

Allergies in Cats

What are allergies and how do they affect cats?

One of the most common medical conditions affecting cats is allergy. An allergy occurs when the cat's immune system overreacts or is hypersensitive to foreign substances called **allergens**. Allergens are simply foreign proteins that the body's immune system tries to remove. Examples of allergens common in humans are pollens, dust, molds, and pet hair. Hypersensitivity in cats can manifest in one of three ways:

1. The most common manifestation is itching of the skin, either localized to one area or a generalized reaction all over the cat's body.
2. Another manifestation involves the respiratory system and may result in coughing, sneezing, and wheezing. Sometimes, there may be an associated nasal or ocular (eye) discharge.
3. The third manifestation involves the digestive system and can result in vomiting, flatulence, and/or diarrhea.



Does that mean that there are several types of allergies?

Yes. There are four common types of allergies in the cat: insect (fleas), food allergy, inhalant (house dust, pollen, and molds), and contact. Each of these has some common physical expressions and signs in cats, and each has some unique features.

What is flea allergy and how is it treated?

Flea allergy is the most common allergy in cats.

In spite of common belief, a normal cat experiences only minor skin irritation in response to fleabites. On the other hand, a cat with flea allergies has a severe reaction to even a single fleabite. This reaction is an allergic response to proteins or antigens present in the flea's saliva. When a flea bites a cat to consume a blood meal, some of its saliva is injected into the skin. Just one fleabite may cause such intense itching that the cat may severely scratch or chew itself, leading to the removal of large amounts of hair. There will often be open sores or scabs on the skin, resulting in a secondary bacterial skin infection (pyoderma). The area most commonly involved is over the rump or base of the tail. In addition, the cat may

have numerous small scabs around the head and neck. These scabs are often referred to as **miliary dermatitis**, a term that was coined because the scabs look like millet seeds (see handout "Miliary Dermatitis in Cats" for more information on this skin condition).

"This reaction is an allergic response to proteins or antigens present in the flea's saliva."

Since the flea saliva causes the reaction, the most important treatment for flea allergy is to prevent fleabites. Most flea infestations occur in the warmer weather but can occur year round. Strict flea control is the foundation of successful treatment. There are many highly effective flea control products, both for treating the cat and for controlling fleas in the environment (for more details, see handout "Flea Control in Cats"). Modern monthly flea preventives have made it easier and less expensive than ever to prevent fleas from affecting your cat.

Corticosteroids (cortisone or steroids) can also be used to block the allergic reaction and give immediate relief to a cat suffering from the intense itching of flea allergy dermatitis. This is often a necessary part of treatment especially during the initial stages. If a secondary bacterial skin infection occurs from the flea allergy dermatitis, appropriate antibiotics must be used, generally for two to four weeks. See handout "Flea Allergy Dermatitis in Cats" for more detailed information about flea allergies in cats.

What is food allergy and how is it treated?

Food allergies in cats are caused by an immune reaction to a food or food additive. The allergy most frequently develops in response to the protein component of the food; for example, beef, pork, chicken, or turkey. Vegetable proteins such as those found in corn or wheat, as well as food additives and preservatives, may cause food allergies in some cases. Food allergy may produce any of the clinical signs previously discussed, including itching, digestive disorders, and respiratory distress.

Food allergy testing is recommended when the clinical signs have been present for several months, when the cat has a poor response to steroids, or when a very young cat itches without other apparent causes of allergy. Testing is conducted by feeding an elimination or hypoallergenic diet. This means a diet in which the ingredients have not previously been fed to the cat (e.g., rabbit, venison). Because it takes at least eight weeks for all other food products to be removed from the body, the cat must eat the special diet exclusively for a minimum of eight to twelve weeks. If a positive response occurs, you will be instructed on how to proceed.



If the diet is not fed exclusively, it will not be a meaningful test. This means absolutely no treats, other foods, people foods, or flavored medications during this period. This cannot be overemphasized. Even accidentally providing a tiny amount of the offending protein can result in invalidating the test.

If your cat's symptoms improve after the food trial, a presumptive diagnosis of food allergy is made. Exclusively feeding a hypoallergenic diet lifelong is highly successful in treating food allergic skin disease in many cats.

See handout "Food Allergies in Cats" for more information on food allergies.

What is inhalant allergy or atopy?

Inhalant allergy or atopy is not well understood in cats. In dogs and humans, atopic dermatitis generally refers to allergic reactions to environmental allergens such as pollens, grasses, molds, mildew, and house dust mites).

"Most cats that have an inhalant allergy are allergic to several allergens."

