

What Your Vet May Not Be Telling You About Heartworm

Now is the time when the pressure to put every cat and dog on heartworm preventives kicks into overdrive. But there's a good chance you're not being told the whole story about this chemical insecticide that can be harmful. Here's what you need to know before you expose your pet.

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STORY AT-A-GLANCE

- Pet pest season is fast approaching, which means pet parents are about to be inundated with recommendations for heartworm preventives from veterinarians and various forms of media
- In recent years, these recommendations have increasingly encouraged giving year-round preventives (chemical insecticides with side effects) to every dog and cat, everywhere
- My alternative recommendation is to assess your pet's real-life, individual risk of acquiring heartworms based primarily on where you live, which dictates the mosquito population
- If you live in an area where mosquitoes are a problem, I recommend working with an integrative veterinarian to develop a sensible preventive protocol to keep your pet safe and healthy
- It's also important in mosquito-endemic areas to have your pet tested for heartworms and other parasitic diseases at the beginning and again at the end of pest season

We're coming up on that time of year when the pressure to put pets on heartworm preventives kicks into high gear. In addition, the American Heartworm Society, heartworm drug manufacturers, and many veterinarians now recommend giving preventives 12 months a year, no matter where you live or your pet's individual risk of exposure.

This isn't a wise or logical approach, in my opinion, since where you live is the most important consideration in assessing your pet's risk. I absolutely do not agree that every pet, everywhere, should be given a chemical insecticide once a month, year in and year out.

No drug is entirely harmless. Heartworm preventives are chemical insecticides with the potential for short- and long-term side effects that can damage your pet's health. In addition, many pet parents don't realize these preventives don't actually prevent anything. They poison heartworm larvae at the microfilaria stage of development, causing them to die inside the body.

And in addition to concerns about the toxicity of these insecticides, there's also evidence that heartworms are becoming resistant to them.

Overexposure to Heartworm Preventives

According to the **2022 heartworm prevalence map** published by the Companion Animal Parasite Council (CAPC), just 1 in 100 dogs in the U.S. — about 1.15% — tests positive for heartworm. And despite the fact that cats aren't natural hosts for heartworm, year-round preventives are recommended for them as well.

In addition, in only 10 states are dogs considered at high risk for heartworm infection. These numbers have actually trended downward in the last few years. The 10 states are primarily in the southeast, where soaring temperatures and high humidity during the warmer months of the year provide an ideal environment for mosquitoes to thrive.

You can use the heartworm prevalence map linked above to drill down to not only your state, but also your county to get information about the prevalence of heartworm disease (as well as other parasitic diseases) in your area.

The problem with typical recommendations on heartworm prevention is that instead of focusing on the likelihood of infection and the risks vs. benefits of administering a toxic chemical every month of every year of an animal's life, the focus is on the scary nature of a disease that occurs in only a small percentage of dogs.

It's important to understand that heartworm preventives are, as I mentioned above, chemical insecticides. In addition to concerns about their toxicity, there is also evidence of growing heartworm resistance to preventives — resistance that is typically the result of overuse of certain classes of drugs.

