

# Environmental Control



## Handbook

ALLERGY  PARTNERS<sup>®</sup>

## Did You Know?

Your body is like a cup which allergens from the environment flow into. Like a cup, your body can hold only so many allergens before it overflows. When your cup overflows, your allergy symptoms appear and you begin to sneeze, wheeze, sniffle, itch, scratch and cough.

The purpose of environmental control is to modify the things in your environment that you are allergic to in order to decrease your exposure time and to keep your body's "cup" from overflowing. The best way to treat your allergy is for you to do as much as you can to avoid the things that bother you or at least minimize your exposure to those things.

The one part of your day that you can control most is the time you sleep. If your sleep time can be as allergy free as possible, your "cup" will get a fresh start the next day.

**Therefore, concentrate on making your bedroom the center of your efforts.**

Physicians recommend encasings as a top priority for reducing allergen exposure. Your bedroom is an oasis. At least it's meant to be, but instead it can be a trouble-zone for high exposure to allergens. Your bed can be the greatest allergen source, where over 1 million dust mites can live and contribute to allergy symptoms. Physicians and the National Institutes of Health (NIH) recommend encasings as a top priority for reducing allergen exposure since encasings block dust mite and pet allergens in the bed, which you would otherwise inhale throughout the night. You can spend up to one-third of your day in your bedroom, so allergy relief steps should start with encasing the bed.





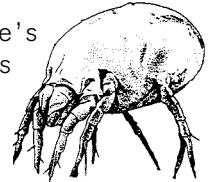
The majority of allergens which can fill up your “cup” fall into 4 major categories: house dust, molds, pollens, and pets. Irritants such as tobacco smoke and air pollution can exacerbate allergic symptoms.

Now, take a look at what specific things you can do to avoid or control allergens in your environment.

## Dust Mite

**House Dust Mites** - are microscopic, sightless, light-sensitive, eight-legged insects.

Dust mite's favorite food is shed human skin. They thrive in warm, damp



homes and die when the temperature falls below 50 degrees or humidity levels are less than 50%. Dust mites can be found in carpeting, mattresses, comforters, pillows, box springs, upholstered furniture and stuffed toys. A dead mite is still an allergic mite as the mite's excreta and body parts also trigger allergic symptoms.

Recent studies show that mite allergy is a major risk factor for emergency visits for treatment of asthma.

# Dust Mite Avoidance: Focus on the “Bedroom”

**MATTRESS AND BOXSPRING:** Encase in dust mite proof encasements.

**PILLOWS:** Use dacron or polyfill in place of feather, down or foam. Replace every 1-2 years. Encase in dust mite proof covers.

**BLANKETS AND COMFORTERS:** Wash in hot water every week or encase in dust mite proof encasements.

**WATERBED:** Wipe mattress and under edge of mattress frequently with warm soapy water.

**STUFFED ANIMALS:** Keep to a minimum. Choose 1-2 that are washable and dryable. In addition, place in a freezer for 24 hours every two weeks.

**LAUNDRY:** Use hot water wash in place of cold water wash for all bed linens including mattress pad every 1 to 2 weeks.

**WINDOW COVERINGS:** Should be washable or wipeable.

**FURNACE AND AIRCONDITIONING FILTER:** Change monthly.

**VACUUM CLEANING:** Should be done one to two times weekly when patient is not present. Wearing a mask may help if patient must do vacuuming. Look for vacuum cleaners with HEPA filters or high filtration bags.

**DUSTING:** Use damp method one to two times per week.

**BEDROOM CLOSET:** Store only current articles. Place seasonal items in other rooms.

**VAPORIZERS AND HUMIDIFIERS:** Avoid since increased humidity promotes mite and mold growth.

**CARPETING:** First choice is tile, wood or other hard floor covering and throw rugs may be used. With wall to wall carpeting, it should be synthetic, short pile, with synthetic pad. Steam clean yearly and ensure it dries within 2-3 hours after cleaning as increased moisture promotes mite growth.

**FANS OF ALL TYPES:** Should be avoided since use causes dust particles to become airborne.

**HUMIDITY:** Keep humidity below 50%. Use air conditioning or supplement with a dehumidifier.

# Pollen

Trees, grasses, and weeds pollinate at different times of the year depending on where you live. Tree pollen is typically most prevalent in the Spring, grasses in the Summer, and weeds in the Fall. Your Allergy Partners physician is an expert in local aerobiology and will be happy to discuss what types of pollens cause problems in your area.

