

## Supplemental Questionnaire

### Questionnaire for telephone survey of St. Thomas residents described in “Ciguatera incidence in the U.S. Virgin Islands has not increased over a 30 year time period, despite rising seawater temperatures” by Radke et al.

Hello, my name is % name and I am calling from the Florida Survey Research Center at the University of Florida. University researchers are conducting a survey of citizens in the Virgin Islands about their experiences with the illness ciguatera, sometimes called “fish poisoning.”

This is not a sales call and your answers will be completely confidential. You may stop the interview at any time. The survey should only take about 15 minutes to complete. May I please speak with the person in the household who is age 18 or older and has the next birthday?

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*First, we'd like to know about your experiences with eating fish.*

1. How often do you eat locally caught fish? Would you say you eat locally caught fish more than 3 times a week; 1 or 2 times a week; less than once a week but more than once a month; less than once a month; or never? [More than 3 times a week; 1 or 2 times a week; Less than once a week but more than once a month; Less than once a month; Never; Don't know; Refuse]

**IF “Less than once a month” or “Never”**

1A. Is concern about “fish poisoning” one of the reasons why you rarely or never eat fish? [YNDR]

GO TO Q5

**IF Q1 “More than 3 times a week”; “1 or 2 times a week” or, “Less than once a week but more than once a month”:**

*Next, please think about the last time you ate locally caught fish.*

2. What kind of fish was the last locally caught fish you ate? [INT: Do not read. Mark ONE.]

[checkbox]

Barracuda

Carang

Grouper

**INT: If “Grouper,” prompt for specific type & mark. If specific type not known, just mark “Grouper.”**

Black grouper

Gag

Red hind

Red grouper

Roch hind

Scamp

Yellowfin grouper

Hardnose (Blue Runner)

Hogfish

Jack

**INT: If “Jack,” prompt for specific type & mark. If specific type not known, just mark “Jack.”**

Amber jack

Bar jack

Black jack

Blue runner

Horse-eye jack

Yellow Jack

Olewife (“Old Wife”)/Triggerfish

Mackerel

**INT: If “Mackerel,” prompt for specific type & mark. If specific type not known, just mark “Mackerel.”**

Cero mackerel

King mackerel/Kingfish

‘Pot fish’ (Small fish caught in fish traps)

Snapper

**INT: If “Snapper,” prompt for specific type & mark. If specific type not known, just mark “Snapper.”**

Blackfin snapper

Cubera snapper

Dog snapper

Gray snapper

Yellowtail snapper

Other  
Don't know  
Refuse]

**IF "Other"**

2A. Specify 'other' type of fish [text]

3. Did you eat that fish at home, at a restaurant, or somewhere else? [Home, Restaurant, Other, Don't know, Refuse]

**IF Q3 NOT RESTAURANT:**

3A. Did you buy the fish or did someone in your household catch the fish? [Buy, Catch, Other (describe), Don't know, Refuse]

**IF Q3A OTHER:**

3A1. How did you get the fish? [text, DR]

**IF Q3A PURCHASED:**

3B. Where did you buy the fish? [Local fisherman / Fish market, Grocery Store, Other, Don't know, Refuse]

**IF OTHER: 3B1.** [text, DR]

4. Do you know where the fish was caught? [YNDR]

**IF YES:**

4A. Where was the fish caught? [North of island, South of island, Away from Island – North, Away from Island – Southwest, Away from Island – Southeast, Don't know, Refuse]

*Next, we have some questions about fish poisoning.*

5. Is there a season when fish are more likely to be poisonous?  
[YNDR]

**IF YES:**

5A. When are fish more likely to be poisonous? [text, DR]

6. Are there certain types of fish that you believe are poisonous?  
[YNDR]

**IF YES:**

6A. What types of fish do you believe are poisonous? [INT: Do not read. Mark all that apply.]

