

# EL DORADO COUNTY EMS AGENCY PREHOSPITAL PROTOCOLS

109

Effective: July 1, 2016  
Revised: March 2025

(on file)

EMS Agency Medical Director

## SEPSIS - ADULT

**PROTOCOL PROCEDURE:** Flow of protocol presumes that condition is continuing. Immediate, rapid transport is preferred with treatment performed en route.

### Basic Life Support

EMT

#### ABCs / ROUTINE MEDICAL CARE -

- Assess airway and support ventilation with appropriate airway adjuncts as indicated
- HP-CPR as indicated
- Apply oxygen if pulse oximetry <94% or signs of hypoperfusion or respiratory distress

Quick Sequential Organ Failure Assessment (**qSOFA**) Scoring:

<b>qSOFA Criteria</b>	<b>Points</b>
<b>RESPIRATORY RATE &gt;20</b>	1
<b>CHANGE IN MENTAL STATUS</b>	1
<b>SBP &lt; 100 mmHg</b>	1

If history is suggestive of infection and qSOFA score is 2 or greater, sepsis should be suspected.

**ETCO<sub>2</sub>**- A low reading of <25 with corresponding 2 or more qSOFA indications can indicate sepsis.

### LOSOP

EMT working under Local Optional Scope

**GLUCOSE LEVEL ASSESSMENT** – Via finger stick and treat if indicated.

## Advanced Life Support

### Paramedic

**GLUCOSE LEVEL ASSESSMENT** - Via venipuncture or finger stick. Consider confirming test results with second glucose check with blood from a different site (and different meter, if available) if the patient's presentation doesn't match the test results.

**VASCULAR ACCESS** - Establish a large bore IV via blood administration or macro drip tubing. Or establish IO if unable to establish IV. Consider a second IV if time and symptoms dictate.

**NORMAL SALINE –**

- 1000 mL fluid bolus
- Repeat fluid bolus of 500-1000 ml to a max of 30ml/kg
- If SBP remains <100 after receiving 30mL/kg total, call base hospital

**Do not** withhold fluid boluses even in the presence of "wet lungs".

**FOR HYPOTENSION REFRACTORY TO FLUID ADMINISTRATION**

**EPINEPHRINE (Push-Dose):**

- **2mL (20mcg)** IVP every 2-5 minutes, carefully monitoring BP
- May reduce subsequent doses by half (**1mL or 10mcg**) to effect.

See EPINEPHRINE DILUTION field procedure for diluting 1mL of 1:10,000 in 9mL normal saline, to create 10 mL Epi 1:100,000

**NOTE:** The initial treatment of Sepsis involves maximizing perfusion with intravenous fluid boluses, not vasopressors.

## **SEPSIS – PEDIATRIC**

**PROTOCOL PROCEDURE:** Flow of protocol presumes that condition is continuing. Immediate, rapid transport is preferred with treatment performed en route.

### **Basic Life Support**

**EMT**

#### **ABCs / ROUTINE MEDICAL CARE –**

- Assess airway and support ventilation with appropriate airway adjuncts as indicated
- HP-CPR as indicated
- Apply oxygen if pulse oximetry <94% or signs of hypoperfusion or respiratory distress
- Assess perfusion with vital signs, capillary refill, and skin signs. Also assess mental status as abnormal responsiveness indicates poor perfusion.
- If fever present without signs of poor perfusion or sepsis, perform passive cooling measures

If history is suggestive of infection and patient has signs of poor perfusion, sepsis should be suspected.

**ETCO<sub>2</sub>**- A low reading of <25 with can indicate sepsis.

### **LOSOP**

**EMT working under Local Optional Scope**

**GLUCOSE LEVEL ASSESSMENT** – Via finger stick and treat if indicated.

### **Advanced Life Support**

**Paramedic**

**GLUCOSE LEVEL ASSESSMENT** - Via venipuncture or finger stick. Consider confirming test results with second glucose check with blood from a different site (and different meter, if available) if the patient's presentation doesn't match the test results.

**VASCULAR ACCESS** - Establish an IV or an IO if unable to establish IV.

#### **NORMAL SALINE –**

- 20 mL/kg rapid bolus. Reassess lungs after every bolus.

**CONTINUED**

- Repeat fluid bolus unless signs of fluid overload for signs of poor perfusion. Max: 60 ml/kg.

FOR HYPOTENSION REFRACTORY TO FLUID ADMINISTRATION

<b>EPINEPHRINE 1:100,000 (push dose):</b>	
<b>&lt;20 kg</b> <b>0.1mL/kg</b> (1 mcg/kg) <ul style="list-style-type: none"><li>• Slow IVP (over 2-5 min), titrated to effect.</li><li>• May reduce to 0.05mL/kg</li><li>• Push <b>slowly</b> and carefully monitor BP.</li></ul>	<b>&gt;20 kg</b> <b>2 mL</b> (20 mcg) <ul style="list-style-type: none"><li>• Slow IVP (over 2-5 min), titrated to effect.</li><li>• May reduce to 1mL</li><li>• Push <b>slowly</b> and carefully monitor BP.</li></ul>
See EPINEPHRINE DILUTION field procedure for diluting 1mL of 1:10,000 in 9mL normal saline to create 10 mL Epi 1:100,000	