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FLEA CONTROL

My pet always seems to have fleas. What can I do?

Successful flea control involves:

1. Eliminating fleas from your pet
2. Controlling fleas in the environment

Dogs and cats share the same fleas. It is important that all pets in your home are on a flea preventative. We carry Frontline Plus, K9 Advantix, and Advantage (for cats >9lbs). For more information on these products please ask the receptionist or technician for a pamphlet. Feel free to ask which product would work best for your pet.

Where does my pet get fleas?

Your pet could be exposed to fleas from other animals (wild or domestic), infested areas outside the house, or people with flea exposure. The most common source of fleas is newly emerged adult fleas from pupae in your house or yard. Modern carpeted centrally-heated homes provide ideal conditions for the year-round development of fleas. The highest numbers of flea eggs, larvae and pupae will be found in areas of the house where pets spend the most time, such as their beds and furniture. Even though fleas may be in your house, you probably won't see them; the eggs are too small to see without magnification and the larvae, which are just visible, migrate deep down in carpets, furniture or cracks in floors away from the light. They also thrive in dirt basements and outdoors during the warmer months.

There are four stages in the life cycle of the flea:

Flea eggs are whitish and about 0.5 millimeter (mm) (1/32") in length. They are unlikely to be seen without a magnifying glass. Eggs are laid by the adult flea after taking a blood meal. The eggs are initially laid on the pet's skin but fall off into the environment to continue their life cycle. Flea eggs constitute approximately 50% of the total flea population. Eggs may hatch in as little as 14 to 28 days, depending on environmental conditions. High humidity and warmer temperatures favor rapid hatching

Flea larvae are about 2-5 mm (1/8" to 1/4") in length. They feed on organic debris found in their environment and on adult flea feces. They dislike bright light and move deep into carpet fibers or under furniture, organic debris, grass, branches, leaves and soil. Flea larvae prefer warm, dark and moist areas. Outdoor larval development occurs only in shaded; moist areas where flea infested pets spend a significant amount of time. Our climate-controlled homes offer an ideal environment for the flea larvae to thrive.

The **flea pupae** produce a protective silk-like cocoon which is sticky. It quickly becomes coated with grime and debris, which acts as a useful camouflage. With warmth and humidity, pupae become adult fleas in 5-10 days. The adults do not emerge from the cocoon unless stimulated

by physical vibrations, carbon dioxide or heat. This is important since once fleas emerge from the cocoon they can only live for a few days unless they are able to feed. Pre-emergent adult fleas can survive within the cocoon for up to 9 months. During this time they are resistant to insecticides applied to the environment. This is important to remember because adult fleas may emerge into the environment a considerable time after you apply insecticides in your home.

Once it emerges, the **flea adult**, unlike the larvae, is attracted to light and heads to the surface in order to encounter a passing host to feed upon. Two days after the first blood meal, female fleas begin egg production. In normal circumstances the adult female will live up to three weeks, laying approximately 40 eggs per day. The entire life cycle, from egg to adult flea can be completed in 14-28 days depending on environmental conditions.

Apart from irritation, are fleas particularly harmful?

Fleas can cause anemia in heavy infestations, especially in young or debilitated animals. They also act as vectors to spread one of the most common tapeworms of the dog and cat, *Dipylidium caninum*. Fleas are a common cause of "flea allergy dermatitis." Symptoms would include hair loss, itchiness and skin irritation. Severe cases of skin irritation can lead to infections which may need the aid of an anti-biotic to resolve. If your pet is showing these symptoms he/she might need additional medication to get the itchiness under control along with the flea preventative.

How can I get rid of fleas on my animal?

This can be a demanding task and requires a three-pronged approach. Fleas need to be eliminated from your pet, from any other pets that you have, from your home and from your yard. Even this rigorous approach may not give 100% control as there are other sources of fleas that are beyond your control such as other people's pets, wild animals and infested environments which your pet may come into contact with outside your house.

What should I put on my pet?

Over the counter shampoos and powders are designed to kill adult fleas. Many of these products have limited effectiveness because they only work for a few hours after application. They kill fleas present on your animal at the time of application but have little residual effect so the day after use the animal may again have fleas. There are topical, once a month products with excellent residual activity that are available from your veterinarian (Frontline plus, Advantix, Advantage). If your pet is infested it is best to treat all animals in your house with topical flea preventative for at least 3 consecutive months. We also carry a product called Capstar that is given orally that will kill all the adult fleas on the pet within a couple of hours. This product is meant only to give you a jump start on flea control, as it does not have any affect on any other life stage of the flea nor does it affect the viability of the flea eggs.

It is worth starting flea prevention in early spring to help prevent population increase on your pet as well as in your home.

How can I treat my home environment?

A number of different products are available, some of which will kill more stages of the flea life cycle in your home such as:

1. Insecticide sprays for use in the house
2. Sprays containing insect growth regulators (IGRs) for use in the house (available at your veterinarian's office)
3. Insecticides applied by professional pest control companies in your house

Your pet's bedding should be regularly washed in hot water or replaced. Regular and thorough vacuuming of your carpets, floors and soft furnishings can remove a large number of flea eggs, larvae and pupae that are present in your home. You will need to throw away the vacuum bag to prevent eggs and larvae from developing inside the vacuum cleaner. Vacuuming prior to the application of a spray to the house is recommended because the vibrations will encourage newly developed fleas to emerge from pupae, which will be killed by the insecticide.

Sprays for use in the house should be used in places where the flea eggs, larvae and pupae are likely to be. It is recommended that you treat the entire household first and then concentrate on the hot spots - your pet's favorite dozing spots - such as soft furniture, beds and carpets. Once they hatch from the egg, flea larvae move away from the light and burrow deep into carpets and into other nooks and crannies where they are difficult to treat and kill. Be sure to move cushions, furniture and beds to spray underneath. Other places larvae are likely to live include baseboards and the cracks in wooden floors.

Despite treating my pet for fleas he still has them. Is there a "super flea"?

There is no evidence of fleas developing resistance to the once-a-month topical flea preventatives. Apparent failure of treatment almost always results from improper application of the preventive, inadequate treatment of the home or exposure to other infested pets or environments. Consider also treating sheds, cars and any outdoor sleeping spots. Most of these problems can be overcome by using an effective product on the pet to kill adult fleas in addition to treating your home.