

PROPOSAL FOR NATURAL RESOURCE WORKERS TICK-BITE PREVENTION PROGRAM

Overview

Federal natural resource workers (biologists, botanists, foresters, rangeland specialists, recreation specialists, soils specialists, rangers, outdoor educators, engineers, law enforcement, etc.) are lacking tick-bite prevention education and control resources. This is a group of employees across many federal departments (Department of Agriculture, Department of Interior) who's daily work duties place them in high exposure tick habitats and are at increased risk of tick bites and the many pathogens they may transmit. Many tick-borne diseases and conditions can result in serious, debilitating, or chronic illness and even death.

Tick bite prevention education and control resources are not standardized across departments, agencies nor regions of the US that employ natural resources workers. Many regions and agencies that employ natural resource workers currently receive no education nor prevention resources regarding ticks and tick-borne diseases within their base units.

The Objective

To prevent tick-bites and tick-borne disease illness and conditions in all Federal natural resource workers.

- Need #1: Standardized tick and tick-borne disease/condition education and prevention across all agencies and across all regions of the US.
- Need #2: Tick-bite prevention controls.
- Need #3: Standardized tick-bite protocols.

The Solution

To develop a standardized "Federal Tick-Bite Prevention TactTicks Program"

- Recommendation #1: Develop or update all federal health and safety handbooks/manuals with standardized tick-bite prevention direction and guidance. This handbook/manual update and direction/guidance development should have input from a tick-borne disease patient or patient advocate.
- Recommendation #2: Development of standardized tick and tick-borne diseases education/prevention materials. These education materials should include all medically important tick species, human pathogens and tick-borne diseases/conditions known to occur within the US, as well as relevant global risks. These materials should emphasize tick checks and proper removal of ticks. These materials should be developed with input from a tick-borne disease patient or patient advocate. These materials should be reviewed annually and updated as new information is discovered.

- Recommendation #3: Development of a standardized tick and tick-borne diseases education/prevention module to be made part of all new federal natural resource employees training as well as annual seasonal employees training. This training module should include all medically important tick species, human pathogens and tick-borne diseases/conditions known to occur within the US, as well as relevant global risks. This training should emphasize tick checks and include proper removal of ticks. This education module should be developed with input from a tick-borne disease patient or patient advocate. This training module should be reviewed annually and updated as new information is discovered.
- Recommendation #4: Provide permethrin for treatment of employee clothing and gear as well as tick approved skin repellants at all duty stations. Supply each field going employee a tick removal kit as part of their gear issuance (alcohol cleanser, stainless steel fine nosed tweezers, and a collection vial to be able to save specimen for testing).
- Recommendation #5: Standardized reporting should be developed for all known or suspected tick-bites or for tick habitat exposure, when tick-borne illness occurs in the absence of a noticeable tick bite. Employees should be offered a resource for tick-testing if a specimen was recovered and saved. Employees should be provided references to both published standards of care for tick-borne disease treatment guidelines to make an informed decision regarding treatment choices, including prophylactic treatment.

Expected Results

Reduction of tick-borne disease illness/conditions in Federal natural resource workers.

Establishment of a standardized “Federal Tick-Bite Prevention TactTicks Program” would increase awareness and education regarding ticks and tick-borne diseases/conditions, as well as provide tick-bite control resources to a high-risk population of federal workers. This education, control, and reporting will decrease incidence of illness and disability among federal natural resource employees.

Program Benefits

- Result #1: Standardized direction, guidelines, education & awareness will aid in prevention of tick-bites among federal natural resource employees.
- Result #2: Standardized direction, guidance, education & awareness will aid in early recognition of tick-borne diseases and conditions, and better access to early treatment and better treatment outcomes for infected employees.
- Result #3: Control/prevention resources (Permethrin application, skin repellents, tick removal kits) decrease tick-bites among Federal natural resource workers working in high-risk tick habitats.
- Result #4: Prompt and proper removal of ticks will decrease risk of tick-borne illness and conditions among Federal natural resource workers.
- Result #5: Standardized reporting will aid in surveillance of tick-bites and tick-borne diseases and conditions among Federal natural resource workers.

Financial Benefits

- Result #1: Reduction of tick-bites will result in less lost wages for natural resource workers due to acute tick-borne disease.

- Result #2: Reduction of tick-bites will result in less loss of career and disability payments for highly trained natural resource workers due to chronic or debilitating tick-borne illnesses/conditions.

Conclusion

I am a former federally employed wildlife biologist and wildland firefighter (militia personnel). I was not provided any tick or tick-borne illness/condition education, training, nor control resources throughout my entire career. My career ended due to severe and chronic tick-borne illness. Diagnosis of tick-borne disease was greatly delayed due to lack of awareness and education. I am personally aware of several other Federal natural resource employees that have lost their health and careers due to illness from tick-borne diseases. Federal employees working in the field of natural resource management are at increased risk of exposure to tick bites and tick-borne diseases/conditions and would benefit greatly in both health and safety from a standardized "Federal Tick-Bite Prevention TactTicks Program."

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May 24, 2021