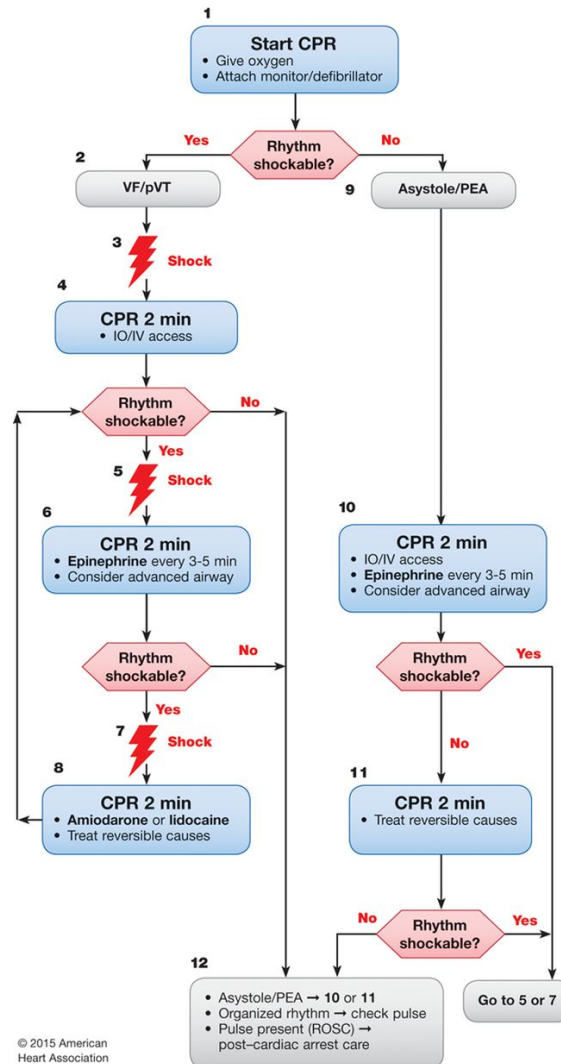


# Pediatric Cardiac Arrest Algorithm—2015 Update.

Pediatric Cardiac Arrest Algorithm—2015 Update



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CPR Quality
<ul style="list-style-type: none"> <li>• Push hard (≥<math>\frac{1}{2}</math> of anteroposterior diameter of chest) and fast (100-120/min) and allow complete chest recoil.</li> <li>• Minimize interruptions in compressions.</li> <li>• Avoid excessive ventilation.</li> <li>• Rotate compressor every 2 minutes, or sooner if fatigued.</li> <li>• If no advanced airway, 15:2 compression-ventilation ratio.</li> </ul>
Shock Energy for Defibrillation
First shock 2 J/kg, second shock 4 J/kg, subsequent shocks $\geq 4$ J/kg, maximum 10 J/kg or adult dose
Drug Therapy
<ul style="list-style-type: none"> <li>• <b>Epinephrine IO/IV dose:</b> 0.01 mg/kg (0.1 mL/kg of 1:10 000 concentration). Repeat every 3-5 minutes. If no IO/IV access, may give endotracheal dose: 0.1 mg/kg (0.1 mL/kg of 1:1000 concentration).</li> <li>• <b>Amiodarone IO/IV dose:</b> 5 mg/kg bolus during cardiac arrest. May repeat up to 2 times for refractory VF/pulseless VT.</li> <li>• <b>Lidocaine IO/IV dose:</b> Initial: 1 mg/kg loading dose. Maintenance: 20-50 mcg/kg per minute infusion (repeat bolus dose if infusion initiated &gt;15 minutes after initial bolus therapy).</li> </ul>
Advanced Airway
<ul style="list-style-type: none"> <li>• Endotracheal intubation or supraglottic advanced airway</li> <li>• Waveform capnography or capnometry to confirm and monitor ET tube placement</li> <li>• Once advanced airway in place, give 1 breath every 6 seconds (10 breaths/min) with continuous chest compressions</li> </ul>
Return of Spontaneous Circulation (ROSC)
<ul style="list-style-type: none"> <li>• Pulse and blood pressure</li> <li>• Spontaneous arterial pressure waves with intra-arterial monitoring</li> </ul>
Reversible Causes
<ul style="list-style-type: none"> <li>• Hypovolemia</li> <li>• Hypoxia</li> <li>• Hydrogen ion (acidosis)</li> <li>• Hypoglycemia</li> <li>• Hypo-/hyperkalemia</li> <li>• Hypothermia</li> <li>• Tension pneumothorax</li> <li>• Tamponade, cardiac</li> <li>• Toxins</li> <li>• Thrombosis, pulmonary</li> <li>• Thrombosis, coronary</li> </ul>

Allan R. de Caen et al. *Circulation*. 2015;132:S526-S542

