
Lab Dept: Chemistry

Test Name: CYANIDE LEVEL

General Information

Lab Order Codes: CYAN

Synonyms: Amygdalin; Laetrile

CPT Codes: 82600 - Cyanide

Test Includes: Cyanide level reported in mg/L.

Logistics

Test Indications: Useful for monitoring possible exposure to cyanide, establishing the cause of death in cyanide exposure.

This test is **not** useful in monitoring nitroprusside therapy. The preferred test for this would be Thiocyanate.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Medical Laboratories (ML Test: 256)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 – 4 days

Special Instructions: N/A

Specimen

Specimen Type: Whole blood

Container: Lavender top (EDTA) tube

Draw Volume: 1 mL (Minimum: 1 mL) blood

Processed Volume: Same as Draw Volume

Collection: Routine venipuncture

Special Processing:	Lab Staff: Do Not centrifuge. Send as whole blood in original collection container. Store and ship at ambient temperatures. Forward promptly.
Patient Preparation:	None
Sample Rejection:	Specimens other than whole blood; mislabeled or unlabeled specimens

Interpretive

Reference Range:	Normal (unexposed population): <0.025 mg/L Smoker: average 0.41 mg/L Note: Exposed: Levels of less than 0.2 mg/L have been found to be non-toxic; however, levels of 0.05 to 1.0 mg/L have been associated with tachycardia and flushing.
Critical Values:	Toxic concentration: ≥ 1.0 mg/L Note: Levels of 1.0 – 2.5 mg/L have been associated with obtundation, coma, and respiratory depression with levels greater than 2.5 mg/L, and death with values greater than 3 mg/L.
Limitations:	Reporting limit: 0.025 mg/L
Methodology:	High Performance Liquid Chromatography with Fluorescence Detection (HPLC-FL)
References:	Mayo Medical Laboratories (October 2014)
Updates:	7/12/2010: Units update from ug/mL to mcg/mL. 8/2/2016: Moved from Mayo to MedTox. Units and reference range update.