

Are You Choosing the Right Protection for Your Pet?

Understand the ongoing debate between chemical and natural preventives and how to make the best choice for your pet's health and well-being.

Analysis by [Dr. Karen Shaw Becker](#)

STORY AT-A-GLANCE

- Summer is almost here, and chances are your veterinarian will be recommending the widespread use of chemical pest preventives, despite their documented dangers to not only pets, but also the environment
- Before automatically reaching for chemical preventives, assess your pet's actual risk of pest infestation, and whenever possible consider safe, nontoxic alternatives
- If you live in a flea or tick-endemic area and use of chemical agents is necessary, it's important to proceed very cautiously, and ask your veterinarian for appropriate exposure tests like the QC6 and the SNAP 4Dx Plus

With summer around the corner, I recently came across an ad in a veterinary journal for a chemical parasiticide that allegedly works against infestation by a long list of pests (e.g., heartworms, fleas, ticks, hookworms, roundworms, whipworms, sarcoptic mange, ear mites). The product is marketed as both "easy" to use and "affordable" for pet owners.¹

As is the case with all chemical preventives, this parasiticide comes with a product insert that if read carefully, will discourage many dog and cat parents from applying it to their pets.

Unfortunately, most conventional veterinarians continue to recommend the widespread use of chemical preventives, and rarely if ever mention nontoxic alternatives or the possible side effects from using these pesticides. This one-size-fits-all policy is not a good approach if the goal is to protect the health of dogs and cats.

It's also important to understand that the risks of these products don't stop at your pet. The environment is also being impacted by these chemicals, with researchers finding they are ubiquitous in waterways, with unknown effects on the ecosystem.²

Safe, Effective Alternatives to Chemicals

There are safe, nontoxic alternatives for pest control for pets, and they don't have side effects, unlike virtually all forms of chemical pesticides. Alternatives I recommend include:

- A safe, natural pest deterrent (see recipes below)
- Cedar oil (specifically manufactured for pet health)

- Natural, food-grade diatomaceous earth, topically (not on the head)
- Fresh garlic (about 1/4 teaspoon for every 15 pounds of dog or cat). For those of you concerned about garlic, a 2000 study showed that only a tremendous amount of garlic, for example, 5 grams per kilogram, which is about 8 to 12 cloves of garlic for an 8-to-10-pound dog, is dangerous.³ You'd never give that much garlic to your pet, but even at extremely high levels, the study showed that garlic did not cause problems (e.g., hemolytic anemia) in dogs or cats
- Feed a nutritionally optimal, species-specific fresh food diet
- Bathe and brush furry family members regularly and perform frequent full-body inspections to check for parasite activity
- Use a flea comb daily during flea season to naturally exfoliate you're the skin while removing or exposing pests
- Make sure both your indoor and outdoor environments are **unfriendly to pests**

All-Natural Homemade Pest Deterrent for Dogs

You can make an all-natural pest deterrent for your dog very easily at home. It will help him avoid a good percentage of the pests he encounters, though not all of them. The recipe: mix 8 ounces of pure water with 4 ounces of organic, unfiltered **apple cider vinegar** and 20 drops of neem oil.

Neem oil is not an essential oil. It's expelled or pressed oil and is effective because fleas and ticks are repelled by it. It's also great for pets who are very sensitive to odors. Catnip oil can also be used as a pest deterrent, since it has been proven to be as effective as diethyltoluamide (DEET), the mosquito and tick spray humans use that has several toxic side effects.

If you want to add some extra punch to your dog's pest deterrent recipe and he's not sensitive to high quality essential oils, go with five drops of lemon, lemongrass, eucalyptus or geranium essential oil. I use geranium oil quite a bit because I find it very effective. In fact, I use it in my Dr. Mercola natural flea and tick products. If you have a dog who comes in contact with ticks, adding the extra punch of one of the essential oils I listed can be very beneficial.

You can store your homemade pest deterrent in the fridge, which is what I do. Before your dog goes outside, give the bottle a good shake, then mist him with it, being careful to avoid the eyes. The active ingredients, especially the oils in the recipe, dissipate in about four hours, so you may need to reapply it several times throughout the day.

All-Natural Homemade Pest Deterrent for Cats

My recipe for cats is very similar to the one for dogs. Mix 8 ounces of pure water with 4 ounces of organic, unfiltered apple cider vinegar, plus 10 drops of neem oil and 10 drops of catnip oil.

Cats and essential oils can be tricky, so we want to leave essential oils out of the kitty recipe. Neither neem nor catnip oil are truly essential oils — they're distillates, so we're safe using those. Catnip oil works to deter mosquitoes as well. Cats aren't prone to heartworm, which is a mosquito-borne disease, but dogs are.

As a bonus, these recipes also make your dog or cat smell wonderful! Sometimes I add five drops of organic vanilla to my dog and cat sprays to make the spray smell extra good. Many people swear vanilla is also naturally repelling to pests, as professional organic pest companies often use vanilla as a base for many of their outdoor lawn and garden formulas.

You can use these sprays during flea season, tick season and all summer long, and feel good that you're not using pesticides on your pet.

Natural Pest Deterrents I Don't Recommend

There are two approaches to pet pest control I don't recommend. One is brewer's yeast, and the other is garlic in pill or capsule form.

Brewer's yeast is allergenic and given the number of pets suffering with allergies these days, I never recommend any substance or food known to be allergenic. That said, brewer's yeast is a great source of B vitamins, which is helpful in repelling pests. Unfortunately, most B vitamin supplements in the U.S. are imported. I don't like imported or synthetic B vitamins. Instead, I'd like you to think about food sources that are rich in the B vitamins, for example, fresh, whole, unadulterated meats, which are perfect for dogs and cats, who are **carnivores** (meat eaters).

