1,25-Dihydroxy Vitamin D

**Panel Code:** DVD

**CPT Codes(s):** 82652  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 96 hours (4 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: Red Top (Fasting 4 hours)  
SUBMIT: 2.0 mL serum REFRIGERATED. (minimum 0.7 mL)  
UNACCEPTABLE: Markedly hemolyzed specimen.  
NOTE: Patient fasting 4 hours preferred but not required. Useful as a second-order test in the assessment of vitamin D status, especially in renal failure.

17-Hydroxyprogesterone

**Panel Code:** OHP

**CPT Codes(s):** 83498  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 120 hours (5 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: Plain Red Top  
SUBMIT: 0.5 mL serum REFRIGERATED.  
UNACCEPTABLE: Specimen collected in an SST® tube, markedly hemolyzed or lipemic specimen.

5,10 MTHFR Mutation, Blood

**Panel Code:** MTR

**CPT Codes(s):** 81291  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 216 hours (9 days)  
**Days Test Performed:** Tue

**Specimen:**  
COLLECT: Lavender Top  
SUBMIT: 3 mL whole blood, unspun and unopened. REFRIGERATED.  
UNACCEPTABLE: Specimen clotted, centrifuged or opened.
5-Hydroxyindoleacetic Acid (5-HIAA), 24 Hour Urine  Panel Code: HIA

CPT Codes(s): 83497
Test Performed at: Mayo Medical Laboratories
Analytic Time: 96 hours (4 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: 24 Hour Urine (Acetic Acid)
SUBMIT: 10 mL aliquot (24 hour collection preserved with 25 mL 50% acetic acid) REFRIGERATED during collection.
NOTE: Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for alternate preservatives and collection instructions. Patient should not eat avocados, bananas, butternuts, cantaloupe, dates, eggplant, grapefruit, hickory nuts, honeydew, kiwi, melons, nuts, pecans, pineapples, plantain, plums, tomatoes, or walnuts for 48 hours prior to collection and during collection. Avoid acetaminophen, ASA, L-Dopa, and guaifenesin.

6-MAM Confirmation, Urine  Panel Code: MAM

CPT Codes(s): 80356
Test Performed at: Mayo Medical Laboratories
Analytic Time: 144 hours (6 days)
Days Test Performed: Wed Sun

Specimen:
COLLECT: Random Urine in a Screw-Top Container
SUBMIT: 10 mL aliquot of a random urine REFRIGERATED (no preservative).

A1AT Proteotype S/Z by LC-MS/MS Alpha-1-Antitrypsin  Panel Code: LAB3038

CPT Codes(s): 82103, 82542
Test Performed at: Mayo Medical Laboratories
Analytic Time: 168 hours (7 days)
Days Test Performed: Mon Tues

Specimen:
COLLECT: Red Top
SUBMIT: 1.5 mL serum REFRIGERATED.
UNACCEPTABLE: Markedly lipemic specimen.
NOTE: If results are discordant, A1AT phenotype (82104) will be performed and charged.
### ABO Typing (HML)

**Panel Code: ABO**

- **CPT Codes(s):** 86900
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 24 hours (1 day)
- **Days Test Performed:** Tue Wed Thu Fri Sat

**Specimen:**
- COLLECT: EDTA-Lavender Top
- SUBMIT: 4 mL whole blood REFRIGERATED; minimum volume 0.5 mL.
- UNACCEPTABLE: Incompletely or incorrectly labeled specimens. Specimens collected in SST® tube or more than 7 days old.

### ABO/RH Type, Cord Blood

**Panel Code: CTY**

- **CPT Codes(s):** 86900 86901
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 8 hours
- **Days Test Performed:** All

**Specimen:**
- COLLECT: EDTA-Lavender Top
- SUBMIT: 1 mL Cord Blood REFRIGERATED.

### ABO/RH Typing (HML)

**Panel Code: HTY**

- **CPT Codes(s):** 86900, 86901
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 24 hours (1 day)
- **Days Test Performed:** Tue Wed Thu Fri Sat

**Specimen:**
- COLLECT: EDTA-Lavender Top
- SUBMIT: 4 mL whole blood REFRIGERATED; minimum volume 0.5 mL. Submit entire tube.
- UNACCEPTABLE: Incompletely or incorrectly labeled specimens. Specimens collected in SST® tube or more than 7 days old.
- **NOTE:** If indicated, a Weak D(Du) test will be performed at no charge. STAT will be done at any time.

### Acetaminophen (Tylenol®)

**Panel Code: ACT**

- **CPT Codes(s):** 80329
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- COLLECT: IP Green Top / OP Red Top
- SUBMIT: 1 mL serum separated from cells and REFRIGERATED up to 7 days.
- UNACCEPTABLE: Markedly hemolyzed specimen.
### Acetylcholine Receptor Binding Antibody

**Panel Code:** ABI  

**CPT Codes(s):** 83519  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 144 hours (6 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sun  

**Specimen:**  
**COLLECT:** Red Top  
**SUBMIT:** 2 mL serum REFRIGERATED.  
**UNACCEPTABLE:** Markedly hemolyzed, lipemic or icteric specimen.

### Activated Protein (APC) Resistance V

**Panel Code:** APC  

**CPT Codes(s):** 85307  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri  

**Specimen:**  
**COLLECT:** Blue Top  
**SUBMIT:** 1 mL platelet-free plasma FROZEN immediately in a separate tube.  
**UNACCEPTABLE:** Specimen not received frozen. Patient receiving heparin. Markedly hemolyzed or lipemic specimen. NOTE: See the Specimen Collection section of this manual for preparation of platelet-free plasma.

### Adenovirus Antibody

**Panel Code:** AND  

**CPT Codes(s):** 86603  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 168 hours (7 days)  
**Days Test Performed:** Tue Wed Thu Fri Sat  

**Specimen:**  
**COLLECT:** Red Top  
**SUBMIT:** 1mL serum ROOM TEMPERATURE.

### Adrenocorticotropic Hormone (ACTH)

**Panel Code:** ACH  

**CPT Codes(s):** 82024  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat  

**Specimen:**  
**COLLECT:** Prechilled Lavender Top  
**SUBMIT:** 1 mL plasma from a prechilled lavender top, centrifuged (in a refrigerated centrifuge), separated, and FROZEN immediately in a separate tube.  
**UNACCEPTABLE:** Specimen not received frozen, or markedly hemolyzed. NOTE: Morning specimen (6 A.M.-10 A.M.) is preferred. This is an ACTH assay, NOT part of an ACTH stimulation test.
### Adulterants, Urine

**Panel Code:** ADL

**CPT Codes(s):** 81005  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat Sun

**Specimen:**  
COLLECT: Random Urine in a Screw-Top Container  
SUBMIT: 10 mL aliquot random urine collection (no preservative) REFRIGERATED.  
NOTE: Assess the possible adulteration of a urine specimen submitted for drug of abuse testing.

---

### AFB Stain

**Panel Code:** AFB

**CPT Codes(s):** 87206  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Sterile Screw-Top Container  
SUBMIT: Specimen in sterile screw-top container REFRIGERATED.  
NOTE: Specimen source is REQUIRED. AFB stain is INCLUDED in respiratory TB cultures only. All other TB cultures need an AFB Stain ordered separately. This stain cannot be ordered alone. Laboratory will order and charge culture separately.

---

### AFP Tumor Marker

**Panel Code:** AFP

**CPT Codes(s):** 82105  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** Mon Wed Fri

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED up to 7 days.

---

### AFP-Amniotic Fluid

**Panel Code:** AFA

**CPT Codes(s):** 82106  
**Test Performed at:** Hennepin County Medical Center  
**Analytic Time:** 216 hours (9 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: Amniotic Fluid in a Screw-Top Container  
SUBMIT: 1 mL uncentrifuged amniotic fluid ROOM TEMPERATURE. Preferred gestational age, 13-24 weeks; 16-18 weeks preferred.  
NOTE: Specimen must arrive at HML by 2 P.M., Mon-Fri. Complete and submit a Maternal AFP form found in the front section of the manual. If AFP is positive, then (82013) Acetylcholinesterase will be performed and charged.
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**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All |
| **Specimen:**  
COLLECT: IP Green Top / OP Red Top  
SUBMIT: 1 mL serum REFRIGERATED. |

| ALF        | **Albumin, Body Fluid** |
| **CPT Codes(s):** 82042  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All |
| **Specimen:**  
COLLECT: Body Fluid in a Screw-Top Container  
SUBMIT: 1 mL body fluid REFRIGERATED.  
**NOTE:** Specimen source is REQUIRED. |

| ALC        | **Alcohol, Ethyl, Blood** |
| **CPT Codes(s):** 80320  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All |
| **Specimen:**  
COLLECT: IP Green Top / OP Grey Top  
SUBMIT: 4 mL whole blood REFRIGERATED. Specimen must arrive unopened within 24 hours of collection.  
**NOTE:** Before drawing specimen, clean site with a non-alcohol germicide. (Do not use alcohol wipes for venipuncture.) Tube should be completely filled to prevent loss of volatile compound into headspace. DO NOT REMOVE CORK BEFORE TESTING. Analysis at HealthEast Medical Laboratory will be performed on plasma (separated at the time of testing).  
* Alternative specimen - Red Top or Lavender Top if received at HealthEast Medical Laboratory within 4 hours of draw. |

| ALU        | **Alcohol, Ethyl, Urine Screen** |
| **CPT Codes(s):** 80320  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All |
| **Specimen:**  
COLLECT: Random Urine in a Screw-Top Container, cap immediately after collection.  
SUBMIT: 10 mL aliquot of random urine collection (no preservative) REFRIGERATED. |
Aldolase

Panel Code: ALS

CPT Codes(s): 82085
Test Performed at: Mayo Medical Laboratories
Analytic Time: 72 hours (3 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
COLLECT: Plain Red Top
SUBMIT: 1 mL serum REFRIGERATED.
UNACCEPTABLE: Markedly hemolyzed, lipemic, or icteric specimen or specimen collected in a SST® tube.

Aldosterone Urine 24hr

Panel Code: ADU

CPT Codes(s): 82088
Test Performed at: Mayo Medical Laboratories
Analytic Time: 192 hours (8 days)
Days Test Performed: Mon Thu

Specimen:
COLLECT: 24 Hour Urine (Acetic Acid)
SUBMIT: 10 mL aliquot REFRIGERATED (24 hour collection preserved with 25 mL 50% acetic acid). The pH must be between 2 and 4.
NOTE: See the Specimen Collection section of this manual for alternate preservatives and collection instructions.

Aldosterone, Serum

Panel Code: ADB

CPT Codes(s): 82088
Test Performed at: Mayo Medical Laboratories
Analytic Time: 120 hours (5 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Red Top @ 8 A.M.
SUBMIT: 1.5 mL serum FROZEN.
NOTE: A.M. specimen is preferred (after patient is active for 2 hours).

Alkaline Phosphatase

Panel Code: ALK

CPT Codes(s): 84075
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: IP Green Top / OP Red Top
SUBMIT: 1 mL serum REFRIGERATED.
UNACCEPTABLE: Markedly hemolyzed specimen.
Alkaline Phosphatase, Bone

Panel Code: BAP

CPT Codes(s): 84080
Test Performed at: Mayo Medical Laboratories
Analytic Time: 72 hours (3 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
COLLECT: Red Top
SUBMIT: 1 mL serum REFRIGERATED.
UNACCEPTABLE: Markedly hemolyzed.

Alkaline Phosphatase, Total and Isoenzymes

Panel Code: AKI

Alkaline Phosphatase, Isoenzymes
Alkaline Phosphatase, Total

CPT Codes(s): 84075, 84080
Test Performed at: Mayo Medical Laboratories
Analytic Time: 96 hours (4 days)
Days Test Performed: Mon, Tue, Wed, Thu, Fri

Specimen:
COLLECT: Red Top
SUBMIT: 0.5 mL serum FROZEN in each of 2 tubes.
UNACCEPTABLE: Hemolyzed specimen.

Alpha-1-Antitrypsin

Panel Code: TRP

CPT Codes(s): 82103
Test Performed at: Mayo Medical Laboratories
Analytic Time: 48 hours (2 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
COLLECT: Red Top
SUBMIT: 1.0 mL serum REFRIGERATED.
UNACCEPTABLE: Markedly Lipemic Specimen.
NOTE: If clinically indicated, patients with <125 mg/dL should be genotyped to confirm homozygous or heterozygous deficiencies.
**Alpha-Fetoprotein (AFP), Single Marker Screen, Maternal**

**Panel Code:** SGL

**CPT Codes(s):** 82105  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**  
**COLLECT:** Red Top (gestational age: 15 wks, 0 days through 22 wks, 6 days)  
**SUBMIT:** 1 mL serum REFRIGERATED.  
**UNACCEPTABLE:** Markedly hemolyzed or incorrect gestational age.  
**NOTE:** Complete and submit the Maternal AFP form found in the front section of the manual. This test is for neural tube defects only.

---

**ALT**

**Panel Code:** ALT

**CPT Codes(s):** 84460  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
**COLLECT:** IP Green Top / OP Red Top  
**SUBMIT:** 1 mL serum REFRIGERATED. Pediatric minimum volume is 115 uL.

---

**Amikacin (Amikin®), Random, Serum**

**Panel Code:** LAB3025

**CPT Codes(s):** 80150  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** All

**Specimen:**  
**COLLECT:** Red Top  
**SUBMIT:** 1 mL serum centrifuged and serum removed from cells within 2 hours and REFRIGERATED.  
**UNACCEPTABLE:** Markedly hemolyzed specimen.  
**NOTE:** Peak levels should be drawn 30 minutes post IV dose, or 60 minutes post IM or oral dose. Trough level is usually drawn 30 minutes before the dose.

---

**Aminolevulinic Acid (ALA), Random Urine**

**Panel Code:** DAL

**CPT Codes(s):** 82135  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 144 hours (6 days)  
**Days Test Performed:** Tue Thu

**Specimen:**  
**COLLECT:** Random Urine in a Screw-Top Container  
**SUBMIT:** 2 mL aliquot of random urine collection (no preservatives) REFRIGERATED.  
**NOTE:** Patient should abstain from alcohol for 24 hours prior to and during testing.
**Amiodarone (Cordarone®)**

Panel Code: LAB3051

Desethylamiodarone

CPT Codes(s): 80299

Test Performed at: Mayo Medical Laboratories

Analytic Time: 120 hours (5 days)

Days Test Performed: Tue Wed Thu Fri Sat

Specimen:

COLLECT: Plain Red Top

SUBMIT: 3 mL serum FROZEN. Minimum sample volume 0.5mL serum.

UNACCEPTABLE: Specimen collected in an SST® tube.

NOTE: Recommended collection is 12 hours post dose (trough).

**Amitriptyline (Elavil®) and Nortriptyline**

Panel Code: LAB3043

Nortriptyline

CPT Codes(s): 80335

Test Performed at: Mayo Medical Laboratories

Analytic Time: 48 hours (2 days)

Days Test Performed: Mon Tue Wed Thu Fri

Specimen:

COLLECT: Plain Red Top

SUBMIT: 1 mL serum centrifuged and aliquoted within 2 hours and REFRIGERATED.

UNACCEPTABLE: Specimen collected in an SST® tube or markedly hemolyzed or lipemic or icteric specimen.

NOTE: Recommended collection is 12 hours post dose (trough).

**Ammonia**

Panel Code: NH3

CPT Codes(s): 82140

Test Performed at: HealthEast Medical Laboratory

Analytic Time: 4 hours

Days Test Performed: All

Specimen:

COLLECT: Green Top (Li Hep) *On Ice*

SUBMIT: 2 mL plasma FROZEN within 15 minutes in a separate tube.

UNACCEPTABLE: Specimen hemolyzed or specimen not frozen.

NOTE: Collection tube should be completely filled. Keep green top on ice until centrifuged.
Ammonia, Arterial

**AVAILABILITY: Hospital Inpatient Only**

** CPT Codes(s): 82140  
** Test Performed at: HealthEast Medical Laboratory  
** Analytic Time: 4 hours  
** Days Test Performed: All

** Specimen:  
COLLECT: Syringe (Lithium Heparin) on ice  
SUBMIT: 2 mL whole blood in a syringe (rinsed with lithium heparin) ON WET ICE.  
UNACCEPTABLE: Hemolyzed specimen.  
NOTE: Specimen should be drawn free of air, immediately corked, mixed well, and placed on wet ice. Transport immediately to laboratory. Analysis at HealthEast Medical Laboratory will be performed on plasma.

Ammonium, 24 Hour Urine

** CPT Codes(s): 82140  
** Test Performed at: Mayo Medical Laboratories  
** Analytic Time: 48 hours (2 days)  
** Days Test Performed: All

** Specimen:  
COLLECT: 24 Hour Urine (No Preservative)  
SUBMIT: 4 mL aliquot of 24 hour urine collection (no preservative) REFRIGERATED.  
NOTE: Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions and alternative preservatives.

Amphetamines Confirmation, Urine

** CPT Codes(s): 80324, 80359  
** Test Performed at: Mayo Medical Laboratories  
** Analytic Time: 120 hours (5 days)  
** Days Test Performed: Mon Tue Wed Thu Sun

** Specimen:  
COLLECT: Random Urine in a Screw-Top Container  
SUBMIT: 20 mL aliquot of random urine collection (no preservative), REFRIGERATED. (2.5 mL minimum)  
NOTE: This test will produce a true-positive result from patients who are administered Adderall, Benzedrine, Desoxyn and Vicks inhaler, Selegiline, clobenzorex, famprofazone, fenethylleline, fenproporex, and mefenorex.
**Amylase**

**Panel Code:** AMY

**CPT Codes(s):** 82150  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
UNACCEPTABLE: Hemolyzed specimen.

---

**Amylase, 2 Hour Urine**

**Panel Code:** A2U

**CPT Codes(s):** 82150  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: 2 Hour Urine (No Preservative)  
SUBMIT: 10 mL aliquot of 2 hour urine collection (no preservative) REFRIGERATED.  
NOTE: Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions.

---

**Amylase, 8 Hour Urine**

**Panel Code:** A8U

**CPT Codes(s):** 82150  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: 8 Hour Urine (No Preservative)  
SUBMIT: 10 mL aliquot of 8 hour urine collection (no preservative) REFRIGERATED.  
NOTE: Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions.

---

**Amylase, Body Fluid**

**Panel Code:** AMF

**CPT Codes(s):** 82150  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Body Fluid in a Screw-Top Container  
SUBMIT: 1 mL body fluid REFRIGERATED.  
NOTE: Specimen source is REQUIRED.
**Anaplasma Smears, Blood**

**Panel Code:** EHR

**CPT Codes(s):** 87015, 87207  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Lavender Top  
SUBMIT: 5 mL whole blood ROOM TEMPERATURE received within 24 hours of collection OR buffy coat smears ROOM TEMPERATURE.  
UNACCEPTABLE: Peripheral smears if submitted for primary examination without a Lavender Top. Lavender Top older than 24 hours.  
NOTE: Positive results will be reported to MDH.

---

**Androstenedione**

**Panel Code:** ADR

**CPT Codes(s):** 82157  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 120 hours (5 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: Plain Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed or lipemic specimen. Specimen collected in an SST® Tube.

---

**Angiotensin Converting Enzyme**

**Panel Code:** ACE

**CPT Codes(s):** 82164  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed, lipemic or icteric specimen.  
NOTE: The use of angiotensin converting enzyme inhibiting antihypertensive drugs will cause decreased ACE values.
**Angiotensin Converting Enzyme, CSF**

Panel Code: ACC

- **CPT Codes(s):** 82164
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 168 hours (7 days)
- **Days Test Performed:** Mon Wed Fri

**Specimen:**
- COLLECT: Spinal fluid in CSF collection tube
- SUBMIT: 0.5 mL spinal fluid FROZEN in a separate tube.
- NOTE: Spinal Fluid ACE activity to aid the diagnosis of neurosarcoidosis has been reported; however, there is insufficient evidence to support ACE being used for this purpose.

---

**Antibody Identification**

Panel Code: ID

- **CPT Codes(s):** 86870
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 24 hours (1 day)
- **Days Test Performed:** All

**Specimen:**
- COLLECT: EDTA-Lavender top
- SUBMIT: 4 mL whole blood REFRIGERATED.
- UNACCEPTABLE: Incompletely or incorrectly labeled specimens.

---

**Antibody Screen (HML)**

Panel Code: HSC

- **CPT Codes(s):** 86850
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 24 hours (1 day)
- **Days Test Performed:** Tue Wed Thu Fri Sat

**Specimen:**
- COLLECT: EDTA-Lavender Top
- SUBMIT: 4 mL whole blood REFRIGERATED.
- UNACCEPTABLE: Incompletely or incorrectly labeled specimens.Specimen more than 72 hours old.
- NOTE: If indicated, Antibody Identification will be performed and charged separately using CPT code 86870 and code 86886 if titer is indicated.Additional specimen may be required for antibody identification.
**Antibody Titer**  
Panel Code: LAB1255  

CPT Codes(s): 86886  
Test Performed at: MBC/INNOVATIVE BLOOD RESOURCES  
Analytic Time: 75 hours (3 days)  
Days Test Performed: Mon Tue Wed Thu Fri  

Specimen:  
COLLECT: 2 EDTA-Lavender Top + 1 Red top 10mL  
SUBMIT: 2 Lavender (EDTA 4 mL) + 1 Red top 10mL  
UNACCEPTABLE: Specimen more than 72 hrs old. Markedly hemolyzed specimen. Incompletely or incorrectly labeled specimen.  
NOTE: Antibody Titer is usually a reflex test done when a clinically significant antibody is identified in a prenatal specimen. If the titer is the initial order, an Antibody Screen and Antibody Identification (if indicated), will be performed first and charged separately. Also order an Antibody Screen (HSC/LAB2286) if Positive. Antibody ID will be charged separately. Titers will not be done on specimens that have no antibody detected.

**Antinuclear Antibodies Screen (ANA)**  
Panel Code: ANB  

CPT Codes(s): 86038  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 24 hours (1 day)  
Days Test Performed: Mon Tue Wed Thu Fri  

Specimen:  
COLLECT: Red Top  
SUBMIT: 0.5 mL serum REFRIGERATED; FROZEN if not submitted within 24 hours.  
UNACCEPTABLE: Markedly hemolyzed, lipemic, or bacterially contaminated specimen. Body fluids are unacceptable. Specimens more than 24 hours old not frozen.

**Antinuclear Antibody (ANA) Cascade**  
Panel Code: ANE  

CPT Codes(s): 86038  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 24 hours (1 day)  
Days Test Performed: Mon Tue Wed Thu Fri  

Specimen:  
COLLECT: Red Top  
SUBMIT: 2 mL serum REFRIGERATED. FROZEN if not submitted within 24 hours.  
UNACCEPTABLE: Specimens > 24 hours old if not frozen. Markedly hemolyzed, lipemic, or bacterially contaminated specimen. Body fluids are unacceptable.  
NOTE: If DNA and ENA tests are indicated, they will be performed and charged separately using CPT codes 86225 and 86235 x 6. If Rheumatoid Factor is desired, order RQT (LAB1195).
Anti-Smith Antibody

Panel Code: ESM

CPT Codes(s): 86235
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 48 hours (2 days)
Days Test Performed: Tue Fri

Specimen:
COLLECT: Red Top
SUBMIT: 1 mL serum REFRIGERATED. FROZEN if not submitted within 24 hours.
UNACCEPTABLE: Specimens > 24 hours old if not frozen. Body fluids are unacceptable.

Anti-Smith Antibody/RNP

Panel Code: ERN

CPT Codes(s): 86235
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 48 hours (2 days)
Days Test Performed: Tue Fri

Specimen:
COLLECT: Red Top
SUBMIT: 1 mL serum REFRIGERATED. FROZEN if not submitted within 24 hours.
UNACCEPTABLE: Specimens > 24 hours old if not frozen. Body fluids are unacceptable.

Anti-Smooth Muscle Antibody

Panel Code: AMS

CPT Codes(s): 86255
Test Performed at: Mayo Medical Laboratories
Analytic Time: 96 hours (4 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
COLLECT: Red Top
SUBMIT: 0.5 mL serum REFRIGERATED
UNACCEPTABLE: Markedly hemolyzed or lipemic specimen.
NOTE: If positive, results are titered at no additional charge (CPT 86256).

Antistreptolysin O Screen

Panel Code: ASO

Anti-DNase B
ASO

CPT Codes(s): 86060, 86215
Test Performed at: Mayo Medical Laboratories
Analytic Time: 72 hours (3 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
COLLECT: Red Top
SUBMIT: 1 mL serum REFRIGERATED.
UNACCEPTABLE: Specimen markedly lipemic.
NOTE: The use of the ASO for the diagnosis of an acute group A streptococcal infection is rarely indicated, unless the patient has received antibiotics that would render the culture negative. There are certain limitations on the use of the ASO test in these circumstances.
### Antithrombin III Activity, Cascade Plasma

**Panel Code:** ATF

- **CPT Codes(s):** 85300
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 168 hours (7 days)
- **Days Test Performed:** Wed

**Specimen:**
- **COLLECT:** BLUx2 DBLCenFZ2tube4hr
- **SUBMIT:** 2 blue top tubes whole blood or 2 mL platelet-free plasma in 2 separate tubes (1 mL/tube) ROOM TEMP within 4 hours of collection. Platelet-free plasma FROZEN withing 4 hours of collection is stable for up to 2 weeks. The specimen must be double-centrifuged to prepare a platelet-free-plasma specimen. Immediately centrifuge at 7,200 RPM for 3 minutes or 3,200 RPM for 10 minutes, at 4 degrees C, if possible. Carefully remove plasma from cells, avoiding the platelet/buffy coat. Dispense into a labeled plastic tube, and centrifuge this, again at 7,200 RM for 3 minutes or 3,200 RM for 10 minutes, at 4 degrees C, if possible. Remove the top portion of plasma, leaving approximately 250μl in the bottom to discard. The double-centrifuged plasma should be aliquoted (at least 1.0ml in each plastic tube) into 2 clearly labeled plastic tubes (glass vials will not be accepted).

**UNACCEPTABLE:** Frozen whole blood specimen, partially filled tube, marked hemolysis, clotted specimen, whole blood received >4 hours of collection or platelet-free plasma not frozen within 4 hours of collection.

**NOTE:** If results are decreased, ATIII Antigen (CPT 85301) at Mayo Medical Laboratories will be performed and charged.

### Anti-Xa Heparin Level

**Panel Code:** XAH

- **CPT Codes(s):** 85520
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** Blue Top, Centrifuge within 1 Hr
- **SUBMIT:** 3 ml whole blood at ROOM TEMP within 1 hour of collection or 1.5 mL platelet-free plasma centrifuged within 1 hour. Transport at room temp within 4 hours of collection. Platelet-free plasma FROZEN within 4 hours of collection is stable for up to 2 weeks.

**UNACCEPTABLE:** Frozen whole blood specimen, partially filled tube, marked hemolysis, clotted specimen, whole blood received >1 hour of collection or platelet-free plasma not frozen within 4 hours of collection.

**NOTE:** Once the whole blood blue top is centrifuged it is acceptable for 4 hours from collection. See the Specimen Collection section of this manual for preparation of platelet-free plasma.
Anti-Xa Low Molecular Weight Heparin  

**Panel Code:** XAL

**CPT Codes(s):** 85520  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
**COLLECT:** DBLCent FZin4hr  
**SUBMIT:** 3 ml whole blood or 1.5 mL platelet-free plasma ROOM TEMP within 4 hours of collection. Platelet-free plasma FROZEN within 4 hours of collection is stable for up to 2 weeks.  
**UNACCEPTABLE:** Frozen whole blood specimen, partially filled tube, marked hemolysis, clotted specimen, whole blood received >4 hours of collection or platelet-free plasma not frozen within 4 hours of collection.  
**NOTE:** See the Specimen Collection section of this manual for preparation of platelet-free plasma.

APTT Inhibitor Screen  

**Panel Code:** ATI

**CPT Codes(s):** 85730, 85732  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
**COLLECT:** Blue Top  
**SUBMIT:** 3 mL whole blood or 1.5 mL platelet-free plasma ROOM TEMP within 4 hours of collection. Platelet-free plasma FROZEN within 4 hours of collection is stable for up to 2 weeks.  
**UNACCEPTABLE:** Frozen whole blood specimen, partially filled tube, or marked hemolysis, clotted specimen, whole blood received >4 hours of collection or platelet-free plasma not frozen within 4 hours of collection.  
**NOTE:** An APTT will be performed first. If the result is normal the test will be cancelled. See Specimen Collection section of this manual for preparation of platelet-free plasma.

APTT(PTT)  

**Panel Code:** PTT

**CPT Codes(s):** 85730  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
**COLLECT:** Blue Top  
**SUBMIT:** 3 mL whole blood or 1.5 mL platelet-free plasma ROOM TEMP within 4 hours of collection. Platelet-free plasma FROZEN within 4 hours of collection is stable for up to 2 weeks.  
**UNACCEPTABLE:** Frozen whole blood specimen, partially filled tube, or marked hemolysis, clotted specimen, whole blood received >4 hours of collection or platelet-free plasma not frozen within 4 hours of collection.  
**NOTE:** See Specimen Collection section of this manual for preparation of platelet-free plasma.
**Arbovirus Antibodies, IgG and IgM (CSF)**

Panel Code: ARC

- California (LaCrosse) IgG and IgM
- Eastern Equine IgG and IgM
- St. Louis IgG and IgM
- Western Equine IgG and IgM

**CPT Codes(s):** 86651 x 2, 86652 x 2, 86653 x 2, 86654 x2

**Test Performed at:** Mayo Medical Laboratories

**Analytic Time:** 96 hours (4 days)

Days Test Performed: Mon Tue Wed Thu Fri

**Specimen:**

- COLLECT: Spinal fluid in CSF collection tube
- SUBMIT: 0.5 mL spinal fluid REFRIGERATED.
- NOTE: Simultaneous analysis for Arbovirus antibodies on serum is recommended.

---

**Arbovirus Antibody Panel, IgG & IgM**

Panel Code: ARB

- California (LaCrosse) IgG and IgM
- Eastern Equine IgG and IgM
- St. Louis IgG and IgM
- Western Equine IgG and IgM

**CPT Codes(s):** 86651 x 2, 86652 x 2, 86653 x 2, 86654 x2

**Test Performed at:** Mayo Medical Laboratories

**Analytic Time:** 96 hours (4 days)

Days Test Performed: Mon Tue Wed Thu Fri

**Specimen:**

- COLLECT: Red Top
- SUBMIT: 1 mL serum REFRIGERATED.
- UNACCEPTABLE: Markedly hemolyzed or lipemic specimen.

---

**Arginine Vasopressin (AVP)**

Panel Code: ADH

**CPT Codes(s):** 84588

**Test Performed at:** Mayo Medical Laboratories

**Analytic Time:** 264 hours (11 days)

Days Test Performed: Wed

**Specimen:**

- COLLECT: 2 Lavenders on ice(Fast/Thirst 6 HR)
- SUBMIT: 2 mL of platelet free plasma FROZEN immediately in a separate tube.
- UNACCEPTABLE: Specimen not received frozen, markedly hemolyzed specimen.
- NOTE: Patient must fast and thirst for 6 hours prior to collection. See the specimen collection section of this manual for preparation of platelet free plasma. Patient should not have received radioactive materials for 5-7 days.
Aripiprazole (Abilify®)  
Panel Code: ARP

CPT Codes(s): 80342  
Test Performed at: NON-INTERFAENCED SEND OUT LABS  
Analytic Time: 120 hours (5 days)  
Days Test Performed: Varies  

Specimen:  
COLLECT: Plain Red Top  
SUBMIT: 2 mL serum REFRIGERATED.  
UNACCEPTABLE: Specimen collected in an SST® tube. NOTE: Trough levels are most reproducible.  
* Days performed varies.

Arsenic Fractionation, Urine  
Panel Code: ASX

CPT Codes(s): 82175 x2  
Test Performed at: NON-INTERFAENCED SEND OUT LABS  
Analytic Time: 72 hours (3 days)  
Days Test Performed: Varies  

Specimen:  
COLLECT: Random Urine in Metal-Free Container  
SUBMIT: 10 mL urine REFRIGERATED in a metal-free container.  
UNACCEPTABLE: Specimen not received in a metal-free container.  
NOTE: Timed collections (24 hour) will be accepted. Performed twice a week.  
*Day(s) test performed varies.

Arsenic, 24 Hour Urine  
Panel Code: ASU

CPT Codes(s): 82175  
Test Performed at: NON-INTERFAENCED SEND OUT LABS  
Analytic Time: 120 hours (5 days)  
Days Test Performed: Mon Tue Wed Thu Fri  

Specimen:  
COLLECT: 24 Hour Urine in a Metal-Free Container  
SUBMIT: 10 mL aliquot of 24 hour urine collection (metal-free) REFRIGERATED in metal-free container.  
UNACCEPTABLE: Specimen not received in a metal-free container. NOTE: Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions.
**Arsenic, Whole Blood**

- **Panel Code:** ASB
- **CPT Codes(s):** 82175
- **Test Performed at:** NON-INTERFACED SEND OUT LABS
- **Analytic Time:** 72 hours (3 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** Navy Blue Top-Lavender Banded (EDTA)
- **SUBMIT:** 3 mL whole blood REFRIGERATED.
- **UNACCEPTABLE:** Specimen clotted or not received in a metal-free tube.

---

**Aspergillus fumigatus, IgG Antibodies**

- **Panel Code:** ASP
- **CPT Codes(s):** 86606
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 72 hours (3 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**
- **COLLECT:** Red Top
- **SUBMIT:** 0.5 mL serum REFRIGERATED.

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**Aspergillus galactomannan Antigen**

- **Panel Code:** GAL
- **CPT Codes(s):** 87305
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 96 hours (4 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri Sun

**Specimen:**
- **COLLECT:** SST® tube-Unopened
- **SUBMIT:** Centrifuged blood in an unopened SST® tube REFRIGERATED. Specimen must be received the same day it is collected.
- **UNACCEPTABLE:** Aliquoted serum specimen, markedly hemolyzed or lipemic specimen.

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**AST**

- **Panel Code:** AST
- **CPT Codes(s):** 84450
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** IP Green Top / OP Red Top
- **SUBMIT:** 1 mL serum REFRIGERATED. Pediatric minimum volume is 115 uL.
- **UNACCEPTABLE:** Hemolyzed specimen.
Automated Differential

Panel Code: ADF

CPT Codes(s): 85004
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: Lavender Top
SUBMIT: 3 mL whole blood REFRIGERATED. May require ABN form.
UNACCEPTABLE: Volume less than 1 mL. DO NOT submit only peripheral blood smears.
NOTE: A WBC or HM2 must be ordered with an ADF.

Babesia microti Antibody IgG

Panel Code: BBM

CPT Codes(s): 86753
Test Performed at: Mayo Medical Laboratories
Analytic Time: 72 hours (3 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Red Top
SUBMIT: 0.5 mL serum REFRIGERATED.
UNACCEPTABLE: Markedly hemolyzed or lipemic specimen.

Babesia Smears, Blood

Panel Code: BAB

CPT Codes(s): 87015, 87207
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: Lavender Top
SUBMIT: 5 mL whole blood received within 24 hours of collection OR slides from submitting lab for parasite confirmation or identification ROOM TEMPERATURE.
UNACCEPTABLE: Whole blood more than 24 hours old.
NOTE: Indicate travel history when placing order. Positives will be reported to MDH.

Babesia species, Molecular Detection, PCR Blood

Panel Code: LAB3006

CPT Codes(s): 87798
Test Performed at: Mayo Medical Laboratories
Analytic Time: 96 hours (4 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
COLLECT: Lavender Top
SUBMIT: 1 mL whole blood (EDTA) REFRIGERATED.
UNACCEPTABLE: Specimen clotted; specimen markedly lipemic.
### Bacterial Antigen Detection

**Panel Code:** BAD  
**CPT Codes(s):** 86403 x6  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 2 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: CSF Screw-Top OR Plain Red Top OR Urine  
SUBMIT: 1.0 mL CSF OR 1.0 mL serum OR 0.5 mL urine REFRIGERATED within 4 hours.  
UNACCEPTABLE: Specimen collected in an SST® tube. Specimen at RT more than 4 hours.  
Serum left on clot more than 4 hours.  
NOTE: Urine is acceptable for Strep pneumo antigen only. If a CSF culture is not ordered or not indicated that it was performed by referring site, one will be ordered and charged. This test detects and differentiates antigens of most serotypes of Haemophilus influenzae type b, Neisseria meningitidis A, B, C, Y, and W-135, Group B Strep, Strep pneumoniae, and E. coli K1.

### Barbiturates Confirmation, Urine

**Panel Code:** CBA  
**CPT Codes(s):** 80345  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 144 hours (6 days)  
**Days Test Performed:** Mon Tue Wed Thu Sun

**Specimen:**  
COLLECT: Random Urine in a Screw-Top Container  
SUBMIT: 20 mL aliquot random urine collection (no preservative),REFRIGERATED. (5 mL minimum)

### Bartonella Antibody Panel

**Panel Code:** BRT  
**CPT Codes(s):** 86611 x4  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 0.5 ml serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed or lipemic specimen.
**Basic Metabolic Panel**  
Panel Code: BMP

- Anion Gap, Calculated
- BUN
- Calcium
- Chloride
- CO2, Total
- Creatinine
- Glomerular Filtration Rate, estimated (eGFR)
- Glucose
- Potassium
- Sodium

**CPT Codes(s):** 80048  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**
- COLLECT: IP Green Top / OP Red Top
- SUBMIT: 1 mL serum REFRIGERATED. May require ABN form.
- UNACCEPTABLE: Hemolyzed specimen.

**NOTE:** Centrifuge and separate serum from cells within 4 hours of draw. See the Special Instructions section of this manual for "Potassium Specimen Recommendations".

**Benzodiazepines Confirmation, Urine**  
Panel Code: CBN

- 7-NH-Conazepam
- 7-NH-Flunitrazepam
- Alpha OH-Alprazolam
- Alpha OH-Triazolam
- Lorazepam
- Nordiazepam
- OH-Ethyl-Flurazepam
- Oxazepam
- Temazepam

**CPT Codes(s):** 80346  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 144 hours (6 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- COLLECT: Random Urine in a Screw-Top Container
- SUBMIT: 20 mL aliquot random urine collection (no preservative), REFRIGERATED. (5 mL minimum)
### Beta-2 Glycoprotein 1 Antibodies, IgG and IgM

**Panel Code:** BGP

**Beta-2 GP1, IgG**

**Beta-2 GP1, IgM**

**CPT Codes(s):** 86146 x2  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 144 hours (6 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**  
- **COLLECT:** Red Top  
- **SUBMIT:** 1 mL serum REFRIGERATED.  
- **UNACCEPTABLE:** Markedly hemolyzed or lipemic specimen.

### Beta-2 Transferrin, Body Fluid

**Panel Code:** B2T

**CPT Codes(s):** 86335  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**  
- **COLLECT:** Body Fluid in a Screw-Top Container  
- **SUBMIT:** 0.5 mL body fluid FROZEN (nasal, otic, etc.)  
- **NOTE:** Direct collection may be done with a pipette, test tube, microcollection device, or syringe.

### Beta-2-Microglobulin (Beta-2-M)

**Panel Code:** BMG

**CPT Codes(s):** 82232  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**  
- **COLLECT:** Red Top  
- **SUBMIT:** 1 mL serum REFRIGERATED.  
- **UNACCEPTABLE:** Markedly lipemic specimen.

### Beta-Carotene

**Panel Code:** BCT

**CPT Codes(s):** 82380  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 144 hours (6 days)  
**Days Test Performed:** Varies - batched 2 times per week.

**Specimen:**  
- **COLLECT:** Red Top. Protect from light  
- **SUBMIT:** 1 mL serum REFRIGERATED in a [amber] tube. Protect from light.  
- **UNACCEPTABLE:** Not protected from light.
**Beta-CrossLaps (Beta-CTx)**  
Panel Code: CTX

CPT Codes(s): 82523  
Test Performed at: Mayo Medical Laboratories  
Analytic Time: 72 hours (3 days)  
Days Test Performed: Mon Tue Wed Thu Fri Sat

**Specimen:**
- COLLECT: Red Top (Fasting 8 Hours)  
- SUBMIT: 1 mL serum FROZEN within 8 hours in a separate tube.  
- UNACCEPTABLE: Markedly hemolyzed specimen.  
- NOTE: Reduced renal function may lead to reduced urinary excretion and a consequent increase of serum CTx. Patients receiving high doses of biotin should wait 8 hours before having CTx drawn. Erroneous findings occur in patients treated with monoclonal mouse antibodies.

**Beta-hCG, Qualitative, Serum**  
Panel Code: PGT

CPT Codes(s): 84703  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 4 hours  
Days Test Performed: All

**Specimen:**
- COLLECT: Red Top  
- SUBMIT: 1 mL serum REFRIGERATED.  
- NOTE: This assay is approved for use in the early detection of pregnancy only. It is not approved for any other uses such as tumor marker screening or monitoring. Not to be ordered on male patients.

**Beta-hCG, Qualitative, Urine**  
Panel Code: HQU

CPT Codes(s): 81025  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 4 hours  
Days Test Performed: All

**Specimen:**
- COLLECT: Random Urine in a Screw-Top Container  
- SUBMIT: 5 mL aliquot of random urine collection (no preservative) REFRIGERATED.  
- UNACCEPTABLE: Volume less than 1 mL.  
- NOTE: This assay is approved for use in the early detection of pregnancy only. It is not approved for any other uses such as tumor marker screening or monitoring. Not to be ordered on male patients.
**Beta-hCG, Quantitative**

Panel Code: HCG

CPT Codes(s): 84702  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 4 hours  
Days Test Performed: All

Specimen:  
COLLECT: IP Green Top/OP Red top  
SUBMIT: 1 mL serum REFRIGERATED. May require ABN form.  
NOTE: This assay is approved for use in the early detection of pregnancy only. It is not approved for any other uses such as tumor marker screening or monitoring. Not to be ordered on male patients.

**Beta-hCG, Quantitative, Tumor Marker**

Panel Code: BTM

CPT Codes(s): 84702  
Test Performed at: Mayo Medical Laboratories  
Analytic Time: 72 hours (3 days)  
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed.  
NOTE: The purpose of this assay is for following the course of therapy of tumors, such as choriocarcinoma. It is NEVER to be used for pregnancy.

**Beta-Hydroxybutyrate, Quantitative (replaces Serum Ketone)**

Panel Code: LAB3057

CPT Codes(s): 82010  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 4 hours  
Days test performed: All

Specimen:  
COLLECT: Red Top  
SUBMIT: 1 ml of serum or plasma (grey or green top-include plasma type on label) REFRIGERATED.  
NOTE: Centrifuge and remove serum or plasma from cells within two hours of collection.
Bicarbonate, Venous, Calculated

Panel Code: BIC

CPT Codes(s): 82803
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 1 hours
Days Test Performed: All

Specimen:
COLLECT: Green Top
SUBMIT: 4 mL whole blood ON WET ICE. Specimen must arrive within 1 hour of collection.
NOTE: Specimen should be drawn free of air and mixed well, and placed on wet ice. Transport immediately to laboratory. DO NOT REMOVE CORK BEFORE TESTING.

Bile Acids, Total

Panel Code: BIL

CPT Codes(s): 82239
Test Performed at: Mayo Medical Laboratories
Analytic Time: 72 hours (3 days)
Days Test Performed: All

Specimen:
COLLECT: Red Top(Fasting 8 hours)
SUBMIT: 1 mL serum REFRIGERATED.
UNACCEPTABLE: Markedly hemolyzed specimen or icteric specimen.
NOTE: Patient fasting 8 hours. Acceptable to draw non-fasting when patient is pregnant and is being evaluated for cholestasis.

Bilirubin Panel

Panel Code: BLP

CPT Codes(s): 82247, 82248
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: IP Green Top / OP Red Top (Protect from Light)
SUBMIT: 1 mL serum REFRIGERATED. Keep out of light as much as possible.
UNACCEPTABLE: Hemolyzed specimen.

Bilirubin, Cord Blood

Panel Code: CBL

CPT Codes(s): 82247
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: IP Green Top / OP Red Top (Protect from Light)
SUBMIT: 3 mL cord blood REFRIGERATED. Keep out of light as much as possible.
### Bilirubin, Direct

<table>
<thead>
<tr>
<th>Panel Code: DBL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 82248</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> HealthEast Medical Laboratory</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 4 hours</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> All</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: IP Green Top / OP Red Top (Protect from Light)
- SUBMIT: 1 mL serum REFRIGERATED. Keep out of light as much as possible.
- UNACCEPTABLE: Hemolyzed specimen.

### Bilirubin, Neonatal Panel

<table>
<thead>
<tr>
<th>Panel Code: BLN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Direct Bilirubin</strong></td>
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<tr>
<td><strong>Indirect Bilirubin, Calculated</strong></td>
</tr>
<tr>
<td><strong>Total Bilirubin</strong></td>
</tr>
<tr>
<td><strong>CPT Codes(s):</strong> 82247, 82248</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> HealthEast Medical Laboratory</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 4 hours</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> All</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: IP Green Top / OP Red Top Microtainer Tube (No Light)
- SUBMIT: 0.5 mL serum REFRIGERATED in Red Top Microtainer Tube. Keep out of light as much as possible.
- UNACCEPTABLE: Hemolyzed specimen.
- NOTE: Only to be ordered on neonate. Report includes time of birth and age calculated in hours.
  - Order only up to two months of age.
  - * Date and time of birth is required.

