Allergy Avoidance Therapy

Division of Allergy and Environmental Disease
Virginia Commonwealth University Health Systems
Department of Otolaryngology / Head and Neck Surgery
804-628-4ENT

Andrew J. Heller, MD
Evan R. Reiter, MD
Minimize Your Allergies by Controlling Your Environment

What is allergy?

Allergy is a condition, often inherited, in which the immune system of the affected person reacts to something that is inhaled, eaten, or touched that doesn’t affect most people. The patient’s immune system reacts to this substance as if it were an “enemy invader” (like a virus). This reaction leads to symptoms that often adversely affect the patient’s work, play, rest, and overall quality of life. Any substance that triggers an allergic reaction is called an allergen. Allergens “invade” the body by being inhaled, swallowed, or injected, or they may be absorbed through the skin. Common allergens include pollen, molds, dust, and animal dander.

Pollens

Allergy symptoms that occur primarily in the spring, summer, or fall are frequently the result of inhaled pollens. Tree pollens in the spring, grass pollens in the early summer, and weed pollens in the late summer and fall provide a predictable pattern of symptoms often helpful in identifying the offending pollens. Pollen counts are higher on dry, hot, and windy days. Pollen counts decrease during rain, increase after rain, and are highest between 5:00 am and 10:00 am. Unfortunately, exposure to pollen is not limited to outdoors because they are carried inside on clothing, shoes, and pets, and enter through open doors and windows.

Molds

Molds or fungi are organisms that thrive on decaying organic matter. They are present year round, especially during the spring and fall. Most molds produce spores that become airborne and may cause inhalant allergies. They thrive in warm, dark, moist areas. Places such as bathrooms, poorly vented laundry rooms and closets, basements, and kitchens provide moisture that allows mold to thrive. Window frames, refrigerator drain pans, old books, plants, leaking roofs, plumbing leaks, and deteriorating carpets can also harbor large quantities of mold. Humid, warm air fosters mold growth. Therefore, control of your home’s temperature and humidity can have a great impact on your allergen exposure in the home.

Dust Mites

Dust mites are microscopic insects that feed on tiny particles of skin that humans shed. Like molds, they tend to thrive with heat and humidity. Their favorite habitats include mattresses, couches, carpets, bedding, pillows, and children’s stuffed animals. They do poorly when the humidity is less than 50% and thrive at comfortable temperatures for humans – 65 to 84 degrees Fahrenheit.
Epidermals (Animal Dander)

Animal dander is small particles found on animals’ skin that can be deposited on anything the animal touches. Animal dander is light and stays airborne even longer than pollens. Cat dander, in particular, is very sticky and will remain in your house for at least six months, even after the cat is removed from the environment. Cat dander is a very powerful trigger for allergic reactions in many individuals. Even if you do not have a cat at home, you will probably be exposed to cat dander through friends, family, and co-workers because the dander is so long lasting and difficult to eradicate. Cat saliva may also induce allergy symptoms.

Take Control of Your Environment!

The first, most basic treatment step, once an allergen has been identified, is to eliminate or avoid it if possible. This is sometimes referred to as “avoidance therapy” or “institution of environmental controls.” Controlling the environment is an often overlooked but generally very useful modality in the treatment of allergic rhinitis and asthma. While it may be impossible to completely eliminate all of the allergens or other substances that trigger your allergies, you can do a great deal to minimize exposure and thereby reduce symptoms.

Environmental Control Measure Checklist

- Create at least one “allergy-safe room” at home. This should be a room where you spend most of your time, most likely the bedroom. Place an appropriately sized room air filter and dehumidifier; eliminate carpets, plants, heavy draperies, and fabric furniture; and use hypo-allergenic covers for pillows and mattresses. Exclude pets from the room. Apply any or all of the following tips to this safe room. These measures can significantly reduce your allergen exposure.

- Avoid feather and wool bedding. These are places that dust mites infest. The use of hypo-allergenic covers for pillows and mattresses is very effective in minimizing dust-mite exposure. Our office can help you find many allergy supply houses, where hypo-allergenic pillow and mattress covers can be purchased. Use polyester-filled pillows and replace them yearly. Wash blankets, quilts, and comforters in very hot water once a week to kill dust mites.

- Avoid clutter and dust-collecting knick-knacks. Books, toys, objects, and other items placed on shelves collect a lot of dust and are very difficult to clean.

- Keep floors bare or use washable throw rugs instead of area rugs and carpets. Use a bagless vacuum cleaner with a HEPA filter to avoid further spreading the dust.
Use air filters. High Efficiency Particulate Arresting Filters (HEPA) are very effective for cleaning the air in any given room. It is best to use a single unit for a particular room, and it is best to concentrate on the bedroom where we tend to spend most of our time. When you look to purchase HEPA filters, it is important to evaluate the capacity that the filter can clean. Be sure to purchase a filter that is big enough to clean the volume of the room where you intend to place it. HEPA filters are available in most home improvement stores or can be ordered from allergy supply houses.

Keep indoor humidity between 48% and 52%. You may need to purchase a hygrometer (a device used to measure humidity) and a dehumidifier to monitor and maintain your indoor humidity. In rare cases, you may even need to install a humidifier if the air is too dry.

Put filters over forced-air heating vents and change the filters regularly. Better quality filters are more effective in removing allergens from the air.

Keep rain gutters clear and correct drainage problems around the home to reduce moisture and mold growth.

Clean up any water spills or leaks inside of the home promptly, and repair leaking faucets and drains. Periodically check foods stored in the refrigerator and discard anything that shows signs of spoilage or mold. Install exhaust fans in the bathroom and over stoves to remove excess moisture and other odors.

Avoid yard work in the early morning when pollen counts are higher, and use pollen filtering masks and gloves when you do have to work out in the yard. If you do spend time outside during periods of high pollen, change clothes and shower when you return inside.

If you are allergic to animals, it is best not to have animals in the house. If you must have pets, keep them outside if at all possible and definitely keep them out of your bedroom or designated “allergy-safe room.” Try to keep the pet confined to one room or area of your house, if it must come inside. Bathe the pet frequently, and wear a mask when you do so. Wash your hands after playing with the pet, and don’t rub your eyes or nose until your hands have been washed.

Keep your car clean by vacuuming the seats and carpets regularly. Try to use auto air conditioning, instead of opening windows during pollen season.

At the office, keep your workspace uncluttered and dust it frequently. Piles of paper attract dust and mold. Do not decorate the work area with plants or flowers. Use a HEPA filter to keep the air in your office workspace as clean as possible.
Summary

Environmental control measures are an often overlooked aspect of managing allergies. The results obtained can be very rewarding. Many of the ideas mentioned above are simple to accomplish. While they may require some initial expenditures, they can have long-lasting rewards in terms of keeping you healthier and feeling better. Remember, creating an allergy-free haven in the bedroom can go a long way toward helping you sleep comfortably and controlling allergy symptoms. Also, there are many useful websites on the internet that can be accessed simply by typing *allergy avoidance* into your search engine. In the long run, effective environmental control measures should keep you feeling better and healthier.