

Attachment 4e

**MICHIGAN DEPARTMENT OF COMMUNITY HEALTH
DIVISION OF ENVIRONMENTAL HEALTH**

**Biomonitoring of Persistent Toxic Substances
in Michigan Urban Fisheaters**

Biomonitoring Questionnaire

Readability has been calculated using the Fry Readability Formula for determining grade level at the 6th grade level when sentences containing agency names are omitted.

OMB: Attachment 4e. Biomonitoring Questionnaire

OMB page 2: Consider only asking for this on the consent form

CONTACT INFORMATION

ATSDR/MDH response: The biomonitoring questionnaire no longer collects address and personal information. This has been moved to the consent process. A Contact Information Form (Attachment 4b) has been created which will be filled in with information collected at the onshore recruiting. Respondents will be asked to verify contact information collected at the onshore recruiting instead of open ended questions to gather this information again.

OMB page 23: Animal

/AMINAL] at

ATSDR/MDH response: the spelling had been corrected.

OMB page 29: What's the intended use of this data?

Now I'd like to measure your blood pressure.

Measurement: ____ / ____

[] Refused

ATSDR/MDCH response:

Blood pressure will be assessed prior to blood sample collection to ensure that participants may safely give the required volume of blood. The Certified Phlebotomy Technician or other qualified person will assess the participants' blood pressure prior to collection of a blood sample. Blood samples will be collected from participants whose blood pressure is below 180/100 (systolic/diastolic) and above 80/50 (systolic/diastolic). Participants will be given an American Heart Association blood pressure information (Attachment 10a7) sheet to take with them. Blood pressure readings will be verbally shared with participants and recorded, but will not be retained for any analytical purpose.

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SURVEY QUESTIONNAIRE

Date of Interview: _____

Interviewer Name: _____

Introductory Script: Hello. My name is _____. Thank you for agreeing to be part of this study. I am going to ask you some questions about you and your normal activities...things like your age, where you live, foods you eat, and a few questions about your lifestyle. Everyone in the study will be asked the same questions.

It will take about one hour to go through all of the questions.

Before we start, I want to remind you about a few things:

First, tell me if I'm going too fast or if you would like to take a break. Also, you don't have to answer any questions that you don't want to. Just tell me that you "don't want to answer" and we'll skip the question.

Second, if you are not sure about an answer, do the best you can. If you can't remember or don't know, just tell me "I don't know".

Third, please do the best you can, because your answers are very important. They will help us learn how people have come into contact with chemicals in the environment.

Finally, you can tell me to stop if you don't want to finish answering these questions.

Do you have any questions for me?

Okay, let's get started.

Public reporting burden of this collection of information is estimated to average 52 minutes per response for total participation, 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 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, MS D-74, Atlanta, GA 30333, ATTN: PRA (0923-XXXX).

Script: Now I will ask you about jobs you have held where you have come into contact with chemicals. Be sure to include seasonal work, self-employment, military service, and farm work in your answers.

Study ID

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BIRTHS

(If MALE, SKIP to Q 49)

(If FEMALE, READ Script) We want to know if you ever had children, because giving birth and nursing can change the amount of some chemicals in the body.

47. How many children have you given birth to? (if none, ENTER "0" and SKIP to Q 49)

_____ child/children

Birth Order (Oldest-to-Youngest)	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th
48. From oldest to youngest, what year was each child born?										
49. How many months {were your children/was your child} breastfed?										

Script: The next questions are about activities or interests done as hobbies. You may do these activities for fun, to earn money, or to keep up your house.

HOBBIES AND ACTIVITIES		
	50. In the past 12 months, have you done any of the following activities at home or somewhere else?	51. In the past 12 months, has someone else living in your household done any of these activities in your home?
Dyeing material (Ex: textiles, making quills)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused
Electronics assembly (Ex: computer circuits, radios, robot kits)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused
Gardening or farming	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused
Glass crafting (Ex: stained glass, glassblowing)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused
Leathercrafting (Ex: leather crafts, taxidermy, tanning hides - chemical or brain)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused
Metal working (Ex: enameling, jewelry making, making fishing sinkers, loading shotgun shells, casting bullets, lost wax casting)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused
Painting and glazing (Ex: household painting, art, ceramics making)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused
Printmaking (Ex: intaglio, etching, lithography)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused
Woodworking (Ex: cabinet making, carpentry, furniture making, wood turning, working with treated lumber)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused

Script: Now I'd like to ask you how the fish, caught by you or someone you know, was prepared and cooked for your meals.

