

Preventing Ticks in the Yard

Create a Tick-Safe Zone Through Landscaping

You can make your yard less attractive to ticks depending on how you landscape. Here are some simple landscaping techniques that can help reduce tick populations:



- Clear tall grasses and brush around homes and at the edge of lawns.
- Place a 3-ft wide barrier of wood chips or gravel between lawns and wooded areas and around patios and play equipment. This will restrict tick migration into recreational areas.
- Mow the lawn frequently and keep leaves raked.
- Stack wood neatly and in a dry area (discourages rodents that ticks feed on).
- Keep playground equipment, decks, and patios away from yard edges and trees and place them in a sunny location, if possible.
- Remove any old furniture, mattresses, or trash from the yard that may give ticks a place to hide.

Tick Removal

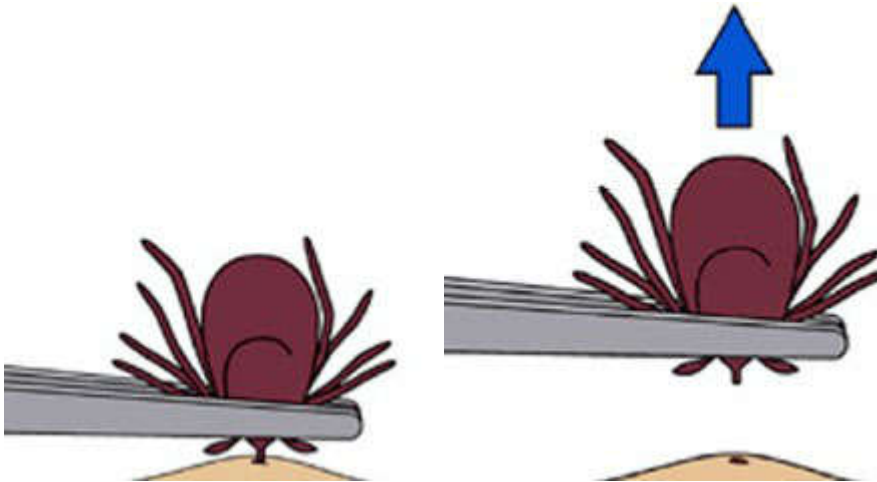
If you find a tick attached to your skin, there's no need to panic. There are several tick removal devices on the market, but a plain set of fine-tipped tweezers will remove a tick quite effectively.

How to remove a tick

1. Use fine-tipped tweezers to grasp the tick as close to the skin's surface as possible.
2. Pull upward with steady, even pressure. Don't twist or jerk the tick; this can cause the mouth-parts to break off and remain in the skin. If this happens, remove the mouth-parts with tweezers. If you are unable to remove the mouth easily with clean tweezers, leave it alone and let the skin heal.
3. After removing the tick, thoroughly clean the bite area and your hands with rubbing alcohol, an iodine scrub, or soap and water.



Avoid folklore remedies such as "painting" the tick with nail polish or petroleum jelly, or using heat to make the tick detach from the skin. Your goal is to remove the tick as quickly as possible--not waiting for it to detach.



Follow-up

If you develop a rash or fever within several weeks of removing a tick, see your doctor. Be sure to tell the doctor about your recent tick bite, when the bite occurred, and where you most likely acquired the tick.

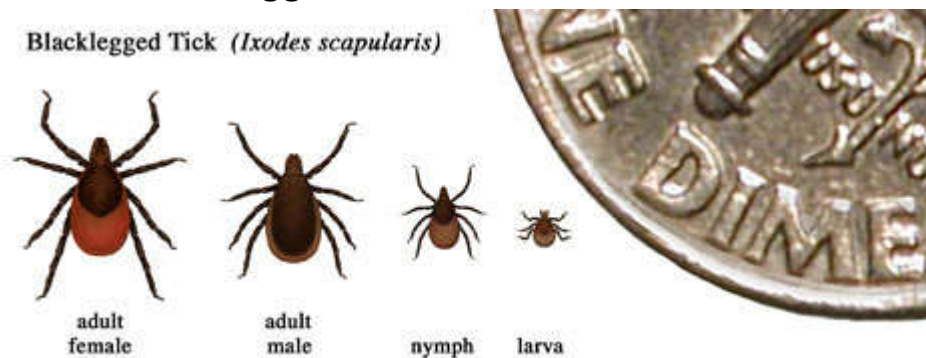
Lyme disease transmission

The Lyme disease bacterium, *Borrelia burgdorferi*, is spread through the bite of infected ticks. The blacklegged tick (or deer tick, *Ixodes scapularis*) spreads the disease in the northeastern, mid-Atlantic, and north-central United States, and the western blacklegged tick (*Ixodes pacificus*) spreads the disease on the Pacific Coast.

Ticks can attach to any part of the human body but are often found in hard-to-see areas such as the groin, armpits, and scalp. In most cases, the tick must be attached for 36-48 hours or more before the Lyme disease bacterium can be transmitted.

Most humans are infected through the bites of immature ticks called nymphs. Nymphs are tiny (less than 2 mm) and difficult to see; they feed during the spring and summer months. Adult ticks can also transmit Lyme disease bacteria, but they are much larger and may be more likely to be discovered and removed before they have had time to transmit the bacteria. Adult *Ixodes* ticks are most active during the cooler months of the year.


