

SEVERE SEPSIS SCREENING TOOL

Patient ID Label

Directions: Screening to be done when PICU Daily Goals Sheet is initiated.

Nursing: answer question #1

PICU resident: answer questions #2 + 3. If all three questions are yes, the patient has severe sepsis.

Screen Initiated: Date: _____ **Time:** _____ **Nurse Name:** _____

Nurse to Complete:

1) Are any two of the following signs and symptoms of infection both present and new to the patient?

- YES, forward the tool to the PICU resident.
 NO, file form in IHI Audit bin in Nursing Station.
- | | | |
|--|--|---|
| <input type="checkbox"/> Hyperthermia >38.3 C (101.0F) | <input type="checkbox"/> Chills with rigors | <input type="checkbox"/> Leukocytosis (WBC count >12,000 uL-1) |
| <input type="checkbox"/> Hypothermia <36 C (96.8 F) | <input type="checkbox"/> Tachycardia (see chart on back) | <input type="checkbox"/> Leukopenia (WBC count <5000 uL-1) |
| <input type="checkbox"/> Acutely altered mental status | <input type="checkbox"/> Tachypnea (see chart on back) | <input type="checkbox"/> Hyperglycemia (plasma glucose >120 mg/dL) in absence of diabetes |

Resident/physician to Complete:

2) Is the patient's history suggestive of a new infection? (Check all that apply)

- YES, proceed to question #3.
 NO, file form in IHI Audit bin in Nursing Station.
- | | | |
|--|--|---|
| <input type="checkbox"/> Pneumonia/empyema | <input type="checkbox"/> Skin/soft tissue inflammation | <input type="checkbox"/> Endocarditis |
| <input type="checkbox"/> Urinary tract infection | <input type="checkbox"/> Bone/joint infection | <input type="checkbox"/> Implantable device infection |
| <input type="checkbox"/> Acute abdominal infection | <input type="checkbox"/> Wound infection | <input type="checkbox"/> Other infection |
| <input type="checkbox"/> Meningitis | <input type="checkbox"/> Blood stream catheter infection | |

3) Are any of the following organ dysfunction criteria present at a site remote from the site of the infection that are NOT considered to be chronic conditions?

Note: In the case of bilateral pulmonary infiltrates the remote site stipulation is waived.

- YES, severe sepsis is present, order serum lactate level and blood cultures.
 NO, file form in IHI Audit bin in Nursing Station.
- | | | |
|---|--|--|
| <input type="checkbox"/> SBP (see chart on back) | <input type="checkbox"/> Bilirubin > 2 mg/dl (34.2 mmol/L) | <input type="checkbox"/> Bilateral pulmonary infiltrates with PaO ₂ /FiO ₂ ratio < 300 |
| <input type="checkbox"/> Coagulopathy (INR > 1.5 or aPTT > 60 secs) | <input type="checkbox"/> Bilateral pulmonary infiltrates with a new (or increased) oxygen requirement to maintain SpO ₂ > 90% | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Lactate > 2 mmol/L (18.0 mg/dl) | | |
| <input type="checkbox"/> Platelet count < 100,000 | | |

Is the answer yes to all 3 items above? (severe sepsis is present)

- Serum lactate level ordered? Yes, No, Explain:
- Blood cultures ordered? Yes, No, Explain:
- First dose antibiotic considered/administered? Yes, No, Explain:
- Enter date and time of diagnosis of severe sepsis:

Date: _____ **Time:** _____ **Physician Name:** _____

NOT A CHART FORM – Fax to 4-5870 if positive

Age-specific vital signs and laboratory variables (lower values for heart rate, and leukocyte count are for the 5th and upper values for heart rate, respiration rate, or leukocyte count for the 95th percentile)

Age Group	Heart Rate, Beats/Min		Respiratory rate, Breaths/Min	Leukocyte Count, Leukocytes X 10 ³ /mm
	Tachycardia	Bradycardia		
0 days – 1 wk	>180	<100	>50	>34
1 wk - 1 mo	>180	<100	>40	>19.5 or <5
1 mo – 1 yr	>180	<90	>34	>17.5 or <5
2 – 5 yrs	>140	NA	>22	>15.5 or <6
6 – 12 yrs	>130	NA	>18	>13.5 or <4.5
13 to <18 yrs	>110	NA	>14	>11 or <4.5

Age-appropriate limits for hypotension

Age Group	Systolic Blood Pressure, mm Hg
Newborn – 30 days	≤ 60
1 mo - <1 yr	≤ 70
> 1 year – 10 yrs	≤ 70 + 2x (age in years)
≥ 10 yrs	< 90