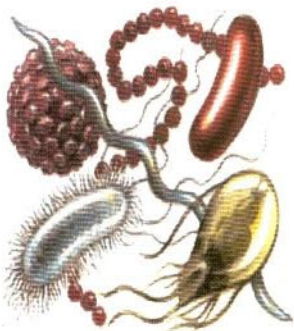


# Appropriate Antibiotic Use For Treatment Of Acute Respiratory Tract Infections In Adults

Summary Of Clinical Practice Guidelines

American College of Physicians—  
American Society of Internal Medicine, 2001



*Ed Jenne*

## *Includes*

- General Guidelines
- Non-Specific URI
- Acute Rhinosinusitis
- Acute Pharyngitis,  
including Centor Criteria
- Uncomplicated Acute  
Bronchitis
- Prescription Pad Blank

Antibiotic resistance is an accelerating clinical and public health concern. Helping clinicians refine their diagnostic acumen for common respiratory infections and prescribe antibiotics only for conditions likely to have bacterial causes will help slow this growth.

This guide summarizes Practice Guidelines from the  
*American College of Physicians—  
American Society of Internal Medicine*

*Full text of these Clinical Practice Guidelines is available from the Annals of Internal Medicine.*<sup>1-5</sup>

## Key points from the Clinical Practice Guidelines:

### General<sup>1</sup>

- The epidemic increase in antibiotic-resistant *Streptococcus pneumoniae* is an ambulatory care problem.
- Previous antibiotic use is an important risk factor for carriage of and infection with antibiotic-resistant *Streptococcus pneumoniae*.
- Most antibiotic prescriptions in the ambulatory setting are for acute respiratory infections.

## Non-Specific Upper Respiratory Tract Infections<sup>2</sup>

- ❑ The diagnosis of upper respiratory tract infection should be used to denote an acute infection that is typically viral in origin and in which sinus, pharyngeal, and lower airway symptoms, although frequently present, are not prominent.
- ❑ Antibiotic treatment of adults with nonspecific upper respiratory tract infection does not enhance illness resolution and is not recommended.
- ❑ Purulent secretions from the nares or throat (commonly observed in patients with uncomplicated upper respiratory tract infection) predict neither bacterial infection nor benefit from antibiotic treatment.

## Acute Rhinosinusitis<sup>3</sup>

- ❑ Most cases of acute rhinosinusitis diagnosed in ambulatory care are caused by uncomplicated viral upper respiratory tract infections.
- ❑ Bacterial and viral rhinosinusitis are difficult to differentiate on clinical grounds. The clinical diagnosis of acute bacterial rhinosinusitis should be reserved for patients with rhinosinusitis symptoms lasting 7 days or more who have maxillary pain or tenderness in the face or teeth (especially when unilateral) and purulent nasal secretions.
- ❑ Sinus radiography is not recommended for diagnosis in routine cases.
- ❑ Acute rhinosinusitis resolves without antibiotic treatment in most cases. Symptomatic treatment and reassurance is the preferred initial management strategy for patients with mild symptoms.



Name: \_\_\_\_\_ Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

**Diagnosis:**   o Cold or Flu                      o Cough                                      o Viral sore throat  
                    o Middle ear fluid (Otitis Media with Effusion, OME)  
                    o Other: \_\_\_\_\_

**Rx**

You have been diagnosed as having a viral illness.  
**Antibiotic treatment does not cure viral infections.**  
Taken when not needed, antibiotics can be harmful.  
Use the treatments prescribed below will help you feel better while your body's defenses are defeating the virus.

**General instructions:**

- o Increase fluids.
- o Use cool mist vaporizer or saline nasal spray to relieve congestion.
- o Soothe throat with ice chips, or sore throat spray; lozenges for older children and adults.

**Specific medicines:**

- o Fever or aches:
- o Ear pain:
  - o \_\_\_\_\_ :
  - o \_\_\_\_\_ :

Use medicines as directed by your doctor or the package instructions. Stop medication when symptoms get better.

**Follow up:**

- o If not improved in \_\_\_\_ days, if new symptoms occur, or if you have other concerns, please call or return to the office for a recheck.

o Other: \_\_\_\_\_  
\_\_\_\_\_

**Signed:** \_\_\_\_\_

Name: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Diagnosis:  Cold or Flu       Cough       Viral sore throat  
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**Specific medicines:**

Fever or aches:

Ear pain:

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Use medicines as directed by your doctor or the package instructions. Stop medication when symptoms get better.

