

ACUTE BRONCHITIS ANTIBIOTIC PRESCRIBING DECISION AID

Definition: Symptoms of an acute respiratory infection where cough predominates, with or without sputum, lasting ≤ 3 weeks **AND** there is no clinical or radiologic evidence of pneumonia, **AND** excludes asthma or COPD.¹ (Respiratory viruses are the most common cause, “Chest Cold”)

Clinical judgement in each situation is needed to determine if the Decision Aid applies

1. IN OTHERWISE HEALTHY ADULTS < AGE 65 (AND NO ASTHMA OR COPD)

Antibiotics generally **NOT** indicated due to minimal impact.^{1,2}

- main consideration for antibiotic use in infection with cough is distinguishing from pneumonia

ABSENCE of the following **reduces the likelihood of pneumonia** sufficiently to eliminate need for a CXR¹:

- Heart rate > 100 beats/min
- Respiratory Rate > 24 breaths/min
- Temperature > 38⁰C (oral)
- findings of consolidation, egophony, fremitus

If ANY present, consider a CXR and/ or close follow up to reassess

A delayed antibiotic prescription can be considered where clinical uncertainty or other situational factors present (e.g. other clinical concern by physician, patient circumstance such as trip - Rx as per Community Acquired Pneumonia)

Employ Safety-Netting: Advice to notify office if symptoms worsen or need to start Rx to facilitate follow up

2. IN ADULTS 65 AND OLDER WITH CO-MORBIDITY

Antibiotic treatment* often **warranted in Persons >80 with one** of the following, **OR Age > 65 with 2 or more** of³:

- Hospitalized in the previous year
- Diabetes
- Congestive heart failure
- Taking oral steroids or immunosuppressives

*Appropriate antibiotics include amoxicillin-clavulanate 875 mg po bid or respiratory fluoroquinolone (adjust dose as needed for renal function)

NOTES: Consider Influenza, RSV, pertussis if appropriate. Purulent sputum is **not** accurate in distinguishing pneumonia from acute bronchitis; Egophony - increased voice sounds resonance heard during auscultation.

SUPPORTIVE CARE¹

- Inhaled OR oral corticosteroids are ineffective and generally not indicated.
- Bronchodilators have no clear evidence supporting effectiveness and are not routinely recommended; may have role if wheezing⁴.
- Antitussives can be offered for short term where cough is distressing or painful.

1. Braman SS. Chronic cough due to acute bronchitis. ACCP evidence-based clinical practice guidelines. *CHEST* 2006; 1: 95S-103S.

2. Smith SM, Fahey T, Smucny J, Becker LA. Antibiotics for acute bronchitis. *Cochrane Database of Systematic Reviews* 2014, Issue 3. Art. No.: CD000245. DOI: 10.1002/14651858.CD000245.pub3.

3. NICE Clinical Guideline 69. Respiratory tract infections – antibiotic prescribing. Prescribing of antibiotics for self-limiting respiratory tract infections in adults and children in primary care. National Institute for Health and Clinical Excellence. London, UK. Last modified July 2008.

4. Becker LA et al. Beta2-agonists for acute cough or a clinical diagnosis of acute bronchitis. *Cochrane Database of Systematic Reviews* 2015, Issue 9. Art. No.: CD001726. DOI 10.1002/14651858.CD001726.pub 5.