



BUG OFF!!

Yes, it is summertime again....swimming, picnics, hiking and those pesky fleas, ticks and mosquitoes! In an attempt to keep our favorite Chinook companion (s) bug free we are forever looking for the perfect insect repellent. This section will review flea, tick and mosquito products

FLEAS

The flea life cycle has four stages: eggs, larvae, pupae(cocoon) and adults. The eggs are laid and hatch into larvae. The larvae live off of "flea dirt", the dried blood/feces of the adult flea. The larvae get bigger and eventually develops into an adult flea. The adult fleas hatch when the right stimuli is present including vibrations, heat and motion. These adults attach to a host (your animal or you) to feed and breed beginning the cycle all over again.

Flea control products can be divided into 2 broad categories: those that involve removal of the fleas from pets and the environment and those that control the flea life cycle.

Flea Killers

Products designed to kill the fleas may be delivered in shampoos, tablets, powders, rinses or dips, sprays, or as a pour-on spot treatment. Be careful of products which contain organophosphate insecticides (OPs) and carbamates. OPs are responsible for the majority of pet poisoning resulting in salivation, vomiting, involuntary defecation and urination, ataxia, convulsions, slow heartbeat and labored breathing. A product contains an OP if the ingredient list contains chlorpyrifos, dichlorvos, phosmet, naled, tetrachlorvinphos, diazinon or malathion. If the ingredient list includes carbaryl or propoxur the product contains a carbamate. Several well known over-the-counter preparations (i.e. Hartz, Sergeant's, Protection) contain these ingredients. Other products contain Pyrethins and are sometimes billed as "natural" since they are derived from chrysanthemums. Unfortunately these products can be quite toxic to insects and mammals at certain levels of exposure. Pyrethrin derivatives called permethrins seem to be less toxic. Some trade products containing Permethrins/Pyethrins include Exspot, (Pour-on) Pulvex(Spray), Natura(Spray,dip), Adams(Spray,dip) PetAgree (shampoo). d-Limonene (trade name: Rio-Vista) is a citrus extract also billed as a natural flea killer. One side effect is vasodilation leading to hypothermia, ataxia and death in cats and dogs

Topical, pour-on spot treatments are another type of flea killer. They are available only by prescription and are dose calibrated according to the dog's weight. Fipronil (Trade: Frontline), imidacloprid (Trade: Advantage) and selamectin Trade: Revolution) work by disrupting the nervous system of insects. Some topicals are applied once a week and others monthly. Frontline is broader spectrum killing fleas, ticks and mites. These products resist wetting. There have been some reports of health effects from these products: thyroid cancer, liver toxicity, loss of appetite, changes in activity, body tremors, labored breathing and unsteady gait. Take care to give the exact dose per weight to avoid overdosing the medication. And, as always, read the package information and report any unusual behavior after application.

Control Flea Lifecycle

Insect Growth Regulators (IGR) and Insect Development Inhibitors (IDIs) are designed to interfere with the stages in the flea life cycle. They are essentially flea birth control. These products will prevent the next generation of fleas but will not kill insects already on your pet so you would have to combine this product with flea killer products. Products in the IGR and IDI category are Pyriproxyfen (Allerderm, FleaFix, BioSpot, OviSpot), Methoprene (Precor, Ovitrol Plus) and Lufenuron (Program, Sentinel).

Natural flea control includes regular flea-combing, fastidious housekeeping (vacuum frequently, change bags frequently), washing dog bedding every other day or so and washing uncarpeted floors at least once a week. Cleaning under furniture is important as flea larva are UV sensitive and tend to congregate in dark areas. Outdoors wash down, at least once a week, the area your dog uses for sleeping and resting. Nematodes, tiny creatures that seek out and kill fleas, can be diluted and sprayed over the outside area to be treated.

TICKS

Ticks are a bit easier to deal with than fleas however ticks can carry and transmit many infectious agents and are a significant threat to human and canine health. Ticks are responsible for such disorders as anemia due to blood loss, tick paralysis (due to neurotoxins in salivary secretions), ehrlichiosis, and of course Lyme disease. Ticks live in the soil for years. Once they sense an oncoming host (by vibration, temperature, change in carbon-dioxide level) they climb up on a blade of grass or leaf, wave their front legs and hope to successfully attach on the host.

Checking for ticks on your dog during and after every outdoor outing is an important piece of tick management. Use your hands to feel the entire body paying particular attention to the dog's head, ears, neck and feet. A flea comb may help in detecting and removing the creatures. If you capture a tick put it in alcohol or insecticide to kill it then flush it down the toilet. Squishing them or just tossing them away is not effective...they will survive! Should the tick become imbedded, the safest way to remove the tick is to put alcohol on it and, with tweezers, grab the tick and pull slowly and steadily out of the animal. Do not squeeze the tick, apply hot matches, petroleum jelly, kerosene, or turpentine. These methods are potentially harmful to you dog and anger the tick so that it deposits potentially disease-causing agents. If the tick site becomes inflamed, use hydrogen peroxide to disinfect the area and consider using a mild antibiotic cream (over-the-counter). Bee propolis, sold in health food stores is reportedly an excellent topical disinfectant and natural antibiotic. If the area remains inflamed for greater than a week consult your veterinarian.

Prevention products are available for tick control. Several natural products have been suggested including Tickweed Plus made by Heart Foods and Tick Guard found at drugstore.com. Additionally there are several natural pet care texts on the market that describe various concoctions for tick repellents. Conventional preparations for tick prevention include topical preparations such as Fipronil (Frontline) and Selamectin (Revolution). Amitraz (Preventic) comes as a collar and spray. If you are treating fleas and ticks make certain your product covers both. Advantage, for example, kills fleas but has no effect on ticks.

When using any flea or tick product here are several important points to consider:

- Read the entire label before use.
- Follow directions exactly. Use gloves if possible.
- For your feline companions, use only products labeled for cats. Cats cannot metabolize all products.
- Layering the same type of chemical (with sprays, shampoos, collars) could accumulate to toxic levels
- Use caution when applying these to the very young, old or debilitated unless directed by a veterinarian

MOSQUITOES

Many of the common mosquito repellents are harmful to pets. Repellants containing the chemical DEET are not recommended for pet use as they may be potentially toxic if they are orally ingested such as through licking. Some pet friendly products include Mosquito Guard distributed through drugstore.com and BugN'Out distributed by doctordog.com

There has been discussion in the literature lately regarding toxic effects of pest control products. Although putting pesticides on your pet may be concerning to you, treating your pet's entire indoor and outdoor environment (with natural products and others) might also give you cause for concern. Each one of us has to make choices based on compassion for our pet, concern for the environment as well as available time and energy.