

## Quarterly HOTLINE: Effective November 12, 2018

0025060 LEAD U Lead, Urine

Specimen Required: Patient Prep: Diet, medication, and nutritional supplements may introduce interfering substances. Patients should be encouraged to discontinue nutritional supplements, vitamins, minerals, and 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: 24-hour or random urine collection. Specimen must be collected in a plastic container. ARUP studies indicate that refrigeration of urine alone, during and after collection, preserves specimens adequately, if tested within 14 days of collection. 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™ or contact ARUP Client Services at (800) 522-2787. (Min: 1 mL)

Storage/Transport Temperature: Refrigerated. Also acceptable: Room temperature or frozen.

Remarks: Trace Elements requisition form may be required (ARUP form #32990-Barcode; #32991-No Barcode). Record total volume and collection time interval on transport tube and on test request form.

Unacceptable Conditions: Urine collected within 72 hours after administration of iodinated or gadolinium-based contrast media. Acid preserved urine. Specimens contaminated with blood or fecal material. Specimens transported in non-trace element free transport tube (with the exception of the original device).

Stability (collection to initiation of testing): Ambient: 1 week; Refrigerated: 2 weeks; Frozen: 1 year

## **Reference Interval:**

Test Number	Components	Reference Interval		
	Lead, Urine- per Volume	Effective November 12, 2018 0-5.0 ug/L		
	Lead, Urine - per 24h	0-8.1 μg/d		
	Lead Urine-ratio to CRT	Effective November 12, 2018 0.0-5.0 ug/gCRT		
	Creatinine, Urine - per 24h	Age	Male	Female
		3-8 years	140-700 mg/d	140-700 mg/d
		9-12 years	300-1300 mg/d	300-1300 mg/d
		13-17 years	500-2300 mg/d	400-1600 mg/d
		18-50 years	1000-2500 mg/d	700-1600 mg/d
		51-80 years	800-2100 mg/d	500-1400 mg/d
		81 years and older	600-2000 mg/d	400-1300 mg/d