Tips to Remember: Indoor Allergens

Millions of people suffer from allergy symptoms caused by indoor allergens, such as house dust mite droppings, animal dander, cockroach droppings and molds. The symptoms are the result of a chain reaction that starts in the genes and is expressed in the immune system.

Your immune system controls how your body defends itself. For instance, if you have an allergy to dust mites, your immune system identifies dust mites as an invader or allergen. Your immune system overreacts by producing antibodies called Immunoglobulin E (IgE). These antibodies travel to cells that release chemicals, causing an allergic reaction. This reaction usually causes symptoms in the nose, lungs, throat, sinuses, ears, lining of the stomach or on the skin.

With the help of an allergist/immunologist, often referred to as an allergist, you can learn what indoor allergens cause your symptoms and make environmental changes to avoid them.

Controlling Dust Mites
Dust mite allergens—the most common trigger of allergy and asthma symptoms—are found throughout the house, but thrive in bedding and soft furnishings. Because so much time is spent in the bedroom, it is essential to reduce mite levels there.

Encase mattresses, box springs and pillows in special allergen-proof fabric covers or airtight, zippered plastic covers. Bedding should be washed weekly in hot water (130° F) and dried in a hot dryer. Cover comforters and pillows that can't be regularly washed with allergen-proof covers.

Keep humidity low by using a dehumidifier or air conditioning. Wall-to-wall carpeting should be removed as much as possible. Instead, throw rugs may be used if they are regularly washed or dry cleaned.

People with allergies should use a vacuum with a HEPA (high-efficiency particulate) filter or a double-layered bag, and wear a dust mask or ask someone else to vacuum.

Controlling Pet Allergens
People are not allergic to an animal’s hair, but to an allergen found in the saliva, dander (dead skin flakes) or urine of an animal with fur. Usually, symptoms occur within minutes.

For some people, symptoms build and become most severe eight to 12 hours after contact with the animal. People with severe allergies can experience reactions in public places if dander has been transported on pet owners’ clothing.

There are no "hypoallergenic" breeds of cats or dogs. The same is true for
any animal with fur, so it's best to remove the pet from the home and avoid contact if you're highly allergic. Keeping an animal outdoors is only a partial solution, since homes with pets in the yard still have higher concentrations of animal allergens. Before getting a pet, ask your allergist to determine if you are allergic to animals.

If you cannot avoid exposure, try to minimize contact and keep the pet out of the bedroom and other rooms where you spend a great deal of time. While dander and saliva are the source of cat and dog allergens, urine is the source of allergens from rabbits, hamsters, mice and guinea pigs; ask a non-allergic family member to clean the animal's cage.

As with dust mites, vacuum carpets often or replace carpet with a hardwood floor, tile or linoleum. Some studies have found that using a HEPA air cleaner may reduce animal allergen exposure.

Controlling Cockroaches
An allergen in cockroach droppings is a main trigger of asthma symptoms, especially for children living in densely populated, urban neighborhoods.

Block all areas where roaches could enter the home, including crevices, wall cracks and windows. Cockroaches need water to survive, so fix and seal all leaky faucets and pipes. Have an exterminator go through the house when your family and pets are gone to eliminate any remaining roaches.

Keep food in lidded containers and put pet food dishes away after your pets are done eating. Vacuum and sweep the floor after meals, and take out garbage and recyclables. Use lidded garbage containers in the kitchen. Wash dishes immediately after use and clean under stoves, refrigerators or toasters where crumbs can accumulate. Wipe off the stove and other kitchen surfaces and cupboards regularly.

Controlling Indoor Molds
Indoor molds and mildew need dampness, such as found in basements, bathrooms or anywhere with leaks. Clean up mold growth on hard surfaces with water, detergent and, if necessary, 5% bleach (do not mix with other cleaners). Then dry the area completely. If mold covers an area more than 10 square feet, consider hiring an indoor environmental professional. For clothing, washing with soap and water is best. If moldy items cannot be cleaned and dried, throw them away.

