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Increasing Tickborne Disease Awareness Through Local Community Organizations and Businesses

John (Jackson) Burke

Community Health Rutland

R2: May-June 2023

Preceptor: Dr. Richard Baker

Problem Identification

- ▶ Tickborne illnesses are a major public health concern in the Rutland Community as well as the rest of Vermont.
- ▶ Information on tickborne illnesses is often distributed through healthcare providers; often primary care and clinics.
- ▶ However, many individuals still lack consistent access to primary care.
- ▶ These individuals therefore need access to information about tickborne illnesses through other means.
- ▶ AHEC Topic Areas: Cultural competency, current and emerging health issues, medical practice transformation



Public Health Costs

- ▶ Lyme Disease continues to be a major public health concern.
 - ▶ Lyme Disease costs the US economy between \$1-10 billion annually
 - ▶ Vermont had the highest rate of reported, confirmed, and probable Lyme Disease cases in the US in 2017.
 - ▶ Large healthcare systems often over-test and overtreat for Lyme, leading to misdiagnoses, patient confusion, and unnecessary antibiotic use.
- ▶ Vermont now has the highest annual incidence of anaplasmosis in the US.
- ▶ Increased public education on tickborne illnesses can reduce these costs.

Community Perspectives

Dr. Richard Baker: Family Medicine Physician at Community Health Rutland

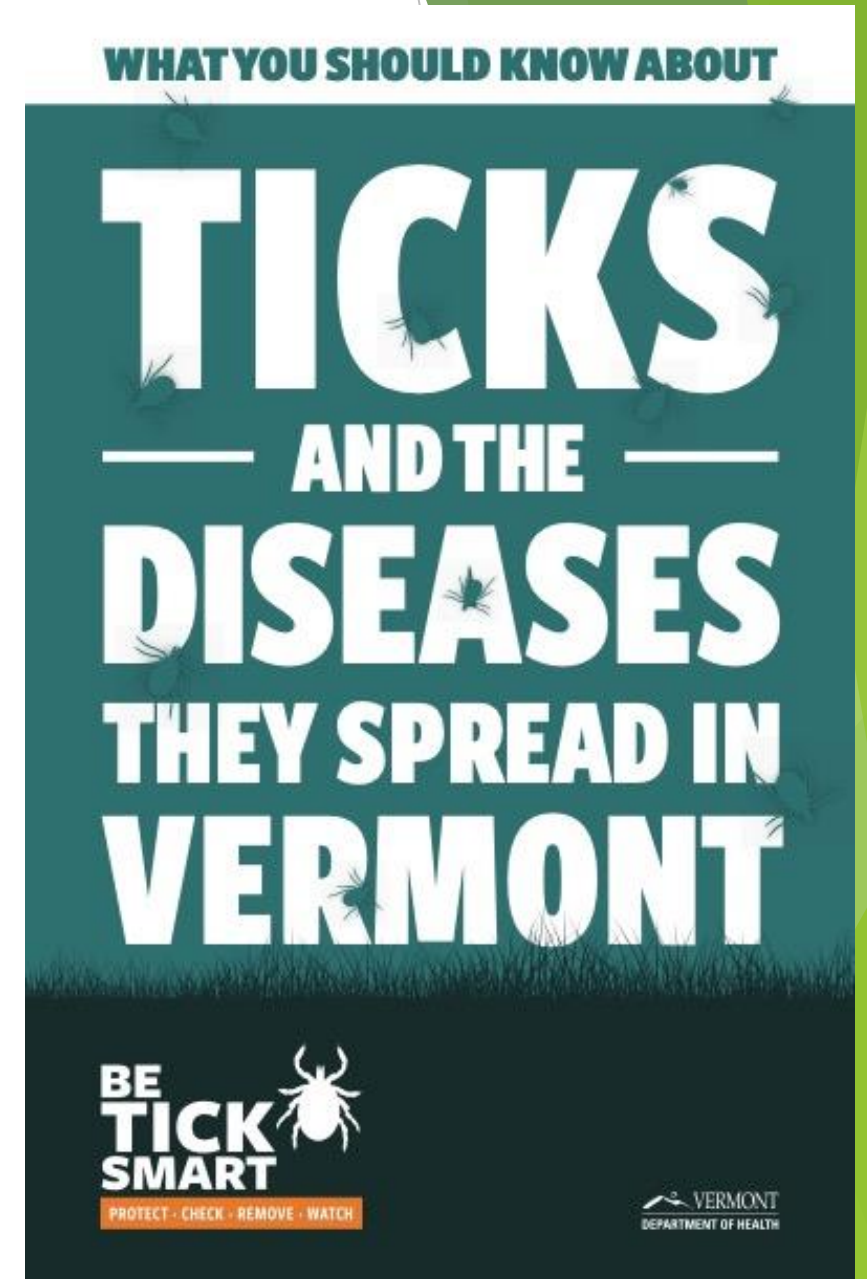
- “Having awareness about the symptoms of Lyme disease is important. Sometimes, distinguishing features, such as the rash, are not present. Often, people who test positive for Lyme never find the tick as well. It is important to be educated on the symptoms, check yourself for ticks, and to see a medical provider if you suspect a tickborne illness”

