

## Canine Heartworm Disease

### What is heartworm?



- Heartworm is a parasite that is injected by mosquitoes into dogs during the summer months. Once the parasite infects a dog, it grows into worms which live in the heart and adjacent blood vessels. These worms can grow up to 12 inches in length, reaching maturity at six or seven months after infection. They can live up to seven years in a dog, and it may take some time before a dog starts to show symptoms.
- Heartworm, if left untreated, can result in increased stress on circulation and ultimately congestive heart failure and death.
- Heartworm is a treatable disease if detected early. Because treatment is very costly, time consuming and not effective for all dogs, prevention is key.

### Can my dog get heartworm?

- Heartworm affects dogs here in Manitoba. The number of cases detected annually in our province is rising, and these numbers only reflect dogs who see their veterinarian. Every year we detect cases using routine testing.
- Heartworm is spread by mosquitoes. Because every home can acquire stray mosquitoes, even dogs who are mostly indoors are at risk.

### What are the symptoms of heartworm?

- Heartworm takes months to years to develop in dogs, so for a significant period of time no signs are visible.
- Once the worms start to mature, symptoms can include *difficulty breathing, coughing, lethargy, weight loss and a rough hair coat.*

### How will I know if my dog has heartworm?

- We recommend having dogs blood tested every three years to screen for heartworm, including dogs on preventative medication. Although the heartworm preventative is very effective, even medicated dogs are not immune. If a dog's monthly dose is missed, spit out or was given too early or late in the season, it is not effective. Because of the potentially lethal nature of this disease, early detection is key.

### How can I prevent heartworm?

- We have more options than ever for heartworm prevention. Most dogs in this region are on **Interceptor** or **Heartgard** tablets monthly beginning June 1<sup>st</sup> and ending November 1<sup>st</sup>. These tablets eliminate any heartworm parasites transmitted to your dog during the previous month. Although there may be no mosquitoes buzzing around on November 1<sup>st</sup>, your dog may have been infected on October 1<sup>st</sup>!
- Animals traveling to areas with a high risk of fleas may benefit from **Sentinel** tablets, which prevent fleas and heartworm. For animals who need flea and tick coverage, or for animals who are difficult to pill, a topical preventative called **Revolution** is an option.
- A once-yearly injection called **Proheart** is available.

We can help you determine which medication is best for your pet.

# Heartworm & Lyme Testing

Our hospital currently uses the SNAP® 4Dx test which can detect four infections (Lyme disease, Anaplasmosis, Ehrlichiosis and Heartworm disease) in one blood sample. Lyme disease, anaplasmosis and ehrlichiosis are *tick-borne* diseases.

This antigen test looks for evidence of adult heartworms in the blood. Since it is performed in our hospital we provide same day results.

## WHEN to test:

- ✓ Regular testing is recommended every 3 years if dog is receiving *annual* heartworm prevention medication.
- ✓ Dogs that have been exposed to mosquitoes without heartworm prevention.
- ✓ Puppies exposed to mosquitoes prior to mid-September should be tested the *following* spring.
- ✓ If uncertain whether exposure occurred without adequate prevention (e.g. dogs that may have missed a dose) testing is recommended 6 months after possible exposure.
- ✓ Dogs that have been exposed to ticks, especially if large numbers and/or engorged ticks have been found.



***Frequency of recommended testing is based on each individual pet's risk of exposure.***

## WHY a test should be performed:

- ✓ Heartworm generally won't show symptoms in the first two years after infection. During this time it is treatable, once symptoms are evident treatment is more difficult.
- ✓ Infection with Borrelia (the organism that cause Lyme disease) can cause an acute arthritis or also chronic damage to the kidneys which often will not exhibit symptoms for the first few years.
- ✓ Co-infection with Lyme disease and anaplasmosis is possible. In addition, it's possible for your dog to become infected with any combination of parasitic diseases – including those not listed here.
- ✓ If detected and treated early, the outcome is usually very good for a full recovery from symptoms. Some of these infections cannot be cured completely, but early intervention usually provides the best prognosis.

## Most common signs of infection

| <b>Lyme disease</b>   | <b>Anaplasmosis</b>   | <b>Ehrlichiosis</b>  | <b>Heartworm disease</b>   |
|---|---|--|--|
| Silent infection <ul style="list-style-type: none"> <li>• Lameness</li> <li>• Fever</li> <li>• Swollen joints</li> <li>• Kidney failure</li> <li>• "Not him/herself"</li> <li>• Anorexia</li> </ul> | Silent infection <ul style="list-style-type: none"> <li>• Lack of energy</li> <li>• High fever</li> <li>• Swollen, very painful joints</li> <li>• Loss of appetite</li> <li>• Vomiting</li> <li>• Diarrhea</li> </ul> | From mild to severe: <ul style="list-style-type: none"> <li>• Loss of appetite</li> <li>• Depression</li> <li>• Fever</li> <li>• Painful joints</li> <li>• Bloody nose</li> <li>• Pale gums</li> </ul> | No sign at first, then: <ul style="list-style-type: none"> <li>• Mild, persistent cough</li> <li>• Reluctance to move or exercise</li> <li>• Tiredness after moderate exercise</li> <li>• Reduced appetite</li> <li>• Weight loss</li> </ul> |