

## 2017 ANMC Acute Bronchitis in Adolescents and Adults

Presenting Symptoms	Comorbidities	Causes
<ul style="list-style-type: none"> <li>• Cough &gt; 5 days in a patient <b>WITHOUT COPD</b> <ul style="list-style-type: none"> <li>◦ Often productive of purulent sputum</li> </ul> </li> <li>• Fever, low-grade (&lt;100.5° F or &lt;38° C)</li> <li>• Diffuse wheezes or rhonchi on exam</li> <li>• Mild dyspnea</li> <li>• Chest wall pain due to coughing</li> </ul>	<ul style="list-style-type: none"> <li>• COPD</li> <li>• Asthma</li> <li>• Elderly (≥75 years)</li> <li>• Immunocompromised</li> <li>• Heart Failure</li> </ul>	<ul style="list-style-type: none"> <li>• Influenza A and B</li> <li>• Parainfluenza</li> <li>• Human metapneumovirus</li> <li>• Rhinovirus</li> <li>• RSV</li> <li>• <i>Pertussis</i></li> </ul>

Testing	Main Points
<ul style="list-style-type: none"> <li>• Vital signs including SpO2</li> <li>• Consider influenza PCR during flu season if high risk or &lt;48 hours of symptoms</li> <li>• Consider pertussis PCR if paroxysms or post-tussive emesis</li> <li>• Respiratory pathogen testing is discouraged in uncomplicated acute bronchitis</li> <li>• Obtain CXR if:               <ul style="list-style-type: none"> <li>◦ Hemoptysis</li> <li>◦ Ill-appearing</li> <li>◦ Focal abnormality on auscultation</li> <li>◦ Age &gt;75</li> <li>◦ RR &gt;24 or Temperature &gt; 100.5° F or &lt;38° C</li> </ul> </li> <li>• Procalcitonin if patient in UCC/ED and antibiotics are being considered (patients &gt;18 yo) –see ANMC Procalcitonin guideline for interpretation</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Antibiotics are not beneficial for uncomplicated acute bronchitis.</b> Using antibiotics when not needed could do more harm than good.</li> <li>• Bacteria are uncommon causes of acute bronchitis</li> <li>• Expected duration of cough is 2-3 weeks (average 18 days)</li> <li>• Cough remedies and reassurance are the primary therapies</li> <li>• Antihistamines are NOT effective for bronchitis</li> <li>• Narcotic medications should not be used for cough suppression in acute bronchitis</li> <li>• Avoid over-the-counter cough medications in children &lt;4 years of age</li> </ul>

Treatment Options		
	Medication	Education
<b>Symptoms <u>without</u> comorbidities present &lt; 14-21 days</b>	<b>Guaifenesin 100mg/5ml</b> PO Q4H prn cough (ANMC Non-Formulary, patient responsible for purchasing) <b>Dextromethorphan 10-20 mg</b> Q4H prn cough (max 120 mg/24H) (ANMC Non-Formulary, patient responsible for purchasing) <b>Albuterol inhaler 90 mcg/inhalation</b> 1-2 puffs PO QID prn difficulty breathing <b>and</b> wheezes present on exam in patients with asthma or underlying pulmonary disease	<ul style="list-style-type: none"> <li>• Rationale for <u>no antibiotics</u></li> <li>• Expected duration is 2-3 weeks</li> <li>• Smoke free environment</li> <li>• Avoidance of irritants</li> <li>• Increase fluid intake</li> <li>• Rest</li> <li>• Humidify air</li> <li>• Honey</li> <li>• Follow up if symptoms worsen</li> <li>• Describe as “viral illness” or “chest cold”</li> </ul>
<b>Symptoms <u>and</u> comorbidities present</b>	<b>Evaluate for pneumonia or COPD exacerbation or alternative causes</b> <ul style="list-style-type: none"> <li>• If positive evaluation, treat accordingly</li> <li>• If negative evaluation, follow guidelines for symptoms without comorbidities</li> </ul>	
<b>Adjunctive medications</b>	<b>Ibuprofen 400mg</b> PO Q6-8H prn pain or inflammation <b>Naproxen 500mg</b> PO Q12H prn pain or inflammation <b>Acetaminophen 325mg-650mg</b> PO Q6h prn pain	

Antimicrobial Stewardship Program Approved 2017

References: Braman SS. Chronic cough due to acute bronchitis: ACCP evidenced-based clinical practice guidelines. *Chest*. 2006 Jan. 129(1 Suppl):95S-103S; Kinkade S, Long NA. Acute Bronchitis: AAFP. *Am Fam Physician*. 2016 Oct 1;94(7):560-565; File TM. Acute bronchitis in adults. Oct 2017. Up to date.