



July 2011

# Lyme Disease

## What is Lyme disease?

Lyme disease is an illness that affects a person's skin, nervous system, heart and/or joints. It is caused by the bacteria *Borrelia burgdorferi*, which can be transmitted to humans by the bite of an infected deer tick.

## What are the symptoms of Lyme disease?

Early symptoms may develop within a week to a few months of the tick bite. The first sign of infection is usually a large, circular, reddish rash that begins at the site of the tick bite. The rash gradually expands over several days, reaching up to 12 inches. The centre of the rash may clear as it enlarges, causing it to look like a "bull's eye". This rash is called "erythema migrans" or EM. Sometimes multiple rash sites appear with or without EM. The rash may appear three to 32 days after tick exposure, but the average is seven to 10 days.

Other symptoms such as fever, headache, fatigue, stiff neck, muscle and/or joint pain may develop. If left untreated, complications such as meningitis, facial paralysis, or heart abnormalities may occur within a few weeks to months. Later symptoms may develop in people who did not have early symptoms or did not recognize them. Swelling and pain (arthritis) in the large joints may recur over many years.

## How is Lyme disease spread?

Not all deer ticks are infected with the bacteria that cause Lyme disease. Ticks can become infected if they feed on small animals such as mice that are infected. The disease can be spread when a tick infected with the bacteria bites a person and stays attached for a period of time.

Lyme disease cannot be spread from one person to another.

## What should I do if I find a tick on myself?

It is important that a tick be removed as soon as it is discovered. If removal occurs within twenty-four hours of attachment, the risk of tick-borne infection is substantially reduced.

- To remove an attached tick, grasp the tick's mouthparts with tweezers as close as possible to the attachment (skin) site, and pull upward and out with a firm and steady pressure.
- If tweezers are not available, use fingers shielded with tissue paper or rubber gloves. Do not handle with bare hands.
- Be careful not to squeeze, crush, or puncture the body of the tick which may contain infectious fluids.
- After removing the tick, thoroughly disinfect the bite site and wash hands.
- See or call a doctor if there is concern about incomplete tick removal or any symptoms of Lyme disease develop.

**Note:** Do not attempt to remove ticks by using petroleum jelly, lit cigarettes, or other home remedies because these methods may actually increase the chance of contracting a tick-borne disease.

For further information, please call:

**York Region Health Connection 1-800-361-5653**

**TTY 1-866-252-9933 or visit [www.york.ca](http://www.york.ca)**

## How can I protect myself from Lyme disease?

- Whenever possible, avoid entering areas that are likely to be infested with ticks, especially in spring and summer.
- Check yourself for ticks attached to clothing or skin after every two to three hours of outdoor activity.
- Wear light-coloured clothing and tuck pants into socks and shirts into pants to minimize exposure to ticks.
- Apply repellents containing DEET (n,n-diethyl-m-toluamide) to skin or clothing. This may prevent tick attachment. Use repellents sparingly and with care, as they may cause adverse reactions in some individuals. Avoid application to damaged or exposed skin, and avoid prolonged or excessive applications, especially in children.
- Control rodents around the home to help in reducing the tick population.

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