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Key Messages:

- On July 1st, 2023, anaplasmosis, babesiosis, and Powassan Virus (POWV) became diseases of public health significance. The reportable disease list now includes the three new tick-borne diseases.
- Anaplasmosis, babesiosis, and POWV are most commonly transmitted by blacklegged ticks.
- Blacklegged ticks are established in Peel region.
- Clinicians should consider tick-borne illness as part of differential diagnosis when patients present with a non-specific febrile illness of unknown origin, at any time temperatures are above 4 degrees Celsius as ticks are active.

NEW: Anaplasmosis, babesiosis, and Powassan Virus (POWV) Risk in Peel

- In response to reports of emerging tick-borne diseases and an increase in blacklegged tick populations across Ontario, on July 1, 2023 anaplasmosis, babesiosis, and Powassan virus (POWV) became diseases of public health significance. The list of reportable diseases has been updated to include anaplasmosis, babesiosis and POWV:
<https://www.peelregion.ca/health/infection-control/reportable-diseases/>
- Anaplasmosis, babesiosis, and POWV infections are most commonly transmitted to humans through the bite of an infected blacklegged tick (*Ixodes scapularis*).
- Blacklegged ticks are established in Peel Region and across most of southern Ontario. Public Health Ontario's (PHO) Lyme disease risk map

shows established blacklegged tick populations:

<https://www.publichealthontario.ca/-/media/Documents/L/2023/ontario-lyme-disease-risk-area-map-2023.pdf>

- Lyme disease is the most common tick-borne disease in Peel Region and in Ontario. Although anaplasmosis, babesiosis, and POWV infection are rare, with an established blacklegged tick population in Peel region, local exposure is possible.
- Peel residents are more likely to contract a tick-borne disease while travelling to areas with higher numbers of infected blacklegged ticks (e.g. eastern Ontario, southern Quebec, Atlantic provinces).
- As of October 5th, 2023, Peel Health has investigated two reports of anaplasmosis and babesiosis in Peel residents:
 - Confirmed case of anaplasmosis acquired during a camping trip to eastern Ontario.
 - Probable case of babesiosis locally acquired.

NEW: Anaplasmosis, babesiosis, and POWV Clinical Presentation, Diagnostic Testing, and Treatment

- Consider tick-borne illness as part of differential diagnosis when patients present with a non-specific febrile illness of unknown origin, and if the patient could have been exposed while ticks are active (which occurs when temperatures are above 4 degrees Celsius).

- For a summary of clinical presentation, diagnostic testing, and treatment of tick-borne disease, refer to Tick- Borne Disease Summary Table (attached).
- For additional information on Lyme disease, refer to the Health Professionals Update sent on July 11, 2023:
<https://www.peelregion.ca/health/professionals/tools/updates2023/2023-07-11-update-vol-16-no-22.pdf>

REMINDER: Tick Species Identification and Reporting

Tick-Borne Diseases

- Peel Public Health no longer accepts tick submissions for identification and testing.
- Residents and health care providers can use: <https://www.etick.ca/>, an online image-based tick identification platform, that provides fast, free and reliable results in approximately 48 hours.
- PHOL continues to accept tick submissions from health care providers for species identification; turnaround time is approximately three weeks.
NOTE: Ticks are NOT tested for pathogens.

REMINDER: Reporting

- Anaplasmosis, babesiosis, and POWV infection are reportable diseases. Report all suspect or confirmed cases by faxing Peel Public Health at 289-801-0257.