



LAST NAME (FIRST)

MRN VISIT NUMBER

DATE OF BIRTH (YYYY-MM-DD) SEX

Division of Paediatric Emergency Medicine Severe Sepsis and Septic Shock Order Set

Neonates, infants and children with *proven or suspected infection* and *signs of decreased perfusion* (including temperature abnormality, tachycardia, tachypnea, hypotension, abnormal capillary refill time, abnormal skin findings, abnormal pulses, altered mental status)

**See reverse for definitions

WEIGHT (kg):	ALLERGIES:	<input type="checkbox"/> NKDA	DATE:
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Provider Signature/Time	ORDERS	Noted by RN Signature/Time		
	<p>PATIENT CARE</p> <p><input type="checkbox"/> Monitoring and access (includes all of the following orders):</p> <ul style="list-style-type: none"> Continuous O₂ saturation and ECG monitoring Vital sign recording: HR, RR, BP, O₂ sat every 5 minutes until symptoms improve Place patient on supplemental oxygen Vascular access x 2 *Notify MD if no access within 5 minutes or 2 failed IV attempts 			
	<p>LABORATORY</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><input type="checkbox"/> Sepsis panel:</p> <ul style="list-style-type: none"> bedside glucose iSTAT blood cultures <ul style="list-style-type: none"> <input type="checkbox"/> peripheral <input type="checkbox"/> central CBC and diff Na, K, Cl, BUN, Cr, Ca VBG, lactate (on ice) AST/ALT, bilirubin, albumin </td> <td style="width: 50%; vertical-align: top;"> <p>Other orders:</p> <ul style="list-style-type: none"> <input type="checkbox"/> type & screen <input type="checkbox"/> urinalysis <input type="checkbox"/> MSU <input type="checkbox"/> in & out catheter <input type="checkbox"/> indwelling foley <input type="checkbox"/> urine culture </td> </tr> </table>	<p><input type="checkbox"/> Sepsis panel:</p> <ul style="list-style-type: none"> bedside glucose iSTAT blood cultures <ul style="list-style-type: none"> <input type="checkbox"/> peripheral <input type="checkbox"/> central CBC and diff Na, K, Cl, BUN, Cr, Ca VBG, lactate (on ice) AST/ALT, bilirubin, albumin 	<p>Other orders:</p> <ul style="list-style-type: none"> <input type="checkbox"/> type & screen <input type="checkbox"/> urinalysis <input type="checkbox"/> MSU <input type="checkbox"/> in & out catheter <input type="checkbox"/> indwelling foley <input type="checkbox"/> urine culture 	
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	<p>FLUIDS AND ANTIBIOTICS</p> <p>Fluid Boluses (should be initiated within 15 minutes):</p> <p><i>Administer fluid boluses rapidly via IV push, pressure bag, or rapid infuser. Reassess perfusion after every bolus to determine need for additional fluid. Up to and over 60 mL/kg may be required within 1 hour. Stop if fluid overload develops.</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Bolus #1: 0.9% NaCl _____ mL IV (20 mL/kg, max 1L, as fast as possible) <input type="checkbox"/> Bolus #2: 0.9% NaCl _____ mL IV (20 mL/kg, max 1L, as fast as possible) <input type="checkbox"/> Bolus #3: 0.9% NaCl _____ mL IV (20 mL/kg, max 1L, as fast as possible) <input type="checkbox"/> Bolus #4: 0.9% NaCl _____ mL IV (20 mL/kg, max 1L, as fast as possible) <p>Standard Antibiotics (should be administered within 60 minutes):</p> <p>For neonates and infants less than 3 months of age (BOTH antibiotics required)</p> <ul style="list-style-type: none"> <input type="checkbox"/> ampicillin _____ mg IV x 1 (75 mg/kg/dose) <input type="checkbox"/> ceftaxime _____ mg IV x 1 (50 mg/kg/dose) <p>If concern for herpes virus, add acyclovir <i>after above antibiotics have been administered:</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> acyclovir _____ mg IV x 1 (20 mg/kg/dose) <p>For children greater than 3 months of age (BOTH antibiotics required)</p> <ul style="list-style-type: none"> <input type="checkbox"/> ceftriaxone _____ mg IV x 1 (100 mg/kg/dose, max dose 2000 mg) <input type="checkbox"/> vancomycin _____ mg IV x 1 (15 mg/kg/dose, max dose 1000 mg) 			

Deborah Schonfeld 2016-2-9 4:36 PM
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SEPTIC SHOCK TRIGGER TOOL

