

Figure E

Note: Text in regular type is to be read to the respondent.

Text in CAPITALS is an instruction for the interviewer and should not be read to the respondent.

Text in *italic* is a suggestion for modification of the questionnaire to tailor the document to the ongoing investigation.

CASE QUESTIONNAIRE FOR CASE-CONTROL STUDY

ID: |_|_|_|_|

Interviewer: _____

Date of Interview: |_|_|-|_|_|-|_|_|
MM DD YY

Interview Outcome Code: |_|_|

TITLE OF YOUR SURVEY/CASE-CONTROL STUDY

WHEN YOU MEET THE SUBJECT:

Hello, my name is (YOUR NAME). I am from (STATE YOUR AFFILIATION). We are conducting a study designed to examine factors associated with the development of *state the disease you are studying*. I am here to speak with you about this study.

ARRANGE PRIVATE SETTING FOR INTERVIEW IF NOT DONE BY PHONE.

As I just mentioned, the purpose of this study is to *state specifically what the primary goal of the interview is, i.e., to collect information on exposure factors for acquiring Cryptosporidium*. Your help in this study is very important. Your participation is voluntary and all information you give will be kept confidential to the extent legally possible. Some of the questions may be sensitive. You may refuse to answer any question at any time. Neither your name nor any identifying information will appear on any report of the study.

ADMINISTER CONSENT FORM.

BEGIN INTERVIEW.

SECTION A: BACKGROUND INFORMATION

CIRCLE CODE FOR PARTICIPANTS GENDER

MALE..... 1
FEMALE..... 2

I would like to begin by asking you some basic questions about yourself.

A1. What is your full name? (LAST, FIRST, MI) _____

A2. What is your home address? (IF RESPONDENT REFUSES, ATTEMPT TO OBTAIN HIS/HER ZIP CODE, EXPLAINING THAT INFORMATION ON THE GENERAL AREA WHERE HE/SHE LIVES IS VERY IMPORTANT FOR EXPOSURE ASSESSMENT.)

A3. What is your work address? (IF RESPONDENT REFUSES, ATTEMPT TO OBTAIN HIS/HER ZIP CODE, EXPLAINING THAT INFORMATION ON THE GENERAL AREA WHERE HE/SHE WORKS IS VERY IMPORTANT FOR EXPOSURE ASSESSMENT.)

A4. What are your home and work phone numbers? (IF SUBJECT REFUSES FILL IN 8s IN THE BOXES. IF NONE, FILL IN 9s.)

--
HOME

--
WORK

A5. What is your date of birth?

-
MONTH YEAR

A6. What racial or ethnic group do you consider yourself part of?

WHITE, NON-HISPANIC.....	1
BLACK, NON-HISPANIC.....	2
WHITE, HISPANIC.....	3
BLACK, HISPANIC.....	4
AMERICAN INDIAN/ALASKA NATIVE.....	5
ASIAN/PACIFIC ISLANDER.....	6
OTHER (SPECIFY)_____	7
REFUSED.....	8
UNKNOWN.....	9

A7. What type of residence are you living in now? (List the appropriate possibilities with codes for your population such as a private home, apartment, condominium, a group residence, a homeless shelter etc.... Codes should include 7 for other, 8 for refused, and 9 for unknown or blank responses.)

A8. How many individuals currently live in your household?

SECTION B: CLINICAL INFORMATION

(The questions in this section relate to symptoms experienced by the case patient. Modify and/or delete as appropriate if the questionnaire is being used to interview a control patient.)

Now I would like to ask you some questions about your illness.

B1. What was the approximate date your symptoms began? --
MM DD YY

B2. Do you currently have these symptoms?

YES.....	1
NO.....	2
REFUSED.....	8
UNKNOWN.....	9

B3. How long have you had these symptoms? (RECORD AS NUMBER OF DAYS. CROSS CHECK THE RESPONSE BY SUBTRACTING THE DATE OF THE INTERVIEW FROM THE DATE OF ONSET OF SYMPTOMS.)

