Munson Healthcare Sepsis Initiative

SEPSIS = SIRS PLUS Suspected Infection PLUS Associated Organ Dysfunction

The Munson Sepsis Initiative (MSI) is a system-wide collaborative to stay ahead of sepsis and improve the care we deliver to patients in our region suffering from sepsis.



It's an urgent, life-threatening medical emergency

SEPSIS is defined as a LIFE THREATENING organ dysfunction caused by a dysregulated host response to known or suspected infection.

SEPTIC SHOCK is a sepsis-induced hypo-perfusion evidenced by refractory hypotension despite adequate fluid resuscitation and/or lactic acid of 4.0 or greater.

SIRS criteria (must meet two):

- Temperature > 38.3 C or < 36 C (> 100.9 or < 96.8)
- Heart rate > 90
- Respiratory rate > 20
- White Blood Cell (WBC) count > 12 or < 4 or Bands > 10%

Organ Dysfunction (must meet one):

- Hypotension: systolic BP< 90 or MAP < 65 mmHg or SBP decrease > 40 mmHg
- Lactic acidosis: lactate > 2
- Acute respiratory failure/new need for mechanical ventilation
- AKI: creatinine > 2.0 and/or UO < 0.5 ml/kg/hr for 2 consecutive hours
- Liver failure: total Bilirubin > 2
- Thrombocytopenia: platelet < 100,000
- Coagulopathy: INR > 1.5 or PTT > 60
- Encephalopathy: new mental status changes

Coding and Documentation Needs

In the Progress Notes, document sepsis and include the organ dysfunction met to arrive at the diagnosis using terms like "due to" or "secondary to" **AND the infection type**, if known. Document septic shock evidenced lactic acid of 4.0 or greater and/or refractory/persistent hypotension requiring pressors.

When it comes to sepsis, remember the 3 Rs:

Respond

Rapidly initiate and carry out sepsis treatment.

Recognize

Critically evaluate for possible infection and signs and symptoms of sepsis.

Reassess

Continuously re-examine and quickly adjust treatment.



Treatment Guidelines

To be completed within 3 hours of time of presentation:

- 1. Measure lactate level
- 2. Obtain blood cultures prior to antibiotics
- 3. STAT administer broad spectrum antibiotics **WITHIN 1 HOUR OF ORDER**
- 4. Infuse total volume of 30ml/kg fluid bolus over 60-90 minutes for hypotension or lactate of 4.0 or greater.

To be completed within 6 hours of time of presentation:

- 5. Administer vasopressors (for hypotension that does not respond to initial fluid resuscitation) to maintain MAP > 65 mmHg
- 6. Within 1 hour after completion of fluid bolus, RN to document two consecutive sets of vital signs. Notify provider.
- If initial lactate was > 2, re-measure lactate within 6 hours of time of presentation. Notify provider.
- 8. Provider to perform and document repeat volume status and tissue perfusion assessment immediately following fluid bolus. Acceptable forms of documentation include: "I have reassessed tissue perfusion after bolus given" OR "sepsis reassessment complete" OR a review of at least five of the following: pulse ox, cap refill, HR and rhythm, peripheral pulses, shock index, skin color and condition, urine output, vital signs OR documentation of CVP, SvO2, cardiac echo/US, fluid challenge, or passive leg raise.

Provider "Pearls"

When notified by nursing staff regarding a sepsis alert/positive screen or concern for sepsis:

- 1. Evaluate the patient and rapidly determine if sepsis is suspected or not suspected
- 2. If Sepsis is not suspected, communicate explanation to nursing staff of non-infectious cause

Use the Sepsis Advisor or Sepsis Order Set for every patient with suspected sepsis:

- 3. Encourages "best practice" standardized treatment across Munson Healthcare
- 4. Includes all mandatory Bundle requirements

All patients experiencing septic shock (as evidenced by hypotension of 4.0 or greater) must receive a 30 ml/kg target fluid volume at a bolus rate. Exceptions include:

- 5. Provider may choose to dose fluid based on patient's ideal body weight for a patient with BMI > 30 IF, within a single note, the provider documents that the patient is obese, and that the patient's IBW in kg was used to dose the sepsis fluid bolus. Example: "Patient is obese, IBW of 65 kg was used to calculate the sepsis fluid bolus."
- 6. Provider may choose to order less than 30 ml/kg sepsis fluid bolus IF there is an order for a lesser volume in mls or ml/kg and the provider documents, within a single note the volume ordered and a clinical reason for ordering a volume less than 30 ml/kg. Example: "Concern for fluid overload, 1000 ml sepsis fluid bolus ordered."

WMUNSON HEALTHCARE

For more information contact: Email: MMC-sepsis@mhc.net Intranet site: sharepoint16.mhc.net/Sepsis