### Bilirubin, Neonatal Total

<table>
<thead>
<tr>
<th>Panel Code: TBN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 82247</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> HealthEast Medical Laboratory</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 4 hours</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> All</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: IP Green Top / OP Red Top Microtainer Tube (No Light)
- SUBMIT: 0.5 mL serum REFRIGERATED in Red Top Microtainer Tube. Keep out of light as much as possible.
- UNACCEPTABLE: Hemolyzed specimen.
- NOTE: Only to be ordered on neonate. Report includes time of birth and age calculated in hours.
  - Order only up to two months of age.
  - * Date and time of birth is required.
### Bilirubin, Total  
Panel Code: TBL  

| CPT Codes(s): | 82247 |  
| Test Performed at: | HealthEast Medical Laboratory |  
| Analytic Time: | 4 hours |  
| Days Test Performed: | All |  

**Specimen:**  
- COLLECT: IP Green Top / OP Red Top (Protect from Light)  
- SUBMIT: 1 mL serum REFRIGERATED. Keep out of light as much as possible. Pediatric minimum volume is 115 µL.  
- UNACCEPTABLE: Hemolyzed specimen.

### BK Virus, DNA, Plasma Quantitative  
Panel Code: QBK  

| CPT Codes(s): | 87799 |  
| Test Performed at: | Mayo Medical Laboratories |  
| Analytic Time: | 120 hours (5 days) |  
| Days Test Performed: | Mon Tue Wed Thu Fri Sat |  

**Specimen:**  
- COLLECT: Lav Top-1 mL Plasma Refrig.  
- SUBMIT: 1 mL EDTA plasma REFRIGERATED.  
- UNACCEPTABLE: Markedly hemolyzed specimen.

### Blastomyces Antibodies  
Panel Code: BST  

| CPT Codes(s): | 86612 |  
| Test Performed at: | Mayo Medical Laboratories |  
| Analytic Time: | 120 hours (5 days) |  
| Days Test Performed: | Mon Tue Wed Thu Fri |  

**Specimen:**  
- COLLECT: Red Top  
- SUBMIT: 0.5 mL serum REFRIGERATED.  
- UNACCEPTABLE: Markedly hemolyzed or lipemic specimen.
<table>
<thead>
<tr>
<th><strong>Blood Gases, Arterial</strong></th>
<th>Panel Code: ABG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Excess, Arterial, Calculated</td>
<td></td>
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<tr>
<td>HCO3, Arterial, Calculated</td>
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<tr>
<td>O2 Saturation, oxyhemoglobin</td>
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</tr>
<tr>
<td>PCO2, Arterial</td>
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<tr>
<td>pH, Arterial</td>
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<tr>
<td>PO2, Arterial</td>
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</tr>
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</table>

**CPT Codes(s):** 82805  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Syringe (Lithium Heparin)  
SUBMIT: 2 mL whole blood in a syringe (rinsed with lithium heparin) ON WET ICE.  
NOTE: Specimen should be drawn free of air, replace needle with cap, mix well and place on WET ICE. Transport immediately to laboratory. DO NOT REMOVE CAP BEFORE TESTING. TESTING MUST BE COMPLETED WITHIN 1 HOUR OF COLLECTION. Include oxygen therapy type, oxygen quantity (e.g., 2L,40%) and patient's temperature.

<table>
<thead>
<tr>
<th><strong>Blood Gases, Arterial Cord</strong></th>
<th>Panel Code: ACB</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Availability:</strong> St. John's, St. Joseph's, and Woodwinds Hospitals Only **</td>
<td></td>
</tr>
<tr>
<td>Base Excess, Cord Arterial, Calculated</td>
<td></td>
</tr>
<tr>
<td>HCO3, Cord Arterial</td>
<td></td>
</tr>
<tr>
<td>PCO2, Cord Arterial</td>
<td></td>
</tr>
<tr>
<td>pH Cord Arterial</td>
<td></td>
</tr>
<tr>
<td>PO2, Cord Arterial</td>
<td></td>
</tr>
</tbody>
</table>

**CPT Codes(s):** 82803  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 1 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Syringe (Heparin)  
SUBMIT: 1.0 mL whole blood in a syringe (rinsed with lithium heparin) ON WET ICE.  
NOTE: Specimen should be drawn free of air, immediately corked, mixed well, and placed on wet ice. Transport immediately to laboratory. DO NOT REMOVE CORK BEFORE TESTING. TESTING MUST BE COMPLETED WITHIN 1 HOUR OF COLLECTION. This test is performed on HealthEast registered patients only.
Blood Gases, Capillary

Panel Code: ABC

- Base Excess, Papillary, Calculated
- HCO3, Capillary, Calculated
- O2 Saturation, oxyhemoglobin
- PCO2, Capillary
- pH, Capillary
- PO2, Capillary

CPT Codes(s): 82805
Test Performed at: HealthEast Medical Laboratory

Analytic Time: 1 hours
Days Test Performed: All

Specimen:
- COLLECT: Capillary Tube, Balanced Heparin
- SUBMIT: 230 uL whole blood in a capillary tube (balanced heparin), cap each end of tube with rubber caps ON WET ICE. Specimen should be drawn free of air, capped, mixed well and placed on wet ice. Transport immediately to laboratory. TESTING MUST BE COMPLETED WITHIN 1 HOUR OF COLLECTION. Include oxygen therapy type, oxygen quantity (e.g. 2L, 40%) and patient's temperature.

Blood Gases, Venous

Panel Code: VBG

- Base Excess, Calculated
- Bicarbonate, Calculated
- O2 Saturation, oxyhemoglobin
- PCO2
- pH
- PO2

CPT Codes(s): 82805
Test Performed at: HealthEast Medical Laboratory

Analytic Time: 1 hours
Days Test Performed: All

Specimen:
- COLLECT: Green Top (Li Hep) *On Ice*
- SUBMIT: 4 mL whole blood ON WET ICE.
- NOTE: Specimen should be drawn free of air, mixed well, and placed on wet ice. Transport immediately to laboratory. DO NOT REMOVE CORK BEFORE TESTING. TESTING MUST BE COMPLETED WITHIN 1 HOUR OF COLLECTION.
### Blood Gases, Venous Cord

**Panel Code: VCB**

**Availability:** St. John's, St. Joseph's, & Woodwinds Hospital Inpatient Only **

- Base Excess, Calculated
- Bicarbonate, Calculated (HC03)
- PCO2
- pH
- PO2

**CPT Codes(s):** 82803  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 1 hours  
**Days Test Performed:** All

**Specimen:**
- **COLLECT:** Syringe (Heparin)  
- **SUBMIT:** 1.0 mL whole blood in a syringe (rinsed with lithium heparin) ON WET ICE.  
- **NOTE:** Specimen should be drawn free of air, immediately corked, mixed well, and placed on wet ice. Transport immediately to laboratory. DO NOT REMOVE CORK BEFORE TESTING. TESTING MUST BE COMPLETED WITHIN 1 HOUR OF COLLECTION. This test is performed on HealthEast registered patients.

### BNP (B-type Natriuretic Peptide)

**Panel Code: BNP**

**CPT Codes(s):** 83880  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**
- **COLLECT:** Lavender Top (Plastic)  
- **SUBMIT:** 1 mL plasma FROZEN within 4 hours in a separate tube.  
- **UNACCEPTABLE:** Specimen at room temperature for >4 hours or specimen at refrigerated temperature for >24 hours. Markedly hemolyzed or specimen collected in glass container.

### Bordetella pertussis and Bordetella parapertussis, Molecular Detection, PCR

**Panel Code: PPC**  

**CPT Codes(s):** 87798 x 2  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sun

**Specimen:**
- **COLLECT:** Charcoal CultureSwab Plus™  
- **SUBMIT:** NP minitip swab in charcoal CultureSwabPlus™ or nasal aspirate/wash in a sterile screw top container REFRIGERATED or ROOM TEMP up to 24 hours. Minimum 0.5 mL.  
- **UNACCEPTABLE:** Specimens other than NP (Throat or nose specimens). Specimens collected on calcium alginate, cotton-tipped swabs, in gel media or in viral media. Frozen swab. CultureSwab™ without charcoal.  
- **NOTE:** Positives will be reported to MDH.
**Breast Carcinoma-Associated Antigen (CA 27.29)**

**Panel Code:** CAB

**CPT Codes(s):** 86300  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 0.5 mL serum FROZEN in a separate tube. Centrifuge within 2 hours of collection.  
May require ABN form.  
UNACCEPTABLE: Markedly hemolyzed specimen.

---

**BUN**

**Panel Code:** BUN

**CPT Codes(s):** 84520  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: IP Green Top / OP Red Top  
SUBMIT: 1 mL serum REFRIGERATED.

---

**Buprenorphine Confirmation, Urine**

**Panel Code:** CBU

**CPT Codes(s):** 80348  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 96 hours (4 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: Random Urine in Screw-Top container  
SUBMIT: 5 mL aliquot of random urine collection (no preservative), REFRIGERATED.

---

**Buprenorphine, Urine**

**Panel Code:** BUP

**CPT Codes(s):** 80301, G0431  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Random Urine in a Screw-Top Container  
SUBMIT: 20 mL aliquot of random urine collection (no preservative) REFRIGERATED up to 5 days. Cap IMMEDIATELY after collection.  
**NOTE:** This test is not intended for medico-legal purposes. This test is for screening only. Confirmations are available upon request at an additional charge.
C. difficile Toxigenic by PCR

Panel Code: CDI

CPT Codes(s): 87493
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: Stool in Sterile Screw-top Container
SUBMIT: Fresh liquid or soft stool in sterile screw-top container. REFRIGERATED up to 5 days. Also acceptable-stool in Cary-Blair-based transport media or FROZEN stool.
UNACCEPTABLE: Rectal swabs, formed stool, not refrigerated or frozen within acceptable time limits stated above. Repeat testing within 7 days will be rejected.
NOTE: Repeat testing for cure is not advised.
NOTE: Test is performed between 7 AM-3:30 PM only.

C1 Esterase (C1ES) Inhibitor Antigen

Panel Code: C1S

CPT Codes(s): 83883
Test Performed at: Mayo Medical Laboratories
Analytic Time: 48 hours (2 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
COLLECT: Red Top
SUBMIT: 1 mL serum FROZEN in separate tube.
UNACCEPTABLE: If the specimen is lipemic, recollect after a 12-14 hour fast.

C1 Esterase Inhibitor, Functional Assay

Panel Code: FNC

CPT Codes(s): 83520
Test Performed at: Mayo Medical Laboratories
Analytic Time: 120 hours (5 days)
Days Test Performed: Varies

Specimen:
COLLECT: Red Top on WET ICE
SUBMIT: 1 mL serum FROZEN immediately in a separate tube.
UNACCEPTABLE: Specimen not received frozen.

CA 125 (Cancer Antigen 125)

Panel Code: C12

CPT Codes(s): 86304
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: Tue Thu

Specimen:
COLLECT: Red Top
SUBMIT: 1 mL serum REFRIGERATED. Freeze after 7 days. May require ABN form.
UNACCEPTABLE: Hemolyzed or lipemic specimen.
NOTE: This test is not useful as a screening assay for cancer detection in the normal population. Normal levels do not rule out recurrence of ovarian carcinoma.
CA 15-3 (Cancer Antigen 15-3)  Panel Code: C15

CPT Codes(s): 86300
Test Performed at: Mayo Medical Laboratories
Analytic Time: 72 hours (3 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
COLLECT: Red Top
SUBMIT: 1 mL serum REFRIGERATED. May require ABN form.
UNACCEPTABLE: Markedly hemolyzed specimen.
NOTE: 12 hours before draw, do not take multivitamins or dietary supplements containing biotin or vitamin B7.

CA 19-9 (Carbohydrate Antigen 19-9)  Panel Code: CGI

CPT Codes(s): 86301
Test Performed at: Mayo Medical Laboratories
Analytic Time: 72 hours (3 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
COLLECT: Red Top
SUBMIT: 0.6 mL serum REFRIGERATED. Centrifuge and aliquot within 2 hours of collection. May require ABN form.
UNACCEPTABLE: Markedly hemolyzed specimen.
NOTE: 12 hours before draw, do not take multivitamins or dietary supplements containing biotin or vitamin B7.

Caffeine  Panel Code: LAB3024

CPT Codes(s): 80155
Test Performed at: Mayo Medical Laboratories
Analytic Time: 24 hours (1 day)
Days Test Performed: All

Specimen:
COLLECT: Plain Red Top
SUBMIT: 0.5 mL serum REFRIGERATED (minimum volume: 0.3 mL).
UNACCEPTABLE: Specimen markedly hemolyzed.
NOTE: Centrifuge and remove serum from cells within 2 hours of draw.

Calcitonin  Panel Code: CTN

CPT Codes(s): 82308
Test Performed at: Mayo Medical Laboratories
Analytic Time: 72 hours (3 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
COLLECT: Red Top on Wet Ice
SUBMIT: 1 mL serum FROZEN immediately in a separate tube.
UNACCEPTABLE: Markedly hemolyzed specimen or not received frozen.
**Calcium**

<table>
<thead>
<tr>
<th>Panel Code: CA</th>
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</thead>
<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 82310</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> HealthEast Medical Laboratory</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 4 hours</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> All</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: IP Green Top / OP Red Top
- SUBMIT: 1 mL serum REFRIGERATED.

**Calcium, 24 Hour Urine**

<table>
<thead>
<tr>
<th>Panel Code: CAU</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 82340</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> HealthEast Medical Laboratory</td>
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<tr>
<td><strong>Analytic Time:</strong> 4 hours</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> All</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: 24 Hour Urine (HCL Preservative)
- SUBMIT: 10 mL aliquot of 24 hour urine collection (preserved with 25 mL of 6N HCl at start of collection) REFRIGERATED. Adjust pH to 2.0.
- NOTE: Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions and alternate preservatives.

**Calcium, Ionized, Measured**

<table>
<thead>
<tr>
<th>Panel Code: ICA</th>
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</thead>
<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 82330</td>
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<tr>
<td><strong>Test Performed at:</strong> HealthEast Medical Laboratory</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 4 hours</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> All</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: Green Top, WB on Wet Ice<4hr
- SUBMIT: A full green top (Lithium Heparin) tube Whole Blood REFRIGERATED on WET ICE or 0.3 mL whole blood from children in SmoothE Syringe on WET ICE.
- Unacceptable: SST tube, frozen specimen, centrifuged specimen, greater than 4 hours old refrigerated (on wet ice) specimen or greater than 15 minutes at room temperature.
- Note: DO NOT REMOVE CORK. A full Lithium heparin (whole blood) green top tube is acceptable for 15 minutes at room temperature or 4 hours refrigerated (on wet ice). SmoothE syringe should be drawn free of air, immediately corked, mixed well and placed on wet ice. SmoothE syringe must arrive within 4 hours.
Calcium, Random Urine

**Panel Code:** UCA

**CPT Codes(s):** 82310

**Test Performed at:** HealthEast Medical Laboratory

**Analytic Time:** 4 hours

**Days Test Performed:** All

**Specimen:**
- COLLECT: Random Urine in a Screw-Top Container
- SUBMIT: 10 mL aliquot of random urine collection (no preservative) REFRIGERATED within 4 hours of collection. Adjust pH to 2.0.

---

Calcium/Creatinine Ratio, Urine

**Panel Code:** CCR

**CPT Codes(s):** 82310, 82570

**Test Performed at:** HealthEast Medical Laboratory

**Analytic Time:** 4 hours

**Days Test Performed:** All

**Specimen:**
- COLLECT: Random Urine in a Screw-Top Container
- SUBMIT: 10 mL aliquot of random urine collection (no preservative) REFRIGERATED within 4 hours of collection.

---

California Virus (La Crosse) Antibodies, IgG and IgM

**Panel Code:** CLA

**CPT Codes(s):** 86651 x2

**Test Performed at:** Mayo Medical Laboratories

**Analytic Time:** 96 hours (4 days)

**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 0.5 mL serum REFRIGERATED.
- UNACCEPTABLE: Markedly hemolyzed or lipemic specimen.

---

Calprotectin

**Panel Code:** LAB3062

**CPT Codes(s):** 83993

**Test Performed at:** Mayo Medical Laboratories

**Analytic Time:** 120 hours (5 days)

**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- COLLECT: Screw-Top Container
- SUBMIT: 5 g stool in a separate screw-top container, FROZEN within 18 hours of collection.
Carbamazepine (Tegretol®)

Panel Code: CAR

**COLLECT:** IP Green Top / OP Plain Red Top  
**SUBMIT:** 1 mL serum REFRIGERATED up to 7 days.  
**UNACCEPTABLE:** Specimen collected in an SST® tube.

**Specimen:**

**Days Test Performed:** All  
**Analytic Time:** 4 hours  
**Test Performed at:** HealthEast Medical Laboratory

**CPT Codes(s):** 80156

---

Carbamazepine-10,11-Epoxide

Panel Code: POX

**COLLECT:** Plain Red Top  
**SUBMIT:** 2 mL serum REFRIGERATED.  
**UNACCEPTABLE:** Specimen collected in an SST® tube.  
**NOTE:** Trough levels are most reproducible.

**Specimen:**

**Days Test Performed:** Mon Tue Wed Thu Fri Sat  
**Analytic Time:** 48 hours (2 days)  
**Test Performed at:** MedTox Laboratory, Inc

**CPT Codes(s):** 80156

---

Carbon Dioxide (CO2)

Panel Code: CO2

**COLLECT:** IP Green Top / OP Red Top  
**SUBMIT:** 1 mL serum REFRIGERATED. Minimize exposure to room air. Immediately recap serum aliquot tube after separation from cells.

**Specimen:**

**Days Test Performed:** All  
**Analytic Time:** 4 hours  
**Test Performed at:** HealthEast Medical Laboratory

**CPT Codes(s):** 82374

---

Carboxyhemoglobin

Panel Code: CO

**COLLECT:** Green Top *On Wet Ice*  
**SUBMIT:** 4 mL whole blood on wet ice REFRIGERATED. Specimen must arrive within 72 hours of collection.  
**NOTE:** Tube should be completely filled to prevent loss of volatile compound into headspace.  
**DO NOT REMOVE CORK BEFORE TESTING.**  
* Alternative specimen: Lavender Top

**Specimen:**

**Days Test Performed:** All  
**Analytic Time:** 4 hours  
**Test Performed at:** HealthEast Medical Laboratory

**CPT Codes(s):** 82375
**Cardiolipin (Phospholipid) Antibodies, IgA**

**Panel Code: ACA**

- **CPT Codes(s):** 86147
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 120 hours (5 days)
- **Days Test Performed:** Mon Wed Fri

**Specimen:**
- **COLLECT:** Red Top
- **SUBMIT:** 0.5 mL serum REFRIGERATED.
- **UNACCEPTABLE:** Markedly hemolyzed or lipemic specimen.
- **NOTE:** The screening test for phospholipid antibodies is the Cardiolipin Antibodies IgG & IgM.

---

**Carnitine, Total and Free**

**Panel Code: CRN**

- **CPT Codes(s):** 82379
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 120 hours (5 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** Red Top
- **SUBMIT:** 0.5 mL serum FROZEN in a separate tube.

---

**Catecholamine Fractionation, Free, 24 Hour Urine**

**Panel Code: CTU**

- **Dopamine**
- **Epinephrine**
- **Norepinephrine**

- **CPT Codes(s):** 82384
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 96 hours (4 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**
- **COLLECT:** 24 Hour Urine (Acetic Acid)
- **SUBMIT:** 10 mL aliquot (24 hour collection preserved with 25 mL 50% acetic acid at start of collection) REFRIGERATED during collection. The pH must be between 2 and 4.
- **UNACCEPTABLE:** Specimen collected without preservative.
- **NOTE:** Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions. Assay is of most value when collected during a hypertensive episode. Discontinue drugs that affect catecholamine metabolism for 1 week. Withdrawal from illegal drugs will cause an elevation.
Catecholamine Fractionation, Free, Plasma

**Panel Code: CAP**

- **Dopamine**
- **Epinephrine**
- **Norepinephrine**

**CPT Codes(s):** 82384  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 120 hours (5 days)  
**Days Test Performed:** Mon Tue Thu Fri

**Specimen:**  
COLLECT: 2 Prechilled Catecholamine Tubes  
SUBMIT: 4 mL plasma (EDTA-Na metabisulfite) FROZEN immediately in a separate tube.  
Specimen must be collected from indwelling catheter.  
UNACCEPTABLE: Specimen not collected through indwelling catheter. Markedly hemolyzed specimen. Suggest Metanephrines, plasma as a substitute.  
NOTE: Discontinue drugs that release epinephrine, norepinephrine or dopamine. No tobacco, caffeine or food for 4 hours. Insert indwelling catheter. Patient must rest 30 minutes. Waste 3.0 mL of blood, then draw 20 mL blood, place in prechilled tubes.

CCP Antibodies

**Panel Code: ACP**

**CPT Codes(s):** 86200  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** Tue Thu

**Specimen:**  
COLLECT: RED TOP  
SUBMIT: 1 mL serum REFRIGERATED up to 7 days then FREEZE.  
UNACCEPTABLE: Room temperature storage for greater than 22 hours.

CEA (Carcinoembryonic Antigen)

**Panel Code: CEA**

**CPT Codes(s):** 82378  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED up to 7 days. May require ABN form.  
UNACCEPTABLE: Markedly hemolyzed specimen.
**Celiac (Gluten) Antibody Panel**

- Gliadin IgA
- Gliadin IgG
- Tissue Transglutaminase IgA
- Tissue Transglutaminase IgG
- Total IgA

**CPT Codes(s):** 82784, 83516 x4  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 120 hours (5 days)  
**Days Test Performed:** Mon Thu

**Specimen:**  
**COLLECT:** Red Top  
**SUBMIT:** 3 mL serum REFRIGERATED; FROZEN if not submitted within 48 hours. Pediatric minimum volume is 1.5 mL  
**UNACCEPTABLE:** Specimens > 48 hours old if not frozen. Markedly hemolyzed or lipemic specimens.

**Cell-Bound Platelet Autoantibody Screen, Blood**

**CPT Codes(s):** 86023  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**  
**COLLECT:** 4 Lavender Tops-Whole Blood  
**SUBMIT:** 20 mL whole blood AMBIENT.  
**UNACCEPTABLE:** Hemolyzed, clotted, centrifuged, refrigerated, frozen or specimen older than 48 hours.  
**NOTE:** The patient must have a platelet count >10000 mm(3). Specimen must arrive within 48 hours. Draw specimen Mon-Thurs only and not before a holiday.

**Centromere Antibodies, IgG**

**CPT Codes(s):** 83516  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**  
**COLLECT:** Red Top  
**SUBMIT:** 0.5 mL serum REFRIGERATED.  
**UNACCEPTABLE:** Markedly hemolyzed or lipemic specimens.
Ceruloplasmin

Panel Code: CPN

**CPT Codes(s):** 82390  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed, lipemic or icteric specimen.

Chlamydia Serology

Panel Code: CLM

Chlamydia pneumoniae IgG & IgM  
Chlamydia psittaci IgG & IgM  
Chlamydia trachomatis IgG & IgM

**CPT Codes(s):** 86631 x 3, 86632 x3  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 0.5 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed or markedly lipemic specimen.  
NOTE: Acute and convalescent testing is recommended.

Chlamydia trachomatis & Neisseria gonorrhoeae, Amplified Detection

Panel Code: CGA

**CPT Codes(s):** 87491, 87591  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: APTIMA Swab OR First-catch Urine  
SUBMIT: APTIMA® swab in APTIMA® Swab Specimen Transport Tube OR 2 mL urine in APTIMA® Urine Specimen Transport Tube REFRIGERATED.  
UNACCEPTABLE: Large cleaning swab, eye or rectal source, and urine specimen >30 mL or not transferred to APTIMA® transport tube within 24 hours. Non-urogenital sources.  
NOTE: Specimen source is REQUIRED. This test should not be used for the diagnosis of genital tract infections in prepubertal children for possible sexual abuse. Do not use spermicidal or feminine powder sprays prior to collection. The performance of this assay has not been evaluated in adolescents less than 16 years of age.
Chlamydia trachomatis Amplified by RNA, non-genital

**Panel Code:** CNA

**CPT Codes(s):** 87491  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**
- **COLLECT:** APTIMA® Collection Unisex Swab
- **SUBMIT:** Aptima® swab of Oral/Throat or ocular (corneal/conjunctiva) or rectal/anal source  
  REFRIGERATED. Peritoneal fluid 1 mL - Aptima® specimen transfer tube.
- **UNACCEPTABLE:** Sources other than those listed above and/or specimens not collected using the Aptima® Collection Unisex Swab.
- **NOTE:** In settings with a low prevalence of sexually transmitted disease, or which a patient's clinical signs and symptoms or risk factors are inconsistent with chlamydial urogenital infection, positive results should be carefully assessed and the patient retested by other methods, if appropriate. This test is used for specimens that are not FDA approved for this assay.

Chlamydia trachomatis, Amplified Detection

**Panel Code:** CHA

**CPT Codes(s):** 87491  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** APTIMA® Swab or First-Catch Urine
- **SUBMIT:** APTIMA® swab in APTIMA® Swab Specimen Transport Tube OR 2 mL urine in APTIMA® Urine Specimen Transport Tube REFRIGERATED. See the Specimen Collection section of this manual for collection instructions.
- **UNACCEPTABLE:** Large cleaning swab, eye or rectal source, and urine specimen >30 mL or not transferred to APTIMA® transport tube within 24 hours. Non-urogenital sources.
- **NOTE:** Specimen source is REQUIRED. This test should not be used for the diagnosis of genital tract infections in prepubertal children for possible sexual abuse. Do not use spermicidal or feminine powder sprays prior to collection. The performance of this assay has not been evaluated in adolescents less than 16 years of age.

Chloride

**Panel Code:** CL

**CPT Codes(s):** 82435  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**
- **COLLECT:** IP Green Top / OP Red Top
- **SUBMIT:** 1 mL serum REFRIGERATED.
Panel Code: CLU

**Chloride, 24 Hour Urine**

**CPT Codes(s):** 82436  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All  

**Specimen:**  
COLLECT: 24 Hour Urine (No Preservative)  
SUBMIT: 10 mL aliquot of 24 hour urine collection (no preservative) REFRIGERATED.  
NOTE: Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions.

Panel Code: UCL

**Chloride, Random Urine**

**CPT Codes(s):** 82436  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All  

**Specimen:**  
COLLECT: Random Urine in a Screw-Top Container  
SUBMIT: 10 mL aliquot of random urine collection (no preservative) REFRIGERATED.

Panel Code: CHF

**Cholesterol, Body Fluid**

**CPT Codes(s):** 82465  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All  

**Specimen:**  
COLLECT: Body Fluid in a Screw-Top Container  
SUBMIT: 1 mL body fluid REFRIGERATED.  
NOTE: Specimen source is REQUIRED.

Panel Code: CHO

**Cholesterol, Total**

**CPT Codes(s):** 82465  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All  

**Specimen:**  
COLLECT: IP Green Top / OP Red Top  
SUBMIT: 1 mL serum REFRIGERATED. May require ABN form.  
UNACCEPTABLE: Markedly hemolyzed specimen.
Chromogranin A

Panel Code: CRA

CPT Codes(s): 86316
Test Performed at: Mayo Medical Laboratories
Analytic Time: 72 hours (3 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Red Top, Serum, FROZEN immediately
SUBMIT: 0.5 mL serum FROZEN immediately in a separate tube.
UNACCEPTABLE: Specimen not received frozen.

Chromosome Analysis, Amniotic Fluid

Panel Code: CAM

CPT Codes(s): 88235, 88269, 88280, 88285
Test Performed at: Hennepin County Medical Center
Analytic Time: 240 hours (10 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Amniotic Fluid in Screw-Top Containers
SUBMIT: 20 mL amniotic fluid ROOM TEMPERATURE. Preferred gestational age, 14-16 weeks.
NOTE: Specimen must arrive at HML by 2 P.M., Monday-Friday. Must include diagnosis, family history and other pertinent information.

Chromosome Analysis, Blood

Panel Code: CBD

CPT Codes(s): 88230, 88262
Test Performed at: Hennepin County Medical Center
Analytic Time: 336 hours (14 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Sodium Heparin Tube
SUBMIT: 5 mL (pediatric-2 mL) whole blood ROOM TEMPERATURE. Specimen must arrive by 2 P.M., Monday-Friday.
UNACCEPTABLE: LITHIUM Heparin green top tube, refrigerated, clotted or centrifuged specimens.
NOTE: Must include diagnosis, family history and other pertinent information.
Chromosome Analysis, Bone Marrow
Panel Code: CBM

**CPT Codes(s):** 88237, 88264, 88280  
**Test Performed at:** Hennepin County Medical Center  
**Analytic Time:** 240 hours (10 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: Sodium Heparin Tube  
SUBMIT: 2-5 mL bone marrow anticoagulated with SODIUM Heparin ROOM TEMPERATURE.  
Specimen must arrive by 2 P.M., Monday-Friday.  
UNACCEPTABLE: LITHIUM Heparin green top tube or refrigerated specimen.  
NOTE: Must include diagnosis, family history and other pertinent information.

Citrate, 24 Hour Urine
Panel Code: CIU

**CPT Codes(s):** 82507  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: 24 Hour Urine (No Preservative)  
SUBMIT: 10 mL aliquot of a 24 hour collection (specimen must be refrigerated at all times).  
UNACCEPTABLE: Specimen not kept refrigerated during the collection time or during transport.  
NOTE: Total volume (mL) REQUIRED.

CK MB
Panel Code: MB

**CPT Codes(s):** 82553  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: IP Green / OP Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed specimen.

CK, Total
Panel Code: CK

**CPT Codes(s):** 82550  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: IP Green Top / OP Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed specimen.
### Clomipramine (Anafranil®)

**Panel Code**: CPM  
Desmethylclomipramine  

**CPT Codes(s)**: 80335  
**Test Performed at**: MedTox Laboratory, Inc  
**Analytic Time**: 72 hours (3 days)  
**Days Test Performed**: Varies  

**Specimen**:  
- **COLLECT**: Plain Red Top  
- **SUBMIT**: 2 mL serum REFRIGERATED.  
- **UNACCEPTABLE**: Specimen collected in an SST® tube.  
- **NOTE**: Trough levels are most reproducible.  
  * Days performed varies

### Clonazepam and 7-Aminoclonazepam

**Panel Code**: LAB3063  

**CPT Codes(s)**: 80346  
**Test Performed at**: Mayo Medical Laboratories  
**Analytic Time**: 72 hours (3 days)  
**Days Test Performed**: Tues Thu  

**Specimen**:  
- **COLLECT**: Plain Red Top  
- **SUBMIT**: 1.2 mL serum REFRIGERATED. Serum must be separated from cells within 2 hours of draw.  
- **UNACCEPTABLE**: Specimen collected in an SST® tube.  
- **NOTE**: Draw specimen before next scheduled dose (minimum 12 hours after last dose). Therapeutic ranges are for specimens drawn at trough timing.

### Clozapine

**Panel Code**: CZP  
Norclazapine  

**CPT Codes(s)**: 80159  
**Test Performed at**: Mayo Medical Laboratories  
**Analytic Time**: 96 hours (4 days)  
**Days Test Performed**: Mon Tue Wed Thu Fri  

**Specimen**:  
- **COLLECT**: Plain Red Top  
- **SUBMIT**: 1 mL serum REFRIGERATED.  
- **UNACCEPTABLE**: Specimen collected in an SST® tube.  
- **NOTE**: Recommended collection is 12 hours post dose (trough).
**CMV Antibodies, IgG and IgM**

**Panel Code: CMV**

- **CPT Codes(s):** 86644, 86645
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 72 hours (3 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**
- **COLLECT:** Red Top
- **SUBMIT:** 1.0 mL serum REFRIGERATED.
- **UNACCEPTABLE:** Markedly hemolyzed, lipemic or icteric specimen.

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**CMV by PCR**

**Panel Code: CVP**

- **CPT Codes(s):** 87496
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 72 hours (3 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**
- **COLLECT:** Sterile Screw-Top Container
- **SUBMIT:** 0.5 mL CSF OR 2 mL Urine OR 0.5 mL Fluid OR 1.5 mL Bronch Wash in a sterile screw-top container OR throat, genital, dermal, eye, nasal, saliva swab in culture transport OR tissue 1.0 - 2.0 mL sterile saline or M5 media REFRIGERATED.
- **UNACCEPTABLE:** Less than 0.3 mL CSF or Urine, Plasma, whole blood or serum. Calcium alginate, wood or gel swab. Specimen at room temperature.
- **NOTE:** Specimen source is REQUIRED.

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**CMV DNA, Quantitative, PCR**

**Panel Code: CVQ**

- **CPT Codes(s):** 87497
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 72 hours (3 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**
- **COLLECT:** LAVx2 FRZplasma/w6hr
- **SUBMIT:** 1.5 mL plasma FROZEN. Spin down and remove plasma from cells within 6 hours of draw. Freeze plasma specimen immediately, and ship specimen frozen on dry ice. If shipment will be delayed for > 24 hours, freeze plasma specimen at -70°C (up to 21 days).
- **UNACCEPTABLE:** Specimen collected in a non-EDTA tube. Serum specimen. Specimen not frozen within 6 hours.
Cocaine and metabolite Confirmation, Urine

Panel Code: CCO

- Benzoylcegonine
- Cocaine

**CPT Codes(s):** 80353  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 120 hours (5 days)  
**Days Test Performed:** Mon Tue Wed Thu Sun

**Specimen:**
- COLLECT: Random Urine in a Screw-Top Container  
- SUBMIT: 20 mL aliquot random urine collection (no preservative), REFRIGERATED. (5 mL minimum)

Coccidioides Antibodies

Panel Code: CCC

**CPT Codes(s):** 86635 x3  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 168 hours (7 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- COLLECT: Red Top  
- SUBMIT: 2 mL serum REFRIGERATED.  
- UNACCEPTABLE: Markedly hemolyzed or lipemic specimen

Cold Agglutinin Cascade

Panel Code: COA

**CPT Codes(s):** 86156  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sun

**Specimen:**
- COLLECT: Plain Red Top on warm pack  
- SUBMIT: 4 mL serum REFRIGERATED.  
- UNACCEPTABLE: Specimen collected in an SST® tube.  
- NOTE: Clot red top for 30 minutes at 37°C. Centrifuge, remove serum ASAP. If screen is positive, results are titrated at no additional charge (CPT86157). For Mycoplasma pneumoniae, order panel MYC (LAB656).

Complement, C'3

Panel Code: C3

**CPT Codes(s):** 86160  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**
- COLLECT: IP Green Top / OP Plain Red Top  
- SUBMIT: 1 mL serum REFRIGERATED up to 8 days.
Complement, C'4

Panel Code: C4

CPT Codes(s): 86160
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
- COLLECT: IP Green Top / OP Plain Red Top
- SUBMIT: 1 mL serum REFRIGERATED up to 2 days.
- UNACCEPTABLE: Markedly hemolyzed specimens.

Complement, Total

Panel Code: C50

CPT Codes(s): 86162
Test Performed at: Mayo Medical Laboratories
Analytic Time: 48 hours (2 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
- COLLECT: Plain Red Top on WET ICE
- SUBMIT: 1 mL serum FROZEN immediately in a separate tube.
- UNACCEPTABLE: Specimen not received frozen. Specimen collected in an SST® tube.
- Markedly hemolyzed specimen.
- NOTE: Keep red top on ice until centrifuged.
**Comprehensive Metabolic Panel**

Panel Code: CMP

- Albumin
- Albumin/Globulin Ratio, Calc
- Alkaline Phosphatase
- ALT (SGPT)
- Anion Gap, Calc
- AST (SGOT)
- Bilirubin, Total
- BUN
- Calcium
- Chloride
- CO2, Total
- Creatinine
- Glomerular Filtration Rate, estimated (eGFR)
- Glucose
- Potassium
- Protein, Total
- Sodium

**CPT Codes(s):** 80053  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**
- COLLECT: IP Green Top / OP Red Top  
- SUBMIT: 1 mL serum REFRIGERATED. Keep out of light as much as possible. May require ABN form. Pediatric minimum volume is 280 uL.  
- UNACCEPTABLE: Hemolyzed specimen.  
- NOTE: Centrifuge and separate serum from cells within 4 hours of draw.

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**Copper, 24 Hour Urine**

Panel Code: CUU

**CPT Codes(s):** 82525  
**Test Performed at:** NON-INTERFACED SEND OUT LABS  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- COLLECT: 24 Hour Urine in a Metal-Free Container  
- SUBMIT: 10 mL aliquot of 24 hour urine collection (metal-free) REFRIGERATED in a metal-free container.  
- UNACCEPTABLE: Specimen not received in a metal-free container.  
- NOTE: Total volume (mL) REQUIRED.
Copper, Serum  

Panel Code: SCU

CPT Codes(s): 82525  
Test Performed at: Mayo Medical Laboratories  
Analytic Time: 72 hours (3 days)  
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:  
COLLECT: Navy Blue Top - (No Additive) Metal Free  
SUBMIT: 1 mL serum REFRIGERATED in a metal-free tube.  
UNACCEPTABLE: Specimen not received in a metal-free tube or markedly icteric.  
NOTE: Draw blood (Navy-no additive) clot 30 min., centrifuge, pour serum(liquid) into a metal-free transfer tube avoiding the transfer of cellular components.

Cord Blood Evaluation  

Panel Code: CRG

CPT Codes(s): 86880, 86900, 86901  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 4 hours  
Days Test Performed: All

Specimen:  
COLLECT: EDTA-Lavender Top  
SUBMIT: 1 mL Cord Blood REFRIGERATED.

Cortisol  

Panel Code: CTL

CPT Codes(s): 82533  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 4 hours  
Days Test Performed: All

Specimen:  
COLLECT: IP Green Top/OP Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
NOTE: Exact time of collection is REQUIRED.

Cortisol, 24 Hour Urine  

Panel Code: COU

CPT Codes(s): 82530  
Test Performed at: Mayo Medical Laboratories  
Analytic Time: 120 hours (5 days)  
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:  
COLLECT: 24 Hour Urine (Boric Acid)  
SUBMIT: 5 mL aliquot of 24 hour collection (preserved with 10 g Boric Acid) REFRIGERATED during collection.  
NOTE: Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions and alternate preservatives.
### Cortisol, Post-Dexamethasone

**Panel Code:** DXP

**CPT Codes(s):** 82533  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: IP Green / OP Red (Fasting)  
SUBMIT: 1 mL serum REFRIGERATED.  
NOTE: Patient is drawn at approximately 2100 (9 P.M.) on the first day of the test for a pre-dexamethasone cortisol level. At bedtime the patient is given 1.0 mg of dexamethasone and a sedative orally, per physician's orders. Patient's sleep should not be interrupted during the night. On the second day of the test, the patient is drawn fasting for a postdexamethasone cortisol level. Patient may eat after sample is drawn. **Date and Time of Dose are required.**

### Cortisol, Pre-Dexamethasone

**Panel Code:** PDX

**CPT Codes(s):** 82533  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: IP Green / OP Red (9 P.M.)  
SUBMIT: 1 mL serum REFRIGERATED.  
NOTE: Patient is drawn at approximately 2100 (9 P.M.) on the first day of the test for a pre-dexamethasone cortisol level. At bedtime the patient is given 1.0 mg of dexamethasone and a sedative orally, per physician's orders. Patient's sleep should not be interrupted during the night. On the second day of the test, the patient is drawn fasting for a postdexamethasone cortisol level. Patient may eat after sample is drawn. **Date and Time of Dose are required.**

### Cortisol, Salivary

**Panel Code:** SLC

**CPT Codes(s):** 82533  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 96 hours (4 days)  
**Days Test Performed:** Mon Wed Fri

**Specimen:**  
COLLECT: Salivette®  
SUBMIT: Saliva collected in a SARSTEDT Salivette® REFRIGERATED.  
NOTE: Do not brush teeth, eat or drink for 15 minutes before collecting. Remove cap, tip swab into mouth. Roll swab in mouth for 2 minutes. Place swab in container without touching. Preferred time of collection is 11 PM to midnight. Reference ranges also available for 7-9 AM and 3-5 PM. **DATE AND TIME OF COLLECTITON ARE REQUIRED.**
Cosyntropin Stimulation

**Panel Code:** SAC

**CPT Codes(s):** 80400, 82533  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed: All**

**Specimen:**
- **COLLECT:** IP Green top/OP Red Top  
- **SUBMIT:** 1 mL serum REFRIGERATED, each collection in a separate tube.  
**NOTE:** 1. Blood is drawn for a pre-dose cortisol level within 1 hour of giving injection.  2. Give 0.25 mg of dose cortrosyn. Dose is IM or IV per physician orders. Exact dose time required. 3. Post-dose cortisol levels are drawn 30 AND 60 minutes after the cortrosyn injection. **LABEL SPECIMENS WITH EXACT TIME OF DRAW.**

**Coxsackie A Antibody**

**Panel Code:** CXA

**Coxsackie A Types 2,4,7,9,10 and 16**

**CPT Codes(s):** 86658 x6  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 216 hours (9 days)  
**Days Test Performed: Mon Tue Wed Thu Fri**

**Specimen:**
- **COLLECT:** Red Top  
- **SUBMIT:** 2 mL serum REFRIGERATED.  
- **UNACCEPTABLE:** Markedly hemolyzed specimen.

**Coxsackie B Antibody**

**Panel Code:** CXB

**Coxsackie B Types 1,2,3,4,5 and 6**

**CPT Codes(s):** 86658 x6  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 216 hours (9 days)  
**Days Test Performed: Mon Tue Wed Thu Fri**

**Specimen:**
- **COLLECT:** Red Top  
- **SUBMIT:** 2 mL serum REFRIGERATED.  
- **UNACCEPTABLE:** Markedly hemolyzed specimen.
C-peptide

Panel Code: CPT

CPT Codes(s):  84681
Test Performed at: Mayo Medical Laboratories
Analytic Time: 72 hours (3 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
COLLECT: Red Top (Fasting 8 hours)
SUBMIT: 0.5 mL serum FROZEN in a separate tube. Centrifuge and aliquot within 2 hours of collection.
UNACCEPTABLE: Markedly hemolyzed specimen.
NOTE: Patient fasting 8 hours. Twelve (12) hours before draw, do not take multivitamins or dietary supplements containing biotin or vitamin B7.

C-Reactive Protein

Panel Code: CRP

CPT Codes(s):  86140
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: IP Green Top / OP Red Top
SUBMIT: 0.5 mL serum REFRIGERATED. Pediatric minimum volume is 110 uL.

C-Reactive Protein, High Sensitivity (hs-CRP)

Panel Code: CHS

CPT Codes(s):  86141
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: IP Green Top / OP Red Top
SUBMIT: 0.5 mL serum REFRIGERATED.
NOTE: This test is recommended for cardiovascular risk assessment only.

Creatinine

Panel Code: CRE

Glomerular Filtration Rate, estimated (eGFR)

CPT Codes(s):  82565
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: IP Green Top / OP Red Top
SUBMIT: 1 mL serum REFRIGERATED.
UNACCEPTABLE: Markedly hemolyzed specimen.
Creatinine Clearance

Creatinine Clearance Calculation
Creatinine, Serum
Creatinine, Urine
Glomerular Filtration Rate, estimated (eGFR)

CPT Codes(s): 82575
Test Performed at: HealthEast Medical Laboratory

Analytic Time:
Days Test Performed: All

Specimen:
COLLECT: 24 Hr Urine (No Preservative) and Red Top
SUBMIT: 10 mL aliquot of 24 hr urine collection (no preservative) REFRIGERATED and 1 mL serum REFRIGERATED.
NOTE: Total volume (mL) and patient's height and weight are REQUIRED. Blood should be drawn within 48 hours of urine collection. See the Specimen Collection section of this manual for collection instructions and acceptable preservatives.

Creatinine, 24 Hour Urine

** AVAILABILITY: HML Client Reference Lab Only **

CPT Codes(s): 82570
Test Performed at: HealthEast Medical Laboratory

Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: 24 Hour Urine (No Preservative)
SUBMIT: 10 mL aliquot of 24 hour urine collection (no preservative) REFRIGERATED.
NOTE: Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions and acceptable preservatives. The CRU panel is not orderable for hospital inpatients.

Creatinine, Body Fluid

CPT Codes(s): 82570
Test Performed at: Mayo Medical Laboratories

Analytic Time: 48 hours (2 days)
Days Test Performed: All

Specimen:
COLLECT: Body Fluid in a Screw-Top Container
SUBMIT: 1 mL centrifuged body fluid REFRIGERATED. Minimum volume 0.5 mL.
UNACCEPTABLE: Specimen markedly hemolyzed.
NOTE: Specimen source is REQUIRED.
Creatinine, Random Urine

**Panel Code: UCR**

**CPT Codes(s):** 82570  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Random Urine in a Screw-Top Container  
SUBMIT: 10 mL aliquot of random urine collection (no preservative) REFRIGERATED.

Creatinine, Timed Urine (Non-24Hr)

**Panel Code: TCR**

**** AVAILABILITY: HML Client Reference Lab Only **

**CPT Codes(s):** 82570  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Timed Urine (No Preservative)  
SUBMIT: 10 mL aliquot of Timed Urine (Non-24 Hr) Collection (no preservative)  
UNACCEPTABLE: 24 Hour Urine Collections.  
NOTE: Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions and acceptable preservatives.

