Lyme Disease Game Plan

There’s one U.S. import that the Buy Canada movement can’t keep out of the country: the tick. That’s unfortunate because ticks carry an array of diseases including Lyme disease. There were 27,463 human cases of Lyme disease across Canada between 2009 and 2024, with case rates rising rapidly as a result of climate change. Thus, the provinces and territories reported over 5,200 Lyme disease cases in 2024, as opposed to just 144 in 2009. Many of these victims are workers on the job. Although Lyme disease isn’t usually fatal, roughly 36% of victims continue to suffer debilitating ailments even after receiving treatment. **Result:** They miss work and utilize expensive healthcare services at an abnormally high rate, which reduces productivity and drives up company costs. Adding insult to injury, failing to protect your workers against Lyme disease can lead to OHS fines.

Bottom Line: As OHS coordinator, you must ensure your company takes 4 steps to protect your workers from potential exposure to Lyme and other tick-borne disease risks.

Step 1. Do a Tick Hazard Assessment

Unlike many other infectious illnesses, Lyme disease is transmitted not by human contact but by tiny insects called ticks that are infected with the bacteria that cause the disease. So, the first thing you must do is perform a hazard

assessment evaluating the risks that workers will get bitten by infected ticks. There are 4 key risk factors to consider.

Risk Factor 1: Where Your Workplace Is Located

Tick	**Diseases It Carries**	**Location(s) Established**
Blacklegged tick (deer tick)	• Lyme disease • Anaplasmosis • *Borrelia miyamotoi* disease • Babesiosis • Powassan virus disease	• BC (south) • Manitoba (south) • New Brunswick (mid- to south) • Nova Scotia • Ontario (west, south, southeast) • Québec (south)
Western blacklegged tick	• Lyme disease • Anaplasmosis • *Borrelia miyamotoi* disease	Coastal and Southern interior of BC
American dog tick	• Tularemia • Rocky Mountain spotted fever	• Alberta • BC • Saskatchewan (western)
Groundhog tick	Powassan virus disease	Southcentral and Southeastern Canada
Rocky Mountain wood tick	• Tularemia • Rocky Mountain spotted fever	• Alberta • BC • Saskatchewan (western)

Tick	Diseases It Carries	Location(s) Established
Squirrel tick	Powassan virus disease	• New Brunswick • Newfoundland • Nova Scotia • Ontario • Prince Edward Island • Québec
Lone star tick	• Tularemia • Ehrlichiosis • Bourbon virus disease • Heartland virus disease	• Alberta • Manitoba • Nova Scotia • Ontario • Québec • Saskatchewan

Source: Health Canada

Risk Factor 2: Your Workplace’s Proximity to Tick Habitats

Ticks live mostly in and near areas with trees, shrubs, grasses, piles of leaves, fields, and lawns bordering woods and near stone walls and wood piles.

Risk Factor 3: Type of Work Performed

Outdoor workers are at the highest risk of Lyme and other tick-borne disease, including those in the following occupations:

- Brush clearing.
- Construction.
- Farming.
- Forestry.
- Landscaping.
- Land surveying.

- Logging.
- Oil field work.
- Park and wildlife management.
- Railroad work.
- Utility line work.

Risk Factor 4: Time of Year Work Is Performed

Risks of Lyme disease are greatest during May through September, the peak season for infected ticks. However, ticks may be active whenever the temperature is consistently above freezing and the ground isn't covered by snow.

Step 2. Select Controls

The next step is to select appropriate measures to manage the risks you identify in your tick hazard assessment.

First Choice: Elimination: If it's reasonably practicable, totally eliminate the hazard. An extreme example would be to stop conducting outdoor operations in or near tick habitats during tick season.

Second Choice: Engineering Controls: If totally eliminating the risk isn't reasonably practicable, the next line of defense is to use engineering controls to minimize the hazard by physically changing the work environment. Engineering controls for Lyme disease would include measures to reduce the likelihood of tick bites, such as:

- Landscaping measures like removing leaf litter and clearing tall grass and brush to create tick-free zones around workplaces; and
- Using pesticides and toxic chemicals to control ticks and/or the deer and rodents that carry them.

Third Choice: Work Controls: Work/administrative controls

involve making the work safer by adjusting the methods you use to carry it out. Examples:

- Developing safe work procedures for work that involves exposure to Lyme disease.
- Scheduling outdoor operations for the fall and winter when ticks aren't in season.
- Providing workers appropriate safety information and training about Lyme disease.

Fourth Choice: Protective Clothing & PPE: The final line of defense is making sure workers have and use appropriate protective clothing and PPE to protect them from ticks, including:

- Light-colored clothing that makes it easier to see ticks.
- Long-sleeved shirts.
- Long pants that are tucked into socks or boots.
- High boots or closed shoes covering the entire foot.
- Socks.
- Hats.
- Insect repellants on the skin.
- Permethrin on clothes.

If you use toxic chemicals for tick controls, you may also have to furnish and ensure workers use proper respirators and implement a respiratory protection policy or plan.

Step 3. Monitor Your Controls

Monitor your current controls, determine if they're effective and make any necessary corrections. Regular monitoring of Lyme disease control measures should take place at least once a year and also:

- In the course of inspecting outdoor work areas.
- In response to worker complaints or concerns.

- In response to changes in work conditions, equipment, or other circumstances not covered in your current hazard assessment.

Step 4: Document Your Compliance Measures

Last but not least, keep careful records documenting the measures you take to assess and control Lyme disease hazards so you can prove you complied with OHS and other legal requirements.