

Sepsis Definition

Sepsis is life threatening organ dysfunction caused by a dysregulation host response to infection. The common language when referring to the Sepsis Severity at Munson Healthcare include:

Term	Definition
SIRS + Infection (This is NOT Sepsis)	Systemic Inflammatory Response Syndrome (SIRS) + suspected infection without organ dysfunction.
Sepsis	SIRS + suspected infection + organ dysfunction.
Septic Shock	Sepsis induced hypoperfusion evidenced by persistent hypotension despite adequate fluid resuscitation and/or lactic acid greater than or equal to 4mmol/L.

Sepsis Summary

1. **Sepsis Recognition** can occur in multiple ways including:
 - a. A nurse Sepsis Screening.
 - b. A nurse SIRS, Sepsis, or Septic Shock Alert.
 - c. A provider **Open Chart Sepsis or Septic Shock Alert**.
2. **Sepsis Response:**
 - a. Provider orders/launches the **Sepsis Advisor**.
 - b. Clinical Staff initiates orders.
3. **Sepsis Reassessment:**
 - a. Within one hour of fluid bolus completion, the nurse completes two full sets of vital signs and updates the provider.
 - b. **Sepsis Advisor is relaunched** by the provider for addition of orders.

Note:

- The system continually monitors patient results and alerts upon recognition of SIRS, Sepsis and Septic Shock.
- SIRS, Sepsis, and Septic Shock Alerts automatically place orders for CBC, CMP, and Lactic Acid if NOT present.
- Alerts and the nurse Screening tool are suppressed for 72 hours after the Sepsis Advisor is ordered unless the patient qualifies for Septic Shock criteria.
- Alerts do not fire for maternity unit patients.



The alerts are displayed on the ED LaunchPoint dashboard next to the patient's name.

Sepsis Screening Tool

1. Open the Sepsis Screening Tool from the Triage form, a Task, or from AdHoc.
2. Select all the boxes that apply for SIRS Screen.
3. Select the appropriate response for Infection Screen. **Choose Possible suspected, or Known infection or positive culture, if applicable. This does NOT generate a diagnosis as that is outside of nursing scope.**
4. A positive SIRS and Infection Screen opens the Organ Dysfunction Screen.
 - a. Select organ dysfunction criteria that apply for **NEW, acute, or worsening** organ dysfunction. **For stable patients with chronic issues like chronic kidney disease, choose 'Known or improving organ dysfunction' box.**
 - b. One or more signs of Organ Dysfunction will calculate a positive Sepsis Screen.
5. Once the Sepsis Action window opens, click Notify the Provider, chart Sepsis Provider Notification (this will generate a Provider Notification Task).

1 Sepsis Screening Tool

The purpose of this tool is to facilitate EARLY RECOGNITION & TREATMENT OF SEPSIS
THIS TOOL DOES NOT REPLACE CLINICAL JUDGMENT

Last 6 Results (in the last 72 hours) -

Temperature		Heart Rate		Respiratory Rate	
38.9	Oral	08/15/2022	12:30	127	08/15/2022 12:30
38.8	Oral	08/15/2022	12:00	125	08/15/2022 12:00
38.9	Oral	08/15/2022	10:00	125	08/15/2022 10:00

Blood Pressure: 105/65 08/15/2022 12:30, 105/65 08/15/2022 12:00, 105/55 08/15/2022 10:00
 Mean BP (MAP): 78, 78, 72
 Lactic Acid: [blank]
 White Blood Count: 13 08/15/2022 12:41

2 SIRS and Infection Screen

SIRS Screen

- None seen
- Temp less than 36 or greater than 38.3 deg C
- Heart Rate greater than 90/min
- Resp Rate greater than 20/min
- WBC under 4 K, above 12 K, or more than 10% bands past 72 hrs

3 Infection Screen

- None seen
- Possible suspected or known infection or positive culture

Reference Text - Right click to access reference text

SIRS and Infection Screen Result

- Negative SIRS and infection screen
- Positive SIRS and infection screen
- Ongoing SIRS and infection screen

For Positive SIRS and infection screen ONLY - look for automatic CBC, CMP, Lactic Acid orders, and notify provider PRN

4 Organ Dysfunction Screen

Only select organ dysfunction criteria that is NEW, acute, or worsening - otherwise choose 'Known or improving organ dysfunction' box

