

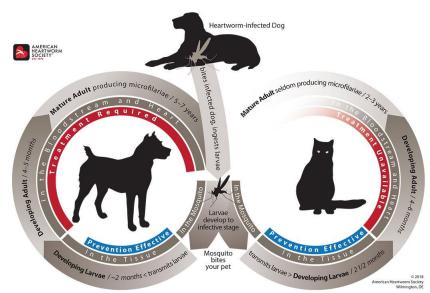
# **Quick Facts on Heartworm Disease**

### What is Heartworm Disease?

- Heartworm Disease is a life-threatening disease caused by the parasite *Dirofilaria immitis,* which can affect a number of mammals, including dogs and cats
- Heartworms can be transmitted when a mosquito infected with larvae bites your dog
- Once fully mature, these worms live predominantly in the pulmonary arteries and heart
- Heartworm disease can be fatal if left untreated

## What is the Life Cycle of Heartworm?

- The cycle begins when a mosquito bites a heartworm infected dog and takes in the larval form of the heartworm, circulating microfilaria (L1), along with their blood meal
- If the environmental conditions are ideal, these larvae develop in the mosquito over the period of 2-3 weeks
- The infected mosquito then transmits the infective larvae to a dog when taking a blood meal
- When the dog has been infected, the parasite develops further, migrating to the heart and pulmonary arteries 3-4 months after infection, reaching mature adulthood and reproducing at 6-7 months after initial infection



• Left untreated, adult heartworms are thought to live, on average from 5-7 years in dogs

#### What are the Symptoms?

• Dogs can be asymptomatic, or can develop clinical symptoms of the disease due to the adult worms in the pulmonary vessels, lungs and heart

- Some symptoms of Heartworm disease include the following:
  - Exercise intolerance
  - Mild to severe cough
  - Weight loss
  - Laboured breathing
  - Heart failure (e.g. abdominal swelling, heart irregularities, weight loss, fainting, & sudden death)

### Why is Heartworm Testing Recommended?

- Testing annually provides owners piece of mind knowing their pet is free of Heartworm
- If a dog is infected, annual testing ensures early diagnosis and treatment of the disease, and helps to prevent transmission of Heartworm to other dogs

## When is Heartworm Testing Required?

- If there has been seasonal potential for exposure, all dogs over 6 months of age should be tested for Heartworm annually
- If monthly doses of medication were missed or given late, testing for Heartworm is necessary before starting Heartworm preventive

### How is Heartworm Disease Diagnosed?

- A blood test detects proteins produced by adult female Heartworms; this test is very specific and sensitive in dogs and will provide a positive or negative result
- Radiographic (x-ray) findings in a heartworm positive dog may reveal an enlarged heart and/or abnormal pulmonary arteries

## How is Heartworm Disease Prevented?

- Heartworm infection is easier to prevent than treat; treatment is not without risk, requiring close monitoring and often requires hospitalization
- Prevention of Heartworm disease can be accomplished by following the recommended guidelines for administering monthly Heartworm preventive medication
- In the province of Ontario, Heartworm preventives are administered for 6 months, beginning in June and ending in November
- Unfortunately, at this time, there are no proven natural methods to prevent heartworm that are as effective as pharmaceutical preventive medications

*Source: Information adapted from Heartgard 30 HGD-14-7263-TSHEET(E)* 

Image: https://www.heartwormsociety.org/veterinary-resources/client-education/heartworm-life-cycle