

COUNTY OF SACRAMENTO EMERGENCY MEDICAL SERVICES AGENCY	Document #	8067.04
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Sepsis/Septic Shock	Last Approval Date:	09/10/20
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Signature on File	Signature on File	
EMS Medical Director	EMS Administrator	

# Purpose:

A. To establish the treatment standard for treating patients with signs and symptoms of Sepsis.

# **Authority:**

- A. California Health and Safety Code, Division 2.5
- B. California Code of Regulations, Title 22, Division 9

#### **Definitions:**

# A. Systemic Inflammatory Response Syndrome (SIRS):

A generalized inflammatory response to a non-specific injury and includes at least 2 of the following criteria;

- 1. Body temperature of >38 C (100.4 F) or <36 C (96.8F).
- 2. Respiratory rate >20 breaths per minute.
- 3. Heart rate >90 bpm.

### B. Sepsis:

Sepsis can be a rapidly progressing, life threatening condition due to SIRS (systemic infection). Sepsis must be recognized early and treated aggressively to prevent progression to shock and death. The most important pre-hospital interventions for SIRS/Sepsis patients include:

- 1. Recognition of potential SIRS/SEPSIS
- 2. Early and aggressive fluid resuscitation
- 3. Pre-arrival "Sepsis Alert" notification to receiving facility.

### Indications:

- A. Treatment interventions and pre-arrival notification shall occur for patients meeting BOTH of the following pre-hospital sepsis criteria:
  - 1. Confirmed or suspected presence of infection:
    - a. By history from patient, family or care home.
    - b. By signs or symptoms of urinary tract infection, respiratory infection, or skin infection.
    - c. Older Adults or immune compromised patients with otherwise unexplained ALOC and no findings to suggest acute STROKE (see stroke protocol),

#### AND

- 2. Any two (2) of the following criteria:
  - a. Temperature of >38 °C (100.4 °F) or <36 °C (96.8 °F) (Acquired by EMS or if reported by patient, family, or care home).
  - b. Respiratory rate >20 breaths per minute.
  - c. Heart rate >90 bpm.
  - d. SBP<90 mmHg
  - e. Waveform capnography, if available, with a reading of < 25mmHg

#### Protocol:

## **BLS**

- 1. Use Supplemental oxygen as necessary to maintain Sp02 ≥ 94%. Use lowest concentration and flow rate of 02 as possible.
- 2. Conduct a pre-arrival "Sepsis Alert" notification to the receiving facility.
- 3. Transport

### ALS

- 1. Cardiac Monitoring
- 2. Establish vascular access.
  - Administer a 500 ml bolus of NS to ALL patients.
  - If SBP ≤ 90 mmHG, repeat 500 ml bolus of NS until SBP ≥ 90 mmHG. Total amount of fluid should not exceed 2000 ml. Recheck vital signs and lung sounds after every 500 ml bolus.
  - Give boluses in rapid succession if SBP remains < 90.
  - Albuterol if wheezing and SOB per Respiratory Distress policy # 8026.
- 3. If SBP remains <90 mmHg after four (4) fluid boluses:
  - Push Dose Epinephrine 0.01 mg/ml (10mcg/ml).

DOSE: 0.5-2 ml (5-20mcg) every 2-5 minutes (5-20mcg) IV/IO

Titrate to SBP > 90

NOTE: Monitor SBP while administering/titrating.

Cross Reference: PD #8020 - Respiratory Distress: Airway Management

PD #8026 - Respiratory Distress

PD #8038 - Shock

PD #8061 - Decreased Sensorium