

# ASTHMA, ADULT



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HEALTH

Asthma is a long-term (chronic) condition that causes recurrent episodes in which the lower airways in the lungs become tight and narrow. The narrowing is caused by inflammation and tightening of the smooth muscle around the lower airways.

Asthma episodes, also called asthma attacks or asthma flares, may cause coughing, making high-pitched whistling sounds when you breathe, most often when you breathe out (wheezing), shortness of breath, and chest pain. The airways may produce extra mucus caused by the inflammation and irritation. During an attack, it can be difficult to breathe. Asthma attacks can range from minor to life-threatening.

Asthma cannot be cured, but medicines and lifestyle changes can help control it and treat acute attacks. It is important to keep your asthma well controlled so the condition does not interfere with your daily life.

## What are the causes?

This condition is believed to be caused by inherited (genetic) and environmental factors, but its exact cause is not known.

## What can trigger an asthma attack?

Many things can bring on an asthma attack or make symptoms worse. These triggers are different for every person. Common triggers include:

- Allergens and irritants like mold, dust, pet dander, cockroaches, pollen, air pollution, and chemical odors.
- Cigarette smoke.
- Weather changes and cold air.
- Stress and strong emotional responses such as crying or laughing hard.
- Certain medications such as aspirin or beta blockers.
- Infections and inflammatory conditions, such as the flu, a cold, pneumonia, or inflammation of the nasal membranes (rhinitis).
- Gastroesophageal reflux disease (GERD).

## What are the signs or symptoms?

Symptoms may occur right after exposure to an asthma trigger or hours later and can vary by person. Common signs and symptoms include:

- Wheezing.
- Trouble breathing (shortness of breath).

- Excessive nighttime or early morning coughing.
- Chest tightness.
- Tiredness (fatigue) with minimal activity.
- Difficulty talking in complete sentences.
- Poor exercise tolerance.

## How is this diagnosed?

This condition is diagnosed based on:

- A physical exam and your medical history.
- Tests, which may include:
  - Lung function studies to evaluate the flow of air in your lungs.
  - Allergy tests.
  - Imaging tests, such as X-rays.

## How is this treated?

There is no cure, but symptoms can be controlled with proper treatment. Treatment usually involves:

- Identifying and avoiding your asthma triggers.
- Inhaled medicines. Two types are commonly used to treat asthma, depending on severity:
  - Controller medicines. These help prevent asthma symptoms from occurring. They are taken every day.
  - Fast-acting reliever or rescue medicines. These quickly relieve asthma symptoms. They are used as needed and provide short-term relief.
- Using other medicines, such as:
  - Allergy medicines, such as antihistamines, if your asthma attacks are triggered by allergens.
  - Immune medicines (immunomodulators). These are medicines that help control the immune system.
- Using supplemental oxygen. This is only needed during a severe episode.
- Creating an asthma action plan. An asthma action plan is a written plan for managing and treating your asthma attacks. This plan includes:
  - A list of your asthma triggers and how to avoid them.
  - Information about when medicines should be taken and when their dosage should be changed.

- Instructions about using a device called a peak flow meter. A peak flow meter measures how well the lungs are working and the severity of your asthma. It helps you monitor your condition.

### **Follow these instructions at home:**

- Take over-the-counter and prescription medicines only as told by your health care provider.
- Stay up to date on all vaccinations as recommended by your healthcare provider, including vaccines for the flu and pneumonia.
- Use a peak flow meter and keep track of your peak flow readings.
- Understand and use your asthma action plan to address any asthma flares.
- **Do not** smoke or allow anyone to smoke in your home.

### **Contact a health care provider if:**

- You have wheezing, shortness of breath, or a cough that is not responding to medicines.
- Your medicines are causing side effects, such as a rash, itching, swelling, or trouble breathing.
- You need to use a reliever medicine more than 2–3 times a week.
- Your peak flow reading is still at 50–79% of your personal best after following your action plan for 1 hour.
- You have a fever and shortness of breath.

### **Get help right away if:**

- You are getting worse and do not respond to treatment during an asthma attack.
- You are short of breath when at rest or when doing very little physical activity.

- You have difficulty eating, drinking, or talking.
- You have chest pain or tightness.
- You develop a fast heartbeat or palpitations.
- You have a bluish color to your lips or fingernails.
- You are light-headed or dizzy, or you faint.
- Your peak flow reading is less than 50% of your personal best.
- You feel too tired to breathe normally.

### **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**

- Asthma is a long-term (chronic) condition that causes recurrent episodes in which the airways become tight and narrow. Asthma episodes, also called asthma attacks or asthma flares, can cause coughing, wheezing, shortness of breath, and chest pain.
- Asthma cannot be cured, but medicines and lifestyle changes can help keep it well controlled and prevent asthma flares.
- Make sure you understand how to avoid triggers and how and when to use your medicines.
- Asthma attacks can range from minor to life-threatening. Get help right away if you have an asthma attack and do not respond to treatment with your usual rescue medicines.

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.