THE University of Vermont MEDICAL CENTER

Pathology & Laboratory Medicine

Communiqué

IN THIS ISSUE

Holiday Hours for Blood Draw Lab Sites

All locations will be CLOSED

Thanksgiving Day, Christmas Day and New Year's Day

Additional Closures

Location	Christmas Eve - Saturday 12/24/2022	New Year's Eve - Saturday 12/31/2022
Main Campus ACC Burlington	7:00 AM – 1:00 PM	7:00 AM – 1:00 PM
Fanny Allen Campus MOB Colchester	Closed	Closed
UHC Campus 1 South Prospect Burlington	Closed	Closed

Fall Fun Facts

The leaves don't turn color in the fall -- their true colors just get revealed.

A green mask conceals their real skin over the summer months.

All the pigments have always been there in the leaves, its just that when the chlorophyll production ceases, it unmasks the yellows, the oranges and the reds.

Laboratory Operations

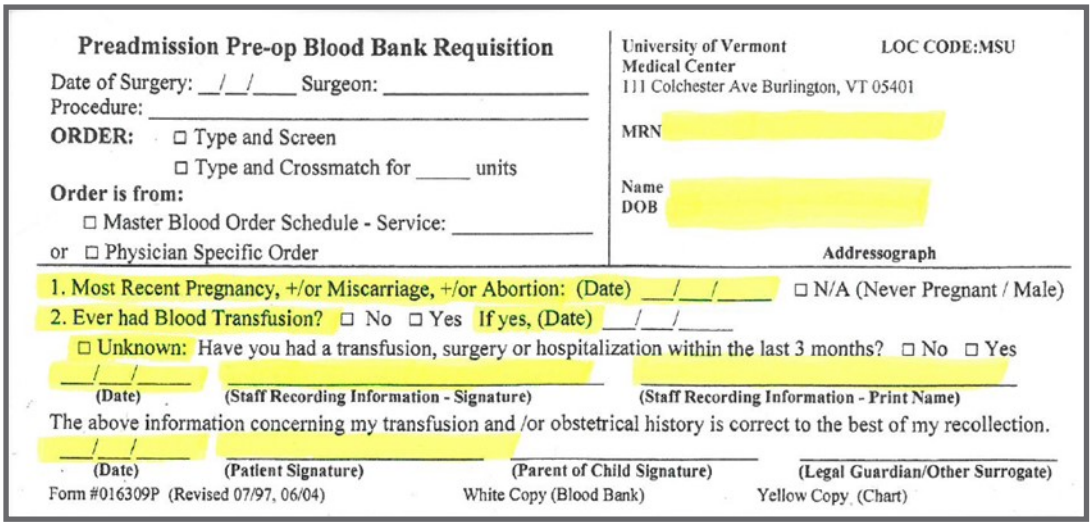
Blood Bank Pre-Admission Program (MPAP)

What is MPAP?

- A patient's provider or surgical office can order a Pre-Op Type and Screen – Prior to admission when they want to collect a Blood Bank sample before a patient's surgery. When collected with the accompanied Preadmission Pre-op Blood Bank Requisition, the Blood Bank can hold the sample for a maximum of 33 days from collection.
- Samples can ONLY be collected by a UVMMC employee trained and signed off to collect Blood Bank samples.
- If the MPAP is valid, and the patient's surgery is within 30 days of collection, the specimen will be valid for 72 hours post-surgery. For example, if the patient's surgery date is 10/1, the specimen expiration date will be 10/4.

What is a Valid MPAP?

- All required fields are filled out on the Preadmission Pre-op Blood Bank Requisition history form. (See highlighted sections).
- Patient has not been transfused with cellular products 3 months prior to collection or currently pregnant.
- Specimen is collected in Beaker correctly with the specimen collection date/time and collectors full name.



