

RETURN

PLEASE COMMENT AND

review + bring to Tues meeting

PHYSICIAN'S ORDER SHEET

Mark X in box for priority order

A FORMULARY EQUIVALENT WILL BE DISPENSED UNLESS NON-FORMULARY DRUG REQUEST COMPLETED

PEDIATRIC SEVERE SEPSIS PROTOCOL All Admitting Physicians

RESUSCITATION PHASE (Emergency Room):

1. Begin high flow O₂ Therapy: Titrate to keep sats > 94% Nasal Cannula _____ L/min Face Mask NRB
2. Apply cardiorespiratory monitors
3. Establish IV/IO access
4. IV Fluid: Push 20 cc/kg isotonic saline (0.9% NaCl) as quickly as possible..
If perfusion or hemodynamics don't improve repeat 20 cc/kg of isotonic saline (0.9% NaCl) IV push.
Repeat 20 cc/kg 0.9% NaCl IV push or administer 5% Albumin _____ cc IV push
Notify physician if no response to 3 fluid boluses or hepatomegaly, rales or increased work of breathing develops.
5. Diagnostic Studies: Blood culture, complete blood count with differential, comprehensive metabolic panel, ionized calcium, bedside glucose, lactate, PT, PTT, Fibrinogen, D-dimer, baseline cortisol level
 Urine culture CXR Other: _____
6. Consider intubation for increased work of breathing, hypoventilation or impaired mental status. Avoid Etomidate use.
7. Correct hypocalcemia (ionized Ca <1.05) with Calcium Chloride _____ (10 mg/kg) slow IV infusion
 Calcium Gluconate _____ (100 mg/kg) slow IV infusion
8. Correct hypoglycemia with D₂₅W _____ (2-4 ml/kg) D₅₀ W _____ (1-2 ml/kg). Repeat glucose check.
9. Administer antibiotics:
Community Acquired: Cefotaxime _____ mg (50 mg/kg) IV Ceftriaxone _____ mg (100 mg/kg) IV
 Vancomycin _____ mg (20 mg/kg) IV Clindamycin _____ mg (10 mg/kg) IV
Healthcare Acquired: Vancomycin _____ mg (20 mg/kg) IV Cefepime _____ mg (50 mg/kg) IV
 Tobramycin or Gentamicin _____ mg (7.5 mg/kg) IV
10. Insert foley catheter and notify physician if urine output < 1 ml/kg/hr
11. Inotrope Therapy: Initiate if shock refractory after at least 60 cc/kg of crystalloid and/or colloid boluses
 Dopamine start at 5 mcg/kg/min and titrate up to 20 mcg/kg/min IV to keep SBP > 90 or MAP > 65
 Dobutamine start at 5 mcg/kg/min and titrate up per MD
 Epinephrine start at 0.02 mcg/kg/min and titrate up to 1 mcg/kg/min IV to keep SBP > 90 or MAP > 65
 Norepinephrine start at 0.05 mcg/kg/min and titrate up to 1 mcg/kg/min IV to keep SBP > 90 or MAP > 65

MAINTENANCE PHASE (Pediatric Intensive Care Unit):

1. Corticosteroid Therapy: Initiate if shock refractory to catecholamines and at risk for absolute adrenal insufficiency
 Hydrocortisone _____ mg (1-2 mg/kg) IV Check baseline cortisol level if not done in ER
2. Monitor CVP, attain normal MAP-CVP and ScvO₂ > 70%, Hgb > 10 g/dL. Titrate fluids and inotropes/vasopressors
3. **Cold shock with normal blood pressure:**
a. If ScvO₂ still < 70%, add vasodilator (Milrinone) with volume loading
4. **Cold shock with low blood pressure:**
a. If still hypotensive, consider Norepinephrine
b. If ScvO₂ still < 70%, consider Dobutamine, Milrinone
5. **Warm shock with low blood pressure:**
a. If still hypotensive, consider Vasopressin
b. If ScvO₂ still < 70%, consider low dose Epinephrine
6. Persistent catecholamine-resistant shock:
a. Rule out and correct pericardial effusion, pneumothorax and intra-abdominal pressure > 12 mmHg
b. Consider PA catheter monitoring, ECHO/Ultrasound to guide further management
c. Goal CI > 3.3 and < 6 L/min/m²
7. Refractory Shock: ECMO

T.O. Dr _____ / _____ RN/RPh Orders Read Back/Verified Date _____ Time _____
 Physician's Signature _____ Date: _____ Time: _____
 Print Name / License # _____

Evaluation for Severe Sepsis Screening Tool

Instructions: Use this optional tool to screen patients for severe sepsis in the Emergency Department, Pediatrics Ward or Pediatrics ICU.

1. Does the patient's history suggest an infection?

Bacteremia	Urinary tract infection/pyelonephritis
Pneumonia	Acute abdominal infection
Empyema	Skin/soft tissue infection
CNS infection	Bone/joint infection
ENT infection	Endocarditis
Wound infection	Implantable device infection
Other _____	_____ Yes _____ No

2. Are any of the clinical signs and symptoms present?

Hypothermia Temperature $< 36^{\circ}\text{C}$ (96.8°F)
Hyperthermia Temperature $> 38.5^{\circ}\text{C}$ (101.3°F)
Heart rate < 70 bpm or > 150 bpm in children
 < 90 bpm or > 160 bpm in infants
Peripheral vasodilation or vasoconstriction with capillary refill > 2 secs
Diminished pulses or bounding peripheral pulses
_____ Yes _____ No

If the answer is yes to both questions 1 and 2, *suspicion of infection* is present.

3. Are any of the following organ dysfunction criteria present?

Altered mental status
Hypotension
Respiratory distress
Pulmonary infiltrates with high oxygen requirements
Decreased urine output < 1 ml/kg/hr
_____ Yes _____ No

If *suspicion of infection* is present AND *organ dysfunction* is present, the patient meets the criteria for SEVERE SEPSIS and should be started on the severe sepsis protocol.

Date: ____/____/____

Time: _____