

TEXAS REGIONAL ASTHMA AND ALLERGY CENTER, L.L.P.

Board Certified specialists in allergy, asthma, immunology, and respiratory disorders

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CAT AND DOG ALLERGY

Some degree of cat or dog allergy occurs in as much as 15% of the population at some time in their lives. It tends to be more severe in the young adult years and varies greatly in severity. Some patients will have minimal symptoms such as itchy eyes on close contact with an animal and no treatment is necessary. Other patients can get more severe nasal symptoms or asthma with only brief contact with an animal. These symptoms may require more intense treatment. In general, cats produce much more severe allergy than dogs, but this does not hold true for *everyone*. In recent years much more research has been done in the field of cat allergy than in dog allergy. Most of the below information is derived from research on cat allergy; it is likely, however, that it is also relevant for dog allergy.

Cat and dog allergy is produced by a protein (allergen) that is secreted by glands in the skin. Salivary gland also produces a similar protein. People are never allergic to the hair of the animal. Allergens get carried in the air on very small particles, which you cannot see. These allergens land on your eyes, nose, and gets inhaled directly into your lungs and causes allergic symptoms. Contact with your skin may also cause itching and hives. All breeds are capable of triggering symptoms -there are no "hypoallergenic" breeds of cats or dogs. People with severe pet allergies can even experience symptoms in public places if dander is transported on pet owner's clothing. Usually symptoms will occur quickly, sometimes within minutes after exposure to the animal. For some people, symptoms may build and become most severe eight to twelve hours after they had contact with the animal.

There are a number of things that make cat and dog allergy very confusing to some people. All allergies tend to be variable from week to week, and also over a period of years. The reason for this variability is usually only partially understood for an individual. Your allergic reactions to cat or dog will be much more severe if other kinds of allergen (such as seasonal pollen or dust mites) are also causing symptoms. Viral infections can sometimes aggravate your animal allergy for weeks at a time.

The diagnosis of animal allergy is usually made by a patient's history and with the assistance of a skin test. Part of your allergy evaluation will include test for other indoor and outdoor allergens that might also be causing allergic symptoms. It is very important to realize that a positive test means you are responding adversely to the tested material. It does not mean that the substance that produces the positive test is causing your symptoms. If you are exposed significantly to an animal and you have a positive skin test it is highly likely that the animal is important in your allergy symptoms. Your doctor will evaluate all of your positive skin tests and correlate this with your specific symptoms and environment before a specific treatment program is started.

TREATMENT OF CAT AND DOG ALLERGY

Environmental controls: A cat or dog produces a certain amount of allergen per week. This amount varies greatly from animal to animal (as far as we know no one breed of cat or dog is better than another). One particularly troublesome aspect of animal allergy is that the allergen progressively accumulates in reservoirs such as carpeting, mattresses, and even vertical and other horizontal surfaces of a room. The total amount of allergen in the air varies greatly depending on the disturbances of the air and the agitation of the reservoirs. It is important to clean off surfaces with a damp cloth and wash curtains and other fabric within the room. Of particular concern are cushions, mattresses, and carpeting, which cannot easily be cleaned. Vacuuming is of limited value, because it does not get at the under surfaces of the rug, and will stir up small allergen particles, which

generally go right through the vacuum cleaner. Vacuum cleaners that have HEPA filters might be of some value. Cleaning wall-to-wall carpeting might be of some benefit. As with dust mites, the best solution is to have a hardwood, linoleum or tile floor. Replacing bedding and carpeting that has animal dander in it.

The most effective treatment for cat and dog allergy is removal of the animal from the indoor environment and to avoid other kinds of contact where possible. Studies have shown that in spite of the existence of large reservoirs that contain allergen, the quantity of animal allergen in the indoor air will decline slowly over a period of weeks to months following removal of the animal.

If you decide to keep an animal, to which you are allergic, then it should be restricted as much as possible within the home. The animal should also be kept totally out of the bedroom. There is now some evidence that washing an animal weekly will reduce the amount of allergen that is given off into the environment. There are no special sprays or treatment of the hair that will inactivate the allergen. You should consult with your veterinarian for advice regarding care of your animal's fur to prevent excessive dryness if you are washing regularly.

Kitty litter, which contains large amounts of allergen, should be housed away from the allergic individual. Since animal allergens are light weight and airborne an air filter such as a HEPA filter or electrostatic air filter may help.

Medication: Your doctor will discuss with you the various kinds of medications that can be used to control your allergy. Medications can be taken to either prevent symptoms when you are exposed or to treat symptoms that occur during unavoidable or unexpected exposure. One serious concern about the use of medication is a may permit you to stay much longer in an unhealthy environment. Even a very effective medication may not adequately suppress severe allergic symptoms if the exposure is prolonged. This may give patients a false sense of security and cause them to be worse of in the long run.

Immunotherapy "Allergy Shots" for Cat and Dog Allergy: This is a form of therapy that has a beneficial effect over a period of many months in certain percentage of patients. The success rate of immunotherapy in cat and dog allergy is probably much greater if you do not have constant exposure to the animal in your environment. It works better to protect you against unavoidable intermittent exposure, than to reduce chronic symptoms produced by living with an animal. Your doctor will have to discuss with you the pro's and con's of immunotherapy (allergy shots) before it is started. At present the immunizing material that we use for cat is much better standardized than it is for dog.