ALLEGAN COUNTY HEALTH DEPARTMENT

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Communicable Disease 673-5411 Environmental Health 673-5415 Resource Recovery 673-5415

Lyme Disease

What is Lyme disease?

Lyme disease is a bacterial illness caused by a bacterium, *Borrelia burgdorferi*. Humans can become infected when bitten by an *Ixodes scapularis* tick (commonly called the black-legged or deer tick). Lyme disease may cause signs and symptoms affecting the skin, nervous system, heart, and/or joints of an infected person.

Who gets Lyme disease?

Males and females of all ages can get Lyme disease. People who spend time outdoors in tick-infested environments are at increased risk of exposure and exposure can occur whenever the temperature at ground level is warm enough for ticks to be active.

How is Lyme disease spread?

The disease is spread through the bite of an *Ixodes scapularis* tick. The tick attaches to a host animal (wild or domestic) such as a deer, field mouse. Once the tick releases itself carrying the bacteria, it attaches to anew host which could be a human. The bite of a tick is usually painless and the tick must be attached for at least 24 hours to transmit the bacteria to its new host.

What are the symptoms of Lyme disease?

Most Lyme disease case patients report their symptoms beginning during the late spring and summer months (May through August). The illness often, but not always, starts as a roughly circular reddish rash (called "Bulls eye rash") around or near the site of the tick bite. The rash expands in size over a period of days or weeks. During the rash stage, other symptoms such as fever, headache, fatigue, stiff neck, muscle and/or joint pain may be present. These signs and symptoms may last for several weeks. If left untreated, complications such as meningitis, facial palsy, heart abnormalities, and arthritis may occur within a few weeks to months after the initial onset of symptoms.

How soon do symptoms occur?

Signs and symptoms of Lyme disease usually develop 7-14 days after a tick bite, but can show up as early as 3 days or as late as 32 days. Early symptoms usually begin within a month of exposure. Does past infection with Lyme disease make a person immune?

Although past infection provides some immunity, this immunity is relatively short-lived. Therefore it is possible for a person to get infected more than once.

What is the treatment for Lyme disease?

The disease is treated with oral or injectable antibiotics. Lyme disease is more easily treated when detected early. Exposed persons should monitor their health and promptly see a health care provider if signs and symptoms consistent with Lyme disease devlop.

How can Lyme disease be prevented?

- Avoid areas that are tick-infested, moist, brushy, wooded or overgrown.
- Insect repellents have been shown to be effective in repelling ticks. Be sure to follow the manufacturer's directions on the label.
- Wear a long-sleeved shirt, long pants, and high socks with pant cuffs tucked into the socks. Light colored clothing will make ticks easier to find.
- Walk in the center of mowed trails to avoid brushing up against vegetation.
- Conduct thorough "tick checks" on yourself and your children after spending time in tick-infected areas. Prompt removal of ticks, even after they have attached, can drastically reduce the chance of Lyme disease transmission.

How should a tick be removed?

To remove an attached tick, grasp it with narrow-bladed tweezers or forceps as close as possible to attachment (skin) site, and pull upward and out with a firm and steady tension. If tweezers are not available, use fingers shielded with tissue paper or rubber gloves. Do not handle with bare hands. Be careful not to squeeze, crush or puncture the body of the tick which may contain infectious fluids. After removing the tick, thoroughly disinfect the bite site and wash hands. See or call a health care provider if there is a concern about incomplete tick removal. Keep the tick in a sealed container with moist paper towel and contact the health department regarding tick identification.

For more information on Lyme disease go to www.michigan.gov/emergingdiseases or www.cdc.gov/lyme

This fact sheet is not intended to replace the advice of your physician. Parents should contact their healthcare provider if they have concerns regarding their child's health. If you have general questions, you may contact an Allegan County Public Health Nurse at 269-673-5411.