

**Lyme Disease Advisory Committee (LDAC) Fall Conference Call
November 12, 2015
Minutes**

Committee members in attendance

Barbara Barsocchini, California Lyme Disease Association (LymeDisease.org)
Karen Chew, Lyme Disease Support Network
Vicki Kramer, PhD, California Department of Public Health (CDPH)
James Miller, PhD, University of California, Los Angeles
Christian Parlier, Lyme Disease Support Network, Committee Chair
Chindi Peavey, PhD, Mosquito and Vector Control Association of California (MVCAC)

Committee members absent

Robert Lane, PhD, University of California, Berkeley
Raphael Stricker, MD, California Medical Association
Scott Morrow, MD, MPH, San Mateo County Health Department

Other attendees

Claudia Erickson, MS, CHES, CDPH, Public Health Educator, Committee Coordinator
Kerry Padgett, PhD, CDPH, Supervising Public Health Biologist
Anne Kjemtrup, DVM, MPVM, PhD, CDPH, Epidemiologist
Various members of the public joined the conference call.

I. Roll call and opening comments

The meeting, which was held via conference call, was brought to order by Chris Parlier, LDAC Chair, at 10:04 a.m.

II. Committee member updates

Dr. Kramer reported that the Vector-Borne Disease Section (VBDS) has a new public health educator, Lauren Salmo. She is funded for eleven months through a grant from the U.S. Centers for Disease Control and Prevention to work on enhancing education on invasive mosquito species and the diseases they can transmit. This winter she will also be working on outreach to local health departments and vector control agencies on tick bite prevention.

Dr. Miller gave a brief update on diagnostic test developments. He described a novel study being conducted by Dr. Zhao at U.C. Irvine using a molecular-based procedure to detect single particles of *Borrelia burgdorferi* in the early stages of disease using cultured organisms.

Ms. Barsocchini noted that Lymedisease.org is funding the diagnostic research mentioned by Dr. Miller.

Mr. Parlier recently met with Ben Fong, area director for Congressman Kevin McCarthy of Bakersfield. They discussed enhancing federal funding for Lyme disease research.

III. CDPH progress report

A. Education update (Claudia Erickson, MS, CHES)

Ms. Erickson presented updates on public education items. Target populations include the public, local agencies, occupational health programs, and the medical community. Since March 2015, VBDS has implemented successful social media posts through the CDPH Office of Public Affairs. They continue to track the number of views of their educational videos on YouTube. Materials distribution is ongoing, with the tick ID card being the most popular. Flash drives were distributed to United States Forest Service safety officers throughout California to ensure access to tick-borne disease prevention and educational materials in areas lacking internet connectivity. The tick ID cards have been revised and the English version printed. A chart titled “Guide to Ticks and the Diseases They Transmit in California” and a new brochure, “Prevent Tick Bites, Prevent Disease,” available in English and Spanish, are now posted on the tick-borne diseases webpage.

B. Surveillance update (Anne Kjemtrup, DVM, MPVM, PhD)

Dr. Kjemtrup presented updates on surveillance and testing. She presented data on the number of reported cases of Lyme disease by year from 2004 through 2015 (2015 data is provisional). Thus far in 2015, nearly 80 cases of confirmed and probable Lyme disease have been reported. A chart titled “2015 *Ixodes pacificus* tested for *Borrelia spp*” presented the total number of adult ticks, nymphs, and larvae collected from each county and the percent positive for *Borrelia* species, *B. burgdorferi s.l.*, and *B. miyamotoi*. Current projects include continued collection of nymphs, a new focus on collecting larvae, investigating emerging/re-emerging tick-borne diseases, and continued enhancement of in-house testing capabilities.

IV. Eco – epidemiology of *Rickettsia philipii*, agent of a Pacific coast tick fever (Kerry Padgett, PhD)

Dr. Padgett presented the eco-epidemiology of *Rickettsia philipii*, the tick-borne agent of a spotted-fever group rickettsiosis in California, including historical background, prevalence, and clinical presentation. In July 2008, the first patient infected with *R. philipii* was identified. Since then, a total of 14 cases have been reported, half of which were exposed in Lake County.

The Pacific coast tick (*Dermacentor occidentalis*) is very common in California and has been identified as the vector of this newly described spotted-fever rickettsiosis. Dr. Padgett reviewed

tick collection and testing efforts for immature and adult *D. occidentalis*. *Rickettsia philipii* has been detected in Pacific coast ticks in 15 of the 36 counties surveyed. Human bite records from the CDPH surveillance database show that *D. occidentalis* nymphal ticks bite people more regularly than the adult stage. Larvae also bite people. Dr. Padgett reviewed the seasonality and habitat of the different life stages. Adults are most common in winter and spring months, and peak in April. Larvae peak in June, July, and August and nymphs peak in July and August. *Rickettsia philipii* vertebrate reservoir hosts are unknown.

