

**Lyme Disease Advisory Committee Teleconference
November 14, 2013**

Committee members in attendance

Barbara Barsocchini, California Lyme Disease Association (LymeDisease.org)
Karen Chew, Lyme Disease Support Network
Vicki Kramer, Ph.D., California Department of Public Health (CDPH)
Robert Lane, Ph.D., University of California, Berkeley
James Miller, Ph.D., University of California, Los Angeles
Christian Parlier, Lyme Disease Support Network
Chindi Peavey, Ph.D., Mosquito and Vector Control Association of California (MVCAC)
Raphael Stricker, M.D., California Medical Association (CMA)

Other attendees

Denise Bonilla, M.S., M.S., CDPH, Committee Coordinator
Claudia Erickson, M.S., C.H.E.S., CDPH, Health Educator
Anne Kjemtrup, D.V.M., M.P.V.M., Ph.D., CDPH, Epidemiologist

Approximately 15 individuals from the interested public attended.

Roll Call and Opening Comments

The meeting was brought to order by Mr. Parlier at 10:10 a.m.

CDPH Progress Report (Denise Bonilla)

Ms. Bonilla reviewed tick-borne disease prevention activities conducted by CDPH. For the general public, CDPH tweets and Facebook messages were posted. Ms. Bonilla reviewed the Vector-Borne Disease Section's (VBDS) outreach to the medical community and local partners. VBDS continues to provide presentations and educational materials on tick-borne diseases to local vector control agencies and other partners. Lastly, she reviewed CDPH tick surveillance results for 2013 and current goals and projects for 2014.

Committee comment:

- Dr. Stricker asked Dr. Lane about the reservoir potential of lizards other than the western fence lizard. Dr. Lane responded that this lizard is the most abundant and has a high parasitization rate, but the reservoir potential of each lizard species should be evaluated independently.
- Dr. Lane suggested CDPH consider listing tick infection prevalence by geographic region. Ms. Bonilla responded that the annual report has the testing rates by county.

Committee Member Updates

Dr. Kramer reported that CDPH/VBDS will no longer reimburse LDAC members for meeting travel expenses and offered the option to continue the annual in-person meeting or have all meetings via teleconference to facilitate attendance for those who may not be able to afford travel. Most committee members responded that they could fund their own travel; mention was made that they could seek donations through support groups to help fund travel as needed for other members. All agreed it is important to meet in-person once per year. The next on-site meeting is scheduled for Thursday, March 13, 2014 in Sacramento.

Dr. Lane reported results of his recent research where his lab detected eight species of *Borrelia* in ticks from Alameda County: the highest reported diversity of *Borrelia* species in North America in a geographic area. Dr. Lane's group is finalizing this research for publication. His graduate student is finishing a paper on modeling Lyme disease variables within reservoir birds and their tick populations. An important paper detailing factors driving tick-borne disease transmission cycles will be published soon. He also suggested that CDPH tick testing should take into consideration other spirochetes that could possibly infect people, such as *B. andersonii* and *B. americana*.

Dr. Stricker reported about a Lyme vaccine under development and suggested that it is similar to the earlier vaccine that was taken off market.

Dr. Miller described a new commercial Lyme disease culture test. He relayed that an initial study indicated that the test was 94% sensitive in detecting Lyme spirochetes in patients suspected of having "chronic" Lyme disease; however, the test is controversial. The test is being further evaluated in carefully designed and monitored studies.

Ms. Barsocchini reported that Lymedisease.org provided travel grants to 37 medical professionals, including 12 individuals from southern California. They are also planning their annual nurse practitioner conference to be held in Newport Beach next spring.

Occupational health tick bite prevention program (Claudia Erickson)

Ms. Erickson reviewed the Occupational Health Tick Bite Prevention packet that VBDS is distributing to United States Forest Service safety officers at nine sites in California. The packet contains a fact sheet, a training video, a workplace poster, Lyme disease brochures, tick identification cards, and a curriculum guide. Ms. Erickson is evaluating implementation of the packet by using a pre/post-test, a three week post-test, and a survey.

Committee comment:

- Dr. Lane wanted to know if the PowerPoint presentation included information on soft ticks. Ms. Erickson responded that the presentation focuses on hard tick bite prevention. She hopes to create soft tick bite prevention materials in the future.

Outreach to the medical community on tick-borne disease prevention (discussion):

Ms. Bonilla started the discussion by outlining the current materials that are available for physician outreach and how they have been distributed. She asked the group for suggestions on additional venues for material distribution.

- In response to a question about how recent information from CDC regarding under reporting of Lyme disease will be integrated into CDPH material, Dr. Kjemtrup noted that as these studies become available, information can be added to physician education presentations. Dr. Kjemtrup noted that physician outreach is useful: after a presentation at UCSF, an anaplasmosis case was recognized and reported to CDPH from a physician who attended the lecture.
- Dr. Lane asked if there is a centralized structure for CME statewide. Dr. Stricker stated that some CME is funded by pharmaceutical companies and focuses on treatment with new medicines, rather than awareness and prevention. The CDC does have CME through MMWR education. Dr. Stricker mentioned that the medical board newsletter is an option that has been effective in the past. Dr. Kramer says CDPH could do an update article since it has been 2 years since they published in the newsletter.
- Ms. Erickson mentioned that the DEET education program provided an educational grant that funded an online CME course for nurses on tick-borne disease prevention, but that it is east-coast focused. The DEET program has expressed an interest in developing a course with a broader focus.

General Public Comment Period

- A suggestion was made that tick-bite prevention information could be provided to the girl scouts via Leader Magazine.
- Can CDPH tick testing detect all of the genospecies or only *B. miyamotoi* and *B. burgdorferi*?
 - Ms. Bonilla responded that the testing captures *B. burgdorferi* sensu lato (the group that includes the Lyme disease pathogen) and *B. miyamotoi* separately, and then the *B. burgdorferi* sensu lato positives are further tested to determine specific genospecies.
 - Dr. Lane commented that there at least eight different genospecies in North America and two are related to European spirochetes, so the PCR should be able to differentiate between members of the different sensu lato genospecies. Several genospecies have not been formally described or named yet.

- Is there a test for humans that will pick up the different genospecies? Does CDPH have control over this?
 - Dr. Kjemtrup remarked that Lyme disease testing is conducted primarily at commercial labs and they sometimes forward specimens to public health labs or specific researchers. CDPH has no influence over the type of tests conducted.
 - A member of the public mentioned this is problematic because the testing is mainly focused on the northeast strains.
- Can ticks at CDPH be tested for other pathogens besides *Borrelia*?
 - Ms. Bonilla responded that CDPH does occasionally test ticks for other pathogens.
- Other medical practitioners, such as chiropractors, should also be educated about Lyme disease.
- Will Dr. Lane's tick surveillance findings be included in the interactive tick map? Incompleteness of this map could possibly facilitate physician ignorance about Lyme disease endemicity.
 - Dr. Kjemtrup remarked that CDPH hopes to integrate these data into the map but there are resource constraints. The webpage with the map includes a statement that not all sites where ticks have been found are included on the map.
- Many Lyme disease reports from certain labs are not reported. Physician education is not sufficient and the importance of a rash is not understood. Patients need help in getting access to medical care for Lyme disease.
 - Dr. Kjemtrup offered to review the Lyme case reporting protocol at the next LDAC meeting.
- The Humboldt Lyme Disease Support Group met with the Humboldt County Health Department and there is interest in being proactive and providing a prevention program for the community.

Meeting adjourned at 12:12 p.m. by Mr. Parlier