



**Figure 1:** Life stages of the blacklegged tick (1-larva, 2-nymph, 3-adult male, 4-adult female). Sizes presented in relation to underlying 10-cent coin.

### What is Lyme disease?

Lyme disease is a bacterial infection that can be transmitted to people through the bite of an infected tick. In Manitoba, blacklegged ticks (deer ticks) may carry the Lyme disease bacteria (*Borrelia burgdorferi*).

### What do blacklegged ticks look like?

Unfed adult blacklegged ticks are 3 to 5 mm in length and unfed larvae or nymphs are smaller and very difficult to see (Figure 1). Adult blacklegged ticks are smaller than the more common American dog tick (often called wood tick) (Figure 2). American dog ticks do not transmit the Lyme disease bacteria.

### Where are blacklegged ticks found?

Blacklegged ticks survive best in locations that provide them with a humid habitat. Wooded or forested areas are very suitable because the trees provide shade and leaf litter for ground cover to protect active ticks. Blacklegged ticks become active in the spring and they remain active until the first permanent snowfall or when air temperatures are consistently below 4°C.

Throughout southern Manitoba, there is a chance of being exposed to the Lyme disease bacteria through contact with infected blacklegged ticks transported by birds. However, there is a greater risk in areas where there is an established blacklegged tick population. Check the Manitoba Health website at [www.gov.mb.ca/health/lyme](http://www.gov.mb.ca/health/lyme) for the latest information on the locations of established tick populations in Manitoba.

### What are the symptoms of Lyme disease?

Many people (60 to 80 per cent) will develop a rash three to 30 days after a bite from an infected tick. Infected ticks must be attached for 24 hours or more before the bacteria is transmitted. This rash, known as Erythema migrans (EM), is a red expanding skin rash usually more than five cm in diameter (Figure 3).

Other early symptoms of Lyme disease may include: a rash other than EM, headache, flu-like symptoms or swollen lymph nodes.

Lyme disease can be successfully treated with antibiotics. Treatment is most successful in the early stages of infection.



**Figure 2:** Adult blacklegged (deer) ticks (top row) and American dog (wood) ticks (bottom row).

(Figures 1 and 2 photos reproduced with the permission of L.R. Lindsay, Public Health Agency of Canada)



**Figure 3:** Erythema migrans (EM) rash on a patient's arm. The rash does not always appear as the bull's eye pattern shown here. (Photo courtesy of James Gathany, Centers for Disease Control and Prevention)

Some people who have had a Lyme disease infection may continue to experience symptoms for months or years, including headaches, dizziness, difficulty concentrating, stiff neck, irregular heartbeat, or joint pain and swelling.

If you are concerned about Lyme disease, contact your health care provider.

### How do you protect yourself, your child and your pets from Lyme disease?

- PREVENTION IS THE FIRST LINE OF DEFENCE AGAINST LYME DISEASE.
- Use trails, whenever possible, and stay to the centre of hiking trails or paths.
- Wear light-coloured clothing to make it easier to see ticks crawling on your clothing.
- Wear long pants and a long-sleeved shirt so that most exposed skin is covered.
- Tuck your shirt into your pants and your pants into your socks; this will make it more difficult for the ticks to attach to your skin.
- Apply an appropriate tick repellent on clothing and exposed skin according to instructions.
- In general, tick numbers can be lowered by reducing cover and shade, through activities such as keeping grass mowed short, removing leaf litter and trimming other vegetation (shrubs and trees) to minimize shade cover in commonly used areas.
- After spending time outdoors, inspect yourself, your children and your pets for ticks and remove any ticks found as soon as possible. Bathing soon after coming indoors is a good way to find ticks.

### What should I do if I find a tick on myself, my child or my pet?

- If a tick is attached to the skin, remove it with tweezers:
  - grasp the tick close to the skin with tweezers and pull slowly upward with steady pressure; avoid twisting or crushing the tick. Other methods such as using a match, petroleum jelly, soap, etc. are not recommended.
- Cleanse the skin around the tick bite with soap and water or disinfectant.
- Mark the date and location of the tick bite on a calendar for future reference.
- If you develop a rash or other symptoms, see your doctor.

### For more information

Talk to your health care provider, your local Public Health Unit or call Health Links-Info Santé in Winnipeg: (204) 788-8200 toll-free (outside Winnipeg): 1-888-315-9257. Information is also available on the Manitoba Health website at [www.gov.mb.ca/health/lyme](http://www.gov.mb.ca/health/lyme).

# Lyme Disease