CRMP-5-IgG Western Blot

**Panel Code: CRM**

**CPT Codes(s):** 84182  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 120 hours (5 days)  
**Days Test Performed:** Mon Wed Fri

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 3 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed, lipemic or icteric specimen.  
NOTE: It is recommended that Paraneoplastic Autoantibody Evaluation be ordered in conjunction with this test if not previously performed. Western blot analysis is indicated when interfering nonorgan-specific or coexisting neuron-specific autoantibodies preclude unambiguous detection of CRMP-5-IgG, by indirect immunofluorescence assay, or when the immunofluorescence assay is negative in a patient whose neurological presentation suggests a CRMP-5-IgG-related syndrome.
Panel Code: CYG

Cryoglobulin and Cryofibrinogen Panel, Serum and Plasma, Cascade

CPT Codes(s): 82585, 82595
Test Performed at: Mayo Medical Laboratories
Analytic Time: 240 hours (10 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Lavender AND 2 Plain Red Top (at 37°C)
SUBMIT: 1 mL plasma AND 5 mL serum REFRIGERATED.
UNACCEPTABLE: Specimens not remaining at 37°C until separated from cells. Specimens collected in an SST® tube.
NOTE: After drawing, place specimens in container with warm water and then transfer to 37°C water bath ASAP. SPECIMENS MUST REMAIN AT 37°C FOR 1 HOUR. After separating serum and plasma from cells, the specimens should be refrigerated. If cryoglobulin is a result other than negative, immunofixation is performed at an additional charge (CPT: 86334) unless previously performed.

Panel Code: LAB3068

Cryptococcal Antigen Cascade

CPT Codes(s): 86403
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 2 hours
Days Test Performed: All

Specimen:
COLLECT: Spinal Fluid Screw-Top OR Plain Red Top
SUBMIT: 0.2 mL CSF OR 1.0 mL serum REFRIGERATED.
UNACCEPTABLE: Specimen collected in an SST® tube. Less than 0.1 mL specimen.
NOTE: If screen is positive, a titer will be performed and charged separately using CPT code 86406.

Panel Code: CRY

Cryptosporidium Detection, Stool

CPT Codes(s): 87015, 87272
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 8 hours
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Prototix™
SUBMIT: Walnut-sized portion of stool or 5.0 mL liquid stool in Prototix™ REFRIGERATED or ROOM TEMPERATURE OR walnut-sized portion of stool or 5.0 mL liquid stool in a clean screw-top container REFRIGERATED.
UNACCEPTABLE: Preserved stool more than 1 week old. Specimen in culture medium. Unpreserved stool more than 48 hours old.
NOTE: Positive results will be reported to MDH. This test also detects Giardia cysts. HML will notify the client and request an order for the result.
Cryptosporidium/Giardia Combo, Stool

**Panel Code:** CGC

**CPT Codes(s):** 87015, 87269, 87272  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 8 hours  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: Protofix™  
SUBMIT: Walnut-sized portion of stool or 5.0 mL liquid stool in Protofix™ REFRIGERATED OR walnut-sized portion of stool of 5.0 mL liquid stool in a clean screw-top container REFRIGERATED.  
UNACCEPTABLE: Preserved stool more than 1 week old. Specimen in culture medium. Unpreserved stool more than 48 hours old.  
NOTE: Positives will be reported to MDH.

Crystals, Body Fluid

**Panel Code:** JFC

**CPT Codes(s):** 89060  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Green Top, Red Top (no additive) or Sterile Container  
SUBMIT: 1 mL of synovial fluid REFRIGERATED. Specimen must arrive within 24 hours of collection.  
UNACCEPTABLE: Volumes less than 0.5 mL.

CSF Exam

**Panel Code:** CSE

**CPT Codes(s):** 82945, 84157, 89050  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Spinal Fluid in CSF Collection Tube  
SUBMIT: 4 mL spinal fluid ROOM TEMP: REFRIGERATED in not received within 2 hours of collection.  
NOTE: Clearly label which tests to perform on particular tubes. If WBC is greater than 5 cells/uL a differential will be performed and CPT code 89051, which carries a higher charge, will be substuted for the original 89050 CPT code.
### CSF, Cell Count

**Panel Code:** CSF

- **CPT Codes(s):** 89050
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- COLLECT: Spinal Fluid in CSF Collection Tube
- SUBMIT: 1 mL spinal fluid ROOM TEMP; REFRIGERATED if not received within 2 hours of collection.

### CSF, Differential

**Panel Code:** CDF

- **CPT Codes(s):** 89051
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- COLLECT: Spinal Fluid in CSF Collection Tube
- SUBMIT: 1 mL spinal fluid ROOM TEMP; REFRIGERATED if not received within 2 hours of collection.

### Culture and Gram Stain, Drainage

**Panel Code:** DRG

- **CPT Codes(s):** 87070, 87205
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 48 hours (2 days)
- **Days Test Performed:** All

**Specimen:**
- COLLECT: Needleless Syringe or CultureSwab™
- SUBMIT: Drainage material in needleless, capped syringe, sterile screw-top or swab of material in CultureSwab™.
- **UNACCEPTABLE:** Dry swab. Specimen older than 24 hours.
- **NOTE:** Specimen source is REQUIRED. Organisms grown on culture will be charged separately using CPT code 87077 for each organism reported. Susceptibility testing performed on reported organisms will be charged separately using CPT code 87186 for each susceptibility panel reported.
**Culture and Gram Stain, Surgical Site**

**Panel Code: ASW**

- **CPT Codes(s):** 87070, 87205
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 72 hours (3 days)
- **Days Test Performed:** All

**Specimen:**

- **COLLECT:** Eswab transport
- **SUBMIT:** Swab in Eswab transport REFRIGERATED.
- **UNACCEPTABLE:** Dry swab. Specimen older than 24 hours.

**NOTE:** Specimen source is REQUIRED. Organisms grown on culture will be charged separately using CPT code 87077 or 87106 for each organism reported. Susceptibility testing performed on reported organisms will be charged separately using CPT code 87186 for each susceptibility panel reported.

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**Culture and Stain, AFB, Respiratory Specimen**

**Panel Code: RTB**

- **CPT Codes(s):** 87015, 87116, 87206
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 1008 hours (42 days)
- **Days Test Performed:** All

**Specimen:**

- **COLLECT:** Sterile Screw-Top Container
- **SUBMIT:** 3 sputum specimens (2-10 mL each) obtained 8-24 hours apart OR bronch wash or lavage in a sterile screw-top container REFRIGERATED.
- **UNACCEPTABLE:** Less than 2.0 mL specimen. Multiple sputum specimens collected less that 8 hours apart. Specimen older than 96 hours.

**NOTE:** See the Specimen Collection section of this manual for collection instructions. Sputum specimens are best collected prior to eating as single, FIRST MORNING deep cough collection. Organisms grown on culture will be charged separately using CPT code 87118. This test includes an acid fast (AFB) stain.

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**Culture, AFB Urine**

**Panel Code: UTB**

- **CPT Codes(s):** 87015, 87116
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 1008 hours (42 days)
- **Days Test Performed:** All

**Specimen:**

- **COLLECT:** Sterile Screw-Top Container
- **SUBMIT:** 50 mL of a first-morning urine in a sterile screw-top container REFRIGERATED.
- **UNACCEPTABLE:** Specimen older than 96 hours.

**NOTE:** If an AFB stain is ordered, request panel AFB (AFB stain). Organisms grown on culture will be charged separately using CPT code 87118.
**Culture, AFB, Blood/Bone Marrow**

**Panel Code: BTB**

**CPT Codes(s):** 87116  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 1008 hours (42 days)  
**Days Test Performed:** All  

**Specimen:**  
**COLLECT:** MYCO/F Bottle OR Green Top  
**SUBMIT:** 5.0 mL blood in a MYCO/F bottle OR 5.0 mL blood in a green top tube ROOM TEMP.  
**NOTE:** See the Specimen Collection section of this manual for collection instructions for blood cultures. Organisms grown on culture will be charged separately using CPT code 87118

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**Culture, AFB, Body Fluid/Tissue**

**Panel Code: OTB**

**CPT Codes(s):** 87015, 87116  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 1008 hours (42 days)  
**Days Test Performed:** All  

**Specimen:**  
**COLLECT:** Sterile Screw-Top Container  
**SUBMIT:** 2-10 mL fluid in sterile screw-top, needleless capped syringe, A.C.T. ® 1 or green top tube OR tissue in a sterile screw-top container REFRIGERATED.  
**UNACCEPTABLE:** Swab. Specimen older than 96 hours. Specimen in formalin.  
**NOTE:** If an AFB smear is ordered, request panel AFB (AFB stain). Specimen source is REQUIRED. Organisms grown on culture will be charged separately using CPT code 87118

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**Culture, Anaerobic**

**Panel Code: CAN**

**CPT Codes(s):** 87075  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** All  

**Specimen:**  
**COLLECT:** Eswab transport or A.C.T. ® 1  
**SUBMIT:** In Eswab transport OR fluid in A.C.T. ® 1, green top tube, or in a needleless capped syringe with air expelled, OR tissue in sterile screwtop container at ROOM TEMP received within 24 hours of collection.  
**UNACCEPTABLE:** CultureSwab™. Cervical, sputum, or vaginal specimens. Specimens older than 24 hours. NOTE: Specimen source is REQUIRED. Organisms grown on culture will be charged separately using CPT code 87076 for each organism reported."
**Culture, Blood**

**Panel Code: BC**

**CPT Codes(s):** 87040  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 144 hours (6 days)  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Blood Culture Bottles, Aerobic, Anaerobic  
SUBMIT: Blood collected in blood culture bottles ROOM TEMP.  
UNACCEPTABLE: Clotted specimen. Vacutainer collected specimen. Less than 7 mL blood on an adult.  
NOTE: See the Specimen Collection section of this manual for collection instructions. Collection site is REQUIRED. Organisms grown on culture will be charged separately using CPT code 87077 or 87076 for each organism reported. Susceptibility testing performed on reported organisms will be charged separately using CPT code 87186 for each susceptibility panel.

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**Culture, Bone Marrow**

**Panel Code: BMC**

**CPT Codes(s):** 87040  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 120 hours (5 days)  
**Days Test Performed:** All

**Specimen:**  
COLLECT: PEDS/PLUS F Blood Culture Bottle  
SUBMIT: 1-2 mL bone marrow in PEDS/PLUS F blood culture bottle OR 1-2 mL bone marrow in green top tube at ROOM TEMP.  
NOTE: Disinfect rubber septum of bottle with 70% alcohol before injecting specimen. Organisms grown on culture will be charged separately using CPT code 87077 or 87076 for each organism reported. Susceptibility testing performed on reported organisms will be charged separately using CPT code 87186 for each susceptibility panel reported.

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**Culture, Catheter Tip**

**Panel Code: CTC**

**CPT Codes(s):** 87071  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Sterile Screw-Top  
SUBMIT: Last 2 inches of catheter in sterile screw-top container REFRIGERATED.  
UNACCEPTABLE: Foley Cath tip, specimen > 24 hours.  
NOTE: Specimen source is REQUIRED. Organisms grown on culture will be charged separately using CPT code 87077 for each organism reported. Susceptibility testing performed on reported organisms will be charged separately using CPT code 87186 for each susceptibility panel reported.
**Culture, Cornea**  
Panel Code: COR

**CPT Codes(s):** 87070  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Port-a-Cul Tube™  
SUBMIT: Cornea rim in E swab tube ROOM TEMP or scrapings collected at bedside and inoculated directly on culture media obtained from Microbiology ROOM TEMP.  
UNACCEPTABLE: Specimen older than 24 hours.  
NOTE: Organisms grown on culture will be charged separately using CPT code 87077 for each organism reported. Susceptibility testing performed on reported organisms will be charged separately using CPT code 87186 for each susceptibility panel reported.

**Culture, CSF**  
Panel Code: SPI

**CPT Codes(s):** 87015, 87070  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 120 hours (5 days)  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Spinal Fluid in CSF Collection Tube  
SUBMIT: 0.5 mL CSF, ROOM TEMP up to 2 hours.  
NOTE: Gram stain must be ordered separately. Order panel GRS. If gram stain not ordered, lab will order and charge separately. Indicate on requisition if specimen is from a tap or from a shunt. Organisms grown on culture will be charged separately using CPT code 87077 for each organism reported. Susceptibility testing performed on reported organisms will be charged separately using CPT code 87186 for each susceptibility panel reported.

**Culture, Drainage**  
Panel Code: DG

**CPT Codes(s):** 87070  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Needleless Syringe or CultureSwab™  
SUBMIT: Drainage material in needleless, capped syringe, sterile screw-top or swab of material in CultureSwab™.  
UNACCEPTABLE: Dry swab. Specimen older than 24 hours.  
NOTE: Specimen source is REQUIRED. Organisms grown on culture will be charged separately using CPT code 87077 for each organism reported. Susceptibility testing performed on reported organisms will be charged separately using CPT code 87186 for each susceptibility panel reported.
**Culture, Ear**

**Panel Code: EAR**

**CPT Codes(s):** 87070  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Needleless Syringe or CultureSwab™  
SUBMIT: Drainage material in needleless, capped syringe, sterile screw-top or swab of material in CultureSwab™.  
UNACCEPTABLE: Dry swab. Specimen older than 72 hours.  
NOTE: Organisms grown on culture will be charged separately using CPT code 87077 or 87106 for each organism reported. Susceptibility testing performed on reported organisms will be charged separately using CPT code 87186 for each susceptibility panel reported.

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**Culture, Eye**

**Panel Code: EYE**

**CPT Codes(s):** 87070  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** All

**Specimen:**  
COLLECT: MiniTip ESwab  
SUBMIT: MiniTip ESwab  
UNACCEPTABLE: Dry swab. Specimen older than 12 hours.  
NOTE: Moisten swab with sterile saline before collection. Organisms grown on culture will be charged separately using CPT code 87077 for each organism reported. Susceptibility testing on reported organisms will be charged separately using CPT code 87186 for each susceptibility panel reported.  
* For cornea scrapings or cornea rims, order Cornea Culture (COR).

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**Culture, Fungus (CSF)**

**Panel Code: FSF**

**CPT Codes(s):** 87102  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 504 hours (21 days)  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Spinal Fluid in CSF Collection Tube  
SUBMIT: 0.5 mL CSF ROOM TEMP.  
NOTE: Organisms grown on culture will be charged separately using CPT code 87106 or 87107 for each organism reported.
**Culture, Fungus, Blood**  
**Panel Code:** BFU

**COLLECT:** MYCO/F Bottle  
**SUBMIT:** 5.0 mL blood in MYCO/F bottle OR 5.0 mL blood in green top tube ROOM TEMP.  
**NOTE:** See the Specimen Collection section of this manual for collection instructions for blood cultures. Organisms grown on culture will be charged separately using CPT code 87106 or 87107 for each organism reported.

**Culture, Fungus, Dermal**  
**Panel Code:** FUD

**COLLECT:** Sterile Screw-Top Container or Culture Swab™  
**SUBMIT:** Hair clippings, nail bed scrapings, skin scrapings in a sterile screw-top container or a swab of a rash/wound in a Culture Swab™ ROOM TEMP or REFRIGERATED.  
**UNACCEPTABLE:** Dry swab.  
**NOTE:** If KOH prep is ordered, request panel KOH (KOH Prep). Organisms grown on culture will be charged separately using CPT code 87106 or 87107 for each organism reported.

**Culture, Fungus, Fluid/Tissue**  
**Panel Code:** FFT

**COLLECT:** Sterile Screw-top Container  
**SUBMIT:** Fluid in A.C.T. ® 1, needleless capped syringe, or sterile screw-top container OR tissue in sterile screw-top container ROOM TEMP.  
**NOTE:** Specimen source is REQUIRED. If KOH is ordered, request panel KOH (KOH Prep). Organisms grown on culture will be charged separately using CPT code 87106 or 87107 for each organism reported.
Culture, Fungus, Respiratory

Panel Code: FRE

CPT Codes(s): 87102
Test Performed at: HealthEast Medical Laboratory

Analytic Time: 504 hours (21 days)
Days Test Performed: All

Specimen:
COLLECT: Sterile Screw-Top Container
SUBMIT: 2 mL first morning sputum in sterile screw-top container REFRIGERATED. Bronch wash or BAL in sterile screw-top container. Sinus specimen on culture swab.
NOTE: See the Specimen Collection section of this manual for collection instructions. If KOH prep is ordered, request panel KOH (KOH Prep). Organisms grown on culture will be charged separately using CPT code 87106 or 87107 for each organism reported.

Culture, Fungus; Misc - Ear, Eye, Mouth, or Vaginal

Panel Code: FUM

CPT Codes(s): 87102
Test Performed at: HealthEast Medical Laboratory

Analytic Time: 168 hours (7 days)
Days Test Performed: All

Specimen:
COLLECT: CultureSwab™
SUBMIT: Swab in CultureSwab™ REFRIGERATED, stool in clean screw top container.
UNACCEPTABLE: Specimen older than 24 hours. Dry swab.
NOTE: Specimen source is REQUIRED. Organisms grown on culture will be charged separately using CPT code 87106 or 87107 for each organism reported.

Culture, Genital

Panel Code: VCU

CPT Codes(s): 87070
Test Performed at: HealthEast Medical Laboratory

Analytic Time: 96 hours (4 days)
Days Test Performed: All

Specimen:
COLLECT: CultureSwab™
SUBMIT: Swab in Charcoal CultureSwab Plus™ OR swab in CultureSwab™ ROOM TEMPERATURE.
UNACCEPTABLE: Dry swab. Specimen older than 24 hours.
NOTE: Specimen source is REQUIRED. Culture should not be used for diagnosis of bacterial vaginosis. Organisms grown on culture will be charged separately using CPT code 87077 or 87106 for each isolate reported. Susceptibility testing performed on reported organisms will be charged separately using 87186 for each susceptibility panel reported. Requests for Neisseria gonorrhoeae (GC) should be collected/ordered separately.
**Culture, Gram Stain: Body Fluid**

Panel Code: BFC

CPT Codes(s): 87015, 87070, 87205  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 72 hours (3 days)  
Days Test Performed: All

Specimen:  
COLLECT: Sterile Screw-top Container or Needleless capped syringe  
SUBMIT: 0.1 mL or more of fluid in A.C.T.® 1, needleless capped syringe, green top tube, or sterile screw-top container at ROOM TEMP. Greater than 1 mL sample preferred. Less than that may compromise culture results.

UNACCEPTABLE: Specimen older than 12 hours. NOTE: Specimen source is REQUIRED. Organisms grown on culture will be charged separately using CPT code 87077 for each organism reported. Susceptibility testing performed on reported organisms will be charged separately using CPT code 87186 for each susceptibility panel reported.

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**Culture, Group A; Vaginal or Rectal**

Panel Code: GRA

CPT Codes(s): 87081  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 48 hours (2 days)  
Days Test Performed: All

Specimen:  
COLLECT: CultureSwab™  
SUBMIT: Swab in CultureSwab™ REFRIGERATED.

UNACCEPTABLE: Dry swab older than 2 hours. CultureSwab™ older than 72 hours.

NOTE: Specimen source is REQUIRED. Organisms grown on culture will be charged separately using CPT code 87077. If a susceptibility test is performed it will be charged separately using CPT code 87186.

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**Culture, Legionella**

Panel Code: LPC

CPT Codes(s): 87081  
Test Performed at: Mayo Medical Laboratories  
Analytic Time: 240 hours (10 days)  
Days Test Performed: All

Specimen:  
COLLECT: Sterile Screw-Top Container  
SUBMIT: 1 mL bronch specimens, chest fluid, pericardial fluid, pleural fluid, sputum, transtracheal aspirate, or tracheal aspirate in sterile screw-top container REFRIGERATED.

UNACCEPTABLE: Frozen specimen.

NOTE: Specimen source is required. Organisms grown on culture will be charged separately using CPT code 87077 or 87153 or 87176.
**Culture, Mouth**

**Panel Code:** MOU

- **CPT Codes(s):** 87070
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 120 hours (5 days)
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** CultureSwab™
- **SUBMIT:** Swab in CultureSwab™ REFRIGERATED.
- **UNACCEPTABLE:** Dry swab. Specimen older than 24 hours.
- **NOTE:** Do not order Yeast Culture separately—Mouth Cultures are always cultured for yeast. Organisms grown on culture will be charged separately using CPT code 87077 or 87106 for each organism reported.

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**Culture, MRSA (ID Only)**

**Panel Code:** MRS

- **CPT Codes(s):** 87081
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 48 hours (2 days)
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** CultureSwab™
- **SUBMIT:** Swab in CultureSwab™ OR sputum or urine in sterile screw-top container REFRIGERATED.
- **UNACCEPTABLE:** Dry swab. Specimen older than 48 hours.
- **NOTE:** Specimen source is REQUIRED. Organisms grown on culture will be charged separately using CPT code 87077. Susceptibilities are not performed unless specifically requested.

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**Culture, Neisseria gonorrhoeae**

**Panel Code:** GC

- **CPT Codes(s):** 87081
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 72 hours (3 days)
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** Charcoal CultureSwab Plus™
- **SUBMIT:** Swab from cervix, urethra, anus, or throat in Charcoal CultureSwab Plus™ OR body fluid in sterile screw-top container ROOM TEMP.
- **UNACCEPTABLE:** Dry swab. Charcoal CultureSwab Plus™ older than 12 hours. CultureSwab™ older than 4 hours. Calcium alginate or cotton swabs.
- **NOTE:** An MDH STD Case Report form will be forwarded to client for completion for all positive cultures. Organisms grown on culture will be charged separately using CPT code 87077.
### Culture, Nocardia/Actinomyces

Panel Code: NOC

**CPT Codes(s):** 87070, 87075  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 504 hours (21 days)  
**Days Test Performed:** All

**Specimen:**  
**COLLECT:** Eswab transport or sterile screw-top  
**SUBMIT:** Swab in Eswab transport OR fluid in A.C.T. ® 1 OR bronch specimen in sterile screw-top container OR tissue in sterile screw-top container ROOM TEMP up to 12 hours.  
**UNACCEPTABLE:** Swab in CultureSwab™. Specimen older than 12 hours.  
**NOTE:** Specimen source is REQUIRED. Organisms grown on culture will be charged separately using CPT code 87076 or 87077.

### Culture, Nose

Panel Code: NOS

**CPT Codes(s):** 87070  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** All

**Specimen:**  
**COLLECT:** CultureSwab™  
**SUBMIT:** Swab in CultureSwab™ REFRIGERATED up to 72 hours.  
**UNACCEPTABLE:** Dry swab.  
**NOTE:** Organisms grown on culture will be charged separately using CPT code 87077 or 87106 for each organism reported. Susceptibility testing performed on reported organisms will be charged separately using CPT code 87186 for each susceptibility panel reported.

### Culture, Pelvic Cavity

Panel Code: PEL

**CPT Codes(s):** 87070  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** All

**Specimen:**  
**COLLECT:** CultureSwab™  
**SUBMIT:** Swab in CultureSwab™ OR specimen in sterile screw-top (Fluid in A.C.T. ® 1 or needleless, capped syringe). ROOM TEMP up to 12 hours.  
**UNACCEPTABLE:** Dry swab. Specimen older than 24 hours.  
**NOTE:** Specimen source is REQUIRED. This panel is to be ordered on specimens from cul-de-sac, placenta, endometrium, IUD, NOT vaginal or cervical sites. Organisms grown on culture will be charged separately using CPT code 87077 or 87106 for each organism reported. Susceptibility testing performed on reported organisms will be charged separately using CPT code 87186 for each susceptibility panel reported.
**Culture, Screen for Staph Only**

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**Panel Code:** CSS

**CPT Codes(s):** 87081  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** All

**Specimen:**  
**COLLECT:** CultureSwab™  
**SUBMIT:** Swab in CultureSwab™ REFRIGERATED.  
**UNACCEPTABLE:** Dry swab older than 2 hours. CultureSwab™ older than 72 hours.  
**NOTE:** Specimen source is REQUIRED. Organisms grown on culture will be charged separately using CPT code 87077 for each organism reported. Susceptibility testing not performed unless specifically requested.

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**Culture, Semen**

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**Panel Code:** SEM

**CPT Codes(s):** 87070  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** All

**Specimen:**  
**COLLECT:** Sterile Screw-Top Container  
**SUBMIT:** Specimen in sterile screw-top container ROOM TEMP up to 4 hours.  
**UNACCEPTABLE:** Specimen older than 24 hours. Dried specimen.  
**NOTE:** Organisms grown on culture will be charged separately using CPT code 87077 or 87106 for each organism reported. Susceptibility testing performed on reported organisms will be charged separately using CPT code 87186 for each susceptibility panel reported.

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**Culture, Sinus**

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**Panel Code:** SIN

**CPT Codes(s):** 87070  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** All

**Specimen:**  
**COLLECT:** CultureSwab™  
**SUBMIT:** Swab in CultureSwab™ REFRIGERATED.  
**UNACCEPTABLE:** Dry swab. Swab from nares or NP swab. Specimen older than 24 hours.  
**NOTE:** Specimen source is REQUIRED. Organisms grown on culture will be charged separately using CPT code 87077 or 87106 for each organism reported. Susceptibility testing performed on reported organisms will be charged using CPT code 87186 for each susceptibility panel reported.
Culture, Stool

Panel Code: LAB2509

- Campylobacter
- Salmonella
- Shiga toxin producing Ecoli 0157 (EHEC)
- Shigella
- Yersinia

CPT Codes(s): 87045, 87046 x2
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 72 hours (3 days)
Days Test Performed: All

Specimen:
COLLECT: Stool Culture Transport Vial
SUBMIT: Walnut-sized portion of stool in ETM™ vial, ROOM TEMP < 72 hrs, OR pea-sized portion of stool in clean screw-top container ROOM TEMP, up to 3 hours.
UNACCEPTABLE: Stool in Proto-Fix™. Stool more than 72 hours in ETM. Fresh stool older than 8 hours.

NOTE: EHEC cannot be performed on a rectal swab. Specimens from hospitalized patients are not acceptable after the 3rd day. All specimens tested for Salm, Shig, Yers, Camp and Shiga-toxin producing Ecoli 0157. Enteric pathogens will be reported to MDH. Organisms grown on culture will be charged separately using CPT 87077. Susceptibility testing will be performed /charged separately on Shig and Yers - CPT 87186.

* The EHEC assay will not be performed on gram negative (GN) broths that do not exhibit growth after incubation period. An EHEC test will only reflex if broth exhibits growth.

Culture, Throat

Panel Code: TC

CPT Codes(s): 87070
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 72 hours (3 days)
Days Test Performed: All

Specimen:
COLLECT: CultureSwab™
SUBMIT: Throat swab in CultureSwab™ REFRIGERATED.
UNACCEPTABLE: Dry swab older than 2 hours. CultureSwab™ older than 72 hours refrigerated.

NOTE: See the Specimen Collection section of this manual for collection instructions.
Organisms grown on culture will be charged separately using CPT code 87077 for each organism reported. This test should be ordered when submitting throat culture plates.
## Culture, Throat, Diptheria

**Panel Code:** DIP

**CPT Codes(s):** 87081  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 120 hours (5 days)  
**Days Test Performed:** All  

**Specimen:**  
**COLLECT:** CultureSwab™  
**SUBMIT:** Throat or NP swab in CultureSwab™ ROOM TEMP.  
**UNACCEPTABLE:** Refrigerated or frozen specimen.  
**NOTE:** Specimen source is REQUIRED. Indicate "Looking for C. diphtheria" when placing order. Positives will be reported to MDH. Organisms grown on culture will be charged separately using CPT code 87077 or 87153.

## Culture, Urine

**Panel Code:** UC

**CPT Codes(s):** 87086  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** All  

**Specimen:**  
**COLLECT:** Sterile Screw-Top OR Boricon Container  
**SUBMIT:** 1.0 mL urine in sterile screw-top container REFRIGERATED OR 20 mL urine in boricon container ROOM TEMP or REFRIGERATED.  
**UNACCEPTABLE:** Unpreserved-more than 24 hours refrigerated or 4 hours room temp. Preserved-older than 48 hours.  
**NOTE:** See the Specimen Collection section of this manual for collection instructions. Indicate midstream, straight cath, foley, or bagged when placing order. Organisms grown on culture will be charged separately using CPT 87088 or 87106 for each non-Ecoli isolate. Susceptibility testing performed on reported organisms will be charged separately using CPT code 87186 for each susceptibility panel reported.

## Culture, Urine Plates Referred for ID/Susceptibility

**Panel Code:** CFW

**CPT Codes(s):** 87081  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** All  

**Specimen:**  
**COLLECT:** Culture Plate  
**SUBMIT:** Actively growing organism on culture media at ROOM TEMP.  
**NOTE:** Specimen source is REQUIRED. Only for urine culture plates. If "SENSITIVITY ONLY" is requested, organism identification must be provided on requisition & sensitivity will be charged separately. If "IDENTIFICATION ONLY" is requested, identification will be charged. If "IDENTIFICATION & SENSITIVITY" are requested, both will be charged. Use CPT code 87088 for each non-Ecoli isolate, or 87106 for each yeast isolate reported, & CPT code 87186 for each susceptibility panel reported. For throat culture plates, order TC.
**Panel Code: VCN**

**Culture, Viral, Non-Respiratory**

- **CPT Codes(s):** 87252
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 336 hours (14 days)
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** Sterile Screw-Top Container
- **SUBMIT:** 1.0 mL body fluid or CSF in sterile screw-top container OR rectal swab in m5 media OR 5-10 grams of stool in sterile screw-top container OR non-lung tissue in sterile saline of M5 OR 0.5 mL urine (for Mumps only) in sterile screw-top container REFRIGERATED.
- **UNACCEPTABLE:** Blood, bone marrow, genital or dermal, oral, synovial fluid, lymph node specimens. Wood or gel swab.
- **NOTE:** Specimen source is REQUIRED. Rapid Herpes or Cytomegalovirus performed on request. The following CPT's may be charged separately if appropriate - 87176 (tiss proc), 87253 (add'l IDs), 87254 (viral smear, shell vial).

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**Panel Code: VCR**

**Culture, Viral, Respiratory**

- **CPT Codes(s):** 87252
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 360 hours (15 days)
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** Sterile Screw-Top Container
- **SUBMIT:** Throat or nasal specimen in CultureSwab™ OR sputum or bronchial specimens in a sterile screw-top container OR lung tissue in sterile saline or M5 REFRIGERATED.
- **UNACCEPTABLE:** FROZEN specimen. Non-respiratory specimen. Specimen at ROOM TEMPERATURE, swab with wooden handle or gel swab.
- **NOTE:** Specimen source is REQUIRED. Rapid Herpes simplex or cytomegalovirus performed on request. The following CPT's may be charged separately if appropriate - 87176 (tiss proc), 87253 (add'l IDs), 87254 (viral smear, shell vial).

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**Panel Code: VRE**

**Culture, VRE**

- **CPT Codes(s):** 87081
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 72 hours (3 days)
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** Sterile Screw-Top Container
- **SUBMIT:** Stool in sterile screw-top container OR swab in CultureSwab™ REFRIGERATED. Urine in sterile container, swab from clinical site.
- **UNACCEPTABLE:** Dry swab. Specimen older than 48 hours.
- **NOTE:** Specimen source is REQUIRED. Organisms grown on culture will be charged separately using CPT code 87077 for each organism reported.
### Culture, Wound

<table>
<thead>
<tr>
<th>CPT Codes(s):</th>
<th>87070</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Performed at:</td>
<td>HealthEast Medical Laboratory</td>
</tr>
<tr>
<td>Analytic Time:</td>
<td>72 hours (3 days)</td>
</tr>
<tr>
<td>Days Test Performed:</td>
<td>All</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: Eswab, CultureSwab™
- SUBMIT: Drainage material in on swab of material in CultureSwab™.
- UNACCEPTABLE: Dry swab. Specimen older than 24 hours.

**NOTE:** Specimen source is REQUIRED. Organisms grown on culture will be charged separately using CPT code 87077 for each organism reported. Susceptibility testing performed on reported organisms will be charged separately using CPT code 87186 for each susceptibility panel reported.

### Culture, Yeast

<table>
<thead>
<tr>
<th>CPT Codes(s):</th>
<th>87102</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Performed at:</td>
<td>HealthEast Medical Laboratory</td>
</tr>
<tr>
<td>Analytic Time:</td>
<td>120 hours (5 days)</td>
</tr>
<tr>
<td>Days Test Performed:</td>
<td>All</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: CultureSwab™
- SUBMIT: Swab in CultureSwab™ REFRIGERATED.
- UNACCEPTABLE: Dry swab. Specimen older than 24 hours.

**NOTE:** Specimen source is REQUIRED. Organisms grown on culture will be charged separately using CPT code 87106 for each organism reported.

### Culture/Gram Mini-BAL

<table>
<thead>
<tr>
<th>CPT Codes(s):</th>
<th>87071, 87205</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Performed at:</td>
<td>HealthEast Medical Laboratory</td>
</tr>
<tr>
<td>Analytic Time:</td>
<td>72 hours (3 days)</td>
</tr>
<tr>
<td>Days Test Performed:</td>
<td>All</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: Sterile screw-top container
- SUBMIT: Mini-BAL in sterile screw-top container REFRIGERATED.
- UNACCEPTABLE: Specimen older than 24 hours.

**NOTE:** Organisms growing on culture will be charged separately using CPT code 87077 for each organism reported. Susceptibility testing performed on reported organism will be charged separately using CPT code 87186 for each susceptibility panel reported.
### Culture/Gram Stain: Aspirate

- **Panel Code:** ASC
- **CPT Codes(s):** 87070, 87205
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 72 hours (3 days)
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** A.C.T. ® 1
- **SUBMIT:** Aspirated specimen in an A.C.T. ® 1, needleless capped syringe, or a sterile screw-top container at ROOM TEMP.
- **UNACCEPTABLE:** Specimen older than 12 hours.
- **NOTE:** Specimen source is REQUIRED. Organisms grown on culture will be charged separately using CPT code 87077 or 87076 for each organism reported. Susceptibility testing performed on reported isolates will be charged separately using CPT code 87186 for each susceptibility panel reported.

### Culture/Gram Stain: Bronchial

- **Panel Code:** BRO
- **CPT Codes(s):** 87070, 87205
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 48 hours (2 days)
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** Sterile Screw-Top Container
- **SUBMIT:** Wash or lavage in sterile screw-top container OR brush in sterile saline REFRIGERATED.
- **UNACCEPTABLE:** Specimen older than 24 hours.
- **NOTE:** Organisms grown on culture will be charged separately using CPT code 87077 or 87106 for each organism reported. Susceptibility testing performed on reported organisms will be charged separately using CPT code 87186 for each susceptibility panel reported.

### Culture/Gram Stain: Joint

- **Panel Code:** JOI
- **CPT Codes(s):** 87070, 87205
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 48 hours (2 days)
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** CultureSwab™
- **SUBMIT:** Swab in Culture Swab™ OR ESwab REFRIGERATED.
- **UNACCEPTABLE:** Dry swab. Specimen older than 24 hours.
- **NOTE:** Specimen source is REQUIRED. Organisms grown on culture will be charged separately using CPT code 87077 or 87076 for each organism reported. Susceptibility testing performed on reported organisms will be charged separately using CPT code 87186 for each susceptibility panel reported.
**Culture/Gram Stain: Sputum**

Panel Code: SPU

CPT Codes(s): 87070, 87205  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 48 hours (2 days)  
Days Test Performed: All

Specimen:  
COLLECT: Sterile Screw-Top Container  
SUBMIT: Expectorated or induced sputum OR trach aspirate in sterile screw-top container  
REFRIGERATED.  
UNACCEPTABLE: Sputum with >10 epithelial cells/LPF or older than 24 hours.  
NOTE: See the Specimen Collection section for collection instructions. Organisms grown on culture will be charged separately using CPT code 87077 for each organism reported. Susceptibility testing performed on reported organisms will be charged separately using CPT code 87186 for each susceptibility panel reported.

**Culture/Gram Stain: Tissue**

Panel Code: TIS

CPT Codes(s): 87070, 87176, 87205  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 72 hours (3 days)  
Days Test Performed: All

Specimen:  
COLLECT: Sterile Screw-Top Container  
SUBMIT: Tissue in sterile screw-top container REFRIGERATED.  
UNACCEPTABLE: Specimen in formalin.  
NOTE: Specimen source is REQUIRED. Specimen must be received in lab within 4 hours if anaerobic culture is ordered. Organisms grown on culture will be charged separately using CPT code 87077 for each organism reported. Susceptibility testing performed on reported organisms will be charged separately using CPT code 87186 for each susceptibility panel reported.

**Culture/Gram Stain: Wound**

Panel Code: WND

CPT Codes(s): 87070, 87205  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 72 hours (3 days)  
Days Test Performed: All

Specimen:  
COLLECT: CultureSwab™  
SUBMIT: Drainage material on swab of material in CultureSwab™.  
UNACCEPTABLE: Dry swab. Specimen older than 24 hours.  
NOTE: Specimen source is REQUIRED. Organisms grown on culture will be charged separately using CPT code 87077 for each organism reported. Susceptibility testing performed on reported organisms will be charged separately using CPT code 87186 for each susceptibility panel reported.
Cyclosporine (Sandimmune®), Whole Blood

Panel Code: CYC

CPT Codes(s): 80158
Test Performed at: Mayo Medical Laboratories
Analytic Time: 24 hours (1 day)
Days Test Performed: All

Specimen:
- COLLECT: Lavender Top
- SUBMIT: 3 mL whole blood REFRIGERATED.
- UNACCEPTABLE: Specimen clotted.
- NOTE: Therapeutic range applies to trough specimens drawn just prior to A.M. dose.

Cystic Fibrosis Mutation Analysis, 106-Mutation Panel

Panel Code: LAB3034

CPT Codes(s): 81220
Test Performed at: Mayo Medical Laboratories
Analytic Time: 144 hours (6 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
- COLLECT: Lavender Top
- SUBMIT: 3 mL whole blood ROOM TEMPERATURE. Specimen must arrive within 96 hours of collection.
- UNACCEPTABLE: Clotted specimen
- NOTE: Diagnosis and race are REQUIRED.

Cytochrome P450 2C19 Genotype, Blood

Panel Code: LAB3013

CPT Codes(s): 81225
Test Performed at: Mayo Medical Laboratories
Analytic Time: 120 hours (5 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
- COLLECT: Lavender Top
- SUBMIT: 3 mL whole blood ROOM TEMPERATURE.
- UNACCEPTABLE: Clotted specimen, patient transfused in the last 4-6 weeks, or has received a bone marrow or liver transplant.

Cytochrome P450 2C9 Genotype by Sequence Analysis, Blood

Panel Code: LAB3012

CPT Codes(s): 81227
Test Performed at: Mayo Medical Laboratories
Analytic Time: 240 hours (10 days)
Days test performed: Mon Thu

Specimen:
- COLLECT: Lavender Top
- SUBMIT: 3 mL whole blood ROOM TEMPERATURE.
- UNACCEPTABLE: Clotted specimen, patient transfused in the last 4-6 weeks, or has received a bone marrow or liver transplant.
Cytochrome P450 2D6 Comprehensive Cascade, Blood

Panel Code: 2D6

CPT Codes(s): 81226
Test Performed at: Mayo Medical Laboratories

Analytic Time: 384 hours (16 days)
Days Test Performed: Mon Thu

Specimen:
COLLECT: Lavender Top
SUBMIT: 3 mL whole blood ROOM TEMPERATURE.
UNACCEPTABLE: Clotted specimen, patient transfused in the last 4-6 weeks, or has received bone marrow or liver transplant.

NOTE: This test is intended for the assessment of patients receiving meds for the treatment of depression and other psychiatric disorders. Panel 2D6 will always include CYP2D6 genotype testing. If needed reflex testing will be performed which may include any of the following: CYP2D6 Copy Number Variation; Full Gene Sequencing; 2D7 Gene Sequencing; 2D6 Gene Sequencing; CYP2D6 Duplication Sequence A, B; Duplication Sequence B, B; Duplication Sequence C, B (CPT 81479) at additional charge.

Cytoplasmic Neutrophil Antibodies

Panel Code: NCA

cANCA
pANCA

CPT Codes(s): 86255
Test Performed at: Mayo Medical Laboratories

Analytic Time: 96 hours (4 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
COLLECT: Red Top
SUBMIT: 0.5 mL serum REFRIGERATED.
UNACCEPTABLE: Markedly hemolyzed or lipemic specimen.

NOTE: This test should not be mistaken for granulocyte antibodies. If positive for cANCA, results are titered (CPT 86256).

D-dimer, Quantitative

Panel Code: DDI

CPT Codes(s): 85379
Test Performed at: HealthEast Medical Laboratory

Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: Blue Top
SUBMIT: 3 mL whole blood or 1.5 mL platelet-free plasma ROOM TEMP within 4 hours of collection. Platelet-free plasma FROZEN within 4 hours of collection is stable for up to 2 weeks.

UNACCEPTABLE: Frozen whole blood specimen, partially filled tube, or marked hemolysis, clotted specimen, whole blood received >4 hours of collection or platelet-free plasma not frozen within 4 hours of collection.

NOTE: See Specimen Collection section of this manual for preparation of platelet-free plasma.
### Dehydroepiandrosterone (DHEA)

<table>
<thead>
<tr>
<th>Panel Code: DEA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 82626</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> Mayo Medical Laboratories</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 144 hours (6 days)</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> Mon Tue Wed Thu Fri</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: Plain Red Top
- SUBMIT: 1 mL serum FROZEN within 8 hours in a separate tube.
- UNACCEPTABLE: Markedly hemolyzed or lipemic specimen or specimen collected in an SST tube.

### Dehydroepiandrosterone Sulfate (DHEA-S)

<table>
<thead>
<tr>
<th>Panel Code: DES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 82627</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> Mayo Medical Laboratories</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 72 hours (3 days)</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> Mon Tue Wed Thu Fri Sat</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 1 mL serum REFRIGERATED.
- UNACCEPTABLE: Markedly hemolyzed specimen.

### Desipramine Level (Norpramin®)

<table>
<thead>
<tr>
<th>Panel Code: LAB3044</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 80335</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> Mayo Medical Laboratories</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 48 hours (2 days)</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> Mon Tue Wed Thu Fri Sat</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: Plain Red Top
- SUBMIT: 1 mL serum REFRIGERATED. Centrifuge and separate serum from cells within 2 hours of draw.
- UNACCEPTABLE: Specimen drawn in an SST® tube. Markedly hemolyzed or lipemic or icteric specimen.
- NOTE: Recommended collection is 12 hours post dose (trough).

### Digoxin (Lanoxin®)

<table>
<thead>
<tr>
<th>Panel Code: DIG</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 80162</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> HealthEast Medical Laboratory</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 4 hours</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> All</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: IP Green Top / OP Plain Red Top
- SUBMIT: 1 mL serum REFRIGERATED up to 48 hours. May require ABN form.
- UNACCEPTABLE: Specimen collected in an SST® tube.
- NOTE: Patient must not have taken digoxin for AT LEAST SIX TO EIGHT HOURS.
Diphtheria Toxoid Antibody, IgG  Panel Code: LAB3022

CPT Codes(s): 86317  
Test Performed at: Mayo Medical Laboratories  
Analytic Time: 96 hours (4 days)  
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:  
COLLECT: Red Top  
SUBMIT: 0.5 mL serum REFRIGERATED  
UNACCEPTABLE: Markedly hemolyzed, lipemic or icteric specimen.

Direct Antiglobulin Test  Panel Code: DAP

DAT - Adult

CPT Codes(s): 86880  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 24 hours (1 day)  
Days Test Performed: All

Specimen:  
COLLECT: Lavender Top  
SUBMIT: 4 mL whole blood REFRIGERATED on patient > 4 months old; minimum volume 0.5 mL  
UNACCEPTABLE: Specimen collected in an SST® tube. Incompletely or incorrectly labeled specimen.  
NOTE: If poly DAT is pos, IgG DAT will be reflexed unless done within last month and charged separately using CPT code 86880. If DAT on a HealthEast hospital patient transfused within the last 3 months has turned positive or significantly changed, an elution and antibody I.D. may be performed and charged separately. Elutions are not done on HML orders unless specifically requested.

Direct Antiglobulin Test (patient < or = 4 months old)  Panel Code: DAG

DAT - Neonate

CPT Codes(s): 86880  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 24 hours (1 day)  
Days Test Performed: All

Specimen:  
COLLECT: Lavender Top  
SUBMIT: 0.5 mL whole blood REFRIGERATED on patient no older than 4 months old. Minimum volume 250 uL  
UNACCEPTABLE: Specimen collected in an SST® tube. Incompletely or incorrectly labeled specimen.
### DNA DS Screen

<table>
<thead>
<tr>
<th>Panel Code: DNB</th>
</tr>
</thead>
</table>

**CPT Codes(s):** 86225  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Tue Fri

**Specimen:**
- **COLLECT:** Red Top  
- **SUBMIT:** 0.5mL serum REFRIGERATED; FROZEN in a separate tube if not submitted within 24 hours.  
- **UNACCEPTABLE:** Non-frozen specimen more than 24 hours old.

---

### Doxepin (Sinequan®) and Nordoxepin

<table>
<thead>
<tr>
<th>Panel Code: LAB3042</th>
</tr>
</thead>
</table>

Nordoxepin  

**CPT Codes(s):** 80335  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 96 hours (4 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**
- **COLLECT:** Plain Red Top  
- **SUBMIT:** 1 mL serum REFRIGERATED. Centrifuge and separate serum from cells within 2 hours of draw.  
- **UNACCEPTABLE:** Specimen collected in an SST® tube, markedly hemolyzed or lipemic or icteric specimen.  
- **NOTE:** Recommended collection is 12 hours post dose (trough).

