

Allergies and asthma

Allergies occur when your immune system reacts to a specific substance or food. Allergies can be hereditary and can also be unique to everyone. When you have allergies, your immune system makes antibodies that signal an allergen is harmful, even when it isn't. Your immune system's reaction can inflame your skin, sinuses, airways, or digestive system.

Symptoms

Allergic reactions will vary for each person, but below are a few common symptoms of an allergic reaction:

- Sneezing
- Itching of the skin, nose, eyes, or roof of the mouth
- Runny, stuffy nose
- Watery, red, or swollen eyes
- Swelling of the lips, tongue, face, or throat
- Hives
- Cough, chest tightness, wheezing or shortness of breath

Triggers

When you are exposed to a substance that your immune system has a reaction to, that is called an allergen or allergy trigger. Allergy triggers can be anything from airborne substances, foods, insect stings, or substances that you touch. Below are a few of the most common allergy triggers:

- Pollen
- Animal dander
- Dust mites/mold
- Bee stings
- Tree nuts
- Latex



Diagnosis

In order to fully determine if you do have allergies, your healthcare provider may recommend one or both of the following tests:

- **Skin test**, where your healthcare provider exposes you to small amounts of the allergens by slightly pricking your skin to test for a reaction
- **Blood test**, where a vial of blood is taken and tested to determine which allergens will affect you

Prevention

The best way to avoid allergies is to learn more about your allergies and avoid known allergens. Keep a diary to track your activities, what you eat, when symptoms occur, and what seems to help manage your allergic response. Have your allergy prescription or over-thecounter medication quickly accessible when needed.

Some allergic reactions can be severe and even life-threatening. If you believe you or a loved one is experiencing an allergic reaction, please seek medical attention immediately.

Asthma is a health condition that impacts over 25 million Americans. Asthma can cause inflammation that can result in flare-ups or asthma attacks. During an asthma attack, your airways become inflamed, which can make it hard to breathe.

Asthma symptoms and diagnosis

Asthma symptoms can last for a few minutes or for a prolonged period of time, depending on each patient. Some common symptoms include chronic coughing, wheezing, shortness of breath, and chest tightness. It is important to track and recognize patterns when your asthma flares up so you can avoid your triggers in the future.

Asthma attack triggers

Asthma triggers can be all around you. It is very important to learn to avoid your triggers as best as possible. Make sure to partner with your healthcare provider or local pharmacist to discuss and learn more about your asthma symptoms, triggers, and management plan. Begin keeping a diary to track your activities, when symptoms occur and what helps manage your asthma condition and triggers. Below are a few of the most common asthma triggers:

- Sudden changes in weather
- Pollen
- Dust
- Molds
- Pet dander

What is an asthma attack?

During an asthma attack, your airways become inflamed, which can make it hard to breathe. It is important to recognize the symptoms of an asthma attack early before it becomes more severe.

Progression of asthma attack symptoms

Early warning signs

- Dark circles under eyes
- Tiredness

Signs of an asthma attack

- Trouble breathing or shortness of breath
- Tightness in chest
- Coughing/Wheezing

Severe signs of an asthma attack

- Shortness of breath with difficulty walking or talking
- Confusion
- Blue fingernails or lips

Some asthma attacks can be severe and even life-threatening. If you believe you or a loved one is experiencing an asthma attack, please seek medical attention immediately.



Asthma treatment / Asthma attack treatment

Medications do not cure asthma; however they do improve symptoms if the right medication is taken at the right time. Every person's asthma is different. Your health care provider and pharmacist can help to determine the appropriate medications that work for you. Individual treatment plans will depend on the severity and frequency of symptoms. Symptoms can be controlled with:

- Inhalers
 - Metered dose inhalers are aerosol
 - canisters that contain asthma medication that can be administered through an attached mouthpiece.
 - Dry powder inhalers deliver asthma medicine as dry powder using a special inhaler
- Rescue inhalers
 - Rescue Inhalers are intended for use in emergency situations or when quick, immediate relief is needed due to a flare up when symptoms are not under control
 - They can also be used before exercise to prevent an attack
- Maintenance inhalers
 - Maintenance inhalers are intended to be used on a regular basis to help manage asthma, aiming to avoid any complications.

References

- 1. Asthma and Allergy Foundation of America https://www.aafa.org/asthma.aspx
- Allergy Control https://www.allergycontrol.com/ learning/how-to-avoid-allergy-asthma-triggersfebruary-2013/?gclid=EAIaIQobChMI0bW-2Oe8AIV_W1vBB3pxwxcEAMYASAAEgKsvPD_BwE
- Mayo Clinic https://www.mayoclinic.org/ diseases-conditions/allergies/symptoms-causes/ syc-20351497
- 4. aafa Asthma and Allergy Foundation of America: https://www.aafa.org/asthma.aspx

- 5. CDC Centers for Disease Control and Prevention: https://www.cdc.gov/asthma/children.htm
- Centers for Disease Control and Prevention. Asthma. https://www.cdc.gov/asthma/default.htm
- American College of Allergy, Asthma and Immunology. Childhood asthma. https://www. aaaai.org/conditions-and-treatments/library/ asthma-library/childhood-asthma
- 8. Centers for Disease Control and Prevention. Asthma and allergies in the workplace. https:// www.cdc.gov/asthma/workplace.html
- https://www.mayoclinic.org/diseases-conditions/ asthma/symptoms-causes/syc-20369653
- 10. https://acaai.org/asthma/symptoms/asthmaattack
- 11. %20https:/medlineplus.gov/ency/ patientinstructions/000062.htm. 2020
- 12. https://www.cdc.gov/asthma/triggers.html

