



**lyme.kaiserpapers.org**

**A Kaiser Papers  
Public Service Page**



In Copyright Since September 11, 2000  
This web site is in no manner affiliated with any  
Kaiser entity and the for profit Permanente  
Permission is granted to mirror this web site -  
Please acknowledge where the material was  
obtained.

## Lyme Disease in California

Lyme and other tick borne disease information for California is excellent compared to other Western states. This is mainly due to the efforts of the California Lyme Disease Association (CALDA) and an enlightened California Department of Public Health.

Despite these efforts, most physicians in California remain uneducated about Lyme disease and rarely consider it in differential diagnosis mistakenly believing the disease is “rare” in the West. HMO’s and major health plans discourage the appropriate diagnosis and treatment of Lyme disease because of potentially large expenses. The HMO penetration rate in California is over 40%. <http://kff.org/other/state-indicator/hmo-penetration-rate/>

Kaiser is headquartered in California and is a well-known denier of Lyme disease.

California is one of the relatively few states that have passed legislation protecting physicians who provide long-term treatment to Lyme disease victims. In 2005, CALDA worked on and supported legislation amending Section 2234.1 of the Business & Professions Code to extend the physician protection provision in an alternative medicine bill to physicians who treat persistent Lyme disease, provided they meet certain conditions. The Senate committee amendment specifically recognizes in statute the treatment of “persistent Lyme disease.”

### **Major resources**

#### **CALDA – California Lyme Disease Association**

California Lyme Disease Association (CALDA) is a non-profit corporation acting as the central voice for all tick-borne disease issues. The site provides comprehensive information about Lyme disease in California and nationally.

**CALDA played a major role in the investigation by the Connecticut Attorney General into the Lyme disease guidelines issued by the Infectious Diseases Society of America (IDSA).** CALDA is also publisher of the Lyme Times, the only national print journal dedicated to Lyme disease.

<http://www.lymedisease.org/>

### **CALDA Lyme Policy Wonk**

Lorraine Johnson, JD, MBA is an attorney advocate on issues related to the medico-legal and ethical aspects of Lyme disease. Lyme Policy Wonk is a blog that focuses on medico-legal ethics and health care policy issues in Lyme disease.

<http://www.lymedisease.org/news/lymepolicywonk/index.1.html>

## **Maps**

### **Lyme risk map of California**

The ticks that carry Lyme disease have been found in all but two counties in California.

[http://www.lymedisease.org/california/california\\_map.html](http://www.lymedisease.org/california/california_map.html)

### **Mapping the national distribution of blacklegged ticks in 1998**

[http://wildlifehealth.tennessee.edu/lyme\\_gradient/map.htm](http://wildlifehealth.tennessee.edu/lyme_gradient/map.htm)

### **Where tick-borne diseases are found (from IDEXX, a veterinarian testing laboratory)**

[http://www.dogsandticks.com/diseases\\_in\\_your\\_area.php](http://www.dogsandticks.com/diseases_in_your_area.php)

Note; the well-executed and thorough tick studies by entomologist Robert Lane, Ph.D of UC Berkeley played an important part in the appropriate recognition of Lyme disease in California. Many of his tick and Lyme disease studies can be found on the Internet.

## **State provided information**

### **Lyme disease in California**

The link below provides a number of links for Lyme disease information issued by the California Department of Public Health.

<http://www.cdph.ca.gov/healthinfo/discond/Pages/LymeDisease.aspx>

### **Tick borne diseases in California**

Provides information on other tick-borne diseases found in California.  
<http://www.cdph.ca.gov/HealthInfo/discond/Pages/TickBorneDiseases.aspx>

### **Tick identification brochure**

<http://www.cdph.ca.gov/HealthInfo/discond/Documents/tickcard2007eng.pdf>

### **Lyme Disease Advisory Committee (LDAC)**

The mission of the Lyme Disease Advisory Committee (LDAC) is to make recommendations to the California Department of Public Health (CDPH) on strategies to enhance the awareness of the public and the medical community about Lyme disease in California, and thereby reduce exposure to, and suffering from, this and other tick-borne diseases.

