

## Allergic skin disease

- Itchy dogs can be classified into 2 groups.

Infectious	Non-infectious
Fleas	Atopic dermatitis
Mites	Food allergy
Bacterial infections	Contact Allergy
Fungal Infections	Flea Allergy
Yeast Infections	

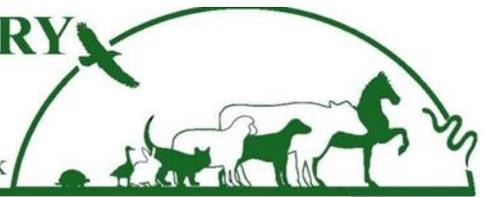
As infectious causes of itching can be cured, it is important to rule these out first. This often involves the use of topical flea/mite preparations (Advocate) and treating with appropriate antibiotics/anti-yeast medications for 3-6 weeks. If these measures should fail to resolve the itching, then it is likely the patient has allergic skin disease (see non-infectious causes of itching). Before embarking on allergy testing, the following points should be checked:

- Have all in-contact animals been treated for fleas (even if no fleas have been seen)?
- Has the environment been treated for fleas/mites with an appropriate spray?
- Have bacterial and yeast infections been thoroughly treated?

It is worth noting that some animals will improve with the above treatments but the symptoms recur on a regular basis. Recurrent skin infections are a common presentation for allergic skin disease.

If a skin allergy is suspected, an elimination diet is usually recommended as the first diagnostic test. An elimination diet is the **only** means of excluding a food allergy as the cause of itching or recurrent infection. Trying to guess what food could be setting off the allergy is usually fruitless and frustrating. An elimination diet (consisting of a single protein source that the patient has never eaten before) is recommended for 6 weeks. Should the itching resolve or there is a reduction in skin infections, the patient is challenged with the original food to confirm a causal relationship.

If an elimination diet has no effect on the skin disease, then atopic dermatitis is the most likely cause for itching/recurrent infection. Atopic dermatitis is an inherited



predisposition to developing inflammatory and itchy skin disease caused by an allergic reaction to dust mites, pollens, moulds, human dander and other environmental allergens. Blood tests may be performed to look for circulating antibodies against common environmental allergens and this may support a diagnosis of atopic dermatitis. It is important that all other causes of itching have been eliminated first because atopic dermatitis is a diagnosis of exclusion. Occasionally dogs are said to have 'atopic-like disease'. These dogs show all the symptoms of atopic dermatitis (and have had other causes of itching ruled out) but it is not possible to identify an offending allergen on blood tests.

Regardless of cause, allergic inflammation damages the skin defences and predisposes to secondary infection. Some common 'flare factors' are listed below:

Flare factor	Treatment	Comment
Pyoderma/folliculitis (bacterial skin infection)	3-6 weeks of antibiotics +/- antibacterial shampoo 2-3x a week	The skin contains bacteria on its surface. Skin allergy damages the normal defence mechanisms and predisposes to secondary infection. Sometimes recurrent infection is the only manifestation of an allergy.
Malassezia dermatitis (yeast infection)	Anti-yeast shampoo 2-3x a week. Antifungal tablets for severe cases	Malassezia are found in greasy, damp areas such as skin folds under the forelimbs, groin, under the tail and feet. Due to deranged skin defences, secondary yeast infections are common
Fleas	Monthly flea treatment (Advocate)	Fleas can aggravate skin allergies by causing scratching which disturbs the skin barrier and leads to infection
Mites	Monthly Advocate	Regular flea prevention with Advocate should also control mite infections. Note that Frontline dose not kill mites.

Atopic dermatitis is not curable. However, most dogs can be controlled with maintenance treatment and have a good quality of life. Unfortunately, flare ups do occur occasionally and will necessitate short courses of additional treatment on top of maintenance therapy.