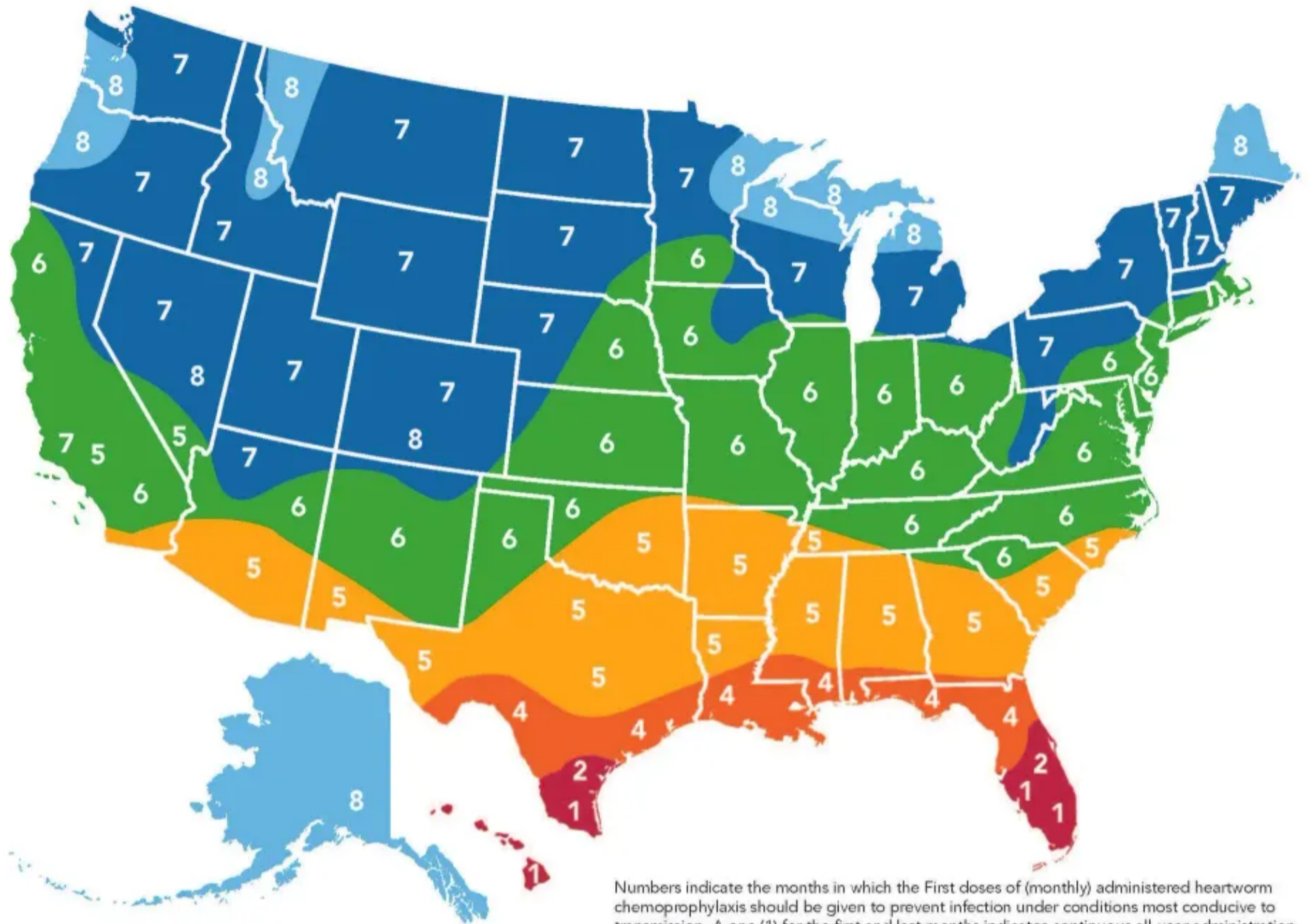
Perhaps the traditional veterinary community is well-intentioned in their year-round heartworm prevention recommendations, but along with the drawbacks I've already discussed, their approach also assumes pet parents can't be trusted to figure out when it's appropriate to protect dogs from mosquito bites.

When to Use Preventives in Mosquito Endemic Areas

There are only a few areas in the U.S. in which giving a year-round heartworm preventive might be advisable — meaning the risk of infection may outweigh the risks associated with chronic exposure to a chemical insecticide. Those areas are in south Texas, south Florida, and a few other locations along the Gulf Coast.

