

Tickborne Disease Work Group 2023

July 13th, 2023

Meeting location: 410 Westhampton Way; Gottwald Center for the Sciences,
Richmond VA, 23173

Meeting time: 11AM-3PM

Meeting participants:

In-person: Vanessa Wigand, Virginia Department of Education
Matthew Allen, Virginia Hospital and Healthcare Association
Holly Gaff, Old Dominion University
Wayne Hynes, Old Dominion University
Josh Bernick, Virginia Department of Health
Lori Flammia, Virginia Department of Health
David Gaines, Virginia Department of Health
Julia Murphy, Virginia Department of Health
Eleanor Field, Virginia Department of Health
Kathy Hosig, Virginia Cooperative Extension
Monte Skall, National Capital Lyme Disease Association
Greg Skall, National Capital Lyme Disease Association
Sammy Zambon, Virginia Department of Conservation and
Recreation
Maria Circosta, Virginia Council of Nurse Practitioners
Jennifer Platt, Tick-Borne Conditions United
Linda Grace, Virginia Veterinary Medical Association
Ellen Stromdahl, Defense Centers for Public Health
John Tracey, Department of Wildlife Resources
Jory Brinkerhoff, University of Richmond
Katelyn Jordan, Virginia Farm Bureau

Virtual: Emily Spangler
Chris Przybyszewski, *US Biologic*

Welcome and Introductions

Julia Murphy, State Public Health Veterinarian with the Virginia Department of Health (VDH), introduced herself and welcomed attendees. She then mentioned two changes to the agenda: first, Jim Broyhill of the Virginia Department of Health was unavailable to be present today so his presentation will be given by Joshua Bernick of the Virginia

Department of Health; second, the private company *US Biologic* will be giving a presentation on a Lyme vaccine developed for mice. She then asked all meeting participants introduced themselves to the group with both name and affiliation.

Previous Meeting's Minutes

An addition was made to the previous meeting's minutes to the recommendations made in the presentation by Monte and Greg Skall of the National Capitol Lyme Association. The group agreed unanimously that these minutes should be approved pending that addition. The meetings, the agenda, and the minutes are posted on the town hall for anyone to review. If there is going to be more than 10 business days between when the minutes would be approved a draft copy would be made available online.

Report timeline and enrolled bill language review

Julia Murphy reported to the group that the timeline for the final report submission to the VDH senior leadership is September 1, 2023. A review of the language:

The language of HB2008, which was enacted by the 2023 General Assembly on March 21, 2023, and major aspects of tickborne disease that the work group has been tasked with addressing in its report were reviewed, namely:

- (i) increasing public awareness of tick-borne diseases and strategies for preventing tick-borne diseases,
- (ii) educating health care providers and the public about the importance of and need for early diagnosis and treatment of tick-borne diseases,
- (iii) improving public health surveillance and data collection related to tick-borne diseases, and
- (iv) developing and implementing strategies to reduce tick populations and reduce the risk of exposure to and transmission of tick-borne diseases in the Commonwealth.

Review of recent report updates

An overall review of the current report status was done. Dr. Ellen Stromdahl then shared her edits made to the first section (regarding tick ecology). There was discussion about language around tick ecology (specifically, the use of the word suburban, the need to convey that there is always a risk of tick exposure anywhere in the Commonwealth, and the dynamic nature of the relationship between ticks and their environment), characterizing entomological vs. public health risk, wildlife and human interactions, and recommendations (specifically around including a focus on deer and localities have a tick plan). There is discussion about clarifying the data associated with the tick elevation graphic included in the report and Joshua Bernick was asked to coordinate efforts to revise this graphic with a deadline of 7/21/23. John Tracey and Katelyn Jordan proposed thoughts about including ecological considerations and locality specific recommendations in the section of the report that speaks to reducing tick populations in the environment.

While neither had specific language at this time, both will consider developing language and were given the deadline of 7/21/23 to communicate with Julia Murphy about any recommendations for consideration in the next version of the report.

