## **Bradycardia With** a Pulse Algorithm



Assess appropriateness for clinical condition. Heart rate typically < 50/min if bradyarrhythmia. Identify and treat underlying cause Maintain patent airway; assist breathing as necessary\* If the patient is short of breath, administer oxygen Oxygen — if <94%, 90% if ischemia present, or if short of breath Cardiac monitor to identify rhythm; monitor blood pressure and oximetry 12-lead ECG if available; don't delay therapy Persistent bradyarrhythmia causing: Hypotension? **Monitor** Acutely altered mental status? and Signs of shock? observe Ischemic chest discomfort? Acute heart failure? **Atropine IV Dose:** First dose: Atropine 1.0 mg Repeat every 3-5 minutes Maximum: 3 mg If atropine ineffective: Transcutaneous pacing\*\* Dopamine IV infusion: 2–20 mcg/kg per minute OR Epinephrine IV infusion: 2–10 mcg per minute

## **Consider:**

- Expert consultation
- Transvenous pacing

<sup>\*</sup> Dorges V, Wenzel V, Knacke P, Gerlach K, Comparison of different airway management strategies to ventilate apneic, nonpreoxygenated patients. Crit Care Med. 2003;31:800-804

<sup>\*\*</sup> Link MS, Atkins DL, Passman RS, Halperin HR, Samson RA, White RD, Cudnik MT, Berg MD, Kudenchuk PJ, Kerber RE. "Part 6: electrical therapies: automated external defibrillators, defillation, cardioversion, and pacing: 2010 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care". Circulation. 2010; 122(suppl 3):5706-5719. http://circ.ahajournals.org/content/122/18\_suppl\_3/5706