Promptly repair and seal leaking roofs or pipes. Using dehumidifiers in damp basements may be helpful, but empty the water and clean units regularly to prevent mildew from forming. All rooms, especially basements, bathrooms and kitchens, require ventilation and cleaning to deter mold and mildew growth. Avoid carpeting on concrete or damp floors, and storing items in damp areas.

See your allergist for more suggestions.

Healthy Tips
- Your allergist can help you identify things in your home, workplace or school that may be making your asthma or allergies worse.
- Keep your home clean and dry to help make it "allergen-free."
- Focus on sites where allergens accumulate—bedding, carpet and upholstered furniture.
- Weekly vacuuming can help. Use a vacuum with a HEPA filter or double bags.
- Keep humidity low by using an air conditioner or dehumidifier.
- Fix leaks to avoid mold, and clean or remove moldy materials promptly.
Avoid pests by keeping food in sealed containers and using covered garbage cans.

**Feel Better. Live Better.**
An allergist/immunologist, often referred to as an allergist, is a pediatrician or internist with at least two additional years of specialized training in the diagnosis and treatment of problems such as allergies, asthma, autoimmune diseases and the evaluation and treatment of patients with recurrent infections, such as immunodeficiency diseases.

The right care can make the difference between suffering with an allergic disease and feeling better. By visiting the office of an allergist, you can expect an accurate diagnosis, a treatment plan that works and educational information to help you manage your disease.

Find an allergist near you at:
[www.aaaai.org/physref](http://www.aaaai.org/physref)

The contents of this brochure are for informational purposes only. It is not intended to replace evaluation by a physician. If you have questions or medical concerns, please contact your allergist/immunologist.

**A Trusted Resource**
The American Academy of Allergy, Asthma & Immunology (AAAAI) represents allergists, asthma specialists, clinical immunologists, allied health professionals and others with a special interest in the research and treatment of allergic disease.

**Ordering Information**
To order copies of this brochure, please see the Public Education Materials Online Store.

©2010, American Academy of Allergy, Asthma & Immunology All rights reserved. May not be duplicated or appropriated without permission. Contact copyright@aaaai.org.

<back>
Tips to Remember: Outdoor Allergens

Seasonal allergic rhinitis, or “hay fever,” affects more than 35 million Americans. If you suffer from it, you may experience sneezing, stuffiness, a runny nose and itchiness in your nose, the roof of your mouth, throat, eyes or ears. These allergic reactions are most commonly caused by pollen and mold spores in the air, which start a chain reaction in your immune system.

Your immune system controls how your body defends itself. For instance, if you have an allergy to pollen, the immune system identifies pollen as an invader or allergen. Your immune system overreacts by producing antibodies called Immunoglobulin E (IgE). These antibodies travel to cells that release chemicals, causing an allergic reaction.

Pollen

Pollen are tiny cells needed to fertilize plants. Pollen from plants with colorful flowers, like roses, usually do not cause allergies. These plants rely on insects to transport the pollen for fertilization. On the other hand, many plants have flowers which produce light, dry pollen that are easily spread by wind. These culprits cause allergy symptoms.

Each plant has a period of pollination that does not vary much from year to year. However, the weather can affect the amount of pollen in the air at any time. The pollinating season starts later in the spring the further north one goes. Generally, the entire pollen season lasts from February or March through October. In warmer places, pollination can be year-round.

Seasonal allergic rhinitis is often caused by tree pollen in the early spring. During the late spring and early summer, grasses often cause symptoms. Late summer and fall hay fever is caused by weeds.

Molds

Molds are tiny fungi related to mushrooms but without stems, roots or leaves. Their spores float in the air like pollen. Outdoor mold spores begin to increase as temperatures rise in the spring and reach their peak in July in warmer states and October in the colder states. They can be found year-round in the South and on the West Coast.

Molds can be found almost anywhere, including soil, plants and rotting wood.

