

# Appropriate Treatment Guidelines in the Outpatient Setting: Acute, Uncomplicated Bronchitis in Adults

## EPIDEMIOLOGY/ETIOLOGY<sup>1,4</sup>

- Acute, uncomplicated bronchitis affects ~5% of adults each year
- Most often caused by viruses
  - For example: RSV, influenza A/B, parainfluenza, rhinovirus
- If etiology is bacterial, it's often "atypical" bacteria, *C. pneumoniae*, *M. pneumoniae*, or *B. pertussis*
- "Typical" bacterial causes may include *H. influenzae*, *S. pneumoniae*, or *S. aureus*

## SIGNS AND SYMPTOMS<sup>1,2</sup>

- Cough, malaise, difficulty breathing, wheezing
- Cough often persists for 10-20 days, but may last for over 4 weeks
- Colored sputum does *not* indicate bacterial infection

## DIAGNOSIS<sup>1,2</sup>

- Based on clinical history, exam
- Microbiological testing usually does not change case management, except for suspected influenza or pertussis
- Focus should be on ruling out pneumonia; CXR not necessary unless pneumonia suspected

## TREATMENT<sup>2,3</sup>

- Antibiotics should **NOT** be prescribed, even when bacterial infection is suspected, as bronchitis is a self-limited infection. Prescribing antibiotics presents a greater risk than benefit for most patients.
- **Antibiotics are prescribed inappropriately in >70% of ambulatory visits for acute bronchitis in the U.S., accounting for 44% of all antibiotics prescribed in outpatient settings**
- This audit tool may help identify opportunities to improve treatment for bronchitis
- Options for symptomatic therapy include:
  - Cough suppressants (codeine, dextromethorphan)
  - First-generation antihistamines (diphenhydramine)
  - Decongestants (phenylephrine)

## REFERENCES

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3. Pagels CM, Dilworth TJ, Fehrenbacher L, Singh M, & Brummitt CF. Impact of an electronic best-practice advisory in combination with prescriber education on antibiotic prescribing for ambulatory adults with acute, uncomplicated bronchitis within a large integrated health system. *Hosp Epidemiol*, 40(12), October 2019, 1348-1355. doi: <http://dx.doi.org/10.1017/ice.2019.295>
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