

Lyme Disease Advisory Committee (LDAC) Spring Meeting

April 20, 2023

Minutes

Committee members in attendance (via phone/Microsoft [MS] Teams)

Wendy Adams, Bay Area Lyme Foundation

Barbara Barsocchini, California Lyme Disease Association (LymeDisease.org)

Karen Chew, Lyme Disease Support Network

Vicki Kramer, PhD, California Department of Public Health (CDPH)

Robert Lane, PhD, University of California, Berkeley

Chris Parlier, Lyme Disease Support Network, Committee Chair

Raphael Stricker, MD, California Medical Association

Committee members absent

James Miller, PhD, University of California, Los Angeles

Scott Morrow, MD, MPH, San Mateo County Health Department

Paula Macedo, DVM, PhD, Mosquito and Vector Control Association of California (MVCAC)

Other attendees

CDPH Vector-Borne Disease Section (CDPH-VBDS) staff, including:

Anne Kjemtrup, DVM, MPVM, PhD, Research Scientist III

Allyx Nicolici, MPH, CHES®, Health Educator

Mark Novak, PhD, Supervising Public Health Biologist

Megan Saunders, PhD, MSPH, Senior Public Health Biologist

Other members of CDPH-VBDS, local vector control agencies, and the public joined the meeting via MS Teams.

I. Roll Call and Opening Comments

Meeting brought to order by LDAC Chair, Chris Parlier, at 9:30am.

II. Committee Member Updates

Ms. Wendy Adams provided an update on the federal Tick-borne Disease Working Group report given to U.S. Congress; mental health issues and related deaths associated with Lyme disease in the San Francisco Bay Area were noted and emphasized as important public health issues. Ms. Adams noted that a new documentary about Lyme disease, titled “The Quiet Epidemic”, was released in 2022 and is being shown in several cities in California.

Dr. Ray Stricker provided an update about a conference held in Carmel, CA in January 2023, where a publication on MyLymeData was presented.

Dr. Vicki Kramer reported that CDPH and the Pacific Southwest Center of Excellence in Vector-Borne Diseases (PacVec) co-hosted a successful tick working group meeting with academic and public health partners in March 2023 at UC Davis.

Dr. Kelly Liebman of the Marin/Sonoma Mosquito and Vector Control District provided an update for MVCAC on behalf of Dr. Paula Macedo. The annual MVCAC conference was held in January 2023 and included a well-attended symposium on ticks and tick-borne diseases; there were 14 presentations. The MVCAC conference proceedings will be published later in 2023.

Ms. Barbara Barsocchini asked the committee if any members were aware of mosquitoes infected with *Borrelia burgdorferi* in California. Dr. Robert Lane responded that he was not aware of mosquitoes being infected with *B. burgdorferi* in California.

III. CDPH Progress Report

A. Surveillance Update (Anne Kjemtrup, DVM, MPVM, PhD; Megan Saunders, PhD, MSPH)

Dr. Kjemtrup provided an overview of reported Lyme disease cases in California from 2013 through 2022. Dr. Kjemtrup also detailed updates made to the Council of State and Territorial Epidemiologists (CSTE) Lyme disease case definition in 2022, highlighting the impacts of this change on testing and reporting. Dr. Saunders provided a summary of *Ixodes pacificus* testing for *Borrelia* spp. by CDPH-VBDS from January 1 through April 1, 2023. During this period, 1,844 adult and 5 nymphal *I. pacificus* were collected from various California counties and submitted for *Borrelia* spp. testing. Of the ticks submitted for testing, 30 adult and 1 nymph tested positive for *Borrelia burgdorferi* sensu lato, and 15 adult ticks tested positive for *B. miyamotoi*. Current CDPH-VBDS projects and goals for tick surveillance and testing were also described, including a continued focus on collection and testing of *I. pacificus* immatures.

