



durham.ca/hcp

FAX about...



Lyme Disease

Lyme disease (LD) continues to be **increasingly prevalent in Ontario** as the climate changes. The rapid spread of tick populations and the mobility of the population put Ontarians at risk throughout the province. In 2017, a total of **176** tick specimens were submitted by the Health Department and to date **18** of the ticks have tested positive for ***Borrelia burgdorferi***. In comparison, **83** ticks were submitted in 2016 with only **4** ticks testing positive. For the most up-to-date information on Lyme disease risk areas in Ontario visit Public Health Ontario's website at publichealthontario.ca.

LD is a preventable disease caused by the bacterium *B. burgdorferi*. It is **transmitted** to humans through the **bite** of an **infected tick**. In Ontario, *Ixodes scapularis* (the **blacklegged tick** or "**deer tick**") is the **sole vector** of *B. burgdorferi*. Blacklegged ticks have become **established** in **certain areas** within **Durham Region** and some have **tested positive** for *B. burgdorferi*.

The **incubation period** for LD is usually **1 to 4 weeks** after an infected tick bite. During the early stages of infection, (3-30 days after tick bite) **70 - 80% of cases** exhibit an ***erythema migrans*** ("**bull's eye rash**"). Other early symptoms may include **fever, headache, muscle and joint pain, fatigue, and stiff neck**. LD is **preventable** and **prompt treatment** with appropriate **antibiotics** is important. If left untreated, the disease can **progress** to a **more serious illness** involving the **cardiac and nervous systems**. **Not all blacklegged ticks are infected** and an infected tick has to generally be **attached and feeding** on an individual for **at least 24 hours** before it can **transmit** the bacteria to the human host. Prompt removal of attached ticks is important to prevent LD. Testing ticks should **not** be used to diagnose LD. Diagnosis should be based on the health care provider's (HCP) clinical judgement. In **2017, 48** human cases of LD were reported for Durham Region compared to only **24** LD cases reported in **2016**.

Laboratory testing is used to **support the diagnosis** of LD and should be used in conjunction with **clinical signs and symptoms**. HCPs must request "**Lyme disease testing**" on the PHO Laboratories (PHOL) General Test Requisition Form and list **clinical symptoms (with onset date), exposure** (e.g., tick bite) **history, and travel history**, for the patient (refer to the PHOL Labstract on LD). A blood test may be negative in patients with early stage LD, or patients previously treated with antibiotics. The accuracy of blood tests increases as the infection progresses, although it is recognized that a small proportion of patients with later-stage LD may test negative.

HCPs or residents can **submit, to the Health Department, any ticks** that are found on the **human body**. **These will be identified and tested** (if applicable) for LD. Please contact the **Environmental Help Line** at **1-888-777-9613** or **905-723-3818** to submit a tick. Tick surveillance helps to identify areas of blacklegged tick activity. HCPs **must report all cases of LD** (a reportable disease), **including clinical or suspect cases** (no laboratory confirmation) to the **DRHD at 905-723-3818 or 1-888-777-9613**.

Durham Region Health Department: 905-723-3818, 1-888-777 9613

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If you prefer to receive this information in an electronic format please submit your request to healthresources@durham.ca

If you require this information in an accessible format, contact 1-888-777-9613.