Preadmission Pre-op Blood Bank Requisition

Date of Surgery: __/__/____ Surgeon: _____
Procedure: _____
ORDER: ☐ Type and Screen
☐ Type and Crossmatch for _____ units
Order is from:
☐ Master Blood Order Schedule - Service: _____
or ☐ Physician Specific Order

University of Vermont Medical Center LOC CODE:MSU
111 Colchester Ave Burlington, VT 05401
MRN
Name
DOB
Addressograph

1. Most Recent Pregnancy, +/or Miscarriage, +/or Abortion: (Date) ___/___/_____ ☐ N/A (Never Pregnant / Male)
2. Ever had Blood Transfusion? ☐ No ☐ Yes If yes, (Date) ___/___/_____
☐ Unknown: Have you had a transfusion, surgery or hospitalization within the last 3 months? ☐ No ☐ Yes

___/___/____ _____ _____
(Date) (Staff Recording Information - Signature) (Staff Recording Information - Print Name)

The above information concerning my transfusion and /or obstetrical history is correct to the best of my recollection.

___/___/____ _____ _____ _____
(Date) (Patient Signature) (Parent of Child Signature) (Legal Guardian/Other Surrogate)

Form #016309P (Revised 07/97, 06/04) White Copy (Blood Bank) Yellow Copy (Chart)

Common Reasons for MPAP Rejection:

- Improper date of collection on the Preadmission Pre-op Blood Bank Requisition history form.
- Missing phlebotomist or patient signature on the Preadmission Pre-op Blood Bank Requisition history form.
- Patient has been transfused with cellular products within the last 3 months or is currently pregnant.
- If the patient is transfused within the 30 days from collection to the patient's surgery date, the MPAP now expires 3 days post the day of transfusion.

For questions or concerns, please contact the UVMMC Blood Bank at (802) 847-3569.

New Test Updates

Cytopathology

How Lubricants impact ThinPrep PAP Test Results

The UVMMC Cytopathology department actively monitors the unsatisfactory rate for the Pap tests it performs. We understand how an unsatisfactory diagnosis affects patient care and patient satisfaction. The national median unsatisfactory Pap test rate is 1.6% for ThinPrep Pap tests. The Bethesda system for reporting Pap tests requires a sample to have a minimum of 5000 well preserved and visualized squamous cells in order to help reduce false negative diagnoses. This threshold is reduced to 2000 squamous cells for patients with atrophic epithelium.

Our current rate is 2.8% for the first eight months of 2022, putting us at the 75th percentile. Our goal is to be close to the median rate.

There are two main reasons we see unsatisfactory Pap tests: bloody specimens and lubricant. We re-process bloody specimens in order to enrich cell content, which helps to reduce unsatisfactory diagnoses with these specimens. Some unsatisfactory due to blood diagnoses have clinical significance. An unsatisfactory diagnosis can be a sign of increased risk of underlying disease with 26% of patients harboring ASCUS/SIL[1] or up to a four time greater risk of CIN2/3 than a normal Pap[2].

Lubricants, both procedural and personal lubricants used by patients, can result in unsatisfactory specimens. There is no successful reprocessing technique for specimens with lubricant. Patients should be instructed to discontinue personal lubricant use for at least 48 hours prior to the collection of the Pap test. For patients without a physical or physiological need for lubricant, use lukewarm water to warm and lubricate the speculum. Water lubrication has the fewest risks to the quality of the Pap sample collected[3]. If lubricant is necessary due to patient discomfort or the use of a plastic speculum, sparingly apply a thin film of **carbomer-free** lubricant on the speculum's surface, avoiding the tip. Do not use an excessive amount of lubricant to lubricate the speculum[4]. The following page contains a list of compatible and incompatible lubricants for use when collecting ThinPrep Pap test specimens.

We may contact your office for additional assistance if your unsatisfactory rate is above 3%, with the majority involving lubricant contamination.

References:

1. Ransdell JS, et al. (1997). Clinicopathologic correlation of the unsatisfactory Papanicolaou smear. *Cancer*, 81(3), 139-143.
2. Nygård JF, et al. (2004). CIN 2/3 and cervical cancer in an organised screening programme after an unsatisfactory or a normal Pap smear: A seven-year prospective study of the Norwegian population-based screening programme. *Journal of Medical Screening*, 11(2), 70-76.
3. Clinical Laboratory Standards Institute. (2008). GP15-A3 Cervicovaginal Cytology Based on the Papanicolaou Technique; Approved Guideline.
4. Hologic. (2015). Lubricant Use during Pap Sample Collection, MISC-00579 Rev. 006.

