Understanding Tickborne Disease Prevention Practices

Tick bites and tickborne disease (TBD), most notably Lyme disease, are a growing public health threat of particular concern in the northeast region of the United States.

In a collaborative effort to reduce tick exposure and prevent TBD among State employees, the New Hampshire Department of Health and Human Services, Division of Public Health Services (DPHS) and the New Hampshire Occupational Health Surveillance Program (OHSP) at the University of New Hampshire supported a survey on workplace TBD prevention practices and policies among State agencies.

The survey focused on:

- Awareness of risk and risk-reduction behaviors,
- Existence of workplace training and materials,
- Existence of workplace surveillance/reporting, and
- Willingness to engage in future trainings, surveillance, and evaluation.

The objective of the first phase of this project was to gather and analyze information on current workplace policies and practices. The next phase of the project is to formulate recommendations on best practices for training and surveillance related to TBD prevention.

A Survey of New Hampshire State Agencies

Each year, there are over 1,000 reported cases of Lyme disease in New Hampshire. The statewide incidence rate is among the highest in the United States. In addition, the incidence rates of co-infections such as Anaplasmosis and Babesiosis are increasing. Outdoor workers are thought to be at greater risk of exposure to TBDs through the bite of an infected blacklegged tick. In response, DPHS and OHSP supported a survey of 30 participants representing 9 State agencies, with representatives from 18 unique divisions.

Key Findings and Recommendations

- TBD prevention programming is important for state employees. It is recommended that enhanced education on risk-reduction behaviors be provided to relevant state agency administrators and staff.
- Risk perception among employees does not always align with training and reporting mechanisms. It is recommended that those agencies and employees at high risk be prioritized for future training and tracking.
- Of those agencies that provide trainings, survey respondents viewed the training as comprehensive. It is recommended that DPHS gather and review existing training materials with the goal of standardizing training content to establish best practices.

Concerns about a tick bite should be discussed with a healthcare provider.
How to Prevent Tickborne Disease:

- Avoid tick-infested areas.
- Use insect repellent (20-30% DEET).
- Wear protective clothing.
- Wash and dry clothing at a high temperature to kill any ticks that may remain on clothing after being outdoors.
- Perform daily tick checks after you or your pets have been outdoors.
- Remove attached ticks promptly. Tick removal within 36 hours of attachment can prevent Lyme disease.
- Be mindful of the environment you create around your home and in your community.
- Shower soon after returning indoors to wash off any unattached ticks.

Source: www.cdc.gov/lyme/index.html

How to Remove a Tick:

1. Use fine-tipped tweezers to grasp the tick as close to the skin’s surface as possible.
2. Pull upward with steady, even pressure to remove the tick. Avoid twisting or jerking.
3. Clean the bite area and your hands with rubbing alcohol, iodine, or soap and water.

New Hampshire Tickborne Disease Prevention Among State Agencies

Survey participants were asked: (1) how does your agency view risk of TBD among your employees and, (2) does your agency offer training to employees on personal protective measures to prevent tick exposure?

Among respondents that indicated their agency views risk of TBD among employees as high, 67% state that training is offered. Of those respondents for whom training is offered, 40% state trainings are required for full-time employees. It is unclear if training is required for part-time employees, seasonal workers, or interns. The majority of trainings (73%) are conducted by in-house staff. Training topics include background on TBDs (67%), information on transmission of TBDs (87%), risk of exposure (87%), risk reduction behaviors (87%), and importance of timely reporting of workplace injury and illness (80%). Furthermore, 75% of respondents are interested in TBD prevention training.

Limitations: The survey targeted administrative, human resources, and training personnel in order to gauge structural policies and procedures. Not all respondents had expertise in every topic addressed. As such, data do not represent actual implementation of health behaviors on the part of the workers.

Special thanks to Kyle Dopfel who designed this survey as part of a Field Study Project to fulfill requirements for a Masters in Public Health.

For more information, visit:

NH Environmental Public Health Tracking wisdom.dhhs.nh.gov/EPHT

NH Bureau of Infectious Disease Control dhhs.nh.gov/dphs/edcs/lyme/

NH Occupational Health Surveillance Program nhojsp.unh.edu

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