Lyme Disease

What is it?

- An illness caused by a bite from a tick that has been infected with the bacteria Borrelia burgdorferi.
- Lyme disease can cause serious symptoms but is treatable.
- Symptoms of lyme disease usually happen in 3 stages, although not all persons have every symptom.
- The first sign of infection is usually a circular rash at the site of the tick bite that occurs 3 days to 1 month after being bitten. Other common symptoms include:
  - fatigue
  - fever
  - chills
  - headache
  - muscle and joint pain
  - swollen lymph nodes
- If untreated, the second stage of the disease can last up to several months and include:
  - multiple skin rashes
  - heart palpitations (irregular heart beats)
  - central and peripheral nervous system disorders
  - extreme weakness and fatigue
  - arthritis and arthritic symptoms
- If the disease remains untreated, the third stage can last months to years with symptoms that can include recurring arthritis and neurological problems.
- Death from lyme disease is rare.

How is it spread?

- Lyme disease is spread through the bite of certain types of ticks.
- Ticks get infected when they feed on mice, squirrels, birds and other small animals that can carry the bacteria.
- People cannot spread lyme disease to each other.
- Although dogs and cats can contract lyme disease, there is no evidence that they can spread the infection to people. Pets can, however, carry infected ticks into homes and yards.
- Hunters may be at greater risk because they spend more time in woodland and brush areas where ticks tend to live.
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Is there treatment for it?

- The sooner treatment starts, the better.
- Several antibiotics can treat the illness.
- Most cases of lyme disease can be cured within 2 to 4 weeks with antibiotics.
- People with certain neurological or heart problems may need intravenous (IV) antibiotics.
- If diagnosed in the later stages of the disease there may be persistent or recurrent symptoms and a longer course of antibiotic treatment is needed.

What can be done to prevent the spread of it?

- Use insect repellents containing permethrin or DEET. Follow the instructions on the label.
- Wear a long-sleeved shirt, long pants, and high socks with pant cuffs tucked into the socks. Light-coloured clothing will make ticks easier to find.
- Walk in the centre of mowed trails to avoid brushing against vegetation.
- Conduct thorough “tick checks” on yourself and your children after spending time in tick-infested areas. Quick removal of ticks, even after they have attached, can drastically reduce the chance of spreading lyme disease.

For more information:

Public Health Agency of Canada


This fact sheet provides basic general information only and is to be used as a quick guide, not as a complete resource on the subject. If you have any further questions, ask Infection Prevention & Control, your physician or health care provider.