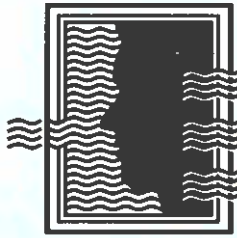


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Allergy is an abnormality of the immune system to certain things in your environment. Any substance that initiates this abnormal immune response is called an allergen. This reaction can cause symptoms that can adversely affect your quality of life.

Many health problems that can be allergy related include: chronic nasal congestion, post-nasal drip, runny nose, chronic sinusitis, middle ear disease, nasal polyps, dizziness, headaches and chronic sore throats. Allergy testing is done to determine the specific allergens that can trigger your symptoms. This includes inhalant allergens: tree/grass/weed pollen, animal dander, molds, dust and dust mites. Based on your diagnosis, your provider will recommend an allergy treatment and prevention plan for your specific condition. There are three methods currently available to help manage your allergy symptoms: 1) avoidance, 2) medications and 3) immunotherapy.

What is Immunotherapy?

Immunotherapy is a way to help decrease your level of sensitivity to allergens you're allergic to in your environment. It's the only type of therapy that offers any potential for long-term benefit. Approximately 80% of patient's who complete a course of immunotherapy will develop a sustained response. A typical course of immunotherapy is 3 to 4 yrs. You have the option of doing Immunotherapy in one of two ways: allergy injections or sublingual drops (under the tongue).

Allergy injections are given once to twice weekly until a "maintenance" dose is achieved. This can take anywhere from 6 months to 1 year, depending on a number of factors. After that point, we recommend spacing out your injections to every other week (twice monthly), then every 3 weeks & even up to once monthly for a period of time – again, depending on a number of factors.

Sublingual Immunotherapy (SLIT) is an alternative effective way to treat allergies without injections. The method of administration is liquid drops that you self-administer on a daily basis under your tongue. According to the World Allergy Organization (WAO), SLIT is widely acceptable and used in Europe, South America, Asian countries & Australia. It is gaining interest in the United States. SLIT is not yet considered established by the FDA, therefore its usage is off-label and your insurance company will not cover SLIT at this time. However, trials for FDA registration are currently ongoing.

It's important to realize there is no cure presently for allergies. Those patients affected by their allergies will usually have symptoms throughout their lifetime. We are here to give you guidance on finding the most effective method of treatment to help you get control your allergy symptoms and live a productive life.

HOUSE DUST & DUST MITE

House dust and dust mite are actually separate allergens. House dust allergen may contain mite, dirt particles, mold, human & animal danders. Mite allergens consist of a specific mite. Dust mites are the most common cause of allergy from house dust. They belong to the family of eight-legged creatures called arachnids that also include spiders, chiggers and ticks.

There are millions of tiny house dust mites living within your home. It doesn't matter how clean your home is, the dust mite will continue to reproduce at an astounding rate. The most common of all mites are *Dermatophagoides pteronyssinus* & *Dermatophagoides farinae*. These microscopic creatures are present in vast quantities and thrive by feeding primarily on the dander produced by humans and animals. The substance guanine, found in the excrement of these mites, is one of the most offending of all allergens. House dust mites avoid contact with humans and do not transfer any diseases.

Mites make their home wherever there is sufficient amount of epithelium (skin) for them to feed on (people and animals) and where environmental factors are favorable. The pillow, mattress, box spring, carpet & upholstered furniture are places found to be infested by mites. There may be as many as 19,000 dust mites in one gram of dust, but usually between 100-500 mites live in each gram. (A gram is about the weight of a paper clip). They thrive on temperatures between 68 – 84 degrees F and relative humidity 65-80%. Relative humidity over 90% and below 33% is harmful to them. For this reason, house dust mites are rarely found in high mountain areas b/c the relative humidity is too low. Relative humidity is more important than temperatures for house dust mites living, growing and propagating conditions.

AVOIDANCE MEASURES
Cover the mattress, pillow & box spring with a suitable encasing.
Wash sheets at least once a week in hot water to remove dust mite allergy substance.
Use cotton/polyester blankets and wash them at least twice a month in hot water. Do not use wool or down comforters.
Avoid placing heavy drapes & stuffed animals in the bedroom. If there is an animal the child cannot live without, it should be washed regularly with the blankets. A 5 hr "arctic vacation" in a plastic bag in the freezer will kill the dust mites.
Clean and dust rooms frequently.
Use vent covers for additional filtration. Install high efficiency filters with a MERV rating of 11 or 12 in the furnace and air-conditioning unit. Change the filter every 3 months (with the change of seasons).
Use a face mask while cleaning, vacuuming or making beds.
Frequently vacuum.
Keep indoor relative humidity at or below 50-55%.
Consider installing hard surface flooring such as wood, tile or linoleum.
Do not use vaporizers.
Keep all pets out of the room if possible.

