



# **Understanding Fleas**

Fleas are amazing creatures. They have a life cycle that is well suited to survival. From egg to adult can be as short as 2 weeks if conditions are ideal up to one year if they are waiting for things to get better. The adults don't emerge until a host (the animal or human they will feed on) is near. No wonder their populations explode so readily!



Understanding how they develop will help you understand the challenges of controlling them. There are many myths and just plain wrong information out there. Know the facts and you have a better chance of conquering them.

## Adults

Adult fleas jump onto your pet (or you) and start feeding on blood within minutes. One myth is that they jump off to lay eggs or to jump onto another pet. **That is not true.** Fleas stay on their host unless they are removed manually. That means you have to pick them off or your pet has to scratch or lick them off. Pets often swallow the fleas. If a flea is forced to leave, it will often die.

What this means to you is your pet is getting fleas from the environment and not directly from another animal. The fleas on your pet came from eggs in the house or outside that eventually developed into adults that hopped onto your pet. The fleas did not jump off another pet and jump onto yours.

The great outdoors is the usual source to start the problem because wild animals carry fleas. They leave the eggs behind to grow new fleas near areas you walk in or that your pet visits. Your pet then brings the fleas indoors.

You can also bring them in on your shoes or clothes. By the time you notice them, they've usually been in your house a couple months multiplying like crazy.

## Eggs

Fleas start breeding about 8 hours after they start feeding and, about a day later, the female starts laying eggs, up to 40-50 a day. These eggs are laid on your pet, but they don't stay there. They fall off quickly into the environment. Many of them will be where your pet spends time sleeping and resting.

Does your pet sleep on your bed? If so, that means you will have eggs and larvae (think maggots) sharing the bed with you. If that doesn't make you want to get rid of fleas, nothing will.

If the weather gets too cold or too dry, the eggs can die. This is rarely the case in our houses. However, during the winter when humidity is often lower, the eggs may not hatch as quickly. They may wait until conditions are better in spring. You then discover fleas coming out in full force.



#### Larvae



Larvae hatch from the eggs. These are little maggot-like creatures. They don't like light so they tend to crawl under furniture, bedding, and

into crevices in floors. This puts them into protected areas where they can happily develop into the next flea stage.

They are more susceptible to drying so to protect them, the eggs won't hatch if the humidity is too low. This ensures the larvae are more likely to survive. They also tend to curl around carpet fibers. This makes it hard to pick them up when you vacuum.

## Pupae

After the larvae have finished doing their thing, they spin a cocoon. Inside is what's called the pupa (more than one is pupae) which is the pre-adult stage. Within the cocoon, the pupa will develop into an adult. The cocoon protects the pupa from drying out, freezing, and insecticides. This helps pupae to survive being outside during the winter.

The cocoon is sticky so it will tend to stick to carpet fibers. Pupae can stay dormant up to 6 months if conditions are not ideal. The result is that many fleas survive from egg to adult.

## More Adults

The adults come out of the cocoon in one to two weeks if the chances are good for finding a host and conditions are good for survival. Vibrations (your pet or you walking across the floor or vacuuming), carbon dioxide (from breathing out), or heat will stimulate the adult to emerge.

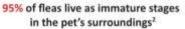
If you go on vacation and your house is empty for an extended time, the adults will safely stay in their cocoons until you return walking and breathing. They then come out in large numbers.

This scenario also happens when people move into a new apartment or house that has been vacant awhile.

The adults hop on to your pet, start feasting and the whole process starts over. Fleas are good at making babies. If your pet has 100 fleas, which is not a large number, within 2 months there can be 160,000 eggs in the environment. It doesn't take much time for fleas to

be overwhelming.

When you see fleas, 95% of the population is still in the house waiting to become adults. Even if it looks like your pet has only a few fleas, imagine how many are still to come.





## Disease

Fleabites can be irritating to your pet and cause some itchiness. Pets that are allergic to the saliva in the fleabite will become extremely itchy and often develop



scabby areas and sores, a condition called Flea Allergy Dermatitis (FAD).

Often the itchiness and sores are focused on the back half of the body. The allergic reaction can drive him (and you) crazy. People can also be bitten by fleas and have the same problems.

Besides being a nuisance to your pet and you, fleas can also carry diseases. Tapeworms are the most common one. Pets get tapeworms when they swallow a flea that is carrying them. Fleas can also carry several different organisms that cause infections.



Because they feed on blood, an excessive number can cause anemia. This is more likely in young or small pets. There have been pets that have died from blood loss due to fleas.

These are all good reasons why controlling fleas and keeping them out of your house is an excellent idea.

## Looking for fleas



You can check your pet for fleas by parting the fur and looking at the skin. You may see them scurrying away. You can also look for "flea dirt", the feces from fleas.

Flea dirt is dark and often comma shaped. When you place it on a damp paper towel and crush it, you will see a reddish brown color. This is from the blood the flea ate. Finding flea dirt tells you fleas are on your pet even if you don't see them.

You can use a flea comb to help you find evidence.

This is a comb with teeth spaced very close together. It picks up fleas and flea dirt. It works well on short-coated pets but may be difficult to use with a long or thick hair coat. If it looks like specks of dirt in the hair on the comb,



it's probably flea dirt. You can test it with the damp towel to make sure.

Unfortunately, you won't always see fleas or flea dirt when you check your pet. If the fleas are in low numbers, if you just don't check the right spot, or if your pet is removing them rapidly, they are hard to find.

This will often happen when fleas are just getting started in your house or with pets that are allergic to the fleas and scratching or licking excessively. Not finding fleas DOES NOT mean your pet doesn't have fleas.

# **Controlling fleas**

There is no quick and easy way to do this. Realize at the beginning that it may be frustrating and will take months. However, if you do everything right, you will get rid of them. You need to treat all pets with effective products as frequently as the product says in order to get fleas under control. Cleaning and treating the house will also help.

It will still take 2-3 months to stop the problem completely due to all the eggs and immature stages in the environment. You can also see more fleas during the first month as adults hatch from the pupae even though the product you are using is effective.

If your product is good, those adults will be killed quickly. After the first month, numbers should dramatically improve because you've broken the life cycle by killing the adults. Dead adults can't make eggs.

The best way to control fleas is to start treating all your pets BEFORE they get fleas. Keep them on an effective product all year long and you won't have to go through the agony of fleas.

