	COUNTY OF SACRAMENTO EMERGENCY MEDICAL SERVICES AGENCY	Document #	9006.18
	<u>PROGRAM DOCUMENT:</u> PEDIATRIC Cardiac Arrest	Draft Date:	02/24/95
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 EMS Medical Director

 EMS Administrator

Purpose:

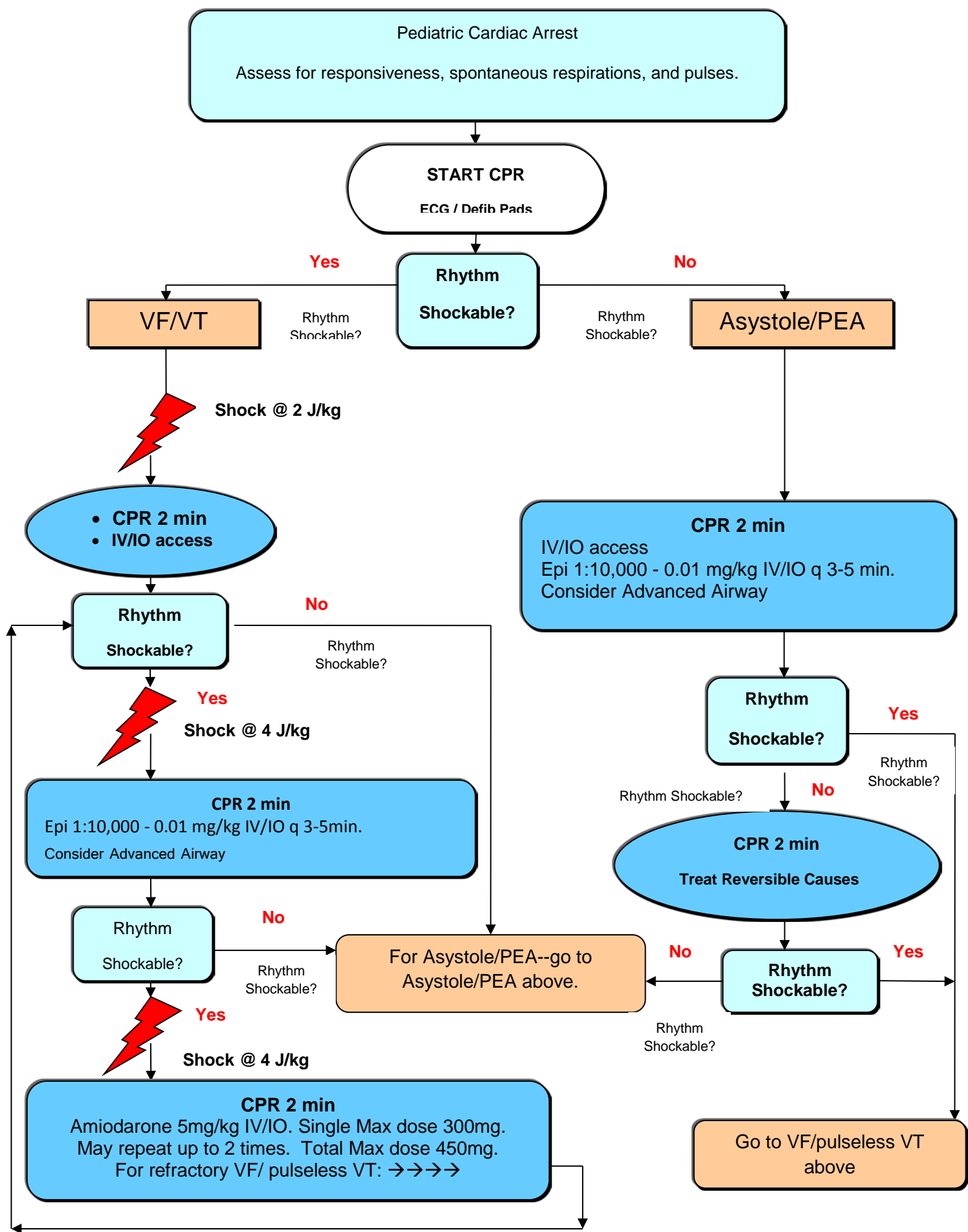
- A. To serve as the treatment standard for EMT's and Paramedics in treating pediatric cardiac arrest patients.
- B. To serve as the pediatric treatment standard for Asystole, Pulseless Electrical Activity (PEA), Ventricular Fibrillation (VF), and Pulseless Ventricular Tachycardia (VT).

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, and perform a pulse check when an organized rhythm is detected, or place an advanced airway.
- 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. ~~Oral Tracheal tube placement should be confirmed with continuous waveform Capnography~~ **Airway management per Pediatric Airway Management Policy; PD# 8837**
- D. Vascular access, drug delivery, and advanced airway placement should not cause significant interruptions in chest compressions or delay defibrillation.



2010 American Heart Association Notes:

- CPR Quality: Push hard ($\geq 1/3$ of A:P diameter of chest) and fast (at least 100 - 120 min) and allow complete chest recoil. Minimize interruptions in compressions. Avoid excessive ventilations. If no advanced airway, 15:2 compression-ventilation ratio. If advanced airway, 8-10 breaths per minute with continuous compressions.
- Advanced Airway: Waveform Capnography to confirm and monitor ET or supraglottic tube placement.
- Reversible Causes: Hypovolemia, Hypoxia, Hydrogen Ion (Acidosis), Hypoglycemia, Hypo/hyperkalemia, Hypothermia, Tension Pneumothorax, Tamponade (Cardiac), Toxins, Thrombosis (Pulmonary), Thrombosis (Coronary).

POST RESUSCITATION CONSIDERATIONS:

1. IV fluids should be placed @TKO unless hypotension is present.
2. Post-resuscitation Bradycardia, Hypotension and Shock:
 - a. ~~Bradycardia, see Bradycardia Protocol~~ See Cardiac Dysrhythmias Protocol
 - b. Hypotension/Shock:
 - (1) Normal saline 20ml/kg, may repeat once, reassess vital signs after each bolus.
 - (2) To determine if shock is present, assess capillary refill (≤ 2 seconds) and brachial and femoral pulses (absent, weak, or present).
 - (3) 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
3. **BASE HOSPITAL ORDER ONLY:**
Dopamine @ 10 mcg/kg/min, if hypotensive

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