

Place Sticker Here

**Devils Tower National Monument Tularemia Survey**

Demographics

1. Name: \_\_\_\_\_

2. Age: \_\_\_\_\_

3. Sex:         Male         Female

4. Address of residence while working at Devils Tower:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Is this Park housing?         Yes         No

5. Permanent address, if different from above:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. To which address would you like us to mail your test results (results will be mailed in September or October)?

- Residence while working at Devils Tower
- Permanent Address
- Other address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. Phone numbers

Home:        \_\_\_\_\_

Cell:        \_\_\_\_\_

Work:        \_\_\_\_\_

ID
----

Number \_\_\_\_\_

Occupational and Exposure History

8. Current job

Job title: \_\_\_\_\_

- Job type:
- DETO Permanent full-time employee
  - DETO Term employee
  - DETO Seasonal employee
  - DETO Volunteer
  - Devils Tower Natural History Association Employee
  - Other (please specify): \_\_\_\_\_

Average hours per week during the past 3 months: \_\_\_\_\_

Current division(s) (check all that apply):

- Office of the Superintendent
- Division of Administration
- Division of Facility Management
- Division of Interpretation
- Division of Visitor and Resource Protection
- Division of Resource Management
- Entrance Station
- Devils Tower History Association
- Other (specify): \_\_\_\_\_

Dates of employment at Devils Tower during 2015: \_\_\_\_\_

9. What types of jobs have you held during the past 5 years, both with the National Park Service (NPS) and outside of the National Park Service? Please list the job types, location (state or National Park) and years performed.

Job Type	With NPS? Yes/No	Location (State or National Park)	Year(s)

Number \_\_\_\_\_

10. Please indicate your job duties at Devils Tower (select all that apply), hours per week worked on each job duty, and hours per week working outdoors on each job duty **in the past three months**.

Job Duty	Hours Per Week	# of Hours Per Week Spent Outdoors
<input type="checkbox"/> Office/Admin		
<input type="checkbox"/> Supervisory/Management		
<input type="checkbox"/> EMS/Search and Rescue		
<input type="checkbox"/> Custodial		
<input type="checkbox"/> Buildings (plumbing, electrical, carpentry)/ Utilities (water, waste-water)		
<input type="checkbox"/> Trail Maintenance		
<input type="checkbox"/> Roads/Grounds Maintenance		
<input type="checkbox"/> Wildlife		
<input type="checkbox"/> Vegetation		
<input type="checkbox"/> Wildland Fire		
<input type="checkbox"/> Campground/Fee		
<input type="checkbox"/> Cultural Resources/Archaeology		
<input type="checkbox"/> Resource Education (visitor center, outdoor programs, education)		
<input type="checkbox"/> Law enforcement		
<input type="checkbox"/> Fees		
<input type="checkbox"/> Devils Tower Natural History Assoc.		
<input type="checkbox"/> Other (specify):		

11. **Before this summer**, had you ever heard of the disease called tularemia?

Yes       No

12. In your opinion, what are the ways that people can get tularemia (check all that apply)?

- |   |  |
|---|--|
| <input type="checkbox"/> Mowing                         | <input type="checkbox"/> Landscaping                 |
| <input type="checkbox"/> Inhaling contaminated droplets | <input type="checkbox"/> Tick bite                   |
| <input type="checkbox"/> Mosquito bite                  | <input type="checkbox"/> Fly bite                    |
| <input type="checkbox"/> Flies landing on food          | <input type="checkbox"/> Contact with a sick person  |
| <input type="checkbox"/> Handling sick or dead animals  | <input type="checkbox"/> Drinking contaminated water |
| <input type="checkbox"/> Other (please specify): _____  |  |
| <input type="checkbox"/> Don't know                     |  |

Number \_\_\_\_\_

13. Did you travel outside of Wyoming and stay overnight in another state or country during the past three months?

Yes       No (if no, go to question 14)

If yes, please list the state or country you visited, and the month of travel:

Travel Location (state or country)	Month

14. In the past 3 months, have you come into contact with wild rabbits?

Yes       No (if no, go to question 15)

