

Fido is dogged by ticks. Fleas are making Kitty's fur a catastrophe. Here, safe ways to rid pets of fleas, ticks, and mites.

s of 1989, there were 50 million dogs and 58 million cats in the U.S. It's a safe bet that there were also more than enough fleas, ticks, and mites to cause every one of them misery now and then. When pets are plagued, sympathetic owners are easily tempted to come to their aid with

potent remedies. Chemicals such as carbaryl (Sevin), found in some flea and tick collars or sprays, kill pests, but they also might harm you or the pet.

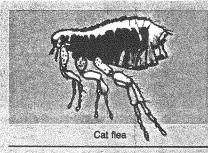
In this report, we give you less-toxic ways to relieve a dog's or cat's distress. Specific products are listed on page 565.

## HEAR

The nature of the beast: Fleas, wingless insects about an eighth of an inch long, have pestered animals (and humans) for centuries. Adult fleas live on the animal, their eggs and larvae in the animal's surroundings. Substances in the fleas' saliva cause intense itching and inflammation of the skin. In many animals, the saliva can aggravate the dry-skin condition known as "summer dermatitis." Peak season for fleas: summer and fall, especially if there's been a lot of rain.

Types:The cat flea, probably the most common species, attacks both cats and dogs, particularly in the East and West. The very similar dog flea is found throughout the U.S. except in the Rockies. The sticktight flea, a species found primarily in the South, infests poultry but also sometimes attacks the ears of dogs and cats.

Warning signs: Suspect fleas if the pet scratches a lot. Starting in spring or early summer, check your pet every week or two. Look for little white or black specks (eggs and fecal pellets), small red spots on the skin (the bites), or the fleas themselves. To find the fleas, regularly groom the pet with a flea comb, a fine-toothed metal device available at pet stores. Put Vaseline on the base of the comb's teeth to make the fleas stick, and flick any you find into alcohol or soapy water. One or two fleas may be just passing through. If the number of fleas starts to rise, it's time to take action.



Action: Effective flea control requires two steps: direct treatment of the pet, to kill adult fleas; and treatment of the pet's environment, to kill eggs and larvae. We list products for both purposes on page 565. Soaps, powders, and dips are the best direct treatments. The least toxic contain diatomaceous earth, silica gel, or insecticidal scaps, all of which damage the flea's exoskeleton, causing the creature to dry out and die. Slightly more toxic, especially to cats, who lick their fur frequently: citrus oils, which kill all flea stages, and the pyrethrum/pyrethroid/rotenone family of "botanical" insecticides. Products containing piperonyl butoxide, or petroleum distillates should be used cautiously-the longterm health effects of those chemicals aren't yet known.

Avoid standard flea collars unless the pet suffers from a chronic infestation. Collars continuously expose the pet to compounds that are toxic to mammals as well as insects. Some collars contain

carbaryl, which is suspected of causing birth defects in dogs. The chemicals in some collars may also irritate the pet's neck

Nor should you shell out big bucks for "ultrasonic" or "electronic" flea collars.

Anecdotal testimonials aside, there's no hard evidence to confirm the manufacturers' claims that these devices alter flea behavior.

To get rid of larvae and adults around the pet—in bedding, furniture, carpets, and anything else likely to be flearidden—vacuum the areas thoroughly. If possible, wash the pet's bedding.

Any of the substances used on the pet can be safely used around the pet, too. Other useful and relatively nontoxic weapons for getting rid of flea larvae around the pet are the insect growth regulators methoprene (Precor) and hydroprene. They work by preventing larvae from turning into adults. Both are found in several sprays and foggers on the market.

We're reluctant to suggest foggers and bombs, particularly those that contain more potent insecticides. Such products unnecessarily expose everyone and everything in the house to the chemical residues. Some contain flammable propellants or solvents, making their use around appliances with pilot lights dangerous. Sometimes, however, a fogger is the only thing that can eliminate fleas from a badly infested house.