B4. Have you had any of the following symptoms? (READ AND CIRCLE ALL THAT APPLY. CLARIFY THAT THE DEFINITION FOR DIARRHEA IS THREE OR MORE LOOSE OR WATERY STOOLS IN A 24-HOUR PERIOD.)

Diarrhea.....	01
Nausea.....	02
Vomiting.....	03
Fever.....	04
Loss of weight or appetite.....	05
Cramping.....	06
Gas.....	07

Headache..... 08
 Other (SPECIFY)_____ 77
 REFUSED..... 88
 UNKNOWN..... 99
 NO SYMPTOMS..... 00 (GO TO B12)

B5. Have you consulted a health care provider for your symptoms?

YES..... 1
 NO..... 2 (GO TO B8)
 REFUSED..... 8 (GO TO B8)
 UNKNOWN..... 9 (GO TO B8)

B6. What was his or her name, address, and telephone number?

B7. What was the diagnosis? (RECORD THE RESPONDENT'S ANSWER VERBATIM AND CODE LATER.) _____

B8. Has any laboratory work been done, such as a blood test and/or a stool examination?

YES..... 1
 NO..... 2 (GO TO B10)
 REFUSED..... 8 (GO TO B10)
 UNKNOWN..... 9 (GO TO B10)

B9. What were the results of the test(s)? (RECORD THE RESPONDENT'S ANSWER VERBATIM, AND VERIFY WITH THE LAB AND CODE LATER.)

BLOOD _____
 STOOL _____

B10. Were you hospitalized as a result of your symptoms?

YES..... 1
 NO..... 2 (GO TO B12)
 REFUSED..... 8 (GO TO B12)
 UNKNOWN..... 9 (GO TO B12)

B11. How many days were you hospitalized?

B12. Do you have a weakened immune system? In other words, are you HIV positive, receiving cancer chemotherapy, or an organ transplant recipient?

YES..... 1
 NO..... 2
 REFUSED..... 8
 UNKNOWN..... 9

B13. Had you regularly been taking any medication before your symptoms began?

YES..... 1
 NO..... 2 (GO TO LINE BEFORE B15)
 REFUSED..... 8 (GO TO LINE BEFORE B15)
 UNKNOWN..... 9 (GO TO LINE BEFORE B15)

B14. Tell me the name of this (these) medications. (RECORD THE RESPONDENT'S ANSWER VERBATIM AND CODE LATER.)

_____ _____
 _____ _____

IF RESPONDENT LIVES ALONE, GO TO SECTION C.

B15. Are other members of your household ill with similar symptoms?

- YES..... 1
 NO..... 2 (GO TO SECTION C)
 REFUSED..... 8 (GO TO SECTION C)
 UNKNOWN..... 9 (GO TO SECTION C)

B16. How many members are ill? (CODE 88 FOR REFUSAL, 99 FOR UNKNOWN.)

B17. What is his (her, their) relationship to you, and his (her, their) age and gender?

- RELATION AGE GENDER (M=1, F=2)
 RELATION AGE GENDER (M=1, F=2)
 RELATION AGE GENDER (M=1, F=2)

SECTION C: EXPOSURE INFORMATION

(Questions in this section should be added, deleted, and/or tailored to the specific situation being investigated, and to whether the respondent is a case or control patient. The time of reference should be between 2 and 4 weeks before the onset of the illness.)

I would like to move on to some questions about how you might have acquired your illness. First, I would like to concentrate on your exposure to water during the 2 weeks before you became ill. (EMPHASIZE THE TIME FRAME OF INTEREST.)

C1. What were your sources of drinking water at home? (READ AND CIRCLE ALL THAT APPLY.)