Susan White, AHEC representative and Rutland Community Member

- “Tickborne illnesses are an on-going concern here in southern Vermont. Every time you go outside you must be aware, and conduct a tick check on yourself when you return. My husband and I wear tick gaitors when we are in the woods but still pulled off multiple ticks after hiking through an uncut field earlier this spring. I worry that some people aren’t checking themselves. The symptoms can resemble other illnesses so there is a risk for it to go undetected for too long. It would be helpful to have tick reminders at trail heads, town and school recreation fields and garden centers. Social media reminders are helpful, too. Also, I wonder if high school cross country teams do regular tick checks. Both my husband and I have had mild cases of Lyme disease, which were treated effectively with the standard antibiotic - thankfully!”

Intervention and Methodology

- ▶ The Vermont Department of Health has great pamphlet on the different tickborne illnesses, types of ticks, how to remove them, and when to see a healthcare provider
- ▶ This pamphlet was sent to different businesses and organizations throughout Rutland that focus on outdoor activities with the goal of:
 - ▶ Sharing physical copies with clients and shoppers at stores and outreach events
 - ▶ Including it on their websites
 - ▶ Spreading it through monthly listservs and other electronic means



Results

- ▶ Mr. Twitters, a garden and supply store, will share the pamphlet at its store, on its website, and through its summer email to its clientele.
- ▶ Come Alive Outside, a Rutland organization focused on getting more people outdoors, will be sharing the pamphlets at their outreach tables during their events
- ▶ The Rutland Recreation and Parks Department will also share this resource in some capacity



Evaluation and Limitations

- ▶ Success in this project would mean a greater community awareness of tickborne illnesses. This could be measured by:
 - ▶ Reduced incidence of tickborne illnesses in Rutland.
 - ▶ Better utilization of tests and antibiotics by practitioners in the area.
- ▶ Limitations of the project:
 - ▶ Many businesses and organizations did not respond to outreach attempts.
 - ▶ A proper evaluation would require data from all primary care providers in Rutland. This could be difficult to organize.
 - ▶ Evaluation is limited due to the time constraints of the clerkship.

Recommendations for the future

- ▶ Continue to work with the VDH to spread pamphlets to other locations:
 - ▶ Hotels that host the unhoused population of Rutland.
 - ▶ Farm share programs for low-income residents.
- ▶ Share resources with public libraries and schools.
 - ▶ Reach out to coaches of the Cross Country and Track teams from Rutland City Public School District.
- ▶ Find and share additional resources about tickborne disease from the VDH and the CDC.

References

- ▶ **Vermont Department of Health Pamphlet that was sent out to members of the Rutland Community:**
https://healthvermont.gov/sites/default/files/documents/pdf/HS_ID_TickBooklet.FINAL_.pdf
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