



# Bend Fire & Rescue

## EMS Performance Standards

### Cardiac Pacing – 3.4.3

#### Performance Objective

- To improve cardiac output and tissue perfusion through the electrical capture and control of the heart.

#### Equipment Needed

- PPE
- Cardiac Monitor / Defibrillator (E-Series)
- ECG Electrodes
- Defibrillation Pads
- Sedative

#### Procedure

- Take or verbalize appropriate body substance isolation precautions.
  - Examples: gloves, goggles, mask, gown, etc.
- Evaluate airway / breathing / circulation and determine patient is hemodynamically unstable.
  - Exhibits signs and symptoms of poor systemic perfusion.
- Place ECG leads on patient for cardiac monitoring and confirm significant bradycardia is present.
  - Heart rate less than 50.
  - \*Note: Confirm underlying causes of bradycardia have been considered and reversible causes treated.
- Prepare equipment for transcutaneous cardiac pacing (TCP) and consider medications for treatment and/or sedation.
  - Do not delay pacing in an unstable patient presenting with signs / symptoms of poor perfusion.
  - \*Note: Reference protocol for contraindications.
- Locate appropriate anatomical location and apply defibrillator pads firmly on patient's skin.
- Place cardiac monitor / defibrillator in "PACER" mode and begin capture sequence.
  - Set "PACER RATE" at 60-80 bpm.
  - Increase "PACER OUTPUT" in 20mA increments until electrical capture is obtained.
  - Electrical capture is evident when each ventricular complex consistently and immediately follows a pacer spike.
  - \*Note: Ideally, energy setting should be as low as possible while maintaining electrical capture.
- Confirm mechanical capture.
  - Mechanical capture is evident when a pulse is generated simultaneously with paced complexes.
- Immediately evaluate the effectiveness of TCP through the assessment of patient's condition.
- If not previously provided, administer sedative.
- Continually reassess patient condition.