Attachment 10c. New York Results Communications

NOTE: State programs will work with their respective ethics sub-committees and ATSDR to improve and revise these letters. ATSDR and the states will take into consideration current guidelines via subject matter experts on the communication of results and potential follow-up with biomonitoring program respondents.

Attachment 10c1. (NY Appendix 38). Sample letter reporting individual chemical results to a participant (Flesch-Kincaid Reading Level: grade 9.9)



Sue Kelly

Nirav R. Shah, M.D., M.P.H. Commissioner

[NAME AND ADDRESS]

Dear [NAME]:

We would like to thank you for taking part in the Great Lakes Biomonitoring Project. On page 3 you will find your results for PCBs, pesticides (DDT/DDE, hexachlorobenzene (HCB), Mirex), and two pesticide metabolites (oxychlordane, and trans-nonachlor).

Most people in the general population have some measurable level of these chemicals in their blood. Also, older people tend to have higher levels than younger people and men generally have higher levels than women.

These chemicals are no longer produced in the U.S., but still exist in the food chain due to their persistence in the environment. To reduce your exposure to these chemicals, follow the New York State fish advisories available at: http://www.health.state.ny.us/environmental/outdoors/fish/fish.htm.

Your report includes the range of levels typically found in adults in the U.S. If your levels are higher than the reference range, it does not mean you will develop disease nor have any health effects. Scientists are still learning what the impact of these chemicals is on human health.

All of the results in the report are given as nanogram per gram of lipid (ng/g). To give you an idea of the relative size, one nanogram per gram would be like 1 inch in 16 miles, 1 minute in 2 years, or 1 cent in \$10,000.

As you requested, we have also sent a copy of these results to your personal physician. We will be happy to answer any questions you have about the project, but concerns you may have about these results should be brought to the attention of your physician.

If you have any questions about the project in general, please contact me at 518-402-7950.

Thank you again for your participation.

Sincerely,

Syni-An A. Hwang Director Bureau of Environmental and Occupational Epidemiology

Matthew P. Mauer, D.O., M.P.H. Public Health Physician Bureau of Occupational Health

Great Lake Biomonitoring Project Laboratory Report

Collection date: Report date:

[NAME AND ADDRESS]

Chemical or metabolite	Your result, lipid adjusted	Reference value (ng/g of lipid)*, lipid adjusted	
total PCBs		TBD	
DDT		< LOD - 20.7	
DDE		233 - 1990	
hexachlorobenzene (HCB)		15.1 - 29.0	
Mirex		< LOD - 15.4	
oxychlordane		11.4 - 39.2	
trans-nonachlor		17.3 - 74.7	

* The reference values are found in adults (20 years and older) as reported by the National Health and Nutrition Examination Survey (NHANES) conducted by the Centers for Disease Control and Prevention (values are subject to change per survey data availability).

Lipid adjusted: The level of the chemical reported here takes account of the amount of lipids (fat) in the blood sample.

UTA: Unable to analyze. The lab could not test the blood sample because clots formed or there was not enough blood to do the test.

LOD: Level of detection. Below LOD means the level was too low to assign a number.

If you would like more information about any of these tests please call XXX-XXX-XXXX and ask for

Tests were performed by the Wadsworth Center, New York State Department of Health.

Attachment 10c2. (NY Appendix 39). Sample letter reporting individual metal, cholesterol, and triglyceride results to a participant (Flesch-Kincaid Reading Level: grade 9.4)



[NAME AND ADDRESS]

Dear [NAME]:

We would like to thank you for taking part in the Great Lakes Biomonitoring Project. On page 3 you will find your results for mercury, lead, cadmium, total cholesterol, and triglycerides.

Lead, mercury and cadmium levels are reported in micrograms per deciliter (mcg/dl). To give you an idea of the relative size, one mcg/dl is equivalent one drop of a chemical in six average size swimming pools. These metals are found in samples from most adults in the U.S., and levels tend to increase with age.

