

Lyme Disease

COMMUNICABLE DISEASE CONTROL

What is Lyme Disease?

Lyme Disease is a bacterial infection transmitted from infected deer ticks (*blacklegged ticks*) to humans.

The ticks which spread Lyme Disease are smaller than the more common wood ticks found in Manitoba, and unlike wood ticks, do not have white markings on their bodies. In the wild, adult deer ticks are usually found on deer, but may be carried on domestic animals such as dogs, cats and horses. Tick bites are usually painless and most people do not know that they have been bitten.

Lyme Disease has become a common problem in parts of the United States and can also be acquired in certain parts of Canada. Over 265 blacklegged ticks have been identified in Manitoba since 1996, and 28 have tested positive for the bacteria that causes Lyme Disease. There has been one laboratory-confirmed case of Lyme Disease since it became reportable in Manitoba (Jan. 1, 1999) and five clinically-suspected cases have been treated by physicians. Lyme Disease should therefore be considered in people with appropriate symptoms.

How do people know that they have Lyme Disease?

The symptoms of Lyme Disease are common to many diseases. This makes it difficult to diagnose. Lyme Disease usually starts with “flu-like” symptoms (*such as headache, stiff neck, fever, muscle aches or fatigue*). Many people will also develop a ring-like rash days to weeks after the bite. This rash usually expands from the centre for about 2 weeks and then fades. Some people do not notice these early signs of infection, and among those who do, symptoms usually disappear after several weeks.

Later on, some people may continue to experience headaches, and may develop dizziness, difficulty concentrating, stiff neck and, perhaps an irregular heartbeat. Some people will also develop joint pain and swelling. These symptoms may occur up to two years or perhaps longer after the tick bite.

Your doctor will make the diagnosis of Lyme Disease based on symptoms and signs, and possibly the results of a blood test. Because blood tests are not always accurate, treatment may be prescribed with a negative blood test if

the doctor feels that the symptoms and signs are sufficiently typical of Lyme Disease. If you are concerned about Lyme Disease, you should contact your doctor.

What is the treatment?

Lyme Disease can be successfully treated with antibiotics. Treatment is most successful in the early stages of infection and usually consists of antibiotic pills taken by mouth. Treatment for long-standing disease may be more complicated and require longer durations of therapy with antibiotics.

How do you protect yourself from ticks?

In Manitoba, the wood tick is very common and will be the tick that most people encounter. However, wood ticks, unlike deer ticks, are not effective transmitters of Lyme Disease. Both types of ticks can be collected in tall grass, along trail margins and in wooded areas. Adult wood ticks are common in Manitoba during May, June and July. **Adult deer ticks are most common in October and November**, as well as during the spring months.

Protect yourself from Lyme Disease by avoiding contact with deer ticks:

- Keep the grass around your house cut.
- When you are outside during tick season, avoid sitting on, lying on or travelling through tick habitats. Avoid sitting directly on the ground, and stay in the centre of paths.
- Wear light coloured clothing to make it easier to see ticks that may be on you.
- Tuck your shirt into your pants and your pants into your socks to thwart a tick's effort to crawl onto your skin.
- Always wear long pants and a long-sleeved shirt if you are in tall grass or wooded areas.
- Spray repellents containing DEET onto your clothing and exposed skin (other than the face). Use with caution on small children.
- Inspect yourself, your children and your pets for ticks as soon as you leave an area that may have ticks.



What should you do if you think that you have been bitten?

- If the tick is attached to your skin, remove it with tweezers. Grasp the tick close to the skin and pull slowly upward with steady pressure; avoid twisting or crushing the tick. Do not burn or smother the tick. Cleanse the skin around the tick bite with soap and water or disinfectant. Mark the date and location of the bite on the calendar, and place the tick in a container (*see below*).
- If you suspect that the tick may be a deer tick, submit it to the University of Manitoba for identification (*see below*).
- If you develop a rash or other symptoms, see your doctor.

You Can Help in the Study of Lyme Disease

Deer ticks can carry the bacteria that cause Lyme Disease. By collecting deer ticks, you can contribute to research being carried out for Manitoba Health by Health Canada's National Microbiology Laboratory in Winnipeg, with the assistance of the University of Manitoba and the Cadham Provincial Laboratory.

To help us learn more about Lyme Disease and ticks in Manitoba, we would very much appreciate your sending us the tick for identification. The deer tick is smaller than the wood tick and does not have white markings on the large part of its body (*see illustration below*). Ticks matching this description can be either hand-delivered (preferred) or mailed to:

Dr. Terry Galloway
 Department of Entomology
 General Office, Room 214 Animal Sciences Building
 Fort Garry Campus, University of Manitoba
 Winnipeg, Manitoba R3T 2N2

Delivery hours are 8:30 - 12 noon, and 1:00 - 4:30 p.m., Monday through Friday.

Remove the tick with tweezers. Grasp the tick close to the skin and pull slowly upward with steady pressure; avoid twisting or crushing the tick. Place in a pill bottle or film canister and add a piece of moist paper towel to the container. This helps keep the tick alive. Do not use alcohol or immerse the tick. Firmly tape the lid shut. If mailing, place the container in two sealed plastic bags, and then in a cardboard box. Do NOT use glass. Include with the package your name, telephone number, and information as to where, when and on whom (e.g., dog, person) the tick was found. The box should be wrapped in mailing paper and labelled "Research Specimens – Fragile – Handle with Care."

For more information, please contact your local public health office
(see the municipal and provincial listings in the grey pages at the back of your telephone directory).



MALE WOOD TICK
(DO NOT SEND)

WHAT DO YOU SEND?

NO
WOOD TICKS

Slightly larger than deer ticks,
with white markings on back.



FEMALE WOOD TICK
(DO NOT SEND)



MALE DEER TICK
(SEND IN)

YES
DEER TICKS

Slightly smaller than wood ticks. Male is uniformly brown,
while the bodies of unfed females are orange.



FEMALE DEER TICK
(SEND IN)

