

Pediatric Ventricular Fibrillation / Pulseless Ventricular Tachycardia



History

- Events leading to arrest
- Estimated downtime
- Past medical history
- Medications
- Existence of terminal illness
- Airway obstruction
- Hypothermia

Signs and Symptoms

- Unresponsive
- Cardiac Arrest

Differential

- Respiratory failure / Airway obstruction
- Hyper / hypokalemia, Hypovolemia
- Hypothermia, Hypoglycemia, Acidosis
- Tension pneumothorax, Tamponade
- Toxin or medication
- Thrombosis: Coronary / Pulmonary Embolism
- Congenital heart disease

Pediatric Pulseless Arrest Protocol

AT ANY TIME

Return of Spontaneous Circulation

Go to Post Resuscitation Protocol

	<p>Begin Continuous CPR Compressions Push Hard (Infant-1.5 inches / Child-2 inches) (≥ 1/3 AP Diameter of Chest) Push Fast (100-120 compressions/min) Change Compressors every 200 compressions (Limit changes / pulse checks ≤ 10 seconds) Ventilate 1 breath every 10 seconds Monitor ETCO2</p>
P	<p>At compression #180 of each cycle: Charge defibrillator at Age-Specific Joule Settings If SHOCKABLE rhythm present, deliver shock and immediately continue chest compressions If NONSHOCKABLE rhythm present, utilize DISARM soft key</p>
	Defibrillation Automated <i>if available</i>
A	<p>IV / IO Procedure</p> <p>Epinephrine 1:10,000 0.01 mg/kg IV / IO (Maximum 1mg) Repeat every 3 – 5 minutes</p>
P	Defibrillation Manual Procedure 4 J / Kg (Initial)
	<p>If Rhythm Refractory Continue CPR and give Agency specific Anti-arrhythmic(s). Continue epinephrine during compressions. Continue CPR up to point where you are ready to defibrillate with device charged. Repeat pattern during resuscitation.</p>
P	<p>Amiodarone 5 mg/kg IV / IO (Maximum dose 300 mg) Repeat every 5 minutes (Maximum Repeat dose 150 mg) (Maximum total dose 15 mg/kg) High Quality, Continuous Compressions</p> <p>Lidocaine 1 mg/kg IV / IO (Maximum 100 mg) Repeat 0.5 mg/kg (Maximum total dose 3 mg/kg) High Quality, Continuous Compressions</p>
	Defibrillation Manual Procedure Initial 4 J/kg, Subsequent shocks increase by 2 J/Kg each Maximum 10 J / kg or adult dose
	Consider Defibrillation Dual Sequential Manual Procedure <i>if available and rhythm refractory</i>

Persistent VF / VT
 Or
Torsades de Points

Magnesium Sulfate
 40 mg/kg IV / IO over
 1 – 2 minutes
 May repeat every 5 minutes
 (Maximum 2 g)

Notify Destination or Contact Medical Control

Pediatric Cardiac Protocol Section