	<b>COUNTY OF SACRAMENTO</b> EMERGENCY MEDICAL SERVICES AGENCY	Document #	9014.21
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	<b>PEDIATRIC</b>	Last Approved Date:	11/01/15
	<b>Cardiac Dysrhythmias</b>	Effective Date:	05/01/18
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 EMS Medical Director

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 EMS Administrator

**Purpose:**

- A. To serve as the treatment standard for EMT's and Paramedics in treating pediatric patients with symptomatic bradycardias.
- B. To serve as the treatment standard for EMT's and Paramedics in treating pediatric patients with tachyarrhythmia's with pulses.

**Authority:**

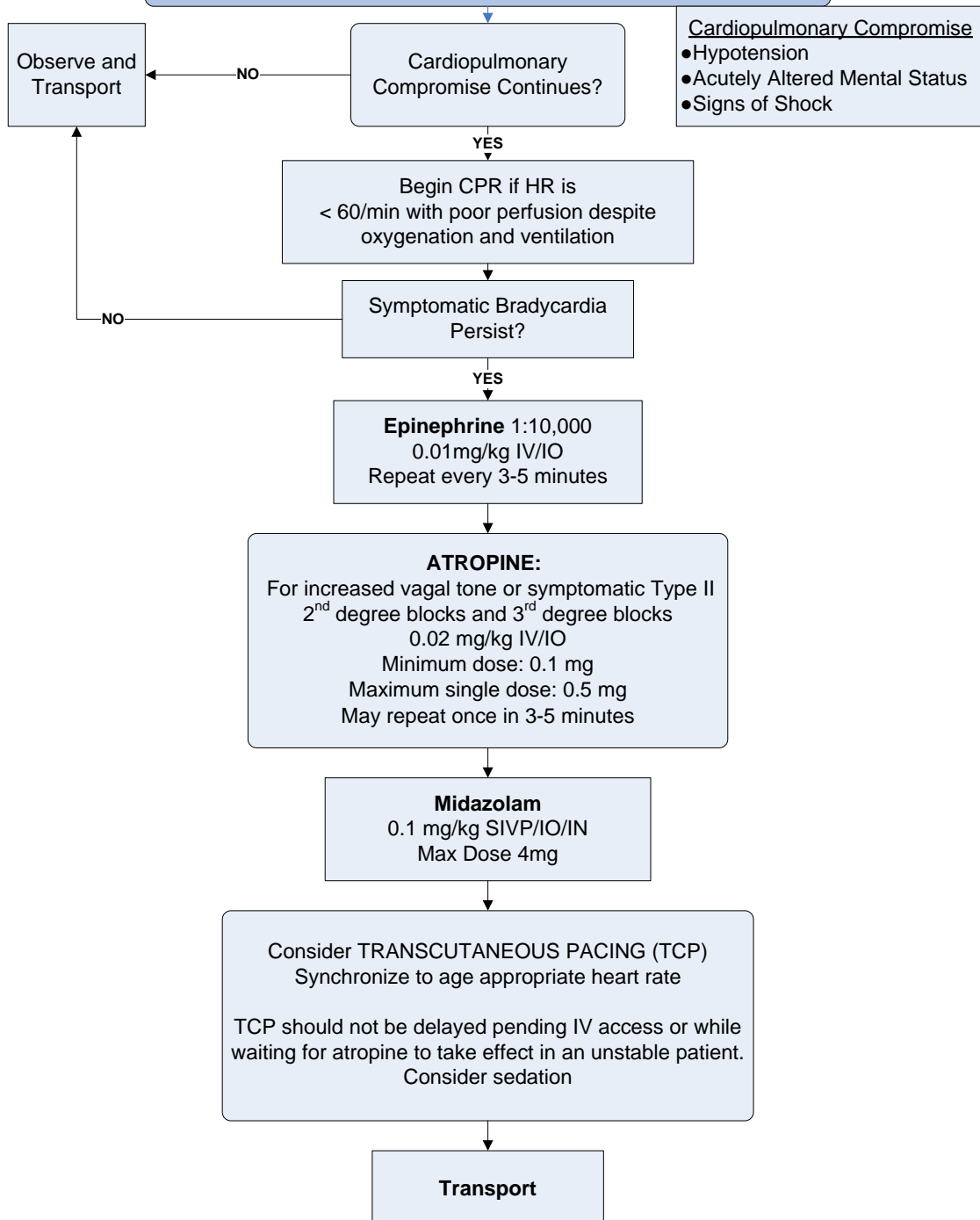
- A. California Health and Safety Code, Division 2.5
- B. California Code of Regulations, Title 22, Division 9

**Protocol:**

- A. Most pediatric bradycardias can be corrected by hyperventilation with 100% oxygen
- B. When Cardiopulmonary Resuscitation (CPR) is indicated, high quality CPR improves survival: "Push hard, push fast, minimize interruptions; allow full chest recoil, and don't hyperventilate"
- C. In the prehospital setting with short transport times, Bag Valve Mask (BVM) ventilation is the method of choice for children who required ventilator support
- D. Symptomatic Brady and Tachy-Dysrhythmias frequently have an underlying cause which should be recognized and treated in addition to any treatment directed at the dysrhythmia itself. It is critically important to determine the cause of the patient's instability in order to properly direct treatment. Search for and treat possible contributing factors (i.e. Hypothermia, Hyperkalemia, Hypovolemia, Hypoxia, Hypoglycemia, Tamponade, Thrombosis, Tension Pneumo, Toxins, Trauma, etc.)

