



# Sepsis Adult Medical

**Austin County**  
EMS Protocol & Guideline

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Medical Director: Benjamin Oei, M.D.

**Overview:** In severe sepsis, the body's response to an infection (bacterial, fungal, viral or parasitic) causes the balance between inflammatory and anti-inflammatory chemical responses and becomes mismatched. A massive release of pro-inflammatory mediators creates an uncontrolled inflammatory response. This systemic inflammatory response is known as SIRS (systemic inflammatory response syndrome).

**Definition:** Patients who present with findings indicating a systemic infection. These indications are not isolated to the febrile state of the patient. Septic patients may present hyper-hypo-and even normal-thermic. Trending VS with a thorough history and physical will largely indicate the patient's septic status

## EMT

- **Oxygen** administration as appropriate to the patient presentation, SPO2 must be maintained greater than 94%
- **Airway Adjuncts** (Supraglottic Airway, OPA, NPA), EtCO2 monitoring appropriate to patient presentation
- **High Flow Oxygen** – Consider **CPAP** for patients with moderate to severe associated respiratory distress/crackles
- Obtain **BGL**
- 12 Lead ECG acquisition
- **Acetaminophen:** 960 mg PO or rectal for fever greater than 100 degrees

## AEMT

- **IV's**, 18g if possible. **IO** if Unable to obtain IV and appropriate to patient presentation
- **Normal Saline bolus**, 20ml/kg in first 20 min (goal).
  - **Re-bolus:** 20 ml/kg titrated to patient presentation

## Paramedic

### Blood Pressure Control – if applicable

- **Epinephrine IV infusion**, 1 mg of **1:10;000-Epinephrine** in a 100 NS bag - titrated to maintain BP 90 mmHg or greater
- **Or**
- **Dopamine 5 to 20 mcg/kg/min** titrated to maintain systolic BP 90 mmHg or greater
- Refer to **RSI** protocol as indicated by patient presentation

### \*\*\*Septic Shock\*\*\*

#### 1. Suspected Infection

#### 2. Signs of Hypoperfusion, such as AMS, Mottled or Cool Extremities

#### 3. SIRS or Systemic Inflammatory Response Syndrome, look for 2 or more of the following criteria

- HR >100-110
- Respiratory Rate >24
- Temp > 100.4 or < 96.8
- End Tidal CO2 >35

### Hospital Notification

Ensure to state "Septic Patient" to the Charge Nurse or Nurse

### PEARLS

- Patients presenting with sepsis have a high morbidity and mortality rate, especially with increased age and/or co-morbidities. Early recognition and treatment of these patients is key to improving patient outcomes. EMS focus is on aggressive fluid administration and maintaining Oxygenation.
- Fluid administration should not routinely be withheld from patients presenting with pulmonary edema. Managing patients with significant preexisting pulmonary edema with CPAP and/or RSI with PEEP in conjunction with fluid administration is acceptable.
- Septic patients often require 60 ml/kg (or more) of fluid administration in the first hour of initiating treatment.
- Prevent hypothermia by keeping cool patients warm, and inversely, passively treat hyperthermic patients by removing clothing/uncovering.
- ~60% of septic patients will, at some point, require the use of vasopressors. If a vasopressor is needed, use in conjunction with fluid resuscitation.
- "Typical" signs and symptoms of sepsis may not present progressively, especially in aggressive development of sepsis. These cases can be described as "gross onset of symptoms without explanation" (general weakness, tachycardia, tachypneic, hypotensive). Monitor and assess closely for **atypical** manifestation of sepsis.
- **Ketamine** is the preferred RSI sedation drug over Etomidate.