61. What parts of the fish did you usually eat in the past 12 months? (CHECK all that apply)

- Fillet
- Skin
- Cheeks
- Eggs/Roe
- Liver
- Other, specify _____

62. How was the fish that you ate in the past 12 months usually cleaned? (CHECK all that apply)

- Trimmed fat
- Trimmed belly meat
- Removed/punctured skin
- Removed guts/gutted
- Other, specify _____

63. How was the fish that you ate in the past 12 months usually cooked? (CHECK all that apply)

- Pan fry
- Deep fried
- Baked/Broiled
- Boiled/Poached
- Smoked
- Stewed/Chowder
- Dried
- Grilled
- Eaten raw
- Pickled
- Other, specify _____

64. For fish caught in any of these areas (SHOW MAPS), how has the total amount of fish you eat changed during the past five years?

Saginaw AOC

- Eat less
- Eat about the same
- Eat more
- N/A

Detroit AOC

- Eat less
- Eat about the same
- Eat more
- N/A

Other locations

- Eat less
- Eat about the same
- Eat more
- N/A

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STORE / MARKET / RESTAURANT FISH

Script: The following questions are about fish you have eaten that were bought at a store, supermarket, or restaurant. (SHOW State Bought List)

FISH BOUGHT FROM A STORE, SUPERMARKET, OR RESTAURANT			
SPECIES	65. Which fish have you eaten at least five times in your life from a store, supermarket, or restaurant? SHOW CARD	66. (If [SPECIES] is YES) How many years did you eat [SPECIES] from a store, supermarket or restaurant? (If NEVER, enter 00 years)	67. In the past 12 months, have you eaten [SPECIES] bought from a store, supermarket, or restaurant? Tell me the number of times per week, month, or year, whichever is easiest to remember. [If NEVER, enter 00 times per year]
Catfish	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	_____ years	_____ times per <input type="checkbox"/> wk <input type="checkbox"/> mo <input type="checkbox"/> year <input type="checkbox"/> DK <input type="checkbox"/> Refused
Salmon	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	_____ years	_____ times per <input type="checkbox"/> wk <input type="checkbox"/> mo <input type="checkbox"/> year <input type="checkbox"/> DK <input type="checkbox"/> Refused

Trout	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	_____ years	_____ times per <input type="checkbox"/> wk <input type="checkbox"/> mo <input type="checkbox"/> year <input type="checkbox"/> DK <input type="checkbox"/> Refused
Tuna (canned)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	_____ years	_____ times per <input type="checkbox"/> wk <input type="checkbox"/> mo <input type="checkbox"/> year <input type="checkbox"/> DK <input type="checkbox"/> Refused
Tuna (steak/filet, not canned)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	_____ years	_____ times per <input type="checkbox"/> wk <input type="checkbox"/> mo <input type="checkbox"/> year <input type="checkbox"/> DK <input type="checkbox"/> Refused
Whitefish	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	_____ years	_____ times per <input type="checkbox"/> wk <input type="checkbox"/> mo <input type="checkbox"/> year <input type="checkbox"/> DK <input type="checkbox"/> Refused

69. In the past 12 months, what parts of the [Wild Bird or Animal] did you usually eat? (CHECK all that apply. If NONE, enter 00)

- Meat
- Skin
- Liver
- Other, specify _____
- DK
- Refused

HOME-RAISED OR HOME-GROWN FOODS

Script: The next set of questions is about home-raised birds or animals and home-grown vegetables and fruit. For this interview, “home-raised” and “home-grown” means not purchased in a grocery store or market and not wild.

Study ID

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	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	<input type="checkbox"/> Yes, Other Location Name of counties: _____ _____ <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	_____ years	_____times per <input type="checkbox"/> wk for <input type="checkbox"/> mo for <input type="checkbox"/> year <input type="checkbox"/> DK <input type="checkbox"/> Refused
Poultry or poultry products (chicken, duck, goose, turkey)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	<input type="checkbox"/> Yes, Saginaw AOC <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	_____ years	_____times per <input type="checkbox"/> wk for <input type="checkbox"/> mo for <input type="checkbox"/> year <input type="checkbox"/> DK <input type="checkbox"/> Refused
		<input type="checkbox"/> Yes, Other Location Name of counties: _____ _____ <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	_____ years	_____times per <input type="checkbox"/> wk for <input type="checkbox"/> mo for <input type="checkbox"/> year <input type="checkbox"/> DK <input type="checkbox"/> Refused

