



INHALANT ALLERGY

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 so on that result in itching.

Is there more than one type of allergy?

Yes, there are at least five common types of allergy in the dog:

- a) Flea
- b) Inhalant
- c) Food
- d) Contact
- e) Bacterial Hypersensitivity



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

Yes. After flea allergy dermatitis (FAD), atopy is the second most common type of allergy in the dog. It is caused by an inhaled allergen to which the dog's immune system overreacts.

What exactly causes an inhalant allergy?

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 inhales dust, pollens or molds, the allergic response occurs.

What happens to the dog when this occurs?

Atopy in the dog is usually characterized by seasonal, generalized itching. Affected dogs chew, lick and scratch all over, especially on the feet and face. Saliva will often stain light colored hairs resulting in orange or reddish brown hair. The dog may also scratch and rub around the eyes and ears, the axillae (armpits), the groin or the inside of the thighs.

In humans, inhaled allergens cause respiratory problems such as hay fever or asthma. Dogs will occasionally have respiratory signs in addition to the pruritus (itching).



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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 and ruling out other causes of pruritus such as flea allergy dermatitis or food allergies. The clinical signs and itching caused by grass pollen are the same as those 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: excessive itching and scratching.

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 heard that my dog will have to have allergy tests to make a diagnosis. Is this true?

In order to determine the *exact* cause of your dog's itching, allergy tests will be required. Approximately 80% of allergy diagnoses can be confirmed by allergy testing. There are two primary methods of allergy testing. The traditional allergy test is called intra-dermal allergy testing and consists of injecting a tiny amount of allergen into the skin. If the body produces a response to the allergen, the body is said to be allergic to that substance. A more recently developed allergy test involves taking a blood sample, and is called IgE allergy testing. The blood is evaluated for the presence of IgE antibodies against specific food allergens. If it contains a high number of these IgE antibodies, an allergy to that allergen is presumed to exist. Your veterinarian will discuss the best type of testing for your pet's condition.

Once the diagnosis has been made, it may be possible to desensitize the dog to the offending allergens. This involves the use of specific allergen injections that will be formulated for your pet according to the results of the allergy tests. The theory behind hyposensitization or "allergy shots" is that the controlled injections of increasing amounts of the offending allergens will "reprogram" the dog's immune system and lessen its hypersensitivity. For most dogs, these "allergy injections" result in significantly reduced itching.



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

Anti-inflammatory drugs including corticosteroids and antihistamines will often bring relief from itching. In addition, the use of certain omega fatty acids help most pets with allergic skin disease. Antibiotics may be used if there is a secondary bacterial skin infection (pyoderma). However, these products treat only the clinical signs, not the underlying allergy.

My friend's dog has atopy and seems to be helped by frequent baths. Can I try this?

Many dogs benefit from frequent bathing with special hypoallergenic shampoos. Research shows that some allergens are absorbed through the skin; frequent bathing may help reduce the



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amount of allergen that the patient absorbs. Some of the special shampoos incorporate omega fatty acids, which may be absorbed through the skin and help reduce the itching.

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

Seasonal allergy and atopy are terms used to 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, which means that the allergen is constantly present, or that the dog has developed multiple allergies. A common cause of non-seasonal atopy is the house dust mite.

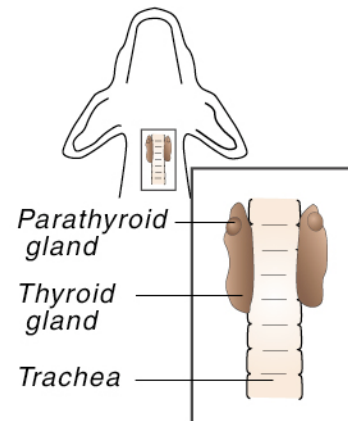
My dog has a grass allergy each year. Does that mean it should not walk on grass?

No. So-called "grass allergies" are more correctly termed grass pollen allergies. Pollens are airborne. Closely cut grass with no seeding heads will cause fewer problems for your dog, but there is little you can do to prevent your pet from being exposed to grass pollens.

Are there any other conditions connected with atopy that I should know about?

Yes. Some dogs with atopy also have *hypothyroidism* or low thyroid gland production. Hypothyroidism affects the skin and may exacerbate allergic skin conditions.

Dogs with chronic skin infections or allergies should be tested for hypothyroidism. If your pet has hypothyroidism, desensitization therapy and anti-inflammatory medications will often fail to help your pet unless the hypothyroid condition is also treated.



When my dog's allergies are bad, 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* also clear up. Skin odor may also be caused by a skin or ear infection, which may require antibiotic treatment in addition to the allergy treatment.