

	<b>COUNTY OF SACRAMENTO</b> EMERGENCY MEDICAL SERVICES AGENCY	<b>Document #</b>	<b>9006.21</b>
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	<b>Pediatric Cardiac Arrest</b>	<b>Last Approved Date:</b>	<b>09/09/21</b>
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Signature on File

EMS Medical Director

Signature on File

EMS Administrator

**Purpose:**

- A. To ~~serve as~~ **establish** treatment standards in treating pediatric cardiac arrest patients.
- B. To ~~serve as~~ **establish** pediatric treatment standards for Asystole, Pulseless Electrical Activity (PEA), Ventricular Fibrillation (VF), and Pulseless Ventricular Tachycardia (VT).

**Authority:**

- A. California Health and Safety Code, Division 2.5
- B. California Code of Regulations, Title 22, Division 9

**Protocol:**

- A. High-quality Cardiopulmonary Resuscitation (CPR) is fundamental to the management of all cardiac arrest rhythms. Periodic pauses in CPR should be as brief as possible and only as necessary to assess rhythm, shock VF/VT, vascular access, drug delivery and perform a pulse check when an organized rhythm is detected, or an advanced airway is placed for patients as per SCEMSA Policy 8837-Pediatric Airway Management.
- B. CPR must be performed with a “Chest Compression, Airway, Breathing” sequence (C-A-B) to emphasize the importance of maintaining blood flow with good compressions.
- C. Airway management per Pediatric Airway Management SCEMSA Policy; PD# 8837.
- D. Whenever feasible, transport the medical Durable Power of Attorney (DPOA) or immediate family member with the patient to the hospital. DPOA and immediate family members can provide medical insight and consent for special therapies or termination of resuscitation to hospital staff.
- E. The ability to maintain temperature in prehospital settings in pediatric patients is a significant problem with a dose dependent increase in mortality for temperatures below 37°C or 98.6°F. Simple interventions to prevent hypothermia can reduce mortality. During transport warm and maintain normal temperature, being careful to avoid hyperthermia.



## POST RESUSCITATION CONSIDERATIONS:

- A. IV fluids should be placed @TKO unless hypotension is present.
- B. Post-resuscitation Bradycardia, Hypotension and Shock:
  1. See Cardiac Dysrhythmias Protocol
  2. Hypotension/Shock:
    - Administer 20ml/kg fluid bolus. Repeat once. Reassess vital signs and lungs sounds after each bolus.
    - To determine if shock is present, assess capillary refill ( $\leq 2$  seconds) and brachial and femoral pulses (absent, weak, or present).
    - Systolic blood pressure parameters for pediatric patients older than one year can be approximated by the following formulas:
      - a.  $90\text{mm HG} + (2 \times \text{age in years})$
      - b.  $70\text{mm HG} + (2 \times \text{age in years})$  – Lower limit

### **C. Push Dose Epinephrine**

1. 0.01 mg/ml (10mcg/ml)-0.5-2ml (5-20 mcg) IV/IO every 2-5 minutes. Titrate to systolic blood pressure (SBP), for patient's age, improvement of symptoms, or a total of 0.3 mg is given.

NOTE: Monitor SBP while administering/titrating.

**Cross Reference:** PD# 9014 - Pediatric Cardiac Dysrhythmias  
PD# 8837 - Pediatric Airway Management