

# Flea Treatment in Animal Shelters

Fleas are the most common external parasite found on animals that enter shelters. Per ASV guidelines, "Shelters have a responsibility to reduce risk of parasite transmission to humans and animals." Here are some flea prevention and treatment recommendations.

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## From the ASV Guidelines for Standards of Care in Animal Shelters:

"Many animals entering shelters are infected with internal and external parasites (Bowman 2009). Though not always clinically apparent, parasites can be easily transmitted, cause significant disease and suffering, persist in the environment, and pose a risk to public health (CAPC 2008; CDC 2009). Shelters have a responsibility to reduce risk of parasite transmission to humans and animals.

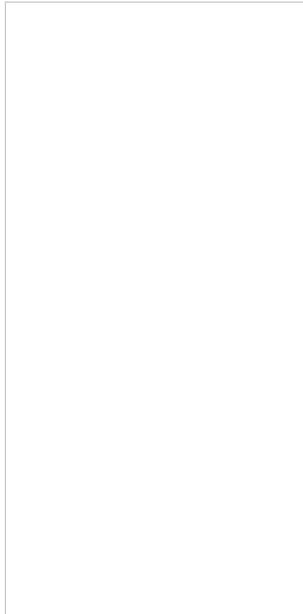
"An effective parasite control program should be designed with the supervision of a veterinarian. Animals should receive treatment for internal and external parasites common to the region and for any obvious detrimental parasite infection they are harboring. Treatment and prevention schedules should be guided by parasite lifecycles and surveillance testing to identify internal and external parasites that may be prevalent in the population.

"Ideally, animals should receive parasite prevention on entry and regularly throughout their shelter stay to prevent environmental contamination and minimize risk to people in the shelter. At minimum, because of the public health significance, all dogs and cats must be de-wormed for roundworms and hookworms before leaving the shelter."

## Fleas and flea allergies

Most external parasite infections are irritating to the animal and cause some degree of pruritus. If severe or an animal is young or immunosuppressed, infections can even be fatal. Fleas are the most common external parasite found on animals that enter shelters. Fleas

have a worldwide distribution and flea allergy dermatitis (FAD) is the most common small animal dermatologic disease. Some animals may have a heavy flea burden yet appear unbothered by the presence of the parasite while other animals may not have visual evidence of a flea infestation but have a hypersensitivity to the parasite (its saliva to be specific) and will have an alopecia pattern and pruritus that is suggestive of FAD (figure 1).



**Figure 1** (courtesy Dr. L. Stewart)

FAD is a hypersensitivity to flea saliva however the pathogenesis is not completely understood. Animals that are flea naïve are more likely to be hypersensitive. When a flea gets on an animal it feeds every 3 minutes, each time introducing it's saliva during the blood meal. It is this action that causes the hypersensitivity reaction. There is no gender, breed, or age predisposition to this hypersensitivity however animals with atopic dermatitis (environmental allergies) are predisposed to FAD. Clinical signs include pruritus directed at the caudal end of the body, mild to severe alopecia and fleas may or may not be noted. Specific physical exam findings in a dog with FAD include lesions on the caudal half of the body that are papules or crusts, excoriations, scaling, traumatic alopecia, dull dry hair coat or pyotraumatic dermatitis ("hotspots") from licking. Physical exam findings in a cat includes lesions NOT always on the caudal half of body, but that can involve the neck or face, that are multi-focal crusted papules (Miliary dermatitis), self-induced alopecia, or eosinophilic skin diseases. There is not a specific therapy for FAD as it needs to tailor to the patient. The overall goal of treatment is to minimize the number of flea bites by quickly killing adult fleas; this is usually best accomplished with an oral flea treatment. The objectives to managing

FAD complete flea eradication in the environment, to provide symptomatic relief to the patient and to treat and prevent infestations on the patient.

## **Prevention & Treatment recommendations for shelters**

The only way to prevent infestation of the shelter population is to practice strict flea control as animals enter the shelter. There are now many products available to prevent and treat flea infestations. Treatment options include topical and oral products that may also treat other external parasites such as ticks, lice and mites.

Product choice should be guided by a variety of factors including frequency of use, number and significance of parasites targeted, impact from bathing, cost, and safety.

If a shelter does not have the resources to treat all animals at intake, priority for treatment should be given to animals with obvious flea infestation (i.e. fleas or flea dirt evident on the hair/skin), clinical signs consistent with FAD and litters of puppies and kittens.

Severely flea infested, anemic kittens and puppies should be treated with a product that is safe for use at their age, dewormed and given supportive care such as sub-cutaneous fluids, warming, syringe feeding if anorexic and antibiotics for any secondary infection. [Download our summary of ecto parasite treatments.](#)