ThinPrep® Pap Test Lubricant Compatibility List

The use of lubricants with the ThinPrep Pap test is not recommended. However, if a lubricant is necessary the following lubricant brands are validated by Hologic, Inc. for use with the ThinPrep Pap test when used as instructed.[1] *

	Lubricant	Manufacturer	Contains Carbomer?
Pre-ferred†	**Pap Test Lubricating Jelly**	Aseptic Control Products	No
	Surgilube Surgical Lubricant	HR Pharmaceuticals	No
	CerviLube Lubricant	Sion Brands	No

New Test Updates

How Lubricants impact ThinPrep PAP Test Results

ThinPrep® Pap Test Lubricant Compatibility List (cont.)

	Lubricant	Manufacturer
Not Aproved‡	Aquagel Lubricating Gel	Parker Laboratories, Inc.
	Astroglide (Physician Formula)	BioFilm, Inc.
	Astroglide (Personal Formula)	BioFilm, Inc.
	HR Lubricating Jelly	HR Pharmaceuticals, Inc.
	Lubricating Gel	Henry Schein
	Lubricating Jelly	McKesson
	MediChoice Lubricating Jelly	Owens & Minor
	PDI Lubricating Jelly I and II	PDI Healthcare
	PSS Select (also known as Triad)	PSS World Medical, Inc.
	Rite Aid Pharmacy Lubricating Gel	Rite Aid Corp.
	Allegiance	Medline Industries, Inc. (formerly Triad/H&P Industries)
	Aplicare Sterile Lubricating Jelly (also known as Operand Lubricating Jelly)	Aplicare Inc./Clorox Professional
	Aqua Lube Personal Lubricant	Mayer Laboratories
	DynaLube Lubricating Jelly	Dynarex Corporation
	E-Z Lubricating Jelly	Chester Packaging
	IMCO Lubricating Jelly	Medline Industries, Inc. (formerly Triad/H&P Industries)
	Lubricating Jelly	DUKAL Corporation
	Lubri-Gel	Sheffield Pharmaceuticals
	Maxilube Personal Lubricant	Mission Pharmacal
	NovaPlus	Medline Industries, Inc. (formerly Triad/H&P Industries)
	Pro Advantage Lubricating Jelly	National Distribution & Contracting, Inc.
	ReliaMed Lubricating Jelly	ReliaMed

1. *The use of lubricants (including personal lubricants) should be avoided prior to specimen collection. Lubricants can adhere to the filter membrane and may cause poor cell transfer to the slide. If its use is unavoidable, the lubricant should be used in minimum amounts.
2. †Validated: Lubricants have multiple lots run through periodic testing to ensure compatibility.
3. ‡Not approved: Lubricants have either been tested and deemed incompatible or excluded from testing because they contain carbomer.
4. **Reference: 1.** ThinPrep 2000 System Operator's Manual. MAN-02585-001. Marlborough, MA: Hologic, Inc.; 2017

New Test Updates

Ustekinumab QN with Antibodies, Serum

Effective 11/16/22, the following newly defined Mayo test will be available to order:

New Orderable	Epic Code	Atlas Code	Mayo Test ID	Order LOINC	CPT Codes
Ustekinumab QN with Antibodies, S.	LAB17569	LAB17569	USTEK	In process	80299, 83520
Result Component Name	**Epic Code**	**Atlas Code**	**Mayo Test ID**	**Result LOINC**	
Ustekinumab QN, S.	12301019867	MUSQN	USQN	87408-1	
Ustekinumab Ab, S.	12301019868	MUSTAB	USTAB	87409-9	
Container	**Specimen**	**Temperature**	**Collect Vol**	**Submit Vol**	**Stability**
SST (preferred)	Serum	Refrigerate	1 mL	0.5 mL	21 days
Collection Instructions:					
Red Top tube is acceptable.					
Collect immediately before next dose of drug administration (trough level).					