## Pollen Avoidance

- \_\_\_ 1. Keep bedroom windows closed at all times during pollen season.
- \_\_\_ 2. Use central or window air conditioning and change filters at least once a month.
- \_\_\_ 3. If air conditioning is not present, cut furnace filter to fit bedroom window.
- \_\_\_ 4. Shower and shampoo hair as soon as you are finished working or playing outdoors.
- \_\_\_ 5. Leave pollen-contaminated clothing out of bedroom.
- \_\_\_ 6. Avoid newly cut grass.
- \_\_\_ 7. Keep animals outdoors as they carry pollen on their coats during pollen season.
- \_\_\_ 8. Wear a pollen mask when necessary to work in heavily pollinated areas.



# Mold Allergens

Molds or fungi are tiny plants without roots or stems that reproduce by releasing spores into the air. Indoor molds grow in damp, musty areas like basements, garages, bathtubs, shower stalls, laundry rooms, refrigerators, vaporizers, and humidifiers.

Outdoor molds prefer warm, moist and shady confines such as mulch piles, black soil gardens and fallen leaves. Some molds reproduce rapidly when it rains, while others release their spores during the dry periods that follow rainy weather.

## Mold Avoidance

- \_\_\_ 1. Avoid damp and dusty places, such as attics, basements, garages and store-rooms.
- \_\_\_ 2. Keep the basement and other damp household areas as dry as possible.
- \_\_\_ 3. In bathroom, check behind the toilet, under sink, on shower curtain and walls for mold growth, clean with mold inhibitor such as X-14 or diluted bleach.
- \_\_\_ 4. Check closets, old shoes, boots, sneakers, etc. for mildew.
- \_\_\_ 5. Check stored foods for spoilage and mold growth.
- \_\_\_ 6. Check pan under refrigerator for possible mold growth
- \_\_\_ 7. Avoid use of vaporizers and humidifiers, as they can encourage mold growth.

# mold avoidance

- \_\_\_ 8. Houseplants and dried flower arrangements should be kept to a minimum and out of the bedroom completely. Potting soil may breed molds.
- \_\_\_ 9. Water house plants when patient will be away from area for several hours.
- \_\_\_ 10. When cleaning carpeting, use steam cleaning, but make sure it dries in 2-3 hours.
- \_\_\_ 11. Use artificial Christmas trees, as natural trees carry many mold spores.
- \_\_\_ 12. Store firewood outdoors.
- \_\_\_ 13. Check crawl spaces for standing water.
- \_\_\_ 14. Store compost piles away from house areas.
- \_\_\_ 15. Avoid piles of dried grass, weeds and fallen leaves.
- \_\_\_ 16. Avoid deep woods and caves.
- \_\_\_ 17. Check exterior of home for plants growing close to the home.
- \_\_\_ 18. Vent clothes dryers to the outdoors.
- \_\_\_ 19. Air conditioning will help keep humidity lower and prevent mold growth.
- \_\_\_ 20. Change and/or clean filter on air conditioning frequently.
- \_\_\_ 21. Keep home humidity between 30-40%, never above 50%. An additional dehumidifier may be beneficial.
- \_\_\_ 22. Kitchen and bathroom exhaust fans can help remove water vapors.
- \_\_\_ 23. Use mold retardant paints in areas where humidity and mold growth have been a problem.



**Cladosporium**



**Alternaria**



**Penicillium**



**Aspergillus**

# Animal Allergens

Dogs and cats are the most frequent offenders, but any furry or feathered pet including gerbils, guinea pigs, hamsters, rats, mice, rabbits and birds can trigger allergies. New studies have shown the most allergic part of animals or birds is their saliva, followed by their urine, mucus, feces, dander, hair, and feathers.

## Animal Avoidance

- \_\_\_ 1. If you don't have household pets, do not acquire one.
- \_\_\_ 2. If you already have a pet, it is preferable that it lives outdoors in a house of its own.
- \_\_\_ 3. Keep pets out of bedroom at all times.
- \_\_\_ 4. Washing the pet twice weekly can decrease allergens.
- \_\_\_ 5. HEPA filters can reduce significant amounts of animal allergen.
- \_\_\_ 6. Fur-bearing animals should not be carried in the car. The close, confined area may aggravate allergy symptoms.
- \_\_\_ 7. Vacuum carpets once per week, or remove carpet if practical.
- \_\_\_ 8. After direct contact with an animal, it is best to change clothing and wash hands thoroughly.
- \_\_\_ 9. When moving to a new home, inquire if pets were present in the past. Studies show that animal antigen continues to remain for months, even after cleaning.
- \_\_\_ 10. If pets are outdoors during the allergy season, many pollen antigens are trapped in their coat and will be carried indoors.
- \_\_\_ 11. After pet removal - thoroughly clean carpeting, upholstered furniture, bedding, walls, window coverings, furnace filter and vacuum cleaner.
- \_\_\_ 12. There is no evidence that certain breeds of dogs or cats are less allergenic than others.