[checkbox]

Barracuda

Carang

Grouper

**INT: If "Grouper," prompt for specific type & mark. If specific type not known, just mark "Grouper."**

Black grouper

Gag

Red hind

Red grouper

Roch hind

Scamp

Yellowfin grouper

Hardnose (Blue Runner)

Hogfish

Jack

**INT: If "Jack," prompt for specific type & mark. If specific type not known, just mark "Jack."**

Amber jack

Bar jack

Black jack

Blue runner

Horse-eye jack

Yellow Jack

Olewife ('Old Wife')/Triggerfish

Mackerel

**INT: If "Mackerel," prompt for specific type & mark. If specific type not known, just mark "Mackerel."**

Cero mackerel

King mackerel/Kingfish

'Pot fish' (Small fish caught in fish traps)

Snapper

**INT: If "Snapper," prompt for specific type & mark. If specific type not known, just mark "Snapper."**

Blackfin snapper

Cubera snapper

Dog snapper

Gray snapper

Yellowtail snapper

Other

Don't know

Refuse]

**IF "Other"**

6A1. Specify 'other' type of fish [text]

6B. Do you avoid eating these types of fish? [YNDR]

7. Is there any way to tell if a fish might be poisonous? [YNDR]

**IF YES:**

7A. How can you tell if a fish might be poisonous? [INT: Do not read. Mark all that apply.]

[checkbox

Big eyes

Cook silver coin or spoon with the fish

Feed piece of fish to pet

Green flesh

Put fish on ant bed

See if flies land on fish

Taste liver of fish

Other

Don't know

Refuse]

**IF "Other"**

7A1. Specify 'other' method [text]

8. If you, or someone in your household, got fish poisoning, how would you treat it? [INT: Do not read. Mark all that apply.]

[checkbox

Go to the emergency room

Visit local medical clinic or doctor

Benadryl

Brown sugar

Bush tea

Charcoal

Mauby Bark

Other

Don't know

Refuse]

**IF "Other"**

8A1. Specify 'other' method [text]

9. Have you ever been poisoned by fish? [YNDR]

**IF NO: GO TO Q18**

**IF YES:**

9A. How many times have you had fish poisoning in your lifetime? [#, DR]

9B. How many times have you had fish poisoning in the past five years? [#, DR]

**IF One or More:**

9C. How many times have you had fish poisoning in the past year? [#, DR]

*Next, we'd like to know a little more about the fish poisoning you had.*

**IF "One" to Q9A:**

9D. In what month and year did you first have fish poisoning?

Month [January, February, March, April, May, June, July, August, September, October, November, December, Don't know, Refuse]  
Year [year, dr]

**GO TO Q10**

**IF "Two":**

9E. In what month and year did you first have fish poisoning?

Month [January, February, March, April, May, June, July, August, September, October, November, December, Don't know, Refuse]

Year [year, dr]

9F. And, in what month and year did you next have fish poisoning?

Month [January, February, March, April, May, June, July, August, September, October, November, December, Don't know, Refuse]

Year [year, dr]

**GO TO Q10**

**IF "Three":**

9G. In what month and year did you first have fish poisoning?

Month [January, February, March, April, May, June, July, August, September, October, November, December, Don't know, Refuse]

Year [year, dr]

9H. And, in what month and year did you next have fish poisoning?

Month [January, February, March, April, May, June, July, August, September, October, November, December, Don't know, Refuse]

Year [year, dr]

9I. And, in what month and year did you next have fish poisoning?

Month [January, February, March, April, May, June, July, August, September, October, November, December, Don't know, Refuse]

Year [year, dr]

**GO TO Q10**

**IF More than three:**

*Please consider the three most recent times you had fish poisoning.*

9J. In what month and year did you most recently have fish poisoning?

Month [January, February, March, April, May, June, July, August, September, October, November, December, Don't know, Refuse]

Year [year, dr]

9K. And, in what month and year did you most recently have fish poisoning prior to that?

Month [January, February, March, April, May, June, July, August, September, October, November, December, Don't know, Refuse]

Year [year, dr]

9L. And, in what month and year did you most recently have fish poisoning before that?

