

Leptospirosis in Dogs

Leptospirosis is most common in younger dogs, of large breed and with outdoor access. Acute or subacute disease can occur with a wide range of clinical presentations.

In dogs with clinical signs and / or haematological and biochemical changes supportive of leptospirosis, two test modalities are available.

Serology: MAT

Dogs become seropositive 2-3 weeks post infection. A single low titre is not diagnostic of infection, but paired titres at 3 week intervals can be evaluated. A single high titre is diagnostic.

Successful therapy results in a rapidly decreasing serological titre.

PCR

Dogs may be PCR positive before becoming serologically positive. Early in infection, blood is the most sensitive sample. After 10-14 days, urine is the most sensitive sample. As the time of infection is rarely known, testing of both EDTA blood and urine concurrently is recommended.

In humans, over the course of natural disease, PCR has lower sensitivity but higher specificity than serology. However it has higher sensitivity than serology in the acute phase of disease.