

0099007

Antimony, Blood

ANT B

**Specimen Required:** Patient Prep: 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).

Collect: Greiner Bio-One Vacuette Tube 6 mL NH Trace Elements Sodium Heparin tube.

Specimen Preparation: Transport 6 mL whole blood in the original collection tube (ARUP supply #57238). Available online through eSupply using ARUP Connect™ or contact ARUP Client Services at (800) 522-2787. (Min: 4.0mL)

Storage/Transport Temperature: Room temperature. Also acceptable: Refrigerated.

Unacceptable Conditions: Specimens collected in containers other than specified (including the BD Plastic Royal Blue (K<sub>2</sub>EDTA) collection tubes), Specimens transported in containers other than specified. Clotted specimens.

Stability (collection to initiation of testing): Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Unacceptable

**Interpretive Data:**

Elevated results may be due to skin- or collection device-related contamination. If contamination concerns exist due to elevated levels of blood antimony, confirmation should be performed with a second specimen collected in the recommended collection device.

Blood antimony levels predominantly reflect recent exposure and are most useful in the diagnosis of acute poisoning. Blood concentrations in unexposed individuals rarely exceed 3 µg/L. The form of antimony greatly influences distribution and elimination. Trivalent antimony readily enters red blood cells, has an extended half-life on the order of weeks to months, and is eliminated predominantly through the bile. Pentavalent antimony resides in the plasma, has a relatively short half-life on the order of hours to days, and is eliminated predominantly through the kidneys. Reported symptoms after toxic antimony exposure vary based upon route of exposure, duration, and antimony source and may include abdominal pain, dyspnea, nausea, vomiting, dermatitis, and eye irritation. Clinical presentation is similar to that of inorganic arsenic exposure.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes.

**Note:** BD Plastic Royal Blue (K<sub>2</sub>EDTA) collection tubes are not acceptable for antimony testing and can cause an elevated result in unexposed individuals.