

Bradycardia Algorithm

1

BRADYCARDIA
Heart rate <60 bpm and
inadequate for clinical condition

2

- Maintain patent **airway**; assist **breathing** as needed
- Give **oxygen**
- Monitor ECG (identify rhythm), blood pressure, oximetry
- Establish IV access

3

Signs or symptoms of poor perfusion caused by the bradycardia?
(eg, acute altered mental status, ongoing chest pain, hypotension or other signs of shock)

4A

Observe/Monitor

**Adequate
Perfusion**

**Poor
Perfusion**

4

- **Prepare for transcutaneous pacing**; use without delay for high-degree block (type II second-degree block or third-degree AV block)
- Consider **atropine** 0.5 mg IV while awaiting pacer. May repeat to a total dose of 3 mg. If ineffective, begin pacing
- Consider **epinephrine** (2 to 10 µg/min) or **dopamine** (2 to 10 µg/kg per minute) infusion while awaiting pacer or if pacing ineffective

5

- Prepare for **transvenous pacing**
- Treat contributing causes
- Consider expert consultation

Reminders

- If pulseless arrest develops, go to Pulseless Arrest Algorithm
- Search for and treat possible contributing factors:
 - Hypovolemia
 - Hypoxia
 - Hydrogen ion (acidosis)
 - Hypo-/hyperkalemia
 - Hypoglycemia
 - Hypothermia
 - Toxins
 - Tamponade, cardiac
 - Tension pneumothorax
 - Thrombosis (coronary or pulmonary)
 - Trauma (hypovolemia, increased ICP)