I'm also not a fan of garlic capsules for this reason: A fresh clove of garlic contains two inactive compounds, alliin and alliinase, which convert to allicin, an active medicinal compound when the clove is cut, crushed, or chopped. The medicinal components of allicin in fresh garlic only last for about eight hours, so the garlic you buy in capsule form or as a spice no longer contains the wonderful anticancer, antiparasitic, antibacterial and antiviral properties of freshly chopped garlic.

If You Live Where Fleas Are a Problem

Unless it's absolutely necessary, I strongly discourage pet parents from automatically applying potentially toxic chemical agents to furry family members or around their home to repel or kill pests. If, however, you live in a flea-endemic area and have a family member with **flea allergy dermatitis** (FAD) or an infestation that requires that you use these chemicals, follow these precautions:

- Be very careful to follow dosing directions on the label, and if your pet is at the low end of a dosage range use the next lowest dosage. Be extremely cautious with small dogs, and do not under any circumstances apply dog product to your **cat**. Dr. Jean Dodds suggests the Spinosad class of drugs may have fewer side effects than isoxazoline products.
- Monitor your pet for adverse reactions after you apply a chemical product — especially when using one for the first time.
- Don't depend exclusively on chemical treatments. Rotate natural preventives with chemicals, including diatomaceous earth, pet-friendly essential oil products and natural deterrent collars. An every-other-month rotation works well for many pet parents in high-risk areas.
- Since your pet's liver will be tasked with processing the chemicals that make it into the bloodstream, it can be very beneficial to give her a supplement to help **detoxify the liver**. I recommend, at the very least, milk thistle, which is a general detox herb and helps to regenerate liver cells. Another product I recommend is chlorella, a super green food that is a very powerful detox agent. If you're using isoxazoline products, I also

recommend giving GABA, glutathione, NAC (n-acetyl cysteine) and SOD (superoxide dismutase) to help decrease the potential for neurotoxicity.

Work with your integrative veterinarian to determine how much to give your dog or cat depending on her age, weight, and any medications she's taking.

If You Live Where Ticks Are a Problem

In deciding how to best protect your dog or cat from ticks, I recommend you assess your pets just as you assess the rest of your family. If you're planning a hike in a high-risk area and plan to use chemicals to repel parasites on you or your kids, your dogs will also need the same level of protection (so you'll need to be prepared with products from your veterinarian).

You also need to consider when pest season begins and ends where you live, your pet's individual risk (e.g., do you go for long walks in the woods or do a lot of hiking? Does your furry family member have unrestricted access to the outdoors?), as well as the level of disease risk in your area.

If you opt to use chemicals on your human and animal family members, it's still wise to do tick checks when you get home; don't rely solely on any product and assume you're protected.

Check for ticks around your dog's eyes, the base of the ears and tail, and between the toes. Use a flea and tick comb to naturally exfoliate your pet's skin while pulling off or exposing pests. You can also use a lint roller as soon as your pet comes indoors to grab any ticks that are on top of the coat before they burrow in and attach to the skin.

It's important to realize that a tick exposure is not the same as an infection. In many cases, your healthy pet's immune system will fight off tick-borne diseases with no treatment required. The only way to know if a pet has effectively eliminated the bacteria (was exposed but not infected) or is currently infected is to run a QC6 (Quantitative C6) test that differentiates exposure from infection. Sadly, large numbers of dogs and even some cats each year are unnecessarily treated with extensive antibiotic therapy because their veterinarians panic after seeing a positive exposure on a screening test. Please don't let this happen to your pet!

Up to 90% of dogs in certain areas (and substantially fewer cats)⁴ may have been exposed to tick-borne pathogens, but most are able to fight off infection on their own. In those that do not, quickly identifying the problem and creating an appropriate treatment plan is crucial. I recommend that my clients who live in tick-endemic areas or who have pets who receive multiple tick bites each year have them screened for exposure every six months.

How do you make sure you're catching possible tick-borne infections before they take hold? Ask your veterinarian to replace the standard heartworm test with a more comprehensive annual blood test that identifies several tick-borne pathogens long before pets show symptoms.

The SNAP 4Dx Plus (from Idexx Labs) and the Accuplex4 tests (Antech Diagnostics) that screen for heartworm, Lyme disease and two strains each of ehrlichia and anaplasma should be screening tests for animal companions in tick-endemic areas, in my opinion. Completing one of these simple blood tests every 6 to 12 months is the best way to:

- Avoid unnecessary chemical preventive application
- Identify infections before chronic disease occurs

- Catch cases of dogs infected as a result of pesticide resistance (a growing problem)

I also recommend that pets living in tick-infested areas who test positive on the SNAP 4Dx Plus or the Accuplex4 also be screened for **babesia exposure**. The best way to detect exposure to this parasite is with a PCR (polymerase chain reaction) test that checks for the presence of babesia DNA. Unfortunately, there isn't a quick in-house test that checks for feline tick-borne diseases, probably because they occur in much lower frequency, compared to dogs.

Sources and References

¹ [Virbac Parasedge](#)

² [Science of the Total Environment February 10, 2021, Volume 755, Part 1, 143560](#)

³ [Lee, K-W, et al. American Journal of Veterinary Research, Vol. 61, Issue 11, November 1, 2000](#)

⁴ [Hegarty, B.C. et al. Parasit Vectors. 2015; 8: 320](#)
