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**FLEAS: Dogs and Cats**

**What Kinds of Damage Can Fleas Cause?**

• Flea Allergy Dermatitis, a skin condition associated severe itchiness and discomfort

• Flea Anemia, or blood loss through flea bites, which can be dangerous for young, old or small pets

• Feline Infectious Anemia, a life-threatening illness caused by a blood parasite carried by fleas

• Cat Scratch Fever/Bartonellosis, which doesn’t make cats sick but can cause serious illness in people exposed to infected cats

• Common Tapeworm infection, which is cosmetically unappealing and causes perianal irritation in pets

**Myths About Fleas**

**• *My pet cannot have fleas because he lives entirely indoors*.**

Fleas thrive particularly well in the well-regulated temperatures in the home.

**• *If my pet had fleas, the people in the house would be getting flea bites, too.***

*Ctenocephalides felis*, the flea that affects dogs and cats, canfeed on a wide variety of hosts. However, this flea regards human blood as a last choice, and humans tend not to be bitten unless there is a large flea population.

**• *We do not have fleas because we have only hard wood floors.***

While carpet provides excellent shelter for developing fleas, the cracks between the boards of wood floors are also great places for fleas to lay eggs and develop.

**• *My pet cannot have fleas because I would see them.***

The adult flea is very small (up to 1/8 inch), and some animals are adept at licking away fleas before they can be seen. Moreover, even a small number of fleas can cause problems for your pet. One flea bite is enough to send some allergic animals into an episode of biting and scratching at severely itchy skin. Sometimes, the characteristic skin irritation is the only sign of flea infestation.

  **• *Flea preventatives need to be used only during warm weather months.***

Fleas are adaptive and their life cycle is always active: eggs are laid, larvae are developing, pupae are growing, etc. The environmental temperature controls how fast this occurs. To eradicate the flea population in your home, it is best to attack when numbers are low in the winter. Stopping flea control products in the winter makes it much harder to gain the upper hand in the spring and summer when the flea populations are rising.

**The Flea Life Cycle**

To understand how to fight flea infestation, it helps to understand the **four stages of flea development**--egg, larva, pupa and adult. Flea populations are unevenly distributed, with about 50% eggs, 35% larvae, 10% pupae, and 5% adults.

The largest population in an infested home is in the **egg** stage. The female flea begins to produce eggs within 24 to 48 hours of her first blood meal and will lay eggs continually until she dies. The adult female flea lays up to 40 eggs daily. Female fleas can lay 500 or more eggs over their life, allowing for phenomenal growth rates.

It generally takes about three weeks for an egg to develop into an adult flea. The eggs are laid on the pet and then fall off to hatch in the environment. Eggs incubate best in high humidity and temperatures of 65 to 80 degrees Fahrenheit.

The next stage is the **larva**. The tiny, worm-like larvae feed on the “flea dirt” (droppings of adult fleas) that is generally in their vicinity. Larvae cannot survive in temperatures above 95 degrees.

Due to environmental factors, most fleas die before reaching the next stage, **pupa**. However, once pupae have spun cocoons they are nearly invincible. Inside the cocoon, the pupa is developing into the adult flea. Carpet provides excellent shelter for cocoons.

The pupa can remain dormant in its cocoon for many months, emerging as an **adult flea** only when until it detects a host nearby. The mature pupa senses a potential host through vibrations, carbon dioxide gradients, and sound and light patterns.

Adult fleas only have about a week to find food once they emerge, but after that they can survive two months to a year between meals.

**How Can Flea Infestation Be Prevented?**

Years ago, flea control meant foggers, shampoos, powders, collars and sprays. While these products are still available, they have been largely replaced with once-a-month oral and topical medications, which are considered more convenient, effective and safe. It can be difficult to choose among the variety of new flea medications, which work in different ways and have different advantages. Here are our recommendations for flea preventatives in dogs and cats (You may also check out our **Flea and Tick Product Chart**):

**DOGS**

For basic flea protection in dogs, we recommend **Frontline Plus** or **K9 Advantix II.** Bothcan provide extra protection because both products contain a juvenile growth inhibitor in addition to an effective flea adulticide.

1. Advantix II (Imidocloprid, Permethrin and Pyriproxifen) repels and kills all life stages of fleas. Existing fleas on your dog are killed within 12 hours, and new fleas are killed within two hours. It also prevents flea eggs and larvae from developing into adults, which helps prevent reinfestation, and repels and kills ticks and mosquitoes and kills lice and repels biting flies.

Advantix II is safe for use in dogs seven weeks of age and older. One of its ingredients, permethrin, is toxic to cats; K9 Advantix II must never be applied to cats.

2. Frontline Plus (Fipronil and (S)-methoprene ) kills 100% of fleas within 12 hours of application. It is approved for use on puppies and kittens 8 weeks of age and older and in breeding, pregnant or lactating cats and dogs. It also prevents flea eggs and larvae from developing into adults and kills chewing lice and controls the mite that causes sarcoptic mange.

**CATS**

For basic flea protection in cats, you may consider **Revolution** (Selamectin), a monthly topical medication that kills all fleas within 42 hours and prevents flea eggs from hatching. Revolution also treats and prevents other parasites that can make cats sick, including heartworms, ear mites, the mite that causes sarcoptic mange and some gastrointestinal parasites (roundworms and hookworms). It is approved for use in cats eight weeks of age and older.

For more severe flea problems in cats, we recommend **Advantage II (**imidocloprid and pyriproxifen **) or Frontline Plus** (Fipronil and (S)-methoprene). Advantage II kills 98%-100% of existing fleas within the first 12 hours of application and Frontline Plus kills 100% in that time frame. Both products also contain flea juvenile growth inhibitors which inhibit juvenile fleas from maturing.

Unlike Revolution, Advantage and Frontline Plus do not protect against heartworm or other parasites.

**What does it mean that my topical product is waterproof?**

It means studies have been done to assess the efficacy of your tick/flea topical on pets after bathing and swimming. Each product is unique and some hold up better than others with frequent water exposure. In general, it is best to hold off on applying the tick/flea topical to you dog or cat until 48 hrs before and after bathing or swimming**.** Non-detergent shampoos are also less likely to affect the topical product’s efficacy.

**Can I apply a dog specific flea and tick topical to my cat? Is it safe to even use dog topicals considered toxic to cats in my home that has both dogs and cats present?**

\*\*\*Canine flea medications must never be used on cats; some products can cause life-threatening toxic reactions. Cat have a unique physiology and an inability to metabolize certain compounds.\*\*\*

Generally speaking, if a household cat avoids direct contact and/or ingestion of a canine-specific topical that is considered toxic to cats while the product is being absorbed into the skin between the shoulder blades of the dog, the cat should not exhibit any clinical signs. The companies that made effective canine flea and tick topicals that are toxic to cats suggest separating the treated dog from all other dogs and cats for 24 hours after application. If you are concerned about having a product in the home that is potentially hazardous to your cat though, Frontline Plus would be the best choice because it is the safest option. Frontline is made for both cats and dogs.

**What should I be weary of in terms of online pharmacies?**

Products that are not purchased from a veterinary hospital (pet supply stores or online pharmacies) may come from black market sources and may not be effective, or worse can be detrimental to your pet. They are not guaranteed by the manufacturer. There are numerous cases of these medications being tampered with and then sold to the community. Please be cautious with your purchases.