Short Course Therapy for Community-acquired Pneumonia (CAP)

**BOTTOM LINE:** CAP can be safely and effectively treated with a 5 day course of antibiotic therapy.

- Current guidelines from the Infectious Diseases Society of America (IDSA) recommend that adult patients with community-acquired pneumonia (CAP) be treated for a minimum of 5 days (level I evidence), should be afebrile for 48–72 hours, and should have no more than one CAP-associated sign of clinical instability (Table 1) (level II evidence).¹
- There is no need to treat CAP until radiologic resolution; only to clinical improvement.
- Two meta-analyses found no difference in clinical and microbiological efficacy, relapses, or mortality between short- (less than or equal to 7 days) and long-course (greater than 7 days) antibiotic regimens in adult and pediatric patients with mild to moderate CAP.²,³

**NB:** Exceptions: patients with bacteremic *S. aureus* pneumonia, necrotizing pneumonia, empyema, or lung abscess need longer than 5 days of therapy.⁴

Shorter durations of therapy (reduced overall antibiotic exposure) have the following benefits:²,⁴,⁶

- reduces the selective pressure on bacterial flora thereby reducing the prevalence of antimicrobial resistance
- decreases collateral damage of antibiotic therapy:
  - adverse events
  - *C. difficile* infection
- better patient adherence
- decreased costs.

Table 1. Criteria for clinical stability in adult patients¹

<table>
<thead>
<tr>
<th>Test</th>
<th>Criteria</th>
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<tbody>
<tr>
<td>Temperature</td>
<td>less than or equal to 37.8°C</td>
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<tr>
<td>Heart rate</td>
<td>less than or equal to 100 beats/min</td>
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<tr>
<td>Respiratory rate</td>
<td>less than or equal to 24 breaths/min</td>
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<tr>
<td>Systolic blood pressure</td>
<td>greater than or equal to 90 mm Hg</td>
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<tr>
<td>Arterial O₂ saturation</td>
<td>greater than or equal to 90% or greater than or equal to 60 mm Hg on room air</td>
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References


Treat only for as long as is required to cure the infection.

**Did you know...?**

Reducing the duration of antibiotic therapy is the antimicrobial stewardship strategy most likely to be effective in reducing antibiotic resistance.⁴