

# **Allergies in Dogs - Part 1**

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Allergic diseases (atopic dermatitis, atopic disease, allergic inhalant dermatitis, and food hypersensitivity) are conditions in which an animal is predisposed to become sensitized to a substance or substances more easily than a normal individual. When sensitized and exposed to these offending substances, activated cells in the skin will cause inflammation (dermatitis).

## ***What can dogs become allergic or sensitized to?***

Allergies can be caused by grass and tree pollens in the spring and weed pollens in late summer and fall. House dust, house dust mites, cotton, wool, molds and foods are the types of substances that can produce allergic reactions that persist all year around.

## ***Clinical appearance or signs of allergies:***

Pruritis (itching) is the most consistent finding in allergies. Other signs may include conjunctivitis (inflammation of membranes of eyelids), inflammation or redness between the toes resulting in excessive licking or chewing at the feet, inflammation of the ears or ear infections, inflammation or redness in the axillary areas (under the front legs), ventral abdomen (stomach area) and under the tail. A small percentage of pets may also evidence sneezing.

## ***Complications of allergies:***

Inflammation of the skin may be responsible for one or all of the following conditions:

- *Secondary Staph Infection* – Inflammation of the skin creates an environment favorable for the growth of Staphylococcus bacteria. These bacteria may result in formation of papules (small red bumps), pustules, and folliculitis (inflammation of the hair follicles). Lesions of Staph infection may occur on any part of the body but are most often found on the ventral abdomen and back. Old lesions may appear as small circular areas of scaling and hair loss. Individual lesions will heal while new lesions develop. Lesions resulting from the Staph will often produce as much or more discomfort than the allergic response.
- *Seborrhea* – Inflammation in the skin often stimulates the sebaceous glands (oil glands) to produce more sebum (oil) than normal. The excessive oil may cause the pet to have a strong odor.
- *Scale (dandruff)* – Inflammation in the skin may lead to faster turnover of skin cells causing excessive scaling.

## ***Diagnosis:***

Is generally based on history and clinical finding, allergy testing and diet trials. However, to rule out other diseases and determine which therapy would be most appropriate it is often necessary to evaluate culture, skin biopsies, blood counts, and blood chemistries.

- *Allergy testing* – May be performed to determine what the pet is allergic to. 90% of the allergic dogs tested will react to one or more of the 60 substances we test for. It is felt that skin testing is a more accurate method for determining what a dog is allergic to than the ELISA or RAST blood tests.
- *Diet trials* – In order to rule out food allergies, a 10 week feeding of a trial diet is necessary. Ideally, this should be with Hill's Science Diet ZD food.