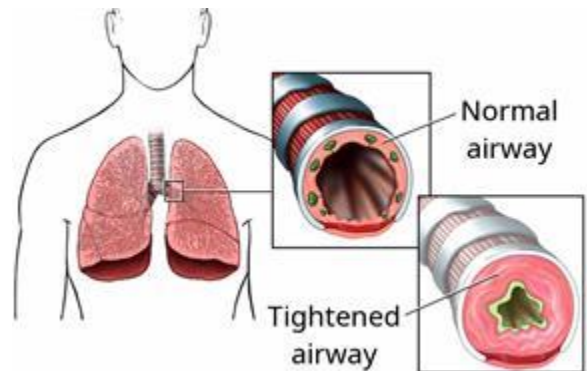


# Bronchospasm, Adult

Bronchospasm is a tightening of the smooth muscle that wraps around the small airways in the lungs. When the muscle tightens, the small airways narrow. Narrowed airways limit the air you breathe in or out of your lungs. Inflammation (*swelling*) and more mucus (*sputum*) than usual can further irritate the airways. This can make it very hard to breathe. Bronchospasm can happen suddenly or over a period of time.



## What are the causes?

Common causes of this condition include:

- An infection, such as a cold or sinus drainage.
- Exercise.
- Strong odors from aerosol sprays, and fumes from perfume, candles, and household cleaners.
- Cold air.
- Stress or strong emotions such as crying or laughing.

## What increases the risk?

The following factors may make you more likely to develop this condition:

- Having asthma.
- Smoking or being around someone who smokes (*secondhand smoke*).
- Seasonal allergies, such as pollen or mold.
- Allergic reaction (*anaphylaxis*) to food, medicine, or insect bites or stings.

## What are the signs or symptoms?

Symptoms of this condition include:

- Making a high-pitched whistling sound when you breathe, most often when you breathe out (*wheezing*).
- Coughing.
- Chest tightness.
- Shortness of breath.
- Decreased ability to exercise.
- Noisy breathing or a high-pitched cough.

## How is this diagnosed?

This condition may be diagnosed based on your medical history and a physical exam. Your health care provider may also perform tests, including:

- A chest X-ray.
- Lung function tests.

## How is this treated?

This condition may be treated by:

- Using inhaled medicines. These open up (*relax*) the airways and help you breathe. They can be taken with a metered dose inhaler or a nebulizer device.
- Taking corticosteroid medicines. These may be given to reduce inflammation and swelling.
- Removing the irritant or trigger that started the bronchospasm.



## Follow these instructions at home:

### Medicines

- Take over-the-counter and prescription medicines only as told by your health care provider.
- If you need to use an inhaler or nebulizer to take your medicine, ask your health care provider how to use it correctly.
- You may be given a spacer to use with your inhaler. This makes it easier to get the medicine from the inhaler into your lungs.

### Lifestyle

- **Do not** use any products that contain nicotine or tobacco. These products include cigarettes, chewing tobacco, and vaping devices, such as e-cigarettes. If you need help quitting, ask your health care provider.
- Keep track of things that trigger your bronchospasm. Avoid these if possible.
- When pollen, air pollution, or humidity levels are bad, keep windows closed and use an air conditioner or go to places that have air conditioning.
- Find ways to manage stress and your emotions, such as mindfulness, relaxation, or breathing exercises.

### Activity

Some people have bronchospasm when they exercise. This is called exercise-induced bronchoconstriction (EIB). If you have this problem, talk with your health care provider about how to manage EIB. Some tips include:

- Using your fast-acting inhaler before exercise.
- Exercising indoors if it is very cold or humid, or if the pollen and mold counts are high.
- Warming up and cool down before and after exercise.
- Stopping exercising right away if your symptoms start or get worse.

### General instructions

- If you have asthma, make sure you have an asthma action plan.
- Stay up to date on your immunizations.
- Keep all follow-up visits. This is important.

## Get help right away if:

- You have trouble breathing.
- Your wheezing and coughing do not get better after taking your medicine.
- You have chest pain.
- You have trouble speaking more than one-word sentences.

**These symptoms may be an emergency. Get help right away. Call 911.**

- **Do not wait to see if the symptoms will go away.**
- **Do not drive yourself to the hospital.**

## Summary

- Bronchospasm is a tightening of the smooth muscle that wraps around the small airways in the lungs.
- Some people have bronchospasm when they exercise. This is called exercise-induced bronchoconstriction (EIB). If you have this problem, talk with your health care provider about how to manage EIB.
- **Do not** use any products that contain nicotine or tobacco. These products include cigarettes, chewing tobacco, and vaping devices, such as e-cigarettes. If you need help quitting, ask your health care provider.
- Get help right away if your wheezing and coughing do not get better after taking your medicine.

This information is not intended to replace advice given to you by your health care provider. Make sure you discuss any questions you have with your health care provider.

