

Protecting Outdoor Workers from Tick Bites and Lyme Disease

What is the health hazard?

Blacklegged ticks that can transmit Lyme disease are in Ontario, and in more areas than previously thought. Workers who work in certain outdoor areas are at risk for tick bites and developing Lyme disease, and should protect themselves.

What is Lyme Disease?

Lyme disease is an infection caused by a bacteria, *Borrelia burgdorferi*. In Ontario only bites by the blacklegged ticks (formerly called deer ticks) can spread the disease. Not all blacklegged ticks are infected with the bacteria. These ticks are more commonly found in wooded areas or tall grasslands and in provincial and national parks along the north shores of Lake Erie, Lake Ontario, and the St. Lawrence River. Areas known to have blacklegged tick populations infected with the Lyme disease agent include Long Point Provincial Park, Turkey Point Provincial Park, Rondeau Provincial Park, Point Pelee National Park, Prince Edward Point National Wildlife Area, Wainfleet Bog Conservation Area, and St. Lawrence Islands National Park. However, it is thought that the tick populations will continue to expand into neighbouring areas and may be spread by migratory birds to other parts of Ontario. Ticks carrying the Lyme disease agent have recently been documented in the Thunder Bay area and other parts of Northwestern Ontario, and Lyme disease in humans has been reported in Northern Ontario. The risk of tick bites increases between early spring and late fall.

Symptoms of Lyme disease usually occur within one to two weeks but can occur as soon as three days or as long as months, after an infected tick bite. In order to transmit the disease, a tick must be attached to feed for at least 18 to 24 hours. The early symptoms and signs may include fever, headache, muscle and joint pains, fatigue, swollen glands, and a skin rash, especially one that looks like a red bull's eye (called *erythema migrans*). If you develop these symptoms, promptly seek medical advice. Tell your doctor about your outdoor occupation, and if you have been working in an area where you may have had exposure to ticks. Early treatment with antibiotics usually results in complete recovery.

Lyme disease is not spread from person to person or by animals. However, animals may carry the ticks.

Examples of occupations at risk:

Occupations at risk include outdoor workers especially those in southern Ontario who may work in wooded, bushy areas or in tall grasses such as workers in park and wildlife management, ground keepers, loggers, construction workers, farmers, fishers, camp counsellors, landscape workers, biologists, veterinarians, silviculture workers and tree planters.

Prevention

What must employers do to protect workers?

- Determine if workers may be at risk of getting tick bites and developing Lyme disease.
- Take every precaution reasonable in the circumstances for the protection of workers from Lyme disease as required under Section 25(2)(h) of the Occupational Health and Safety Act.
- Provide workers with information, instruction and supervision to protect the health or safety of the worker as required under Section 25(2)(a) of the Occupational Health and Safety Act. Ensure workers are aware of the risk and know how to identify the presence of ticks, how to prevent or minimize exposure, and how to treat a tick bite that has occurred.
- Ensure that appropriate personal protective clothing as required is provided.
- When made aware that a worker has developed Lyme disease, report to the Ministry of Labour as an occupational illness as required under Section 52(2) of the Occupational Health and Safety Act.

How can workers avoid ticks? If you are working outside, protect yourself!

- Wear light-coloured clothing to help find ticks more easily.
- Wear long sleeve shirts and long pants. Wear a hat if contact with overhead vegetation cannot be avoided. Wear closed footwear and socks.
- Tuck your pants into your socks
- Use a bug (tick) repellent that contains 20 to 30% "DEET". Read the manufacturer's instructions before applying the repellent. Spray or apply it to your exposed skin and outer clothing.
- Avoid bushy areas and long grass if possible.
- Immediately after outdoor work do a total body inspection for ticks. Pay close attention to armpits, in and around ears, behind knees, areas with body hair, navel and groin.

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- Shower soon after being outdoors.
 - Check any equipment or gear that you may have brought with you outside for ticks.
 - Put clothes in the dryer for one hour on high heat to kill any ticks.
 - Wear protective gloves when handling dead animals.
 - If you find any ticks, report it to your employer so that other workers can be made aware of the hazard and recheck themselves for ticks.

Treatment and removal of ticks:

Prompt removal of attached ticks (within 24 to 36 hours) can decrease the risk of infection. For information on the removal of ticks and treatment, visit the links below to the Ministry of Health and Long-Term Care website.

Resources and further information

Ministry of Health and Long-Term Care:

<http://www.health.gov.on.ca/en/ms/lyme/default.aspx>

<http://www.health.gov.on.ca/en/public/publications/disease/lyme.aspx>

Canadian Centre for Occupational Health and Safety:

<http://www.ccohs.ca/oshanswers/diseases/lyme.html>

Public Health Agency of Canada (PHAC):

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

Health Canada:

<http://www.hc-sc.gc.ca/hl-vs/iyh-vsv/diseases-maladies/lyme-eng.php>

Ministry of Labour – Report an Incident:

<http://www.labour.gov.on.ca/english/hs/incident.php>

This Guidance Note has been prepared to assist the workplace parties in understanding their obligations under the Occupational Health and Safety Act (OHSA) and its regulations. It is not intended to replace the OHSA or its regulations and reference should always be made to the official version of the legislation.

It is the responsibility of the workplace parties to ensure compliance with the legislation. This Guidance Note does not constitute legal advice. If you require assistance with respect to the interpretation of the legislation and its potential application in specific circumstances, please contact your legal counsel.

While this Guidance Note will also be available to Ministry of Labour inspectors, they will apply and enforce the OHSA and its regulations based on the facts as they may find them in the workplace. This Guidance Note does not affect their enforcement discretion in any way.