



**Bay Area Lyme**  
FOUNDATION



# About Lyme Disease

Lyme disease is the fastest growing vector-borne illness in the US. It is an infectious disease caused by the bacteria *Borrelia burgdorferi* transmitted to humans by the bite of an infected blacklegged tick. Untreated, Lyme disease can become a severely debilitating disease affecting joints, the heart, the brain, and/or the central nervous system. More than two million Americans are struggling with persistent Lyme disease. With limited awareness and an expanding geographic footprint, Lyme disease has become a prevalent 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. The CDC states that it's the fastest growing, vector-borne disease in the United States. Yet, despite an estimated **620,000+ new cases per year**, Lyme disease currently receives little government funding.



## MYTHS OF LYME DISEASE

Getting the facts about Lyme is not always easy. There are many misconceptions about Lyme disease.

**MYTH: Everyone with Lyme disease gets a telltale bulls-eye rash.**

**REALITY:** Recent studies show that less than 50% develop a bulls-eye, and the CDC estimates that 30% of people never develop any type of skin rash.

**MYTH: Lyme disease is a Northeast problem.**

**REALITY:** Lyme disease has been reported in all 50 states, and ticks carrying the bacteria that cause Lyme disease are widespread throughout California.

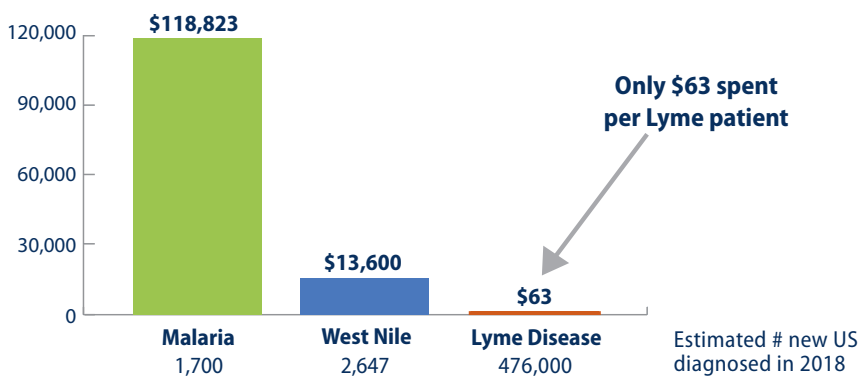
**MYTH: Antibiotics cure everyone.**

**REALITY:** Statistics show that at least 20% of patients continue to exhibit symptoms even after antibiotic treatment.

**MYTH: If the test is negative, you don't have Lyme.**

**REALITY:** Current diagnostics are less than 50% accurate.

**NIH Spending Per US Patient Vector-borne Diseases – 2018**



Sources: National Institutes for Health (NIH). Approximate case counts from Centers for Disease Control & Prevention (CDC). Malaria is a global health concern but virtually all US cases are contracted outside of the US. An estimated 1500-2000 cases are domestically contracted. © Bay Area Lyme Foundation

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. Thanks to the generous contributions of private sponsors, we are able to dedicate 100% of every donation dollar directly to research project initiatives and awareness programs.

# Found a tick?



## 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 OUT to pull out of the skin. Do not twist.
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. For an example of the correct information you need to record, visit [www.bayarealyme.org](http://www.bayarealyme.org).
6. Wash your hands and the bite with soap and water or antiseptic.
7. Visit [www.bayarealyme.org/get-help/tick-testing](http://www.bayarealyme.org/get-help/tick-testing) 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 out, calmly and quickly.

## ABOUT BAY AREA LYME FOUNDATION

Bay Area Lyme is a national nonprofit dedicated to accelerating medical breakthroughs for Lyme disease. The organization was founded in 2012 by a group of ambitious entrepreneurs and community leaders from Silicon Valley, each fueled by the passion of having personally suffered through this debilitating disease. Alarmed by the lack of answers and public awareness about Lyme, the team saw an opportunity to mobilize the research community and engage the private sector in the effort to develop reliable diagnostics and helpful therapeutics. **Learn more and find out how you can get involved and join our cause.** Visit [www.bayarealyme.org](http://www.bayarealyme.org).



## Know the stats:

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

- Over 620,000 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 all 50 states
- Infection rates vary 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        | • Ehrlichiosis                                  | • Tick Paralysis             |
| • Babesiosis          | • Rocky Mountain spotted fever                  | • Tick-borne relapsing fever |
| • Bartonella          | • Southern tick-associated rash illness (STARI) | • Tularemia                  |
| • Colorado tick fever |   |                              |

## Prevention is Key!

- Walk in the middle of the trail, avoiding questing ticks on the grassy edges and leaf litter
- Conduct THOROUGH tick-checks DAILY, especially during showers
- After being outdoors, dry clothes in the dryer on high for 10-20 minutes to kill any ticks
- Wear light-colored clothing to more easily spot ticks
- Ticks crawl UP, so tuck pants into socks
- Monitor for any new symptoms for months after possible tick exposure and seek medical care from an experienced medical provider