

TEST CHANGE

Cadmium, Random Urine

2011479, U CAD RAND

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. Abstinence from iodine-containing medications or contrast agents for at least 1 month prior to collecting specimens for elemental testing is recommended.

Collect: Random urine.

Specimen Preparation: Transfer an 8 mL aliquot 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 48 hours after administration of a gadolinium (Gd) containing contrast media (may occur with MRI studies). Acid preserved urine.

Remarks:

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

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

Note:

CPT Codes: 82300

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

Interpretive Data:

Urine cadmium ~~concentrations~~ **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.

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:

| <u>Test Number</u> | <u>Components</u> | <u>Reference Interval</u> |
|--------------------|--------------------------------------|---|
| | <u>Cadmium, Urine - per volume</u> | <u>Less than or equal to 1.0 microg/L</u> |
| | <u>Cadmium, Urine - ratio to CRT</u> | <u>Less than or equal to 3.2 microg/g CRT</u> |

~~Effective November 13, 2017~~

| Test Number | Components | Reference Interval |
|------------------------|--|--------------------------------|
| | Cadmium Rnd Urn ratio/CRT nonoccupation | 0.0-3.2 microg/gCRT |
| | Cadmium, Urine - per volume | 0.0-1.0 microg/L |

HOTLINE NOTE: There is a component change associated with this test. One or more components have been added or removed. Refer to the Hotline Test Mix for interface build information.