

**Lyme Disease Advisory Committee Meeting
March 12, 2009, Sacramento, California**

Committee members in attendance

Vicki Kramer, Ph.D., California Department of Public Health
Robert Lane, Ph.D., University of California, Berkeley
Christian Parlier, Lyme Disease Support Network
Chindi Peavey, Ph.D., Mosquito and Vector Control Association of California
Susie Merrill, Lyme Disease Support Network
James Miller, Ph.D., University of California, Los Angeles (via phone)
Raphael Stricker, M.D., California Medical Association
Scott Morrow, M.D., M.P.H., California conference of Local Health Officers
Lisa Messner, CPhT., Lyme Disease Support Network
Barbara Barsocchini, California Lyme Disease Association.

Committee members not in attendance

Victoria Deloney, Ph.N., Sacramento County Public Health

Other attendees

Anne Kjemtrup, D.V.M., M.P.V.M., Ph.D., California Department of Public Health,
Committee Coordinator
Kerry Padgett, Ph.D., California Department of Public Health
Erin Parker, M.P.H., California Department of Public Health
Claudia Erickson, MS, CHES, California Department of Public Health

Approximately 15 individuals representing the interested public and public health agencies (includes phone attendees).

I. Opening comments

Mr. Chris Parlier brought the meeting to order at 9:40. He welcomed Dr. Chindi Peavey, newly appointed member to the Lyme Disease Advisory Committee (LDAC) representing the Mosquito and Vector Control Association of California. Dr. Vicki Kramer added a welcome on behalf of the Director of the California Department of Public Health (CDPH).

II. Review and approval of minutes of the December 12, 2008 teleconference

Dr. Miller made the motion to approve the minutes. Ms. Messner seconded the motion. There was no committee discussion. The minutes were unanimously approved by the committee.

III. Election of New Chairperson

Mr. Parlier stated that as Chairperson of the LDAC for the last 5.5 years, he felt the LDAC had accomplished quite a lot but that it was time for him to step down and offer the chairperson position to another interested member, though he would be willing to serve if the committee so chose. Dr. Kramer thanked Mr. Parlier for his leadership of the committee during this time. The floor was opened for nominations from the committee for chairman. Dr.

Miller nominated Mr. Parlier, given that he was willing to run again. Dr. Morrow seconded the motion. There was neither further committee discussion nor public comment. Mr. Parlier was unanimously approved by the LDAC to continue serving as the Chairperson.

IV. CDPH progress report (Dr. Anne Kjemtrup)

Dr. Kjemtrup presented the update on CDPH education and surveillance activities regarding tick-borne diseases. The winter press release garnered two interviews. Progress is being made on the website with the ability to track visitors and conversion of the tick-database to a more exact GIS-based presentation. The “Timothy Tickfinder” children education program has proven popular and will be evaluated this spring during a train-the-trainer session with educators in Nevada County. A letter to medical school has been approved to send to Deans of Education for 128 Nursing schools, 16 Medical schools, and 15 Public Health Schools in California to encourage the inclusion of tick-borne disease information in medical curriculum. Biologists with the Vector-Borne Disease Section (VBDS) provided training on flagging and tick identification to multiple local agencies throughout the state, and 27 presentations regarding ticks and/or tick-borne diseases were given to agencies, medical community, general public or other groups. Two scientific publications on tick-borne diseases with VBDS personnel as coauthors were published in 2008.

In terms of surveillance, 55 cases of Lyme disease were reported to date for 2008 (this number is provisional because 2008 case reports are received through May 2009). 1,843 *Ixodes pacificus* ticks from 21 counties were submitted for *Borrelia* spp. testing. Testing was performed by the VBDS laboratory, U.S. Army, or local mosquito and vector control districts. *Borrelia burgdorferi* infected ticks were identified from Santa Clara, Napa, and Calaveras County. Ticks infected with *Borrelia* spp. (not *B. burgdorferi*) were identified from Lake, Amador, Solano, Santa Cruz and Calaveras County. Many specific projects are ongoing throughout the state including site investigation and follow-up of tick borne diseases such as a unique *Rickettsia* spp. from Lake County, Rocky Mountain spotted fever in Los Angeles dogs, tick surveillance in high human exposure areas in the Golden Gate National Recreation Area, Point Reyes National Seashore, San Francisco and El Dorado Counties, and ecological studies in Los Angeles and Yolo Counties.

Questions and comments for Dr. Kjemtrup included:

- Dr. Lane offered to share his tick surveillance data collected over many years for the tick-testing database
- The ground-truthing project on location of nymphal ticks in Southern California has been put on hold temporarily since there is no longer an intern available to work on the project; staff will attempt to continue the work.
- There was a discussion on the decreasing trend of reported cases, particularly given the inclusion of Lyme disease as a laboratory reportable disease. The change in the reporting form does not appear to contribute to this. Local health departments evaluate reported cases based on the surveillance definition only. It does not matter if a case was exposed out of state; that case is still reportable since they are reported by county of residence, not exposure. The decrease in the reported cases remains a conundrum.

