



1765 Toxic Effects CORE Profile - Blood/Urine

Methodology: Gas Chromatography/Mass Spectrometry, LC/Tandem Mass Spectrometry, Colorimetric

Summary of Toxins found at or above the 95th percentile

Blood Assessment	Urine Assessment												
<p>Elevated Volatile Solvents No elevations found at or above the 95th percentile.</p> <p>Elevated Chlorinated Pesticides No elevations found at or above the 95th percentile.</p> <p>Elevated Polychlorinated Biphenyls (PCBs) No elevations found at or above the 95th percentile.</p> <p>*Includes detected values which may not be at or above the 95th percentile.</p> <table border="0"> <tr> <td>Cholesterol</td> <td>186</td> <td><= 200</td> <td>mg/dl</td> </tr> <tr> <td>Triglycerides</td> <td>145</td> <td>35 - 160</td> <td>mg/dL</td> </tr> <tr> <td>Total Lipids (calc.)*</td> <td>5</td> <td></td> <td>g/L</td> </tr> </table> <p>* Covaci A, <i>Science of the Total Environment</i> 366(2006) 361-366.</p>	Cholesterol	186	<= 200	mg/dl	Triglycerides	145	35 - 160	mg/dL	Total Lipids (calc.)*	5		g/L	<p>Elevated Organophosphates No elevations found at or above the 95th percentile.</p> <p>Elevated Bisphenol A and compounds No elevations found at or above the 95th percentile.</p> <p>Elevated Phthalates and Parabens No elevations found at or above the 95th percentile.</p> <p>Creatinine = 205 mg/dL</p>
Cholesterol	186	<= 200	mg/dl										
Triglycerides	145	35 - 160	mg/dL										
Total Lipids (calc.)*	5		g/L										

For interpretive information, visit www.metamatrix.com/ToxicEffectsCore and select the Interpretive Guide from the downloads tab.
Finding a measurable amount of one or more toxins does not mean that adverse health effects are present, therefore no levels are flagged as abnormal.
These levels provide a reference range to determine whether an individual has been exposed to higher levels of toxicants than found in the general population.



Volatile Solvents - Whole Blood

	Results ng/mL	Percentile			
		50th	75th	90th	95th
1. Benzene	<DL	<DL	0.06	0.17	0.26
2. Ethylbenzene	<DL	<DL	0.05	0.08	0.11
3. Styrene	<DL	<DL	0.05	0.09	0.12
4. Toluene	<DL	<DL	<DL	0.43	0.68
5. m,p-Xylene	<DL	0.13	0.2	0.28	0.34
6. o-Xylene	<DL	<DL	0.051	0.072	0.09

Percentile values are from the NHANES Fourth National Report on Human Exposure to Environmental Chemicals, CDC, 2009.

7. Hexane	199	236	304	380	419
8. 2-Methylpentane	32	52	63	75	88
9. 3-Methylpentane	69	100	116	142	164
10. Iso-octane	<DL	7.6	8.6	9.6	10.2

No national reference ranges are established for hexane, 2- and 3- methylpentane and iso-octane. Percentile ranges are based on patient samples analyzed at Genova Diagnostics.

<DL = less than detection limit



Chlorinated Pesticides - Serum

	Results ppb	95th Percentile** ppb	Lipid Adjusted Results ng/g lipid	95th Percentile** ng/g lipid
11. DDE	0.59 Detected	12.1	107.43 Detected	1860
12. DDT	Not Detected	0.13	N/A	19.5
13. Dieldrin	Not Detected	0.14	N/A	19.0
14. Heptachlor Epoxide	Not Detected	0.13	N/A	18.9
15. Hexachlorobenzene (HCB)	Not Detected	0.19	N/A	28.9
16. Mirex	Not Detected	0.09	N/A	13.2
17. Oxychlorane	Not Detected	0.27	N/A	37.7
18. trans-Nonachlor	Not Detected	0.47	N/A	68.3
19. Endosulfan Sulfate†	Not Detected		N/A	

†No national percentiles have been set for Endosulfan Sulfate. Detected levels are above the Genova Diagnostics limit of quantification (0.34 ppb).



Polychlorinated Biphenyls (PCBs) - Serum

	Results ppb	95th Percentile** ppb	Lipid Adjusted Results ng/g lipid	95th Percentile** ng/g lipid
Dioxin-like Polychlorinated Biphenyls				
20. PCB 118	Not Detected	0.22	N/A	31.3
21. PCB 126	Not Detected	0.00048	N/A	0.069
22. PCB 156	Not Detected	0.10	N/A	15.3
23. PCB 169	Not Detected	0.00027	N/A	0.041
24. PCB 77††	Not Detected		N/A	

††No national percentiles have been set for PCB 77. Detected levels are above the Genova Diagnostics limit of quantification (0.07 ppb).

Non-Dioxin-like Polychlorinated Biphenyls

25. PCB 74	Not Detected	0.15	N/A	22.3
26. PCB 138	0.21 Detected	0.48	38.24 Detected	75.3
27. PCB 153	0.1 - 0.32* Detected	0.62	18.2 - 58.3* Detected	97.1
28. PCB 180	0.39 Detected	0.53	71.02 Detected	81.5

* Patient value falls in this range.

** 95th percentile values are from the NHANES Fourth National Report on Human Exposure to Environmental Chemicals, CDC, 2009.



Organophosphates - Urine

Test Name	Result	1.8	5.2	15.7	30.4
29. Dimethylthiophosphate (DMTP)	<DL	◆			
30. Dimethyldithiophosphate (DMDTP)	5.14			◆	
31. Diethylthiophosphate (DETP)	<DL	◆			
32. Diethyldithiophosphate (DEDTP)	<DL		◆		
33. Atrazine*	0.052				◆
34. Atrazine mercapturate*	0.055			◆	

Percentile values for organophosphates are from the NHANES Fourth National Report on Human Exposure to Environmental Chemicals, CDC, 2009.

*No national reference ranges are established for atrazine or atrazine mercapturate; percentile ranges are based on patient samples analyzed at Genova Diagnostics.



Bisphenol A (BPA) - Urine

Results	Percentile			
	50th	75th	90th	95th
35. 4-Nonylphenol** 1.6		<DL	1.11	4.69
36. Bisphenol A <DL	1.95	3.45	6.09	10
37. Triclosan 2	12	50	233	443

Percentile values are from the NHANES Fourth National Report on Human Exposure to Environmental Chemicals, Updated Tables, CDC, Feb. 2011.

**No national reference ranges are established for 4-Nonylphenol. Percentile ranges are based on patient samples analyzed at Genova Diagnostics.

<DL = less than detection limit



Phthalates and Parabens - Urine

Phthalates - Metabolites of DEHP (Di-2-ethylhexyl phthalate)

	Results mcg/gm creatinine	Percentile			
		50th	75th	90th	95th
38. MEHHP	6	19	41	99	179
39. MEHP	0.8	2.4	5.2	11.8	22.1
40. MEOHP	3	11	22	53	107
41. MEtP	9	115	312	835	1500

Parabens

42. Butylparaben	<DL	<DL	1.2	9.8	23.1
43. Ethylparaben	<DL	<DL	5.5	32.7	78.8
44. Methylparaben	35	61	228	535	817
45. Propylparaben	<DL	8	50	138	235

Percentile values are from the NHANES Fourth National Report on Human Exposure to Environmental Chemicals, Updated Tables, CDC, Feb. 2011.

<DL = less than detection limit