Lyme disease and Tick-Borne Illnesses FAQ

What is Lyme disease?
Lyme disease is caused by bacteria (germs) that are spread by tiny, infected deer ticks. Both people and animals can have Lyme disease.

How is Lyme disease transmitted?
The Lyme disease bacterium, Borrelia burgdorferi, normally lives in mice, squirrels and other small animals. It is transmitted among these animals – and to humans – through the bites of certain species of ticks.

How soon do symptoms of Lyme disease appear after a tick bite?
Symptoms of early Lyme disease, described below, usually begin to appear from 3 to 30 days after being bitten by an infected tick. If untreated, symptoms of late Lyme disease may occur from weeks to years after the initial infection.

What are the symptoms of Lyme disease?

**Early stage (days to weeks):** The most common early symptom is a rash where the tick was attached. It often, but not always, starts as a small red area that spreads outward, clearing up in the center so it looks like a donut. Flu-like symptoms, such as fever, headache, stiff neck, sore and aching muscles and joints, fatigue and swollen glands may also occur. Even though these symptoms may go away by themselves, without medical treatment, some people will get the rash again in other places on their bodies, and many will experience more serious problems.

*Treatment during the early stage prevents later, more serious problems.*

**Later stages (weeks to years):** If untreated, people with Lyme disease can develop late-stage symptoms even if they never had a rash. The joints, nervous system and heart are most commonly affected.
• About 60% of people with untreated Lyme disease get arthritis in their knees, elbows and/or wrists. The arthritis can move from joint to joint and become chronic.
• Many people who don’t get treatment develop nervous system problems. These problems include meningitis (an inflammation of the membranes covering the brain and spinal cord), facial weakness (Bell’s palsy) or other problems with nerves of the head, and weakness or pain (or both) in the hands, arms, feet and/or legs. These symptoms can last for months, often shifting between mild and severe.
• The heart also can be affected in Lyme disease, with slowing down of the heart rate and fainting. The effect on the heart can be early or late.

When can I get Lyme disease?
Lyme disease can occur during any time of the year. The bacteria that cause Lyme disease are spread by infected deer ticks. Young ticks (nymphs) are most active during the warm weather months between May and July. Adult ticks are
most active during the fall and spring but may also be out searching for a host any time that winter temperatures are above freezing.

**How common is Lyme disease nationwide and in Massachusetts?**
Lyme disease is the most commonly reported tick-borne disease in the United States, accounting for more than 95% of all cases of reported tick-borne disease. National statistics on Lyme disease are available from the Centers for Disease Control and Prevention website at: [www.cdc.gov/ncidod/dvbid/lyme/ld_statistics.htm](http://www.cdc.gov/ncidod/dvbid/lyme/ld_statistics.htm).

In the United States, the reported incidence of Lyme disease, or number of new cases, is greatest in the Northeast, mid-Atlantic, and upper-Midwest regions. In 2005, Massachusetts had the fourth highest incidence rate (number of new cases per 100,000 people) of Lyme disease nationwide. The incidence rate of Lyme disease in Massachusetts in 2005 was 36.4 cases per 100,000, which is almost 4 ½ times higher than the 2005 national incidence rate of 7.9 cases per 100,000.

**What should I do if I find a tick on me?**
The longer a tick remains attached to someone, the greater the chance it will be able to spread a disease-causing germ. Therefore, any attached tick should be removed as soon as possible using a fine-point tweezers. The tick should not be squeezed or twisted, but grasped close to the skin and pulled straight out with steady pressure.

**Where on my body or my children’s should I look for ticks?**
Favorite places for ticks to attach are between toes, the back of knees, the groin, armpits, behind the ears, along the hairline and neck. Don’t forget to check your pets too.

**Should I be treated after removing an attached tick?**
Although not routinely recommended, taking antibiotics after a tick bite may be beneficial for some persons. If you answer “yes” to the following questions, discuss the possibilities with your health care provider:

- Can the tick be identified as a deer tick? Review the Massachusetts Department of Public Health’s [“Overview of Tickborne Diseases”](http://www.mass.gov/dph/tickborne/overview.html) to see what ticks look like.
- Was the tick attached for at least one full day?
- Has it been less than three days since you removed the tick?
Your health care provider must determine whether the advantages of prescribing antibiotics after a tick bite outweigh the disadvantages.

**After I remove an attached tick, what symptoms should I look for?**
Whenever someone removes an attached tick from their body, they should watch for the appearance of any type of rash, fever or flu-like symptoms. Immediately seek the advice of a health care provider should any symptoms occur, especially if the tick was attached for more than 24 hours.

**How can I prevent myself from getting Lyme disease?**
Reducing exposure to ticks is the best defense against Lyme disease and other tick-borne infections. There are several approaches you and your family can use to prevent and control Lyme disease:
- Protect yourself from bites
- Control ticks around your home
- Manage deer populations and movement
- Consult your doctor after tick bites
- Learn the early signs of tick-borne illness

**What treatments are available for Lyme disease?**
People who are diagnosed with Lyme disease can be treated with antibiotics. Prompt treatment during the early stage of the disease prevents later, more serious problems.

**Where can I find online resources regarding tick management and about Lyme disease?**
Check out these websites:
- Protect Yourself from Tick-Borne Diseases
- Lyme Disease: A Public Information Guide
- Fact sheet about Lyme Disease:
- Preventing Disease Spread by Ticks: