

## TEST CHANGE

Lead, Whole Blood (Capillary)

0020745, LEAD CAP

### Specimen Requirements:

**Patient Preparation:** Clean puncture site well with soap and water before collection procedure begins.

**Collect:** Lavender microtainer (K2EDTA)

**Specimen Preparation:** Invert specimen 10 times to prevent clot formation. Transport 0.5 mL whole blood in the original collection tube. (Min: 0.3 mL)

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

**Unacceptable Conditions:** Specimens collected in tubes other than lavender microtainer (K2EDTA~~K<sub>2</sub>EDTA~~). Specimens transported in tubes other than trace element-free transport tubes or lavender microtainer (K2EDTA~~K<sub>2</sub>EDTA~~) tubes. Heparin anticoagulant. Clotted specimens. Venous whole blood, refer to Lead, Whole Blood (Venous) (ARUP test code 0020098).

### 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:** 83655

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

### Interpretive Data:

Reference intervals are based on the CDC's Blood Lead Reference Value (BLRV). Analysis performed by inductively coupled plasma-mass spectrometry (ICP-MS).

Elevated results may be due to skin or collection-related contamination, including the use of a noncertified lead-free collection/transport tube. If contamination concerns exist due to elevated levels of blood lead, confirmation with a venous specimen collected in a certified lead-free tube is recommended.

Repeat testing is recommended prior to initiating chelation therapy or conducting environmental investigations of potential lead sources. Repeat testing collections should be performed using a venous specimen collected in a certified lead-free collection tube.

Information sources for blood lead reference intervals and interpretive comments include the CDC's "Childhood Lead Poisoning Prevention: Recommended Actions Based on Blood Lead Level" and the "Adult Blood Lead Epidemiology and Surveillance: Reference Blood Lead Levels (BLLs) for Adults in the U.S.," Thresholds and time intervals for retesting, medical evaluation, and response vary by state and regulatory body. Contact your State Department of Health and/or applicable regulatory agency for specific guidance on medical management recommendations.

Capillary collections are prone to contamination from skin and from use of nontrace element-free collection tubes. Results above the reference interval should be confirmed with a venous specimen collected in a certified trace element-free tube.

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

#### Adults

Concentration	Comment
5-19.9 ug/dL	Medical removal is recommended for pregnant women or those who are trying or may become pregnant. Adverse health effects are possible. Reduced lead exposure and increased blood lead monitoring are recommended.
20-69.9 ug/dL	Adverse health effects are indicated. Medical removal from lead exposure is required by OSHA if blood lead level exceeds 50 ug/dL. Prompt medical

Greater than 69.9 ug/dL	evaluation is recommended.  Critical: Immediate medical evaluation is recommended. Consider chelation therapy when symptoms of lead toxicity are present.
<b>Children</b>	
Concentration	Comment
3.5-19.9 ug/dL	Children under the age of 6 years are the most vulnerable to the harmful effects of lead exposure. Environmental investigation and exposure history to identify potential sources of lead. Biological and nutritional monitoring are recommended. Follow-up blood lead monitoring is recommended.
20-44.9 ug/dL	Lead hazard reduction and prompt medical evaluation are recommended. Contact a Pediatric Environmental Health Specialty Unit or poison control center for guidance.
Greater than 44.9 ug/dL	Critical: Immediate medical evaluation, including detailed neurological exam is recommended. Consider chelation therapy when symptoms of lead toxicity are present. Contact a Pediatric

Environmental  
Health Specialty  
Unit or poison  
control center for  
assistance.

Reference Interval:

<u>Test Number</u>	<u>Components</u>	<u>Reference Interval</u>
	<u>Lead, Whole Blood (Capillary)</u>	<u>Less than or equal to 3.4 µg/dL</u>

Effective December 6, 2021

0-5 years	Less than or equal to 3.4 µg/dL
6 years or above	Less than or equal to 4.9 µg/dL