If patient presents with **concern for infection and/or temperature abnormality**, then provider must assess for the presence of the following 8 clinical criteria:

- Temperature abnormality
- Tachycardia (or bradycardia in < 1 year)
- Tachypnea
- Hypotension
- Capillary refill abnormality (≥ 3 seconds or < 1 second)
- Pulse abnormality (decreased/weak or bounding)
- Skin abnormality (cool/mottled or flushed/ruddy (other than face))
- Mental status abnormality (decreased mental status, irritable, confused, lethargic, inappropriate crying)

SEPTIC SHOCK ALERT CRITERIA:

**Hypotension -OR-
 ≥ 3 of 8 above clinical criteria -OR-
High risk** and ≥ 2 of 8 above clinical criteria**

***Abnormal vital sign definitions:**

Temperature:

0-3 months: < 36 °C or ≥ 38 °C

≥ 3 months: ≥ 38.5 °C

Heart Rate: Any value that flags **RED** on EDIS tracking board

Respiratory Rate: Any value that flags **RED** on EDIS tracking board

Systolic Blood Pressure: Any value that flags **RED** on EDIS tracking board

(**RED** values represent values that are > 2 SD from the normal range according to CTAS guidelines (CJEM 2014;16:1-5))

****High risk conditions:**

Malignancy

Asplenia (including sickle cell disease)

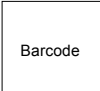
Solid organ or bone marrow transplant

Central or indwelling catheter

Global developmental delay or complex care

Immunodeficiency or immunocompromised

Recent surgical procedure



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	<p>Other antibiotic choices</p> <p>Consider:</p> <ul style="list-style-type: none"> For true penicillin allergy, use vancomycin (see above dosing) + levofloxacin For patients with febrile neutropenia, refer to Hematology/Oncology fever guidelines For intra-abdominal sepsis, use piperacillin-tazobactam <p><input type="checkbox"/> levoFLOXACin _____ mg IV x 1 (10 mg/kg/dose, max dose 500 mg)</p> <p><input type="checkbox"/> piperacillin-tazobactam _____ mg (piperacillin) IV x 1 (100 mg/kg/dose, max dose 4 g)</p>	
	<p>VASOACTIVE SUPPORT (should be initiated at <i>the 60 minute mark, or earlier</i>)</p> <p>Continuous infusions</p> <p><i>Vasoactive support is indicated for shock persisting after 40-60 mL/kg fluids, or earlier in patients with decreased cardiac function or signs of fluid overload. Vasoactive agents may be infused via PIV or IO while central access is being established.</i></p> <p>For 'cold shock' (shock with prolonged capillary refill), or <u>undifferentiated shock</u>, start:</p> <p><input type="checkbox"/> epinephrine 0.1 mcg/kg/min IV (Titrate to max dose 1 mcg/kg/min)</p> <p><i>Refer to online infusion calculator "High Dose" option appropriate for patient weight.</i></p> <p>For 'warm shock' (shock with flash capillary refill/hyperdynamic circulation), start:</p> <p><input type="checkbox"/> norepinephrine 0.05 mcg/kg/min IV (Titrate to max dose 2 mcg/kg/min)</p> <p>If second agent needed, for 'cold shock' (shock with prolonged capillary refill), can add:</p> <p><input type="checkbox"/> DOPamine 10 mcg/kg/min IV (Titrate to max dose 20 mcg/kg/min)</p> <p>Other medications</p> <p><i>For patients with vasopressor-refractory shock or suspected adrenal insufficiency</i></p> <p><input type="checkbox"/> hydrocortisone _____ mg IV x 1 (2 mg/kg/dose, max dose 100 mg)</p>	
	<p>ANTIPYRETICS (avoid ibuprofen if patient is coagulopathic or thrombocytopenic)</p> <p><input type="checkbox"/> acetaminophen _____ mg PO/PR x 1 (15 mg/kg/dose, max 1000 mg/dose)</p> <p><input type="checkbox"/> ibuprofen _____ mg PO x 1 (10 mg/kg/dose, max 600 mg/dose) <i>Infants less than 6 months: 5 mg/kg/dose</i></p>	
	<p>OTHER ORDERS</p> <p>For hypoglycemia:</p> <p><input type="checkbox"/> D10W _____ mL IV x 1 (5 mL/kg/dose)</p> <p>or</p> <p><input type="checkbox"/> D25W _____ mL IV x 1 (2 mL/kg/dose)</p> <p>For hypocalcemia:</p> <p><input type="checkbox"/> calcium gluconate 10% _____ mg IV x 1 (100 mg/kg/dose, max dose 3 g)</p>	

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