Contact occurred at (check all that apply):

Work     Home     Other (specify: ) \_\_\_\_\_

How many times did contact occur? (for example, once, twice, etc...) \_\_\_\_\_

Types of contacts (check all that apply):

- a)  Touched live rabbit, no gloves
- b)  Touched live rabbit, with gloves
- c)  Touched dead rabbit, no gloves
- d)  Touched dead rabbit, with gloves
- e)  Picked up rabbit carcass with pick-up tool or shovel, no hand contact
- f)  Bitten by rabbit
- g)  Scratched by rabbit
- h)  Contact with rabbit body fluids or tissue
- i)  Contact with rabbit feces

Number\_\_\_\_\_

15. In the past 3 months, have you come into contact with wild rodents, such as mice, rats, voles, or prairie dogs?

Yes       No (if no, go to question 16)

If yes, please list the types of rodents:\_\_\_\_\_

Contact occurred at (check all that apply):

Work       Home       Other (specify: )\_\_\_\_\_

How many times did contact occur? (for example, once, twice, etc...)\_\_\_\_\_

Types of contacts (check all that apply). Please specify rodent type(s) for each type of contact.

a)  Touched live rodent, no gloves  
Rodent type(s)\_\_\_\_\_

b)  Touched live rodent, with gloves  
Rodent type(s)\_\_\_\_\_

c)  Touched dead rodent, no gloves  
Rodent type(s)\_\_\_\_\_

d)  Touched dead rodent, with gloves  
Rodent type(s)\_\_\_\_\_

e)  Picked up rodent carcass with pick-up tool or shovel, no hand contact  
Rodent type(s)\_\_\_\_\_

f)  Bitten by rodent  
Rodent type(s)\_\_\_\_\_

g)  Scratched by rodent  
Rodent type(s)\_\_\_\_\_

h)  Contact with rodent body fluids or tissue  
Rodent type(s)\_\_\_\_\_

i)  Contact with rodent feces  
Rodent type(s)\_\_\_\_\_

Number\_\_\_\_\_

16. In the past 3 months, have you come into contact with any other wild animals?

Yes       No (if no, go to question 17)

If yes, please list the types of animals:\_\_\_\_\_

Contact occurred at (check all that apply):

Work     Home     Other (specify: )\_\_\_\_\_

How many times did contact occur? (for example, once, twice, etc...)\_\_\_\_\_

Types of contacts (check all that apply). Please specify animal type(s) for each type of contact.

a)  Touched live animal, no gloves  
Animal type(s)\_\_\_\_\_

b)  Touched live animal, with gloves  
Animal type(s)\_\_\_\_\_

c)  Touched dead animal, no gloves  
Animal type(s)\_\_\_\_\_

d)  Touched dead animal, with gloves  
Animal type(s)\_\_\_\_\_

e)  Picked up carcass with pick-up tool or shovel, no hand contact  
Animal type(s)\_\_\_\_\_

f)  Bitten by animal  
Animal type(s)\_\_\_\_\_

g)  Scratched by animal  
Animal type(s)\_\_\_\_\_

h)  Contact with animal body fluids or tissue  
Animal type(s)\_\_\_\_\_

i)  Contact with animal feces  
Animal type(s)\_\_\_\_\_

Number\_\_\_\_\_

17. Do you have any household pets living with you this summer while working at Devils Tower?

Yes     No (if no, go to question 18)

Please indicate the types of pets you have living with you while working at Devils Tower and whether they are outdoor pets, indoor pets, or both:

Dog(s)     Yes     No    If yes:     Outdoor     Indoor     Both

Cat(s)     Yes     No    If yes:     Outdoor     Indoor     Both

Other pet (specify):\_\_\_\_\_  Outdoor     Indoor     Both

Other pet (specify):\_\_\_\_\_  Outdoor     Indoor     Both

Other pet (specify):\_\_\_\_\_  Outdoor     Indoor     Both

Did your pets have contact with dead animals this summer – for example, did they catch animals and/or bring carcasses home?

