TEST CHANGE

Lead, Industrial, Whole Blood

0025016, LEAD-IND

Specimen Requirements:	
Patient Preparation:	Collect from patient aged 16 years or older.
Collect:	Royal blue(K2EDTA) or royal~~), Royal~~ blue (NaHep~~) or tan (K2EDTA~~).
Specimen Preparation:	Transport 3 or 6 mL whole blood in the original collection tube (royal blue K2EDTA or NaHep) .~~)~~ (Min: 0.5 mL) ~~OR Transport 3 mL whole blood (tan) (Min: 0.5 mL)~~
Transport Temperature:	Refrigerated.
Unacceptable Conditions:	Serum. Specimens collected in tubes other than r~~R~~oyal blue(K2EDTA or ~~), Royal blue (~~NaHep~~), or tan (K2EDTA~~). Hemolyzed or clotted specimens.
Remarks:	
Stability:	Ambient: 30 hours; Refrigerated: 5 weeks; Frozen: Unacceptable
Methodology:	Quantitative Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) / Hematofluorometry
Note:	
CPT Codes:	83655; 84202
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

Interpretive Data
Reference intervals are based on the CDC's Blood Lead Reference Value (BLRV). 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. Actions described by OSHA in 1978 and finalized in 1983 are shown below.

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).

"Occupational Safety and Health Standards: Lead (1983). 29 CFR Part 1910.1025 App C" Action required for workers with Elevated Lead Values OSHA, Occupational Exposure to Lead, 1978

No. of Tests	Lead	Action Required

1	Greater than equal to 40.0 ug/dL	Notification of worker in writing; medical examination of worker and consultation.
3 (average)	Greater than or equal to 50.0 ug/dL	Removal of worker from job with potential lead exposure.
1	Greater than or equal to 60.0 ug/dL	Removal of worker from job with potential lead exposure.
2	Less than 40.0 ug/dL	Reinstatement of worker in job with potential lead exposure is based upon symptoms and medical evaluation.

OSHA requirements in effect since 1978 call for the measurement of whole blood lead and zinc protoporphyrins (ZPP) (NCCLS document C42-A, Nov. 1996) to evaluate the occupational exposure to lead. OSHA requires ZPP whole blood testing to be reported in units of ug/dL. For adults, conversion of ZPP units if ug/dL whole blood assumes a hematocrit of 45 percent. Conversion factor: umol/mol heme x 0.584= ug/dL.

Reference Interval:

Test Number	Components	Reference Interval
	Lead, Industrial, Whole Blood	Less than or equal to 3.4 µg/dL
	Zinc Protoporphyrin (ZPP) WholeBld Ratio	0-69 umol ZPP/ mol Hem
	Zinc Protoporphyrin (ZPP), Whole Blood	0-40 microg/dL