

## Tick and Lyme Disease Survey of Northwestern Pennsylvania Residents

Lyme disease is one of the most common tick-borne diseases in the United States. The Pennsylvania Department of Health, Northwest District Office, is working with local communities to assess knowledge of tick and Lyme disease, risk factors, and prevention for people living in northwestern Pennsylvania. As part of this effort, we are asking you to complete this, Tick and Lyme Disease Survey, which is completely voluntary and anonymous. Please answer the questions as accurately as possible, and complete one questionnaire per household. You may leave blank any question you do not wish to answer. If you have any questions about this survey, please feel free to contact the Pennsylvania Department of Health, Northwest District Office, at 724-662-6068.

- 1. Please answer the following:** Are you a full time resident of Pa.?  Yes  No  
 My gender is:  Male  Female  
 My age is: \_\_\_\_\_

- 2. If there are children in your household, please write how many in each age groups:**  
 \_\_\_ 0-4 years \_\_\_ 5-9 years \_\_\_ 10-14 years \_\_\_ 15 years or more \_\_\_ No children

- 3. What county in Pennsylvania do you live in?**
- |                                  |                                  |                                     |                                      |                                 |
|----------------------------------|----------------------------------|-------------------------------------|--------------------------------------|---------------------------------|
| <input type="checkbox"/> Cameron | <input type="checkbox"/> Clarion | <input type="checkbox"/> Clearfield | <input type="checkbox"/> Crawford    | <input type="checkbox"/> Elk    |
| <input type="checkbox"/> Erie    | <input type="checkbox"/> Forest  | <input type="checkbox"/> Jefferson  | <input type="checkbox"/> Lawrence    | <input type="checkbox"/> McKean |
| <input type="checkbox"/> Mercer  | <input type="checkbox"/> Venango | <input type="checkbox"/> Warren     | <input type="checkbox"/> Other _____ |                                 |

- 4. What type(s) of outdoor activities do you and people in your household do? (Check all that apply.)**
- |                                 |                               |                                             |                                         |                                                      |
|---------------------------------|-------------------------------|---------------------------------------------|-----------------------------------------|------------------------------------------------------|
| <input type="checkbox"/> Bike   | <input type="checkbox"/> Farm | <input type="checkbox"/> Canoe/kayak/tube   | <input type="checkbox"/> Go to a park   | <input type="checkbox"/> Lawn care/mowing            |
| <input type="checkbox"/> Camp   | <input type="checkbox"/> Golf | <input type="checkbox"/> Ski/snowboard/tube | <input type="checkbox"/> Outside sports | <input type="checkbox"/> Hunting/ trapping/ scouting |
| <input type="checkbox"/> Garden | <input type="checkbox"/> Fish | <input type="checkbox"/> Horseback riding   | <input type="checkbox"/> Hike/walk      | <input type="checkbox"/> Other _____                 |

- 5. For each of the photos below, please check whether you believe it is a tick or not a tick.**



- |                                     |                                     |                                     |                                     |                                     |                                     |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| <input type="checkbox"/> Tick       |
| <input type="checkbox"/> Not a tick |

- 6. Indicate what describes your household as it relates to pet dog/cat(s)?**

- We have a dog/cat.  We do not have a dog/cat.

- 7. If yes to question 6, please indicate what describes your household as it relates to pet dog/cat(s) to reduce ticks? (Check all that apply.)**

- We treat our dog/cat with a medicine.  
 We do not treat our dog/cat with a medicine.  
 We check our dog/cat for attached ticks.

**8. How many days per week do individuals in your household typically spend outdoors in the spring, summer, and fall?**

- Less than one    One to two    Three to five    More than five    I don't know.

**9. On those days when time is spent outside, how many hours per day do individuals in your household typically spend outdoors?**

- Less than one    One to two    Three to five    More than five    More than 10    I don't know.