Yes     No

If yes, what type of animal(s)? \_\_\_\_\_

18. Did you mow any grass in during the last 3 months?

Yes     No (if no, go to question 19)

If yes, where did you mow?

Work     Home     Both

Please indicate what type of mower you used (select all that apply):

Riding Mower     Push Mower

Did you ever use the mower without a mower bag to collect clippings?

Yes     No

Number \_\_\_\_\_

If you mowed at Devils Tower, please indicate the areas you mowed.

Select all that apply.

- Roadside mowing  
 Visitor Center  
 Housing/Administration/Maintenance areas  
 Entrance area  
 Other (please specify): \_\_\_\_\_

19. Please indicate which of the following activities you performed during the last 3 months, and whether they were performed while working at Devils Tower, at home, or both.

<p><b>a) Collecting animal carcasses</b></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes: <input type="checkbox"/> Work <input type="checkbox"/> Home <input type="checkbox"/> Both</p>	<p><b>b) Weed whacking</b></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes: <input type="checkbox"/> Work <input type="checkbox"/> Home <input type="checkbox"/> Both</p>
<p><b>c) Raking grass clippings</b></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes: <input type="checkbox"/> Work <input type="checkbox"/> Home <input type="checkbox"/> Both</p>	<p><b>d) Using a chainsaw</b></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes: <input type="checkbox"/> Work <input type="checkbox"/> Home <input type="checkbox"/> Both</p>
<p><b>e) Construction</b></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes: <input type="checkbox"/> Work <input type="checkbox"/> Home <input type="checkbox"/> Both</p>	<p><b>f) Gardening</b></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes: <input type="checkbox"/> Work <input type="checkbox"/> Home <input type="checkbox"/> Both</p>
<p><b>g) Mulching</b></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes: <input type="checkbox"/> Work <input type="checkbox"/> Home <input type="checkbox"/> Both</p>	<p><b>h) Tree work (pruning, trimming)</b></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes: <input type="checkbox"/> Work <input type="checkbox"/> Home <input type="checkbox"/> Both</p>
<p><b>i) Brush-cutting</b></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes: <input type="checkbox"/> Work <input type="checkbox"/> Home <input type="checkbox"/> Both</p>	<p><b>j) Using a powered blower</b></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes: <input type="checkbox"/> Work <input type="checkbox"/> Home <input type="checkbox"/> Both</p>



Number \_\_\_\_\_

<p><b>k) Invasive plant management</b></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes: <input type="checkbox"/> Work <input type="checkbox"/> Home <input type="checkbox"/> Both</p>	<p><b>l) Work with hands in soil</b></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes: <input type="checkbox"/> Work <input type="checkbox"/> Home <input type="checkbox"/> Both</p>
<p><b>m) Hosing off outdoor structures or surfaces</b></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes: <input type="checkbox"/> Work <input type="checkbox"/> Home <input type="checkbox"/> Both</p>	<p><b>n) Cleaning off mowers/lawn equipment</b></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes: <input type="checkbox"/> Work <input type="checkbox"/> Home <input type="checkbox"/> Both</p> <p>If yes, did you ever clean equipment with a hose?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p><b>q) Using powered digging or earth-moving equipment (for example, auger or tractor)</b></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes: <input type="checkbox"/> Work <input type="checkbox"/> Home <input type="checkbox"/> Both</p>	

20. Do you recall mowing or weed-whacking over any dead animal or their remains during the last 3 months?

Yes  No (if no, go to question 20)

If yes, where did this occur?  Work  Home  Both

If yes, approximate date(s): \_\_\_\_\_

21. Do you recall seeing dead animals on your home property during the last 3 months?

Yes  No (if no, go to question 21)  
 Not applicable – I've been staying in Park housing

If yes, what type of animals did you see? \_\_\_\_\_

\_\_\_\_\_

Number \_\_\_\_\_

22. Did you hunt during the past 3 months?

 Yes  No (if no, go to question 22)

If yes, in what state(s) did you hunt? \_\_\_\_\_

If yes, what species did you hunt? \_\_\_\_\_

Did you skin/process any of the animals that you hunted?