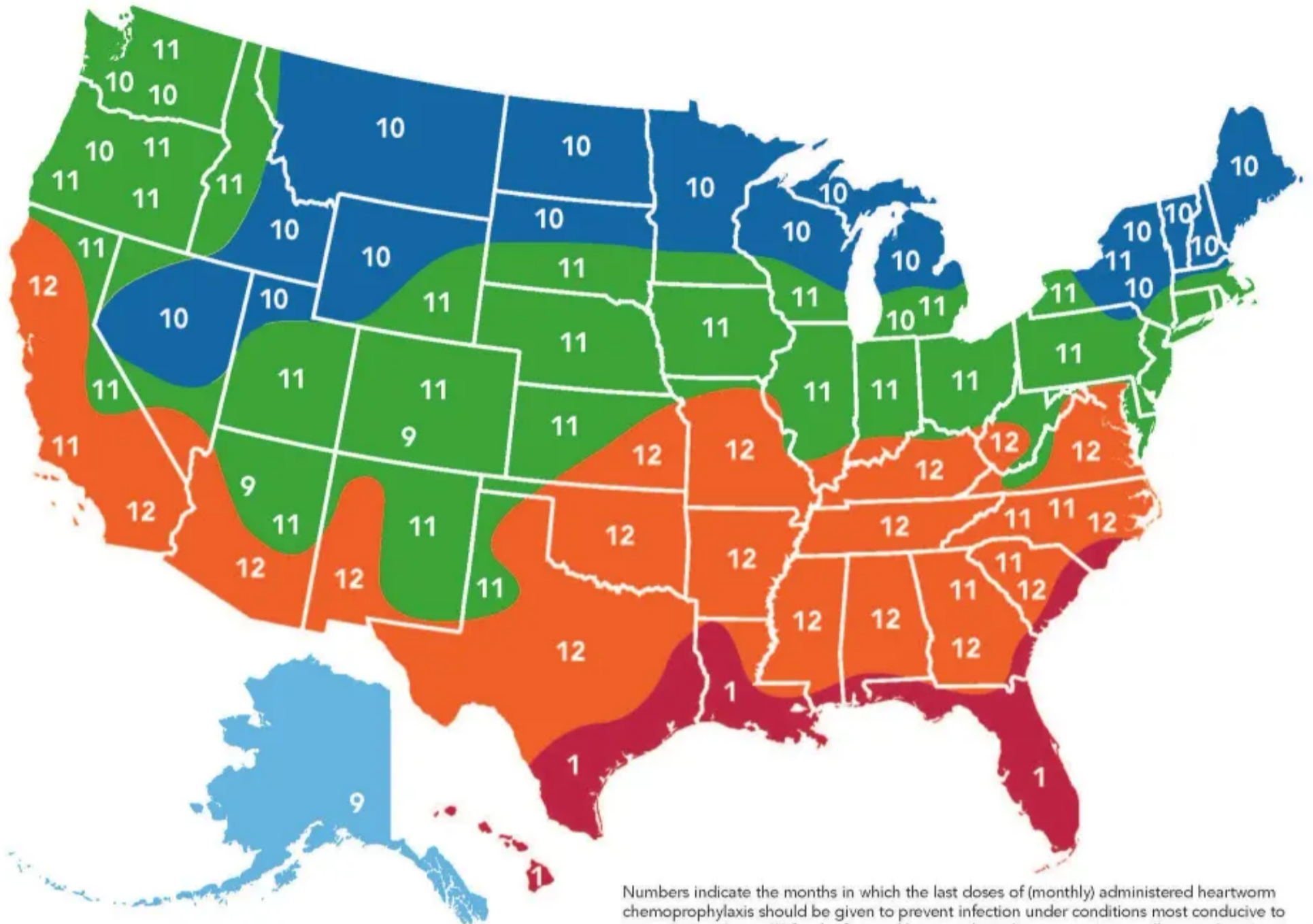
The rest of the U.S. ranges from 3 to 7 months of high exposure risk. The majority of states are at 6 months or less. If you're concerned your dog is at risk of a heartworm infection, in consultation with your integrative veterinarian, you can use the following maps to guide you in when to start and stop a heartworm preventive.

