

**Lyme Disease Advisory Committee (LDAC) Spring Meeting
April 11, 2018
Minutes**

Committee members in attendance

Barbara Barsocchini, California Lyme Disease Association (LymeDisease.org) [via phone]
Karen Chew, Lyme Disease Support Network
Robert Lane, PhD, University of California, Berkeley
Lisa Messner, Lyme Disease Support Network
James Miller, PhD, University of California, Los Angeles
Chris Parlier, Lyme Disease Support Network, Committee Chair
Chindi Peavey, PhD, Mosquito and Vector Control Association of California (MVCAC) [via phone]
Raphael Stricker, MD, California Medical Association
Kerry Padgett, PhD, representing California Department of Public Health (CDPH) for Vicki Kramer

Committee members absent

Scott Morrow, MD, MPH, San Mateo County Health Department
Vicki Kramer, PhD, California Department of Public Health (CDPH)

Other attendees:

CDPH staff included:

Claudia Erickson, MS, CHES®, Public Health Educator, Committee Coordinator
Kerry Padgett, PhD, Supervising Public Health Biologist
Melissa Yoshimizu, PhD, Senior Public Health Biologist
Anne Kjemtrup, DVM, MPVM, PhD, Research Scientist
Greg Hacker, MS, Associate Public Health Biologist
Allyx Nicolici, Health Educator
Nikki Johnson, CHES®, Zoonotic Surveillance Administrative Assistant
Mary Beth Danforth, PhD, Biologist
Marry Joyce Pakingan, Assistant Microbiologist

Various members of local vector control agencies and the general public joined the meeting.

I. Roll call and opening comments

Meeting brought to order by Chris Parlier, LDAC Chair, at 10:00am.

II. Committee member updates

Dr. James Miller reported there is still no vaccine for Lyme disease. Dr. Miller also discussed a study by Dr. Samuels at the University of Montana ([linked here](#)) which discusses gene regulation in *Borrelia burgdorferi*. Dr. Miller discussed concerns with the new taxonomy of

Borrelia/Borreliella. The new taxonomy is not official, but researchers can use the new nomenclature in published papers. Dr. Miller noted that many physicians and researchers in the field are skeptical about the new name because it may cause public confusion and database issues. Dr. Miller and the committee suggested CDPH and the Centers for Disease Control and Prevention (CDC) address the nomenclature change on their webpages.

Dr. Robert Lane published a report earlier this year regarding *Borrelia miyamotoi* infections in Californians. His lab found compelling evidence for human infection and highlighted the difficulties associated with serologic testing for this newly described human disease. Dr. Lane believes there is an urgent need for a new serology test for better specificity. California has a minimum of 12 species of *Borrelia* and there is cross-reactivity between the species.

Dr. Ray Stricker has published a paper in the Journal of Healthcare about persistent symptoms in patients with Lyme disease. The study looked at 12 Lyme disease patients who had previously undergone antibiotic treatment. Findings showed all 12 patients had detectable spirochetes post-treatment, suggesting Lyme disease treatments need improvement. A second study by Dr. Stricker looked at patients he diagnosed with Morgellons disease. His findings suggested that most patients with Morgellons disease also had Lyme disease and roughly 6% of those with Lyme disease had Morgellons. He summarized that Lyme disease and possible co-infections cause a vast set of symptoms which make diagnoses and treatment difficult.

Lisa Messner reported that she is no longer organizing the Lyme disease support group in Ventura. However, she continues to provide online and phone support to individuals upon request. Ms. Messner also requested feedback regarding the Lyme disease information on the [Seasons on the Fly webpage](#).

Dr. Chindi Peavey mentioned MVCAC's new website and reminded meeting participants that local vector control agencies often do presentations for the public. Local agencies are listed on the [MVCAC website](#).

Barbara Barsocchini reported on the continuation of the [MY Lyme Data](#) project. A biostatistician has been hired to work on the project. The organization also continues to collaborate with other groups such as UC Davis and Johns Hopkins.

Karen Chew suggested running a PSA in movie theatres as a way to effectively reach the public.

Dr. Kerry Padgett reported that CDPH is busy with vector-borne disease surveillance. Biologists are tracking *Aedes* mosquitoes and developing a pesticide resistance program. CDPH continues to follow Zika, plague, and hantavirus cases and is working to enhance *B. burgdorferi* surveillance and tick testing. Dr. Padgett mentioned the newly named *Rickettsia* species which is named after Dr. Robert Lane (*Rickettsia lanei*).

