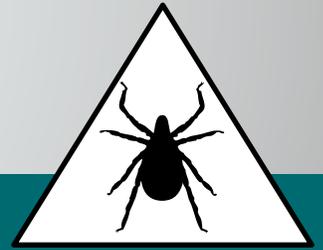




# Understanding Tick Bites and Lyme Disease



## How to prevent tick bites



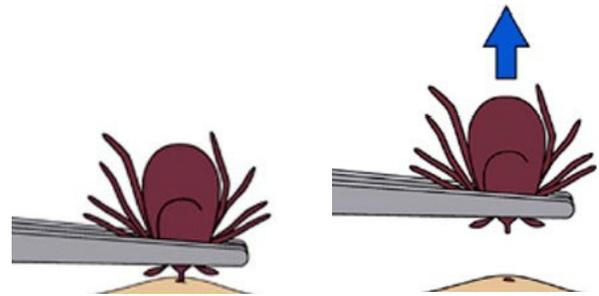
**Ticks can spread disease, including Lyme disease.**

### Protect yourself:

- Use Environmental Protection Agency (EPA)-registered insect repellents containing DEET, picaridin, IR3535, oil of lemon eucalyptus, para-menthane-diol, or 2-undecanone. Always follow product instructions.
- Wear clothing treated with permethrin.
- Shower as soon as possible after spending time outdoors.
- Check for ticks daily. Ticks can hide under the armpits, behind the knees, in the hair, and in the groin.
- Tumble clothes in a dryer on high heat for 10 minutes to kill ticks on dry clothing after you come indoors. If the clothes are damp, additional time may be needed.

## 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 to remove the tick. Avoid twisting or jerking.
3. Clean the bite area and your hands with rubbing alcohol or soap and water.



### Notes:

- Remove the tick as soon as possible to reduce your chances of getting an infection from the tick bite.
- Don't use nail polish, petroleum jelly, or a hot match to make the tick detach.
- If tick mouthparts remain in the skin, leave them alone. In most cases, they will fall out in a few days.



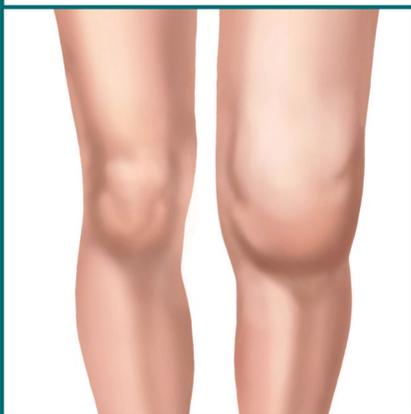
U.S. Department of  
Health and Human Services  
Centers for Disease  
Control and Prevention



*Facial paralysis.*



*Bull's eye rash on the back.*



*Arthritic knee.*



## When to see your healthcare provider

If you develop a rash, fever, exhaustion, or joint and muscle aches within several weeks of removing a tick or spending time in tick habitat, see your healthcare provider. Be sure to mention your recent tick bite and when it happened, or that you've spent time in places where ticks may live.

If left untreated, Lyme disease can affect the joints, heart, or nervous system.

## Antibiotics treat Lyme disease

People treated with antibiotics in the early stages of Lyme disease usually recover rapidly and completely. The antibiotics most commonly used to treat Lyme disease include: doxycycline, amoxicillin, or cefuroxime axetil.

## Looking ahead to recovery

Rest and take antibiotics as prescribed. Recovery may take several weeks or longer.

Some people wonder if there is a test to confirm that they are cured, but there is no such test. Retesting for Lyme disease is not recommended because blood tests might be positive for months or years after you have been treated. A positive test doesn't mean you are still infected. It simply means that your immune system remembers your infection.

You can get Lyme disease again if you are bitten by another infected tick, so protect yourself from tick bites.

**For more information see [www.cdc.gov/Lyme](http://www.cdc.gov/Lyme)  
and [www.cdc.gov/Ticks](http://www.cdc.gov/Ticks)**