Lyme Disease Advisory Committee (LDAC) Fall Conference Call Meeting  
November 6, 2019  
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  
Chris Parlier, Lyme Disease Support Network, Committee Chair  
Chindi Peavey, PhD, Mosquito and Vector Control Association of California (MVCAC)  
Raphael Stricker, MD, California Medical Association  

Committee members absent  
Lisa Messner, Lyme Disease Support Network  
James Miller, PhD, University of California, Los Angeles  
Scott Morrow, MD, MPH, San Mateo County Health Department  

Other attendees  
CDPH Vector-Borne Disease Section (VBDS) staff included:  
   Elizabeth Andrews, PhD, Associate Public Health Biologist  
   Chris Kilonzo, DVM, MPVM, PhD, Associate Public Health Biologist  
   Anne Kjemtrup, DVM, MPVM, PhD, Research ScientistIII  
   Marco Metzger, PhD, Senior Public Health Biologist  
   Allyx Nicolici, MPH, CHES®, Health Educator  
   Kerry Padgett, PhD, Supervising Public Health Biologist  
   Mary Joyce Pakingan, Microbiologist  

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 Chris Parlier, LDAC Chair, at 10:00am.  
Dr. Vicki Kramer provided a brief update on 2019 vector-borne disease activity in California.

II. Committee Member Updates  
Dr. Robert Lane provided an update about a study being conducted at the UC Hopland Research and Extension Center in Mendocino County, which was affected by the Mendocino Complex Fire in 2018. Dr. Lane and a team of colleagues from UC Davis and UC Berkeley are studying the impact of the severe wildfire on tick and vertebrate abundance in that area. Their field research thus far has determined that over 90% of the tick populations that were previously under study have been destroyed by the fire. Vertebrates
and rodents in the area (including the western gray squirrel) are scarce. Dr. Lane and his colleagues will continue this research for at least another year.

The research paper submitted by Dr. Lane and led by Dr. Gabrielle Margos about the identification and description of a new genospecies of Lyme disease group spirochete has been accepted for publication; the new spirochete is named *Borrelia maritima*. This new identification marks the 22nd member of the Lyme disease group spirochete family, seven of which have been identified in California.

Dr. Raphael Stricker provided an update about two new recombinant antigen tests for *Borrelia* infection in humans which he stated have identified a wide range of *Borrelia* infections in patients. Dr. Stricker also discussed a recent journal article that analyzed laboratory data collected by Quest Diagnostics from 2010 to 2016 and suggests an increase in testing and Lyme disease positivity rates over time in California.

Dr. Chindi Peavy reiterated that the Mosquito and Vector Control Association of California (MVCAC) provides contact information for member agencies that conduct tick surveillance in California; the public can use the MVCAC agency list to obtain tick surveillance information in their local area. Dr. Peavy also reported that the San Mateo County Mosquito and Vector Control District continues to do tick surveillance, and agency staff are currently working with schools in the city of Pacifica to provide education about ticks and tick-borne diseases.

Karen Chew requested that an update or presentation about soft ticks be provided at the next LDAC meeting.

### III. CDPH Progress Report

**A. Surveillance Update** (Mary Joyce Pakingan)

Ms. Pakingan provided an update of reported Lyme disease cases in California; for cases reported in 2019, over 40% had out-of-state exposure. Ms. Pakingan reported on the detection of *Borrelia* species in *Ixodes pacificus* ticks collected and tested from October 2018 to September 2019. CDPH’s nymphal tick testing doubled in 2019, with over 1,100 nymphal *I. pacificus* ticks tested. Current CDPH projects and goals were also described, including the continued goal of collecting and testing immature *I. pacificus* ticks, as well as the implementation of sentinel sites to better standardize tick collection and surveillance across regions of California.

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

Ms. Nicolici provided an overview of tick-related outreach and education efforts since the March 2019 LDAC meeting. Outreach includes the distribution of CDPH’s educational materials and social media posts for Facebook, Twitter, and Instagram.
Two tick-bite prevention resources were recently updated and reprinted, including the tick identification wallet card, which is a very popular resource that is distributed statewide. Design revisions made to the tick identification card were outlined and reviewed. A tick outreach event at the Exploratorium in San Francisco was described.

IV. Presentation: Sentinel site tick surveillance in three regions on California (Kerry Padgett, PhD; Christopher Kilonzo, DVM, MPVM, PhD; Elizabeth Andrews, PhD; Marco Metzger, PhD)

Dr. Padgett provided an overview of the sentinel site surveillance that CDPH-VBDS has recently implemented as a way to standardize tick collections and better clarify seasonality and abundance of *Ixodes pacificus* ticks, the vector for Lyme disease, in California. Data from this effort can inform public messaging about tick-bite prevention. Dr. Padgett provided a summary of the standardized surveillance methods used at the sentinel sites, and a representative of each sentinel site region provided an update about surveillance and results within their specific region.

- Dr. Kilonzo provided an update on coastal tick surveillance and the sentinel site established at China Camp State Park in Marin County. Monthly sampling at this site was initiated in April 2019.
- Dr. Andrews provided an update on northern California tick surveillance and the two sentinel sites established at Folsom Lake State Recreation Area and Auburn State Recreation Area. Sampling at these sites was initiated in November 2011 and December 2018, respectively.
- Dr. Metzger provided an update on southern California tick surveillance and the sentinel site established at the Chantry Flat Recreation Area in the Angeles National Forest. Sampling at this site was initiated in February 2019.

Following the presentations, the committee discussed nymphal tick collection and the difficulty of collecting nymphal ticks, especially in southern California.

V. Discussion: CDPH-VBDS Lyme disease webpage revisions (Allyx Nicolici, MPH, CHES®)

Ms. Nicolici shared proposed revisions to the CDPH Lyme disease webpage based on research about website user experience and the importance of page layout. The committee discussed prioritizing the content on the webpage so viewers have a summary of the most important information about Lyme disease and prevention at the top of the page. The committee also discussed ways to use styling and formatting to structure the webpage and make it easier to navigate. A new seasonal risk graphic will be posted to the updated webpage, and further revisions will be shared at the next LDAC meeting.

VI. Public Comment

No individuals provided public comment.

VII. Adjourn
The next in-person LDAC meeting will be held in Sacramento in the spring of 2020. Meeting date and time to be announced.

Meeting adjourned at 11:50am