# **POLLEN**

Many people are allergic to common outdoor pollen allergens such as weeds, grasses, and trees. For people who are allergic to trees and grasses, springtime may be the worst time for your symptoms. Those who are allergic to grasses and weeds may have more symptoms in the summertime and early fall. Your allergist can help to distinguish your specific allergies.

Here are some ways to minimize pollen exposure and control your symptoms:

- While in the car, avoid having the windows down, and try to use only the air conditioning
- Avoid opening the windows of the home: try to only use air-conditioning as open windows could allow for the pollens to be spread into the home
- High-efficiency particulate air filter (HEPA) may reduce the circulation of pollens in the home
- Minimize the amount of time outdoors and avoid activities that involve prolonged outdoor exposure such as camping, hiking, gardening, or other yardwork
- If your child enjoys playing outside, have them take a bath or shower, and change clothes once they are inside. Pollens can be on the child's clothing, skin, and hair.
- Have your child wear long pants, especially when playing in the grass to avoid pollen contact with skin.

# MOLD

Mold is a natural part of the environment, but only appears in homes in areas where there is standing water, high amounts of moisture, or water damage. Asthmatic or allergic people have reactions when the mold or mold spores are inhaled.

Here are some tips to control mold allergens:

- In areas where moisture is high, place a de-humidifier to try to remove moisture from the air. De-humidifiers can be purchased at most home stores.
- Repair any water leaks in your home, and check for areas of standing water in your home, especially after hard rains
- Avoid the use of humidifiers, as these are reservoirs of standing water, and will actually breed mold and then put mold into the air.
- If your child has a bedroom in the basement, have them switch to a room upstairs, as basements are more prone to being humid, and therefore may have more mold.
- To remove mold from around window sills or in bathrooms, try using a cloth and a diluted solution of bleach (10%) to wipe down areas.
- Use the bathroom fan during a shower to reduce the amount of humidity.
- Do not paint or caulk over surfaces that have mold! The mold must be removed first!



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# **DUST MITES**

## What are dust mites?

Dust mites are microscopic bugs that feed of of dead skin cells that are shed by both people and animals. They are a common cause of allergy in many people. They cannot bite or spread disease, but they can aggravate symptoms of asthma, allergic rhinitis and eczema. Symptoms occur when the dust mite's debris is inhaled or comes in contact with the skin.

# Where are they found?

Dust mites live in warm, humid environments. Since they need people and animals to live, they tend to reside in environments where people spend time, such as in couches, mattresses, pillows, stuf ed toys, and carpeting. As they are attracted to humidity as well, they are often found in moist areas such as basements.

### How to control them

Environmental modification is the key to controlling dust mite allergy. Here are some tips:

#### Humidity:

Since dust mites thrive of of humidity, moist basements are a prime target for them. If you child has a bedroom in the basement, it is best if their room is changed to somewhere else. If there are areas in your house that are humid, such as the basement, we recommend getting a dehumidifier in order to reduce the humidity level. A humidity level of less than 50% cannot sustain dust mites.

## Bedding:

Pillows and mattresses are nesting places for dust mites. Symptoms of your child's dust mite allergy can be reduced by encasing the pillow and mattress in a hypoallergenic pillow and mattress cover. These can be found at department and home specialty stores. Extreme temperatures (hot and cold) kill dust mites. Wash your sheets, pillowcases, mattress pads, and any blankets in hot water and your normal laundry detergent at least once a week.

#### Carpeting

The ideal modification would be to remove wall-to-wall carpeting, as dust mites tend to settle in it. If the carpet can't be removed, frequent vacuuming, or even steam cleaning, is recommended to reduce dust mites.

### Stuf ed Toys:

Stuf ed toys also attract dust mites. Stuf ed toys that are on your child's bed should be removed in order to decrease your child's allergy symptoms. If they can be washed, wash them in hot water, as with your bedding. Stuf ed toys can also be placed in a plastic bag and be put in the freezer for 24 hours to kill dust mites.

#### Surfaces

Dust mites are a large percentage of house dust that can reside on shelves, dressers, and even along the edges of hardwood f oors. Remove the dust from these surfaces often by using a moist cloth that can pick up the dust without spreading it around.

