

TEST CHANGE

Mercury, Whole Blood

0099305, HG B

Specimen Requirements:

Patient Preparation: Diet, medication, and nutritional supplements may introduce interfering substances. Patient should be encouraged to discontinue nutritional supplements, vitamins, minerals, and non-essential over-the-counter medications (upon the advice of their physician), and avoid shellfish and seafood for 48 to 72 hours.

Collect: Royal blue (K2EDTA) or royal blue (NaHep).

Specimen Preparation: Transport 3 or 6 mL whole blood in the original collection tube. (Min: 0.5 mL)

Transport Temperature: Room temperature. Also acceptable: Refrigerated.

Unacceptable Conditions: Specimens collected in tubes other than royal blue (K2EDTA) or royal blue (NaHep). Specimens transported in containers other than royal blue (K2EDTA) or royal blue (NaHep) tube or trace element-free transport tube. Clotted specimens.

Remarks:

Stability: Ambient: 1 week; Refrigerated: 1 week; Frozen: Unacceptable

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

Performed: Sun-Sat

Reported: 1-3 days

Note: Mercury is volatile; concentration may decrease over time.

CPT Codes: 83825

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

Interpretive Data:

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

Blood mercury levels predominantly reflect recent exposure and are most useful in the diagnosis of acute poisoning as blood mercury concentrations rise sharply and fall quickly over several days after ingestion. Blood concentrations in unexposed individuals rarely exceed 20 ~~ug#g~~/L. The provided reference interval relates to inorganic mercury concentrations. Dietary and ~~nonoccupational~~~~non-occupational~~ exposure to organic mercury forms may contribute to an elevated total mercury result. Clinical presentation after toxic exposure to organic mercury may include dysarthria, ataxia, and constricted vision fields with mercury blood concentrations from 20 to 50 ~~ug#g~~/L.

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).

Reference Interval:

Less than or equal to 10.0 µg/L