



**Cardiovascular**  
**BRADYCARDIA WITH PULSES - PEDIATRIC**  
**Practice Guideline**

**Patient Care Goals:**

1. Maintain adequate perfusion
2. Restore regular sinus rhythm, correct rhythm disturbance if unstable
3. Search for underlying cause (hypoxia, shock, second or third degree AV block, toxin exposure)

**Patient Presentation:**  
 May present with symptoms such as diaphoresis, dyspnea, chest pain, syncope/near syncope, hemodynamic instability, altered mental status

**Inclusion Criteria**  
 Heart rate <60 in pediatric patients

**Patient Management:**

**Epinephrine:**  
 0.01 mg/kg IV/IO q 3-5 min. Repeat as symptoms persist or decompensate.

**Atropine**  
 0.02 mg/kg (minimum of 0.1 mg single dose, maximum 0.5 mg single dose)

**Transcutaneous pacing (TCP):**  
 Set pacer to fixed mode, Rate 70, output 50mA. Determine electrical capture and mechanical capture (right sided pulses); increase rate by 5 and/or output by 10mA to ensure/maintain capture

**Note:** IV access *not* required prior to TCP  
 Consider IM/IN as bridge prior to IV access

**Sedation or Analgesia PRN stability:**  
 Midazolam 0.1 mg/kg max of 2 mg  
 --OR--  
 Fentanyl 0.5 to 1 mcg/kg max of 100 mcg

**Patient Safety Considerations**  
 If pacing is performed, consider sedation or analgesia  
 Routine use of lights and sirens is not recommended during transport unless hemodynamically unstable

**Quality Improvement:**  
 Key Documentation Elements

1. Heart rate and rhythm changes
2. Interventions
3. Mental status, signs of instability

