

# ALLERGY ANSWERS

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Information on **allergy treatment**  
for you and your family



## Allergy Facts

An allergy is the reaction of your body's defense system to a substance that normally doesn't bother most people.

Your body fights against invaders like bacteria and viruses by producing antibodies. In most allergic reactions, these antibodies attack the offending substance, called an allergen, as if it's bacteria or a virus.

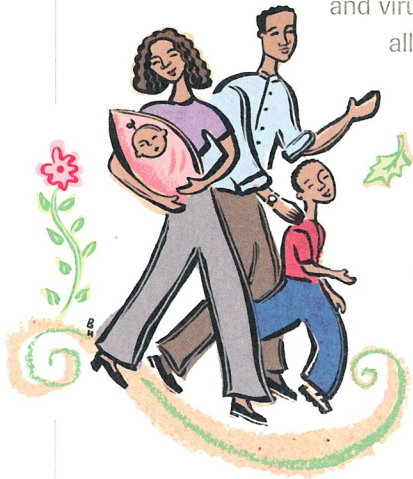
This process causes allergy-like symptoms such as sneezing, watery eyes, stuffy or runny nose, and cough.

Most people with true allergies are sensitive to more than one thing. Symptoms often don't appear until exposure to allergens builds to a level that puts a person over their personal tolerance level. This makes testing to find the specific cause of your

symptoms essential. If you find out you do have allergies, you can work to reduce exposure and keep your system below your allergy threshold.

## Who Gets Allergies?

Allergic diseases can be major causes of illness and disability. Allergic disease usually begins in early childhood (although common symptoms may not appear until later in life), and peaks between ages 20 and 40. Food allergies have been found to be the most common sensitivity in infants and very young children. These allergies may indicate a later sensitivity to airborne allergens. Also, children who develop certain allergic diseases within the first year of life are more likely to have a wide range of symptoms and increased risk of developing serious diseases such as asthma. If you can identify and manage allergy symptoms early on, you can diminish the symptoms. In fact, you might even be able to treat the allergy before symptoms develop.



## Types of Allergies

Dust mites, pet dander, pollens, latex, insects, mold spores, food (peanuts, milk, eggs, wheat, fish). It seems just about anything can trigger an allergic reaction. Most allergies fall into one or more of the following categories:

### Food Allergies

Food allergy symptoms can be confusing because there are many different things that can cause a bad reaction to a certain food. A true food allergy occurs only when the immune system is involved in producing antibodies to a particular food.

Food allergy symptoms can include a tingling sensation in the mouth, hives, vomiting or, in extreme cases, death. Symptoms typically appear within minutes to two hours after the person has eaten the food to which he or she is allergic.

### Food Allergy Avoidance Tips

- *Strict avoidance is the only sure way to avoid a food allergy reaction. But first you have to know what you're allergic to.*
- *If you know you have a food allergy, carefully read ingredient labels on all processed foods.*
- *If an allergic reaction does occur, epinephrine, also called adrenaline, is the medication of choice for controlling it. This medication is available by prescription from your doctor.*

### Household Allergies

The most common household allergy is to dust mites. Dust mite allergy is a reaction to the waste product of this tiny organism that lives in the dust found in bedding, upholstered furniture and carpets in most homes and workplaces. The waste products of cockroaches also are an important cause of allergy symptoms, particularly in cities.



### **Household Allergen/Dust Mite Avoidance Tips**

- Encase mattresses, pillows and box springs in allergen-safe covers.
- Wash bedding weekly in hot water (130°F or above).
- Reduce indoor humidity to less than 50 percent, if possible.
- Remove stuffed toys from bedrooms.
- Remove carpets from the bedroom and do not lay carpets on concrete.
- Minimize upholstered furniture.

### **Outdoor Allergies**

#### **Pollen**

Each spring, summer and fall, tiny particles of pollen are released from trees, weeds and grasses, and float through the air. Sometimes pollen enters human noses and throats, triggering allergic rhinitis or “hay fever.” Pollen is one of the most widespread allergy causes, affecting more than 35 million Americans. There’s no easy way to completely stay away from pollen. A single ragweed plant can generate a million grains of pollen a day, and pollen can be carried many miles from its source.

Though “hay fever” is often seasonal, it can strike anytime. People with pollen allergies can develop sensitivities to other allergens – like dust mites – that are present all year. For these allergy sufferers, there is no “allergy season.” Year-round airborne allergens cause perennial or year-round allergic rhinitis. This is different from seasonal allergic rhinitis and may need to be treated differently.

