

## **TICK SURVEY, Final version, October 2013**

*[This is a translated version from the original survey in Swedish]*

Link to the websurvey in Swedish:

<http://www.enkatfabriken.com/survey/index.php?sid=51721&lang=sv&token=n9wqfw9ugpukz2>



GÖTEBORGS UNIVERSITET

# **Ticks, TBE and Lyme Disease**

## **A study of the risk of tick-borne diseases and how it affects our behavior**

Ticks and tick-borne diseases, Lyme disease and TBE are becoming more common in Sweden. We want to know how you are affected!

Our research will increase knowledge of how different people perceive the risk of tick-borne diseases and measures to reduce risk. The research is conducted at the University of Gothenburg with funding from the Region Västra Götaland.

You are part of a random sample of individuals participating in a webpanel and therefore receive this survey. To answer the survey is voluntary.

The survey takes about 15 minutes to fill in.

Even if you think that some questions are difficult to answer precisely, answer as best you can. Your responses are valuable even if they are approximate.

The survey results will be presented at various seminars and in scientific publications.

Your answers will be treated so that unauthorized access to them will be prevented. Responsible for your personal information - in accordance with the Data Protection Act (1998: 204) - is University of Gothenburg, Privacy Officer Kristina Ullgren, Box 100, SE-405 30 Gothenburg, tel. 031-7861092, email: [kristina.ullgren@gu.se](mailto:kristina.ullgren@gu.se).

Many thanks for your participation in our research! For additional information about the survey and its results, or if there is any questions, please feel free to contact us.

### Responsible for the study:

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## Introductory questions

1. When were you born? [scroll bar]
2. Sex
  - female
  - male
3. Area of living? [ Name: of municipality in [scroll bar] (compulsory question)
4. Zip code: \_\_\_\_\_
5. How do you rate your general health status?

Very bad	Rather bad	Neither good or bad	Rather good	Very good
1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. How large risk do you think that the following things may have for your or your family's health? (please tick one option per line)

	Very low risk	Rather low risk	Rather large risk	Vey high risk	No opinion
Trafik accidents					
Air pollution					
Additives or pesticide residues in food					
A new pandemic					
Side effects from vaccinations					
Tick bites					

7. How much trust do you have in.....?

	1.Very low trust	2. Rather low trust	3. Neither low or high trust	4. Rather high trust	5.Very high trust	No opinion
The Swedish health care						
The County Council where you live						
The medical center						

where you are listed						
Vaccine recommendations from the health care system						

**Exposure to ticks and tick-borne diseases**

**8. Have you ever had a tick bite?**

- Yes
- No (go to q xx)
- Don't know

**9. [If yes] How many?**

- 1
- 2-10
- 11-49
- 50 or more

**10. [If yes on Q 8] How many tick bites have you had in the last 12 months?**

- 0
- 1-2
- 3-5
- 6-10
- More than 10

**11. In which municipality did you get bitten by ticks during the last 12 months?(several answers possible)**

- In my home municipality
- In another municipality (scroll bar)
- In another country
- Don't know

**12. Have you ever had a tick-borne disease?**

- Yes
- No (go to q xx)
- Don't know

**13. [If yes] Which disease? (several answers possible)**

- Borreliainfektion
- TBE (tick-borne encephalitis)
- Other disease (specify): \_\_\_\_\_
- Don't know

**14. Was the disease diagnosed by a doctor?**

- Yes

- No
- Don't know

**15. Do you have children below the age of 18 years?**

- Yes
- No → Q xx

**16. [If yes] Has your child/any of your children ever been bitten by a tick?**

- Yes
- No
- Don't know

**17. [If yes / do not know at Q16] Has your child / any of your children ever had a tick-borne disease?**

- Yes
- No (go to q xx)
- Don't know

**18. [If yes] Which disease? (several answers possible)**

- Borreliainfektion
- TBE (tick-borne encephalitis)
- Other disease (specify): \_\_\_\_\_
- Don't know

**19. Was the disease diagnosed by a doctor?**

- Yes
- No
- Don't know

**20. Do you have another family member or someone in your immediate circle of acquaintances who has ever had a tick-borne disease?**

- Yes
- No (go to q xx)
- Don't know

**21. [If yes] Which disease? (several answers possible)**

- Borreliainfektion
- TBE (tick-borne encephalitis)
- Other disease (specify): \_\_\_\_\_
- Don't know

