

Inpatient Sepsis Alert & Screening Process

Nursing alert will fire for nurses if SIRS, Sepsis, or Septic Shock criteria is met.

SIRS	Sepsis	Septic Shock
<p>Patient will alert for SIRS when at least 3 of the following are true for the latest result over the past 30 hrs:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Heart Rate ≥ 91 <input type="checkbox"/> Temp < 36 or ≥ 38.4 °C <input type="checkbox"/> Respiratory Rate ≥ 21 <input type="checkbox"/> WBC* < 4 or > 12 or Bands $> 10\%$ 	<p>Patient will alert for Severe Sepsis when there are 2 SIRS criteria and at least 1 of the following signs of organ dysfunction:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Creatinine* ≥ 2.0 mg/dL AND increase of $\geq .5$ mg/dL over 72 hours <input type="checkbox"/> Lactate > 2.0 and < 4 mmol/L <input type="checkbox"/> Bilirubin > 2.0 mg/dL and < 10.0 mg/dL <input type="checkbox"/> Platelet count $< 100,000$ <input type="checkbox"/> INR* > 1.5 	<p>Patient will alert for Septic Shock when there are 2 SIRS criteria and at least 1 of the following:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lactate ≥ 4.0 mmol/L <input type="checkbox"/> SBP < 90 mmHg <input type="checkbox"/> MAP < 65 mmHg

Below are the criteria built in system that suppress the **SIRS**, **Sepsis**, and **Septic Shock** alerts.

- Active Resuscitation Status order – DNR/Comfort Measures exists.
- **Severe Sepsis (R65.20)** or **Septic Shock (R65.21)** diagnosis code suppresses alerts for 3 days (span visits).
- Any Sepsis plan suppresses alerts for 48 hours.
- Documentation of a **Surgery Stop Date/Time** or **PACU In Date/Time** suppresses alerts for 4 hours.
- Alerts are suppressed for 24 hours after a **Shock** or **Sepsis** alert fires.
- **SIRS** alerts are suppressed for 12 hours after an alert fires.
- Any IV/IM/IO antibiotic administration suppresses alerts for 48 hours for the following meds:
 - Ampicillin-sulbactam
 - Ampicillin
 - Aztreonam
 - cefepime
 - Cefiderocol
 - Ceftazidime/Avibactam
 - Ceftolozane/tazobactam
 - Ceftriaxone
 - Meropenem
 - Meropenem/vabobactam
 - Metronidazole
 - Piperacillin/tazobactam
 - Vancomycin

Alert will be labeled by type of alert: SIRS, Sepsis, or Septic Shock. It will fire even if the nurse is not in that patient's chart and will include the patient location, name, MRN, and the criteria that was met to fire the alert.

The nurse will be prompted to launch the Sepsis Screening PowerForm.

Discern Notification Message

Subject: **SIRS [Sepsis] Alert**
Event Date/Time: 06/22/23 00:20:49

SIRS ALERT
LOCATION: CB4SW; L4329
NAME: Upgrd, Sepsisball
MRN: 55465829

Launch Sepsis Screening PowerForm

This patient's vital signs and lab values meet criteria for SIRS as of June 22, 2023 00:20:49 EDT

SIRS Criteria
06/22/23 00:00:00 Temperature Oral = 39 C (H) [Greater than or equal to 38.4]
06/22/23 00:00:00 Heart Rate Monitored = 99 bpm (H) [Greater than or equal to 91]
06/22/23 00:00:00 Respiratory Rate = 23 bpm (H) [Greater than or equal to 21]

Click the Delete Message icon (red X) once the screening tool has been completed.

Delete Close

Discern Notification Message

Subject: **Sepsis Alert**
Event Date/Time: 06/22/23 13:36:06

SEPSIS ALERT
LOCATION: CB4SW; L4329
NAME: Upgrd, Sepsisball
MRN: 55465829

Launch Sepsis Screening PowerForm

This patient's vital signs and lab values meet criteria for Sepsis as of June 22, 2023 13:36:06 EDT

Sepsis Criteria
06/22/23 00:00:00 Temperature Oral = 39 C (H) [Greater than or equal to 38.4]
06/22/23 00:00:00 Heart Rate Monitored = 99 bpm (H) [Greater than or equal to 91]
06/22/23 00:00:00 Respiratory Rate = 23 bpm (H) [Greater than or equal to 21]
06/22/23 13:30:00 Bilirubin Total SerPI QN = 3.2 mg/dL (H) [Greater than 2.0 and less than 10.0]

Click the Delete Message icon (red X) once the screening tool has been completed.

Delete Close

Discern Notification Message

Subject: **Septic Shock Alert**
Event Date/Time: 06/22/23 13:47:16

SEPTIC SHOCK ALERT
LOCATION: CB4SW; L4329
NAME: Upgrd, Sepsisball
MRN: 55465829

Launch Sepsis Screening PowerForm

This patient's vital signs and lab values meet criteria for Septic Shock as of June 22, 2023 13:47:16 EDT. If patient is decompensating, notify provider or RRT (where available).

