Concentrations (µg/L) of environmental phenols (bisphenol A, triclosan, and parabens) in urine samples collected from 101 firefighters in 2010 - 2011 for the Firefighter Occupational Exposures (FOX) Project

Environmental Phenols[a,b]	Geometric Mean (95% Confidence Interval)	Selected Percentiles				Detection Frequency	Limit of Detection (LOD)
		25th	50th	75th	95th		
Bisphenol A	**1.58** (1.25 – 1.99)	0.718	1.53	3.16	11.9	94.1%	0.20
Triclosan	**20.2** (13.5 – 30.2)	3.00	19.6	103	563	99.0%	0.50
Butyl paraben	*	*<LOD*	*<LOD*	0.68	5.9	44.6%	0.50
Ethyl paraben	*	*<LOD*	*<LOD*	2.52	56.5	35.6%	1.0
Methyl paraben	**46.9** (34.2 – 64.3)	19.6	48.0	108	687	98.2%	1.0
Propyl paraben	*	*<LOD*	2.96	19.0	135	61.4%	1.0

a. See page three for explanation of terms.

* Geometric mean was not calculated because the chemical was found in less than 65% of the study group.

Chemical Abstracts Service Registry Numbers (CASRNs) for bisphenol A, triclosan, and parabens

Chemical	CASRN[a]
Bisphenol A	80-05-7
Triclosan	3380-34-5
Butyl paraben	94-26-8
Ethyl paraben	120-47-8
Methyl paraben	99-76-3
Propyl paraben	94-13-3

a. See page two for explanation of CASRN.

Explanation of Terms

µg/L	Micrograms of the chemical per liter of urine.
Geometric mean	The geometric mean is an estimated middle value of a set of numbers. This is different than the average, also called the "arithmetic mean." A geometric mean is sometimes calculated when the set of numbers contains some extreme values. For example, the geometric mean of the set of numbers "1, 2, 2, 3, 4, 5, 5, 6, 10, 100" is calculated by *multiplying* all ten numbers together and then *raising the product to the 1/10th power*, giving 4.8. To compare, the arithmetic mean is calculated by *adding* all ten numbers and *dividing by 10*, giving 14.
95% confidence interval	A *sample* is a subset of a larger *population*. A confidence interval for a statistical measure is a range of values estimated from *sample* data. This interval is likely to include the true value of the statistical measure, such as a geometric mean, for the larger *population*. A 95% confidence interval for a statistical measure implies that we are 95% confident that the range includes the true *population* value for this measure.
Percentiles	Percentiles are best explained by an example: if the 75th percentile is 1.5 µg/L, this means that 75% of participants had levels less than or equal to 1.5 µg/L.
Limit of detection (LOD)	The LOD is the lowest level of a chemical that the laboratory can measure in blood or urine.
CASRN - Chemical Abstracts Service Registry Number	The CASRN is a unique identification number assigned to individual chemicals by the Chemical Abstracts Service division of the American Chemical Society.