



## Cat Allergy

### WHAT IS CAT ALLERGEN?

Direct contact with cats may produce various allergic symptoms. For example, hives (contact urticaria) may occur when a cat licks an individual's skin. Cat allergen may also be rubbed on one's eyes or nose after petting or holding a cat. This is a common, but often ignored, source of significant exposure.

The most important route of exposure results from breathing of airborne cat allergen. This allows deposition of large quantities of allergen in both the upper and lower airways. The most important determinants of an allergic reaction to a cat are the amount of airborne allergen in the immediate environment, and an individual's sensitivity to the allergen.

An allergen is a material (such as a pollen grain, dust particle, or animal dander) which is capable of provoking an allergic reaction (sneezing, rash, shortness of breath).

Cat allergen, the allergy causing material from cats, is not cat hair, but rather a protein present in the dander and saliva of cats. These allergens become airborne as microscopic particles, which when inhaled into the nose or lungs can produce allergic symptoms.

### SYMPTOMS

The symptoms of cat allergy may include the following:

- Runny nose and congestion (rhinitis)
- Itchy eyes (conjunctivitis)
- Sneezing
- Rash or skin itching (contact dermatitis)
- Hives (contact urticaria)
- Shortness of breath (dyspnea)
- Wheezing

The symptoms of cat allergy usually do not appear immediately.

- Rhinitis (runny nose and congestion) seldom becomes severe before 15-30 minutes, and asthma symptoms begin after 30 minutes.
- Symptoms may not occur until there have been several days of cumulative exposure.
- Some patients may experience a reduction or an increase in symptoms after long-term exposure.

### SOME FACTS

- Exposure to cat allergens is an important cause of allergic disease, especially asthma.

- At least 2% of the population is allergic to cats, and 1/3 of these have a cat in the house.
- Cat allergy is common among asthmatics, and a significant risk factor for ER visits with asthma.
- Patients who are allergic to cats often experience a rapid onset of symptoms.
- Less than 10% of airborne cat allergen comes from the cat breathing.
- Cat allergen is found in the dander, saliva, exocrine glands, urinary, and fecal proteins.
- Male cats shed more allergen than female cats.

## **ENVIRONMENTAL CONTROL**

For several reasons, controlling the environment of a person allergic to cats is especially difficult. Among them are the following:

- Cat allergen is extremely difficult to remove from a patient's environment.
- The allergen remains airborne in undisturbed conditions for extended periods of time.
- A significant portion is associated with particles less than 2.5 microns in diameter.
- Cat allergen adheres to walls and has been found in homes which have never had a cat as a pet.
- Many patients report more severe allergic symptoms when exposed to certain cats.
- As far as the amount of allergen shed, considerable variation exists between cats and from time to time in the same cat.

For all these reasons, for most patients avoidance can only be considered an adjunct to other forms of therapy. Even though avoidance represents the ideal form of therapy for the allergic patient, it is often impossible to accomplish. Patients are often reluctant to give up their pets, and even when they do so, cat allergen is extremely difficult to remove from a patient's environment.

The following steps can be taken, however to reduce the level of cat allergen in air and in house dust.

1. Remove the cat entirely.
2. When this is not possible, keep the cat outdoors all or some of the time.
3. Limit an indoor cat to a single area of the house. It is especially important to keep the cat out of the bedroom of the allergic patient.
4. Keep the house well ventilated. An energy-efficient house actually traps animal dander inside.
5. Shampoo the cat in plain water every few weeks to remove much of the surface allergen. Cats bathed from a young age do not mind being washed.
6. Remove rugs, carpeting, stuffed animals, and fabric-upholstered furniture as cat allergen adheres to soft furnishings. When touched, the cat allergen is then released into the air.
7. In an uncarpeted room, the combination of vacuum cleaning, air filtration and washing the cat can reduce airborne cat allergen by as much as 90%.
8. Cover mattresses and pillows with impermeable covers.
9. Launder bedspreads and blankets frequently.
10. Use a face mask when brushing the cat or changing kitty litter.
11. Wash your hands after touching a cat.
12. Change clothing after coming in contact with a cat. Wash the clothing in hot water.

13. Take particular care when vacuuming because vacuuming can blow the cat allergen into the air.  
Use a vacuum with a high level of allergen containment.

\*\*Adapted from Allergy Forum, Miles Inc. Pharmaceutical Division. Allergy Products