



POLICY: 554.04
TITLE: Symptomatic Bradycardia

EFFECTIVE: 9/16/2020
REVIEW: 9/2025
SUPERCEDES:

APPROVAL SIGNATURES ON FILE IN EMS OFFICE

SYMPTOMATIC BRADYCARDIA

- I. AUTHORITY
Health and Safety Code, Division 2.5, California Code of Regulations, Title 22, Division 9
- II. PURPOSE
To serve as a patient treatment standard for EMRs, EMTs, and Paramedics within their scope of practice.
- III. PROTOCOL
Bradycardia may be secondary to sinus node disease, increased parasympathetic tone or drug effects (e.g. digitalis, beta-blockers, or calcium channel blockers). Heart rate is below 50 beats per minute, with associated signs/symptoms of low cardiac output. Never treat any bradycardia if the patient does not have serious symptoms.

EMR STANDING ORDERS

Patient Assessment	Circulation, Airway, Breathing, assess vital signs q 5 minutes and report findings to incoming Advanced Life Support providers
Oxygen Administration	Provide oxygen if appropriate and be prepared to support ventilations with a BVM

EMT STANDING ORDERS

Note	Must perform items in EMR standing orders if applicable
Glucometer	Check blood sugar if patient displays signs of altered mentation
Pulse Oximetry	Report initial reading to paramedic if applicable
Mentation	If Altered Level of Consciousness check blood sugar and refer to 554.31 Altered Level of Consciousness if BGL<60mg/dl

PARAMEDIC STANDING ORDERS	
Note	Must perform items in EMT standing orders if applicable
IV/IO access	TKO. 250ml fluid challenge if systolic BP is <90mm/Hg. Repeat until BP improves
Cardiac monitor	Confirm heart rhythm and obtain 12 lead if time permits
Mentation	For Altered Level of Consciousness, refer to policy 554.31 Altered Level of Consciousness
Fentanyl	50mcg if systolic blood pressure is >90mm/Hg. Do not delay TCP for IV/IO access or pain management if the patient is unconscious
Consider Atropine	0.5-1.0 mg IV/IO push. Repeat every 3 minutes for max. total dose of 3 mg IV/IO. Use as low a dose as possible to reverse symptoms, especially in patients with suspected heart disease
Transcutaneous Pacing	For systolic <90mm/hg related to bradycardic rhythms (HR<50) and with serious signs and symptoms related to heart rate (severe chest pain, shortness of breath, Altered level of consciousness or congestive heart failure). If decreased rate and rhythm, are present, and serious signs and symptoms are exhibited proceed to intervention sequence. Follow manufacturer recommended settings.
Re-assessment	Observe for hemodynamic changes. Monitor patient. If pacer stops, do not make changes, patients heart rate might be above the pacer rate. Maintain current rate. If heart rate drops, the pacer will restart. Record and document vital sign q 5 minutes.

Clinical PEARLS

- Intravenous access is preferred over Intraosseous unless patient is unstable.
- Secure airway with simplest technique, i.e. BLS airway unless unable to manage.
- High index of suspicion in a non-traumatic altered patient.
- The use of capnography is recommended and should be considered during the use of analgesia.