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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) NO GEL tube **preferred**  
Alternate tube: Red NO GEL, Blue (Citrate), Gray (Oxalate)

**Draw Volume:** Dependent on size of collection tube. Fill tube selected to full fill volume.  
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> Do not use alcohol as a disinfectant when collecting or storing blood specimens.  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>	Skin must not be cleaned with alcohol or betadine.
<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>	<10 mg/dL
<b>Critical Values:</b>	N/A
<b>Limitations:</b>	N-propanol increases ethyl alcohol results.
<b>Methodology:</b>	Alcohol dehydrogenase enzymatic oxidation
<b>References:</b>	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  Abbot Alinity c Ethanol Reagent Kit Instructions for Use, Abbott Diagnostics Division, Abbott Park IL, USA Revised December 2017.  Abbot Alinity c Ethanol Calibrator Kit Package Insert, Abbott Diagnostics Division, Abbott Park IL, USA, Revised January 2018.

**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

11/6/2020: Collection tube update, Vista method info retired and removed.