**10. Where do you get your information regarding ticks and tick-borne diseases?**

**(Choose one.)**

- Internet    PA Game Commission    Newspaper    TV  
 Doctor    Pa. Department of Health    Medical text book    Radio  
 CDC website    Friend or family member    I can't remember.    Other \_\_\_\_\_

**11. Which is more likely to increase your exposure to ticks? (Choose one.)**

- Walking under trees    Walking through high grass/brush

**12. How long must a biting tick be attached to transmit a disease like Lyme disease?**

**(Choose one.)**

- Less than an hour    24 hours    Tick doesn't need to be attached.  
 12 hours    36 hours or more    I don't know.

**13. For each of the symptoms below, please check yes or no if you believe it is a symptom of Lyme disease.**

- |           |                              |                             |                 |                              |                             |
|-----------|------------------------------|-----------------------------|-----------------|------------------------------|-----------------------------|
| Red eyes  | <input type="checkbox"/> Yes | <input type="checkbox"/> No | Hearing loss    | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Rash      | <input type="checkbox"/> Yes | <input type="checkbox"/> No | Sore throat     | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Cough     | <input type="checkbox"/> Yes | <input type="checkbox"/> No | Blurry vision   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Hair loss | <input type="checkbox"/> Yes | <input type="checkbox"/> No | Diarrhea        | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Fever     | <input type="checkbox"/> Yes | <input type="checkbox"/> No | Aches and pains | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

**14. What type of repellent do you apply to yourself and your family members to reduce potential risk exposures? (Choose one.)**

- I don't apply repellents on my family members.  
 I use a product containing DEET or Picaridin.  
 I use a product with all natural active ingredients (e.g., oil of lemon eucalyptus).  
 I use a repellent, but I don't know the active ingredients.

**15. When you are outside in the summer and fall, how often do you (please check only one answer for each):**

|                                      | 1<br>0% of<br>the time   | 2<br>25% of<br>the time  | 3<br>50% of<br>the time  | 4<br>75% of<br>the time  | 5<br>100% of<br>the time |
|--------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a. Apply bug spray to clothes/skin?  | <input type="checkbox"/> |
| b. Wear light colored clothing?      | <input type="checkbox"/> |
| c. Wear long sleeves?                | <input type="checkbox"/> |
| d. Wear long pants?                  | <input type="checkbox"/> |
| e. Lay, sit, or kneel on the ground? | <input type="checkbox"/> |
| f. Wear shoes or boots?              | <input type="checkbox"/> |
| g. Tuck pants into socks or boots?   | <input type="checkbox"/> |

**16. When you are outside in the summer and fall, are there any measures that you do not take?**

**Please list why.**

**(Choose all that apply.)**

|                                     | I nearly always do this measure. | I don't think I need it. | Forgot                   | Doesn't work             | I don't like the way it looks, feels, or smells. | I don't have access to it. | I don't know.            |
|-------------------------------------|----------------------------------|--------------------------|--------------------------|--------------------------|--------------------------------------------------|----------------------------|--------------------------|
| a. Apply bug spray to clothes/skin? | <input type="checkbox"/>         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>                         | <input type="checkbox"/>   | <input type="checkbox"/> |
| b. Wear light colored clothing?     | <input type="checkbox"/>         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>                         | <input type="checkbox"/>   | <input type="checkbox"/> |
| c. Wear long sleeves?               | <input type="checkbox"/>         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>                         | <input type="checkbox"/>   | <input type="checkbox"/> |
| d. Wear long pants?                 | <input type="checkbox"/>         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>                         | <input type="checkbox"/>   | <input type="checkbox"/> |
| e. Tuck pants into socks or boots?  | <input type="checkbox"/>         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>                         | <input type="checkbox"/>   | <input type="checkbox"/> |

**17. After you have been outside in the summer and fall, how often do you:**

|                                                   | 1<br>0% of the time      | 2<br>25% of the time     | 3<br>50% of the time     | 4<br>75% of the time     | 5<br>100% of the time    |
|---------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a. Check your body for ticks?                     | <input type="checkbox"/> |
| b. Take shower within two hours of being outside? | <input type="checkbox"/> |

