

# Ticks and Lyme Disease

## Overview

Tick exposure can occur year-round, but ticks are most active during warmer months (April-September). The tips in this handout will help you learn how to prevent and remove ticks, as well as the signs and symptoms of lyme disease.



## Lyme Disease

Lyme disease is transmitted to humans through the bite of infected black-legged (deer) ticks. It takes 18-36 hours for ticks to transmit lyme disease.

**\*\*Only deer ticks can transmit the disease.**

Signs and Symptoms (usually within 2-4 weeks of tick bite):

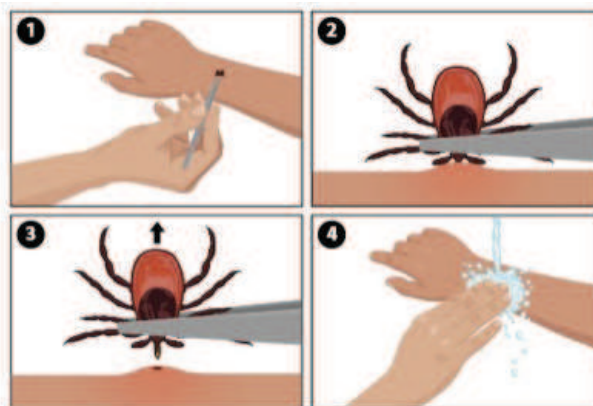
- Fever
- Headache
- Fatigue
- Joint swelling
- Characteristic Rash - painless, non-itchy lesion that looks like a bullseye or a target that increases in size over several days. Usually occurs 1-2 weeks after the tick bite.

## How do I remove a tick?

1. Remove the tick as soon as you notice it.
2. Use fine-tipped tweezers to firmly grasp the tick as close to the skin's surface as possible.
3. Pull upward with steady, even pressure. Don't twist or jerk the tick - this can cause mouth part 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 the skin will heal.
  - a. Once these parts are separated from the body, they can no longer transmit the disease and the remnant will work their way out on their own.
4. After removing the tick, thoroughly clean the bite area and your hands with rubbing alcohol, iodine, or soap and water.

**\*\*Avoid folklore remedies such as covering tick with petroleum jelly, or using heat to make the tick detach.**

- The bacteria that causes Lyme Disease (and other tick borne diseases) lives in the salivary glands of the tick. If you try to suffocate the tick using petroleum jelly or try to burn or squish it, the stress of such actions will cause the tick to regurgitate the infected saliva into the blood stream, which increases the risk of contracting a tick borne disease



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## Preventing Tick Bites

- Be aware of areas where ticks live - most commonly in forests, grassy or marshy areas, or wooded areas.
- When outdoors, wear long-sleeve shirts tucked into pants. Pants should be tucked into socks or boots. Wearing light colored clothes can make it easier to spot ticks.
- **Check yourself and your child everyday for ticks.** Pets should also be examined. When doing checks, remember that ticks like places that are warm and moist. Pay extra attention to area like back of knees, armpits, groin, scalp, back of neck, and behind ears.
- Use of Insect Repellent:
  - Use repellents that contain DEET (20-30%). DEET should not be used on children younger than 2 months old.
  - Always read and follow the instructions on the label.
  - When applying repellents, avoid hands, eyes, and mouth. Be sure to wash off repellent at the end of the day.
  - Products that contain permethrin should only be used on clothing.
- Ticks can also enter your home after attaching themselves to pets. Talk to your vet about products to prevent tick bites on your pets.
- Remember - Take preventative measures towards ticks, but continue to enjoy those outdoor activities you love!

## Reducing Tick Exposure

- **Modify your landscape.**
  - Reduce the size of wooded areas and increase the size of open lawns.
  - Shift children's play areas, picnic tables, and lawn furniture as far away as possible from any woods, shrubs, and undergrowth.
  - Create a three-foot-wide distance between your yard and the woods, using mulch, wood chips, and gravel.
- **Decrease tick habitats around your home.**
  - Keep grass mowed and other vegetation trimmed close to the ground, about 2 inches or less. Ticks are less likely to survive if the humidity is low at ground level. This will also help prevent small animals, such as mice in your area, which host ticks.
  - Remove all leaf litter and cut away undergrowth from trees and shrubs.
  - Prune plants, shrubs, and bushes to let in more sunlight, making it less attractive to ticks.
- **Decrease habitats of hosts that carry ticks (deer, mice, and chipmunks)**
  - Reduce wood piles and stone walls where small rodents hide and nest.
  - Reduce the plants in your yard that deer love to eat (azaleas, rhododendrons, arborvitae, and crabapple).
  - Increase deer resistant plants (Scotch pine, boxwood, American Holly, daffodils, pansy, sage, marigolds, etc.). Local extension agencies and nurseries can offer more suggestions for your area.
  - Move bird feeders and birdbaths as far from your house as possible. Birds can spread immature ticks over great distances as they travel.