- None seen
- Known or improving organ dysfunction
- Lactic Acid greater than 2 mmol/L
- Systolic blood pressure (SBP) less than 90 mmHg
- Mean Blood Pressure (MAP) less than 65 mmHg
- Resp. Failure: Increasing O2 needs, Mech. Vent, BIPAP/CPAP
- Creatinine increase more than 0.5mg/dl/no chronic Kidney Dx
- Creatinine above 2 mg/dL - no chronic Kidney Dx
- Bilirubin greater than 2 mg/dL
- Platelet count less than 100,000 K/uL
- aPTT more than 60 seconds without anticoagulants
- INR more than 1.5 without anticoagulants

1 or more NEW signs of Organ Dysfunction will calculate a positive Sepsis Screen (Sepsis = SIRS + Infection + Organ Dysfunction)

Sepsis Screen Result

- Negative organ dysfunction screen - No Sepsis
- Positive organ dysfunction - Sepsis
- Known or improving organ dysfunction

Focus Note: Open

5 Sepsis Action

Sepsis Intervention: Notify Provider, chart Sepsis Provider Notification Form

- a. Click the
6. Notify the Provider.
7. Document the Sepsis Provider Notification task.
8. Right click to access the Checklist (see the Sepsis and Septic Shock Checklist section for more details).
9. Implement Sepsis orders ASAP.

7 Sepsis Provider Notification

Selecting 'Known or ongoing Sepsis' or 'Sepsis NOT suspected' will suppress SIRS & Sepsis Alerts for 72 hours.

Sepsis SBAR Provider Intervention

- Possible Sepsis
- Known or ongoing Sepsis
- Sepsis NOT suspected

Explanation/Diagnosis given by Provider during notification

Provider Notified: [text field]

Date/Time Provider Notified: [calendar]

START SEPSIS CHECKLIST anytime 'Possible Sepsis' selected - right click to access the checklist

