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**BiomonitoringNH 2019 Tracking and Assessment
 of Chemical Exposures (TrACE) Study
 Clinical Testing List**

Serum will be tested for cotinine and 14 per- and polyfluoroalkyl substances (PFAS).

Whole blood will be tested for 5 metals.

Urine will be tested for 16 metals, 6 metabolites of arsenic, and 8 pesticide metabolites.

Acronym descriptions are on page 2.

Terms

- Metabolite: A breakdown product in the human body. For example, cotinine is a metabolite of nicotine. Cotinine can be found in the body after exposure to nicotine.
- Serum: A natural substance in blood that can be separated from red blood cells for clinical testing.

Serum	Whole blood	Urine	
		Metals	Pesticide metabolites
Cotinine	Cadmium	Antimony	2,4-D
PFBS	Lead	Arsenic, Total	3-PBA
PFDA	Manganese	Arsenic (V) acid	4F-3PBA
PFDoA	Mercury, Total	Arsenobetaine	<i>cis</i> -DBCA
PFHpA	Selenium	Arsenocholine	<i>cis</i> -DCCA
PFHxS		Arsenous (III) acid	<i>trans</i> -DCCA
PFNA		DMA	PNP
PFOA		MMA	TCPy
PFOS		Barium	
PFOSA		Beryllium	
EtFOSAA		Cadmium	
MeFOSAA		Cesium	
PFUnDA		Cobalt	
PFHxA		Lead	
GenX		Manganese	
		Molybdenum	
		Platinum	
		Strontium	
		Thallium	
		Tin	
		Tungsten	
		Uranium	

Acronym Descriptions

Per- and polyfluoroalkyl substances (PFAS)

PFBS: Perfluorobutane sulfonic acid
PFDA: Perfluorodecanoic acid
PFDoA: Perfluorododecanoic acid
PFHpA: Perfluoroheptanoic acid
PFHxS: Perfluorohexane sulfonic acid
PFNA: Perfluorononanoic acid
PFOA: Perfluorooctanoic acid
PFOS: Perfluorooctane sulfonic acid
PFOSA: Perfluorooctane sulfonamide
EtFOSAA: 2-(N-ethyl-perfluorooctane sulfonamido) acetic acid
MeFOSAA: 2-(N-methyl-perfluorooctane sulfonamido) acetic acid
PFUnDA: Perfluoroundecanoic acid
PFHxA: Perfluorohexanoic acid
GenX: Tetrafluoro-2-(heptafluoropropoxy) propanoic acid

Arsenic metabolites

DMA: Dimethylarsinic acid
MMA: Monomethylarsonic acid

Organophosphorus insecticide metabolites

PNP: para-Nitrophenol
TCPy: 3,5,6-trichloro-2-pyridinol

Pyrethroid insecticide metabolites

3-PBA: 3-phenoxybenzoic acid
4F-3PBA: 4-fluoro-3-phenoxybenzoic acid
cis-DBCA: *cis*-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropane carboxylic acid
cis-DCCA: *cis*-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane carboxylic acid
trans-DCCA: *trans*-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane carboxylic acid

Herbicide metabolite

2,4-D: 2,4-dichlorophenoxyacetic acid