

June 12, 2017

Attention: Physicians, Nurse Practitioners, Hospitals - Emergency Rooms / Infection Control / Occupational Health, Walk-In Clinics

## **RE: LYME DISEASE**

### **Diagnosing Lyme Disease and Laboratory Testing**

Lyme disease is a tick-borne zoonotic disease caused by the bacterium, *Borrelia burgdorferi*. This bacteria is found in the gut of the female deer tick or blacklegged tick (*Ixodes scapularis*) and can be transferred by feeding on a human for a **MINIMUM** of 24 hours.

**Diagnosis is primarily based on clinical and epidemiological findings.**

Blood tests to support a diagnosis of Lyme disease are performed at the Ontario Public Health Laboratory (OPHL) or the National Microbiology Laboratory. Please refer to the Public Health Ontario Lababstract for more information on laboratory testing:

[https://www.publichealthontario.ca/en/ServicesAndTools/LaboratoryServices/Pages/Lyme\\_Disease\\_Serology.aspx](https://www.publichealthontario.ca/en/ServicesAndTools/LaboratoryServices/Pages/Lyme_Disease_Serology.aspx)

[https://www.publichealthontario.ca/en/eRepository/LAB\\_SD\\_088\\_LymeDisease\\_IgGIgM\\_C6peptide\\_assay\\_BorreliaBurgdorferi.pdf](https://www.publichealthontario.ca/en/eRepository/LAB_SD_088_LymeDisease_IgGIgM_C6peptide_assay_BorreliaBurgdorferi.pdf)

**If a tick is still attached, it should be removed and submitted for identification to the Public Health Ontario Laboratory.**

[https://www.publichealthontario.ca/en/eRepository/LAB\\_SD\\_118\\_Tick\\_Surveillance.pdf](https://www.publichealthontario.ca/en/eRepository/LAB_SD_118_Tick_Surveillance.pdf)

### **Human Case Surveillance**

Within the Haliburton, Kawartha, Pine Ridge District Health Unit (HKPRDHU) area, from 2011-2015, there were 7 laboratory-confirmed cases, and 9 probable cases of Lyme disease reported; in 2016 there were 7 laboratory-confirmed cases and 3 probable cases reported. Please note that the Ontario Provincial case definition within the Infectious Diseases Protocols was modified in April 2015.

### **Tick Surveillance**

In 2016, the Brighton area was identified as a high-risk area where there is an established blacklegged tick population and more than 20% of those ticks carry *Borrelia burgdorferi*. For this reason, effective June 1, 2017, the Health Unit will no longer accept ticks for testing in the area east of Colborne and south of Highway 401, however, ticks can still be submitted from other parts of Northumberland County, City of Kawartha Lakes and Haliburton County for testing. Please refer to the map of Lyme disease Risk Areas, which is available and annually updated by Public Health Ontario to assist clinicians in the diagnosis and/or treatment of Lyme disease. [http://www.publichealthontario.ca/en/eRepository/Lyme\\_disease\\_risk\\_areas\\_map.pdf](http://www.publichealthontario.ca/en/eRepository/Lyme_disease_risk_areas_map.pdf)

Communicable Disease Control nurses in the Infectious Diseases Program contact all probable\* and confirmed\* cases to provide health teaching on prevention, signs, symptoms, treatment, and to obtain case details for reporting to the Ministry of Health and Long-Term Care (MOHLTC).

### **Confirmed\* Case**

- Clinician confirmed Erythema Migrans > 5cm in diameter with a history of residence in, or visit to, Lyme disease endemic or risk area.  
**OR**
- Clinical evidence of Lyme disease with laboratory confirmation by PCR or culture.  
**OR**
- Clinical evidence of Lyme disease with laboratory support by serological methods, and a history of residence in, or visit to, an endemic or risk area.

### **Probable\* Case**

- Clinical evidence of Lyme disease with laboratory support by serological methods, but with no history of residence in, or visit to an endemic or risk area.  
**OR**
- Clinician confirmed EM > 5 cm in diameter, but with no history of residence in, or visit to an endemic or risk area.

**\*From *Infectious Disease Protocol: Case Definitions for Reportable Diseases – Lyme Disease*, MOHLTC March 2017**

### **Reporting to HKPR District Health Unit**

**Please report any probable or confirmed Lyme disease cases to the Infectious Diseases team at 905-885-9100 ext. 1232 in Port Hope, and 705-324-3569 ext. 2232 in the Haliburton and City of Kawartha Lakes areas.**

### **Resources on Lyme Disease**

Haliburton, Kawartha, Pine Ridge District Health Unit website- [www.hkpr.on.ca](http://www.hkpr.on.ca)

Public Health Ontario- [www.publichealthontario.ca](http://www.publichealthontario.ca)

Public Health Agency of Canada – [www.phac-aspc.gc.ca](http://www.phac-aspc.gc.ca)

Infectious Diseases Society of America – [www.idsociety.org](http://www.idsociety.org)

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NOTE: For easier access to the above web links, visit the Health Unit website ([www.hkpr.on.ca](http://www.hkpr.on.ca)) for electronic copies of all current – and previous – editions of *FAX Facts*. Go to the ‘Resources & Forms’ header at the top of the web page, and use the drop-down menu to click on the ‘Health Care Professionals’ section (a link to FAX Facts is posted there). A direct link is also provided below:

[www.hkpr.on.ca/ResourcesForms/HealthCareProfessionals/FAXFacts.aspx](http://www.hkpr.on.ca/ResourcesForms/HealthCareProfessionals/FAXFacts.aspx)

Haliburton	Lindsay	Port Hope	After Hours
705-457-1391	705-324-3569	905-885-9100	1-888-255-7839