<http://www.aaaai.org/allergist/allergies/Types/dust-allergy-information/Pages/default.aspx>

<http://www.mayoclinic.com/health/dust-mites/DS00842>

<http://www.webmd.com/allergies/dust-allergies>

<http://www.aafa.org/display.cfm?id=9&sub=18&cont=228>

PET DANDER ALLERGY

Pet dander, the dead skin that dogs, cats and other warm-blooded animals shed, is a common allergy trigger for many people. Dog and cat dander is the most common, however you'll find pet dander on just about every warm-blooded animal: birds, hamsters, ferrets, etc. Up to two thirds of the households in the US own or have owned some type of pet. Even if you have never owned a pet, pet dander is everywhere, even in the homes of people without pets because its carried on peoples clothing.

DOG ALLERGY

You may have heard that some dog breeds trigger allergy symptoms while others don't or that short-haired dogs are safe while long haired dogs are not. On the whole, experts say that isn't the case. In fact, one dog and another of the same breed can give off very different levels of allergen. Its not the hair on the dog that's the real problem. Instead, it's the flakes of dead skin as well as the urine and saliva that are the big problem. So no matter how long or short the hair on the dog, it can be potentially problematic.

CAT ALLERGY

Cat allergies are twice as common as dog allergies. Just like in dogs, its not the fur or hair on cats that's the real problem. People with cat allergies are allergic to the protein in the cat's saliva, urine and dander (dried flakes of skin). What about so-called "hypoallergenic" cats? While some breeds, like the "hairless" sphinx are said to be less likely to trigger symptoms of cat allergies, any cat has the potential to cause problems. This is true regardless of its breed, hair length or how much it sheds.

PET ALLERGY: MAKING IT WORK

Keep your bedroom pet free.

Consider a HEPA filter for the bedroom or other areas of the home. HEPA filters remove pet dander from the air you breathe.

Vacuum frequently, shampoo rugs regularly, change pet bedding frequently, dust often. Steam cleaning the carpet may be helpful in reducing the amount of dander, but generally doesn't eliminate it all.

Consider converting to hard-surface flooring & minimize the amount of upholstered furniture in your home.

Wash your hands frequently.

Bath the animal frequently (once weekly recommended).

Consider doing a "trial" where the animal is removed from the home for a period of 1-2 months. If symptoms are lessened, permanent removal may be necessary for the benefit of the patient.

<http://www.aafa.org/display.cfm?id=9&sub=18&cont=236>

<http://www.webmd.com/allergies/pet-dander-allergies-directory>

<http://www.natallergy.com/article.asp?ai=137>

MOLD ALLERGY

Mold is a fungus, which makes spores rather than seeds like plants. These spores float in the air like pollen. There are indoor and outdoor molds. While people with pollen allergies tend to have seasonal symptoms, mold allergies can flare-up all year long. Indoor molds can be a problem in the winter months because mold will grow in your house where there is enough moisture.

Most of the time you don't realize the mold is there and guess what? Molds are *everywhere*. Molds are spread by the wind outdoors and by the air indoors. Some mold spores are released in dry, windy weather. Others are released with the dew when the humidity is high. Hampton Roads is a very high humidity, wet/damp environment year round. Due to this reason, reaction to molds can occur year-round. Unlike pollens, molds don't die with the first killing frost. Indoors, mold can grow in damp areas, particularly in the bathroom, kitchen or basement.

There is very weak evidence that allergic symptoms are caused by food fungi (mold).

MOLDS: WHERE THEY CAN BE FOUND	
<i>Alternaria</i>	Indoor & outdoor. Extremely widespread. Often found in soil, on plants, in carpets, textiles, building interiors, & window frames. The spores are easily airborne.
<i>Aspergillus</i>	Indoor & outdoor. Especially common on decaying vegetation, soils, stored food & feed products. Also found in damp hay & grain.
<i>Cephalosporium</i>	Indoor & Outdoor. Found in decomposing vegetation & it is a common soil inhabitant. Also found in dust & in textile plants, soil when gardening, bathrooms & damp old houses.
<i>Fusarium</i>	Indoor & Outdoor. Common soil fungus and is widely found on numerous grasses and other plants including decaying plants. It is often found in humidifiers.
<i>Epicoccum</i>	Indoor & Outdoor. Can be found in the soil, on canvas and cotton, and on any decaying vegetation. Has been isolated from carpets, wood flooring, mattress dust, exposed acrylic paint, and is frequently reported in air samplings.
<i>Hormodendrum (Cladosporium)</i>	Indoor & Outdoor. Found in decomposed plants, leather, rubber, cloth, paper & wood products. Released into the atmosphere in great numbers after rain and during damp weather.
<i>Penicillium</i>	Indoor & Outdoor. If you're allergic to this mold this <i>doesn't</i> mean you're allergic to the drug, "Penicillin". This mold is a soil inhabitant and grows on fruits, breads, cheeses and other foods.

MOLD ALLERGY MANAGEMENT

Stay indoors, if possible, when mold counts are high.

Avoid raking leaves (or wear a mask if you do).

Take a shower after being outdoors. This will wash out the mold spores in your hair.

Fix leaky faucets and pipes.

Reduce the humidity in your home (< 60%). Use a dehumidifier to keep your house dry.

Remove basement carpet and replace with linoleum, concrete, or wood flooring.

Discard old pillows, especially feather pillows.

Stay clear of hay and straw (or wear a mask).

Clean garbage cans often.

