Durham Region Health Department
FAX about...
For Health Care Professionals

Lyme Disease Update

Lyme disease continues to rise across Ontario. In Durham Region, there were 201 cases reported in 2025. For 2026, there have been 4 cases reported to date. Lyme disease is caused by the bacterium *Borrelia burgdorferi* which 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*.

As **all of Durham Region is now a risk area** consider Lyme disease as well as the other reportable tick-borne diseases (Anaplasmosis, Babesiosis, Powassan virus) in your differential diagnosis.

Clinical Presentation for Symptomatic Patients

Early Localized Infection

Up to 70-80% of infected patients will present with an erythema migrans (EM) rash (bullseye lesion or expansile red patch) at the bite site, within 3-30 days after exposure to an infected blacklegged tick. Early systemic symptoms may include fatigue, headache, myalgia, arthralgia, and fever. Also consider cellulitis in an unusual location or a bruise-like rash in dark skinned patients.

Testing recommendations: Clinical diagnosis, serology may not yet be positive

Early Disseminated Infection

May present with multiple EM-like lesions, neurological symptoms including facial nerve (Bell's) palsy, aseptic meningitis, radiculitis, mononeuritis multiplex and/or cardiac symptoms including carditis, PR prolongation, and myopericarditis.

Testing recommendations: Lyme Serology (IgM/IgG)

Late Disseminated Infection

May present with arthritis and/or encephalopathy.

Testing recommendations: Lyme Serology (IgM/IgG)

Lyme disease has been previously misdiagnosed as cellulitis, bug bite infection, joint infection, allergic reaction, wound infection, venomous reaction, or shingles. **Consider repeat serology in 4-6 weeks if initial serology is negative and patient presents with persistent signs/symptoms of Lyme disease.**

… over

Testing

Please visit the Public Health Ontario website for Lyme disease testing information. **Serological testing of asymptomatic patients, including individuals following a tick bite, is not recommended**. Serological testing is useful for individuals in the absence of a rash, presenting with non-specific symptoms where Lyme disease is suspected.

Clinical Guidance

Please see the Clinical Guidance Document by Ontario Health.

Post Exposure Prophylaxis for Asymptomatic Patients

Blacklegged ticks are established across all of Durham Region. **Post-exposure prophylaxis should be considered if the following 4 conditions are met:**

- The tick was attached for 24 hours or more
- The tick was removed within the past 72 hours
- The tick was acquired in an area with a prevalence of ticks infected with *B. burgdorferi* is greater than 20% (*All of Durham Region meets this criteria)
- Doxycycline is not contraindicated (e.g. allergy; pregnancy is no longer a contraindication)

Recommended treatment for post-exposure prophylaxis:

- Adults: 1 dose of doxycycline 200 mg, by mouth
- Children: 1 dose of doxycycline 200 mg or 4 mg/kg (maximum dose of 200mg), by mouth

Tick Identification

Public Health Ontario Laboratory will accept ticks from health care providers for identification of tick species (i.e., *Ixodes scapularis*). They only accept ticks found on humans. The Health Department does not submit ticks for identification as Durham is an already established risk area for *Ixodes scapularis*. **Tick identification is used for surveillance and not for diagnosis in an individual patient**. Health care providers may also submit ticks for identification through the eTick.ca website.

Reporting

Please continue to report any cases of Lyme disease and other tickborne diseases (i.e. Anaplasmosis, Babesiosis, Powassan virus) 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).

March 26, 2026