## **PETS**

Pets can be another source of allergy in many people, and 15-30% of people with allergies are reactive to cats and dogs. Dander, saliva, and urine all have proteins that cause reactions in people that have pet allergy. A common misconception is that the pet hair is what causes the reaction when it is actually the dander (dead skin cells) that is shed from the pet and may collect in the fur.

## Where is pet dander found?

Dander and saliva collect in the pet's fur. From petting the animal, the fur from the animal is released into the air and can either remain airborne, or the fur can be left on furniture, bedding, and carpeting. Dander is a sticky allergen and can also be carried on clothing.

# How to control pet dander allergy

The best way to remove pet dander is to find another home for your pet. If you decide to find another home for your pet, it is recommended that a thorough cleaning be performed. Mattresses should be replaced and carpeting removed after the pet is gone. However, despite all of these measures, pet allergen will still be present in the home for several months to come.

There is not a difference between the amount of dander from pets that are long-haired as opposed to short-haired, and there is not a "hypo-allergenic" pet. For someone who has a pet allergy, the dander, saliva and urine may affect them no matter what.

## Here are some ways to avoid pet allergens:

- While at a friend or relative's house where there is a pet, try to minimize your contact
  with the pet. If you pet or play with the animal, make sure to wash your hands well,
  especially before touching your eyes and face.
- If you are keeping your pet, you may decide to have a designated "pet area" in the home or even keep the pet outside. However, dander can still be carried around the home on clothing and in the air, so you will never have a 'pet allergen-free' home.
- Frequent vacuuming and the use of high-efficiency particulate air (HEPA) filters may provide temporary removal of some of the allergens.
- Avoid having the pets sit on furniture and in your child's bedroom.

# **RODENTS (MICE AND RATS)**

Mice and rat allergens are very similar to those of cats and dogs. The allergens are found mainly in the urine, and are small particles that can be found in settled dust or can remain airborne. These allergens are known to cause increased symptoms in children with allergic rhinitis and asthma.

Tips for dealing with rodents:

- Avoid eating and storing food in your or your child's bedrooms
- Keep kitchen counters and f oors clean by cleaning up spills and crumbs as soon as possible
- Take the trash out daily, and use a trashcan that has a tight lid and odor control
- Mice like to find pieces of clutter to make homes with; try to keep clutter of the f oor and keep the yard free from litter
- $\bullet\hspace{0.4mm}$  In places where you see droppings, place traps or call an exterminator
- Close up any small holes or crevices that may serve as entry points for rodents into the home

# **ROACHES**

"Roach dust" can cause problems with asthma and allergies in people who are sensitive to this allergen. Roach dust is a combination of shed roach parts, urine, fecal material, and secretions of roaches. The allergens can brief y become airborne when "stirred up" but tend to settle quickly into carpeting, upholstered furniture and on surfaces. Roaches are very mobile, so the allergen could be widespread throughout the house.

## How to Control Roach Allergens

Roaches travel to where food is located, so they are often found in the cracks and smalls spaces of kitchens, though their allergen is found throughout the house.

- Avoid eating in bedrooms, as this may attract them into the room
- Keep kitchen f oors and counters clean of crumbs and open foods
- Close up any holes or cracks that may be in your kitchen

Many forms of roach treatment involve the use of sprays and bombs, however, these aerosols can worsen your child's asthma when inhaled. Try using these other forms of roach removal that are easily found at hardware and grocery stores.

- Roach baits: the roach will eat the bait, then carry it on to other roaches
- Borate powders: these powders will get on the roach's shell, then when it is licked of , will poison the roach

Place the powder or bait along baseboards or under sinks and cabinets, while being careful to keep these out of the reach of children and pets!

#### Roach dust removal

- Roach dust can be a part of house dust, just as with dust mites, and can be found on
  hard surfaces where dust collects such as on shelves, dressers, etc. Remove this dust
  often by cleaning with soapy water and a clean cloth that will pick up the dust and not
  spread it around.
- Vacuuming often will help to remove roach allergens, however this is only temporary
  until the roaches themselves are gone. Try to vacuum often; but try to avoid
  vacuuming when your child is in the room, as the vacuuming may stir up dust and
  cause more symptoms.
- Since roach allergens are airborne only brief y, an air filtration system, such as HEPA filters, may not be as ef ective in removing roach allergens.

