

Allergies in Dogs

What is an allergy?

In a pet with an allergy, the immune system overreacts and produces antibodies to substances that it would normally tolerate. This excessive response is termed an *allergic or hypersensitivity reaction*. Allergies can develop to any substance which a pet is frequently exposed to, such as food, fleas, seasonal environmental allergens (ie pollen, grass), or indoor allergens (ie dust mites, mold).

What are the symptoms of allergies in dogs?

In the dog, the most common symptom associated with allergies is itching of the skin and ears, either localized (in one area) or generalized (all over the body). Keep in mind that in some dogs licking or chewing the feet is the only symptom of itching. In some cases, the symptoms involve the respiratory system, with coughing, sneezing, and/or wheezing. Sometimes, there may be runny discharge from eyes or nose. In other cases allergies affect the digestive system resulting in vomiting and diarrhea or chronic anal gland issues.

How common are allergies in dogs?

Unfortunately, allergies are quite common in dogs of all breeds and backgrounds. Most allergies appear after the pet is six months of age with the majority of affected dogs over age one or two. This is because it takes time for the body to become “sensitized” to the substance the pet is allergic to.

How are allergies treated?

There are a wide variety of allergy medications available – this is because there is no “one size fits all” approach to allergy treatment – it can take several months of trial and error to find a protocol which manages your dog’s allergies effectively. It is important to keep in contact with your veterinarian to adjust treatments based on response. It is also helpful to keep a log of your pet’s symptoms to identify specific seasonal patterns – proactively starting allergy medications before symptoms get bad will keep your pet comfortable and avoid complications. Some common allergy medications include:

- Apoquel – a daily tablet which blocks the itching pathway
- Cytopoint – a monthly injection which blocks the itching pathway
- Medicated shampoos – keeping the skin barrier healthy keeps allergens out and helps avoid secondary infections
- Antihistamines – not typically recommended for itching, since histamine is a much less important molecule in dog allergies than it is in people. Sometimes used for respiratory symptoms like sneezing or runny eyes.
- Special diets – limited ingredient or hydrolyzed protein diets if food allergy is suspected, or other specialized diets which promote a healthy skin barrier.
- Hyposensitization – similar to human “allergy shots”, very small doses of allergens are given daily to desensitize the immune system. This is now available in oral liquid for ease of dosing.

Why is my veterinarian prescribing antibiotics if my dog has an allergy?

Regardless of what the underlying allergy is, once a dog starts scratching they traumatize their skin, damaging the healthy barrier and allowing “outside” bacteria in to the deeper layers of the skin (dermis). Pyoderma (skin infection) and otitis (ear infection) are itchy conditions on their own, and these combined with allergies can create a vicious cycle. Your veterinarian may prescribe oral antibiotics, medicated shampoos, and topical ear drops to treat secondary infections when managing allergies. The goal of any good allergy treatment plan is to manage allergy symptoms proactively and AVOID secondary infections, although when these “flare ups” occur the infections will have to be treated separately.

Environmental Allergies and Atopic Dermatitis

Environmental allergies can be to any substance your dog encounters, such as grass, mold, pollen, and dust. These allergens are typically inhaled, although some dogs will develop contact allergies to things like shampoos, plants, or specific chemicals. Affected dogs are often very itchy, and will lick/chew/scratch all over. Owners of light colored dogs may notice a reddish-brown staining of the fur caused by saliva. Owners may also notice a red “rash”, which can indicate skin irritation or secondary infection. Dogs may show respiratory symptoms (sneezing and runny eyes), but these are less common than in humans.

Atopy is a type of environmental allergy. Typically dogs who have allergies to multiple environmental factors, have severe symptoms, and/or are affected for multiple seasons of the year are termed “atopic”. These dogs often require more aggressive management, and most have to stay on allergy medications all year long.

It is often difficult to determine the specific cause of your dog’s allergies. Keeping a log of the seasonality of your dog’s allergies may help identify patterns and guide our treatment plan. There is a blood test available for environmental allergies, although this is typically reserved for severe cases which will require hyposensitization treatment.

The key to treating environmental allergies is *to be proactive* – utilizing maintenance medications to prevent itching before symptoms are severe will keep your pet more comfortable, and you will avoid frequent visits to the veterinarian for secondary infections or complications. It is also important to keep in mind that we can never cure allergies, only manage the symptoms for the duration of the dog’s life.

Food Allergies

Food allergies are less common than environmental allergies, but are still present in 10-15% of allergy patients. Symptoms of food allergies include chronically soft stool, chronic anal gland inflammation (pets often scoot at home), chronic ear infections, itching, and sometimes frequent vomiting.

Many dogs will occasionally "react" to something they ate – acute, short term, infrequent episodes of stomach upset do not necessarily represent food allergy or intolerance. In an allergic reaction to a food, antibodies are produced against some part of the food, usually a protein or complex carbohydrate. Since antibody production is required for an allergy to develop, food allergies usually manifest after eating the same food for a long time.

There is no reliable test for food allergies. Saliva and blood tests which claim to detect food allergies have not been proven to consistently predict real allergies. The only way to diagnose a food allergy is through the use of a food trial (see food trial handout for guidelines). A food trial may consist of a special limited ingredient diet with a "novel protein" (a protein source the dog has never eaten, such as venison or kangaroo) or "hydrolyzed protein" (a protein broken down to such small pieces that the body can not recognize it). It takes 6 to 8 weeks on a food trial to determine success, and it is important to remember that the dog cannot have ANY other food, treats, etc during this time. Even flavored medications may need to be eliminated. Food trials may be complicated by concurrent environmental allergies, so your veterinarian may also prescribe other allergy medications for your dog. If the first food trial is not successful but your veterinarian is still suspicious of a food allergy, a trial with a different type of food may be suggested – this is why food allergies can take so long and be so difficult to diagnose.

Flea Allergies

Although flea allergies could technically be considered an environmental allergy, the clinical symptoms and treatment are often different than other allergies. In a pet with any kind of allergies good flea control is crucial, because anything which triggers itching can exacerbate already inflamed skin.

The management of this type of allergy is a complicated separate topic – please consult your veterinarian if you are concerned about a flea allergy, and see our separate flea handout.