

## CARDIAC EMERGENCIES

### Bradycardia C8

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#### BRADYCARDIA: UNSTABLE (SYMPTOMATIC)

*Heart rate less than 60 signs or symptoms of poor perfusion (e.g., acute altered mental status, hypotension, other signs of shock).*

1. Ensure a patent airway
  - **OXYGEN** - high flow. Be prepared to support ventilation as needed.
2. Position of comfort. If decreased level of consciousness, position left lateral decubitus
3. Cardiac monitor - Consider 12-lead ECG if patient not in extremis
4. **IV ACCESS TKO** - if not promptly available, proceed to external cardiac pacing
  - Consider **IO ACCESS** if patient in extremis and unconscious or not responsive to painful stimuli
5. **TRANSCUTANEOUS PACING** - Set rate at 80, start at 10 mA and increase in 10 mA increments until capture is achieved
6. Consider sedation (if pacing urgently needed, sedate after pacing initiated):
  - **MIDAZOLAM** - initial dose 1 mg IV or IO, titrated in 1-2 mg increments (maximum dose 5 mg)
  - **MORPHINE SULFATE** 1-5 mg IV or IO in 1 mg increments for pain relief if BP 90 systolic or greater
7. **ATROPINE** 0.5 mg IV or IO if availability of pacing delayed or pacing ineffective. Will not be effective for wide-QRS second- and third-degree blocks.
8. Transport
9. Consider:
  - Repeat **ATROPINE** 0.5 mg IV or IO every 3-5 minutes to maximum of 3 mg - use with caution in patients with suspected ongoing cardiac ischemia.
  - **FLUID BOLUS** 250-500 ml if clear lung sounds and no respiratory distress
  - **DOPAMINE** infusion beginning at 5 mcg/kg/min if patient not responsive to pacing or atropine (see [Table 1](#))
10. **Contact Base Hospital if any questions or if additional therapy is required**