



LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT W
WX0000003827 M 07/08/1978 45 Y

Referral Testing

Collected: 08/28/2023 11:33 Received: 08/28/2023 11:33

Table with 6 columns: Test Name, Result, Flag, Ref-Ranges, Units, Site. Contains rows for Creatinine, Urine - per volume and Cadmium, Blood.

INTERPRETATION INFORMATION: Cadmium, Blood

Elevated results may be due to skin or collection-related contamination, including the use of a noncertified metal-free collection/transport tube. If contamination concerns exist due to elevated levels of blood cadmium, confirmation with a second specimen collected in a certified metal-free tube is recommended.

Blood cadmium levels can be used to monitor acute toxicity and in combination with cadmium urine and B-2 microglobulin is the preferred method for monitoring occupational exposure. 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.

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.

Table with 6 columns: Test Name, Result, Flag, Ref-Ranges, Units, Site. Contains rows for Beta 2 Microglobulin, Urine and pH, Urine.

Performed By: ARUP Laboratories
500 Chipeta Way
Salt Lake City, UT 84108
Laboratory Director: Jonathan R. Genzen, MD, PhD

Table with 6 columns: Test Name, Result, Flag, Ref-Ranges, Units, Site. Contains rows for Beta 2 Microglobulin, ratio to CRT and Cadmium, Urine - per volume.

INTERPRETATION INFORMATION: Cadmium, Urine

Urine cadmium levels can be used to assess cadmium body burden. In chronic exposures, the kidneys are the primary

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED



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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.

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Cadmium, Urine - ratio to CRT	Not Applicable		0.0-3.0	ug/g CRT	ARRL
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Unable to accurately calculate the creatinine normalized result due to a low per volume result.
 CADMIUM ACTION LEVELS BEGINNING JANUARY 1999
 (Federal Register 1999 Std. CFR, Part 1910.1027 Appendix A)

Cadmium Urine (ug/g CRT):

A	B	C
0 - 3	3.1 - 7.0	7.1 or Greater

Cadmium Blood (ug/L):

A	B	C
0 - 5	5.1 - 10.0	10.1 or Greater

B-2-Microglobulin (ug/g CRT):

A	B	C
0 - 300	301 - 750	751 or Greater*

	A	B	C
Monitor	Annual	Semiannual	Quarterly

Med Exam	Biennial	Annual	Semiannual
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Reassess CD exposure in less than 2 weeks **	---	Discretionary removal	Mandatory removal
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*If an employee's B2Microglobulin is above 750 ug/g CRT, in order for mandatory medical removal to be required, either the employee's CdU level must also be greater than 3 ug/g CRT or CdB level must also be greater than 5 ug/L.

**The determination of discretionary or mandatory removal is made by the examining physician consistent with the medical surveillance specifications in the Federal Register

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F228000041
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 Printed D&T: 08/28/23 11:41

Ordered By: KAJAL SITWALA, MD, PhD
 WX00000000002365

Kajal V. Sitwala, MD, PhD - Medical Director
 Form: MM RL1
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pages 42456 to 42463.

References:

1. US Department of Labor(2004).Cadmium Occupational Safety and Health Administration.3136-06R.
2. US Department of Labor(1999).Cadmium Occupational Safety and Health Standard.1910.1027.

Urine B-2 Microglobulin is an early marker of irreversible kidney damage and disease.
Urine Creatinine values less than 20 mg/dL represent very dilute urines and collection should be repeated.

Performing Site:

ARRL: ARUP REFERENCE LAB 500 Chipeta Way Salt Lake City UT 841081221

Reported Date: 2023.08.28 11:33 CADEP

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Kajal V. Sitwala, MD, PhD - Medical Director

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