

**HOURLY ONE BUNDLE: INITIAL RESUSCITATION FOR SEPSIS AND SEPTIC SHOCK (BEGIN IMMEDIATELY):**

- 1) Measure lactate level.\*
- 2) Obtain blood cultures before administering antibiotics.
- 3) Administer broad-spectrum antibiotics.
- 4) Begin rapid administration of 30ml/kg crystalloid for hypotension or lactate  $\geq 4$  mmol/L.
- 5) Apply vasopressors if hypotensive during or after fluid resuscitation to maintain a mean arterial pressure  $\geq 65$  mm Hg.

\*Remeasure lactate if initial lactate elevated ( $> 2$ mmol/L).

## CMS bundle

### Within 3 hours:

- Lactate
- Blood cultures before abx
- Broad spectrum abx (beta lactam before vanc)
- Initiation of fluid resuscitation
  - 30ml/kg if the patient has hypotension or lactate  $> 4$
  - 30ml/kg IBW if BMI  $> 30$

### Within 6 hours

- Repeat lactate if the initial lactate  $> 2$
- Initiation of vasopressors if MAP still  $< 65$  or sbp  $< 90$
- Complete a .sepsisexam

# UNC Sepsis Bundle Order Set

Order Sets

Clear All Orders

Adult Sepsis Bundle  Personalize 

- UNC Healthcare Code Sepsis Website

## ▼ Adult Sepsis Bundle

### ▼ IV Fluid Bolus Orders

Sepsis Fluid Resuscitation

### ▼ Adult Sepsis Bundle

Adult Sepsis Bundle (UNC/HBR)

## ▼ Antibiotics by Source of Infection

- ▶ Immunocompromised Click for more
- ▶ Intra-abdominal Click for more
- ▶ Meningitis Click for more
- ▶ Pneumonia Community Acquired Click for more
- ▶ Pneumonia Hospital-Acquired or Healthcare-Associated Click for more
- ▶ Skin and Soft Tissue Click for more
- ▶ Unknown Click for more
- ▶ Urinary Tract Click for more

## ▼ Adult Sepsis Bundle

### ▼ IV Fluid Bolus Orders

#### Sepsis Fluid Resuscitation

Lactated ringers is recommended for large volume fluid resuscitation in patients with critical illness.

For patients with a BMI > 30, dose fluids by Ideal Body Weight (IBW).

Use Lactated Ringer solution with caution in patients with clinically significant hyperkalemia or brain injury.

- lactated ringers 30 mL/kg bolus  
30 mL/kg, Intravenous, Administer over 20 Minutes, Once, STAT
- sodium chloride 0.9% (NS) 30 mL/kg bolus  
30 mL/kg, Intravenous, Administer over 20 Minutes, Once, STAT
- lactated ringers 30 mL/kg bolus (if patient BMI > 30)  
30 mL/kg (Ideal), Intravenous, Administer over 20 Minutes, Once, Use patient's Ideal Body Weight if BMI > 30, STAT
- sodium chloride 0.9% (NS) 30 mL/kg bolus (if patient BMI > 30)  
30 mL/kg (Ideal), Intravenous, Once, Use patient's Ideal Body Weight if BMI > 30, STAT
- lactated ringers bolus  
1,000 mL, Intravenous, Administer over 30 Minutes, Once, Hang bag to gravity and allow fluids to run as fast as possible, STAT
- sodium chloride 0.9% (NS) bolus  
1,000 mL, Intravenous, Administer over 30 Minutes, Once, Hang bag to gravity and allow fluids to run as fast as possible, STAT

## ▼ Adult Sepsis Bundle

### ▼ IV Fluid Bolus Orders

#### Sepsis Fluid Resuscitation

Lactated ringers is recommended for large volume fluid resuscitation in patients with critical illness.

For patients with a BMI > 30, dose fluids by Ideal Body Weight (IBW).

