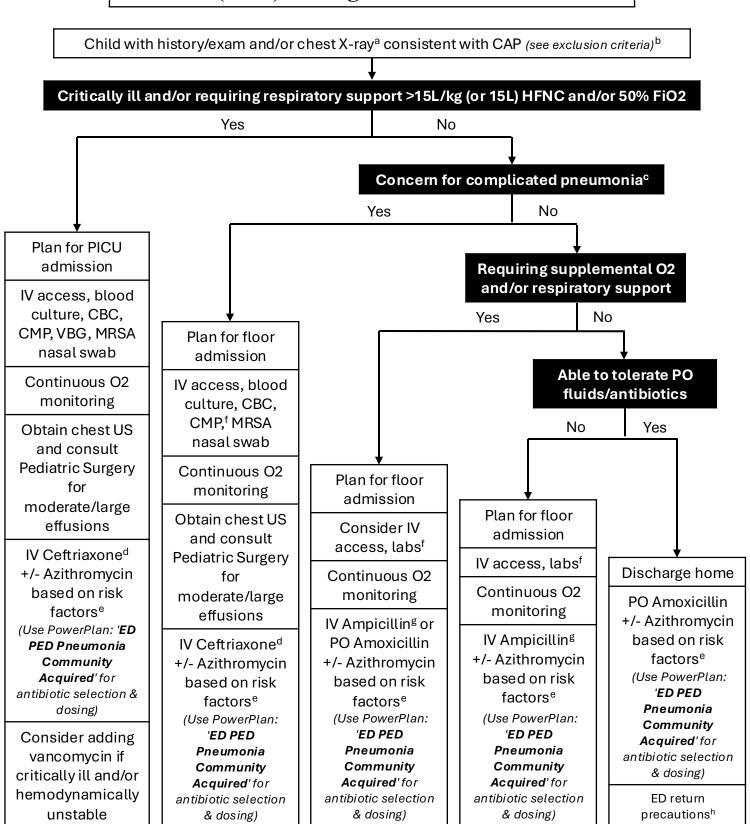


## **University of Missouri Pediatric Service Line**

Pediatric Emergency • Clinical Practice Guidelines

# Pediatric Community Acquired Pneumonia (CAP) Management Guideline





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### Footnotes:

- a. Routine CXRs are not necessary for the confirmation of suspected CAP. AP and lateral CXRs should be obtained in cases of diagnostic uncertainty or for patients with concern for CAP and hypoxemia, significant respiratory distress, or if failed initial antibiotic therapy to verify presence or absence of complications.<sup>1</sup>
- b. Exclusion Criteria: age < 60 days, chronic pulmonary diagnoses (e.g. bronchopulmonary dysplasia/chronic lung disease, cystic fibrosis, asthma, history of aspiration), immunodeficiency, tracheostomy with or without mechanical ventilation, hospital acquired pneumonia
- c. Complicated pneumonia: moderate to large parapneumonic effusion, empyema, abscess, necrosis
- d. Give clindamycin if cephalosporin allergy. Clindamycin can be added to ceftriaxone for complicated pneumonia if concern for MRSA (obtain MRSA nasal swab).
- e. Atypical pneumonia risk factors/clinical features: age > 5 years, insidious onset of symptoms, constitutional symptoms (headache, rash, conjunctivitis, photophobia, sore throat) failure to improve on typical CAP antibiotic coverage, increased local prevalence. Mycoplasma pneumonia can have various radiographic appearances including lobar or segmental consolidation (37%), perihilar or peribronchial infiltrates (27%), localized reticulonodular infiltrates (21%), an patchy infiltrates (15%).<sup>2</sup>
- f. Consider IV access and basic blood work for inability to tolerate adequate PO fluids, concern for dehydration, requiring escalating HFNC. Blood cultures should be obtained in children requiring hospitalization for CAP that is moderate to severe, particularly those with complicated pneumonia. Routine blood work and inflammatory markers are not routinely recommended for uncomplicated CAP, mild to moderate respiratory distress, and no chronic complex conditions.<sup>1</sup>
- g. Give ceftriaxone instead of ampicillin if not fully immunized for age against HiB and Pneumoococcus or if true penicillin allergy.
- h. ED return precautions: lack of improvement after 48 hours of antibiotic therapy, worsening respiratory distress, progressive systemic symptoms (e.g. development of altered mental status, dehydration), inability to tolerate oral antibiotics

### References:

- 1. Bradely et al. The management of community-acquired pneumonia in infants and children older than 3 months of age: clinical practice guidelines by the Pediatric Infectious Diseases Society and the Infectious Diseases Society of America. Clinical Infectious Diseases. 2011; 53 (7): 617-630.
- 2. Community-acquired pneumonia in children: Outpatient treatment, UpToDate 2024.

  <a href="https://www.uptodate.com/contents/community-acquired-pneumonia-in-children-outpatient-treatment?search=pneumonia%20children%20treatment&source=search\_result&selectedTitle=1%7E150&usage\_type=default&display\_rank=1#H264608206</a>