Month [January, February, March, April, May, June, July, August, September, October, November, December, Don't know, Refuse]

Year [year, dr]

**GO TO Q10**

*For the next few questions, please consider the most recent time you had fish poisoning.*

10. What type of fish do you believe caused your symptoms? [INT: Do not read. Mark ONE.]

- Barracuda
- Carang
- Grouper

**INT: If "Grouper," prompt for specific type & mark. If specific type not known, just mark "Grouper."**

Black grouper  
Gag  
Red hind  
Red grouper  
Roch hind  
Scamp  
Yellowfin grouper  
Hardnose (Blue Runner )  
Hogfish  
Jack

**INT: If “Jack,” prompt for specific type & mark. If specific type not known, just mark “Jack.”**

Amber jack  
Bar jack  
Black jack  
Blue runner  
Horse-eye jack  
Yellow Jack  
Olewife (‘Old Wife’)/Triggerfish  
Mackerel

**INT: If “Mackerel,” prompt for specific type & mark. If specific type not known, just mark “Mackerel.”**

Cero mackerel  
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‘Pot fish’ (Small fish caught in fish traps)  
Snapper

**INT: If “Snapper,” prompt for specific type & mark. If specific type not known, just mark “Snapper.”**

Blackfin snapper  
Cubera snapper  
Dog snapper  
Gray snapper  
Yellowtail snapper  
Other  
Don’t know  
Refuse]

**IF “Other”**

10A. Specify ‘other’ type of fish [text]

11. Did you eat that fish at home, at a restaurant, or somewhere else? [Home, Restaurant, Other, Don’t know, Refuse]

**IF OTHER:**

11A. Where was that? [text, DR]

**IF Q11 NOT RESTAURANT:**

11B. Did you buy the fish or did someone in your house-hold catch the fish? [Buy, Catch, Other (describe), Don’t know, Refuse]

**IF Q11B OTHER:**

11B1. How did you get the fish? [text, DR]

**IF Q11B PURCHASED:**

11C. Where did you buy the fish? [Local fisherman/Fish market, Grocery Store, Other, Don’t know, Refuse]

**IF OTHER: 11C1.** [text, DR]

12. Do you know where the fish was caught? [YNDR]

**IF YES:**

12A. Where was the fish caught? [North of island, South of island, Away from Island – North, Away from Island – Southwest, Away from Island – Southeast, Don’t know, Refuse]

13. How soon after you ate the fish did your first symptoms of fish poisoning appear? [text, DR]

14. What symptoms of fish poisoning did you have? [INT: Do NOT read. Mark ALL that apply.]

[checkbox  
Abdominal pain  
Diarrhea  
Hot and cold reversal

Tingling / numbness in hands or feet  
Weakness  
Other  
Don't know  
Refuse]

**IF OTHER:** 14A. Describe 'other' symptoms [text, DR]

**FOR EACH RESPONSE GIVEN:**

14B. How many days did you have [symptom]? [#, DR]

15. Did the symptoms cause you to take to bed? [YNDR]

**IF YES:**

15A. How many days did you stay in bed? [#, DR]

16. Did the symptoms make you miss work? [YNDR]

**IF YES:**

16A. How many days of work did you miss? [#, DR]

17. How did you treat your symptoms from fish poisoning? [INT: Prompt if needed. Do not read. Mark ALL that apply.]

[checkbox

Went to the emergency room

Visited a local medical clinic or doctor

Benadryl

Brown sugar

Bush tea

Charcoal

Mauby Bark

Other over-the-counter medicine

Other

Don't know

Refuse]

**IF "Went to the emergency room" or "Visited a local medical clinic or doctor":**

17A. Did your trip to the emergency room, doctor, or clinic cost you any money? [YNDR]

**IF YES:**

17A1. How much money did you spend to go to the emergency room, doctor, or clinic? [%, DR]

17B. Were you prescribed any medication by the emergency room, doctor, or clinic? [YNDR]