**22. Do you have animals?**

- No
- Only indoor pets (including indoor cat)
- cat
- dog
- Other animal (e.g. horse, cow or sheep)

**23. By how many ticks have your animal been bitten during the last 12 months? (If you have more than one animal choose the one that has been bitten by most ticks)**

- 0
- 1
- 2-10
- 11-50
- More than 50
- Don't know

**24. How often do you check your animal for ticks during the summer?**

daily	
1-3 times a week	
1-2 times a month	
More rarely	
never	

**25. How often do you protect your cat or dog through using a special necklace, spot-on, a spray or other item?**

- Always
- Often
- Rarely
- Never

**26. How much did you approximately pay for this type of protection for your cat or dog during the last 12 months? (if you have several pets specify the total amount)**

- 0 kr
- 1-100 kr
- 101-300 kr
- 301-500 kr
- 501-1000 kr
- More than 1000 kr

**Risk perception**

**27. How serious do you think it is to:**

Choose the correct answer for each item:

	Not serious at all	A little serious	Rather serious	Very serious	Don't know
Be bitten by a tick					
Get the tick-borne Lyme disease					
Get TBE					

**28. How likely do you think that any of the following events occur during the next 12 months?**

Choose the correct answer for each item:

	Not likely at all	A little bit likely	Rather likely	Very likely	Don't know
You get bitten by a tick					
You become ill as a result of a tick bite					
You are diagnosed with Lyme disease					
You are diagnosed with TBE (tick-borne encephalitis)					

**29. [IF HAVE CHILDREN] How likely do you think that any of the following events occur during the next 12 months?**

	Not likely at all	A little bit likely	Rather likely	Very likely	Don't know
Your child/ any of your children get diagnosed with Lyme Disease or TBE					

**30. Which of the following statements do you think are correct? (tick true or false for each statement)**

	True	False	Don't know
If you get bitten by a tick there is a large risk that you get ill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Borrelia can be passed from one person to another	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mosquito repellent decrease the risk of getting a tick-bite	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is a vaccine you can buy that can prevent TBE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TBE can be treated with antibiotics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Borrelia can be treated with antibiotics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Borrelia is more common than TBE in Sweden	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 31. Information about TBE and Lyme Disease

Please read the following information before you proceed.

<b>Information about TBE and Lyme Disease</b>	
<p style="text-align: center;"><b>The disease TBE</b></p> <p>TBE (tick-borne encephalitis) is a disease that can be transmitted between animals and humans through tick. Common symptoms of TBE are high fever, severe headache and occasional convulsions and paralysis. About 40 percent of those infected develop a long-term or permanent symptoms such as fatigue, memory lapses, and in rare cases, paralysis. Today there is no cure for TBE, however, is an effective vaccine.</p> <p style="text-align: center;"><b>Where are the TBE and how many are infected?</b></p> <p>TBE infection are mainly in Uppland and Södermanland archipelagos and in parts of Lake Mälaren. Most people infected around Södertörn Södertäljeviken and central parts of the lake. The infection include also around Vänern and lake and in some places along the west coast. In 2011 and 2012, just over 280 cases of infection per year in Sweden. Each dot on the map to the left indicates where someone was infected with TBE in 2011.</p> <p style="text-align: center;"><b>Vaccine</b></p> <p>It is possible at a vaccination against the disease. Three doses of the vaccine provides nearly 100 percent of those vaccinated a shelter for at least three years. The side effects from the vaccine are mild. Vaccination is usually recommended for permanent and summer residents in risk areas and to people who spend a lot of woods and fields in areas with high risk of infection, and that often gets bitten by a tick.</p>	<p style="text-align: center;"><b>Lyme Disease</b></p> <p>In approximately half of those infected with Lyme disease develop a ring-shaped redness at the site of the tick bite. If the infection is not treated with antibiotics, after a couple of weeks to months progress to a more severe illness with central nervous system symptoms. You can also have joint problems and in rare cases also affect the heart. The disease can be treated with antibiotics.</p> <p style="text-align: center;"><b>Where is Lyme disease and how many are infected?</b></p> <p>Lyme disease is most likely on most places where ticks are present. There are no reliable statistics on the number of cases of Lyme disease infection in Sweden. Studies show that it can move about 10 000 cases per year in southern Sweden. North of the Dal River, the cases get. Studies also show that even if you get bitten by a tick carrying the Lyme disease bacteria, the risk of getting infected is low.</p> <p style="text-align: center;"><b>Vaccine</b></p> <p>Today there is no vaccine for Lyme disease to buy, but there are ongoing efforts to develop such a vaccine.</p>

