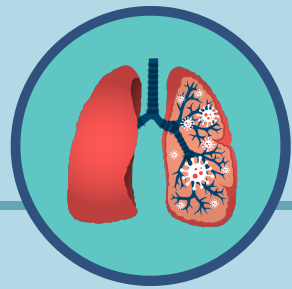


Management of Community-Acquired Pneumonia



Community-Acquired Pneumonia (CAP) is pneumonia that develops outside the hospital or within 48 hours of hospital admission. See [ASP website](#) for detailed guidance.

Outpatient

No Comorbidities

- Amoxicillin OR Doxycycline

Comorbidities

Malignancy, alcoholism, asplenia, diabetes, chronic heart/lung/liver/renal disease

- Amoxicillin/Clavulanate OR Cefuroxime PLUS Azithromycin OR Doxycycline
- Severe beta-lactam allergy: Levofloxacin

Inpatient



DO NOT routinely add broad spectrum antibiotics. Evaluate risk factors first.

Risk Factors for Resistance in CAP

Risk Factors for MRSA	Risk factors for resistant Gram-negative rods (<i>Pseudomonas</i> , etc.)	Risk factors for MRSA and resistant Gram-negative rods
<ul style="list-style-type: none"> • History of MRSA sputum colonization (within 1 year) • Post-influenza pneumonia • Severe necrotizing pneumonia 	<ul style="list-style-type: none"> • History of sputum colonization with <i>Pseudomonas</i> or Gram-negative rod resistant to typical CAP therapy (within 1 year) 	<ul style="list-style-type: none"> • Recently hospitalized (last 90 days) and treated with broad spectrum antibiotics for at least 5 days (both required)

Assess Severity

Non-Severe

- **Preferred:** Ampicillin/Sulbactam OR Ceftriaxone PLUS Azithromycin OR Doxycycline
- Alternative: Levofloxacin
- No risk factors for resistance → no diagnostic testing
- Any risk factor → obtain sputum culture:
 - Positive MRSA → consider adding Vancomycin or Linezolid
 - Positive *Pseudomonas* → consider use of Piperacillin/Tazobactam** OR Cefepime
 - If patient improves on typical CAP therapy, no antibiotic adjustments needed

Severe

- Always obtain respiratory tract diagnostic testing and modify therapy based on results
- Ampicillin/Sulbactam OR Ceftriaxone PLUS Azithromycin* (OR Levofloxacin)
- Beta-lactam allergy → Levofloxacin
- If MRSA risk factors → consider adding Vancomycin or Linezolid
- If resistant GNR risk factors → consider Piperacillin/Tazobactam** OR Cefepime PLUS Azithromycin*
- If recent hospital stay with use of IV antibiotics:
 - Consider addition of Vancomycin or Linezolid PLUS Piperacillin/Tazobactam** OR Cefepime PLUS Azithromycin*

Treat most patients five (5) days only

*Azithromycin preferred. If azithromycin cannot be used, use levofloxacin. If neither levofloxacin nor azithromycin can be used, doxycycline can be substituted.

**Avoid use of vancomycin in combination with piperacillin/tazobactam