ASTRIA SUNNYSIDE HOSPITAL

Antibiotic Guidelines for Common Diseases (Inpatient Use Only)

These guidelines are intended to provide initial guidance, but do not replace clinical judgement. Doses of drugs recommended are not adjusted for renal/hepatic failure

Disease	Common Organisms	First-Line	Alternative Therapy	Comments
Diabetic Foot Infection Without Osteomyelitis 	*Streptococcus* spp. *Staphylococcus aureus* (MSSA) Enterobacteriaceae Obligate anaerobes	**If not septic:** Ampicillin-sulbactam 1.5g – 3 g IV every 6 hours **If septic:** Cefepime 2g IV every 8 hours **PLUS** Metronidazole 500mg IV every 6 hours **PLUS** Vancomycin (pharmacy to dose)	**For severe penicillin allergy:** Levofloxacin 750mg PO/IV daily **PLUS** Metronidazole 500mg IV every 6 hours **PLUS** Vancomycin (pharmacy to dose)	*P. aeruginosa* is often a non-pathogenic colonizer in diabetic foot wounds. Consider coverage for MRSA infection if history of colonization/infection Antibiotics not needed if wound is not clinically infected

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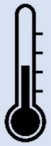
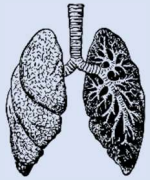
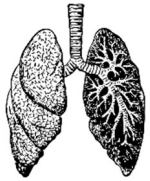
Diabetic Foot Infection With Osteomyelitis 	*Staphylococcus aureus* *Staphylococcus epidermidis*	Vancomycin (pharmacy to dose)	Vancomycin (pharmacy to dose)	*Staphyloccocus aureus* is the most commonly isolated organism in osteomyelitis
Intra-Abdominal Infection, Community-Acquired 	Enteric Gram-Negative Rods Anaerobes	**If not septic:** Ceftriaxone 2g IV daily **PLUS** Metronidazole 500mg PO/IV every 8 hours **If septic:** Piperacillin-tazobactam 3.375g IV every 8 hours	**For severe penicillin allergy:** Levofloxacin 750mg IV/PO daily **PLUS** Metronidazole 500mg PO/IV daily every 8 hours	For uncomplicated biliary infections, consider using ceftriaxone alone - anaerobic coverage not typically needed
Neutropenic Fever 	*Pseudomonas aeruginosa* *Staphylococcus epidermidis*	**If not septic:** Ceftazidime 2g IV every 8 hours **If septic:** Cefepime 2g IV every 8 hours **PLUS** Vancomycin (pharmacy to dose) (see comments)	**For severe penicillin allergy:** Aztreonam 2g IV every 6 to 8 hours **PLUS** Ciprofloxacin 400mg IV/PO every 8 hours **PLUS** Vancomycin (pharmacy to dose)	Consider vancomycin only if mucositis, line infection, colonization, history of infection, or skin/skin structure infection is present

Disease	Common Organisms	First-Line	Alternative Therapy	Comments
Pneumonia, Aspiration 	Streptococci Gram-Negative Bacilli Anaerobes	Ceftriaxone 1g IV daily	**For severe penicillin allergy:** Levofloxacin 750mg IV/PO daily	Add anaerobic coverage only if empyema, poor dentition, or lung abscess suspected Many patients who aspirate gastric contents have resolution of symptoms within 24-48 hours and require only supportive therapy
Pneumonia, Community-Acquired, ICU 	*Streptococcus pneumoniae* *Haemophilus influenzae* *Moraxella catarrhalis* *Mycoplasma pneumoniae* *Chlamydia pneumoniae* *Legionella pneumophilia* *Klebsiella pneumoniae* *Staphyloccous aureus* Respiratory viruses	Ceftriaxone 1g IV q24h **PLUS** Azithromycin 500mg IV/PO daily **WITH OR WITHOUT** Vancomycin (pharmacy to dose) (see comments)	**For severe penicillin allergy:** Levofloxacin 750mg IV/PO daily	MRSA risk factors: known colonization or prior infection, recent influenza infection, empyema, necrotizing/cavitary pneumonia MRSA nasal swab has a 98% negative predictive value for MRSA pneumonia Consider *Pseudomonas* coverage only if history of prior respiratory isolation and/or recent history of hospitalization + exposure to parenteral antibiotics

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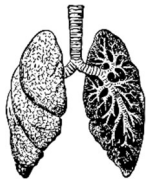
Pneumonia, Community-Acquired, Non-ICU 	*Streptococcus pneumoniae* *Haemophilus influenzae* *Moraxella catarrhalis* *Mycoplasma pneumoniae* *Chlamydia pneumoniae* *Legionella pneumophilia* *Klebsiella pneumoniae* *Staphyloccous aureus* Respiratory viruses	Ceftriaxone 1g IV daily **PLUS** Azithromycin 500mg daily	**For severe penicillin allergy:** Levofloxacin 750mg IV/PO daily	
Pneumonia, Hospital-Acquired 	*Pseudomonas aeruginosa* *Staphylococcus aureus* *Klebsiella pneumoniae* *Escherichia coli* *Acinetobacter* (less common)	Cefepime 2g IV every 8 hours **PLUS** Vancomycin (pharmacy to dose)	**For severe penicillin allergy:** Ciprofloxacin 400mg IV every 8 hours **PLUS** Aztreonam 2g IV every 6 to 8 hours **PLUS** Vancomycin (pharmacy to dose)	If < 4 days of hospitalization, consider ceftriaxone instead of cefepime
Skin and Skin Structure Infection, Not Purulent 	*Streptococcus* species	Cefazolin 1g-2g every 8 hours	**For severe penicillin allergy:** Clindamycin 600 – 900mg every 8 hours	Cefazolin may be used in those penicillin-allergic patients who do not report a history of anaphylaxis or Steven-Johnson's Syndrome May appear to worsen within first 24-48 hrs due to the presence of *Streptococcus* toxin

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Skin and Skin Structure Infection, Necrotizing Fasciitis 	*Staphylococcus aureus* Group A streptococcus Anaerobes Gram-negative rods	Vancomycin (pharmacy to dose) **PLUS** Penicillin 4 million units IV every 4 hours **PLUS** Clindamycin 900mg every 8 hours	**For severe penicillin allergy:** Levofloxacin 750mg IV/PO daily	Clindamycin added for anti-toxin properties and can be stopped once surgical debridement is achieved
Skin and Skin Structure Infection, Purulent 	*Staphylococcus aureus*	Vancomycin (pharmacy to dose)	Vancomycin (pharmacy to dose)	Incision and drainage is the primary therapy for abscesses Consider sending pus instead of wound swab for culture
Urinary Tract Infection, Cather Present 	*Escherichia coli* *Enterococcus* spp. *Pseudomonas aeruginosa* *Klebsiella* spp.	Ceftazidime 2g IV every 8 hours	**For severe penicillin allergy:** Ciprofloxacin 400mg IV/PO every 8 hours **WITH OR WITHOUT** Aztreonam 2g IV every 8 hours	
Urinary Tract Infection – No Catheter 	*Escherichia coli* *Klebsiella pneumoniae* *Proteus mirabilis*	Ceftriaxone 1g daily	**For severe penicillin allergy:** Ciprofloxacin 400mg IV/PO every 12 hours	Use of ciprofloxacin is discouraged unless there is no other option available to treat infection

Sources:

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