

Guidelines for heartworm testing

Antigen tests

These tests have good specificity and sensitivity, however, positive results rely on the presence of adult female worms which are only present 6-7 months after infection. Testing is therefore not warranted in puppies under 6 months of age. False negative results may also be returned early in the course of the disease. Patients with a high index of suspicion for heartworm and a negative antigen test should be subjected to further testing which may include the Knott's test for microfilaria or advanced imaging. Repeat antigen testing in 4-6 weeks may also be helpful.

False positive results are fairly rare, however, the recommendation is to confirm positive results with a Knott's test or subsequent antigen test using a different test kit.

Tests for microfilaria

If there is a high parasite burden microfilaria may be visible on routine blood films. With lower parasite burdens concentration techniques such as a Knott's test is advised.

Microfilaria seen must be differentiated from other filaria such as *Dirofilaria repens* and *Acanthocheilonema reconditum*.

Cats

Cats tend to have a shorter duration of microfilaraemia than dogs and lower adult worm burdens. Diagnostic tests are therefore less sensitive in cats and occult infections are more common. Advanced imaging studies are advised if there is string clinic al suspicion of heartworm disease.