Form Approved
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Appendix 1. Survey Questionnaire

Public reporting burden of this collection of information is estimated to average 20 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to CDC/ATSDR Reports Clearance Officer; 1600 Clifton Road NE, MS D-74 Atlanta, Georgia 30333; ATTN: PRA (0920-1011)

Interviewer: ______________________________________ **Date of Interview:** __________________________________

Identification number: ___________________________

A. Introduction

In this interview, we will be asking you questions about your pregnancy, your health, your baby's health and some things you might have been exposed to during pregnancy. These questions cover many topics and will hopefully help us to understand better why some infants have microcephaly and other do not.

Current age of mother:__________(years)
Current age of baby: ____________(*circle*: weeks or months)
Residential location: ☐ Urban ☐ Suburban ☐ Rural
Sex of the baby: ☐ Male ☐ Female ☐ Ambiguous

B. Maternal residence and travel history

1.. How long have you lived in Paraíba?
Years: ____ Months: ____ ☐ Don't know

2. How long have you lived at your current address?
☐ <1 month ☐ 1-6 months ☐ 7-12 months ☐ >12 months

3. While you were pregnant, did you live in?
☐ Same neighborhood ☐ Different neighborhood but same municipality
☐ Different municipality ☐ Different state (not Paraíba)

Note: If the mother has lived at the location less than 7 months (plus the age of the infant), the woman might not meet the eligibility criteria for the investigation, verify inclusion criteria

4. During your pregnancy, did you travel more than 3 hours from your home?
☐ Yes ☐ No (skip to C) ☐ Don't know (skip to C)

5. Please list travel dates and destinations:
Dates: Locations:
Dates: Locations:
Dates: Locations:

C. Pregnancy information

1. What was this baby's date of birth?
☐☐/☐☐/☐☐☐☐ (DD/MM/YYYY)

2. What date did the doctor give you as a due date for this baby's birth?
☐☐/☐☐/☐☐☐☐ (DD/MM/YYYY)
☐ Don't know

3. In your pregnancy with this baby how many babies were you carrying? (a single baby,

twins, or more babies?)
Number of babies: ______

4. How many times have you been pregnant before this pregnancy, including pregnancies that may have ended in miscarriages, stillbirths, or other outcomes?
Number of pregnancies: ____

5. Are there any (other) children born in your extended family with microcephaly?
☐ No ☐ Yes; describe who:____

D. Illnesses during pregnancy

Now I am going to ask you some questions about any illnesses you may have had during your pregnancy.

1. From the month before you became pregnant through the end of your pregnancy, did you have an illness with any of the following symptoms? [*If yes, record week of pregnancy if possible, and month(s) of pregnancy if week is unknown*]

Fever:	☐ No	☐ Yes, when?____________ (weeks or months)	☐ Don't know
Rash:	☐ No	☐ Yes, when?____________ (weeks or months)	☐ Don't know
Joint pains:	☐ No	☐ Yes, when?____________ (weeks or months)	☐ Don't know
Red eyes:	☐ No	☐ Yes, when?____________ (weeks or months)	☐ Don't know

2. From the month before you became pregnant through the end of your pregnancy, did you have any of the following illnesses or infections? [*If yes, record week of pregnancy if possible, and month(s) of pregnancy if week is unknown*]

Kidney, bladder, or urinary tract infection	☐ No	☐ Yes, when?_______ (weeks or months)	☐ Don't know
Yeast infection	☐ No	☐ Yes, when?_______ (weeks or months)	☐ Don't know
Toxoplasmosis	☐ No	☐ Yes, when?_______ (weeks or months)	☐ Don't know
Cytomegalovirus (CMV)	☐ No	☐ Yes, when?_______ (weeks or months)	☐ Don't know
Rubella (German measles)	☐ No	☐ Yes, when?_______ (weeks or months)	☐ Don't know
Herpes	☐ No	☐ Yes, when?_______ (weeks or months)	☐ Don't know
Syphilis	☐ No	☐ Yes, when?_______ (weeks or months)	☐ Don't know
Chickenpox	☐ No	☐ Yes, when?_______ (weeks or	☐ Don't know

months)

LCMV (lymphocytic Choriomeningitis) ☐ No ☐ Yes, when?_______ (weeks or months) ☐ Don't know

3. From the month before you became pregnant through the end of your pregnancy, did you have any other infections that we haven't discussed? [*If yes, record week of pregnancy if possible, and month(s) of pregnancy if week is unknown*]

   ☐ No ☐ Yes (please specify): ____
   When:______________ (weeks or months)

4. Have you ever been diagnosed with any of the following conditions?
   ☐ High blood pressure ☐ Diabetes (not during pregnancy) ☐ Diabetes during pregnancy
   ☐ Respiratory Disease ☐ Neurologic Disease ☐ Heart Disease
   ☐ Other chronic medical condition: ____
   ☐ None of the above
   ☐ Don't know

E. Medications

Now I'm going to ask you about medications that you may have taken while you were pregnant.

1. From the month before you became pregnant, through the end of your pregnancy, did you take any over-the-counter or prescription medications? [*If yes, record week of pregnancy if possible, and month(s) of pregnancy if week is unknown*]
   ☐ No ☐ Yes ☐ Don't know
   List medications:
   ____________________________ When: ____________________ (weeks or months)
   ____________________________ When: ____________________ (weeks or months)
   ____________________________ When: ____________________ (weeks or months)
   ____________________________ When: ____________________ (weeks or months)
   ____________________________ When: ____________________ (weeks or months)

2. From the month before you became pregnant, through the end of your pregnancy, did you take any traditional medicine or herbal medications? [*If yes, specify medication and record week of pregnancy if possible, and month(s) of pregnancy if week is unknown*]
   ☐ No ☐Yes What medication:_____________________________________
   When:____________________ (weeks or months)
   ☐ No ☐Yes What medication:_____________________________________
   When:____________________ (weeks or months)
   ☐ No ☐Yes What medication:_____________________________________
   When:____________________ (weeks or months)

3. From the month before you became pregnant, through the end of your pregnancy, did you take any multivitamins, prenatal vitamins, or folic acid supplements? [*If yes, record week of pregnancy if possible, and month(s) of pregnancy if week is unknown*]
☐ No ☐ Yes, When:________________ (weeks or months) ☐ Don't know

F. Smoking and alcohol exposures

The next questions are about cigarette and alcohol use.

