

# Allergies

## What Are Allergies?

Your eyes itch, your nose is running, you're sneezing, and you're covered in hives. It's allergy season again, and all you want to do is curl up into a ball of misery.

There has to be something you can do to feel better. After all, doctors seem to have a cure for everything, right? Not for allergies. But there are ways to relieve allergy symptoms or avoid getting the symptoms, even though you can't actually get rid of the allergies themselves.

Allergies are abnormal immune system reactions to things that are typically harmless to most people. When you're allergic to something, your immune system mistakenly believes that this substance is harmful to your body. (Substances that cause allergic reactions, such as certain foods, dust, plant pollen, or medicines, are known as **allergens**.) In an attempt to protect the body, the immune system produces **IgE antibodies** to that allergen. Those antibodies then cause certain cells in the body to release chemicals into the bloodstream, one of which is **histamine** (pronounced: **his-tuh-meen**).

The histamine then acts on a person's eyes, nose, throat, lungs, skin, or gastrointestinal tract and causes the symptoms of the allergic reaction. Future exposure to that same allergen will trigger this antibody response again. This means that every time you come into contact with that allergen, you'll have an allergic reaction.

Allergic reactions can be mild, like a runny nose, or they can be severe, like difficulty breathing. An asthma attack, for example, is often an allergic reaction to something that is breathed into the lungs in a person who is susceptible.

Some types of allergies produce multiple symptoms, and in rare cases, an allergic reaction can become very severe — this severe reaction is called **anaphylaxis** (pronounced: ah-nuh-fuh-lak-sis). Some of the signs of anaphylaxis are difficulty breathing, difficulty swallowing, swelling of the lips, tongue, and throat or other parts of the body, and dizziness or loss of consciousness. Anaphylaxis usually occurs minutes after exposure to a triggering substance, such as a peanut, but some reactions may be delayed by as long as 4 hours. Luckily, anaphylactic reactions don't occur often, and they can be treated successfully if proper medical procedures are followed.

## Why Do People Get Allergies?

The tendency to develop allergies is often hereditary, which means it can be passed down through your genes. (Thanks a lot, Mom and Dad!) However, just because a parent or sibling might have

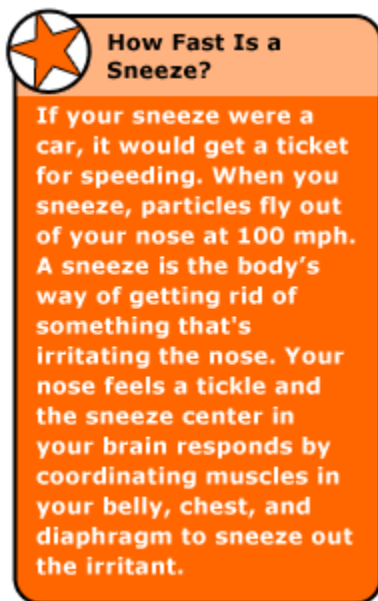
allergies, that doesn't mean you will definitely get them, too. A person usually doesn't inherit a particular allergy, just the likelihood of having allergies.

## What Are Some Things That People Are Allergic To?

Some of the most common allergens are:

**Foods.** Food allergies are most common in infants and often go away as a child gets older. Although some food allergies can be serious, many simply cause annoying symptoms like an itchy rash, a stuffy nose, and diarrhea. Most allergy specialists agree that the foods that people are most commonly allergic to are milk and other dairy products, eggs, wheat, soy, peanuts and tree nuts, and seafood.

**Insect bites and stings.** The venom (poison) in insect bites and stings causes allergic reactions in many people. These allergies can be severe and may cause an anaphylactic reaction in some people.



**Airborne particles.** These are often called environmental allergens, and they're the most common allergens. Some examples of airborne particles that can cause allergies in people are dust mites (tiny bugs that live in house dust); mold spores; animal dander (flakes of scaly, dried skin, and dried saliva from your pets); and pollen from grass, ragweed, and trees.

**Medicines.** Antibiotics — medications used to treat infections — are the most common types of medicines that cause allergic reactions. Many other medicines, including over-the-counter medications (those you can buy without a prescription), can also cause allergic reactions.

**Chemicals.** Some cosmetics or laundry detergents can cause people to break out in an itchy rash (hives). Usually, this is because the person has a reaction to the chemicals in these products. Dyes, household cleaners, and pesticides used on lawns or plants can also cause allergic reactions in some people.

## How Do Doctors Diagnose and Treat Allergies?

If your family doctor suspects you might have an allergy, he or she might refer you to an allergist, a person who specializes in allergy treatment, for further testing. The allergy specialist will ask you questions both about your own allergy symptoms (such as how often they occur and when) and about whether any family members have allergies. The allergist will also perform tests to confirm an allergy — these will depend on the type of allergy a person has and may include a skin test or blood test.