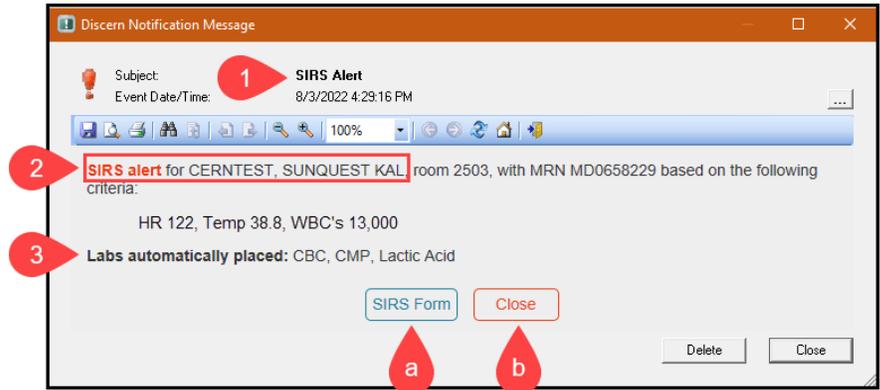
8

Document the Explanation/Diagnosis given by the provider

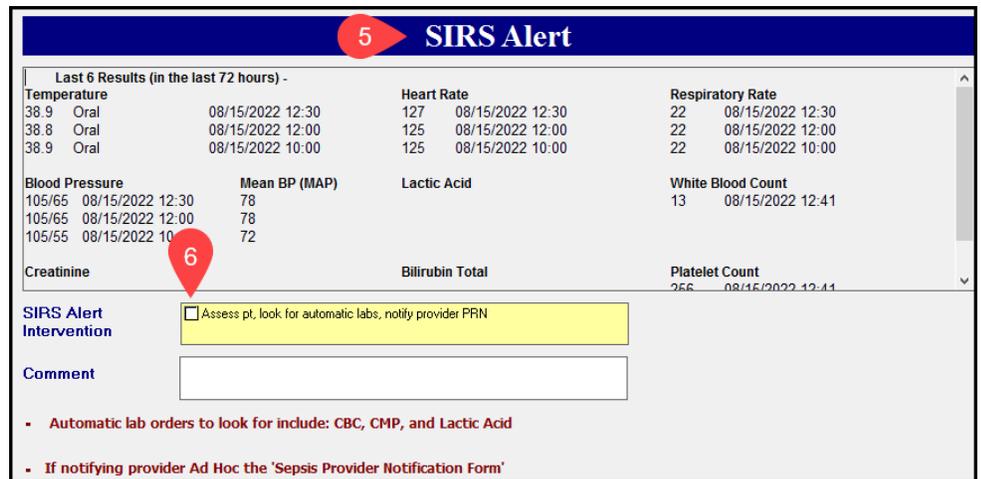
SIRS Notification Workflow

PowerChart/FirstNet detects symptoms consistent with SIRS:

1. A SIRS Alert fires to nurses who have an established electronic relationship with the patient.
2. Verify the patient's name on the notification.
3. Labs automatically placed: CBC, CMP, and Lactic Acid.
4. Acknowledge the notification:
 - a. Click SIRS Form if you are the caregiver responding to the alert.
 - b. Click Close and others will continue to receive the alert.



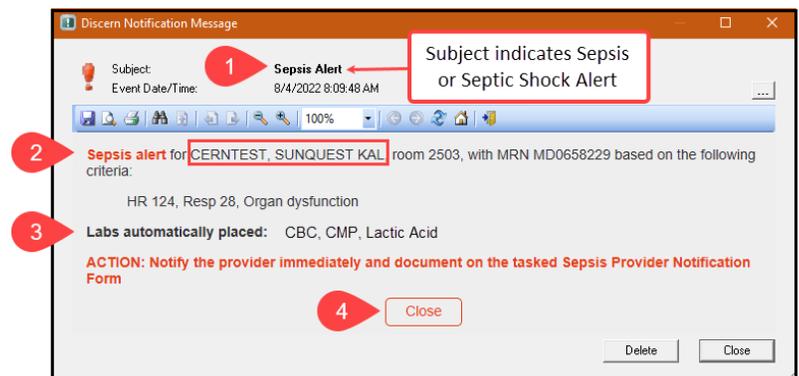
5. Selecting SIRS Form will open the SIRS Alert Form.
6. Click Assess pt. and look for automatic labs, **notify provider PRN.**
7. If the provider is notified, document notification on the AdHoc Sepsis Provider Notification form.



Sepsis and Septic Shock Notification Workflow

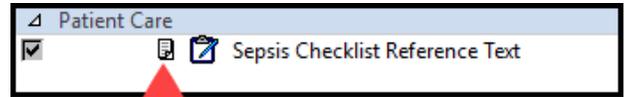
PowerChart/FirstNet detects symptoms consistent with Sepsis or Septic Shock:

1. A Sepsis or Septic Shock Alert fires to nurses who have an established electronic relationship with the patient.
2. Verify the patient's name on the notification.
3. Labs automatically placed: CBC, CMP, and Lactic Acid.
4. Acknowledge the notification and click Close.
5. The Sepsis Provider Notification Task fires to the nurse.
6. **Notify the provider immediately.**
7. Document the Sepsis Provider Notification form.



Sepsis and Septic Shock Checklist

- Available in paper format which can be accessed from:
 - The Sepsis Checklist Reference Text order.
 - The Sepsis Screening Tool.
 - The Provider Notification Task.
- The Checklist assists with the recognition of sepsis, treatment guidelines, and provides an area to record the dates and times of sepsis tasks completed.
 - It serves as an SBAR/Hand-off tool to let the next caregivers know what has and has not been completed.
- Send the Checklist with the patient upon transfer to another floor/facility.
- The Checklist will be scanned into the medical record upon discharge.



MUNSON HEALTHCARE

Disclaimer: ONLY items that are ordered via the Sepsis plan within the electronic order set/health record should be carried out and documented on this checklist. Documentation on this form does not replace or supersede other documentation standards of care required within the EHR. The evidence based best practice recommendations in this document are intended solely to provide guidance for teams caring for patients with sepsis or septic shock, and to serve as a communication tool across the continuum of care. This document also does not replace case-by-case assessment and clinical decision-making by a licensed healthcare provider.

