

## Recommended Duration of Therapy for Common Infections

### Based on Clinical Practice Guidelines

Intended Audience: Physicians, Pharmacists, and allied health providers

Urinary Tract Infections (IDSA – 2005, 2010, 2011)		
Asymptomatic bacteruria	Do NOT treat unless patient is pregnant or undergoing urologic procedure with potential mucosal bleeding	
Acute uncomplicated cystitis	Nitrofurantoin	5 days
	Trimethoprim/Sulfamethoxazole (Bactrim) Ciprofloxacin	3 days
	Fosfomycin	1 dose
	Cephalexin Cefpodoxime	5-7 days
	Fluoroquinolone (Cipro or Levofloxacin)	5-7 days
Acute pyelonephritis	Trimethoprim/Sulfamethoxazole (Bactrim)	14 days
	Beta-lactam	10-14 days
Recurrent cystitis		2-6 weeks
Complicated UTI	Prompt Resolution	7 days
	Delayed Response	7-14 days
Urosepsis		7-10 days
Catheter-associated urinary tract infection (CA-UTI)	Short-term indwelling catheter	7 days if symptoms resolve
		10-14 days if delayed response
		3 days if catheter removed in female pt ≤65yo with no upper urinary tract symptoms
	Long-term indwelling catheter	7 days
Acute Prostatitis		4-6 weeks
Chronic prostatitis	*Consult specialist	1-4 months

Acute Bacterial Skin and Skin Structure Infections (ABSSSI) (IDSA – 2014)		
Impetigo and Ecthyma		5-7 days
Erysipelas		5 days
Cellulitis	Non-Purulent (usually caused by Strep)	5-10 days
	Purulent (usually caused by Staph)	
Complicated SSTI		7 – 14 days
Cutaneous anthrax	Naturally acquired	7-10 days
	Bioterrorism	60 days

**Note: This document is just a guideline and should never replace the clinical judgment of a physician or pharmacist. Always review primary literature in complex clinical situations.**

Respiratory Tract Infections (IDSA/ATS – 2005,2007; IDSA: 2010; GOLD 2016)		
COPD exacerbations	Amoxicillin/clavulanate	5-10 days
	Azithromycin	3-5 days
	Doxycycline	5-10 days
	Levofloxacin (severe or recent ABX use)	5-7 days
Rhinosinusitis		5-7 days
Influenza	Treatment	5 days
	Prophylaxis	10 days
Community acquired pneumonia  **Cough and CXR may take 4-6 weeks to improve, no need to extend treatment if pt clinically stable **	Without immune deficiency or structural lung disease	3–5 days
	Moderate immune deficiency and/or structural lung disease (e.g., COPD, Bronchiectasis)	7 days
	Poor clinical response, received initial inappropriate therapy, or significantly immunocompromised	10-14 days
Hospital acquired or Ventilator associated pneumonia	<i>Staphylococcus aureus</i>	7-21 days depending on extent of the infection
	Caused by bacteria <b>other</b> than <i>Pseudomonas</i> , <i>Acinetobacter</i> , or <i>Stenotrophomonas</i>	7 days
	Confirmed <i>Pseudomonas</i> , <i>Acinetobacter</i> , or <i>Stenotrophomonas</i>	14-21 days
	Questionable HAP with clinical improvement	3 days
Persistent cough/pertussis	Azithromycin	5 days
	Clarithromycin	7 days

GI/Intra-abdominal Infections (IDSA/SIS – 2010)	
Acute appendicitis (Without evidence of perforation, abscess, or local peritonitis)	Prophylactic antibiotics only, treatment should be discontinued within 24 h
Bowel injuries attributable to penetrating, blunt, or iatrogenic trauma that are repaired within 12 hours	
Complicated Intra-abdominal Infections - Biliary sepsis - Complicated acute appendicitis - Complicated cholecystitis - Diverticulitis - Peritonitis	4-7 days  *Unless it is difficult to achieve adequate source control or clinical signs and symptoms have not resolved
Uncomplicated cholecystitis	Treat only until obstruction is relieved No post-op antibiotic needed if obstruction is relieved
<i>Clostridium difficile</i> infection	10-14 days
<i>Helicobacter pylori</i> infection	14 days

