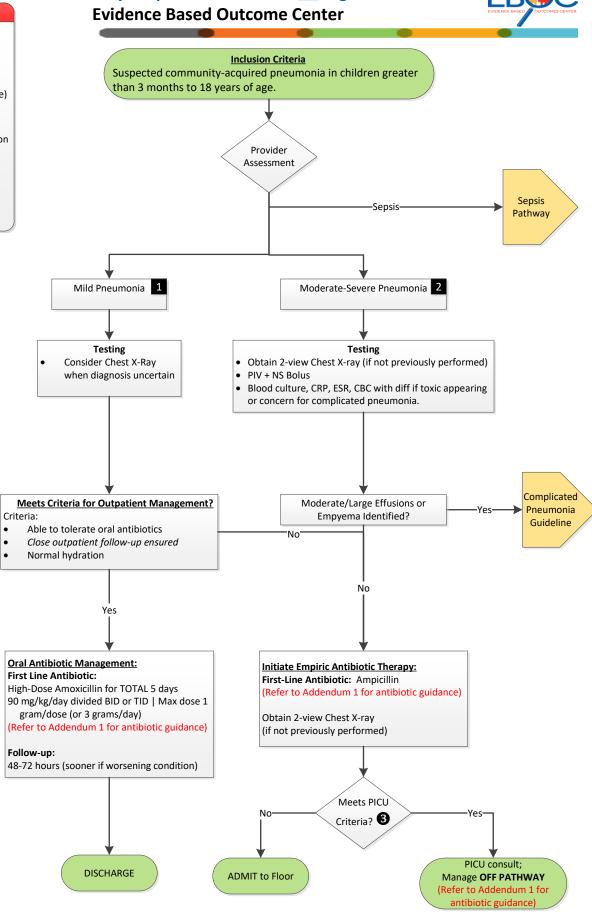
Exclusion Criteria • Children ≤ 3 months • Cystic Fibrosis • Chronic lung disease • Immunodeficiency • Immunosuppression (e.g., children undergoing chemo or chronic steroid use) Moderate to large or complex effusions, lung abscess or pneumatocele Sickle Cell Disease History of feeding difficulties or aspiration • Recent history of thoracic trauma • Extensive comorbidities • Tracheostomy tube presence • If Suspected Viral Etiology and no suspicion of bacterial coinfection Pneumonia suspected to be from fungal disease or mycobacterial infection Mild Pneumonia Criteria Normal to Mild WOB Oxygen Saturations ≥ 90% RT Moderate/Severe Pneumonia <u>Criteria</u> Moderate-to-severe retractions Grunting or nasal flaring Altered mental status or lethargy Oxygen saturations persistently < 90% on room air Known moderate-to-large effusion, empyema, or necrotizing changes Failure of outpatient antibiotic therapy (No improvement in 48-72 hours on appropriate therapy OR significant worsening on appropriate therapy) Severe/ PICU Criteria FiO2 ≥ 0.5 Sepsis Impending respiratory failure Altered mental status



