MSH Emergency Department

Pediatric CAP Pathway

Date Created: *10/14/2021*
Date Reviewed:
Reviewed By: *S Bhadiraju, M Boyle, A Buttigieg, L Douglas, J Fune, N Hodo, D Lee, A Lim, L Ngai, R Posada, L Spina, J Tokarski, C Tran, L Zinns*

History and physical exam

- Fever
- Tachypnea
- Hypoxia (O2 sat <94% on room air)
- Cough
- Retractions and/or nasal flaring
- Focal rales/crackles
- Chest pain
- Abdominal pain

Note: Mycoplasma/atypicals may have

- *Insidious onset (5-7 days)*
- *Headache, malaise, sore throat, prominent cough*
- *Diffuse rales on auscultation*

Note: Pertussis may have

- *Paroxysmal. prolonged cough*
- *Post-tussive emesis*
- *Apnea*

Clinical severity

Mild (ALL of the following)

- Age >3 months
- No retractions, grunting, nasal flaring,apnea
- O2 saturation >90% RA
- Non-toxic appearance
- Tolerating orals
- No concerns for follow-up

Moderate (>1 of the following)

- Age <3 months
- Dyspnea or retractions
- O2 saturation <90% RA
- Not tolerating orals
- Failure of appropriate antibiotic therapy for ≥48 hours
- Concern for poor follow-up
- Moderate pleural effusion

Severe (≥1 of the following)

- Severe retractions, grunting, nasal flaring, or apnea
- HFNC
- Mechanical ventilator support
- New/increased CPAP/BIPAP support
- Altered mental status
- Hemodynamic instability
- Large pleural effusion
- Effusion requiring emergent drainage

Testing

Mild - *Consider*

- CBC, CRP
- CXR if diagnosis uncertain
- RPP, rapid RSV/influenza, SARS-CoV2 PCR

Moderate and Severe

- CXR +/- US or CT if large effusion
- CBC, BMP, CRP/procalcitonin
- Consider RPP
- Consider MRSA nasal PCR
- Consider Respiratory culture if can expectorate
- Consider blood culture

Antibiotics

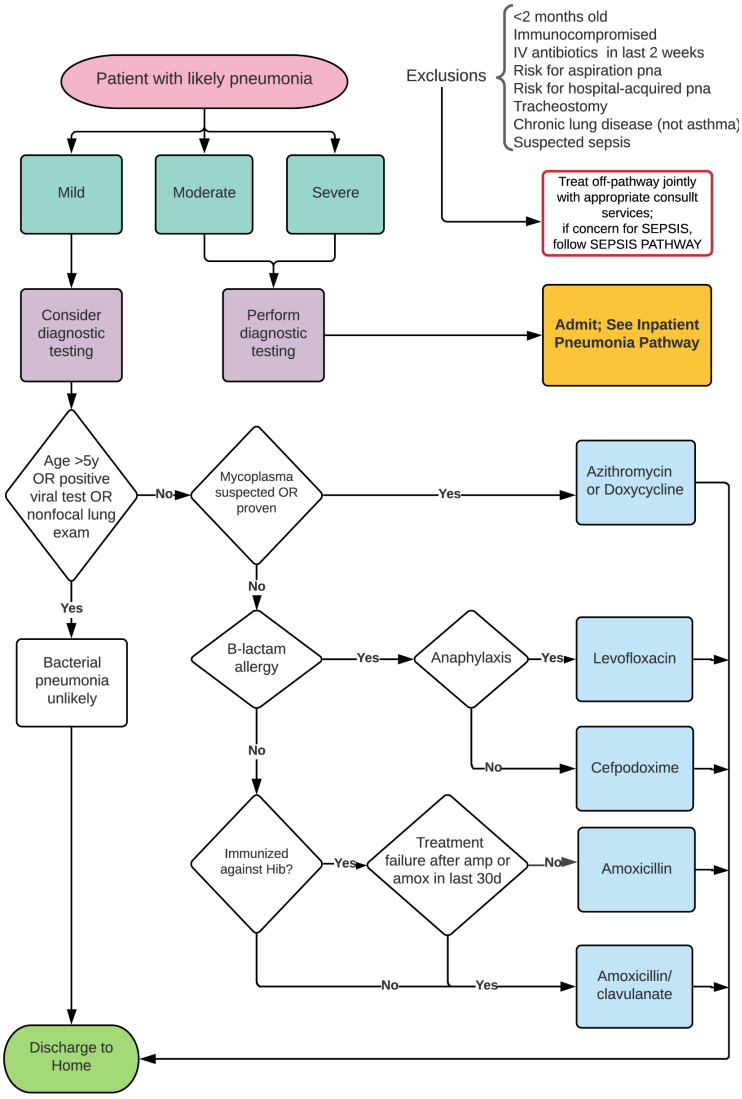
Amoxicillin: 30 mg/kg/dose PO q8h or 45mg/kg/dose PO q12h (max 1000 mg/dose; may consider max 2000 mg/dose if q12h)
Amoxicillin/clavulanate: <40 kg: 30 mg/kg/dose PO q8h or 45 mg/kg/dose PO q12h using ES-600 suspension; ≥40 kg: 875 mg PO BID or 2 g XR tab PO BID
Azithromycin: 10 mg/kg/dose (max 500 mg/dose) PO day 1, then 5 mg/kg/dose PO q24h (max 250mg/dose) days 2-5
Cefpodoxime: 3 mo to <12 years: 5 mg/kg/dose PO q12h (max 200 mg/dose); ≥12 years: 200 mg PO q12h
Doxycycline: 2.2 mg/kg/dose PO q12h (max 100 mg/dose)
Levofloxacin: 6 months to <5 years: 10 mg/kg/dose PO q12h (max 375 mg/dose); ≥5 years: 10 mg/kg/dose PO q24h (max 750 mg/dose)