---

### Drug Abuse Confirm, Urine

<table>
<thead>
<tr>
<th>Panel Code: AB8</th>
</tr>
</thead>
</table>

Amphetamines  
Barbiturates  
Benzodiazepines  
Cocaine Metabolite  
Ethanol  
Opiates  
Phencyclidine (PCP)  
THC Metabolite

**CPT Codes(s):** 80301  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** All

**Specimen:**
- **COLLECT:** Random Urine in a Screw-Top Container  
- **SUBMIT:** 30 mL aliquot random urine collection (no preservative), REFRIGERATED. Minimum 15 mL.  
- **NOTE:** If the screen is positive for any of the 8 drugs, confirmatory testing will be performed and charged. CPT's for the confirmations are: Benzodiazepines(80346), THC(80349), Alcohol(80320), Amphetamines(80324,80359), Barbiturates(80345), Cocaine(80353), Opiates(80361,80365), PCP(83992).
**Drug Screen Prescription/OTC, Serum**

**Panel Code:** PDS

- **CPT Codes(s):** 80304
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 72 hours (3 days)
- **Days Test Performed:** All

**Specimen:**
- COLLECT: 2 Plain Red Tops
- SUBMIT: 5 mL serum REFRIGERATED (minimum volume 2.1 mL).
- UNACCEPTABLE: Specimen drawn in an SST® tube.
- NOTE: Test is not appropriate for drugs of abuse/illicit drug testing. See Special Instructions for a list of drugs screened for in this panel.

**Drug Screen Prescription/OTC, Urine**

**Panel Code:** UDS

- **CPT Codes(s):** 80304
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 120 hours (5 days)
- **Days Test Performed:** All

**Specimen:**
- COLLECT: Random Urine in a Screw-Top Container
- SUBMIT: 30 mL aliquot of random urine collection (no preservative), REFRIGERATED.
- NOTE: Useful for the qualitative detection and identification of prescription or over-the-counter drugs. See Special Instructions section of this manual for a list of drugs screened for in this panel.

**Drugs of Abuse 1, Urine**

**Panel Code:** DA1

- **CPT Codes(s):** 80301, G0431
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- COLLECT: Random Urine in a Screw-Top Container
- SUBMIT: 20 mL aliquot of random urine collection (no preservative) REFRIGERATED up to 5 days.
- NOTE: This test is not intended for medico-legal purposes. This test does NOT include alcohol, urine screen. Order test ALU if alcohol, urine screen is to be performed and charged. This test is for screening only. Confirmations are available upon request at an additional charge.
Drugs of Abuse 1+, Urine  
Panel Code: DAM

- Amphetamines
- Barbiturates
- Benzodiazepines
- Cocaine Metabolite
- Creatinine, urine
- Methadone
- Opiates
- Oxycodone
- Phencyclidine (PCP)
- THC Metabolite

CPT Codes(s):  80301, G0431
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
- COLLECT: Random Urine in a Screw-Top Container
- SUBMIT: 20 mL aliquot of random urine collection (no preservative) REFRIGERATED up to 5 days.

NOTE: This test is not intended for medico-legal purposes. This test does NOT include alcohol, urine screen. Order test ALU if alcohol, urine screen is to be performed and charged. This test is for screening only. Confirmations are available upon request at an additional charge.

Drugs of Abuse 2, Urine  
Panel Code: DA2

- Amphetamines
- Benzodiazepines
- Cocaine Metabolite
- Creatinine, urine
- Opiates
- Phencyclidine (PCP)
- THC Metabolite

CPT Codes(s):  80301, G0431
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
- COLLECT: Random Urine in a Screw-Top Container
- SUBMIT: 20 mL aliquot of random urine collection (no preservative) REFRIGERATED up to 5 days.

NOTE: This test is not intended for medico-legal purposes. This test does NOT include alcohol, urine screen. Order test ALU if alcohol, urine screen is to be performed and charged. This test is for screening only. Confirmations are available upon request at an additional charge.
Drugs of Abuse 3, Urine

Panel Code: DA3

- Cocaine Metabolite
- Creatinine, urine
- THC Metabolite

CPT Codes(s): 80301, G0431
Test Performed at: HealthEast Medical Laboratory

Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: Random Urine in a Screw-Top Container
SUBMIT: 20 mL aliquot of random urine collection (no preservative) REFRIGERATED up to 5 days.

NOTE: This test is not intended for medico-legal purposes. This test does NOT include alcohol, urine screen. Order test ALU if alcohol, urine screen is to be performed and charged. This test is for screening only. Confirmations are available upon request at an additional charge.

Drugs of Abuse 8-Panel, Urine, Legal

Panel Code: L08

- Alcohol
- Amphetamines
- Barbiturates
- Benzodiazepines
- Cocaine
- Creatinine
- Opiates
- Phencyclidine
- THC Marijuana

CPT Codes(s): 80320, 80301
Test Performed at: NON-INTERFACED SEND OUT LABS

Analytic Time: 168 hours (7 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Sealed with Legal/Chain of Custody Urine
SUBMIT: 20 mL aliquot of random urine collection (no preservative), sealed in a Chain of Custody container and pouch, REFRIGERATED.

UNACCEPTABLE: Unsealed collection container and/or pouch, no Chain of Custody included.
Drugs of Abuse Child Protection, Urine

Panel Code: DCP

** AVAILABILITY: St. John's, St. Joseph's & Woodwinds Hospital Inpatient Only **

CPT Codes(s): No CPTs
Test Performed at: MedTox Laboratory, Inc
Analytic Time: 168 hours (7 days)
Days Test Performed: All

Specimen:
COLLECT: Chain of Custody Urine
SUBMIT: Urine REFRIGERATED using Chain of Custody protocol.
UNACCEPTABLE: Unsealed collection container and/or pouch, no chain of custody included.

Drugs of Abuse Screen, 10 Panel, Meconium

Panel Code: M10

** AVAILABILITY: St. John's, St. Joseph's & Woodwinds Hospital Inpatient Only **
Amphetamines
Barbiturates
Benzodiazepines
Cocaine
Marijuana
Methadone
Opiates
Oxycodone
Phencyclidine
Propoxyphene

CPT Codes(s): 80301
Test Performed at: MedTox Laboratory, Inc
Analytic Time: 168 hours (7 days)
Days Test Performed: All

Specimen:
COLLECT: Chain of Custody Container
SUBMIT: 5 g Meconium REFRIGERATED using Chain of Custody protocol.
UNACCEPTABLE: Unsealed collection container and/or pouch, no Chain of Custody included.
NOTE: Specimens from different voidings may be pooled if necessary.

Echovirus Antibodies

Panel Code: ECO

Echo serotypes 4,7,9,11 and 30

CPT Codes(s): 86658 x5
Test Performed at: Mayo Medical Laboratories
Analytic Time: 216 hours (9 days)
Days Test Performed: Tue Wed Thu Fri Sat

Specimen:
COLLECT: Red Top
SUBMIT: 1 mL serum REFRIGERATED.
**Ehrlichia Antibody Panel**

<table>
<thead>
<tr>
<th>Panel Code: EH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anaplasma phagocytophilum Ab, IgG</td>
</tr>
<tr>
<td>Ehrlichia chaffeensis (HME) Ab, IgG</td>
</tr>
</tbody>
</table>

**CPT Codes(s):** 86666 x2  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 0.5 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed or lipemic specimen.

---

**Ehrlichia/Anaplasma, Molecular Detection, PCR, Whole Blood**

<table>
<thead>
<tr>
<th>Panel Code: EHL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anaplasma phagocytophilum</td>
</tr>
<tr>
<td>Ehrlichia chaffeensis</td>
</tr>
<tr>
<td>Ehrlichia ewingii/canis</td>
</tr>
<tr>
<td>Ehrlichia muris-like</td>
</tr>
</tbody>
</table>

**CPT Codes(s):** 87798 x4  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 96 hours (4 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**  
COLLECT: Lavender Top  
SUBMIT: 1 mL whole blood (EDTA) REFRIGERATED.  
UNACCEPTABLE: Specimen clotted, markedly lipemic.

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**Electrolyte Profile**

<table>
<thead>
<tr>
<th>Panel Code: LT4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anion Gap, Calculated</td>
</tr>
<tr>
<td>Carbon Dioxide (CO2), Total</td>
</tr>
<tr>
<td>Chloride</td>
</tr>
<tr>
<td>Potassium</td>
</tr>
<tr>
<td>Sodium</td>
</tr>
</tbody>
</table>

**CPT Codes(s):** 80051  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: IP Green Top / OP Red Top  
SUBMIT: 1 mL serum REFRIGERATED. May require ABN form.  
UNACCEPTABLE: Hemolyzed specimen.  
NOTE: Centrifuge and separate serum from cells within 4 hours of draw. See Special Instructions for "Potassium Specimen Recommendations".
Electrolytes and Osmolality, Stool

- Chloride
- Magnesium
- Osmolality
- Osmotic Gap, Calculated
- Phosphorous
- Potassium
- Sodium

**Panel Code:** FLY

**CPT Codes(s):** 84100, 82438, 83735, 84302, 84999 x2

**Test Performed at:** Mayo Medical Laboratories

**Analytic Time:** 72 hours (3 days)

**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** Screw-Top Stool Container
- **SUBMIT:** 20 mL VERY LIQUID stool in a screw-top container, FROZEN.
- **UNACCEPTABLE:** Formed stool.

Electrophoresis, Protein, 24 Hour Cascade

**Panel Code:** EUC

**CPT Codes(s):** 84166

**Test Performed at:** HealthEast Medical Laboratory

**Analytic Time:** 48 hours (2 days)

**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** 24 hour Urine (No Preservative)
- **SUBMIT:** 25 mL aliquot of 24 hour urine collection (no preservative) REFRIGERATED.
- **NOTE:** Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions. A separate charge for the for the pathologist's interpretation is billed using CPT 84166 with a 26 modifier. If a monoclonal peak is present, then Immunofixation Electrophoresis, Urine will be performed and charged separately using CPT code 86335 and 86335 with a 26 modifier for the pathologist's interpretation.

Electrophoresis, Protein, 24 hour Urine

**Panel Code:** PEU

**CPT Codes(s):** 84166

**Test Performed at:** HealthEast Medical Laboratory

**Analytic Time:** 48 hours (2 days)

**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** 24 HR Urine (No preservative)
- **SUBMIT:** 25 mL aliquot of 24 Hour urine collection (no preservative) REFRIGERATED.
- **NOTE:** Total Volume (mL) REQUIRED. See the Specimen Collection section of the manual for collection instructions. A separate charge for the pathologist's interpretation is billed using CPT 84166 with a 26 modifier.
Electrophoresis, Protein, CSF

Panel Code: PEC

CPT Codes(s): 84166
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 48 hours (2 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Spinal Fluid in CSF Collection Tube
SUBMIT: 1.0 mL spinal fluid REFRIGERATED.
NOTE: A separate charge for the pathologist's interpretation is billed using CPT 84166 with a 26 modifier.

Electrophoresis, Protein, Random Urine

Panel Code: UPE

CPT Codes(s): 84166
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 48 hours (2 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Random Urine in a Screw-Top Container
SUBMIT: 25 mL aliquot of random urine collection (no preservative) REFRIGERATED.
NOTE: A separate charge for the pathologist's interpretation is billed using CPT 84166 with a 26 modifier.

Electrophoresis, Protein, Random Urine Cascade

Panel Code: ERC

CPT Codes(s): 84166
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 48 hours (2 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Random Urine in a Screw-Top
SUBMIT: 25 mL aliquot of random urine collection (no preservative). Container
REFRIGERATED.
NOTE: A separate charge for the pathologist's interpretation is billed using CPT 84166 with a 26 modifier. If a monoclonal peak is present, then Immunofixation Electrophoresis, Urine will be performed and charged separately using CPT 86335 and 86335 with a 26 modifier for the pathologist's interpretation.
**Electrophoresis, Protein, Serum**

**Panel Code:** ELP

**CPT Codes(s):** 84165  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
UNACCEPTABLE: Hemolyzed specimen.  
NOTE: A separate charge for the pathologist's interpretation is billed using CPT 84165 with a 26 modifier.

---

**Electrophoresis, Protein, Serum, Cascade**

**Panel Code:** ELC

**CPT Codes(s):** 84165  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
UNACCEPTABLE: Hemolyzed specimen.  
NOTE: A separate charge for the pathologist's interpretation is billed using CPT 84165 with a 26 modifier. If a monoclonal peak is present, then Immunofixation Electrophoresis, Serum will be performed and charged separately using CPT code 86334 and 86334 with a 26 modifier for the pathologist's interpretation.

---

**ENA (Antibodies to Extractable Nuclear Antigens) Profile**

**Panel Code:** AEN

**CPT Codes(s):** 86235 x6  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** Tue Fri

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED. FROZEN if not submitted within 24 hours.  
UNACCEPTABLE: Specimens > 24 hours old if not frozen. Body fluids are unacceptable.
Endomysial Antibodies, IgA

**Panel Code:** EML

**CPT Codes(s):** 86255  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 168 hours (7 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
- **COLLECT:** Red Top  
- **SUBMIT:** 2 mL serum REFRIGERATED.  
- **UNACCEPTABLE:** Markedly hemolyzed, lipemic or icteric specimen.

Enterovirus, PCR

**Panel Code:** EVP

**CPT Codes(s):** 87498  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** All

**Specimen:**  
- **COLLECT:** Sterile Container  
- **SUBMIT:** 0.5 mL (CSF, pericardial, peritoneal, or pleural) fluid or 1.5 mL respiratory specimen. Dermal, eye, rectal, genital, nasopharyngeal, throat, nasal or urethral with CultureSwab, REFRIGERATED. Maintain sterility.  
- **UNACCEPTABLE:** ROOM TEMP more than 24 hours. Calcium alginate-tip, wood or gel swab.  
- **NOTE:** Rectal swabs must have no visible stool. Do not centrifuge fluid. Specimen source is REQUIRED.

Eosinophil Count

**Panel Code:** EOS

**CPT Codes(s):** 85048  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
- **COLLECT:** Lavender Top  
- **SUBMIT:** 3 mL whole blood REFRIGERATED or ROOM TEMPERATURE. Specimen must arrive within 24 hours.  
- **UNACCEPTABLE:** Specimen more than 24 hours old, less than 1 mL of whole blood in tube, or clotted specimen.
Eosinophil Smear, Nasal, Sputum or Urine

**Panel Code:** EOM

**CPT Codes(s):** 89190  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Screw-Top Container  
SUBMIT: 2 well-made, prepared slides from material collected. If unable to prepare slides, send specimen within 4 hours of collection, ROOM TEMP.  
UNACCEPTABLE: Specimens arriving greater than 4 hours after collection, unless slides are sent.  
NOTE: Specimen source is REQUIRED on request form for processing.

Epstein-Barr Virus (EBV) Antibody Profile

**Panel Code:** EBV

- Anti-EBNA
- Anti-VCA IgG
- Anti-VCA IgM

**CPT Codes(s):** 86664, 86665 x2  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sun

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED. Minimum volume is 0.6 mL.  
UNACCEPTABLE: Markedly hemolyzed, lipemic or icteric specimen.

Erythrocyte Sedimentation Rate

**Panel Code:** ESR

**CPT Codes(s):** 85652  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Lavender Top  
SUBMIT: 3 mL whole blood REFRIGERATED or ROOM TEMPERATURE. Specimen must arrive within 24 hours of collection. Pediatric minimum volume is 1 mL.  
UNACCEPTABLE: Specimen more than 24 hours old, less than 2 mL of whole blood in tube, or clotted specimen.
### Erythropoietin (EPO)

<table>
<thead>
<tr>
<th>Panel Code: EPO</th>
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</thead>
</table>
| **CPT Codes(s):** 82668  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat |

**Specimen:**  
- **COLLECT:** Red Top  
- **SUBMIT:** 1 mL serum REFRIGERATED  
- **UNACCEPTABLE:** Markedly hemolyzed specimen.

### Estradiol

<table>
<thead>
<tr>
<th>Panel Code: EST</th>
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</thead>
</table>
| **CPT Codes(s):** 82670  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All |

**Specimen:**  
- **COLLECT:** IP Green Top / OP Red Top  
- **SUBMIT:** 1 mL serum REFRIGERATED up to 7 days

### Ethosuximide (Zarontin®)

<table>
<thead>
<tr>
<th>Panel Code: LAB3027</th>
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</table>
| **CPT Codes(s):** 80168  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** All |

**Specimen:**  
- **COLLECT:** Plain Red Top  
- **SUBMIT:** 0.5 mL serum REFRIGERATED  
- **UNACCEPTABLE:** Markedly hemolyzed specimen.  
- **NOTE:** Centrifuge and remove serum from cells within 2 hours of draw.
### Factor 10 Assay, Chromogenic

**Panel Code:** FXC

**CPT Codes(s):** 85130  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** All  

**Specimen:**  
**COLLECT:** Blue Top  
**SUBMIT:** 3 mL whole blood or 1.5 mL platelet-free plasma ROOM TEMP within 4 hours of collection. Platelet-free plasma FROZEN within 4 hours of collection is stable for up to 2 weeks.  
**UNACCEPTABLE:** Frozen whole blood specimen, partially filled tube, marked hemolysis, clotted specimen, whole blood received >4 hours of collection or platelet-free plasma not frozen within 4 hours of collection.  
**NOTE:** Specimen must arrive in the Laboratory before 2PM to guarantee same-day reporting. See the Specimen Collection section of this manual for preparation of platelet-free plasma.

### Factor 11 Assay

**Panel Code:** F11

**CPT Codes(s):** 85270  
**Test Performed at:** University of MN Physicians  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** Varies  

**Specimen:**  
**COLLECT:** Blue Top  
**SUBMIT:** 1.0 mL platelet-free plasma FROZEN immediately or whole blood which must be received at U of M lab within 4 hours of collection.  
**UNACCEPTABLE:** Specimen not received frozen or whole blood received at U of M lab >4 hours after collection.  
**NOTE:** Centrifuge specimen for 30 minutes at 3000 rpm. Aliquot plasma and freeze.

### Factor 12 Assay

**Panel Code:** F12

**CPT Codes(s):** 85280  
**Test Performed at:** University of MN Physicians  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** Varies  

**Specimen:**  
**COLLECT:** Blue Top  
**SUBMIT:** 1.0 mL platelet-free plasma FROZEN immediately or whole blood which must be received at U of M lab within 4 hours of collection.  
**UNACCEPTABLE:** Specimen not received frozen or whole blood received at U of M lab >4 hours after collection.  
**NOTE:** Centrifuge specimen for 30 minutes at 3000 rpm. Aliquot plasma and freeze.
### Factor 2 Assay

**Panel Code:** FA2

**CPT Codes(s):** 85210  
**Test Performed at:** University of MN Physicians  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** Mon Tue Wed Thu Fri  

**Specimen:**  
COLLECT: Blue Top  
SUBMIT: 1.0 mL platelet-free plasma FROZEN immediately or whole blood which must be received at U of M lab within 4 hours of collection.  
UNACCEPTABLE: Specimen not received frozen or whole blood received at U of M lab >4 hours after collection.  
NOTE: If the patient's hematocrit is >55%, contact HML for a special collection tube. Centrifuge specimen for 30 minutes at 3000 rpm. Aliquot plasma and freeze.  

* This test is different from the Factor 2 Mutation (Prothrombin Mutation) *

### Factor 5 Assay

**Panel Code:** FA5

**CPT Codes(s):** 85220  
**Test Performed at:** University of MN Physicians  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** Varies  

**Specimen:**  
COLLECT: Blue Top  
SUBMIT: 1.0 mL platelet-free plasma FROZEN immediately or Room Temp whole blood which must be received at U of M lab within 4 hours of collection.  
UNACCEPTABLE: Specimen not received frozen or whole blood received at U of M lab >4 hours after collection.  
NOTE: This test is different from the Factor 5 Leiden Mutation. Centrifuge specimen for 30 minutes at 3000 rpm. Aliquot plasma and freeze.

### Factor 7 Assay

**Panel Code:** FA7

**CPT Codes(s):** 85230  
**Test Performed at:** University of MN Physicians  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** Varies  

**Specimen:**  
COLLECT: Blue Top  
SUBMIT: 1.0 mL platelet-free plasma FROZEN immediately or whole blood which must be received at U of M lab within 4 hours of collection.  
UNACCEPTABLE: Specimen not received frozen or whole blood received at U of M lab >4 hours after collection.  
NOTE: Centrifuge for 30 minutes at 3000 rpm. Aliquot plasma and freeze.
Factor 8 Assay

Panel Code: FA8

CPT Codes(s): 85240
Test Performed at: University of MN Physicians
Analytic Time: 24 hours (1 day)
Days Test Performed: Varies

Specimen:
COLLECT: Blue Top
SUBMIT: 1.0 mL platelet-free plasma FROZEN immediately or whole blood which must be received at U of M lab within 4 hours of collection.
UNACCEPTABLE: Specimen not received frozen or whole blood received at U of M lab >4 hours after collection.
NOTE: Centrifuge specimen for 30 minutes at 3000 rpm. Aliquot plasma and freeze.

Factor 9 Assay

Panel Code: FA9

CPT Codes(s): 85250
Test Performed at: University of MN Physicians
Analytic Time: 24 hours (1 day)
Days Test Performed: Varies

Specimen:
COLLECT: Blue Top
SUBMIT: 1.0 mL platelet-free plasma FROZEN immediately or whole blood which must be received at U of M lab within 4 hours of collection.
UNACCEPTABLE: Specimen not received frozen or whole blood received at U of M lab >4 hours after collection.
NOTE: Centrifuge specimen for 30 minutes at 3000 rpm. Aliquot plasma and freeze.

Factor V Leiden

Panel Code: FVL

CPT Codes(s): 81241
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 216 hours (9 days)
Days Test Performed: Tue

Specimen:
COLLECT: Lavender Top
SUBMIT: 3 mL whole blood REFRIGERATED.
UNACCEPTABLE: Specimen clotted, centrifuged or opened.
**Factor V Leiden and Factor II Prothrombin Mutation Panel**

- **CPT Codes(s):** 81240, 81241
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 216 hours (9 days)
- **Days Test Performed:** Tue

**Specimen:**
- **COLLECT:** Lavender Top
- **SUBMIT:** 3 mL whole blood REFRIGERATED.
- **UNACCEPTABLE:** Specimen clotted, centrifuged or opened.

**Factor V Leiden, Prothrombin Mutate, MTHFR, Panel**

- **CPT Codes(s):** 81240, 81241, 81291
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 216 hours (9 days)
- **Days Test Performed:** Tue

**Specimen:**
- **COLLECT:** Lavender Top
- **SUBMIT:** 3 mL whole blood REFRIGERATED.
- **UNACCEPTABLE:** Specimen clotted, centrifuged or opened.

**Fat Qualitative, Fecal**

- **CPT Codes(s):** 82705
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 24 hours (1 day)
- **Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** Clean Screw-Top Container
- **SUBMIT:** A fresh random stool specimen REFRIGERATED. Specimen must arrive within 48 hours of collection.
- **UNACCEPTABLE:** Specimen more than 48 hours old.
- **NOTE:** This is a qualitative screen only.

**Fat Qualitative, Urine**

- **CPT Codes(s):** 89125
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 24 hours (1 day)
- **Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** Random Urine in Screw-Top Container
- **SUBMIT:** 15 mL aliquot of random urine collection (no preservative) REFRIGERATED.
## Fecal Fat Quantitative

**Panel Code:** FQT

**CPT Codes(s):** 82710  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
- **COLLECT:** 48-72 Hour Stool Container  
- **SUBMIT:** Entire fecal collection in container supplied by HML, FROZEN. Store refrigerated during collection.  
**NOTE:** 48 or 72 hour collections are recommended. Laxatives must NOT be used during collection period. Barium interferes with the test procedure. Synthetic fat substitutes (i.e. Olestra) interfere with the test procedure. For 3 days prior and throughout the collection period, patient must follow a controlled diet of 100-150 g of fat per day. A separate collection must take place if electrolytes are also ordered.

## Fecal WBC's

**Panel Code:** FWC

**CPT Codes(s):** 89055  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 2 hours  
**Days Test Performed:** All

**Specimen:**  
- **COLLECT:** Clean Screw-Top Container  
- **SUBMIT:** 1.0 mL liquid or pea-sized portion of stool REFRIGERATED.  
- **UNACCEPTABLE:** Stool in preservative. Specimens over 72 hours.

## Felbamate (Felbatol®)

**Panel Code:** FEL

**CPT Codes(s):** 80299  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Wed Fri

**Specimen:**  
- **COLLECT:** Red Top  
- **SUBMIT:** 1 mL serum REFRIGERATED.  
**NOTE:** Recommended collection is 1 hour prior to dose.
### FENA (Fractional Excretion of Sodium)

**Panel Code:** FES

- **Creatinine, urine & serum**
- **Sodium, urine & serum**

**CPT Codes(s):** 82565, 82570, 84295, 84300  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Red Top and Random Urine in Screw-Top  
SUBMIT: 1 mL serum REFRIGERATED AND 10 mL aliquot of random urine (no preservative) REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed serum specimen.  
NOTE: Blood should be drawn within 4 hours of urine collection. Label specimens appropriately (serum, urine).

### Fentanyl w/metabolite Confirmation, Urine

**Panel Code:** FTL

- **CPT Codes(s):** 80354  
- **Test Performed at:** Mayo Medical Laboratories  
- **Analytic Time:** 144 hours (6 days)  
- **Days Test Performed:** Mon Tue Wed Thu

**Specimen:**  
COLLECT: Random Urine in a Screw Top Container  
SUBMIT: 5mL urine REFRIGERATED

### Ferritin

**Panel Code:** FER

- **CPT Codes(s):** 82728  
- **Test Performed at:** HealthEast Medical Laboratory  
- **Analytic Time:** 4 hours  
- **Days Test Performed:** All

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED up to 7 days. May require ABN form. Pediatric minimum volume is 120 uL.  
UNACCEPTABLE: Hemolyzed specimen.  
NOTE: The performance of this assay has not been established for individuals younger than 13 months of age.
### Fetal Bleed Screen

**Panel Code: FBS**

**CPT Codes(s):** 85461  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** All  

**Specimen:**  
COLLECT: Lavender Top  
SUBMIT: 4 mL whole blood REFRIGERATED. Specimen must be tested within two days of collection. If a fetal bleed screen is positive, a Kleihauer-Betke stain will be performed and charged separately using CPT code 85460. If fetal screen is negative, testing is complete.  
NOTE: Order FBS only on Rh negative women who've delivered an Rh positive child. Order KLB for all other fetal bleed testing.

### Fetal Fibronectin

**Panel Code: FFN**

**CPT Codes(s):** 82731  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All  

**Specimen:**  
COLLECT: Adeza Biomedical Specimen Collection Kit  
NOTE: Specimen stable 8 hrs RT, 3 days refrigerated or 3 months frozen. Testing is PERFORMED at St John's and Woodwinds Lab(schedule courier accordingly). The number of weeks gestation is REQUIRED. Recommend sampling between 24 wks and 35 wks gestation. See the Specimen Collection section for collection instructions. Do not perform test on women with any of the following conditions: multiple fetuses, partial or complete placenta previa, cervical cerclage, cervical dilation >3 cm, ruptured amniotic membranes, moderate or gross vaginal bleeding or sexual intercourse within 24 hrs.

### Fetal Lung Profile, L/S Ratio, Amniotic Fluid

**Panel Code: LAB3018**

**CPT Codes(s):** 83661, 84081  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri, Sat til 2pm, Sun til 11am  

**Specimen:**  
COLLECT: Amniotic Fluid in a Screw-Top Tube  
SUBMIT: 6 mL amniotic fluid REFRIGERATED in a screw-top tube. Unprocessed specimen MUST arrive at HML within 2 hours of collection. If the specimen in not received at HML within 2 hours, centrifuge specimen 10 minutes at 1000 rpm or 200xG. Separate supernatant from pellet, freeze both and ship FROZEN.  
NOTE: Include estimate of duration of pregnancy (in weeks).
**Fibrinogen**

**Panel Code:** FIB

**CPT Codes(s):** 85384  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 8 hours  
**Days Test Performed:** All

**Specimen:**
- **COLLECT:** Blue Top  
- **SUBMIT:** 3 mL whole blood or 1.5 mL platelet-free plasma ROOM TEMP within 4 hours of collection. Platelet-free plasma FROZEN within 4 hours of collection is stable for up to 2 weeks.
- **UNACCEPTABLE:** Frozen whole blood specimen, partially filled tube, or marked hemolysis, clotted specimen, whole blood received >4 hours of collection or platelet-free plasma not frozen within 4 hours of collection.

**NOTE:** See Specimen Collection section of this manual for preparation of platelet-free plasma.

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**Flecainide (Tambocor®)**

**Panel Code:** FLC

**CPT Codes(s):** 80299  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 192 hours (8 days)  
**Days Test Performed:** Mon Wed Fri

**Specimen:**
- **COLLECT:** Plain Red Top  
- **SUBMIT:** 3 mL serum REFRIGERATED. Specimen must be centrifuged and serum aliquoted within 2 hours of collection.
- **UNACCEPTABLE:** Specimen drawn in an SST tube or markedly lipemic.

---

**Flow Cytometry**

**Panel Code:** FLO

Call Flow Cytometry Laboratory (651-232-4188) prior to sample submission. Please indicate probable diagnosis.

**CPT Codes(s):** 88184, 88185  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** See Below  
- **SUBMIT:** Peripheral blood: 3 mL whole blood in lavender top (EDTA) tube at ROOM TEMP. Bone marrow: 2 mL bone marrow in lavender top (EDTA) at ROOM TEMP. Lymph nodes and Extramedal Tissue: Submit specimen from surgical biopsy or needle biopsy in RPMI 1640 supplied by HealthEast Medical Laboratory. Forward promptly at ROOM TEMP before 2 p.m.
- **UNACCEPTABLE:** Refrigerated or frozen specimen. Rec'd after 2pm Fridays.  
**NOTE:** Specimen source is REQUIRED. CPT code 88184 is used for the first marker, 88185 for each additional marker. CPT code 88187 is used for Pathology interpretation (2-8 markers), 88188(9-15markers), 88189 (16+).
### Fluoxetine (Prozac®)

Panel Code: FLU

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<th>SPECIMEN</th>
<th>COLLECTION</th>
<th>SUBMISSION</th>
<th>REFERENCE RANGE</th>
<th>DIAGNOSTIC TOOL</th>
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<tr>
<td>Norfluoxetine</td>
<td>1 Plain Red Top</td>
<td>1 mL serum REFRIGERATED</td>
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**CPT Codes(s):** 80299  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 192 hours (8 days)  
**Days Test Performed:** Wed  

**Specimen:**  
COLLECT: 1 Plain Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
UNACCEPTABLE: Specimen drawn in an SST® tube, markedly hemolyzed, lipemic or icteric.  
NOTE: Serum must be removed from cells within 2 hours of draw.

---

### Folate, Serum

Panel Code: FOL

<table>
<thead>
<tr>
<th>SPECIMEN</th>
<th>COLLECTION</th>
<th>SUBMISSION</th>
<th>REFERENCE RANGE</th>
<th>DIAGNOSTIC TOOL</th>
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</thead>
<tbody>
<tr>
<td>Folate, Serum</td>
<td>Red Top (Fasting &amp; Protect From Light)</td>
<td>1 mL serum REFRIGERATED; FROZEN in a separate tube if not submitted within 7 days. Protect from light.</td>
<td></td>
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**CPT Codes(s):** 82746  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** All  

**Specimen:**  
COLLECT: Red Top (Fasting & Protect From Light)  
SUBMIT: 1 mL serum REFRIGERATED; FROZEN in a separate tube if not submitted within 7 days. Protect from light.  
UNACCEPTABLE: Hemolyzed specimen.  
NOTE: Patient fasting 8 hours.

---

### Fragile X Syndrome, Molecular Analysis

Panel Code: LAB3037

<table>
<thead>
<tr>
<th>SPECIMEN</th>
<th>COLLECTION</th>
<th>SUBMISSION</th>
<th>REFERENCE RANGE</th>
<th>DIAGNOSTIC TOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fragile X Syndrome, Molecular Analysis</td>
<td>Lavender Top</td>
<td>3 mL whole blood ROOM TEMPERATURE.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CPT Codes(s):** 81243  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 240 hours (10 days)  
**Days Test Performed:** Mon Wed  

**Specimen:**  
COLLECT: Lavender Top  
SUBMIT: 3 mL whole blood ROOM TEMPERATURE.  
UNACCEPTABLE: Clotted specimen.  
NOTE: Diagnosis is REQUIRED. Genetic Testing Code Modifier 5B needs to be added to all CPT codes. Fragile X follow up analysis testing (81244) will be performed and charged dependent upon the size of the CGG repeat found by PCR analysis.
**Fructosamine**

**Panel Code:** FSM

**CPT Codes(s):** 82985  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
UNACCEPTABLE: Mildly hemolyzed and icteric specimen.  
NOTE: Centrifuge and aliquot within 2 hours of collection.

---

**FSH**

**Panel Code:** FSH

**CPT Codes(s):** 83001  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED up to 7 days.

---

**G-6-PD (Glucose-6-Phosphate Dehydrogenase), Qualitative**

**Panel Code:** G6S

**CPT Codes(s):** 82960  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Lavender Top  
SUBMIT: 3 mL whole blood REFRIGERATED.  
UNACCEPTABLE: Frozen specimen or markedly hemolyzed specimen. Volume less than 1 mL.

---

**G-6-PD Quantitative**

**Panel Code:** GPD

**CPT Codes(s):** 82955  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 96 hours (4 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**  
COLLECT: Lavender Top  
SUBMIT: 3 mL whole blood REFRIGERATED in original tube.  
UNACCEPTABLE: Markedly hemolyzed specimen.
**Gabapentin (Neurontin®)**

Panel Code: GBP

CPT Codes(s): 80171  
Test Performed at: Mayo Medical Laboratories  
Analytic Time: 48 hours (2 days)  
Days Test Performed: Tue Wed Thu Fri Sat

Specimen:  
COLLECT: Plain Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
UNACCEPTABLE: Specimen drawn in an SST tube.  
NOTE: Recommended collection is 1 hour before dose. Serum must be removed from cells within 2 hours of collection.

**GAD65 (Glutamic Acid Decarboxylase Antibody)**

Panel Code: GAD

CPT Codes(s): 86341  
Test Performed at: Mayo Medical Laboratories  
Analytic Time: 144 hours (6 days)  
Days Test Performed: Mon Tue Wed Thu Sun

Specimen:  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed, lipemic or icteric specimen.

**Ganglioside Antibody Panel**

Panel Code: GM1

Asialo GM1 IgG & IgM  
Disialo GD1b IgG & IgM  
Monosialo GM1 IgG & IgM

CPT Codes(s): 83520 x6  
Test Performed at: Mayo Medical Laboratories  
Analytic Time: 192 hours (8 days)  
Days Test Performed: Mon Wed

Specimen:  
COLLECT: Red Top  
SUBMIT: 1 mL serum FROZEN within 8 hours in a separate tube.  
UNACCEPTABLE: Markedly hemolyzed or lipemic specimen.

**Gastrin**

Panel Code: GSN

CPT Codes(s): 82941  
Test Performed at: Mayo Medical Laboratories  
Analytic Time: 72 hours (3 days)  
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:  
COLLECT: Red Top (Fasting 8 Hours)  
SUBMIT: 1 mL serum FROZEN in a separate tube within 4 hours.  
UNACCEPTABLE: Markedly hemolyzed specimen.  
NOTE: Patient must be fasting 8 hours.
### Gentamicin

**Panel Code:** GNT

<table>
<thead>
<tr>
<th>CPT Codes(s):</th>
<th>80170</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Test Performed at:</strong></td>
<td>HealthEast Medical Laboratory</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong></td>
<td>4 hours</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong></td>
<td>All</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: IP Green Top / OP Plain Red Top
- SUBMIT: 1 mL serum REFRIGERATED up to 7 days.
- UNACCEPTABLE: Specimen collected in an SST® tube.
- NOTE: Date and time of last dose are REQUIRED. PEAK Specimen: Draw blood 30 minutes after intramuscular dose or 15 minutes after intravenous dose. TROUGH specimen: Draw blood 15 minutes before next dose. Label specimen appropriately (peak or trough and collection time).

### GGT (Gamma GT)

**Panel Code:** GGT

<table>
<thead>
<tr>
<th>CPT Codes(s):</th>
<th>82977</th>
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</thead>
<tbody>
<tr>
<td><strong>Test Performed at:</strong></td>
<td>HealthEast Medical Laboratory</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong></td>
<td>4 hours</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong></td>
<td>All</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: IP Green Top / OP Red Top
- SUBMIT: 1 mL serum REFRIGERATED. May require ABN form.

### Giardia Detection, Stool

**Panel Code:** GSA

<table>
<thead>
<tr>
<th>CPT Codes(s):</th>
<th>87015, 87269</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Test Performed at:</strong></td>
<td>HealthEast Medical Laboratory</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong></td>
<td>8 hours</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong></td>
<td>Mon Tue Wed Thu Fri</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: Prototix™
- UNACCEPTABLE: Preserved stool more than 1 week old. Unpreserved stool more than 48 hours old. Stool in culture media.
- NOTE: Positives will be reported to MDH. This test may also detect cryptosporidia oocysts. HML will notify client and request an order for the result.

### Giardia lamblia Antibody Panel, IgG, IgA, and IgM

**Panel Code:** GIA

<table>
<thead>
<tr>
<th>CPT Codes(s):</th>
<th>86674 x3</th>
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</thead>
<tbody>
<tr>
<td><strong>Test Performed at:</strong></td>
<td>Mayo Medical Laboratories</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong></td>
<td>120 hours (5 days)</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong></td>
<td>Mon Tue Wed Thu Fri Sat</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 2 mL serum REFRIGERATED.
Gliadin Antibodies IgA and IgG

**Panel Code:** GAG

**CPT Codes(s):** 83516 x2  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 120 hours (5 days)  
**Days Test Performed:** Mon Thu

**Specimen:**
- **COLLECT:** Red Top  
- **SUBMIT:** 1mL serum REFRIGERATED. FROZEN is not submitted within 48 hours.  
- **UNACCEPTABLE:** Specimens > 48 hours old if not frozen. Markedly hemolyzed or lipemic specimens.

Globulin

**Panel Code:** GLB

**CPT Codes(s):** 82040, 84155  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**
- **COLLECT:** IP Green Top / OP Red Top  
- **SUBMIT:** 1 mL serum REFRIGERATED.

Glomerular Basement Membrane (GBM) Antibodies, IgG

**Panel Code:** GBM

**CPT Codes(s):** 83520  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sun

**Specimen:**
- **COLLECT:** Red Top  
- **SUBMIT:** 0.5 mL serum REFRIGERATED.  
- **UNACCEPTABLE:** Markedly hemolyzed or lipemic specimen.

Glucose

**Panel Code:** GLU

**CPT Codes(s):** 82947  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**
- **COLLECT:** Green Top or Red Top  
- **SUBMIT:** 1 mL serum REFRIGERATED. Centrifuge and separate serum from cells within 4 hours of draw. May require ABN form. Pediatric minimum volume is 210 uL.  
- **NOTE:** Patient fasting 8-14 hours. ADA glucose guidelines released 1/2007 Fasting plasma glucose: 70-99 mg/dL. Impaired fasting plasma glucose: 100-125 mg/dL. Provisional diagnosis of diabetes fasting plasma glucose: > or = 126 mg/dL.
Glucose Tolerance, Non-Gestational (2 Hour)  
Panel Code: GT2

CPT Codes(s): 82947, 82950  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 24 hours (1 day)  
Days Test Performed: All

**Specimen:**  
COLLECT: Grey Tops X2  
SUBMIT: 1mL plasma REFRIGERATED for each time period.  
NOTE: See the Specimen Collection section of this manual for collection instructions. Patient should be maintained on a >150 g/day carbohydrate diet ("unrestricted") for three days prior to this test and have unrestricted physical activity. Patient is not allowed to smoke or drink for the duration of test. Sips of water are allowed if needed. Patient must remain seated throughout the test. Vomiting negates the test.

---

Glucose, 1 Hour Post Prandial  
Panel Code: GL1

CPT Codes(s): 82947  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 4 hours  
Days Test Performed: All

**Specimen:**  
COLLECT: IP Green Top / OP Red Top (1 Hour Postprandial)  
SUBMIT: 1 mL serum REFRIGERATED. Centrifuge and separate serum from cells within 4 hours of draw. May require ABN form.  
NOTE: Specimen collected 1 hour after meal. Current American Diabetic Association (ADA) guidelines do not include recommendations using 1 hour post-prandial glucose measurements.

---

Glucose, 2 Hour Post Prandial  
Panel Code: GL2

CPT Codes(s): 82947  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 4 hours  
Days Test Performed: All

**Specimen:**  
COLLECT: IP Green Top / OP Red Top (2 Hours Postprandial)  
SUBMIT: 1 mL serum REFRIGERATED. Centrifuge and separate serum from cells within 4 hours of draw. May require ABN form.  
NOTE: Specimen collected 2 hours after meal.
**Glucose, Body Fluid**

- **Panel Code:** GLF
- **CPT Codes(s):** 82945
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- COLLECT: Body Fluid in a Screw-Top Container
- SUBMIT: 0.5 mL body fluid REFRIGERATED.
- NOTE: Specimen source is REQUIRED.

**Glucose, CSF**

- **Panel Code:** GLC
- **CPT Codes(s):** 82945
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- COLLECT: Spinal Fluid in CSF Collection Tube
- SUBMIT: 0.5 mL spinal fluid REFRIGERATED. Specimen must arrive within 2 hours of collection.

**Glucose, Gestational Challenge (1 Hour)**

- **Panel Code:** G50
- **CPT Codes(s):** 82950
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- COLLECT: Grey Top (Post)
- SUBMIT: 1 mL plasma REFRIGERATED.
- NOTE: Have patient drink a 50 g dose of the glucose tolerance beverage. Ingestion should be completed within 10 minutes. Record the time the dosage is given. Draw blood 1 hour after glucose tolerance beverage is given. Patient is not allowed to smoke or drink for the duration of test. Sips of water are allowed if needed. Patient must remain seated throughout the test. Vomiting negates the test.
### Glucose, Gestational Challenge (2 hour)

**Panel Code:** G2G  
**CPT Codes(s):** 82951  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
- COLLECT: Grey Tops x3 - Collect 2 hours after Glucola administration  
- SUBMIT: 1 ml plasma REFRIGERATED for each time period.  
- NOTE: See the Specimen Collection section of this manual for collection instructions. Patient should be maintained on a >150 g/day carbohydrate diet ("unrestricted") for three days prior to this test and have unrestricted physical activity. Patient is not allowed to smoke or drink for the duration of test. Sips of water are allowed if needed. Patient must remain seated throughout the test. Vomiting negates the test.

### Glucose, Gestational Challenge (3 hour)

**Panel Code:** GTG  
**CPT Codes(s):** 82951, 82952  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
- COLLECT: Grey Tops x4 - Collect 3 hours after Glucola administration  
- SUBMIT: 1 mL plasma REFRIGERATED for each time period.  
- NOTE: See the Specimen Collection section of this manual for collection instructions. Patient should be maintained on a >150 g/day carbohydrate diet ("unrestricted") for three days prior to this test and have unrestricted physical activity. Patient is not allowed to smoke or drink for the duration of test. Sips of water are allowed if needed. Patient must remain seated throughout the test. Vomiting negates the test.

### Glycosylated Hemoglobin A1c

**Panel Code:** A1C  
**CPT Codes(s):** 83036  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sun

**Specimen:**  
- COLLECT: Lavender Top  
- SUBMIT: 3 mL whole blood REFRIGERATED for up to 7 days. May require ABN form.
**Gram Stain**

Panel Code: GRS

- **CPT Codes(s):** 87205
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 2 hours
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** Specimen in Sterile Container
- **SUBMIT:** Specimen in container appropriate for culture on that specimen type.
- **NOTE:** Specimen source is REQUIRED. If the specimen submitted is a swab and a culture is also ordered, a second CultureSwab™ must be submitted for the culture.

---

**Group A Strep, RNA Direct Detection, Throat**

Panel Code: GAT

- **CPT Codes(s):** 87650
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 8 hours
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** CultureSwab™
- **SUBMIT:** Swab in CultureSwab™ REFRIGERATED
- **UNACCEPTABLE:** Specimen collected on wooden swab, swabs in gel media, swabs in charcoal media, bloody swabs, Eswabs. Specimen older than 5 days refrigerated OR older than 48 hours at room temperature. Frozen specimen.
- **NOTE:** See the specimen collection section of this manual for collection instructions.

---

**Group B Strep Screen by PCR**

Panel Code: GBS

- **CPT Codes(s):** 87653
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 48 hours (2 days)
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** CultureSwab™
- **SUBMIT:** Vaginal/Rectal swab in CultureSwab™ REFRIGERATED or ROOM TEMP up to 4 days.
- **UNACCEPTABLE:** Cervical or vaginal collection only. Specimens other than vaginal/rectal. Dry swab, charcoal swab.
- **NOTE:** Indicate patient's penicillin allergy status when placing order. If patient is allergic to penicillin and a Group B Strep is isolated, a susceptibility panel will be performed and charged separately using CPT code 87186.
### Growth Hormone

<table>
<thead>
<tr>
<th>Panel Code: GH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 83003</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> Mayo Medical Laboratories</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 72 hours (3 days)</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> Mon Tue Wed Thu Fri Sat</td>
</tr>
</tbody>
</table>

**Specimen:**
- **COLLECT:** Red Top (Fasting)
- **SUBMIT:** 1 mL serum REFRIGERATED.
- **UNACCEPTABLE:** Markedly hemolyzed specimen.

