

# Acute Bronchitis for Adult and Pediatric Patients Algorithm

## Strategies to reduce antibiotic use for acute bronchitis:

1. Use delayed prescription strategies
2. Discuss the expected course of illness and cough duration (2-3 weeks)
3. Explain that the illness is typically caused by a virus (90%) and not bacteria
4. Explain that antibiotics do not significantly shorten illness duration and are associated with adverse effects and antibiotic resistance

File TM. Acute bronchitis in Adults. In: UpToDate, Bond S, Aronson MD (Ed), UpToDate, Waltham, MA. (Accessed on April 13, 2017.) Kinkade S, Long NA. Acute Bronchitis. Am Fam Physician. 2016;94(7):560-565. Lexicomp Online®, Dosing: Adult and Pediatric, Hudson, Ohio: Lexi-Comp, Inc.; April 13, 2017.

**Symptoms consistent with acute bronchitis lasting > 5 days:**  
Cough, sputum production, dyspnea, nasal congestion, headache, and fever

**Conduct Differential Diagnosis:**  
Pneumonia, asthma, exacerbation of COPD, heart failure, upper respiratory tract infection

Symptoms are not consistent with acute bronchitis (Bronchitis is ruled out as a diagnosis)

*Acute bronchitis is most likely viral. Other causes include: Mycoplasma or Chlamydia pneumonia and Bordetella pertussis.*

Are the following symptoms present:  
malaise, rhinorrhea, mild or paroxysmal cough, excessive lacrimation, conjunctival infection?

Are the following symptoms present:  
Dyspnea, bloody or rusty sputum, pulse > 100 bpm, RR > 24 bpm, T > 100.4°F (37.8°C), Focal consolidation, egophony, or fremitus on chest examination, delirium if age > 75?

Antibiotics are not indicated for treatment.

Yes, pertussis is likely

No

**Adult:**

1. Azithromycin 500mg x 1 day, then 250mg x 4 days
2. If macrolide contraindicated: Bactrim® DS BID x 14 days

**Pediatric:**

1. Azithromycin 10mg/kg x 1 days (Max 500), then 5mg/kg x 4 days (Max 250)
2. Bactrim® 4mg/kg/dose Q12H x 14 days

Chest radiography is indicated

Infiltrate

No Infiltrate

Refer to CAP/HAP guidelines

Pneumonia ruled out of differential

**Supportive care and symptom management**

- Antitussives: Dextromethorphan, guaifenesin (adults only), benzonatate (Rx only)
- Expectorants: Guaifenesin
- Consider Beta2-Agonists if underlying history of lung disease or wheezing or airway obstruction on exam
- Analgesics/Antipyretics: APAP or ibuprofen for fever and pain

Cold and cough medications **are not** recommended in children under 4 years old:  
Fluids, APAP/ibuprofen (fever/pain control), saline nasal spray, and if > 1 year honey (antitussive).