

**TEST CHANGE**

**Arsenic, Random Urine with Reflex to Fractionated**

2011478, U ARS RAND

**Specimen Requirements:**

**Patient Preparation:** Diet, medication, and nutritional supplements may introduce interfering substances. Patients should be encouraged to discontinue nutritional supplements, vitamins, minerals, nonessential over-the-counter medications (upon the advice of their physician), and avoid shellfish and seafood for 48 to 72 hours. 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 contact ARUP Client Services at 800-522-2787. (Min: 2 mL)

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

**Unacceptable Conditions:** Acid-preserved urine. Specimens collected within 72 hours after administration of iodinated or gadolinium-based contrast media.

**Remarks:**

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

**Methodology:** Quantitative High Performance Liquid Chromatography (HPLC) / Quantitative Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)

**Note:** If total arsenic concentration is found to be elevated based on reference intervals, then Arsenic, Fractionated, will be added to determine the proportion of organic, inorganic, and methylated forms. Additional charges apply.

**CPT Codes:** 82175; if reflexed, add 82175

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

**Interpretive Data:**

The ACGIH Biological Exposure Index (BEI) for arsenic in urine is 35 ug/L measured at the end of the work week. The ACGIH BEI is based on the sum of inorganic and methylated species. For specimens with elevated total arsenic results, fractionation is automatically performed to determine the proportions of inorganic, methylated, and organic species.

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)

Reference Interval:

Test Number	Components	Reference Interval
	Arsenic, Urine - per volume	Less than or equal to 34.9 microg/L
	Arsenic, Urine - ratio to CRT	Less than or equal to 29.9 microg/g CRT