

# Lyme Disease Meeting Kit

Lyme disease is a bacterial infection spread by deer ticks and black-legged ticks. Lyme disease has greatly increased over the last few decades.

## RISK OCCUPATIONS

Workers at risk of Lyme disease include, but are not limited to, those working in the following:

- Construction
- Landscaping
- Forestry
- Brush clearing
- Land surveying
- Farming
- Railroad work
- Oil field work
- Utility line work
- Park or wildlife management
- Outdoor work and activities hiking, camping, birding, golfing, hunting, fishing, etc.

## TICKS INFORMATION

Ticks usually live in woods or tall grasslands in Canada, the United States, Europe and Asia. Ticks infected with *Borrelia burgdorferi* spread the disease when they feed on blood from the host. Ticks cannot fly – they hang onto small bushes or tall grasses and are usually found close to the ground. They wait for an animal or person to pass near them and when the animals or person make contact, the ticks attach themselves to the skin to feed.

In North America, Lyme disease is transmitted (spread) mainly by two species of ticks:

- Blacklegged tick (sometimes called the deer tick), *Ixodes scapularis*.
- Western blacklegged tick, *Ixodes pacificus*.

The Public Health Agency of Canada (PHAC) also states that pets, especially dogs, can get Lyme disease, but there is no evidence that pets can spread the infection directly to humans. However, pets can carry infected ticks into the home or workplace.

## **LYME DISEASE SYMPTOMS**

- Early Signs and Symptoms (3 to 30 days after tick bite).
- Fever, chills, headache, fatigue, muscle and joint aches, and swollen lymph nodes.
- Erythema migrans (EM) rashes- Rashes that are located at the bite site and often are a red circle or oval shaped rash that can resemble a bull's eye.
- Later Signs and Symptoms (days to months after tick bite)Lyme disease and tick safety.
- Severe headaches and neck stiffness.
- Additional EM rashes on other areas of the body.
- Arthritis with severe joint pain and swelling, particularly the knees and other large joints.
- Facial or Bell's palsy (loss of muscle tone or droop on one or both sides of the face).
- Intermittent pain in tendons, muscles, joints, and bones.
- Heart palpitations or an irregular heart beat (Lyme carditis).
- Episodes of dizziness or shortness of breath.
- Inflammation of the brain and spinal cord.
- Shooting pains, numbness, or tingling in the hands or feet.
- Problems with short-term memory.

## **HOW CAN LYME DISEASE BE PREVENTED?**

- Find out from your local public health office if there are ticks in your area, especially *Ixodes* ticks.
- Wear protective clothing to prevent ticks from attaching to your skin. Wear closed toed shoes, long sleeve shirts that

fit tightly around the wrist, and long-legged pant tucked into your socks or boots.

- Use insect repellents containing DEET or Icaridin to repel ticks. Apply to both clothes and skin. Always read the label and follow instructions for use.
- If possible, avoid contact with low bushes and long grasses.
- Wear light coloured clothing to help you to find the ticks more easily.
- Check for ticks on and under clothing, especially after being in areas where ticks may live.
- Inspecting your skin daily greatly reduces the risk of infection as ticks may take several hours to two days to attach to the skin and feed. Check areas including armpits, in and around hair, navel, groin, and behind the ears and knees. Also check children and pets.
- Wash clothes promptly and put them in the dryer with heat to help kill any ticks that may remain.
- Shower or bathe within two hours of being outdoors to wash away loose ticks.

## **TIPS FOR WORKER PROTECTION**

- The importance of the timely reporting of workplace illnesses and injuries.
- Recommend that workers wear light-colored long-sleeved shirts, long pants, socks, and hat when possible.
- If worker uniforms are provided, provide long-sleeved shirts and long pants as options.
- Provide workers with repellents (containing 20% to 30% DEET) to use on their skin and clothing for protection against tick bites.
- Provide workers with insecticides (such as permethrin) to provide greater protection. Permethrin kills ticks and can be used on clothing (but not skin).
- When possible, have workers avoid working at sites with woods, bushes, tall grass, and leaf litter.
- When avoiding these sites is not possible, personal

protective measures are of particular importance. If work in these higher-risk sites must occur, take the following steps to reduce tick populations:

- Remove leaf litter.
- Remove, mow, or cut back tall grass and brush.
- Control rodent and small mammal populations.
- Discourage deer activity.

## **FINAL WORD**

It is important to prevent tick bites. Proper prompt removal of any ticks that have bitten you will also protect you from getting infected from the bite. It is important to understand the symptoms of Lyme disease. Often times the disease is not diagnosed properly and this can lead to more serious issues.