

# Lyme Disease

## What is it?

Lyme disease is an infection caused by the bacterium *B. burgdorferi*. The bacterium is transmitted through the bite of infected blacklegged ticks, which can be found in North America. In most cases, the tick must attach and feed for 24-36 hours before Lyme disease can be transmitted. Bites from infected ticks will not cause infection if they are promptly removed.

## How is it spread?

- Humans can develop Lyme disease when bitten by an infected tick. The bites are usually painless. Humans cannot pass the disease to others.

## What do the ticks look like?

- Ticks vary in size and color.
- An adult female is about 0.5 cm long and after feeding, can grow as big as a grape.



Female blacklegged ticks in various stages of feeding.

*Reproduced with permission Dr. R. Lindsay.*

## Where do ticks live?

They live in long grasses and wooded areas in Ontario. While the probability is low, it is possible to find an infected tick almost anywhere in Ontario. Blacklegged ticks are spreading to new areas of the province because of climate change and by traveling on birds and deer.

## What are the symptoms of Lyme disease?

Symptoms can differ from person-to-person and usually begin three days to one month after being bitten by a tick.

Symptoms may include:

- “Flu-like” symptoms including fatigue, chills/fever, headache, muscle and joint pain

- A red rash that expands and may look like a “bull’s eye” pattern as it grows. It is not itchy.
- Stiff neck and swollen lymph nodes
- Spasms or weakness
- Numbness or tingling
- Abnormal heartbeat
- Nervous system disorders
- Cognitive dysfunction (brain fog) or dizziness

**If not treated, symptoms can last months to years.**

## How is it diagnosed?

- A physical exam by a health care provider, history of exposure to infected ticks, and blood work can help determine if one has Lyme disease.

## Is there a treatment?

- Antibiotics can be used for treatment. See your health care provider.

## How do you prevent Lyme disease?

If possible, avoid areas where ticks live and use the following precautions:

- Wear long-sleeved shirts and pants tucked into your socks
- Wear closed-toe shoes and a hat
- Wear light colours to see ticks easier
- Use insect repellents containing DEET or Icaridin and follow manufacturer’s directions. For more information on different types of insect repellents, see the Government of Canada website: [www.canada.ca/en/health-canada/services/about-pesticides/insect-repellents.html](http://www.canada.ca/en/health-canada/services/about-pesticides/insect-repellents.html)
- Do a careful inspection of yourself, your children and your pets after being in tick-infested areas
- Shower or bathe within two hours of being outside to wash away loose ticks

## Tick Removal:

- Remove any ticks immediately with small tweezers.

- Grab the tick and remove in a slow, straight manner, trying not to twist or crush the tick. Ensure all parts of the tick are removed. Seek medical attention immediately if you cannot do this yourself.
- After removal of tick, wash the affected area with soap and water or cleanse with alcohol or antiseptic if you choose.
- Note the date of the tick bite and contact the Health Unit to discuss testing of the tick.
- Contact your health care provider **immediately** if you had a tick bite and are experiencing symptoms.
- To submit a tick for testing contact the Environmental Health Program at the health unit.

For up-to-date information and resources see Lyme disease at the Government of Ontario's website:

<https://www.ontario.ca/page/lyme-disease>

For more information contact the Communicable Disease Control Program at the health unit at 705-474-1400 or 1-800-563-2808, ext.5229.

References:

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