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PUBLIC HEALTH ADVISORY

To: Health Care Providers
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Subject: Tickborne Illness Risk Remains High Amid Record Numbers of Reported Anaplasmosis and Babesiosis Cases
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Tickborne Illness Risk Remains High Amid Record Numbers of Reported Anaplasmosis and Babesiosis Cases

Maine CDC would like to alert clinicians that the tick season in Maine continues to be very active this year, posing increased risk of tickborne disease. Maine CDC reported record numbers of anaplasmosis and babesiosis cases, surpassing the record number of cases reported in 2019. As of November 23, 2021, Maine reported 1,276 cases of Lyme disease, 748 cases of anaplasmosis, 184 cases of babesiosis, eight cases of *Borrelia miyamotoi*, and three cases of Powassan encephalitis.

As a result of ongoing tick activity, there is potential for increased human tickborne disease in Maine, and clinicians should consider testing for tickborne diseases in patients presenting with febrile illnesses ($\geq 100.4^{\circ}\text{F}$ or 38°C) during the late fall into early winter.

The deer tick (*Ixodes scapularis*) is the most common tick in Maine. Maine typically experiences increased deer tick activity starting in October and extending through late fall as adult ticks come out to feed. This year, as the state continues to experience daily temperatures above freezing, deer ticks are still active and biting. Therefore, Mainers and visitors who spend time outdoors are at increased risk of exposure to tickborne disease.

The deer tick can carry the pathogens that cause anaplasmosis, babesiosis, *B. miyamotoi*, Lyme disease, and Powassan encephalitis. Co-infections with multiple pathogens can occur. These diseases can have serious and even fatal consequences for those who contract them.

Risk Groups:

Many people infected with tickborne illnesses remain asymptomatic. The following groups of people are at higher risk for clinically significant tickborne infection:

- Residents of and visitors to areas with tick activity

- People who engage in outdoor work and recreational activities
- Persons over age 50 years and younger than age 15 years

Testing:

- Preferred testing for Lyme disease is a two-tier method, with an EIA or IFA test followed by either a Western Blot for both IgG and IgM or EIA (<http://dx.doi.org/10.15585/mmwr.mm6832a4>). IgM is only considered reliable in the first month after exposure.
- Preferred testing for anaplasmosis, babesiosis, *B. miyamotoi*, and Powassan is by PCR. Many reference and commercial laboratories offer testing for anaplasmosis, babesiosis, and *B. miyamotoi*.
- Commercial testing for Powassan virus is not available. Testing for Powassan can be performed at Maine's Health and Environmental Testing Laboratory (HETL),
- If providers suspect Powassan encephalitis: All samples of CSF submitted to HETL should be accompanied by a serum sample. Ideally providers should submit an acute (within 14 days of symptom onset) and a convalescent (ten days to four weeks following acute specimen collection) serum sample for each patient. A HETL requisition and Arboviral submission form are required for testing. When suspicion is high, IgM testing on serum may be forwarded to federal CDC for confirmation based on patient symptoms and requires a completed federal CDC DASH form.

Reporting:

Anaplasmosis, babesiosis, *Borrelia miyamotoi*, ehrlichiosis, Lyme disease, Powassan, Spotted Fever Rickettsiosis (SFR, including Rocky Mountain Spotted Fever), and Tularemia are all reportable in Maine. That said, ehrlichiosis and SFR are uncommon in the state. All suspect cases, and positive laboratory reports should be reported by phone to the 24/7 disease reporting and consultation line at 1-800-821-5821 or by fax to 1-800-293-7534.

A Physician's Reference Guide is available and describes the most common tickborne diseases in Maine. Download a PDF of this guide or order free copies at www.maine.gov/dhhs/order.

Additional information:

- Maine CDC Vectorborne Disease webpage: www.maine.gov/dhhs/vectorborne
- Maine CDC Tick Frequently Asked Questions: www.maine.gov/dhhs/tickfaq
- HETL Laboratory Submission Information Sheets and Submission forms: www.maine.gov/dhhs/lsls
- Arboviral Testing Information for Healthcare Providers: www.maine.gov/dhhs/mecdc/infectious-disease/epi/vector-borne/documents/Arboviral-Testing-Healthcare.pdf
- Maine CDC Disease Reporting and Consultation Line: **1-800-821-5821** (available 24/7)