



# PUBLIC HEALTH MATTERS

*A Newsletter for Healthcare Professionals*

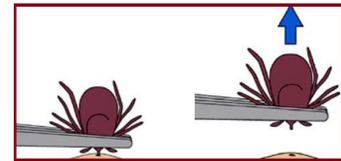
## **Update on Lyme Disease**

Lyme disease is caused by the bacteria *Borellia burgdorferi*, transmitted by *Ixodes Scapularis*, also known as the blacklegged tick or deer tick. Currently, Northeastern Ontario including Timiskaming Health Unit, is considered low risk for both ticks and Lyme disease.

We have no identified risk areas and submit low numbers of ticks for testing. Timiskaming Health Unit has no history of Lyme disease or positive ticks acquired within our health unit's borders. As such, we only engage in passive tick surveillance. High risk areas have been identified in Southern Ontario, Eastern Ontario, and Northwestern Ontario.



Ticks can only transmit Lyme disease after they have been attached for 24 hours. The Public Health Agency of Canada advises that ticks are most effectively removed with a fine pair of tweezers/forceps. Grasp the tick as close to the skin as possible. The forceps should be held at a right angle to the main axis of the tick's body. Gently pull the tick away from the skin. Avoid twisting or turning the tick during removal as this can cause the tick's mouthparts to break off. When appropriate, disinfect the feeding site after the tick is removed. Once removed, immediately transfer the tick to a collection vial.



Proper tick removal

Ticks of human origin can be dropped off at a health unit office during regular business hours. From there, they are sent for identification by an entomologist at Public Health Ontario. Ticks identified as *Ixodes Scapularis* are then tested to determine if they carry Lyme disease. This test is intended for surveillance purposes due to a long turnaround time and the likelihood that more than one tick was attached the patient.

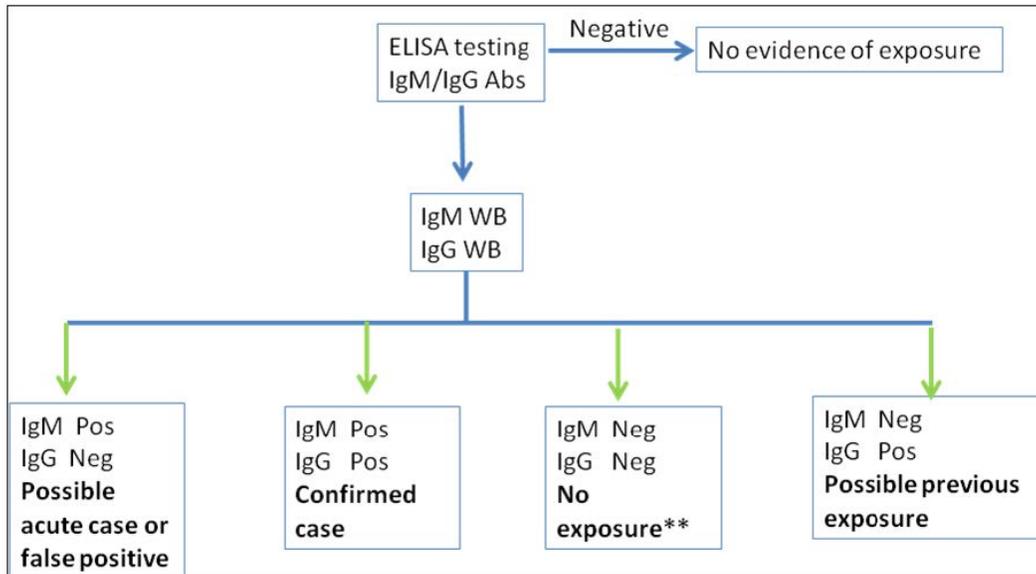
Lyme disease is reportable in Ontario. Early localized Lyme disease usually presents as an acute illness characterized by fever, myalgia, headache and the presence of an erythema migrans (or bulls-eye) rash. While not all patients will develop an EM rash, most patients will present with an EM rash within 7 days of the tick bite (a range of 3 to 30 days). Patients that present with an EM rash greater than 5 cm in diameter after possible exposure or have laboratory confirmation of Lyme disease, are reportable to public health.



