



Diseases Fact Sheet - Lyme Disease

South Dakota Department of Health

Office of Disease Prevention Services - 605-773-3737 -(1-800-592-1861 in South Dakota only)

This material is provided for informational purposes only and is not a substitute for medical care. We are not able to answer personal medical questions. Please see your health care provider concerning appropriate care, treatment or other medical advice.

What is it?

Lyme disease is caused by a bacterial infection transmitted by a certain type of tick called *Ixodes scapularis*, also called the deer tick or black-legged tick. Lyme disease may cause symptoms affecting the skin, nervous system, heart and/or joints of an individual.

Why is it called Lyme disease?

The first cluster of disease cases associated with this infectious agent was discovered near Lyme, Connecticut.

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 an increased risk of exposure. Most cases have reported an exposure to ticks or their woodland/brush habitat during June, July and August, but cases have been reported during every month of the year.

How is Lyme disease spread?

The Lyme disease bacteria (*Borrelia*) is found in wild animals and spread by deer ticks. Certain stages of the tick, especially the nymph, can feed on a human and, if the tick is infected with the bacteria, can cause an infection in man. Cases of Lyme disease have also been reported in dogs and horses. Person to person spread of Lyme disease does not occur. The deer tick that carries the bacteria has been found in five eastern South Dakota counties to date.

What are the symptoms of Lyme disease?

The illness usually occurs during the summer months and generally starts as a circular reddish expanding rash around or near the site of the tick bite. Multiple rash sites may occur. During the rash stage, or occasionally prior to the rash, other symptoms such as fever, headache, fatigue, stiff neck, muscle and/or joint pain may be present. These may last for several weeks. If left untreated, within a few weeks to months after the rash onset, complications such as

meningitis, facial palsy or heart abnormalities may occur. Swelling and pain in the large joints may recur over many years.

How soon do symptoms occur?

Symptoms usually begin within a month of exposure.

Does past infection with Lyme disease make a person immune?

Information available at present indicates that reinfection is possible.

What is the treatment for Lyme disease?

Current therapy includes the use of antibiotics.

What can be done to prevent the spread of Lyme disease?

Special precautions to prevent exposure to ticks should be used such as wearing light-colored clothing and tucking pants into socks and shirts into pants. Repellents containing DEET applied to skin or clothing may prevent tick attachment. The control of rodents around the home may be helpful. If trapping mice at or near home, extreme care should be taken to dispose of carcasses with a minimum of exposure, since ticks attached to the mice might attach to the skin of the trapper. If exposed to tick-infested areas, family members should help to check body surfaces for attached ticks.

How should a tick be removed?

To remove an attached tick, grasp with tweezers or forceps as close as possible to attachment (skin) site, and pull upward and out with a firm and steady pressure. 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 doctor if there is a concern about incomplete tick removal. It is important that a tick be removed as soon as it is discovered. Check after every two or three hours of outdoor activity for ticks attached to clothing or skin. If removal occurs within three hours after attachment, the risk of tick-borne infection is reduced.

Related Sites:

- South Dakota Office of Disease Prevention
 - [Reporting a Disease](#)
- [SDSU Extension Service](#)
- [Centers for Disease Control and Prevention](#)



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