We also tested your blood for total cholesterol and triglycerides, which tell us the amount of fat in your blood. We need to know the amount of fat in your blood sample because some of the chemicals tested for in this project are contained in body fat. If you discuss your results with your physician, please note that you were not asked to fast before the cholesterol test.

<u>Lead</u>

A blood lead level of 10 mcg/dl or greater is considered high and requires follow-up. If your blood lead level is above 10 mcg/dl, you will receive a call from the NYSDOH to help you identify the possible source of your exposure. On-going exposure to lead may result in build-up in the body, damage to the nervous system, anemia, and other health problems. High blood lead levels could be from exposures on a job, such as removing old lead paint. Lead exposure may also be from hobbies, such as working with stained glass.

Mercury

We measured mercury in blood and urine to look for different types of mercury. Mercury levels in blood are mainly from mercury in fish. Higher levels of mercury in fish are found in larger predatory fish such as swordfish, shark, and grouper. Mercury levels in urine are mainly from breathing mercury in air. Higher exposures from air may occur to workers in workplaces such as dental offices or metal smelting plants, or to people in places where liquid mercury has been spilled.

When a laboratory measures mercury levels of 0.5 mcg/dl or greater in blood or 2.0 mcg/dl or greater in urine, these findings must be reported to the NYSDOH Heavy Metals Registry. If your blood mercury level is above 2.5 mcg/dl, you will receive a call from the NYSDOH to help you identify the possible

source of your exposure. Scientists are still learning about how, and at what levels, mercury affects our health. We do know that ongoing exposure to mercury at high levels can cause damage to the nervous system.

<u>Cadmium</u>

When a laboratory measures a cadmium level of 1.0 mcg/dl or greater in a blood sample, the findings must be reported to the NYSDOH Heavy Metals Registry. Also at this level, the NYSDOH contacts people to help identify the possible source of exposure. Higher levels of exposure to cadmium occur primarily at workplaces, from metal soldering or welding, or battery manufacturing, for example. Exposure also occurs from a variety of foods and from cigarette smoke. Smokers can have twice the amount of cadmium in their bodies as nonsmokers. Factories that burn fossil fuels like coal or oil, or that burn municipal wastes, contribute to cadmium exposures from air.

As you requested, we have also sent a copy of these results to your personal physician. We will be happy to answer any questions you have about the project, but concerns you may have about these results should be brought to the attention of your physician.

If you have any questions about the project in general, please contact me at 518-402-7950.

Thank you again for your participation.

Sincerely,

Syni-An A. Hwang Director Bureau of Environmental and Occupational Epidemiology

Matthew P. Mauer, D.O., M.P.H. Public Health Physician Bureau of Occupational Health

Great Lakes Biomonitoring Project Laboratory Report

Collection date: Report date:

[NAME AND ADDRESS]

Metal	Your results Reference levels*	
Lead, in blood		1.3 - 3.9 μg/dL
Mercury, in blood		0.89 – 5.32 μg/L
Mercury, in urine		0.47 - 2.82 μg/L
Cadmium, in blood		0.33 - 1.7 μg/L

* The reference values are found in adults (20 years and older) as reported by the National Health and Nutrition Examination Survey (NHANES) conducted by the Centers for Disease Control and Prevention.

UTA: Unable to analyze. The lab could not test the blood sample because clots formed or there was not enough blood to do the test.

LOD: Level of detection (level too low to assign a number)

		Range*	
Measurement	Your results	Borderline high	High
Cholesterol (non-fasting)		200-239 mg/dL	>240 mg/dl
Triglycerides		150-199 mg/dL	200-499
			mg/dL

* The range of levels in adults from the American Heart Association.

UTA: Unable to analyze. The lab could not test the blood sample because clots formed or there was not enough blood to do the test.

LOD: Level of detection. Below LOD means the level was too low to assign a number.

If you would like more information about any of these tests please call XXX-XXX-XXXX and ask for

Tests performed by the Wadsworth Center, New York State Department of Health.