

HEALTHEAST MEDICAL TRANSPORTATION MEDICAL OPERATIONS MANUAL

3I SEPSIS/SEPTIC SHOCK

PATIENT CARE GOALS

- Identify and treat or rule out potential mechanisms of shock and other life threats, and maintain adequate oxygenation, ventilation, and perfusion. ¹
- Continue therapies initiated by transferring facilities, as appropriate. ^{2,4}

EMT

1. Assess the patient and provide initial care, including oxygen and vascular access, per **1B General Assessment and Care**. Oxygen administration should be high flow oxygen via non-rebreather at 10 to 15 liters per minute.

PARAMEDIC

ADULT	PEDIATRIC (less than 60 kg)
<ol style="list-style-type: none"> 2. For hypotension, start at least 2 large bore IV/IO lines. Administer 20 mL/kg normal saline bolus. Repeat to maintain a MAP greater than 65 mmHg. 3. If the patient is tachypneic (respiratory rate greater than 30), consider intubation to reduce metabolic demand. 4. If there is inadequate improvement in blood pressure after infusion of 40 mL/kg IV fluids, administer norepinephrine (Levophed) infusion starting at 0.1 mcg/kg/min. Titrate up to 0.5 mcg/kg/min to achieve MAP of 65 mmHg or greater. ³ 5. On interfacility transfers, follow physician orders for administration of antibiotics or other specific treatments within scope of practice. Contact Medical Control as needed. ⁴ 	<ol style="list-style-type: none"> 2. For hypotension, start at least 2 large bore IV/IO lines. Administer normal saline bolus as per Handtevy Pediatric Guidelines. ⁵ Repeat to maintain MAP at 65 mmHg. 3. If the patient is tachypneic (respiratory rate greater than 60 for patient's less than 5 years of age), consider intubation to reduce metabolic demand. 4. If there is inadequate improvement in blood pressure after infusion of 40 mL/kg IV fluids, administer norepinephrine (Levophed) infusion starting at 0.1/mcg/kg/min. Titrate up to 0.5mcg/kg/min to maintain a systolic blood pressure of 100 mmHg. ³ 5. On interfacility transfers, follow physician orders for administration of antibiotics or other specific treatments within scope of practice. Contact Medical Control as needed. ⁴

DOCUMENTATION KEY POINTS

- Patient history and assessment findings indicative of sepsis/septic shock, including recent illness, history of exposure to infection, and history of immunosuppression and other pertinent factors.

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- On interfacility transfers, identification of the infectious organism, if available, and treatment initiated before the transfer including the amount of fluid given by the referring facility.
- Amount of IV fluid administered.
- Vasopressor started and response in blood pressure
- Temperature (if available).

NOTES

- ¹ **Differential assessment:** Consider and rule out nonseptic causes of shock (e.g., hypovolemic, cardiogenic, anaphylactic, neurogenic, obstructive). Suspect septic shock in any patient with fever or abnormally low temperature, hypotension, signs of inadequate perfusion, and recent signs/symptoms of pneumonia, UTI, peritonitis, or other infection.
- ² **Interfacility transfers:** If possible, determine if the causative organism has been identified (gram-negative, gram-positive, or non-bacterial organism).
- ³ **Norepinephrine (Levophed) infusion:** Mix 8 mg of **norepinephrine (Levophed)** in a 250 ml bag of normal saline (concentration of 32 mcg/ml). Attach to 60gtt tubing. Monitor carefully for infiltration at the IV/IO site. Continuous cardiac monitoring is required.
- ⁴ **Antibiotics:** Doses are typically infused over 30 to 60 minutes. Closely monitor for allergic reactions and anaphylaxis. Monitor the infusion site for irritation, pain, and signs of infiltration.
- ⁵ **Handtevy pediatric fluid bolus guidelines:**
 - **Patients up to 4 months old:** Administer a 10 ml/kg normal saline bolus.
 - **Patients 4 months to 11 years old:** Administer a 20 ml/kg normal saline bolus.
 - **Patients greater than 11 years old:** Administer a 1 Liter normal saline bolus.