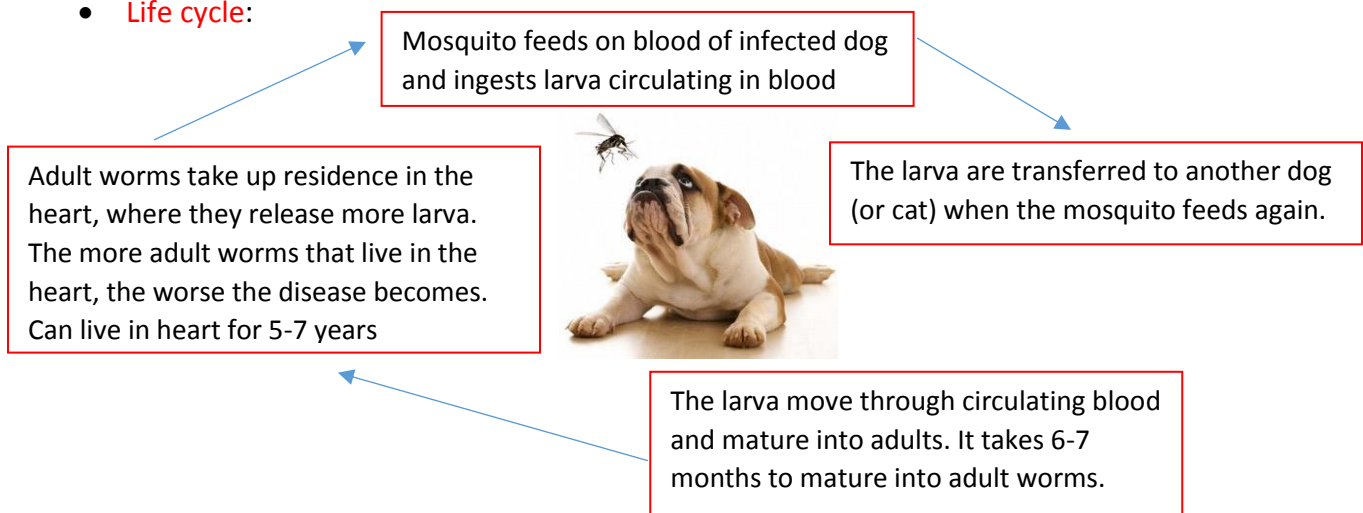


Parasite Prevention Part 1 – Canine Heartworm Disease

This is the first in a multi-week series for Wellness Wednesdays about parasite prevention and why we need to do our best to prevent them from affecting our pets. Part 1 will cover **Heartworm Disease**, part 2 will discuss **Fleas and Ticks**, and part 3 will take a quick look at other parasites that our pets may come into contact with such as **Intestinal Parasites and/or Mites**. Each part will look at the diseases and problems watch parasite causes, how to diagnose and treat it, and how to prevent them.

- What is the **cause** of Heartworm Disease? Caused by the internal parasite *Dirofilaria immitis*. The natural host for heartworms are dogs and cats, but a few very rare cases of human infection have occurred.
 - See a map of reported cases in 2013: <https://www.heartwormsociety.org/images/pdf/AHS-2013-Incidence-Map.pdf>
- How is it **transmitted**? Infected mosquitos transfer the larva when they fed on dogs and cats.
- **Life cycle:**



- **Signs** of illness: persistent cough, exercise intolerance, easily fatigues, decreased appetite, weight loss. As the disease progresses, heart failure and fluid accumulation in the abdomen can occur.
 - Caval Syndrome: Very severe infection from massive accumulation of heartworms in the heart causing heart block and sudden cardiovascular collapse. Will see sudden onset of labored breathing, pale gums, and dark colored urine. Often fatal at this stage
- **Diagnosing** Heartworm infection: It only takes 3 drops of blood and 8 minutes to have your vet test for heartworm disease (most vets have access to easy 'in house' tests).
- When to **test**: Most tests check for blood antigens in response to the presence of adult worms. But since it takes 6-7 months for larva to mature into adults, timing is key....
 - Puppies: test at between 6 to 7 months of age.
 - Strays and adopted dogs: tested immediately and then again in 6 months.
 - All dogs should get an annual Heartworm test with annual check-up



- How to **treat** a dog that is heartworm positive: If the dog is showing signs of heartworm disease he/she must be stabilized prior to treatment. Treatment varies depending on severity and the vet's protocol. The dog must be kept on strict cage rest during the treatment process to avoid overloading the heart and causing collapse. Surgery is an option but it is very risky.
- Frequently asked Questions:
 - **Do I really need to do an annual heartworm test if my dog has been on prevention every month?** Yes. It is not just a ploy to get more money out of you. Preventatives are like birth control....it's not a 100% guarantee. It is possible to still become infected, though reputable heartworm preventatives are fairly good at doing their job. Plus if you can prove to the company that you have given the preventative as directed and had a negative heartworm test within the last year, most companies will pay for the treatment.
 - **Can't I just give my dog monthly preventative to treat heartworm disease?** Heartworm preventatives kill the larva, not adults. So while the larva won't continue to mature into adults, the adults already present can grow and still clog the heart.
 - **I accidentally missed a month, is my pet at risk?** There is always a chance that infection can occur. Make sure to get your pet back on preventative and make sure to do a heartworm blood test in about 6 months to double check.
 - **Is it necessary to keep my dog on preventative during the winter months?** Yes, it's cold outside. Yes, most insects 'die' when it's too cold outside. However, just like mice that move inside during winter, so can bugs, and that includes mosquitos. Mosquitoes just need a quite small puddle of water and they can reproduce. Better be safe than sorry....use preventatives year long.
- More information can be found at <https://www.heartwormsociety.org/>
- Preventatives (<http://www.1800petmeds.com/Heartworm-cat11.html>)

Product	Application	Active Ingredient	Prevents (in addition to heartworms)
Heartgard Plus	Chewable	Ivermectin, pyrantel	Roundworm, hookworm
Sentinel	Chewable	Milbemycin oxime, lufenuron	Roundworm, whipworm, hookworm, flea eggs
Sentinel Spectrum	Chewable	Milbemycin oxime, lufenuron, praziquantel	Whipworm, hookworm, roundworm, tapeworm, flea eggs
Advantage Multi	Topical	Moxidectin, imidacloprid	Fleas, roundworm, hookworm, whipworm
Trifexis	chewable	Milbemycin oxime and spinosad	Fleas, roundworm, hookworm, whipworm
Revolution	Topical	Selamectin	Fleas, flea eggs, ear mite, sarcoptes mite, American dog tick
Iverhart Max	chewable	Ivermectin, pyrantel, praziquantel	Roundworm, hookworm