

ANMC Acute Bronchitis in Adolescents and Adults

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

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

Treatment Options		
	Medication	Education
Symptoms present <14-21 days <u>without</u> comorbidities	Guaifenesin 100mg/5ml PO q4hr prn cough (ANMC Non-Formulary, patient responsible for purchasing) Dextromethorphan 10-20mg PO q4hr prn cough (max 120 mg/24hr) (ANMC Non-Formulary, patient responsible for purchasing) Albuterol inhaler 90mcg/inhalation 1-2 puffs PO QID prn difficulty breathing and wheezes present on exam in patients with asthma or underlying pulmonary disease	<ul style="list-style-type: none"> • Rationale for <u>no antibiotics</u> • Expected duration is 2-3 weeks • Smoke free environment • Avoidance of irritants • Increase fluid intake • Rest • Humidify air • Honey • Follow up if symptoms worsen • Describe as “viral illness” or “chest cold”
Symptoms <u>and</u> comorbidities present	Evaluate for pneumonia or COPD exacerbation or alternative causes <ul style="list-style-type: none"> • If positive evaluation, treat accordingly • If negative evaluation, follow guidelines for symptoms without comorbidities 	
Adjunctive medications	Ibuprofen 400mg PO q6-8hr prn pain or inflammation Naproxen 500mg PO q12hr prn pain or inflammation Acetaminophen 325mg-650mg PO q6hr prn pain	

Antimicrobial Stewardship Program Approved 2017; Updated June 19, 2019

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.