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**Lab Dept:** Chemistry

**Test Name:** ALCOHOL, ETHYL (MEDICAL)

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***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.

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***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](#)

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***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.

<b>Processed Volume:</b>	0.2 mL (Minimum volume) serum/plasma
<b>Collection:</b>	Routine venipuncture. <b>Do not use alcohol or betadine to clean venipuncture site.</b>  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.
<b>Special Processing:</b>	Lab Staff: <b>Do not</b> 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.
<b>Patient Preparation:</b>	None
<b>Sample Rejection:</b>	Mislabeled or unlabeled specimen; improper collection or storage, collection using alcohol to cleanse the skin

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### ***Interpretive***

<b>Reference Range:</b>	<3 mg/dL
<b>Critical Values:</b>	N/A
<b>Limitations:</b>	Butanol or n-propanol increase ethyl alcohol results.
<b>Methodology:</b>	Alcohol dehydrogenase enzymatic oxidation
<b>References:</b>	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
<b>Updates:</b>	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

