

## ANTIBIOTIC TREATMENT FOR SEPSIS

**Clinical Practice:** Empiric Antibiotic Treatment for Sepsis and Septic Shock patients

**Clinical Team:** Sepsis Steering Committee

**Owners:** Dr. Matthew Geib and Carolyn Brown, RN

**Approved by:** Clinical Excellence Council

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### Practice Statement and Rational:

Every hour of delay in the recognition of sepsis or septic shock to antibiotic administration is associated with increased mortality.

For effective management of sepsis or septic shock and prevention of mortality, empiric broad-spectrum antimicrobial therapy is recommended at the time of presentation.

### Clinical Approach:

Condition	Antimicrobial Therapy
Septic Shock and Sepsis	<p>As soon as possible upon recognition of sepsis (goal &lt; 60 minutes), administer:</p> <ol style="list-style-type: none"> <li>Empiric Approach: <ul style="list-style-type: none"> <li>Cefepime</li> <li>Vancomycin (pharmacy to dose)</li> </ul> </li> <li>If source is known on presentation prior to diagnostic results, administer source specific antibiotic</li> </ol>

Antibiotic reconsideration should be addressed at 48 hours after admission and therapy adjusted as appropriate.

### Workflow Enablers:

- ED order set: 183
- Admission order sets: 1563, 593
- 48 Hour antibiotic timeout driven by pharmacy

### Measuring Success:

- % of Code Sepsis patients with ED and admission order sets used
- % of Code Sepsis patients with door to antibiotic administered within 60 minutes
- % of patients with 48-hour timeout documentation by pharmacist

### References:

1. Ferrer R, Martin-Loeches I, Phillips G, et al: Empiric antibiotic treatment reduces mortality in severe sepsis and septic shock from the first hour: results from a guideline-based performance improvement program. *Crit Care Med* 2014; 42:1749–1755.
2. Kumar A, Roberts D, Wood KE, et al: Duration of hypotension before initiation of effective antimicrobial therapy is the critical determinant of survival in human septic shock. *Crit Care Med* 2006; 34:1589–1596.
3. Rhodes A, Evans LE, Alhazzani W, et al: Surviving Sepsis Campaign: International guidelines for management of sepsis and septic shock: 2016. *Crit Care Med* 2017; 45:486–552

This recommendation is not a substitute for clinical judgement.