

Sharp Healthcare Treatment Guidelines for Pneumonia

Take Home Points:

1. Viruses are the most common cause for community-acquired pneumonia leading to hospitalization
 - Consider stopping antibiotics if viral studies positive and no bacterial pathogen found

2. Treat HCAP the same as CAP
 - Exception: septic shock, immunocompromised or recent receipt of IV abx

3. Reserve empiric double-covering pseudomonas for patients with septic shock on pressors only.

4. Patients with anaphylactic reactions to penicillin or 1st gen cephalosporins (cefazolin or cephalexin) can safely receive ceftriaxone or cefepime. Avoid quinolones if possible.

| Indication | Inpatient Therapy | Transition to Outpatient Therapy | Total Duration |
|---|--|---|----------------|
| <i>HCAP - treat similarly to CAP unless high risk for drug resistant organisms</i> (i.e. septic shock, immunocompromised, or receipt of IV antibiotics in last 90 days) | | | |
| CAP OR HCAP (no pseudomonas risk) | Ceftriaxone 2g IV q24h + Doxycycline 100mg BID ± Vancomycin IV (if post influenza pneumonia) or linezolid 600 mg IV q12h | Doxycycline 100mg PO BID ± Cefuroxime 500mg PO BID | 5 days |
| | Use Azithromycin 500mg IV/PO daily instead of doxycycline if pregnant | | |
| | <i>Ceftriaxone allergy only:</i> Levofloxacin 750mg daily | | |
| Pseudomonas risk CAP/HCAP (IV ABX in last 30 days, structural lung disease) | Cefepime 2g IV q8h + Doxycycline 100mg BID ± Vancomycin IV (if post influenza pneumonia) or linezolid 600 mg IV q12h | Levofloxacin 750mg PO daily | 5 days |
| HAP/VAP | Cefepime 2g q8h + (Vancomycin IV or linezolid 600 mg IV q12h) ± Tobramycin 7-10mg/kg IV (septic shock only) | Levofloxacin 750mg PO daily | 7 days |
| | <i>Cefepime allergy only:</i> Aztreonam 2g IV q6h + (Vancomycin IV or linezolid 600 mg IV q12h) | | |
| Aspiration Pneumonia <i>Community acquired</i> | Unasyn 3g IV q6h (lung abscess or gingival disease) OR Ceftriaxone 2g IV q24h | Augmentin 875/125mg PO BID | 5-7 days |
| | <i>Penicillin/Ceftriaxone allergy:</i> Clindamycin 600mg IV q8h (or 300mg PO q8h) | | |
| <i>Nosocomial</i> | Zosyn 4.5g IV q8h | | |
| COPD exacerbation | Azithromycin 500mg PO daily x 3 days OR Doxycycline 100mg PO BID x 5 days | | |

The above recommendations are based on available literature and national guidelines. They are not intended to replace physician clinical judgment based on patient-specific factors. Last updated 10/2024