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## LYME DISEASE

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### Overview

Lyme disease is the most commonly reported tick-borne disease in the United States. Lyme disease is passed to humans by the bite of black-legged ticks (also known as deer ticks in the eastern United States) and western black-legged ticks infected with the bacterium *Borrelia burgdorferi*. Worksites with woods, bushes, high grass, or leaf litter are likely to have more ticks. Outdoor workers should be extra careful to protect themselves in the late spring and summer when young ticks are most active.

### Recommendations for Workers

Take the following steps to protect yourself from tick bites:

- Wear a hat and light-colored clothing, including long-sleeved shirts and long pants tucked into boots or socks.
- Use insect repellents that provide protection for the amount of time you will be outdoors:
  - Follow repellent label directions for use.
  - Use repellents containing 20% to 30% DEET on your skin or clothing.
  - Reapply repellents as needed.
- Use insecticides such as Permethrin for greater protection.
  - Permethrin kills ticks on contact.
  - Permethrin can be used on clothing but should not be used on skin.
  - One application of permethrin to pants, socks, and shoes typically stays effective through several washings.
- Check your skin and clothes for ticks every day. The immature forms of these ticks are very small and may be hard to see.
  - Remember to check your hair, underarms, and groin for ticks.
  - Immediately remove ticks from your body using fine-tipped tweezers.
  - Grasp the tick firmly and as close to your skin as possible.
  - Pull the tick's body away from your skin with a steady motion.
  - Clean the area with soap and water.
  - Removing infected ticks within 24 hours reduces your risk of being infected with the Lyme disease bacterium.
- Wash and dry work clothes in a hot dryer to kill any ticks present.
- Learn [the symptoms of Lyme disease](#).
- If you develop symptoms of Lyme disease seek medical attention promptly. Be sure to tell your health care provider that you work outdoors in an area where ticks may be present.

### Symptoms of Lyme Disease

Lyme disease may cause one or more of the following symptoms:

- An expanding circular rash called erythema migrans (may look like a red bulls-eye at the site of the tick bite)
- Fever
- Joint and muscle pains
- Headache
- Chills
- Fatigue
- Swollen lymph nodes

Any worker who has symptoms consistent with Lyme disease should contact his or her health care provider.

## Diagnosis and Treatment of Lyme Disease

Lyme disease is diagnosed based on symptoms and the possibility that the worker has been exposed to infected ticks.

Most cases can be successfully treated with antibiotics, especially if treatment is started early. However, some workers may have symptoms such as arthritis, muscle and joint pain, or fatigue for an extended period of time.

Prevention and early diagnosis of Lyme disease are important in pregnant workers. Lyme disease acquired during pregnancy may lead to infection of the placenta and possible stillbirth. However, no negative effects on the fetus have been found when the mother receives appropriate antibiotic treatment. There are no reports of Lyme disease transmission from breast milk.

**Content Source: National Institute for Occupational Safety and Health (NIOSH)** ) (Users of Safety Talk are advised to determine the suitability of the information as it applies to local situations and work practices and its conformance with applicable laws and regulations).