

Lyme Disease

What causes lyme disease?

Lyme disease is caused by the bacteria *Borrelia burgdorferi*. Humans may get lyme disease from the bite of an infected ixodes tick. This tick is referred to as a deer tick. In the United States, the white-tailed deer is the preferred host of this tick. Other animals may carry this tick as well. These may include rabbits, horses, chipmunks, raccoons, dogs and bugs. The tick is about the size of the point of a pencil. Because of the small size of this tick, less than 30% of patients with lyme disease recall getting a tick bite. If an infected deer tick bites your child, there is only an 8%-10% chance of getting lyme disease.

What are the symptoms?

The symptoms of Lyme disease are feeling tired, fever, weakness and flu-like symptoms. A skin lesion typically develops 7-14 days after the tick bite. This is the acute phase of the illness. The initial lesion occurs at the site of the bite. The lesion rapidly gets larger. It may get to a size of between 9 and 30 inches. It may be itchy or painful. The skin may be red or it may appear as a "bull's-eye" or target lesion. The most common locations for the lesion are the underarms, the thigh, the groin, and around the belly button. Your child may develop more lesions several days or weeks after the first one is seen. If your child gets new lesions, they may also have a fever, headache, tiredness and muscle aches. The early signs and symptoms of lyme disease often fade in 3-4 weeks. The fatigue and lethargy may last a lot longer.

How is it treated?

Antibiotic therapy is very effective in the treatment of Lyme Disease. Early diagnosis and treatment can shorten the duration of the bull's-eye lesion. Antibiotics prevent many of the complications. After treatment is completed, fatigue and joint or muscle pain may take weeks or months to go away.

What are the complications?

If the disease is left untreated for several weeks to months:

- 5%-8% of patients develop heart problems.
- 10 of patients develop neurological problems.
- 50% of patients develop arthritis.

Will my child get lyme disease if bitten by an infected tick?

An infected ixodes tick must be attached to the skin for 24-48 hours **before** the infection is transmitted. As a result, inspecting the skin every day is crucial. If a tick is found imbedded in the skin, it is important that the tick is removed promptly. This helps to prevent transmission of the disease. Remove the tick by grasping it with a tweezers or forceps. Pull it out of the skin with a steady motion. After being bitten by an infected deer tick, there is only an 8%-10% chance of getting lyme disease.

How can lyme disease be prevented?

Avoiding areas where there may be ticks can prevent Lyme Disease. These include tall grass, bushes and woods. Avoid these areas from April to October. If your child will be in these areas, dress them in light-colored clothing. Your child should wear a long-sleeved shirt and long pants. Insect repellents provide some protection. Insect repellents, however, may be absorbed through the skin. As a result, they should be used with caution in small children. Talk your child's doctor about the use of repellents.

ALERT: Call your child's doctor, nurse, or clinic if you have any questions or concerns or if your child has special health care needs that were not covered by this information.

This teaching sheet is meant to provide you with additional information about your child's care. Diagnosis, treatment, and follow-up should be provided by your health care professional.