
Lab Dept: Chemistry

Test Name: ALCOHOL, ETHYL (MEDICAL)

General Information

Lab Order Codes: ALCO

Synonyms: Ethanol, Serum; Ethyl Alcohol; Alcohol; ETOH

CPT Codes: 80320 – Alcohols OR
G0480 – Drug, test, definitive (if appropriate)

Test Includes: Ethyl alcohol level concentration (not for legal purposes) reported in mg/dL.

Logistics

Test Indications: **Not** for detecting legal intoxication levels. Ethyl alcohol test results may be used in the diagnosis and treatment of alcohol intoxication and poisoning. Ethyl alcohol is considered the most commonly abused substance. It affects the central nervous system, causing feelings of euphoria, decreased inhibitions, and depression.

Lab Testing Sections: Chemistry

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 4 hours; Stat 1 hour

Special Instructions: [See Collection](#), [See Draw Volume](#)

Specimen

Specimen Type: Blood

Container: Green top (Li heparin) tube **preferred**
Alternate tube: Red, marble or gold top tube

Draw Volume: Dependant on size of collection tube. Fill tube selected to full fill volume.

Note: Minimum collection would be 0.7 mL in a green top Microtainer™. Avoid specimen contact with the air as much as possible.

Processed Volume:	0.2 mL (Minimum volume) serum/plasma
Collection:	Routine venipuncture. Do not use alcohol or betadine to clean venipuncture site. Povidone Iodine preps should be used for cleaning. The specimen tube should be completely filled. Mix tubes containing anticoagulant by gentle inversion. The specimen tube should remain sealed until it is ready to be analyzed. Forward the specimen promptly to the laboratory for best test results.
Special Processing:	Lab Staff: Do not centrifuge or remove the specimen stopper until the specimen is ready to be analyzed. The specimen should be stored at refrigerated temperatures until tested. When ready to test, centrifuge the specimen, remove serum/plasma aliquot into a plastic sample cup and analyze immediately in the STAT mode.
Patient Preparation:	None
Sample Rejection:	Mislabeled or unlabeled specimen; improper collection or storage, collection using alcohol to cleanse the skin

Interpretive

Reference Range:	<10 mg/dL
Critical Values:	N/A
Limitations:	Butanol or n-propanol increase ethyl alcohol results.
Methodology:	Alcohol dehydrogenase enzymatic oxidation
References:	Siemens Dimension Vista® ETOH Flex® reagent cartridge Instructions for Use, Siemens Healthcare Diagnostics, PN 781022.001 Issued 2013-04-29, REV G Siemens Dimension Vista® CHEM CAL3 Instructions for Use, Siemens Healthcare Diagnostics, 6/1/2014 Jacobs & DeMott Laboratory Test Handbook (2001) Lexi-Comp, Inc, Hudson, OH, 5th Edition Biorad Liquichek Ethanol/Ammonia Control Product Insert (2013) Bio-Rad Laboratories, Irvine, CA 92618
Updates:	9/10/2014: Reference range change, previously listed as <5 mg/dL. 1/5/2014: CPT update 2/1/2016: CPT update 2/8/2016: Update alternate tubes 7/27/2018: Updated reference range

