



# Clinical Practice Guidelines: Cardiac/Bradycardia

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<b>Date</b>	April, 2016
<b>Purpose</b>	To ensure consistent management of patients with bradycardia.
<b>Scope</b>	Applies to Queensland Ambulance Service (QAS) clinical staff.
<b>Health care setting</b>	Pre-hospital assessment and treatment.
<b>Population</b>	Applies to all ages unless stated otherwise.
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**Bradycardia** is defined as a heart rate of < 60 bpm in adults and is age dependant in children. However, bradycardia may be considered normal for some patients (e.g. whilst at rest or very fit individuals). Patients with asymptomatic bradycardia rarely require treatment.

Bradycardia can be classified as *cardiac* or *non-cardiac*.

**Cardiac:** associated with a diseased SA node, AV node or His-Purkinje system.

**Non-cardiac:** associated with environmental conditions, metabolic or endocrine disorders and toxicology.

### Common types of bradycardic rhythms include:

- sinus bradycardia
- sick sinus syndrome
- high degree AV block:
  - AV nodal (junctional) escape
  - ventricular escape (usually occurs with 3rd degree AV block)<sup>[1,2]</sup>

### Additional information

- Treatment should be aimed at restoring cardiac output and cerebral perfusion, whilst targeting a heart rate appropriate for the age of the patient.

### Clinical features



- Hypotension (< 90 mmHg systolic)
- Syncope
- ALOC
- Chest pain and/or discomfort (described as burning, pressure or tightness)
- Congestive cardiac failure
- Dyspnoea
- Diaphoresis
- Nausea and/or vomiting
- Dizziness

### Risk Assessment



- Hypoxia is a common cause of bradycardia and initial management should focus on improving oxygenation and ventilation.
- The treatment of non-cardiac bradycardia should always commence with focusing on removing and/or reversing any causative factors.

