

## CFC protocol for fleas found on a dog in clinic

### General information about fleas:

A) What do fleas look like, where do they live, and what are the signs of fleas on a dog:



Dog flea (1)



Fleas on a dog (1)

Fleas are some of the most annoying pests to deal with. They're small enough to get around easily and agile enough to be called acrobatic. Fleas generally prefer four-legged hosts to humans. However, if a family pet has fleas, it's likely that the pet's yard, house, and furniture will be targeted next. Itching is a telltale sign of a flea infestation. You may even spot the little jumpers. On average, fleas are 2.5 millimeters long, making them visible to the naked eye. Their strong legs allow them to jump as far as 13 inches in distance (2). Flea dirt, dark specks resembling pepper grounds scattered on the skin's surface can also signal that there are fleas on a dog. If you see flea dirt—which is actually flea feces that is composed of digested blood—pick some off the pet and place on a wet paper towel. If the tiny specks spread out like a small bloodstain after a few minutes, it's definitely flea dirt, and your pet has fleas. Fleas prefer temperatures of 18-27°C and humidity levels of 75-85 percent—so for some areas of the country, fleas on dogs are more than just a summer problem. Dogs often get infested with fleas through contact with other animals or contact with fleas in the environment. (3)

B) What is the life cycle of a flea:

The life cycle of the flea depends on environmental conditions. Fleas flourish in warm climates. The ideal temperature range is 26 to 32 °C with 70 percent humidity. In these conditions, fleas have a life cycle of 18 to 21 days. If the weather isn't ideal and there isn't a host to feed on, flea larvae may remain dormant for months while waiting for better conditions to develop. On average, adult fleas live from several weeks to several months (2, 3). The various flea

stages are quite resistant to freezing temperatures. The adult female flea typically lives for several days to weeks on its host. During this time period, she will suck the animal's blood two to three times and lay 20 to 30 eggs each day. She may lay several hundred eggs over her life span. These eggs fall off of the pet and into the yard, bedding, carpet and wherever else the animal spends time (3).

C) Removing fleas from dog at home and avoiding spreading infestation to other places:

1. Give your pet a bath: Just lukewarm water, or water and a mild soap, can help get fleas off the dog's fur and skin. Consult with your veterinarian before using a flea shampoo or any other medicated shampoo or substance. If your dog is allergic to fleas (your vet may call it flea allergy dermatitis), its skin might be especially sensitive, and some of the chemicals in flea products can make skin irritation and infections worse. If you're worried about how your pet will react with a bath, it's OK to skip this step (4).
2. Comb your dog's hair using a fine-tooth flea comb: The teeth on a flea comb are spaced to trap fleas while they allow your pet's fur to pass through. Flea combs also help remove flea dirt. Be sure to take special care while you comb around your pet's neck and tail areas. That's where fleas tend to feed (4).
3. Kill the fleas: The little buggers are usually between the size of a poppy seed and a sesame seed, and they're brown or reddish brown. If you see a flea on the flea comb, dunk the comb into hot, soapy water to kill the flea. Don't try to crush fleas. They jump quickly and can be hard to kill by hand (4).
4. Do regular checks: If your dog has a history of fleas, comb your dog with a flea comb at least once a week until you're sure that your home and pet are free of fleas (4).
5. Let your pet groom itself: Cats and dogs may clean themselves more when they have fleas. If your pet is nipping, chewing, or scratching at itself enough that you notice hair loss or red, inflamed, or bloody skin, call your vet right away. Your animal may have an infection or a flea allergy. Keep in mind that you may not find fleas on your pet, even if your vet has confirmed your pet has been bitten by fleas (4).

