**Shock** is a state of decreased tissue oxygenation. Significant vital organ hypoperfusion may be present without hypotension. Home medications and/or comorbidities may also limit development of tachycardia.

**Goal** is to maximize oxygen delivery with supplemental oxygen and assisted ventilations (if needed), and to maximize perfusion with IV fluids.

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**Septic Shock**

Defined by:

1. Presence of Systemic Inflammatory Response Syndrome (SIRS)  
   AND

2. Suspected infection  
   AND

3. Signs of hypoperfusion (hypotension or elevated venous lactate)

**PEDS SIRS criteria:**

Positive if two of T, HR or RR

Temp > 100.4°F or < 96.8°F

<table>
<thead>
<tr>
<th>Age</th>
<th>HR</th>
<th>RR</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 2</td>
<td>&gt;180</td>
<td>&gt;35</td>
</tr>
<tr>
<td>2-5</td>
<td>&gt;140</td>
<td>&gt;30</td>
</tr>
<tr>
<td>6-12</td>
<td>&gt;130</td>
<td>&gt;20</td>
</tr>
</tbody>
</table>

The initial treatment of septic shock involves maximizing perfusion with IVF boluses, not vasopressors.

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**6110 PEDIATRIC MEDICAL HYPOTENSION / SHOCK GUIDELINE**

- SBP < 70 + 2 x age in years AND/OR signs of poor perfusion
  - ABCs
  - Complete set of vital signs
  - Full monitoring
  - O₂ via NRB facemask @ 15L/min
  - IV access
  - ALS transport

**Signs of poor perfusion?**

- Altered mental status
- Tachycardia
- Cool, clammy skin
- Venous lactate > 4 (see below)

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**Life-threatening brady or tachydysrrhythmia?**

- Yes
  - Treat according to appropriate protocol

- No
  - Repeat 20cc/kg boluses, reassessing for pulmonary edema, up to 3 boluses total or until goal of SBP > 70 + 2 x age in years mmHg and signs adequate perfusion

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For ongoing hypotension, poor perfusion or pulmonary edema, contact base for dopamine drip

If patient at risk for adrenal insufficiency, see Adrenal Insufficiency guideline

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Consider the etiology of your patient’s shock state, which may have specific treatments, e.g.:

- Sepsis
- Hemorrhage
- Anaphylaxis
- Overdose
- Cyanide or carbon monoxide poisoning
- Other: PE, MI, tension pneumothorax