



COLORADO ENVIRONMENTAL PESTICIDE EDUCATION PROGRAM

Pesticide Fact Sheet #203
CEPEP 5/00
Updated 6/06

FLEA AND TICK PRODUCTS AND YOUR PET

L.G. Skoglund
S.K. McDonald

This fact sheet covers insecticides and other compounds used for flea control, symptoms of pesticide poisonings, what to do if pesticide poisoning occurs, and what should be included in a pet first aid kit.

<http://www.cepep.colostate.edu>

Flea and Tick Products and Your Pet

Products sold for flea and tick control on pets come in pesticide-impregnated plastic collars, shampoos, and powders. These are safe if used according to the instructions on the label. Problems arise when flea and tick products are not used correctly. One common error is to give topical (skin) treatments orally (by mouth). Another error is to use products meant for dogs on cats. Cats are especially sensitive to organophosphate insecticides (chlorpyrifos) and synthetic pyrethroids (permethrin).

Human contact with flea collars can lead to dermal allergic reactions (see Pesticide Fact Sheet [Pesticide Sensitivity and Hypersensitivity](#)). These are related to the non-pesticidal substances in the collars more often than the pesticide itself. The best treatment is removal of the collar.

Insecticides commonly used for flea control include:

- Imidacloprid (Advantage)
- Fipronil (Frontline, Top Spot)
- Lufenuron (Program)
- Pyriproxyfen (Nylar)
- Methoprene (Precor)



Other compounds used include:

- Pyrethins
- Permethrin
- Organophosphates (chlorpyrifos, phosmet)
- Limonene

Symptoms of topical pesticides given orally:

- Acute onset
- Mild to moderate gastritis
- Depression
- Anorexia
- Respiratory difficulty
- Abdominal tenderness

Symptoms of organophosphate poisoning in cats:

- Marked anorexia – refusal to eat
- Mental depression
- Weakness

- Drooling
- Jitteriness, head bobbing, ear/neck tremors
- Onset is gradual over several days and persists for several weeks with low dose exposure

If pesticide poisoning occurs:

1. Keep the animal warm and quiet
2. Identify chemical(s) applied
3. Determine likely exposure
 - Diluted or concentrated product
 - Concentration
 - Application rate
 - Time elapsed since application
4. Obtain toxicity information.
 - Label – locate EPA registration number (see Pesticide Fact Sheet [The Pesticide Label](#))
 - Material Safety Data Sheet (MSDS) (see Pesticide Fact Sheet [Understanding the MSDS](#))
5. Save vomit for possible analysis
6. Call your veterinarian and follow his/her instructions. The vet may want you to administer first aid so have a Pet First Aid Kit available

Pet First Aid Kit

- Fresh 3% hydrogen peroxide
- Can of soft food
- Turkey baster, bulb syringe, or large medicine syringe
- Saline eye solution
- Mild dishwashing liquid
- Rubber gloves
- Muzzle
- Pet carrier

National Animal Poison Control Center

24-hour emergency 888-426-4435

(a consultation fee per case may apply)

References and Resources

Fleas & Ticks: How to Protect Your Pet. Fort Worth Water Department Brochure, Fort Worth, TX.

Things to Know About Pet Grooming and Pesticides. August 1995. California Environmental Protection Agency, Department of Pesticide Regulation Fact Sheet, Sacramento, CA.

[CEPEP Home Page](#)

Issued in furtherance of Cooperative Extension work; Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Milan A. Rewerts, Director of Cooperative Extension, Colorado State University, Fort Collins, Colorado. Cooperative Extension Programs are available to all without discrimination. No endorsement of products mentioned is intended nor is criticism implied of products not mentioned.