Discharge Instructions

Supportive care
If treating, antibiotics for 5 days
Follow up with PCP within 2-3 days

Pediatric Community-Acquired Pneumonia (CAP) Pathway

This pathway serves as a guide and DOES NOT replace clinical judgment



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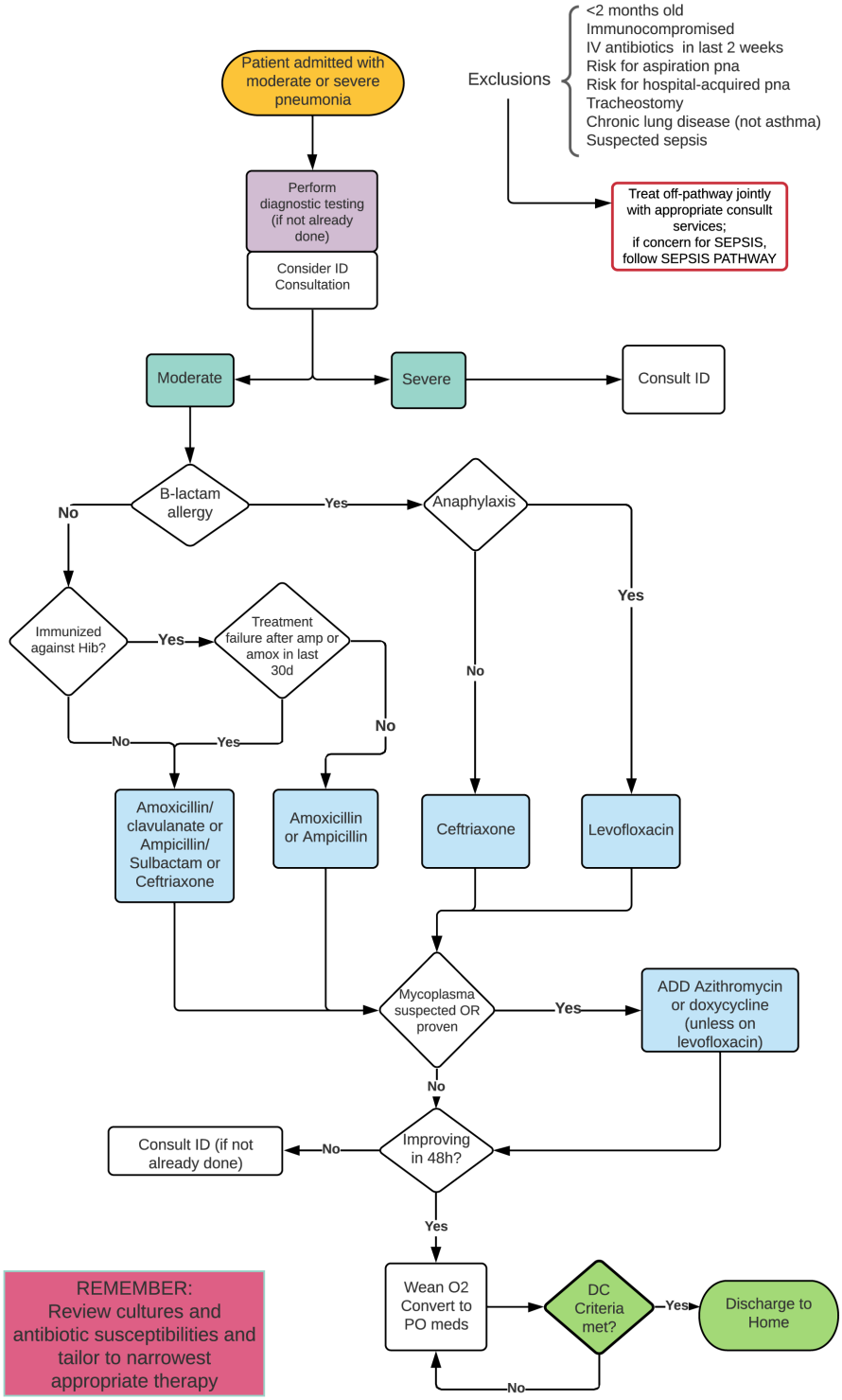
Pediatric Community-Acquired Pneumonia (CAP) Inpatient Pathway



