

## Causes for under-detection of Lyme disease in Canada

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[The authors estimate](#) that the number of Lyme disease cases in Canada that go undetected is greater than the 10-fold difference in the U.S.

For example, “Calculation of expected human Lyme disease cases based on tick and canine infections in New Brunswick indicates a minimum of 12.1 to 58.2-fold underestimation (1.7% to 8.3% cases detected).”

**The discrepancy, they say, is due to several reasons:**

- Non-reporting of clinically diagnosed acute Lyme disease;
- Failure by both patients and healthcare providers to identify acute Lyme disease;
- Failure to consider Lyme disease as a differential diagnosis in disseminated stages and hence initiate serological testing;
- Insensitivity of the two-tiered serological testing algorithm to accurately capture infections.

**The authors suggest that “for every person with a reported case of Lyme disease, there are approximately 30 other people with Lyme disease excluded by serological insensitivity.”**

In 2016, there were 992 cases of Lyme disease reported in Canada, but the true number should range between 8,432 and 56,147, the authors write.

“Under-estimation of the problem likely results in inadequate allocation of health care and research resources,” they say.

“But most importantly, significant health, social and [economic costs](#) from impaired health, [quality of life](#), ability to function and to [contribute to society](#), and the attendant personal suffering for those who truly have Lyme disease.”

**Related Articles:**

[Hundreds of infected ticks found in one yard in Canada](#)

["Hot spots" for blacklegged ticks found in Canada](#)

[Five cases of Lyme carditis in Canada: Multiple hospital visits to diagnose](#)

**References:**

1. Lloyd VK, Hawkins RG. Under-Detection of Lyme Disease in Canada. *Healthcare (Basel)*. 2018;6(4).

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