

## Adult Recommendations for Managing Acute Respiratory Tract Infections



| Condition                      | Epidemiology  | Diagnosis   | Management   |
|--------------------------------|---|---|--|
| Acute uncomplicated bronchitis | <ul style="list-style-type: none"> <li>Cough is the most common symptom for adult ambulatory visit, and acute bronchitis is the most common diagnosis provided</li> </ul>   | <ul style="list-style-type: none"> <li>Colored sputum does not indicate bacterial infection</li> <li>Evaluation should focus on ruling out pneumonia</li> <li>Pneumonia is exceedingly rare among healthy adults in the absence of                             <ul style="list-style-type: none"> <li>Abnormal vital signs (pulse <math>\geq 100</math> beats/min, respiratory rate <math>\geq 24</math> breaths/min, or temperature <math>\geq 38^{\circ}\text{C}</math>), AND</li> <li>Abnormal lung examination findings (focal consolidation, egophony, fremitus)</li> </ul> </li> <li>Chest radiography is <b>not</b> indicated in most cases</li> </ul>                           | <p>Antibiotic treatment of uncomplicated acute bronchitis <b>does not provide benefit and is not recommended</b>, regardless of cough duration.</p> <p>Use symptomatic therapy such as:</p> <ul style="list-style-type: none"> <li>Cough suppressants (benzonatate, dextromethorphan)</li> <li>First-generation antihistamines (diphenhydramine, promethazine)</li> <li>Decongestants (phenylephrine, pseudoephedrine)</li> <li>Although evidence supporting these symptomatic therapies is limited</li> </ul> |
| Acute rhinosinusitis           | <ul style="list-style-type: none"> <li>90-98% of rhinosinusitis cases are viral</li> <li>Even when caused by bacteria, antibiotics are not guaranteed to help</li> <li>1 out of 8 adults (12%) reported being diagnosed with rhinosinusitis in 2012, resulting in &gt;30 million diagnoses</li> </ul> | <ul style="list-style-type: none"> <li>Diagnose acute <u>bacterial</u> rhinosinusitis based on symptoms that are:                             <ul style="list-style-type: none"> <li><b>Severe (&gt;3-4 days)</b> = fever <math>\geq 39^{\circ}\text{C}</math> (<math>102^{\circ}\text{F}</math>) + purulent nasal discharge or facial pain <u>OR</u></li> <li><b>Persistent (&gt;10 days) without improvement</b> = nasal discharge, facial pain, congestion <u>OR</u></li> <li><b>Worsening (3-4 days)</b> = worsening or new onset fever, facial pain, congestion after initial improvement of symptoms</li> </ul> </li> <li>Sinus radiographs are <b>not</b> recommended</li> </ul> | <p>If a bacterial infection is established:</p> <ul style="list-style-type: none"> <li>Watchful waiting is reasonable for uncomplicated cases with reliable follow-up</li> <li><b>First-line therapy</b> = amoxicillin/clavulanate 875mg BID x 5-7 days</li> <li><b>Penicillin allergy</b> = doxycycline 100mg BID or levofloxacin 500mg daily x 5-7 days</li> <li><b>Not recommended</b> = macrolides (azithromycin, etc.) due to high resistance rate in <i>Streptococcus pneumoniae</i> (~40%)</li> </ul>   |

Source: <https://www.cdc.gov/antibiotic-use/community/for-hcp/outpatient-hcp/adult-treatment-rec.html>

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|---|---|--|--|
| Common cold or non-specific upper respiratory tract infection (URI) | <ul style="list-style-type: none"> <li>The common cold is the third most frequent diagnosis in office visits, and most adults experience 2-4 colds annually</li> <li>At least 200 viruses can cause the common cold</li> </ul>                            | <ul style="list-style-type: none"> <li>Prominent cold symptoms include fever, cough, rhinorrhea, nasal congestion, postnasal drip, sore throat, headache, and myalgias</li> <li>Symptoms such as cough and congestion commonly last 7-10 days</li> </ul>   | <p><b>Do not use antibiotics to treat viral upper respiratory tract infections (URI)</b></p> <ul style="list-style-type: none"> <li>Decongestants (phenylephrine or pseudoephedrine) combined with a first-generation antihistamine may provide short-term symptomatic relief</li> <li>Acetaminophen or non-steroidal anti-inflammatory drugs can also be used</li> <li>Evidence is lacking to support antihistamines alone, opioids, intranasal corticosteroids as effective treatments for cold symptom relief</li> <li>Weigh the benefits and harms of symptomatic therapy</li> </ul>                       |
| Pharyngitis   | <ul style="list-style-type: none"> <li>Group A beta-hemolytic streptococcal (GAS) infection is the <b>only</b> common indication for antibiotic therapy for sore throat cases</li> <li>Only 5-10% of adult sore throat cases are caused by GAS</li> </ul> | <ul style="list-style-type: none"> <li>Patient with pharyngitis should be evaluated using the <b>Centor criteria</b> (fever, tonsillar exudates, tender cervical lymphadenopathy, absence of cough)</li> <li>Patients meeting &lt;2 criteria should <b>not</b> be tested or treated for GAS</li> <li>For those with <math>\geq 2</math> criteria, perform a Rapid Strep Test (RST) as clinical features alone are not adequate to distinguish between GAS and viral pharyngitis</li> <li>Throat cultures are not routinely recommended for adults</li> </ul> | <p>Antibiotic treatment is <b>not</b> recommended for patients with a negative RST or meeting &lt;2 Centor criteria</p> <ul style="list-style-type: none"> <li><b>First-line therapy</b> = amoxicillin 500mg BID or penicillin VK 500mg BID</li> <li><b>Non-severe penicillin allergy</b> = cephalexin 500mg BID or cefuroxime 250mg BID</li> <li><b>Severe penicillin allergy</b> = clindamycin 300mg TID or macrolides</li> <li>Avoid macrolides and clindamycin if possible as resistance in GAS is increasingly common</li> <li>Recommended duration is 10 days, except 5 days for azithromycin</li> </ul> |

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