

Specimen Collected: 14-Dec-20 10:22

Heavy Metals Panel 6, Urine with Reflex | Received: 14-Dec-20 10:22

Report/Verified: 15-Dec-20 07:53

	Result	Units	Reference Interval
Hours Collected	24	hr	
Total Volume	800	mL	
Creatinine, Urine -per volume	54	mg/dL	
Creatinine, Urine -per 24h	432 ^L	mg/d	700-1600
Cadmium, Urine -per volume	<1.0 ⁱ¹	ug/L	0.0-1.0
Cadmium, Urine -per 24h	Not Applicable	ug/d	0.0-3.2
Cadmium, Urine -ratio to CRT	Not Applicable ^{f1}	ug/g CRT	0.0-3.2
Lead, Urine -per volume	<5.0 ⁱ²	ug/L	0.0-5.0
Lead, Urine -per 24h	Not Applicable	ug/d	0.0-8.1
Lead, Urine -ratio to CRT	Not Applicable ^{f1}	ug/g CRT	0.0-5.0
Copper, Urine -per volume	2.6 ⁱ³	ug/dL	<=3.2
Copper, Urine -per 24h	20.8	ug/d	3.0-45.0
Copper, Urine -ratio to CRT	48.1 ^H	ug/g CRT	10.0-45.0
Mercury, Urine -per volume	<2.5 ⁱ⁴	ug/L	0.0-5.0
Mercury, Urine -per 24h	Not Applicable	ug/d	0.0-20.0
Mercury, Urine -ratio to CRT	Not Applicable ^{f1}	ug/g CRT	0.0-20.0
Zinc, Urine -per volume	80.4	ug/dL	15.0-120.0
Zinc, Urine -per 24h	643.2	ug/d	150.0-1200.0
Zinc, Urine -ratio to CRT	1488.9 ^{H i5}	ug/g CRT	110.0-750.0
Arsenic Urine -per volume	62.4 ^{H i6}	ug/L	0.0-34.9
Arsenic Urine -per 24h	49.9	ug/d	0.0-49.9
Arsenic, Urine -ratio to CRT	115.6 ^H	ug/g CRT	0.0-29.9

Result Footnote

f1: Cadmium, Urine - ratio to CRT, Lead, Urine - ratio to CRT, Mercury, Urine - ratio to CRT

Unable to accurately calculate the creatinine normalized result due to a low per volume result.

Test Information

i1: Cadmium, Urine - per volume

INTERPRETATION INFORMATION: Cadmium, Urine

*=Abnormal, #=Corrected, C=Critical, f=Result Footnote, H=High, i=Test Information, L=Low, t=Interpretive Text, @=Performing Lab

Unless otherwise indicated, testing performed at:**ARUP Laboratories**

500 Chipeta Way, Salt Lake City, UT 84108

Laboratory Director: Tracy I. George, MD

ARUP Accession: 20-349-900057**Report Request ID:** 13693576**Printed:** 15-Dec-20 08:33

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Test Information

i1: Cadmium, Urine - per volume

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.

See Compliance Statement B: aruplab.com/CS

i2: Lead, Urine - per volume

INTERPRETIVE INFORMATION: Lead, Urine

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.

See Compliance Statement B: aruplab.com/CS

i3: Copper, Urine - per volume

INTERPRETIVE INFORMATION: Copper, Urine

Individuals with symptomatic Wilson disease usually excrete more than 100 ug copper per day. Other conditions associated with elevated urine copper include cholestatic liver disease, proteinuria, some medications, and contaminated specimens.

Although random specimens may contain diagnostic information, a 24-hour collection is a more consistent indicator of urine copper.

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement B: aruplab.com/CS

i4: Mercury, Urine - per volume

INTERPRETIVE INFORMATION: Mercury, Urine

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

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement B: aruplab.com/CS

i5: Zinc, Urine - ratio to CRT

INTERPRETIVE INFORMATION: Zinc, Urine

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Test Information

i5: Zinc, Urine - ratio to CRT
Zinc is predominantly eliminated in the feces. Elevated urine zinc may suggest excessive zinc supplementation but should be interpreted with a corresponding serum zinc concentration.

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement B: aruplab.com/CS

i6: Arsenic Urine - per volume
INTERPRETIVE INFORMATION: Arsenic, Urine w/ Reflex to Fractionated

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

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Pending Procedures

Arsenic, Fractionated, Urine

Order Date/Time 15-Dec-20 07:53

Status: In-Lab

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