TBE cases 2012



**Out-door activities**

**32. Is there a risk that you get bitten by a tick while working on your job?**

- YEs
- No
- Don't know

**33. How many hours per day do you usually spend outdoors during the months May to September?**

	0	1-3	4-8	9+
Weekdays				
Weekends/vacation				

**34. How often did you spend time in areas where you may come into contact with ticks during the months of May to September this year?**

Just select one of the following:

- Daily
- 1-3 Times a Week
- 1-2 Times a Month
- More Rarely
- Never
- Don't know

✓ Ticks thrive in the forests and meadows with tall grass and scrubland.

**35. How often, during the months of May to September this year, did you spend time in areas where you may come into contact with ticks and where you also know or have heard that there is TBE,?**

Just select one of the following:

- Daily
- 1-3 Times a Week
- 1-2 Times a Month
- More Rarely
- Never
- Don't know

*Reported cases of TBE 2012*

Each dot on the map to the right indicates where someone was infected with TBE in 2011.



**Protective measures against tick-bites**

**36. How often do you protect yourself against tick bites, one of the following ways, when you are in areas with ticks? Put a cross on each line.**

	Never	Rarely	Often	Always
Uses comprehensive pants and long-sleeved shirt / jacket	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Uses anti-mosquito or tick repellent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have socks outside the pants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Avoid tall grass and go near the bushes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Examining body for ticks after being outdoors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**37. [If child <18 years] How often do you protect yourself against tick bites, one of the following ways, when you are in areas with ticks?**

	Never	Rarely	Often	Always
Examines my child's body for ticks after being outdoors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**38.** How good protection against tick bites do you think that the following measures provide:

	<b>No protection</b>	<b>Rather poor</b>	<b>Rather good</b>	<b>Very good</b>
Use comprehensive pants and long-sleeved shirt / jacket	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use anti-mosquito or tick repellent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have socks outside the pants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Avoid tall grass and go near the bushes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Examining body for ticks after being outdoors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[respondents with outdoor pets:]				
Examine pets for ticks when they have been outdoors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**39.** Do you avoid activities or areas where you risk being bitten by ticks?

(For example, if you refrain from going for a walk in a certain forest area or if you are walking on a dirt road instead of a path with high grass to avoid ticks)

- Yes, very often
- Yes, rather often
- Yes, but rarely
- No, never
- Do not know

**40.** Briefly describe what type of activities or areas that you avoid:

\_\_\_\_\_

## Choice between recreational areas

Imagine that it is late summer and that you have decided to spend 4 hours during the weekend outdoors with activities such as walking, picking berries or mushrooms, picnic, or other things you enjoy doing. Imagine that you are to choose between spending the four hours outdoors in one of two areas (Area A or B).

We will now describe the areas A and B and then ask you to **select which area you would prefer to spend the four hours in:**

The following things distinguish areas A and B from each other:

### Area characteristics

Imagine that you have "graded" the area after a previous visit. This can include how beautiful the area is, its natural values, or the presence of mushrooms and berries. You have divided the areas into the following categories:

- "ordinary area",
- "nice area",
- "very nice area."

