



# Sepsis and Septic Shock

## Assessment

### Pediatric Pearls:

- Use pediatric dosing of medications or electrical therapy for a pediatric patient < 37 kg and as defined by the PEDIA Tape.
- Pediatric hypotension is defined as SBP < 70 + (age in years x 2) mmHg

### Signs & Symptoms:

- Trigger for sepsis guideline:
  - Known or suspected infection -and-
  - EtCO<sub>2</sub> < 32 or > 45
- AND 2 or more of the following:
  - Temp < 96.8 F or > 100.4 F
  - Heart rate > 95
  - SBP < 100
  - Respiratory rate > 20
  - Altered Mental Status

### Differential:

- Arrhythmia
- Pulmonary embolism
- Anaphylaxis
- Drug intoxication
- Heat stroke
- Hypothermia
- Hypoglycemia
- Dehydration
- Stroke

## Clinical Management Options

P	P	P	P	P	P
L	L	L	L	L	L
1	2	3	4	5	6

- [Oxygen](#)
  - [BGL](#) assessment
  - Keep patient warm
  - Treat wheezing, hypoxia, dyspnea, and pain as appropriate per COGs
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- 4 and [12 lead ECG](#)
  - [EtCO<sub>2</sub>](#)
  - [Acetaminophen](#)
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- Vascular access
  - [Isotonic Crystalloid](#) fluid challenge:
    - Adult: 30 ml/kg
    - Pediatric: 20 ml/kg
    - Newborn: 10 ml/kg
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- Monitoring and interpretation of ECG & EtCO<sub>2</sub>
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- [Norepinephrine](#) infusion, titrate to MAP > 65 if not responsive to IV fluid
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- Ceftriaxone or Cefepime for severe sepsis or septic shock

## Consult Online Medical Control As Needed

### Pearls:

- Refer to drug formulary charts for all medication dosing for both adults and pediatric patients.
- Early septic patients often become hypothermic instead of developing fevers.
- Hypoglycemia is not uncommon in patients with sepsis, particularly those on beta blockers.
- Sinus tachycardia may be misinterpreted as SVT or A-fib. Sinus tachycardia > 150 bpm in the adult patient or > 180 in the pediatric patient may be seen with sepsis.