

Ministry of Health

Ministère de la Santé

Office of Chief Medical Officer of Health, Public

Health

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September 15, 2025

MEMORANDUM

TO: Public Hospitals and Primary Care

FROM: Office of the Chief Medical Officer of Health

RE: Rocky Mountain Spotted Fever Exposures at Long Point, ON

The purpose of this memo is to highlight the need for increased awareness of Rocky Mountain spotted fever (RMSF) in Ontario.

Recent reports have confirmed the emergence of RMSF in Ontario, with two confirmed human cases with compatible clinical presentation and confirmatory laboratory evidence, both with exposures at Long Point, Ontario. Additionally, multiple dogs with a history of travel to the Long Point area were diagnosed with RMSF this summer.

RMSF is a serious, potentially life-threatening tick-borne illness caused by the bacterium *Rickettsia rickettsii*. The American dog tick (*Dermacentor variabilis*), a known vector for *R. rickettsii*, is a common tick species in Ontario. Local tick surveillance in the Long Point area has identified *R. rickettsii* in American dog ticks.

RMSF symptoms usually appear within 2 to 14 days after a tick bite and may include fever, headache, rash, nausea, vomiting, muscle pain, and abdominal pain. The rash typically starts as a maculopapular rash on the wrists, forearms and ankles, then spreads to the trunk and becomes petechial over time. The characteristic rash may be absent or delayed, and the illness can progress rapidly. Prompt recognition and treatment are critical to preventing severe outcomes. Diagnosis is primarily clinical, and treatment with doxycycline should not be delayed while awaiting laboratory confirmation.

The main diagnostic test options for RMSF are serology and PCR. Serology sensitivity remains under 50% when tested within the first week of illness and should not be used to rule out infection. Pairing an acute serum sample with another serum sample collected two to three weeks later allows for comparing serological titres and increases test sensitivity. *Rickettsia* PCR assays can detect and identify *R. rickettsii* on blood specimens (and occasionally skin biopsy specimens), however PCR sensitivity is usually low, therefore a negative result cannot be used to rule out infection. For information on testing, please visit Public Health Ontario's testing information page: Rickettsia (Spotted Fever Group and Typhus Group) | Public Health Ontario.

Health care providers are reminded to maintain a high index of suspicion for RMSF in patients presenting with compatible symptoms and recent travel or exposure history to Long Point or surrounding areas, and/or history of a tick bite. Although RMSF is not currently designated as a Disease of Public Health Significance in Ontario, health care providers are strongly encouraged to report all cases to their local public health unit. This will support surveillance efforts and provide valuable information about the risk of transmission in Ontario.

Individuals can protect themselves against tick bites by performing regular preventive measures including using DEET or icaridin insect repellent, wearing long sleeves and pants, performing regular tick checks, and promptly removing ticks to reduce the risk of infection.

If you have any questions, please do not hesitate to contact IDPP@ontario.ca.

Sincerely,

Kate Bingham, M.D., MSc, CCFP-EM, FRCPC

Associate Chief Medical Officer of Health

C: Dr. Kieran Moore, Chief Medical Officer of Health, Office of the Chief Medical Officer of Health

Liz Walker, Executive Lead, Office of the Chief Medical Officer of Health Michael Sherar, President and Chief Executive Office, Public Health Ontario