



Jackson Hole Fire/EMS Operations Manual

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Title: **Bradycardia with a pulse (Adult)**
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Bradycardia with a pulse (Adult) (Treatment Protocol)

ALS PROVIDERS per Skill level Identify and treat underlying cause

- Assess vitals and rhythm
- Maintain airway/Oxygen sats >94%
- Cardiac monitor to identify rhythm
- HR typically <50/min if

Persistent Bradyarrhythmia causing:

- Hypotension?
- Acutely altered mental status?
- Signs of shock?
- Ischemic Chest discomfort?
- Acute heart failure?

NO

Monitor and observe

YES

Atropine

If Atropine ineffective:

- **Transcutaneous Pacing**
(consider sedation/analgesia)
AND/OR
- **Epinephrine infusion**
- **Norepinephrine infusion**

**Consider Fluid Bolus
NS 250-500ml*

Doses/Details

Atropine IV/IO dose:

- 1.0 mg bolus
- Repeat every 3-5 minutes
- Maximum: 3 mg

Norepinephrine IV/IO Infusion:

- 2-12 mcg/minute

Epinephrine Drip

- 2-10 mcg/min.

Pacing:

- Set rate at 80 bpm
- Increase current until capture

Sedation/Analgesia (if needed):

- Versed 2-4 mg IV/IO/IN
- Fentanyl 25-50 mcg IV/IO/IN

Search for and treat possible contributing factors (H's & T's)

- | | |
|---------------------------|--------------------------------------|
| ✓ Hypovolemia | ✓ Toxins |
| ✓ Hypoxia | ✓ Tamponade, cardiac |
| ✓ Hydrogen Ion (acidosis) | ✓ Tension pneumothorax |
| ✓ Hypo-/hyperkalemia | ✓ Thrombosis (coronary or pulmonary) |
| ✓ Hypoglycemia | ✓ Trauma |
| ✓ Hypothermia | |