



Defibrillation Energy Doses

- First shock: 2 J/kg
- Second shock: 4 J/kg
- Subsequent shocks: ≥ 4 to 10 J/kg max, or the adult dose

Medications

Epinephrine

- 0.01 mg/kg (0.1 mg/mL concentration) IV/IO every 3 to 5 min, max single dose 1 mg

Amiodarone

- 5 mg/kg IV/IO bolus (max single dose, 300 mg)
- May repeat initial dose two additional times (3 total doses, max 15 mg/kg, adolescent max 2.2 g) for refractory VF/pulseless VT

Lidocaine

- Initial dose: 1 mg/kg loading dose IV/IO
- Repeat dose: 0.5 mg/kg IV/IO
- Maintenance dose: 20 to 50 mcg/kg per min infusion (repeat bolus dose if infusion initiated > 15 min after initial bolus therapy)

High-Quality CPR

- Compress at a rate of 100 to 120/min and a depth of about 2 inches (5 cm) for children and about 1 1/2 inches (3.8 cm) for infants; allow for full chest recoil after each compression
- Minimize interruptions to chest compressions to less than 10 sec
- Avoid excessive ventilations; each ventilation should last about 1 sec and make the chest begin to rise
- Without advanced airway:** Single provider, 30 compressions: 2 ventilations; multiple providers 15 compressions: 2 ventilations
- With advanced airway:** Continuous compressions at 100 to 120/min and deliver 1 ventilation every 2 to 3 sec without pausing compressions
- Rotate compressor every 2 min
- Monitor CPR quality with ETCO₂ or arterial blood pressure (if available)

Signs of ROSC

- A palpable central pulse and measurable blood pressure
- A sudden and sustained increase in ETCO₂ to a value of 35 to 40 mmHg, or an arterial pulse waveform on an arterial line when no compressions are being delivered
- Additional signs of life, such as patient movement, spontaneous respirations or coughing

Hs and Ts

- Hypovolemia
- Hypoxemia
- Hydrogen ion excess (acidosis)
- Hyperkalemia/hypokalemia
- Hypothermia
- Hypoglycemia
- Tamponade (cardiac)
- Tension pneumothorax
- Thrombosis (pulmonary embolism)
- Thrombosis (myocardial infarction)
- Toxins

*For an adolescent in cardiac arrest, follow adult CPR guidelines. See **Adult Cardiac Arrest** Code Card.