

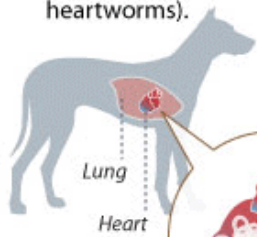
# Heartworm Disease

Heartworm disease affects pets in all parts of the United States. Adult heartworms can interfere with blood flow in the lungs and when large numbers of worms are present, can cause heart failure.

## The Heartworm Lifecycle

It usually takes between seven and nine months for heartworms to complete their lifecycle in dogs. Heartworm lifecycle and stages are different in cats.

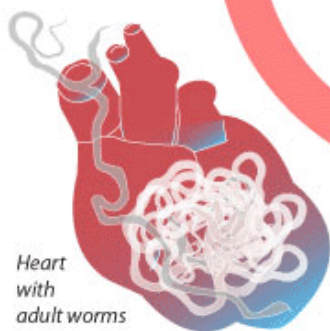
- 1** Adult worms in an infected dog's heart and the blood vessels of its lungs breed and produce microfilaria (larval heartworms).



- 2** A mosquito feeds on the dog and picks up the microfilariae.

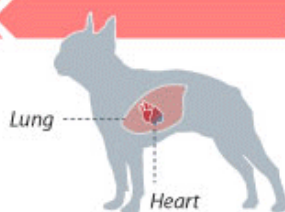


- 3** Microfilariae mature into infective third stage larvae (L3) within the mosquito.



- 6** L4 mature into adult worms that breed and produce microfilariae, thereby completing the heartworm lifecycle.

- 5** L3 mature into fourth stage larvae (L4) in the dog's tissues and migrate through the body and into veins through which they reach the heart and lungs.



- 4** L3 are transferred to a new host via a mosquito bite.



Microfilariae