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Patient education: Acute bronchitis in adults (Beyond the Basics)

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BRONCHITIS OVERVIEW

Bronchitis develops when there is swelling and irritation of the bronchi, the large tubes that carry air to the lungs ([figure 1](#)). There are two types of bronchitis: acute (sudden onset) and chronic (longstanding).

Acute bronchitis often occurs with a viral infection, such as the common cold, and is sometimes called a "chest cold." The most common symptom of acute bronchitis is a nagging cough, which usually subsides within two to three weeks, although a lingering cough can persist for several weeks after the acute bronchitis has improved. Treatment of acute bronchitis usually involves treating the symptoms of the viral infection, such as sore throat and congestion. Antibiotics do not help to eliminate acute bronchitis caused by a virus. Antiviral agents are useful in some cases of acute bronchitis due to influenza, but there are no antiviral agents for other forms of viral bronchitis.

This topic will review the causes, symptoms, diagnosis, and treatment of acute bronchitis.

Topics that discuss the common cold and sore throat are also available. (See ["Patient education:](#)

[The common cold in adults \(Beyond the Basics\)](#)" and ["Patient education: Sore throat in adults \(Beyond the Basics\)"](#).)

Chronic bronchitis is discussed separately (see ["Patient education: Chronic obstructive pulmonary disease \(COPD\) \(Beyond the Basics\)"](#)). More detailed information about acute bronchitis is available by subscription (see ["Acute bronchitis in adults"](#)).

BRONCHITIS CAUSES

Most cases of bronchitis are caused by a viral infection of the upper airways, such as the common cold or the flu. Less commonly, a bacterium called *Bordetella pertussis*, which causes pertussis (whooping cough), is the cause. (See ['Whooping cough'](#) below.)

BRONCHITIS SYMPTOMS

The most common symptoms of acute bronchitis include:

- A persistent cough; this may last 10 to 20 days.
- Some people cough up mucus, which may be clear, yellow, or green in color (in this case, coughing is a good response to help clear the bronchi of the mucus).

Fever is not common in people with acute bronchitis. However, having a fever can be a sign of another condition, such as the flu or pneumonia. (See ["Patient education: Influenza symptoms and treatment \(Beyond the Basics\)"](#) and ["Patient education: Pneumonia in adults \(Beyond the Basics\)"](#).)

Conditions with similar features — There are other conditions that have symptoms similar to those of acute bronchitis.

- Chronic cough – A persistent cough that lasts more than eight weeks is considered a chronic cough and can be due to asthma, acid reflux, certain medications, and other disorders. Chronic cough is discussed in detail elsewhere. (See ["Patient education: Chronic cough in adults \(Beyond the Basics\)"](#).)
- Chronic bronchitis – Chronic bronchitis is defined as a cough that occurs on most days of the month for at least three months of the year during two consecutive years. This condition is discussed separately. (See ["Patient education: Chronic obstructive pulmonary disease \(COPD\) \(Beyond the Basics\)"](#).)

- COVID-19 – Coronavirus disease 2019 (COVID-19) can also cause prolonged cough and other respiratory symptoms. (See "[Patient education: COVID-19 overview \(The Basics\)](#)" and "[Patient education: Recovery after COVID-19 \(The Basics\)](#)".)
- Pneumonia – Signs of pneumonia include fever, a fast heart and/or breathing rate, chest pain, shortness of breath, and discolored mucus production. (See "[Patient education: Pneumonia in adults \(Beyond the Basics\)](#)".)
- Postnasal drip – Postnasal drip occurs when secretions drain from the sinuses into the throat. This can cause the throat to feel irritated, which causes you to feel like you need to clear your throat frequently. Postnasal drip can be caused by the common cold, allergies, sinusitis, or environmental irritants. (See "[Patient education: Allergic rhinitis \(Beyond the Basics\)](#)".)

