

# EL DORADO COUNTY EMS AGENCY

## PREHOSPITAL PROTOCOLS

Effective: July 1, 2016

Reviewed: N/A

Revised: **September 2022**

Scope: BLS/ALS – Adult

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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:

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

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, call base hospital

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

#### FOR HYPOTENSION REFRACTORY TO FLUID ADMINISTRATION

##### **EPINEPHRINE (push dose):**

- Mix 1mL of Epi 1:10,000 (0.1mg/mL) with 9 mL of NaCl 0.9% to make a concentration of 1:100,000 (0.01mg/mL)
- Label syringe “epi 10 mcg/mL”
- 0.5-1 mL (5-10mcg) IVP every 1-5 minutes

Consider **EPINEPHRINE** gtt per formulary guidelines

**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.
- Repeat fluid bolus unless signs of fluid overload for signs of poor perfusion up to 60 ml/kg.

FOR HYPOTENSION REFRACTORY TO FLUID ADMINISTRATION

### **EPINEPHRINE (push dose):**

- Draw-up patient's 0.01 mg/kg code dose of 1:10,000 (0.1mg/mL) epi
- In the same syringe draw the necessary quantity of NaCl 0.9% to total 10 mL
- Label the syringe with "epi" and the calculated concentration in mcg/mL
- Give 1 mL every 1-5 minutes (which is 1mcg/kg) and titrate to age-appropriate SBP

Consider **EPINEPHRINE** gtt per formulary guidelines