



**Cardiovascular**  
**BRADYCARDIA WITH PULSES - ADULT**  
**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 diaphoresis, dyspnea, chest pain, syncope/near syncope, hemodynamic instability, altered mental status

Inclusion Criteria

Heart rate <50 in adults

Exclusion criteria

No specific recommendations

**Patient Management:**

Atropine: 1 mg IV/IO q 3-5 min to max of 3mg.  
 Patients with history of heart transplant will not respond to atropine.  
 Second degree type II and Third degree heart block will likely need TCP; use atropine as bridge to TCP.

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

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 or signs of instability

