

## Flea Allergy Dermatitis

**Also Known As:** Flea bite hypersensitivity

**Transmission or Cause:** When a flea sucks blood from a pet, it passes its saliva into the animal's skin. Animals that are allergic to flea allergen will experience swelling, irritation, and itchiness. When the animal scratches the bites, further trauma to the skin lesions, hair loss, and more intense itchiness will result. A single flea bite can cause these symptoms in an allergic pet; animals without this allergy must be bitten many more times before their skin becomes irritated.

**Affected Animals:** Any breed or sex of dog can be affected. The average age for flea allergy is three to five years. Cats also can be allergic to fleas.

**Overview:** Animals that have flea allergy dermatitis are hypersensitive to the saliva a flea passes into the skin when it bites. The bite from a single flea will have a minimal affect on a normal animal, but animals with flea allergy will experience immediate itching, redness and swelling. It is the animals themselves, and not the fleas, that typically do the worst damage. When an animal scratches its fleabites excessively, hair loss and skin abrasions can result. Some animals will develop circular, red, painful sores called hot spots that can occur anywhere on the skin, but commonly are seen along the back and tail base.

The most common allergic skin disorder, flea allergy only can be resolved by preventing the animal from being bitten by the flea and removing all the fleas from the animal's environment. There are medications available, however, that will alleviate the itching and discomfort until complete flea control is achieved.

**Symptoms:** Common findings in an animal that is allergic to fleas include increased scratching or itchiness, loss of hair, hairs that appear broken, crusts and erosions of the skin, and pimple-like bumps. Thickened skin with darkened areas can be seen in severe cases. Fleas or flea feces, which can be difficult to detect, indicate the presence of fleas. Hot spots sometimes can be seen along the dog's back and tail base. These sores are usually circular, red, oozing, and very painful, often requiring medical attention.

**Description:** Flea allergy is the most common allergic skin disorder, affecting animals with an abnormal sensitivity to the saliva a flea injects into the skin when it takes a blood meal. In reaction to flea allergen, allergic animals will have inflammation and irritation of their skin, not to mention intense itchiness. Hair loss and skin lesions can result when an animal scratches or bites its irritated skin.

The problem may last year-round in warm climates or in flea-infested indoor environments. In regions with cold winters, the allergy will appear seasonally during the warm months of the year. Treatment of flea allergy requires eliminating the fleas from the animal, other pets, and the surroundings. Various medications can provide temporary relief of itching for severely affected animals until flea control is achieved.

It may be difficult to detect fleas on a pet, but brushing it over a white sheet may help: flea feces, a dark, black material, that falls from the animal's hair onto the sheet would suggest the presence of fleas. A flea comb also can be used to look for the feces or the fleas themselves. Pets should be examined often if itching is noted.

**Diagnosis:** The symptoms of flea allergy can mimic other disorders of the skin. Before concluding that an animal is allergic to fleas, the examining veterinarian first will attempt to rule out allergies to food and inhalants, internal parasites, drug reactions, hair follicle inflammation (folliculitis), fungal infection, and other topical parasites, all of which may have signs similar to an allergic reaction to fleas. A thorough history and physical exam will be required, during which the veterinarian will analyze the type and size of the skin lesions.

It is often very beneficial for pets with suspected allergies to be tested for allergens that may be causing the animal to be itchy and uncomfortable. There are two common techniques that veterinarians can use to determine any underlying allergies to allergens such as fleas. One technique is called intradermal skin testing which requires the injection of different allergens into the skin. This usually is done by a veterinary dermatologist and may require sedation. The second technique involves taking a blood sample and sending it to a laboratory for allergy testing. This is called serologic allergy testing. There are varying opinions about serologic testing, so consultation with the examining veterinarian will be necessary.

**Prognosis:** An animal with flea allergy dermatitis will always remain allergic to fleas. The severity of this allergy typically worsens as the pet ages. If fleas are eliminated from the animal's environment, the pet will stop suffering the symptoms of flea allergy. If the response is incomplete but flea control has been achieved, the animal should be reevaluated by the veterinarian for concurrent allergies.

**Treatment:** The goals of treatment are to alleviate the animal's allergic reaction to fleas by preventing the flea from biting the animal and eliminating the fleas from the environment. It is very important that owners completely remove the fleas and their eggs from the animal's environment. This involves the treatment of all household animals for fleas to prevent the allergic pet from becoming reinfested. There are many commercially available products that kill fleas both indoors and outdoors. Additional products have been designed for use on the animal. Professional pest extermination companies, which usually carry a satisfaction guarantee, are also an option. A veterinarian can customize a flea control program to meet an allergic pet's individual needs.

Therapy for the allergic reaction is based on the severity and history of the symptoms. Following an evaluation of the dog, the veterinarian may prescribe any of the following medications: topical treatments, medicated shampoos, steroids, antihistamines, antibiotics, and fatty acid supplements such as skin oil replacement. The examining veterinarian often will recommend a commercially available product that kills fleas on contact, before they have a chance to bite. These products are ideal in helping prevent further flea allergic reactions.

The effectiveness of allergy shots, or hyposensitization, for treating flea bite hypersensitivity remains controversial. This method of treatment, prescribed by a veterinary dermatologist, usually is reserved as a final therapeutic step for severely afflicted animals not responding to strict flea control.

**Prevention:** Prevent fleas from entering the household. If evidence of fleas is noted on the dog or on any other pets in the household, early intervention can stop the problem before the symptoms become severe.