#### **Pollen Avoidance Tips**

- Keep windows and doors closed.
- Avoid using window or attic fans that draw in outside air.
- Use air conditioning.
- Dry clothes in a vented dryer, not outdoors.
- Check foods and cleaners that may contain plant extracts.
- Shower or bathe, and change clothes after outdoor activity.
- If possible, refrain from outdoor activities during times of high pollen counts.
- To cut back on your allergic symptoms while exercising, try breathing through your nose to clear passages.

- Try waiting until late in the day, when pollen counts are generally lower, to enjoy the great outdoors.
- Keep your car windows rolled up during hay fever season.
- Keep your lawn two inches or shorter to minimize flowering and airborne pollen.
- Monitor the pollen count on your local weather report to know when it’s risky to be outside.



#### **Molds and Fungi**

Molds are also a common cause of allergic rhinitis. The outdoor mold season usually peaks from July to late summer, and people with mold allergies may have symptoms from spring to late fall. Molds can be found wherever there is moisture, oxygen and a source of the few other chemicals they need, from rotting logs

and leaves to your garden’s compost pile. Unlike pollens, molds may persist after the first killing frost. Snow cover reduces outdoor mold but does not kill it. After the spring thaw, molds thrive on vegetation that has been killed by the winter cold. In the warmest areas of the United States, however, molds thrive all year and can cause year-round allergic problems. In addition, molds growing indoors can cause perennial allergic rhinitis even in the coldest climates.

Indoors, mold can be found in damp basements and closets, bathrooms (especially shower stalls), places where fresh food is stored, refrigerator drip trays, house plants, air conditioners, humidifiers, garbage pails, mattresses, upholstered furniture and certain kinds of pillows.



### **Mold/Fungus Avoidance Tips**

- Refrain from walking through uncut fields, working with compost or dry soil, and raking leaves.
- Clean moldy surfaces.
- Fix all water leaks.
- Use air conditioning and a dehumidifier to reduce indoor humidity to less than 50 percent, if possible.
- Wash air conditioner filters and other cooling devices frequently.



### **Animal Allergies**

About 15 percent of people are allergic to cats or dogs, but many other common household pets and farm animals can bring on symptoms. While many people believe fur causes pet allergies, researchers have found that the real culprits are proteins secreted by oil glands in the animal's skin. These proteins are shed in pet dander, saliva and urine. When the substance carrying the proteins dries, the proteins then float into the air.

Allergies to animals can take two years or more to develop and may not subside until six months or more after the end of contact with the animal. Carpets and furniture can hold pet allergens for four to six weeks after contact. Animal allergens can stay in the air for months after the animal has been removed.

### **Animal Allergen Avoidance Tips**

- Remove the pet from the home.
- If removal is not acceptable, then:*
- Keep the pet out of the allergic person's bedroom, and keep the bedroom door closed.
  - Keep the pet off carpets and upholstered furniture.
  - Wash the pet weekly (twice a week is better), to decrease the amount of dander and dried saliva.
  - Use a HEPA-type air cleaner in the bedroom and elevate the cleaner off the floor.
  - Close air ducts in the bedroom.



## **Avoidance Works**

If you are allergic, you probably have allergies in more than one of the categories we've discussed here. But remember that the annoying symptoms of allergy appear only when we



are exposed to enough allergens to put us over our body's tolerance level, or threshold. For instance, if you're allergic to grass, dust mites and dogs, avoid freshly mowed grass and put dust mite covers on bedding in your home. This may be enough to reduce your allergy load so you can keep the dog. It doesn't mean you're

less allergic to the dog. It just means you've reduced the total allergen exposure that put you over your limit. And always remember that until you're tested, you don't really know if you're allergic. It would be a shame to say goodbye to your pet cat if your stuffy nose had another cause.

## **Signs and Symptoms**

People come into contact with allergens through the air they breathe, the food they eat and the things they touch. This means that allergic reactions can occur anywhere in the body.

The most common allergy symptoms are:

- Sneezing, often accompanied by a runny or clogged nose
- Coughing and postnasal drip
- Itching eyes, nose and throat
- Dark circles under the eyes, caused by increased blood flow near the sinuses
- The "allergic salute" (persistent upward rubbing of the nose that causes a crease mark on the nose)
- Watery eyes
- Conjunctivitis (an inflammation of the membrane that lines the eyelids, causing red-rimmed, swollen eyes and crusting of the eyelids)
- Shortness of breath, wheezing and tightness in the chest
- Itchy rashes, raw patches of skin, swelling or red blotches
- Stomach pains and diarrhea (mostly in infants and young children)

## Allergy and Related Diseases

Allergies can be much more serious than most people think. On its own, allergy makes people miserable and disrupts their lives. However, allergies can contribute to, or even cause, other diseases with severe consequences, including death. From ear infections to asthma, allergy can trigger certain diseases or make them worse. Knowledge is key. Knowing if you are allergic and finding out what you're allergic to can make a big difference in how you treat and manage allergy and its related diseases.