Septic Shock Criteria
06/22/23 00:00:00 Temperature Oral = 39 C (H) [Greater than or equal to 38.4]
06/22/23 00:00:00 Heart Rate Monitored = 99 bpm (H) [Greater than or equal to 91]
06/22/23 00:00:00 Respiratory Rate = 23 bpm (H) [Greater than or equal to 21]
06/22/23 13:45:00 Lactate Venous PI QN = 5.0 mmol/L (H) [Greater than or equal to 4.0]
06/22/23 13:30:00 Bilirubin Total SerPI QN = 3.3 mg/dL (H) [Greater than 2.0 and less than 10.0]

Click the Delete Message icon (red X) once the screening tool has been completed.

Delete Close

Discern Notification Message

Subject: **Septic Shock Alert**
Event Date/Time: 06/22/23 13:44:23

SEPTIC SHOCK ALERT
LOCATION: CB4SW; L4329
NAME: Upgrd, Sepsisball
MRN: 55465829

Launch Sepsis Screening PowerForm

First, verify hypotension. If patient is decompensating, notify provider or RRT (where available).

Septic Shock Criteria
06/22/23 00:00:00 Temperature Oral = 39 C (H) [Greater than or equal to 38.4]
06/22/23 00:00:00 Heart Rate Monitored = 99 bpm (H) [Greater than or equal to 91]
06/22/23 00:00:00 Respiratory Rate = 23 bpm (H) [Greater than or equal to 21]
06/22/23 13:00:00 MAP Invasive = 64 mmHg [Less than 65]
06/22/23 13:30:00 Bilirubin Total SerPI QN = 3.3 mg/dL (H) [Greater than 2.0 and less than 10.0]

Click the Delete Message icon (red X) once the screening tool has been completed.

Delete Close

Nurse evaluates patient to ensure they meet SIRS, Sepsis, or Septic Shock alert criteria and have signs and symptoms of a new or worsening infection.

If “None” is selected, there is no further action by the nurse.

Inpatient Adult Sepsis Screening

Step 1

Most Recent Alert

06/22/23 13:47 - **Septic shock**

06/22/23 00:00:00 Temperature Oral = 39 C (H) [Greater than or equal to 38.4]
06/22/23 00:00:00 Heart Rate Monitored = 99 bpm (H) [Greater than or equal to 91]
06/22/23 00:00:00 Respiratory Rate = 23 bpm (H) [Greater than or equal to 21]
06/22/23 13:45:00 Lactate Venous PI QN = 5.0 mmol/L (H) [Greater than or equal to 4.0]
06/22/23 13:30:00 Bilirubin Total SerPI QN = 3.3 mg/dL (H) [Greater than 2.0 and less than 10.0]

Does the patient display signs/symptoms of a new or worsening infection?

☐ None
☐ Altered mental status from baseline
☐ Signs and Symptoms of Infection
☐ Other:

Signs, Symptoms, and Risks of Infection (Unless clear alternative source such as seizure)
Temp <36 or >38.3, HR>90, RR>20, MAP <65, SBP <90 or >40 decrease in SBP
Breathlessness, or statements such as "I feel like I'm dying"
Cough
GI symptoms such as: abdominal distention, pain, or change in bowels
Positive blood cultures
Recent antibiotic use
Recent surgery, obstetric care, long term care admission, or hospitalization
Shivering
Shortness of Breath
Urinary urgency, frequency, pain, or foul/cloudy urine
Wound, abscess, or cellulitis with drainage, swelling, redness with or without streaks, or pain

In Progress

If the patient screens positive and if the patient has no pending lactate orders, a lactate order will be auto-entered via system protocol and drawn by the nurse. Furthermore, the nurse will ensure the patient has patent IV access.

Step 2

IV ACCESS
Ensure patient has freely available, patent IV access. Two sites are preferred for potential administration of IVF and antibiotics simultaneously.

LACTATE TEST REVIEW

Pending Lactate PI Venous QN - Ordered on 08/23/23 13:37
No Lactate results exist in the last 48 hours.

Is there a pending lactate?

☐ Draw lactate, there is no pending lactate order
☐ No lactate needed, there is a pending lactate order

If "Draw lactate" response selected, draw lactate as soon as possible. Order will be auto-entered via the system protocol upon signing this form.

Notify provider. Call RRT if appropriate based on unit protocol.

Nursing Assessment:
- Current abx regimen
Prepare to discuss with provider:
- Status of lactate lab/need for blood cultures
- Relevant history
- SIRS criteria shown above
- Sepsis organ dysfunction/shock criteria shown above
- Potential source of infection, if known
- Ask to initiate sepsis order set

If the patient screened positive for sepsis, a second task will fire to the nurse to provide follow-up documentation.

The screenshot shows a web application titled "Inpatient Adult Sepsis Screening Follow-up - Cttest, Sepsisball". The interface includes a top navigation bar with various icons and a "Show Sign Confirmation" checkbox. Below the navigation bar, there is a header section with a date and time selector ("*Performed on: 08/23/2023 13:20 EDT") and a user identifier ("By: Kaminski, Christina Ann, RN"). The main content area features a large blue banner with the text "Inpatient Adult Sepsis Screening Follow-up". Below the banner, there are three sections: "Action Taken:" with checkboxes for "Provider notified" and "Rapid Response Called"; "Provider Notified:" with a text input field and a search icon; and "Provider/RRT Notified Dt/Tm:" with a date and time selector. At the bottom, there is a "Comments" section with a large text input field. The application is running in a web browser window, and the status bar at the bottom indicates "In Progress".