The first step in treating allergies to dust mites, mold, animal dander and pollen is allergen avoidance. While often difficult to completely avoid these allergens, patients can take specific measures to lessen their exposure which may, in turn, help them minimize symptoms from allergic diseases like asthma or allergic rhinitis. Understanding these major allergens and how we are exposed to them is therefore required in any good allergy treatment program.

HOUSE DUST

The dust mite is an extremely common, microscopic, insect-like creature that is responsible for causing house dust allergy. Found in even the cleanest of homes, dust mites thrive in pillows, mattresses, carpet, upholstered furniture, stuffed



animals and clothing. They feed on our shed skin, the main component of dust. Dust mite excrement represents the true allergen and is easily inhaled upon close contact. The allergen is heavy and usually settled on surfaces so is not easily removed by room air purifiers or by standard vacuum cleaners. Fortunately, other techniques are available to minimize our exposure.

We often focus our dust mite avoidance measures on the bedroom since our greatest exposure to dust mites occurs while we sleep in our bed. Specially designed allergen-proof covers that completely enclose pillows, mattress, and box springs help to trap the mites inside and keep them from triggering allergy symptoms. Even pillows labeled "allergy free" should be covered. Comfortable dust mite covers that lack a plastic feel can be purchased at local stores or online. Sheets and pillowcases should be washed in hot water (over 130 degrees) once per week as the high temperatures kill dust mites. Avoid hanging bed sheets on an outdoor clothes line to dry as pollen and mold will accumulate on them. And to prevent further contamination, store bedding in plastic or tight drawers.

Carpet provides a significant reservoir for dust mites and, ideally, should be removed from the bedroom. If removal is not practical, carpet should be cleaned twice a week with a vacuum fitted with special allergy bags with tight filters or a cyclonic vacuum.

High humidity not only encourages mold growth but increases dust mite reproduction. So avoid humidifiers and attempt to maintain bedroom humidity levels below 50%.

Other important dust reducing measures in the bedroom include the following:

- Avoid using ceiling fans.
- Close or place a guard over the bedroom vent.
- Avoid stuffed animals and decorative pillows. If not, dust mites can be killed by placing contaminated objects in the freezer for 24-48 hrs or by machine washing in the hot cycle.
- Simplify and remove clutter from the area around the head of the bed and the bedside table.
- Dust daily with a damp cloth or a commercial dusting product.
- Avoid using bookcase headboards with decorative items.
- The head of the bed should not be placed against the window.
- Keep closet doors shut.
- Avoid venetian blinds, grass wallpaper, and wicker furniture since they are difficult to keep dust-free.

Dust avoidance involves active participation by the patient and understanding of dust mite allergy. By exercising control over your environment, you can help control your allergies.

MOLD

Mold reproduces by forming tiny, invisible spores that "pop off" into the air where they may be inhaled. Mold usually grows in warm, dark, moist environments and can be found in hay, mulch, leaf piles and compost. Mold counts are usually highest in humid weather and classically spike after a heavy rain. Outside molds often permeate the air inside our homes as well but become problematic when they begin to grow inside. Damp basements and damp bathrooms are common indoor mold reservoirs along with potted plants, refrigerator pans, and water-damaged wallboard, carpets, etc.

Avoiding mold growth in the home may be accomplished by minimizing indoor humidity and repairing any sources of water damage. Dehumidifiers work well and should be used to keep the humidity less than 50%. Avoid using humidifiers, but if necessary, they should be cleaned regularly to prevent their collection basin from growing mold, which can be killed with bleach solutions, available in most grocery stores.

Leaks and flooded areas should be cleaned and dried within 24 hours. Mold sources like old carpeting and padding or wet furniture should be removed from the house. Carpet should not be steam-cleaned or placed in damp environments like the bathroom. Alternatively, for homes where mold cannot be seen or smelled, chances are it is not a problem.

Around the house, avoid raking leaves or even cutting grass as both may contain mold. Although we can never completely avoid mold, a deeper understanding of where mold grows and how to remove it can make all the difference in minimizing symptoms in allergic individuals.

POLLEN

Pollen grains produced by plants are dispersed in the wind and are easily inhaled to cause allergy symptoms. Because of their shape, pollen may travel as far as 40 miles and fill the air during the spring, summer, and fall. Georgia is known for its severe tree pollen season



in the spring when golden pine pollen covers windshields everywhere. Grass pollinates in the late spring and peaks in May. Ragweed season begins in August. Outside pollen and mold last until the end of the fall, at the time of the first frost. Although nearly impossible to avoid pollen completely, patients can minimize their exposure and symptoms by following a few suggestions.

