



POLICY: 555.14  
TITLE: Pediatric Symptomatic Bradycardia

EFFECTIVE: 7/1/2018  
REVIEW: 7/2023  
SUPERCEDES:

APPROVAL SIGNATURES ON FILE IN EMS OFFICE

**PEDIATRIC SYMPTOMATIC BRADYCARDIA**

- 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 EMRs, EMTs, AEMTs and Paramedics within their scope of practice.
- III. PROTOCOL: Most bradycardias in children are due to hypoxia. Bradycardia may also be secondary to sinus node disease, increased parasympathetic tone or drug effects (e.g., digitalis, beta-blockers, or calcium antagonists), hypothermia or head injury. Heart rate is below 60 beats per minute, with associated signs/symptoms of low cardiac output. Never treat any bradycardia if the patient does not have serious symptoms.

**STANDING ORDERS**

<b>ASSESS</b>	CAB
<b>OXYGEN</b>	<b>NOTE:</b> Most bradycardias in children are due to hypoxia.
<b>SECURE AIRWAY</b>	Using the simplest effective method. A BLS airway with objective evidence of good ventilation and oxygenation is adequate and acceptable. Refer to Policy 554.00 – General Protocols.
<b>MONITOR</b>	
<b>IV/IO ACCESS</b>	TKO with microdrip tubing and volume control chamber.
<b>ASSESS</b>	For: 1. Heart rate: less than 80 beats per minute in infants (less than 1 year); less than 60 beats per minute in children (1 - 12 years). AND 2. Signs of poor perfusion (delayed capillary refill, diminished distal pulses, cool extremities, altered level of consciousness) or respiratory distress.
<b>CPR</b>	If heart rate less than 80/minute in infant or less than 60/minute child.
<b>EPINEPHRINE</b>	0.01 mg/kg of 1:10,000 IV/IO. Repeat every 3 minutes until above heart rate target or signs of poor perfusion or respiratory distress have improved.
<b>CONSIDER</b>	
<b>ATROPINE</b>	0.02 mg/kg IV/IO. Minimum dose 0.1 mg. Maximum single dose 0.5 mg. May be repeated once in 3 minutes.