

Community-Acquired Pneumonia in Non-Pregnant Adults

Key points

- Avoid diagnosing CAP without radiographic evidence of pneumonia
- Multiple studies suggest short-course antibiotic therapy is as effective as longer courses

Possible signs and symptoms of community-acquired pneumonia (CAP):

- | | |
|------------------------|---------------------------------|
| 1) Cough | 5) Pleuritic chest pain |
| 2) Shortness of breath | 6) Tachycardia |
| 3) Fever | 7) Tachypnea |
| 4) Sputum production | 8) Rales, egophany, or fremitus |

Clinical picture suggestive of CAP

Yes

No

Obtain chest radiograph (CXR)
Consider complete blood count

Consider alternative etiologies

Infiltrate present on CXR

No infiltrate on CXR*

Does not meet criteria for CAP*

2 or more CURB-65 criteria?

- Confusion – new onset disorientation to person, place, or time
- Uremia – BUN >20
- Respiratory rate >30
- Blood pressure – systolic <90 OR diastolic <60
- 65 – age >65

Yes

No

Consider hospital admission

No

Appropriate for outpatient therapy based on other medical and social needs?

Yes

Any risk factors for drug-resistant *S. pneumoniae*?†

- Use of antibiotics within 3 months
- Uncontrolled diabetes mellitus
- Chronic medical condition with frequent health care contact
- Alcoholism
- Asplenia
- Immunosuppressing conditions or medications

Yes

No

1st line: Levofloxacin 750mg QDay for 5 days**

Alternative: Amoxicillin 1gm TID *plus*
Doxycycline 100mg BID for 7 days

1st line: Doxycycline 100mg BID for 7 days

Alternative: Azithromycin 500mg QDay for 3 days

Disclaimer: This is intended only as a guide for evidence-based decision-making; it is not intended to replace clinical judgment. Assess for antibiotic allergies and use alternative agents as appropriate. Suggested antibiotic doses are for normal renal function; adjust for renal impairment when necessary.

*CXR may be negative early in the course of pneumonia; consider a repeat CXR in 24 hours if suspicion for CAP remains high

**Avoid use of fluoroquinolones if risk factors for *M. tuberculosis* present (born outside United States), as may lead to delay in TB diagnosis

†Conditions associated with drug-resistant *Streptococcus pneumoniae* warrant expanded coverage

Reference: Infectious Diseases Society of America/American Thoracic Society Consensus Guidelines on the Management of Community-Acquired Pneumonia in Adults. *Clin Infect Dis* 2007; 44:S27-72