Clinical severity

Moderate (≥1 of the following)
- Age <3 months
- Dyspnea or retractions
- O2 saturation <90% RA
- Not tolerating orals
- Failure of appropriate antibiotic therapy for ≥48 hours
- Concern for poor follow-up
- Moderate pleural effusion

Severe (≥1 of the following)
- Severe retractions, grunting, nasal flaring, or apnea
- HFNC
- Mechanical ventilator support
- New/increased CPAP/BIPAP support
- Altered mental status
- Hemodynamic instability
- Large effusion
- Effusion requiring emergent drainage

Testing

CXR +/- US or CT if large effusion
CBC, BMP, CRP/procalcitonin
Consider RPP
Consider MRSA nasal PCR
Consider Respiratory culture
Consider blood culture

Antibiotics:

Amoxicillin: 30 mg/kg/dose PO q8h or 45mg/kg/dose PO q12h (max 1000 mg/dose; may consider max 2000 mg/dose if q12h)
Ampicillin: 50-100 mg/kg/dose IV q6h (max 2000mg/dose)
Amoxicillin/clavulanate: <40 kg: 30 mg/kg/dose PO q8h or 45 mg/kg/dose PO q12h using ES-600 suspension; ≥40 kg: 875 mg PO BID or 2 g XR tab PO BID
Azithromycin: 10 mg/kg/dose (max 500 mg/dose) PO/IV day 1, then 5 mg/kg/dose q24h (max 250mg/dose) PO/IV days 2-5
Cefpodoxime: 3 mo to <12 y: 5 mg/kg/dose PO q12h (max 200 mg/dose); ≥12 y: 200 mg PO q12h
Ceftriaxone:75 mg/kg/dose IV q24h (max 2000 g/dose)
Doxycycline: 2.2 mg/kg/dose PO/IV q12h (max 100 mg/dose)
***Levofloxacin:** 6 months to <5 y: 10 mg/kg/dose PO/IV q12h (max 375 mg/dose); ≥5 y: 10 mg/kg/dose PO/IV q24h (max 750 mg/dose)
***Vancomycin:** 15mg/kg IV q8h

***Requires ID approval**

Discharge Criteria

No oxygen need
No respiratory distress
PO meds

Discharge Instructions

Moderate: Antibiotics for 7d
Severe: Antibiotics for 10d
Follow up with PCP within 2-3 days