
Reporting Title: Lead Profile Occ Exposure, B
Performing Location: Rochester

Ordering Guidance:

This test is only for assessment of occupational exposure to lead. The preferred test for lead toxicity in children is blood lead. For more information see:

- PBDV / Lead, Venous, with Demographics, Blood
- PBDC / Lead, Capillary, with Demographics, Blood

The preferred screening test for suspicion of a hepatic porphyria is urine porphyrins. For more information see PQNRU / Porphyrins, Quantitative, Random, Urine.

Necessary Information:

Include a list of medications the patient is currently taking.

Specimen Requirements:

Both EDTA whole blood and heparin whole blood specimens are required.

Patient Preparation:

1. High concentrations of gadolinium and iodine are known to interfere with most inductively couple plasma mass spectrometry-based metal tests. If either gadolinium- or iodine-containing contrast media has been administered, a specimen should not be collected for 96 hours.
2. Patient should abstain from alcohol for 24 hours prior to specimen collection.

Specimen Type: Whole blood

Supplies:

- Metal Free B-D Tube (EDTA), 6 mL (T183)
- Metal Free (Lead only) EDTA Tube, 3 mL (T615)
- Microtainer (EDTA) Tube, 0.5 mL (T174)

Container/Tube:

Preferred: Royal blue-top BD Vacutainer Plus with EDTA blood collection tube (BD catalog no. 368381)

Acceptable: Tan-top (lead only) BD Vacutainer Plus with EDTA blood collection tube, BD Microtainer with EDTA, or royal blue-top Monoject trace element blood collection tube

Specimen Volume: 2 mL

Collection Instructions:

1. See Metal Analysis Specimen Collection and Transport for complete instructions.
2. Send whole blood specimen in original tube. Do not aliquot.
3. Refrigerate specimen as soon as possible.

Specimen Type: Whole blood

Container/Tube:

Preferred: Green top (sodium heparin)

Acceptable: Dark blue top (metal free heparin), green top (lithium heparin), or lavender top (EDTA)

Specimen Volume: 4 mL

Collection Instructions: Refrigerate specimen as soon as possible after collection.

Specimen Minimum Volume:

See Specimen Required

Forms:

Lead and Heavy Metals Reporting (T491)

Specimen Type	Temperature	Time	Special Container
Whole blood	Refrigerated	7 days	

Ask at Order Entry (AOE) Questions:

Test ID	Question ID	Description	Type	Reportable
DEMO5	VECP	Venous/Capillary: <ul style="list-style-type: none">• Venous• Capillary	Answer List	Yes
DEMO5	PTADD	Patient Street Address	Plain Text	Yes
DEMO5	PTCIT	Patient City	Plain Text	Yes
DEMO5	PTSTA	Patient State	Plain Text	Yes
DEMO5	PTZIP	Patient Zip Code	Plain Text	Yes
DEMO5	PTCNT	Patient County	Plain Text	Yes
DEMO5	PTPHO	Patient Home Phone	Plain Text	Yes
DEMO5	PTRAC	Patient Race	Plain Text	Yes
DEMO5	PTETH	Patient Ethnicity	Plain Text	Yes
DEMO5	PTOCC	Patient Occupation	Plain Text	Yes
DEMO5	PTEMP	Patient Employer	Plain Text	Yes
DEMO5	GDFN	Guardian First Name	Plain Text	Yes
DEMO5	GDLN	Guardian Last Name	Plain Text	Yes
DEMO5	MDORD	Health Care Provider Name	Plain Text	Yes
DEMO5	MDADD	Health Care Provider Street Address	Plain Text	Yes
DEMO5	MDCIT	Health Care Provider City	Plain Text	Yes
DEMO5	MDSTA	Health Care Provider State	Plain Text	Yes

Test ID	Question ID	Description	Type	Reportable
DEMO5	MDZIP	Health Care Provider Zip Code	Plain Text	Yes
DEMO5	MDPHO	Health Care Provider Phone	Plain Text	Yes
DEMO5	LABPH	Submitting Laboratory Phone	Plain Text	Yes

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
8602	Lead, B Also used by tests: PBB	Numeric	mcg/dL	77307-7
2327	Zinc-Complexed Protoporphyrin Also used by tests: PPFE	Alphanumeric	mcg/dL	2895-1
2326	Free Protoporphyrin Also used by tests: PPFE	Alphanumeric	mcg/dL	94491-8
29511	Interpretation Also used by tests: PPFE	Alphanumeric		59462-2
VECP	Venous/Capillary	Alphanumeric		31208-2
PTADD	Patient Street Address	Alphanumeric		56799-0
PTCIT	Patient City	Alphanumeric		68997-6
PTSTA	Patient State	Alphanumeric		46499-0
PTZIP	Patient Zip Code	Alphanumeric		45401-7
PTCNT	Patient County	Alphanumeric		87721-7
PTPHO	Patient Home Phone	Alphanumeric		42077-8
PTRAC	Patient Race	Alphanumeric		32624-9
PTETH	Patient Ethnicity	Alphanumeric		69490-1
PTOCC	Patient Occupation	Alphanumeric		11341-5
PTEMP	Patient Employer	Alphanumeric		80427-8
GDFN	Guardian First Name	Alphanumeric		79183-0
GDLN	Guardian Last Name	Alphanumeric		79184-8
MDORD	Health Care Provider Name	Alphanumeric		52526-1
MDADD	Health Care Provider Street Address	Alphanumeric		74221-3

Result ID	Reporting Name	Type	Unit	LOINC®
MDCIT	Health Care Provider City	Alphanumeric		52531-1
MDSTA	Health Care Provider State	Alphanumeric		52532-9
MDZIP	Health Care Provider Zip Code	Alphanumeric		87720-9
MDPHO	Health Care Provider Phone	Alphanumeric		68340-9
LABPH	Submitting Laboratory Phone	Alphanumeric		65651-2

LOINC and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

Components:

Test ID	Reporting Name	CPT Units	CPT Code	Always Performed	Orderable Separately
PBB	Lead, B			Yes	Yes (order PBDV)
PPFE	Protoporphyrins, Fractionation, WB			Yes	Yes
DEMO5	Patient Demographics			Yes	No

CPT Code Information:

83655
82542

Reference Values:

LEAD: <3.5 mcg/dL

The Occupational Safety and Health Administration (OSHA) recommended limit for blood lead level is 40 mcg/dL (OSHA 1978).

The biological exposure index (BEI) for Pb in blood of exposed workers is 20 mcg/dL (ACGIH 2018).

Critical Values:

Pediatrics (< or =15 years): > or =20.0 mcg/dL

Adults (> or =16 years): > or =70.0 mcg/dL

PROTOPORPHYRINS, FRACTIONATION

Free Protoporphyrin: <20 mcg/dL

Zinc-Complexed Protoporphyrin: <60 mcg/dL