



Durham Region Health Department FAX about...

For Health Care Professionals



Recognizing Tick-Borne Diseases

Tick-borne disease incidence is rising in Durham Region as tick populations are now established throughout the area. Blacklegged ticks (*Ixodes scapularis* or deer tick)s can transmit diseases such as Lyme disease, Anaplasmosis, Babesiosis, and Powassan virus.

As a reminder, Anaplasmosis, Babesiosis, and Powassan virus were classified as Diseases of Public Health Significance (DoPHS) in Ontario on July 1st, 2023. These diseases must be reported to the Durham Region Health Department.

Recommended Actions for Clinicians

Please continue to consider tick-borne diseases in your differential diagnoses.

Anaplasmosis

Symptoms typically occur within 1-3 weeks after exposure to an infected tick. Signs and symptoms are characterized by fever and one or more of the following non-specific symptoms: chills, malaise, headache, myalgia, arthralgia, leukopenia, thrombocytopenia or elevated hepatic transaminases. In rare cases, if treatment is delayed or other medical conditions are present, anaplasmosis can lead to serious illness, including respiratory failure, bleeding problems, or organ failure.

Babesiosis

Symptoms typically occur 1-4 weeks after exposure to an infected tick. Most infections are asymptomatic, however infected individuals may develop mild to severe systemic symptoms such as fever, chills, sweats, headache, arthralgia, loss of appetite, nausea or fatigue. Babesiosis may also cause hemolytic anemia, with symptoms including fatigue, jaundice and dark urine. Other severe symptoms include thrombocytopenia and renal failure.

Powassan Virus

Symptoms typically occur 1-4 weeks after exposure to an infected tick. Most infections are asymptomatic, however infected individuals may develop an initial prodrome of fever, chills, headache, gastrointestinal symptoms, myalgias, confusion, weakness, or nuchal rigidity, among others. Neuroinvasive disease may present as meningitis and/or encephalitis accompanied by neurological deterioration or other focal neurologic signs/symptoms.

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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.



Testing Indications

Please visit the Public Health Ontario website for testing information:

- PHO Anaplasma [serology](#)
- PHO Babesia [microscopy & PCR](#)
- PHO Powassan virus [serology](#)

Prevention

Please continue to educate patients how to prevent tick-borne diseases. This includes:

- Wearing closed shoes and light colored, long sleeve shirts and long pants
- Using diethyltoluamide (DEET), icaridin (picaridin) insect repellents or permethrin treated clothing
- Avoid tick infested areas when possible
- Avoid wooded and brushy areas with high grass and leaf litter
- Walk in the centre of trails

Reporting

Please continue to report any cases of Anaplasmosis, Babesiosis, and 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).

Additional Information

Please see the Durham Region Health Department Tick-Borne Diseases website www.durham.ca/ticks.

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