



Bay Area Lyme  
FOUNDATION



## WHAT EDUCATORS NEED TO KNOW

# About Lyme Disease

People are still under the mistaken assumption that Lyme disease is an East Coast problem. In fact, Lyme has been detected in 42 of 58 California counties and—most concerning—in California “tick season” is year-round. The CDC states that Lyme disease is the fastest-growing vector-borne disease in the US with over 300,000 new cases each year. The ticks that carry the bacteria responsible for Lyme disease (*Borrelia burgdorferi*) are now not only found in forested areas where leaf mold, shrubs and tall grasses abound, but in chaparral and meadows. With limited awareness and an expanding geographic footprint, Lyme disease has become a genuine public health threat.

## At Bay Area Lyme, our mission is to make Lyme disease easy to diagnose and simple to cure

Bay Area Lyme Foundation is a national nonprofit dedicated to accelerating medical breakthroughs for Lyme disease. Lyme research is significantly underfunded. Our goal is to accelerate the pace of new drug and diagnostic development in order to alleviate the suffering of millions. We have a rigorous funding model for new medical research. And, thanks to the generous contributions of private sponsors, we are able to dedicate 100% of every donation dollar directly to research project initiatives. Although primarily a research-based organization, awareness and prevention are important aspects of our mission.

We are committed to ensure that all California school children get the right information about preventing tick-borne diseases. Our educational outreach campaign’s goal is to reach 200,000 California 4th- through 6th-grade school children each year. Students engaging in the outdoors on school field trips, camping trips, summer camps and outdoor education programs must be as “tick-smart” as possible.

**Studies show that school-age children are particularly susceptible to contracting Lyme. We are actively targeting this specific demographic to reduce the incidences of this and other tick-borne diseases.**



## WHAT STUDENTS NEED TO KNOW ABOUT LYME DISEASE:

- The kinds of natural environments that ticks inhabit
- Ticks carry bacteria that can make people extremely sick
- Ticks use humans as a food source and transmit bacteria when feeding
- How to check for ticks
- Often, people don’t even KNOW they’ve been bitten by a tick
- The symptoms that develop after a tick bite that indicate there’s a problem
- Doctors often don’t connect new illness(es) with ticks and Lyme disease
- Getting treated EARLY after a tick bite is **very** important
- The right steps to take if someone is bitten

# Found a tick?



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## Stay calm...remove the tick as soon as possible.

1. Using pointy tweezers, grasp the tick as close to the skin as possible.
2. Lift the tick STRAIGHT UP to pull out of the skin. Do not twist. (Yanking may increase infection risk).
3. If the tick is alive, place it inside a sealed zip-lock bag or sealed vial with a piece of moist paper towel or swab of moist cotton.
4. If tick is dead, save the tick in a zip-lock bag or vial. **Do NOT store the tick in alcohol or any other substance** as it may compromise testing.
5. Label the bag and document the tick for testing. An example of the correct information you need to record and keep with the tick is below.
6. Wash your hands and the bite with soap and water or antiseptic.
7. Send tick WITH documentation home with child to a special laboratory. **Go to [www.bayarealyme.org](http://www.bayarealyme.org) for an up-to-date list of places to send the tick.**



Image © Tick Encounter.org

### REMOVING TICKS SAFELY:

- Grasp the tick as close to the skin as possible
- Pull straight up, calmly and quickly

#### EXAMPLE of CORRECT Tick-Bite Documentation

Date \_\_\_\_\_ Time removed: \_\_\_\_\_

From whom: \_\_\_\_\_ Age: \_\_\_\_\_

Body part(s) attached to: \_\_\_\_\_

Visible rash? Yes \_\_\_\_ No \_\_\_\_

Town/zipcode where acquired: \_\_\_\_\_

Symptoms noted at time of bite: \_\_\_\_\_

#### Notes for Parents

Early treatment is key to preventing debilitating complications that may arise from a tick bite. Symptoms usually appear days or weeks after infection and include any of the following:

**Not everyone gets a rash.** If your child is symptomatic and

- Skin rash or redness at bite site
- Headaches
- Flu-like ailments
- Extreme fatigue
- Dizziness
- Joint pain
- Bell's Palsy

has been exposed, call a doctor. Be vigilant; not all tests to establish if humans are carrying the bacteria that causes Lyme are reliable. Trust your instincts. Consider a second opinion.

**To get the tick tested, it must be sent to a special laboratory. Go to [www.bayarealyme.org](http://www.bayarealyme.org) for a list of places to send the tick.**

## Know the stats:

Ticks may carry a number of different bacteria, each responsible for different tick-borne diseases. The most common pathogen is *Borrelia burgdoferi*, the bacteria responsible for causing Lyme disease.

- 300,000 new cases of Lyme disease annually in the US
- Greatest incidence of Lyme is among school-age children
- In California, tick season is year-round
- Infected ticks are found in 42 of 58 counties in California
- Lyme is reported in 49 states
- Infection rates vary considerably by location (even park-to-park and county-to-county)

Ticks have dirty mouths! A single tick bite can transmit other diseases besides Lyme, often referred to as co-infections. Understanding the possibility of these other infections and knowing their symptoms will help you get the proper diagnosis and treatment. Some of the most common tick-borne diseases include:

- Anaplasmosis
- Babesiosis
- Bartonella
- Colorado tick fever
- Ehrlichiosis
- Rocky Mountain spotted fever
- Southern tick-associated rash illness (STARI)
- Tick Paralysis
- Tick-borne relapsing fever
- Tularemia

## Prevention is Key! Teach kids to:

- Conduct tick-checks DAILY, especially during showers
- Ticks like certain parts of the body: groin, armpits and around the waistband
- Walk in the middle of the trail
- Avoid bushes, grasses, leaf piles and logs
- Wear light-colored clothing covering ankles and wrists
- Ticks crawl UP, so tuck pants into socks
- Stay calm and go talk to an adult if they find a tick on themselves or another person
- Make sure they tell the doctor they've been in a place where ticks are present if they get sick after outdoor education, even if they don't think they were bitten

**Teachers!** Get free educational materials to help you teach Lyme Disease awareness. Visit [www.bayarealyme.org/educators](http://www.bayarealyme.org/educators)