

## Fleas

The cat flea is the most common flea encountered in homes. It survives on both dogs and cats and will bite humans. Fleas are important pests for several reasons. Not only do they bite but they can also transmit several diseases such as the double-pored dog tapeworm, which can infect dogs, cats or humans. Flea bite dermatitis is the most common skin disease in dogs and cats. Flea control in the home and on the pet is very important.



*Cat Flea  
Larva*



*Cat Flea*

### Biology

Adult cat fleas are about 1/16-1/8" long, brownish black and flattened from side to side. They are wingless, but can jump considerable distances for their size. Each body segment has backward projecting spines that help hold the flea in the pet's fur.

Female fleas lay 4-8 eggs after each blood meal. The eggs are laid on the host but fall off easily. The eggs are usually found in

the pet's bedding or in areas where they frequent. Eggs are oval, whitish, and only about 1/64" long. They hatch in 1-12 days, depending on temperature and humidity. Flea larvae do not bite but have chewing mouthparts and feed on organic debris. They require dried fecal material from adult fleas to complete their development. (The adult fecal material is digested blood.) They are worm-like, whitish in color and about twice as long as the adult flea. Depending on the conditions, larvae can take from 1-2 weeks to several months to develop. There are 3 instars (stages) and the last instar larva spins a silk cocoon and incorporates debris to help camouflage it. The pupal stage may last 4-14 days under ideal conditions or may last up to a year under adverse conditions. Pupae and larvae are found in the area where eggs and adult fecal material accumulate (where animals sleep or frequent). The adult flea molts in the cocoon and waits for stimuli, such as direct pressure to the cocoon, increased temperature or increased carbon dioxide before emergence.

Adult fleas generally seek a blood meal on the second day after emergence. If no host is available, they may live for several months on stored body fat. Once the fleas find a suitable host, they tend to spend all of their time on the host where they feed, mate and lay eggs. Adult fleas can live up to a year. However, many only live a few days because grooming by the animal host removes up to 50% of the fleas. Cat fleas may also feed on other hosts such as opossum, fox, and rats.

Fleas may be present in a building where there are no pets. They can jump (6") and be carried in on a person's shoes or trousers. They may also occur in a building, such as a vacation home, that has been vacant for as long as six months. Their persistence is due to the long pupal period, ability of the adults to survive for months without food and because the adult fleas have not been removed by routine vacuuming. Fleas are also removed from an area by finding a suitable host such as the family pet. Other sources of fleas invading homes may be wild animals such as squirrels or raccoons nesting in the chimney, attic or crawl space.

## Control Indoors:

The primary control strategy should be to thoroughly vacuum the home or building. This should include all upholstered furniture, under furniture and all floors. Pay particular attention to areas where the pet sleeps or frequents and routes of travel through the house. Also vacuum along edges, in corners, and areas where dust develops. Dispose of the bag when finished. Shampooing (especially steam cleaning) of rugs and carpeting is also an effective treatment for killing and removing many of the fleas. The pet's bedding should also be cleaned on a regular basis.

Residual insecticides (such as Precor 2000) can be used to treat carpeted areas and cracks and crevices. This product contains a residual insecticide to kill adult fleas and an insect growth regulator to prevent egg hatch and development of larvae.

For severe flea infestations, a professional pest control company may be needed.

\*In situations where no pets have been in the home and there is a flea problem there may be a wild animal nesting in the building. As previously mentioned these may include squirrels, raccoons, opossums, etc. Check chimneys, attics and crawl spaces. The animal(s) should be trapped and/or excluded from the building and the nesting area cleaned and treated for fleas.

## Control on the Pet:

Use a flea comb on the pet regularly to remove adult fleas. Provide a single sleeping area for the pet that can be cleaned easily. You may also consider restricting the pet's access to bedrooms, attics, basements or wherever cleaning may be difficult or fleas may be a particular problem. Do not let your pets roam the neighborhood. Domestic animals kept indoors rarely have flea problems.

Check with your veterinarian for what is the best flea control for your pet. Several oral medications which prevent flea development are available.

## Several Flea Products available from your veterinarian are Advantage® & Frontline®

**Advantage®:** Monthly, a small vial of this product is applied to the skin of the pet. It spreads naturally on the skin surface providing whole body coverage. It usually kills fleas on the pet within 24 hours. The flea does not have to bite the animal for Advantage to be effective.

**Frontline®:** It is similar in usage to Advantage. It absorbs into the sebum and translocates over the pet within 24 hours. This product collects in the hair follicles and hair glands. Once applied, it kills fleas within 24 hours-48 hours and continues killing fleas for 3 months and ticks for 1 month. Your pet should not be bathed 2 days before or after application of Frontline.

## Control Outdoors:

Fleas are seldom an outdoor problem unless the pet spends all of its' time outdoors. Fleas prefer a protected, moist environment away from direct sunlight. However, spot treating of pet resting areas may be necessary. These outdoor areas may be treated with insecticidal soap or, outdoors, use a pyrethroid spray. Also, either drying out or heavily watering of these areas kills eggs and larvae. If the pet is restricted to a fenced area, such as a dog run, it may be necessary to treat with an insecticide. Check with your veterinarian or pet supply store for availability and safety. **Consult your veterinarian before treating with an insecticide.** Treating of large outdoor areas or yards is seldom cost effective.

Author: Mary Kay Malinoski, Regional Specialist, Home and Garden Information Center, University of Maryland Cooperative Extension, Ellicott City, MD.

Reviewed by: Jay Nixon, American Pest Management  
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**USE INSECTICIDES WITH CARE.  
READ THE LABEL DIRECTIONS.  
FOLLOW ALL SAFETY PRECAUTIONS.**

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