- Municipal water from the tap..... 1 (GO TO C4)
 Municipal water processed with a home filter.... 2
 Well water..... 3 (GO TO C4)
 Commercially bottled water..... 4 (GO TO C4)
 (SPECIFY NAME) _____
 Other (SPECIFY) _____ 7 (GO TO C4)
 REFUSED..... 8 (GO TO C4)
 UNKNOWN..... 9 (GO TO C4)

C2. Which brand(s) and model(s) of water filter have you been using? (CODE 8 FOR REFUSED AND 9 FOR UNKNOWN.)

Brand(s) _____

Model(s) _____

C3. When was the last time you changed the filter element? (CODE 8 FOR REFUSED AND 9 FOR UNKNOWN, E.G. 99-99.) -

MM YY

C4. What were your sources of drinking water at school or at work? (READ AND CIRCLE ALL THAT APPLY.)

- Municipal water from the tap..... 01
 Municipal tap water with more filtration at work..... 02
 Municipal tap water filtered at home and taken to work... 03
 Well water..... 04
 Commercially bottled water..... 05
 (SPECIFY NAME) _____
 Other (SPECIFY) _____ 77

REFUSED..... 88
 UNKNOWN..... 99
 DOES NOT GO TO SCHOOL OR WORK..... 00

- C5. Before you became ill, on average, how many glasses of water did you drink in a day? (RECORD THE NUMBER FOR HOME AND SCHOOL/WORK CONSUMPTION SEPARATELY. FILL IN 8s FOR REFUSED, 9s FOR UNKNOWN, AND 0s FOR NOT APPLICABLE.)

 HOME SCHOOL/WORK

- C6. What was your usual source of ice during the 2 weeks before you became ill? (READ AND CIRCLE ALL THAT APPLY.)

Tap water from your home..... 1
 Tap water from your school/work..... 2
 Commercially bought ice..... 3

(SPECIFY BRAND AND LOCATION)

Does not use ice..... 4
 Other (SPECIFY) _____ 7
 REFUSED..... 8
 UNKNOWN..... 9

- C7. During the 2 weeks before you became ill, did you drink any beverage made with water, such as ice-tea or lemonade, at a restaurant, picnic, fair, or other social event?

YES..... 1
 NO..... 2 (GO TO C9)
 REFUSED..... 8 (GO TO C9)
 UNKNOWN..... 9 (GO TO C9)

- C8. What was the name, date, and location of the event(s)?

NAME _____

LOCATION _____

DATE --
 MM DD YY

(Duplicate this information for each restaurant and/or event.)

- C9. During the 2 weeks before you became ill, did you swim in a pool, lake or river?

YES..... 1
 NO..... 2 (GO TO C15)
 REFUSED..... 8 (GO TO C15)
 UNKNOWN..... 9 (GO TO C15)

- C10. Where did you swim?

BODY OF WATER _____

LOCATION _____

- C11. Do you remember if you put your face in the water?

YES..... 1
 NO..... 2 (GO TO C15)
 REFUSED..... 8 (GO TO C15)
 UNKNOWN..... 9 (GO TO C15)

- C12. Did you get any of the water in your mouth?
 YES..... 1
 NO..... 2 (GO TO C15)
 REFUSED..... 8 (GO TO C15)
 UNKNOWN..... 9 (GO TO C15)
- C13. Do you remember accidentally swallowing any of the water?
 YES..... 1
 NO..... 2 (GO TO C15)
 REFUSED..... 8 (GO TO C15)
 UNKNOWN..... 9 (GO TO C15)
- C14. Please estimate how much water you swallowed. (READ.)
 A mouthful..... 1
 Several mouthfuls..... 2
 The equivalent of a glass..... 3
 REFUSED..... 8
 UNKNOWN..... 9
- C15. During the 2 weeks before you became ill, did you bathe in a hot tub or jacuzzi?
 YES..... 1
 NO..... 2 (GO TO INTRO BEFORE C17)
 REFUSED..... 8 (GO TO INTRO BEFORE C17)
 UNKNOWN..... 9 (GO TO INTRO BEFORE C17)
- C16. Where did you bathe in this hot tub or jacuzzi?
 LOCATION _____

Now I would like to concentrate on your exposure to food during the 2 weeks before you became ill.
 (EMPHASIZE THE TIME FRAME OF INTEREST AGAIN.)

