

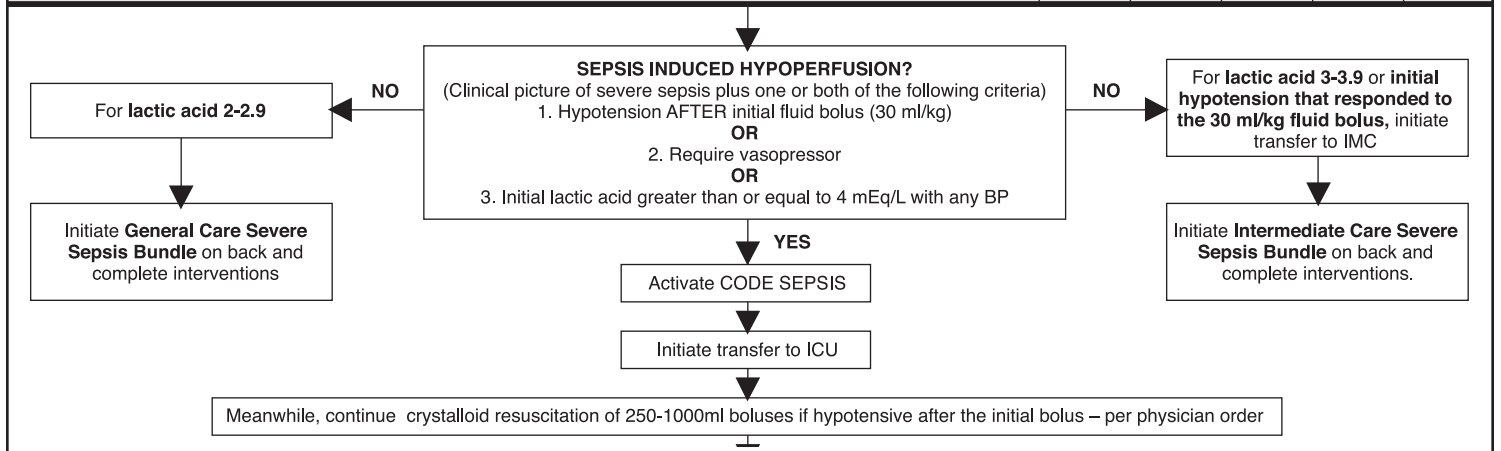
**Patient Units Severe Sepsis Screening Tool**

Severe Sepsis = Infection + SIRS + Organ Dysfunction

PLUE Sticker

**Directions:** The screening tool is for use in identifying patients with severe sepsis. Screen each patient upon admission, once per shift and PRN with change in condition.

	DATE:				
	TIME:				
<b>I. SIRS-Systemic Inflammatory Response Syndrome (two or more of the following) current values:</b>					
Temperature greater than or equal to 101°F or less than or equal to 96.8°F					
Heart Rate greater than 90 beats/minute					
Respiratory Rate greater than 20 breaths per minute					
WBC greater than or equal to 12,000/mm <sup>3</sup> or less than or equal to 4,000/mm <sup>3</sup> or greater than 0.5 K/uL bands (in last 24 hours)					
Negative screen for severe sepsis (Please initial)					
<b>if check two of the above, move to II</b>					
<b>II. Infection (one or more of following):</b>					
Suspected or documented infection					
Antibiotic Therapy (not prophylaxis)					
<b>If check none of above – Negative screen for severe sepsis (Please initial) – answer infection question NO in I-View</b>					
<b>If check one of the above – answer infection question YES in I-View, obtain serum lactic acid per protocol and move to III</b>					
<b>III. Organ Dysfunction (change from baseline) (one or more of the following in an organ system distant from the infection)</b>					
Respiratory: SaO <sub>2</sub> less than 90% OR increasing O <sub>2</sub> requirements					
Cardiovascular: SBP less than 90mmHg OR 40mmHg less than baseline OR MAP less than 65mmHg					
Renal: urine output less than 0.5ml/kg/hr; creatinine increase of greater than 0.5mg/dl from baseline					
CNS: altered consciousness (unrelated to primary neuro pathology) Glasgow Coma Score less than or equal to 12					
Hematologic: platelets less than 100,000; INR greater than 1.5					
Hepatic: Serum total bilirubin greater than or equal to 4mg/dl					
Metabolic: Serum lactic acid greater than 2mEq/L					
<b>Negative screen for severe sepsis (Please initial)</b>					
<b>If check one in section III or a severe sepsis alert fires, patient has screened positive for severe sepsis</b>					
1. Call rapid response team					
2. Call physician, physician assistant or nurse practitioner and implement urgent measures protocol.					
3. Initiate or ensure IV access (2 large bore IV's if no central access)					
4. Obtain a venous blood gas (peripheral draw), serum lactic acid, CBC (if it has been greater than 12 hrs since last test), two sets of blood cultures (if greater than 24 hours since last set)					
5. If patient is hypotensive: Give crystalloid (NS) fluid bolus – 30ml/kg over one hour or as fast as possible until hypotension resolved, unless known EF is less than 35% or active treatment for heart failure.					