**NOTE:** Patient should be fasting.

### H. pylori Antibody, IgG

<table>
<thead>
<tr>
<th>Panel Code: HPG</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 86677</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> HealthEast Medical Laboratory</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 72 hours (3 days)</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> Mon Wed Thu</td>
</tr>
</tbody>
</table>

**Specimen:**
- **COLLECT:** Red Top
- **SUBMIT:** 0.5 mL serum REFRIGERATED up to 3 days. FROZEN if not submitted within 72 hours.
- **UNACCEPTABLE:** Hemolyzed specimen or specimen not frozen within 72 hours.

### H. pylori Antigen, Stool

<table>
<thead>
<tr>
<th>Panel Code: PYL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 87338</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> Mayo Medical Laboratories</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 72 hours (3 days)</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> Mon Tue Wed Thu Fri Sat</td>
</tr>
</tbody>
</table>

**Specimen:**
- **COLLECT:** Screw-Top Container
- **SUBMIT:** 5 g stool in a separate screw-top container, FROZEN.
- **UNACCEPTABLE:** Watery, liquid stool, bloody, mucoid specimen or specimen stored at room temperature.

**NOTE:** False negative results if specimen collected within 2 weeks of treatment with antimicrobials, bismuth, or proton pump inhibitors.

### Haemophilus influenzae Type B Antibody, IgG

<table>
<thead>
<tr>
<th>Panel Code: HAB</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 86684</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> Mayo Medical Laboratories</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 144 hours (6 days)</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> Tue Thu</td>
</tr>
</tbody>
</table>

**Specimen:**
- **COLLECT:** Red Top
- **SUBMIT:** 0.5 mL serum REFRIGERATED.
- **UNACCEPTABLE:** Markedly hemolyzed or lipemic specimen
**Haptoglobin**

**Panel Code:** HPT

- **CPT Codes(s):** 83010
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- COLLECT: IP Green Top / OP Red Top
- SUBMIT: 1 mL serum REFRIGERATED up to 7 days.
- **UNACCEPTABLE:** Markedly hemolyzed specimens.

**HDL Cholesterol**

**Panel Code:** HDL

- **CPT Codes(s):** 83718
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- COLLECT: IP Green Top / OP Red Top (Fasting)
- SUBMIT: 1 mL serum REFRIGERATED. May require ABN form.
- **NOTE:** Patient fasting 12-14 hours.

**Heavy Metal Panel (As, Hg, Pb), 24 Hour Urine**

**Panel Code:** MTU

- **Arsenic**
- **Lead**
- **Mercury**

- **CPT Codes(s):** 82175, 83655, 83825
- **Test Performed at:** NON-INTERFACED SEND OUT LABS
- **Analytic Time:** 72 hours (3 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- COLLECT: 24 Hour Metal-free Container
- SUBMIT: 10 mL aliquot of 24 hour urine collection (metal-free) REFRIGERATED in a metal-free container.
- **UNACCEPTABLE:** Specimen not received in a metal-free container.
- **NOTE:** Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions.
### Heavy Metals Screen, Whole Blood

**Panel Code:** MTB

- **Arsenic**
- **Lead**
- **Mercury**

**CPT Codes(s):** 82175, 83655, 83825  
**Test Performed at:** MedTox Laboratory, Inc  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** Navy Blue Top-Lav (EDTA)-WB  
- **SUBMIT:** 2 mL whole blood REFRIGERATED.  
- **UNACCEPTABLE:** Specimen clotted or not received in a metal-free tube.

### Helper Suppressor Panel & Extended Helper Suppressor Panel

**Panel Code:** HSP

Panel code HSP=Helper Suppressor

- **CPT Codes(s):** 86359, 86360  
- **Test Performed at:** HealthEast Medical Laboratory  
- **Analytic Time:** 24 hours (1 day)  
- **Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** Lavender Top  
- **SUBMIT:** 3 mL whole blood ROOM TEMP. Specimen to be collected Monday through Thursday only and not on the day before a holiday. Specimen must arrive before 2 p.m.  
- **UNACCEPTABLE:** Refrigerated, clotted, or markedly hemolyzed specimen.  
- **NOTE:** An Extended Helper/Suppressor Panel is available in addition to the regular Helper/Suppressor Panel. For more details, contact the Flow Cytometry Lab at 651-232-4188. Additional CPT codes 86355 and 86357 will be added to the regular Helper Suppressor panel for this purpose.

### Hematocrit

**Panel Code:** HCT

- **CPT Codes(s):** 85014  
- **Test Performed at:** HealthEast Medical Laboratory  
- **Analytic Time:** 24 hours (1 day)  
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** Lavender Top  
- **SUBMIT:** 3 mL whole blood REFRIGERATED.  
- **UNACCEPTABLE:** Volume less than 1 mL in tube; specimen > 24 hours old.
**Hemochromatosis HFE Gene Analysis, Blood**

**Panel Code:** LAB3033

**CPT Codes(s):** 81256  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 168 hours (7 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: Lavender Top  
SUBMIT: 3 mL whole blood ROOM TEMPERATURE in original tube.  
UNACCEPTABLE: Specimen clotted or centrifuged.  
NOTE: Specimen must arrive at Mayo within 96 hours of draw.

---

**Hemoglobin**

**Panel Code:** HGB

**CPT Codes(s):** 85018  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Lavender Top  
SUBMIT: 3 mL whole blood REFRIGERATED.  
UNACCEPTABLE: Volume less than 1 mL in tube; specimen > 24 hours old.

---

**Hemoglobinopathy / Thalassemia Cascade**

**Panel Code:** ELB

**CPT Codes(s):** 83020, 83021  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 96 hours (4 days)  
**Days Test Performed:** Varies

**Specimen:**  
COLLECT: Lavender Top  
SUBMIT: 3 mL whole blood REFRIGERATED. Stable for 4 days at 2°-8° C.  
NOTE: Assay is performed on varying days. A separate charge for the pathologist interpretation is billed using CPT code 83020 with a 26 modifier. Reflex testing (performed at additional charge) may include any or all of the following: hemoglobin S screen (CPT 85660), unstable hemoglobin (CPT 83068), isoelectric focusing confirms (CPT 82664), hemoglobin variant by mass spectrometry (CPT 83789), hemoglobin F red cell distribution (CPT 88184), Hgb Electrophoresis Molecular (CPT 81257, 81401, 81403).
Hemogram 1 (CBC w/Differential)

Basophils
Basophils (Absolute)
Eosinophils (Absolute)
Eosiohils
Hematocrit
Hemoglobin
Lymphs
Lymphs (Absolute)
MCHC
MCV
Mean Platelet Volume
Monocytes
Monocytes (Absolute)
Neutrophils
Neutrophils (Absolute)
Platelet Count
RBC
RDW
WBC

CPT Codes(s): 85025
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 24 hours (1 day)
Days Test Performed: All

Specimen:
COLLECT: Lavender Top
SUBMIT: 3 mL whole blood REFRIGERATED or ROOM TEMPERATURE if < 24 hours old. May require ABN form. Pediatric minimum volume is 1/0.4 - 1 mL tube/0.4 microtainer; EDTA tube must have at least 1 mL of blood.
UNACCEPTABLE: Volume less than 1 mL. Peripheral smears without lavender top. Specimen > 24 hours old.
Hemogram 2 (CBC w/o Differential)  
Panel Code: HM2

- Hematocrit
- Hemoglobin
- MCH
- MCHC
- MCV
- Mean Platelet Volume
- Platelet Count
- RBC
- RDW
- WBC

**CPT Codes(s):** 85027  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** All

**Specimen:**
- **COLLECT:** Lavender Top
- **SUBMIT:** 3 mL whole blood REFRIGERATED or ROOM TEMPERATURE if < 24 hours old. May require ABN form.
- **UNACCEPTABLE:** Volume less than 1 mL. Specimen > 24 hours old.

HemoQuant, Fecal  
Panel Code: HEQ

- **CPT Codes(s):** 84126  
- **Test Performed at:** Mayo Medical Laboratories  
- **Analytic Time:** 48 hours (2 days)  
- **Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**
- **COLLECT:** Hemoquant Container
- **SUBMIT:** 1 g stool from a single defecation REFRIGERATED. May require ABN form. Collection container available from HML.
- **NOTE:** Patient should be instructed to refrain from red meat and aspirin for 3 days prior to specimen collection.

Hemosiderin, Urine  
Panel Code: FEU

- **CPT Codes(s):** 83070  
- **Test Performed at:** HealthEast Medical Laboratory  
- **Analytic Time:** 24 hours (1 day)  
- **Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** Random Urine in a Screw-Top Container
- **SUBMIT:** 10 mL aliquot from random urine collection (no preservative) REFRIGERATED. Specimen must arrive within 4 hours of collection.
- **UNACCEPTABLE:** Specimen more than 4 hours old or with preservative. Volume less than 5 mL of urine.
**Heparin-induced Platelet Antibody**

**Panel Code:** HIT

- **CPT Codes(s):** 86022
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 48 hours (2 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri Sun

**Specimen:**
- **COLLECT:** Plain Red Top
- **SUBMIT:** 1 mL serum FROZEN within 8 hours in a separate tube.
- **UNACCEPTABLE:** Specimen collected in an SST® tube.

---

**Hepatic Profile**

**Panel Code:** LFT

- **Albumin**
- **Alkaline Phosphatase**
- **ALT (SGPT)**
- **AST (SGOT)**
- **Direct Bilirubin**
- **Protein, Total**
- **Total Bilirubin**

- **CPT Codes(s):** 80076
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** IP Green Top / Red Top
- **SUBMIT:** 1 mL serum REFRIGERATED. Keep out of light as much as possible. May require ABN form.
- **UNACCEPTABLE:** Hemolyzed specimen.

---

**Hepatitis A Antibody, IgG (Anti-HAV, IgG)**

**Panel Code:** HAV

- **CPT Codes(s):** 86708
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 48 hours (2 days)
- **Days Test Performed:** Mon Wed Fri

**Specimen:**
- **COLLECT:** Red Top
- **SUBMIT:** 1 mL serum REFRIGERATED up to 7 days.
- **NOTE:** Performance of the Anti-HAV, IgG test has not been established with neonatal specimens (<= 2 months of age).
Hepatitis A Antibody, IgM (Anti-HAV, IgM)  
Panel Code: HAM

- **CPT Codes(s):** 86709  
- **Test Performed at:** HealthEast Medical Laboratory  
- **Analytic Time:** 48 hours (2 days)  
- **Days Test Performed:** Mon Wed Fri

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED up to 7 days.

---

Hepatitis A Immune Status  
Panel Code: HAT

- **CPT Codes(s):** 86708  
- **Test Performed at:** HealthEast Medical Laboratory  
- **Analytic Time:** 48 hours (2 days)  
- **Days Test Performed:** Mon Wed Fri

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED up to 7 days.  
**NOTE:** Performance of the Anti-HAV, IgG test has not been established with neonatal specimens (≤ 2 months of age).

---

Hepatitis Acute Evaluation  
Panel Code: HAE

- **CPT Codes(s):** 80074  
- **Test Performed at:** HealthEast Medical Laboratory  
- **Analytic Time:** 48 hours (2 days)  
- **Days Test Performed:** Mon Wed Fri

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 2 mL serum REFRIGERATED; FROZEN in a separate tube if not submitted within 6 days. May require ABN form.  
**UNACCEPTABLE:** Markedly hemolyzed specimens.  
**NOTE:** If Hepatitis B Surface Antigen is positive, it will be confirmed by neutralization testing unless patient previously confirmed positive for HBsAg.
### Hepatitis B Chronic Evaluation

**Panel Code:** HCE

- **Hepatitis B Core Antibody (Anti-HBc)**
- **Hepatitis B Surface Antibody (Anti-HBs)**

**CPT Codes(s):** 86704, 86706  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** Mon Wed Fri  

**Specimen:**  
- **COLLECT:** Red Top  
- **SUBMIT:** 2 mL serum REFRIGERATED up to 7 days.

### Hepatitis B Core Antibody (Anti-HBc), Total

**Panel Code:** HBC

**CPT Codes(s):** 86704  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** Mon Wed Fri  

**Specimen:**  
- **COLLECT:** Red Top  
- **SUBMIT:** 1 mL serum REFRIGERATED up to 7 days.

### Hepatitis B Core Antibody, IgM (Anti-HBc, IgM)

**Panel Code:** BCM

**CPT Codes(s):** 86705  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** Mon Wed Fri  

**Specimen:**  
- **COLLECT:** Red Top  
- **SUBMIT:** 1 mL serum REFRIGERATED up to 7 days.

### Hepatitis B Surface Antibody (Anti-HBs)

**Panel Code:** ABS

**CPT Codes(s):** 86706  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri  

**Specimen:**  
- **COLLECT:** Red Top  
- **SUBMIT:** 1 mL serum REFRIGERATED up to 7 days.
### Hepatitis B Surface Antibody (Anti-HBs) Vaccine Check

<table>
<thead>
<tr>
<th>Panel Code: HBV</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COLLECT:</strong> Red Top</td>
</tr>
<tr>
<td><strong>SUBMIT:</strong> 1 mL serum REFRIGERATED up to 7 days.</td>
</tr>
</tbody>
</table>

**Test Performed at:** HealthEast Medical Laboratory

**Analytic Time:** 48 hours (2 days)

**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 1 mL serum REFRIGERATED up to 7 days.

### Hepatitis B Surface Antigen

<table>
<thead>
<tr>
<th>Panel Code: BSA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COLLECT:</strong> Red Top</td>
</tr>
<tr>
<td><strong>SUBMIT:</strong> 1 mL serum REFRIGERATED for up to 7 days.</td>
</tr>
</tbody>
</table>

**Test Performed at:** HealthEast Medical Laboratory

**Analytic Time:** 24 hours (1 day)

**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 1 mL serum REFRIGERATED; FROZEN in a separate tube if not submitted within 6 days.

**UNACCEPTABLE:** Markedly hemolyzed specimens.

**NOTE:** If Hepatitis B Surface Antigen is positive, it will be confirmed by neutralization testing unless patient previously confirmed positive for HBsAg.

### Hepatitis B Virus (HBV) DNA, Detection and Quantification by RT-PCR

<table>
<thead>
<tr>
<th>Panel Code: HBQ</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COLLECT:</strong> SST® tube</td>
</tr>
<tr>
<td><strong>SUBMIT:</strong> 2 mL serum FROZEN within 6 hours.</td>
</tr>
</tbody>
</table>

**Test Performed at:** Mayo Medical Laboratories

**Analytic Time:** 96 hours (4 days)

**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- COLLECT: SST® tube
- SUBMIT: 2 mL serum FROZEN within 6 hours.

**UNACCEPTABLE:** Not drawn in SST® tube or specimen not received frozen.

**NOTE:** This test is intended to be used to monitor known Hepatitis B virus DNA-positive infections, confirmation of chronic hepatitis B infection and to diagnose some cases of early acute HBV infection.

### Hepatitis Be Antibody (Anti-HBe)

<table>
<thead>
<tr>
<th>Panel Code: ABE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COLLECT:</strong> SST® tube</td>
</tr>
<tr>
<td><strong>SUBMIT:</strong> 1 mL serum FROZEN.</td>
</tr>
</tbody>
</table>

**Test Performed at:** Mayo Medical Laboratories

**Analytic Time:** 48 hours (2 days)

**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**
- COLLECT: SST® tube
- SUBMIT: 1 mL serum FROZEN.

**UNACCEPTABLE:** Markedly hemolyzed, lipemic or icteric specimen. Not drawn in SST® tube.
Hepatitis Be Antigen

Panel Code: BEA

CPT Codes(s): 87350
Test Performed at: Mayo Medical Laboratories
Analytic Time: 48 hours (2 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
- COLLECT: SST® tube
- SUBMIT: 1 mL serum FROZEN.
- UNACCEPTABLE: Markedly hemolyzed or lipemic specimen or icteric. Not drawn in SST® tube.

Hepatitis C Antibody (Anti-HCV)

Panel Code: HCV

CPT Codes(s): 86803
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 24 hours (1 day)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
- COLLECT: Red Top
- SUBMIT: 1 mL serum REFRIGERATED up to 7 days.
- UNACCEPTABLE: Hemolyzed specimen.

Hepatitis C Virus (HCV) RNA Detection and Quantification by RT-PCR

Panel Code: HCQ

CPT Codes(s): 87522
Test Performed at: Mayo Medical Laboratories
Analytic Time: 72 hours (3 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
- COLLECT: SST® tube (minimum 0.8 mL)
- SUBMIT: 2 mL serum FROZEN within 6 hours. (minimum 0.8 mL)
- UNACCEPTABLE: Not drawn in SST Tube.
- NOTE: Useful for detection of acute HCV infection (ie, < 2 month from exposure), detection and confirmation of chronic HCV infection, monitoring disease progression in chronic HCV and/or response to anti-HCV therapy.
**Hepatitis C Virus Genotype**

Panel Code: GHC

**CPT Codes(s):** 87902  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 144 hours (6 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri  

**Specimen:**  
COLLECT: SST® tube (Minimum 1.5 serum)  
SUBMIT: 3.0 mL serum FROZEN within 6 hours.  
UNACCEPTABLE: Not drawn in SST® tube.  
NOTE: This assay should NOT be used as a screening test for HCV infection. It should be requested only on serum specimens obtained from patients with minimum HCV viral load of 500 IU/mL. If result is either "Indeterminate" or "Genotype 1 without subtype", HCV genotype resolution assay (CPT 87902) will be performed and charged.

**Hepatitis D Virus Antibody, Total**

Panel Code: HDV

**CPT Codes(s):** 86692  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 168 hours (7 days)  
**Days Test Performed:** Mon Thu  

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1.0 mL serum at ROOM TEMPERATURE.

**Herpes Simplex PCR**

Panel Code: HPC

**CPT Codes(s):** 87529  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat  

**Specimen:**  
COLLECT: Sterile Container or CultureSwab™  
SUBMIT: 0.5 mL fluid (body, amniotic, ocular) OR 1.5 mL respiratory (bronchial washing, BAL, nasopharyngeal aspirate or washing, sputum, tracheal aspirate) OR swab in culture transport (genital, dermal, eye, nasal, throat) REFRIGERATED.  
UNACCEPTABLE: CSF, calcium alginate or wooden swab or transport swab containing gel.  
NOTE: Specimen source is required.
Herpes Simplex Virus (HSV), Molecular Detection, PCR, Spinal Fluid

- **Panel Code:** LAB3078
- **CPT Codes(s):** 87529
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 72 hours (3 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri Sat Sun

**Specimen:**
- **COLLECT:** Sterile Container, Min Volume: 0.1 mL
- **SUBMIT:** 0.2 mL Cerebrospinal Fluid (CSF) REFRIGERATED.
- **NOTE:** DO NOT centrifuge.

Herpes simplex Virus (Type 1 and 2) IgG Antibody

- **Panel Code:** HSG
- **HSV1-IgG**
- **HSV2-IgG**
- **CPT Codes(s):** 86695, 86696
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 48 hours (2 days)
- **Days Test Performed:** Mon Wed Fri

**Specimen:**
- **COLLECT:** Red Top
- **SUBMIT:** 0.5 mL serum REFRIGERATED.
- **UNACCEPTABLE:** Hemolyzed or lipemic specimen.
- **NOTE:** Specimen may be refrigerated up to 7 days OR frozen indefinitely.

Herpes Simplex Virus Antibody, IgM by EIA Cascade

- **Panel Code:** HSM
- **CPT Codes(s):** 86694
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 48 hours (2 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**
- **COLLECT:** Red Top
- **SUBMIT:** 1 mL serum REFRIGERATED.
- **UNACCEPTABLE:** Markedly hemolyzed or lipemic specimen.
- **NOTE:** If the result of HSV IgM by EIA is positive, the HSV IgM by IFA (86694) will be performed and charged.
Herpes simplex, Varicella zoster PCR

**Panel Code: HZP**

**CPT Codes(s):** 87529, 87798  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Sterile Container or CultureSwab™  
SUBMIT: 0.5 mL fluid (body, amniotic, ocular) OR 1.5 mL Respiratory (bronchial washing, BAL, nasopharyngeal aspirate or washing, sputum, tracheal aspirate) or BBL CultureSwab™ (genital, dermal, eye, nasal, throat) REFRIGERATED. M5 or M4 media is acceptable. Do NOT centrifuge fluid.  
UNACCEPTABLE: Dry swab. Calcium alginate, wooden swab, gel swab.  
NOTE: Specimen source is REQUIRED. This test detects both Varicella zoster (shingles/chicken pox) and Herpes simplex.

Herpesvirus 6 (HHV-6) Antibodies IgG & IgM

**Panel Code: HP6**

**CPT Codes(s):** 86790 x2  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 96 hours (4 days)  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED.

Histoplasma Ab, Serum

**Panel Code: HST**

- Histoplasma immunodiffusion  
- Histoplasma mycelial  
- Histoplasma yeast

**CPT Codes(s):** 86698 x3  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 168 hours (7 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed or lipemic specimen.
Histoplasma Antigen Cascade, Urine

**Panel Code:** LAB3008

**CPT Codes(s):** 87385
**Test Performed at:** Mayo Medical Laboratories
**Analytic Time:** 48 hours (2 days)
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**
- COLLECT: Random Urine in a screw-top container
- SUBMIT: 3 mL urine REFRIGERATED.
- UNACCEPTABLE: Specimen in preservative

**NOTE:** If Histoplasma Antigen, Urine result is indeterminate, the MVista Histoplasma Ag, Urine will be performed at an additional charge (87385).

HIV Antigen/Antibody Diagnostic Cascade

**Panel Code:** HVD

**CPT Codes(s):** 87389
**Test Performed at:** HealthEast Medical Laboratory
**Analytic Time:** 24 hours (1 day)
**Days Test Performed:** All

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 1 mL serum REFRIGERATED. May require ABN form.
- UNACCEPTABLE: Hemolyzed specimen.

**NOTE:** If results are repeatedly reactive, then HIV-1 and HIV-2 antibody differentiation(86701,86702) will be performed and charged. If needed, HIV-1 Antibody Confirmation by WB(86689) and/or HIV-2 Antibody Confirmation(86689) will be performed and charged. The physician will be contacted. The performance of this assay has not been established for individuals younger than 2 yr. of age. Nearly all infants born to HIV infected mothers passively acquire maternal antibody and test antibody positive until 18 mo. of age regardless of infection status.

HIV Antigen/Antibody Screening Cascade

**Panel Code:** HIV

**CPT Codes(s):** G0475, G0432
**Test Performed at:** HealthEast Medical Laboratory
**Analytic Time:** 24 hours (1 day)
**Days Test Performed:** All

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 1 mL serum REFRIGERATED.
- UNACCEPTABLE: Hemolyzed specimen.

**NOTE:** If results are repeatedly reactive, then HIV-1 and HIV-2 antibody differentiation(86701,86702) will be performed and charged. If needed, HIV-1 Antibody Confirmation by WB(86689) and/or HIV-2 Antibody Confirmation(86689) will be performed and charged. The physician will be contacted. The performance of this assay has not been established for individuals younger than 2 yr. of age. Nearly all infants born to HIV infected mothers passively acquire maternal antibody and test antibody positive until 18 mo. of age regardless of infection status.
HIV-1 RNA Quantification

Panel Code: LAB3032

**CPT Codes(s):** 87536  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat  

**Specimen:**  
**COLLECT:** 2 Lavender Tops (minimum 1.2 mL)  
**SUBMIT:** 2.5 mL EDTA plasma FROZEN within 6 hours in a separate tube. Aliquotted specimen can be sent refrigerated up to 5 days. May require ABN form.  
**UNACCEPTABLE:** Specimen at ROOM TEMPERATURE for greater than 6 hours.  
**NOTE:** This test is intended to be used to monitor known HIV positive infections and for children < 18 months of age.

HLA-B27 Antigen

Panel Code: B27

**CPT Codes(s):** 86812  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 144 hours (6 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat  

**Specimen:**  
**COLLECT:** 2 Lavender Tops  
**SUBMIT:** 5 mL whole blood ROOM TEMPERATURE in original tubes. Specimen must arrive at Mayo within 96 hours of collection.  
**UNACCEPTABLE:** Specimen clotted, centrifuged, refrigerated or frozen.

Homocysteine

Panel Code: HOM

**CPT Codes(s):** 83090  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 120 hours (5 days)  
**Days Test Performed:** Tue Thu  

**Specimen:**  
**COLLECT:** Lavender Top on Wet Ice (Fasting)  
**SUBMIT:** 0.5 mL plasma separated within 6 hours REFRIGERATED up to 14 days.  
**NOTE:** Patient fasting 8 hours minimum. MUST keep lavender top on ice until centrifuged.
Homovanillic Acid (HVA), 24 Hour Urine

**Panel Code:** HVA

**CPT Codes(s):** 83150  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 96 hours (4 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** 24 Hour Urine (Acetic Acid)  
- **SUBMIT:** 10 mL aliquot of 24 hour collection (preserved with 25 mL 50% acetic acid at start of collection) REFRIGERATED. The pH must be between 1 and 5.  
- **UNACCEPTABLE:** Specimen collected without preservative.  
- **NOTE:** Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions and alternate preservatives. L-dopa should be stopped for 24 hours prior to and during collection.

HTLV-I/II Antibody Cascade

**Panel Code:** TLV

**CPT Codes(s):** 86687  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 120 hours (5 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** SST Tube  
- **SUBMIT:** 1 mL serum FROZEN within 8 hours in a separate tube.  
- **UNACCEPTABLE:** Markedly hemolyzed, lipemic or icteric specimen.  
- **NOTE:** If the HTLV-I/II is repeatedly reactive, then confirmatory testing (CPT: 86689) will be performed at an additional charge.

Hypersensitivity Pneumonitis IgG Antibodies

**Panel Code:** FLG

**CPT Codes(s):** 86606, 86609 x2  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** Red Top  
- **SUBMIT:** 0.5 mL serum REFRIGERATED.
IgE Allergen Panel Childhood March with Total IgE

Panel Code: R01

Alternaria alternata
Cat Dander
Cockroach
Codfish
D. farinae
D. pteronyssinus
Dog Dander
Egg White
Milk, Cow
Peanut
Soybean
Total IgE
Wheat

CPT Codes(s): 82785, 86003 x12
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 72 hours (3 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Red Top
SUBMIT: 3.0 mL serum REFRIGERATED; FROZEN in a separate tube if not submitted within 7 days.

IgE Allergen Panel Food

Panel Code: FOO

Carrot
Chicken
Codfish
Corn
Egg White
Egg Yolk
Milk, Cow
Oat
Peanut
Rice
Soybean
Tomato
Wheat

CPT Codes(s): 86003 x13
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 48 hours (2 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Red Top
SUBMIT: 3.0 mL serum REFRIGERATED; FROZEN in a separate tube if not submitted within 7 days. Pediatric minimum volume is 0.6 mL.
### IgE Allergen Panel Midwest 7

**Panel Code:** MW7

- Alternaria alternata
- Cat dander
- Cladosporium herbarum
- Common Ragweed (Short)
- D.Farinae
- Dog Dander
- House Dust, Greer Labs

**CPT Codes(s):** 86003 x7

**Test Performed at:** HealthEast Medical Laboratory

**Analytic Time:** 48 hours (2 days)

**Test Performed at:** HealthEast Medical Laboratory

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 3.0 mL serum REFRIGERATED; FROZEN in a separate tube if not submitted within 7 days.

### IgE Allergen Panel Midwest Large

**Panel Code:** MWL

- Alternaria alternata
- Cladosporium herbarum
- Cat Dander
- Cocksfoot (Orchard Grass)
- Common Ragweed (short)
- Cottonwood
- D.Farinae
- Dandelion
- Dog Dander
- Elm
- Giant Ragweed
- House Dust, Greer Labs
- Maple, Box-elder
- Meadow Fescue
- Meadowgrass, Kentucky Blue
- Mountain Juniper (Cedar)
- Olive Tree
- Rye Grass
- Saltwort, R.Thistle
- Timothy Grass

**CPT Codes(s):** 86003 x20

**Test Performed at:** HealthEast Medical Laboratory

**Analytic Time:** 48 hours (2 days)

**Test Performed at:** HealthEast Medical Laboratory

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 3.0 mL serum REFRIGERATED; FROZEN in a separate tube if not submitted within 7 days.
## IgE Allergen Panel Mini

<table>
<thead>
<tr>
<th>Panel Code: MIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternaria alternata</td>
</tr>
<tr>
<td>Cat Dander</td>
</tr>
<tr>
<td>Common Ragweed (Short)</td>
</tr>
<tr>
<td>D. farinae</td>
</tr>
<tr>
<td>Dog Dander</td>
</tr>
<tr>
<td>Giant Ragweed</td>
</tr>
<tr>
<td>House Dust/Hollister-Stier</td>
</tr>
<tr>
<td>Maple, Box-elder</td>
</tr>
<tr>
<td>Meadowgrass, Kentucky Blue</td>
</tr>
<tr>
<td>Oak</td>
</tr>
<tr>
<td>Red Top Grass</td>
</tr>
</tbody>
</table>

**CPT Codes(s):** 86003 x11  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 3.0 mL serum REFRIGERATED; FROZEN in a separate tube if not submitted within 7 days.

## IgE Allergen Panel Nut Food

<table>
<thead>
<tr>
<th>Panel Code: NUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almond</td>
</tr>
<tr>
<td>Brazil Nut</td>
</tr>
<tr>
<td>Cashew</td>
</tr>
<tr>
<td>Chestnut</td>
</tr>
<tr>
<td>Hazelnut</td>
</tr>
<tr>
<td>Pecan</td>
</tr>
<tr>
<td>Pistachio</td>
</tr>
<tr>
<td>Walnut</td>
</tr>
</tbody>
</table>

**CPT Codes(s):** 86003 x8  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 3.0 mL serum REFRIGERATED; FROZEN in a separate tube if not submitted within 7 days.
IgE Allergen Panel Regular

Panel Code: REG

Alternaria alternata
Aspergillus fumigatus
Cat Dander
Cladosporium herbarum
Cocksfoot (Orchard Grass)
Common Ragweed (Short)
D.farinae
Dog Dander
Elm
English Plantain
Giant Ragweed
House Dust/Hollister-Stier
Maple, Box-elder
Meadowgrass, Kentucky Blue
Oak
Timothy Grass

CPT Codes(s): 86003 x16
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 48 hours (2 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Red Top
SUBMIT: 3.0 mL serum REFRIGERATED; FROZEN in a separate tube if not submitted within 7 days.
IgE Allergen Panel Respiratory with Total IgE  
Panel Code: R02

- Alternaria alternata
- Aspergillus fumigatus
- Cat Dander
- Cladosporium herbarum
- Cockroach
- Cocksfoot (Orchard Grass)
- Common Ragweed (Short)
- Common Silver Birch
- Cottonwood
- D. farinae
- D. pteronyssinus
- Dog Dander
- Elm
- Maple, Box-elder
- Meadowgrass, Kentucky Blue
- Oak
- Timothy Grass
- Total IgE
- White Ash

CPT Codes(s): 82785, 86003 x18  
Test Performed at: HealthEast Medical Laboratory

Analytic Time: 72 hours (3 days)  
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:  
COLLECT: Red Top  
SUBMIT: 3.0 mL serum REFRIGERATED; FROZEN in a separate tube if not submitted within 7 days. Pediatric minimum volume is 0.75 mL.

IgE Allergen Seafood Panel  
Panel Code: FO1

- Clam
- Lobster
- Salmon
- Scallop
- Shrimp
- Tuna

CPT Codes(s): 86003 x6  
Test Performed at: HealthEast Medical Laboratory

Analytic Time: 48 hours (2 days)  
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:  
COLLECT: Red Top  
SUBMIT: 3.0 mL serum REFRIGERATED; FROZEN in a separate tube if not submitted within 7 days.
IGE Single Allergen  
Panel Code: ALG

CPT Codes(s): 86003  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 72 hours (3 Days)  
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:  
COLLECT: Red Top  
SUBMIT: 0.1 mL serum, per allergen requested, REFRIGERATED; frozen if not submitted within 7 days.  
NOTE: See section "IgE Single Allergens" for list of available allergens with panel codes.  
CPT:86003 times the number of allergens requested. Order Allergen specific panel.  
If test is performed at HealthEast Medical Laboratory the analytical time is 48 hours.

IGF-1, LC/MS  
Panel Code: LAB3056

CPT Codes(s): 84305  
Test Performed at: Mayo Medical Laboratories  
Analytic Time: 72 hours (3 days)  
Days Test Performed: Mon Tue Wed Thu Fri Sun

Specimen:  
COLLECT: Red Top  
SUBMIT: 0.5 mL serum FROZEN in a separate tube.  
UNACCEPTABLE: Markedly hemolyzed specimen.

IgG Subclasses  
Panel Code: SUB

Subclasses 1,2,3 and 4  
Total Immunoglobulin G

CPT Codes(s): 82784, 82787 x4  
Test Performed at: Mayo Medical Laboratories  
Analytic Time: 48 hours (2 days)  
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly lipemic specimen.
Imipramine (Tofranil®) and Desipramine  
**Panel Code:** LAB3045  

**Desipramine**  

**CPT Codes(s):** 80335 x1  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 96 hours (4 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat  

**Specimen:**  
COLLECT: Plain Red Top  
SUBMIT: 1 mL serum REFRIGERATED. Remove serum from cells within 2 hours.  
UNACCEPTABLE: Specimen drawn in an SST® tube, markedly hemolyzed or lipemic or icteric.  
NOTE: Recommended collection is prior to next dose (trough).

Immunofixation Electrophoresis, Serum  
**Panel Code:** IFE  

**CPT Codes(s):** 86334  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri  

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
NOTE: A separate charge for the pathologist's interpretation is billed using CPT 86334 with a 26 modifier.

Immunofixation Electrophoresis, Urine  
**Panel Code:** IFU  

**CPT Codes(s):** 86335  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri  

**Specimen:**  
COLLECT: Random Urine in Screw-Top Container  
SUBMIT: 25 mL aliquot of random urine or 24 hour collection (no preservative) REFRIGERATED.  
NOTE: Timed collection (no preservative) is also acceptable. A separate charge for the pathologist's interpretation is billed using CPT 86335 with a 26 modifier.

Immunoglobulin E  
**Panel Code:** TIG  

**CPT Codes(s):** 82785  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Tue Fri  

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 0.1 mL serum REFRIGERATED; FROZEN in a separate tube if not submitted within 1 week.
IgA

**Panel Code: IGA**

**CPT Codes(s):** 82784  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: IP Green Top / OP Red Top  
SUBMIT: 1 mL serum REFRIGERATED. Pediatric minimum volume is 130 uL.

IgA Free Light Chains, Serum

**Panel Code: LCS**

**Kappa Free Light Chains**  
**Kappa/Lambda FLC Ratio, calculated**  
**Lambda Free Light Chains**

**CPT Codes(s):** 83883 x2  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly lipemic specimen.

IgG

**Panel Code: IGG**

**CPT Codes(s):** 82784  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: IP Green Top / OP Red Top  
SUBMIT: 1 mL serum REFRIGERATED.

IgM

**Panel Code: IGM**

**CPT Codes(s):** 82784  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: IP Green Top / OP Red Top  
SUBMIT: 1 mL serum REFRIGERATED.
### Immunoglobulin Total Light Chains, Urine  
Panel Code: LIT

- **Kappa Light Chains**
- **Kappa/Lambda TLC Ratio, calculated**
- **Lambda Light Chains**

**CPT Codes(s):** 83883 x2  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**  
**COLLECT:** Urine in a Screw-Top Container  
**SUBMIT:** 10 mL aliquot of 24 hour collection (no preservative) OR random urine (no preservative) REFRIGERATED.

### Immunoglobulins, Quantitative  
Panel Code: IGO

- **IgA**
- **IgG**
- **IgM**

**CPT Codes(s):** 82784 x3  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
**COLLECT:** IP Green Top / OP Red Top  
**SUBMIT:** 1 mL serum REFRIGERATED  
**UNACCEPTABLE:** Markedly hemolyzed specimens.

### Inflammatory Bowel Disease (IBD) Serology Panel  
Panel Code: IBD

- **ASCA IgA & IgG**
- **Neutrophil Specific Antibody**

**CPT Codes(s):** 86255, 86671 x 2  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** Varies

**Specimen:**  
**COLLECT:** Red Top  
**SUBMIT:** 1 mL serum REFRIGERATED.  
**UNACCEPTABLE:** Markedly hemolyzed or lipemic specimen.
Influenza A/B Rapid Test

**Panel Code:** FAB

**CPT Codes(s):** 87804, 87400 x2
**Test Performed at:** HealthEast Medical Laboratory
**Analytic Time:** 2 hours
**Days Test Performed:** All

**Specimen:**
- COLLECT: NP Wash or Eswab
- SUBMIT: NP wash in sterile screw-top container or NP swab in minitip Eswab or viral transport media.
- UNACCEPTABLE: All swabs in non-liquid media. Throat swabs. Specimens more than 72 hours old.

---

Influenza Virus A Antibodies, IgG and IgM

**Panel Code:** FLA

**CPT Codes(s):** 86710 x2
**Test Performed at:** Mayo Medical Laboratories
**Analytic Time:** 72 hours (3 days)
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 0.5 mL serum REFRIGERATED.
- UNACCEPTABLE: Markedly hemolyzed or lipemic specimens.

---

Influenza Virus B Antibodies, IgG and IgM

**Panel Code:** FUB

**CPT Codes(s):** 86710 x2
**Test Performed at:** Mayo Medical Laboratories
**Analytic Time:** 72 hours (3 days)
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 0.5 mL serum REFRIGERATED.
- UNACCEPTABLE: Markedly hemolyzed or lipemic specimens.

---

Inhibin A and B, Tumor Marker

**Panel Code:** IAB

**CPT Codes(s):** 83520, 86336
**Test Performed at:** Mayo Medical Laboratories
**Analytic Time:** 192 hours (8 days)
**Days Test Performed:** Tue

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 1.0 mL serum REFRIGERATED.
- UNACCEPTABLE: Markedly hemolyzed specimen.
**INR**

**Panel Code:** INR

**CPT Codes(s):** 85610  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** All

**Specimen:**  
**COLLECT:** Blue Top  
**SUBMIT:** 3 mL whole blood or 1.5 mL platelet-free plasma ROOM TEMP within 24 hours of collection. Platelet-free plasma FROZEN within 24 hours of collection is stable for up to 2 weeks.  
**UNACCEPTABLE:** Refrigerated or frozen whole blood specimen, partially filled tube, marked hemolysis, clotted specimen, whole blood received >24 hours of collection or platelet-free plasma not frozen within 24 hours of collection.  
**NOTE:** See the specimen collection section of this manual for preparation of platelet-free plasma.

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**Insulin**

**Panel Code:** ISL

**CPT Codes(s):** 83525  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**  
**COLLECT:** Red Top  
**SUBMIT:** 1 mL serum FROZEN in a separate tube. Centrifuge and aliquot within 2 hours of collection.  
**UNACCEPTABLE:** Markedly hemolyzed specimen.  
**NOTE:** Patients with a history of insulin usage may have insulin antibodies which cause an inaccurate assay result. Recommend fasting. Twelve (12) hours prior to draw, do not take multivitamins or dietary supplements containing biotin or vitamin B7.

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**Insulin-Like-Growth Factor Binding Protein-3 (IGFBP-3)**

**Panel Code:** BP3

**CPT Codes(s):** 83520  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**  
**COLLECT:** Red Top  
**SUBMIT:** 1 mL serum FROZEN within 4 hours in a separate tube.  
**UNACCEPTABLE:** Markedly hemolyzed specimen.
**Intrinsic Factor Blocking Antibody**  
**Panel Code:** IFB  
**CPT Codes(s):** 86340  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat  
**Specimen:**  
- COLLECT: Red Top  
- SUBMIT: 1 mL serum REFRIGERATED.  
- UNACCEPTABLE: Markedly hemolyzed specimen.  
**NOTE:** This test should not be ordered on patients who have received a vitamin B12 injection within 14 days of collection.

**Iron**  
**Panel Code:** FE  
**CPT Codes(s):** 83540  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All  
**Specimen:**  
- COLLECT: IP Green Top / OP Red Top  
- SUBMIT: 1 mL serum REFRIGERATED. May require ABN form.  
- UNACCEPTABLE: Hemolyzed specimen.  
**NOTE:** Iron containing supplements should be avoided for 24 hours prior to draw.

**Iron and Transferrin Iron Binding Capacity**  
**Panel Code:** ITS  
**CPT Codes(s):** 83540, 84466  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All  
**Specimen:**  
- COLLECT: IP Green Top / OP Red Top  
- SUBMIT: 1 mL serum REFRIGERATED; FROZEN in a separate tube if not submitted within 3 days. May require ABN form.  
- UNACCEPTABLE: Hemolyzed specimen.  
**NOTE:** Iron containing supplements should be avoided for 24 hours prior to draw.
JAK V617F Mutation, Blood

Panel Code: JAK

CPT Codes(s): 81270
Test Performed at: Mayo Medical Laboratories
Analytic Time: 120 hours (5 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
- COLLECT: Lavender Top (EDTA)
- SUBMIT: 3 mL whole blood in a Lavender top tube (EDTA) ROOM TEMPERATURE. Specimen must arrive at Mayo within 168 hours of collection.
- UNACCEPTABLE: Clotted, centrifuged, frozen or markedly hemolyzed specimen.

JAK2 V617F Mutation, Bone Marrow

Panel Code: JAM

CPT Codes(s): 81270
Test Performed at: Mayo Medical Laboratories
Analytic Time: 120 hours (5 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
- COLLECT: Lavender Top (EDTA)
- SUBMIT: 3 mL bone marrow in a lavender top tube (EDTA) ROOM TEMPERATURE. Specimen must arrive at Mayo within 168 hours of collection.
- UNACCEPTABLE: Clotted, centrifuged, frozen or markedly hemolyzed specimen.

JO-1 Auto Antibodies

Panel Code: EJO

CPT Codes(s): 86235
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 72 hours (3 days)
Days Test Performed: Tue Fri

Specimen:
- COLLECT: Red Top
- SUBMIT: 1 mL serum REFRIGERATED. FROZEN if not submitted within 24 hours.
- UNACCEPTABLE: Specimens > 24 hours old if not frozen. Body fluids are unacceptable.
Joint Fluid Exam

- Cell Count and Differential
- Crystal Exam
- Glucose
- Protein

**Panel Code:** JFE

**CPT Codes(s):** 82945, 84157, 89051, 89060

**Test Performed at:** HealthEast Medical Laboratory

**Analytic Time:** 4 hours

**Days Test Performed:** All

**Specimen:**
- **COLLECT:** Red Top, Lavender Top and Sterile Tubes
- **SUBMIT:** 2 mL in plain red top, 3 mL in lavender top, and sterile screw-top tubes
- **REFRIGERATED.**
- **UNACCEPTABLE:** Specimen > 24 hours old.

**NOTE:** Specimen source is REQUIRED.

---

Kleihauer-Betke Stain

**Panel Code:** KLB

**CPT Codes(s):** 85460

**Test Performed at:** HealthEast Medical Laboratory

**Analytic Time:** 24 hours (1 day)

**Days Test Performed:** All

**Specimen:**
- **COLLECT:** Lavender Top
- **SUBMIT:** 3 mL whole blood REFRIGERATED. Specimen must arrive within 24 hours of collection.
- **UNACCEPTABLE:** Volume less than 1 mL. Specimen > 24 hours old.

**NOTE:** This test will be performed only if the fetal blood screen (FBS) is positive, with the exception of a test needed on a Rh positive mother.

---

KOH Prep

**Panel Code:** KOH

**CPT Codes(s):** 87220

**Test Performed at:** HealthEast Medical Laboratory

**Analytic Time:** 24 hours (1 day)

**Days Test Performed:** All

**Specimen:**
- **COLLECT:** Sterile Screw-Top Container
- **SUBMIT:** Swab in CultureSwab™ OR hair, skin, nails, fluid, sputum, or tissue in sterile screw-top container OR fluid in Port-a-Cul™ vial, OR needleless capped syringe REFRIGERATED.
- **UNACCEPTABLE:** Dry swab.

**NOTE:** Specimen source is REQUIRED.
Lacosamide (Vimpat®)

Desmethylacasmide

Panel Code: VIM

CPT Codes(s): 80339
Test Performed at: MedTox Laboratory, Inc

Analytic Time: 48 hours (2 days)
Days Test Performed: Varies

Specimen:
COLLECT: Plain Red Top
SUBMIT: 1.0 mL serum REFRIGERATED.
UNACCEPTABLE: Specimen collected in an SST® tube.
NOTE: Trough levels are most reproducible.

Lactic Acid

Panel Code: LA

CPT Codes(s): 83605
Test Performed at: HealthEast Medical Laboratory

Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: Grey Top-centrif & aliq within 15 min
SUBMIT: 1 mL plasma REFRIGERATED.
UNACCEPTABLE: Markedly hemolyzed specimens.
NOTE: Specimen must be centrifuged and plasma separated from cells within 15 minutes of collection. Refrigerate immediately.

