TEST CHANGE

Lead, Whole Blood (Venous)

0020098, LEAD-WB

Specimen Requirements:	
Patient Preparation:	
Collect:	Royal blue (K2EDTA), Royal blue (NaHep), or tan (K2EDTA).
Specimen Preparation:	Transport 3 or 6 mL whole blood in the original collection tube (royal blue). (Min: 0.5 mL) OR Transport 3 mL whole blood in the original collection tube (tan). (Min: 0.5 mL)
Transport Temperature:	Room temperature. Also acceptable: Refrigerated.
Unacceptable Conditions:	Serum. Specimens collected in tubes other than rRoyal blue(K2EDTA), rRoyal blue (NaHep), or tan (K2EDTA). Clotted specimens. Capillary pediatric EDTA collection tubes, refer to Lead, Whole Blood (Capillary) 0020745.
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 tube. If contamination concerns exist due to elevated levels of blood lead, confirmation with a second specimen collected in a certified lead-free tube is recommended.~~

~~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.

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).

~~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 evaluation is recommended.~~
~~Greater than 69.9 ug/dL~~	~~Critical. Immediate medical~~

	evaluation is recommended. Consider chelation therapy when symptoms of lead toxicity are present.

Children

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:

Test Number~~Effective December 6, 2021~~		Components	Reference Interval	
~~Age~~	~~Reference Internal~~	Lead, Whole Blood (Venous)	Less than or equal to 3.4 µg/L	
~~0-5 years~~	~~Less than or equal to 3.4 ug/dL~~			
~~6 year or above~~	~~Less than or equal to 4.9 ug/dL~~			
		Lead, Whole Blood (Venous)		
			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

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			recommended. Consider chelation therapy when symptoms of lead toxicity are present. Contact a Pediatric Environmental Health Specialty Unit or poison control center for assistance.
	Lead, Whole Blood (Venous)		
		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 evaluation is recommended.
		Greater than 69.9 ug/dL	Critical. Immediate medical evaluation is recommended. Consider chelation therapy when symptoms of

			lead toxicity are present.

Effective July 21, 2025