

# Lyme Disease

## **HNHB Infection Prevention and Control**

# May '22

# ug of the Month

### What is it?

It is caused by the bacterial spirochete, (a corkscrew-shaped bacterium), *Borrelia burgdorferi* and transmitted to humans by blacklegged ticks (Ixodes scapularis).

### Signs and Symptoms:

Three to 32 days (average 7-10 days) following a bite from an infected blacklegged tick, a person may experience symptoms which are generally divided into 3 stages:

- 1. Early localized disease: This stage may have a characteristic Erythema migrans (EM) or "bull's eye" rash at the site of the recent infective tick bite, fever, chills, fatigue, headache, swollen lymph nodes, muscle and joint aches.
- 2. Early disseminated disease: This stage is primarily characterized by evidence of systemic infection, which means infection has spread throughout the body, including to other organs. Symptoms can include, multiple EM lesions, disturbances in heart rhythm, neurologic conditions, such as numbness, tingling, facial and cranial nerve palsies, and meningitis. The symptoms of stages 1 and 2 can overlap.
- 3. Late disease: This stage may develop in people with early infection that was undetected or not adequately treated. It can occur months or years after the tick bite. If left untreated, the infection could spread to the joints, heart and nervous system.

### **Transmission:**

One can estimate the time attached by how engorged the ticks are. If already clearly engorged, it must have been attached for more than 24h once detected. Not all blacklegged ticks are infected.

### Who is at Risk?

In regions where blacklegged ticks are found, people can come into contact with ticks by brushing against vegetation while participating in outdoor activities. Risk of a tick bite is highest in the spring and summer months.

### **Diagnosis and Treatment:**

The diagnosis of early localized Lyme disease is primarily clinical with presence of an erythema migrans rash, supported by history of exposure to blacklegged ticks. Lyme disease can be effectively treated with 10-14 days of antibiotics; however, a longer course of antibiotics, up to 4 weeks, may be required with joint infections.

### Remember...

Lyme disease is a reportable disease to Public Health.

Lyme disease is vector borne by black legged ticks. There is no person to person transmission and no isolation is required.

### How to remove a tick...



### Prevention?

When hiking in wooded/grassy areas:

- Wear closed toed shoes, long sleeve shirts and pants.
- Pull socks over pant legs to prevent ticks from crawling up legs.
- Wear light coloured clothes to spot ticks easier.
- Use insect repellants that contain DEET or Icaridin. Apply to clothing and exposed skin.
- Shower or bathe within 2 hours of being outdoors to wash away loose ticks.
- Do daily full body checks for ticks on yourself, your children and your pets.
- Removing a tick from your skin within 24 hours will usually prevent infection.