

0020572 Heavy Metals Panel 4, Urine with Reflex to Arsenic Fractionated

HY MET U4

Reference Interval:

Test Number	Components	Reference Interval		
0025000	Arsenic, Urine with Reflex to Fractionated	Effective November 13, 2017		
		Test Number Components Reference Interval		
			Arsenic, Urine - per volume	0.0- 34.9 µg/L (based on Biological Exposure Index)
			Arsenic, Urine - per24h	0.0- 49.9 µg/d
			Arsenic, Urine-ratio to CRT	0.0-29.9 ug/gCRT
0020734	Arsenic, Fractionated, Urine	Refer to report		
	Creatinine, Urine - per 24h	Refer to report		
0025040	Cadmium, Urine	Effective November 13, 2017		
		Test Number Components Reference Interval		
			Cadmium, Urine - per volume	0.0- 1.0 µg/L
			Cadmium, Urine - per 24h	0.0- 3.2 µg/d
			Cadmium, Urine - ratio to CRT	0.0- 3.2 µg/g CRT
	Creatinine, Urine - per 24h	Refer to report		
0025060	Lead, Urine	Effective November 13, 2017		
		Test Number Components Reference Interval		
			Lead, Urine - per 24h	0.0- 8.1 µg/d
			Lead, Urine - per volume	0.0- 1.4 µg/L
			Lead Urine-ratio to CRT	0.0-1.4 ug/gCRT
	Creatinine, Urine - per 24h	Refer to report		
0025050	Mercury, Urine	Effective November 13, 2017		
		Test Number Components Reference Interval		
			Mercury, Urine - per 24h	0.0- 2.9 µg/d
			Mercury, Urine - per volume	0.0- 1.9 µg/L
			Mercury, Urine - ratio to CRT	0.0-20.0 µg/gCRT
	Creatinine, Urine - per 24h	Refer to report		

Interpretive Data: Urine cadmium levels can be used to assess cadmium body burden. In chronic exposures, the kidneys are the primary target organ. Symptoms associated with cadmium toxicity vary based upon route of exposure and may include tubular proteinuria, fever, headache, dyspnea, chest pain, conjunctivitis, rhinitis, sore throat and cough. Ingestion of cadmium in high concentration may cause vomiting, diarrhea, salivation, cramps, and abdominal pain.

Quantification of urine excretion rates before or after chelation therapy has been used as an indicator of lead exposure. Urinary excretion of >125 mg of lead per 24 hours is usually associated with related evidence of lead toxicity.

Urinary mercury levels predominantly reflect acute or chronic elemental or inorganic mercury exposure. Urine concentrations in unexposed individuals are typically less than 10 µg/L. 24 hour urine concentrations of 30 to 100 µg/L may be associated with subclinical neuropsychiatric symptoms and tremor while concentrations greater than 100 µg/L can be associated with overt neuropsychiatric disturbances and tremors. Urine mercury levels may be useful in monitoring chelation therapy.

The ACGIH Biological Exposure Index (BEI) for arsenic in urine is 35 µg/L. The ACGIH BEI is based on the sum of inorganic and methylated species. For specimens with a total arsenic concentration between 35-2000 µg/L, fractionation is automatically performed to determine the proportions of inorganic, methylated and organic species. It may be appropriate to request fractionation for specimens with a total arsenic greater than 30 µg/gCRT despite a total arsenic concentration less than 35 µg/L. If low-level chronic poisoning is suspected, the µg/gCRT ratio may be a more sensitive indicator of arsenic exposure than the total arsenic concentration.

See Compliance Statement B: www.aruplab.com/CS

HOTLINE NOTE: There is a numeric map change associated with this test.

Change the numeric map for component 0025062, Lead, Urine - per volume from XXXXX to **XXXXX.X**.

Change the numeric map for component 0025061, Lead, Urine - per 24h from XXXXX to **XXXXX.X**

Change the numeric map for component 0025051, Mercury, Urine - per 24h from XXX to **XXX.X**.