# Tobacco Smoke



Tobacco smoke often goes unrecognized as an important aggravating factor in allergic disease. Exposure to tobacco smoke in homes presents the greatest problem. Tobacco smoke acts as a respiratory irritant resulting in a worsening of the allergy patient's condition. Studies indicate that in almost every case of elimination of smoke in the home, clinical improvement followed.

***Eliminating tobacco smoke from the allergic patient's environment should be the #1 step of the environmental control.***

## Tobacco Avoidance

- \_\_\_ 1. No smoking rules indoors
- \_\_\_ 2. No smoking rules in cars
- \_\_\_ 3. Avoid smoking areas in public

Studies show that children of smoking parents have 60% more upper respiratory infections than children of nonsmoking parents.

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## Non-Specific Irritants

Nonspecific irritants such as odors and fumes may adversely affect the allergic patient causing an increase in the allergic symptoms. The effect on the respiratory system is one of irritation.

### Avoidance

- \_\_\_ 1. Avoid heavily scented cosmetics, perfumes, moth balls, insect sprays, tobacco smoke, soap powders, chalk dust, fertilizer, fresh newspaper, smoke, paints, polishes, household chemicals, ammonia, chlorine water, gasoline fumes, formaldehyde and natural gas.
- \_\_\_ 2. Wood burning stoves and fireplaces should be well vented and should be kept burning rather than allowed to smolder. Pollution measurements from a smoldering fire are greater than a steady burning fire.
- \_\_\_ 3. Avoid wood burning stoves and fireplaces when respiratory symptoms are increased.

# Who Better to Recommend Superior Protection Against Allergens in Your Home, Than the Leaders in Allergy & Asthma Care

**Allergy Partners®** is committed to having healthy, happy patients and therefore researched and acquired the leading manufacturer of encasement products, Allergy Guardian.

Who better to oversee the quality standards of allergy control products, than the leaders in allergy and asthma care. Partnering with leading not-for-

profit allergy and asthma organizations, all profits from the sale of Allergy Guardian encasement products go back to funding education, advocacy and research to advance treatment for our patients and the millions of Americans suffering from allergic conditions.



## Allergy Guardian Encasings

### We Know What It Takes to Deliver Exceptional Quality and Value

Say “No” to plastic covers and crinkly fabrics in favor of the wonderful comfort and superior protection of Allergy Guardian encasings. Although you may be new to encasings, we’re not. Allergy Guardian encasings are designed with an emphasis on construction details that you won’t

find elsewhere. We know that these details are the key to providing superior nighttime protection. With Allergy Guardian encasings, you’ll receive an ideal combination of protection, quality, value and comfort. Plus, with our patient discount, you’ll receive even more savings!

# Encasings

## Why do I need to encase my bed?

Your bed is the greatest source of allergens and where you are directly exposed to allergens for an extended time. As a result, physicians recommend encasings as a top priority for allergy relief.

## What is an encasing?

Encasings block allergens and create a protective layer between you and the allergens in your bed. An encasing zips completely around your pillow, mattress or parts of the bed to block allergens so you don't inhale them throughout the night.

## Will an encasing make me uncomfortable at night?

High quality encasings are made from soft, breathable fabrics. They feel "invisible" on the bed. You won't feel them under your linens, yet the high performance fabrics will block allergens to give you the relief you need.

## What is pore size?

A critical encasing reference point is pore size. The smaller the pore size, the better the encasing's allergen-blocking ability. A major scientific study indicated pore size must be under 10 microns for dust mite protection and under 6 microns for dust mite and pet dander protection.



## Do I need to encase all parts of the bed?

Scientific studies prove the effectiveness of encasing the bed (even down to the box spring). Bedding that can't be encased should be washed weekly to remove allergens.

## Are all encasings alike?

Quality makes a big difference in the level of protection and comfort you receive. Lesser quality encasings are often made from uncomfortable and noisy fabrics. They don't offer the same protection or their inferior construction allows allergens to escape. Construction is critical to prevent the escape of allergens or bed bugs from bedding. Encasings, such as those made by Allergy Guardian, feature advanced allergy-blocking fabrics that feel soft and supple. These particular products include double-stitched seams, superior zippers and an extra layer of fabric over all seams to prevent leakage at the zipper area. While many encasings may appear to be alike, quality features are critical when it comes to providing you with exceptional nighttime protection.

