



KEEP

FLEAS

OFF YOUR PETS AND OUT OF YOUR HOME

CONTROL FLEAS IN YOUR HOME WITH THESE ECO-FRIENDLY PRODUCTS

Borate-based treatment for fleas on rugs and upholstered furniture

Ecology Works Dustmite and Flea Control, Ecology Works Dustmitex Pre-mixed Spray

Insecticidal soaps for outdoor application

Bonide Insecticidal Soap, Garden Safe Insecticidal Soap Insect Killer, Safer Brand Insect Killing Soap

Desiccating dust containing diatomaceous earth (DE)

Concern Diatomaceous Earth Crawling Insect Killer, Safer Brand Ant and Crawling Insect Killer—Diatomaceous Earth, Safer Brand Diatomaceous Earth, St. Gabriel Organics Insect Dust Diatomaceous Earth

Flea trap

Enforcer Over Nite Flea Trap, Enforcer Over Nite Flea and Insect Trap, Victor The Ultimate Flea Trap

Applicator for diatomaceous earth (DE)

Pest Pistol

FINDING FLEAS IN THE HOME

Adult fleas spend almost all of their time on an animal's body. If you haven't seen fleas but your dog or cat is scratching, your pet may have fleas.

You may be able to see tiny white flea eggs and white, worm-like flea larvae on the floor, in cracks and crevices, in carpets, and where pets rest or sleep. You may also see "flea dirt" (flea droppings) where your pet sleeps. These black specks contain blood, and turn red when wet.

CONTROLLING FLEAS

Fleas in your home

Because fleas in many life stages live in your home and not on your pet, thorough vacuuming and washing your pet's bedding is a key part of your flea control program.

- Vacuum carpets, floors, couches, and chairs often to pick up adult fleas, larvae, and eggs. Empty vacuum or dispose of bags in the trash, outdoors.
- Wash pet bedding in hot soapy water every week.
- Thoroughly clean cracks and crevices in floors or baseboards, or seal permanently with caulk.
- Use a non-toxic flea trap to attract fleas and trap them on sticky paper. Traps work better if people and pets are not around—fleas prefer warm bodies to traps.

Fleas make pets and people uncomfortable, and can transmit tapeworms to pets and sometimes to children.

It takes about 18 days for a flea egg to grow into an adult flea, but in temperatures above 37°F, fleas can be dormant for up to 18 months. A flea lays 20 to 50 eggs each day, so flea problems in your home can get out of control quickly, especially in warm weather. Adult fleas can live on your pet for 30 to 40 days—and they generally account for only 5 percent of fleas (counting fleas in all stages of their life cycle) in your home!

- Use diatomaceous earth (DE) to treat carpets, chairs, couches, and pet bedding. Use a hand duster to apply a thin layer of DE (labeled for use on pests, or use "food-grade" DE if you have small children) and blow it into cracks and crevices. Wear a dust mask and goggles to keep DE out of your lungs and eyes!
- When you treat furniture or carpets to kill fleas, use a borate-based solution, which can control fleas for up to a year.



Choose eco-friendly products for your home and garden. Look for this symbol before you buy.

Fleas on your pet

- Wash your pet with pet shampoo and warm water. Using a flea comb while your pet is lathered should get rid of most adult fleas on him or her.
- Use a flea comb (available at pet stores) often to catch fleas crawling on your cat or dog. Drown fleas caught in the comb in a cup of warm soapy water and flush or pour down the drain. Make sure to comb well around your pet's neck and base of the tail.

Outdoors

- Don't treat for fleas outdoors unless you know you have a major problem there.
- Do not try to combat fleas by spraying around the perimeter of your house or spraying your entire yard. Spot-treat with insecticidal soap only those areas where you find large populations of fleas.

Choose medications in pill form to protect water quality!

Wastewater treatment plants cannot fully remove complex chemicals like pesticides. Wastewater agencies are concerned that pesticides in spot-on flea treatments can wash off a pet even weeks after being applied—and are turning up in wastewater treatment plant discharge and recycled water.

- Apply beneficial nematodes (*Heterorhabditis bacteriophora* or *Stenonema carpocapse*) to soil where you have found fleas. You can buy them at garden centers or order online. Soil temperature must be between 60°F and 90°F, and the soil should be moist. Water before and after application, but don't soak the area.

Choosing flea medications

- Pet medications that control fleas are usually either chewable pills, or topical ("spot-on") products you apply between your pet's shoulder blades. *Our Water Our World* and participating agencies do not endorse any pet medications.
- Medications containing **pyrethroids** (ingredient names often ending in "-thrin") may poison pets.
- Medications containing **permethrin** are toxic to cats.
- Some medications should not be used on puppies, pregnant females, or sick or old pets. Ask your veterinarian what is safe for your pet.
- Some brands of medicine may not work as well as they did in the past because fleas are becoming resistant to them. Ask your veterinarian for a recommendation.
- Be sure you use the right dose for your type of pet (dog or cat) and his or her weight. Don't divide a large-animal dose between two smaller pets.
- If you use spot-on flea treatments, we recommend using products that do not contain fipronil, bifenthrin, imidacloprid, indoxacarb, deltamethrin, or permethrin—chemicals that cause water quality problems in creeks, rivers, or bays, and the ocean.

Medication	Form	Ingredient	How Often?	Action
Bravecto	Pill	Fluralaner	Every 12 weeks	Kills adult fleas and ticks
Capstar, Capguard	Pill	Nitenpyram	Daily as needed	Starts killing adult fleas in about 30 minutes
Nexgard	Pill	Afoxolaner	Monthly	Kills adult fleas and ticks
Program	Pill	Lufenuron	Monthly	Stops flea eggs from growing into adults, but does not kill adult fleas or ticks



WWW.OURWATEROURWORLD.ORG

Common home and garden pesticides are found in stormwater runoff, treated wastewater, and in local waterways, sometimes at levels that can harm sensitive aquatic life. **Our Water Our World** is a joint effort by water pollution prevention agencies, participating retail stores, and pesticide distributors and manufacturers—working together to reduce the risks associated with pesticide use.

Our Water Our World fact sheets and store displays educate residents about less-toxic pest management. For the rest of the series of fact sheets, visit www.OurWaterOurWorld.org. Look for the **Eco-friendly** tag next to less-toxic products in participating stores and nurseries. See the *Pesticides and Water Quality* fact sheet for information on active ingredients in common pesticides that may cause water quality problems.

Pest control strategies and methods described in this publication are consistent with integrated pest management (IPM) concepts, and are based on scientific studies and tests in actual home and garden settings. Use suggested products according to label directions and dispose of unwanted or leftover pesticides at a household hazardous waste collection facility or event. For more information on pesticide disposal, visit www.earth911.com. No endorsement of specific brand name products is intended, nor is criticism implied of similar products that are not mentioned.

For more information, contact:

Bio-Integral Resource Center (BIRC), 510.524.2567, www.birc.org
University of California Cooperative Extension Master Gardeners in your area
University of California IPM website, www.ipm.ucan.edu