

## **LYME DISEASE PREVENTION TIPS**

### **Who is at risk for Lyme disease?**

Outdoor workers, gardeners, campers, hikers, pet owners, people who hunt, fish, golf, or picnic in parks, and children, including those on school sponsored outdoor activities are at risk. Children are especially vulnerable since they run and play without caution.

Deer bring ticks into your yard, so reducing deer populations can help in lowering tick numbers. Birds and other animals also transport ticks. Mice are a primary reservoir for Lyme disease as well as a number of disease-causing microorganisms and often have many deer ticks attached to them. A tick seeking a blood meal will attach to a mouse, feed, and become infected. Other infections transmitted at the same time as Lyme disease may include Anaplasmosis, Babesiosis, Bartonellosis, Ehrlichiosis, Powassan Fever, Mycoplasmosis, Rocky Mountain spotted fever, etc. Ticks are described as a cesspool of disease. The spring and summer months are the prime time for Lyme; however, you can be bitten year-round. Ticks seek a blood meal anytime the temperature is high enough for them to be mobile, even with snow cover.

### **Personal prevention tips**

Avoid sitting on the ground, stone walls, woodpiles or fallen logs, use an impervious ground cover, e.g., Gore-Tex®. Walk in the center of well-maintained trails, avoid contacting brush along trails, and do not use deer trails. Periodically check for ticks while in tick-infested areas. Deer ticks like cool, moist environments, such as leaf litter, tall grass, and the edge of yards, playgrounds, wooded areas, or roadsides. Many infections occur within the home yard if bordered by deer-inhabited woods.

### **Outdoor clothing**

Wear light-colored long pants, long sleeved shirts and closely knitted socks. Tuck shirts into pants and tuck pants into socks. This will prevent a tick from crawling under clothing. Wear a kerchief and hat to protect your neck and head.

Rynoskin™ underwear is made from a knitted breathable stretch fabric that ticks have difficulty

penetrating

. It is reportedly helpful for hunters and anyone outdoors when the weather is cooler. Available in long sleeved tops, long bottoms, socks, hoods, and gloves. Available from rynoskin.com.

### **Permethrin Clothing Treatment**

Permethrin is a synthetic chemical that kills ticks. Treat shoes, boots, socks, pants, sleeves, gloves, kerchief, and hat. Spray clothing outdoors until wet. Do not apply to skin. Available from Sawyer, Ultrathon™ Gear and Clothing Spray, Duranon, Permanone, etc. or outdoor retail stores or online. A clothing soaking-treatment (Duration™) is available (see LINK 1 at end). Treated clothing can be worn when dry. A treatment lasts 6 weeks. Follow all label directions carefully.

### **Insect Shield® Clothing**

Clothing commercially treated with permethrin and effective through 70 washings. Developed by the US Department of Defense. Available from Insect Shield, ExOfficio, LL Bean, Orvis, REI, Columbia, or your own outdoor clothing can be commercially treated by Insect Shield® (see LINK 2 at end).

### **Repellents**

DEET products for use on skin or clothing. Caution using DEET on children. Follow label instructions and avoid getting repellent in the eyes or mouth. Higher concentrations provide longer protection.

Available as sprays, creams, or wipes, e.g., OFF®, Deep Woods OFF®, Cutter© Backwoods, and Ultrathon™ time-release formulations provide extended protection. Non-DEET repellents, include Natrapel® (rei.com), IR3535 (Avon Skin So Soft Bug Guard Plus IR3535® Expedition SPF30 Pump Spray), and BioUD™ (see LINK 3 at end), etc. Plant oils are reported to be tick repellents.

### **After returning indoors**

Immediately perform a careful tick check. Deer ticks are tiny and difficult to see. If possible, have someone else inspect you. Be sure to check your hairline and where clothes fit tightly. Parents should check children. Shower promptly using a washcloth to remove unattached ticks. Remove attached ticks

immediately using fine pointed tweezers or tick-removal tool. Grasp tick close to the skin, pull gently straight out. Do not use petroleum jelly, alcohol, soap, lit match or cigarette as this might cause the tick to regurgitate infectious microorganisms into you. Save tick in a plastic bag or vial with a moistened cotton ball for identification and possible testing. After removing the tick, call your doctor promptly and consider requesting immediate antibiotic treatment. If the tick is infected, early diagnosis and appropriate treatment is key to recovery. Delay will allow the infection to disseminate in the body where treatment is often less effective.

Consider keeping outdoor clothes in the garage or shed as ticks can migrate from clothing brought indoors and invade the home. You can also wash and dry your clothes immediately. Some people put the clothes in a trash bag then spray with permethrin and tie up the bag to kill the ticks before washing. Washing alone will not kill ticks, but a 30-minute hot cycle in a dryer will.

### **Damminix® Tick Tubes**

These are small paper tubes containing permethrin-treated cotton balls. Placed in mice habitats, the cotton is used for nesting material. Permethrin kills ticks on mice. Available from some home and garden stores and online (see LINK 4 at end) .

### **Select TCS™ Tick Control System**

Small plastic boxes containing bait to attract mice. The enclosed insecticide fipronil kills ticks on mice. See LINK 5 at end) for certified installers.

### **Yard spraying for tick control**

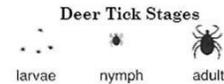
Available from lawn care and residential tree services companies, , and homeowner-applied hose-end applicators available from Home Depot, Lowes, etc. Available as permethrin, bifenthrin, deltamethrin, cyfluthrin, cypermethrin, cyhalothrin, or Sevin®. Treat shady yard areas, fence rows, woodpiles, stone rows, and yard-woods borders. Grassy areas greater than 9 feet from the border and

in full sun contain fewer ticks. (see LINK 6, 7 at end).

### **Pets**

Products available for dogs and cats, e.g., Frontline®, Fiproguard™, Certifect®, K9 Atvantix®, Preventic® and Seresto™ collars, etc. Caution: not all dog products are safe for cats. Read labels carefully. Obtain online or from your veterinarian. Consider keeping pets either inside or outside as even treated outdoor pets can bring ticks into your home and to your children. It is not advisable to have your outdoor pets sleep with you. See LINK 8 at end).

### **Deer ticks are small: Actual size**



### **LINKS**

- 1 - [www.travelerssupply.com](http://www.travelerssupply.com)
- 2 - [www.InsectShield.com](http://www.InsectShield.com) (use code LDASEPA at checkout for a 20% discount)
- 3 - [homs.com](http://homs.com)
- 4 - [www.ticktubes.com](http://www.ticktubes.com)
- 5 - [tickboxtcs.com](http://tickboxtcs.com)
- 6 - [bartlett.com](http://bartlett.com)
- 7 - <https://www.mosquitocontrolsepa.com/> (use code LDASEPA for a 10% discount)
- 8 - [tickencounter.org/prevention](http://tickencounter.org/prevention)

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