1. From the month before you became pregnant through the end of your pregnancy, did you [*If yes, record week of pregnancy if possible, and month(s) of pregnancy if week is unknown*]:

Smoke cigarettes	☐ No	☐ Yes When:____________________ (weeks or months) How many per day:_________________

2. From the month before you became pregnant through the end of your pregnancy, did any member of your household:

Smoke cigarettes	☐ No	☐ Yes Inside the house: ☐ No ☐ Yes When:____________________ (weeks or months) How many per day:_________________
Smoke shisha or hookah	☐ No	☐ Yes Inside the house: ☐ No ☐ Yes When:____________________ (weeks or months) How much per day:_________________

3. From the month before you became pregnant to the end of your pregnancy, did you drink any wine, beer, liquor, such as cachaça, or mixed drinks? [*If yes, record week of pregnancy if possible, and month(s) of pregnancy if week is unknown*]:
☐ No ☐ Yes, when: ______________________ (weeks or months)
How often: ☐ Daily ☐ Weekly ☐ Monthly ☐ <6 times ☐ Once ☐ None

G. Environmental exposures

Now we are going to ask about other things you might have been exposed to during your pregnancy.

1. What is your main source of drinking water during your pregnancy?

☐ A faucet/tap	☐ A rural aqueduct
☐ A well	☐ Bottled water/filter
☐ A river or pond	☐ Cistern or tank
☐ Other source: ______________________	☐ Don't know

2. Do you do anything to filter or clean your drinking water?
☐ No ☐ Yes, how? _______________ ☐ Don't know

3. How much time did you spend outdoors each day during your pregnancy?

☐ <1 hour ☐ 1-4 hours ☐ 5-8 hours ☐ >8 hours

4. Did you keep windows and doors open during the day when you were pregnant?
   ☐ Yes ☐ No ☐ Don't know

5. Did your windows and doors have screens covering them?
   ☐ Yes ☐ No ☐ Don't know

6. Did you wear insect repellent when outside while you were pregnant?
   ☐ All the time ☐ Some of the time ☐ Never

7. During your pregnancy, were you exposed to [*If yes, record week of pregnancy if possible, and month(s) of pregnancy if week is unknown*]:

Pesticide	☐ No	☐ Don't know	☐ Yes, Name of pesticide:____________________ When: _________ (weeks or months) How often? Daily/Weekly/Monthly/<5 times
Insecticide	☐ No	☐ Don't know	☐ Yes, Name of insecticide:__________________ When: _________ (weeks or months) How often? Daily/Weekly/Monthly/<5 times
Rodenticides	☐ No	☐ Don't know	☐ Yes, Name of rodenticides:_________________ When: _________ (weeks or months) How often? Daily/Weekly/Monthly/<5 times
Fertilizers	☐ No	☐ Don't know	☐ Yes, Name of fertilizer:____________________ When: _________ (weeks or months) How often? Daily/Weekly/Monthly/<5 times
Fumigants	☐ No	☐ Don't know	☐ Yes, Name of fumigant:__________________ When: _________ (weeks or months) How often? Daily/Weekly/Monthly/<5 times

H. Assessment of infant

Now I am going to ask your some questions about your baby's health.

1. In general, how would you describe your baby's health?
   ☐ Excellent ☐ Fair
   ☐ Very good ☐ Poor
   ☐ Good
   If fair or poor,

explain:____

2. Since your baby was born, has he/she had any of the following?

Seizures	☐ No	☐ Yes
Fever	☐ No	☐ Yes
Hearing problems	☐ No	☐ Yes
Vision problems	☐ No	☐ Yes
Other condition	☐ No	☐ Yes

If other, describe:____
____

I. Additional demographic and household characteristics

Now I just want to ask a few remaining questions about you and your family.

1. How would you describe your race?
   ☐ White ☐ Black ☐ Mulatto
   ☐ Asian ☐ Indigenous ☐ Other (please specify): _________________

2. What was the highest grade or year of school or college that you had completed at the time this baby was born?
   ☐ No formal schooling
   ☐ 1-6 years
   ☐ 7-8 years
   ☐ 9-11 years
   ☐ 12 years
   ☐ 1-3 years university
   ☐ Completed technical college
   ☐ 4 years university (bachelors)
   ☐ Master's degree
   ☐ Advanced degree (MD, PhD, JD)

3. During the 9 months that you were pregnant, how much income does your family make in a month? Please include income from all members in your household.
   ☐ < R$500
   ☐ R$500-R$1,499
   ☐ R$1,500-R$2,999
   ☐ R$3,000-R$6,999
   ☐ > R$7,000
   ☐ Do not know

4. How many people were supported by this income, including adults and children?
   Number: _______

J. Concluding remarks and sample collection

In closing, we would like to sincerely thank you for your time, answering our questions and providing us some blood to see if your baby or you were infected with Zika virus. Your contribution to this important investigation will help us greatly in our efforts to better understand the reason why so many baby are being born with microcephaly in Brazil. Thank you.

1. Was a blood sample taken from the mother?
   ☐ Yes ☐ No

2. Was a blood sample taken from the infant?

☐ Yes	☐ No