6. Keep your dog at home: If you have found fleas on your pet, in addition to the above-mentioned measures to eradicate fleas from the dog and dog's living environment, avoid taking your pet to other places (i.e. parks, groomer, therapist, and/or vet). Consult with your vet regarding medical treatment for prevention of future flea infestations. (3)

D) Removing fleas from home/yard:

If your pet is a walking carrier of mature fleas, your home can become the nursery. It's estimated that only 5 percent of a flea infestation can be attributed to the adult fleas unwillingly hosted by your pet. The remaining 95 percent is thought to be the eggs, larvae, and cocoons spread throughout your house. This means that you have to tackle the problem from all angles in order to truly eradicate the infestation, even after your dog has received medical treatment to kill the adult fleas as well as eggs, larvae, and cocoons from his body. To do this, you must treat your pet and its living environment at the same time. Depending on your pet's boundaries, this may include your whole house or yard. Here's how to start eliminating fleas from your home (2):

1. Use a powerful vacuum on any floors, upholstery, and mattresses and vacuum every day for 18-21 days, which is the duration of the life cycle of an adult flea (2). Because flea eggs are difficult to see and even more difficult to remove, every time you vacuum you should assume you're only removing the adults. Even after medical treatment to kill adult fleas as well as eggs, larvae, and cocoons on your dog, it's important to vacuum daily for the duration of the life cycle, or 18-21 days. Every day you vacuum, you'll be able to remove all of the hatched eggs before they've become adults and create more flea eggs (5). Cracks and other tight spaces are usually good hiding places for fleas and their cohort of eggs, larvae, and cocoons. If you can, use a vacuum with a bag you can dispose of without coming into contact with its contents. If not, empty the canister in the vacuum immediately after vacuuming into a plastic bag. Close plastic bag securely and place outside (2).

2. Employ a steam cleaner for carpets and upholstery, including pet beds. The combination of high heat and soap is the enemy of fleas in all stages of life. Pay special attention to any hot spots where your pet usually lies down (2).

3. Wash all bedding, including your pet's, in hot water. Dry it at the highest heat setting. If the infestation is severe, consider getting rid of old bedding and starting anew (2).

4. Use chemical treatments. Aerosol sprays are recommended over the foggers, as you can direct the spray under beds or other places that the foggers may be unable to reach. Choose an insecticide that contains both an adulticide, such as permethrin, that kills adult fleas, and an insect growth regulator, such as methoprene or pyriproxyfen, that kills the eggs, larvae, and pupae. Sterifab is also highly successful in killing fleas and ticks. (6) People and pets shouldn't come into contact with the spray until it has dried. Be sure to wear gloves when you apply the spray, and only spray when everyone is out of the house (2).

5. Get rid of fleas in your yard. The best way to eliminate fleas from your yard is to think about where they'd most like to hide. Take a good look at your yard and make a list of the places that are shady, humid, and warm. Sun-exposed areas can get too hot, so you probably won't find many fleas there. Spot problem areas by observing where your pet likes to lie down. These typically become preferred hanging spots for fleas. Once you have your target zones, here's what you can do to eliminate the fleas: - Mow your lawn regularly and rake the exposed surfaces thoroughly. Fleas like to hide in tall grass. Make sure to bag the contents rather than add them to your compost pile. - Remove all debris, such as dead leaves and twigs, from flower beds and from under any bushes. - Expose as much of the shady areas to sunlight as you can. - Spread cedar chips on the areas where your pet likes to lie down, under the bushes, and on flower beds. -Ask your gardening center about nematodes, which are small worms that can eat parasite eggs, and sulphur granules. You can spread both around problem areas to help remove fleas (2).

#### E) Medical treatment to prevent flea infestations:

Dog flea and tick pills and other spot-on dog flea and tick treatments have proven to be some of the fastest ways to rid your pet of fleas. Some only target adults, while others target flea eggs, larvae and adult fleas, so it's important to buy the right one. Others will combine flea control and heartworm prevention in one treatment. You'll notice that some require a prescription, while others do not. So, what is the best oral flea treatment for dogs? It will depend on your individual dog's needs. Talk to your vet about which option is the best for your pet. (2)

**1. Prescription flea medications.** There are a variety of highly effective and safe brands of flea products on the market today. Talk to your veterinarian about preventative flea and tick medicine for dogs. Prescription treatments present one of the best ways to kill fleas fast. (2)

