

ATTACHMENT E: Case-control Telephone Interview

Hello, [respondent name], my name is _____ and I am from the Puerto Rico Department of Health OR the Centers for Disease Control and Prevention. Could I please speak with [__name__]?

I am calling you because I am partnering with WIC and the Puerto Rico Department of Health to evaluate different services that have been offered to pregnant women in order to help them protect themselves and their babies from Zika. We are also trying to learn more about the best ways to prevent Zika among women who were tested for Zika virus by their doctor. Would you be willing to talk with me for a few minutes (less than 20 minutes) about your experience and the types of Zika prevention services you received in the past few months? It will help us know how we can do a better job of helping you and other pregnant women in Puerto Rico.

No

Yes, [If yes, are you over 18 years of age]

Great! Thank you for your willingness to share your opinions with me.

Your doctor reported that you had blood drawn for a Zika test on <specimen collection date>. Is that correct?

No

Yes - continue

I also see here that you received information or materials about Zika Prevention Kit from WIC on <ZPK receipt date>. Is that correct?

No or if unsure what ZPKs are: *The Zika Prevention Kit is a tote bag that contains educational information from the Puerto Rico Health Department and the Centers for Disease Control and Prevention about how to prevent Zika infection while you are pregnant along with items that could help prevent Zika virus infection. Items in the kit include: a mosquito bed net, mosquito repellent, condoms, and some include mosquito dunks (larvicide) and thermometers.*

Do you remember receiving anything like that?

No - stop interview

Yes - Great!

I would like to ask you some questions about the time between when you received the Zika prevention kit from WIC to the time when you had your blood drawn. It might be helpful to look at a calendar to help remember your activities during that time; do you have a calendar that you can use? Your opinions will help us improve the types of services we can offer women. I have just a few questions that will take less than 20 minutes. If we get disconnected, I will call you back.

Before I begin I want to go over a couple of items:

- This interview is voluntary. You can decline to answer any question and you can end our conversation at any time
- There are no right or wrong answers. I am interested in your opinion. If you don't understand the question, feel free to let me know and I can ask it another way. This is not a test, so feel free to say you don't know or don't have an opinion to offer and "I don't know" is a perfectly acceptable response to any question I ask you.
- The information you provide today will not be shared with anyone except those involved in this project. It's important to know that the questions I'm about to ask you will not affect your eligibility for WIC services in any way. Our reports will include the responses of ALL the women who talk with us so that you can provide honest answers without worrying that your answers will hurt you in any way.
- Do you have any questions before we begin?

1. Did you attend an educational session at WIC that provided information about Zika?

- No
- Don't know/not sure
- Refused
- Yes

Did it occur before, after, or on the same day that you received the Zika Prevention Kit?

- Before
- After
- Same day
- Don't know/not sure
- Refused

2. Did you receive educational materials (handouts, written information) about Zika from WIC?

- No
- Don't know/not sure
- Refused
- Yes

Did it occur, before, during, or on the same day that you received the Zika prevention Kit?

- Before
- After

- Same day
- Don't know/not sure
- Refused

3. When you received the Zika Prevention Kit, what color was the tote bag?

- White
- Blue
- Green
- Other, please specify:
- Don't know/Not sure
- Refused

4. Did you open your Zika Prevention Kit?

Yes

a. What did the information in the kit say you need to do? (Probe for use repellents, use bed net, use condoms, etc.)

- a. Use insect repellent
- b. Sleep under bed net
- c. Put mosquito dunks in standing water
- d. Use condoms/don't have unprotected sex
- e. Go to doctor if ill
- f. Other, please specify: _____

b. What items were included in the kit? (*Do not read, tick all mentioned*)

- Repellent
- Bed net
- Mosquito dunks
- Condom(s)
- Thermometer
- Educational materials
- Other, please specify:

No, why not?

Refused

Some of the items in the kit may be items that you already had in your house and used. Others may be items that you didn't have or have never used before.

5. **BEFORE** receiving the kit, when you were pregnant, how often did you use each of the following the items?

How often were you using these items BEFORE receiving the kit?	Never or Almost Never	Seldom or Rarely	Sometimes	Often	Usually or most of the time	Always or Almost always	Refused

a. Insect repellent							
b. Condoms							
c. Mosquito dunks for treating accumulated water							
d. Bed net							

Now, I'm going to ask more questions about your use of these items AFTER receiving the kit, but before you got blood drawn for the Zika test. For most of the questions, I'll be asking from now on, think about what you did in that period of time.

6. During the time between when you received the Zika prevention kit and when you had blood drawn for the Zika test, how often did you put mosquito repellent on skin that was not covered by clothing?

- Never or almost never
- Seldom or rarely
- Sometimes
- Often
- Usually or most of the time
- Always or almost always
- Refused

If yes to any repellent use: Did you use the repellent from the ZPK?