Presentations

Delivering Disease Prevention – Chris Przybyszewski, *US Biologic*

This presentation focused on the potential application of the newly licensed oral vaccine pellets to prevent *Borrelia* infections in mice. There is discussion about the success of pellet up-take in mice, ideal placement of pellets for maximum Lyme-reduction effect, and the composition of the vaccine.

An Overview of Tick-borne Disease Surveillance and Investigation within a State Public Health Agency – Josh Bernick, Virginia Department of Health

This presentation focused on the goals of disease surveillance for public health purposes, what case definitions are and how they are used, how we collect and interpret public health data and the limitations of these data. The increasing local transmission of *Babesia* first reported in 2016 and the first case of Heartland virus in Virginia demonstrate the need for looking at improving surveillance.

Trends in Lyme disease, anaplasmosis, ehrlichiosis, cases were shared and how we can use trends to make inferences about the future. Recommendations include seeking opportunities for funding at both the state and federal level, seek and encourage training and continuing education for vector borne team staff at VDH, use modern resources (SQGL) to identify emerging cases more quickly and more correctly, improve public health awareness regarding case classification and reporting at the local level, maintain and strengthen relationships with external partners.

Enhanced Public Health Surveillance and Collaborations Associated with Tick-borne Diseases in Virginia - Julia Murphy

Current external collaborations that, in part, assist with VDH's situational awareness and understanding of surveillance strategies were shared (e.g., alpha-gal syndrome work group, interstate tick surveillance work group, ehrlichiosis and anaplasmosis work group). Concepts associated with the Data Modernization Initiative (DMI) and how it relates to tick borne disease surveillance in Virginia were also presented. DMI is a national initiative to modernize infrastructure to improve data intake, management, and data sharing across and within multiple levels of government. There is discussion about balancing the need for complete/accurate electronic case data for public health surveillance and not overburdening clinical providers.

Two federal grants that support state health department tick borne disease work (i.e., the CDC's Epidemiology Laboratory Capacity grant and Emerging Infections Program) were

discussed. VDH efforts associated with tick borne disease support are largely funded by the ELC Epidemiology Laboratory Capacity grant. VDH has also applied to receive Emerging Infections Program funding specifically to help explore alpha-gal syndrome surveillance in the Commonwealth. Recommendations include modernizing and improving data visualizations and data associated with tick-borne disease, increasing public health workforce knowledge, assessing the utility of incorporating animal health data, and continuing to engage with providers to understand best mechanisms for surveillance data sharing.

Public Comment

Dr. Jennifer Platt (from Tick-Borne Conditions United) introduced herself and provided a public statement as a North Carolina resident and as someone who has been personally affected by tick-borne disease and as someone who works with the public in this space as well. Her thoughts and recommendations include: using care around language that groups ticks as a monolith, that there is little science behind environmental control, using existing programs to build upon recommendations from this report, the need to include animal data in public health discussions, exploring workplace safety programs (military, utility workers) as they relate to tick borne disease prevention, including patients whenever possible, the need to understand incomplete case data, wanting to have alpha-gal syndrome be reportable, clinicians needing to understand what tests to run, and understanding disease hotspots.

Final discussions

There is discussion about using the length of tick feeding time to determine how to assess risk. There is discussion about recent trends of plateauing Lyme disease being entomologically driven and the limitations of public health surveillance particularly reporting fatigue, as well as the differences between clinical diagnoses and public health case reporting. There is discussion about how to interpret the data from any source and understand its limitations. There is a recommendation to stress again the need for financial support through general funds from the General Assembly in order to diversify the funding needed to support tick borne disease surveillance.

Minutes will be shared from this meeting along with the next version of the report; the next meeting will focus on early diagnosis and clinical perspectives, and this meeting is virtual only and will be held on August 14, 2023 from 11AM to 3PM.

The meeting was adjourned at 3:09PM.