# Why Doctors Strongly Recommend "Environmental Controls" As an Important Part of Allergy Treatment

Allergy physicians tell us that people are most allergic to dust and dust mites, mold spores, pollens, and animal danders. All of these allergens have two things in common: they are invisible particles that float through the air, and they have to be breathed in to cause allergy symptoms.

A common mistake made by allergy sufferers is to assume that if you can't avoid *all* the allergens *all* the time, there is no point in even trying to avoid *any* of them. But, according to most allergy physicians, breathing in airborne allergens is a cumulative problem. Think of your immune system as a bucket. It takes in allergens and starts filling up. But the

symptoms don't appear until your "bucket" has filled up and begins to overflow. That's when you become miserable. Allergy physicians have many ways of dealing with this problem. High on the list are various environmental controls to help you avoid enough allergens so that your bucket won't overflow. Whether you are allergic to one or several substances, successful avoidance of even one of them can keep your bucket from overflowing.

For example, let's say you have been diagnosed as having dust mite allergies - the most common allergy of them all. Dust mite allergens are primarily a bedroom

problem. Practicing simple avoidance can make your bedroom almost free of dust mite allergen. Now, while sleeping, you're not breathing in this invisible allergen all night. Result: you may not have symptoms in the morning (stuffy nose, etc.), plus, the 8-10 hours of super-clean air will have given your system a chance to recover so that you can maybe even start the day with an "empty bucket." In fact, with conscientious, on-going avoidance measures - coupled with your doctor's other recommendations - your bucket may not reach "overflow" again. And wouldn't that be nice!

## "Environmental Controls"

# **Most Commonly Recommended by Allergy Physicians**

## Mattress, Boxspring, Pillow Encasings

If you have dust mite allergies, encasings are an absolute must according to most allergists. Why? Because mite-proof encasings are complete barriers against dust mite allergen which is found by the millions in mattresses, pillows, and boxsprings! Without encasings, as you move during sleep, these allergens are kicked up from the mattress, pillow, etc. and are breathed in directly. With encasings this harmful process is stopped. The invisible particles are blocked by the encasing and are no longer breathed in all night. So called "hypo-allergenic" pillows still need to be encased, as that phrase means only the material inside the pillow is less likely to cause an allergic reaction. Dust mites are still found in these pillows. In the past, people have resisted encasings because they were made of plain plastic and therefore crinkly and hot. But softer and more durable fabric-covered encasings with mite-proof membranes are now available that eliminate this problem.

# Washing of sheets, blankets, pads, etc.

Eliminating dust mites and their allergen from sheets, blankets and mattress pads is simple. Just wash these items every 10-14 days in hot water. Washing in hot water

kills the microscopic mite and removes the allergen. By the way, it is important to know that dust mites are common to all households and have little to do with good or bad housekeeping.

#### Vent Filters

These are inexpensive filtering kits that cover the incoming air vent. They are designed to minimize all kinds of airborne allergens from entering the bedroom from other areas of the house via the duct work. Although not as efficient as full featured HEPA air cleaners, they are, however, a great start.

#### **HEPA Air Cleaners**

This type of air cleaner is amazingly efficient at removing dust mite allergen, pollen, mold spores, dog and cat dander, even smoke and fumes. Filtering efficiency on a HEPA air cleaner, by law, has to be at least 99.97% on all particles down to 1/3 micron in size (a hair is about 60 microns, or 180 times larger than that!) The term "HEPA" may not be used by any manufacturer unless these requirements are met. In addition, HEPA filters lose no efficiency and stay at 99.97% for years. In the past they were only available in hi-tech uses, but now several companies make them available for allergy use. HEPA Air Cleaners come with different power levels. Air cleaning power is measured in CFM (Cubic Feet cleaned per Minute). The more often the air is cleaned in the bedroom, the fewer allergens remain behind. Cleaning the air every 4-6 minutes is ideal. Every 15 minutes is marginal, but OK. To find how often a room will be cleaned (in minutes), divide the cubic feet of the room space by the air cleaner's CFM. HEPA Air Cleaners should have at least 200-250 CFM of power. Beware of weak HEPA cleaners which produce only 50-100 CFM! Despite having a HEPA filter, such units simply do not have the power to pull air from more than a few feet away. The remainder of the air in the room stays unfiltered and loaded with allergens.

#### Pet Allergy Avoidance

Pets should be washed every two weeks. Washing removes much of the allergenic dander from the fur before it becomes airborne. Do not let your pet sleep in the same room with you. HEPA aircleaning will further reduce presence of this allergen.

#### 3% Tannic Acid Solution

Sold under the label Allersearch™ A.D.S. this spray denatures (or neutralizes) dust mite & cat allergen in carpets and upholstered furniture. It does not kill dust mites so the mites continue to produce the allergen making more frequent treatments necessary.

