

Canine Allergies

**What are allergies and how do they affect dogs?**

Allergies may be defined as the body’s response to foreign proteins. For our purposes, we will consider allergies to be any of the common reactions or responses to pollens, flea bites and some foods that result in itching.

Many animals will not exhibit clinical signs until the additive effect of multiple allergens causes them to exceed their threshold. For this reason, we do not always need to eliminate every allergen in order to successfully treat your pet. We need to try to identify and eliminate what we can to drop him/her below the threshold of discomfort.

Although this may sound easy, it is often a long, frustrating process before we discover what works for a particular individual. Close communication and follow-up appointments to see how the pet is responding to therapy is essential to success.

**Is there more than one type of allergy?**

Yes, there are four known types of allergies in the dog:

* Contact
* Flea
* Food
* Inhalant

**I have been told that my dog is atopic. Is this the same as transdermal allergy?**

Yes. After flea allergy dermatitis (FAD), atopy is the second most common type of allergy in the dog. It is caused by topical allergens to which the dog’s immune system overreacts. Most dogs (70 percent) begin to show signs between one and three years of age, but can start as early as one month or as late as six years. Most allergies that begin under six months or over six years of age involve food.

**What exactly causes it?**

There are a wide variety of allergens that can cause atopy. These are similar to the causes of hay fever or human asthma. When the affected individual is exposed to dust, pollens or molds, they are absorbed through the skin and an allergic response occurs.

Certain breeds are more prone to atopy than others, but it can occur in any breed. There also seems to be a genetic predilection.

**What happens to the dog when this occurs?**

Atopy in the dog is usually characterized by seasonal, generalized itching. Early on, many owners think their dogs’ behavior is normal, but as the disease progresses the signs become worse.

Atopic animals will usually rub, lick, chew, bite or scratch at their feet, muzzle, ears, armpits or groin. This can cause hair loss, redness and thickening and/or darkening of the skin. Saliva will often stain light-colored hair resulting in an orange or reddish-brown color. Some dogs (20 percent) will only show signs associated with chronic ear inflammation and infection.

**How do you find the cause of my dog’s inhalant allergy?**

Diagnosis is not easy. It is based on the presence of clinical signs as well as ruling out other causes of itching such as flea allergies, food allergies, parasites or bacterial dermatitis. The itching caused by grass pollen looks the same as itching caused by house dust mites and many molds. In other words, your dog may be allergic to several different things with the end result being the same.

A thorough medical history will help narrow the causes. For example, if the itching occurs in the spring when certain pollen is prevalent, this narrows the field of investigation.

**I understand my dog will have to have allergy tests to make a diagnosis. Is this true?**

Approximately 80 percent of allergy diagnoses can be confirmed by allergy testing. There are two types of allergy tests. Skin testing involves injecting a series of antigens under the skin, while serum testing involves taking a blood sample.

Serum testing, also called IgE testing, is the method used most commonly at our facility. The blood is evaluated for the presence of immune cells against certain allergens. If the body contains a high number of these IgE antibodies, an allergy to that allergen exists.

Once the diagnosis has been made, it is possible to desensitize the dog. This involves the use of specific antigen injections that can be formulated according to the results of the allergy tests. The theory is that the controlled injections of increasing amounts of the offending allergens “reprogram” the dog’s immune system to reduce its response.

For most dogs, allergen therapy results in significantly reduced itching and may be completely curative in some (45 to 60 percent). Some improvement is seen in 80 percent of dogs who are treated with allergy injections. Results are usually seen within three to six months, but some animals do not respond for nine to 12 months. If there is no improvement after that, re-evaluation is necessary.

**If this does not work, what else can be done?**

Anti-inflammatory drugs including corticosteroids, antihistamines and cyclosporin (or combinations of these) will often alleviate itching. In addition, the use of certain omega fatty acids aid many pets with allergic skin disease.

However, these approaches treat only the clinical signs, not the underlying allergy. Finding the right combination of therapies can be frustrating. It is by experimenting with different treatments that the appropriate combination is ultimately discovered. As time goes by, therapies may need to be occasionally altered to keep your pet comfortable.

**My friend’s dog has an atopy and seems to be helped by regular bathing. Can I try this?**

Many dogs benefit from weekly bathing with special shampoos or topical sprays. Atopic skin is sensitive and subject to drying, so only hypoallergenic shampoos should be used. Rinsing should be very thorough. You can follow the bath with a remoisturizing rinse or spray.

Research shows that some allergens are absorbed through the skin and it is thought that frequent bathing reduces the amount of allergens that the pet absorbs. Some shampoos incorporate omega fatty acids, which may be absorbed through the skin and help reduce itching. Antibiotics or antifungal medication may also be used if there is a secondary bacterial skin infection (pyoderma) or yeast dermatitis.

**My dog only itches in the spring and I have been told he/she has a seasonal allergy. What does this mean?**

Seasonal allergies and atopy describe the same type of allergic skin disease. The majority of atopic dogs experience itching during certain seasons when flowers or trees are blooming and producing pollens. Other atopic dogs will have problems year-round. This means the allergen is constantly present.

Many dogs with atopy begin with seasonal itching, but continue to develop reactions for progressively longer periods of time. This can result in year-round allergy problems. Treatment recommendations may need to be adjusted as the dog's symptoms change.

**When my dog’s allergies are bad, he/she seems to have a terrible smell. Is this normal?**

When allergies occur, the skin produces more sebum, which is an oily material that causes a musty odor. Once the itching and scratching are controlled, the odor and seborrhea (dandruff) also clear up.

Another cause of odor is infection. Yeast and bacterial infections in the skin and ears can produce an unpleasant odor and are very common in animals with atopy.