

EL DORADO COUNTY EMS AGENCY PREHOSPITAL PROTOCOLS

Effective: January 2012

Reviewed: July 2013

Revised: **July 1, 2016, 2018**

Scope: ALS – Adult/Pediatric



EMS Agency Medical Director

BRADYCARDIA

ADULT ALGORITHM

ABCs / ROUTINE MEDICAL CARE - Be prepared to support ventilation with appropriate airway adjuncts and circulation with external chest compressions.

Administer oxygen if indicated at the appropriate flow rate.

Place patient in position of comfort.

Obtain and transmit 12 lead EKG (Do not delay therapy).

PROTOCOL PROCEDURE: Flow of protocol presumes that bradycardia is continuing. If response or condition changes, see appropriate protocol. If at any time a stable patient becomes unstable, go to the unstable section of this protocol. If patient is in severe distress, immediate, rapid transport is preferred with treatment performed enroute.

<p align="center">STABLE HR < 50; SBP > 100; GCS >14; NO SEVERE CHEST PAIN/DYSPNEA</p>	<p align="center">UNSTABLE HR < 50; SBP <100; GCS <14; SEVERE CHEST PAIN/DYSPNEA</p>
<p>Cardiac Monitor</p> <p>↓</p> <p>Establish IV</p> <p>↓</p> <p>Moved to unstable section if condition deteriorates</p>	<p>Consider 2nd IV or IO if difficult access.</p> <p>↓</p> <p>Consider 250 mL Fluid Bolus</p> <p>↓</p> <p>Give Atropine IV/IO: 0.5 mg q 3-5 min (Max 3 mg)</p> <p>↓</p> <p>If Atropine is ineffective or if delay in IV/IO Begin TCP at 80 bpm</p> <p><u>Do not</u> delay if high degree block is present</p> <p>↓</p> <p>Consider pain Management Fentanyl 50mcg <u>slow</u> IV/IO over 2 min Withhold if Systolic BP < 100 mm Hg</p>
	<p align="center">CONTACT BASE</p> <p>Dopamine infusion may be ordered for hypotension. 2-10 µg/kg/min IV/IO. Titrate to patient response. Taper slowly</p>
<p>References: Prehospital Formulary, Transcutaneous Pacing Procedure, 12 Lead EKG Procedure</p>	

PEDIATRIC ALGORITHM

ABCs / ROUTINE MEDICAL CARE - Be prepared to support ventilation with appropriate airway adjuncts and circulation with external chest compressions.

Begin ventilation with BVM if HR < 60; if no improvement in 1 minute begin CPR.

Administer oxygen if indicated at the appropriate flow rate.

Place patient in position of comfort.

Obtain and transmit 12 lead EKG (Do not delay therapy).

PROTOCOL PROCEDURE: Flow of protocol presumes that bradycardia is continuing. If response or condition changes, see appropriate protocol. If at any time a stable patient becomes unstable, go to the unstable section of this protocol. If patient is in severe distress, immediate, rapid transport is preferred with treatment performed enroute.

STABLE NO HYPOTENSION, NO DELAYED CRT, NO SEVERE CHEST PAIN/DYSPNEA	UNSTABLE ALOC, HYPOTENSION, DELAYED CRT, SEVERE CHEST PAIN/DYSPNEA
<p style="text-align: center;">Cardiac Monitor</p> <p style="text-align: center;">↓</p> <p style="text-align: center;">Establish IV</p> <p style="text-align: center;">↓</p> <p style="text-align: center;">Moved to unstable section if condition deteriorates</p>	<p>Begin Ventilation with BVM if HR<60; if no improvement in 1 minute begin CPR</p> <p style="padding-left: 40px;">If HR < 60 Perform CPR</p> <p style="text-align: center;">↓</p> <p style="padding-left: 40px;">Consider 2nd IV or IO if difficult access.</p> <p style="text-align: center;">↓</p> <p style="padding-left: 40px;">Give Epinephrine 0.01 mg/kg IV/IO 1:10,000 = 0.1 mL/kg Repeat every 3 – 5 min.</p> <p style="text-align: center;">↓</p> <p style="padding-left: 40px;">If increased vagal tone or primary AV block: Give Atropine 0.02 mg/kg IV/IO May repeat dose once in 5 min. Minimum dose 0.1mg. Max. total dose of 1 mg.</p> <p style="text-align: center;">↓</p> <p style="padding-left: 40px;">Consider TCP at 80 bpm</p> <p>Do Not delay if high degree block is present Consider pain management if BP adequate Fentanyl 1mcg/kg <u>slow</u> IV/IO over 2 min (Max individual dose of 50mcg) May repeat every 5minutes to a max total dose of 200mcg.</p> <p style="text-align: center;">↓</p> <p style="padding-left: 40px;">Treat underlying causes</p> <p style="text-align: center;">↓</p> <p style="padding-left: 40px;">Contact Base: if pt <2y/o or for dosing above 200mcg *Intranasal= give ½ of dose per nostril.</p>

References: Prehospital Formulary, Transcutaneous Pacing Procedure, 12 Lead EKG Procedure