ANMC Pediatric Ambulatory Community Acquired Pneumonia (CAP) Treatment Guideline

Most Common Etiologies	Diagnostic Criteria Tools
Bacterial: *S. pneumoniae, Mycoplasma pneumoniae, H. influenza, Chlamydophila pneumoniae* Respiratory viruses (influenza A & B, adenovirus, respiratory syncytial virus, parainfluenza)	**Signs Respiratory Distress in Children with Pneumonia** 1. Tachypea, RR, breaths/min Age 0-2 mo.: > 60 Age 2-12 mo: > 50 Age 1-5 yrs: > 40 Age > 5 yrs: > 20 2. Dyspnea 3. Retractions 4. Grunting 5. Nasal flaring 6. Apnea 7. Altered mental status 8. Pulse Ox < 90% on RA *Respiratory distress & hypoxemia on room air is a mitigating factor for admission in children and infants.* ***Infants < 3-6 mo. suspected to have bacterial CAP are likely to benefit from hospitalization***

Symptoms	Testing/Imaging	Duration of Therapy
Productive cough Chest pain Dyspnea/Shortness of breath Diminished breath sounds Crackles not cleared with coughing Abdominal pain +/- fever	Pulse Oximetry	• **10 days** have been best studied, shorter courses may be considered for mild disease

Antibiotic Selection

(> 3 months) Treatment Selection

	Preferred Treatment	Alternatives
Previously Healthy with Mild-Moderate CAP; appropriately immunized	**Amoxicillin** 90mg/kg/day divided BID x 7 days	**Cefuroxime** 30mg/kg/day divided BID, or **Levofloxacin** (max dose 750mg) <5 years: 20mg/kg/day divided BID >5 years: 10mg/kg daily
Unimmunized child OR risk for *H. influenza* A	**Amoxicillin/clavulanate** <*40kg*: (**ES 600mg/42.5mg/5mL**) 90mg/kg/day amox component divided BID or 45mg/kg/day amox component divided TID; *>40kg*: 875mg/125mg BID x 7 days	**Cefuroxime** 30mg/kg/day divided BID, or **Levofloxacin** (max dose 750mg) <5 years: 20mg/kg/day divided BID >5 years: 10mg/kg daily
CAP Associated with Atypical Pathogens		
Mycoplasma pneumoniae	**Azithromycin** 10mg/kg daily x 3 days	**Doxycycline** 2-4 mg/kg/day divided BID (>7 years of age)

CONSIDERATIONS

Routine CXR are not necessary for the confirmation of suspected CAP in children well enough to be treated in the outpatient setting
Blood cultures should not be routinely performed in nontoxic, fully immunized children with CAP with initial presentation.
Urinary Antigen detection tests are not recommended in children; false-positive tests are common.
Antibiotic therapy is not necessary for children with a positive test for influenza virus in the absence of clinical, laboratory, or radiographic findings suggestive of bacterial co-infection.

Antimicrobial Stewardship Program Approved 2016

REFERENCES: Bradley IDSA CAP Infants & Children 2011;AAP endorsed