


**Michigan Quality Improvement Consortium Guideline**
**Management of Uncomplicated Acute Bronchitis in Adults**

The following guideline recommends assessment, diagnosis, treatment and counseling interventions for the management of uncomplicated acute bronchitis in adults.

| Eligible Population  | Key Components           | Recommendation and Level of Evidence   |   |
|--|--------------------------|--|---|
| Healthy adults 18 years or older with clinical suspicion of uncomplicated acute bronchitis | Assessment               | Perform thorough history (including tobacco use status <b>[A]</b> ) and physical exam.<br>Assess the likelihood of uncomplicated acute bronchitis using the following items:<br>Acute respiratory infection (ARI): cough, with or without sputum production lasting up to (or $\leq$ ) 3 weeks.<br>No clinical evidence of pneumonia, not immunocompromised.<br>Consider common cold, reflux esophagitis, acute asthma, or exacerbation of COPD.<br>Consider other diagnoses if cough persists greater than 3 weeks.<br>Consider travel history. Follow CDC guidelines regarding emerging illnesses.   |   |
|  | Diagnosis                | Presumed diagnosis of acute bronchitis:<br>ARI and cough with or without sputum production lasting no more than 3 weeks<br>No clinical evidence of pneumonia, respiratory distress, hypoxemia or sepsis<br>Consider chest x-ray if: pulse > 100, respirations > 24, fever > 38° C oral, lung consolidation or dyspnea <b>[B]</b><br>Viral cultures, serologic assays and sputum analyses should not be routinely performed. <b>[C]</b> If pertussis is suspected (history of exposure/characteristic cough), consider PCR testing. <b>[D]</b><br>Purulent sputum is not predictive of bacterial infection and by itself is not an indication for a chest x-ray or antibiotic therapy. <b>[C]</b> |   |
|  | Treatment                | <b>Avoid antibiotics [A]</b><br>Symptomatic treatment only<br>Beta <sub>2</sub> agonist bronchodilators should not be routinely used to alleviate cough. In select patients with significant wheezing, short-term treatment with beta <sub>2</sub> agonist bronchodilators may be useful <b>[C]</b><br>Antitussive agents can be offered for short-term symptomatic relief of coughing <b>[C]</b><br>Mucolytic agents are not recommended (no consistent favorable effect) <b>[D]</b>  |   |
|  | Education and counseling | <b>Educate patient/family use of antibiotics is not recommended, even if bacterial</b><br>Acute bronchitis is a self-limited respiratory disorder, with cough, lasting up to 3 weeks<br>Rest and increase oral fluid intake; avoid smoke and second-hand smoke <b>[C]</b><br>Reduce viral spread by frequent hand hygiene, cough and sneeze hygiene, avoid touching face, stay home if ill<br>Influenza and pertussis vaccine<br>Check CDC website and local health department   | <b>For patients:</b><br>See a healthcare professional if you have: <ul style="list-style-type: none"> <li>• Temperature higher than 100.4 °F</li> <li>• Cough with bloody mucus</li> <li>• Shortness of breath or trouble breathing</li> <li>• Symptoms that last more than 3 weeks</li> <li>• Repeated episodes of bronchitis</li> </ul> |

**Levels of Evidence for the most significant recommendations:** A = randomized controlled trials; B = controlled trials, no randomization; C = observational studies; D = opinion of expert panel

This guideline lists core management steps. It is based on several sources including Antibiotics for acute bronchitis (Review), Smith SM, Fahey T, Smucny J, Becker LA. The Cochrane Collaboration, 2012, Issue 4; and Inhaled corticosteroids for stable chronic obstructive pulmonary disease (Review), Yang IA, Clarke MS, Sim EHA, Fong KM. The Cochrane Collaboration, 2012, Issue 7; and, American College of Chest Physicians Chronic Cough Due to Acute Bronchitis: ACCP Evidence-Based Clinical Practice Guidelines, 2006. Individual patient considerations and advances in medical science may supersede or modify these recommendations.

Approved by MQIC Medical Directors May 2008, 2010, 2012, 2014, 2016, 2018, 2020

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