### Treatment Selection

#### Suspected Bacterial Pneumonia

**Most Common Pathogens:** *Streptococcus pneumoniae, Haemophilus influenzae*

<table>
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<tr>
<th>Demographics</th>
<th>Preferred Treatment</th>
<th>Treatment Alternatives for β-Lactam Allergy</th>
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</table>
| Previously Healthy AND Appropriately Immunized  | **Amoxicillin** 45mg/kg PO BID (Max dose 4000mg/day) x 7 days | Non-Type 1 β-Lactam Allergy:  
**Cefuroxime** 15mg/kg PO BID (Max 1000mg/day) x 10 days*   |
| Not appropriately immunized with PCV13 + Hib OR Suspicion for *H. influenzae* | **Amoxicillin/clavulanate**  
<40kg: (ES 600mg/42.5mg/5mL) 45mg/kg PO BID or 15mg/kg PO TID (Max dose 4000mg/day) x 10 days*  
>40kg: 875mg/125mg PO BID PLUS Amoxicillin 1g PO BID x 7 days | Type 1 β-Lactam Allergy:  
**Levofloxacin**  
<5 years: 10mg/kg PO BID (Max dose 750mg/day) x 10 days*  
>5 years: 10mg/kg PO daily (Max dose 750mg/day) x 10 days* |

#### Suspected Atypical Pneumonia

**Most Common Pathogens:** *Mycoplasma pneumoniae, Chlamydia pneumoniae*

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<tr>
<th>Demographics</th>
<th>Preferred Treatment</th>
<th>Alternatives</th>
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| Most common in ≥5yo In ≥5yo macrolide may be empirically added if there is no clinical evidence that distinguishes bacterial from atypical CAP | **Azithromycin** 10mg/kg PO daily x 3 days (Max dose 500mg/day) | For children >7yo:  
**Doxycycline** 1-2 mg/kg PO BID (Max dose 200mg/day) x 10 days* |

#### Suspected Viral Pneumonia

**Most Common Pathogens:** Influenza A & B, Adenovirus, Respiratory Syncytial Virus, Parainfluenza

Most common in <5yo  
If influenza positive, see influenza guidelines for treatment algorithm.

### Considerations

- *For bacterial CAP 10 day durations have been best studied, shorter courses may be considered for mild disease able to be managed as an outpatient*
- *Children should show clinical signs of improvement within 48-72 hours*
- *Cefuroxime oral suspension has been discontinued, consider cefprozil 15mg/kg PO BID (max dose 500mg) in children >6 months of age needing liquid antibiotic*

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**ANMC Pediatric (≥3mo) Ambulatory Community Acquired Pneumonia (CAP) Treatment Guideline**

**Criteria For Outpatient Management**

- Mild CAP: no signs of respiratory distress and SpO2 ≥ 90% on room air
- Able to tolerate PO
- No concerns for pathogen with increased virulence (ex. CA-MRSA)
- Family able to carefully observe child at home, comply with therapy plan, and attend follow up appointments

*If patient does not meet outpatient management criteria refer to inpatient pneumonia guideline for initial workup and testing.*

**Testing/Imaging**

- Vital Signs: Standard VS and Pulse Oximetry
- Labs: No routine labs indicated for children well enough to be managed outpatient
- Blood cultures if not fully immunized OR fails to improve/worsens after initiation of antibiotics
- Urinary antigen detection testing is not recommended in children; false-positive tests are common.
- Radiography: No routine CXR indicated for children well enough to be managed outpatient
- AP and lateral CXR if fails initial antibiotic therapy
- AP and lateral CXR 4-6 weeks after diagnosis if recurrent pneumonia involving the same lobe

**REFERENCES:**  