# What Makes Allergy Guardian Different?

## Protection

Allergy Guardian encasings are made from advanced barrier fabrics to provide high performance protection from allergens and bed bugs.

## Comfort

We choose the best barrier fabrics that are soft and breathable to ensure your sleeping comfort throughout the night.

## Quality

We focus on exceptional quality details that you won't find elsewhere. Our commitment to quality construction makes a big difference when it comes to superior allergen protection and long-term durability.

## Value

Allergy Guardian encasings offer exceptional value and savings with manufacturer-direct prices and exclusive allergy patient discounts.

## Ultimate vs Premium vs Standard

### Ultimate

#### Fabric

100% Cotton

#### Pore Size

3.6 micron pore size

#### Protects Against

Protects against dust mites  
pet dander and bed bugs

#### Warranty

Lifetime Warranty



### Premium

#### Fabric

100% Patented  
Pristine® Microfiber

#### Pore Size

2.4 micron pore size

#### Protects Against

Protects against dust mites  
pet dander and bed bugs

#### Warranty

Lifetime Warranty



### Standard

#### Fabric

100% Polyester

#### Pore Size

5.8 micron pore size

#### Protects Against

Protects against dust mites  
and pet dander

#### Warranty

10 Year Warranty



## Allergy Partners Discounted Pricing

(Following prices include 15% discount)

### Pillow Encasing

		<i>Ultimate</i>	<i>Premium</i>	<i>Standard</i>
King	21 x 37	25.59	16.79	14.39
Queen	21 x 31	23.99	15.19	12.79
Standard	21 x 27	20.79	12.79	9.59

### Mattress or Box Spring Encasing

CA King	73 x 84 x 9	155.99	120.79	102.39
King	78 x 80 x 9	155.99	120.79	102.39
Queen	60 x 80 x 9	119.99	88.79	75.99
Full	54 x 75 x 9	110.39	75.19	65.59
Long Twin	39 x 80 x 9	91.99	71.99	58.39
Twin	39 x 75 x 9	86.39	63.99	54.39
Crib	29 x 52 x 6	55.99	43.99	N/A

*\*Deeper mattress covers available for 12, 15 and 18 inch; additional cost will apply.*

### Comforter Encasing

King	104 x 92	155.99	131.99	91.99
Queen/Full	88 x 92	139.99	115.99	75.99
Twin	66 x 86	115.99	99.99	59.99

## Special

Allergy Partners

Discount

**SAVE 15%**

On Allergy Guardian  
Encasings

Use code

**AllergyPartners2017**



Have more questions? **We're ready to help.**

Just call our helpful staff at **1.800.631.3549** or visit us online,

**[www.allergyguardian.com](http://www.allergyguardian.com)**

When you choose Allergy Guardian, we will donate 100% of our profits to asthma and allergy-related charities.

# Healthy Bedding

Dust mites thrive in all bedding; even hypoallergenic bedding. The term “hypoallergenic” simply means the materials used to make the products do not cause allergies. If you have allergies, choose healthy bedding selections that are hot water washable to remove allergens, include an allergen barrier or bedding that can be easily covered with an allergy encasing.

## Aller-Ease Allergy Protection Bedding



Aller-Ease Pillow - Std/Queen Combo	\$11.99
Aller-Ease Pillow - King	\$14.99
Aller-Ease Comforter - Twin	\$59.99
Aller-Ease Comforter - F/Q	\$79.99
Aller-Ease Comforter - King	\$89.99



Aller-Ease Mattress Pad - Twin	\$29.99
Aller-Ease Mattress Pad - Full	\$34.99
Aller-Ease Mattress Pad - Queen	\$39.99
Aller-Ease Mattress Pad - King	\$44.99
Aller-Ease Waterproof Pad - Twin	\$44.99
Aller-Ease Waterproof Pad - Long Twin	\$49.99
Aller-Ease Waterproof Pad - Full	\$59.99
Aller-Ease Waterproof Pad - Queen	\$64.99
Aller-Ease Waterproof Pad - King/CA	\$84.99

Aller-Ease bedding products include an allergen-blocking cotton fabric that helps protect you from dust mite, pet and pollen allergens that build up in bedding. Each includes a soft hypoallergenic fill for sleeping comfort. The waterproof mattress pad features a 100% organic cotton top fabric that is naturally finished and chemical free. Backed by Good Housekeeping’s Seal with a 2-year ltd. Warranty. Machine wash and dry. For more details, go to: [www.AllergyGuardian.com](http://www.AllergyGuardian.com).