Pollen and Mold Levels

Pollen and mold counts measure the amount of allergens present in the air.

The National Allergy Bureau™ (NAB™) is the nation’s only pollen and mold counting network certified by the American Academy of Allergy, Asthma & Immunology (AAAAI). As a free service to the public, the NAB compiles...
pollen and mold levels from certified stations across the nation. You can find these levels on the NAB page of the AAAAI's Web site at www.aaaai.org/nab.

Effects of Weather and Location
The relationship between pollen and mold levels and your symptoms can be complex. Your symptoms may be affected by recent contact with other allergens, the amount of pollen exposure and your sensitivity to pollen and mold.

Allergy symptoms are often less prominent on rainy, cloudy or windless days because pollen does not move around during these conditions. Pollen tends to travel more with hot, dry and windy weather, which can increase your allergy symptoms.

Some people think that moving to another area of the country may help to lessen their symptoms. However, many pollen (especially grasses) and molds are common to most plant zones in the United States, so moving to escape your allergies is not recommended. Also, because your allergy problem begins in your genes, you are likely to find new allergens to react to in new environments.

Treatment
Finding the right treatment is the best method for managing your allergies. If your seasonal allergy symptoms are making you miserable, an allergist/immunologist, often referred to as an allergist, can help. Your allergist has the background and experience to test which pollen or molds are causing your symptoms and prescribe a treatment plan to help you feel better. This plan may include avoiding outdoor exposure, along with medications.

If your symptoms continue or if you have them for many months of the year, your allergist may recommend allergy shots, or immunotherapy. This involves receiving regular injections, which help your immune system become more and more resistant to the specific allergen and lessen your symptoms as well as the need for medications.

There are also simple steps you can take to limit your exposure to the pollen or molds that cause your symptoms.

Keep your windows closed at night and if possible, use air conditioning, which cleans, cools and dries the air.

Try to stay indoors when the pollen or mold levels are reported to be high. Wear a pollen mask if long periods of exposure are unavoidable.

Don't mow lawns or rake leaves because it stirs up pollen and molds. Also avoid hanging sheets or clothes outside to dry.

Consider taking a vacation during the height of the pollen season to a more pollen-free area, such as the beach or sea. When traveling by car, keep your windows closed.

Most important, be sure to take any medications prescribed by your allergist regularly, in the recommended dosage.

Healthy Tips
- Seasonal allergic rhinitis or "hay fever," causes sneezing, stuffiness, a runny nose and itchiness in your nose, the roof of your mouth, throat, eyes or ears.
- Pollen and mold in the air commonly cause these symptoms.
- Treatment from an allergist is the best method for coping with your allergies. This could include medications, limiting exposure or even
allergy shots.

- Monitor pollen and mold levels from the National Allergy Bureau at www.aaaai.org/nab.

**Feel Better. Live Better.**
An allergist/immunologist, often referred to as an allergist, is a pediatrician or internist with at least two additional years of specialized training in the diagnosis and treatment of problems such as allergies, asthma, autoimmune diseases and the evaluation and treatment of patients with recurrent infections, such as immunodeficiency diseases.

The right care can make the difference between suffering with an allergic disease and feeling better. By visiting the office of an allergist, you can expect an accurate diagnosis, a treatment plan that works and educational information to help you manage your disease.

Find an allergist near you at:
www.aaaai.org/physref

The contents of this brochure are for informational purposes only. It is not intended to replace evaluation by a physician. If you have questions or medical concerns, please contact your allergist/immunologist.

**A Trusted Resource**
The American Academy of Allergy, Asthma & Immunology (AAAAI) represents allergists, asthma specialists, clinical immunologists, allied health professionals and others with a special interest in the research and treatment of allergic disease.

**Ordering Information**
To order copies of this brochure, please see the Public Education Materials Online Store.

©2010, American Academy of Allergy, Asthma & Immunology All rights reserved. May not be duplicated or appropriated without permission. Contact copyright@aaaai.org.