Status

☑ Blood feeder

☑ Can transmit pathogens through bite

# **Ticks**

## **General Information**

Ticks are blood-sucking arthropods, usually found in grassy areas, in brush, or in wooded areas. They are a health concern because some species can transmit disease-causing bacteria and viruses to humans, pets, and wildlife. Tick mouthparts are adapted to penetrate and hold fast in the skin of their host. Additionally, they secrete a cement-like material that helps them stay attached to their host.

Most ticks spend the majority of their life on or near the ground, waiting for a suitable host animal. They climb up tall objects, such as plants or up onto fences, and wait for a suitable host to pass by. This behavior is called questing. Once a host passes by, the tick climbs on the host and feeds.

Ticks do not:

- Fly, jump, run, or fall out of trees.
- Embed their entire head or body in skin.
- Have mouthparts threaded like a screw that can be unscrewed.

### What Do They Look Like?

Ticks are flattened front to back and have a large shield (scutum) on their back. Adults have eight legs. Their central mouthpart (hypostome) has backward-pointing barbs that hold it in skin. On either side of the hypostome are finger-like pedipalps that help drive the hypostome into skin.

#### **Health Risks**

Ticks can transmit several bacteria and viruses that cause diseases such as Lyme disease and Pacific Coast tick fever (PCTF). Disease transmission occurs during the feeding process. It is important to remove ticks correctly and as soon as possible. Early symptoms of Lyme disease may include head and muscle aches, sore throat, nausea, fever, stiff neck, or fatigue. Later symptoms may involve the skin, eyes, heart, nervous system, brain, or joints. Symptoms of PCTF include fever, headache, rash, nausea, abdominal pain, lack of appetite, and red eyes. Serious cases can result in death. Seek medical attention if you experience symptoms after a tick bite.

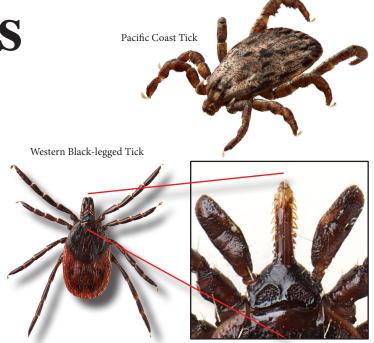
#### **Protect Yourself: Avoid Ticks**

Around your home:

- Keep grass mowed low.
- Cut back and thin dense shrubs.
- Remove leaf piles.

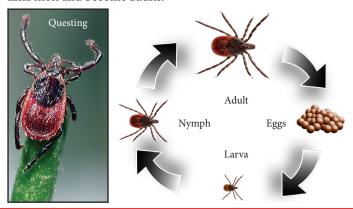
When camping or hiking:

- Stay on groomed trails.
- Wear long pants and long-sleeved clothing.
- Wear light colored clothing so ticks can be easily seen and removed.
- Tuck pants into socks or boots.



## Life Cycle

Ticks have four life stages in their life cycle: egg, larva, nymph, and adult. Mated females take a single blood meal, engorge with blood, and drop off their host. She lays 3,000 to 4,500 eggs on the soil surface. A few days later, the 6-legged larvae hatch from the eggs. Larvae climb onto a host animal and feed on its blood. As larvae eat and mature, they outgrow their skin, grow a new skin layer, and shed the old one, a process called molting. After the molt, they grow two more legs and become 8-legged nymphs. Nymphs also grow and molt, until they reach their final molt and become adults.



#### **Tick Removal**

- Use tweezers and grasp the tick's mouthparts as close to the skin as possible.
- Gently pull the tick straight out with steady pressure.
- Do not twist or jerk the tick.
- Do not try to remove the tick by burning it or applying salve or lotion.
- Apply an antiseptic to the bite area after removing tick.
- Wash your hands with soap and water.