For questions or concerns, please contact UVMMC Lab Outreach at laboutreach@uvmhealth.org.

The need for Medical Laboratory Scientists is on the rise!

Medical Laboratory Scientist jobs are expected to grow 13% in the next few years. In fact, Forbes has listed MLS jobs as some of the hardest to fill. Research shows it is not a well-known professional career option and most people don't know the extent of what Medical Laboratory Scientists, as well as Phlebotomists, actually do. We welcome any opportunities to talk about our profession with anyone who is interested.

For more information, please contact the UVM Health Network Manager of Outreach and Business Development, Lynn Bryan at Lynn.Bryan@uvmhealth.org.

Previously Distributed Test Updates

Barbiturates Confirmation Test Update

Effective 9/28/22, Mayo Test ID BARBU, LAB365, will be replaced by Champlain Toxicology Test ID CTL7050, LAB17557:

New Champlain Toxicology Orderable	Epic Code	Atlas Code	CHTOX ID	Mayo Access ID	Order LOINC	CPT Code
Barbiturates Confirmation Panel, Urine	LAB17557	LAB17557	CTL7050	FAH6076	N/A	80345
Result Component Name	**Epic Code**	**Atlas Code**	**CHTOX ID**	**Mayo Access ID**	**Result LOINC**	
Amobarbital	12301019835	12301019835	CTL3039	FAH6077	N/A	
Phenobarbital	12301019836	12301019836	CTL3040	FAH6078	N/A	
Secobarbital	12301019837	12301019837	CTL3041	FAH6079	N/A	
Butabarbital	12301019838	12301019838	CTL3042	FAH6080	N/A	
Butalbital	12301019839	12301019839	CTL3043	FAH6081	N/A	
Container	**Specimen**	**Temperature**	**Collect Vol**	**Submit Vol**	**Min Vol**	**Stability**
Clean Container	Urine	Refrigerate	2 mL	2 mL	2 mL	7 days
Medicare National Coverage Determination Policy	This test is subject to Medicare National Coverage Determination (LCD) L36037-Urine Drug Testing.					

Mayo Test to be Inactivated	Epic Code	Atlas Code	Mayo Test ID	Order LOINC	CPT Code
Barbiturates Confirmation, Random, U	LAB365	BARBC	BARBU	53746-4	80345

IGH Somatic Hypermutation in B-CLL

Effective 9/28/2022, UVMMC will begin offering the Mayo test IGH Somatic Hypermutation in B-CLL, which is Mayo Test ID BCLL.

New Orderable	Epic Code	Atlas Code	Mayo Test ID	Order LOINC	CPT Code
IGH Somatic Hypermutation in B-CLL, Varies	LAB16858	LAB16858	BCLL	50627-9	81263
Result Component Name	**Epic Code**	**Atlas Code**	**Mayo Test ID**	**Result LOINC**	
BCLL Result	12301015849	M39465	39465	N/A	
Specimen Type	12301015850	MMP005	MP005	31208-2	
Final Diagnosis	12301015851	M19674	19674	50398-7	
Container	**Specimen**	**Temperature**	**Collect Vol**	**Submit Vol**	**Stability**
Lavender Top (EDTA) (preferred)	Whole Blood or Bone Marrow	Refrigerate (preferred)	WB = 4 mL; BM = 2 mL	WB = 4 mL; BM = 2 mL	7 days
Collection Instructions:					
Yellow top (ACD) is acceptable. Ambient temperature is acceptable; stability = 7 days. Invert several times to mix. Send specimen in original tube. Label tube with specimen type.					
Additional Information:					
This test is subject to Local Coverage Determination (LCD) Molecular Pathology Procedures (L35000). Please check with the patient's insurance to determine if prior authorization is necessary. If in doubt about the coverage for a Medicare patient, please obtain an ABN.					

Previously Distributed Test Updates

Reticulocyte Battery

Effective 9/28/2022, UVMMC will begin offering a Reticulocyte Battery, which will include a reticulocyte count as well as the following additional reticulocyte parameters: Reticulocyte Hemoglobin equivalent (RET-He) and Immature Reticulocyte Fraction (IRF). RET-He provides a measurement of the hemoglobin content of reticulocytes and is useful in diagnosing and monitoring iron deficiency anemia. IRF provides the immature fraction of the absolute reticulocyte count and assesses the maturity of circulating reticulocytes.