Use Lactated Ringer solution with caution in patients with clinically significant hyperkalemia or brain injury.

lactated ringers bolus 1,944 mL  
1,944 mL (30 mL/kg × 64.8 kg), Intravenous, Administer over 20 Minutes, Once, today at 1100, For 1 dose  
STAT

sodium chloride 0.9% (NS) 30 mL/kg bolus  
30 mL/kg, Intravenous, Administer over 20 Minutes, Once, STAT

lactated ringers 30 mL/kg bolus (if patient BMI > 30)  
30 mL/kg (Ideal), Intravenous, Administer over 20 Minutes, Once, Use patient's Ideal Body Weight if BMI > 30, STAT

sodium chloride 0.9% (NS) 30 mL/kg bolus (if patient BMI > 30)  
30 mL/kg (Ideal), Intravenous, Once, Use patient's Ideal Body Weight if BMI > 30, STAT

Adult Sepsis Bundle (UNC/HBR)

**Administer antibiotics AFTER blood culture obtained if possible.**

**Antibiotic orders can be found in the Antibiotics by Source of Infection section of the order set.**

- 1) The 2nd Blood Gas Critical Care Panel - Venous or Arterial must be entered by Nursing for 1 HR after the first Lab.**
- 2) Edit the time for the 2nd POCT Venous Blood Gas or POCT Arterial Blood Gas to be 1 HR after the first POCT. (Must Enter a Specific Time.)**

Notify Pharmacy of sepsis patient

STAT, Once, First occurrence today at 1043

Notify the inpatient pharmacy immediately of Adult Code Sepsis. Provide MRN and antibiotic ordered.

Cardiac Monitor

STAT, Until discontinued, starting today at 1043, Until Specified

Indication: Risk for physiological instability

Oxygen sat continuous monitoring

STAT, Until discontinued, starting today at 1043, Until Specified

Nursing oxygen orders / instructions

Insert peripheral IV

STAT, Once, First occurrence today at 1043

PIV Details: IV Access at all times

Confirm patency of existing line.

Blood Culture

STAT, First occurrence today at 1043


 Draw before administering any antibiotic if possible.

Blood to be drawn by: Nurse

Blood

Blood Culture

STAT, First occurrence today at 1043

 Draw from different site than culture #1 before administering any antibiotic.

Blood to be drawn by: Nurse

Blood


Comprehensive Metabolic Panel

 Add to specimen collected 48m ago?

STAT, First occurrence today at 1043

New collection

CBC w/ Differential

 Add to specimen collected 48m ago?

STAT, First occurrence today at 1043

## ▼ Antibiotics by Source of Infection

### ▶ Immunocompromised

[Click for more](#)

### ▼ Intra-abdominal

Primary Therapy is piperacillin-tazobactam (Zosyn) [OR cefepime (Maxipime) **AND** metronidazole (Flagyl)]. If at REX, Primary Therapy is piperacillin-tazobactam (Zosyn) [OR cefepime (Maxipime) **AND** vancomycin **AND** metronidazole (Flagyl)].

**\*\* If infection is healthcare-associated, add vancomycin to piperacillin-tazobactam (Zosyn). \*\***

Choose aztreonam (Azactam) **AND** metronidazole (Flagyl) **AND** vancomycin for **SEVERE** beta-lactam allergy.

Replace vancomycin with daptomycin (Cubicin) if patient is allergic to vancomycin.

piperacillin-tazobactam (and vancomycin if indicated) (UNC/CHT/PRDH/CLDH/JHH/JHCH/NSHH/WAYH)

cefepime AND vancomycin AND metronidazole (UNC/CHT/PRDH/CLDH/JHH/JHCH/NSHH/WAYH)

aztreonam AND vancomycin AND metronidazole (daptomycin if allergic to vanc) (UNC/CHT/PRDH/CLDH/JHH/NSHH/WAYH)

### ▶ Meningitis

[Click for more](#)

### ▶ Pneumonia Community Acquired

[Click for more](#)

