

PREVENTING & CONTROLLING FLEAS

Fleas are common in areas with moderate, humid climates (such as the Midwest). They are difficult to get rid of because some of their life stages are very resistant to insecticides & can be dormant for up to 1 year.

The key to eliminating a flea infestation is to treat your pet and the environment on a regular basis to kill the fleas at each stage of the life cycle. Flea infestations can easily be prevented using systemic products from your veterinarian.

Understanding the Flea Life Cycle

There are four stages to the flea life cycle:

1. Egg
2. Larva
3. Pupae
4. Adult

A female flea lays about 50 eggs per day on an animal. The eggs fall off and develop in the environment. They hatch within 2 weeks in dark, warm, moist environments. Eggs die quickly in low-humidity environments (less than 50% relative humidity) and do not survive winter.

The eggs hatch into larvae. The larvae are tiny worms that burrow into carpets, pet bedding, etc. They feed off adult flea feces and other organic material. Larvae develop quickly in favorable conditions (15 days) and slowly in unfavorable conditions (200 days).

The larvae spin a cocoon and enter the pupal stage. The pupae survive very well in all environments and lie dormant for up to a year waiting for conditions that are favorable for adult flea survival. They are very resistant to insecticides. Because of this, a home that is flea-infested must be treated monthly from spring through fall.

Adult fleas live only a few days and are easily killed by insecticides. They feed on animal blood.

Do my Pets have Fleas?

The signs of fleas in dogs and cats include:

1. Itching
2. Presence of flea dirt (black specks) on the abdomen, neck, and base of the tail.
3. Presence of adult fleas (tiny, black crawling bugs about 3mm in length) on the abdomen, neck, or base of the tail.
4. Small, round, red, itchy welts on *you!*

How do I Get Rid of Fleas?

To get rid of fleas, you must treat the animal and the environment. Depending on what products you use, you must treat weekly, bi-weekly, or monthly from spring through fall if your home is infested.

ENVIRONMENTAL CONTROL

- **VACUUM!** 50% of the fleas in your carpet can be removed using a vacuum with a beater bar. Change your vacuum bag weekly to prevent re-infestation.
- **BOMB!** Bomb your house with a product that quickly kills adult fleas (most products do) and has an insect growth regulator (IGR) that inhibits or kills other life stages. The most common IGR is methoprene. These products are toxic. You must remove your pets from your home when you bomb. *Follow the instructions carefully.* Repeat bi-weekly or monthly as recommended on the label from spring through fall.
- **LAUNDRY:** Wash your pet's bedding frequently. Infested bedding that can't be washed should be thrown out in a sealed plastic bag.

- **SPRAY OUTDOORS!** (Optional) Fleas hang out in shady, moist areas of your yard. Spray these areas with a product designed for outdoor use. These products are very toxic. Limit your pet's access to these areas.

TREATING YOUR PETS

Use low-toxicity products directly on your pets. Use shampoos in conjunction with sprays or dips that contain pyrethrins or pyrethroids. D-limolene and linalool are botanical products with very low toxicity for dogs, but may cause problems for cats. Follow the instructions carefully and follow up with additional treatments as directed. Because these products do not have much of a residual effect, you must treat your pets frequently as directed.

Avoid using organophosphates (such as dichlorvos, diazanon, malathion) and carbamates (such as carbaryl, bendiocarb), as these products are very toxic.

Systemic products are also available from your veterinarian. These products kill fleas after they bite your pet. They come in pill form and topical liquids. These products are very convenient to use and work best to *prevent* a flea infestation. They can also be used in conjunction with environmental treatments to get rid of a flea infestation. Treat monthly from spring through fall or as directed by your veterinarian.

Flea collars are generally ineffective at repelling or killing fleas. They may also cause skin irritation. There is no evidence that ultrasonic devices, garlic, brewers yeast and other "unconventional" treatments are effective against fleas.

Preventing a Flea Infestation

Preventing fleas is much easier and more convenient than treating an infestation! Contact your veterinarian for a prescription systemic product that can be given to your pets once a month . This is the simplest way to keep you **FLEA-FREE!**