

Sharp Healthcare Treatment Guidelines for Empiric Sepsis Treatment Based on Suspected Source

Selecting Antimicrobial Agent(s) <ul style="list-style-type: none"> • Review pathogen history • Review for recent exposure to antimicrobial agents 	MDRO Risk Factors (Consider ID Consultation*) <ul style="list-style-type: none"> • Prior history of MDROs • Structural lung disease, IV antibiotics within past 90 days, hospital stay ≥ 5 days, preceding ARDS
All cephalosporins included in the sepsis antibiotic recommendations are considered safe alternatives in patients with penicillin allergy, including Type I anaphylaxis (see Policy 43008 Cephalosporin administration to Penicillin-allergic Patients)	

*Particularly for patients with history of carbapenem-resistant organisms (e.g. KPC, CRE) given high associated mortality, the recommended regimens below may or may not provide adequate coverage for such organisms.

Suspected Source	Preferred Empiric Regimen	PCN Allergy, Including Severe or Type 1
Community acquired pneumonia (CAP)	Ceftriaxone 2g IV q24h + Doxycycline ¹ 100mg IV q12h	Ceftriaxone 2g IV q24h + Doxycycline ¹ 100mg IV q12h
CAP with Pseudomonas Risk ²	Cefepime 2g IV q8h + Doxycycline ¹ 100mg IV q12h +/- Tobramycin 5mg/kg IV x1 if septic shock	Cefepime 2g IV q8h + Doxycycline ¹ 100mg IV q12h +/- Tobramycin IV 5mg/kg x1 if septic shock
Nosocomial Pneumonia HAP/VAP	Cefepime 2g IV q8h + Vancomycin ³ per pharmacy +/- Tobramycin IV 5mg/kg x1 if septic shock	Cefepime 2g IV q8h + Vancomycin ³ per pharmacy +/- Tobramycin IV 5mg/kg x1 if septic shock
Nosocomial Pneumonia, h/o ESBL	Meropenem 500mg IV q6h + Vancomycin ³ per pharmacy	Meropenem 500mg IV q6h + Vancomycin ³ per pharmacy
Urinary Tract	Ceftriaxone 2g IV q24h +/- Gentamicin per pharmacy	Ceftriaxone 2g IV q24h +/- Gentamicin per pharmacy
Urinary Tract, h/o ESBL	Meropenem 500mg IV q6h	Meropenem 500mg IV q6h
Intra-abdominal	Zosyn 4.5g IV q8h	Cefepime 2g IV q8h + Metronidazole 500mg IV q8h
Intra-abdominal, h/o ESBL	Meropenem 500mg IV q6h	Meropenem 500mg IV q6h
Skin and Soft Tissue	Cefazolin 2g IV q8h + Vancomycin ^{3,4} per pharmacy	Cefazolin 2g IV q8h + Vancomycin ^{3,4} per pharmacy
Diabetic Foot/Wound/Ulcer	Zosyn 4.5g IV q8h + Vancomycin ³ per pharmacy	Cefepime 2g IV q8h + Metronidazole 500mg IV q8h + Vancomycin ³ per pharmacy
Skin and Soft Tissue, Diabetic Foot, or Wound/Ulcer h/o ESBL	Meropenem 500mg IV q6h + Vancomycin ³ per pharmacy	Meropenem 500mg IV q6h + Vancomycin ³ per pharmacy
Necrotizing Skin and Soft Tissue including fasciitis, Gas Gangrene	Zosyn 4.5g IV q8h + Vancomycin ³ per pharmacy + Clindamycin ⁴ 900 mg IV q8h	Cefepime 2g IV q8h + Vancomycin ³ per pharmacy + Clindamycin ⁵ 900mg IV q8h
Unknown Source	Zosyn 4.5g IV q8h + Vancomycin ³ per pharmacy	Cefepime 2g IV q8h + Vancomycin ³ per pharmacy +/- Metronidazole 500mg IV q8h
Unknown Source, h/o ESBL	Meropenem 500mg IV q6h + Vancomycin ³ per pharmacy	Meropenem 500mg IV q6h + Vancomycin ³ per pharmacy

MDRO=Multi-drug resistant organisms (e.g. ESBL, AmpC, etc), PCN=penicillins

¹ Doxycycline will also provide MRSA activity and may be associated with less CDI vs. Azithromycin.

² Patients with structural lung disease (e.g. cystic fibrosis, bronchiectasis, etc), recurrent COPD exacerbations treated with antibiotics and/or systemic steroids, etc.

³ For patients with allergic reactions (excluding red man syndrome) to vancomycin or a history of vancomycin resistant enterococcus (VRE), substitute with Daptomycin 6 mg/kg IV q24h for non-respiratory infections. For respiratory infections, substitute with Linezolid 600 mg IV Q12H. For patients with red man syndrome to vancomycin, please re-challenge with vancomycin slow infusion +/- premedication.

⁴ Consider discontinuing vancomycin if no MRSA identified

⁵ For anti-toxin effect if suspected severe streptococcal infection or presence of toxic shock syndrome.

The above recommendations are based on available literature and national guidelines. They are not intended to replace physician clinical judgment based on patient-specific factors. Last updated 02/2023