Following the presentation, the Committee discussed tick testing and the Lyme disease case definition/classification. It was emphasized that CDPH has consistently clarified that the surveillance case definition for Lyme disease is not the diagnostic case definition; cases are classified as suspect, probable, and confirmed based on case definition criteria. Additional comments were made about the variety of *Borrelia* genospecies in California, the difference between a skin reaction to a tick bite and erythema migrans (EM) rash, and immunoblot tests for Lyme disease.

B. Education Update (Allyx Nicolici, MPH, CHES®)

Ms. Nicolici provided an update on CDPH's tick-related outreach and education efforts since November 2022, including the distribution of CDPH-VBDS' tick-bite prevention print materials and social media messages. Key messages about Lyme disease and tick-bite prevention are shared via CDPH-VBDS webpages, social media channels, staff trainings and site visits, print materials (including brochures and tick ID cards), and email newsletters. Ms.

Nicolici also shared an overview of [CDPH's new tick-borne disease prevention webpage](#), which provides comprehensive information about tick bite prevention, tick removal, tick-borne disease symptom awareness, and information to share with a healthcare provider when concerned about a tick-borne disease. Comments and feedback about content for this webpage were provided by the Committee at the previous meeting in November 2022 and were incorporated prior to final development/publication of the webpage.

Following the presentation, the Committee provided additional feedback about CDPH's new disease prevention webpage and discussed the need to increase awareness among healthcare providers and groups that are typically diagnosed with Lyme disease at a later stage.

IV. Presentation: Folsom SRA Adult Tick Surveillance, 2011-2021, El Dorado County

(Mark Novak, PhD)

Dr. Novak provided an overview of a long-term adult tick surveillance project at Salmon Falls in Folsom State Recreation Area in California, which began in November 2011 and is conducted monthly. The surveillance project was established to describe seasonality and relative abundance of common adult tick species in the recreation area, and document changes in tick abundance relative to habitat and environmental variables. A summary of tick drag sampling along two adjacent trails within the recreation area was provided, including dates of first seasonal tick activity detection in the area. Results indicate that adult tick abundance varies by year and trail location, and that drought conditions may impact *Ixodes pacificus* abundance more in drier, fragmented habitat along the trails. Other samples of *I. pacificus* are collected annually from these same trails, but outside of the monthly-sampled transects, and submitted to the CDPH-VBDS laboratory for *Borrelia* testing.

Following the presentation, the Committee inquired about plans for publishing the findings and the reasoning behind certain sampling/counting protocols for the project. The surveillance project is intended to assess tick presence, seasonality, and changes in abundance over time, thus ticks are not retained after counting.

V. Discussion: Tick Bite Prevention Messaging – Results from CDC Focus Groups

(Allyx Nicolici)

Ms. Nicolici shared recent findings and results from focus groups conducted by the U.S. Centers for Disease Control and Prevention (CDC) in 2022 to assess the likelihood of performing personal protective behaviors for tick and mosquito bite prevention. An overview of participants from at-risk groups and their responses was provided; key findings indicated that participants reported they were not likely to engage in some protective behaviors that are typically included in prevention messaging, including avoiding brushy areas, tumble drying clothes in a hot dryer, and using permethrin. Questions were posed to

the Committee about the benefit of recommending these prevention activities if people are not likely to perform them, as well as how to address lack of tick-borne disease concern reported among older adults. It was shared that the incidence of Lyme disease in California is higher among older adults between the ages of 60 to 70 years; suggestions for updated messaging for this age group were discussed, as well as other recommendations for future CDPH Lyme disease prevention messaging.

VI. Public Comment

- A member of the public provided feedback about the presentations and educational materials, webpages, and graphics shared during the meeting. The individual recommended that CDPH contact groups who previously ordered educational materials and provide them with updated content and resources as needed. Additional suggestions for optimizing outreach via social media and the use of videos and reels on social media were shared. Finally, the individual provided information about emergency email lists which provide weather and other updates to subscribers and how they could be improved to include information about ticks and tick-borne disease risks.

Closing Comments

The Committee Chair thanked members of the public for their comments and thanked the Committee for discussion and input during the meeting. The next LDAC meeting will be held in November 2023.

Meeting adjourned at 11:58am.