

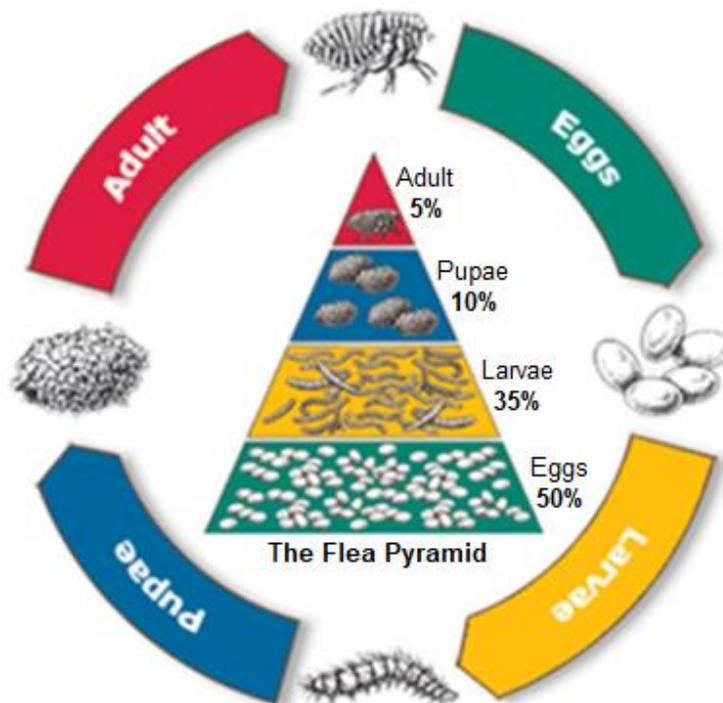


## FLEAS, FLEAS, FLEAS!!!

Fleas are the most common external parasite affecting our pets. Flea allergy dermatitis is the most common skin disease of dogs and cats! Flea control has always been a challenge for veterinarians and pet owners because the adult fleas are a nuisance and cause your pet to itch, but most of the flea population (eggs, larvae and pupae) are not found on your pet but rather in the environment, in and around your home. The ideal flea control program utilizes products that target the various stages of the flea life cycle, not just adult fleas. Selecting the most appropriate products to achieve a flea-free existence for your pet and understanding the flea life cycle is important.

### Flea Life Cycle

Flea eggs are laid in the hair coat and are designed to fall off the pet. They are resistant to insecticides, but susceptible to various insect growth regulators (IGR), inhibiting their ability to hatch. Larvae develop in the environment (carpet, yard, etc.) and feed on adult flea feces (blood) that fall out of the hair coat. The larvae are susceptible to traditional insecticides and insect growth regulators. Larvae eventually spin cocoons (often within carpet fibers) for pupation. Pupae are resistant to freezing, desiccation, and insecticides. Pupae can lie dormant for many months; they are stimulated to expupate and emerge into adults by vibration, warming and increased carbon dioxide. Normally, expupation occurs when your pets are near and the new fleas find them within seconds of emergence. Emergent fleas are mobile and can survive a few days in a suitable environment. New fleas begin feeding within hours of finding your pet. The entire life cycle, from egg to adult, can be as short as 16 days.



## **Environmental Flea Control**

Understanding the flea life cycle gives valuable insight on how to manage them. As stated above, 90-95% of fleas are in the environment as eggs, larvae and pupae. For this reason, it is extremely important to treat the environment. Fleas like moist cool places, so treating under trees, the house and porches are the important areas to concentrate on outside. Areas where there is exposure to increased sun are less important as the eggs dry and die in the sun's heat. There are many products available from sprays to granules and powders to treat your yard and if possible, use a product that kills both adults and has an IGR to stop the eggs and larvae from further development. Employ or talk with a professional exterminator for more information. Inside the house, sweep all floors 2-3 times a week to remove eggs that have fallen off your pet and dump them in a bag in an outside trash can. If you have carpet, vacuum 2-3 times a week and change the bag, or if a bag less vacuum, dump the waste in a bag in an outside trash can. The vibration from sweeping and vacuuming will cause the pupae to expulate and the adults will escape the vacuum and trash if not disposed of EVERY time. It is important to dispose of the waste outdoors, each time, or you will never rid your house from the escaping adults.

## **Animal Flea Control**

There are several flea products on the market with multiple routes of administration. Most flea products work well, but the most important aspect to flea control is treating EVERY pet in the household. Not only pets, but any animal that may be a source of re-infestation to the yard or home must be treated or controlled. Examples include stray cats and dogs, squirrels, opossums, rats, mice, raccoons, skunks, moles, gophers, etc. The list is long, but wild and feral animals can be the failure to flea management as they are hard to treat and/or control and therefore are a continual source of fleas to your environment. So, for treatable animals, monthly flea prevention year-round is recommended. Geographical areas that do not have cold winters to "kill off" fleas or have several fleas in the pupae stage that can withstand cold weather, makes flea prevention important year-round.

Flea preventions given by mouth verses topicals applied to the skin are preferred for a few reasons. Many pets with fleas or flea allergy benefit from bathing 1-2 times a week. Bathing can wash-off topical flea treatments giving way to "product failure." With new, highly effective oral products available, bathing can be performed as often as needed and product will not be "washed-off". When swallowed, oral products ensure the full dose is given, verses multiple topical application failures including skin diseases, thick hair coat, etc., inhibiting absorption. If vomiting occurs with oral products, nausea meds can be dispensed or switching brands with an equivalent product may be necessary.

If a large flea burden is present in the house or yard, after starting flea prevention, fleas may be visible on the pet for several months. This does not indicate the flea product is not working. This proves there is a large flea burden and will take several months to get the burden down. The continual fleas noticed are the 90-95% eggs, larvae and pupae maturing in the environment to adults, and jumping on the pet. The product is killing what is on your pet, but the burden is so high they are constantly being re-infested. It takes 3-4 months of environment and monthly treatments of ALL your pets to reduce your flea burden. Fleas are tough to manage, especially if treatment has never been instituted.

## **Flea Allergy Dermatitis (FAD):**

FAD is extremely common and may be worse in warmer areas as the winters are not cold enough to kill fleas as seen in colder areas. This makes flea allergy dermatitis a year-round issue in warm areas. Signs typically start when pets are less than 6 months old. They are allergic to the saliva of the flea bite and react by becoming extremely itchy on their back around their tail head that may progress to their groin and inner thighs. Pets may have red irritated skin, hair loss and secondary skin infections that present with scale and pustules. Many times the flea is not seen, but one bite sets off the reaction. Mainstay treatment includes routine flea prevention for ALL pets in the household and treatment of the environment. Ninety-five percent of the flea life cycle is in the environment making it extremely important to vacuum routinely emptying it each time in an outside trash can and spraying the yard and home regularly. Year-round flea prevention is required lifelong to manage Flea Allergy Dermatitis.

