Kentucky Antimicrobial Stewardship Innovation Consortium

Educational Pearl

Even Shorter, Even Better: 3 Days for Community-Acquired Pneumonia

The 2019 American Thoracic Society (ATS) and Infectious Diseases Society of America (IDSA) community-acquired pneumonia (CAP) guidelines recommend treating patients until they are clinically stable and for a minimum of 5 days.[1] However, in the newest 2025 ATS CAP guidelines, an even shorter duration of 3 days is recommended for some patients.[2] Which patients with CAP can be treated with 3 days of antibiotics?

What do the guidelines say?

Hot off the press, the 2025 ATS CAP guideline recommends a minimum of 3 days in adult outpatients and inpatients with non-severe CAP who reach clinical stability. This is a conditional recommendation that requires individualization. Specific factors that may strengthen or weaken the recommendation for 3 days are provided and summarized in the table below.

Patients	Strengthen 3-day recommendation	Weaken 3-day recommendation (i.e., consider > 3 days)
Outpatients with CAP who reach clinical stability	↑ risk of antibiotic harm (e.g., history of *C. difficile* infection or antibiotic adverse event) Patient preference to minimize antibiotic exposure	Barrier to self-assessment, follow-up, or communication to ensure recovery Organism requiring longer duration (e.g., *S. aureus, P. aeruginosa*, *Legionella* spp., other intracellular organism) Radiographic imaging (e.g., high burden of disease, necrotizing infection, dense consolidations) Underlying lung disease (e.g., bronchiectasis, post-obstructive pneumonia, chronic respiratory insufficiency) Recent hospitalization or resident in long-term care
Non-severe inpatients with CAP who reach clinical stability	As above AND Resolution of inflammatory markers	As above AND Pneumonia complication (e.g., empyema/parapneumonic effusion, abscess, necrotizing pneumonia, bacteremia, extrapulmonary site of infection) Pregnancy Recent antibiotics

A minimum of five days is still recommended in adult inpatients with severe CAP who reach clinical stability.

What is the evidence?

Two double blind, randomized controlled trials have compared 3 days to 8 days of beta-lactam therapy in non-ICU inpatients with CAP who reached clinical stability on day 3. Similar rates in early clinical cure (10-15 days after antibiotic start) and late clinical cure (28-30 days after antibiotic start) were observed.[3,4] In one study, rates of 30-day mortality were low but similar (2% vs 1%).[4] The factors that weaken the 3-day recommendation (see above) include key exclusion criteria from these studies. Immunocompromised patients were also excluded from these studies and are outside the stated scope of the guidelines.[2-4]

Key Takeaway: Stop antibiotics after 3 days in clinically stable outpatients and non-severe inpatients with community-acquired pneumonia. Stop antibiotics after 5 days in clinically stable patients with severe community-acquired pneumonia without complications.

References:

1. Metlay JP, Waterer GW, Long AC et al. Diagnosis and treatment of adults with community-acquired pneumonia: an official clinical practice guideline from the American Thoracic Society and Infectious Diseases Society of America. *Am J Respir Crit Care Med*. 2019. 200(7): e45-67
2. Jones BE, Ramirez JA, Oren E, et al. Diagnosis and Management of Community-acquired Pneumonia. An Official American Thoracic Society Clinical Practice Guideline. *Am J Respir Crit Care Med*. Published online July 18, 2025. doi:10.1164/rccm.202507-1692ST
3. el Moussaoui R, de Borgie CA, van den Broek P, et al. Effectiveness of discontinuing antibiotic treatment after three days versus eight days in mild to moderate-severe community acquired pneumonia: randomised, double blind study. *BMJ*. 2006;332(7554):1355. doi:10.1136/bmj.332.7554.1355
4. Dinh A, Ropers J, Duran C, et al. Discontinuing β-lactam treatment after 3 days for patients with community-acquired pneumonia in non-critical care wards (PTC): a double-blind, randomised, placebo-controlled, non-inferiority trial. *Lancet*. 2021;397(10280):1195-1203. doi:10.1016/S0140-6736(21)00313-5

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