

# Lyme Disease

## What is Lyme disease?

Lyme disease is an illness caused by the *Borrelia burgdorferi* bacteria that is spread through the bite of an infected blacklegged tick (deer tick).

## What are ticks?

Ticks are small bugs, the size of a sesame seed, which feed off the blood of animals and humans. They can be found on tall grasses and bushes and can attach themselves to people or animals.

Ticks do not fly and move quite slowly. Most tick bites are painless. Not all ticks are infected with the *Borrelia burgdorferi* bacteria, so not all tick bites will spread Lyme disease.

## How do you get Lyme disease?

Lyme disease is spread through the bite of an infected tick. Ticks feed slowly and will attach themselves for 24-72 hours. They are most likely to spread infection after being attached for 24 hours or more. Lyme disease does not spread from human to human.

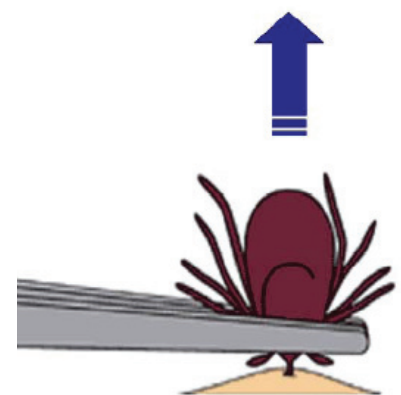
## How do I remove a tick?

- Remove it by grasping the tick with a set of tweezers as close to the skin as possible
- Slowly pull straight out until the tick is removed
- Do not squeeze the tick
- Do not put anything on the tick or try to burn it off
- After removing the tick, thoroughly cleanse the bite site with rubbing alcohol and/or soap and water
- Place the tick in a moistened paper towel and place in a screw top container such as a pill bottle or sealable plastic baggie – do not use glass containers
- Store the container in a refrigerator or freezer until the tick can be submitted for testing
- Contact Health Connection to speak to a Public Health Inspector for information on how to submit a tick for identification

Public Health Agency of Canada



Image shows ticks at various stages of feeding.



CDC

Centers for Disease Control  
and Prevention



**1-800-361-5653**  
TTY: **1-866-252-9933**

York Region Health Connection

**Community and Health Services**

Public Health

[www.york.ca](http://www.york.ca)



## How do I submit a tick for testing?

It is recommended that you submit the tick to your local public health unit or your doctor. The tick will be identified and only blacklegged ticks will be further tested for Lyme disease. Ticks are accepted at the following York Region Community and Health Services office locations:

### Markham

4261 Highway 7 East  
Suite B6-9  
Markham, ON

### Richmond Hill

50 High Tech Road  
2nd floor  
Richmond Hill, ON

### Newmarket

465 Davis Drive  
Suite 240  
Newmarket, ON

### Vaughan

9060 Jane Street  
Vaughan, ON

## Symptoms

Early symptoms of Lyme disease usually occur within one to two weeks, but can occur as early as three days, or as long as one month after, a tick bite.

Initial symptoms differ from person to person, which makes Lyme disease very difficult to diagnose.

Some people may have no symptoms at all. Others may suffer severe symptoms (but not for weeks after the bite) and therefore they may not associate their illness with the bite.

The sooner you get treatment, the sooner you can begin your recovery.

Signs and symptoms of Lyme disease may include one or a combination of the following with varying degrees of severity:

- fatigue
- fever or chills
- headache
- spasms or weakness
- numbness or tingling
- swollen lymph nodes
- skin rash
- cognitive dysfunction (brain fog) or dizziness
- nervous system disorders
- arthritis/arthritis symptoms (muscle and joint pain)
- abnormal heartbeat



Untreated, symptoms can last months to years and include recurring arthritis (muscle and joint pain), nervous system and/or neurological problems, numbness and/or paralysis (unable to move parts of the body).

Although not common, fatalities from Lyme disease have been reported.

## What to do if you become ill

See your healthcare provider right away, if you develop symptoms of Lyme disease in the weeks after a tick bite.

<http://www.phac-aspc.gc.ca/id-mi/tickinfo-eng.php#sec-2.1>



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## How is Lyme disease treated?

Lyme disease can be treated with several antibiotics. Beginning treatment in the early stages of the disease is critical for full recovery.

## Where are infected ticks found in Ontario?

In Ontario, blacklegged ticks are more commonly found in areas along the north shores of Lake Erie, Lake Ontario and the St. Lawrence River. Ticks are active in early spring when the weather is warm, until the end of fall. However, blacklegged ticks can also be active in the winter when the ground is not snow-covered or frozen, especially during a winter thaw or early spring day.

The risk for exposure is highest in regions where the ticks infected with the bacteria that causes Lyme disease are known to be established.

Locations with established blacklegged tick populations include:

- Long Point Provincial Park (Haldimand-Norfolk)
- Turkey Point Provincial Park (Haldimand-Norfolk)
- Rondeau Provincial Park (Chatham-Kent)
- Point Pelee National Park (Windsor-Essex)
- Prince Edward Point National Wildlife Area (Hastings-Prince Edward)
- Wainfleet Bog Conservation Area (Niagara)
- St. Lawrence Islands National Park Area (Thousand Islands)

Durham Region, City of Toronto, and York Region health units have found evidence that blacklegged ticks are in the Rouge Valley and that some of these ticks have tested positive for the bacteria that causes Lyme disease. York Region Public Health will continue tick dragging at various locations across York Region, including the Rouge Valley system to monitor the presence of blacklegged ticks.

(There is a chance of being exposed to the Lyme disease bacteria through contact with infected blacklegged ticks transported by birds almost anywhere in Ontario).

Take precautions against ticks when you are in suitable, woodland tick habitats.



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## How can I protect myself from Lyme disease?

It is important to protect yourself each time you are in an area where infected ticks have been found. When traveling to areas with infected ticks, follow these simple tips to protect yourself:

- Wear long pants and long sleeved tops that are light coloured to help spot ticks
- Wear closed footwear and tuck your pants into your socks
- Use an insect repellent containing DEET and apply according to manufacturer's directions
- Search your body for ticks
- Remove attached ticks from your body as quickly as possible
- Pay special attention to the following body areas:
  - groin
  - scalp
  - underarm areas
  - back

## Protect yourself while traveling

When traveling, keep in mind that ticks that carry Lyme disease can be found in the temperate forested areas of North America, Europe and Asia.

For more information on ticks and Lyme disease in Canada:

<http://www.phac-aspc.gc.ca/id-mi/lyme-eng.php>

For more information on ticks and Lyme disease in the United States,

visit: <http://www.cdc.gov/lyme/>

For more information on ticks and Lyme disease in Europe,

visit: [http://ecdc.europa.eu/en/healthtopics/emerging\\_and\\_vector-borne\\_diseases/tick\\_borne\\_diseases/lyme\\_disease/pages/index.aspx](http://ecdc.europa.eu/en/healthtopics/emerging_and_vector-borne_diseases/tick_borne_diseases/lyme_disease/pages/index.aspx)

## Can pets get Lyme disease?

Dogs can get Lyme disease and can bring infected ticks into your home. However, they cannot transmit the disease to humans. It is important to check your pets regularly for ticks. Speak to your veterinarian for information on how to protect your pets from ticks.

For more information on Lyme disease or to speak to a Public Health Inspector, please contact York Region Health Connection at **1-800-361-5653**, TTY **1-866-252-9933**, **[www.york.ca/lymedisease](http://www.york.ca/lymedisease)**



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