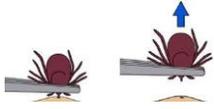


HOW SHOULD A TICK BE REMOVED?

Use fine-tipped tweezers. Grasping tick as close to the skin as possible, With a steady motion, pull the tick's body away from the skin.



Use a tick key-- place notch at front of the tick and pull up and back.



Grasp the embedded tick with fine-tipped tweezers or a tick key (never with bare hands) as close to your skin as possible and pull straight up.

Do not jerk or twist the tick as you extract it. Do not apply alcohol, fingernail polish, heat from a lit match, or petroleum jelly to the tick.

These methods are not effective and can increase the chances of the tick transmitting diseases. If the tick cannot be removed or part of it is left in the skin, consult your physician.

Wash hands with soap and water and cleanse the area with an antiseptic.

We recommend you have the tick tested for the various pathogen. Place the live tick in a zip-lock bag along with a blade of grass. Keep it in a cool place. It will live in that bag for 30 days. There are several laboratories that can test the tick, for free or for a small fee, to determine if it harbors the Lyme disease bacteria or other disease-causing organisms. Testing the tick will help your physician evaluate if you were exposed to the organisms.

- **Bay Area Lyme Foundation**
<http://www.bayarealyme.org/>
Testing is FREE!
- **IGeneX, Inc.**
795 San Antonio Rd, Palo Alto, CA 94303
(800) 832-3200
- **County of Sonoma, Dept. s Health Services, Public Health Lab**, 3313 Chanate Rd., Santa Rosa, CA 94504, (707) 565-4711

CAN PETS GET TICK-BORNE DISEASE?

Pets can get many of the same diseases that humans can get. Contact your veterinarian if your pet exhibits symptoms such as swollen joints, lameness or nervous system abnormalities and has been in an area where ticks occur. Your veterinarian can provide information on vaccines, tick repellents, testing & treatments appropriate for pets.

- Pets can bring ticks into homes thus into close proximity to people.
- Dogs are more likely to get tick-borne diseases than people.
- Dogs act as sentinels for Lyme disease — Lyme is often recognized in dogs before it's recognized in humans.
- Cats and horses can get tick-borne diseases, too.

CAN WILD ANIMALS GET TICK-BORNE DISEASES?

There is an increasing awareness among hunters that there are medical risks associated with handling wildlife, and certain safety precautions should be taken. Game meat & blood can become infected with Lyme disease & other organisms. Insects such as mosquitoes, ticks, flies, fleas or mites serve as vectors, capable of transmitting infection from an infected animal to another animal or a person. *Following certain game-handling precautions will minimize your exposure to them.*

- Hang a deer or elk carcass for a day or two away from your house or garage to allow the ticks to drop off. Avoid refrigeration for it may discourage ticks from dropping.
- Wear latex gloves while dressing and processing game. Gloves prevent any possible disease transmission through open cuts or abrasions.
- Use an insect repellent on skin (like DEET) and treat clothing with Permethrin or a similar vector spray while dressing game. Shower soon after. Check your body closely for ticks. Wash & dry your clothes.
- Always cook wild meat until the juices run clear and the meat temperature is 150-180°F to reduce the risk of food-borne disease.

Lyme and Tick-borne Diseases In Oregon



“Questing” Ixodes Tick

For information on ticks, Lyme disease and other tick-borne infections call or email:

Southern Oregon Lyme Disease Support Group

Sharon Lee, RN, MSN
(541) 879-0222
sleesold@aol.com

WHAT IS LYME DISEASE?

Lyme disease is a preventable bacterial infection transmitted to humans by the bite of a tick. Lyme disease was named for Old Lyme, Connecticut where it was first recognized in 1975. It has been spread to the rest of the US by migrating birds. It has since been reported in most counties of Oregon and is the most reported vector-borne disease in Southern Oregon as well as in the US.

WHAT CAUSES LYME DISEASE?

