Keeping the bugs off of your pet

Flea/Tick

It is important to evaluate risk and seasonality. Do NOT buy into one-size-fits-all, year-round protocols. Conventional products are harsh pesticides, neurotoxins which can have a multitude of adverse effects. Do not assume because your conventional vet prescribed them, that they are safe. Read this article for more information on this topic: https://theanimalkeeper.com/harmed-66-6-of-pets-yet-veterinarians-still-prescribe-them/

<u>Wondercide</u> – <u>https://www.wondercide.com/collections/dogs-flea-tick-spray</u>

- Has some added chemicals, but still topical and less toxic than the conventional oral or spot-on products
- They also have a selection of home and yard products

Essential oil sprays –

- DIY or Pre-made
- You can find recipes online
- Use good quality oils
- Eucalyptus, citronella, lemongrass, geranium, catnip oil, any citrus are good choices to try

Garlic powders - Springtime Bug Off

https://www.springtimeinc.com/product/bug-off-garlic-dogs/Natural-Dog-Supplements

<u>Herbal powder</u> – *Earth Animal* – some sourcing from out of the US, so cannot be verified. Still better than conventional preventatives:

https://earthanimal.com/product/natures-protection-flea-tick-daily-herbal-internal-powder-yeast-free/

<u>Coffee grounds</u> – I have not tried this, but did read that if used coffee grounds are worked into the coat and rinsed out, it will help to repel unwanted bugs

This is an excellent article from Dogs Naturally with more DIY recipes: https://www.dogsnaturallymagazine.com/natural-solutions-tick-season

Regular shampooing with a non-chemical soap followed by a vinegar rinse with 1 cup apple cider vinegar in 1 quart water.

Diatomaceous earth (food grade in case your pet ingests some) can be dusted into pet coats and under cushions or in carpeting. This kills the insects if they ingest it.

One thing I recently learned is that raising poultry will also help control ticks and other insects. This may not be for everyone, but it is a great option if you have the capacity to do so. Chickens and turkeys eat many types of insect larvae, which for them, is a very nutritious snack. Wonderful symbiosis!

Species appropriate, fresh-food diet will help make your pet less attractive to the bugs

Using more than one product simultaneously will help enhance the effects. Every pet and situation is different, so you will need to try some different things to see what works best for you and your pet. **Heartworm**

Heartworm disease is never spread dog to dog; it is only spread by mosquitoes.

Here is our blog article on heartworm disease risk and treatment: https://ahavet.com/heartworm-what-is-the-risk-to-your-pet/

Note the importance of temperature in assessing the risk of heartworm disease.

Natural repellents as listed above for flea tick can also be used to repel mosquitoes and stronger internal treatments may not be necessary. In almost all areas, **year round prevention of any kind is unnecessary** as the mosquitoes die off in the wintertime.

It can take up to 6 months to detect an infestation in the blood, so I recommend testing for heartworm in the spring to check for exposure during the previous summer season.

For high-risk areas, I still prefer herbal alternatives such as:

Azmira Parasitic DTox - https://azmira.com/products/herbal-extracts/giardia-and-parasitic-dtox/
Amber Naturalz HWF Clean Heart - https://www.ambernaturalz.com/index.php/product/hwf/

Either of these can be used, but ideally, I would rotate them to get full benefit. Pick one for 5 days, take 2 days off, and then use the other for 5 days on and 2 days off. There are no guarantees here, but this is a much safer option and in otherwise healthy pets should be effective.

For a more intensive treatment, you can use an ivermectin-only product every 60 days during the warmer months. The only small animal product that I am aware of that only contains ivermectin, and no other pharmaceutical is called Valuheart. It can be found here, and to date does not appear to require a prescription: https://sierrapetmeds.com/valuheart-monthly-heartworm-tablets-for-large-dogs-45-88-lbs-gold-6-pack/

Another option is using a livestock ivermectin product, labeled for cattle and sheep. Although these products are not labeled for dogs, there is nothing toxic in them; they just have not been approved by the FDA for use in dogs. Note that this does not need to be injected, it can be measured and give orally, either directly in the mouth or in food. These products are available online or at your local livestock supply store. The dose is 1ml per 100lb of body weight. So for a 50lb dog, the dose would be 0.50ml. This dose is higher than the typical small animal heartworm treatment to make it easier to measure and dose, but ivermectin is very safe and this dose is fine to use.

**Be very careful to NOT use pour-ons or dips as they are only safe for topical use and may be toxic if injected or consumed orally. **

Be sure the product you choose is ivermectin ONLY, with no other pharmaceuticals.

There has been some concern regarding the use of ivermectin in herding breeds that may be sensitive to ivermectin and some other medications due to the MDR1 gene. Here is a reported list of susceptible breeds: https://prime.vetmed.wsu.edu/2021/10/19/breeds-commonly-affected-by-mdr1-mutation/ If you have a herding breed, or mixed breed, there is a simple saliva test that you can do at home to test your dog. The test is affordable at \$55 from UCDavis: https://vgl.ucdavis.edu/test/multidrug-sensitivity-mdr1

If your dog tests positive, I would stay with the herbal treatments.

Most importantly, keep your dog's immune system strong with proper nutrition, as this will go a long way to keeping them heartworm-free, even if exposed.