- Bravecto (fluralaner) begins to kill fleas within two hours and lasts for three months, while products containing spinosad (Comfortis, Trifexis) begin to work within 30 minutes and last for one month. Some of these flea products do not harm the adult flea but instead prevent her eggs from hatching, thus breaking the life cycle of the flea. With no reproduction, the flea population eventually dissipates as long as the pet isn't coming in contact with new fleas continually. In in Calgary's climate, your dog's treatment should begin in early spring before the flea season starts. (2)

- For animals that are allergic to flea saliva (have flea bite hypersensitivity), choose a product that targets adult fleas as well, since they are still able to bite the animal. For dogs with flea hypersensitivity, products containing a flea repellent (Seresto collar, Vectra 3D) are the best choice so that the fleas never bite. (2)

**1. Non-prescription flea medications.** There are also many other products which will kill fleas on the pet and for which no prescription is needed. The drawback, however, is that these products may be less effective than the prescription products.

- These nonprescription flea products include flea shampoos, flea powders, flea sprays, flea collars, oral flea treatment and spot-on products. Many veterinarians are reporting that their patients still have fleas after use of these over-the-counter products, but there are also good reviews from pet parents for some of these products. (2)

- Capstar, for instance, is a tablet that kills adult fleas and is taken orally. It begins to work within 30 minutes, and kills more than 90 percent of all fleas within four hours. (2)

F) What to do if a flea is found on a dog in clinic:

**1. Remove dog from clinic.** Immediately after a flea is discovered on a dog's skin, the client should be politely informed that we have a protocol in place to

contain a potential flea infestation that requires the potentially infected dog to be removed from the clinic immediately. Also inform the client that we can provide them with information regarding diagnosis/ treatment / control of flea infestation in their dog and home.

**2. Remove and wash blanket.** Once the dog is removed from our premises, the blanket where the dog was laying should be gathered in a bunch and placed directly into the washer and washed immediately OR placed in a plastic bag immediately or, setting the water temperature at the hottest possible setting, or 'Sanitize' in our current washer. If the washer is in use and not immediately available, keep the blanket in the plastic bag until the washer becomes available and proceed with washing the blanket as described above. Set the clothes dryer also in the hottest possible setting and proceed to dry the blanket. The blanket should be washed and dried along with the clothes of any staff that would have become in contact to the infested dog.

**3. Change clothes.** Anyone that has been in contact with the dog should change their clothes and place the exposed clothes directly into the washer or in the plastic bag containing the blanket. Proceed to wash as described above.

**4. Vacuum the room thoroughly.** Once the dog and the blanket have been removed, vacuum the floor in the entire room VERY thoroughly, making sure to get under the chairs, desk, bench, etc. Empty the vacuum cleaner into a plastic bag and dispose of it directly into the outside dumpster.

**5. Employ a steam cleaner** for carpets and any upholstery where the dog might have been in contact with. Pay special attention to any spots where the dog might have been.

**6. Use chemical treatments.** Use aerosol sprays rather than foggers, as you can direct the spray under beds or other places that the foggers may be unable to reach. Choose an insecticide that contains both an adulticide, such as permethrin, that kills adult fleas, and an insect growth regulator, such as methoprene or pyriproxyfen, that kills the eggs, larvae, and pupae. Sterifab is also highly successful in killing fleas as well as ticks. People and pets shouldn't come into contact with the spray until it has dried. Be sure to wear gloves when you apply the spray, and only spray when everyone is out of the room.

7. Provide information to the owner. Once the owner and dog have left the premises, provide owner with written information (see file) as to how to proceed to exterminate fleas at home and recommend to seek veterinary advise.

References:

- 1- [dog fleas images - Google Search](#)
- 2- <https://www.healthline.com/health/healthy-home-guide/how-to-get-rid-of-fleas>
- 3- [https://www.petmd.com/dog/care/evr\\_dg\\_fleas\\_on\\_dogs\\_and\\_what\\_you\\_can do about them](https://www.petmd.com/dog/care/evr_dg_fleas_on_dogs_and_what_you_can_do_about_them)
- 4- <https://pets.webmd.com/remove-fleas-from-pet#1>
- 5- [Tips to Vacuum Your House of Fleas - Green Pest Solutions](#)
- 6- <https://www.sterifab.com/post/how-to-get-rid-of-scabies>