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### Infective Endocarditis (AHA/IDSA – 2015)

Organism	Valve Status or MIC	Duration
Viridans group streptococci and <i>Streptococcus gallolyticus (bovis)</i>	<u>Native Valve</u> MIC < 0.12 MIC > 0.12–0.5 MIC > 0.5	2–4 weeks* 4 weeks (2 weeks gentamicin) 4–6 weeks
	<u>Prosthetic valve</u> MIC < 0.12 MIC > 0.12	6 weeks 6 weeks
Ampicillin-susceptible enterococci	Native Valve	4-6 weeks**
	Prosthetic Valve	6 weeks
Vancomycin-resistant enterococci	Native or Prosthetic	> 6 weeks
Methicillin-sensitive <i>Staphylococcus aureus</i> (MSSA)	Native Valve	6 weeks
	Prosthetic Valve	≥ 6 weeks (2 weeks gentamicin)
Uncomplicated right-sided MSSA (e.g., IVDU)	Native Valve	2 weeks (if using β-lactam therapy)
Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA)	Native Valve	6 weeks
	Prosthetic Valve	≥ 6 weeks (2 weeks gentamicin)
HACEK ( <i>Haemophilus, Aggregatibacter, Cardiobacterium, Eikenella, and Kingella</i> )	Native or Prosthetic	4 weeks
Non-HACEK Gram-negative organism	Native or Prosthetic	6 weeks

\*2-week regimen indicated only for uncomplicated cases in which patients are also at low risk for aminoglycoside adverse events

\*\*4-week regimen indicated only if symptoms present for < 3 months and when utilizing ampicillin plus gentamicin combination. 6-week therapy recommended for symptoms > 3 months and when utilizing dual β-lactam therapy or vancomycin-containing regimen

#### Duration of Therapy Recommendations from the IE Guidelines

- It is reasonable that the counting of days for the duration of antimicrobial therapy begin on the first day on which blood cultures are negative in cases in which blood cultures were initially positive (Class IIa; Level of Evidence C)
- If operative tissue cultures are positive, then an entire antimicrobial course is reasonable after valve surgery (Class IIa; Level of Evidence B)
- If operative tissue cultures are negative, it may be reasonable to count the number of days of antimicrobial therapy administered before surgery in the overall duration of therapy (Class IIb; Level of Evidence C)

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Central Nervous System Infections (IDSA – 2004)		
Bacterial Meningitis	<i>Streptococcus pneumoniae</i>	10-14 days
	<i>Haemophilus influenzae</i>	7 days
	<i>Neisseria meningitides</i>	7 days
	<i>Listeria monocytogenes</i>	21 days
	Gram-negative bacilli	21 days
Herpes Simplex (HSV) Meningitis or Encephalitis	Acyclovir	14-21 days
Varicella-zoster virus	Acyclovir	10-14 days
Cytomegalovirus (CMV)	Ganciclovir +/- foscarnet	21 days followed by maintenance therapy

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#### References:

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4. Practice Guidelines for the Diagnosis and Management of Skin and Soft Tissue Infections: 2014 Update by the Infectious Diseases Society of America. *Clinical Infectious Diseases* 2014;1 -43
5. Global Strategy for the Diagnosis, Management, and Prevention of Chronic Obstructive Pulmonary Disease. 2016 Update: Accessed 3/7/2016: <http://www.goldcopd.org/guidelines-global-strategy-for-diagnosis-management.html>
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9. Management of Patients with Infections Caused by Methicillin-Resistant Staphylococcus Aureus: Clinical Practice Guidelines by the Infectious Diseases Society of America. *Clinical Infectious Diseases* 2011;52:1 -38
10. Guidelines for the Selection of Anti-infective Agents for Complicated Intra-abdominal Infections. *Clinical Infectious Diseases* 2010;50:133-164
11. Infective Endocarditis in Adults: Diagnosis, Antimicrobial Therapy, and Management of Complications. *Circulation* 2015;132:1-53
12. Practice Guidelines for the Management of Bacterial Meningitis. *Clinical Infectious Diseases* 2004;39:1267-1284

The most up-to-date guidelines from IDSA may be accessed at [http://www.idsociety.org/IDSA Practice Guidelines](http://www.idsociety.org/IDSA_Practice_Guidelines)