**IF YES:**

17B1. How much money did you spend on the prescriptions? [%, DR]

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*Next, we have a few questions about fish poisoning among other members of your household.*

18. I first need to ask, how many total people live in your household including yourself? [#, R]

**IF ONE (OR REFUSE): GO TO Q22**

**IF MORE THAN ONE, Continue**

19. In the past five years, has anyone else in your household had fish poisoning? [YNDR]

**IF NO, DON'T KNOW, REFUSE GO TO Q22**

**IF YES, Continue**

20. How many total episodes of fish poisoning have other people in your household had in the past five years? [#, DR]

**IF One or More:**

21. And, how many total episodes of fish poisoning have other people in your household had in just the past year? [#, DR]

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*Finally, I just have a few demographic questions for statistical purposes.*

22. Gender [Don't ask; just record] [Male, Female]
23. What area of the island do you live in? [North, South, East, West, Charlotte Amalie, DK, R]
24. What is your age in years? [#, R]
25. Were you born in the Caribbean? [YNDR]

**IF NO:**

25A. Where were you born? [text, R]

**IF YES:**

25B. On which island were you born? [INT: Do not read. Mark ONE response.]

[check box:

Anegada

Anguilla

Antigua

Barbados

Dominca

Haiti / Dominican Republic (Santo Domingo)

Jamaica

Jost Van Dyke

Puerto Rico

St. Croix

St. John

St. Kitts/Nevis

St. Lucia

St. Marteen

St. Thomas

Tortola

Vigin Gorda

Other

Don't know]

25C. **IF 'Other'**: [text]

26. What is the highest level of education you have completed? [Some high school or less, High school graduate, Some college, College graduate, Refuse]
27. Is your household's total yearly income before taxes \$35,000 or less, or more than \$35,000? [\$35,000 or less, More than \$35,000, DK, R]

**IF \$35,000 or less:**

27A. And is that: [Less than \$20,000; \$20,000 up to \$30,000; \$30,000 up to \$35,000; DK; R]

**IF More than \$35,000:**

27B. And is that: [\$35,001 up to \$50,000; \$50,000 up to \$75,000; \$75,000 up to \$100,000; more than \$100,000; DK; R]

28. Do you have a working cell phone? [YNDR]

**IF NO:**

28A. Does anyone in your household have a working cell phone? [YNDR]

29. How often do you currently have a drink containing alcohol [INT: Prompt if needed – “any alcoholic beverage including beer, wine, and liquor”]? [Never; Once a month; 2 to 4 times a month; 2 to 3 times a week; 4 or more times a week; Other (describe); DK; R]

**IF NOT 'Never'**

29A. How often do you drink more than five drinks containing alcohol at one time [INT: Prompt if needed – “in one sitting,” or “on one occasion”]? [1 to 3 times per week; Less than once a week, but at least once a month; Less than once a month; More than 4 times per year; Fewer than 4 times per year; Never; DK; R]

30. Do you currently smoke tobacco [INT: Prompt if needed – “cigarettes, pipe, cigars”]? [YNDR]

**IF NO:**

30A. Are you a former smoker who quit smoking, or were you never a smoker? [Former smoker; Never smoked; Refuse]

31. Have you ever had any of the following medical problems?

- A. Diabetes [YNDR]
- B. Cancer [YNDR]
- C. Stroke [YNDR]
- D. Kidney disease [YNDR]
- E. Heart problem [YNDR]
- F. High blood pressure [YNDR]
- G. Jaundice or hepatitis [YNDR]

32. Would you like to add any other comments about fish poisoning? [YNDR]

**IF YES:** 32A. Comments [text]

33. Do you have any questions regarding this study or your rights as a participant? [YNDR]

**IF YES:** *For questions regarding this study you may contact Dr. Mike Scicchitano at the Florida Survey Research Center toll free at 866-392-3475. For questions regarding your rights as a participant you may contact the University of Florida Institutional Review Board at 352-392-0433.*

*That concludes our survey, thank you very much for your time and participation.*