

# **Exposure to pets and cockroaches allergy**

## **Introduction**

There is a body of evidence suggesting that allergic respiratory diseases, particularly bronchial asthma, have become more common in the last two decades in industrialised countries all over the world and are a true problem for the Health Authorities. Nevertheless, indoor allergens represent the major risk factor for development of allergic sensitization of airways because these antigenic proteins are usually inhaled in the first years of life.

Pets and cockroaches are two increasing causes of respiratory allergy in indoor environments. Cockroach allergens are the second agent of indoor allergic sensitisation.

## **Cockroach Allergy**

Cockroaches live in all types of buildings and all kinds of neighborhoods. Some people develop allergy symptoms when they are around cockroaches. Luckily, there are ways to treat a cockroach allergy and prevent and get rid of cockroaches.

Almost 62% of U.S. households have pets, and more than 161 million of these pets are cats and dogs, unfortunately, millions of pet owners have an allergy (allergic rhinitis) to their animals.

The proteins found in a pet's dander, skin flakes, saliva and urine can cause an allergic reaction or aggravate asthma symptoms in some people. Also, pet hair or fur can collect pollen, mold spores and other outdoor allergens.

The increasing prevalence of allergic sensitization to indoor allergens such as dust mites, pets and cockroaches is the result of the changes in indoor environments induced by human activities. The increasing time spent indoors determine a reduction in natural air ventilation and, consequently, higher levels of allergen concentrations and longer exposure to allergens.

## **Where do cockroaches usually live?**

Cockroaches usually live where there is something they like to eat, in moist areas, and in warm hiding places.

Things they like to eat. Food and paints, wallpaper pastes, newspapers, and book binding material.

Moist areas. Any moist area including standing water and “sweating pipes.”

Warm hiding places.

## How do cockroaches cause allergy symptoms?

Cockroach *allergens* (substances that cause allergy symptoms) come from different parts of the cockroach. These allergens also can cause asthma. An allergy occurs when you react to things like cockroaches and dust mites that don't affect most people. If you are allergic to cockroaches and you come in contact with them, you may have symptoms. This is called an *allergic reaction*.

## How can I prevent or get rid of cockroaches in my home?

1. Keep food and garbage in containers with tight lids. Never leave food out in the kitchen or anywhere else.
2. Clean up all food crumbs and spilled drinks right away
3. Store food in tight containers or storage jars.
4. Wash dirty dishes right away.
5. Don't leave out pet food, except when your pet is eating
6. Keep counters, sinks, stove, tables, and floors clean and clear of clutter.
7. Vacuum or sweep the kitchen floor after meals. Mop the floor at least once a week.
8. Fix leaky faucets, drain pipes, and other moisture problems.
9. Get rid of piles of things, like cardboard boxes and newspapers, where cockroaches may hide.
10. Plug up small spaces around the house, such as cracks between the wall and floor, where cockroaches can enter
11. Use poison baits, boric acid, or traps.

## **Reduce access to and through buildings**

The first defence against unwanted visitors—pests included—is making sure they do not get into the building. If there are apartments with pest infestations, spread of the infestation can be minimized to the extent the passageway from these apartments to the rest of the building can be blocked. Pest management experts recommend regular inspections of the building exterior to spot holes where pests may gain entry. Other steps to keep insects and rodents from entering or traveling through your building include:

- Fix broken windows, screens, vent covers or holes in exterior walls as soon as possible. A mouse can fit through a hole as small as the diameter of a dime.
- Doors and windows that do not completely close must be fixed immediately to prevent pests from getting in. Doors that do not seal at the bottom should be fitted with weatherproof sweeps, or the bottom should be extended, or the threshold built up to insure the gap is less than 1/4 inch.
- Automatic door closers should be considered for frequently used doors that tend to be left open, and for doors that are near rooms or outdoor areas where food or trash is present.
- Do not leave doors to buildings propped open, particularly near kitchen areas or dumpsters.
- Place screens over air intake and exhaust vents for heating ventilation and air conditioning (HVAC) systems to prevent insects and rodents from entering buildings. Whenever possible, use screens on doors, hatches, skylights and other openings. Cover fan and vent openings with galvanized mesh with openings of 1/4 inch or smaller.
- Carefully review HVAC components, such as piping and duct work, where they meet floors, walls or ceilings, and close openings pests could enter to prevent these from becoming runways for pests. The most commonly used materials for this are caulk, sheet metal, knitted copper mesh or steel wool, spray foam insulation and cement. Knitted copper mesh, steel wool and cement are among the best materials to plug openings of 1/4-inch or greater. Rodents can gnaw through softer substances.
- Plug gaps and openings where wires and conduits come through walls, ceilings, floors, the backs of cabinets, etc. to prevent rodents and insects from using electrical wires and conduits as a means to gain access to, and travel throughout, buildings.
- Eliminate pest access in plumbing systems. Seal around sill cocks, sewer lines and other openings. Use caulk, knitted copper mesh, steel wool or foam insulation to block access around pipe openings. These materials are often used in combination with hinged metal “collars” designed specifically to cover gaps around plumbing and other service conduits.

## **Reduce sources of water.**

Take steps to reduce sources of water for pests:

- Fix leaking pipes and faucets as soon as possible. A five-gallon bucket under a slow leak may seem an easy solution to a plumbing problems. However, it provides a watering trough for rats, mice and cockroaches and may be a moisture source for supporting mold growth.
- Keep roof drains and downspouts open and free flowing.
- Keep gutters clean and unclogged. Standing water and debris in gutters provides water for rats, carpenter ants, mosquitoes and other pests.
- Fix clogged or slow drains as quickly as possible.
- Replace water damaged wood as soon as possible.
- Insulate pipes in areas that might be prone to condensation. Condensation is a significant source of water for pests.
- Empty mop buckets and store mops head up.

## **Management and Treatment**

### **How is cockroach allergy treated?**

-Take steps to prevent or get rid of cockroaches.

-Take medicine to relieve your symptoms. Your allergist may prescribe medicines such as antihistamines, decongestants, nose (nasal) sprays, or eye drops for allergy symptoms and asthma medicine for asthma symptoms.

-Get allergy shots, if the allergist suggests you get them. Some people need them when they can't avoid an allergen. The shots contain a tiny but increasing amount of the allergen you're sensitive to. Over time, your body becomes used to the allergen and no longer reacts to it.

## **Pet Allergy Management and Treatment**

-Avoid being around dogs and cats; if you have a pet at home, take specific steps to limit exposure.

-Nasal sprays, antihistamines and bronchodilators can help relieve symptoms.

-Consider allergy shots (immunotherapy).

### **Pet allergens**

Cats and dogs are the most popular pets in the western world and up to a third of asthma sufferers share their home with a pet. Sensitization to cat allergen has been shown to be a risk factor for patients seeking treatment in emergency rooms.

Despite continued symptoms many cat-or dog-allergic patients

Consider removal of the animal to be an unacceptable option.

Airborne cat and dog allergen can be detected in undisturbed conditions for prolonged periods, where as house dust mite allergen only becomes airborne after vigorous disturbance and settles rapidly. Pet allergens are carried on smaller particles than house dust mite allergen. This is likely to underlie the rapid onset of symptoms experienced by cat-or dog-allergic patients entering a house with a pet.

### **Symptoms of Pet Allergies**

1. Sneezing
2. Runny or stuffy nose
3. Facial pain (from nasal congestion)
4. Coughing, chest tightness, shortness of breath and wheezing
5. Watery, red or itchy eyes
6. Skin rash or hives