Management of Bronchitis in Children and Adolescents

Clinical Practice Guideline
MedStar Health
Antibiotic Stewardship

"These guidelines are provided to assist physicians and other clinicians in making decisions regarding the care of their patients. They are not a substitute for individual judgment brought to each clinical situation by the patient's primary care provider-in collaboration with the patient. As with all clinical reference resources, they reflect the best understanding of the science of medicine at the time of publication, but should be used with the clear understanding that continued research may result in new knowledge and recommendations."

Diagnostic Evaluation and Treatment for Acute Bronchitis:

1. Signs and Symptoms of Typical Acute Bronchitis
   - Cough
   - Production of mucus (sputum), which can be clear, white, yellowish-gray or green in color — rarely, it may be streaked with blood
   - Fatigue
   - Shortness of breath
   - Slight fever and chills
   - Chest discomfort

2. Most common causes of bronchitis in immunocompetent children and adolescence are viral in origin and antibiotics are not indicated. Consider specific causes if indicated.
   - Influenza – when influenza is suspected, appropriate diagnostic testing and treatment should be utilized as clinically indicated.
   - Pertussis – when pertussis infection is suspected, appropriate diagnostic testing and empiric antimicrobial therapy should be initiated.

3. Consider alternative diagnoses such as pneumonia or bronchiolitis if symptoms such as:
   - Fever (temperature greater than 100.3 F or 38.0 C)
   - Tachycardia (heart rate > 100 bpm)
   - Tachypnea (respiratory rate 24 breaths per minute or higher)
   - Hypoxemia (pulse oxygenation < 95%)
   - Asymmetrical lung sounds (rales, egophony, fremitus)
   - Cough lasting 3 weeks or longer.
   - Color Changes

4. In high-risk immunocompromised patients (i.e. HIV, Cancer, Sickle Cell, Cystic Fibrosis) consider other sources, diagnostic tests, and treatment.

5. Routine antibiotic treatment of bronchitis is not recommended.
DEFINITIONS

Antimicrobial stewardship refers to coordinated interventions designed to improve and measure the appropriate use of antimicrobials by promoting the selection of the optimal antimicrobial drug regimen, dose, duration of therapy, and route of administration. Antimicrobial stewards seek to achieve optimal clinical outcomes related to antimicrobial use, minimize toxicity and other adverse events, reduce the costs of health care for infections, and limit the selection for antimicrobial resistant strains. - See more at: [http://www.idsociety.org/stewardship_policy/#sthash.SM1baBaC.dpuf](http://www.idsociety.org/stewardship_policy/#sthash.SM1baBaC.dpuf)

REFERENCES:

Association for Professionals in Infection Control and Epidemiology (APIC), 2015. Antimicrobial stewardship. Retrieved from [http://www.apic.org/Professional-Practice/Practice-Resources/Antimicrobial-Stewardship](http://www.apic.org/Professional-Practice/Practice-Resources/Antimicrobial-Stewardship)


Society for Healthcare Epidemiology of America (SHEA), 2015. Antimicrobial Stewardship. Retrieved from [http://www.shea-online.org/PriorityTopics/AntimicrobialStewardship.aspx](http://www.shea-online.org/PriorityTopics/AntimicrobialStewardship.aspx)

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Condition: Bronchitis Pediatric