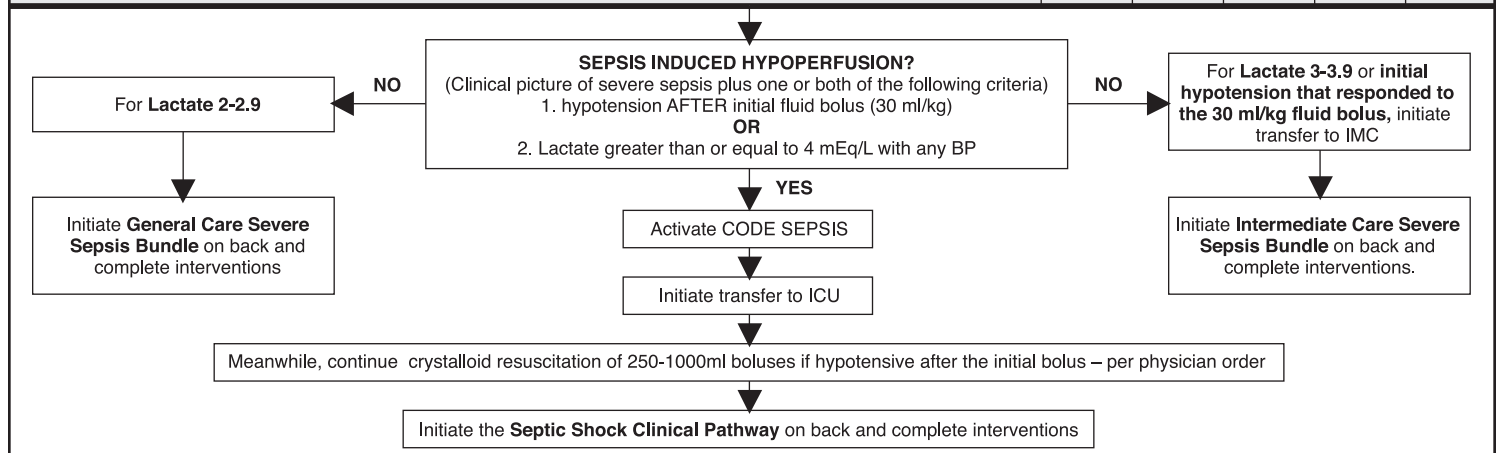


## ICU Severe Sepsis Screening Tool

Severe Sepsis = Infection + SIRS + Organ Dysfunction

**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):</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					
Blood glucose greater than 140 mg/dL in non-diabetic patient					
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, call physician for serum lactic acid order and move to III</b>					
<b>III. Organ Dysfunction (change from baseline) (one or more of the following within 3 days of new 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 or equal to 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 Date & Time:




**SEPTIC SHOCK CLINICAL PATHWAY**

Room # \_\_\_\_\_ ICU admission Date: \_\_\_\_\_ Time: \_\_\_\_\_

**Please complete the following:**

- **ED Triage:** Date: \_\_\_\_\_ Time: \_\_\_\_\_
- **Septic Shock\* diagnosis (Time Zero):** Date: \_\_\_\_\_ Time: \_\_\_\_\_
- Patient transferred from (unit or hospital): \_\_\_\_\_
- Decision to move to comfort care in first 24 hours after diagnosis:  ED  Floor  ICU Admission  During ICU Stay
- ICU discharge: Date: \_\_\_\_\_ Time: \_\_\_\_\_
- Discharge status:  Alive  Expired **Attending physician at time of diagnosis:** ED \_\_\_\_\_ ICU \_\_\_\_\_

**\*Septic Shock (Time Zero) defined as:**  
SBP less than 90mmHg or 40mmHg decrease from baseline after 30ml/kg fluid bolus, or requires vasopressors or initial lactic acid is greater than or equal to 4mEq/L

Date _____ to _____	Date _____ to _____	Date _____ to _____	Date _____ to _____
0-1 Hours	1-6 Hours	6-24 Hours	24-72 Hours
<input type="checkbox"/> Initial Labs: serum lactic acid, additional labs as ordered by physician Serum lactic acid drawn Blood Cultures X 2 Time 1: _____ Time 2: _____ Other Cultures: _____ Establish IV access <input type="checkbox"/> Volume resuscitate: initial 30ml/kg over 1 hour or as fast as possible then additional boluses as needed per order Time initial fluid bolus completed to resolve hypotension <input type="checkbox"/> Broad Spectrum Antibiotic-start after obtain blood culture (see Infonet under Pharmacy Guide to Antimicrobial Therapy) Yes No Was a new antibiotic initiated for this episode of septic shock? Time antibiotic hung Source Control	Yes No Is patient hypotensive after initial fluid bolus? Yes No Did patient require vasopressor(s)? If YES to either, continue to next column (Septic Shock Bundle) Yes No Is lactic acid greater or equal to 4 mEq/L? Yes No Is there evidence of additional organ dysfunction besides elevated lactic acid? If YES to lactic acid & additional organ dysfunction, please continue to next column (Septic Shock Bundle) If NO to additional organ dysfunction, <b>please continue below:</b> <input type="checkbox"/> Maintain MAP greater than or equal to 65 mmHg <input type="checkbox"/> Maintain U/O of 0.5 ml/kg/hour <input type="checkbox"/> Consider arterial line insertion <input type="checkbox"/> Monitor Stroke Volume & Stroke Volume Variation to guide fluid resuscitation <input type="checkbox"/> Ensure decrease in lactic acid x3 or normalization x2 within 12 hours • Begin next column (Septic Shock Bundle) if additional organ dysfunction occurs &/ or patient remains/becomes hypotensive after initial 30 ml/kg fluid bolus	<b>Septic Shock Bundle Resuscitation Goals</b> Yes No CVP placed If no, why? _____ Time CVP placed (record first CVP reading prior to x-ray confirmation) Record the <b>FIRST TIME</b> the following is achieved: Time CVP 8-12 mmHg on vent 12-15 mmHg Time MAP greater than or equal to 65 mmHg Time SCVO <sub>2</sub> greater than 70%; mixed venous greater than or equal to 65% Time Optimized stroke volume (optional) Yes No Assess for risk factors for abdominal compartment syndrome (fluid resuscitation greater than 5 L in 24 hours or less) Repeat lactic acid every 4-6 hours	<b>Septic Shock Bundle</b> Yes No Is patient on vasopressor at greater than 6 hours Yes No Consider Vasopressin for refractory septic shock In patients with acute lung injury or ARDS; Yes No Patient on mechanical ventilator PaO <sub>2</sub> / FiO <sub>2</sub> ratio _____ Yes No Is tidal volume 6ml/kg of ideal body weight in first 24 hours? Yes No Are the static or plateau inspiratory pressures less than 30cmH <sub>2</sub> O in first 24 hours? Confirm Infectious Source Re-assess need for broad spectrum antibiotics based on culture reports. Was there an organism identified? If YES, was the organism sensitive to the initial antibiotic? Discontinue Vancomycin if appropriate Re-evaluate need for invasive lines and tubes Nutrition Therapy Progress Mobility
Nurse _____			
Nurse _____			
Physician _____			
Signature, Date & Time _____			