

# Pet Health: Fleas



Fleas are tiny, flat, wingless, blood-sucking insects that live on the skin of a host animal. They can carry and transmit serious diseases and are the leading cause of skin problems in domestic dogs and cats. Often, fleas can be seen scurrying under the fur of their host, but they can be difficult to catch.

Fleas spend most of their adult lives on their host, where they cut open the skin and feed on its blood. A single adult flea typically feeds for at least eight hours a day, ingesting about 15 microliters of blood. Fleas need a blood meal before they can reproduce. They mate shortly after feeding, and females lay eggs a few days later. One female flea can produce 2000 eggs during her three-to-four-month life.

Eggs fall off the host soon after they're laid and incubate where they land, hatching into larvae in about 10 days. Flea larvae hibernate from days to months and do not eat. Once the temperature and humidity are right, the flea pupae emerge from their cocoons as immature adults. They have one to two weeks to find a host or they die. Adult fleas can live for three to four months on a host, but they can't survive in the environment for more than a few days.

## **Causes of Flea Infestation**

When flea preventative measures are not taken, cats and dogs pick up fleas from the environment or by coming into contact with other animals that have them. Fleas thrive in warm, wet climates. An average temperature in the range of 70 to 85 degrees Fahrenheit is optimal. Pets living in hot, humid climates tend to develop more severe complications from flea bites than those living in cold, dry climates. Fleas don't live above 5,000 feet.

## **Preventing Flea Infestation**

There are many things pet guardians can do to control fleas. Some of the most effective include grooming a pet regularly, keeping its living environment clean, and using veterinarian-recommended flea preventatives.

Regular in-home grooming gives owners an opportunity to inspect their pet's skin and coat for fleas and other external parasites. If open wounds or suspicious "salt and pepper" particles are present—flea eggs and flea feces—a trip to the veterinarian is worthwhile.

## **How Fleas Affect Pets**

Some dogs and cats have fairly mild reactions to flea bites. Others, especially young puppies, kittens, and smaller animals, become severely anemic and gravely ill from the blood loss caused by heavy flea infestation.

Pets may also have a severe allergic reaction to flea saliva, becoming intensely itchy. The most frequently affected areas are the rump, thighs, tail base, belly, flanks, and upper arms (especially under the arm pits). Guardians of pets with fleas may notice one or more of the following signs:

- Scratching
- Licking
- Chewing
- Biting
- Rubbing
- Skin abrasions (sores)—often red, raw, weeping and/or bloody
- Pus oozing out of skin sores, caused by secondary bacterial infection

## Pet Health: Fleas *(continued)*

- Patchy areas of hair loss
- Tapeworm segments on or around the pet's anus and in the stool
- Tapeworm larvae on or around the pet's anus and in the stool (look like rice)

A pet's self-mutilation in reaction to flea bites sets the stage for potentially devastating secondary bacterial skin infections, which can be fatal. Many pets that do not have flea allergies still develop severe skin irritation from flea bites.

In addition to causing skin damage, fleas can transmit a number of potentially serious diseases that affect animals and people. Fleas are intermediate hosts for tapeworms. Pets that ingest adult fleas during their licking and chewing episodes are at high risk for tapeworm infection. Children can also develop tapeworm infections if they get fleas into their mouths through any route. Fleas act as carriers of other infectious microorganisms as well, including those that cause plague, tularemia, typhus, and myxomatosis.

### Treatment Options

**Note: NEVER use a flea preventative product on cats if it's meant for dogs, and vice versa. Doing so can cause serious health problems, even death.**

Guardians should adopt an integrated flea management program that treats the pet and its immediate environment. The affected animal and other animals in the household must be treated.

Pets can be treated with topical pesticides such as shampoos, liquids, foams, sprays, powders, dusts, and dips. Oral medications are also available. Some flea treatments control other parasites, including lice, mites, ticks, roundworms, hookworms, whipworms, and heartworms. A flea comb can be used to remove adult fleas, especially from short-haired cats. Kill fleas immediately by putting them into a sealable container with a bit of liquid detergent or rubbing alcohol.

Corticosteroids and antihistamines may be prescribed to help relieve the itchiness and other symptoms that accompany a heavy flea burden. These can be given orally or by injection. Organic flea treatments may benefit some pets that live in cool, dry climates. These treatments include essential oil applications and dietary supplements.

Consult a veterinarian before using flea-control products because they vary widely in safety, method of action, and effectiveness. Some should not be used on puppies, kittens, or pregnant animals. Some are toxic if ingested in large amounts, which can happen when a pet grooms itself after the products are applied.

It is also critical to eliminate the reservoir of fleas maturing in a pet's house and yard. Over 90 percent of the flea population lives in the environment in the form of eggs, larvae, and pupae. Clean all floor surfaces by sweeping, mopping, or vacuuming. Insecticidal carpet shampoos, sprays, powders, and foggers are widely available over the counter. Bedding and housing should be cleaned or replaced. Several insect growth regulators are available in liquid spray or powder dust forms. These prevent eggs, larvae and pupae from maturing into adults. Professional exterminators can be helpful with a heavy infestation. The yard should be treated as well, including kennels, runs, pens, dog houses, cat houses, patio furniture, decks, and carpeted cat furniture including climbing towers.