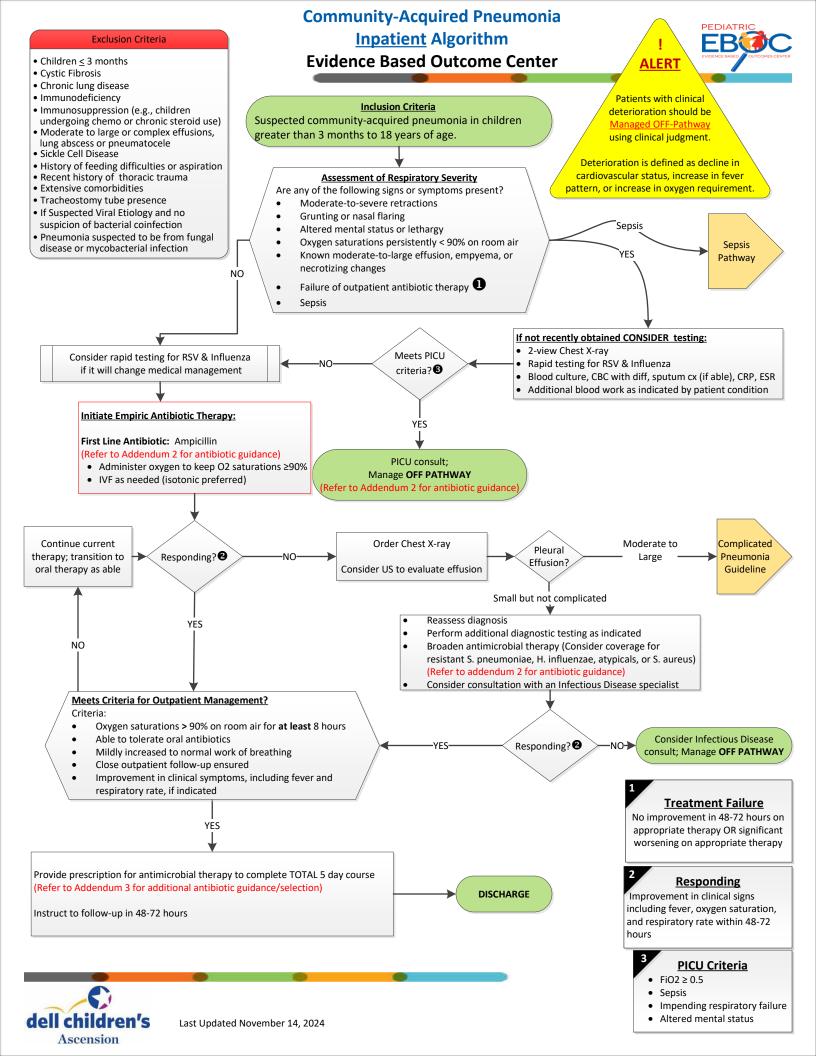
Community-Acquired Pneumonia ED Algorithm

Exclusion Criteria Evidence Based Outcome Center • Children ≤ 3 months Cystic Fibrosis Chronic lung disease **Inclusion Criteria** Immunodeficiency Suspected community-acquired pneumonia in children greater • Immunosuppression (e.g., children than 3 months to 18 years of age. undergoing chemo or chronic steroid use) Moderate to large or complex effusions, lung abscess or pneumatocele Sickle Cell Disease • History of feeding difficulties or aspiration Recent history of thoracic trauma Assessment of Respiratory Severity • Extensive comorbidities Are any of the following signs or symptoms present? Tracheostomy tube presence Moderate-to-severe retractions If Suspected Viral Etiology and no Grunting or nasal flaring Refer to DCMC ER for suspicion of bacterial coinfection Known moderate-to-large effusion, empyema, or necrotizing immediate evaluation • Pneumonia suspected to be from fungal disease or mycobacterial infection Altered mental status or lethargy Oxygen saturations persistently < 90% on room air NO If suspected viral etiology and no suspicion of bacterial Consider rapid testing for RSV & Influenza coinfection consider Managing OFF-Pathway if it will change medical management Refer to CDC guidelines if concern for influenza No initial blood work required Consider Chest X-Ray to confirm clinical diagnosis Meets Criteria for Outpatient Management? Criteria: Able to tolerate oral antibiotics Mildly increased to normal work of breathing Refer for direct admission to DCMC Close outpatient follow-up ensured Improvement in clinical symptoms, including fever and respiratory rate, if indicated Consider admission for infants < 6 months of age Continue antimicrobial therapy for 5-day total course YES YES Outpatient Oral Antibiotic Management: First-Line Antibiotic: High Dose Amoxicillin for 5 days 90 mg/kg/day divided BID or TID | Max dose 1 gram/dose (or 3 grams/day) Responding? (Refer to the Addendum 1: for antibiotic guidance) 48-72 hours (sooner if worsening condition) NO Chest X-ray Effusion? NO NO Re-evaluate diagnosis (consider additional testing if indicated) Broaden antibiotic coverage: Change to high-dose Amoxicillin-clavulanate(1) w/wo Azithromycin(2) Responding? (1) 90 mg/kg/day divided BID | Max dose 875 mg/dose (tablet), 1 Continue antimicrobial O grams/dose (ES Suspension) therapy an additional 5 days (2) 10 mg/kg once daily x3 doses | Max dose 500 mg (Refer to Addendum 1 for antibiotic guidance, allergy alternatives) Follow-up in 24 - 48 hours Responding Improvement in clinical signs including fever, oxygen saturation, and respiratory rate within 48-72 hours

