

# Pediatric V-Fib/Pulseless V-Tach

For non-traumatic cardiac arrest in which any resuscitation is initiated, NOT dead on arrival

**History**

- Events leading to arrest
- Estimated downtime
- Prior resuscitation attempts
- Past medical history
- Medications
- Known terminal illness

**Signs and Symptoms**

- Pulseless
- Apneic

**Differential**

- Airway obstruction/respiratory disease
- Medical vs. trauma
- VF vs. pulseless VT
- Asystole
- PEA
- Primary cardiac event vs. respiratory arrest or drug overdose

 Enter from Cardiac Arrest

**Defibrillation**  
*Use length-based tape; refer to dosing guide*

**P**  
 Resume chest compressions (**15:2 ratio**)  
 1.5 inches for infants; 2 inches for children  
 Change compressors every 2 minutes  
 (Limit changes/pulse checks to < 5 seconds)

Establish IV/IO

**AT ANY TIME**  
 Return of spontaneous circulation  
  
 Go to Post Resuscitation

**Defibrillation**  
*Use measuring tape; refer to dosing guide*

**P**  
 Resume chest compressions (**15:2 ratio**)  
 1.5 inches for infants; 2 inches for children  
 Change compressors every 2 minutes  
 (Limit changes/pulse checks to < 5 seconds)

**Epinephrine (1:10,000)**  
*Use length-based tape; refer to dosing guide*

**Defibrillation**  
*Use measuring tape; refer to dosing guide*

**P**  
 Resume chest compressions (**15:2 ratio**)  
 1.5 inches for infants; 2 inches for children  
 Change compressors every 2 minutes  
 (Limit changes/pulse checks to < 5 seconds)

**If V-Fib/ Pulseless V-Tach is refractory after 3 shocks**  
 Continue high performance CPR and give medications during compressions

**Lidocaine**  
*Use length-based tape; refer to dosing guide*

Persistent V-Fib/V-Tach

Yes

 Aystole/PEA



No

Return of spontaneous circulation?

No

Yes

 Post Resuscitation

 **Notify receiving facility.**  
**Consider Base Hospital for medical direction** 

Pediatric Cardiac Arrest Treatment Protocols



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## Pearls

- Airway is a more important intervention in pediatric arrests. This should be accomplished quickly with a BVM, airway adjunct, and appropriately sized mask. Patient survival is often dependent on proper ventilation and oxygenation.
- Efforts should be directed at high quality chest compressions with limited interruptions.
- Use appropriately sized pediatric BVM with EtCO<sub>2</sub>.
- Do not delay chest compressions while applying any device or intervention.
- Use a metronome during chest compression to ensure proper rate.
- Provide resuscitative efforts for 30 minutes to maximize chance of ROSC.
- If resuscitative efforts do not attain ROSC, consider cessation of efforts per Policy 507 – Determining Death.
- Resuscitation is based on proper planning and organized execution. Procedures require space and patient access. Make room to work. Utilize a team focused approach assigning responders to predetermined tasks.
- Reassess airway and document EtCO<sub>2</sub> frequently.
- Defibrillation vests should be removed by EMS personnel before compressions, but do not cut vests. Once removed, disengage battery to prevent alarming.