### Ear Infection

Ear infection is the most common childhood disease requiring a healthcare visit. It's also the most common cause of acquired hearing loss in children. Many kids suffer ear infections again and again, despite treatment with antibiotics. Recent studies have shown food allergy to be an underlying cause of these repeat episodes in many cases.

### Asthma

Asthma is a breathing disorder that affects an estimated 15 million Americans, including five million kids. Asthma typically occurs in stages, often starting with inflammation caused by an allergic response to dust mites, animal dandruff, mold or pollen. In these cases, avoidance of allergens could alleviate asthma symptoms.

### Skin Rashes

Skin rashes, like eczema, are a common problem in children, usually appearing in the first three months of life. Eczema can be caused by a food allergy and can be the start of a lifelong tendency to allergy-related illness. The itching, blisters and redness of eczema are usually seen within minutes of exposure to an allergen. Most children with this condition continue to show symptoms into adulthood, and up to 50 percent develop asthma. Again, proper diagnosis followed by avoidance could make a huge difference.

### Allergic Rhinitis

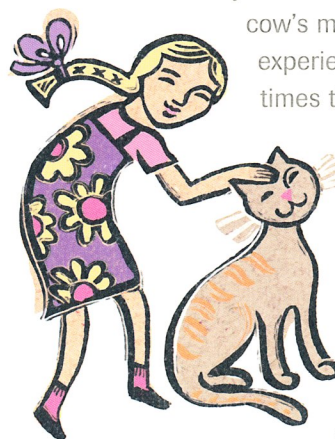
Rhinitis is an inflammation of the mucous membranes of the nose, resulting in constant runny nose, coughing, sneezing and stuffiness. This condition can be either allergic or non-allergic, and either long-lasting or short-term. Finding out if allergy is at the heart of your rhinitis symptoms is a good first step in treating the disease effectively.

### Sinus Infection

Sinusitis – inflammation or infection of the sinus areas – often follows common colds. Disorders like allergic rhinitis that cause swelling of the membranes of the nose are the most common cause of sinus infections, because this swelling prevents fluid from draining out of the sinus normally.

## Get to the Cause

Testing for allergy should be done as soon as possible after allergy-like symptoms appear. Newborn babies rarely exhibit symptoms of allergy. Yet as soon as cow's milk is introduced to the diet, some infants experience vomiting, diarrhea and colic. Sometimes this is followed by diaper rash or a crusty rash elsewhere on the body. Difficulty breathing or other early signs of asthma may appear. Notice the pattern: For people who have a tendency to allergy, the disease follows a specific path, getting worse with age. This path is sometimes referred to as the "allergy march." Finding the cause through allergy testing at an early age can help you and your doctor predict the path of the allergy march. From there you can decide on the right course of intervention or treatment.



## Diagnosing Allergies

When you're in the middle of an allergic reaction, you just want to feel better. Itchy, watery eyes, sneezing and a runny nose may not be life-threatening, but they certainly can make you feel awful. The first step toward feeling better is to find the cause. Allergy can be difficult to diagnose without testing, because allergic reactions are often confused with other health problems that have similar symptoms.

If you think you have allergies, you should see your family doctor. He or she will take a detailed history of your symptoms and living habits and give you a physical exam. This may be enough to accurately identify what's causing your problem. However, in most cases, more information is needed. When allergy is suspected, only an allergy test can tell you for sure if you are allergic and what might be triggering your symptoms.

### Testing Options

Two types of tests can be used to confirm an initial allergy diagnosis – blood testing and skin testing. For many years, skin testing by an allergy specialist was the only method available. Today, your family doctor can safely and accurately use a simple blood test to identify most allergies. Both methods measure how sensitive you are to different allergens. And while both tests can give you answers, the two methods differ in regard to comfort and convenience.

Blood testing is done in a laboratory and is referred to as *in vitro* testing because the procedure is done in glass, or IgE blood testing, after the immunoglobulin that the test measures. A single blood draw is done in your doctor's office. The sample is then sent to a lab. Results are usually available within 24 hours and will tell your doctor if you're allergic, and exactly what you're allergic to. Blood testing can check for dozens of different allergens at the same time.



The latest technology in allergy blood testing is the ImmunoCAP® Allergy Blood Test. ImmunoCAP is widely regarded as the standard for *in vitro* allergy testing. It's been cleared for use by the Food and Drug Administration (FDA) and endorsed by the National Institutes of Health (NIH). Leading institutions such as Johns Hopkins, the Mayo Clinic and the Cleveland Clinic use ImmunoCAP for their patients.