### ▶ Pneumonia Hospital-Acquired or Healthcare-Associated

[Click for more](#)

### ▶ Skin and Soft Tissue

[Click for more](#)

### ▶ Unknown

[Click for more](#)

### ▶ Urinary Tract

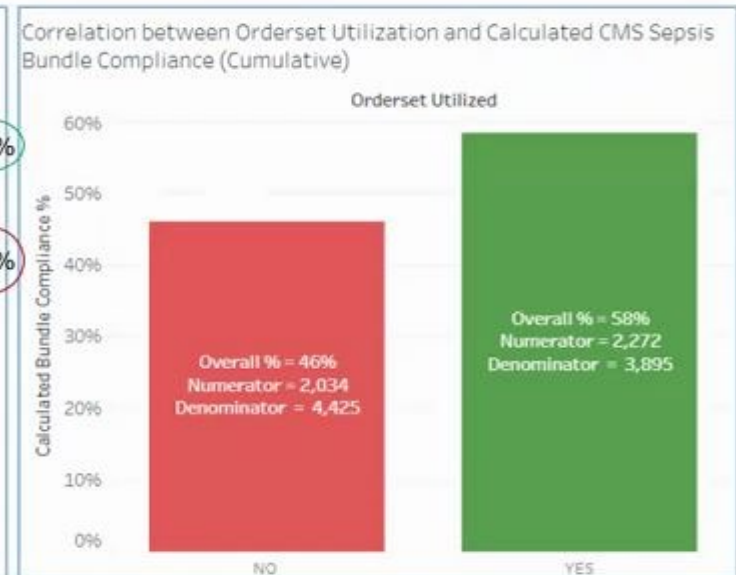
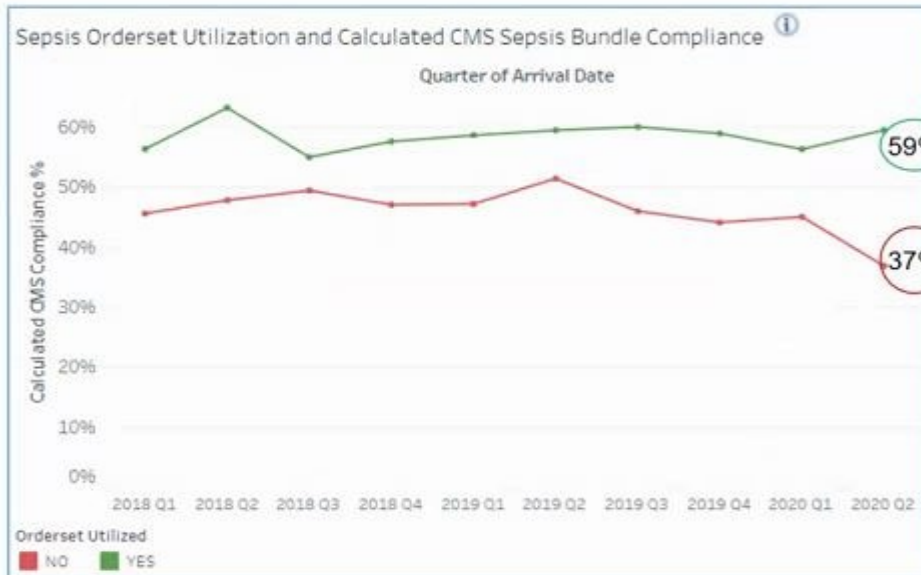
[Click for more](#)

# Order Set w/ Compliance

## Order Set Utilization and Calculated CMS Bundle Compliance, January 2019 – June 2020

All Epic@UNC Entities, IP and ED

- There is a strong, consistent correlation between order set utilization (nursing and provider), and calculated CMS bundle compliance



# Order Set w/ Mortality Index & Rate

## Order Set Utilization and Mortality: January 2019 – May(Index), June(Rate) 2020

All Epic@UNC Entities, IP and ED

