Allergies:
Questions and Answers
Allergy Questions & Answers

Allergic disease affects one out of six Americans, and costs millions of dollars in medications, physician services and missed days from school and work. Following are some common questions and answers on allergy. If you have any other questions not addressed here or if you need additional information about a related topic, please consult a health care provider or an allergist.

Q. What is an allergy?
A. An allergy is an abnormal reaction to an ordinarily harmless substance called an allergen. When an allergen, such as pollen, is absorbed into the body of an allergic person, that person’s immune system views the allergen as an invader and a chain reaction is initiated. White blood cells of the immune system produce IgE antibodies. These antibodies attach themselves to special cells called mast cells, causing a release of potent chemicals such as histamine. These chemicals cause symptoms such as a runny nose, watery eyes, itching and sneezing.

Q. What are some common allergens?
A. People can be allergic to one or several allergens. The most common include pollens, molds, dust mites, animal dander (dead skin flakes from animals with fur), foods, medications, cockroach droppings and insect stings.

Q. Is there only one type of allergic reaction?
A. Allergic individuals can exhibit a variety of reactions depending on the allergen and the way it was absorbed into the body.

Seasonal allergic rhinitis, sometimes called “hay fever”, is caused by an allergy to the pollen of trees, grasses, weeds or mold spores. Depending on what you are allergic to, the section of the country and the pollination periods, seasonal allergic rhinitis may occur in the spring, summer or fall and may last until the first frost. The sufferer has spells of sneezing, itching and watery eyes, runny nose, burning palate and throat. Seasonal allergies also can trigger asthma.

Allergic rhinitis is a general term used to apply to anyone who has symptoms of nasal congestion, sneezing and a runny nose due to allergies. This may be a seasonal problem as with hay fever, or it may be a year-round problem caused by indoor allergens such as dust mite droppings, animal dander, cockroach droppings or indoor molds/mildew. Frequently, this problem is complicated by sinusitis. Patients with constant nasal symptoms should consult their health care provider or an allergist.

Eczema or atopic dermatitis is a non-contagious, itchy rash that often occurs on the hands, arms, legs, and neck, although it can cover the entire body. This condition is frequently associated with allergies, and substances to which a person is sensitive may aggravate it.

Contact dermatitis is a reaction affecting areas of the skin, which become red, itchy and inflamed after contact with allergens or irritants such as plants, cosmetics, medications, metals and chemicals.

Urticaria or hives are red, itchy, swollen areas of the skin that can vary in size and appear anywhere on the body. Approximately 25% of the U.S. population will experience an episode of hives at least once in their lives. Most common are acute cases of hives, where the cause is readily identifiable as a reaction to a viral infection, medication, food or latex. Some people have chronic hives that occur almost daily for months to years, with no identifiable trigger. Angioedema is a swelling of the deeper layers of the skin. It is not red or itchy, and most often occurs in soft tissue, such as the eyelids or mouth. Hives and angioedema may appear together or separately on the body.

Q. What is Immunotherapy?
A. Immunotherapy, or “allergy shots”, is recommended for patients with moderate to severe allergy symptoms throughout most of the year, who do not respond adequately to medications, and whose symptoms are triggered by an allergen that is not easily avoided, such as pollens or house dust mites. Immunotherapy involves the injection of allergenic extracts (tiny amounts of allergens) that are given over a period of 3-5 years. By gradually increasing the amount of extract,
tolerance to the offending allergen will increase, and the patient’s symptoms will be relieved.

Currently, immunotherapy is used to treat patients who are sensitive to inhaled allergens—pollens, molds, dander and house dust. Studies have also found immunotherapy to be extremely effective in many cases of stinging insect allergy as well. Immunotherapy for food allergies is not recommended because of the chance of a severe allergic reaction to the injection.

Q. Will moving help my allergies?
A. People with allergies have an inherited, genetic tendency to produce IgE, the allergic antibody, to many different substances such as seasonal allergens, (trees, grasses, weeds) or year-round allergens (dust mites, pet dander). When a person with allergies moves to another location, exposures to different allergens in the new location will likely result in a new set of allergy triggers, thereby trading one set of symptoms for another. In some cases, the benefits of a change in location may outweigh the negative aspects.