### The presence of ticks:

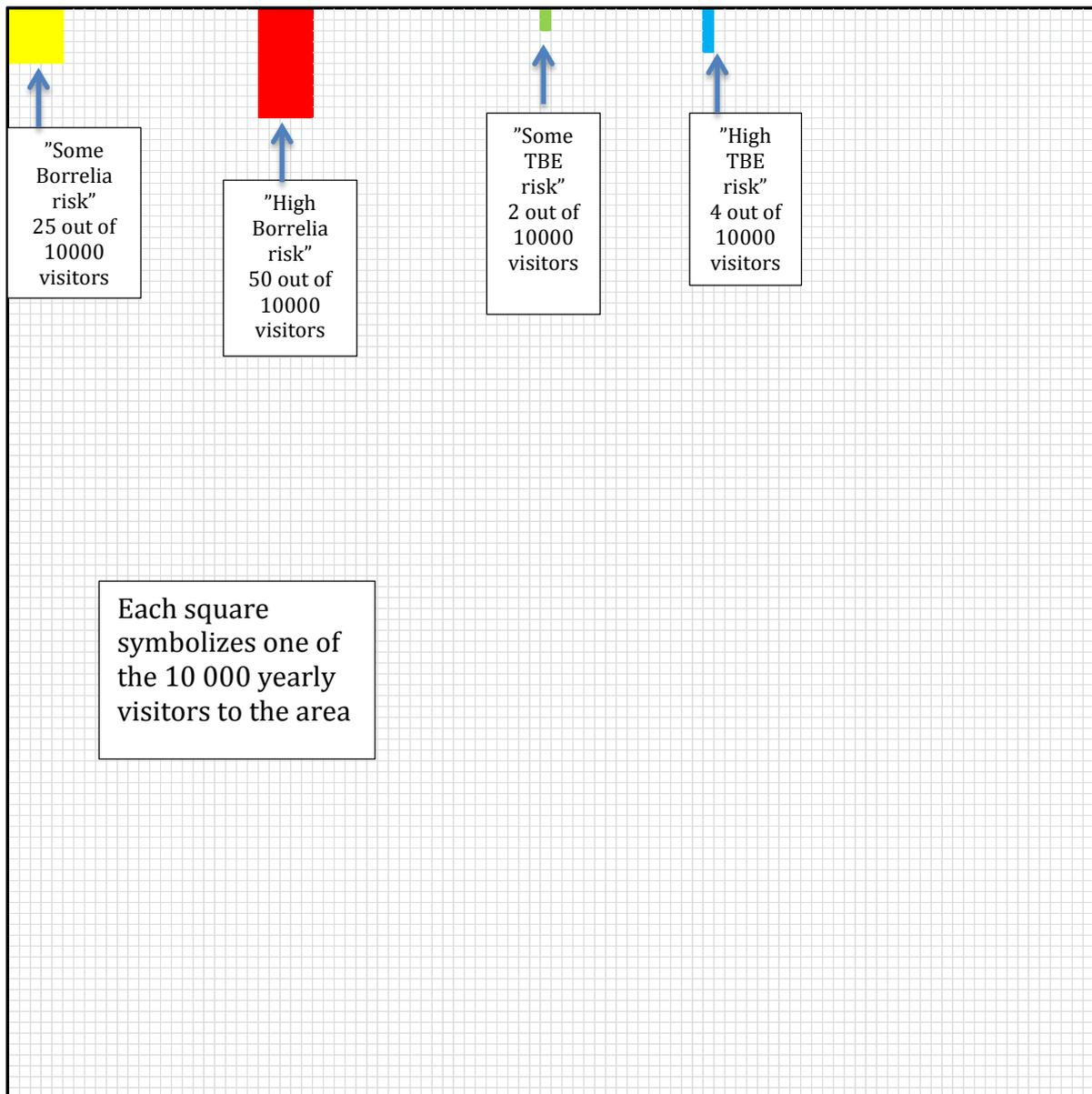
- "no ticks"
- "some ticks" - it is likely that you will get 1-2 ticks on your clothes or your skin if you walk in high grass or in the forest during your stay in the area
- "many ticks" - it is likely that you get 4 or more ticks on your clothes or your skin if you walk in high grass or in the forest during your stay in the area

### The distance to the area

- 1 km
- 5 km
- 30 km
- 70 km

### The risk of contracting Lyme Disease and TBE

Both Areas A and B is about 10 square kilometers and is visited by about 10,000 people per year. The figure below contains 10 000 squares. Each square symbolizes 1 person who visits the area.



- **"Some Borrelia risk"** –means that 25 of the 10 000 visitors get Lyme Disease every year after visiting the area. This is symbolized by the 25 yellow-colored squares in the figure.
- **"High Borrelia risk"** – means that 50 people get Lyme Disease every year after visiting the area. This is symbolized by the 50 red-colored squares in the figure.
- **"Some TBE risk"** – means that 2 people get TBE every year after visiting the area. This is symbolized by the 2 green-colored squares in the figure.
- **"High TBE risk"**– means that 4 people get TBE every year after visiting the area. This is symbolized by the 4 blue-colored squares in the figure.

