

## Fleas

The cat flea (*Ctenocephalides felis*) is the most common flea affecting both dogs and cats, causing itching and scratching. The dog flea (*Ctenocephalides canis*) affects dogs primarily in Europe and New Zealand, and to a lesser extent in North America. Other fleas that can affect dogs are the human flea (*Pulex irritans*) and the bird flea (*Echidnophaga gallinacea*).

Fleas are amazing little creatures. They can jump 300,000 times without stopping and can jump 150 times their length vertically or horizontally. This is the equivalent to a man jumping the length of three football fields.

Fleas survive by feeding on blood. In most animals, the bites cause only a mild itch, but in some instances animals will develop an increased hypersensitivity to the saliva of fleas. This can lead to intense itching, skin abrasions, hair loss and secondary pyoderma. In heavy infestations, especially on a puppy or small dog, severe anemia or even death may result.

The adult flea is a small, dark brown insect about 2.5 millimeters in size. Flea infestation can be diagnosed by actually seeing the fleas on the animal or by seeing black and white grains about the size of sand in the coat. These particles are flea feces which is comprised of digested blood. When wet the grains will turn reddish brown.

Fleas need a warm, humid environment to live and reproduce. The adult flea can live up to 115 days on an animal, but only two days when off. Fleas will mate on the animal after a blood meal. The female will produce and lay up to 2000 eggs within 24 to 48 hours. The eggs do not attach to the hair coat of the animal and will fall off and incubate in furniture, carpets, cracks and of course the outside environment. Within 10 days the eggs will hatch into larvae. The larvae will spin a cocoon and go into a pupal stage where they will remain for days or months. The higher the humidity the faster they will hatch. After hatching, the immature adult fleas only have two weeks to find a host.

Only about 1 percent of fleas are adults. The remaining 99 percent are in the egg, the larval form or in the pupal stage. An effective flea control program must eliminate all the stages.

It is best to have your pet on a monthly flea control program. Prevention is the best way to control possible flea problems. If fleas have already become established, it is best to first give your pet a flea dip or shampoo. This immediately kills all the fleas on the animal. 24 to 48 hours later apply a monthly flea control program. This will kill any new fleas hatching from eggs when they jump on your pet. All these products prevent fleas from reproducing, thus they eventually rid the environment of fleas.

There are numerous flea control products on the market. The traditional insecticides and flea collars have all but been replaced by newer more effective products which are also easier to administer.

Advantage (*imidacloprid*) for dogs and Advantage for cats is a once-a-month treatment that kills fleas by direct contact. Fleas don't have to bite the animal for the preparation to work. Advantage comes in a tube, based on your pet's weight, which is applied to the skin between the shoulder blades. It is important to part the hair and make sure the preparation is applied to the skin. One application lasts 30 days. After administration, fleas are killed within 12 hours. Advantage is water proof.

Frontline Plus (*fipronil*) for dogs and Frontline Plus for cats is a once-a-month treatment that kills fleas and ticks by direct contact. Fleas don't have to bite the animal for the preparation to work. Frontline Plus comes in a tube, based on your pet's weight, which is applied to the skin between the shoulder blades. It is important to part the hair and make sure the preparation is applied to the skin. One application lasts 30 days. In some dogs, there can be a residual effect of up to 90 days. After administration, fleas are killed within 24 to 48 hours. Frontline is waterproof and thus the effectiveness is not lost if the animal's coat becomes wet.

There are new flea and tick treatments such as Comfortis, an oral chew which kills fleas within 30 minutes. Check with your Veterinarian about these and other veterinary prescribed Flea and Tick Treatments. Stay away from over the counter flea and tick treatments which can be extremely toxic to your pet.