



Lyme Disease

Now that we are in the summer months, insects pose a greater risk to our Safety and Health. In addition to the more common wasps, bees, hornets and snakes that we are aware of, ticks can pose a different and possibly a more difficult problem. That problem is more commonly called Lyme Disease.

Lyme Disease is an infection caused by bacteria that is transmitted after one receives a tick bite. It often starts with a large red rash at the site of the tick bite, followed by flu-like symptoms and fatigue. Early in the course of the disease, the symptoms often go unnoticed or are mistaken for the flu, and not all persons develop the same symptoms. To further complicate matters, the symptoms of the disease mimic those of other diseases, so even persons who complain of flu-like symptoms and fatigue can have any number of conditions other than Lyme disease.

How does Lyme disease spread?

Lyme Disease is spread by the bites of the deer tick, bear tick, western black-legged tick or black-legged tick (depending on the region of the country). These ticks are much smaller than the common dog or cattle ticks. They can attach to any part of the body, often to moist or hairy areas such as the groin, armpits, and scalp.

Campers, hikers, **outdoor workers**, and gardeners are at the greatest risk of exposure to infected ticks. Lyme disease is widely distributed in northern regions of the world. In the United States, the highest incidence rates occur in the Northeast, North Central states, and the West Coast (particularly in northern California).

What are the symptoms (early / late) of Lyme disease?

The symptoms of **early** Lyme disease include:

- A characteristic skin rash (bulls-eye rash)
- Muscle and joint aches
- Headache
- Chills and fever
- Fatigue, and
- Swollen lymph nodes

The rash is a circular red patch that usually appears 3 to 30 days after being bitten by an infected tick. The patch expands (to an average of 5 to 6 inches in diameter) and persists for 3 to 5 weeks. Sometimes many patches appear and vary in shape depending on their locations. The center of the patch may clear as the rash enlarges, giving a “bull’s-eye” appearance. In some persons, the characteristic rash never forms or is noticed, and not every rash that occurs at the site of a tick bite is due to Lyme disease. In some cases, the rash can be an allergic reaction to the tick saliva.

The symptoms of **late** Lyme disease may not appear until weeks, months, or even years after a tick bite and include:

- Arthritis (pain/swelling) of one or two large joints
- Disabling neurological disorders (disorientation; confusion; dizziness; short-term memory loss; inability to concentrate, finish sentences or follow conversations; mental “fog”)
- Numbness in arms/hands or legs/feet

Can Lyme disease be treated?

If there are definite symptoms of Lyme disease, the doctor may prescribe antibiotics, which are usually given by mouth. Antibiotics should not be given only because a tick bit a person. Patients who are diagnosed and treated with antibiotics in the early stages of Lyme disease usually recover quickly and completely. Most patients treated in later stages of Lyme disease also respond well to antibiotics. A few patients may have relapses and need additional treatment. Permanent damage to the joints and nervous system can develop in patients with chronic late Lyme disease. Usually these are patients not diagnosed in the early stages or their initial treatments were unsuccessful.



What precautions can be taken to reduce the chance of getting Lyme disease?

To decrease the chance of being bitten by a tick:

- Avoid wooded, brushy, and grassy areas, especially in May, June, and July. (Contact the local health department or park/extension service for information on local distribution of ticks).
- Wear light-colored clothing, so that ticks can be seen more easily
- Wear long pants and long-sleeved shirts
- Wear shoes that cover the entire foot
- Tuck pant legs into socks or shoes and shirt into pants
- Wear a hat for extra protection
- Spray insect repellent containing DEET on clothes and exposed skin other than the face, or treat clothes with permethrin that kills ticks on contact
- Walk in the center of trails to avoid brush and grass
- After being outdoors, remove clothing and wash and dry at high temperatures
- Do a careful body check for ticks. To remove a tick, use tweezers and grasp the tick close to the skin. Pull straight back and avoid crushing the ticks body. Save the tick for possible identification by a doctor or local health department