Lamellar Body Count, Amnio

Panel Code: LAB3017

CPT Codes(s): 83664
Test Performed at: University of MN Physicians

Analytic Time: 24 hours (1 day)
Days Test Performed: Mon Tue Wed Thu Fri Sat Sun

Specimen:
COLLECT: Amniotic Fluid (tap only) in a Screw-Top Container
SUBMIT: 6 mL amniotic fluid REFRIGERATED in a screw-top container. Do not centrifuge. Ship unprocessed amniotic fluid on wet ice. Must arrive at U of M within 24 hours of collection.
UNACCEPTABLE: Clotted specimen or vaginal pool. Frozen or centrifuged. Gross hemolysis, meconium or mucus contamination.
NOTE: A minimum of 0.5 mL amniotic fluid is required.
### Lamotrigine (Lamictal ®)

- **Panel Code:** LMO
- **CPT Codes(s):** 80175
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 48 hours (2 days)
- **Days Test Performed:** All

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 1 mL serum REFRIGERATED.
- NOTE: Preferred specimen is trough or at least 12 hours after last dose.

### LD (LDH), Body Fluid

- **Panel Code:** LDF
- **CPT Codes(s):** 83615
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- COLLECT: Body Fluid in a Screw-Top Container
- SUBMIT: 1 mL body fluid REFRIGERATED up to 4 days.
- NOTE: Specimen source is REQUIRED.

### LD(LDH)

- **Panel Code:** LD
- **CPT Codes(s):** 83615
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 1 mL serum REFRIGERATED up to 4 days.
- UNACCEPTABLE: Hemolyzed specimen.
- NOTE: Centrifuge and separate serum from cells within 4 hours.

### LDL Cholesterol, Direct

- **Panel Code:** LDD
- **CPT Codes(s):** 83721
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- COLLECT: IP Green Top / OP Plain Red Top
- SUBMIT: 1 mL serum REFRIGERATED up to 5 days. May require an ABN form.
- NOTE: Centrifuge and separate serum from cells within 3 hours.
**Lead Blood**

**Panel Code:** PB

**CPT Codes(s):** 83655  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** Wed Thu Fri Sat Sun

**Specimen:**  
**COLLECT:** Navy Blue Top Sodium Heparin Tube  
**SUBMIT:** 1 mL whole blood REFRIGERATED.  
**NOTE:** A lavender MICROTAINTER® (capillary fingerstick) can be substituted for use in young children. If lead is >5 ug/dL on a MICROTAINTER® specimen, the patient must be drawn by venipuncture and analysis repeated on a navy blue top (sodium heparin) tube. Patient’s address (street address, city, state, and zip code), race, and ethnicity are REQUIRED. See Special Instructions "LEAD Screening Recommendation by CDC".

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**Legionella Antigen, Urine**

**Panel Code:** LUA

**CPT Codes(s):** 87899  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 96 hours (4 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
**COLLECT:** Sterile Screw-Top Container  
**SUBMIT:** 0.5 mL urine REFRIGERATED in a sterile screw-top container.  
**UNACCEPTABLE:** Specimen in preservative. Specimen at ROOM TEMP >24 hrs.

---

**Legionella by PCR**

**Panel Code:** LCR

**CPT Codes(s):** 87801  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** All

**Specimen:**  
**COLLECT:** Sterile Screw-Top  
**SUBMIT:** 1 mL bronch specimens, pleural fluid, sputum, transtracheal aspirate, or tracheal secretions sterile screw-top container REFRIGERATED.  
**NOTE:** Specimen source is required.
Legionella pneumophila Antibodies, Total

**Panel Code: LEG**

**CPT Codes(s):** 86713  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 120 hours (5 days)  
**Days Test Performed:** Tue Thu

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 0.5 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed or lipemic specimen.  
NOTE: Paired specimens, both acute and convalescent sera (≥21 days after onset of fever), are strongly recommended.

Levetiracetam

**Panel Code: LVT**

**CPT Codes(s):** 80177  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Plain Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
UNACCEPTABLE: Specimen collected in an SST® tube.  
NOTE: Trough levels are preferred, as they are the most consistent for therapeutic drug monitoring.

LH

**Panel Code: LH**

**CPT Codes(s):** 83002  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED up to 7 days.

Lidocaine (Xylocaine®)

**Panel Code: LID**

**CPT Codes(s):** 80176  
**Test Performed at:** MedTox Laboratory, Inc  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Plain Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
UNACCEPTABLE: Specimen drawn in an SST® tube.  
NOTE: Trough levels are most reproducible.
**Lipase**

**Panel Code: LPS**

- **CPT Codes(s):** 83690
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** IP Green Top/ OP Red Top
- **SUBMIT:** 1 mL serum REFRIGERATED up to 7 days.

---

**Lipid Cascade**

**Panel Code: L01**

- **Cholesterol, Total**
- **HDL Cholesterol**
- **LDL Cholesterol, calculated**
- **Triglycerides**

**CPT Codes(s):** 80061
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** IP Green Top / OP Plain Red Top (Fasting)
- **SUBMIT:** 1 mL serum REFRIGERATED up to 5 days. May require ABN form.
- **UNACCEPTABLE:** Specimen more than 5 days old or markedly hemolyzed.
- **NOTE:** Patient fasting 12-14 hours. Centrifuge and separate serum from cells within 3 hours. If the triglyceride is 401-1100 mg/dL a direct LDL cholesterol will be performed and charged separately using CPT 83721.

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**Lipid Profile**

**Panel Code: LIP**

- **Cholesterol, Total**
- **HDL Cholesterol**
- **LDL Cholesterol, calculated**
- **Triglycerides**

**CPT Codes(s):** 80061
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** IP Green / OP Red Top (Fasting)
- **SUBMIT:** 1 mL serum REFRIGERATED. May require ABN form. Pediatric minimum volume is 116 uL.
- **UNACCEPTABLE:** Markedly hemolyzed specimen.
- **NOTE:** Patient fasting 12-14 hours.
**Lipoprotein A**

**Panel Code:** LPA

**CPT Codes(s):** 83695  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**  
COLLECT: Red Top (Fasting 12 hours)  
SUBMIT: 1 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed, lipemic or icteric specimen.  
NOTE: Because Lp(a) acts like an acute-phase protein, it should not be measured during periods of active inflammation. Lp(a) should not be measured for at least 1 month following an MI or stroke. Patient must be fasting 12 hours.

---

**Lithium**

**Panel Code:** LI

**CPT Codes(s):** 80178  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED up to 7 days. Remove serum from cells within 4 hours. May require ABN form.  
NOTE: Recommended draw time is 12 hours post dose.

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**Liver/Kidney Microsome (LKM) Type 1 Antibodies**

**Panel Code:** LKM

**CPT Codes(s):** 86376  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 96 hours (4 days)  
**Days Test Performed:** Mon Wed Fri

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 0.5 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed or lipemic specimen.
Lupus Anticoagulant

**Panel Code: LLA**

**CPT Codes(s):** 85613  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 168 hours (7 days)  
**Days Test Performed:** Wed

**Specimen:**
- **COLLECT:** BLUx2 DBLCenFZ2tube4hr  
- **SUBMIT:** 2 blue top tubes whole blood or 2 mL platelet-free plasma in 2 separate tubes (1 mL/tube) ROOM TEMP within 4 hours of collection. Platelet-free plasma FROZEN within 4 hours of collection is stable for up to 2 weeks. The specimen must be double-centrifuged to prepare a platelet-free-plasma specimen. Immediately centrifuge at 7,200 RPM for 3 minutes or 3,200 RPM for 10 minutes, at 4 degrees C, if possible. Carefully remove plasma from cells, avoiding the platelet/buffy coat. Dispense into a labeled plastic tube, and centrifuge this, again at 7,200 RM for 3 minutes or 3,200 RM for 10 minutes, at 4 degrees C, if possible. Remove the top portion of plasma, leaving approximately 250ul in the bottom to discard. The double-centrifuged plasma should be aliquoted (at least 1.0ml in each plastic tube) into 2 clearly labeled plastic tubes (glass vials will not be accepted).
- **UNACCEPTABLE:** Frozen whole blood specimen, partially filled tube, marked hemolysis, clotted specimen, whole blood received >4 hours of collection or platelet-free plasma not frozen within 4 hours of collection.
- **NOTE:** If results are abnormal, a confirmatory test will be performed and charged separately as CPT code 85730 and a mixing study will be performed and charged separately as CPT code 85730 and 85732.

Lyme Antibody Cascade

**Panel Code: LYC**

**CPT Codes(s):** 86618  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 168 hours (7 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** Plain Red top  
- **SUBMIT:** 2 mL serum REFRIGERATED up to 5 days.
- **NOTE:** If total Lyme antibody is >0.90, then Lyme Confirmation (CPT86617x2) will be performed at an added charge.

Lyme Antibody Disease, Total

**Panel Code: LYM**

**CPT Codes(s):** 86618  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** Plain Red Top  
- **SUBMIT:** 1 mL serum REFRIGERATED up to 5 days.
**Lyme Disease (Borrelia burgdorferi), Molecular Detection, PCR, Whole Blood**

**Panel Code:** LWB

- **CPT Codes(s):** 87476
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 96 hours (4 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- COLLECT: Lavender Top
- SUBMIT: 3 mL whole blood (EDTA) in its original container REFRIGERATED.
- UNACCEPTABLE: Clotted, frozen or centrifuged specimen.

---

**Lyme Disease Antibody Confirmation**

**Panel Code:** CFL

- **CPT Codes(s):** 86617 x2
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 168 hours (7 days)
- **Days Test Performed:** Varies

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 0.5 mL serum REFRIGERATED for up to 5 days. If stored for greater than 5 days, FREEZE.
- UNACCEPTABLE: Markedly hemolyzed or icteric specimen.
- NOTE: This is a confirmatory test for patients with positive Lyme Antibody screening test (EIA or IFA). Testing includes IgG and IgM by Line Blot (Western blot). Due to the seasonality of this test, testing will be performed on fewer days per week in the winter months.

* Days performed varies.

---

**Lyme Disease by PCR (Borrelia burgdorferi) CSF, Synovial Fluid**

**Panel Code:** LPR

- **CPT Codes(s):** 87476
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 96 hours (4 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- COLLECT: CSF, Synovial Fluid
- SUBMIT: 1 mL uncentrifuged CSF or synovial fluid REFRIGERATED.
- UNACCEPTABLE: Heparinized specimen.
- NOTE: Specimen must remain sterile.
### Magnesium

**Panel Code:** MG

**CPT Codes(s):** 83735  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: IP Green Top / OP Red Top  
SUBMIT: 1 mL serum REFRIGERATED. May require ABN form.  
UNACCEPTABLE: Hemolyzed specimen.

### Magnesium, 24 Hour Urine

**Panel Code:** MGU

**CPT Codes(s):** 83735  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: 24 Hour Urine (HCL Preservative)  
SUBMIT: 10 mL aliquot of 24 hour urine collection (preserved with 20 mL of 6N HCl at start of collection) REFRIGERATED. Adjust pH to 1.5 - 2.0.  
NOTE: Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions and alternate preservatives.

### Magnesium, Random Urine

**Panel Code:** UMG

**CPT Codes(s):** 83735  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Random Urine in a Screw-Top Container  
SUBMIT: 10 mL aliquot of random urine collection (no preservative) REFRIGERATED within 4 hours of collection.

### Magnesium, Red Blood Cell

**Panel Code:** RMG

**CPT Codes(s):** 83735  
**Test Performed at:** NON-INTERFACED SEND OUT LABS  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Varies

**Specimen:**  
COLLECT: Navy Blue EDTA-PL&RB-2 Metal-Free Tubes  
SUBMIT: 1 mL packed RBC's and 1 mL plasma in 2 metal-free aliquot tubes REFRIGERATED.  
UNACCEPTABLE: Both RBC's and plasma not received.  
NOTE: * Days performed varies. Within 2 hours of collection, centrifuge Navy-Blue Lavender Banded collection tube. Transfer plasma to a metal-free aliquot tube. Transfer at least 1 mL packed RBC's to a second metal-free transfer tube. Submit both.
Malaria Smear, Blood

Panel Code: MAL

CPT Codes(s): 87015, 87207
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: Lavender Top
SUBMIT: 5 mL whole blood ROOM TEMPERATURE received within 24 hours of collection OR
slides from referring lab for parasite confirmation ROOM TEMPERATURE.
UNACCEPTABLE: Lavender Top more than 24 hours old.
NOTE: Patient should be drawn just before temp spike. Indicate travel history or past infection.
Positive results will be reported to MDH.

Mepobarbital

Panel Code: MEP

Phenobarbital

CPT Codes(s): 80345
Test Performed at: Mayo Medical Laboratories
Analytic Time: 192 hours (8 days)
Days Test Performed: Wed

Specimen:
COLLECT: 1 Plain Red Top
SUBMIT: 2 mL serum REFRIGERATED. Separate serum from cells within 2 hours of draw.
UNACCEPTABLE: Specimens drawn in an SST® tube or markedly hemolyzed, lipemic or
icteric.
NOTE: Includes phenobarbital level.

Mercury, 24 Hour Urine

Panel Code: UHG

CPT Codes(s): 83825
Test Performed at: NON-INTERFACED SEND OUT LABS
Analytic Time: 120 hours (5 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: 24 Hour Metal-free Container
SUBMIT: 10 mL aliquot of 24 hour urine collection (metal-free) REFRIGERATED in a metal-free
container.
UNACCEPTABLE: Specimen not received in a metal-free container.
NOTE: Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for
collection instructions.
Mercury, Whole Blood

CPT Codes(s): 83825
Test Performed at: MedTox Laboratory, Inc
Analytic Time: 72 hours (3 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Navy Blue Top-Lavender Banded (EDTA)
SUBMIT: 3 mL whole blood REFRIGERATED.
UNACCEPTABLE: Specimen clotted or not received in a metal-free tube.

Metanephrines, Fractionated, 24 Hour Urine

CPT Codes(s): 83835
Test Performed at: Mayo Medical Laboratories
Analytic Time: 48 hours (2 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
COLLECT: 24 Hour Urine (Acetic Acid)
SUBMIT: 10 mL aliquot of 24 hour collection (preserved with 25 mL 50% acetic acid at start of collection) REFRIGERATED. The pH must be < 7. Refrigerate during collection.
UNACCEPTABLE: Specimen collected without preservative.
NOTE: Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions and alternate preservatives. Tricyclic antidepressants (TCA), labetalol, and sotalol medications elevate levels of metanephrines producing results which cannot be interpreted.

Metanephrines, Fractionated, Free, Plasma

CPT Codes(s): 83835
Test Performed at: Mayo Medical Laboratories
Analytic Time: 96 hours (4 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
COLLECT: 1 Lavender Tops
SUBMIT: 1 mL plasma FROZEN within 4 hours in a separate tube.
UNACCEPTABLE: Specimen not received frozen or moderately hemolyzed.
**Methadone Confirmation, Urine**

Panel Code: CDO

**EDDP Methadone**

**CPT Codes(s):** 80358  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 120 hours (5 days)  
**Days Test Performed:** Mon Tue Wed Thu Sun

**Specimen:**  
COLLECT: Random Urine in a Screw-Top Container  
SUBMIT: 20 mL aliquot of random urine collection (no preservative), minimum volume 2.5 mL  
REFRIGERATED.

**Methemoglobin**

Panel Code: MHG

**CPT Codes(s):** 83050  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 1 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Green Top  
SUBMIT: 4 mL whole blood ON WET ICE. Specimen must arrive within 2 hours of collection.  
**NOTE:** Specimen should be drawn free of air, mixed well, and placed on wet ice. Transport immediately to laboratory. DO NOT REMOVE CORK BEFORE TESTING.  
Methemoglobin is pH dependent. Methemoglobin may revert to hemoglobin on standing. Ideally, test is performed within 2 hours of collection; up to a 10% decrease in methemoglobin values on iced samples may occur after 4 hours, up to a 16% decrease after 8 hours. Test must be performed within 8 hours or false-negatives may occur.

**Methotrexate (Mexate®)**

Panel Code: MTX

**CPT Codes(s):** 80299  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 1 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Plain Red Top (Protect from Light)  
SUBMIT: 1 mL serum REFRIGERATED. FROZEN in a separate amber aliquot tube if not submitted with 24 hours. PROTECT FROM LIGHT.  
UNACCEPTABLE: Specimen collected in SST tube or not protected from light.  
**NOTE:** Send STAT when ordered on oncology patient.
Methylmalonic Acid (MMA), Quantitative

**Panel Code:** MMA

**CPT Codes(s):** 83921  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 120 hours (5 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 2 mL serum REFRIGERATED.

Mexiletine (Mexitil®)

**Panel Code:** MXL

**CPT Codes(s):** 80299  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Wed Fri

**Specimen:**  
COLLECT: Plain Red Top  
SUBMIT: 3 mL serum REFRIGERATED.  
UNACCEPTABLE: Specimen collected in an SST® tube or markedly lipemic.  
NOTE: Trough specimen recommended.

Microalbumin, 24 hour Urine

**Panel Code:** MAU

**CPT Codes(s):** 82043, 82570  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: 24 Hour Urine (No Preservative)  
SUBMIT: 10 mL aliquot of 24 hour urine collection (no preservative) REFRIGERATED.  
NOTE: Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions.
Microalbumin, Random Urine

Panel Code: UMA

- Creatinine, Urine
- Microalbumin, Urine
- Microalbumin/Creatinine Ratio, calculation

CPT Codes(s): 82043, 82570
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: Random Urine in a Screw-Top Container
SUBMIT: 10 mL aliquot of random urine collection (no preservative) REFRIGERATED.

Mitochondrial Antibodies, M2

Panel Code: AM2

CPT Codes(s): 83516
Test Performed at: Mayo Medical Laboratories
Analytic Time: 24 hours (1 day)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
COLLECT: Red Top
SUBMIT: 0.5 mL serum REFRIGERATED
UNACCEPTABLE: Markedly hemolyzed or lipemic specimen.

Mononucleosis Screen

Panel Code: MON

CPT Codes(s): 86308
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: Red Top or Lavender Top
SUBMIT: 0.5 mL serum or EDTA plasma REFRIGERATED; FROZEN in separate tube if not submitted within 48 hours.
NOTE: If test is negative but patient has clinical and hematologic evidence of mono, notify the laboratory. Prozone may have occurred and we will repeat the test on a dilute specimen.
Morphology, Smear Review

Panel Code: MOR

CPT Codes(s): 85060
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 48 hours (2 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Lavender Top
SUBMIT: 3 mL whole blood REFRIGERATED. Also, 4 well-made air-dried peripheral blood smears labeled with patient's name, send at ROOM TEMP. Please submit requisition or HML pathology form containing billing information with the specimen (not required for HE Clinics using order/charge software).
UNACCEPTABLE: Specimens arriving greater than 24 hours after collection. Volume less than 1 mL.
NOTE: A Hemogram 1 is required in addition to the morphology and will be charged separately.

Multiple Sclerosis (MS) Profile, CSF/Serum

Panel Code: MSP

Albumin, CSF
Albumin, serum
IgG Index, calculated
IgG, CSF
IgG, serum
Oligoclonal band, CSF
Oligoclonal band, serum

CPT Codes(s): 82040, 82042, 82784 x 2, 83916 x2
Test Performed at: Mayo Medical Laboratories
Analytic Time: 72 hours (3 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
COLLECT: Red Top & Spinal Fluid in Collect Tube
SUBMIT: 1 mL serum REFRIGERATED AND 1 mL spinal fluid REFRIGERATED. Label specimen appropriately as serum and CSF.
UNACCEPTABLE: Not receiving BOTH serum and CSF, markedly lipemic serum.

Mumps Immune Status Antibody, IgG

Panel Code: MIS

CPT Codes(s): 86735
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 24 hours (1 day)
Days Test Performed: Mon Wed Fri

Specimen:
COLLECT: Red Top
SUBMIT: 0.5 mL serum REFRIGERATED.
UNACCEPTABLE: Hemolyzed or lipemic specimen.
NOTE: Specimen may be refrigerated up to 5 days OR frozen indefinitely.
Myasthenia Gravis (MG) Evaluation, Adult

Panel Code: MGA

- ACh Receptor Binding Antibody
- ACh Receptor Modulating Antibody
- Striational Muscle Antibody

CPT Codes(s):  83519 x 2, 83520
Test Performed at: Mayo Medical Laboratories

Analytic Time: 168 hours (7 days)
Days Test Performed: Varies

Specimen:
COLLECT: RED TOP
SUBMIT: 3 mL serum REFRIGERATED.
UNACCEPTABLE: Markedly hemolyzed, lipemic or icteric specimens.
NOTE: Initial assays are AChR binding, modulating and striational antibodies. If the AChR modulating is > or = 90%, and striational antibodies are positive, AChR Ganglionic Neuronal antibody (CPT 83519), GAD65 (CPT 86341), VGKC antibody (CPT 83519) and CRMP-5-IgG (CPT 84182) are performed at added charges.

Myasthenia Gravis (MG) Evaluation, with MuSk Reflex

Panel Code: LAB3079

- ACh Receptor Binding Antibody
- ACh Receptor Modulating Antibody
- Striational Muscle Antibody

CPT Codes(s):  83519 x 2, 83520
Test Performed at: Mayo Medical Laboratories

Analytic Time: 168 hours (7 days)
Days Test Performed: Varies

Specimen:
COLLECT: RED TOP
SUBMIT: 3 mL serum REFRIGERATED.
UNACCEPTABLE: Markedly hemolyzed, lipemic or icteric specimens.
NOTE: Initial assays are AChR binding, modulating and striational antibodies. If the AChR modulating is >= 90%, and striational antibodies are >= 1:120, the AChR ganglionic neuronal autoantibody (CPT 83519), GAD65 (CPT 86341), VGKC antibody (CPT 83519) and CRMP-5-IgG Western Blot (CPT 84182) are performed with additional charges. If AChR binding antibodies are <=0.02 and AChR modulating antibodies are <=20%, then MuSK autoantibodies (CPT 83519) will be performed at an additional charge.
**Myasthenia Gravis (MG)/Lambert-Eaton Syndrome (LES) Evaluation**

**Panel Code:** LES

**CPT Codes(s):** 83519 x 4, 83520

**Test Performed at:** Mayo Medical Laboratories

**Analytic Time:** 168 hours (7 days)

**Days Test Performed:** Varies

**Specimen:**
- **COLLECT:** Red Top
- **SUBMIT:** 3 mL serum REFRIGERATED.
- **UNACCEPTABLE:** Markedly hemolyzed, lipemic or icteric specimens.
- **NOTE:** Initial assays are AChR Binding aby, AChR Modulating aby, and striational aby and Calcium Channel abys (P/Q and N). If AChr modulating aby is >=90%, and striational aby is >= 1:120, CRMP-5 W. Blot (CPT code 84182) and AChR Ganglionic Neuronal aby (CPT 83519) are performed at added charges.

**Mycobacterium tuberculosis Infection by QuantiFERON-TB Gold**

**Panel Code:** TBG

**CPT Codes(s):** 86480

**Test Performed at:** University of MN Physicians

**Analytic Time:** 120 hours (5 days)

**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** 3 QuantiFERON Tubes
- **SUBMIT:** If drawn at clinic, specimens must be at room temperature until incubated. Must be incubated within 16 hours of collection. Clinic patients can be drawn at a HealthEast facility. 1) Collect 3 TBQ tubes. 2) Invert 10 times to coat inner surface of tubes. DO NOT shake to froth. 3) Incubate 37° (upright) 16-24 hrs. 4) Centrifuge 3000 RCF(g) for 15 mins. Submit refrigerated in original tubes.

**Mycophenolic Acid (CellCept®)**

**Panel Code:** MPA

**CPT Codes(s):** 80180

**Test Performed at:** Mayo Medical Laboratories

**Analytic Time:** 72 hours (3 days)

**Days Test Performed:** All

**Specimen:**
- **COLLECT:** PLAIN RED TOP
- **SUBMIT:** 1 mL serum REFRIGERATED.
- **UNACCEPTABLE:** Specimen collected in a SST® tube.
- **NOTE:** Correct interpretation requires a trough specimen.
### Mycoplasma hominis PCR

**Panel Code:** MHR

- **CPT Codes(s):** 87798
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 96 hours (4 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** Sterile Screw-Top Container
- **SUBMIT:** SWAB: Cervical, urethral, vaginal or wound. FLUID: 1-2 mL sterile screw top. 
  Respiratory (neonate only < 3 mos), reproductive, synovial. URINE: 10 mL or PLASMA: Lavender EDTA. REFRIGERATED. Tissue 5 mm - placenta, products of conception, 
  genitourinary, respiratory, wound.
- **UNACCEPTABLE:** Cotton swab, wooden shaft, gel swab or dry swabs.
- **NOTE:** Specimen source is REQUIRED.

### Mycoplasma pneumoniae Antibodies, IgG and IgM, Cascade

**Panel Code:** MYC

- **CPT Codes(s):** 86738 x2
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 72 hours (3 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** Red Top
- **SUBMIT:** 1.0 mL serum REFRIGERATED.
- **UNACCEPTABLE:** Markedly hemolyzed or lipemic specimen.
- **NOTE:** If the result of Mycoplasma IgM by EIA is positive or equivocal, Mycoplasma IgM by IFA (86738) will be performed and charged.

### Myeloperoxidase Antibodies, IgG

**Panel Code:** MYP

- **CPT Codes(s):** 83516
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 96 hours (4 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**
- **COLLECT:** Red Top
- **SUBMIT:** 0.5 mL serum REFRIGERATED.
- **UNACCEPTABLE:** Markedly hemolyzed, lipemic specimen.
### Myoglobin, Serum

<table>
<thead>
<tr>
<th>Panel Code: MYS</th>
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<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 83874</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> Mayo Medical Laboratories</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 48 hours (2 days)</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> All</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 1 mL serum REFRIGERATED.
- UNACCEPTABLE: Markedly lipemic specimen.

### Myoglobin, Urine

<table>
<thead>
<tr>
<th>Panel Code: MYG</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 83874</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> Mayo Medical Laboratories</td>
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<tr>
<td><strong>Analytic Time:</strong> 48 hours (2 days)</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> Mon Tue Wed Thu Fri Sat</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: SO-Myoglobin Tube
- SUBMIT: 5 mL random urine aliquoted into a Urine Myoglobin (Na2CO3) Transport Tube within 1 hour of collection REFRIGERATED.
- UNACCEPTABLE: Urine specimen NOT received in a Urine Myoglobin Transport Preservative Tube.
- NOTE: Urinary myoglobin is highly unstable unless alkalinized with Na2CO3 preservative. Even with alkalinization, myoglobin deterioration is variable and sample dependent (approximate averages of 10% at 1 day, 20% at 3 days, and 30% at 7 days).

### Myositis Antibody Panel

<table>
<thead>
<tr>
<th>Panel Code: MYO</th>
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<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 83516 x8</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> Mayo Medical Laboratories</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 432 hours (18 days)</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> Batched weekly</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: Red Top (3mL serum)
- SUBMIT: 3 mL serum REFRIGERATED. Minimum volume is 3.0 mL serum
- UNACCEPTABLE: Markedly hemolyzed, lipemic or icteric specimen.
Neisseria gonorrhoeae, Amplified Detection

**Panel Code:** GCA

**CPT Codes(s):** 87591  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri  

**Specimen:**
- COLLECT: APTIMA Swab OR Urine  
- SUBMIT: APTIMA® swab in APTIMA® Swab Specimen Transport Tube OR 2 mL urine in APTIMA® Urine Specimen Transport Tube REFRIGERATED. See the Specimen Collection section of this manual for collection instructions.  
- UNACCEPTABLE: Large cleaning swab, eye or rectal source, and urine specimen >30 mL or not transferred to APTIMA® transport tube within 24 hours. Non-urogenital sources.  
- NOTE: Specimen source is REQUIRED. This test should not be used for the diagnosis of genital tract infections in prepubertal children for possible sexual abuse. Do not use spermicidal or feminine powder sprays prior to collection. The performance of this assay has not been evaluated in adolescents less than 16 years of age.

Neuromyelitis Optica (NMO)/Aquaporin-4-IgG Fluorescence-Activated Cell Sorting (FACS) Assay, Serum

**Panel Code:** NMO

**CPT Codes(s):** 86255  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 144 hours (6 days)  
**Days Test Performed:** Mon Tue Thu  

**Specimen:**
- COLLECT: Red Top  
- SUBMIT: 2 mL serum REFRIGERATED.  
- UNACCEPTABLE: Markedly hemolyzed or icteric specimen.  
- NOTE: When the results of this assay require further evaluation, NMOTS/Neuromyelitis Optica (NMO)/Aquaporin-4-IgG Fluorescence-Activated Cell Sorting (FACS) Titer Assay (CPT 86256) will be performed and charged.

Newborn Genetic Screen

**Panel Code:** NBS

**CPT Codes(s):** 82261, 82760, 82776, 83020, 83498, 83516, 83789, 84443, 81479, 83021  
**Test Performed at:** Minnesota Dept of Health  
**Analytic Time:** 216 hours (9 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri  

**Specimen:**
- COLLECT: Newborn Screen Card  
- SUBMIT: Dried, completely filled-out Newborn Screen Card at ROOM TEMPERATURE.  
- UNACCEPTABLE: Circles partially or incompletely filled. Incomplete patient information on card including date and time of birth and date and time of collection. Layering or clotting of blood.
Niacin (Vitamin B3), Plasma

**Panel Code: VB3**

- **CPT Codes(s):** 84591
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 240 hours (10 days)
- **Days Test Performed:** Varies; one day per week.

**Specimen:**
- COLLECT: 3 LAVS (protect from light)-4 mL Plasma
- SUBMIT: 4 mL plasma FROZEN in a separate amber tube. Specimen must be centrifuged and plasma separated from cells within 30 minutes of collection. Specimen must be protected from light.
- UNACCEPTABLE: Not protected from light or markedly hemolzyed or lipemic.
- NOTE: * Performance days vary.

Nicotine and Metabolites, Urine

**Panel Code: NIC**

- Anabasine
- Cotinine
- Nicotine
- Nornicotine

- **CPT Codes(s):** 80323
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 120 hours (5 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri Sun

**Specimen:**
- COLLECT: Random Urine in Screw-Top Container
- SUBMIT: 5 mL aliquot of a random urine REFRIGERATED (no preservative).

NMR LipoProfile w/IR Markers

**Panel Code: LAB3060**

- **CPT Codes(s):** 80061, 83704
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 168 hours (7 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- COLLECT: Lavender Top (Plasma,Fasting)
- SUBMIT: 2 mL plasma REFRIGERATED.
- UNACCEPTABLE: Patient not fasting, markedly hemolzyed specimen. Gel top tube is unacceptable.
- NOTE: Patient fasting 12-14 hours. Serum is also an acceptable specimen drawn using plain red-top tube.
### Norovirus Detection, Stool

**Panel Code:** NOR

- **CPT Codes(s):** 87449
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 216 hours (9 days)
- **Days Test Performed:** Mon Wed Fri

**Specimen:**
- **COLLECT:** Sterile screw-top container
- **SUBMIT:** 1-2 grams of stool in sterile screw-top container FROZEN within 4 hours.
- **UNACCEPTABLE:** Room temperature specimens. Specimens other than stool.

### Nortriptyline (Aventyl®)

**Panel Code:** LAB3041

- **CPT Codes(s):** 80335
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 48 hours (2 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** Plain Red Top
- **SUBMIT:** 1mL serum REFRIGERATED. Serum must be separated from cells within 2 hours of draw.
- **UNACCEPTABLE:** Specimen collected in an SST® tube or markedly hemolyzed or lipemic or icteric specimen.
- **NOTE:** Recommended collection is 12 hours post dose (trough).

### NTX-Telopeptide, Urine

**Panel Code:** NTX

- **Creatinine, Urine**
- **CPT Codes(s):** 82523
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 48 hours (2 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** Urine 2nd morning void
- **SUBMIT:** 4 mL urine (no preservative) FROZEN. May require ABN form.
- **UNACCEPTABLE:** Specimen contaminated with blood or pH < 5.
- **NOTE:** Urine specimen is stable 72 hours at room temperature and 14 days refrigerated. Test no longer requires a 24-hour collection.
Occult Blood, Fecal

Panel Code: OBF

**CPT Codes(s):** 82272  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** All

**Specimen:**  
**COLLECT:** Screw-Top Container  
**SUBMIT:** A small fecal specimen collected into a sterile screw-top container or smeared as a thin preparation to the guaiac paper of the Hemoccult™ SENSA slide kit, ROOM TEMP. An ABN form may be required.  
**UNACCEPTABLE:** Any other slide kit.  
**NOTE:** Patient should be instructed to avoid ingesting foods, drugs, vitamins or other substances which can cause false-positive or false-negative test results for at least 48 hours before and continuing through the test period, (red meat, processed meats, liver or vitamin C intake of more than 250 mg/day). Aspirin and other NSAIDS should be avoided.

---

Occult Blood, Gastric

Panel Code: OBG

**CPT Codes(s):** 82271  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
**COLLECT:** Screw-Top Container  
**SUBMIT:** 1 mL of gastric contents or emesis in a sterile screw-top container or a nasogastric tube. Specimen can be applied directly to the Gastroccult™ slide and sent to the laboratory.  
**NOTE:** Patient should be instructed to refrain from ingesting foods, drugs, vitamins or other substances which can cause false-positive or false-negative test results for at least 48 hours before and continuing through the test period, e.g. red meat, processed meats, liver or vitamin C intake of more than 250 mg/day. Aspirin and other NSAIDS should be avoided.

---

Occult Blood, QL, Immunochemical, Fecal

Panel Code: LAB3059

**CPT Codes(s):** 82274  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
**COLLECT:** Fecal Occult Blood Test Kit  
**SUBMIT:** Collect a random stool specimen. Follow these instructions for collection and submission:  
**UNACCEPTABLE:** Stool specimen contaminated with urine or water from the toilet bowl.  
**NOTE:** Specimen must be collected in specific sample vial within 4 hours of defecation.
### Opiate Quant Urine Confirmation

**Panel Code:** COP  

<table>
<thead>
<tr>
<th>Test Performed at:</th>
<th>Mayo Medical Laboratories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytic Time:</td>
<td>120 hours (5 days)</td>
</tr>
<tr>
<td>Days Test Performed:</td>
<td>Mon Tue Wed Thu Fri</td>
</tr>
</tbody>
</table>

**Collect:** Random Urine (no preservative)  
**Submit:** 20 mL aliquot random urine collection (no preservative) REFRIGERATED. (2.5 mL minimum volume).  
**Note:** Drugs detected are codeine, hydrocodone, hydromorphone, morphine, oxycodone and oxymorphone. Opioid class such as fentanyl, meperidine, methadone, and naloxone are not detected.

### Organic Acids Screen, Urine

**Panel Code:** OAU  

<table>
<thead>
<tr>
<th>Test Performed at:</th>
<th>Mayo Medical Laboratories</th>
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</thead>
<tbody>
<tr>
<td>Analytic Time:</td>
<td>144 hours (6 days)</td>
</tr>
<tr>
<td>Days Test Performed:</td>
<td>Mon Tue Wed Thu Fri</td>
</tr>
</tbody>
</table>

**Collect:** Random Urine in a Screw-Top Container  
**Submit:** 10 mL (pediatric 5.0 mL) aliquot of a random urine collection FROZEN in a separate tube.  
**Unacceptable:** Stored at room temperature.  
**Note:** Include diagnosis, drug therapy and diet.

### Osmolality

**Panel Code:** OSB  

<table>
<thead>
<tr>
<th>Test Performed at:</th>
<th>HealthEast Medical Laboratory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytic Time:</td>
<td>4 hours</td>
</tr>
<tr>
<td>Days Test Performed:</td>
<td>All</td>
</tr>
</tbody>
</table>

**Collect:** Red Top  
**Submit:** 1 mL serum REFRIGERATED.  
**Unacceptable:** Markedly hemolyzed specimen.

### Osmolality, 24 Hour Urine

**Panel Code:** OSU  

<table>
<thead>
<tr>
<th>Test Performed at:</th>
<th>HealthEast Medical Laboratory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytic Time:</td>
<td>4 hours</td>
</tr>
<tr>
<td>Days Test Performed:</td>
<td>All</td>
</tr>
</tbody>
</table>

**Collect:** 24 Hour Urine (No Preservative)  
**Submit:** 10 mL aliquot of 24 hour urine collection (no preservative) REFRIGERATED.  
**Note:** Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions and alternate
### Osmolality, Random, Urine

**Panel Code:** UOS  
**CPT Codes(s):** 83935  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All  
**Specimen:**  
COLLECT: Random Urine in a Screw-Top Container  
SUBMIT: 10 mL aliquot of random urine collection (no preservative) REFRIGERATED.

### Osmotic Fragility, RBC

**Panel Code:** OFE  
**CPT Codes(s):** 85557  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 120 hours (5 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat  
**Specimen:**  
COLLECT: Lavender + Lavender on normal control  
SUBMIT: 3 mL whole blood REFRIGERATED. Include a control specimen drawn at the same time from a normal unrelated non-smoking individual. Label clearly NORMAL CONTROL. Specimens must arrive at Mayo within 72 hours of collection in original tube. DO NOT aliquot.  
UNACCEPTABLE: Specimen clotted or no normal control received or mildly hemolyzed specimen.

### Ova and Parasite Screen

**Panel Code:** OPS  
**CPT Codes(s):** 87177, 87209  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 8 hours  
**Days Test Performed:** Mon Tue Wed Thu Fri  
**Specimen:**  
COLLECT: Proto-fix™  
SUBMIT: Stool in Prototix™ vial REFRIGERATED or ROOM TEMP OR walnut-sized portion of stool in clean screw-top container REFRIGERATED.  
UNACCEPTABLE: Less than 1 mL stool. Multiple stools collected within 24 hr Stool in culture vial [ETM™]. Unpreserved stool more than 48 hours old. Specimen containing antacids or barium. Specimen containing urine.  
NOTE: See the Specimen Collection section of this manual for collection instructions. Requests on patients hospitalized for more than 3 days require consultation with Microbiology. Multiple specimens (X3) collected over several days result in the highest yield of positives.
Ova and Parasite, Urine

Panel Code: OPU

- **CPT Codes(s):** 87177, 87209
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 8 hours
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** Clean Screw-Top Container
- **SUBMIT:** Urine collected around noon REFRIGERATED.
- **NOTE:** Instruct patient to collect the middle and end of the urine stream and to squeeze out the last few drops of urine into the container. It is recommended to collect noon specimens on 3 consecutive days.

Oxalate, 24 Hour Urine

Panel Code: OLU

- **CPT Codes(s):** 83945
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** Tue Thu

**Specimen:**
- **COLLECT:** 24 Hour Urine (No Preservative)
- **SUBMIT:** One 10 mL aliquot of a 24 hour collection (specimen must be refrigerated at all times).
  - Submit REFRIGERATED.
- **UNACCEPTABLE:** Specimen not kept refrigerated during the collection time or during transport.
- **NOTE:** Total volume (mL) REQUIRED.

Oxcarbazepine (Trileptal®) Metabolite (MHC)

Panel Code: OXB

- **CPT Codes(s):** 80183
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 72 hours (3 days)
- **Days Test Performed:** Tue Wed Thu Fri Sat

**Specimen:**
- **COLLECT:** Red Top
- **SUBMIT:** 0.5 mL serum REFRIGERATED. Separate serum from cells within 2 hours of draw.
- **NOTE:** Trough specimen is recommended.
Oxycodone with Metabolite Confirmation, Urine

Noroxycodone
Noroxymorphone
Oxycodone
Oxymorphone

CPT Codes(s): 80365
Test Performed at: Mayo Medical Laboratories
Analytic Time: 120 hours (5 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Random Urine in a Screw-Top Container
SUBMIT: 20 mL aliquot random urine collection (no preservative), REFRIGERATED. (2.5 mL minimum)
NOTE: Other drugs in the opioid class, such as fentanyl, meperidine, methadone, and opiate antagonists such as naloxone, are not detected.

Pain Clinic Survey, Urine

Amphetamines
Barbiturates
Benzodiazepines
Cocaine
Methadone
Opiate Screen-(33 compounds tested. See appendix for comprehensive drug listing.)
Oxycodone
Phencyclidine (PCP)
THC Metabolite

CPT Codes(s): 80364, 80301
Test Performed at: Mayo Medical Laboratories
Analytic Time: 120 hours (5 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Random Urine in a Screw-Top Container
SUBMIT: 30 mL aliquot random urine collection (no preservative) REFRIGERATED.
UNACCEPTABLE: Less than 20 mL volume.
NOTE: Testing begins with an adulterant survey. If the sample is found to be adulterated, testing will end, and the remaining tests will be canceled. If sample is normal or only diluted, remaining testing will continue. Targeted opioid screen uses high-resolution accurate mass method qualitatively (present vs. not detected) to identify 33 opioid compounds (parent drug and metabolites) to help determine compliance or identify illicit opioid drug use. If immunoassay screen is positive, quantitative confirmation is performed and charged using the following CPT codes: Amphetamines (80324,80359), Barbiturates (80345), Benzodiazepines (80346), Cocaine (80353), PCP (83992), THC (80349).
Pancreatic Elastase, Stool

CPT Codes(s): 82656
Test Performed at: Mayo Medical Laboratories
Analytic Time: 240 hours (10 days)
Days Test Performed: Varies; one time per week.

Specimen:
   COLLECT: Screw-Top Container
   SUBMIT: 1 gm formed stool in a separate screw-top container FROZEN.
   UNACCEPTABLE: A watery, diarrheal stool.
   NOTE: Pancreatic supplementation therapy should be discontinued prior to collection.
Paraneoplastic Autoantibody Evaluation, Cascade

AChR Ganglionic Neuronal Ab, S
AChR Receptor (Muscle) Binding Ab
Amphiphysin Ab, S
Anti-Glial Nuclear, Type 1
Anti-Neuronal Nuclear Ab, Type 1
Anti-Neuronal Nuclear Ab, Type 2
Anti-Neuronal Nuclear Ab, Type 3
CRMP-5-IgG, S
Neuronal (V-G) K+ Channel Ab, S
N-Type Calcium Channel Ab
P/Q-Type Calcium Channel Ab
Purkinje Cell Cytoplasmic Ab Type 1
Purkinje Cell Cytoplasmic Ab Type 2
Purkinje Cell Cytoplasmic Ab Type Tr
Striational (Striated Muscle) Ab, S

CPT Codes(s): 83519 x 5, 83520, 86256 x9
Test Performed at: Mayo Medical Laboratories

Analytic Time: 408 hours (17 days)
Days Test Performed: Varies

Specimen:
COLLECT: 2 Red Tops
SUBMIT: 4 mL serum REFRIGERATED.
UNACCEPTABLE: Markedly hemolyzed, lipemic or icteric specimen.
NOTE: If IFA patterns are indeterminate, paraneop W. Blot (84182) is performed and charged.
If IFA pattern suggests CRMP-5-IgG, CRMP-5-IgG W. Blot (84182) is performed and charged. If IFA pattern suggest NMO/AQP4-IgG, NMO/AQP4-IgG FACS (86255) is performed and charged. If the results of NMO/AQP4-IgG FACS assay require further evaluation, then NMO/AQP4-IgG FACS titration assay (86256) is performed and charged. If IFA pattern suggests Amphiphysin aby, Amphiphysin W. Blot (84182) is performed and charged. If IFA pattern suggests GAD65, GAD65 aby (86341) is performed and charged. If IFA pattern suggest NMDA-R, NMDA-R Ab CBA(86255) and/or NMDA-R Ab IF Titer Assay(86256) is performed and charge. If IFA pattern AMPA-R, AMPA-R Ab CBA (86255) and/or AMPA-R IF Titer Assay (86256) is performed and charged. If IFA pattern suggest GABA-B-R, GABA-B-R Ab CBA (86255) and/or GABA-B-R Ab IF Titer Assay (86256) is performed and charged. If AChR binding is >0.02, AChR modulating Ab(83519) and CRMP-5- IgG Western Blot (84182) is performed and charged.
Parasite Identification

Panel Code: PID

CPT Codes(s): 87169
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 2 hours
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
- COLLECT: Clean Screw-Top Container
- SUBMIT: Parasite in clean screw-top container OR worm in formalin OR skin scrapings in mineral oil on clean glass slide.
- NOTE: See the Specimen Collection section of this manual for collection instructions for scabies.

Parathyroid Hormone Intact

Panel Code: PHI

CPT Codes(s): 83970
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
- COLLECT: Plain Red Top
- SUBMIT: 1 mL serum. Refrigerated up to 2 days or FREEZE after 2 days.
- UNACCEPTABLE: Markedly hemolyzed specimen. Specimen collected in an SST® tube.

Parathyroid Hormone Intact with Minerals

Panel Code: PHM

Calcium, serum
Creatinine, serum
Glomerular Filtration Rate, estimated (eGFR)
Parathyroid Hormone Intact, serum
Phosphorus, serum

CPT Codes(s): 82310, 82565, 83970, 84100
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
- COLLECT: Plain Red Top
- SUBMIT: 1 mL serum REFRIGERATED up to 2 days or FREEZE after 2 days.
- UNACCEPTABLE: Markedly hemolyzed specimen. Specimen collected in an SST® tube.
### Parathyroid Hormone, Intraoperative

**Panel Code:** OPH  

- **AVAILABILITY:** St. John’s, St. Joseph’s & Woodwinds Hospital Inpatient Only  
- **CPT Codes(s):** 83970  
- **Test Performed at:** HealthEast Medical Laboratory  
- **Analytic Time:** 30 minutes  
- **Days Test Performed:** Mon Tue Wed Thu Fri  

**Specimen:**  
- **COLLECT:** Lavender Top  
- **SUBMIT:** Submit 1mL EDTA plasma. Operating Room must call the Chemistry lab to schedule when specimen is drawn OR deliver specimen to laboratory accessioning department. Laboratory will call Operating Room with results.

