
Lab Dept: Chemistry

Test Name: LEAD LEVEL

General Information

Lab Order Codes: PB

Synonyms: Blood Lead; Pb

CPT Codes: 83655 - Lead

Test Includes: Blood lead concentration reported in ug/dL.

Logistics

Test Indications: Lead is a heavy metal commonly found in the environment. Lead can be an acute and chronic toxin. Young children are particularly prone to the affects of lead because they have a greater opportunity for exposure.

Lab Testing Sections: Chemistry

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 – 4 days, test performed Monday – Friday, except on holidays

Special Instructions: [See Collection](#)

Specimen

Specimen Type: Whole blood

Container: Dark Blue top with Lavender Stripe (EDTA, metal free) tube
Alternate: Lavender top (EDTA) microtainer or Green top (Lithium Heparin)

Note: Microtainers preferred for minimum volume when drawn into EDTA tubes only.

Draw Volume: Venous: Minimum: 1.5 mL blood (full tube capacity, preferred)

Capillary: 0.5 mL blood

Processed Volume:	Same as draw volume
Collection:	Venous samples are preferred by routine venipuncture. Capillary specimens collected with scrupulous hand washing, will be accepted with the restriction that elevated lead must be confirmed with a venous sample.
Special Processing:	Lab Staff: Do Not centrifuge. Samples should remain as whole blood in original collection tube. Store at refrigerated temperatures.
Patient Preparation:	None
Sample Rejection:	Mislabeled or unlabeled specimen; clotted specimen; collected in green gel microtainer tube

Interpretive

Reference Range:	<5 ug/dL All blood lead results are reported to the MN Department of Health.
Critical Values:	>30 ug/dL
Limitations:	N/A
Methodology:	Atomic Absorption, Graphite Furnace
References:	Tietz (1999) Textbook of Clinical Chemistry, 3 rd edition, Philadelphia, WB Saunders Co, pp 989-990 Minnesota Department of Health Lead Program (2005), PO Box 64974, St Paul, MN, December 2005 NCCLS Approved Guideline C40-A, Analytical Procedures for the Determination of Lead in Blood and Urine, Vol 21, No 9, June 2001 CDC Response to Advisory Committee on Childhood Lead Poisoning Prevention Recommendations in "Low Level Lead Exposure Harms Children: A Renewed Call of Primary Prevention", June/7/2012 (reference range).
Updates:	6/11/2007: Microtainer green top gel tubes are not acceptable containers for lead collections. 10/7/2013: Reference range previously listed as <10 ug/dL. 2/9/2016: Update container types. 2/14/2017: Tube update 4/19/2017: Added alternate tube Green (Li Heparin)