PATIENT ID LABEL

SEPSIS & SEPTIC SHOCK CHECKLIST

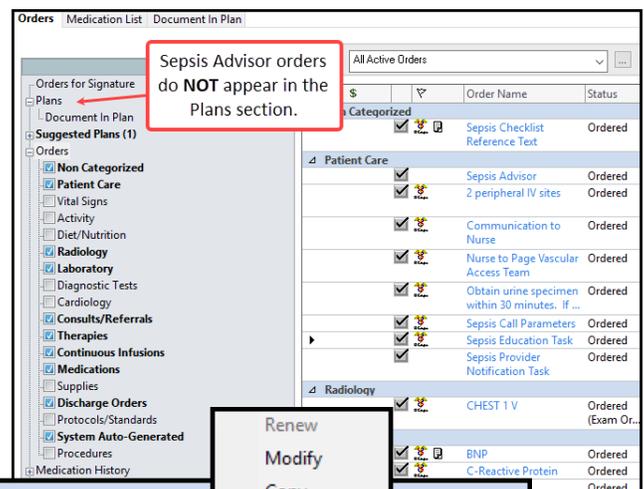
SEPSIS = Suspicion of infection plus 2 or more SIRS plus organ dysfunction
 SEPTIC SHOCK = Sepsis induced hypotension (SBP less than 90mmHg, MAP less than 65mmHg) after fluid resuscitation or lactate greater or equal to 4

SEPSIS 3 HOUR	Date: / /	Comments
Early Identification		
Sepsis Time Zero (must include all three)	Time: : :	
1. Suspicion of infection plus	Nurse Initial:	
2. 2 or more SIRS plus		
3. Organ dysfunction		
Initial lactate level measured	Time: : :	
Result: _____	Nurse Initial: _____	
Administration of 30 mL/kg crystalloid fluid bolus	Time: : :	Take 2 complete sets of vital signs & notify provider to perform sepsis reassessment when bolus complete
Pre-hospital EMS fluids, if any - # mL _____	Nurse Initial: _____	
	Time: : :	
	Nurse Initial: _____	
	#1 Time: : :	
	Nurse Initial: _____	
Blood cultures drawn x 2		

Viewing and Discontinuing Sepsis Advisor Orders

- Sepsis Advisor orders can be viewed in the Orders Flowsheet within the assigned categories of the Navigator.
 - Sepsis Advisor orders do **NOT** appear in the Plans (PowerPlan) section.

NOTE: Nurses cannot order the Sepsis Advisor. Only providers can place the order.



- All Sepsis Advisor orders can be individually discontinued from the Orders Flowsheet.

Category	Order Name	Status	Start/Stop	Action
Radiology	CHEST 1 V	Ordered (Exam Or...)	STAT, 09/06/22 11:56:00 EDT, Stop: 09/06/22 11:56:00 E	
Laboratory	BNP	Ordered	STAT, ONCE, 09/08/22 10:09:00 EDT, Stop 09/08/22 10:0	<ul style="list-style-type: none"> Cancel/DC Delete/Void
	C-Reactive Protein	Ordered	STAT, ONCE, 09/08/22 10:09:00 EDT, Stop 09/08/22 10:0	
	Prottime	Ordered	STAT, ONCE, 09/08/22 10:09:00 EDT, Stop 09/08/22 10:0	
	Urinalysis w/ Culture if	Ordered	STAT, ONCE, 09/08/22 10:09:00 EDT, Stop 09/08/22 10:0	

Results Review: Sepsis Screening Results

Within the Screening Results section of various flowsheets, users can view the following information:

- a. Recommendation/Action-Crawler - Displays system generated Sepsis Alerts.
- b. Sepsis Infection Source - Displays Infection Source assigned in the Sepsis Advisor.
- c. Patient shows signs of (Sepsis Advisor) - Displays the Sepsis term assigned in the Sepsis Advisor.
- d. Sepsis Dismiss Alert - Displays **Yes** when the provider selects **Open Chart** from Sepsis Alert.

Flowsheet	10/7/2022 12:22 PM EDT	10/7/2022 11:14 AM EDT	10/7/2022 10:50 AM EDT	10/7/2022 10:42 AM EDT
Screening Results				
Recommendation/Action-Crawler				Septic shock *
Sepsis Infection Source		Pneumonia		
Patient shows signs of (Sepsis Advisor)		Septic shock		
Sepsis Dismiss Alert			Yes	