- Yes
- No
- Refused

7. During the time between when you received the Zika prevention kit and when you had blood drawn for the Zika test, how often did you wear long pants?

- a. Never or almost never
- b. Seldom or rarely
- c. Sometimes
- d. Often
- e. Usually or most of the time
- f. Always or almost always
- g. Refused

8. During the time between when you received the Zika prevention kit and when you had blood drawn for the Zika test, how often did you wear a long-sleeved shirt?

- a. Never or almost never
- b. Seldom or rarely
- c. Sometimes
- d. Often
- e. Usually or most of the time
- f. Always or almost always

g. Refused

9. During the time between when you received the Zika prevention kit and when you had blood drawn for the Zika test, how often did you or somebody else in your household remove accumulated water and cover up or screen water containers inside and around your home (on your property)?
- a. Never or almost never
 - b. Seldom or rarely
 - c. Sometimes
 - d. Often
 - e. Usually or most of the time
 - f. Always or almost always
 - g. Refused

10. During the time between when you received the Zika prevention kit and when you had blood drawn for the Zika test, did you ever put a mosquito dunk, or larvicide, in accumulated water around your home?
- a. Never or almost never
 - b. Seldom or rarely
 - c. Sometimes
 - d. Often
 - e. Usually or most of the time
 - f. Always or almost always
 - g. Refused

If yes, did you use the mosquito dunk from the Zika Prevention Kit?

Yes

No

Refused

11. During the time between when you received the Zika prevention kit and when you had blood drawn for the Zika test, did you usually sleep under a mosquito net when you slept or took a nap?
- a. Never or almost never
 - b. Seldom or rarely
 - c. Sometimes
 - d. Often
 - e. Usually or most of the time
 - f. Always or almost always
 - g. Refused

If yes, did you use the mosquito net from the Zika Prevention Kit?

Yes

No

Refused

The next questions are about sexual relations with your husband or male partner.

12. During the time between when you received the Zika prevention kit and when you had blood drawn for the Zika test, did you have sexual intercourse [that is, vaginal, anal, or oral (mouth-to-penis) sex] with your male partner?

No,

After recording response, go to question 15

Yes

Prefer not to answer

13. When you had sex during the time between when you received the Zika prevention kit and when you had blood drawn for the Zika test, how often did you use a condom?

Every time I had sex → Go to question 14

Sometimes when I had sex → Go to question 14

I never used a condom when I had sex → Go to question 15

Prefer not to answer

14. Did you use condoms from the Zika Prevention Kit?

Yes

No

Refused

15. During the time between when you received the Zika prevention kit and when you had blood drawn for the Zika test, did you **use up** any of the items that were included in the Zika prevention kit? (or have you needed to replace any items that came in the kit?) Which items?

Yes, which items

Repellent

Condoms

Mosquito dunks (or other larvicide)

Mosquito bed net

No

Don't know/not sure

Refused

16. During the time between when you received the Zika prevention kit and when you had blood drawn for the Zika test, did you purchase any items to replace the items in the kit that you used up (or needed to replace)?

Yes, which items

Repellent

Condoms

Mosquito dunks (or other larvicide)

Mosquito bed net

No, why not?

Do not have money to buy

Items are too expensive (too costly)

Am embarrassed to buy (e.g., condoms)

Do not feel I need them (they don't offer protection)

Other, please specify:

Don't know/not sure

Refused

17. Is there anything that we haven't discussed that you have been doing to reduce the risk of mosquito bites to avoid getting Zika virus during the time between when you received the Zika prevention kit and when you had blood drawn for the Zika test?

No

Yes, What?

Staying indoors

I moved to/spend more time in another location with fewer mosquitoes, or better housing

I have sprayed my house with pesticide by myself or my family

I have had a business come spray my house

Burn mosquito coils

Use mosquito zapper rackets

Other, please specify:

Refused

18. If you got to say what items should go into a Zika Prevention Kit to help pregnant women in Puerto Rico to protect themselves from getting infected with Zika, what items would you put in the kit?

I would include the same items that are there now

I don't know

I would include more (a current item)_____

I would add... (new items)

I would do something else entirely (specify)

Don't know/not sure

Refused

For any items that are not currently included in the Zika Prevention Kit, ask them why they would put the particular item in the kit? What protection do they think it offers?

Questions about insecticide services for pregnant women

READ: *Indoor residual spraying (IRS) is when specially trained professionals spray insecticide inside of the home in and on the places that mosquitoes like to rest - usually dark and moist places. Examples of*

places are under tables, behind furniture, under beds and cabinets with sinks, and by dirty laundry. The spraying can be done anytime during the day and usually will kill mosquitoes for about three months. IRS is most effective when most houses in a neighborhood have their homes sprayed.

