

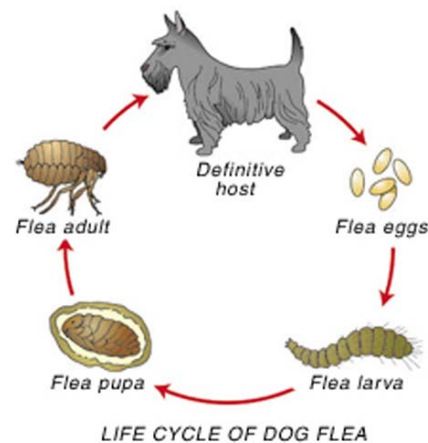
FLEA CONTROL

My dog always seems to be picking up fleas. What can I do?

Successful flea control involves:

1. Eliminating fleas from your dog
2. Strict environmental flea control.

Fleas are not host specific. Dogs and cats share the same fleas so that it is important that all the pets in the home are treated with appropriate medication. Treatment of the pet is relatively simple since it is only the adult flea that has to be eliminated. When it comes to environmental control other stages of the life cycle have to be considered.



Do fleas have a complicated life cycle?

There are four stages in the life cycle of the flea and the adult constitutes only about 5% of the entire flea population, if one includes the immature forms.

1. Flea eggs are whitish and about half a millimetre (1/32 in) in length. They are very unlikely to be seen without a magnifying glass. The adult flea has to bite the dog for the essential blood meal. This is required for food and to complete the life cycle. Eggs are then laid on the dog but soon drop off on to the ground. They constitute approximately 50% of the flea population. High humidity and temperature favour rapid hatching.
2. Flea larvae are about 2-5 mm (1/8 to 1/4 in) in length. They feed on organic debris found in their environment and on adult flea faeces which are essential for successful development. They dislike strong light and actively move deep into carpet fibres or under organic debris, grass, branches, leaves, soil etc. If outdoors they will develop outside if temperature and humidity are sufficiently high. Moisture is essential for survival and they are killed if the environment is too dry. Outdoor larval development occur in shaded, moist areas where flea infested pets spend a significant amount of time

so that adult flea faeces are available to provide food for the developing larvae. Outdoor flea development in the United Kingdom is of less significance than in southern Europe. In Britain our centrally heated, wall to wall carpeted homes afford an ideal environment for survival.

3. The final, third stage larval flea pupates. The pupae produce a silk-like cocoon which is sticky. It quickly becomes coated with grime which acts as a useful camouflage. Again with warmth and sufficient humidity pupae become adult fleas in 5-10 days. The adults do not emerge from the cocoon unless stimulated by physical pressure, carbon dioxide or heat, i.e. the presence of a potential host. This is important since once emerged from the cocoon adults can only exist for a few days unless they are able to feed. Pre-emerged adult fleas within the cocoon will routinely survive 3-4 months and up to 9 months has been recorded. During this time they are resistant to insecticides applied to the environment. Most adult fleas therefore are able to emerge into the environment a considerable time after the application of any insecticides.
4. Once emerged the adult flea, unlike the larvae, is attracted to light and therefore emerges to the surface of the ground cover (carpets etc.) in order to encounter a passing host. Once this has been achieved the flea attempts to remain upon the host if at all possible but some dogs are particularly good groomers and the life span of the flea is then often short. 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, adult flea to → egg → larvae → adults can be completed in 14-21 days with optimum temperature and humidity.

If there is a high infestation, particularly in a young animal, anaemia can occur due to the amount of blood being taken from the dog. A single female flea can take up to 15 times her body weight in blood over the several weeks of her adult life. In addition fleas can carry certain diseases and also act as vectors to spread one of the most common tapeworms of the dog and cat.

What shall I put on my pet?

Many products on sale over the counter have no residual action and therefore if the environment is heavily contaminated fleas will soon reappear on your pet. It is worthwhile consulting us regarding specific advice in relation to particular circumstances. The preparations that we sell at our practice are prescription-only-medicines so the vet will only prescribe to our own customers once the animal has been seen. They contain ingredients that are thoroughly tested and only a small quantity required when treating your pet. For flea and tick prevention we recommend **Practic** spot-on treatment or **Frontline** spray. **Frontline Combo** is available for cats. Products have become available that effectively control not only fleas and other parasites that live on the skin but also certain worms. **Stronghold** is used to prevent against ectoparasites and specific endoparasites.

What about the environment?

Today there are preparations available that prevent flea larval development in the environment such as **Frontline Combo**. These, although more expensive than traditional products, are indicated where environmental fleas are a problem. Other products although only effective against adult fleas, are sufficiently long lasting that they will be effective against the adult once hatched. Pre-emerged fleas can be encouraged to emerge by increasing the humidity and temperature, by boiling a kettle and heating the room.

