San Mateo County Emergency Medical Services

**Sepsis**

For patients with suspected sepsis (i.e., signs suggestive of sepsis including fever, tachycardia, suspected infection)

**History**
- Age (common in elderly and very young)
- Presence and duration of fever
- Previously documented infection or illness (UTI, pneumonia, meningitis, encephalitis, cellulitis, or abscess)
- Recent surgery or invasive procedure
- Immunocompromised
- Bedridden or immobile patients
- Prosthetic or indwelling devices
- Immunization status

**Signs and Symptoms**
- Hyper or hypothermia
- Rash or excessive bruising
- Chills
- Myalgia
- Markedly decreased urine output
- AMS
- Delayed capillary refill
- Hypo/Hyperglycemia

**Differential**
- Shock (hypovolemic or cardiogenic)
- Dehydration
- Hyperthyroidism
- Hypothyroidism
- Medication or drug interaction
- Non-septic infection
- Allergic reaction or anaphylaxis
- Toxicological emergency
- Hyperthermia/heat stroke
- DKA/HHS

**Pearls**
- Early recognition of sepsis allows for attentive care and early administration of antibiotics.
- Aggressive IV fluid therapy is the most important prehospital treatment for sepsis. Suspected sepsis patients should receive repeated fluid boluses (to a Maximum of 2L) while being checked frequently for signs of pulmonary edema, especially in patients with a known history of CHF or ESRD on dialysis. STOP fluid administration in the setting of pulmonary edema.
- Attempt to identify source of infection (e.g., skin, respiratory, etc.).

**Treatment Protocol**

1. Obvious or suspected infection AND any TWO of the following criteria:
   - \( \text{EtCO}_2 \leq 25 \)
   - AMS with GCS \( \leq 13 \)
   - Systolic blood pressure \( \leq 100\text{mmHg} \)

2. Consider appropriate PPE and infection control measures
   - Temperature measurement
   - Blood glucose
   - Establish IV/IO
   - Cardiac monitor
   - \( \text{EtCO}_2 \) monitoring, if available

3. Normal Saline bolus 500ml IV/IO
   - Reassess patient for criteria above
   - Repeat 500ml bolus to a Maximum 2L as long as criteria above exists, unless concern for fluid overload
   - *See Pearls*

4. Notify receiving facility.
   - Consider Base Hospital for medical direction

Effective November 2018

Effective April 2020