

# Indoor Allergens

## **What are indoor allergens?**

Indoor allergens are biological or chemical substances that trigger the immune system, causing an allergic reaction. Biological sources of allergens include pets, insects, dust mites, plants, bacteria, and mold. Chemical sources are often gases or particles released by items such as building materials, fabrics, glues, paints, solvents, dyes, and perfumes.

## **How can I be exposed to indoor allergens?**

The most common way to be exposed to indoor allergens is by breathing them. Exposures can also occur if allergens are ingested, or if they come into contact with the skin or eyes. All buildings contain indoor allergens because there are so many different sources. For instance, pet hair, dust mites, cockroaches, and mold are common sources of indoor allergens.

Outdoor plants can contribute to indoor allergens by releasing pollen that then enters buildings. Hay fever is an allergic response to grass pollen. Chemicals can also act as allergens. Metals, perfumes, dyes, and solvents found in common household products such as carpet, upholstery, laundry detergents, and paints can cause symptoms in people.

## **What are the effects of exposure to indoor allergens?**

An allergic reaction develops when a person who is sensitive to a particular substance, comes into contact with that substance. Exposures to an allergen can cause a runny nose, sneezing, coughing, difficulty breathing, skin rashes, and watery eyes.

Severe allergic reactions can be life threatening and require immediate medical treatment. Sensitivity to allergens varies between people; for instance, some people are allergic to cats, while others are not. Exposure to other chemicals (e.g., tobacco smoke), in addition to the allergen, can sometimes worsen the symptoms. Repeated or long exposure to the allergen will often make the symptoms worse.

## How can I avoid being exposed to indoor allergens?

- Find out which allergens are bothering you by visiting your doctor. After you identify the allergen, remove the source to prevent further reactions.
- Keep your home clean of mold, cockroaches, and dust. Keep areas dry and clean, such as bathroom window sills, basements, and refrigerator doors.
- Keep the relative humidity level in your home between 30-50%. This helps control the growth of dust mites and mold.
- Vacuum regularly in order to eliminate allergens in dust. Special vacuum bags (HEPA filter) can be used to control small dust particles and prevent them from re-circulating back into rooms.
- Wash bed sheets in hot water every 7 to 10 days to kill dust mites. Impervious mattress covers will help keep dust mites from getting inside mattresses.
- If you are sensitive to pollen, keep windows closed to reduce the amount of pollen that enters your home.
- Use unscented or low-odor detergents and paints to reduce exposure to chemical allergens.
- Hard-surfaced floors and simple window coverings make it easier to control dust levels in your home. Machine washable throw rugs can be cleaned frequently to remove dust and other allergens.
- Use fiber-filled pillows instead of feather-filled pillows.
- Food allergies may increase sensitivity to indoor allergens (e.g. Some people are allergic to certain foods, like peanut butter, chocolate, wheat, or milk).
- For information on the use of air filters to purify household air, see the fact sheet on air cleaners (<http://www.dhs.wisconsin.gov/eh/> click on “Air Issues”).

## What should I do if I suspect a problem?

New pets, cockroaches, water damage, high humidity, and home remodeling can trigger reactions to indoor allergens. If you suspect that you have allergies, consult your doctor. Have a skin test to determine the cause of your symptoms. Once the allergen is identified, take steps to reduce your exposure and control your symptoms.

A professional home inspector or indoor air specialist can help you identify sources of allergens in your home.

## For more information

- Contact the Wisconsin Division of Public Health, Bureau of Environmental Health, PO Box 2659, Madison, WI 53701-2659, (608) 266-1120; or
- Visit the department's website, [www.dhs.wisconsin.gov/eh](http://www.dhs.wisconsin.gov/eh)



Developed by the Wisconsin Division of Public Health,  
Bureau of Environmental Health  
1 West Wilson, Madison WI 53701  
P-47101 (revised 11/00)