V. Public Education - Spotted Fever Group *Rickettsia* Brainstorm Session (Claudia Erickson, MS, CHES)

Ms. Erickson facilitated a committee brainstorming session on Spotted Fever Group *Rickettsia* (SFGR) public education for the public (including children), vector control, local agencies, and the medical community. The committee was asked to provide their input.

Committee comments:

- Ms. Barsocchini noted that the CDPH website has improved dramatically and is quite effective. She suggested conducting additional outreach to infectious disease, internal medicine, and family practice physicians.
- Ms. Erickson suggested adding a link to the CDPH spotted fever *Rickettsia* webpage for the medical community to have easier access to the Viral and Rickettsial Disease Laboratory's testing document for SFGR.
- Dr. Kjemtrup suggested that we utilize the existing health-care-directed CDPH presentation on the epidemiology and prevention of tick-borne diseases in California by separating out the existing section on SFGR and posting on the SFGR webpage.
- Dr. Kramer noted that the public health educator, Lauren Salmo, can contact local health officers and communicable disease controllers in affected counties regarding various tick-borne diseases to ensure that they are aware of disease incidence and materials available, and make recommendations for outreach to their respective physician communities.
- Ms. Barsocchini mentioned Dr. Kjemtrup's past articles on Lyme disease in the Medical Board of California newsletter and wondered if a similar article on SFGR could be drafted.
- Dr. Peavey noted that she could share information with MVCAC members. The MVCAC posts articles on their website, sends a weekly newsfeed to all local districts, and sends notices to agency managers.
- Ms. Erickson suggested reminding local vector control agencies of the tick-borne disease prevention tool kit on the CDPH website. Local vector control agencies can help disseminate information to local groups and conduct staff education on tick-borne diseases and tick bite prevention.

The committee was asked to provide their input regarding additional education for children or modifications to current material.

- Ms. Erickson noted that the language on the “Don’t Let the Ticks Bite” brochure could include “to see your doctor” if you have a scab following a tick bite, in addition to the general recommendation to see a physician if you feel ill after a tick bite. This may help capture infections with *R. philipii*.

The committee was asked to provide their input regarding adding more information to the SFGR webpage.

- Ms. Barsocchini suggested adding local newspaper articles.
 - Ms. Erickson noted that CDPH typically does not link to news articles. She suggested increasing social media efforts.
- Dr. Peavey suggested posting Dr. Padgett’s map that demonstrates where human infections with *R. philipii* have been exposed and where ticks have tested positive for *R. philipii*.
- Ms. Barsocchini added that it is important to share information with vector control agencies because they conduct outreach within communities in various locations, including at schools, community centers, and fire departments.

Comments from the public:

- A member of the public suggested that we need greater educational efforts targeting the medical community. She suggested greater outreach regarding *R. philipii* and other diseases and providing links to websites.
- A member of the public noted that a lot of people do not use social media or computers, and suggested using bus ads and billboards to reach a broader audience.
 - Ms. Erickson described how billboards and bus/bus stop ads are usually funded by local vector control agencies or health departments.
 - Ms. Barsocchini mentioned that the Marin-Sonoma Mosquito and Vector Control District funded billboards, and that this work was prompted by the local Lyme disease support group.

VI. General public comment period

- A member of the public mentioned a project launched by lymedisease.org titled MyLymeData. This is a patient registry where people can self-report their Lyme disease infection, answer an initial survey, and come back periodically (every 4-6 months) to provide an update on their treatment and symptoms.
- A member of the public asked whether old printed educational materials should continue to be shared, or thrown out and replaced with new materials.
 - Ms. Erickson responded that old materials can still be used.

- Dr. Kjemtrup mentioned that there is a health fair poster available for download on the CDPH tick-borne disease website that focuses on tick-bite prevention.
<http://www.cdph.ca.gov/HealthInfo/discond/Documents/Tickbornediseaseslgposter.pdf>
- A member of the public noted that the chart with ticks and diseases was missing information on ehrlichiosis and babesiosis. She also voiced her disagreement with points in an article on tick-borne diseases published in *Sonoma Medicine* and posted on the CDPH website.
 - Dr. Kjemtrup responded that *Ehrlichia* is not on the tick sheet because it is transmitted by ticks that are not found in California and the tick vector for *Babesia duncani* is not known. She added that ehrlichiosis in canines is caused by *Ehrlichia canis*, an agent not infective to humans.
- A member of the public suggested using the word “spot” in the title of educational materials for SFGR, such as “how to spot spotted fever.” She mentioned that they are finding co-infections in ticks, and that in general, people don’t know about Lyme disease. She suggested using billboards with attention-grabbing messaging to educate the public.
- A member of the public asked that the article on tick-borne diseases in *Sonoma Medicine* be placed on the agenda for discussion at the next meeting.
 - Dr. Kramer noted that the article has already been discussed among committee members.

Dr. Kramer announced that the next meeting will be held on March 10, 2016.

Meeting adjourned at 12:00.