<http://www.cdph.ca.gov/services/boards/ldac/Pages/default.aspx>

### **U.C. Davis – Lyme disease in California**

“In most areas of northern California where Lyme disease occurs, only about 1 to 2% of the adult *Ixodes pacificus* ticks and 2 to 15% of the nymphal ticks, on average, are infected with *Borrelia burgdorferi*. However, Lyme disease transmission risk can be highly localized. In one woodland site in Mendocino County, for example, 41% of the nymphs were found to contain Lyme disease bacteria.”

<http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7485.html>

### **Studies**

#### **Stanford researchers find surprising level of tick-borne disease risk on local trails**

- Study reveals mysterious pathogen in higher concentrations than thought in trailside ticks in the San Francisco Bay Area.

<http://news.stanford.edu/news/2015/august/ticks-lyme-risk-081815.html>

#### **DENSITY AND SPATIAL DISTRIBUTION OF IXODES PACIFICUS (ACARI: IXODIDAE) IN TWO RECREATIONAL AREAS IN NORTH COASTAL CALIFORNIA**

<http://www.ajtmh.org/content/62/3/415.full.pdf>

#### **Mitochondrial DNA sequence variation in *Ixodes pacificus***

<http://www.nature.com/hdy/journal/v83/n4/full/6886110a.html>

Note; Examines genetic variation in tick populations of western states.  
Map of areas studied -

[http://www.nature.com/hdy/journal/v83/n4/fig\\_tab/6886110f1.html#figure-title](http://www.nature.com/hdy/journal/v83/n4/fig_tab/6886110f1.html#figure-title)

**PREDICTING DENSITY OF IXODES PACIFICUS NYMPHS IN DENSE WOODLANDS IN MENDOCINO COUNTY, CALIFORNIA, BASED ON GEOGRAPHIC INFORMATION SYSTEMS AND REMOTE SENSING VERSUS FIELD-DERIVED DATA**

<http://www.ajtmh.org/content/74/4/632.full>

**SPATIAL PATTERNS OF LYME DISEASE RISK IN CALIFORNIA BASED ON DISEASE INCIDENCE DATA AND MODELING OF VECTOR-TICK EXPOSURE**

<http://www.ajtmh.org/content/75/4/669.full>

**Variation in the density of questing Ixodes Pacificus in California**

<http://www.jstor.org/pss/3285817>

**A newly identified intraerythrocytic Babesia-like organism, WA1, and its relatives were recently shown to be infectious for humans in the western United States (1989)**

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC107933/>

**News articles**

There have been numerous news articles about Lyme disease in California. A few of the more notable ones are listed below.

**Lyme Disease Is A Ticking Epidemic**

Comments by Dr. Raphael Stricker, a Lyme and tick-borne disease specialist in San Francisco.

<http://www.sfgate.com/news/article/Lyme-Disease-Is-A-Ticking-Epidemic-3182068.php>

**Sleuthing Lyme**

**Lyme Disease Often Misdiagnosed**

[http://www.smdailyjournal.com/article\\_preview.php?id=63155](http://www.smdailyjournal.com/article_preview.php?id=63155)

**Support groups**

**California has a number of support groups throughout the state. Below is a link to the California support groups listed by CALDA.**  
[http://www.lymedisease.org/california/california\\_support\\_groups.html](http://www.lymedisease.org/california/california_support_groups.html)

**CALDA has also set up a national network of moderated online patient support and information groups. The California group is located at** <http://health.groups.yahoo.com/group/californialyme>.

[lyme.kaiserpapers.org](http://lyme.kaiserpapers.org)

[KaiserPapers.org](http://KaiserPapers.org) In Copyright since 2000