

## Flea Control - Dogs

Fleas live in your house in four stages. The egg is laid on your pet, but then immediately falls off into the house. After some time, it hatches into a small microscopic worm called a larva. The larva crawls around the house and then eventually spins itself a cocoon, for the metamorphosis into an adult flea. That stage is called the pupal stage. Once the pupal stage is complete, the flea hatches out into an adult and then immediately jumps onto the nearest warm blooded animal. This cycle requires average daily temperatures above 70 degrees, and greater than 50% relative humidity. This means that in wintertime it can take months for a flea to complete this whole cycle, but in the heat of summer it can all be accomplished in 2-3 weeks.



Once fleas establish themselves in your household it can take several weeks and even months to bring them completely under control. Prevention, as always, is the key and it can keep you from having to bomb or flea spray your house. The problem with flea infestations is that for every flea that is on your pet, you can have 10 additional fleas in the house. And the fleas that are in your house are different stages of the life cycle, and are not killed by the same medications that kill adult fleas. In fact, flea pupae are virtually impossible to kill.

The most important thing to understand about the life cycle is that your main concern in the house is to kill the flea eggs and the larvae, while on your pet it is most important to kill the adult fleas. Unfortunately nothing short of a blowtorch can kill flea pupae, and because of that, you need to wait for the pupae to hatch into adults before they can be killed. This is why you cannot rid your home of fleas in one day. Even though in one day you can kill all of the adults, and eggs and larvae, the pupae will remain and will continue to hatch over time.

### FLEAS ON YOUR PET

#### Spot-On Flea Products:

The three best products for killing fleas on dogs are FRONTLINE PLUS, ADVANTAGE, and ADVANTIX. We no longer use the Revolution because of its expense and because it has limited benefit for tick control. Most of our clients use the FRONTLINE PLUS because it is very safe, and also kills flea eggs and ticks. ADVANTAGE just kills adult fleas. ADVANTIX does kill ticks as well, but in our experience, the FRONTLINE PLUS works better. All three of these products are applied once monthly, are very safe for dogs, and are waterproof.

We have two new products in stock, PARASTAR PLUS and CERTIFECT. Both of these new products have added ingredients to the base product found in FRONTLINE in an effort to make them more efficient at killing ticks. Neither should be used around cats.

Over-the-counter products which look like these products are like giving your dog a very strong dip. These products often do not last a full month, they are not waterproof, and like other dips, they can make your pet sick. Because of this we do not recommend them.

#### Flea Shampoos:

These products will kill any fleas on the dog when you're shampooing them, but after you rinse them off, the product rinses off too. We do not recommend shampoos.

#### Flea Collars:

Many years ago most fleas developed resistance to the chemicals in these collars. In addition, the close proximity of the impregnated plastic to the skin of the neck can cause dermatitis. A flea collar that contains an insect-growth regulator is available, which keeps eggs from hatching, and which may be of some help in controlling an infestation.



#### **Flea Sprays:**

These still work well but must be applied every 2-3 days for maximum effectiveness. Because of this, most people prefer the spot on products. In addition, you must take care to not spray the product directly into the eyes of your pet, because most sprays have an alcohol base.

#### **Flea Pills:**

CAPSTAR, COMFORTIS and TRIFEXIS are pills that kill fleas once they bite your dog and suck blood. These medications are extremely popular in the South, where flea infestations are rampant. While CAPSTAR only works for a day or two, COMFORTIS and TRIFEXIS work for an entire month. If we suspect that the fleas on your dog are getting resistant to the standard spot-on medication, we might recommend these to you.

PROGRAM is a pill which is given once monthly. PROGRAM does not kill adult fleas, it only kills flea eggs, and the dog must be bitten for the drug to work. We do not carry this drug.

## **TREATING THE HOUSE**

Do not expect that you will be able to eliminate all the fleas in your house with one treatment. Typical house treatments result in the death of all of the eggs and larvae present with the first application. We do not, however, have the ability to kill flea pupae. Because of this, we have to wait for the pupae to eventually hatch and to jump back on your dog or cat. This means that for at least 2-3 months after you treat your house, you must continue to treat your pets for adult fleas.

Eggs and larvae are very susceptible to direct light, and drying. Most eggs in sunlight, or on a hardwood or linoleum floor will die without any chemicals present. The eggs and larvae that do not die spontaneously are found in carpet, and in upholstery and bedding. Some may also live underneath furniture or in the cracks of baseboards. In those areas, we recommend you apply an insect growth regulator, a product that kills eggs and larvae.

#### **Insect Growth Regulators (IGR):**

Insect growth regulators, like Methoprene (Precor), Esbiothrin, and Pyriproxyfen (Nylar) will kill flea eggs and larvae. Regular flea sprays do not. Therefore, it is extremely important to find a product that has one of these chemicals in it. To apply these products you do not have to bomb the entire house (although bombs with these products are available). Using a premise spray or house treatment on all carpeted rooms, upholstered furniture, under cushions and under furniture will target most of the important areas where fleas live. Spraying your bedding AND your pet's bedding is also very important. If a bomb is used, make sure to supplement the bomb by spraying underneath the cushions and underneath the furniture because fleas thrive in dark areas like this, and a typical bomb does not saturate those areas with the products. Spraying a premise spray into a vacuum cleaner bag will help to control flea populations there too.

Insect growth regulators will last up to 4-6 months once applied. If you shampoo your rugs or wash your bedding you will need to reapply the product. Some people that get repeated infestations year after year, choose to spray their carpeting in June or July (prior to flea season) to get protection in place before the fleas come out.

#### **Boric Acid Powder:**

Boric acid dries out adult fleas, flea eggs and larvae and kills them. It is a very mild chemical which is very safe (it is found in a lot of eye drops). This product (FLEABUSTERS) is sprinkled in appropriate areas and lasts for some time in the environment.