

Lyme Disease Advisory Committee (LDAC) Fall Conference Call Meeting

November 18, 2020

Minutes

Committee members in attendance (via phone/WebEx)

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

Lisa Messner, Lyme Disease Support Network

James Miller, PhD, University of California, Los Angeles

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

Raphael Stricker, MD, California Medical Association

Committee members absent

Chris Parlier, Lyme Disease Support Network, Committee Chair

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

Other attendees

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

Greg Hacker, MS, Senior Public Health Biologist

Megan Saunders, PhD, MSPH, Senior Public Health Biologist

Allyx Nicolici, MPH, CHES®, Health Educator

Kerry Padgett, PhD, Supervising Public Health Biologist

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

Other members of CDPH, local vector control agencies, and the public joined the meeting via phone and WebEx.

I. Roll Call and Opening Comments

Meeting brought to order by Dr. Vicki Kramer in lieu of Chris Parlier, LDAC Chair, at 10:01am.

Dr. Kramer introduced Dr. Paula Macedo as the new member of LDAC representing MVCAC. Dr.

Macedo is the General Manager of Contra Costa Mosquito and Vector Control District; she replaces Dr. Chindi Peavey who recently retired.

II. Committee Member Updates

Lisa Messer provided the Committee with new contact information.

Dr. James Miller provided an update on the development of a Lyme disease vaccine. Due to the COVID-19 pandemic, advances for the Lyme disease vaccine have been delayed.

Dr. Robert Lane provided an update on a research project taking place at the UC Hopland Research and Extension Center in Mendocino County, where an intense wildfire decimated the area and tick population. The third year of fieldwork for this research project was completed in the summer of 2020. Dr. Lane's team (in conjunction with other colleagues) is currently analyzing the data from this research. Dr. Lane anticipates that a manuscript detailing this research will be available next year.

Dr. Raphael Stricker provided a general update on his patients diagnosed with Lyme disease. Dr. Stricker discussed characteristics of Lyme disease and COVID-19 coinfection.

III. CDPH Progress Report

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

Dr. Saunders provided an update of reported Lyme disease cases in California, including provisional case data from 2020. Dr. Saunders also detailed the results of *Ixodes pacificus* ticks tested for *Borrelia* spp. by CDPH-VBDS from October 2019 to September 2020. Over 3,800 adult and 600 nymphal *I. pacificus* ticks were submitted for testing. Testing results of note included two adult ticks that were coinfecting with *B. burgdorferi sensu lato* and *B. miyamotoi*. Current CDPH-VBDS projects and goals for tick surveillance and testing were also described.

Following the presentation, the Committee discussed methods of tick testing and the importance of *Borrelia* speciation.

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

Ms. Nicolici provided an overview of tick-related outreach and education efforts since April 2020. The distribution of CDPH-VBDS's tick-bite prevention printed educational materials (including tick identification wallet cards and brochures) and social media messages was detailed. Updates to CDPH-VBDS tick-related webpages and digital content was also shared, including the creation of a new Lyme disease transmission graphic and updates to the [Tick-Borne Diseases Occupational Health Toolkit for outdoor workers and employers](#).

Following the presentation, the Committee commented on the new Lyme disease transmission graphic and new images added to the website. Dr. Kramer encouraged the Committee and members of the public to explore the CDPH-VBDS webpages and view the recent webpage updates. The Committee also mentioned that local vector control agencies have education programs and could collaborate to increase distribution of tick-borne disease prevention resources.

IV. Presentation: A comparison of questing substrates and environmental factors that influence nymphal *Ixodes pacificus* abundance and seasonality in the Sierra Nevada foothills (Greg Hacker, MS)

Mr. Hacker provided an overview of results from a CDPH-VBDS nymphal tick study conducted to determine which substrates in tick habitat (including leaf litter, logs, tree trunks, and rocks) and certain environmental factors (such as habitat variables, temperature, humidity, and precipitation) affect nymphal abundance within certain areas of Folsom Lake State Recreation Area in Northern California. Findings from this study indicate a significant association between rocks and logs and nymph density (defined as the number of nymphs per meter), as well as medium and high amounts of canopy cover and nymph density. A comparison of vapor pressure deficit (VPD) and nymph density also indicates that VPD is important for determining the seasonal peak of nymph density. Mr. Hacker suggested applications of this research to tick surveillance for CDPH-VBDS and beyond. This research has been submitted to the Journal of Medical Entomology for review and potential publication.

Following the presentation, the Committee discussed spirochete species present in the positive ticks that were found during this study. Members of the Committee also asked about plans to correlate findings with spirochete reservoir hosts; it was suggested that this would make a good follow-up study to this research.

V. Discussion: Residential tick control fact sheet (Megan Saunders, PhD, MSPH)

Dr. Saunders shared CDPH-VBDS's plan to develop a residential tick control fact sheet for California residents. Key concepts for residential tick management were shared, including tick-safe landscaping, keeping ticks off pets, keeping wild animals away, yard/perimeter treatments, and professional pest control. Dr. Saunders asked the Committee for their input on additional messages and tips to control ticks, and four discussion questions were presented and distributed to the Committee for their review and feedback in the coming weeks. CDPH-VBDS plans to produce this new resource in the coming months, and progress on development will be shared with the Committee at future meetings.

The Committee discussed the importance of defining residential areas that may overlap with tick habitat so that homeowners understand the areas where ticks are most likely to be present. The importance of considering the diversity of properties and ecosystems in California was also discussed.

VI. Public Comment

- A member of the public asked the Committee what is being done to educate health professionals about Lyme disease. This individual mentioned that Lyme-literate healthcare providers are not always available for patients that need specific care.

The Committee responded that educating health professionals about Lyme disease is an ongoing priority. CDPH-VBDS continues to work with collaborators to create material for health care providers and ensure key Lyme disease information is distributed to them.

The next LDAC meeting will be held in the spring of 2021. Date and time to be determined.

Meeting adjourned at 12:03pm.