Lyme disease is caused by a corkscrew-shaped bacterium (spirochete) identified in 1982, and named *Borrelia burgdorferi*. This bacterium mainly inhabits the saliva of the *Ixodes pacificus* deer ticks. The ticks vary in size from the tiny larvae, poppy seed sized nymph to the sesame seed sized adult. The ticks act as vectors transmitting the spirochete when the tick feeding. There is no prescribed length of time from tick attachment to organism transmission.



Larvae, Nymph, Adult male & female

HOW DO TICKS BECOME INFECTED WITH LYME DISEASE?

Lyme disease is maintained in wild rodent and some migrating bird populations. The larval or nymphal ticks pick up the disease organism when they feed on the blood of infected rodents or birds. The adult ticks feed on larger hosts, such as deer, pets or humans for their final blood meal.

WHAT OTHER DISEASES ARE TRANSMITTED BY TICKS?

A single tick bite can transmit other infections such as **Bartonella, Babesia, Anaplasma, Ehrlichia, Mycoplasma and Relapsing Fever** which can complicate diagnosis and treatment of Lyme disease.

WHAT ARE THE EARLY SIGNS AND SYMPTOMS OF LYME DISEASE?

Recognizing the early signs and symptoms of Lyme disease is important.

If you have one or more of these signs and symptoms within 3 to 30 days after a deer tick bite or spending time in wooded areas where deer ticks are present, see your physician immediately.

- Fever and chills
- Fatigue
- Muscle and joint pain
- Headache
- A skin rash, called erythema migrans (EM), may have a "bull's eye" appearance – a red ring with a central clearing.
 - Not all rashes look like a bull's eye.
 - Less than 50% get the rash.



Erythema Migrans (EM) Rashes

WHAT ARE THE ADVANCED SYMPTOMS OF LYME DISEASE?

If a person is not treated early in the disease, these late signs and symptoms may develop weeks, months, or years after the tick bite:

- Persistent headache
- Fatigue, especially the day after exercise
- Multiple rashes
- Facial paralysis on one side (Bell's Palsy)
- Unexplained fever, sweats or chills
- Weakness, numbness, tingling sensations
- Pain or stiffness in neck, back or joints
- Irregular heartbeat or heart block
- Memory, concentration problems
- Chronic arthritis in one or more joints

HOW IS LYME DISEASE DIAGNOSED AND TREATED?

The CDC says that diagnosis of Lyme disease is based on signs and symptoms, presence of the EM

rash, and/or a history of exposure to deer ticks. The CDC recommended screening test (ELISA) is accurate less than 50% of the time. So, a person can have a negative test and still be infected. Tick-borne diseases can be treated by taking prolonged (6 weeks or more) antibiotics. Aggressive treatment during the early stage of the diseases can often cure the infection and prevent complications that can occur in the advanced stage. Treatment during the advanced stage is more difficult and not always successful. Therefore, it is important to see a Lyme literate physician within 2 weeks of a tick bite.

For the best diagnosis and treatment contact:

- **Bear Creek Naturopathic Clinic, 2612 E. Barnett Rd, Medford, 541-770-5563**

HOW CAN ONE PREVENT TICK BITES?

Whenever possible, persons should avoid entering areas that are likely to be infested with ticks. Individuals who venture into these areas should be aware of the hazard associated with tick bites and make it a habit to regularly check their bodies for ticks. Other personal protective measures should include:

- Wear light colored clothing so ticks can be seen and removed before they become attached to skin.
- Wear long pants and long-sleeved shirt. Tuck pants into socks or boots, and shirt into pants.
- Use repellents like Permethrin around shoes, ankles and pants and DEET or Picaridin on exposed skin. Be sure to follow the manufacturer's instructions carefully!
- Choose wide trails and walk in the center.
- Avoid oak leaf litter, brushy or grassy areas, deer trails, off-the-trail hikes & sitting on logs.
- Inspect yourself and others (including pets) thoroughly for ticks while walking in suspected tick infested areas and at the end of each day
- Put clothes in the dryer on high heat for 15 minutes after being in a tick area. Shower soon after.