 Yes  No

If yes, did you wear gloves when you skinned/processed these animals?

 Yes  No

23. In the past 3 months, how many ticks have you found crawling on your clothing or body? \_\_\_\_\_

24. In the past 3 months, how many ticks have you found attached to your skin?  
\_\_\_\_\_

25. What kind of tick(s) were attached? Please see pictures on the back page. Select all that apply. Skip this question if no ticks were attached to you.

 Wood Tick  Brown Dog Tick  Other  Don't know

26. In the past 3 months, do you recall being bitten by any of these types of insects?

Deerflies  Yes  NoHorseflies  Yes  NoOther biting flies  Yes  NoFleas  Yes  NoMidges/No-see-ums  Yes  NoMosquitoes  Yes  NoProtective Measures

27. In the past 3 months, how often have you worn a mask or other type of face-covering while performing outdoor work?

 Always  Sometimes  Never Not applicable – I don't perform these activities

If never or not applicable, go to question 27.

Number \_\_\_\_\_

If you did wear a face-covering, what did you wear?

- Simple dust mask       N-95       Bandana  
 Other(specify): \_\_\_\_\_

During which activities did you wear the face-covering (select all that apply)?

- Mowing       Gardening       Brush-cutting  
 Handling dead animals       Handling live animals  
 Other (please specify): \_\_\_\_\_

28. In the past 3 months, how often have you worn gloves while handling animals?

- Always       Sometimes       Never  
 Not applicable – I don't perform these activities

29. In the past 3 months, how often have you worn gloves while handling soil or soiled equipment?

- Always       Sometimes       Never  
 Not applicable – I don't perform these activities

30. In the past 3 months, how often did you use insect/tick repellent while outdoors?

- Always       Sometimes       Never (if never, go to question 29)

If you have used repellent, where did you use it?

- Work       Home       Both

31. Do you have clothes treated with insect repellent/insecticide (e.g. permethrin)?

- Yes       No (if no, go to question 30)

If yes, how often do you wear the treated clothes while outdoors?

- Always       Sometimes       Never

If yes, do you wear the treated clothes at:

- Work       Home       Both

32. In the past 3 months, have you done any of the following to protect yourself from insect bites and ticks? (check all that apply)

- |  |                                 |                                    |                                |
|--|---------------------------------|------------------------------------|--------------------------------|
| <input type="checkbox"/> Wore long pants         | <input type="checkbox"/> Always | <input type="checkbox"/> Sometimes | <input type="checkbox"/> Never |
| <input type="checkbox"/> Wore long sleeves       | <input type="checkbox"/> Always | <input type="checkbox"/> Sometimes | <input type="checkbox"/> Never |
| <input type="checkbox"/> Tucked pants into socks | <input type="checkbox"/> Always | <input type="checkbox"/> Sometimes | <input type="checkbox"/> Never |
| <input type="checkbox"/> Performed tick checks   | <input type="checkbox"/> Always | <input type="checkbox"/> Sometimes | <input type="checkbox"/> Never |
| <input type="checkbox"/> Other (specify): _____  | <input type="checkbox"/> Always | <input type="checkbox"/> Sometimes | <input type="checkbox"/> Never |

Number\_\_\_\_\_

33. What do you use most often to clean your hands?

- Soap and water       Alcohol-based hand gel  
 Other (please specify): \_\_\_\_\_

34. Please indicate how often you clean your hands in the following situations. If the situations don't apply to you, please check N/A (not applicable).