Meat and meat products (other than poultry)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	<input type="checkbox"/> Yes, Saginaw AOC <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	_____ years	_____times per <input type="checkbox"/> wk for <input type="checkbox"/> mo for <input type="checkbox"/> year <input type="checkbox"/> DK <input type="checkbox"/> Refused
		<input type="checkbox"/> Yes, Other Location Name of counties: _____ _____ <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	_____ years	_____times per <input type="checkbox"/> wk for <input type="checkbox"/> mo for <input type="checkbox"/> year <input type="checkbox"/> DK <input type="checkbox"/> Refused
Home-grown vegetables and fruit	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	<input type="checkbox"/> Yes, Saginaw AOC <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	_____ years	_____times per <input type="checkbox"/> wk for <input type="checkbox"/> mo for <input type="checkbox"/> year <input type="checkbox"/> DK <input type="checkbox"/> Refused
		<input type="checkbox"/> Yes, Other Location Name of counties: _____ _____ <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused	_____ years	_____times per <input type="checkbox"/> wk for <input type="checkbox"/> mo for <input type="checkbox"/> year <input type="checkbox"/> DK <input type="checkbox"/> Refused

70. What parts of the home-raised poultry did you usually eat?

- Meat
- Skin
- Liver
- Other _____

71. What parts of the home-raised animals did you usually eat?

- Meat
- Skin
- Liver
- Kidney
- Other _____

DEMOGRAPHICS

Script: To help us compare results between groups of people, it is useful to know the annual income of the study participants. This information can also be useful when planning public health policies and programs. This is the final set of questions.

Script: We consider your family to include everyone currently living with you, who is related by birth, marriage, or adoption and unmarried partners.

72. Including yourself, how many family members currently live with you?

_____ number of family members

73. Can you tell me your total family income in {LAST CALENDAR YEAR} before taxes? *SHOW CARD*

- Less than \$25,000
- \$25,000 to less than \$35,000
- \$35,000 to less than \$50,000
- \$50,000 to less than \$75,000
- \$75,000 to less than \$100,000
- \$100,000 or more
- DK
- Refused

Closing Script:

Thank you for answering these questions. I know it took awhile but the information you gave me is very important to this study.

We will send you a letter with your test results at the mailing address you gave me. Most everyone will receive their letters after we get the test results from all of the people in the study. However, we will let you know as soon as possible if any of your test results are high enough that we think you should be notified right away. In that case, there may be things you want to do to protect your health.

Do you have any questions about the study or how you will get your results? If have questions after you leave, you can contact us at the number in your copy of the Consent Form.

Will you need transportation when you are done? If so, stop by the reception desk and they will help you.

If you don't have any questions, I will show you where to find the (nurse/phlebotomist). (She/he) will get your height, weight, and blood pressure. (She/he) will also ask you whether or not you have gained or lost weight in the last year. Then (she/he) will get your blood and urine samples.

Thank you for coming in today. You can pick up your gift card at the reception desk on your way out.

CLINICAL MEASUREMENTS

Now we'll measure your height.

Measurement: _____ft _____ in

Refused

Next I'd like to measure your weight.

Measurement: _____lbs

Refused

Hand Cards and Response Categories

EDUCATION LEVEL OR DEGREE

8th Grade or less
9th to 12th Grade, No Diploma
High School Graduate or GED
Some College, No Diploma
Associate Degree
Bachelor Degree
Postgraduate, Professional, or Doctoral Degree

TYPES OF INCOME

Earnings Unemployment compensation Workers' compensation Social security Supplemental security income Public assistance Veterans' payments	Survivor benefits Disability benefits Pension or retirement income Interest Dividends Rents, royalties, and estates and trusts	Educational assistance Alimony Child support Financial assistance from outside of the household Other income
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TOTAL FAMILY INCOME

Less than \$25,000
\$25,000 to less than \$35,000
\$35,000 to less than \$50,000
\$50,000 to less than \$75,000
\$75,000 to less than \$100,000
\$100,000 or more

Caught Fish

Bluegill (Sunfish)
Brook trout
Brown trout
Bullhead
Carp
Catfish

Chinook salmon (King salmon)
Coho salmon
Black/White crappie (Calico, Strawberry bass)
Eelpout (Burbot, Ling, Lawyer, Freshwater cod)
Freshwater drum (Sheepshead)
Lake herring (Cisco, Tullibee)
Lake trout
Largemouth bass (Black bass)
Muskellunge (Muskie)
Northern pike
Rainbow smelt
Rainbow trout (Steelhead)
Rock bass
Smallmouth bass (Black bass)
Sturgeon
Suckers
Walleye
Whitefish
White bass (Silver bass)
White perch
Yellow perch

Bought Fish

Catfish
Salmon
Trout
Tuna (canned)
Tuna (steak/fillet, not canned)
Whitefish
Group A – Cod, Haddock, Herring, Freshwater perch, Ocean perch, Pollock, Scallops, Shrimp, Tilapia
Group B – Ocean bass, Grouper, Halibut, Mackerel, Mahi Mahi, Orange Roughy, Snapper
Group C – King Mackerel, Shark, Swordfish, Tilefish

Wild Game

Deer
Duck, Goose, Coot
Grouse, pheasant, turkey or other upland bird
Raccoon, Rabbit, Squirrel, Porcupine, Other Small Animal
Turtle