This means that *only a very small share of the visitors become infected with Lyme disease and TBE every year.*

**41. To be sure that you understand the information we ask you to answer the following question:**

If we state that an area has "Some Borrelia risk" and "High TBE risk", is it a greater risk of contracting TBE than Lyme disease while visiting the area? [compulsory question]

Just select one of the following:

Yes

No

**[IF YES, the following text is displayed:]** Correct answer!

**[IF No, the following text is shown]**

- "Some Borrelia risk" - means that 25 of the 10 000 visitors contract Lyme disease each year in conjunction with visits to the area.

- "High TBE risk" - means that 4 of the 10 000 visitors get infected with TBE each year in conjunction with visits to the area.

**There is thus a greater risk of contracting Lyme disease than TBE while visiting the area.**

\*\*\*\*\*

**Read about what characterizes Area A and B in the table below. Select whether you would choose to go to Area A or B to spend the four hours outdoors. If you under the given circumstances would choose not to visit any of the areas, mark alternative C "Not go".**

*Read the text in the box before making your choice:*

*Experiences from other similar surveys show that it is common that people make other choices in a survey than they would do in real life. Some may state that they would travel 70 km to visit an area while in real life they would only be willing to travel 30 km. We want you to state the choice you would make if this was a real situation.*

	<b>Area A</b>	<b>Area B</b>	<b>Not go (C)</b>
<b>Area characteristics</b>	Nice area	Very nice area	
<b>Presence of ticks</b>	No ticks	Some ticks	
<b>Risk of borrelia</b>	No borrelia risk	Some borrelia risk	
<b>Risk of TBE</b>	No TBE risk	SomeTBE risk	
<b>Distance</b>	5 km	5 km	
<b>Mark if you would you choose A, B or C:</b>	[ ]	[ ]	[ ]

**We will now modify the properties of Area A and Area B.**

**After examining the characteristics of each area we want you to select Area A or B, or the alternative C (not go).**

**Make every choice without thinking of your previous choices.**

	<b>Area A</b>	<b>Area B</b>	<b>Not go (C)</b>
<b>Area characteristics</b>	Nice area	Very nice area	
<b>Presence of ticks</b>	No ticks	Many ticks	
<b>Risk of borrelia</b>	No borrelia risk	High borrelia risk	
<b>Risk of TBE</b>	No TBE risk	High TBE risk	
<b>Distance</b>	5 km	5 km	
<b>Mark if you would you choose A, B or C:</b>	[ ]	[ ]	[ ]

**Continue to make your choice after reading what applies to each area.**

**Make every choice without thinking of your previous choices.**

	<b>Area A</b>	<b>Area B</b>	<b>Not go (C)</b>
<b>Area characteristics</b>	Nice area	Nice area	
<b>Presence of ticks</b>	No ticks	Many ticks	
<b>Risk of borrelia</b>	No borrelia risk	High borrelia risk	
<b>Risk of TBE</b>	No TBE risk	High TBE risk	
<b>Cost</b>	5 km	1 km	
<b>Mark if you would you choose A, B or C:</b>	[ ]	[ ]	[ ]

[The three tables above are presented to all respondents and constitute a transitivity test. All respondents are presented to four additional tables which are created using statistical design methodology and divided into four different blocks. The order in which the tables are presented are randomized among the respondents.]

## Vaccine against Lyme Disease

Today there is no vaccine against Lyme disease to buy, but there are ongoing efforts to develop such a vaccine. Imagine that there was a vaccine that gave almost 100% of those vaccinated themselves a good protection against Lyme disease infections and that the side effects from the vaccine were mild. As with today's TBE vaccination three doses of the vaccine would be necessary to protect ONE PERSON during at least 3 years.

**42. Would you vaccinate yourself or someone in your household against Lyme disease if it cost a total of [100; 250; 500; 1000; 5000] SEK for the three doses of the vaccine that protects ONE person for at least three years' time?**

**PLEASE READ THE INFORMATION IN THE TEXT BOX BEFORE RESPONDING TO THE QUESTION**

*Experiences from other similar surveys show that it is common to make other choices in a survey than one would make in real life. Some may state that they would be willing to pay a higher price for a vaccine than they would actually pay in real life. This may be due to the fact that one does not really consider how big an impact an extra cost actually has to the family budget. We want you to state the choice you would make if this was a real situation.  
Disregard any answers you gave to similar questions earlier in the survey.*

