



Durham Region Health Department FAX about...

For Health Care Professionals



Testing Changes for Lyme Disease

As of April 1, 2023, Public Health Ontario Lab (PHOL) will be moving to a different testing algorithm for Lyme Disease (*Borrelia burgdorferi*) IgM/IgG antibodies.

Move from STTT to MTTT algorithm

The changes to the testing algorithm will help improve Lyme Disease diagnosis in early localized disease (by reducing the chances of a false negative result) and help to decrease the turnaround time for Lyme Disease testing, leading to earlier intervention. This testing is intended to support clinical decision making by increasing the sensitivity of the test and improving turnaround time for test results.

The Standard Two-Tier Testing (STTT) algorithm has been in use for many years in Ontario. Samples are tested for total IgM/IgG antibodies by enzyme-linked immunosorbent assay (ELISA) and those that are reactive/indeterminate are further tested using a separate IgM/IgG Western blot assay. The **Modified Two-Tier Testing (MTTT)** approach will now be used. Initial screening will continue to be performed by IgG/IgM ELISA and samples that are reactive/ indeterminate will be further tested using a second IgG/IgM ELISA targeting specific antigens.

Lyme Disease

Lyme Disease is a preventable disease caused by the bacterium *Borrelia burgdorferi*. It is transmitted to humans through the bite of infected ticks. In Ontario, *Ixodes scapularis* (the blacklegged tick or “deer tick”) is the sole vector of *B. burgdorferi*. Blacklegged ticks are now established in Durham Region.

Please continue to report any cases of Lyme Disease to the Durham Region Health Department:

- Phone: 905-668-2020 or 1-800-841-2729 ext. 7369 (press option 2)
- Confidential Fax: 905-666-1833
- After Hours Phone: 905-576-9991 or 1-800-372-1104
- Access the Notification Form for Diseases of Public Health Significance at www.durham.ca/hcp under Forms, Reporting.

Please visit the PHO website for Lyme Disease [testing information](#). Please contact PHOL if you have questions about these testing changes at customerservicecentre@oahpp.ca or at 416-235-6556.

Updated Clinical Guidance Document

The new Clinical Guidance Document on the [Management of Tick Bites and Investigation of Early Localized Lyme Disease](#) has been released.

March 29, 2023

905-668-2020 or 1-800-841-2729 | durham.ca/health

If you require this information in an accessible format, contact 1-800-841-2729.

