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COUNTY OF DUTCHESS

DEPARTMENT OF BEHAVIORAL AND COMMUNITY HEALTH
Office of the Commissioner

Testimony to the

New York State Senate Task Force on Lyme and Tick Borne Disease and

New York State Senate Standing Committee on Health

August 29, 2017

I would like to thank the New York State Senate Task Force on Lyme and Tick-Borne

Disease and the Senate Standing Committee on Health for extending an invitation to the

Dutchess County Department of Behavioral & Community Health to testify on this important

health matter. Tick-borne disease is a high priority health concern, both in New York State and
specifically in Dutchess County.

Tick-borne disease creates a significant burden of disease that impacts our local residents, health care providers, government officials, and other partners. Lyme disease has been hyper-endemic in Dutchess County, since 1986. In the early nineties, when I began doing Lyme disease surveillance, it was conducted through traditional mail, telephone calls, and visits to the provider offices to review medical records. I recall piles and piles of paper copies of laboratory reports about three feet high covering my office. Eventually, technology came online to allow us to receive lab reports electronically. Over time this resulted in such high numbers of Lyme disease case investigations that it became impossible for us to maintain New York State

reporting standards. In response to the need in Dutchess and other Hudson Valley Counties the New York State Department of Health created a sentinel surveillance system based on ten years of Dutchess County's data for Lyme disease. Under the sentinel surveillance system estimated Lyme disease case numbers for Dutchess County are determined from investigation of a randomized 20% sample of all positive Lyme disease laboratory reports and currently, with more than 4,000 estimated cases since 2009, our county experiences disease rates 2 to 3 times greater than the upstate New York average.

Lyme disease is not the only tick-borne disease impacting our county. Since the late 1990s we have also experienced the emergence and increasing incidence of Anaplasmosis and Babesisois .Between 2003 to 2015 rates of Babesiosis increased from 2.1 cases per 100,000 residents to 25.3 cases per 100,000 residents. Between 1997 and 2015 the rates of Anaplasmosis and Ehrlichiosis increased from 2.2 cases per 100,000 to 30.1 cases per 100,000. Dutchess County annual incidence rates for Anaplasmosis and Babesiosis are approximately 4 to 5 times the New York State average.

Dutchess County periodically conducts surveys to assess the knowledge, attitudes, and behaviors of our constituent community. Survey findings inform our efforts to efficiently and effectively target limited resources to gaps identified. The numbers I've just described in our surveillance data our borne out in the high level of concern expressed by our residents regarding Lyme and other tick-borne disease in our 2015-2016 Tick-borne Disease Community Survey. In this survey, more than 90% of county respondents expressed that Lyme disease is a

serious problem in Dutchess County. Concerningly, this survey also found significant disparities in perceived knowledge of Lyme disease based on gender race and education level.

Local health departments are the boots on the ground in provision of disease surveillance and control, and dissemination of prevention education to health care providers and community residents. Despite waning financial and personnel resources and numerous competing health priorities we, at Dutchess County Department of Behavioral & Community Health, have continued to recognize the significant impact of tick-borne disease. This is evidenced in our inclusion of tick-borne disease prevention as one of three community health improvement goals in our County's Community Health Improvement Plan. The plan includes three strategies to address gaps tick-borne disease prevention efforts in Dutchess County, all of which could be greatly enhanced with provision of additional resources:

1. The first strategy is exploring the use of emerging technologies, including electronic medical records, to make surveillance case numbers more representative of the actual burden of disease in our county. In collaboration with our Regional Health Information Organization, the Department is piloting enhanced, real-time surveillance of Lyme disease through electronic medical record data which would allow for automatic reporting of cases that are diagnosed based on clinical symptoms alone. By streamlining our case investigation through automation, we hope to also be able to reduce the burden of reporting on providers. We believe that additional resources could greatly expand the effectiveness and longevity of this initiative.

- 2. The second strategy is targeted outreach to populations most at risk, such as outdoor workers, summer camp staff, or traditionally underserved populations. These efforts are critical based on disparities and overall low levels of penetration of educational efforts detected in the 2015-2016 Tick-borne Disease Community Survey. For example, the survey found that only 7% of survey respondents had attended a department educational presentation on tick-borne disease prevention. Think how many more we could reach with more resources! Not only could more resources allow us to expand traditional print media and community outreach efforts, they would also allow educational programs to adapt to the current communication technologies and information sharing. Whereas now we have website and post on social media, with more resources these efforts could become full blown digital media marketing campaigns.
- 3. The third strategy is the formation of a work group of key community partners to better address the problem of tick-borne disease through collaboration and sharing of resources. This strategy was included because we know that our Department cannot do it alone. There is much work to be done! Our recent survey demonstrated that 98% of Dutchess County residents are aware of Lyme disease, however only one-third know "a lot" about the disease. In its first six months the educational efforts of our department and other workgroup member organizations have reached approximately 15,000 Dutchess County residents. While we are proud of what we have accomplished, we live in County with a population of nearly 300,000, and we know that more funding is required to significantly increase our reach.

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In my 20 plus years of work in public health, I have witnessed the surge of tick-borne disease diagnosis and the resultant impact of acute and chronic health conditions on the quality of life for our residents and visitors. I firmly believe that strategic investments in public health including funding targeted to surveillance, education, and prevention will not only improve the health of Dutchess County residents but it will also improve the health of individuals throughout New York State.