19. Have you been offered spraying services for your home? [or Has anyone called you/contacted you to offer you spraying services for free?]

- Yes
- No (skip to question 21)
- Don't know/not sure
- Refused

20. Did you receive spraying services at your home? (or has your home been sprayed already?)

Yes

When did the spraying services occur? Did they occur...

Before you received a Zika Prevention Kit?

After you received a Zika Prevention Kit but before you got your blood drawn?

After you received a Zika Prevention Kit AND after you got your blood drawn?

- No
- Don't know/not sure
- Refused

21. During the time between when you received the Zika prevention kit and when you had blood drawn for the Zika test, did you notice any of the following activities in your community? Read the list and for each item, check No if they did not see it or Yes, if they did it.

	No	Yes
a. Municipality workers applying larvicide	<input type="checkbox"/>	<input type="checkbox"/>
b. Fumigation trucks spraying insecticide	<input type="checkbox"/>	<input type="checkbox"/>
c. Efforts to clean up trash and remove tires	<input type="checkbox"/>	<input type="checkbox"/>
d. Community meetings to discuss Zika	<input type="checkbox"/>	<input type="checkbox"/>
e. Messages telling the community to eliminate accumulated water	<input type="checkbox"/>	<input type="checkbox"/>
f. Volunteers going to homes to teach about reducing mosquito breeding sites	<input type="checkbox"/>	<input type="checkbox"/>
g. Zika prevention messages in stores, such as pharmacies or hardware stores	<input type="checkbox"/>	<input type="checkbox"/>
h. Volunteers helping to install screen windows and doors	<input type="checkbox"/>	<input type="checkbox"/>

- i. Neighbors or volunteers putting mosquito traps around homes
- j. Neighbors or workers fixing septic tanks, covering pipes
- k. School events about Zika
- l. Other, please specify:

Questions about mosquitoes in their environment (environmental stimuli)

For all the questions I'm about to ask, try to think about the time from when you received the Zika Prevention Kit to when you had blood drawn.

22. During an average week from 7am – 7pm, how many hours (maximum 12) are you at home or in this community on:

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Number of hours (0 - 12)							

23. In what zipcode do you live?

a. Please specify: _____ -- _____

24. Do you have any air conditioning in your home?

- No, none
- Yes in one room, used at night
- Yes, in one room used all the time
- Yes in more than one room

25. Does the home where you live have any screens (*escrines, tela metalico, tela mosquitero*) on windows that open?

- Not on any windows
- On some windows
- On all windows
- Don't know/not sure
- Refused

26. How about screens on the doors that open?

- None on the doors
- On some doors
- On all doors

Don't know/not sure
Refused

27. Do you currently rent or own your home?

Own
Rent
Occupy without paying rent (live with family or friend)
Live in public housing
Other, please specify:
Refused

28. Do you work outside your home?

Yes
No
Refused

29. Think about the place where you spend the most time when you're not at home. This could be the place where you work (if applicable) or a friend or relative's home. How would you describe that place or building in terms of open-ness between the indoors and outdoors? Would you say that the environment is _____? (read each statement and select ONE that best describes the environment)

- a. Completely outdoor ("open air") with either no windows or doors with screens
- b. Partially indoor and outdoor with some windows or doors having screens
- c. Completely Indoor with all windows and doors having screens
- d. Indoor with air conditioning
- e. Other (please describe): _____

30. What is the highest grade (or year) of regular school you completed?

- a. Elementary/Middle school
- b. High school
- c. College/Junior College
- d. Graduate degree

31. How many people are currently living in your household, including yourself?

- a. Number: _____

32. Of these people, how many are children ≤ 18 years old?

- a. Number: _____

33. Which of these categories best describes your total combined household income for the past 12 months? This should include income (before taxes) from all sources.

- a. <\$25,000
- b. \$25,000 - <\$50,000
- c. \$50,000 - <\$75,000
- d. \$75,000 - <\$100,000
- e. >\$150,000

- f. Don't know/not sure
- g. Refused

34. During the time between when you received the Zika prevention kit and when you had blood drawn for the Zika test, did any members of your household have an illness with rash, fever, or body pain?

No

Yes

How many people were ill? _____

Did this include your sex partner or husband? _____

Were they tested for Zika?

No

Don't know/not sure

Refused

Yes

Did a healthcare provider tell them they had Zika?

Yes

No

Don't know/not sure

Refused

Their opinion about what is needed and how to reach pregnant women

35. What do you think is needed or that needs to happen in order to protect pregnant women from getting infected with the Zika virus? [capture verbatim responses]

Thank you for answering these questions! Your answers will help us in our efforts to keep pregnant women and their babies healthy.