



HEARTWORM DISEASE

ABOUT THE DISEASE

Heartworm disease (HWD) is caused by the infectious parasite *Dirofilaria immitis*. This parasite is transmitted by mosquitoes as microscopic larva (microfilaria) which then grow to foot-long worms that live in the heart and lungs. **HWD** affects dogs, cats, and ferrets, but can also live in wolves, coyotes, and foxes.

Canine patients can harbor several hundred **heartworms** that can cause lasting damage to the heart, lungs, and arteries, and can affect quality of life even after treatment. In early stages, many patients show few symptoms, but as the disease progresses it can mimic signs of heart failure and can result in death.

Feline patients are not a typical host for **heartworms**, and most worms do not mature to the adult stage in cats. Feline patients typically have a low worm burden (1-3), but it can lead to a respiratory disease similar to asthma called heartworm-associated respiratory disease (HARD). In rare cases feline patients may develop signs of heart failure. Please see the [Congestive Heart Failure](#) document for additional information.

OBTAINING A DIAGNOSIS

For both canine and feline patients, simple in-house point-of-care testing can be used to diagnose the presence of adult parasites. However, a microscopic blood slide test can also be used to detect the presence of microfilaria. An antibody test is also available to help aid a diagnosis in more difficult cases.

Testing Criteria (& Prevention Recommendations) for Canine Patients

- Patients under 7 months of age
 - Start on **heartworm** prevention without a testing.
 - It takes at least 6 months for a patient to test positive after it has been infected.
- Patients between 7 and 12 months of age
 - If previously on prevention, test at 7 months old, then again 6 months later, then annually.
 - If previously not on a preventive, patients need to be tested prior to starting **heartworm** prevention.
 - Then tested 6 months later, another 6 months later, and then annually.
- Patients over 12 months of age
 - All dogs should be tested annually for **heartworm** infection.
 - Even if a patient is on prevention year-round, no prevention is 100% effective.
 - Annual testing ensures that the prevention program is working.

Testing Criteria (& Prevention Recommendations) for Feline Patients

- Preferred method for screening is both an adult antigen and a microfilaria antibody test.
 - Harder to detect because they are less likely to have adult **heartworms**.
- Patients should be placed on prevention if deemed appropriate due to exposure and risk.

TREATMENT

While prevention is the ultimate key to success with **heartworm disease**, with today's treatment recommendations most cases are successful. The American Heartworm Society has treatment guidelines for veterinarians as well as distribution materials listed on their website, www.heartwormsociety.org.

Once canine patients test positive for **HWD**, they will undergo confirmatory testing and several diagnostics to maximize their stability prior to treatment. Throughout the course of treatment, patients will need to be kept quiet and their activity reduced.

Unfortunately, there are no approved treatments for feline patients. Prevention is the best management tool.

TIPS FOR SUCCESS

- Nothing is more successful than a veterinary-approved prevention program.
- Test annually so that patients may be treated early, quickly, and effectively before lasting effects have occurred.
- Should the patient test positive, follow guidelines for testing, stability measures, and treatments.