



Facts About Lyme Disease

What is Lyme Disease?

Lyme disease is an illness caused by the bacterium *Borrelia burgdorferi*, which can be spread through the bite of certain species of ticks. In Ontario, the tick of concern is *Ixodes scapularis*, or the “black-legged” tick.

What are Ticks?

Ticks are tiny bugs, about the size of a sesame seed, which feed on blood. Prior to feeding, they are approximately 3-5mm in length and red to dark brown in colour. After feeding, females can expand to the size of a dime.

Research has shown that black-legged ticks can be found in all areas of Canada. In Ontario, black-legged ticks are most often found along the north shore of Lake Erie. In particular, Long Point, Point Pelee National Park, Rondeau Provincial Park, Turkey Point, Prince Edward Point National Wildlife Area, and the St. Lawrence Island National Park. Black-legged ticks are most active in May, June, and July.

How is Lyme Disease Transmitted?

The bacterium that causes Lyme disease is normally carried by mice, squirrels, birds or other small animals. The bacterium is transmitted to ticks when they feed on infected animals. The disease can then be passed on to humans through the bite of an infected tick. Ticks can't jump or fly. They prefer wooded and bushy areas with high grass and plenty of leaves on the ground. They wait on low vegetation and then attach to hosts.

Lyme disease cannot be transmitted directly from person-to-person, or by such means as touching or kissing. Although dogs and cats can contract Lyme disease, there is no evidence they can transmit the infection directly to humans. Pets can, however, carry infected ticks into your home or yard. It is important to note that not all ticks carry Lyme disease and even when bitten by an infected tick, there is only a small chance of getting the disease.

What are the Symptoms?

Symptoms usually occur within 1-2 weeks, but can occur as soon as three days. In some cases, it can take as long as one month for symptoms to appear. The first sign of infection is usually a circular rash called *erythema migrans*, which looks like a red bull's eye. This reaction occurs in approximately 70 to 80 percent of infected individuals and begins at the site of the bite. Other symptoms include fever, headache, muscle and joint pain, chills and swollen lymph nodes. If you develop any of these symptoms it is important to seek medical advice and to tell your doctor when and where you were bitten. Though fatalities from Lyme disease are rare, if undiagnosed, it may develop into a chronic disease that can be more difficult to treat.

Treatment

There are several antibiotics available to treat the illness if treatment is deemed necessary by your physician. A person who is bitten by a tick should remove the tick and have the tick tested by their family physician or local public health department. Removal of a tick must be done carefully. You may follow the steps outlined below or seek assistance from your family doctor.

How to Remove a Tick

- Use fine-pointed tweezers to grab the tick's head and mouth parts as close to your skin as possible.
- Pull slowly. Do not twist or rotate the tick and try not to damage it.
- Place the tick in a plastic container or bag so Public Health can test it.
- Thoroughly wash the area where you were bitten with soap and water.

Preventative Measures

- Wear long sleeved shirts and long pants
- Wear light-coloured clothing. Light colours make ticks easier to spot
- Tuck pant legs into socks and shirts into pants
- Wear fully closed shoes or boots
- When hiking, stay on the path and avoid contact with overgrown brush, vegetation and leaf litter.
- Do a tick check yourself, your family and pets.
- Use DEET. Remember to use the lowest concentration needed for the time outside and never use DEET on children under 6 months of age (see DEET Application Chart)

DEET Application Chart

Age Group	Suggested % of DEET	Recommended Number of Applications Per Day
Newborn to 6 months	DEET is not recommended for this age group. Use netting or limit time outdoors at dusk and dawn to prevent mosquito bites.	
6 months to 2 years	10% or less	Not more than 1 (do not apply to hands or face)
2 years to 12 years	10% or less	Not more than 3
>12 years	Up to 30%	Follow instructions on label

Source: Health Canada, Ministry of Health & Long-Term Care, Centre for Disease Control and Prevention.

- Apply only on exposed skin or clothing. Do not apply under clothing
- Do not apply to children's hands or faces. To apply repellent, place on your own hands and then put on the child. Do not allow children to handle insect repellent
- Do not spray repellent in enclosed areas or near food and avoid breathing it in
- Wash skin with soap and water when protection is no longer needed. Also wash treated clothing before wearing again

Questions or concerns? Talk to a Public Health Inspector at 519-883-2008 ext. 5147.