



How Can You Help Others with Lyme Disease?

Much research still needs to be conducted to make Lyme disease easy to diagnose and simple to cure. In order for researchers to discover and explore potential new diagnostics and treatments, they need blood, urine and tissue samples to use in their studies. The Lyme Disease Biobank, sponsored by Bay Area Lyme Foundation, is working to obtain and characterize critical samples for researchers. By collecting blood and urine from untreated patients with early-stage Lyme disease and patients with chronic disease as well as tissue samples from late-stage patients, this important program will help dramatically accelerate research efforts to accelerate medical breakthroughs. The Lyme Disease Biobank is a collection of nearly 700 human biological samples that facilitates research of Lyme disease and other tickborne infections.

You can help! There are currently three ways to get involved:

1) Know the Symptoms—Tell Your Family, Friends and Acquaintances

Make sure family, friends and acquaintances know the symptoms of Lyme disease. If you or someone you know is experiencing early symptoms, or have just been diagnosed, please donate blood samples by making an appointment at one of our collection centers. Donors must be 10 years of age or older and complete an authorization/eligibility screening. Patients who meet these qualifications should visit www.bayarealyme.org/our-research/biobank/collection-sites.

2) Register Now for Future Organ Donation

All patients with Lyme disease are encouraged to register with the Lyme Disease Biobank Tissue Program (www.bayarealyme.org/our-research/biobank) and MyLymeData (www.mylymedata.org). Registering with our partner NDRI as a future donor of post-mortem organs is critical, as it is rarely possible to evaluate how tick-borne disease may infect vital organs such as a person's heart and/or brain. By also providing information about your symptoms and medical history to MyLymeData, you can assist researchers in understanding the disease.

3) If You Are Having Knee Surgery ...

If you have a surgery that removes tissue from an organ or joint, such as knee replacement, the harvested tissue can be donated to this research program. Registered donors will complete an authorization/eligibility screening prior to surgery. Based on a collaboration with MyLymeData, medical history provided to MyLymeData can be paired with the tissue sample if the donor chooses this.



TISSUE AND ORGAN DONATION ADDITIONAL RESOURCES

Lyme Disease Biobank's Lyme Disease Tissue Collection Program is the only national initiative collecting tissue and organ samples for Lyme disease research. The program is being conducted in conjunction with the National Disease Research Interchange (NDRI).

More information, and appropriate forms for tissue and/or organ donation for Lyme disease research can be found by visiting NDRI's Private Donor Program website at **www.ndriresource.org/lyme-disease** or by calling NDRI at 800-2222-NDRI (6374), Option 5.

Participants are also encouraged to register with MyLymeData at www.mylymedata.org and link their tissue sample with their MyLymeData profile to help researchers better understand this complex disease.

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 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. For an example of the correct information you need to record, visit 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 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 guickly

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 late 2011 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.



Committed to making Lyme disease easy to diagnose and simple to cure

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 50 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:

(STARI)

Tularemia

Tick Paralysis

• Tick-borne relapsing fever

- Anaplasmosis
- Babesiosis
- Bartonella
- Colorado tick fever
- Ehrlichiosis
- Rocky Mountain spotted fever

Prevention is Kev!

- 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, avoiding bushes, grasses, leaf piles and logs
- Wear light-colored clothing covering ankles and wrists
- Ticks crawl UP, so tuck pants into socks
- Coinsider treating your clothing with Permethrin
- Stay calm if you find a tick on yourself or another person
- Make sure you tell your doctor if you get sick after you've been in a place where ticks are present, even if you don't think you were bitten

Southern tick-associated rash illness