- The financial situation of the state has impacted the Vector-Borne Disease Section's (VBDS) work in that two positions have been lost and workloads and areas covered by biologists have increased as a result.
- Barbara Barsocchini recommended tick surveillance in Ojai (Ventura County).
- Chindi Peavey found 1-3% prevalence of infection with *B. burgdorferi* in San Mateo ticks – same prevalence for adults as for nymphs.
- There was a discussion on reporting of tick prevalence and encouragement to report a range of prevalence per stage not just the average prevalence.

V. **Committee member updates**

- Dr. Lane reported that he is editor of a new international journal that will begin publication in January 2010: *Ticks and Tick-Borne Diseases*. He encouraged all members who publish work on ticks to consider this journal as a possible place to submit their work.
- Dr. Peavey reported that one of her current projects is to document all of the agencies in the MVCAC who work on ticks and what functions they perform, such as surveillance, testing, and public education.
- Mr. Parlier asked Ms. Phyllis Mervine of the California Lyme Disease Association (CALDA) and Dr. Kjemtrup to the front of the room. Ms. Mervine presented Dr. Kjemtrup with a plaque from CALDA for Community Service. Dr. Kjemtrup thanked CALDA and noted that Lyme and Tick –Borne Disease education efforts were a shared responsibility of all of VBDS and she thanked the VBDS staff for their efforts.
- Mr. Parlier asked all of VBDS staff present to the front of the room and presented them with an Assembly Resolution by Assemblyperson Jean Fuller, commending the Section for their efforts in prevention of vector-borne diseases. Dr. Kramer thanked Mr. Parlier and the Honorable Jean Fuller, on behalf of VBDS, for the acknowledgement of the Section's efforts.
- Mr. Parlier then presented Ms. Mervine and CALDA with another resolution from Assemblyperson Jean Fuller, commending CALDA for their efforts in prevention and awareness of Lyme disease in California.

Dr. Morrow made the motion that Mr. Parlier should write a letter to the Honorable Jean Fuller, thanking her for introducing the resolutions to the assembly, using LDAC letterhead. Dr. Miller seconded the motion. The LDAC unanimously approved.

VI. **A look into the future of public health education (Claudia Erickson, MS, CHES, Public Health Educator, Center for Infectious Diseases, California Department of Public Health)**

Ms. Claudia Erickson gave a presentation on the future of health education for the purpose of stimulating discussion by the committee on future action items. She defined what effective public health education means, described new media techniques to distribute health messages and where people currently receive health messages, and reviewed some of the ways CDPH website will use media.

Questions and comments for Ms. Erickson included:

- Work in San Mateo suggests that by 2010, more people will use the internet for medical information than those who get their information from physicians.
- Ms. Erickson explained that people who view You-Tube are highly motivated or are updated by RSS feeds.
- It is disheartening to hear that magazines are becoming less popular. Ms. Erickson emphasized that though they are less popular than the internet, they still reach a certain population.
- Physicians are not likely to take the time to go online.
- It would be good to include the faces or stories of people who got Lyme disease since this would draw the public's attention more.

VII. New material review

A. Spring Press Release

Dr. Kjemtrup read the spring press release for the benefit of those on the phone and displayed it on the monitors for the benefit of the audience. Comments from the committee included:

- Change "especially" on the scalp and hairline to "including"
- Move the information about picnic benches to the first paragraph.

Information on checking the bedding after being in tick areas is valuable information but due to the one-page length limitation of press releases, the release needs to be short and to the point. This information will be relayed verbally in any interviews.

B. Physician Newsletter article on tick removal

Dr. Kjemtrup noted that this newsletter article was intended to highlight the proper method for tick removal. Comments from the committee included:

- Put the title in quotations
- Mention that it is the most important human biting tick that is active in fall
- Include text boxes that highlight the fact that Lyme disease is present in California; put the removal technique in a text box.
- Remove information on length of attachment time required for transmission
- Include sentence on other common and effective tick-removal tools
- Note that prevalence of *B. burgdorferi* in adult western black-legged ticks in California does not generally exceed 5%.
- Refer the physicians to the online tutorial.

Ideas for illustrations included:

- Demonstration on the size of ticks.
- Hypostome of *Ixodes pacificus*
- Inset of the tick card
- Diagram of tweezers removing the tick.

C. Brochure rebranding

Dr. Kjemtrup presented the reformatting of the Lyme disease brochure, explaining that the content had not changed but that, as Ms. Erickson had pointed out, simply changing the look of the brochure can make people pick it up and look at it even though they may have seen the previous brochure before. The proposed reformat of the brochure will be put on the website and be made available as printer-ready copy for agencies who may wish to print it. Current supplies of the Lyme disease brochure will be used up before a new version is printed.

The committee was evenly divided as to whether they preferred California all blackened in or with the counties highlighted. They appreciated the new colors but some thought the information from the distribution map was valuable for public education purposes.

VIII. Annual goal matrix review

Dr. Kjemtrup presented the goal matrix that was last reviewed in March 2008 and asked the committee for ideas on how to update the different categories, particularly in light of Ms. Erickson's presentation. The matrix was updated and revised as shown on the last page of these minutes.