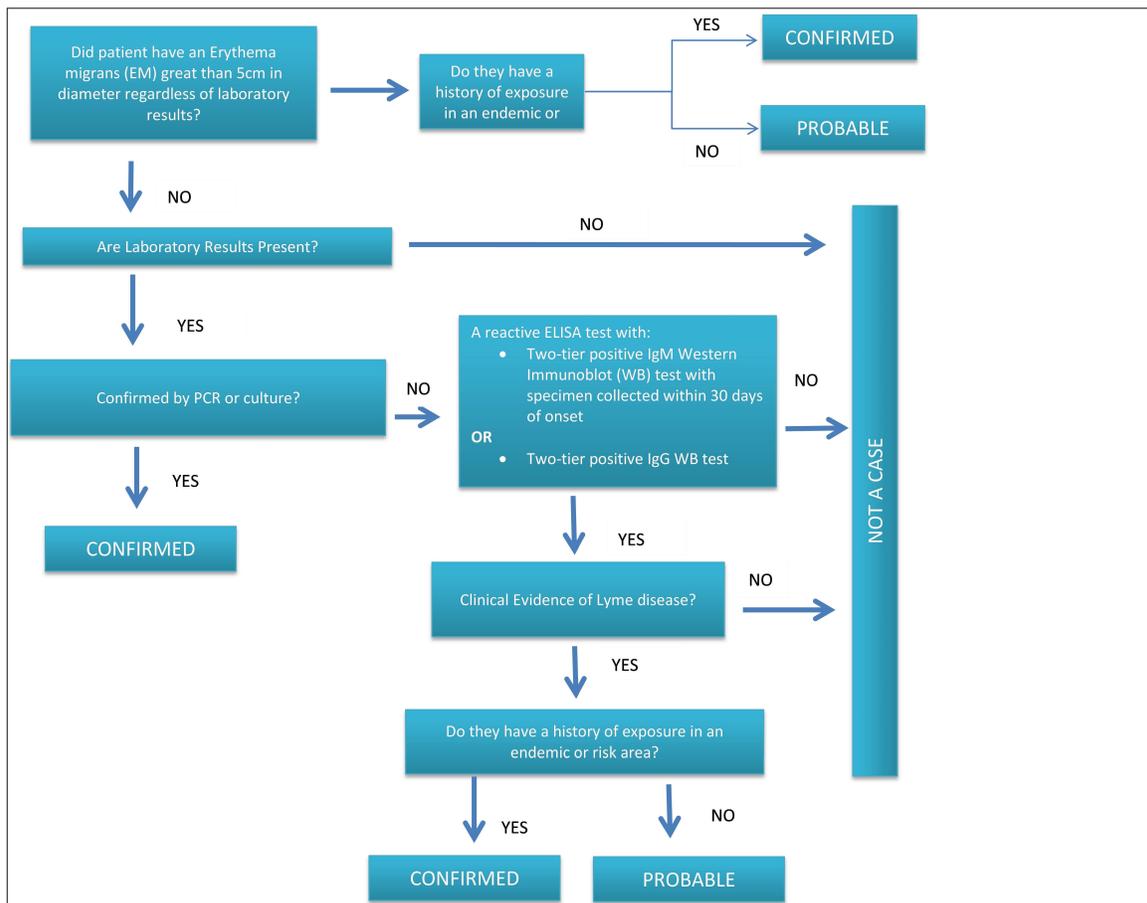
EM rash at the site of a tick bite.

The laboratory testing for Lyme disease is difficult to interpret and the test will cross-react with many common diseases. A chart is attached to help aid in interpreting 2-tier serological testing results. For more information on ticks and Lyme disease, please see [www.publichealthontario.ca](http://www.publichealthontario.ca)

# Interpreting Lab Results for Lyme Disease



Interpreting Laboratory Result



Determining if a patient has confirmed or probable Lyme Disease