

Allergy Testing

- Allergy testing is most commonly performed to determine if a pet has atopy, also known as *atopic dermatitis* or *allergic inhalant dermatitis*.
- Allergy tests can help identify the specific allergens causing a pet's allergy problem. Once a list of "problem" allergens is identified, a specialized serum containing small quantities of these allergens can be formulated specifically for your pet.
- Allergy testing poses minimal risk for your pet, and in many cases the information your veterinarian gains from this testing is invaluable.

What Allergies Can Pets Have?

The most common types of allergies in pets are flea allergy, food allergy, and a condition called *atopy*. Atopy is sometimes called *atopic dermatitis* or *allergic inhalant dermatitis*, and it occurs when allergens that are inhaled or that contact the skin cause an allergic reaction in the body. In dogs (and, less commonly, cats), this allergic reaction is focused largely in the skin. Animals with atopy become very itchy; the resultant scratching can lead to skin injuries and subsequent skin infections. Atopy is usually first noticed in dogs younger than 3 years of age, although older pets can also be affected. Unfortunately, some pets that develop atopy continue to have problems throughout their lives.

Many types of allergens can cause a pet to develop atopy. A wide variety of pollens, grasses, dander, insect proteins (such as in cockroaches), molds, and even house dust can cause animals to develop atopy. Animals can even develop allergies to multiple allergens at the same time. Once an animal develops atopy, the condition will continue as long as the animal is exposed to the allergen that is the source of the problem.

How Is Allergy Testing Performed?

Allergy testing is most commonly performed to determine if a pet has atopy. Allergy testing can also help diagnose flea allergy dermatitis. Most veterinarians do not use allergy testing to diagnose food allergies.

The two most common types of allergy tests used in pets are intradermal skin testing and serum allergy testing:

- **Intradermal skin testing:** Intradermal skin testing can sometimes be performed at your veterinarian's office. However, because the allergens used for this test are very specific (they vary depending on where you live), your veterinarian may refer you to a veterinary dermatologist for this test to be performed. Usually, an area of fur is shaved from your pet's side or abdomen to expose enough skin to perform the test. Using very small needles, tiny amounts of each test allergen are injected just under your pet's skin in different areas. After a brief waiting period, the injection sites are examined to measure the degree of local allergic response, such as redness or a small hive. Allergens that your pet is not allergic to will not cause a reaction, while allergens that your pet is allergic to will cause a reaction that corresponds to the severity of the allergy. Pets are monitored carefully during the procedure in case a serious reaction occurs and treatment is required.

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- **Serum allergy testing:** Serum allergy testing is performed at a laboratory using a small blood sample taken from your pet. Your veterinarian does not need to shave your pet or have special allergens on hand to perform this test. As with intradermal skin testing, the results of serum allergy testing can reveal which allergens are not causing an allergic reaction in your pet, which

ones are causing a mild reaction, and which ones are causing a more serious reaction.

Depending on which type of allergy test is performed, you may need to discontinue your pet's allergy medications for a period of time before the test. Otherwise, the test results may be affected. Your veterinarian will tell you which medications can be used and which ones may need to be discontinued.

What Does Allergy Testing Tell Your Veterinarian?

Allergy tests can help identify the specific allergens that may be at the root of a pet's atopic dermatitis. Once a list of "problem" allergens is identified, a specialized serum containing small quantities of these allergens can be formulated specifically for your pet. Through injection of small amounts of the allergy serum over time, many pets experience a reduced response to the allergens. This treatment, called *immunotherapy*, generally must be continued for several months to years to achieve results. With immunotherapy, the pet owner usually administers the allergy serum injections at home. If you are uncomfortable giving the injections, ask your veterinary care team if the injections can be given at your veterinarian's office. The first injections are

more diluted, containing only tiny amounts of the problem allergens; each subsequent injection solution contains a slightly higher concentration of the allergens. Your veterinarian will schedule the injections according to specific guidelines—more frequently in the beginning, and eventually tapering to one injection every few weeks. Many pets respond to this program. Others may not, especially if they have other underlying conditions.

Is Allergy Testing Safe?

Very few risks are associated with performing allergy testing. If serum allergy testing is performed, drawing blood takes only a few seconds, and your veterinary team will take precautions to ensure that your pet is not injured during this procedure. Once blood is obtained, all further processing is performed at the veterinarian's office or at a diagnostic laboratory, so there is no risk of harm to your pet.

If intradermal skin testing is performed, there is a slight risk of an allergic reaction if your pet responds seriously to some of the allergens being tested. However, pets are monitored very closely during the testing procedure, and if a reaction occurs, medications can quickly be administered to treat the problem.

In general, allergy testing poses minimal risks for your pet, and in many cases, the information your veterinarian gains from this testing is very valuable.