#### Dust Mite Eliminator For Carpets

A new product is now available called Acarosan. It is a moist powder that is applied to carpets. Carpeting is another favorite place for dust mites to exist. The powder kills the dust mites and allows their allergenic waste product to be vacuumed up. One treatment lasts 6-8 months. The best place to use this product would be in the bedroom and/or the living room.

#### Controlling Humidity

High humidity (above 45-50%) promotes dust mite and mold spore growth. Run air-conditioning or add a dehumidifier or both. Get a humidity gauge to measure humidity.

## Electrostatic "Whole House" Air Filters/Cleaners

These are furnace filters that are used in place of regular disposable filters. They are more efficient than regular filters and don't have to be replaced. Although not as efficient as HEPA Air Cleaners, they do make up some of this by covering a larger area. Since they cannot filter unless the furnace fan runs, it is advisable to keep the furnace fan running to get maximum filtration. [A word about built-in "electronic" air cleaners. These cleaners are separately powered and are generally sold and installed by heating and air companies under Honeywell, Carrier, Sears, etc. labels. They charge -or "zap"the particles and make them adhere to oppositely charged metal plates. The problem is that these plates become covered over very quickly and then no more zapped particles can adhere to them. These units lose efficiency rapidly after only 20 to 30 hours of use. Unless the plate element is washed at least weekly instead of the "recommended" monthly or quarterly - little or no filtering will take place. Also, these units are very expensive, and for the same money the patient can buy several HEPA Air Cleaners and space them out in the home to get "whole-house" HEPA air cleaning with no loss of efficiency!]

#### Mold/Mildew Preventatives

Mold spore allergies are common as the spore grows readily in the home in showers, baths, basements, etc. The airborne spore can be avoided with good continuous air cleaning. But preventing the mold spore from growing is also important. Normal cleaning with soap and water, or use of chlorine bleach takes care of the mold/mildew for a short time only. Preventatives, such as No More Mildew™, keep the mold spore from regrowing for long periods of time. Such measures are especially important for homes with mildew problems in basements and crawl spaces. Furnace systems in those areas can actually pull in these mold spores and distribute them throughout the house via the duct system. Preventatives are inexpensive and simple to use.

#### Moldy, Leafy Places, etc.

Stay away from moldy places. Cut down overgrown shrubbery. Avoid sleeping in basement rooms or apartments.

## "Dustless" Vacuum Cleaners

Most vacuum cleaners cannot retain particles under 10-20 micron in size. The dust collection bag is simply too porous. That's not a problem unless you have allergies where the trouble is usually with airborne particles much smaller than that in the 1/3 to 15 micron range. Then the millions of particles that are expelled through a vacuum cleaner bag can be dangerous! Not to mention the fact that this harmful microscopic dust is never picked up and stays in the home to accumulate year after year. HEPA dustless vacuum cleaners are 99.97% efficient down to 1/3 micron size particle. Thus the allergens are picked up permanently and do not get back into the room. The decision to buy an allergy vacuum cleaner should be based on filtering efficiency, not the various "bells and whistles" available. Even a water-based machine can only filter down to about 10 micron size meaning millions of microscopic particles escape back into the room (the reason is that water is really quite porous). Two or three different companies currently make HEPA vacuum cleaners for the allergy market. A popular unit for both industry and the home is the Nilfisk canister type The Lindhaus DP5 is an exceptionally efficient upright model.

### High Efficiency Vacuum Cleaner Bags

A cost effective alternative to HEPA Vacuum cleaners are new Aller-Vac<sup>™</sup> High Efficiency Vacuum Cleaner Bags Available only from National Allergy Supply, Inc. (1-800-522-1448), these bags are made of Dupont's new HYSURF® filte. material that's 97% efficient down to 1 micron size particles. Although not quite matching the HEPA standard, they are still roughly 10 times better than regula vacuum cleaner bags. By using these bags instead of regular bags, carpet allergen such as dust mite waste, pollen, anima dander, and mold spores are permanently removed from the carpet instead of blows back into the room to re-settle and accumulate. Aller-Vac bags are available for most of the 40 or so different domestic vacuum cleaners.

# Your House and Your Car During "Allergy Season"

Outdoor allergens, such as pollen moldspore, etc. will find their way into living areas. So, keep your house and ca closed during the "allergy season". Run ai conditioners and air cleaners as much a possible.

## **Getting Started**

#### Where to find these products

Almost all allergy physicians ask thei patients to do certain environmenta controls. These products and procedure are relatively inexpensive, especially when measured against the life-time obenefits they produce. Because of thei specialized nature the products are almos never available from local stores. But they can be obtained quickly - and with high level of expertise - from several firm specializing in allergy and asthm products. Your allergy physician will gladly refer you to these companies.