

## Attachment 7. Chemical Analytes

### Michigan Department of Community Health Chemical Analytes

Laboratory Analytes		
Analyte	Sample Medium	Laboratory
PCBs*	Serum	Michigan PHL
Mercury (organic)	Whole blood	Michigan PHL
Lead	Whole blood	Michigan PHL
Mirex	Serum	Michigan PHL
Hexachlorobenzene	Serum	Michigan PHL
DDT/DDE	Serum	Michigan PHL
Lindane	Serum	Michigan PHL
Chlordane(s)	Serum	Michigan PHL
PBBs	Serum	Michigan PHL
Manganese	Whole blood	Michigan PHL
Mercury (inorganic)	Urine	Michigan PHL
Arsenic	Urine	Michigan PHL
Cadmium	Urine	Michigan PHL
Dioxins	Serum	NCEH
Furans	Serum	NCEH
Co-planar PCBs	Serum	NCEH
Blood Lipids	Serum	NCEH
Creatinine	Urine	Sparrow Hospital

\* 75 congeners including those required: 28, 52, 101, 105, 118, 138, 153, and 180

Minnesota Department of Health Chemical Analytes

**Table 5. Laboratory Analyses**

Analyte	Sample Medium	Laboratory
PCBs*	Serum	Michigan PHL
Mirex	Serum	Michigan PHL
Hexachlorobenzene	Serum	Michigan PHL
DDT/DDE	Serum	Michigan PHL
Toxaphene	Serum	Michigan PHL
Mercury	Serum	MDH PHL
Mercury speciated**	Whole blood	MDH PHL
Lead	Whole blood	MDH PHL
Cadmium	Whole Blood	MDH PHL
Omega-3 fatty acids	Plasma	MDH PHL
PFCs ***	Serum	MDH PHL
Lipid panel	Serum	MedTox
Glycohemoglobin (A1C)	Plasma	MedTox
1-Hydroxypyrene 3-hydroxyfluoranthene 3-hydroxybenzo(a)pyrene	Urine	NY PHL
Selenium	Urine	MDH PHL
Bisphenol A + triclosan	Urine	MDH PHL
Cotinine	Urine	MedTox
Creatinine	Urine	MedTox

\* Required PCB congeners are referred to as 28, 52, 101, 105, 118, 138, 153, 180

\*\* Mercury samples above the U.S. EPA reference level of 5.8 micrograms/Liter will be further analyzed to quantify organic versus inorganic forms of mercury

\*\*\*Perfluorononanoic acid (PFNA), perfluorooctanoic acid (PFOA), perfluorohexanoic acid (PFHxA), perfluoropentanoic acid (PFPeA), perfluorooctane sulfonate (PFOS), perfluorohexane sulfonate (PFHxS), perfluorobutane sulfonate (PFBS), perfluorobutanoic acid (PFBA)

New York State Department of Health Chemical Analytes

**Appendix 26.** List of required and optional analytes to be measured in blood and urine

Analyte	Required by ATSDR or optional	Specimen type
<b>Organic chemicals</b>		
PCBs (8 required congeners 28, 52, 101, 105, 118, 138, 153, and 180)	Required and Optional	Blood
PBDEs (predominant congeners)	Optional	Blood
Perfluorinated compounds (PFOS, PFOA)	Optional	Blood
DDT/DDE	Required	Blood
Mirex	Required	Blood
Hexachlorobenzene (HCB)	Required	Blood
Toxaphene (Parlar 26, 50)	Optional	Blood
Chlordane	Optional	Blood
Oxychlordane and trans-nonachlor	Optional	Blood
Dieldrin*	Optional	Blood
Dechlorane Plus*	Optional	Blood
<b>Metals</b>		
Mercury (total)	Required	Blood
Lead	Required	Blood
Cadmium	Optional	Blood
Mercury (total inorganic)	Optional	Urine
<b>Nutrient</b>		
Omega-3 fatty acids*	Optional	Blood
<b>Adjustment measurements</b>		
Cholesterol/triglycerides	Optional	Blood
Creatinine	N/A	Urine

\* Will be analyzed in the future using archived blood specimens.