

Hawaii State Department of Health

Disease Investigation Branch

Oahu 586-4586, Maui 984-8213, Hilo 933-0912, Kona 322-4877, Kauai 241-3563

Lyme Disease

(Tick-borne Borreliosis, Lyme Arthritis)

What is Lyme disease?

Lyme disease is an illness caused by bacteria called *Borrelia burgdorferi*. Lyme disease is the most common tick-borne illness reported on the mainland United States but is not found in Hawaii, since the type of tick that spreads this disease is not present in Hawaii.

How do you get it?

Lyme disease is spread to people by the bite of an infected tick. Ticks may become infected by feeding on infected mice, squirrels or other small animals that carry the bacteria. Persons who spend a lot of time outdoors where ticks are found are at greatest risk of getting the disease. Lyme disease is not spread person-to-person.

What are the symptoms of the disease?

The first sign of infection is usually a circular rash that begins at the site of a tick bite, 3-30 days after exposure to the tick. The rash may expand over several days, and the center may clear, resulting in a "bull's-eye" appearance. Other common symptoms are fatigue, chills, fever, headache, and muscle and joint pains.

If untreated, the infection may spread to other parts of the body causing more symptoms including loss of muscle tone in the face, meningitis (inflammation of the lining of the brain and spinal column), shooting pains, heart palpitations and dizziness, and increasing joint pain, leading to arthritis.

When do symptoms start?

The symptoms usually begin within 1 month of being bitten by an infected tick. Ticks may also bite and fall off without being noticed, so any time you have been in a tick infested area and develop a rash, you should see a doctor.

What is the treatment for Lyme disease?

Lyme disease is treated with medicine prescribed by a physician.

How do you remove an attached tick?

Use fine-tipped tweezers, or protect your fingers with a tissue or latex gloves. Avoid removing ticks with bare hands. Grasp the tick as close to the skin surface as possible and pull upward with steady, even pressure. Do not twist or jerk the tick, as this may cause parts of the tick to break off and remain in the skin. Do not squeeze or crush the body of the tick because its fluids may contain infectious organisms.

After removing the tick, wash the affected area and hands with soap and water. It is important to remove the tick as soon as possible after discovery. Do not attempt to remove ticks by using petroleum jelly, lit cigarettes, or other home remedies; this may increase the chances of getting an infection.

How do you keep from getting Lyme disease?

The best way to prevent Lyme disease is to avoid exposure to ticks. When going into tick-infested areas, wear clothing that covers the arms and legs. Tuck trouser legs into socks, and shirts into trousers.

Prevent ticks from attaching by applying insect repellents to trouser legs and sleeves.

Check the entire body for attached ticks every 3 to 4 hours.

For more information, see the CDC's website at http://www.cdc.gov/ncidod/dvbid/lyme/index.htm