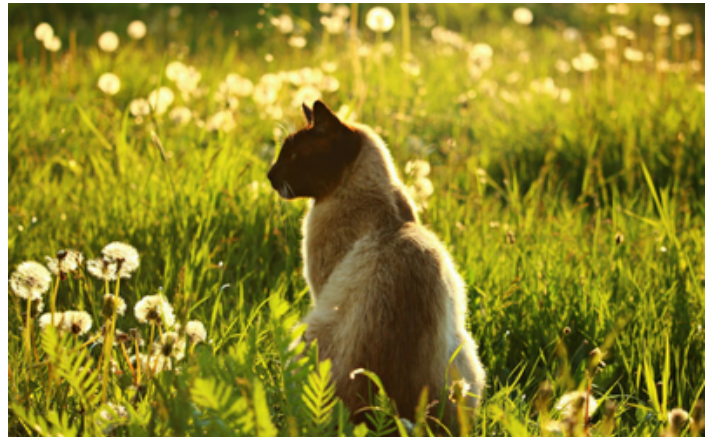
Many of these allergies occur seasonally, such as ragweed, cedar, and grass pollens. However, others are with us all the time, such as molds, mildew, and house dust mites. When humans inhale these allergens, we express the allergy as a respiratory problem. In humans, atopy is also sometimes called 'hay fever'. The cat's primary reaction to atopy is severe, generalized itching.

Most cats that have an inhalant allergy are allergic to several allergens. If the number of allergens is small and they are seasonal, itching may last for just a few weeks at a time during one or two periods of the year. If the number of allergens is large or they are present year-round, the cat may itch constantly.

How is atopy treated?

Treatment depends largely on the length of the cat's allergy season. It involves one of two approaches:

- The first approach involves the use of corticosteroids (e.g., prednisone), as well as improving the health of the hair and skin coat using spot-ons, sprays and/or shampoos. Steroids will dramatically block the allergic reaction in most cases and bring about rapid improvement in the cat's clinical signs. Steroids may be given orally or by injection, depending on the cat's condition. If steroids are appropriate for your cat, you will be instructed in their proper use.
- Treatment with antihistamines and essential fatty acids is variable. Some cats respond well to a particular antihistamine (e.g., cetirizine HCl, brand name Reactin®, Zyrtec®), while others are ineffective. It is important to understand that it can take up to 7–10 days before antihistamines become effective, therefore they are often ineffective in sudden flare-ups. Likewise, essential fatty acids (fish oils) are similarly ineffective during sudden episodes because they require several weeks to take effect. Cats predisposed to atopic dermatitis should be tried on fatty acid supplements to see if they help lessen future flare-ups and clinical signs.
- Another treatment for cats with atopy is immunosuppressive drug therapy (e.g., cyclosporine, brand name Atopica®). These drugs specifically target the immune cells involved in atopic dermatitis to reduce the hypersensitivity reaction that the body is experiencing. It can take up to 30 days for the maximum benefit of the drug to take effect, therefore it is not used for sudden allergic flare-ups.



- The final approach to chronic inhalant allergy treatment is desensitization with specific antigen injections or allergy shots. This is not to be confused with injections of corticosteroids. Once the specific sources of allergy are identified through allergy blood tests (most commonly IgE blood tests) or intradermal skin testing, very small amounts of the antigen are injected weekly. The aim is to 'reprogram' the body's immune system response to the allergen. It is hoped that as time passes, the immune system will become less reactive to the allergens. For most cats, a realistic goal is for the itching to be significantly reduced in severity rather than be completely cured. In some cats, the itching and associated clinical signs may completely resolve while others may experience minimal improvement. Steroids may be used until the allergy shots become effective (up to 12 months), or on an intermittent basis to control severe itchiness.

Any cat suspected of having atopic dermatitis should also be considered for a hypoallergenic food trial. Many cats with atopic dermatitis are also allergic to an ingredient in their food, making diagnosis and treatment more challenging. As previously mentioned, this food trial should last 8 to 12 weeks in most cases.

It is important to keep in mind that atopic dermatitis is a lifelong condition and frequent relapses are common. There is no 'cure' for allergic skin disease, only treatments that lessen clinical signs and improve quality of life. While cats certainly appear less likely to develop side effects associated with chronic steroid usage than dogs or humans, their prolonged use must be carefully monitored. It is important to work closely with your veterinarian to provide the best care for your cat's allergic condition and fully understand the risks and benefits of each treatment (see handout "Steroid Treatment – Effects in Cats" for more information).

What is contact allergy and how is it treated?

Contact allergies are the least common of the four types of allergies in cats.

"They result in a local reaction on the skin from contact with an allergic substance."

They result in a local reaction on the skin from contact with an allergic substance. Examples of contact allergy include reactions to shampoos, flea collars, or certain types of bedding, such as wool. If the cat is allergic to such substances, there will be skin irritation and itching at the points of contact. Removal of the contact irritant solves the problem. However, identifying the allergen can be challenging in many cases.

Contributors: Tammy Hunter, DVM; Ernest Ward, DVM

© Copyright 2018 LifeLearn Inc. Used and/or modified with permission under license.