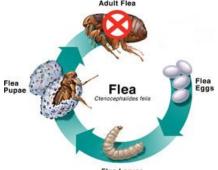
# Flea Control

Flea control is a vital part of pet ownership. You, your family, and your pets can be affected by these tiny, blood-sucking pests.

Fleas can make your dog itch and cause considerable discomfort. Because fleas are so tiny, you might not even see them. But an unseen flea can begin feeding on your dog within seconds. And within 24 hours of its first blood meal, a flea can begin laying eggs at a rate of 40 to 50 per day, resulting in an infestation. That's why it's critical to kill fleas quickly, before



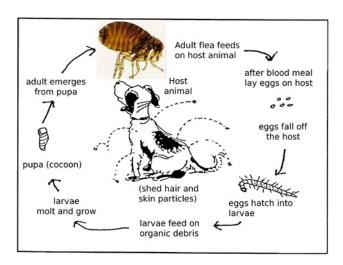
they can lay eggs.

#### What Are Fleas?

Adult fleas are reddish-brown insects with bodies that are compressed, or flattened, from side to side. While visible to the naked eye, they are so small you could line up about eight adult fleas, end-to-end, in one inch. Because fleas are so small, they can be difficult to detect, much less eliminate from your home.

Fleas are wingless, but possess incredible jumping ability. This enables them to jump easily from ground level to "ambush" a pet.

Fleas feed on blood, and female fleas consume about 15 times their body weight each day. Partially digested blood is excreted from the flea and dries to form what is commonly referred to as "flea dirt." This serves as food for developing flea larvae and is one way veterinarians and pet owners can identify an infestation.



#### Flea Relief

CapStar will kill adult fleas on your pet in 30 minutes and our herbal flea shampoo combines three well known herbs in a unique formula to eliminate fleas in a safe and gentle way.

#### Flea Prevention

Kills all stages of fleas, ticks and chewing lice before they lay eggs. Fipronil is released to the skin and coat resulting in a long residual activity.

## Why worry about fleas?

Fleas can pose a serious problem for your dog's health.

Not only can fleas make your dog miserable, but depending on your pet's age and overall physical condition, fleas can pose a serious threat to his health.

- Fleas can cause severe discomfort for dogs, including scratching, chewing, biting and restlessness
- Hot spots can occur as a result of scratching, chewing and biting at the irritated areas
- Fleas are the source of flea allergy dermatitis (FAD), the most common veterinary dermatological condition
- Severe flea infestations can cause anemia, especially in puppies or debilitated adult dogs
- Ingested fleas also can transmit a parasite called tapeworm to dogs

### Fleas also raise human public health concerns

Your dog isn't the only household resident that can suffer from flea bites. Flea infestations in homes and areas around a home often result in humans being bitten by newly-emerging fleas. You, too, are at risk for health issues, some of which can be serious:

 Allergic reaction: Usually in the form of small, raised lesions, called papules, which can be red to purple in color. Severity will vary, depending on the severity of the allergy to the flea bite.

- **Tapeworm:** Tapeworm (*Dipylidium caninum*) is generally spread through infected fleas found on both cats and dogs. Ingestion of infected fleas by children can result in tapeworm infection.
- Typhus: A group of infectious diseases usually resulting in a sustained high fever (typhus fever), headache, delirium and sometimes red rashes. Two kinds are most commonly contracted from flea bites:
  - <u>Flea Typhus</u>. A type of typhus caused by *Rickettsia felis*, a bacteria first identified in cat fleas.
  - <u>Murine typhus</u>. Another bacterial form of *typhus transmitt*ed most commonly by rodent fleas but also *by fleas found o*n dogs.
- **Plague:** Rodent *fleas that can be* acquired by dogs and cats in some areas might *be vectors* for (carriers of) bubonic plague, *Yersinia pestis*. These fleas might leave the host to bite humans.

Everyone knows fleas aren't fun. However, here are some flea facts that will amaze you!

Flea fossils date back to the Lower Cretaceous period, meaning fleas have been around for about 100 million years. At that time, fleas may have infested a Tyrannosaurus Rex or Triceratops!

Fleas can jump up to 150 times their own length. To put that into perspective, if a human competed in the Olympic long jump with that ability, that athlete would certainly win the gold medal with a gravity-defying 1,000 foot long jump. So they can easily jump onto your pet from the ground, or from another pet.

On average, a flea's lifespan is two to three months. However, pre-emerged fleas (those not living on a pet) can survive undisturbed and without a blood meal for more than 100 days.

The female flea can lay 2,000 eggs in her lifetime. That means that if all 53 million dogs in the United States each hosted a population of 60 fleas, the U.S. would house more than six trillion flea eggs. Laid end-to-end, those eggs would stretch around the world more than 76 times! It's important to kill fleas before they get a chance to lay eggs.

The female flea consumes 15 times her own body weight in blood daily.

The largest recorded flea is the North American Hystrichopsylla schefferi. Found in beavers, it can measure 12mm in length - almost 1/2-inch!

A flea can bite 400 times a day. That's a rate of 4,000 bites a day if your pet has just 10 fleas. YIKES.