### Parathyroid Hormone-Related Peptide (PTHrP), Plasma

**Panel Code:** PPR  

- **CPT Codes(s):** 82397  
- **Test Performed at:** Mayo Medical Laboratories  
- **Analytic Time:** 120 hours (5 days)  
- **Days Test Performed:** Mon Tue Wed Thu Fri  

**Specimen:**  
- **COLLECT:** Prechilled Lavender (ice bath)  
- **SUBMIT:** 1 mL plasma FROZEN immediately in a separate tube.  
- **UNACCEPTABLE:** Specimen not received frozen.  
- **NOTE:** Blood should be drawn into a prechilled lavender and placed immediately into an ice bath until it is centrifuged at refrigeration temperature (2-8° C). Plasma must be immediately aliquotted into a separate tube and frozen. Patient should be fasting.

### Parietal Cell Antibodies, IgG

**Panel Code:** PCA  

- **CPT Codes(s):** 83516  
- **Test Performed at:** Mayo Medical Laboratories  
- **Analytic Time:** 96 hours (4 days)  
- **Days Test Performed:** Mon Wed Fri  

**Specimen:**  
- **COLLECT:** Red Top  
- **SUBMIT:** 0.5 mL serum REFRIGERATED.  
- **UNACCEPTABLE:** Markedly hemolyzed or lipemic specimen.

### Parvovirus B19 Antibodies, IgG and IgM

**Panel Code:** B19  

- **CPT Codes(s):** 86747 x2  
- **Test Performed at:** Mayo Medical Laboratories  
- **Analytic Time:** 72 hours (3 days)  
- **Days Test Performed:** Mon Tue Wed Thu Fri  

**Specimen:**  
- **COLLECT:** Red Top  
- **SUBMIT:** 0.5 mL serum REFRIGERATED.  
- **UNACCEPTABLE:** Markedly hemolyzed, lipemic or icteric specimen.
### Pentobarbital (Nembutal®)

**Panel Code:** PTB  

- **CPT Codes(s):** 80345  
  **Test Performed at:** MedTox Laboratory, Inc  
  **Analytic Time:** 72 hours (3 days)  
  **Days Test Performed:** All

**Specimen:**  
- **COLLECT:** Plain Red Top  
- **SUBMIT:** 2 mL serum REFRIGERATED.  
- **UNACCEPTABLE:** Specimen drawn in an SST® tube.  
- **NOTE:** Always order STAT for an induced coma patient.

### pH Venous

**Panel Code:** PHV

- **CPT Codes(s):** 82800  
  **Test Performed at:** HealthEast Medical Laboratory  
  **Analytic Time:** 1 hours  
  **Days Test Performed:** All

**Specimen:**  
- **COLLECT:** Green Top  
- **SUBMIT:** 4 mL whole blood ON WET ICE. Specimen must arrive within 1 hour of collection.  
- **NOTE:** Specimen should be drawn free of air, mixed well, and placed on wet ice. Transport immediately to laboratory. DO NOT REMOVE CORK BEFORE TESTING.

### pH, Body Fluid

**Panel Code:** PHF

- **CPT Codes(s):** 83986  
  **Test Performed at:** HealthEast Medical Laboratory  
  **Analytic Time:** 4 hours  
  **Days Test Performed:** All

**Specimen:**  
- **COLLECT:** Body Fluid in a Screw-Top Container  
- **SUBMIT:** 1 mL body fluid REFRIGERATED.  
- **UNACCEPTABLE:** Specimen > 24 hours old.  
- **NOTE:** Specimen source is REQUIRED.

### pH, Cord Blood

**Panel Code:** PHC

- **CPT Codes(s):** 82800  
  **Test Performed at:** HealthEast Medical Laboratory  
  **Analytic Time:** 1 hours  
  **Days Test Performed:** All

**Specimen:**  
- **COLLECT:** Syringe (Lithium Heparin)  
- **SUBMIT:** 0.3 mL whole blood in a syringe (rinsed with lithium heparin) ON WET ICE. Specimen must arrive within 1 hour of collection.  
- **NOTE:** Specimen should be drawn free of air, replace needle with cap, mixed well and placed on wet ice. Transport immediately to laboratory. DO NOT REMOVE CAP BEFORE TESTING.
### pH, Fecal

<table>
<thead>
<tr>
<th>Panel Code: SPH</th>
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<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 83986</td>
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<tr>
<td><strong>Test Performed at:</strong> HealthEast Medical Laboratory</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 24 hours (1 day)</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> Mon Tue Wed Thu Fri</td>
</tr>
</tbody>
</table>

**Specimen:**
- **COLLECT:** Screw-Top Container-Liquid Specimen Only
- **SUBMIT:** Small amount of fecal material REFRIGERATED.
- **UNACCEPTABLE:** Formed stool.

### Phencyclidine (PCP) Confirmation, Urine

<table>
<thead>
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<th>Panel Code: CPC</th>
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<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 83992</td>
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<tr>
<td><strong>Test Performed at:</strong> Mayo Medical Laboratories</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 196 hours (8 days)</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> Mon</td>
</tr>
</tbody>
</table>

**Specimen:**
- **COLLECT:** Random Urine in a Screw-Top Container
- **SUBMIT:** 20 mL aliquot random urine collection (no preservative), REFRIGERATED. (5 mL minimum volume).

### Phenobarbital (Luminal®)

<table>
<thead>
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<th>Panel Code: PHN</th>
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<tbody>
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<td><strong>CPT Codes(s):</strong> 80184</td>
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<tr>
<td><strong>Test Performed at:</strong> HealthEast Medical Laboratory</td>
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<tr>
<td><strong>Analytic Time:</strong> 4 hours</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> All</td>
</tr>
</tbody>
</table>

**Specimen:**
- **COLLECT:** IP Green Top / OP Plain Red Top
- **SUBMIT:** 1 mL serum REFRIGERATED.
- **UNACCEPTABLE:** Specimen collected in an SST® tube.

### Phenytoin (Dilantin®)

<table>
<thead>
<tr>
<th>Panel Code: DLN</th>
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</thead>
<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 80185</td>
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<td><strong>Test Performed at:</strong> HealthEast Medical Laboratory</td>
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<tr>
<td><strong>Analytic Time:</strong> 4 hours</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> All</td>
</tr>
</tbody>
</table>

**Specimen:**
- **COLLECT:** IP Green Top / OP Plain Red Top
- **SUBMIT:** 1 mL serum REFRIGERATED. May require ABN form.
- **UNACCEPTABLE:** Specimen collected in an SST® tube. Markedly hemolyzed specimen
### Phenytoin, Free (Dilantin®, Free)

- **Panel Code:** DLF
- **CPT Codes(s):** 80186
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 24 hours (1 day)
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** IP Green Top/ OP Red Top
- **SUBMIT:** 2 mL serum REFRIGERATED.
- **UNACCEPTABLE:** Specimen collected in an SST® tube. Markedly hemolyzed specimen.

### Phospholipid Ab (Cardiolip) IgM/IgG

- **Panel Code:** LAB3082
- **CPT Codes(s):** 86147 x 2
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 48 hours (2 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**
- **COLLECT:** Red Top
- **SUBMIT:** 0.5 mL serum REFRIGERATED.
- **UNACCEPTABLE:** Markedly hemolyzed or lipemic specimens.

### Phosphorus

- **Panel Code:** PO4
- **CPT Codes(s):** 84100
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** IP Green Top / OP Red Top
- **SUBMIT:** 1 mL serum REFRIGERATED up to 4 days.
- **UNACCEPTABLE:** Hemolyzed specimen.

### Phosphorus, 24 Hour Urine

- **Panel Code:** POU
- **CPT Codes(s):** 84105
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** 24 Hour Urine (HCL Preservative)
- **SUBMIT:** 10 mL aliquot of 24 hour urine collection (preserved with 20 mL of 6N HCl at start of collection) REFRIGERATED. Adjust pH to 2.0.
- **NOTE:** Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions and alternate preservatives.
Phosphorus, Random Urine

Panel Code: UPO

**CPT Codes(s):** 84105  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All  

**Specimen:**  
COLLECT: Random Urine in a Screw-Top Container  
SUBMIT: 10 mL aliquot of random urine collection (no preservative) REFRIGERATED.

Pinworm Prep

Panel Code: PIN

**CPT Codes(s):** 87172  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 2 hours  
**Days Test Performed:** Mon Tue Wed Thu Fri  

**Specimen:**  
COLLECT: Pinworm Paddle  
SUBMIT: Pinworm paddle at ROOM TEMPERATURE or REFRIGERATED.  
UNACCEPTABLE: Opaque tape.  
NOTE: Collect specimen after the patient has been in bed for several hours or in the early morning before patient arises or uses the bathroom. Wearing gloves, press the "sticky" side of the paddle against the right and left perianal folds and place paddle back in tube. A single paddle may be used for both sides.

Plasminogen Activity

Panel Code: PMG

**CPT Codes(s):** 85420  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri  

**Specimen:**  
COLLECT: Blue Top  
SUBMIT: 1.0 mL platelet-free plasma FROZEN immediately in a separate tube.  
UNACCEPTABLE: Specimen not received frozen, markedly hemolyzed or lipemic specimen.  
NOTE: See the Specimen Collection section of this manual for preparation of platelet-free plasma.
Panel Code: PLT

**Platelet Count**

**CPT Codes(s):** 85049  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Lavender Top  
SUBMIT: 3 mL whole blood ROOM TEMPERATURE. Specimen must arrive within 24 hours of collection.  
UNACCEPTABLE: Specimen more than 24 hours old, frozen or clotted specimen, volume less than 1 mL.

Panel Code: PFA

**Platelet Function Test**

**CPT Codes(s):** 85576  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: 2 Blue Top, 21ga NDL/NO pneumatic tube  
SUBMIT: 3 mL whole blood unspun, unopened, ROOM TEMPERATURE. Do not mix with mechanical mixer. MUST BE RECEIVED AT ST. JOSEPH'S HOSPITAL WITHIN 4 HOURS OF DRAW. CALL FOR STAT PICKUP IF NEEDED. Needs to be kept separate from INR, PTT.  
UNACCEPTABLE: Specimen that has been opened, spun, refrigerated, clotted, more than 4 hours old, or sent through a pneumatic tube. NOTE: If the original test with epinephrine is abnormal, then a second test with ADP will be performed and charged separately using CPT code 85576.

Panel Code: PVX

**Plavix Resistance Assay**

**CPT Codes(s):** 85576  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Special Greiner Blue Top Tube  
SUBMIT: 2 mL whole blood unspun, unopened, ROOM TEMPERATURE in a special Greiner Blue Top Tube (x3). Contact Hematology lab for information and supply. No other tube will be accepted. Do not mix on mechanical mixer. Fill only to black arrow on tube. Do not send through the pneumatic tube system.  
UNACCEPTABLE: Specimen collected in any other tube, specimens that have been spun, opened, refrigerated, are more than 4 hours old, or clotted.
PNH, PI-Linked Antigen, Whole Blood, Cascade

CPT Codes(s): 88184 x 2, 88185 x7
Test Performed at: Mayo Medical Laboratories
Analytic Time: 48 hours (2 days)
Days Test Performed: All; reported Mon-Fri

Specimen:
COLLECT: Yellow Top (ACD,solution B)
SUBMIT: 7 mL whole blood ROOM TEMPERATURE.
UNACCEPTABLE: Clotted, frozen, hemolyzed or centrifuged specimen.
NOTE: Specimen must be received at Mayo within 72 hours of draw.

Poliovirus (Types 1,3) Aby, Neutralization

Polio 1 Titer
Polio 3 Titer

CPT Codes(s): 86382 x2
Test Performed at: Mayo Medical Laboratories
Analytic Time: 120 hours (5 days)
Days Test Performed: Mon Thu

Specimen:
COLLECT: Red Top
SUBMIT: 1 mL serum REFRIGERATED.
NOTE: This panel is unacceptable for acute disease.

Porphyrins, Quantitative, 24 Hour Urine

Coproporphyrins (tetracarboxyl)
Heptacarboxylporphyrins
Hexacarboxylporphyrins
Pentacarboxylporphyrins
Porphobilinogen
Uroporphyrins (octacarboxyl)

CPT Codes(s): 84110, 84120
Test Performed at: Mayo Medical Laboratories
Analytic Time: 72 hours (3 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: 24 Hr Urine (NaCO3), Protect From Light
SUBMIT: 50 mL aliquot of a 24 hour collection [preserved with 5 g sodium carbonate (NaCO3) added at start of collection] FROZEN within 8 hours in a separate container PROTECTED FROM LIGHT. pH must be >7. May require ABN form. REFRIGERATE specimen during collection.
NOTE: Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions. DO NOT freeze entire collection. Patient must abstain from alcohol consumption beginning 24 hours prior to start of collection and continuing through entire collection period.
Potassium

**Panel Code:** K

**CPT Codes(s):** 84132  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: IP Green Top / OP Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
UNACCEPTABLE: Hemolyzed specimen.  
NOTE: Centrifuge and separate serum from cells within 4 hours of collection. See special instructions section of this manual for "Potassium Specimen Recommendations".

Potassium, 24 Hour Urine

**Panel Code:** KU

**CPT Codes(s):** 84133  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: 24 Hour Urine (No Preservative)  
SUBMIT: 10 mL aliquot of 24 hour urine collection (no preservative) REFRIGERATED.  
NOTE: Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions.

Potassium, Random Urine

**Panel Code:** UK

**CPT Codes(s):** 84133  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Random Urine in a Screw-Top Container  
SUBMIT: 10 mL aliquot of random urine collection (no preservative) REFRIGERATED.

Prealbumin

**Panel Code:** PAB

**CPT Codes(s):** 84134  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED up to 3 days.  
UNACCEPTABLE: Markedly hemolyzed specimen.
Prenatal Screen Cascade

Panel Code: LAB2193

**ABO/RH**

**Antibody Screen**

**Hepatitis B Surface Antigen**

**RPR**

**Rubella IgG**

**CPT Codes(s):** 86592, 86762, 86850, 86900, 86901, 87340

**Test Performed at:**

**Analytic Time:** 24 hours (1 day)

Days Test Performed: Mon Tue Wed Thu Fri Sat

**Specimen:**

**COLLECT:** 1 Red Top & 1 EDTA Lavender Top

**SUBMIT:** 4 mL whole blood and 2 mL serum REFRIGERATED. Hepatitis B Surface Antigen serum aliquot must be refrigerated & stored up to 6 days at 2°-8° C.

**UNACCEPTABLE:** Incompletely or incorrectly labeled specimen. Specimen collected in an SST® tube. Markedly hemolyzed specimens.

**NOTE:** If ABY ID & Titer are indicated, they will be performed & charged separately using CPT codes 86870 & 86886. Extra specimen may be required. If Syphilis Screen is reactive, a confirmatory FTA will be sent to MN Dept of Health and charged using CPT code 86780. If Hepatitis B Surface Antigen is positive, it will be confirmed by neutralization testing.

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Prenatal Screen Cascade and Hemogram

Panel Code: LAB2194

**ABO/RH**

**Antibody Screen**

**Hemogram 1**

**Hepatitis B Surface Antigen**

**RPR**

**Rubella IgG**

**CPT Codes(s):** 80055

**Test Performed at:**

**Analytic Time:** 24 hours (1 day)

Days Test Performed: Mon Tue Wed Thu Fri Sat

**Specimen:**

**COLLECT:** 1 Red Top and 2 Lavender tops

**SUBMIT:** 3 mL serum AND 8 mL whole blood (Lavender Tops) REFRIGERATED. Specimen must arrive within 24 hours of collection.

**UNACCEPTABLE:** Incompletely or incorrectly labeled specimen for blood type. Clotted Lavender Top. Specimen collected in an SST® tube. Markedly hemolyzed.

**NOTE:** If ABY ID and Titer are indicated, they will be performed and charged separately using CPT codes 86870 & 86886. If Syphilis Screen is reactive, a confirmatory FTA will be sent to the MN Dept of Health and charged separately using CPT code 86780. If Hepatitis Surface Antigen is positive, it will be confirmed by neutralization testing.
Panel Code: LAB3029

**Primidone (Mysoline) and Phenobarbital**

- **Phenobarbital**
  - COLLECT: Red Top
  - SUBMIT: 0.5 mL serum centrifuged within 2 hours and REFRIGERATED.
  - UNACCEPTABLE: Specimen markedly hemolyzed.
  - NOTE: For proper interpretation a phenobarbital level is included in the assay.

Panel Code: LAB3028

**Procainamide (Pronestyl®) and N-Acetyl Procainamide (NAPA)**

- COLLECT: Red Top
- SUBMIT: 1 mL serum REFRIGERATED.
- UNACCEPTABLE: Markedly hemolyzed specimen.
- NOTE: Centriuge and remove serum from cells within 2 hours of draw.

Panel Code: PCL

**Procalcitonin**

- COLLECT: Red Top
- SUBMIT: 1 mL serum REFRIGERATED up to 48 hours. FROZEN if not submitted within 48 hours.
- UNACCEPTABLE: Specimens > 48 hours if not frozen.

Panel Code: PRG

**Progesterone**

- COLLECT: IP Green Top / OP Red Top
- SUBMIT: 1 mL serum REFRIGERATED up to 10 days.
**Prolactin**

Panel Code: PRL

- **CPT Codes(s):** 84146
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- COLLECT: IP Green Top / OP Red Top
- SUBMIT: 1 mL serum REFRIGERATED up to 7 days.

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**Prolactin, Pituitary Macroadenoma**

Panel Code: PLP

- **CPT Codes(s):** 84146
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 1 mL Serum REFRIGERATED up to 7 days.
- **NOTE:** Dilutions of X10 and X100 will be performed to rule out the possibility of high-dose hook effect.

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**Prometheus Thiopurine Metabolites**

Panel Code: TPM

- **6 - MMPN Metabolite**
- **6 - TGN Metabolite**

- **CPT Codes(s):** 82542
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 168 hours (7 days)
- **Days Test Performed:** Varies

**Specimen:**
- COLLECT: 2 Lavender Tops
- SUBMIT: 5 mL whole blood REFRIGERATED
- UNACCEPTABLE: Specimen clotted, frozen or markedly hemolyzed.

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**Propafenone (Rythmol®)**

Panel Code: PFO

- **CPT Codes(s):** 80299
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 72 hours (3 days)
- **Days Test Performed:** Mon Wed Fri

**Specimen:**
- COLLECT: Plain Red Top
- SUBMIT: 3 mL serum REFRIGERATED.
- UNACCEPTABLE: Specimen drawn in an SST® tube.
- **NOTE:** Patient must have received propafenone for at least 3 days before drawing a level. The level should be drawn just before administration of the next dose.
Protein C Activity Cascade

CPT Codes(s): 85303
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 168 hours (7 days)
Days Test Performed: Wed

Specimen:
COLLECT: BLUx2 DBLCenFZ2tube4hr
SUBMIT: 2 blue top tubes whole blood or 2 mL platelet-free plasma in 2 separate tubes (1 mL /tube) ROOM TEMP within 4 hours of collection. Platelet-free plasma FROZEN within 4 hours of collection is stable for up to 2 weeks. The specimen must be double-centrifuged to prepare a platelet-free-plasma specimen. Immediately centrifuge at 7,200 RPM for 3 minutes or 3,200 RPM for 10 minutes, at 4 degrees C, if possible. Carefully remove plasma from cells, avoiding the platelet/buffy coat. Dispense into a labeled plastic tube, and centrifuge this, again at 7,200 RM for 3 minutes or 3,200 RM for 10 minutes, at 4 degrees C, if possible. Remove the top portion of plasma, leaving approximately 250ul in the bottom to discard. The double-centrifuged plasma should be aliquoted (at least 1.0ml in each plastic tube) into 2 clearly labeled plastic tubes (glass vials will not be accepted).

UNACCEPTABLE: Frozen whole blood specimen, partially filled tube, marked hemolysis, clotted specimen, whole blood received >4 hours of collection or platelet-free plasma not frozen with 4 hours of collection.

NOTE: If results are decreased, Protein C Antigen (CPT 85302) at Mayo Medical Laboratories will be performed and charged.

Protein CSF

CPT Codes(s): 84157
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: Spinal Fluid in CSF Collection Tube
SUBMIT: 0.5 mL spinal fluid REFRIGERATED. Specimen must arrive within 24 hours of collection.
Protein S Activity Cascade

CPT Codes(s): 85306
Test Performed at: HealthEast Medical Laboratory

Analytic Time: 168 hours (7 days)
Days Test Performed: Wed

Specimen:
COLLECT: BLUx2 DBLCenFZ2tube4hr
SUBMIT: 2 blue top tubes whole blood or 2 mL platelet-free plasma in 2 separate tubes (1 mL /tube) ROOM TEMP within 4 hours of collection. Platelet-free plasma FROZEN within 4 hours of collection is stable for up to 2 weeks. The specimen must be double-centrifuged to prepare a platelet-free-plasma specimen. Immediately centrifuge at 7,200 RPM for 3 minutes or 3,200 RPM for 10 minutes, at 4 degrees C, if possible. Carefully remove plasma from cells, avoiding the platelet/buffy coat. Dispense into a labeled plastic tube, and centrifuge this, again at 7,200 RM for 3 minutes or 3,200 RM for 10 minutes, at 4 degrees C, if possible. Remove the top portion of plasma, leaving approximately 250ul in the bottom to discard. The double-centrifuged plasma should be aliquoted (at least 1.0ml in each plastic tube) into 2 clearly labeled plastic tubes (glass vials will not be accepted).

UNACCEPTABLE: Frozen whole blood specimen, partially filled tube, marked hemolysis, clotted specimen, whole blood received >4 hours of collection or platelet-free plasma not frozen with 4 hours of collection.

NOTE: If results are decreased, Protein S Antigen (Free) (CPT 85306) at Mayo Medical Laboratories will be performed and charged. If the Protein S Antigen (Free) is decreased, Protein S Antigen (Total) (CPT 85305) at Mayo Medical Laboratories will be performed and charged.

Protein, 24 Hour Urine

CPT Codes(s): 84156
Test Performed at: HealthEast Medical Laboratory

Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: 24 Hour Urine (No Preservative)
SUBMIT: 10 mL aliquot of 24 hour urine collection (no preservative) REFRIGERATED.

NOTE: Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions.

Protein, Body Fluid

CPT Codes(s): 84157
Test Performed at: HealthEast Medical Laboratory

Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: Body Fluid in a Screw-Top Container
SUBMIT: 1 mL body fluid REFRIGERATED.

NOTE: Specimen source is REQUIRED.
Protein, Random Urine

Panel Code: UTP

CPT Codes(s): 84156
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: Random Urine in a Screw-Top Container
SUBMIT: 10 mL aliquot of random urine collection (no preservative) REFRIGERATED.

Protein, Timed Urine (non-24 hour)

Panel Code: TUP

** AVAILABILITY: HML Client Reference Lab Only **

CPT Codes(s): 84156
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: Timed Urine (No Preservative)
SUBMIT: 10 mL aliquot of Timed Urine Collection (no preservative) REFRIGERATED.
UNACCEPTABLE: 24 hour collection.
NOTE: Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions.

Protein, Total

Panel Code: TPB

CPT Codes(s): 84155
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: IP Green Top / OP Red Top
SUBMIT: 1 mL serum REFRIGERATED.
UNACCEPTABLE: Markedly hemolyzed specimens.

Protein/Creatinine Ratio, Random Urine

Panel Code: UPC

Creatinine, Urine
Protein, Urine
Protein/Creatinine Ratio, calculation

CPT Codes(s): 82570, 84156
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: Random Urine in a Screw-Top Container
SUBMIT: 10 mL aliquot of random urine collection (no preservative) REFRIGERATED.
**Proteinase 3 Antibodies (PR3), IgG**

**Panel Code: PR3**

**CPT Codes(s):** 83516  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat  

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 0.5 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed or lipemic specimen.

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**Prothrombin Gene Mutation**

**Panel Code: PGM**

**CPT Codes(s):** 81240  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 216 hours (9 days)  
**Days Test Performed:** Tue  

**Specimen:**  
COLLECT: Lavender Top  
SUBMIT: 3 mL whole blood REFRIGERATED.  
UNACCEPTABLE: Specimen clotted, centrifuged or opened.

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**PSA (Prostatic-Specific Antigen), Annual Screen**

**Panel Code: PSS**

**CPT Codes(s):** G0103  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All  

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED; FROZEN in a separate tube if not submitted within 24 hours. May require ABN form.  
NOTE: PSA Diagnostic (PSD) should be ordered when a diagnosis exists to support the medical necessity requirements. PSA Screening (PSS) should be ordered for all other requests. Medicare will pay for one screening test every 12 months on patients 50 years or older.

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**PSA (Prostatic-Specific Antigen), Diagnostic**

**Panel Code: PSD**

**CPT Codes(s):** 84153  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All  

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED; FROZEN in a separate tube if not submitted within 24 hours. May require ABN form.  
NOTE: PSA Diagnostic should be ordered when a diagnosis exists to support the medical necessity requirements. PSA Screening should be ordered for all other requests. Medicare will pay for one screening test every 12 months on patients 50 years or older.
### PSA (Prostatic-Specific Antigen), Total & Free

**Panel Code:** PFT  

**CPT Codes(s):** 84153, 84154  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat  

**Specimen:**  
- COLLECT: Red-Top  
- SUBMIT: 1 mL serum FROZEN within 3 hours in a separate tube. May require ABN form.  
- UNACCEPTABLE: Specimen not received frozen or hemolyzed specimen.  
- NOTE: Due to the instability of free PSA, this test cannot be added on to an existing order. Twelve (12) hours prior to draw, do not take multivitamins or dietary supplements containing biotin or vitamin B7.

### Pseudocholinesterase, Total

**Panel Code:** PSU  

**CPT Codes(s):** 82480  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat Sun  

**Specimen:**  
- COLLECT: Red Top  
- SUBMIT: 1 mL serum REFRIGERATED. Centrifuge and separate serum from cells within 2 hours of draw.  
- UNACCEPTABLE: Markedly hemolyzed specimen.  
- NOTE: For case of prolonged apnea following surgery, wait 24 hours before obtaining specimen.

### PT Inhibitor Screen

**Panel Code:** PTI  

**CPT Codes(s):** 85610, 85611  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All  

**Specimen:**  
- COLLECT: Blue Top  
- SUBMIT: 3 mL whole blood or 1.5 mL platelet-free plasma ROOM TEMP within 24 hours of collection. Platelet-free plasma FROZEN within 24 hours of collection is stable for up to 2 weeks.  
- UNACCEPTABLE: Refrigerated or frozen whole blood specimen, partially filled, tube, marked hemolysis, clotted specimen, whole blood received >24 hours of collection or platelet-free plasma not frozen within 24 hours of collection.  
- NOTE: A prothrombin time will be done first. If the result is normal the test will be cancelled. See the Specimen Collection section of this manual for preparation of platelet-free plasma.
Pyruvic Acid, Whole Blood

CPT Codes(s): 84210
Test Performed at: Mayo Medical Laboratories
Analytic Time: 192 hours (8 days)
Days Test Performed: Tue Fri

Specimen:
COLLECT: Perchloric Acid Preserved Blood (prechilled)
SUBMIT: 1 mL whole blood preserved in 2.5 mL of 6% perchloric acid REFRIGERATED.
NOTE: Collect 1 mL in syringe. Transfer exactly 1 mL whole blood to a prechilled vial containing 2.5 mL 6% perchloric acid (available from HML). Shake vigorously. Patient should be fasting at least 4 hours.

Quad Screen (Second Trimester) Maternal

CPT Codes(s): 82105, 82677, 84702, 86336
Test Performed at: Mayo Medical Laboratories
Analytic Time: 96 hours (4 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
COLLECT: Red Top (gestation age 15-22 wks,6 days)
SUBMIT: 1 mL serum REFRIGERATED.
UNACCEPTABLE: Markedly hemolyzed or incorrect gestational age.
NOTE: Complete and submit a Maternal AFP form found in the front section of the manual.

Quinidine (Quinaglute®, Quinidex®)

CPT Codes(s): 80194
Test Performed at: Mayo Medical Laboratories
Analytic Time: 24 hours (1 day)
Days Test Performed: All

Specimen:
COLLECT: Plain Red Top
SUBMIT: 0.5 mL serum REFRIGERATED.
UNACCEPTABLE: Specimen markedly hemolyzed or specimen collected in SST tube.
### Rabies Antibody Endpoint

**Panel Code:** RBS  
**CPT Codes(s):** 86382  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 840 hours (35 days)  
**Days Test Performed:** Mon Wed Thu  

**Specimen:**  
- **COLLECT:** Red Top  
- **SUBMIT:** 2.0 mL serum REFRIGERATED.  
- **UNACCEPTABLE:** Markedly hemolyzed or lipemic specimen.

### Rapid Strep A Screen-Throat

**Panel Code:** RST  
**CPT Codes(s):** 87880  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 2 hours  
**Days Test Performed:** All  

**Specimen:**  
- **COLLECT:** CultureSwab™  
- **SUBMIT:** Swab in CultureSwab™ REFRIGERATED. (Preferably send 2 swabs)  
- **UNACCEPTABLE:** Specimen more than 2 weeks old. Swab in semi-solid media, a swab with a wooden shaft or Eswabs.  
- **NOTE:** See the Specimen Collection section of this manual for collection instructions. If the Rapid Strep is negative and two swabs are received, a Group A Strep direct detection will be performed and charged separately using CPT code 87650.

### Rare Antisera Typing, Patient

**Panel Code:** RPT  
**CPT Codes(s):** 86905  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** All  

**Specimen:**  
- **COLLECT:** EDTA-Lavender Top  
- **SUBMIT:** 4 mL whole blood REFRIGERATED.  
- **UNACCEPTABLE:** Incompletely or incorrectly labeled specimens.

### Red Blood Count

**Panel Code:** RBC  
**CPT Codes(s):** 85041  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** All  

**Specimen:**  
- **COLLECT:** Lavender Top  
- **SUBMIT:** 3 mL whole blood REFRIGERATED or ROOM TEMPERATURE. Specimen must arrive within 24 hours of collection.  
- **UNACCEPTABLE:** Specimen more than 24 hours old, frozen or clotted specimen, volume less than 1 mL.
Reducing Substances, Urine

Panel Code: RDU

CPT Codes(s): 84376  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 24 hours (1 day)  
Days Test Performed: All  

Specimen:  
COLLECT: Random Urine in a Screw-Top Container  
SUBMIT: 5 ml aliquot of random urine collection (no preservative) REFRIGERATED. Specimen must arrive within 24 hours of collection.  
UNACCEPTABLE: Specimen more than 24 hours old.

Renal Function Profile

Panel Code: RFP

Albumin  
Anion Gap, Calculated  
BUN  
Calcium  
Carbon Dioxide (CO2), Total  
Chloride  
Creatinine  
Glomerular Filtration Rate, estimated (eGFR)  
Glucose  
Phosphorus  
Potassium  
Sodium  

CPT Codes(s): 80069  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 4 hours  
Days Test Performed: All  

Specimen:  
COLLECT: IP Green Top / OP Red Top  
SUBMIT: 1 mL serum REFRIGERATED. May require ABN form.  
UNACCEPTABLE: Hemolyzed specimen.  
NOTE: Centrifuge and separate serum from cells within 4 hours of draw. See the Special Instructions section of this manual for "Potassium Specimen Recommendations".
Renin Activity

Panel Code: REN

CPT Codes(s):  84244
Test Performed at: Mayo Medical Laboratories
Analytic Time: 120 hours (5 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT:  2 Prechilled Lavenders (into ice bath)
SUBMIT:  2 mL plasma FROZEN immediately in a separate tube.
UNACCEPTABLE: Specimen markedly hemolyzed or not received frozen.
NOTE: Blood should be drawn into a prechilled lavender and placed immediately into an ice bath
until it is centrifuged at refrigeration temperature. Plasma must be immediately aliquoted
into a separate tube and frozen.

Reticulocytes

Panel Code: ART

CPT Codes(s):  85045
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 72 hours (3 days)
Days Test Performed: All

Specimen:
COLLECT:  Lavender Top
SUBMIT:  3 mL whole blood REFRIGERATED or ROOM TEMPERATURE if < 24 hours old. May
require ABN form.
UNACCEPTABLE: Volume less than 1 mL or greater than 72 hours old.

Rh Typing (HML)

Panel Code: RH

CPT Codes(s):  86901
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: Tue Wed Thu Fri Sat

Specimen:
COLLECT:  EDTA-Lavender Top
SUBMIT:  4 mL whole blood REFRIGERATED; minimum volume 0.5 mL
UNACCEPTABLE: Incompletely or incorrectly labeled specimens. Specimens collected in SST®
tube or more than 7 days old.
NOTE: If indicated, a Weak D(Du) test will be performed at no charge.

Rheumatoid Factor Quantitative

Panel Code: RQT

CPT Codes(s):  86431
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT:  Red Top
SUBMIT:  1.0 mL serum REFRIGERATED for up to 3 days. If not tested within 72 hours,
FREEZE.
### Riboflavin (Vitamin B2), Plasma

**Panel Code:** VB2

**CPT Codes(s):** 84252
**Test Performed at:** Mayo Medical Laboratories

**Analytic Time:** 96 hours (4 days)

**Days Test Performed:** Tue Thu

**Specimen:**
- COLLECT: Green Top (Fast & Protect from Light)
- SUBMIT: 1 mL plasma FROZEN within 4 hours in a separate amber tube. Protect from light.
- UNACCEPTABLE: Specimen not protected from light or patient not fasting or markedly lipemic.
- NOTE: Patient fasting 12 hours.

### Risperidone (Risperdal®) and 9-Hydroxyrisperidone

**Panel Code:** RSP

**CPT Codes(s):** 80342
**Test Performed at:** MedTox Laboratory, Inc

**Analytic Time:** 168 hours (7 days)

**Days Test Performed:** All

**Specimen:**
- COLLECT: Plain Red Top
- SUBMIT: 3 mL serum REFRIGERATED.
- UNACCEPTABLE: Specimen collected in an SST® tube.
- NOTE: Trough levels are most reproducible.

### Ristocetin Cofactor Activity

**Panel Code:** RCF

**CPT Codes(s):** 85245
**Test Performed at:** University of MN Physicians

**Analytic Time:** 120 hours (5 days)

**Days Test Performed:** Varies

**Specimen:**
- COLLECT: Blue Top
- SUBMIT: 1.0 mL platelet-free plasma FROZEN immediately.
- UNACCEPTABLE: Specimen not received frozen.
- NOTE: Centrifuge specimen for 30 minutes at 3000 rpm. Aliquot plasma and freeze.
- * Performed 3-4 times per week.

### Rotavirus Antigen Stool

**Panel Code:** RTV

**CPT Codes(s):** 87425
**Test Performed at:** HealthEast Medical Laboratory

**Analytic Time:** 2 hours

**Days Test Performed:** All

**Specimen:**
- COLLECT: Clean Screw-Top Container
- SUBMIT: 0.5 mL OR 0.5 gm OR pea-size piece of stool REFRIGERATED.
- UNACCEPTABLE: Stool in preservative or less than 0.2 mL stool. Specimen more than 72 hours old.
**RSV Rapid Screen**

**Panel Code: RSV**

- **CPT Codes(s):** 87807
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 2 hours
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** Nasal wash or aspirate in screw-top container, REFRIGERATED.
- **SUBMIT:** Nasal wash or aspirate in screw-top container, REFRIGERATED.
- **UNACCEPTABLE:** Specimen older than 72 hours refrigerated. Swab specimens. Specimens collected from patients > 20 years of age.
- **NOTE:** See the Specimen Collection section of this manual for wash collection instructions. This test is intended only for patients under the age of 20 years old.

**Rubella Immune Status (IgG)**

**Panel Code: RUB**

- **CPT Codes(s):** 86762
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 24 hours (1 day)
- **Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- **COLLECT:** Red Top
- **SUBMIT:** 0.5 mL serum REFRIGERATED up to 7 days.

**Rubeola Immune Status, IgG**

**Panel Code: RIS**

- **CPT Codes(s):** 86765
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 72 hours (3 days)
- **Days Test Performed:** Mon Wed Fri

**Specimen:**
- **COLLECT:** Red Top
- **SUBMIT:** 0.2 mL serum REFRIGERATED up to 9 days.
- **UNACCEPTABLE:** Markedly hemolyzed or lipemic specimen.

**Rupture of Fetal Membrane Screen**

**Panel Code: ROM**

- **** AVAILABILITY: St. John's, St. Joseph's & Woodwinds Hospital Only **

- **CPT Codes(s):** s3628
- **Test Performed at:** HealthEast Medical Laboratory
- **Analytic Time:** 4 hours
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** ROM+ Vial
- **SUBMIT:** ROM+ VAGINAL Swab Specimen Transport Tube ROOM TEMP for up to 6 hours.
- **UNACCEPTABLE:** Storage > 6 hours at room temperature.
- **NOTE:** Test is available for hospital inpatient use only.
### S. pneumoniae IgG Antibodies, 23 Serotypes

- **Panel Code**: N23
- **CPT Codes(s)**: 86317 x23
- **Test Performed at**: Mayo Medical Laboratories
- **Analytic Time**: 144 hours (6 days)
- **Days Test Performed**: Mon Tue Wed Thu Fri

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 0.5 mL serum REFRIGERATED.
- UNACCEPTABLE: Markedly hemolyzed or lipemic serum.

### Salicylate (ASA)

- **Panel Code**: SAL
- **CPT Codes(s)**: 80329
- **Test Performed at**: HealthEast Medical Laboratory
- **Analytic Time**: 4 hours
- **Days Test Performed**: All

**Specimen:**
- COLLECT: IP Green Top / OP Plain Red Top
- SUBMIT: 1 mL serum REFRIGERATED.

### Schistosoma Species Antibody, IgG

- **Panel Code**: SCI
- **CPT Codes(s)**: 86682
- **Test Performed at**: Mayo Medical Laboratories
- **Analytic Time**: 120 hours (5 days)
- **Days Test Performed**: Tue Thu

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 1 mL serum REFRIGERATED.

### SCL-70 Auto Antibodies

- **Panel Code**: ESL
- **CPT Codes(s)**: 86235
- **Test Performed at**: HealthEast Medical Laboratory
- **Analytic Time**: 48 hours (2 days)
- **Days Test Performed**: Tue Fri

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 1 mL serum REFRIGERATED. FROZEN if not submitted within 24 hours.
- UNACCEPTABLE: Specimens > 24 hours old if not frozen. Body fluids are unacceptable.
Selenium, Serum

Panel Code: SSE

CPT Codes(s): 84255
Test Performed at: Mayo Medical Laboratories
Analytic Time: 72 hours (3 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
COLLECT: Navy Blue Top - Red Banded (No Additive)
SUBMIT: 1 mL serum REFRIGERATED in a metal-free tube.
UNACCEPTABLE: Specimen not received in a metal-free tube or icteric specimen.
NOTE: Draw Blood (Navy-Red Band) clot 30 min., centrifuge, pour serum (liquid) into a metal-free transfer tube avoiding the transfer of cellular components.

Semen Analysis

Panel Code: SCT

CPT Codes(s): 89322
Test Performed at: Mayo Medical Laboratories
Analytic Time: 96 hours (4 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Sterile Screw-Top Container
SUBMIT: Total ejaculate in sterile screw-top container as close to BODY TEMPERATURE as possible. Specimen must arrive at the lab within 30 minutes after collection, between 7 a.m. and Noon MONDAY through THURSDAY. Must arrive at Mayo within 24 hours of collection.
UNACCEPTABLE: Specimen collected in a condom containing spermicide. Specimen arriving after Noon or on Friday, Saturday, Sunday or the day before a holiday. If the holiday falls on a Saturday, holiday will be observed on the preceding Friday. Sunday holidays are observed on the following Monday. Specimen arriving >30 minutes after collection.
NOTE: Time of collection is REQUIRED. Patient should have 2-7 days of sexual abstinence at the time of collection for accurate results.

Semen Analysis, Post Vasectomy

Panel Code: PVS

CPT Codes(s): 89321
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 24 hours (1 day)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Sterile Screw-Top Container
SUBMIT: Total ejaculate in sterile screw-top container as close to BODY TEMPERATURE as possible. Specimen must arrive as soon as possible after collection.
UNACCEPTABLE: Specimen collected in a condom containing spermicide.
NOTE: Time of collection is REQUIRED.
Serotonin

Panel Code: SER

**CPT Codes(s):** 84260  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 144 hours (6 days)  
**Days Test Performed:** Mon Wed Fri

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 2.5 mL serum FROZEN in a separate tube. Remove serum from cells within 30 minutes.  
NOTE: Medications that may affect serotonin concentrations include methyldopa, MAO inhibitors, lithium, morphine and reserpine

---

Serotonin Release Assay, Unfractionated Heparin

Panel Code: SRA

**CPT Codes(s):** 86022  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 192 hours (8 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**  
COLLECT: 2 Red Tops  
SUBMIT: 5 mL serum REFRIGERATED.

---

Sex Hormone-Binding Globulin (SHBG)

Panel Code: SHB

**CPT Codes(s):** 84270  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 0.5 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed specimen.

---

Sickle Cell Screen

Panel Code: SKL

**CPT Codes(s):** 85660  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Lavender Top  
SUBMIT: 3 mL whole blood REFRIGERATED. Specimen is stable refrigerated for up to two weeks.  
UNACCEPTABLE: Volume less than 1 mL.  
NOTE: If necessary, any anticoagulated whole blood is acceptable.
## Sirolimus (Rapamune®)

**Panel Code:** SIR  
**CPT Codes(s):** 80195  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** All

**Specimen:**  
- COLLECT: Lavender Top (Whole Blood)  
- SUBMIT: 3 mL whole blood REFRIGERATED.  
- UNACCEPTABLE: Specimen clotted or centrifuged.  
- NOTE: Trough levels are most reproducible.

## Sodium

**Panel Code:** NA  
**CPT Codes(s):** 84295  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
- COLLECT: IP Green Top / OP Red Top  
- SUBMIT: 1 mL serum REFRIGERATED.

## Sodium, 24 Hour Urine

**Panel Code:** NAU  
**CPT Codes(s):** 84300  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
- COLLECT: 24 Hour Urine (No Preservative)  
- SUBMIT: 10 mL aliquot of 24 hour urine collection (no preservative) REFRIGERATED.  
- NOTE: Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions.

## Sodium, Random Urine

**Panel Code:** UNA  
**CPT Codes(s):** 84300  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
- COLLECT: Random Urine in a Screw-Top Container  
- SUBMIT: 10 mL aliquot of random urine collection (no preservative) REFRIGERATED.
Soluble Transferrin Receptor (sTfR)

**CPT Codes(s):** 84238  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1.0 mL serum FROZEN, centrifuged and aliquoted within 2 hours of collection.  
UNACCEPTABLE: Markedly hemolyzed specimen.

---

Specific Gravity, Body Fluid

**CPT Codes(s):** 84315  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Body Fluid in a Screw-Top Container  
SUBMIT: 1 mL body fluid REFRIGERATED.  
NOTE: Specimen source is REQUIRED.

---

Specific Gravity, Urine

**CPT Codes(s):** 81003  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Random Urine in a Screw-Top Container  
SUBMIT: 3 mL aliquot of random urine collection (no preservative) REFRIGERATED within 24 hours of collection.  
UNACCEPTABLE: Specimen > 24 hours old.

---

Spotted Fever Group Ab, IgG and IgM

**CPT Codes(s):** 86757 x2  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 0.5 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed or lipemic specimen.
SS-A/RO Auto Antibodies

Panel Code: ESA

CPT Codes(s): 86235
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 48 hours (2 days)
Days Test Performed: Tue Fri

Specimen:
COLLECT: Red Top
SUBMIT: 1 mL serum REFRIGERATED. FROZEN if not submitted within 24 hours.
UNACCEPTABLE: Specimens > 24 hours old if not frozen. Body fluids are unacceptable.

SS-B/LA Auto Antibodies

Panel Code: ESB

CPT Codes(s): 86235
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 48 hours (2 days)
Days Test Performed: Tue Fri

Specimen:
COLLECT: Red Top
SUBMIT: 1 mL serum REFRIGERATED. FROZEN if not submitted within 24 hours.
UNACCEPTABLE: Specimens > 24 hours old if not frozen. Body fluids are unacceptable.

St. Louis Encephalitis Antibody, IgG and IgM

Panel Code: STL

CPT Codes(s): 86653 x2
Test Performed at: Mayo Medical Laboratories
Analytic Time: 96 hours (4 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Red Top
SUBMIT: 0.5 mL serum REFRIGERATED.
UNACCEPTABLE: CSF, markedly hemolyzed or lipemic specimen.

Stone Analysis

Panel Code: KSA

CPT Codes(s): 82365
Test Performed at: Mayo Medical Laboratories
Analytic Time: 96 hours (4 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
COLLECT: Screw-capped container
SUBMIT: Entire dried stone (calculi) specimen at room temperature. Specimen source is required.
UNACCEPTABLE: Stone embedded in tissue, sent with collection devices, sent in fluid-filled containers, or sent with significant non-stone debris.
NOTE: Acceptable sources: Bladder, kidney, prostatic, renal, or urinary.
Stone Formation, 24 Hour Urine  

Panel Code: SSU  

- Calcium, Urine 24hr  
- Chloride, Urine 24hr  
- Citrate, Urine 24hr  
- Creatinine, Urine 24 hr  
- Magnesium, Urine 24hr  
- Oxalate, Urine, 24hr  
- pH, Urine  
- Phosphorus, Urine 24 hr  
- Potassium, Urine 24hr  
- Sodium, Urine 24hr  
- Uric Acid, Urine 24hr  

CPT Codes(s): 82340, 82436, 82507, 82570, 83735, 83945, 83986, 84105, 84133, 84300, 84560  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 4 hours  
Days Test Performed: Tue Thu

Specimen:  
COLLECT: 24 Hour Urine (No Preservative)  
SUBMIT: Four 10 mL aliquots of 24 hour collection REFRIGERATED.  
UNACCEPTABLE: Specimen not kept refrigerated during the collection time or transport.  
NOTE: Total volume (mL) REQUIRED.

