

Testimony given to the **NEW YORK SENATE TASK FORCE ON LYME AND TICK BORNE DISEASE AND THE SENATE STANDING COMMITTEE ON HEALTH**

29 August 2017

***The Tick Project:
Testing environmental interventions to prevent Lyme
and other tick-borne diseases in our communities***

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- Tick-borne diseases (TBDs) in New York State are widespread and increasing in both geographic range and incidence. New diseases continue to emerge and threaten public health. The vast majority of these diseases are transmitted by the blacklegged tick, *Ixodes scapularis*.
- Successful control of blacklegged tick abundance would prevent exposure to all these tick-borne diseases in New Yorkers. Small-scale field studies have demonstrated the efficacy of several biological and chemical methods of reducing tick populations. However, no prior tick-control study has successfully reduced incidence of any tick-borne disease in human populations.
- ***The Tick Project*** (www.tickproject.org) was initiated to redress prior deficiencies with the goal of designing and testing environmental interventions to prevent tick-borne diseases in our communities.
- The study design consists of two tick-killing treatments: (1) a naturally occurring fungus (“**Met52**”®) that is lethal to ticks but harmless to people, pets, and wildlife; and (2) a device called a “**bait box**” that attracts mice and chipmunks and applies a minute amount of fipronil, the ingredient in Frontline®, killing ticks on these most important tick hosts.
- These treatments are applied throughout residential neighborhoods, rather than being limited to isolated individual properties. Residents of twenty-four neighborhoods, each consisting of roughly 100 adjacent properties, are participating. All neighborhoods are in Dutchess County, where TBD incidence is very high.
- The study design is randomized, placebo-controlled, and double-blind, meeting the highest standards of scientific rigor. Six neighborhoods are treated with both Met52 and bait boxes, six are treated with Met52 and inactive bait boxes (placebo control), six are treated with inactive Met52 (placebo control) and bait boxes, and six are treated with inactive Met52 and inactive bait boxes.
- The following variables are recorded for each member of each participating household: (1) cases of tick-borne disease; (2) ticks found on body or clothing (includes dogs and cats). The following variables are recorded for a representative sample of the properties; (3) numbers of ticks found when sampling the yard; (4) numbers of ticks found on white-footed mice and eastern chipmunks live-trapped on the property.
- To date, 968 households have been enrolled, consisting of 4107 individual participants. Percent participation in the 24 properties ranges from 25% to 45%. All of these properties were assigned to one of the four treatment categories and treated in spring and summer, 2017. Treatments are scheduled to continue annually through 2020.
- Funding is provided by the Steven and Alexandra Cohen Foundation, with additional support from the New York State Department of Health, the Centers for Disease Control and Prevention, and several private donors.