**Follow up:**

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Other: \_\_\_\_\_

**Signed:** \_\_\_\_\_

## Acute Pharyngitis<sup>4</sup>

- Group A  $\beta$ -hemolytic streptococcus (GABHS) is the causal agent in approximately 10% of adult cases of pharyngitis. The large majority of adults with acute pharyngitis have a self-limited illness, for which supportive care only is needed.
- Antibiotic treatment of adult pharyngitis benefits only those patients with GABHS infection. All patients with pharyngitis should be offered appropriate doses of analgesics and antipyretics, and other supportive care.
- Limit antibiotic prescriptions to patients who are most likely to have GABHS infection. ***Clinically screen all adult patients with pharyngitis for the presence of the four Centor criteria:***

### Centor Criteria:

- ◇ History of Fever
- ◇ Tonsillar exudates
- ◇ No cough
- ◇ Tender Anterior Cervical Lymphadenopathy-lymphadenitis

- **Do not test or treat** patients with **none or only one** of these criteria, since these patients are unlikely to have GABHS infection.
- For patients with **two or more** criteria the following strategies are appropriate:
  1. Test patients with 2,3 or 4 criteria by using a rapid antigen test, and limit antibiotic therapy to patients with positive test results;
  2. Test patients with 2 or 3 criteria by using a rapid antigen test, and limit antibiotic therapy to patients with positive test results or patients with 4 criteria;  
or
  3. Do not use any diagnostics tests, and limit antibiotic therapy to patients with 3 or 4 criteria.



- ❑ Throat cultures are not recommended for the routine primary evaluation of adults with pharyngitis or for confirmation of negative results on rapid antigen tests when the test sensitivity exceeds 80%.
- ❑ **The preferred antibiotic treatment of acute GABHS pharyngitis is a penicillin, or erythromycin in a penicillin-allergic patient.**
- ❑ Administer appropriate analgesics, antipyretics, and supportive care to all patients with pharyngitis.

## Uncomplicated Acute Bronchitis<sup>5</sup>

- ❑ The evaluation of adults with an acute cough illness or a presumptive diagnosis of uncomplicated acute bronchitis should focus on ruling out serious illness, particularly pneumonia.
- ❑ Routine antibiotic treatment of uncomplicated acute bronchitis is not recommended, regardless of duration of cough.

Patient satisfaction with care for acute bronchitis depends mostly on **physician-patient communication** rather than on antibiotic treatment.

References: Full text is available online. See:

<http://www.cdc.gov/drugresistance/community/technical.htm>

1. Gonzales R, Bartlett JG, Besser RE, Cooper RJ, Hickner JM, Hoffman JR, Sande MA. Principles of Appropriate Antibiotic Use for Treatment of Acute Respiratory Tract Infections in Adults: Background, Specific Aims, and Methods. *Annals of Internal Medicine*. March 20, 2001;134:479-486.
2. Gonzales R, Bartlett JG, Besser RE, Hickner JM, Hoffman JR, Sande MA. Principles of Appropriate Antibiotic Use for Treatment of Nonspecific Upper Respiratory Tract Infections in Adults: Background. *Annals of Internal Medicine*. March 20, 2001;134:490-494.
3. Hickner JM, Bartlett JG, Besser RE, Gonzales R, Hoffman JR, Sande MA. Principles of Appropriate Antibiotic Use for Acute Rhinosinusitis in Adults: Background. *Annals of Internal Medicine*. March 20, 2001;134:498-505.
4. Cooper RJ, Hoffman JR, Bartlett JG, Besser RE, Gonzales R, Hickner JM, Sande MA. Principles of Appropriate Antibiotic Use for Acute Pharyngitis in Adults: Background. *Annals of Internal Medicine*. March 20, 2001;134:509-517.
5. Gonzales R, Bartlett JG, Besser RE, Cooper RJ, Hickner JM, Hoffman JR, Sande MA. Principles of Appropriate Antibiotic Use for Treatment of Uncomplicated Acute Bronchitis: Background. *Annals of Internal Medicine*. March 20, 2001;134:521-529.

Montana's Antimicrobial Resistance Collaborative  
c/o Yellowstone City-County Health Department  
123 South 27th Street  
Billings, Montana 59101

See [www.cdc.gov/getsmart](http://www.cdc.gov/getsmart)  
for more information



**Know When Antibiotics Work**

Return Service Requested

Resource ID # 6691

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