The most complete way to avoid allergic reactions is to stay away from the substances that cause them (called **avoidance**). Doctors can also treat some allergies using medications and shots.

### Avoidance

In some cases, like food allergies, avoiding the allergen is a life-saving necessity. That's because, unlike allergies to airborne particles that can be treated with shots or medications, the only way to treat food allergies is to avoid the allergen entirely. For example, people who are allergic to peanuts should avoid not only peanuts, but also any food that might contain even tiny traces of them.

Avoidance can help protect people against non-food or chemical allergens, too. In fact, for some people, eliminating exposure to an allergen is enough to prevent allergy symptoms and they don't need to take medicines or go through other allergy treatments.

Here are some things that can help you avoid airborne allergens:

Keep family pets out of certain rooms, like your bedroom, and bathe them if necessary.

Remove carpets or rugs from your room (hard floor surfaces don't collect dust as much as carpets do).

Don't hang heavy drapes, and get rid of other items that allow dust to accumulate.

Clean frequently (if your allergy is severe, you may be able to get someone else to do your dirty work!)

Use special covers to seal pillows and mattresses if you're allergic to dust mites.

If you're allergic to pollen, keep windows closed when pollen season's at its peak, change your clothing after being outdoors — and don't mow lawns.

Avoid damp areas, such as basements, if you're allergic to mold, and keep bathrooms and other mold-prone areas clean and dry.

## Medications

Medications such as pills or nasal sprays are often used to treat allergies. Although medications can control the allergy symptoms (such as sneezing, headaches, or a stuffy nose), they are not a cure and can't make the tendency to have allergic reactions go away. Many effective medications are available to treat common allergies, and your doctor can help you to identify those that work for you.

Another type of medication that some severely allergic people will need to have on hand is a shot of **epinephrine** (pronounced: eh-puh-**neh**-frin), a fast-acting medicine that can help offset an anaphylactic reaction. This medicine comes in an easy-to-carry container that looks like a pen. Epinephrine is available by prescription only. If you have a severe allergy and your doctor thinks you should carry it, he or she will give you instructions on how to use it.

## Shots

Allergy shots are also referred to as **allergen immunotherapy**. By receiving injections of small amounts of an allergen, your body can gradually develop antibodies and undergo other immune system changes. These changes help block the reaction caused by the substance to which you're allergic.

Immunotherapy is only recommended for specific allergies, such as allergies to things you might breathe in (like pollen or pet dander) or insect allergies. Immunotherapy doesn't help with some allergies, like food allergies.

Although a lot of people find the thought of allergy shots unsettling, shots can be highly effective — and it doesn't take long to get used to them. In many cases, the longer a person receives allergy shots, the more they help the body build up antibodies that fight the allergies. Although the shots don't cure allergies, they do tend to raise a person's tolerance when exposed to the allergen, which means fewer or less severe symptoms.

If you're severely allergic to bites and stings, talk to a doctor about getting venom immunotherapy (shots) from an allergist.

## **Is It a Cold or Allergies?**

If the spring and summer seasons leave you sneezing and wheezing, you may suffer from allergies. Colds, on the other hand, are more likely to occur at any time (though they're more common in the colder months). Although colds and allergies produce similar symptoms, colds usually last only a week or so. And although both may cause your nose and eyes to itch, colds and other viral infections may also give you a fever, aches and pains, and colored mucus. Cold symptoms often worsen as the days go on and then gradually improve, but allergies begin immediately after exposure to the offending allergen and last as long as that exposure continues. If you're not sure whether your symptoms are being caused by allergies or a cold, talk with your doctor.

## **Dealing With Allergies**

So once you know you have allergies, how do you deal with them? First and foremost, try to avoid things you're allergic to! If you have a food allergy, that means avoiding foods that trigger symptoms and learning how to read food labels to make sure you're not consuming even tiny amounts of allergens. For people with environmental allergies, keeping your house clean of dust and pet dander and watching the weather for those days when pollen is high can help. Switch to perfume-free and dye-free detergents, cosmetics, and beauty products (you may see non-allergenic ingredients listed as **hypoallergenic** on product labels).

If you're taking medication, be sure to follow the directions carefully and make sure your regular doctor is aware of anything an allergist gives you (like shots or prescriptions). If you have a severe allergy, you may want to consider wearing a medical emergency ID (such as a MedicAlert bracelet), which will explain your allergy and who to contact in case of an emergency.

If you've been diagnosed with allergies, you have a lot of company. The National Institutes of Health (NIH) report that more than 50 million Americans are affected by allergic diseases. The good news is that doctors and scientists are working to better understand allergies, to improve treatment methods, and to possibly prevent allergies altogether.

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