BRONCHITIS DIAGNOSIS

Most people who have a persistent cough after an upper respiratory infection (cold) do not need to see a health care provider. Diagnostic testing, such as X-rays, cultures, and blood tests, are not usually needed for people with acute bronchitis. However, testing may be recommended if your diagnosis is not clear based upon your examination or if another condition, such as pneumonia, is suspected.

When to seek help — You should call your health care provider if you have any of the following:

- Persistent fever or new fever
- A cough that does not improve after 10 days or lasts longer than 20 days
- A cough that worsens and is accompanied by new fever and new discolored mucus production (this may be the signs of a developing pneumonia)
- Chest pain with coughing, difficulty breathing, or coughing up blood
- A barking cough that makes it hard to speak, especially if it persists
- Cough accompanied by unexplained weight loss

People who are older than 75 do not always have a fever or other concerning symptoms that may indicate a more serious infection. If you are over 75 years old and you have a persistent cough, you should call your clinician to determine if and when an office visit is recommended.

BRONCHITIS TREATMENT

Relief of symptoms — There is no specific treatment for bronchitis. There are a few treatments available for the common cold (see "[Patient education: The common cold in adults \(Beyond the Basics\)](#)"):

- Drinking lots of fluids.
- A nonsteroidal anti-inflammatory drug ([ibuprofen](#), [naproxen](#)), [aspirin](#), or [acetaminophen](#) (Tylenol) can help to relieve the pain of a sore throat or headache for most people. Acetaminophen is preferred for pregnant women.
- Heated, humidified air can improve symptoms of nasal congestion and runny nose and has few to no side effects.
- Cough suppressant medications have not been shown to be helpful for most patients. In addition, coughing can be a good response to help clear the bronchi of mucus.
- Inhaler medications, commonly used for patients with asthma, are only helpful for those patients whose symptoms include wheezing or airflow obstruction and would require prescription.

Antibiotics — Antibiotics are **NOT** helpful for most people with bronchitis since the illness is typically caused by a virus. Antibiotics treat bacterial, not viral, infections.

Many people request antibiotics in the hopes that it will get rid of the cough, and some people even think that antibiotics have helped on previous occasions. However, there is no benefit of antibiotics for most cases of bronchitis. Unnecessary use of antibiotics can cause harm by causing side effects and promoting antibiotic resistance so that if you do develop a bacterial infection it may be more difficult to treat.

Whooping cough — Whooping cough is caused by a bacterium, *Bordetella pertussis*. A vaccine is routinely given during childhood and again during adolescence or adulthood to reduce the risk of becoming infected with pertussis. However, the illness can still develop in those who were vaccinated. (See "[Pertussis infection in adolescents and adults: Clinical manifestations and diagnosis](#)".)

Signs of whooping cough in adults include repeated "spasms" of severe coughing, sometimes followed by vomiting. Whooping cough often occurs as outbreaks, usually involving people who are incompletely immunized. If whooping cough is suspected, your health care provider may prescribe an antibiotic. Antibiotics will not help the cough but can reduce the risk of spreading the infection to others. (See "[Pertussis infection in adolescents and adults: Treatment and prevention](#)".)

PREVENTING THE SPREAD OF ILLNESS

Hand washing is an essential and highly effective way to prevent the spread of infection. Wet your hands with water and plain soap and rub them together for 15 to 30 seconds. Pay special attention to the fingernails, between the fingers, and the wrists. Rinse your hands thoroughly, and dry with a single-use towel.

Alcohol-based hand rubs are a good alternative for disinfecting hands if a sink is not available. Spread the hand rub over the entire surface of your hands, fingers, and wrists until dry. You can use hand rubs repeatedly without irritating the skin or losing effectiveness. Hand rubs are available as a liquid or wipe in small, portable sizes that are easy to carry in a pocket or handbag. When a sink is available, you should wash visibly soiled hands with soap and water.

Wash your hands before preparing food and eating; after going to the bathroom; and after coughing, blowing the nose, or sneezing. While it is not always possible to limit contact with people who are ill, avoid touching your eyes, nose, or mouth after direct contact, when possible.

