

Shock / Sepsis (Pediatric)**CFR AND ALL PROVIDER LEVELS**

1. ABCs and vital signs.
2. Airway management.
3. Administer high concentration oxygen.
4. Control external bleeding. See the Bleeding / Hemorrhage Control / Impaled object (Adult and Pediatric) protocol.
5. Keep the child warm.
6. Elevate the legs.
7. Treat all injuries as appropriate.

● CFR STOP**EMT**

8. Request ALS assistance.
9. Transport, keeping the child warm.

● EMT STOP**Paramedic**

For pediatric patients in decompensated shock:

10. If signs of hemorrhage or dehydration are not present, Begin cardiac monitoring.
 - a. For patients in Supraventricular Tachycardia or Ventricular Tachycardia with a pulse and with evidence of low cardiac output, proceed to Medical Control Options.
11. During transport, or if transport is delayed:
 - a. Intravascular access. (Attempt IV access no more than twice.)
 - b. Crystalloid fluid, 20 ml/kg, via a large bore IV catheter.
 - c. If signs of hemorrhage or dehydration are present, and the patient remains in decompensated shock, continue rapid infusion of crystalloid fluid, up to an additional 20 ml/kg (total of 40 ml/kg) via a second large bore catheter.

● Paramedic STOP**Medical Control Options**

For patients still remaining in decompensated shock:

1. If signs of hemorrhage or dehydration are still present, continue rapid infusion of crystalloid fluid, up to an additional 20 ml/kg (total of 60 ml/kg).
2. If in Supraventricular Tachycardia or Ventricular Tachycardia with a pulse, with evidence of low cardiac output, and the Defibrillator is able to deliver calculated dose:
 - a. Perform Synchronized cardioversion at 0.5 mg - 1 joule/kg, using pads of appropriate size.
 - b. If this fails to convert the dysrhythmia, Synchronized Cardioversion may be repeated at 1 - 2 joules/kg, using pads of appropriate size.
 - c. **DO NOT** perform synchronized cardioversion in pediatric patients with Supraventricular Tachycardia or Ventricular Tachycardia with a pulse unless the defibrillator is able to deliver calculated dose.

3. If in Supraventricular Tachycardia with evidence of low cardiac output, but the Defibrillator is not able to deliver calculated dose:
 - a. Administer Adenosine 0.1 mg/kg IV bolus (maximum initial dose 6 mg), rapidly, followed by 2 - 3 ml of crystalloid fluid flush.
 - b. Observe EKG monitor for 1-2 minutes for evidence of synchronized cardioversion.
 - c. If there is no change, administer Adenosine 0.2 mg/kg IV bolus (maximum dose 12 mg), rapidly, followed by 2 - 3 ml of crystalloid fluid flush.
 - d. If there is no change, repeat Adenosine 0.2 mg/kg IV bolus (maximum dose 12 mg), rapidly, followed by 2 - 3 ml of crystalloid fluid flush.

Key Points / Considerations

1. High concentration oxygen should always be used in pediatric patients.
2. Refer all weight-based fluids/medications to a Length Based Dosing Device.

CRITERIA FOR SEVERE SEPSIS / SEPTIC SHOCK

1. Patients with at least one (1) symptom from each of the following categories, without evidence of shock from cardiac or traumatic etiologies:
 - a. Abnormal temperature
 - i. Skin: Tactile fever/hypothermia
OR
 - ii. Temperature > 100.4°F (38° C), if thermometer is available
 - b. Elevated vital signs
 - i. High heart rate (age dependent)
OR
 - ii. High respiratory rate (age dependent)
 - c. Any of the following signs and symptoms
 - i. Poor perfusion (capillary refill > 3 seconds, decreased peripheral pulses, distal extremity [hands/feet] coolness and dusky color, or age-dependent hypotension)
OR
 - ii. Need for oxygen
OR
 - iii. Altered mental status (lethargy, irritability)
OR
 - iv. Point of care lactate > 4 mmol/L