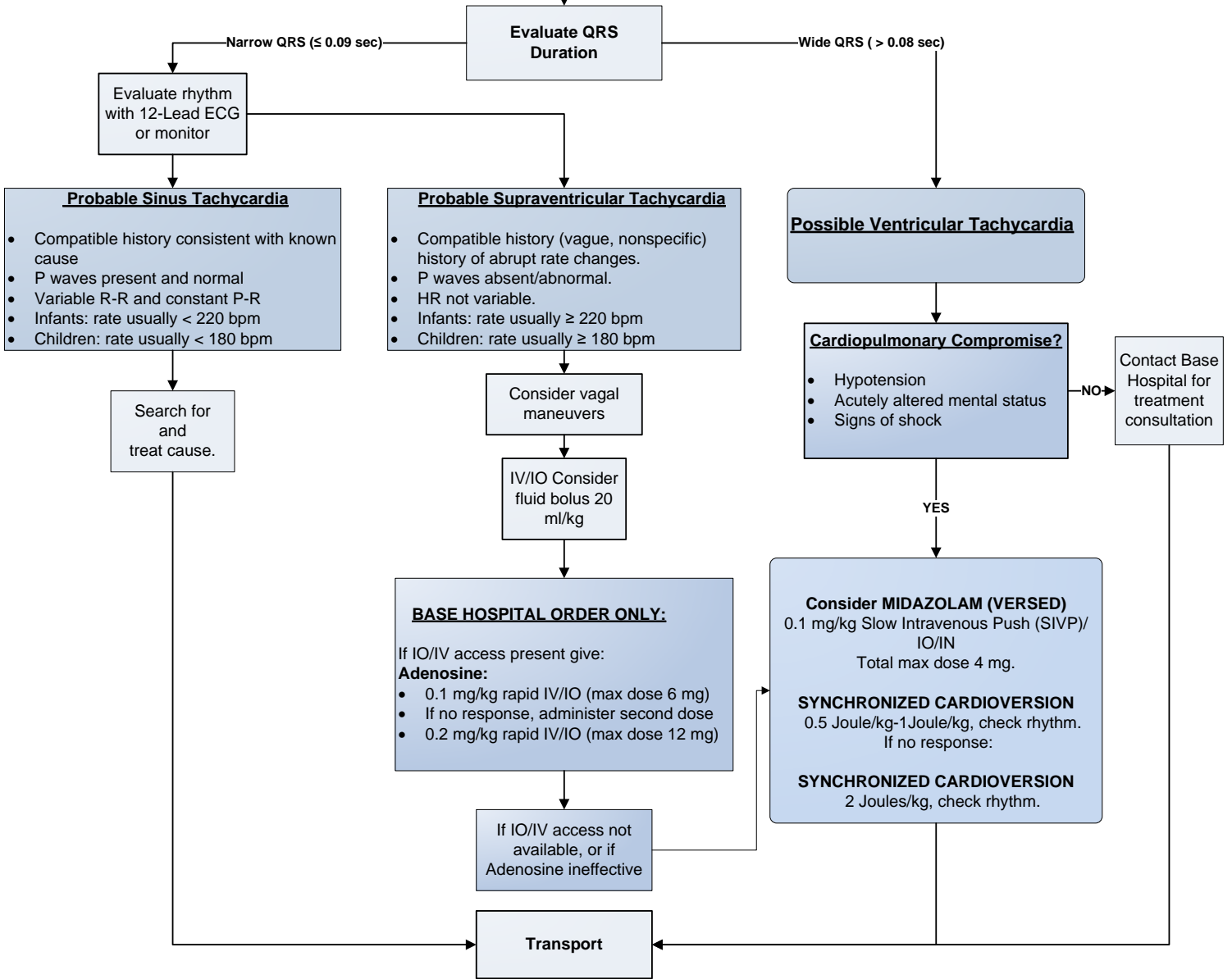
## PEDIATRIC BRADYCARDIA

- Identify and Treat underlying cause.  
→ Hypoxemia → Hypothermia → Head Injury → Heart Block  
→ Toxins/drugs → Beta Blockers or Calcium Channel Blockers
- Maintain patent airway: Assist breathing as necessary.
- Supplemental O<sub>2</sub> as needed to maintain SpO<sub>2</sub> ≥ 94%. Use lowest concentration and flow rate of O<sub>2</sub> as possible.
- Cardiac monitor, monitor B/P and SpO<sub>2</sub> oximetry.
- IV/IO access



**Pediatric Tachycardia with a Pulse and Poor Perfusion**

- Identify and treat underlying causes
- Maintain patent airway: Assist breathing as necessary
- Supplemental O2 as needed to maintain SpO2 ≥ 94%. Use lowest concentration and flow rate of O2 as possible.
- Cardiac monitor to identify rhythm; monitor blood pressure.
- 12-Lead ECG if available; don't delay therapy.
- IV/IO Access.



**Cross Reference:** Pediatric Airway Management, PD# 8837