## Alpine Loft Down-Alternative Bedding



Alpine Loft Pillow - Standard	\$25.99
Alpine Loft Pillow - Queen	\$29.99
Alpine Loft Pillow - King	\$34.99



Alpine Loft Comforter - Twin	\$99.99
Alpine Loft Comforter - F/Q	\$124.99
Alpine Loft Comforter - King	\$139.99

Eliminate down’s allergic sensitivities and high costs, but enjoy the same wonderful comfort with the Alpine Loft Down-Alternative Pillow or Comforter. Both are filled with an extremely fine, hypoallergenic poly fiber that simulates the feel and lofty properties of down and are covered with a soft 100% cotton fabric with an elegant windowpane design. These beautifully-made bedding items include double-stitched piping and a baffled box construction on the comforter. Machine washable.

# Home Care

Designed especially for allergy sufferers, these allergy-busting products improve cleaning to create a healthier home.

## Allersearch Allergen Wash Detergent



This popular all-in-one detergent removes allergens and cleans washables, even in cold water. Allergen Wash eliminates dust mite allergens, pet dander, pollen and mold for clean, fresh and healthy results. Protect your fabrics and electric bill by avoiding hot water washes for allergy relief. 2 capfuls for 30 medium-sized laundry loads. 24-oz bottle.

Allersearch Allergen Wash Detergent \$24.99

## Allersearch ADS or ADMS Anti-Allergen Sprays



These sprays destroy allergens from dust mites, pets, pollen and molds that build up in carpets, soft furnishing, curtains and more. Each neutralizes allergens so they won't trigger allergy symptoms. Stronger formula ADS Spray lasts for up to 3 months but should not be used on white or light colored surfaces. Use milder ADMS Spray on all colors, although reapply every 30 days. 32-oz per bottle.

Allersearch ADS Spray \$34.99

Allersearch ADMS Spray \$23.99

## DeMite® Laundry Additive



Use DeMite with your favorite detergent to eliminate dust mite allergens from your bedding, clothes and other washables in any wash temperature (even cold water). Less than 1 oz per load (0.75 oz) will effectively remove allergens.

DeMite - 8-oz (Treats 11 - 12 Loads) \$15.99

DeMite - Liter (Treats 45 - 50 Loads) \$47.99



## Electrolux UltraOne® Delux Canister HEPA Vacuum Cleaner - EL7080ACL



Electrolux UltraOne Classic HEPA Vacuum works quietly while providing deep cleanin power on your carpets and floors. A sealed system and washable HEPA filter offer supe dust containment. Adjust suction level on the handle with just a push of the button and at 12.5 lbs, is easy to move for cleaning convenience. Includes 3 in 1 dusting brush, crevice tool and upholstery tool. Blue color. 7-yr ltd mfr wty.

Electrolux UltraOne Classic EL7080ACL \$499.9

Electrolux Anti-Allergy S-Bag (4-pack) \$10.9

# Allergen Control

Allergens pollute the air in your home, and inhaling allergens triggers symptoms. Breathe better by addressing allergen sources and by reducing exposure to airborne allergens with air filtration products, air purifiers and face masks.

## Allergy Zone Furnace Filters



Designed by an allergy specialist, Allergy Zone's MERV 12 furnace filters have the highest rating awarded to filters for home use. Its pleated, electrostatic material captures over 90% of allergy-causing particles, far more than traditional flat filters. Disposable filter lasts for up to 3 months. 1" thick and available in a 4-pack. Select from 5 sizes: 14x25, 16x20, 16x25, 20x20, 20x25.

Allergy Zone Filters (4-pack) \$59.99

## Allergy Zone Humidity Gauge



Easily monitor humidity levels with this helpful Allergy Zone humidity gauge. Made especially for people with allergy and asthma, the gauge displays humidity, temperature and time. Memory setting retains min and max values to see how humidity levels are trending in your room. Includes stand or can be wall mounted.

Allergy Zone Gauge \$19.99

## Allergy Zone Vent Filter



This Vent Filter is an easy and economical way to improve indoor air in a specific room. Simply cut the 16" x 60" media to the fit behind the room's vent cover and the filter media will trap allergens before the air flows into the room. Change every 4 to 6 weeks.

Allergy Zone Vent Filter \$14.99

## Vanicream Hypoallergenic Skin Care



Vanicream's rich body cream moisturizes and soothes skin without irritating ingredients or fragrances. The hypoallergenic, non-greasy formula absorbs quickly into skin, alleviating dryness and tackling itchiness. Dermatologist-recommended for sensitive skin, eczema, psoriasis and more.