Striated Muscle Antibody  

Panel Code: ASM

CPT Codes(s): 83520  
Test Performed at: Mayo Medical Laboratories  
Analytic Time: 120 hours (5 days)  
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:  
COLLECT: Red Top  
SUBMIT: 0.5 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed, lipemic or icteric specimen.

Strongyloides Antibody, IgG  

Panel Code: LAB3049

CPT Codes(s): 86682  
Test Performed at: Mayo Medical Laboratories  
Analytic Time: 96 hours (4 days)  
Days Test Performed: Mon Wed Fri

Specimen:  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed, lipemic or icteric specimen.
**Sulfate, 24 Hour Urine**

**Panel Code:** SUF

**CPT Codes(s):** 82140  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: 24 Hour Urine (no preservative)  
SUBMIT: 4 mL aliquot of a 24 hour urine collection (no preservative) REFRIGERATED.  
NOTE: Total volume (mL) REQUIRED. See Specimen Collection section of this manual for collection instructions and alternate preservatives. Specimens with pH>8 indicate bacterial contamination, and testing will be cancelled. Do not attempt to adjust pH as it will adversely affect results.

**Sulfatide Autoantibody Test**

**Panel Code:** SUL

**CPT Codes(s):** 83520 x2  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 432 hours (18 days)  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 2 mL serum REFRIGERATED

**Syphilis Screen, Cascade**

**Panel Code:** RPR

**CPT Codes(s):** 86592  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 48 hours (2 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED; FROZEN in a separate tube if not submitted within 5 days. May require ABN form.  
UNACCEPTABLE: Refrigerated specimen more than 5 days old. Cord blood specimens and spinal fluid are unacceptable.  
NOTE: If Syphilis Screen is reactive, a confirmatory FTA will be sent to the MN Dept. of Health and charged separately using CPT code 86780.
T- and B-Cell Extended Helper/Suppressor Panel, Blood

**Panel Code:** EHS

**CPT Codes(s):** 86355, 86357, 86359, 86360  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: Lavender Top  
SUBMIT: 4 mL whole blood ROOM TEMP. Specimen to be collected Monday through Thursday only and not on the day before a holiday. Specimen must arrive before 2 PM.  
UNACCEPTABLE: Refrigerated, clotted, or markedly hemolyzed specimen.

## T3 (Triiodothyronine), Free

**Panel Code:** T3F

**CPT Codes(s):** 84481  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: IP Green Top / OP Red Top  
SUBMIT: 1 mL serum REFRIGERATED up to 6 days. May require an ABN form.

## T3 Reverse

**Panel Code:** RT3

**CPT Codes(s):** 84482  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 144 hours (6 days)  
**Days Test Performed:** Mon Wed Fri

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1.0 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed specimen.

## T3, Total

**Panel Code:** T3T

**CPT Codes(s):** 84480  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: IP Green Top / OP Red Top  
SUBMIT: 1 mL serum REFRIGERATED up to 6 days. May require ABN form.
**T4, Free**

Panel Code: FT4

CPT Codes(s): 84439  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 4 hours  
Days Test Performed: All  

**Specimen:**  
COLLECT: IP Green Top / OP Red Top  
SUBMIT: 1 mL serum REFRIGERATED up to 6 days. May require ABN form.

---

**T4, Total**

Panel Code: T4

CPT Codes(s): 84436  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 4 hours  
Days Test Performed: All  

**Specimen:**  
COLLECT: IP Green Top / OP Red Top  
SUBMIT: 1 mL serum REFRIGERATED up to 6 days. May require ABN form. Pediatric minimum volume is 125 uL.

---

**Tacrolimus (Prograf®)**

Panel Code: TAC

CPT Codes(s): 80197  
Test Performed at: Mayo Medical Laboratories  
Analytic Time: 48 hours (2 days)  
Days Test Performed: All  

**Specimen:**  
COLLECT: Lavender Top (Whole Blood)  
SUBMIT: 3 mL whole blood REFRIGERATED.  
UNACCEPTABLE: Clotted specimen or centrifuged specimen.  
NOTE: Therapeutic range applies to trough specimens drawn prior to dose.

---

**Testosterone, Total**

Panel Code: TSE

CPT Codes(s): 84403  
Test Performed at: HealthEast Medical Laboratory  
Analytic Time: 24 hours (1 day)  
Days Test Performed: Mon Wed Fri  

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED up to 7 days.  
NOTE: No reference ranges established for <21 years of age. Thus, <21 years will be sent to Mayo Medical Laboratories.
# Testosterone, Total and Bioavailable

<table>
<thead>
<tr>
<th>Panel Code: BIO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 84402, 84403</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> Mayo Medical Laboratories</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 96 hours (4 days)</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> Mon Tue Wed Thu Fri</td>
</tr>
<tr>
<td><strong>Specimen:</strong></td>
</tr>
<tr>
<td>Collect: Red Top</td>
</tr>
<tr>
<td>Submit: 1.0 mL serum REFRIGERATED</td>
</tr>
<tr>
<td>Unacceptable: Markedly hemolyzed specimen</td>
</tr>
</tbody>
</table>

# Testosterone, Total and Free

<table>
<thead>
<tr>
<th>Panel Code: FTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 84402, 84403</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> Mayo Medical Laboratories</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 120 hours (5 days)</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> All</td>
</tr>
<tr>
<td><strong>Specimen:</strong></td>
</tr>
<tr>
<td>Collect: Red Top (1.0 serum)</td>
</tr>
<tr>
<td>Submit: 2.5 mL serum REFRIGERATED. Minimum volume 1.0 mL</td>
</tr>
<tr>
<td>Unacceptable: Markedly hemolyzed specimen</td>
</tr>
</tbody>
</table>

# Tetanus Toxoid IgG Antibody Assay

<table>
<thead>
<tr>
<th>Panel Code: LAB3023</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 86774</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> Mayo Medical Laboratories</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 96 hours (4 days)</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> Mon Tue Wed Thu Fri</td>
</tr>
<tr>
<td><strong>Specimen:</strong></td>
</tr>
<tr>
<td>Collect: Red Top</td>
</tr>
<tr>
<td>Submit: 0.5 mL serum REFRIGERATED</td>
</tr>
<tr>
<td>Unacceptable: Markedly hemolyzed, lipemic or icteric specimen</td>
</tr>
</tbody>
</table>

# THC (Marijuana) Screen, Qualitative, Urine

<table>
<thead>
<tr>
<th>Panel Code: THC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 80301, G0431</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> HealthEast Medical Laboratory</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 4 hours</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> All</td>
</tr>
<tr>
<td><strong>Specimen:</strong></td>
</tr>
<tr>
<td>Collect: Random Urine in a Screw-Top Container</td>
</tr>
<tr>
<td>Submit: 10 mL aliquot of random urine collection (no preservative) REFRIGERATED up to 5 days</td>
</tr>
<tr>
<td>Note: This test is not intended for medico-legal purposes</td>
</tr>
</tbody>
</table>
**THC Confirmation, Urine**

**Panel Code:** CTH

**CPT Codes(s):** 80349  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 96 hours (4 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: Random Urine in a Screw-Top Container  
SUBMIT: 20 mL aliquot random urine collection (no preservative), REFRIGERATED. (5 mL minimum)

---

**Theophylline (Theo-dur®)**

**Panel Code:** THE

**CPT Codes(s):** 80198  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: IP Green Top / OP Plain Red Top  
SUBMIT: 1 mL serum REFRIGERATED. May require ABN form.  
UNACCEPTABLE: Specimen collected in an SST® tube.

---

**Thiamin (Vitamin B1), Whole Blood**

**Panel Code:** VB1

**CPT Codes(s):** 84425  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 120 hours (5 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**  
COLLECT: Lavender Top (Protect from light, Whole blood,fasting)  
SUBMIT: 4 mL whole blood FROZEN.  
NOTE: Patient fasting 12 hours. Patient must not take vitamin supplements for 12 hours prior to testing. Specimen is acceptable at room temperature or refrigerated temperature. Specimen frozen is preferred.

---

**Thiocyanate, Serum**

**Panel Code:** TCY

**CPT Codes(s):** 84430  
**Test Performed at:** MedTox Laboratory, Inc  
**Analytic Time:** 120 hours (5 days)  
**Days Test Performed:** All

**Specimen:**  
COLLECT: Plain Red Top  
SUBMIT: 1 mL serum REFRIGERATED.  
UNACCEPTABLE: Specimen collected in an SST® tube.  
NOTE: Useful for determining toxicity during prolonged nitroprusside therapy.
**Thiopurine Methyltransferase, Erythrocytes**

**Panel Code:** LAB3058

- **CPT Codes(s):** 82657
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 192 hours (8 days)
- **Days Test Performed:** Mon Wed Fri

**Specimen:**
- **COLLECT:** Lavender Top (Whole Blood)
- **SUBMIT:** 5 mL whole blood in original tube REFRIGERATED.
- **UNACCEPTABLE:** Markedly hemolyzed specimen.
- **NOTE:** Green Top (Sodium or Lithium Heparin) whole blood are acceptable specimen types.

---

**Thrombin Time (TT)**

- **Panel Code:** TT

- **CPT Codes(s):** 85670
- **Test Performed at:** University of MN Physicians
- **Analytic Time:** 24 hours (1 day)
- **Days Test Performed:** All

**Specimen:**
- **COLLECT:** Blue Top
- **SUBMIT:** 1.0 mL platelet-free plasma FROZEN within 4 hours.
- **UNACCEPTABLE:** Tube not completely filled or specimen is clotted.
- **NOTE:** If the patient's hematocrit is >55%, contact HML to obtain a special collection container.
  - Centrifuge specimen for 30 minutes at 3000 rpm. Aliquot plasma and freeze.

---

**Thyroglobulin Antibody**

- **Panel Code:** ATG

- **CPT Codes(s):** 86800
- **Test Performed at:** Mayo Medical Laboratories
- **Analytic Time:** 72 hours (3 days)
- **Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**
- **COLLECT:** Plain Red Top
- **SUBMIT:** 1 mL serum REFRIGERATED. Centrifuge and aliquot within 2 hours of collection.
- **UNACCEPTABLE:** Markedly hemolyzed specimen, specimen drawn in an SST tube.
- **NOTE:** Twelve (12) hours prior to draw, do not take multivitamins or dietary supplements containing biotin or vitamin B7.
**Thyroglobulin, Tumor Marker, Serum**

**Panel Code:** TGL

- **Thyroglobulin Antibody**
  - **CPT Codes(s):** 84432, 86800
  - **Test Performed at:** Mayo Medical Laboratories
  - **Analytic Time:** 72 hours (3 days)
  - **Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**
- COLLECT: Plain Red Top
- SUBMIT: 1.0 mL serum REFRIGERATED. Centrifuge and aliquot within 2 hours of collection.
- UNACCEPTABLE: Markedly hemolyzed specimen, specimen collected in an SST tube.
- NOTE: Twelve (12) hours prior to draw, do not take multivitamins or dietary supplements containing biotin or vitamin B7.

**Thyroid Cascade**

**Panel Code:** TYC

- **TSH**
  - **CPT Codes(s):** 84443
  - **Test Performed at:** HealthEast Medical Laboratory
  - **Analytic Time:** 4 hours
  - **Days Test Performed:** All

**Specimen:**
- COLLECT: IP Greeen Top / OP Red Top
- SUBMIT: 1 mL serum REFRIGERATED up to 6 days. May require ABN form.
- UNACCEPTABLE: Markedly hemolyzed specimen.
- NOTE: If TSH is abnormal, then T4 Free will be performed and charged separately using CPT code 84439.

**Thyroid Peroxidase Antibody**

**Panel Code:** TPX

- **CPT Codes(s):** 86376
  - **Test Performed at:** HealthEast Medical Laboratory
  - **Analytic Time:** 4 hours
  - **Days Test Performed:** Tue Thu

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 1 mL serum REFRIGERATED up to 72 hours, then FREEZE. May require ABN form.

**Thyroid-Stimulating Immunoglobulin (TSI)**

**Panel Code:** TSI

- **CPT Codes(s):** 84445
  - **Test Performed at:** Mayo Medical Laboratories
  - **Analytic Time:** 144 hours (6 days)
  - **Days Test Performed:** Mon Tue Wed Thu Fri

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 0.5 mL serum REFRIGERATED.
- UNACCEPTABLE: Markedly hemolyzed specimen.
### Thyrotropin Receptor Antibody

**Panel Code:** TRE

**CPT Codes(s):** 83520  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 72 hours (3 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri Sat

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1.0 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed specimen.  
NOTE: Do not take multivitamins or dietary supplements containing biotin or vitamin B7 within 12 hours prior to collection.

### Tissue Transglutaminase, IgA & IgG

**Panel Code:** TGA

**CPT Codes(s):** 83516 x2  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 120 hours (5 days)  
**Days Test Performed:** Mon Thu

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED. FROZEN if not submitted within 48 hours.  
UNACCEPTABLE: Specimens > 48 hours old not frozen. Markedly hemolyzed or lipemic specimens.

### Tobramycin (Nebcin®)

**Panel Code:** TOB

**CPT Codes(s):** 80200  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All

**Specimen:**  
COLLECT: IP Green Top / OP Plain Red Top  
SUBMIT: 1 mL serum REFRIGERATED up to 7 days.  
UNACCEPTABLE: Specimen collected in an SST® tube.  
NOTE: Date and time of last dose are REQUIRED. PEAK Specimen: Draw blood 30 minutes after intramuscular dose or 15 minutes after intravenous dose. TROUGH specimen: Draw blood 15 minutes before next dose. Label specimen appropriately (peak or trough AND collection time).
Topiramate (Topamax®)

Panel Code: TPR

CPT Codes(s): 80201
Test Performed at: Mayo Medical Laboratories
Analytic Time: 48 hours (2 days)
Days Test Performed: All

Specimen:
COLLECT: Plain Red Top
SUBMIT: 1 mL serum REFRIGERATED. Centrifuge and aliquot within 2 hours of collection.
UNACCEPTABLE: Specimen collected in an SST® tube.
NOTE: Peak concentration is achieved 2-3 hours after dosing. Trough should be drawn 30 minutes before dose.

ToRCH Profile, IgG

Panel Code: TCG

CPT Codes(s): 86644, 86695, 86696, 86762, 86777
Test Performed at: Mayo Medical Laboratories
Analytic Time: 72 hours (3 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
COLLECT: Red Top
SUBMIT: 2 mL serum REFRIGERATED.
UNACCEPTABLE: Markedly hemolyzed, lipemic or icteric specimen.

ToRCH Profile, IgM

Panel Code: TCM

CPT Codes(s): 86645, 86694, 86778
Test Performed at: Mayo Medical Laboratories
Analytic Time: 72 hours (3 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
COLLECT: Red Top
SUBMIT: 2.0 mL serum (minimum 1.5 mL) REFRIGERATED.
UNACCEPTABLE: Markedly hemolyzed or lipemic specimen.
### Toxoplasma gondii Antibody, IgM and IgG

<table>
<thead>
<tr>
<th>CPT Codes(s):</th>
<th>86777, 86778</th>
</tr>
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<tbody>
<tr>
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<td>Mayo Medical Laboratories</td>
</tr>
<tr>
<td>Analytic Time:</td>
<td>72 hours (3 days)</td>
</tr>
<tr>
<td>Days Test Performed:</td>
<td>Mon Tue Wed Thu Fri</td>
</tr>
</tbody>
</table>

**Specimen:**
- **COLLECT:** Red Top
- **SUBMIT:** 1.5 mL serum REFRIGERATED.
- **UNACCEPTABLE:** Markedly hemolyzed or lipemic specimen.

### TPN Panel

<table>
<thead>
<tr>
<th>CPT Codes(s):</th>
<th>80069, 82247, 83735, 84075, 84134, 84155, 84450, 84478</th>
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<tbody>
<tr>
<td>Test Performed at:</td>
<td>HealthEast Medical Laboratory</td>
</tr>
<tr>
<td>Analytic Time:</td>
<td>4 hours</td>
</tr>
<tr>
<td>Days Test Performed:</td>
<td>All</td>
</tr>
</tbody>
</table>

**Specimen:**
- **COLLECT:** Collect: Red Top (Protect from Light)
- **SUBMIT:** 1 mL serum REFRIGERATED. Protect from light. May require ABN form.
- **UNACCEPTABLE:** Hemolyzed specimen.
- **NOTE:** Centrifuge and separate serum from cells within 4 hours of draw. See Appendix for Potassium Specimen Recommendations.

### Tramadol Screen Urine

<table>
<thead>
<tr>
<th>CPT Codes(s):</th>
<th>80373</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Performed at:</td>
<td>MedTox Laboratory, Inc</td>
</tr>
<tr>
<td>Analytic Time:</td>
<td>120 hours (5 days)</td>
</tr>
<tr>
<td>Days Test Performed:</td>
<td>All</td>
</tr>
</tbody>
</table>

**Specimen:**
- **COLLECT:** Random Urine in a Screw-Top Container
- **SUBMIT:** 10 mL aliquot of random urine collection (no preservative) REFRIGERATED.

### Transferrin

<table>
<thead>
<tr>
<th>CPT Codes(s):</th>
<th>84466</th>
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</thead>
<tbody>
<tr>
<td>Test Performed at:</td>
<td>HealthEast Medical Laboratory</td>
</tr>
<tr>
<td>Analytic Time:</td>
<td>4 hours</td>
</tr>
<tr>
<td>Days Test Performed:</td>
<td>All</td>
</tr>
</tbody>
</table>

**Specimen:**
- **COLLECT:** IP Green Top / OP Red Top
- **SUBMIT:** 1 mL serum REFRIGERATED up to 3 days, then FREEZE. May require ABN form.
### Trazodone (Desyrel®)

<table>
<thead>
<tr>
<th>Panel Code: TRZ</th>
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</thead>
<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 80338</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> MedTox Laboratory, Inc</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 120 hours (5 days)</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> Varies</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: Plain Red Top
- SUBMIT: 1 mL serum REFRIGERATED.
- UNACCEPTABLE: Specimen collected in an SST® tube.
- NOTE: Recommended collection is 12 hours post dose (trough) following a minimum of 5 days on trazodone.

### Triglycerides

<table>
<thead>
<tr>
<th>Panel Code: TRG</th>
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</thead>
<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 84478</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> HealthEast Medical Laboratory</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 4 hours</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> All</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: IP Green Top / OP Red Top (Fasting)
- SUBMIT: 1 mL serum REFRIGERATED up to 7 days. May require ABN form.
- UNACCEPTABLE: Markedly hemolyzed specimen.
- NOTE: Patient fasting 12-14 hours.

### Triglycerides, Body Fluid

<table>
<thead>
<tr>
<th>Panel Code: TGF</th>
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</thead>
<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 84478</td>
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<tr>
<td><strong>Test Performed at:</strong> HealthEast Medical Laboratory</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 4 hours</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> All</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: Body Fluid in a Screw-Top Container
- SUBMIT: 1 mL body fluid REFRIGERATED up to 7 days.
- NOTE: Specimen source is REQUIRED.

### Tropheryma whipplei DNA by PCR

<table>
<thead>
<tr>
<th>Panel Code: WIP</th>
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<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 87798</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> Mayo Medical Laboratories</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 168 hours (7 days)</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> Mon Wed Fri</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: Sterile Screw-Top Container
- SUBMIT: 0.5 mL CSF or synovial fluid in a sterile screw-top container FROZEN or REFRIGERATED.
- UNACCEPTABLE: Room temperature CSF, synovial fluid or blood specimens.
- NOTE: Markedly bloody CSF or synovial fluid may produce false-negative results.
Troponin I

Panel Code: TRO

CPT Codes(s): 84484
Test Performed at: HealthEast Medical Laboratory

Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: IP Green Top / OP Red Top
SUBMIT: 1 mL serum REFRIGERATED up to 72 hours. Frozen specimens are acceptable up to 7 days.

Tryptase

Panel Code: TRY

CPT Codes(s): 83520
Test Performed at: Mayo Medical Laboratories

Analytic Time: 120 hours (5 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Red Top
SUBMIT: 0.5 mL serum FROZEN within 8 hours in a separate tube.

TSH

Panel Code: TSH

CPT Codes(s): 84443
Test Performed at: HealthEast Medical Laboratory

Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: IP Green Top / OP Red Top
SUBMIT: 1 mL serum REFRIGERATED; FROZEN if not submitted within 7 days. May require ABN form. Pediatric minimum volume is 300 uL.
UNACCEPTABLE: Markedly hemolyzed specimen.

Tumor Necrosis Factor-Alpha, Highly Sensitive

Panel Code: TNF

CPT Codes(s): 83520
Test Performed at: Mayo Medical Laboratories

Analytic Time: 432 hours (18 days)
Days Test Performed: Mon

Specimen:
COLLECT: Red Top
SUBMIT: 1 mL serum FROZEN immediately in a separate tube.
UNACCEPTABLE: Not received frozen.
UGT1A1 TA Repeat Genotype

Panel Code: LAB3067

CPT Codes(s): 81350
Test Performed at: Mayo Medical Laboratories
Analytic Time: 120 hours (5 days)
Days Test Performed: Mon Wed Fri ;varies

Specimen:
COLLECT: Lavender Top
SUBMIT: 3 mL Lavender Top (EDTA) in original tube at ROOM TEMPERATURE.
NOTE: Patients who have received a heterologous blood transfusion within the preceding 6 weeks, or who have received an allogeneic blood or marrow transplant, can have inaccurate genetic test results due to presence of donor DNA.

Urea Nitrogen, 24 Hour Urine

Panel Code: UNU

CPT Codes(s): 84540
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: 24 Hour Urine (No Preservative)
SUBMIT: 10 mL aliquot of 24 hour urine collection (no preservative) REFRIGERATED.
NOTE: Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions and acceptable preservatives.

Urea Nitrogen, Random Urine

Panel Code: UUN

CPT Codes(s): 84540
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 4 hours
Days Test Performed: All

Specimen:
COLLECT: Random Urine in a Screw-Top Container
SUBMIT: 10 mL aliquot of random urine collection (no preservative) REFRIGERATED.
Ureaplasma PCR

Panel Code: UMP

**COLLECT:** Sterile Screw-Top Container

**SUBMIT:** SWAB: Cervical, urethral or vaginal. Dacron or rayon swab with aluminum or plastic shaft. FLUID: 1-2 mL sterile screw top. Respiratory (neonate only < 3 mos), reproductive, synovial. URINE: 2 mL - 10 mL or PLASMA: 1 mL Lavender EDTA REFRIGERATED.

**UNACCEPTABLE:** Wooden shaft, cotton swab, dry swab, Port-a-Cul™ tube, swab containing gel or charcoal, calcium-alginate tipped swabs.

**NOTE:** Specimen source is REQUIRED.

CPT Codes(s): 87798 x 2

Test Performed at: Mayo Medical Laboratories

Analytic Time: 96 hours (4 days)

Days Test Performed: Mon Tue Wed Thu Fri

Uric Acid

Panel Code: URA

CPT Codes(s): 84550

Test Performed at: HealthEast Medical Laboratory

Analytic Time: 4 hours

Days Test Performed: All

Specimen:

**COLLECT:** IP Green Top / OP Red Top

**SUBMIT:** 1 mL serum REFRIGERATED.

Uric Acid, 24 Hour Urine

Panel Code: UAU

CPT Codes(s): 84560

Test Performed at: HealthEast Medical Laboratory

Analytic Time: 4 hours

Days Test Performed: All

Specimen:

**COLLECT:** 24 Hour Urine (No Preservative)

**SUBMIT:** 10 mL aliquot of 24 hour urine collection (no preservative) REFRIGERATED. Must be received in lab within 4 hours of collection.

**NOTE:** Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions and acceptable preservatives.
### Uric Acid, Random urine

**Panel Code:** UUA

**CPT Codes(s):** 84560  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All  

**Specimen:**  
COLLECT: Random Urine in a Screw-Top Container  
SUBMIT: 10 mL aliquot of random urine collection (no preservative) REFRIGERATED. Must be received in lab within 4 hours of collection.

### Uric Acid, Rasburicase

**Panel Code:** UAR

**CPT Codes(s):** 84550  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 4 hours  
**Days Test Performed:** All  

**Specimen:**  
COLLECT: 1 PRECHILLED Li Hep green (into ice bath)  
SUBMIT: 1 mL plasma in green top primary tube on wet ice, centrifuged and analyzed within 4 hours.  
UNACCEPTABLE: Specimen that is hemolyzed, not drawn into prechilled tubes, not kept on wet ice, not centrifuged and run within 4 hours.  
NOTE: Blood should be drawn into a prechilled green and placed immediately into an ice bath until it is centrifuged at refrigerator temperature. The centrifuged specimen must be analyzed within 4 hours of draw. Patients must have this processing protocol followed for all uric acid orders for 96 hours (4 days) post all Rasburicase doses.

### Urinalysis Macro reflex Micro UC if indicated

**Panel Code:** UAI

**CPT Codes(s):** 81001  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** All  

**Specimen:**  
COLLECT: Sterile Screw-Top OR Boricon Container  
SUBMIT: 10 mL urine in sterile screw-top REFRIGERATED OR 20 mL urine in boricon container ROOM TEMP or REFRIGERATED. Maintain sterility. May require ABN form.  
UNACCEPTABLE: Unpreserved urine >24 hr refrigerated or >4 hr room temp. <5 mL urine will not be analyzed microscopically. Not orderable or acceptable for children <12 yr or obstetric patients.  
NOTE: If UA results indicate (Leukesterase: positive, Nitrite: positive WBC: >=5/HPF, Bacteria: >Few/HPF), a UC will be performed and charged separately using CPT Code 87086. If urine microscopic is done, use CPT Code 81001. If urine microscopic is not done, use CPT Code 81003.
Urinalysis, Macro & Microscopic

Panel Code: UAM

CPT Codes(s):  81001
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 24 hours (1 day)
Days Test Performed: All

Specimen:

COLLECT: Sterile Screw-Top or Boricon Container
SUBMIT: 10 mL random urine in sterile screw top container REFRIGERATED or 20 mL in a boricon container sent at ROOM TEMP or REFRIGERATED.
UNACCEPTABLE: Volumes less than 5 mL will not be analyzed. Unpreserved urine >24 hr refrigerated or >4 hr room temp.
NOTE: Test is not available for hospital registered patients.

Urinalysis, Macro reflex Micro

Panel Code: UA

CPT Codes(s):  81015, 81003
Test Performed at: HealthEast Medical Laboratory
Analytic Time: 24 hours (1 day)
Days Test Performed: All

Specimen:

COLLECT: Sterile Screw-Top or Boricon Container
SUBMIT: 10 mL urine in sterile screw-top REFRIGERATED OR 20 mL urine in boricon container ROOM TEMP or REFRIGERATED. Maintain sterility. May require ABN form.
UNACCEPTABLE: Unpreserved urine >24 hr refrigerated or >4 hr room temp. Specimens with less than 5 mL of urine will not be analyzed microscopically.
Note: If urine microscopic is performed, use CPT Code 81001. If urine microscopic is not performed, use CPT Code 81003.

UroVysion for Detection of Bladder Cancer

Panel Code: LAB3036

CPT Codes(s):  88120
Test Performed at: Mayo Medical Laboratories
Analytic Time: 168 hours (7 days)
Days Test Performed: All

Specimen:

COLLECT: ThinPrep Urocyte(PreservCyt)
SUBMIT: Random urine (33-60 mL) preserved with PreservCyt solution REFRIGERATED. (Kit available from HML).
NOTE: Collect random urine (Recommend 30 mL). If greater than 60 mL pour off excess. Carefully add contents of PreservCyt solution into specimen cup.
### Valproic Acid (Depakene®)

**Panel Code:** VAL

<table>
<thead>
<tr>
<th>CPT Codes(s):</th>
<th>80164</th>
</tr>
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<tr>
<td><strong>Test Performed at:</strong></td>
<td>HealthEast Medical Laboratory</td>
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<tr>
<td><strong>Analytic Time:</strong></td>
<td>4 hours</td>
</tr>
<tr>
<td>Days Test Performed:</td>
<td>All</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: IP Green Top / OP Plain Red Top
- SUBMIT: 1 mL serum REFRIGERATED up to 7 days.
- UNACCEPTABLE: Specimen collected in an SST® tube.

### Valproic Acid Free

**Panel Code:** VPA

<table>
<thead>
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<th>CPT Codes(s):</th>
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</thead>
<tbody>
<tr>
<td><strong>Test Performed at:</strong></td>
<td>MedTox Laboratory, Inc</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong></td>
<td>24 hours (1 day)</td>
</tr>
<tr>
<td>Days Test Performed:</td>
<td>All</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: Plain Red Top
- SUBMIT: 3 mL serum REFRIGERATED.
- UNACCEPTABLE: Specimen collected in an SST® tube.
- NOTE: Trough levels are most reproducible.

### Vancomycin (Vancocin®)

**Panel Code:** VAN

<table>
<thead>
<tr>
<th>CPT Codes(s):</th>
<th>80202</th>
</tr>
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<tbody>
<tr>
<td><strong>Test Performed at:</strong></td>
<td>HealthEast Medical Laboratory</td>
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<tr>
<td><strong>Analytic Time:</strong></td>
<td>4 hours</td>
</tr>
<tr>
<td>Days Test Performed:</td>
<td>All</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: IP Green Top / OP Plain Red Top
- SUBMIT: 1 mL serum REFRIGERATED up to 8 days.
- UNACCEPTABLE: Specimen collected in an SST® tube.
- NOTE: Date and time of last dose are REQUIRED. PEAK Specimen: Draw blood 30 minutes after intramuscular dose or 15 minutes after intravenous dose. TROUGH specimen: Draw blood 15 minutes before next dose. Label specimen appropriately (peak or trough AND collection time).

### Varicella Zoster Immune Status Antibody, IgG

**Panel Code:** VIS

<table>
<thead>
<tr>
<th>CPT Codes(s):</th>
<th>86787</th>
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<tbody>
<tr>
<td><strong>Test Performed at:</strong></td>
<td>HealthEast Medical Laboratory</td>
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<tr>
<td><strong>Analytic Time:</strong></td>
<td>48 hours (2 days)</td>
</tr>
<tr>
<td>Days Test Performed:</td>
<td>Mon Wed Fri</td>
</tr>
</tbody>
</table>

**Specimen:**
- COLLECT: Red Top
- SUBMIT: 0.5 mL serum REFRIGERATED up to 5 days or freeze.
- UNACCEPTABLE: Hemolyzed or lipemic specimen.
Varicella-Zoster By PCR

Panel Code: ZPC

CPT Codes(s): 87798
Test Performed at: Mayo Medical Laboratories
Analytic Time: 72 hours (3 days)
Days Test Performed: Mon Tue Wed Thu Fri Sat

Specimen:
COLLECT: Sterile Container or CultureSwab™
Submit: 0.5 mL Fluid (CSF, body, amniotic, ocular) OR 1.5 mL Respiratory (bronchial washing, BAL, nasopharyngeal aspirate or washing, sputum, tracheal aspirate) OR CultureSwab (dermal, eye, nasal, throat, genital) REFRIGERATED. M4 or M5 media are acceptable.
Do NOT centrifuge fluid.
Unacceptable: Calcium alginate-tipped swab, wood swab, swab containing gel or specimen at room temperature.

Vasoactive Intestinal Polypeptide (VIP), Plasma

Panel Code: VIP

CPT Codes(s): 84586
Test Performed at: Mayo Medical Laboratories
Analytic Time: 192 hours (8 days)
Days Test Performed: Mon Wed

Specimen:
COLLECT: 1 Lavender Top (Fasting 8 hours)
SUBMIT: 1 mL plasma FROZEN immediately in a separate tube.
UNACCEPTABLE: Markedly hemolyzed, lipemic or specimen not frozen.
NOTE: Patient fasting 8 hours. Patient receiving recent radioactive materials should not be tested.

VDRL CSF

Panel Code: VSF

CPT Codes(s): 86592
Test Performed at: Mayo Medical Laboratories
Analytic Time: 72 hours (3 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
COLLECT: Spinal Fluid in CSF Collection Tube
SUBMIT: 0.5 mL spinal fluid FROZEN within 8 hours in a separate tube.
UNACCEPTABLE: Markedly hemolyzed or lipemic specimen.
## Viscosity

**Panel Code:** VSC

<table>
<thead>
<tr>
<th>CPT Codes(s):</th>
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</thead>
<tbody>
<tr>
<td>Test Performed at:</td>
<td>Mayo Medical Laboratories</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong></td>
<td>72 hours (3 days)</td>
</tr>
<tr>
<td>Days Test Performed:</td>
<td>Mon Tue Wed Thu Fri</td>
</tr>
</tbody>
</table>

**Specimen:**

| COLLECT: | Plain Red Top (clot at 37°C) |
| SUBMIT: | 1.5 mL serum REFRIGERATED. |
| UNACCEPTABLE: | Specimen collected in an SST® tube. |
| NOTE: | Keep specimen at 37°C until centrifugation. After separating serum from cells, the specimen should be refrigerated. |

## Vitamin A

**Panel Code:** VTA

<table>
<thead>
<tr>
<th>CPT Codes(s):</th>
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<tbody>
<tr>
<td>Test Performed at:</td>
<td>Mayo Medical Laboratories</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong></td>
<td>120 hours (5 days)</td>
</tr>
<tr>
<td>Days Test Performed:</td>
<td>Mon Tue Wed Thu Fri</td>
</tr>
</tbody>
</table>

**Specimen:**

| COLLECT: | Red Top (Fasting) |
| SUBMIT: | 0.5 mL serum REFRIGERATED. |
| NOTE: | Patient fasting 12 hours. Patient must not consume alcohol or ingest vitamin supplements for 24 hours prior to testing. Reference values were established in patients who are fasting. |

## Vitamin B12

**Panel Code:** B12

<table>
<thead>
<tr>
<th>CPT Codes(s):</th>
<th>82607</th>
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</thead>
<tbody>
<tr>
<td>Test Performed at:</td>
<td>HealthEast Medical Laboratory</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong></td>
<td>4 hours</td>
</tr>
<tr>
<td>Days Test Performed:</td>
<td>All</td>
</tr>
</tbody>
</table>

**Specimen:**

| COLLECT: | Red Top |
| SUBMIT: | 1 mL serum REFRIGERATED; FROZEN in a separate tube if not submitted within 7 days. Keep out of light as much as possible. |
| UNACCEPTABLE: | Hemolyzed specimens. |
**Vitamin B6 (Pyridoxal 5-Phosphate) (PLP)**

**Panel Code:** VB6

**CPT Codes(s):** 84207  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 96 hours (4 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri  

**Specimen:**  
COLLECT: Green Top (Fast & Protect from Light)  
SUBMIT: 1 mL plasma REFRIGERATED in an amber tube (protect from light).  
UNACCEPTABLE: Not protected from light.  
NOTE: Patient fasting 12 hours. Patient must not ingest vitamin supplements for 24 hours prior to testing. Reference ranges were established using fasting individuals.

**Vitamin D, Total (25-Hydroxy)**

**Panel Code:** VID

**CPT Codes(s):** 82306  
**Test Performed at:** HealthEast Medical Laboratory  
**Analytic Time:** 24 hours (1 day)  
**Days Test Performed:** Mon Tue Wed Thu Fri  

**Specimen:**  
COLLECT: Red Top  
SUBMIT: 1 mL serum REFRIGERATED for up to 5 days.  
UNACCEPTABLE: Markedly hemolyzed or lipemic specimens.

**Vitamin E**

**Panel Code:** VTE

**CPT Codes(s):** 84446  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 120 hours (5 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri  

**Specimen:**  
COLLECT: Red Top (fasting)  
SUBMIT: 0.5 mL serum REFRIGERATED.  
UNACCEPTABLE: Markedly hemolyzed or lipemic specimen.  
NOTE: Patient fasting 12 hours. Patient must not ingest vitamin supplements or consume alcohol for 24 hours prior to testing. Reference values were established in patients who were fasting.
Vitamin K1

Panel Code: VK1

CPT Codes(s): 84597
Test Performed at: Mayo Medical Laboratories
Analytic Time: 96 hours (4 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
- COLLECT: 2 Red Tops, fasting
- SUBMIT: 2.0 mL serum REFRIGERATED.
- UNACCEPTABLE: Markedly lipemic specimen.
- NOTE: Patient fasting 12 hours. Patient must not ingest vitamin supplements or consume alcohol for 24 hours prior to testing.

VMA (Vanillylmandelic Acid), 24 Hour Urine

Panel Code: VMA

CPT Codes(s): 84585
Test Performed at: Mayo Medical Laboratories
Analytic Time: 96 hours (4 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
- COLLECT: 24 Hr Urine (Acetic Acid) pH 1-5
- SUBMIT: 10 mL aliquot of 24 hour collection (preserved with 25 mL 50% acetic acid at start of collection) REFRIGERATED. The pH must be between 1 and 5.
- UNACCEPTABLE: Specimen collected without preservative.
- NOTE: Total volume (mL) REQUIRED. See the Specimen Collection section of this manual for collection instructions and alternate preservatives. L-dopa may falsely increase VMA results; discontinue 24 hours prior to and during collection.

VMA and HVA, Random Urine

Panel Code: VHA

CPT Codes(s): 83150, 84585
Test Performed at: Mayo Medical Laboratories
Analytic Time: 96 hours (4 days)
Days Test Performed: Mon Tue Wed Thu Fri

Specimen:
- COLLECT: Random Urine in a Screw-Top Container
- SUBMIT: 10 mL aliquot random urine collection (pH'd 1-5 with 50% acetic acid within 4 hours of collection) REFRIGERATED.
- UNACCEPTABLE: Specimen pH not 1-5.
- NOTE: L-dopa may falsely increase HVA and VMA results; discontinue 24 hours prior to and during collection. Bactrim may interfere - notify laboratory when test is ordered.
### Von Willebrand Antigen

<table>
<thead>
<tr>
<th>Panel Code: VWA</th>
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<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 85246</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> University of MN Physicians</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 120 hours (5 days)</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> Varies</td>
</tr>
</tbody>
</table>

**Specimen:**
- **COLLECT:** Blue Top
- **SUBMIT:** 1.0 mL platelet-free plasma FROZEN immediately.
- **UNACCEPTABLE:** Specimen not received frozen.
- **NOTE:** Centrifuge specimen for 30 minutes at 3000 rpm. Aliquot plasma and freeze.
- * Performed 2-4 times per week.

### Von Willebrand Factor Activity (VWF:Act)

<table>
<thead>
<tr>
<th>Panel Code: LAB3053</th>
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<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 85245</td>
</tr>
<tr>
<td><strong>Test Performed at:</strong> University of MN Physicians</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 168 hours (7 days)</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> Varies</td>
</tr>
</tbody>
</table>

**Specimen:**
- **COLLECT:** 2 Blue Tops
- **SUBMIT:** 1.0 mL platelet-free plasma FROZEN immediately in each of 2 tubes.
- **UNACCEPTABLE:** Specimen not received frozen, specimen hemolyzed, icteric or lipemic.
- **NOTE:** Centrifuge specimen for 30 minutes at 3000 rpm. Aliquot plasma and freeze. When VWF:Act to VWF:Ag ratio is <=0.70 or VWF:Act <=50% or VWF:Ag <=50%, then Ristocetin Cofactor Activity(85245) will be performed and charged.
- * Performed 2-3 times per week.

### WBC

<table>
<thead>
<tr>
<th>Panel Code: WBC</th>
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<tbody>
<tr>
<td><strong>CPT Codes(s):</strong> 85048</td>
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<tr>
<td><strong>Test Performed at:</strong> HealthEast Medical Laboratory</td>
</tr>
<tr>
<td><strong>Analytic Time:</strong> 24 hours (1 day)</td>
</tr>
<tr>
<td><strong>Days Test Performed:</strong> All</td>
</tr>
</tbody>
</table>

**Specimen:**
- **COLLECT:** Lavender Top
- **SUBMIT:** 3 mL whole blood REFRIGERATED. Specimen must arrive within 24 hours of collection. May require ABN form.
- **UNACCEPTABLE:** Specimen more than 24 hours old, frozen or clotted specimen, volume less than 1 mL.
### West Nile Virus (PCR) Plasma

**Panel Code:** WNP

**CPT Codes(s):** 87798  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 120 hours (5 days)  
**Days Test Performed:** Varies - Mon Tue Wed Thu Fri Sat (June - November); Mon Wed Fri (December-May).  

**Specimen:**  
- COLLECT: Lavender Top (1 mL Plasma)  
- SUBMIT: 1 mL EDTA plasma REFRIGERATED.  
- UNACCEPTABLE: Markedly hemolyzed specimen.  

**NOTE:** Laboratory diagnosis is best achieved by antibody testing. PCR testing can detect viremic target RNA before antibodies are present (2-8 days after onset of symptoms). In CSF, the sensitivity is approximately 55% and in blood, about 10%.

### West Nile Virus (WNS) Antibody, IgG and IgM  

**Panel Code:** LAB3050

**CPT Codes(s):** 86788, 86789  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 96 hours (4 days)  
**Days Test Performed:** Varies - Mon Tue Wed Thu Fri (June-October); Mon Wed Fri (November-May).  

**Specimen:**  
- COLLECT: Red Top  
- SUBMIT: 0.5 mL Serum REFRIGERATED.  
- UNACCEPTABLE: Markedly hemolyzed, lipemic or icteric specimen.

### West Nile Virus PCR, CSF

**Panel Code:** WNV

**CPT Codes(s):** 87798  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 120 hours (5 days)  
**Days Test Performed:** Varies - Mon Tue Wed Thu Fri Sat (June-November), Mon Wed Fri (December-May).  

**Specimen:**  
- COLLECT: Spinal fluid in CSF collection tube  
- SUBMIT: 1 mL uncentrifuged CSF REFRIGERATED.  

**NOTE:** Laboratory diagnosis is best achieved by antibody testing. PCR testing can detect viremic target RNA before antibodies are present (2-8 days after onset of symptoms). In CSF, the sensitivity is approximately 55% and in blood, about 10%.

### Western Equine Encephalitis Antibody, IgG an IgM

**Panel Code:** WEQ

**CPT Codes(s):** 86654 x2  
**Test Performed at:** Mayo Medical Laboratories  
**Analytic Time:** 96 hours (4 days)  
**Days Test Performed:** Mon Tue Wed Thu Fri  

**Specimen:**  
- COLLECT: Red Top  
- SUBMIT: 0.5 mL serum REFRIGERATED.  
- UNACCEPTABLE: Markedly hemolyzed or lipemic
### Wet Prep

**Panel Code:** WET

<table>
<thead>
<tr>
<th>CPT Codes(s):</th>
<th>87210</th>
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</thead>
<tbody>
<tr>
<td>Test Performed at:</td>
<td>HealthEast Medical Laboratory</td>
</tr>
<tr>
<td>Analytic Time:</td>
<td>2 hours</td>
</tr>
<tr>
<td>Days Test Performed:</td>
<td>ALL</td>
</tr>
</tbody>
</table>

**Specimen:**
- **COLLECT:** CultureSwab™
- **SUBMIT:** Swab in CultureSwab™ at ROOM TEMPERATURE or swab in saline less than 2 hours
  - ROOM TEMPERATURE.
- **UNACCEPTABLE:** Dry swab. CultureSwab older than 12 hours or refrigerated. Swab in saline older than 2 hours. Swab of vaginal discharge, swabs contaminated with lubricant.
- **NOTE:** Collect specimen by swabbing vaginal wall.

### Zinc, Serum

**Panel Code:** SZN

<table>
<thead>
<tr>
<th>CPT Codes(s):</th>
<th>84630</th>
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</thead>
<tbody>
<tr>
<td>Test Performed at:</td>
<td>Mayo Medical Laboratories</td>
</tr>
<tr>
<td>Analytic Time:</td>
<td>72 hours (3 days)</td>
</tr>
<tr>
<td>Days Test Performed:</td>
<td>Mon Tue Wed Thu Fri Sat</td>
</tr>
</tbody>
</table>

**Specimen:**
- **COLLECT:** Navy Blue Top - No Additive
- **SUBMIT:** 1 mL serum REFRIGERATED in a metal-free tube.
- **UNACCEPTABLE:** Specimen not received in metal-free tube, mildly hemolyzed or markedly icteric specimen.
- **NOTE:** Draw blood (Navy-No Additive) clot 30 min., centrifuge, pour serum (liquid) into a metal-free transfer tube avoiding the transfer of cellular components.

### Zonisamide (Zonegran®)

**Panel Code:** ZON

<table>
<thead>
<tr>
<th>CPT Codes(s):</th>
<th>80203</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Performed at:</td>
<td>Mayo Medical Laboratories</td>
</tr>
<tr>
<td>Analytic Time:</td>
<td>216 hours (9 days)</td>
</tr>
<tr>
<td>Days Test Performed:</td>
<td>Mon Tue Wed Thu</td>
</tr>
</tbody>
</table>

**Specimen:**
- **COLLECT:** Plain Red Top
- **SUBMIT:** 2 mL serum REFRIGERATED. Centrifuge and aliquot within 2 hours of collection.
- **NOTE:** Recommended collection is 30 minutes before next dose.