- C17. During an average week, how many meals did you eat outside your home, including breakfast, lunch, and dinner, and any take out food ordered and brought home? (CODE 00 FOR NONE, 88 FOR REFUSED, AND 99 FOR UNKNOWN. IF NONE, THEN GO TO C19.)
 NUMBER OF MEALS
- C18. How is food served at these restaurants? (READ AND CIRCLE ALL THAT APPLY.)
 Take-out or Drive-thru..... 01
 Buffet or Salad Bar..... 02
 Sit-down restaurant..... 03
 Other (SPECIFY) _____ 77
 REFUSED..... 88
 UNKNOWN..... 99
- C19. During the 2 weeks before you became ill, how many times did you eat the following food items?
 (CODE 0 FOR NONE, 8 FOR REFUSED, AND 9 FOR UNKNOWN.)
- | | |
|---|----------------------|
| Lettuce or garden salad..... | <input type="text"/> |
| Other cold salads such as coleslaw, potato salad, or pasta salad... | <input type="text"/> |
| Cold cuts, chicken salad, egg salad, or tuna salad..... | <input type="text"/> |
| Raw vegetables such as carrots, tomatoes, and cucumbers..... | <input type="text"/> |
| Raw fruits such as strawberries and raspberries..... | <input type="text"/> |

C20. During the 2 weeks before you became ill, did you drink unpasteurized milk, unpasteurized apple juice, and/or eat any unpasteurized products?

YES..... 1
 NO..... 2 (GO TO C22)
 REFUSED..... 8 (GO TO C22)
 UNKNOWN..... 9 (GO TO C22)

C21. What unpasteurized product(s) did you eat?

_____	<input type="text"/>
A SPECIFY	CODE
_____	<input type="text"/>
B	
_____	<input type="text"/>
C	
_____	<input type="text"/>
D	

C22. During the 2 weeks before you became ill, did you begin eating any new health foods or begin using any new dietary supplements?

YES..... 1
 NO..... 2 (GO TO C24)
 REFUSED..... 8 (GO TO C24)
 UNKNOWN..... 9 (GO TO C24)

C23. What were these new products?

_____	<input type="text"/>
A SPECIFY	CODE
_____	<input type="text"/>
B	
_____	<input type="text"/>
C	
_____	<input type="text"/>
D	

C24. During the two weeks before you became ill, did you use any nontraditional or alternative treatments or therapies?

YES..... 1
 NO..... 2 (GO TO C26)
 REFUSED..... 8 (GO TO C26)
 UNKNOWN..... 9 (GO TO C26)

C25. What product(s) did you use?

_____	<input type="text"/>
A SPECIFY	CODE
_____	<input type="text"/>
B	
_____	<input type="text"/>
C	
_____	<input type="text"/>
D	

C26. Before you became ill, where did you do most of your grocery shopping? (READ AND CIRCLE ALL THAT APPLY.)

(List and code groceries found in the location being investigated. If there are specialty markets or stores, make sure to collect information on what products were bought at each store.)

- C27. During the 2 weeks before you became ill, did you go to any of the following bars, clubs, and/or discos?
(READ AND CIRCLE ALL THAT APPLY.)

(List clubs, bars etc...found in the location being investigated and code.)

- C28. During the 2 weeks before you became ill, did you attend any parties, weddings, receptions, banquets, or other events?

YES..... 1
 NO..... 2 (GO TO INTRO BEFORE C30)
 REFUSED..... 8 (GO TO INTRO BEFORE C30)
 UNKNOWN..... 9 (GO TO INTRO BEFORE C30)

- C29. What event(s) did you attend? (RECORD THE TYPE, THE LOCATION, AND THE DATE OF THE EVENT(S).)

EVENT _____ []

LOCATION _____ [][]-[][]-[][][]
 MM DD YY

(Duplicate this information for each event.)

