

# Dangers of Lyme disease

If you love nature and are already thinking about all the hiking and walking you will do in the great outdoors this year – or if you live near a wooded area or where deer are prevalent – you need to be aware of Lyme disease.

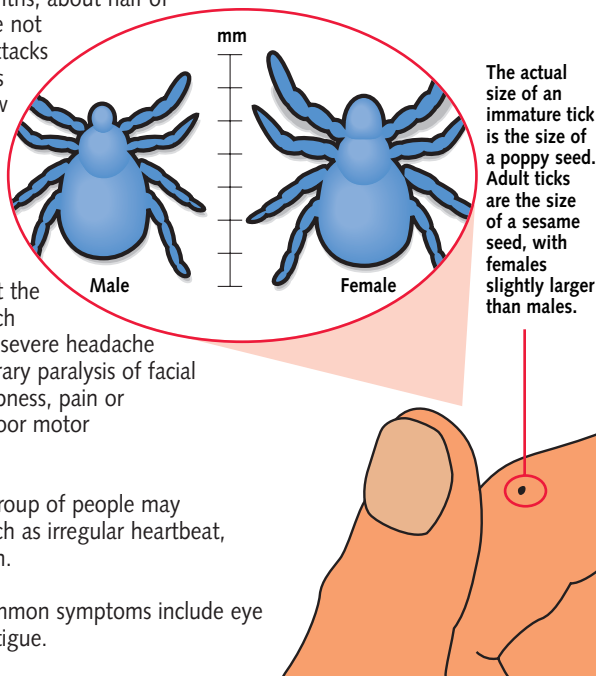
If you are bitten by a deer tick and it stays on you for 48 hours, there's a small chance that you could acquire Lyme disease. Early detection and treatment with antibiotics will readily cure it, but determining whether someone has Lyme disease can be

difficult because the symptoms can resemble other illnesses. If you suspect that anyone in your family has Lyme disease, consult your physician.

A study in the February 2, 2000, issue of *JAMA* shows that many people reported no difference in the way they feel between 1 to 11 years after being diagnosed with Lyme disease than people who don't have the disease. This means that most people with Lyme disease who receive antibiotic treatment can return to normal health.

## SYMPTOMS:

- **Erythema migrans (EM)** – A red rash, it is usually the first symptom of Lyme disease. The red rash usually starts at the site of the tick bite and can expand over a period of days to weeks. EM is usually accompanied by fever, stiff neck, body aches, and fatigue.
- **Arthritis** – After several months, about half of the infected people who are not treated develop recurrent attacks of painful and swollen joints that last a few days to a few months. About 10% to 20% of untreated people go on to develop chronic arthritis.
- **Neurological symptoms** – Lyme disease also can affect the nervous system, causing such symptoms as stiff neck and severe headache (due to **meningitis**), temporary paralysis of facial muscles (**Bell's palsy**), numbness, pain or weakness in the limbs, or poor motor coordination.
- **Heart problems** – A small group of people may develop heart problems, such as irregular heartbeat, several weeks after infection.
- **Other symptoms** – Less common symptoms include eye inflammation and severe fatigue.



The actual size of an immature tick is the size of a poppy seed. Adult ticks are the size of a sesame seed, with females slightly larger than males.

Sources: National Institute of Allergy and Infectious Diseases, American Lyme Disease Foundation

## WHAT IS LYME DISEASE?

Lyme disease is an infection caused by a bacterium called *Borrelia burgdorferi*. It is usually transmitted by the bite of an infected tick. Ticks most commonly infected with *B burgdorferi* usually feed and mate on deer.

## TREATMENT:

Lyme disease can be treated with antibiotics. But the earlier the treatment is started after infection, the quicker and more complete the recovery.

## PREVENTION:

The best way to avoid getting Lyme disease is to avoid deer ticks, which are most prevalent during the summer. Deer ticks are most often found in wooded areas and nearby shady grasslands, and are especially common where the 2 areas merge. To minimize exposure, wear long pants and long-sleeved shirts that fit tightly at the ankles and wrists. Also wear hats, tuck pants into socks, and wear closed-toe shoes. Insect repellents can also help, but some people may have allergic reactions to them. A vaccine to prevent Lyme disease is available. Discuss its use with your doctor.

## FOR MORE INFORMATION:

- National Institute of Allergy and Infectious Diseases  
Building 31, Room 7A50  
31 Center Drive, MSC 2520  
Bethesda, MD 20892-2520  
or [www.niaid.nih.gov/publications/tick.htm](http://www.niaid.nih.gov/publications/tick.htm)

## INFORM YOURSELF:

To find this and previous *JAMA* Patient Pages, check out the AMA's Web site at [www.ama-assn.org/consumer.htm](http://www.ama-assn.org/consumer.htm).

Additional Sources: National Institute of Allergy and Infectious Diseases, National Institute of Neurological Disorders and Stroke

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