

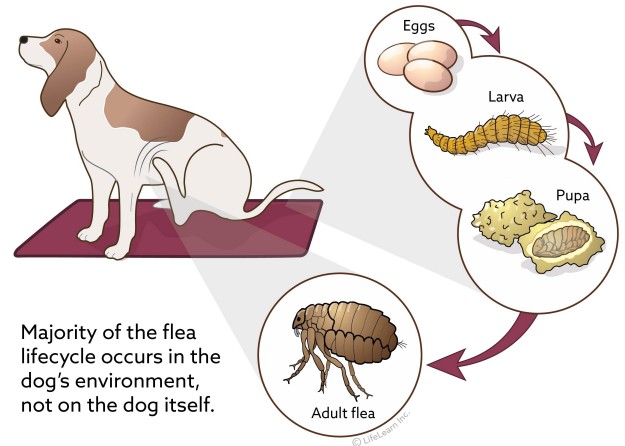
## Flea Control in Dogs

### My dog always seems to have fleas. What can I do?

Successful flea control involves both eliminating fleas from your dog and controlling fleas in your dog's environment. Dogs and cats share the same fleas, and fleas can travel from one animal to another. Therefore, it is important that all pets in your home are on a flea preventive program.

Treating your pet for fleas has never been easier. With the many choices available today, your veterinarian can provide you with the safest and most effective flea preventive for your pet's needs.

However, when it comes to environmental control, it is important to understand the flea life cycle.



### What is the life cycle of the flea?

There are four stages to the flea life cycle: egg, larva, pupa, and adult.

Flea eggs are whitish and about 1/32" (0.5 mm) in length. They are unlikely to be seen without a magnifying glass. Adult fleas lay eggs after eating a blood meal. The eggs are initially laid on the dog's skin but fall off into the environment to continue their life cycle. Flea eggs make up about half of the total flea population. Eggs may hatch in as little as 14 to 28 days, depending on environmental conditions. High humidity and temperature favor rapid hatching.

Flea larvae are about 1/8" to 1/4" (2-5 mm) in length. They have a whitish body and a black head. They feed on organic debris found in their environment and on adult flea feces. They do not like bright light and move deep into carpet fibers or under furniture, organic debris, grass, branches, leaves, and soil. Flea larvae prefer warm, dark, and moist areas. Outdoors, larval development occurs only in shaded, moist areas where flea infested pets spend a significant amount of time. Our climate-controlled homes offer an ideal environment for the flea larvae to thrive.

Flea pupae produce a protective silk-like cocoon that is sticky. It quickly becomes coated with grime and debris, which act as camouflage. With warmth and humidity, pupae become adult fleas in 5–10 days. The adults do not emerge from the cocoon unless stimulated by physical pressure, vibrations, carbon dioxide, or heat. This is important since once fleas emerge from the cocoon they can only survive for a few days unless they are able to feed. Pre-emergent adult fleas can survive within the cocoon for up to 9 months. During this time, they are resistant to many insecticides applied to the environment. This is important to remember because adult fleas may emerge from their pupae into the environment long after you have applied insecticides in your home.



Once it emerges, the **adult flea**, unlike the larva, is attracted to light and heads to the surface in order to encounter a passing host to feed upon. Two days after the first blood meal, female fleas begin egg production. In normal circumstances the adult female will live up to three weeks, laying approximately 40 eggs per day. The entire life cycle, from egg to adult flea can be completed in as little as 14–28 days depending on environmental conditions.

### Apart from irritation, are fleas particularly harmful?

Fleas can cause anemia in heavy infestations, especially in young or debilitated dogs. A single female flea can consume up to 15 times her body weight in blood over the several weeks of her adult life. In addition, fleas can carry several diseases, including plague, and they act as hosts for one of the most common tapeworms of the dog and cat, *Dipylidium caninum*.

### How do I treat my dog if he has fleas?

Successful flea control includes treating both your pet(s) and the environment. Shampoos, sprays, powders, and topical preparations are all available.

There are very effective products designed for monthly administration, or even administration every three months, that are available through your veterinary clinic. Some of these products are conveniently combined with medications to prevent heartworm and intestinal worms. Be sure to consult your veterinarian to choose the most effective and safe flea control products for your home and pet(s).

**ALWAYS READ THE LABEL CAREFULLY** – apply the product as instructed and repeat at the intervals stated. If you have cats in your home that you are treating, ensure that the product is labelled for use in cats, as some dog products may be poisonous to cats.



## What about the environment?

Environmental preparations are becoming increasingly sophisticated. Most quick kill products are only effective against the adult flea. Your veterinarian can provide you with flea products that contain **insect growth regulators** (IGRs) that will prevent larvae from developing into adults, in addition to chemicals that will kill the adult fleas.

**"Before applying any environmental product, vacuum your carpet to stimulate the pre-adult fleas to emerge from their protective cocoons."**

Before applying any environmental product, vacuum your carpet to stimulate the pre-adult fleas to emerge from their protective cocoons. Be sure to discard the vacuum cleaner bag after its use, or empty your canister vacuum outside.

## My dog lives most of his life outside. What should I do?

Concentrate on dark, shaded areas and the areas he sleeps in, including his bedding. Spray a product containing an IGR and repeat every 14–21 days for three to five applications.

The newer topical and oral flea preventives will greatly assist you in solving your flea problem. By understanding the flea life cycle and following your veterinarian's recommendations, you and your pet will be flea free in no time.

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