In addition, use a tissue to cover your mouth when sneezing or coughing. Throw away used tissues promptly and then wash your hands. Sneezing/coughing into the sleeve of your clothing (at the inner elbow) is another way of containing sprays of saliva and secretions and does not contaminate your hands. Sneezing and coughing without covering your mouth can spread infection to anyone within six feet.

WHERE TO GET MORE INFORMATION

Your health care provider is the best source of information for questions and concerns related to your medical problem.

This article will be updated as needed on our website (www.uptodate.com/patients). Related topics for patients, as well as selected articles written for health care professionals, are also available. Some of the most relevant are listed below.

Patient level information — UpToDate offers two types of patient education materials.

The Basics — The Basics patient education pieces answer the four or five key questions a patient might have about a given condition. These articles are best for patients who want a general overview and who prefer short, easy-to-read materials.

[Patient education: Acute bronchitis \(The Basics\)](#)

Beyond the Basics — Beyond the Basics patient education pieces are longer, more sophisticated, and more detailed. These articles are best for patients who want in-depth information and are comfortable with some medical jargon.

[Patient education: The common cold in adults \(Beyond the Basics\)](#)

[Patient education: Sore throat in adults \(Beyond the Basics\)](#)

[Patient education: Chronic obstructive pulmonary disease \(COPD\) \(Beyond the Basics\)](#)

[Patient education: Influenza symptoms and treatment \(Beyond the Basics\)](#)

[Patient education: Pneumonia in adults \(Beyond the Basics\)](#)

[Patient education: Chronic cough in adults \(Beyond the Basics\)](#)

[Patient education: Allergic rhinitis \(Beyond the Basics\)](#)

Professional level information — Professional level articles are designed to keep doctors and other health professionals up-to-date on the latest medical findings. These articles are thorough, long, and complex, and they contain multiple references to the research on which they are based. Professional level articles are best for people who are comfortable with a lot of medical terminology and who want to read the same materials their doctors are reading.

[Acute bronchitis in adults](#)

[Pertussis infection in adolescents and adults: Clinical manifestations and diagnosis](#)

[Management of infection in exacerbations of chronic obstructive pulmonary disease](#)

[Evaluation of nonlife-threatening hemoptysis in adults](#)

[Fluoroquinolones](#)

[Respiratory syncytial virus infection: Clinical features and diagnosis](#)

[The common cold in adults: Treatment and prevention](#)

[Pertussis infection in adolescents and adults: Treatment and prevention](#)

The following organizations also provide reliable health information.

- National Library of Medicine

www.nlm.nih.gov/medlineplus/bronchitis.html

- Centers for Disease Control and Prevention (CDC)

