







December 2011

Leptospirosis Testing

Due to on-going quality assurance issues with our current leptospirosis serology assay (which is presently a macroscopic agglutination method), a different assay (**Leptospiral MAT** or Micro Agglutination Titre) will now be utilised. The new assay is widely regarded as the "gold standard" for diagnosis of leptospirosis, and is more specific for acute infection. The assay tests for antibodies to the most common serovars currently found in New Zealand.

The new leptospiral assay will give more sensitive and specific results than the old method. However it should be noted that due to the more involved methodology, the turnaround time will be longer than the previous method. We anticipate a turnaround time of **up to 5-6 working days**.

The new leptospirosis test will be performed at ESR laboratories in Wallaceville, Upper Hutt.

A high antibody titre for a leptospiral serovar from a single serum sample is indicative of leptospirosis infection. However, optimal testing should include both acute and convalescent serum samples at least two weeks apart. It is important to note the date of onset of illness on the request form.

The new testing protocol will come into effect on the 5th December 2011.

We plan to audit the turnaround time after the test has been in use for a few months. As always, please feedback to me any concerns that you may have with regards to the test or its' interpretation.

Note also that in seriously ill, hospitalised patients, **leptospiral PCR** in addition to serological testing may also be indicated. Leptospira can be detected from blood and CSF up to 7 days after the initial onset of illness. For diagnosis beyond this period a urine sample is optimal.

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