

**TEST CHANGE**

Lead, Random Urine

2011482, U LEADRAND

**Specimen Requirements:**

**Patient Preparation:** Diet, medication, and nutritional supplements may introduce interfering substances. Patients should be encouraged to discontinue nutritional supplements, vitamins, minerals, and **nonessential****non-essential** over-the-counter medications (upon the advice of their physician). High concentrations of iodine may interfere with elemental testing. Collection of urine specimens from patients receiving iodinated or gadolinium-based contrast media should be avoided for a minimum of 72 hours post-exposure. Collection from patients with impaired kidney function should be avoided for a minimum of 14 days post-contrast media exposure.

**Collect:** Random urine.

**Specimen Preparation:** Transfer an 8 mL aliquot from a well-mixed collection to ARUP Trace Element-Free Transport Tubes (ARUP supply #43116), available online through eSupply using ARUP **Connect(TM)** **or Connector** contact ARUP Client Services at (800) 522-2787. (Min: 1 mL)

**Transport Temperature:** Refrigerated. Also acceptable: Room temperature or frozen.

**Unacceptable Conditions:** Urine collected within 72 hours after administration of iodinated or gadolinium-based contrast media.

**Remarks:**

**Stability:** Ambient: 1 week; Refrigerated: 2 weeks; Frozen: 1 year

**Methodology:** Quantitative Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)

**Note:**

**CPT Codes:** 83655

**New York DOH Approval Status:** This test is New York DOH approved.

**Interpretive Data:**

**Elevated results may be due to skin or collection-related contamination, including the use of collection containers that are not certified to be trace element-free. If an elevated result is suspected to be due to contamination, confirmation with a second specimen collected in a certified trace element-free container is recommended.**

**Methodology:** Inductively Coupled Plasma - Mass Spectrometry (ICP-MS) 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.

**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.~~

Reference Interval:

Effective November 12, 2018

Test Number	Components	Reference Interval
	Lead, Urine - per volume	<u>Less than or equal to</u> <del>0.0</del> -5.0 microg/L
	Lead, Urine - ratio to CRT	<u>Less than or equal to</u> <del>0.0</del> -5.0 microg/g CRT