Clean refrigerator door gaskets and drip pans.

Remove plants, dried flowers, aquariums, terrariums from the home.

Vent the clothes dryer to the outside of the home.

How to get rid of existing mold: Scrub solid items such as floors, cabinets, and furniture with diluted bleach solution. Rinse and dry the items completely. Wear gloves, mask and eye protection when cleansing. The US Environmental Protection Agency suggests that you also wear a N-95 respirator, which you can buy at a local hardware store (\$12-25).

<http://www.mayoclinic.com/health/mold-allergy/DS00773>

<http://www.webmd.com/allergies/guide/mold-allergy>

<http://www.aaaai.org/conditions-and-treatments/allergies/mold-allergy.aspx>

<http://www.aaaai.org/allergist/allergies/Types/Pages/mold-allergies.aspx>

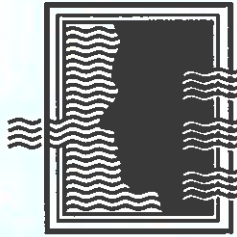
Pollen Allergy

During the early months of Spring, the trees and grasses begin their pollination. In the late Fall, the ragweed and weed pollens cause many allergy sufferers to have their greatest increase in symptoms. Some pollen is visible, while others are not. The most common allergenic pollens are those that are airborne. Most flowers are pollinated by insects and generally aren't offensive to allergenic individuals, although any pollen has the potential to cause symptoms upon exposure.

<u>Grass</u>	<u>Pollinating Periods</u>	<u>Trees</u>	<u>Pollinating Periods</u>
Bermuda	April-September	Ash, White	March-May
Johnson	July-September	Birch	March-April
Timothy	June-July	Boxelder, Maple	February-March
<u>Weeds</u>	<u>Pollinating Periods</u>	Cedar, Mountain	February- April
Lambs Quarters	May-October	Cottonwood	February-March
Marshelder/Poverty	July-August	Elm, American	March-April
Pigweed	July-September	Hackberry	February-April
Plantain, English	April-October	Mulberry	April-May
Sagebrush/Mugwort	July-October	Oak	April-May
Sorrel/Dock	May-June	Sycamore, American	April-May
Short Ragweed	Aug-October		

<u>Pollen Allergy Management</u>
Keep your windows and outside doors closed as much as possible.
Use air-conditioning to cool your home. Avoid using window and attic fans during pollen season.
Keep your car windows rolled up when driving; use air conditioning.
Check pollen counts before planning outdoor activities.
Avoid being outdoors in the early morning, when pollen count is most prevalent.
Remove your clothing when you come indoors; shower and wash hair.
Dry clothes and bedding in the dryer; do not hang outdoors to dry.
Keep pets that spend time outdoors out of your bedroom, because they bring in pollen on their fur.
Don't rake leaves during pollen season. If you do – wear a mask.
Have someone else mow your grass if possible. If you must mow – wear a mask.
Use a portable high efficiency particulate (HEPA) air filter in your bedroom.

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INFORMATION & RESOURCES:

American Academy of Otolaryngic (ENT) Allergy	www.aaof.org
American Academy of Allergy, Asthma and Immunology	www.aaaai.org
National Institute of Allergy & Infectious Diseases	www.niaid.nih.org/Pages/default.aspx
Asthma & Allergy Foundation of America	www.aafa.org
Allergy & Asthma Network Mothers of Asthmatics	www.aanma.org
American Academy of Pediatrics	www.aap.org
Pollen Count	www.pollen.com
Pollen Library	www.pollenlibrary.com
Mayo Clinic: Allergies	www.mayoclinic.com/health/allergies/DS01118
American Latex Allergy Association (A.L.E.R.T., Inc)	www.latexallergyresources.org
Immune Deficiency Foundation	www.primaryimmune.org

ALLERGY RELIEF PRODUCTS

Eastern VA ENT does not promote any one specific product or company.

WebMD slideshow of allergy relief products	<u>www.webmd.com/allergies/ss/slideshow-nasal-allergy-relief-products#</u>
WebMD shopping tips for an allergy free home	<u>www.webmd.com/allergies/features/shopping-tips-allergy-free-home</u>
WebMD: Top 10 items for your allergy relief kit	<u>www.webmd.com/allergies/ss/slideshow-allergy-medicines</u>
Allergy Relief Store (Products)	<u>www.onlineallergyrelief.com</u>
National Allergy (Products)	<u>www.natlallergy.com</u>
Allergy Relief Center (Products)	<u>www.theallergyreliefcenter.com</u>

FOOD ALLERGY INFORMATION:

Please discuss with your provider if you suspect a food allergy.

Food Allergy & Anaphylaxis Network (FAAN)	<u>www.foodallergy.org</u>
Food Allergy Website: Just for Kids	<u>www.faankids.org</u>
Kids with Food Allergies Foundation	<u>www.kidswithfoodallergies.org</u>
Food Allergy Initiative (FAI)	<u>www.faiusa.org</u>
Do you have a Food Allergy? Learn about the most common food allergies, symptoms and how food allergies are diagnosed.	<u>www.foodallergy.org/files/DoYouHaveBrochure.pdf</u>