

# TICK RELATED INFORMATION

## Avoid Direct Contact with Ticks

- Avoid wooded and brushy areas with high grass and leaf litter.
- Walk in the center of trails.

## Repel Ticks with DEET or Permethrin

- Use repellents that contain 20 to 30% DEET (N, N-diethyl-m-toluamide) on exposed skin and clothing for protection that lasts up to several hours. Always follow product instructions. Parents should apply this product to their children, avoiding hands, eyes, and mouth.
- Use products that contain permethrin on clothing. Treat clothing and gear, such as boots, pants, socks and tents with products containing 0.5% permethrin. It remains protective through several washings. Pre-treated clothing is available and may be protective longer.

## Find and Remove Ticks from Your Body

- Bathe or shower as soon as possible after coming indoors to wash off and more easily find ticks that are crawling on you.
- Conduct a full-body tick check using a hand-held or full-length mirror to view all parts of your body upon return from tick-infested areas. Parents should check their children for ticks under the arms, in and around the ears, inside the belly button, behind the knees, between the legs, around the waist, and especially in their hair.
- Examine gear and pets. Ticks can ride into the home on clothing and pets, then attach to a person later, so carefully examine pets, coats, and day packs.
- Tumble clothes in a dryer on high heat for an hour to kill remaining ticks. (Some research suggests that shorter drying times may also be effective, particularly if the clothing is not wet.)

## Symptoms of Tick-Related Illness:

- Fever/chills: With all tick-borne diseases, patients can experience fever at varying degrees and time of onset.
- Aches and pains: Tick-borne disease symptoms include headache, fatigue, and muscle aches. With Lyme disease you may also experience joint pain. The severity and time of onset of these symptoms can depend on the disease and the patient's personal tolerance level.
- Rash: In Lyme disease, the rash may appear within 3-30 days, typically before the onset of fever. The Lyme disease rash is the first sign of infection and is usually a circular rash called [erythema migrans](#) or EM. This rash occurs in approximately 70-80% of infected persons and begins at the site of a tick bite. It may be warm, but is not usually painful. Some patients develop additional EM lesions in other areas of the body several days later.

Tick-borne diseases can result in mild symptoms treatable at home to severe infections requiring hospitalization. Although easily treated with antibiotics, these diseases can be difficult for physicians to diagnose. However, early recognition and treatment of the infection decreases the risk of serious complications. So see your doctor immediately if you have been bitten by a tick and experience any of the symptoms described here.

POWASSAN (POW) VIRUS: Signs and symptoms of infection can include fever, headache, vomiting, weakness, confusion, seizures and memory loss. Long-term neurologic problems may occur. There is no specific treatment. You can reduce your risk of being infected with POW virus by following the directions listed above.

### Notes

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- Fever and other general symptoms may occur in the absence of rash.
- A small bump or redness at the site of a tick bite that occurs immediately and resembles a mosquito bite is common. This irritation generally goes away in 1-2 days and is not a sign of Lyme disease.
- Ticks can spread other organisms that may cause a different type of rash.

**For more information please visit the Center for Disease Control and Prevention website.**