**18. After being outside in the summer and fall, are there any measures that you do not take?**

**Please list why.**

**(Please check only one answer for each.)**

|                                                   | I nearly always do this measure. | I don't think I need it. | Forgot                   | Doesn't work             | I don't know.            |
|---------------------------------------------------|----------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a. Check your body for ticks?                     | <input type="checkbox"/>         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Take shower within two hours of being outside? | <input type="checkbox"/>         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**19. Answer each of the following questions.**

**(Please check only one answer for each.)**

|                                                                                            | Yes                      | No                       |
|--------------------------------------------------------------------------------------------|--------------------------|--------------------------|
| a. Are you familiar with landscaping methods to create "tick-free zones" around your home? | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Do you know how to check for ticks (e.g., clothing and body)?                           | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Do you feel confident in identifying ticks?                                             | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Do you know the proper way to remove a tick after it has attached to your skin?         | <input type="checkbox"/> | <input type="checkbox"/> |

**20. If you found a tick attached (not just crawling) on yourself or a household member, how would you remove it?**

**(Check only one answer.)**

- Pull straight out with tweezers
- Remove/squeeze with fingers
- Apply substance (e.g., vasoline). Or something else? \_\_\_\_\_
- Burn with a match
- I don't know.
- Other \_\_\_\_\_

**21. Please estimate how many times in the past 12 months you or someone in your household found a tick on themselves or on clothing after being outside?**

- One to three times
- Four to six times
- Seven to 10 times
- More than 10 times
- None
- I can't remember.

**22. Answer each of the following questions,  
(Please check only one answer for each.)**

|                                                                                                     | Yes                      | No                       |
|-----------------------------------------------------------------------------------------------------|--------------------------|--------------------------|
| a. Has anyone in your household ever visited a health care provider because of a tick bite?         | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Has anyone in your household ever been diagnosed with a tick-borne disease such as Lyme disease? | <input type="checkbox"/> | <input type="checkbox"/> |

**23. If yes to question 22a, where did anyone in your household go to seek medical attention for a tick bite?**

**(Choose all that apply.)**

- Doctors' office     Emergency room     Nurse practitioner/midwife     I can't remember.  
 Urgent care     Natural/home remedy     Never had a tick bite     Other \_\_\_\_\_

**24. If yes, to question 22b, which tick-borne diseases have any persons in your household been diagnosed with?**

**(Choose all that apply.)**

- Lyme disease     Babesiosis     Spotted fever Rickettsioses     I can't remember.  
 Anaplasmosis     Ehrlichiosis     Tularemia     Other \_\_\_\_\_

**25. If yes, to question 22b, how long ago was the most recent tick-borne disease diagnosis?**

- Less than one year     Three to five years     More than 10 years  
 One to two years     More than five years     I can't remember.     Other \_\_\_\_\_

**26. If anyone in your household ever visited a health care provider for a known tick bite, please list why?**

**(Choose all that apply.)**

- I or they needed assistance to remove the tick.  
 I or they did not have any illness but was concerned about getting a tick-borne disease.  
 I or they was ill and thought I may have gotten a tick-borne disease.  
 I or they went to receive an antibiotic. Was an antibiotic prescribed?     Yes     No  
 Other (Please specify.) \_\_\_\_\_

**27. How effective are these preventative measures against tick-borne diseases?**

|                                                 | Highly effective         | Somewhat effective       | Not very effective       | Not at all effective     |
|-------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a. Avoid walking in high grass and leaves.      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Walk in the center of trails.                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Drink plenty of water before you leave home. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Use bug spray.                               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Tuck your pants into socks or boots.         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Check your body for ticks.                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Get a bath or shower as soon as you can.     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**Thank you for your time in completing this survey. We appreciate your feedback!**