- Yes  
 No [jump to Q.48]

**43. [IF YES] Enter the number of adults in your household that you would choose to vaccinate at this cost: \_\_\_\_\_**

**44. Enter the number of children below age 18 in your household that you would choose to vaccinate at this cost: \_\_\_\_\_**

**45. The total cost to vaccinate [x] people in your household would be [yy] kr.**

*You now have the possibility to adjust your choice!*

**46. How certain are you that this is the choice you would make in a real world situation?**

- Very uncertain  
 Rather uncertain  
 Rather certain  
 Very certain

**47. Do you think other persons resembling yourself (e.g. persons that have the same age, sex and lives in the same municipality as you) would choose to vaccinate against Lyme Disease if it cost a total of [SAME PRICE AS ABOVE] SEK for the three doses of the vaccine that protects ONE person for at least three years' time?**

- Yes
- No

**48. [IF NO] Would you vaccinate yourself or someone in your household against Lyme Disease if the vaccine was free?**

- Yes
- No
- Don't know

**49. [FOLLOW-UP QUESTION OF RESPONDENTS WHO SAYS YES TO INTEREST OF BUYING BORRELIA VACCINE] Why would you buy a vaccine against Lyme disease? Select all that apply:**

- I often stay in areas with ticks
- I often get bitten by ticks
- I would not need to worry about Lyme Disease
- Someone close to me (eg, friend, family member) has had Lyme disease
- I've heard a lot about Lyme disease in the media
- Other reason, please specify: \_\_\_\_\_
- Do not know

**50. [FOLLOW-UP QUESTION TO RESPONDENTS WHO SAYS NO TO INTEREST OF BUYING BORRELIA VACCINE] Why would not you buy a vaccine against Lyme disease?**

Select all that apply:

- I'm never / rarely in tick-affected areas
- The risk of contracting Lyme disease is so small that I do not need to vaccinate me
- The vaccine costs too much
- If I become infected with Lyme disease, I expect that I can treat it with antibiotics
- I am afraid of negative side effects of the vaccine
- I do not think that the vaccine would be effective
- Medical reasons
- I'm afraid of needles
- Other reason, please specify: \_\_\_\_\_
- Do not know

## Vaccine against TBE

### 51. Have you been vaccinated against TBE?

Just select one of the following:

- Yes
- Yes, I have started vaccination against TBE but not had time to take all doses
- I have started but discontinued vaccination against TBE [PROCEED TO QUESTION XX]
- No [PROCEED TO QUESTION XX]
- Don't know

### 52. [IF "YES, I have started", "YES" or "I have started but discontinued vaccination against TBE"] What year did you take your last dose of the vaccine?

Year: (scroll bar)

### 53. [IF YES, I have started or YES] Enter the number of adults in your household who are vaccinated against TBE. Number of adults: \_\_\_\_\_

### 54. [IF YES, I have started or YES] Enter the number of children in your household who are vaccinated against TBE.

Number of children under 18 years: \_\_\_\_\_

### 55. [IF YES, I have started or YES] What were the main reasons that you got vaccinated against TBE?

Select all that apply:

- I live in a TBE risk area
- I travel to TBE risk areas
- I often stay in areas with ticks
- I often get bitten by ticks
- I do not need to worry anymore for TBE
- Someone close to me (eg, friend, family member) contracted TBE
- Seen, read or heard about in the media TBE
- My doctor recommended TBE vaccination
- My family/friends recommended TBE vaccination
- Other reason, please specify: \_\_\_\_\_
- Do not know

**56. Have you changed your behavior in any of the following ways after you got vaccinated against TBE? (highlight to what extent you agree with the following statements, please tick one option per line)**

	Don't agree at all	Agree to some extent	Agree completely	Don't know
I worry less about tick bites				
I spend more time in forests				
I do not avoid to go to areas with TBE risk				
I do not check my body for ticks after being outdoors as carefully as before				
I wear protective clothing less often when I am in forest areas				

**57. [IF NO TO Q51] Why are you not vaccinated against TBE?**

Select all that apply

- I'm never / rarely in tick-affected areas
- I'm never / rarely in areas where there is a risk of contracting TBE
- The risk of contracting TBE is so small that I do not need to be vaccinated
- I did not know there was a vaccine against TBE
- The vaccine costs too much
- I have intended to get vaccinated, but have not gotten to it
- Have never thought about it
- It is complicated / take too long to get vaccinated
- I'm afraid of getting side effects from the vaccine
- I'm afraid of needles
- Medical reasons
- Other reason, please specify: \_\_\_\_\_
- Do not know

