

Fleas and Flea Control

April 2015

Fleas are the most common external parasite of companion animals. Flea allergy dermatitis is the most common skin disease of dogs and cats. Flea control has always been a challenge for veterinarians and pet owners because the adult fleas cause the clinical signs, yet the majority of the flea population (eggs, larvae, and pupae) are found off of the pet in and around the home. The ideal flea control program utilizes products that target the various stages of the flea life cycle, not only the adult fleas on the pet.

The Flea Life Cycle

Eggs are laid in the hair coat and then fall off of the host. They are resistant to insecticides, but susceptible to various insect growth regulators. Larvae develop in the host's environment and feed on adult flea feces (blood) that fall out of the hair coat of the pet. Larvae are susceptible to traditional insecticides, borates, and insect growth regulators. Larvae eventually spin cocoons (often within carpet fibers) for pupation. Pupae are resistant to freezing, desiccation, and insecticides. Pupae can lie dormant for many months. They are stimulated to expupate as emergent adults by vibration, warming, and increased carbon dioxide. Normally, expupation occurs when a pet is near, and the new flea finds the pet within seconds of emergence. Emergent fleas are fairly mobile, and can survive a few days (if in a suitable environment) without a host. New fleas begin feeding within hours of finding a dog or cat. Once a blood meal has been taken, the flea can survive only a short time if it is dislodged from the host. New fleas experience very high mortality on healthy adult hosts. Most fleas do not survive 72 hours on an animal that is itching and able to groom itself. Unfortunately, limited egg production does occur even on allergic animals. The entire life cycle of the flea can be completed in as few as 16 days.

Flea Control Recommendations

For the flea allergic patient, continuous excellent flea control is required to remain symptom free. Even very minimal exposure may be sufficient to perpetuate itching in a hypersensitive patient. In the past, veterinarians and pet owners always had to try to control fleas by treating the environment of the animal for the immature stages of the flea. This approach, although effective when properly instituted, is labor intensive and requires frequent repetitive applications. Also, some of the older products made for killing fleas on our pets do not kill fleas instantly, or are not long lasting enough to really help flea allergy pets, because the female fleas survived long enough to lay a few eggs and perpetuate the life cycle.

Today we now have several very effective, long lasting, safe, and convenient flea control products available. Listed below are some of the better products that we recommend.

Bravecto®

Bravecto® is an oral chewable tablet containing fluralaner. It is given once every THREE months for long lasting flea control and 2 months for tick control. It is recommended to give with food. It can be used in dogs over 6 months of age. It is not labeled for cats. It became available in mid 2014 and appears to be working very well, especially for flea allergic dogs. Bravecto® is available only by prescription.

Comfortis®/Trifexis®

Comfortis® is another oral chewable tablet which contains spinosad. It is given once every 30 days for flea control and can be given to dogs/cats and puppies/kittens over 14 weeks of age. It must be given with a meal for it to be properly absorbed and reduce the chance of vomiting, which is the most common side affect. It also should be used with caution in dogs that have seizures. It also works very well and is very useful for flea allergic dogs and cats.

Trifexis® is a combination drug containing spinosad (like Comfortis®) and milbemycin (a monthly heartworm preventative (also in Interceptor® and Sentinel® heartworm preventatives). It is available for dogs.

Comfortis® and Trifexis® are available only by prescription.

Cheristin®

Cheristin® for cats only, is a once a month topical solution for flea control containing spinetoram. It works similar to Comfortis® but is applied topically instead of orally. It is very effective as well. Cheristin is an over-the-counter product.

Nexgard®

Nexgard® is another chewable monthly flea and tick tablet for dogs. This one contains afoxoloner. It should also be used with caution in dogs with a history of seizures. Nexgard® is available only by prescription.

Advantage Multi®

Advantage Multi® is a topical once a month flea control, heartworm preventative and intestinal parasite control product. It is available for both dogs and cats. It contains imidacloprid for flea control and moxidectin for heartworms, hookworms, roundworms, and whipworms. It also treats scabies (Sarcoptic mange in dogs, and Notoedric mange in cats) and may be effective in some other types of mange in dogs and especially cats. Advantage Multi® is a prescription drug.

Bayer (the maker of Advantage Multi®) also makes several other topical products in the Advantage® line which also contain imidacloprid alone or in combination with other products for fleas, ticks, mosquito repellent, etc. The other Advantage® products are over-the-counter products.

Frontline Top-Spot®, Frontline Spray®, Frontline Plus®, Frontline Tritak®, Certifect®

These products, all made by Merial, all contain fipronil as the main flea control ingredient. Some also contain S-Methoprene, an insect growth regulator. Tritak also contains Cyphenothrin for ticks. Certifect contains amitraz for ticks. Frontline Tritak for dogs cannot be used in cats (although Tritak is also formulated for use in cats but is a different product than the dog product). Certifect is for dogs only. These are all monthly topicals. These are over-the-counter products.

Seresto®

Seresto is a flea collar for dogs and cats which contain Flumethrin and imidacloprid (same ingredient as the Advantage® products). It is labeled for 8 months of flea control. This is not the traditional flea collar (past collars have not been very useful). This collar works very well controlling fleas. It is also labeled for ticks. We have used it in several flea allergic dogs and cats with surprisingly excellent results.

Other Products

There are now numerous generic products containing fipronil (same ingredient as Frontline® products) on the market. These may or may not be as effective as Frontline® due to possibly different carrier ingredients in the products. Vectra 3-D® is another topical spot-on containing other types of insecticides. We haven't had any experience with this product, but it is fast-acting and also contains repellents. Revolution® is a topical flea control and heartworm preventative. We have used it in the past, but were not impressed with its flea control. Capstar® is a oral flea tablet that is quick-acting, but only lasts 24 hours. It is useful in some situations, but with the monthly and 3 month pills, it is not very cost-effective. Sentinel® is a monthly heartworm and flea preventative tablet. It contains lufenuron which is an insect growth regulator. This product does NOT kill adult fleas, only prevents eggs from hatching, so it is a flea "prevention" and not for flea control. Flea shampoos, traditional sprays, etc. are also available, but newer products above are MUCH more effective and useful. With severe infestations, environmental treatment is also recommended. Products to treat the yard and home are available. Use ones that contain an adulticide and insect growth regulator for the best effect. Yard treatment often needs to be repeated often to be effective.

Always be very careful of which products you use on cats. Cats are very sensitive to some insecticides. Always follow label directions!