Vanicream Pump Jar \$15.99  
Vanicream Skin Cream Tube \$6.99  
Vanicream Cleansing Bar \$3.99



Go online to [www.allergyGuardian.com](http://www.allergyGuardian.com) for more Vanicream and Free & Clear products.

## I Can Breathe Masks



These lightweight masks help you breathe better by reducing exposure to allergens, pollutants, odors and fumes. Each mask features an adjustable fit, is low profile and easy to wear for everyday activities whether indoors or outdoors. The Honeycomb Mask includes a replaceable carbon filter for further protection. See our website for more information.

I Can Breathe Honeycomb Mask \$26.99  
I Can Breathe Silk Comfort Mask \$23.99

## Allergy Zone N95 Face Mask



Allergy Zone's lightweight face mask filters airborne particles and helps protect you from harmful viruses. The NIOSH N95 rating means it's 95% efficient at filtering particles down to 0.3 microns. Its unique exhalation valve reduces heat build-up. Disposable design and a great value with 3 masks in each pack.

Allergy Zone Face Mask (3-pack) \$9.99

Find more allergy relief products at: [www.AllergyGuardian.com](http://www.AllergyGuardian.com).

# Air Purifiers

One of the first recommendations made by allergists to help control allergy or asthma symptoms is to reduce indoor air pollutants at the source. Unfortunately, complete avoidance is not possible but there are some options to improve the air you breathe.

Contaminants found inside our homes and workplaces, such as dust mites, mold spores, pollen, pet dander and volatile organic compounds (VOCs also known as toxic gases), can exasperate allergy or asthma symptoms. Air purifiers are recommended in conjunction with other environmental control measures as an effective means to reduce or control allergy and asthma symptoms resulting from these contaminants.



In the past, there have only been four types of air cleaning technologies available to remove these pollutants. These options are somewhat effective in eliminating individual, targeted contaminants but limited in their ability to remove all contaminants. The reason is that most filters bring pollutants into the filter using airflow. However, only 10% of airborne pollution—large particles such as smoke—can be moved with airflow. The remaining 90% of air pollution—the toxic gases, fine particles, and microorganisms—are NOT moved by airflow. There has been recent development in the technology of air purifiers which has allowed all types of pollutants to be captured by a single air purifier utilizing an organic, water based filtration system. This new technology is changing the way our patients handle the need to reduce indoor air pollutants that worsen their allergy and asthma symptoms.

***In cooperation with your allergist, the below chart will help you determine the best air filtration technology to meet your air cleaning needs.***

Air Purifiers	Particle Size Removed	VOCs	Allergens	Bacteria	Odors	Viruses & Germs
O <sub>2</sub> BioHygienic	No Limit	Yes	Yes	Yes	Yes	Yes
HEPA	Down to .3	None	Yes	Some	Some	Some
CARBON	None	Some	None	None	Some	None
IONIC*	Down to .1	None	Yes	Some	Some	Some
UV	None	None	None	Some	None	Some
MULTI-STAGE	Down to .1	Some	Yes	Some	Some	Some

\*Note: Ionizers are not recommended for allergy patients and have been shown to increase asthma symptoms.

# The Patient's Guide to Immunotherapy

## What is Immunotherapy?

Immunotherapy, or "allergy shots", is a form of treatment aimed at decreasing your sensitivity to substances in the environment called allergens. These allergens are identified by allergy testing. They can trigger your allergy symptoms when you are exposed to them. Immunotherapy works as a vaccination against allergens and helps prevent allergy symptoms. Immunotherapy has been shown to prevent the development of new allergies. In children, it can prevent the progression of allergic diseases from allergic rhinitis (hay fever) to asthma. Immunotherapy can lead to long-lasting relief of allergy symptoms even after treatment is stopped.

Immunotherapy has been shown to be very effective in the treatment of allergic rhinitis, allergic conjunctivitis, allergic asthma, and insect sting allergy. If your allergy symptoms are not well controlled with avoidance measures and medications, your allergist may use this customized series of injections to reduce and control your symptoms.

## How Does Immunotherapy Work?

By giving small doses of highly refined substances to which you are allergic, immunotherapy stimulates your immune system to become tolerant to these allergens. This tolerance protects you on further exposure to the same substance and can help decrease or even eliminate your allergy symptoms. Our initial goal is to reduce your allergy symptoms. As you build up on the strength of your shots, we hope to reduce the medications needed to control you symptoms.

