



### Diagnosing heartworm in your pet

The diagnosis of heartworm is made from a simple blood test from your pet. The tests available detect immune responses, proteins or baby heartworm, called microfilariae, from adult heartworm. To determine the optimum time for testing let's consider when adults mature from the time after a mosquito first infects your pet.

After an infected mosquito bites, larval heartworm migrate under the skin of your pet before entering the blood vessels for 1-2 months after the initial infection. Reaching and lodging in the heart and lungs occurs 3 months after the initial infection, then lastly heartworm mature to become an adult up to 7 months after the initial infection. Only at this point can the blood tests detect what they are testing for.

These adult heartworms in the heart and lungs are responsible for the clinical signs of heartworm disease that may lead to a diagnosis. This means that your pet could have a heartworm infection for 7 months before becoming ill. Blood testing allows your vet to diagnose heartworm before your pet has any clinical symptoms of disease.



#### Did you know?

Heartworm infection is carried by mosquitoes, meaning even isolated or indoor dogs and cats are at risk of infection if not protected with an appropriate parasite preventative.

## Signs of heartworm infection

Early adult heartworm infections, within the heart and lungs, show only mild clinical symptoms: an infrequent cough and slightly reduced exercise tolerance. Later in the infection, these parasites substantially disrupt blood flow around the heart, causing heart disease that interferes with the activities your dog loves.

#### Signs in dogs include:

- Coughing
- Exercise intolerance
- Weight loss
- Difficulty breathing
- Potbellied appearance

Symptoms will only progress if the disease remains untreated.

#### In cats, heartworm disease signs include:

- Difficulty breathing
- Vomiting
- Coughing
- Weight loss

Heartworm preventatives only stop one period of the heartworm lifecycle within the developing heartworm before they mature into adults. Maintaining regular treatment prevents the clinical symptoms of heartworm disease by stopping the formation of adult heartworms within your pet's heart.



# Heartworm prevention is recommended all year round

Heartworm's lifecycle is complicated and quite different to other intestinal worms. The lifecycle predominately occurs in the circulatory system of those infected and also includes a period of time where the developing heartworm lives and grows within a mosquito.

This involvement of mosquitos in the lifecycle means that within heartworm areas your pet is always at risk of a new infection when mosquitos are active. Therefore year-round protection against heartworm remains the key step in preventing this disease.



**Keeping a routine** - Preventative treatments against heartworm act across only a small part of the entire heartworm lifecycle, just after these developing worms enter under your pet's skin following a mosquito bite.

A regular routine of using a heartworm preventative ensures this opportunity to prevent heartworm disease is never missed. If you forget a heartworm preventative treatment for your pet speak to your vet to find out the next step to return to good parasite control.

Heartworm prevention is important so if using a monthly preventative treatment these steps can ensure a dose is never forgotten:

- Treat on the same day each month (the first of the month works particularly well here).
- Write it in your calendar.
- Put a monthly reminder in your phone.
- Your vet can also provide alternatives when compliance for treating is difficult.



#### Why heartworm prevention is important

Heartworm disease has serious health consequences for cats and dogs. Caused by the adult heartworms when present within the heart and lungs, these worms disrupt the normal flow of blood through the heart and lungs adding a significant strain and workload onto the heart's activities. A second important reason for a preventative plan for heartworm is treatment of clinical disease from these worms is complicated and carries a level of risk as well.

There is a preventative solution for every cat, dog and ferret with every lifestyle, and the medications used have been shown to be safe and effective.

# Your vet will recommend a heartworm preventative

Discuss with your vet their recommendation for heartworm control if your cat, dog or ferret lives within a heartworm area to ensure your pet is properly protected.

Although heartworm infection is better known in dogs, heartworm is also an important disease in cats and ferrets, resulting in a strong inflammatory response and significant lung disease. Prevention of heartworm should form part of your parasite prevention plan.

# Moxiclear

## **Affordable Parasite Protection**











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n Sarcoptes mites\*

Intestinal worms\*\*

<sup>\*</sup>Registered for the treatment and control of sarcoptic mange in dogs.
\*\*MOXICLEAR\* treats and controls the major gastrointestinal nematodes of dogs and cats but does not control tapeworms.



#### Meeting your pet's needs

Your veterinarian is the trusted professional to meet your pet's needs. This leaflet contains important information that can help you work with your veterinarian to keep your pet safe from heartworm.

Heartworm is present throughout Australia where mosquitos host this parasite to allow completion of its lifecycle by transferring the disease from one animal to the next. Veterinarians recommend using a preventative treatment in heartworm areas as infection results in serious illness. Your vet will consider heartworm amongst other important parasite diseases when advising treatments. We trust that the information contained will help you work with your vet towards a parasite preventative plan considering heartworm.

#### **Parasite Preventative Plans**

Heartworm, together with fleas, gastrointestinal worms, mites, lice and ticks are important parasites to consider when developing a parasite preventative plan for your cat and dog. The importance of these parasites varies between geographical regions, so there is not a single plan for all. A regular preventative that provides broader protection is often used to simplify your plan.

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