Last Updated November 14, 2024

Ascension

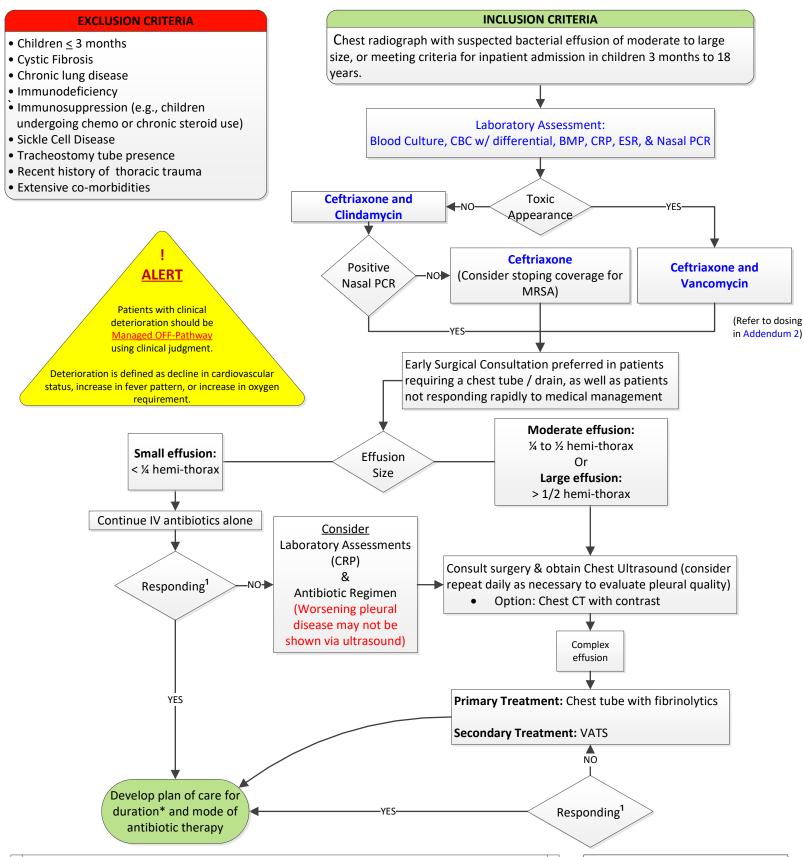
Community-acquired Pneumonia Outpatient Algorithm



COMPLICATED BACTERIAL PNEUMONIA ALGORITHM



EVIDENCE BASED OUTCOME CENTER



Recommendations:

- 1. Ultrasound preferred over Chest CT to evaluate quality of pleural fluid. (I.e. loculations)
- 2. Chest CT indicated for atypical clinical or radiological features. (I.e. parenchymal abscess)
- 4. Consider ID consult for diagnostic testing, antibiotic selection, as well as length of treatment.
- 5. Consider Pulmonology consult for those with necrotizing pneumonias which requires long-term follow-up.
- 6. Outpatient follow-up with a chest radiograph one month post completion of the antibiotic course is recommended.

there is no set duration of antibiotics, and it is based on clinical improvement

Responding

Improvement in clinical signs including fever, respiratory rate, Fi02 within 48-72 hours.

Lateral decubitus films not generally indicated.

