

**Date:** September 9, 2015

**To:** All Community Physicians, Alberta Health, Laboratory Directors and Managers, Medical Officers of Health, Pediatric and Adult Infectious Disease Physicians and FNIHB

**From:** Provincial Laboratory for Public Health (ProvLab)

**Re:** Change in Reporting Lyme Disease (*Borrelia burgdorferi*, *afzelii* & *garii*) Serology Results

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**Key Messages:**

- Effective September 15, 2015, bloods with positive or indeterminate Lyme disease (LD) results, arising from the ProvLab Lyme C6 EIA, will ONLY be reported in conjunction with the confirmatory Western Blot results from the National Microbiology Laboratory (NML) in Winnipeg.
  - The turnaround time for the NML Western Blot results is usually 2 to 3 weeks for *B. burgdorferi* and generally a further two weeks for *B. afzelii* and *B. garii* (the European genospecies of LD).
- Samples testing negative in the Lyme C6 EIA are unaffected by this reporting change and negative results will be reported once testing is completed (turnaround time usually 2-3 days from receipt at ProvLab).
- To ensure appropriate ordering of Western Blot testing, providing recent travel history (within 3 months) to countries outside of North America and especially to Europe cannot be overemphasized. Samples sent to NML for confirmatory Western Blot testing will ONLY be tested for *B. burgdorferi* in the ABSENCE of any travel history OR travel to countries outside of North America.
  - **Note:** The Lyme C6 EIA is highly sensitive for detecting antibodies to *B. garii* and *B. afzelii* in the early stages of Lyme disease acquired in Europe. Therefore, testing positive/indeterminate samples ONLY in the *B. burgdorferi* Western Blot confirmatory assay can result in a false negative interpretation.

**Action required:**

- ALWAYS provide a COMPLETE travel history on ALL Lyme disease serology requests.
- If the confirmatory Western Blot result for *B. burgdorferi* is negative, and follow-up discussions between the patient and submitter determine travel to Europe, EITHER, (a) send another blood with the updated travel history if requested OR, (b) FAX the updated travel information to 403-944-1701 "Attention Microbiologist/Virologist-on-Call" to have the Western Blot for *B. garii* and *B. afzelii* added on to the blood previously submitted.

**Additional information:** on Lyme disease testing is posted on the ProvLab website <http://www.albertahealthservices.ca/assets/wf/plab/wf-provlab-appendix-laboratory-testing-of-lyme-disease-in-alberta.pdf>

**Comment/Questions:** Dr. Kevin Fonseca, Program Lead at [Kevin.Fonseca@albertahealthservices.ca](mailto:Kevin.Fonseca@albertahealthservices.ca)

**This bulletin has been reviewed and approved by:**

Dr. Graham Tipples, Medical / Scientific Director, Provincial Laboratory for Public Health (ProvLab)