

## PROTECT YOURSELF AND YOUR FAMILY FROM TICKS

- 1. Protect yourself from ticks:** Wear light-colored clothing with long sleeves and long pants when hiking, walking or working in areas where ticks may be present. Pre-treat clothing and equipment with permethrin to kill ticks. Apply repellent containing DEET (at least 20% concentration) on exposed skin to repel ticks as well as mosquitoes. Discourage ticks around your home by keeping grass mowed, cutting back dense vegetation, and removing debris piles.
- 2. Perform regular tick checks:** Showering after being in tick habitat can help you detect ticks on your body. You should continue to check yourself for ticks periodically for several days, paying close attention to the hairline, waistline, armpits, and other places where clothing is constricted. Carefully examine children and pets as well.
- 3. Remove attached ticks immediately:** Removing ticks promptly can reduce the risk of transmission of Lyme disease and other tick-borne diseases.
- 4. Seek medical attention:** Contact your physician if you become ill after a tick bite.
- 5. Contact the District:** For additional information call 800.231.3236 or 707.285.2200, or visit us online at [www.ms mosquito.com](http://www.ms mosquito.com).

### What is a vector?

A vector is an insect or any other animal capable of transmitting a disease or causing harm to people or animals.



## OUR SERVICES

The Marin/Sonoma Mosquito & Vector Control District is committed to protecting the health and welfare of the communities in which we serve.

### *Our services include:*

- Mosquito Control & Mosquitofish
- Ground-Nesting Yellowjacket Control
- Rodent Control Advice & Inspections



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[www.twitter.com/MSMVCD](http://www.twitter.com/MSMVCD)

### Marin/Sonoma Mosquito & Vector Control District

595 Helman Lane, Cotati, CA 94931

Monday through Friday 7:00am to 3:30pm

**1.800.231.3236 or 707.285.2200**

**[www.ms mosquito.com](http://www.ms mosquito.com)**

# TICKS

## OF MARIN & SONOMA COUNTIES



PROTECTING PUBLIC HEALTH SINCE 1915

## THE FACTS ABOUT TICKS

Ticks are blood-sucking arthropods that can transmit a wide variety of diseases such as Lyme disease, Rocky Mountain spotted fever, tick-borne relapsing fever, tularemia, babesiosis, anaplasmosis and ehrlichiosis. Lyme disease is the most common tick-borne disease in the United States.

Ticks can be found in grassy, brushy, or wooded areas, especially along sides of trails. Ticks do not fly, jump, or fall out of trees. Adult ticks wait on the tips of vegetation with legs outstretched for people or other animal hosts to pass by, while nymphs are commonly found in leaf litter or on logs and branches. After a tick grasps onto a host, it will crawl in search of a suitable location to attach to the skin. Once attached, the tick will secrete a cement-like substance that helps it stay firmly in place to feed. Generally, the longer the tick stays attached the higher the risk of disease transmission. The tick may remain attached for many hours or several days, after which it will drop off the host.

### A tick's life cycle

Ticks have four distinct life stages (photo below): 1) egg, 2) larva, 3) nymph, and 4) adult. Both males and females in the last three stages require a blood meal.

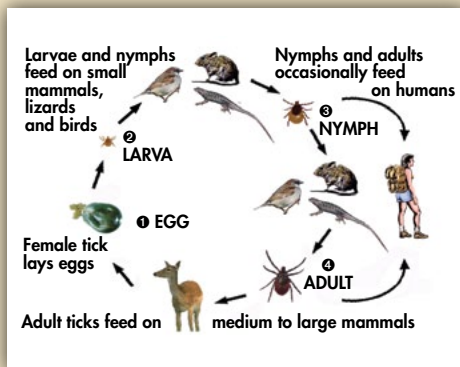


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## SOME LOCAL TICK SPECIES OF CONCERN



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### Western Black-legged Tick (*Ixodes pacificus*)

This tick is usually found locally from October through July. Adults are commonly encountered during the cooler months while the nymphs are found later in the spring and early summer. Larvae and nymphs typically feed on small animals such as rodents and lizards, while adults feed on larger mammals including humans and deer. Both nymphs and adult females can transmit Lyme disease bacteria to humans.



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### Pacific Coast Tick (*Dermacentor occidentalis*)

This tick is usually found locally from November through June. Larvae and nymphs feed on small rodents while adults feed on large mammals, especially deer.



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### American Dog Tick (*Dermacentor variabilis*)

This tick is usually found locally from May through August. Larvae and nymphs feed on smaller mammals, while adults feed on larger mammals, especially dogs.



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From left to right: larva, nymph, adult male, and adult female tick (photo enlarged to show detail)

## PROPER TICK REMOVAL

- Do not squish, burn, smother or twist ticks.
- Ideally, use tweezers to grasp the head of the tick as close to the skin as possible, and pull straight out.
- Use gloves, tissue or another barrier if you must use your fingers to remove the tick.
- Wash your hands and the bite site with soap and water after tick removal.
- Apply an antiseptic to the bite site.



A localized reaction or infection can occur where the tick was attached. If redness or pain develops at the tick bite site, consult your physician.

If you are bitten by a tick it is important that you remove the tick as soon as possible to reduce the risk of contracting a tick-borne illness.

If you have questions regarding tick testing, contact your local health department.