If you have had allergy skin tests and know what pollens elicit your allergies and when your allergy season begins you may plan outdoor activities appropriately. Because pollen counts are highest in the morning, patients are advised to wait to the late afternoon before spending any prolonged time outside. Pollen counts drop significantly immediately after a rain although mold counts usually spike. Wash your hair and clothes at night to avoid taking pollen to bed and consider placing a high efficiency particulate air (HEPA) filter in the bedroom. Keep your home and car windows closed, even during the warm Georgia summer and spring seasons, and use air conditioning instead to keep cool and to help filter outside pollen grains. Avoid cutting grass and being outside while your neighbor cuts his lawn, but if not practical, make sure to wear a mask and sunglasses to keep pollen out of the nose and eyes. In addition to keeping your car windows closed, use the recycled air button on the car air conditioner. Also, note that some new cars contain pollen free filtration systems, a consideration if you are in the market for a new purchase.

ANIMAL DANDER

The culprit allergic protein produced by cats and dogs is found in their hair, sloughed skin, urine, and saliva. Once animal dander – hair and skin – infiltrates the home, removal is difficult. Dander may survive over 6 months, even after the pet is removed. Pet owners are advised to give up their beloved pet or to keep it outside, but this recommendation is rarely taken. At the minimum, pets should be kept out of the bedroom, especially if the pet



owner has asthma. HEPA filters may be placed in the bedroom and other frequently traveled rooms to help minimize airborne dander. Washing pets may also help minimize their shed dander, but when done in isolation, has not been shown to significantly impact allergic patient's symptoms.

ADDITIONAL ALLERGENS & IRRITANTS

Cockroach is a frightening word, especially when we consider this as a true allergen. Cockroach allergy may well be a major cause of asthma in those settings. Control measures include the use of pesticides and roach traps, and keeping food off counters and the floor.



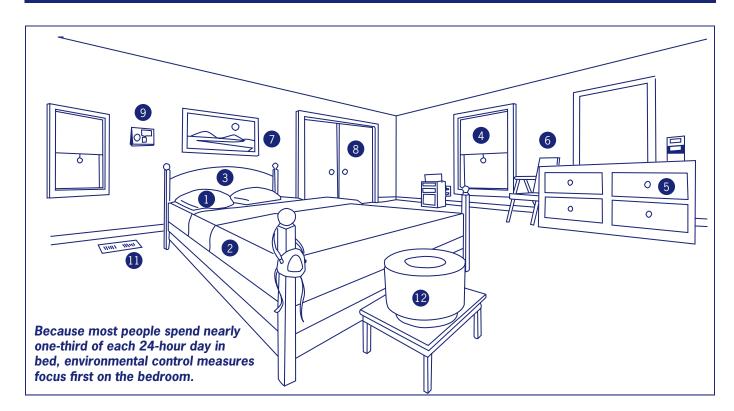
Tobacco smoke, while not a true allergen, is an irritant and a prime consideration. It is well established that breathing secondhand smoke causes problems in allergic individuals and others. Smoking should not be allowed in the house, in the car, or in the work place. Opening a window does not eliminate smoke sufficiently to make it acceptable. Smoking with an asthmatic in the house is absolutely unacceptable.

Reducing your exposure to allergens through avoidance and environmental control is the most basic, cost effective and least invasive treatment an allergic person can have. Take control and actively participate in the management of your allergies.





Allergy Avoidance In The Bedroom



- Enclose pillows in zippered, dust-proof (vinyl) covers. Encase mattresses and box springs in zippered, dust-proof (vinyl) covers. Wash sheets and pillow cases weekly at 130°F or greater.
- Wash blankets in hot water (130°F or greater) every two weeks. (Replace wool or down blankets with a type such as Vellux® that can withstand repeated hot water washings.)
- Dust around the head of your bed with a commercial dusting product (e.g., Pledge, Endust) or a damp cloth every day. (It only takes a minute!)
- Use window shades instead of heavy curtains and venetian blinds. Launder curtains frequently if you use them in the room.
- Dust drawers and closets regularly with a damp cloth. A dust and pollen filter mask may be used for housecleaning and making the bed.
- Use wooden or plastic furniture instead of upholstered pieces.

- Avoid dust-collecting room decor (pennants, macrame hangings, etc.)
- 8 Keep clothing in a closet with the door shut.
- Air conditioners reduce the heat and humidity that stimulate mite (and mold) growth. Use a dehumidifier in a damp basement.
- Maintain relative humidity at 40-50%. (Use a humidity gauge.) Mites grow best at 75-80% relative humidity and cannot live at humidity below 50%. Avoid over humidification in the winter.
- 11 Consider filter covers for air vents.
- Room HEPA air cleaners can remove airborne dust particles effectively.

Allergy Avoidance Program





helping you breathe easier season after season



helping you breathe easier season after season

19 Atlanta area locations to serve you.

For Appointments: 770.953.3331

www.atlantaallergy.com

