

Lyme Disease Advisory Committee (LDAC) Fall Meeting

November 14, 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

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

Chris Parlier, Lyme Disease Support Network, Committee Chair

Matt Willis, MD, MPH, California Conference of Local Health Officers (CCLHO)

Committee member absent

Raphael Stricker, MD, California Medical Association

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

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 9:31am. Dr. Vicki Kramer provided an introduction for Dr. Matt Willis, Public Health Officer, County of Marin Department of Health and Human Services, who is now the CCLHO representative on the LDAC. Mr. Parlier thanked Dr. Willis for joining the Committee.

II. Committee Member Updates

Ms. Wendy Adams provided an update on Lyme disease patient advocacy and medical funding, specifically highlighting a conference in June 2023 titled “Toward a Common Research Agenda in Infection-Associated Chronic Illnesses: A Workshop to Examine Common, Overlapping Clinical and Biological Factors”.

Ms. Barbara Barsocchini spoke in remembrance of Dr. James Miller, LDAC member who passed away in 2023. Dr. Miller worked at the University of California, Los Angeles into his mid-90s as a dedicated teacher and mentor to six generations of students from all over the world. Members

of the Committee expressed their appreciation for his service and contribution to the LDAC since his joining in 2000.

Dr. Robert Lane shared his plans to further analyze ticks and rodent samples collected from Alameda County for the presence of different *Borrelia* species. In a prior study, Dr. Lane and colleagues from the Alameda County Vector Control Services District (VCSD) identified a new *Borrelia* species in roof rats. This spirochete also has been detected in rodents from Spain and Australia, but not in ticks. Dr. Lane will work with the Alameda County VCSD to revisit the site where this novel *Borrelia* was detected. They will attempt to collect more infected roof rats and to culture, describe, and name the spirochete in collaboration with colleagues from Germany.

Dr. Paula Macedo provided an update from MVCAC on the various projects and activities being conducted by local vector control agencies. These projects include the second year of a study to assess residential yards for the presence of ticks, and ongoing tick surveillance in areas of California affected by fire and forest management. Results of these projects will be shared once available.

III. CDPH Progress Report

A. Surveillance Update (Megan Saunders, PhD, MSPH)

Dr. Saunders provided an overview of reported Lyme disease cases in California from 2014 through 2023 (2023 data are provisional). Dr. Saunders also provided a summary of *Borrelia* spp. infection prevalence in ticks collected and tested by CDPH-VBDS from January 1 through November 3, 2023. During this period, 3,016 adult and 522 nymphal ticks were collected from various California counties and submitted for *Borrelia* spp. testing. Of the ticks submitted for testing, 53 adult and 54 nymphal ticks tested positive for *Borrelia burgdorferi* sensu lato, with an infection prevalence of 1.8% and 10.3%, respectively. Additionally, 24 adult and 9 nymphal ticks tested positive for *B. miyamotoi*, with an infection prevalence of 0.8% and 1.7%, respectively. Maps were shown depicting infection prevalence by California county. Current CDPH-VBDS projects and goals for tick surveillance and testing were also described, including a continued focus on sequencing of *Borrelia burgdorferi* sensu lato-positive ticks to better understand distribution in California.

In response to a question, Dr. Saunders noted that some vector control agencies collect and test ticks without the involvement of CDPH-VBDS; those agencies share their data with CDPH-VBDS for inclusion in the CDPH-VBDS Annual Report. The Committee also discussed how nymphal tick infection prevalence is typically higher than in adults, and thus nymphal tick bites pose a higher disease transmission risk. Dr. Saunders clarified that tick testing involves ticks collected from the environment, not ticks that were attached to humans.

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

Ms. Nicolici provided an update on CDPH's tick-related outreach and education efforts since April 2023, including an overview of CDPH-VBDS' tick-related information webpages and the ongoing distribution of print materials and social media messages. Social media messages for nymphal tick season in spring and Lyme Disease Awareness Month in May were specifically highlighted. Ms. Nicolici also shared an overview of CDPH's new [tick-borne disease information for health professionals webpage](#), which provides an overview of reportable tick-borne diseases in California, tick removal steps, questions to ask patients to assess risk of tick-borne disease, and key points for patient education. Comments and feedback about content for this new webpage were provided by the Committee during a discussion at the November 2022 LDAC meeting and were incorporated prior to final development/publication of the webpage.

Following the presentation, a member of the Committee noted the importance of reiterating the diversity of erythema migrans rashes for Lyme disease. A link to [CDC's Lyme Disease Rashes and Look-alikes webpage](#) was added to the new CDPH tick-borne diseases webpage for health professionals to help emphasize this point.

IV. Presentation: Physician awareness of Lyme disease in California: How data can inform messaging (Anne Kjemtrup, DVM, MPVM, PhD)

Dr. Kjemtrup presented on past, present, and future examples of CDPH's public health outreach to physicians about Lyme disease. Results of a questionnaire developed for and shared with California physicians in 2003 helped CDPH-VBDS develop tick-testing recommendations and tick identification tools used in a medical office setting. Another questionnaire was developed and shared in 2020 as part of a graduate student's project; Dr. Kjemtrup highlighted methods, physician demographics, and awareness questions from this questionnaire project, as well as limitations given timing of the project. Finally, along with the information learned from past projects and questionnaires, Dr. Kjemtrup shared how tick-borne disease data and information about Lyme disease seasonality and travel risk can inform future physician outreach.

Following the presentation, members of the Committee raised questions about the fluctuation of Lyme disease incidence in California, and Dr. Kjemtrup discussed how underreporting, case definitions, and improvements to surveillance systems impact reported incidence. The Committee also discussed if different timing and sampling methods for future questionnaires involving healthcare providers might yield more responses. A member of the Committee also commented that clinicians are often overwhelmed with information, thus system changes are needed to address barriers to testing and help providers more easily consider Lyme disease during differential diagnosis. Improved electronic provider reporting and better communications to providers about underreporting and test utilization were suggestions posed by Committee members.

V. Discussion: Ticks and travel outreach flyer (Allyx Nicolici)

Ms. Nicolici provided a brief overview of how travel may expose Californians to Lyme disease transmission outside the state. A draft of a new “Ticks and Travel” flyer was shared, highlighting where (both within and outside of California) and when there is risk of Lyme disease. Ms. Nicolici asked the Committee for feedback on the draft flyer, especially regarding the need for additional messaging about travel for complementary messaging paired with this flyer. Members of the Committee provided helpful comments, including adding images of people recreating outdoors in tick habitat, as well as providing written links (in addition to a QR code) to the flyer for accessibility.

Suggestions for edits will be implemented into an updated draft. A finalized flyer will be posted on the CDPH website and distributed digitally.

VI. Public Comment

- A member of the public complemented the presentations and shared their personal experience with Lyme disease and another health condition with similar symptoms to Lyme disease. The individual provided feedback and recommendations regarding the distribution of print materials and social media messaging to boost engagement and share messaging with a wider audience, including students attending field trips or conducting field work outdoors in tick habitat. Additional suggestions for CDPH’s webpages were shared to help patients when seeing a healthcare provider about a tick-borne illness.

Closing Comments

The Committee Chair thanked members of the public for their comments and thanked CDPH-VBDS, local vector control agency staff, and local support networks for their work and contributions to this Committee. The next LDAC meeting will be in April 2024 – date and time to be announced.

Meeting adjourned at 11:50am.