

Canine Atopy (Atopic Dermatitis)

from [Dog Owner's Home Veterinary Handbook](#)

Canine atopy is a disease in which there is an inherited tendency to develop IgE antibodies in response to exposure to *allergens* inhaled or absorbed through the skin. This extremely common allergic skin disease is second only to flea allergy dermatitis in frequency, and affects about 10 percent of dogs.

Atopy begins in dogs one to three years of age. Susceptible breeds include Golden and Labrador Retrievers, Lhasa Apsos, Wire Fox Terriers, West Highland White Terriers, Dalmatians, Poodles, English and Irish Setters, Boxers, Bulldogs, among others.

Signs first appear in conjunction with the weed pollens of late summer and fall. Later, other pollens begin to influence the picture: tree pollens in March and April; then grass pollens in May, June and early July. Finally, the dog starts to react to wool, house dust, molds, feathers, plant fibers and so forth. With prolonged exposure and multiple allergens, the condition becomes a year-round affair.



**Itchy papules between toes,
caused by atopy.**



Canine atopy: Note the characteristic brown stains on the feet from licking at the paws.

In *early* canine atopy, itching is seasonal and the skin looks normal. Dogs scratch at the ears and underside of the body. The itching is often accompanied by face-rubbing, sneezing, a runny nose (*allergic rhinitis*), watery eyes and licking at the paws (leaving characteristic brown stains on the feet). In many dogs the disease does not progress beyond this stage.

When it does progress, an itch-scratch-itch cycle develops with deep scratches (called *excoriations*) in the skin, hair loss, scabs, crusts and secondary bacterial skin infection. These dogs are miserable. In time, the skin become and darkly pigmented. A dry or greasy seborrhea with flaky skin often develops in conjunction with skin infection.

Ear canal infections may accompany these signs, or may be the sole manifestation of atopy. The ear flaps are red and inflamed, and the canals filled with a brown wax that eventually causes bacterial or yeast otitis.

Canine atopy, especially when complicated by *pyoderma*, can be difficult to distinguish from flea allergy dermatitis, scabies, demodectic mange, food allergies and other skin diseases. The diagnosis can be suspected on the basis of the history, location of skin lesions and seasonal pattern of occurrence. Skin scrapings, bacterial and fungal cultures, and a trial on a hypoallergenic test diet should be considered before embarking on an involved course of treatment for atopy. It is important to treat and eliminate fleas. The majority of dogs with canine atopy are allergic to fleas and may have an associated flea allergy dermatitis complicating the picture.

The preferred method of diagnosing canine atopy is through intradermal skin testing, which means injecting small amounts of many known allergens and observing the skin reaction. This can be time consuming and expensive, because it requires many trips to the veterinarian. To be accurate, all supportive drugs must be withdrawn during the testing period. If intradermal skin testing is not available, a serologic blood test (ELISA) designed to detect group-specific IgE antibody may assist in making the diagnosis.

Treatment: The most effective long-term solution would be to change the dog's living circumstances to avoid the allergen. The atopic dog is usually allergic to many different allergens, however, and it often is not practical or feasible to avoid exposure to them all.

Most dogs with atopy respond well to treatment. A first and most important step is to reduce the threshold for scratching by treating and eliminating all associated irritative skin problems such as *seborrhea* and *pyoderma*.

Antihistamines control itching and scratching in 20 to 40 percent of atopic dogs. Corticosteroids are the most effective anti-itch drugs, but also have the most serious side effects. They are best used intermittently in low doses

and for a limited time. Preparations containing hydrocortisone with Pramoxine are often prescribed for treating local areas of itching. Pramoxine is a topical anesthetic that provides temporary relief from pain and itching.

Derm Caps and other essential fatty acid products derived from fish oils have produced good results in some dogs. They are used as nutritional supplements in conjunction with other therapies. A variety of shampoos are available and may be prescribed by your veterinarian to rehydrate the skin, treat bacterial infection and control seborrhea.

Dogs that do not respond to medical treatment can be considered for immunotherapy with hyposensitization. This involves skin testing to identify the allergen(s) and then desensitizing the dog to the specific irritants through a series of injections given over a period of 9 to 12 months or longer.