www.cdc.gov/getsmart/antibiotic-use/URI/bronchitis.html

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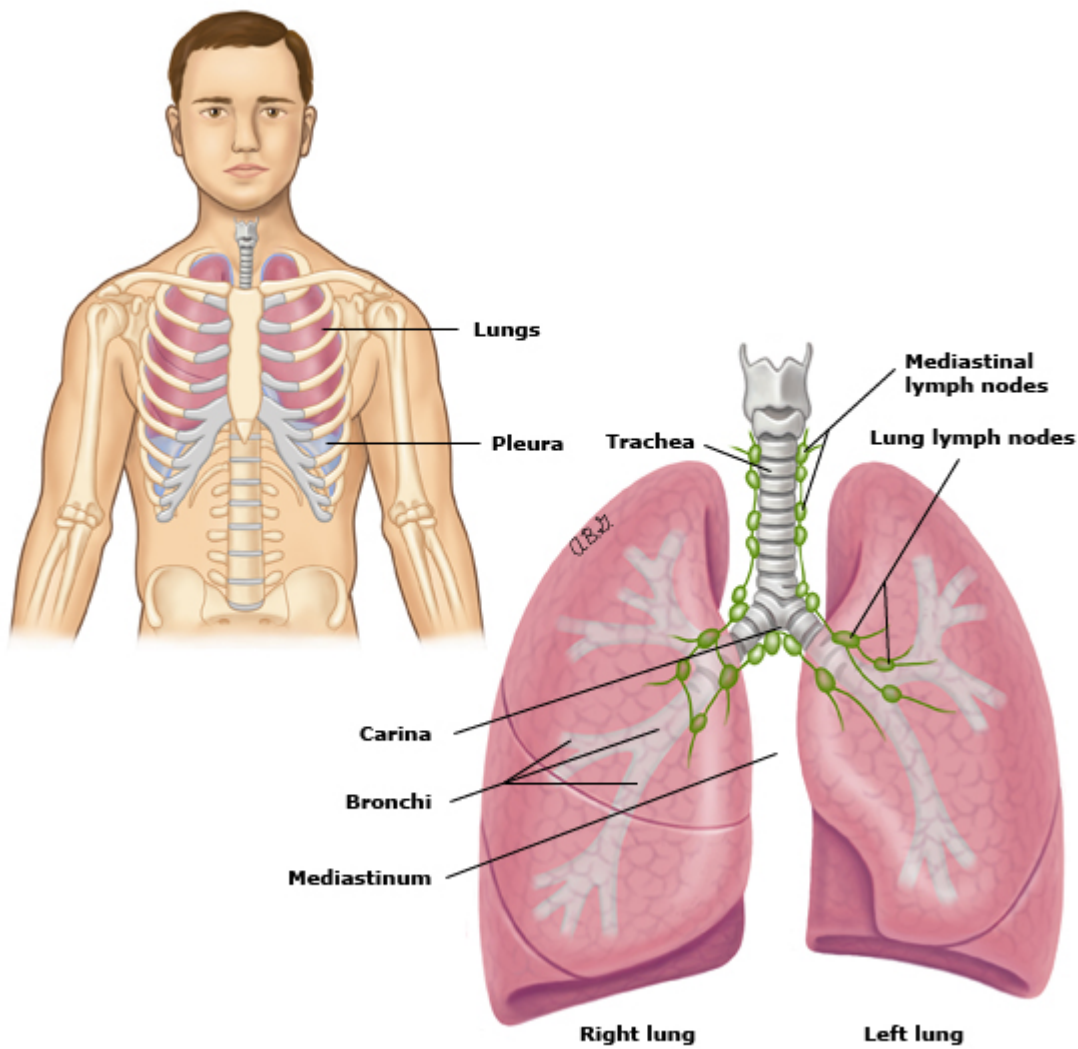
REFERENCES

1. [Snow V, Mottur-Pilson C, Gonzales R, et al. Principles of appropriate antibiotic use for treatment of acute bronchitis in adults. Ann Intern Med 2001; 134:518.](#)
2. [Wenzel RP, Fowler AA 3rd. Clinical practice. Acute bronchitis. N Engl J Med 2006; 355:2125.](#)
3. [Braman SS. Chronic cough due to acute bronchitis: ACCP evidence-based clinical practice guidelines. Chest 2006; 129:95S.](#)
4. [Smith SM, Fahey T, Smucny J, et al. Antibiotics for acute bronchitis. Cochrane Database Syst Rev 2012; CD000245.](#)
5. [Smith SM, Schroeder K, Fahey T. Over-the-counter \(OTC\) medications for acute cough in children and adults in ambulatory settings. Cochrane Database Syst Rev 2012; :CD001831.](#)

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GRAPHICS

Normal lungs



The lungs sit in the chest, inside the ribcage. They are covered with a thin membrane called the "pleura." The windpipe, or trachea, branches into two smaller airways called the left and right "bronchi." The space between the lungs is called the "mediastinum." Lymph nodes are located within and around the lungs and mediastinum.

Graphic 67527 Version 13.0

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