

## TEST CHANGE

Cadmium, **Whole** Blood

0099675, CADMIUM B

### Specimen Requirements:

**Patient Preparation:** Diet, medication, and nutritional supplements may introduce interfering substances. Patients should be encouraged to discontinue nutritional supplements, vitamins, minerals, non-essential over-the-counter medications (upon the advice of their physician).

**Collect:** Royal blue (K2EDTA) or royal blue (NaHep).

**Specimen Preparation:** Transport 3 or 6 mL whole blood in the original collection tube. (Min: 0.5 mL)

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

**Unacceptable Conditions:** Specimens collected in tubes other than royal blue (K2EDTA) or royal blue (NaHep). Specimens transported in containers other than royal blue (K2EDTA) or royal blue (NaHep) tube or trace element-free transport tube. Clotted specimens.

### Remarks:

**Stability:** Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable

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

**Performed:** Sun-Sat

**Reported:** 1-3 days

### Note:

**CPT Codes:** 82300

**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 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<sub>u</sub> 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<sub>u</sub>, 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 tubes 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 tube is recommended.

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

Reference Interval:

Less than or equal to 5.0 µg/L