I would now like to ask you a few questions about your travel history.

- C30. During the 2 weeks before you became ill, did you travel within the state?

YES..... 1
 NO..... 2 (GO TO C32)
 REFUSED..... 8 (GO TO C32)
 UNKNOWN..... 9 (GO TO C32)

- C31. Please give me the locations and the number of days you spent at each location.

A	LOCATION	CODE	DAYS
	_____	[][]	[][]
B	_____	[][]	[][]
C	_____	[][]	[][]
D	_____	[][]	[][]

- C32. During the 2 weeks before you became ill, did you travel to another state within the United States?

YES..... 1
 NO..... 2 (GO TO C34)
 REFUSED..... 8 (GO TO C34)
 UNKNOWN..... 9 (GO TO C34)

- C33. Please give me the name of the cities and states, and the number of days you spent in each state.

A	CITY/STATE	CODE	DAYS
	_____	[][]	[][]
B	_____	[][]	[][]
C	_____	[][]	[][]
D	_____	[][]	[][]

C34. During the 2 weeks before you became ill, did you travel to another country?

- YES..... 1
 NO..... 2 (GO TO INTRO BEFORE C36)
 REFUSED..... 8 (GO TO INTRO BEFORE C36)
 UNKNOWN..... 9 (GO TO INTRO BEFORE C36)

C35. Please tell me which country (ies) and the number of days you spent in each country.

A	COUNTRY	CODE	DAYS
	_____	[][]	[][]
	_____	[][]	[][]
B	_____	[][]	[][]
	_____	[][]	[][]
C	_____	[][]	[][]
	_____	[][]	[][]
D	_____	[][]	[][]

Next, I would like to ask you some questions about person to person and person to animal exposures.

C36. During the 2 weeks before you became ill, did you work or go to school outside of your home?

- YES..... 1
 NO..... 2
 REFUSED..... 8
 UNKNOWN..... 9

C37. During the 2 weeks before you became ill, were you involved in any of the following types of activities? (READ AND CIRCLE ALL THAT APPLY.)

- Food handling..... 1 (GO TO C38)
 Child care..... 2 (GO TO C39)
 Animal care outside of household 3 (GO TO C40)
 Patient care..... 4 (GO TO C41)
 Other (SPECIFY)_____ 7 (GO TO C42)
 REFUSED..... 8 (GO TO C42)
 UNKNOWN..... 9 (GO TO C42)

C38. What type of food handling or preparation were you involved with? (READ AND CIRCLE ALL THAT APPLY.)

- Hot food preparation..... 1
 Cold food preparation..... 2
 As server or waiter..... 3
 As bartender..... 4
 As salad bar/buffet organizer..... 5
 Other (SPECIFY)_____ 7
 REFUSED..... 8
 UNKNOWN..... 9

C39. What type of child care work were you involved in? (READ AND CIRCLE ALL THAT APPLY.)

- Out of home child care center..... 1
 (SPECIFY NAME)_____ 2
 In-home child care center..... 2
 Out of home babysitter..... 3
 In-home babysitter..... 4
 Other (SPECIFY)_____ 7
 REFUSED..... 8
 UNKNOWN..... 9

- C40. What type of animal care were you involved in? (READ AND CIRCLE ALL THAT APPLY.)
- Work in a pet store..... 1
 - Work on a farm..... 2
 - Work on a dairy farm..... 3
 - Dog walker..... 4
 - Dog groomer..... 5
 - Veterinarian..... 6
 - Other (SPECIFY)_____ 7
 - REFUSED..... 8
 - UNKNOWN..... 9

- C41. What type of patient care were you involved in? (READ AND CIRCLE ALL THAT APPLY.)
- Physician..... 1
 - Nurse..... 2
 - Nurse's aid..... 3
 - Home health care worker..... 4
 - Other (SPECIFY)_____ 7
 - REFUSED..... 8
 - UNKNOWN..... 9

- C42. Do you have children in out of home child care?
- YES..... 1
 - NO..... 2 (GO TO LINE BEFORE C44)
 - REFUSED..... 8 (GO TO LINE BEFORE C44)
 - UNKNOWN..... 9 (GO TO LINE BEFORE C44)

- C43. Where is the out of home child care located?
NAME/ADDRESS _____

IF THE CASE PATIENT IS 5 YEARS OLD OR LESS, ASK QUESTION C44. OTHERWISE GO TO QUESTION C46.