- |  |                                 |                                    |                                |                              |
|--|---------------------------------|------------------------------------|--------------------------------|------------------------------|
| <input type="checkbox"/> After completing outdoor work | <input type="checkbox"/> Always | <input type="checkbox"/> Sometimes | <input type="checkbox"/> Never | <input type="checkbox"/> N/A |
| <input type="checkbox"/> After touching live animals   | <input type="checkbox"/> Always | <input type="checkbox"/> Sometimes | <input type="checkbox"/> Never | <input type="checkbox"/> N/A |
| <input type="checkbox"/> After touching dead animals   | <input type="checkbox"/> Always | <input type="checkbox"/> Sometimes | <input type="checkbox"/> Never | <input type="checkbox"/> N/A |
| <input type="checkbox"/> Before eating or drinking     | <input type="checkbox"/> Always | <input type="checkbox"/> Sometimes | <input type="checkbox"/> Never |                              |
| <input type="checkbox"/> Before smoking                | <input type="checkbox"/> Always | <input type="checkbox"/> Sometimes | <input type="checkbox"/> Never | <input type="checkbox"/> N/A |

35. Are there situations at work when you would like to wash your hands but are unable to?

- Yes       No

If yes, please describe these situations: \_\_\_\_\_

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36. Did you change the protective measures you took while working after learning that there was tularemia in animals at DETO?

- Yes       No (if no, go to question 35)

If yes, what changes did you make? (check all that apply)

- Wearing a mask more often during mowing and other outdoor jobs  
 Before mowing, checking the area to be mowed for dead or sick animals  
 Stopped mowing areas with tall grass or previously unmowed areas  
 Wearing gloves more often when working with animals/animal habitats  
 Increased use of insect/tick repellent  
 Taking more precautions to prevent insect and tick bites, such as wearing long clothing, tucking pants into socks, and performing tick checks  
 Cleaning hands more frequently  
 Other (please specify): \_\_\_\_\_

What influenced you to change the protective measures you use?

- National Park Service educational materials  
 Supervisor recommendation  
 Colleagues taking these protective measures  
 All-employee emails  
 News reports  
 Other (please specify): \_\_\_\_\_

Number \_\_\_\_\_

37. If you did not change your protective measures after learning there was tularemia in animals at DETO, why not? (Skip this question if answer to 34 was yes).

- I was already taking protective measures  
 I didn't know there was tularemia at DETO  
 I didn't know what protective measures to take  
 I don't think these protective measures are effective  
 I didn't have access to the equipment needed, such as gloves and insect repellent  
 I didn't have access to hand-cleaning supplies  
 Other (please specify): \_\_\_\_\_

### Health History

38. Has a doctor ever told you that you had tularemia?  Yes  No

If yes, approximately what month and year? \_\_\_\_\_

39. Have you been diagnosed with pneumonia in the past 3 years?  Yes  No

If yes, approximately what month and year? \_\_\_\_\_

Were you hospitalized for the pneumonia?  Yes  No

Did you take an antibiotic for the pneumonia?  Yes  No

40. Have you had a festering sore on your skin that was not diagnosed in the past 3 years?

- Yes  No (if no, go to question 39)

If yes, approximately what month and year?

\_\_\_\_\_

Where was the sore located?

- Hands/Arms  Feet/Legs  Abdomen/Chest  
 Back  Other (specify) \_\_\_\_\_

Number \_\_\_\_\_

41. Did you have an illness that included a fever during this summer?

 Yes       No (if no, go to question 40)

If yes, what month did the illness start? \_\_\_\_\_

Did you have any of the following symptoms with your fever? Check all that apply:

- |  |  |
|--|--|
| <input type="checkbox"/> Cough                         | <input type="checkbox"/> Muscle Aches            |
| <input type="checkbox"/> Shortness of breath           | <input type="checkbox"/> Night sweats            |
| <input type="checkbox"/> Swollen lymph nodes           | <input type="checkbox"/> Conjunctivitis/Pink eye |
| <input type="checkbox"/> Chills                        | <input type="checkbox"/> Sore throat             |
| <input type="checkbox"/> Other (please specify): _____ |  |
- 

Did a doctor give you a diagnosis for this illness?  Yes     No  
If yes, what was the diagnosis? \_\_\_\_\_Were you hospitalized for this illness?     Yes     NoDid you take antibiotics for this illness?     Yes     No

42. Do you smoke cigarettes?

 Yes     No

If yes, how many packs per day? \_\_\_\_\_

**Thank you for your participation in this study!**

Number\_\_\_\_\_

ID



Wood Tick



Brown Dog Tick