Pediatric Bradycardia With a Pulse Algorithm

Child with bradycardia and a pulse

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Cardiopulmonary compromise?
- Acutely altered mental status
- Signs of shock
- Hypotension

No →

Yes ↓

Assessment and support
- Maintain patent airway and provide oxygen
- Assist breathing with positive-pressure ventilation as necessary
- Attach cardiorespiratory monitor
- Monitor pulse

- Identify and treat underlying causes
  – Support ABCs
  – Consider oxygen
  – Consider 12-lead ECG
- Observe

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Bradycardia persists with cardiopulmonary compromise?

No →

Yes ↓

Start CPR if HR <60
- IV/IO access
- Epinephrine
- Atropine for increased vagal tone or primary AV block

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- Identify and treat underlying causes
- Consider transthoracic/transvenous pacing

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Yes ←

Check pulse every 2 minutes. **Pulse present?**
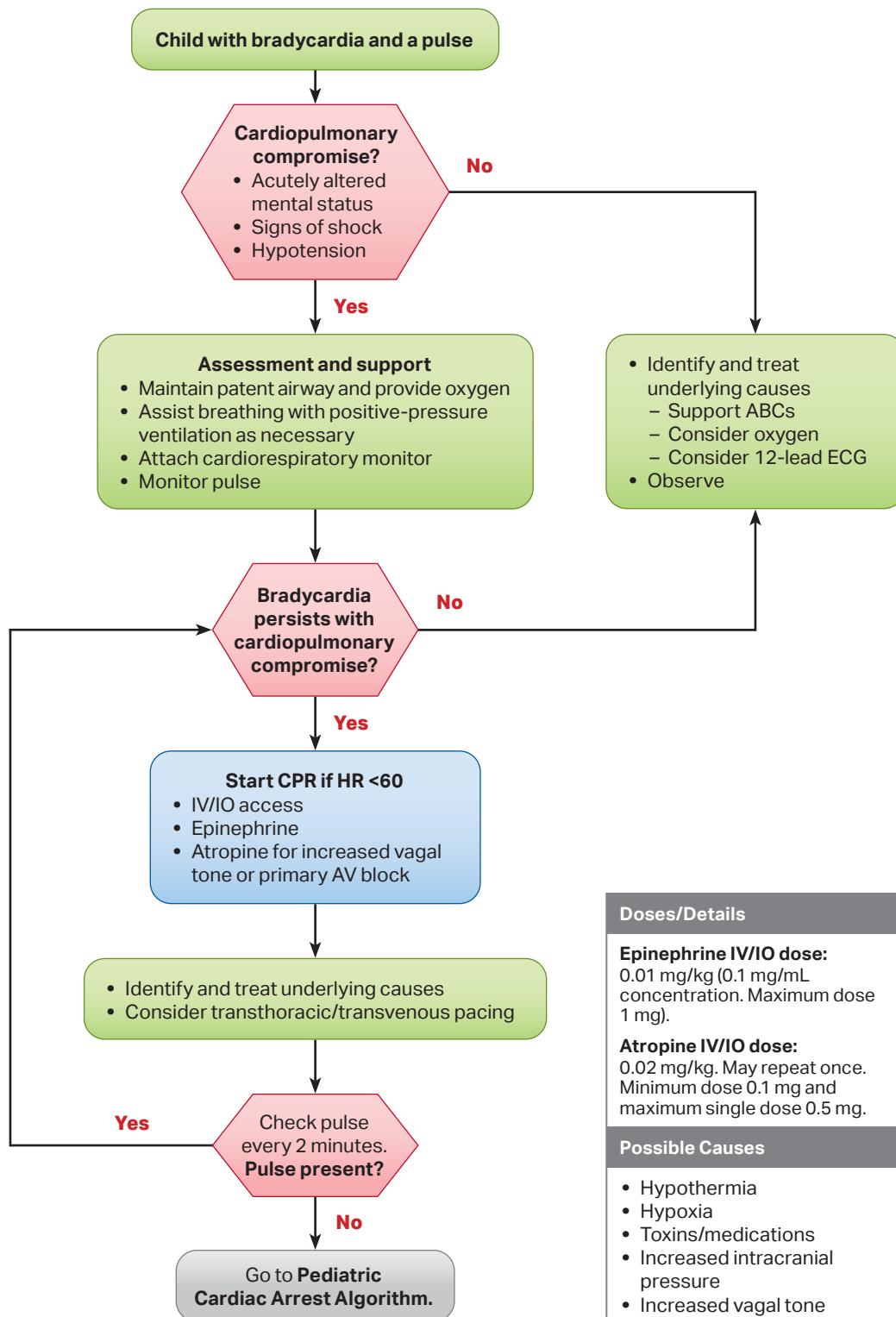
No ↓

Go to **Pediatric Cardiac Arrest Algorithm.**

Doses/Details

Epinephrine IV/IO dose:
0.01 mg/kg (0.1 mg/mL concentration. Maximum dose 1 mg).

Atropine IV/IO dose:
0.02 mg/kg. May repeat once. Minimum dose 0.1 mg and maximum single dose 0.5 mg.

Possible Causes

- Hypothermia
- Hypoxia
- Toxins/medications
- Increased intracranial pressure
- Increased vagal tone
- Heart block
- Physiologic/appropriate