**RN Signature & Initial:**




## General Care Severe Sepsis Bundle

For patients with 2 or more SIRS + known/suspected infection + initial lactic acid less than 2.9 w/o additional organ dysfunction

- Blood cultures x 2
- Antibiotics w/in 1 hr of screening positive for sepsis. Ensure antibiotic is ordered STAT (call Pharmacy and notify of STAT order)
- Vital signs: every 1 hr x 4, then every 4 hr x 2, then once per shift
- Lactic acid: if initial is greater than 2, repeat in 2 hours; then every 4 hours till 2 consecutive normal values
- I & O every 2 hr (if no void w/in 4 hr, bladder scan- if greater than 200 ml perform intermittent straight cath), call MD if less than 0.5 ml/kg/hr
- Maintain/monitor for:
  - SBP greater than 90 mmHg
  - Urine output greater than 0.5 ml/kg/hr
  - Decrease in lactic acid x 3 results or normalization x 2 within 12 hours

**\*\*If unable to maintain these parameters or if pt has additional organ dysfunction, call MD for possible transfer to IMC/ICU**

- Continue sepsis screen every shift and prn change in patient condition
- Complete 0 to 1 hour interventions, below

## Intermediate Care Severe Sepsis Bundle

For patients with 2 or more SIRS + known/suspected infection + initial lactic acid 3-3.9 or had hypotension that responded to fluid bolus

- Blood cultures x 2
- Antibiotics w/in 1 hr of screening positive for sepsis. Ensure antibiotic is ordered STAT (call Rx and notify of STAT order)
- Vital signs: every 30 min x 4, then every 1hr x 2, then every 2hr x 4; then every 4 hr
- Lactic acid: if initial is greater than 2, repeat in 2 hours; then every 4 hours till 2 consecutive normal values
- I & O every 2 hr (if no void w/in 4 hr, bladder scan- if greater than 200 ml perform intermittent straight cath), call MD if less than 0.5 ml/kg/hr
- Continue to administer fluid boluses per physician order to achieve/maintain the following goals:
  - SBP greater than 90 mmHg
  - Urine output greater than 0.5 ml/kg/hr
  - Decrease in lactic acid x 3 results or normalization x2 within 12 hours

**\*\*If unable to achieve these parameters or if pt has increase in lactic acid of 0.5 or more, increase in O2 requirements, mental status change, or additional organ dysfunction, call MD for possible transfer to ICU**

- Complete 0 to 1 hour interventions, below

Date/Time: \_\_\_\_\_ to \_\_\_\_\_

\_\_\_\_\_ If hypotensive, volume resuscitate: initial 30 ml/kg as fast as possible, then additional boluses as needed per order

\_\_\_\_\_ Post fluid bolus: Repeat vital signs including temperature; obtain 2 SBP less than 90mmHg, consecutively within the hour to confirm shock

\_\_\_\_\_ Broad spectrum antibiotic-start after obtaining blood culture

\_\_\_\_\_ Time antibiotic hung

\_\_\_\_\_ Initial Labs: serum lactate, additional labs as ordered by physician

Yes No Serum lactic acid drawn

Yes No Blood Cultures x 2

\_\_\_\_\_ Time 1: \_\_\_\_\_ Time 2: \_\_\_\_\_

\_\_\_\_\_ Other cultures: \_\_\_\_\_

\_\_\_\_\_ Establish IV access (2 large bore IVs)

Signature: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Date/Time: \_\_\_\_\_ to \_\_\_\_\_

\_\_\_\_\_ If hypotensive, volume resuscitate: initial 30 ml/kg as fast as possible, then additional boluses as needed per order

\_\_\_\_\_ Post fluid bolus: Repeat vital signs including temperature; obtain 2 SBP less than 90mmHg, consecutively within the hour to confirm shock

\_\_\_\_\_ Broad spectrum antibiotic-start after obtaining blood culture

\_\_\_\_\_ Time antibiotic hung

\_\_\_\_\_ Initial Labs: serum lactate, additional labs as ordered by physician

Yes No Serum lactic acid drawn

Yes No Blood Cultures x 2

\_\_\_\_\_ Time 1: \_\_\_\_\_ Time 2: \_\_\_\_\_

\_\_\_\_\_ Other cultures: \_\_\_\_\_

\_\_\_\_\_ Establish IV access (2 large bore IVs)

Signature: \_\_\_\_\_ Date/Time: \_\_\_\_\_