

Acute Bronchitis vs. Pneumonia

**Almost all cases of acute bronchitis are viral, and 70% of outpatient visits for cough are for acute bronchitis. Unlike pneumonia, acute bronchitis lacks shortness of breath, hypoxia and abnormal pulmonary examination**

Acute cough Management Flowchart

	Acute Bronchitis	Pneumonia
<b>Symptoms &amp; Clinical Findings</b>	<ul style="list-style-type: none"> <li>- cough (productive or nonproductive) &lt;3 weeks</li> <li>- pulmonary examination may be normal or demonstrate wheezes</li> <li>- often with nasal congestion/rhinorrhea</li> <li>- low-grade fevers may be present</li> <li>- myalgias and headache may be present</li> </ul>	<ul style="list-style-type: none"> <li>- cough (productive or nonproductive), fevers, chills, shortness of breath</li> <li>- abnormal pulmonary findings (crackles and/or decreased breath sounds, dullness, tachypnea)</li> <li>- myalgias and headache may be present</li> </ul> <p>Post-influenza bacterial pneumonia develops about a week after onset of influenza illness</p>
	<ol style="list-style-type: none"> <li>1. Evaluation should focus on ruling out pneumonia (which is rare among healthy adults)</li> <li>2. Chest radiography is not indicated if suspicion for pneumonia is low</li> <li>3. Pediatric patients –Chest radiography may be warranted in atypical disease (absence of viral symptoms, severe distress, frequent recurrences or lack of improvement)</li> </ol>	<ol style="list-style-type: none"> <li>1. COVID and influenza should be ruled out before starting antibiotics, unless local rates of these viruses are low</li> <li>2. Chest radiography confirms diagnosis of pneumonia</li> <li>3. Do not order blood/sputum cultures (or urine antigen tests) for outpatients with suspected pneumonia</li> <li>4. CRB-65 can help assess severity of illness &amp; disposition in patients with pneumonia (consider transfer to ED if score ≥ 2) <ul style="list-style-type: none"> <li>Age &gt;65 (1 point)</li> <li>SBP &lt;90 mmHg, or DBP ≤60 mmHg (1 point)</li> <li>Confusion (1 point)</li> <li>Respiratory rate ≥30 (1 point)</li> </ul> </li> </ol>
<b>Antibiotic Treatment</b>	Antibiotics <b>not</b> recommended, regardless of cough duration See Adjunctive Measures	See chart below for antibiotic guidance for pneumonia See Adjunctive Measures
<b>Adjunctive measures</b>	<ul style="list-style-type: none"> <li>- Home remedies (lemon, honey, etc.)</li> <li>- Expectorants e.g., guaifenesin</li> <li>- Oral hydration &amp; humidified/steamed air</li> </ul>	<ul style="list-style-type: none"> <li>- Cough suppressants e.g., benzonatate</li> <li>- Acetaminophen or NSAIDs for fever &amp; discomfort</li> </ul>

	Adults & Adolescents Bacterial Pneumonia Treatment	Pediatric Bacterial Pneumonia Treatment		
<b>Antibiotics for Pneumonia</b>	<p><b>Without comorbidities*</b></p> <p><b>Amoxicillin</b> 1 g TID for 5 days</p> <p>OR</p> <p><b>Doxycycline</b> 100 mg BID for 5 days (also the <b>Low, Moderate</b> and <b>High Risk Beta-lactam Allergy History</b> option)</p> <p><b>With comorbidities*</b></p> <p><b>Standard Antibiotics (select ONE from Box C &amp; ONE from Box D):</b></p> <table border="1" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><b>Box C</b></p> <ol style="list-style-type: none"> <li>1. <b>Amoxicillin-clavulanate</b> 875 mg/125 mg BID for 5 days</li> <li>2. <b>Cefpodoxime</b>†^ 200 mg BID for 5 days (also <b>Low &amp; Moderate risk pcn allergy hx</b>)</li> </ol> </td> <td style="width: 50%; vertical-align: top;"> <p><b>Box D</b></p> <ol style="list-style-type: none"> <li>1. <b>Azithromycin</b> 500 mg QD for 1 day, then 250 mg QD for 4 days</li> <li>2. <b>Doxycycline</b> 100 mg BID for 5 days</li> </ol> </td> </tr> </table> <p>OR</p> <p>For <b>High Risk Beta Lactam Allergy History</b> (see <a href="#">NM O/P Allergy Risk Assessment</a> first):</p> <p><b>Levofloxacin</b> 750 mg QD for 5 days (select ONE)</p> <p><small>*Comorbidities: heart, lung, liver or kidney disease; alcohol use disorder; diabetes mellitus or malignancy</small></p> <p><small>†For patients on acid suppressive therapy, use cefpodoxime 400 mg BID</small></p> <p><small>^dissimilar drug structure from penicillins</small></p>	<p><b>Box C</b></p> <ol style="list-style-type: none"> <li>1. <b>Amoxicillin-clavulanate</b> 875 mg/125 mg BID for 5 days</li> <li>2. <b>Cefpodoxime</b>†^ 200 mg BID for 5 days (also <b>Low &amp; Moderate risk pcn allergy hx</b>)</li> </ol>	<p><b>Box D</b></p> <ol style="list-style-type: none"> <li>1. <b>Azithromycin</b> 500 mg QD for 1 day, then 250 mg QD for 4 days</li> <li>2. <b>Doxycycline</b> 100 mg BID for 5 days</li> </ol>	<p><b>Up to 6 months</b></p> <p>Infants under 6 months of age with suspected bacterial pneumonia should be hospitalized</p> <p>≥6 months (select ONE)</p> <p><b>Amoxicillin</b> 90 mg/kg/day <u>divided BID to TID</u> for 5 days (dose based on amox component) (maximum dose (amox): 4 g/day)</p> <p><b>Amoxicillin-clavulanate</b> 90 mg/kg/day <u>divided BID-TID</u> for 5 days</p> <p>Use <i>ES suspension</i> 600 mg-42.9 mg/5 mL (dose based on amox component) (maximum dose (amox): 4 g/day)</p> <p><b>Penicillin Allergy History (see <a href="#">NM O/P Allergy Risk Assessment</a> first):</b></p> <p><b>Low</b> or <b>Moderate Risk Allergy History</b> (select ONE)</p> <p><b>Cefpodoxime</b>^ 10 mg/kg/day <u>divided BID</u> for 5 days (maximum dose: 400 mg/day)</p> <p><b>Cefixime</b>^ 8 mg/kg/day <u>divided BID</u> for 5 days (maximum dose :400 mg/day)</p> <p><b>High Risk Beta Lactam Allergy History</b></p> <p><b>6 months to 5 years</b></p> <p><b>Levofloxacin</b> 16 to 20 mg/kg/day <u>divided BID</u> for 5 days (maximum dose: 750 mg/day)</p> <p>≥5 years</p> <p><b>Levofloxacin</b> 8 to 10 mg/kg/day <u>once daily</u> for 5 days (maximum dose: 750 mg/day)</p>
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**Key Points for Counseling Patients**

1. Most cases of bronchitis are viral; antibiotics are not recommended
2. Viral bronchitis can last 3 weeks
3. Colored or cloudy sputum is seen in both viral and bacterial infections
4. Avoid side effects by avoiding unnecessary antibiotics

**When to Consider Transfer to ED**

1. CRB-65 score ≥2
2. Age <6 months
3. Severe immunocompromise, asplenia or active receipt of chemotherapy

**Updated 10 18 2023**