

Ticks

There are approximately 850 species of ticks worldwide, made up of two families: soft and hard ticks. These parasites transmit the widest variety of diseases of any blood sucking arthropod. Here in the United States current diseases include Lyme disease, ehrlichiosis, babesiosis, rocky mountain spotted fever, tularemia, and tick-borne relapsing fever.

Soft ticks commonly found in California are the Pajahuello tick, the Spinose ear tick, and the poultry tick. Hard ticks include the winter tick, the Pacific Coast tick, the Rocky Mountain Wood tick, the Brown Dog tick, and the Western Black-legged tick. Not all are interested in attaching themselves to humans!

Ticks come in one-host, two-host or three-host varieties. Many hard ticks feed on three hosts, one during each life stage. These ticks drop off and re-attach to a new host during each life stage, until finally the adult females lay their batch of eggs. In each case, the fed adult stage is terminal. After laying one batch of eggs the female dies, and after the male has reproduced, he dies as well.

Hard ticks crawl up stems of grass or perch on the edge of leaves with legs extended waiting for a host to pass by and onto which they can attach themselves. This behavior is known as "questing". Heat and movement stimulate questing.

Hard ticks can actually grow 200-600 times their unfed body weight after a blood meal. Soft ticks, on the other hand, quest in low-lying vegetation and only grow 5 to 10 times their body weight after feeding.

Many hard ticks can go for several months without feeding.

Ticks and Lyme Disease

Lyme disease was first recognized in the United States in 1975, after a mysterious outbreak of arthritis near Lyme, Connecticut. Since that time, reports of Lyme disease have increased dramatically.

It is spread by the bite of some ticks infected with *Borrelia burgdorferi*. The western black-legged tick (deer tick) is responsible for spreading Lyme disease in this area. This type of tick is much smaller than the more common dog tick, and is about the size of a pinhead in the larval and nymphal stages. As adults, they are only slightly larger.

Ticks can attach to any part of the human body but often attach to more hidden and hairy areas around the groin, armpits and scalp.

Research has indicated that ticks in the nymphal stage are more likely to feed on humans and transmit the disease. This is mainly because they largely remain

unnoticed which allows ample time for them to feed.

Ticks only crawl and do not fly or jump!

Lyme Disease can be difficult to diagnose. Symptoms include muscle ache, fever, and fatigue, symptoms which can easily be mistaken for other viral infections. Joint pain can be mistaken for arthritis, and neurological signs mistaken for conditions such as multiple sclerosis. The early stage of Lyme disease is usually marked by one, or more, of the following symptoms or signs.

Headache

Fever

Fatigue

Joint pain

Swollen lymph nodes

Skin rash (bullseye-shaped with outer round pinkish-red mark with inner red circle)

Treatment of Lyme Disease includes antibiotics under the supervision of a doctor. Patients treated in the early stages usually recover quickly and completely. However, symptoms may not become apparent for weeks, months, or even years after a bite.

HOW TO AVOID CONTRACTING LYME DISEASE

- Avoid tick-infested areas.
- Walk in the middle area of trails and avoid contact with brush at the side of trails.
- Wear light-colored clothing so that ticks can be seen more easily.
- Tuck in shirts, and pant bottoms into socks. Wear long sleeves and a hat.
- Use a tick-repellent.
- Stop every so often for a 'tick check'. If in a group, check each other!

IF YOU DO FIND A TICK ON YOU

If the tick is attached, remove it with tweezers. Grasp the tick as closely to the skin as possible and pull straight back gently to avoid leaving any part of the tick. Try not to crush it.

DO NOT burn the tick. Heat or too much force carries the risk of making the tick regurgitate, increasing the likelihood of infection.

DO NOT smother it in Vaseline or nail polish. The tick might take hours to die from suffocation. Removing the tick as quickly as possible is crucial.

Related Links:

- [County of San Diego Website: Lyme Disease](#)