## What's Involved in Immunotherapy?

After you have been tested and your allergy triggers

determined, an allergy vaccine will be made specifically for you based on your individual allergies. You may require 1, 2, or 3 vials of vaccines depending on the number and type of allergens that trigger your symptoms.

Your vaccine series will start with very small quantities of allergen. Over time, you will receive increasing amounts. The highest dose of vaccine may be up to 10,000 times the concentration of your first dose. There are two phases of immunotherapy: a build-up phase and a maintenance phase.

**Build-up Phase:** You receive injections once or twice a week with increasing amounts of allergen. At first you will receive shots from a green topped bottle, starting at 0.05 cc and increasing up to 0.5 cc. You will then progress through more concentrated vaccine bottles - Blue, gold, red. The red topped vial is the most concentrated/strongest and will contain your maintenance dose. It typically takes 6-8 months (shorter for insect venoms) to reach the highest concentration.

**Maintenance Phase:** The typical top dose is 0.5cc of allergen vaccine from the red topped vial and is called 'Maintenance'. Not all people, however, progress to this dose. Therefore, your 'Maintenance' dose may be different. Once you are at maintenance, the intervals between shots may be increased.

Vaccines lose potency with time: When you receive a new bottle of extract for maintenance therapy, the new vial may be slightly more potent than your old vial. We, therefore, will reduce your dose slightly with a new vial to insure safety. You will then need to go through a 'mini build-up' every one to two weeks to return to your maintenance dose.

# The Patient's Guide to Immunotherapy *continued*

## **How Long Do I Stay on Immunotherapy?**

Immunotherapy is generally continued for 3 to 5 years, at which time the decision to stop immunotherapy should be discussed with your allergist. Some people may experience lasting relief of their allergy symptoms after stopping shots. Others may find that their symptoms gradually return. Therefore, the decision to stop immunotherapy must be individualized.

## **When Will I Start to Feel Better?**

Initial improvement with immunotherapy may be noted as soon as 2 to 4 months after starting, but it may take longer. Symptomatic improvement tends to progress throughout treatment. Maximum symptom relief occurs approximately 2 years after starting. Because immunotherapy does not provide immediate relief of your allergy symptoms, you will need to continue your allergy medicines at least during the beginning of build up. Hopefully, as you continue on immunotherapy, your need for medications to control your symptoms should gradually decline.

## **What Kind of Reactions Can Occur?**

The most common shot reaction is a local reaction. It appears as redness and swelling at the injection site. This can happen immediately, several hours, or 1-2 days after an injection. If you experience such reactions, it is very important to notify your nurse before your next injection. Your immunotherapy dose may need to be modified to prevent further local reactions. Systemic reactions are much less common than local reactions. However they are much more serious. Systemic reactions are usually mild and respond rapidly to medications. Symptoms can include increased allergy symptoms such as sneezing, nasal congestion, or hives. Rarely, a serious systemic

reaction, called anaphylaxis, can occur. Symptoms of anaphylaxis include swelling in the throat, wheezing or tightness in the chest, nausea, dizziness, or other symptoms. In very rare instances, anaphylactic reactions can be fatal. Because of possible reactions to immunotherapy, it is absolutely mandatory that injections be given in the presence of qualified medical providers. It is necessary to wait at least 30 minutes following your injection to ensure there is no significant reaction. If you feel any itching, swelling, tightness in the throat or chest, you must immediately let the shot nurse know so that you can receive prompt care. If a systemic reaction begins to occur after you have left the office, return immediately to the office or go to the nearest emergency medical facility.

## **What Can I Expect from Immunotherapy?**

In over 85% of cases, immunotherapy can provide substantial, long lasting improvement in allergy symptoms. You should have fewer and less severe allergic reactions to those substances that currently cause your allergies or asthma to flare. Also, you should be able to control your symptoms with less medicine than you presently need. Allergy shots may not be a cure, but they are an excellent means of controlling your allergy symptoms.

Utilizing our app, APpal, can help track when your due for your next injection as well as provide a wealth of other resources for tracking symptoms, receiving customized alerts, health coaching, self-assessment tools and more. It is also integrated with our Patient Portal so you can manage appointments, access records, and pay your bill, all from your mobile device! Download from the Google PlayStore or App Store today.

# Skin Testing

## Special Instructions

### Skin Testing

#### Why Skin Testing?

On the next page you will find the “Allergy Skin Test Record” which we have used to record the results of the skin tests, which have been done. Skin tests are the most reliable form of allergy testing. Other blood tests may or may not have been performed depending on the individual patient. If these are needed now or at a later date, they will be discussed with you by the doctor.