# Cough, Adult

Coughing is a reflex that clears your throat and airways (*respiratory system*). It helps heal and protect your lungs. It is normal to cough from time to time. A cough that happens with other symptoms or that lasts a long time may be a sign of a condition that needs treatment. A short-term (*acute*) cough may only last 2–3 weeks. A long-term (*chronic*) cough may last 8 or more weeks.

Coughing is often caused by:

- Diseases, such as:
  - An infection of the respiratory system.
  - Asthma or other heart or lung diseases.
  - Gastroesophageal reflux. This is when acid comes back up from the stomach.
- Breathing in things that irritate your lungs.
- Allergies.
- Postnasal drip. This is when mucus runs down the back of your throat.
- Smoking.
- Some medicines.

Follow these instructions at home:

## Medicines

- Take over-the-counter and prescription medicines only as told by your health care provider.
- Talk with your provider before you take cough medicine (*cough suppressants*).

## Eating and drinking

- **Do not** drink alcohol.
- Avoid caffeine.
- Drink enough fluid to keep your pee (*urine*) pale yellow.

## Lifestyle

- Avoid cigarette smoke.
- **Do not** use any products that contain nicotine or tobacco. These products include cigarettes, chewing tobacco, and vaping devices, such as e-cigarettes. If you need help quitting, ask your provider.
- Avoid things that make you cough. These may include perfumes, candles, cleaning products, or campfire smoke.

## General instructions

- Watch for any changes to your cough. Tell your provider about them.
- Always cover your mouth when you cough.
- If the air is dry in your bedroom or home, use a cool mist vaporizer or humidifier.
- If your cough is worse at night, try to sleep in a semi-upright position.
- Rest as needed.



## Contact a health care provider if:

- You have new symptoms, or your symptoms get worse.
- You cough up pus.
- You have a fever that does not go away or a cough that does not get better after 2–3 weeks.
- You cannot control your cough with medicine, and you are losing sleep.
- You have pain that gets worse or is not helped with medicine.
- You lose weight for no clear reason.
- You have night sweats.

## Get help right away if:

- You cough up blood.
- You have trouble breathing.
- Your heart is beating very fast.

**These symptoms may be an emergency. Get help right away. Call 911.**

- **Do not wait to see if the symptoms will go away.**
- **Do not drive yourself to the hospital.**

This information is not intended to replace advice given to you by your health care provider. Make sure you discuss any questions you have with your health care provider.

# Chronic Cough

Coughing is a reflex that clears your throat and airways (*respiratory system*). It helps heal and protect your lungs. It is normal to cough from time to time. A cough that happens with other symptoms or that lasts a long time may be a sign of a condition that needs treatment. A long-term (*chronic*) cough may last 8 or more weeks. There are two types of chronic cough:

- A symptomatic chronic cough. This is caused by a disease that can be found and treated.
- A refractory chronic cough. This is a cough that does not go away with testing and treatment.

A chronic cough may be caused by:

- Long-term lung diseases. These include chronic obstructive pulmonary disease (COPD), asthma, and pulmonary fibrosis.
- Upper airway problems. These include allergies, sinusitis, and gastric reflux.
- Some medicines.
- Smoking.

## Follow these instructions at home:

### Medicines

- Take over-the-counter and prescription medicines only as told by your health care provider.
- Ask your provider about getting a flu (*influenza*) or pneumonia vaccine.

### Managing a sore or dry throat

- If your throat is sore or dry, gargle with a mixture of salt and water 3–4 times a day or as needed. To make salt water, completely dissolve  $\frac{1}{2}$ –1 tsp (3–6 g) of salt in 1 cup (237 mL) of warm water.
- Soothe your throat with a cough drop or honey. A dry throat may make your cough worse.
- Use a cool mist vaporizer at home to add moisture to the air.

### Lifestyle

- Avoid cigarette smoke.
- **Do not** use any products that contain nicotine or tobacco. These products include cigarettes, chewing tobacco, and vaping devices, such as e-cigarettes. If you need help quitting, ask your provider.
- Avoid things that may irritate your throat or trigger your allergies.

### General instructions

- Drink enough fluid to keep your pee (*urine*) pale yellow.
- Always cover your mouth when you cough.
- Stay away from people who are sick. Getting a cold or the flu can make your cough worse.



- Wash your hands often with soap and water for at least 20 seconds. If soap and water are not available, use hand sanitizer.

## Contact a health care provider if:

- Your cough gets worse.
- You have a fever or chills.
- You are short of breath.

## Get help right away if:

- You have trouble breathing.
- You have chest pain.

**These symptoms may be an emergency. Get help right away. Call 911.**

- **Do not wait to see if the symptoms will go away.**
- **Do not drive yourself to the hospital.**

This information is not intended to replace advice given to you by your health care provider. Make sure you discuss any questions you have with your health care provider.

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