

Uncomplicated Community Acquired Pneumonia (CAP) in the Inpatient Setting: **Strive for Five*!**

Empiric Therapy for Uncomplicated, Non-severe CAP: Hospitalized Patients*

Therapy	Notes
Ceftriaxone PLUS azithromycin (or ceftriaxone plus doxycycline)	<ul style="list-style-type: none"> Ceftriaxone can be used in non-severe penicillin allergic patients
Levofloxacin	<ul style="list-style-type: none"> Consider use only if severe penicillin allergy Strongly associated with development of C. difficile Associated with prolonged QTc intervals, tendinopathies and altered mental status especially in the elderly

- Anaerobic coverage is not routinely warranted in non-critically ill patients with aspiration pneumonia

Duration of Therapy: STRIVE FOR 5*

- 5 days of therapy is sufficient for most patients with uncomplicated CAP.**
 - Patients will commonly be discharged with only 1 or 2 (or 0) days of discharge antibiotics depending on days of therapy received while hospitalized.
 - The prescribing of extra days of antibiotics at discharge is the #1 reason patients are treated too long.
 - The Empiric Oral Antibiotics listed in the chart to the left are also suggested discharge antibiotics. Azithromycin is not recommended as monotherapy at discharge **or** if patient has already received 3 days of azithromycin therapy (unless treating Legionella).
- Therapy can be continued for patients who are febrile or clinically unstable⁺⁺ on the 5th day of treatment
- Consider prolonging to at least 7 days if patient is immunocompromised, has underlying structural lung disease, or did not have adequate clinical response within 72 hours
- If the patient has Legionella, P. aeruginosa, or S. aureus, longer durations of therapy are usually required, particularly if there is associated bacteremia or a parapneumonic effusion
- A lingering cough and chest x-ray abnormalities may take several weeks to improve.

Step-Down and Transitioning to Oral Therapy

- Convert to oral antibiotics as soon as clinical improvement is observed and the patient is able to tolerate oral therapy.

Empiric Oral Antibiotics for Step-down Therapy when no Etiologic Pathogen Identified:

Amoxicillin*	
Amoxicillin-Clavulanate*	
Cefdinir* or Cefuroxime*	<ul style="list-style-type: none"> can be used in non-severe penicillin allergic patients.
Levofloxacin	<ul style="list-style-type: none"> Consider use only if severe Penicillin allergy Strongly associated with development of C. difficile Associated with prolonged QTc intervals, altered mental status & tendinopathies.

*Azithromycin can be added to above step-down therapy. However, 3 days of azithromycin is generally sufficient in uncomplicated CAP given its long half-life unless treating Legionella.

For more information and guidance:

- Refer to the Beaumont Health Adult Community-Acquired Pneumonia (CAP) Antimicrobial Treatment Guidelines located on both PolicyStat and the Beaumont Antimicrobial Stewardship Site and the HMS Guidelines located at: https://mi-hms.org/sites/default/files/CAP-Empiric-Treatment-and-Duration-Guidelines-030421_0.pdf
- Use the Order Set titled: EC/IP Pneumonia Management

STRIVE FOR FIVE

Most cases of pneumonia
can be treated with
five days of antibiotics.

*These recommendations are intended for non-ICU patients with CAP who are not severely immunosuppressed and do not have risk factors for MDR organisms
⁺⁺ Signs of clinical instability: oxygen saturation > 90% or new oxygen requirement, heart rate > 100 beats/minute, respiratory rate > 24 breaths/minute, systolic blood pressure < 90 mmHg, altered mental status (different than baseline).