Before making a move to “get away from your allergies”, consult with your allergist. Also, when contemplating a move, if possible, check out the new environment by visiting there for two to four weeks (or more) to see if your symptoms improve. Keep in mind it may take months or years to become allergic to a new allergen, i.e., tree, grass or weed species.

Seasonal allergy sufferers may be able to find temporary relief by taking a vacation during the height of the pollen season to a more pollen-free environment such as near large bodies of water.

Q. Is it dangerous to do nothing about an allergy?
A. In some cases, it is dangerous to ignore allergy symptoms. Severe and untreated hay fever may lead to asthma, sinusitis, and other serious conditions. Allergic dermatitis or eczema can spread to secondary infections if they are not treated properly, and untreated asthma can lead to chronic symptoms. Early detection and treatment of all allergic diseases is important.

Q. Can I ever be cured of my allergy?
A. The tendency to have allergies is genetically inherited. Thus, instead of a cure, patients should work with their allergist to keep their allergies under control. Successful treatment of allergies includes early detection, proper usage of medications and simple allergen avoidance techniques.

Frequently Asked Questions about Mold

Allergic disease affects one out of six Americans, and costs millions of dollars in medications, physician services and missed days from school and work. Following are some common questions and answers regarding mold.

Q. What is mold?
A. There are hundreds of thousands of types of molds. All are fungi, which means they are many-celled organisms that reproduce by sending tiny seeds called spores into the air. Molds need four things to grow: food, air, the right temperature and water. Molds are very common in buildings and homes and will grow anywhere indoors where there is moisture. They like dark, damp, warm environments, and can grow on anything from basement walls to garbage pails to houseplants.

Q. Why is mold dangerous?
A. Mold and its spores are allergens, meaning that in some people their bodies produce an extreme response in an attempt to rid the body of mold. Molds also produce toxins in their battle against bacteria. Penicillin, for example, is a concentrated form of the bacteria-killing toxin produced by the penicillium mold. These toxins also can act as poisons in humans. Certain molds can even cause infection, in the same way bacteria does.

Q. What is stachybotrys chartarum (Stachybotrys atra)?
A. Stachybotrys chartarum (also known by its synonym Stachybotrys atra) is a greenish-black mold that occurs where there is moisture from water damage, excessive humidity, water leaks, condensation, water infiltration, or flooding. Leaking roofs, leaky plumbing, sewer backups and frequently overflowing washing machines can create environments for this mold. Constant moisture is required for its growth. Stachybotrys grows only on wood, paper and cotton products and can be found in 2% to 5% of American buildings and homes. Under specific environmental conditions, stachybotrys chartarum may produce several toxic chemicals called mycotoxins. These chemicals are present on spores and small fungus fragments released into the air.

Q. What are the health effects of stachybotrys chartarum?
A. If stachybotrys chartarum spores are released into the air, there is a potential for humans to develop symptoms such as coughing, wheezing, runny nose, irritated eyes or throat, skin rash or diarrhea. Some people are more susceptible than others, one person
may become debilitated by exposure to mold in the home, another person sharing the same environment is essentially unaffected.

Q. What should people do if they have Stachybotrys chartarum in their building or home?

A. Mold growing in homes and buildings, whether it is Stachybotrys chartarum or other molds, indicates that there is a problem with water or moisture. This is the first problem that needs to be addressed. Mold can be cleaned off surfaces with a weak bleach solution. Mold under carpets typically requires that the carpets be removed. Once mold starts to grow in wood or wallboard, the only way to deal with the problem is by removal and replacement. In areas where flooding has occurred, prompt cleaning of walls and other flood-damaged items with water mixed with chlorine bleach, diluted 10 parts water to 1 part bleach, is necessary to prevent mold growth. Moldy items should be thrown away.

For more information on mold, visit the Environmental Protection Agency web site, http://www.epa.gov/iaq/molds/moldresources.html.

For more information on allergies, visit the American Academy of Allergy, Asthma and Immunology web site, http://www.aaaai.org/.

The content of this brochure is for informational purposes only. It is not intended to replace evaluation or treatment by a health care provider. If you have questions or medical concerns, please contact your health care provider.