#### What Are Allergy Skin Tests?

Allergy skin tests are extracts of various substances which are known to cause allergies. We have chosen the extracts which are felt to give the most reliable results in test interpretation. Many things, which at one time were thought to have caused allergies, are now felt to be only irritating to certain people but not allergenic. We have elected not to include these in our battery of tests.

Extensive testing to food allergens is generally not indicated. We routinely test to only a handful of foods which account for over 95% of food allergy.

Allergy tests have been done. These are the tests placed ordinarily placed on the back. In addition, a group of “intradermal” tests may have been placed on your arm. In young children and infants, “scratch” tests may be the only tests indicated. All skin tests are read by the nurse and/or the doctor.

#### Skin Test Site Care

Skin test sites are usually not painful following the testing. Some of the individual sites might itch and

become enlarged and/or red at times. It may take several days or occasionally several weeks for the sites to completely fade. For excessive itching, the patient may take their antihistamines. Prolonged swelling and/or soreness may be treated with ice packs and/or anti-inflammatory medications (i.e., Ibuprofen, Motrin®, Advil®, etc.). The sites should be kept clean by washing daily with soap and water.

#### About Your Positive Skin Tests

Please refer to the next page for those tests which were found to be positive. The doctor or allergy nurse will discuss with you those considered most significant. A brief description follows. Please refer to the individual environmental control pages for a discussion of ways to reduce exposure to those things to which you are allergic.



# Allergy Skin Test Results Summary

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Your skin tests showed that you have a sensitivity to the substances checked below:

- Tree Pollen      Trees pollinate most heavily in the early spring, from February through May.
  
- Grass Pollen      Grass pollinates from mid-spring through most of the summer.
  
- Weed Pollen      Although some weeds pollinate in the spring and summer, the most important ones pollinate heavily from mid-August until there have been several hard frosts.
  
- Molds/Mildew      Molds send out spores almost year-round. They occur both outdoors and indoors.
  
- House Dust Mites      These microscopic pests infest homes year-round. They are the number one cause of year round allergies.
  
- Cat/Dog Dander      There is usually no significant difference in sensitivity between breeds.
  
- Cockroach      \_\_\_\_\_  
\_\_\_\_\_
  
- Other      \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## National Allergy Organizations

The following organizations are made up of 3,000 allergists dedicated to educating physicians and health-care providers in the field of allergy. They encourage research and maintain skills of their members by sponsoring educational programs. Scientific publications, and patient information.

American Academy of Allergy,  
Asthma & Immunology  
555 East Wells St., Ste. 1100  
www.aaaai.org

*American College of Allergy, Asthma & Immunology*  
85 West Algonquin Rd., Ste. 550  
Arlington Heights, IL 600  
www.acaai.org

## Air Purification

AirStar, LLC  
1978 Hendersonville Rd. Suite 130  
Asheville, NC 28803  
Customer Service: 877-689-6247  
02airpurifier.com

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## Allergy Resources

*Allergy Bedding/Encasements*  
*Allergy Guardian*  
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800-631-3549  
www.allergyguardian.com

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# Take Action Against Allergens with Our Allergen Avoidance Action Plan

Guard your health and home by taking action against allergens to reduce your exposure. Our Allergen Avoidance Action Plan tasks are based on recommendations from physicians and the National Institutes of Health (NIH). Keep in mind that some steps are a top priority, but overall relief requires taking comprehensive action throughout your home to reduce your overall exposure.

**1 Allergy Encasings: ENCASE** bedding to block allergens.

- Pillow
- Box Spring
- Mattress
- Comforter

**2 Healthy Bedding: WASH** other bedding in hot water weekly.

- Linens and Blankets
- Hypoallergenic Bedding

**3 Home Care (Carpet): REMOVE** or treat carpet, another top allergen source.

- Remove or Treat Carpet
- Use a HEPA Vacuum

**4 Home Care (Surfaces): CLEAN** to reduce allergens throughout your home.

- Dust Regularly
- Avoid Soft Furnishings and Drapes
- Wear a Face Mask
- Choose Leather Furniture and Blinds

**5 Allergen Control: REDUCE** humidity to avoid dust mite and mold growth.

- Monitor with a Gauge
- Run Air Conditioning
- Use a Dehumidifier
- Address Damp Areas

**6 Air Purification: FILTER** airborne particles to avoid inhaling allergens.

- Central Air Filters
- HEPA Air Purifiers