Ms. Barsocchini noted that CALDA has limited funds for some research studies.

IX. Set date for November meeting

Dr. Kjemtrup noted that the November meeting date is a teleconference so there is not an exact date set yet: committee members did not report any known conflict in November. The next in-person LDAC meeting will be March 11, 2010.

X. Public comment

- CALDA's web site is expanding to include blogging about where people were infected. 150 responses so far.
- Many people are facing walls to diagnosis. Public health needs to focus on secondary and tertiary prevention in addition to primary prevention.
- The primary issue physicians need to overcome is resistance to recognizing Lyme disease. Being bitten by a tick is not taken seriously enough.
- Study results from a survey of people in San Bernardino County were presented. Many people are potentially exposed to Lyme disease in San Bernardino County, based on extrapolations of tick saliva antibody studies in other parts of California. Many people did not know how to safely remove a tick although they professed to do so. Physicians in San Bernardino County will not consider Lyme disease as a diagnosis.
- It is important to focus on tots and toddlers. Be sure to include advice on how to do activities safely so that one does not encounter a tick. Consider expanding the number of languages that the education material is translated into.
- Lyme disease is a real problem. The psychological effects that are recently highlighted in the news need to be taken seriously.
- The audience talked about ways to support the committee. Be sure to include obstetricians in physician outreach. Surveillance criteria are too stringent.
- University students are often unwittingly exposed to Lyme disease during field studies. This is an important population to reach.
- The medical system treats Lyme disease patients as second class citizens. The Connecticut Attorney General brought a law suit against the Infectious Disease Society of America.

Goals recommended by the Lyme Disease Advisory Committee (Last reviewed March 2009)

Goal Area	6 months	12 months	18 months	2 years	2+ years
Educate Medical Community	<ul style="list-style-type: none"> ▪ <i>“Awareness of Tick-borne disease in CA” presentations for Grand Rounds as requested</i> ▪ <i>Target ER with educational materials (Physician newsletter article on tick removal will address this)</i> 	<ul style="list-style-type: none"> ▪ <i>Send brochures to all California hospitals for inclusion in their libraries.</i> 	<ul style="list-style-type: none"> ▪ <i>Get brief articles into HMO newsletters.</i> ▪ <i>Continue to make brochures available to local health departments. Include information on local incidence; and encourage the HD to send brochures to local physicians.</i> 		
Educate General Public	<ul style="list-style-type: none"> ▪ <i>Target high risk groups for presentations</i> ▪ <i>Post areas of risk with information about prevention</i> ▪ Re-label website to make it more easily navigatable 	<ul style="list-style-type: none"> ▪ <i>Provide consultation to and collaborate with LD support groups to facilitate public education</i> ▪ <i>Continue update of tick surveillance data on website.</i> ▪ <i>Retool and re-release “Bright White” public service announcement.</i> ▪ <i>Focus on regional parks and state parks for information distribution.</i> 	<ul style="list-style-type: none"> ▪ Make a You-tube video on how to remove a tick ▪ Make a You-tube video on personal protective measures ▪ Develop instructional poster on how to remove a tick 		
Educate School Children	<ul style="list-style-type: none"> ▪ Encourage local agencies to send brochures to school librarians within their jurisdiction. ▪ <i>Make a kid’s section on the website</i> ▪ <i>Implement and Evaluate “Don’t Let the Ticks Bite” program. Target health departments and vector control districts in all counties.</i> 	<ul style="list-style-type: none"> ▪ <i>Use the website to provide information for school-age children (tick i.d. and coloring pages, etc.)</i> ▪ <i>Make “Don’t Let the Ticks Bite” poster into laminatable PowerPoint slides for use in field.</i> ▪ <i>Coordinate with other school-based organizations to distribute material</i> 	<ul style="list-style-type: none"> ▪ Translate “Timothy Tickfinder” into Spanish 		
Risk Assessment			<ul style="list-style-type: none"> ▪ <i>Solicit grant if possible for expanding tick-testing for surveillance</i> ▪ <i>Follow development of electronic reporting system’s ability to capture “probable,” “suspect,” and “confirmed” LD cases.</i> 	<ul style="list-style-type: none"> ▪ <i>Encourage and facilitate local vector control districts to conduct nymphal and adult tick surveillance; provide consultation as needed</i> ▪ <i>Encourage tick studies in every county showing nymphal infectivity rates.</i> 	<ul style="list-style-type: none"> ▪ <i>Encourage studies that evaluate tick-borne disease risk and make recommendations</i>
Research		<ul style="list-style-type: none"> ▪ Increase awareness such that legislative funding is made available for LD research ▪ UC Berkeley and VBDS to evaluate tick removal techniques 		<ul style="list-style-type: none"> ▪ Ground-truth model of nymphal tick risk in California 	

*Key: Goals in normal font = previously suggested goals, still in consideration
Goals in italics = in progress or ongoing
Goals in bold = new goals suggested March 2009