

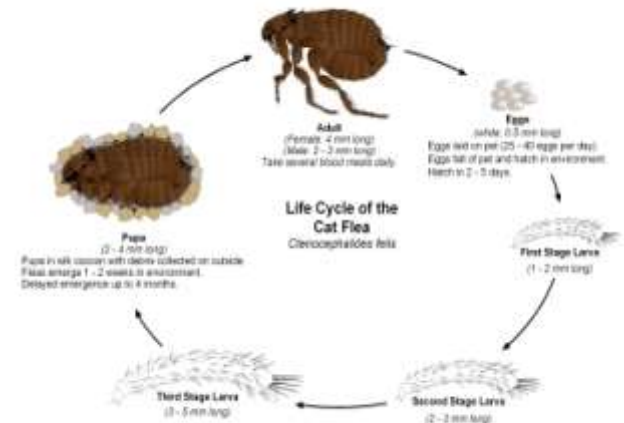


## Dealing with a Flea Infestation

Your veterinarian has sent home a dose of Frontline® for your pet today because evidence of fleas was found during the physical exam. We understand that dealing with a flea infestation can be a very frustrating process for everyone involved and we are here to help you.

### The Flea Life Cycle (“How it all starts”)

The flea most commonly found on our dogs and cats is called *Ctenocephalides felis*. Like most insects, fleas go through multiple stages before they become those annoying, biting adults. Unfortunately, all of these other stages occur \*off\* your pet --- usually deep in your carpeting --- which makes them more difficult to target. Although female fleas lay their eggs in your pet’s coat, they typically drop off and can be deposited anywhere your pet has access. After 2-5 days, the eggs hatch into larvae, which like to burrow deeper into your carpet or furniture to avoid the light. In another 7-14 days, the larvae pupate, enclosing themselves in a protective, cocoon-like shell. Unlike the other stages, this shell is nearly indestructible by chemical means. The pupal stage can last anywhere from 1 week to 4 months, depending on conditions. The trigger for pupae to hatch is vibration, such as your pet walking by. This becomes particularly important when going to cottages or moving to a new home which has been empty for a few months --- you can have hundreds of pupae in the carpet just waiting for your visit to all hatch at once! As soon as the adults hatch, they are hungry and ready to jump onto a suitable host for a meal, starting the life cycle over again.



### Flea Treatments (“Why won’t they go away?!”)

A flea infestation can be a very frustrating problem to deal with --- a quick internet search produces over 13 million websites on flea control and treatment! Depending on the severity of your infestation, one or more types of treatment may be recommended. At the very least, your pet should be on a topical product (we recommend Frontline®) which not only kills the adults, but contains an Insect Growth Regulator (IGR) to control the eggs and larvae. IGRs essentially work like flea birth-control, preventing eggs from hatching and reducing the viability of any larvae that do hatch. If your pet is on the monthly preventative Sentinel® with lufenuron, you already have an IGR on board. An additional adulticide (Capstar®) may be prescribed for daily use if your pet is allergic to flea saliva or you have a severe infestation. Flea baths are typically not very useful as they only kill the adults (doing nothing to treat all the larvae, eggs, and pupae) and tend to be very harsh and drying to your pet’s coat.

Mechanical control measures should also be used --- flea comb your pet often, dipping the comb in soapy water to trap any adult fleas removed. Vacuum your floors and furniture, paying special attention to dark areas, like under the beds or under couch cushions. Throw away the vacuum bag immediately (outside!). Some websites have suggested cutting up flea collars and putting them in your vacuum bag to kill any fleas vacuumed up; however, some caution should be used as this may cause faster release and aerosolization of the chemicals into your environment. There are a number of commercially available premise sprays as well; unfortunately most of these utilize pyrethrins – chemicals which are highly toxic to cats and birds. With any significant infestation, or if your pet has a flea bite allergy, we recommend calling a professional exterminator to treat your home and yard, even if your pet doesn't spend much time outside. Typically the professionals will guarantee their work, so you are sure to get those fleas out of your home.

Additional information on flea products can be found on the veterinary support site,

Veterinary Partner, at: <http://www.veterinarypartner.com>

Flea Product Comparison: <http://www.veterinarypartner.com/Content.plx?P=A&S=0&C=0&A=545>

### **What about “Natural” or “Holistic” Flea Treatments?**

With the boom in holistic medicine in humans, we are also seeing a lot of people who want more natural therapies for their pets. These alternative therapies can be very effective for certain conditions; however, in the case of fleas, they are often not worth the cost. Most of the plants and essential oils purported to kill or deter fleas (such as Pennyroyal) are poisonous to our pets as well. “Flea traps”, which generally consist of a light source over either sticky-paper or soapy water, may be used to identify the extent of your environmental flea problem, but likely will not trap enough fleas to actually correct it. Of all of the natural treatments we've looked into, the one most widely supported was the use of Borax powder (Flea-stoppers® granules) or diatomaceous earth sprinkled on the carpet to help kill eggs and larvae, then later vacuumed up. This would be used in addition to on-the-pet control measures, and does not kill pupae or biting adults.

Regardless of the control measures you use, be aware that getting rid of a serious flea infestation takes \*time\*. The infestation didn't develop overnight, and it won't go away overnight either. Remember, we have no chemical means to destroy the pupal stage, which can last months in your carpets. However, it is possible to get rid of them, and we are happy to help in any way we can.