CDPH Progress Report

A. Education Update (Claudia Erickson, MS, CHES®)

Ms. Erickson provided a report on tick-bite prevention outreach activities including YouTube video views, webpage visits, and distribution of educational materials, which have been tracked from November 2017 to April 2018. The target populations for outreach include members of the public, medical and public health communities, and local agencies. YouTube viewership has decreased since the last meeting prompting discussion about the importance of informing the public about tick activity during winter months. There have been thousands of visits to both the [CDPH Tick-Borne Diseases webpage](#) and the [CDPH Lyme Disease webpage](#). Thousands of educational materials were distributed; the Common California Ticks wallet I.D. card continues to be the most requested. Various papers and presentations from the staff at CDPH were listed.

B. Repellent Toolkit Development (Allyx Nicolici)

Ms. Nicolici reported on the development of an insect repellent educational campaign that CDPH will be conducting. This campaign will create digital educational materials and social media to provide information to the public about repellents so they can make informed decisions about which repellent to use. Committee members were enthusiastic about the campaign and provided suggestions.

C. Surveillance Update (Melissa Yoshimizu, PhD)

Dr. Yoshimizu reported on the number of Lyme disease cases in 2017, with 89 confirmed cases reported to date. Cases continue to be most prevalent along the northern coast and western facing Sierra Nevada regions. Due to a recent change in case definition, cases with rash only symptoms that are not laboratory confirmed will no longer be classified as confirmed. Since October 2017, 1,553 ticks (including three larval pools) were submitted for testing. Seventeen (1.1%) adults tested positive for *B. burgdorferi*; nine (0.6%) adult ticks and one pool of larvae (6.3%) tested positive for *B. miyamotoi*. CDPH goals include collecting and testing *Ixodes pacificus* immatures, enhancing surveillance in low sampled areas, and continuing to enhance in-house testing capabilities and *Borrelia* speciation.

III. Tick Surveillance in California – An Overview (Melissa Yoshimizu, PhD)

Dr. Yoshimizu provided an overview of the tick-borne disease program in California. The goal of the program is to estimate prevalence and distribution of pathogenic tick-borne disease agents and to communicate risk to people. Lyme disease is the most common vector-borne disease in the country and the most common tick-borne disease in California. In California, the *Ixodes pacificus* tick is the only known vector for human transmission and there are an average of 80 to 100 confirmed human cases each year. Surveillance and testing efforts indicate *I. pacificus* ticks are found in nearly every county and there is an average *B. burgdorferi* prevalence of 1% in adults and 4% in nymphs. CDPH is working to enhance testing and surveillance capabilities.

Members from the committee suggested breaking down statewide maps into regions for

clarity and commented that improving underreporting of *B. burgdorferi* in humans may increase funding opportunities.

IV. Public Education – Tick-Bite Prevention Social Media Discussion (Claudia Erickson, MS, CHES®; Nikki Johnson, CHES®)

Ms. Johnson provided a report on the tick-bite prevention social media campaign, which ran on CDPH’s Facebook and Twitter pages from December 2017 through February 2018. Posts were released on Fridays to target all Californians before their weekend activities. Analytics showed a positive public response based on the number of “likes, shares, retweets, and comments” on both platforms. Facebook is the more popular platform for CDPH and humorous posts are the most popular. Moving forward, CDPH will focus messaging on tick exposure while outdoors, traveling, and on pets. CDPH will also work to translate the upcoming posts into Spanish.

The committee expressed that there is a need for more Spanish translations of educational materials.

V. Public Comment

- A member of the audience recommended paying for social media post promotion to enhance CDPH’s social media presence. The abundance of Zika related posts compared to other vector-borne discussed posts was questioned.
- A member of the public recommended using the PMEF (pulsed electromagnetic fields) machine treatment for tinnitus and pain.
- A member of the public stated the new Lyme disease case definition should be posted on the CDPH website to better inform the public and medical community.
- A member of the public suggested placing emotion-triggering billboards as a form of public health messaging.
- A member of the public reported a CDC paper on Lyme disease did not list California in the introduction as an area with Lyme. In addition, a brochure on Lyme disease in a veterinary office did not state *Ixodes pacificus* as a vector. It was requested the committee stay vigilant for opportunities to expand education about Lyme disease.

Meeting adjourned at 1:00 pm.