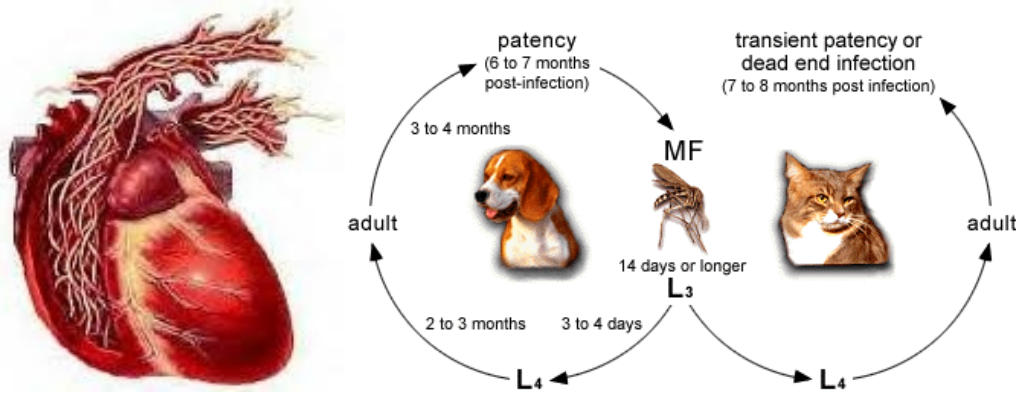


HEARTWORM DISEASE



Heartworm disease is caused by a parasite called *Dirofilaria immitis* that uses mosquitoes as the vector and dogs as the host. Cats can get heartworm disease but are considered an aberrant host so it behaves very differently in them. A dog that receives a bite from a mosquito that is carrying the larval stage of the heartworm receives this larval stage and it develops into adult heartworms in the arteries of the lungs. This causes an inflammation as well as many other changes in the lungs. Eventually the blood pressure in these vessels can increase (pulmonary hypertension) which increases the workload on the right side of the heart which pumps blood to the lungs. Heartworms can cause a variety of symptoms including coughing, decreased exercise tolerance, increased breathing rate or effort, abdomen distended with fluid, discolored urine as well as many other symptoms depending on the severity of the disease process. Once there are live adults living in the pulmonary arteries, adulticide therapy needs to be performed after assessing the overall health of the pet. This is done with injections of an arsenic derivative medication over a month. The pet has to be strictly confined during this therapy period (for approximately 2 months) because activity can lead to complications. Some of the changes that occur with the heartworm therapy are not reversible with heartworm therapy.

Heartworm disease is easily prevented by administering a monthly heartworm preventative to your pet. Your veterinarian can assist you in selecting the best preventative for your pet.