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

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**Enter from Cardiac Arrest**

**Defibrillation**
Use Broselow Tape; refer to dosing guide
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

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

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

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**Persistent V-Fib/V-Tach**

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**Aystole/PEA**

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**Return of spontaneous circulation?**
Yes

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**Post Resuscitation**

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**Notify receiving facility. Consider Base Hospital for medical direction**
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 EtCO₂.
- 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 Operations 10 – Determination of 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 EtCO₂ frequently.
- Defibrillation vests should be removed by EMS personnel before compressions, but do not cut vests. Once removed, disengage battery to prevent alarming.