TIMING OF FIRST MONTHLY DOSE OF HEARTWORM PREVENTIVE



Numbers indicate the months in which the First doses of (monthly) administered heartworm chemoprophylaxis should be given to prevent infection under conditions most conducive to transmission. A one (1) for the first and last months indicates continuous all-year administration. Adapted from maps included in the article *Seasonal Timing of Heartworm Chemoprophylaxis in the United States*, Knight and Lok

TIMING OF LAST MONTHLY DOSE OF HEARTWORM PREVENTIVE



For example, if you live on the Gulf Coast in either Texas or Florida where mosquitoes are a problem, the map suggests you begin giving a preventive on day 1 of month 1 (January), and give it year-round. However, if you live in western Oregon or Washington, the map suggests you start dosing in July-August and stop in October-November.

It's important to keep in mind that these maps are only one tool in your toolbox. Let's say you live in southern Nevada where mosquitoes are almost unheard of, yet the map suggests giving a preventive starting in May and continuing through the end of the year. If that doesn't make sense to you, use your common sense.

Factor in your own knowledge and experience of the area in which you live when assessing your pet's risk.

Important Heartworm Prevention Tips

If you live in an area of the U.S. where mosquitoes are common and you know your dog's risk of exposure to heartworm disease is significant, here are my recommendations for protecting your furry family member:

- If you don't live in a high-risk area (for example, North Dakota), with guidance from an **integrative veterinarian**, consider a multi-modal preventive protocol, including heartworm nosodes, rather than using solely chemicals.

Make sure to do heartworm testing every 3 to 4 months (not annually), as natural heartworm preventives can't guarantee your pet will never acquire the disease. And because the ongoing use of chemical preventives doesn't guarantee an infection-free dog, testing at least every 6 months to identify positive animals as soon as possible is important.

It's also important to note that since heartworms live in the bloodstream, natural GI (gastrointestinal) dewormers such as diatomaceous earth, and antiparasitic herbs (e.g., wormwood, pumpkin seed, black walnut tinctures) are not effective at killing larvae in the bloodstream.

- Focus on keeping your pet's immune function robust by feeding a species-specific, nutritionally optimal, fresh food diet that helps bolster natural defenses. Unprocessed meats are rich in B vitamins (and a less allergenic option than brewer's yeast). Also, specific antiparasitic foods such as fresh garlic can be added in small quantities to provide additional support.
- If your dog's kidneys and liver are healthy, try using a single chemical preventive at the lowest effective dosage. This could mean having the Ivermectin or Milbemycin compounded, if necessary, for dogs weighing in at the low end of dosing instructions. Give the treatment at 6-week intervals rather than every 4 weeks, for the minimum number of months required during mosquito season.
- Avoid all-in-one chemical products that claim to get rid of multiple types of GI worms and external parasites as well. The goal is to use the least amount of chemical necessary that successfully treats heartworm. Adding other chemicals to the mix increases the toxic load your dog's body must contend with. Also avoid giving your pet a chemical flea/tick preventive during the same week.
- Follow up all heartworm medications with natural liver detox agents like milk thistle and SAMe for a week after treatment, in consultation with your veterinarian, and feed **probiotic-rich foods**.
- Always insist on a heartworm test before beginning any preventive treatment. If you live or spend time with your pet in areas where mosquitoes and other pests, especially ticks, are prevalent, ask your veterinarian for a SNAP-4Dx test or an Accuplex test, both of which check for Lyme disease, ehrlichiosis, and anaplasmosis, along with heartworm.

I like to run the SNAP-4Dx every 6 months on all dogs who live in environments with mosquitoes, but these easy diagnostic tests are especially important for dogs who spend a lot of time outdoors during warmer weather because parasites are becoming resistant to heartworm and flea/tick chemicals. The sooner we identify an infection in your pet, the sooner a protocol can be instituted to safely treat it with fewer long-term side effects.

If you live in the midwest or the east coast of the U.S., it's a good idea early in the year and at the end of pest season to check for these illnesses, which can be resistant to preventives and are relatively easy to treat and cure when they're identified before they create chronic disease.

Sources and References

[American Heartworm Society](#)
