



# Durham Region Health Department FAX about...

For Health Care Professionals



## Diseases of Public Health Significance – Tick-Borne Diseases added

In response to reports of emerging tick-borne diseases and an increase in blacklegged tick populations across Ontario, amendments to Ontario Regulation 135/18 to add Anaplasmosis, Babesiosis, and Powassan virus as [Diseases of Public Health Significance \(DoPHS\)](#) were approved. The effective date for these amendments is July 1st, 2023.

Timely reporting of communicable diseases is essential. If you suspect or have laboratory confirmation of any of the following DoPHS, they must be reported to the local Medical Officer of Health as per the *Health Protection and Promotion Act*.

### Recommended actions for clinicians

Provide prompt assessment and treatment for patients with symptoms of tick-borne diseases. There are concerns of long-term health problems such as recurring headaches, loss of muscle mass and strength and memory problems.

Educate patients and/or parent/guardians on the signs and symptoms infections as well when to seek urgent medical attention.

#### Risk factors for tick-borne diseases:

- weakened immune system (e.g., cancer, transplantation, or certain medications)
- coinfection with other tick-borne diseases
- older adults
- travel to endemic areas and outdoor activities in the previous 30 days
- outdoor recreational activities and outdoor occupations
- infants and young children
- individuals who are pregnant or postpartum
- individuals experiencing homelessness and/or using injection drugs
- individuals with recent viral infection (e.g., chickenpox)

#### Prevention Measures:

- 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

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905-668-2020 or 1-800-841-2729 | [durham.ca/health](http://durham.ca/health)

If you require this information in an accessible format, contact 1-800-841-2729.



## **Anaplasmosis**

Symptoms typically occur within 1-2 weeks from a bite of an infected tick. Clinically compatible signs and symptoms are characterized by fever and at least one of the following: headache, malaise/asthenia, arthralgia, myalgia, nonhemolytic anemia, thrombocytopenia, leukopenia, elevated hepatic transaminase levels or neutrophils. If treatment is delayed or other medical conditions are present, severe illness such as respiratory failure, organ failure, bleeding problems may occur or lead to death.

## **Babesiosis**

Symptoms typically occur 1-4 weeks from a bite of an infected tick, and 1-9 (up to 6 months) weeks after contaminated blood transfusion. Congenital transmission may be possible although rarely reported. Most infections are asymptomatic, however, infected individuals may show mild to severe systemic symptoms such as fever, chills, sweats, headache, body aches, loss of appetite, nausea, or fatigue. Since *Babesia* parasites infect and destroy red blood cells, babesiosis can cause severe hemolytic anemia.

## **Powassan Virus**

Symptoms typically occur 1-4 weeks from a bite of an infected blacklegged tick. Most infections are asymptomatic, however, infected individuals may show mild to severe symptoms such as fever, headache, nausea, vomiting, asthenia, or myalgia. Neuroinvasive disease may take the form of meningitis and or encephalitis syndromes with symptoms of confusion, loss of coordination, difficulty speaking, paralysis, seizure, or coma.

## **Reporting & Additional Information**

Anaplasmosis, Babesiosis, and Powassan virus are now a reportable diseases in Ontario. Please continue to report any cases.

In Durham, DoPHs are reported to two different divisions at the health department. Please ensure you report to the correct division as specified.

- Phone: 905-668-2020 or 1-800-841-2729 ext.7369
- After Hours Phone: 905-576-9991 or 1-800-372-1104
- Confidential Fax: 905-666-1833
- Access [Notification Form for Diseases of Public Health Significance](#) at [Durham.ca/HCP](http://Durham.ca/HCP)

June 29, 2023