**58. [IF NO to Q51] Would you vaccinate yourself or someone in your household against TBE if it cost a total of [100, 250, 500, 750, 1000] SEK for the three doses of the vaccine that protects ONE person for at least three years' time?**

**PLEASE READ THE INFORMATION IN THE TEXT BOX BEFORE RESPONDING TO THE QUESTION**

*Experiences from other similar surveys show that it is common to make other choices in a survey than one would make in real life. Some may state that they would be willing to pay a higher price for a vaccine than they would actually pay in real life. This may be due to the fact that one does not really consider how big an impact an extra cost actually has to the family budget. We want you to state the choice you would make if this was a real situation.  
Disregard any answers you gave to similar questions earlier in the survey.*

- Yes  
 No            [JUMP TO Q63]

**59. [IF YES] Enter the number of adults in your household that you would choose to vaccinate at this cost: \_\_\_\_\_**

**60. [IF YES] Enter the number of children below age 18 in your household that you would choose to vaccinate at this cost:**

\_\_\_\_\_

**The total cost to vaccinate [x] people in your household would be [yy] kr.  
*You now have the possibility to adjust your choice!***

**61. How certain are you that this is the choice you would make in a real world situation?**

- Very uncertain  
 Rather uncertain  
 Rather certain  
 Very certain

**62. Do you think other persons resembling yourself (e.g. persons that have the same age, sex and lives in the same municipality as you) would choose to vaccinate against TBE if it cost a total of [SAME PRICE AS ABOVE] SEK for the three doses of the vaccine that protects ONE person for at least three years' time against TBE?**

- Yes  
 No

**63. [IF NO] Would you vaccinate yourself or someone in your household against TBE if the vaccine was free?**

- Yes  
 No  
 Don't know

64. [IF "I have started but discontinued vaccination against TBE" IN Q51]

**Why have not you finished your TBE vaccination?**

Select all that apply

- Forgot to do it
- I have intended to continue to take TBE vaccine, but have not gotten to it
- Too busy to do a follow-up meeting
- Lack of information, not sure when I would take follow-up injections
- No longer live in a TBE-risk area
- Do not travel to TBE risk areas
- The vaccine costs too much
- I discussed it with friends / family and came to the conclusion that I do not need TBE vaccination
- I'm afraid of side effects from the vaccine
- I'm already protected with the doses I have taken, I do not take any more doses of vaccine
- Other reason, please specify: \_\_\_\_\_
- Do not know

**Public programs to reduce the risk of tick-borne diseases**

65. Swedish authorities can take various measures to reduce the risk of tick-borne diseases. Below are a number of possible actions. What is your opinion on each of them?

Choose one answer for each item:

<i>Program</i>	<i>Very good proposal</i>	<i>Rather good proposal</i>	<i>Neither good nor bad proposal</i>	<i>Rather bad proposal</i>	<i>Very bad proposal</i>
Reduce the price of TBE vaccinations to people living in areas at risk					
Reduce the price of TBE vaccination to anyone who wants to get vaccinated in Sweden					
Include TBE vaccination in the general vaccination program for children					
Increase resources for research on tick-borne diseases					
Increase communication efforts on tick-borne diseases					
Drastically reducing the number of deer in Sweden by hunting (deer are an important host animals for ticks)					

## Information about you and your household

**66. Where do you live today? (Tick the option that best describes your living area)**

- Countryside with just a few houses in sight
- Village or small town in the countryside
- Small town (less than about 50 000 inhabitants)
- Medium-sized town (about 50 000 - 200 000 residents)
- Larger city (more than 200 000 inhabitants)

**67. Which people live in your household?**

Select all that apply:

- I live alone
- I live with / share regularly household with adults 18 years and older
- I live with / regularly share of household with children below 18 years

**68. Including yourself, how many adults aged 18 or older, are there in the household?: \_\_\_\_**

**69. How many children below 18 years are there in the household?: \_\_\_\_\_**

**70. Please indicate YOUR total monthly income (before tax).**

Estimate your total income from all sources or income, such as wages, pensions, social security, unemployment compensation, net income from business, child support or any other income. (please circle one alternative)