All about blacklegged ticks



Relative sizes of several ticks at different life stages. In general, adult ticks are approximately the size of a sesame seed and nymphal ticks are approximately the size of a poppy seed.

Are there other ways to get Lyme disease?

- There is no evidence that Lyme disease is transmitted from person-to-person. For example, a person cannot get infected from touching, kissing or having sex with a person who has Lyme disease.
- Lyme disease acquired during pregnancy may lead to infection of the placenta and possible stillbirth; however, no negative effects on the fetus have been found when the mother receives appropriate antibiotic treatment. There are no reports of Lyme disease transmission from breast milk.
- Although no cases of Lyme disease have been linked to blood transfusion, scientists have found that the Lyme disease bacteria can live in blood that is stored for donation. Individuals being treated for Lyme disease with an antibiotic

should not donate blood. Individuals who have completed antibiotic treatment for Lyme disease may be considered as potential blood donors. Information on the current criteria for blood donation is available on the Red Cross website at <http://www.redcross.org/donate/give/>.

- Although dogs and cats can get Lyme disease, there is no evidence that they spread the disease directly to their owners. However, pets can bring infected ticks into your home or yard. Consider protecting your pet, and possibly yourself, through the use of tick control products for animals.
- You will not get Lyme disease from eating venison or squirrel meat, but in keeping with general food safety principles meat should always be cooked thoroughly. Note that hunting and dressing deer or squirrels may bring you into close contact with infected ticks.
- There is no credible evidence that Lyme disease can be transmitted through air, food, water, or from the bites of mosquitoes, flies, fleas, or lice.
- Ticks **not** known to transmit Lyme disease include Lone star ticks (*Amblyomma americanum*), the American dog tick (*Dermacentor variabilis*), the Rocky Mountain wood tick (*Dermacentor andersoni*), and the brown dog tick (*Rhipicephalus sanguineus*).

Contact Us:

- Centers for Disease Control and Prevention
Bacterial Diseases Branch
Foothills Campus
Fort Collins, CO 80521
- 800-CDC-INFO
(800-232-4636)
TTY: (888) 232-6348
- [Contact CDC-INFO](#)

Symptoms of Lyme Disease-<http://www.lymemd.org/learn-about-lyme.html>

Flu-like symptoms

- Fever, chills, fatigue, body aches, swollen glands, and a headache may accompany the rash.
- In some cases, these may be the only symptoms of infection and there is no rash.

Neurological problems

- In some cases, inflammation of the membranes surrounding the brain (meningitis), temporary paralysis of one side of the face ("Bell's palsy), numbness or weakness in limbs, and impaired muscle movement may occur weeks or months, after an untreated Lyme disease infection.
- Other problems can occur months to years later and include difficulty with short-term memory, migraines, dizziness, 'brain fog', poor sleep, lack of verbal fluency, confusion or disorientation, and decreased ability to concentrate.
- Lyme has also been found to mimic several psychiatric disorders.

Joint pain

- Untreated, the infection may cause severe joint pain and swelling from several weeks to months after infection.
- Knees are often affected, but the pain can shift from one joint to another.

Other Symptoms

- Some people experience irregular heartbeat several weeks after infection, rarely lasting more than a few days or weeks.
 - Eye inflammation, hepatitis, shooting pains, and severe fatigue are also possible.
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When To See a Doctor

If you are bitten by a tick and develop the rash or symptoms of Lyme disease — especially if you live or vacation where Lyme is prevalent, contact your doctor immediately. Treatment is most effective if begun early. Although only a small number of tick bites lead to Lyme disease: the longer the tick remains attached to your skin, the greater your risk of getting the disease.

How Lyme Disease is Diagnosed

Lyme disease is a clinical diagnosis made by a doctor or nurse examining the patient. Early Lyme is not a laboratory diagnosis: a negative Lyme blood test doesn't rule out Lyme in the first few weeks of the illness. Also, 20% of people have no rash, only a "flu like" illness. Fever, aches and abrupt severe fatigue can be the main symptoms of acute Lyme disease. Lyme is different from a respiratory "cold" and does not cause a runny nose or a prominent cough.

Tick bite reactions are small and do not get bigger over several days. If you have a tick bite, watch the site for signs of a growing red rash in the next 1 - 3 weeks. Small, red reactions less than 1-2" in size (the size of a dime) are common do not represent Lyme

disease. These are tick-bite reactions, often confused with the rash of Lyme disease. With a tick-bite reaction, the red area does not expand over 24 to 48 hours. Small reactions at the bite site can last days to weeks.

The earliest stage of Lyme disease occurs at the site of the tick bite. If the rash is Lyme, it will get bigger over days or weeks and will not fade over the next few days. Only 2% of tick bites result in Lyme disease. A Lyme rash occurs at the site of the tick bite in 80% of people who have early Lyme disease. The incubation period from a tick bite to the development of a rash is 3-30 days (usually 3-10 days).

The Lyme rash is red and round or oval and is called erythema migrans. It may have the distinctive bull's-eye appearance. Often, the rash is uniformly red and usually more than 2" across - often as large as 6-8". It is sometimes confused with a spider bite.

What Is Not Lyme Disease

- Small, red areas about the size of a dime are common after tick bites. They are not Lyme disease.
- With a non-Lyme tick bite reaction, the surrounding redness does not expand over 2 to 4 days.
- These small reactions from a tick bite can last from several days to weeks