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 Executive Director

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 Medical Director

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**PEDIATRIC PULSELESS ELECTRICAL ACTIVITY**

- I. AUTHORITY: Health and Safety Code, Division 2.5, California Code of Regulations, Title 22, Division 9
- II. PURPOSE: To serve as the treatment standard for EMT-Is and EMT-Ps in treating patients.
- III. PROTOCOL:

The absence of a detectable pulse and the presence of some type of electrical activity other than V-Tach defines this group of arrhythmias. Many of these patients do have cardiac mechanical activity without effective cardiac output (they are in profound shock). Consider hypovolemia in these patients.

Consider Possible Causes: (Possible field treatments in parentheses)

- |   |  |
|---|--|
| HYPOVOLEMIA (volume infusion)               | PULMONARY EMBOLISM                             |
| HYPOXIA (ventilation)                       | DRUG OVERDOSE (appropriate antidote)           |
| CARDIAC TAMPONADE                           | HYPERKALEMIA (sodium bicarb, calcium chloride) |
| TENSION PNEUMOTHORAX (needle decompression) | ACIDOSIS (ventilation)                         |
| HYPOTHERMIA (See Hypothermia 555.62)        | MYOCARDIAL INFARCTION                          |

Consider Code 2 transport of all patients in cardiac arrest unless special circumstances which might favor survival are suspected.

**STANDING ORDERS**

**ABCs**

**CPR**

**SECURE AIRWAY/  
 INTUBATE**

Using the simplest effective method. A BLS airway with objective evidence of good ventilation and oxygenation is adequate and acceptable. Consider intubation while en route. Confirm placement, if intubated, with end-tidal CO<sub>2</sub> detector and esophageal detector device. **Continuous waveform capnography should be used in all intubated patients, if available.**

**IV/IO ACCESS:**

TKO with microdrip tubing and volume control chamber.

**CONSIDER TREATABLE  
 CAUSES:**

Hypovolemia: Bolus 20mg/kg. Repeat in 5 minutes. Reassess after each bolus  
 Tension pneumothorax: Refer to 544.00-ALS Introduction  
 Hypoxia: Provide oxygen  
 Hypothermia: Refer to Hypothermia protocol 555.62

**EPINEPHRINE:**

0.01 mg/kg of 1:10,000 IV/IO push or 0.1 mg/kg of 1:1000 ET. Repeat every 3 minutes.

**IV FLUID**

20 mg/kg bolus. Repeat in 5 minutes. Reassess the patient after each bolus.

**BASE PHYSICIAN ORDERS**

**DECLARATION OF DEATH**

After 3 doses epinephrine and 2 fluid boluses, if no reversible causes are identified.