- |  |   |
|--|---|
| <input type="checkbox"/> Less than 10 000 kronor | <input type="checkbox"/> 60 000 - 69 999 kronor |
| <input type="checkbox"/> 10 000 - 19 999 kronor  | <input type="checkbox"/> 70 000 - 79 999 kronor |
| <input type="checkbox"/> 20 000 - 29 999 kronor  | <input type="checkbox"/> Above 80 000 kronor    |
| <input type="checkbox"/> 30 000 - 39 999 kronor  |   |
| <input type="checkbox"/> 40 000 - 49 999 kronor  |   |
| <input type="checkbox"/> 50 000 - 59 999 kronor  |   |

**71. Please indicate the total monthly income of your HOUSEHOLD (before tax).** Estimate your total household income from all sources or income, such as wages, pensions, social security, unemployment compensation, net income from business, child support or any other income. (please circle one alternative)

- |  |   |
|--|---|
| <input type="checkbox"/> Less than 10 000 kronor | <input type="checkbox"/> 60 000 - 69 999 kronor   |
| <input type="checkbox"/> 10 000 - 19 999 kronor  | <input type="checkbox"/> 70 000 - 79 999 kronor   |
| <input type="checkbox"/> 20 000 - 29 999 kronor  | <input type="checkbox"/> 80 000 - 89 999 kronor   |
| <input type="checkbox"/> 30 000 - 39 999 kronor  | <input type="checkbox"/> 90 000 - 99 999 kronor   |
| <input type="checkbox"/> 40 000 - 49 999 kronor  | <input type="checkbox"/> 100 000 - 110 000 kronor |
| <input type="checkbox"/> 50 000 - 59 999 kronor  | <input type="checkbox"/> Above 110 000 kronor     |

**72. Were you ....:**

- Born in Sweden
- Born in another country

**73. Do you own or have regular access to a summer house?**

- Yes
- No, [GO TO QUESTION 79]

**74. Where is your summer house located?**

- In Sweden
- Abroad [go to Q77]

**75. In which municipality? [scroll bar]**

**76. Which zip code? \_\_\_\_\_**

**77. In which country? (scroll bar)**

**78. How many days or parts of days did you spend in the summerhouse during the period May to September this year?**

- 0 days
- 1-7 days
- 8-21 days
- More than 21 days
- Do not know

**79. Do you or your household own a car?**

- Yes, one car
- No, but I have regular access to a car
- No

**80. What is the highest level of schooling you have completed?**

Please circle one alternative.

- Not completed elementary school
- Elementary school
- Secondary school 1-2 years
- Secondary school 3 years
- University 1-3 years
- University more than 3 years
- Doctoral studies

**81. Life Situation / Employment**

Just select one of the following:

- Employment in the private or public sector (including sick leave, maternity leave)
- Working in own business (self employed)
- Have work in labor market programs / Undergoing employment training
- Unemployed
- Age Pensioners / Senior Contracts
- Have "sick or activity payment" (ex early retirement / disability pensioner)
- Student
- Other: \_\_\_\_\_

## Final questions

### 82. ANY OTHER COMMENTS about ticks and tick-borne diseases or about the survey?

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### THANK YOU FOR YOUR COOPERATION!

The questionnaire contains brief information on Lyme disease and TBE. Detailed information on tick-borne diseases are on SMI's website: [www.SMI.se](http://www.SMI.se) and [www.Internetmedicin.se](http://www.Internetmedicin.se).

The information on Lyme disease risk and TBE risk given for the hypothetical fields A and B are based on information about the areas in Sweden, with the highest incidence of Lyme disease and TBE. In most places, the risk is much lower.

The actual risk of becoming infected with TBE or Lyme disease is largely dependent on factors such as:

- where you live and where you are in the summer, since ticks carrying TBE or Lyme disease is more common in certain parts of Sweden
- Leisure activities / work habits (if you spend much time in the forest, scrubland or high grass, the risk of becoming infected higher)
- if you dress in protective clothing, such as pants and long sleeves , when you walk in the woods or in tall grass, the risk of contracting lower
- if you check your body for ticks after being out in the woods or tall grass, the risk of being infected less
- if you are vaccinated against TBE is the risk of contracting TBE minimal