

Title: Tick Bite Prevention and Risk Reduction for School-Aged Children

Project Leader(s): Kristina Ferrare, Forestry Program Specialist at CCE Onondaga (CCE-OC) has participated as an educator and facilitator of several deer management committees for communities in Onondaga County, which includes tick bite prevention education and tick population monitoring. As a forester, Kristina regularly uses principles of IPM to advise homeowners on managing tree health issues. Clare Carney, Natural Resources Educator at CCE-OC works in urban forestry and has developed and delivered tick programming to adults and youth throughout the County. Clare also assists in tick population monitoring via tick drags as part of deer and tick community committee activities in the area.

Cooperator(s): Joellen Lampman, School and Turfgrass IPM Support Specialist, NYS IPM Program.

Abstract: Youth and families spend the most time out of doors and are therefore at a great risk for tick bites. Research has shown that children ages 5-9, especially boys, are most at risk for tick bites. This project is increasing parent and guardian knowledge about ticks through direct outreach to parents in Syracuse and Onondaga County elementary, after-school programs, and community centers. Additionally, it supports staff in making additional connections within the county to extend the program in the future to elementary school-aged youth and other professionals that work regularly with them: physical education teachers and nurses.

Background and Justification: The NYS IPM Program has identified promoting methods for reducing the impact of ticks in community settings as a top priority for 2018. Concerns about ticks are increasing in CNY in conjunction with increasing deer pressure in urban and suburban settings. The Onondaga County Legislature convened a Deer and Lyme disease Task Force to address the issue in 2015. The Onondaga County Health Department website offers information about tick removal and symptom detection and briefly addresses yard management and personal protective techniques, but has expressed that there is a clear need for more direct IPM outreach and education with an emphasis on cultural controls and preventing tick bites. As a result of the NYS IPM 2015 grants program, CCE-OC developed materials focused on outreach and resource development in these areas. We have participated in several public meetings and workshops and talked to thousands of people at the NYS Fair. We still, however, are challenged in reaching a critical population.

Parents of elementary-aged school children are a prime audience for education about reducing the risk of human-tick interactions with IPM practices. Children ages 5-9, especially boys, are most likely to encounter ticks and be exposed to tick-borne pathogens. Parents are often hard to reach with traditional evening/weekend workshop programming. The best place to meet families is where they are: at community center parenting groups, PTO meetings, and other parental engagement meetings they are already attending.

Objectives:

1. Increase knowledge of threats from ticks, prevention techniques to reduce tick exposure, and proper tick removal techniques
2. Focus on parents of elementary school-aged children
3. Develop contacts for elementary school nurses and physical education teachers and their students in the county in order to expand programming to this audience if future funding is available

4. Evaluate the project to determine behavior change and learning

Procedures:

1. Increase knowledge of threats from ticks, prevention techniques to reduce tick exposure, and proper tick removal techniques
 - a. Update and enhance adult presentation in coordination with NYS IPM
 - b. Use tick resources produced by NYS IPM whenever possible to avoid duplicating resources and supporting the dontgettickedNY.org brand
2. Focus on parents of elementary school-aged children; these children are most likely to encounter a tick outdoors and be exposed to tick-borne pathogens
 - a. Train parents at meetings they are already planning on attending such as PTO meetings, community center parenting group meetings and other after school program meetings
3. Develop relationships with school nurses and physical education teachers in the county school systems to expand programming to this audience and their youth in the future
 - a. Continue to develop contacts within the Syracuse City School District and other school districts to prepare for future funding opportunities
4. Evaluate the project to determine behavior change and learning
 - a. Develop evaluation tool for parents
 - b. Conduct in person evaluation both before and after workshop to measure changes in learning

The ultimate outcome of the project is to raise the awareness of parents about ticks, tick bite prevention, and IPM strategies to prevent tick exposure, resulting in modification of personal habits. A secondary outcome is to build relationships with future audiences in order to expand programming when funding becomes available.

Results and Discussion:

Using educational resources made available through NYS IPM and the Don't Get Ticked NY campaign, CCE Onondaga has updated its tick education training for parents, primarily of young children. Our programming is designed to be delivered where parents are already gathering, such as community centers and PTO meetings.

In the initial outreach of the Tick Prevention program, educators contacted 64 Parent Teacher Organizations (PTO) and elementary schools of Onondaga County. As a result of this effort, CCE Onondaga now has an up to date database of elementary schools in the county where we will continue to focus educational efforts. Of the schools and groups contacted, 16 responded but did not follow up on conversation and did not schedule programming. Two of the groups contacted declined to have the educational program presented to their group. The program was presented to two groups in December - Huntington Family Center and Northside Creating Hope; both of which were coordinated through Parent University with Syracuse City School District.

The presentation at Huntington Family Center was given to an audience of 17 parents from the Syracuse community. Participants were engaged and had numerous stimulating questions that led to informative dialog for the group. The majority of the audience were not aware of ticks and their habitats, and believed themselves to be insulated from the dangers of tick-borne

pathogens. This educational program provided them with the knowledge and the tools to protect their families and be proactive against tick bites.

The second presentation coordinated with Parent University was with Northside Creating Hope, on the Northside of the City of Syracuse. This area has a high population of New Americans, and this was reflected in the audience of the program. With 41 participants, and a handful of translators, this was an interactive presentation of the tick prevention material. CCE educators worked with the translators to provide accurate interpretation of the material to the different language groups for comprehension and understanding. Albeit slow, the translation and demonstration of identification, prevention, and removal of ticks and of tick-borne illness was incredibly important to bring to this audience that was unaware of the threat to their community.

Parents attending the program learn about ticks, tick bite prevention, and IPM strategies to prevent tick exposure. The same evaluation is given before and after the workshop. It was difficult to get the evaluation completed at the Northside Creating Hope presentation due to language barriers. Parents receive a tick removal kit for attending the workshop – one per household. The funding to build these kits was provided through this grant.

Several contacts on our list were unable to schedule a session during the grant period, but have requested that we deliver programming later in the spring. CCE Onondaga is currently working to try and accommodate some of these requests but will need to source other funding to do so.

We continue to reach out to school district staff to create relationships to better prepare us for future funding opportunities. CCE Onondaga is currently speaking with Syracuse City School District's nursing coordinator to try and access nursing staff to deliver programming that way. This is perhaps the most challenging but potentially impactful part of the project and will be a focus of the time remaining.

While CCE is immersed in tick education and programming, contacting schools and community groups with the offer of programming has revealed a vast gap in public knowledge about the risk of tick exposure. It was especially surprising that some PTOs felt the topic would not be of interest to parents. This IPM education is critical to health and well-being of our residents and communities. Continuing to promote a statewide effort like Don't Get Ticked NY supported by local delivery of information that this grant affords is the best way to raise tick bite prevention literacy to the population most impacted.

Project location:

This project has occurred in Onondaga County, NY.