This blood test can be done on young children as well as adults. You don't have to stop using medications to have the test done, unlike other allergy tests. Additionally, blood testing does not require that you have contact with suspected allergens, making it safer than other test procedures for people who might be at risk for severe reactions from exposure to certain allergens. Because ImmunoCAP has been available to primary care physicians for only a short time, you may need to ask for it by name.



The other method of allergy testing, skin testing, is done by applying suspected allergens under the skin (usually on the forearm or back) with a skin-prick device or needle. One prick or poke is necessary for each allergen suspected. If a welt or other irritation appears, it can be assumed you have a sensitivity, but it doesn't always mean you're allergic.

Because the skin testing process requires injection of suspected allergy triggers, this procedure carries a risk of reaction. The procedure is not recommended for people with eczema or other skin conditions, those taking certain medications, very old persons or very young children. Skin testing is usually performed by an allergy specialist after a referral from your family doctor.

## Treatment Options

Once you know what's causing your symptoms, you and your doctor can decide which course of treatment is best for you. A negative result from your allergy test means you and your doctor will need to further investigate possible causes. If you have a positive result, there are four general approaches your doctor can take:

- offer suggestions on how to avoid the allergen(s)
- prescribe medication to relieve your symptoms
- refer you to an allergy specialist for further evaluation
- a combination of the above

Although a cure for allergic reactions has yet to be discovered, one or more of these options can provide relief from allergy symptoms.

### Avoidance

Allergies to airborne pollens, dust particles and mold spores are some of the most common. Unfortunately, they can be the hardest to avoid. Complete avoidance of pollen or mold that creates a reaction means moving to a place where the offending substance does not grow and where it is not present in the air. But even this extreme solution may offer only temporary relief, since a person who is sensitive to a specific pollen or mold may develop allergies to new allergens after repeated exposure. Relocating is not a reliable or practical solution for most people, and allergy specialists rarely encourage this approach.

An allergic person should use air conditioners in the home or car to help prevent pollen and mold allergens from entering. Various types of air-filtering devices can be added to heating and cooling systems. In addition, portable devices that can be used in individual rooms are especially helpful in reducing animal allergens.



## Medications

For people who can't adequately avoid allergens, symptoms often can be controlled with medication. Your doctor can prescribe effective medications, including antihistamines and topical nasal steroids – which can be used alone or in combination. Many effective medications also are available over the counter, without a prescription.

### Antihistamines

An antihistamine counters the effects of histamine, a substance released by cells in the body's tissues that contributes to allergy symptoms. Antihistamines are available over the counter and by prescription. For many years, antihistamines have proven useful for those with confirmed allergies in relieving sneezing and itching in the nose, throat and eyes, and in reducing nasal swelling and drainage. However, for those who aren't allergic, antihistamines won't help these symptoms, and they may make congestion worse.

Antihistamines can also cause side effects such as drowsiness and loss of alertness and coordination. Non-sedating antihistamines, which decrease the drowsiness effect, are now available by prescription and are effective in preventing histamine-induced symptoms. Because these

medications may also have side effects, you should always let your doctor or pharmacist know what other medications you are taking.



### **Decongestants**

Congestion is the number-one complaint of people with allergies and allergy-like symptoms. Sometimes helping nasal passages to drain will relieve symptoms such as congestion, swelling, nasal stuffiness, pressure and pain in the sinuses. Your doctor may recommend oral or nasal decongestants to reduce your congestion, often with an antihistamine to control allergic symptoms, if needed. Over-the-counter and prescription decongestant nose drops and sprays should not be used for more than a few days. Longer use can lead to even more congestion and swelling of the nasal passages. Patients with uncontrolled high blood pressure and other heart problems should avoid oral decongestants. Again, discuss these medications with your doctor or pharmacist.

### **Topical Nasal Steroids**

Topical nasal steroids are anti-inflammatory drugs that stop allergic reactions. These medications come in nose sprays and are available only by prescription. In addition to other benefits, they reduce mucous secretion, nasal swelling and inflammation, which means they may be helpful for people with allergies or those with allergy-like symptoms.

### **Cromolyn Sodium**

Cromolyn sodium is a nasal spray for allergic rhinitis that can help prevent allergic reactions from starting. It can safely inhibit the release of chemicals like histamine. This medication, available as NasalCrom<sup>®</sup>, is available over the counter without a prescription, has few side effects when used as directed, and significantly helps some patients with nasal allergies.

### **Immunotherapy**

Immunotherapy is more commonly known as allergy shots – a series of injections of increasing concentrations of the allergen(s) to which the patient is sensitive, in order to build up a tolerance. This treatment is administered by allergy specialists.

## **Your Next Steps**

Talk to your doctor about the most appropriate allergy treatment for you. Visit [www.isitallergy.com](http://www.isitallergy.com) or call 1-877-862-4948 to get more information or obtain more copies of this brochure.







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