ASP-001: ANMC Adult Ambulatory Community-Acquired Pneumonia (CAP) Treatment Guideline

Common Etiologies

Bacterial: *S. pneumoniae, H. influenzae, Chlamydia pneumoniae, Mycoplasma pneumoniae, M. catarrhalis*

Respiratory viruses (influenza A & B, COVID-19, adenovirus, RSV, parainfluenza)

Diagnostic Criteria Tools

Pneumonia Severity Index (PSI) Scoring Tool

Demographics	Comorbidities	Physical Exam/Vitals	Labs/Imaging
• Age (1 point per year) -Male (Age) -Female (Age -10)	• Neoplasia +30 • Liver disease +20 • Heart Failure +10 • Cerebrovascular disease +10 • Renal disease +10	• Confusion +20 • Resp rate >30 +20 • SBP <90 +20 • Temperature <35C or >40C +15 • HR >125 bpm +15	• Arterial pH <7.35 +30 • BUN >30mg/dL +20 • Sodium <130 +20 • Glucose >250 +10 • Hematocrit <30% +10 • Pleural Effusion +10 • PaO2 <60 +10
• Nursing home residency +10			

Risk Class (Points)	Mortality (%)	Recommended site of care
I (<50)	0.1	Outpatient
II (51-70)	0.6	Outpatient
III (71-90)	2.8	Outpatient or brief inpatient
IV (91-130)	8.2	Inpatient
V (>130)	29.2	Inpatient

Symptoms

- Productive cough
- Chest pain
- Dyspnea/Shortness of breath
- Diminished breath sounds
- Crackles not cleared with coughing
- Abdominal pain
- +/- Fever

Testing/Imaging

- Chest x-ray
- Pulse Oximetry

Clinical Stability

- Temperature <37.8C
- Heart rate <100 bpm
- Respiratory rate <24 bpm
- SpO2 >90% or PaO2 >60 mmHg on room air or baseline oxygen requirement
- SBP >90 mm Hg
- Mental status Normal/baseline

Duration of Therapy

- Typically healthy, no structural lung disease: **3-5 days**
- Immunocompromised, moderate structural lung disease or comorbidities present, see below*: **5-7 days**
- Patients with complicating factors (bronchiectasis, structural lung disease, etc) should have follow-up before decision to stop antibiotics before day
- Clinical stability should be met before stopping antibiotics.

Antibiotic Selection

	Preferred Treatment	Alternatives
No comorbidities or risk factors for MRSA or *Pseudomonas aeruginosa*	• **Amoxicillin 1gm** PO TID x3-5 days	• **Doxycycline 100mg** PO BID x3-5 days
Comorbidities present* • Comorbidities including chronic heart, lung, liver, or renal disease; diabetes mellitus; alcoholism; malignancy; asplenia	• **Amoxicillin/Clavulanate 875mg/125mg** PO BID x 5-7 days **PLUS** • **Azithromycin 500mg** PO daily x 3 days	**Non-severe PCN allergy:** • **Cefuroxime 500mg** PO BID x 5-7 days **PLUS** • **Azithromycin 500mg** PO daily x 3 days **Severe PCN allergy:** • **Levofloxacin 750mg** PO daily x 5 days
Risk factors for MRSA or *Pseudomonas aeruginosa* • Prior respiratory isolation of MRSA or *P. aeruginosa within previous year*; OR • Recent hospitalization AND receipt of parenteral antibiotics in previous 90 days	• **Treatment should be based on previous culture & susceptibility, IV antimicrobials may be required**	

CONSIDERATIONS

- PCR respiratory pathogen panel testing is discouraged in the ambulatory setting. If concern for viral respiratory illnesses, influenza and/or COVID PCR can be ordered, see ANMC respiratory virus testing & treatment guideline for additional details.
- *Consider additional **Amoxicillin 1g** BID in addition to **Augmentin** for CAP complicated by empyema, asplenia or *Strep pneumoniae* PenG MIC 2-4

ANMC Associated Powerplan: AMB Adult Ambulatory Community Acquired Pneumonia (CAP) *Antimicrobial Stewardship Program Approved 2016; Updated December 2023, December 17, 2025*

REFERENCES: Metlay et al. IDSA/ATS Consensus Guideline CAP in Adults. Am J Respir Crit Care. 2019;200(7):e45-e67.; Jones BE et al. ATS Diagnosis and Management of Community-acquired Pneumonia. Published July 2025.