- C44. Does the child who is ill attend a child care center?
- YES..... 1
 - NO..... 2 (GO TO C46)
 - REFUSED..... 8 (GO TO C46)
 - UNKNOWN..... 9 (GO TO C46)

- C45. Where is the child care center located?
NAME/ADDRESS _____

- C46. During the 2 weeks before you became ill, did you come in contact with anyone who had diarrhea, including (READ AND CIRCLE ALL THAT APPLY.)
- Teenagers or adults..... 1
(SPECIFY)_____
 - Children..... 2
(SPECIFY)_____
 - Animals..... 3
(SPECIFY)_____
 - REFUSED..... 8
 - UNKNOWN..... 9

- C47. During the 2 weeks before you became ill, did you visit a person who was ill with an intestinal problem, e.g., diarrhea, nausea, or vomiting?
- | | |
|--------------|---------------|
| YES..... | 1 |
| NO..... | 2 (GO TO C49) |
| REFUSED..... | 8 (GO TO C49) |
| UNKNOWN..... | 9 (GO TO C49) |
- C48. Where did you visit this person? (READ.)
- | | |
|------------------------|---|
| In a hospital..... | 1 |
| In a nursing home..... | 2 |
| In a hospice..... | 3 |
| At their home..... | 4 |
| Other location..... | 7 |
| (SPECIFY)_____ | |
| REFUSED..... | 8 |
| UNKNOWN..... | 9 |
- C49. During the 2 weeks before you became ill, did you visit anyone in a hospital, nursing home, and/or hospice?
- | | |
|--------------|---------------|
| YES..... | 1 |
| NO..... | 2 (GO TO C52) |
| REFUSED..... | 8 (GO TO C52) |
| UNKNOWN..... | 9 (GO TO C52) |
- C50. What is this person's relationship to you, and his or her age and gender?
- RELATION _____ |__|__| AGE |__|__| GENDER (M=1, F=2) |__|
- C51. Where was this person located?
- LOCATION _____ |__|
- C52. During the 2 weeks before you became ill, did you come in contact with children in diapers?
- | | |
|----------------|---|
| YES..... | 1 |
| (SPECIFY)_____ | |
| NO..... | 2 |
| REFUSED..... | 8 |
| UNKNOWN..... | 9 |
- C53. During the 2 weeks before you became ill, did you come in contact with young animals, that is animals who are less than 6 months of age?
- | | |
|--------------|----------------------------|
| YES..... | 1 |
| NO..... | 2 (GO TO INTRO BEFORE C56) |
| REFUSED..... | 8 (GO TO INTRO BEFORE C56) |
| UNKNOWN..... | 9 (GO TO INTRO BEFORE C56) |
- C54. How did you come in contact with these young animals? For example, were they (READ AND CIRCLE ALL THAT APPLY.)
- | | |
|-------------------------------|---|
| Pets in a house..... | 1 |
| Animals on a farm..... | 2 |
| Animals in a petting zoo..... | 3 |
| Other (SPECIFY)_____ | 7 |
| REFUSED..... | 8 |
| UNKNOWN..... | 9 |

C55. What types of young animals did you come in contact with? (*List appropriate animals for this investigation or leave open ended as needed.*)

Finally, I would like to ask you a few questions about possible sexual exposures. Some of these questions may be very personal. I would like to remind you that you may refuse to answer any question at any time.

(Design questions C56 and on to collect information on sexual practices that could involve oral exposure to fecal matter.)

I would like to thank you very much for your time and cooperation in answering my questions.

END OF QUESTIONNAIRE