New Orderable	Epic Code	Atlas Code	Mayo Access ID	Order LOINC	CPT Code
Reticulocyte Battery	LAB17561	LAB17561	FAH6073	in process	85046
Result Component Name	**Epic Code**	**Atlas Code**	**Mayo Access ID**	**Result LOINC**	
Reticulocyte Count	12301000146	RET	FAH197	17849-1	
Reticulocyte Hemoglobin	12301018801	12301018801	FAH6074	71694-4	
Immature Reticulocyte Fraction	12301018802	12301018802	FAH6075	33516-6	
Container	**Specimen**	**Temperature**	**Collect Vol**	**Submit Vol**	**Min Vol**
Lavender Top (EDTA)	Whole Blood	Refrigerate	2.5 mL	2.5 mL	1.5 mL
Collection Instructions:					
Pediatric Purple (EDTA) is acceptable; minimum volume is 0.5 mL. Stability: Refrigerate (preferred) = 48 hours; Ambient = 24 hours Mix sample well.					

The existing test, Reticulocyte Count, LAB296, will remain available as a stand-alone orderable.

For questions relating to this change, please contact the Medical Director of the Hematology Lab, Dr. Joanna Conant at Joanna.Conant@uvmhealth.org.

References:
Brugnara C, Schiller B, Moran J. Reticulocyte hemoglobin equivalent (Ret He) and assessment of iron-deficient states. Clin Lab Haematol. 2006;28 (5):303-308.
Chinudomwong P, Binyasing A, Trongsakul R, Paisooksantivatana K. Diagnostic performance of reticulocyte hemoglobin equivalent in assessing the iron status. J Clin Lab Anal. 2020;34(6):e23225.

Prothrombin Time (PT) Reference Range Change

Beginning Wednesday, September 21, 2022, the normal reference range for the Prothrombin Time (PT) will change to reflect a new lot of testing reagents.

Affected Orderables:

Orderable Test Name	Epic Code	Atlas Code	Mayo Access ID
Prothrombin Time	LAB320	PRO	FAH4828
Prothrombin Time 50/50 Mixing Study	LAB321	PRO50	FAH5271

Reference Range Change:

Current PT Ref Range	New PT Ref Range
10.4 - 12.6 seconds	9.7 - 12.8 seconds

The normal range 0.9 – 1.1 for the International Normalized Ratio (INR) will remain unchanged.In our mission to integrate laboratory testing across the University of Vermont Health Network, all the Health Network laboratories will now use the same coagulation instrumentation and the same reagent lots for the Prothrombin Time (PT) and the activated Partial Thromboplastin Time (aPTT). This will allow us to establish a single reference range for both the PT and aPTT tests in all our Health Network laboratories.

If you have any questions, please contact the Medical Director, Thrombosis and Hemostasis Laboratory, Dr. Andrew Goodwin, at Andrew.Goodwin@uvmhealth.org or (802) 847-2377.

Previously Distributed Test Updates

Stool Parasitology Specimens Update

Effective 10/03/2022, the microbiology lab is updating the stability of unpreserved stool specimens submitted in sterile containers for parasitology tests:

- Ova/parasite exam (LAB955)

  OVA & PARASITE EXAMINATION - University of Vermont Medical Center Laboratory Test Catalog

- Giardia & Cryptosporidium Antigen Detection (LAB1319)

  GIARDIA & CRYPTOSPORIDIUM ANTIGEN DETECTION - University of Vermont Medical Center Laboratory Test Catalog

- Modified Acid Fast Parasitology (LAB905/CSPORA).

  MODIFIED ACID FAST PARASITOLOGY - University of Vermont Medical Center Laboratory Test Catalog

Unpreserved specimens must be delivered to the laboratory within **ONE HOUR** of collection. If unable to deliver to the laboratory within one hour of collection, please preserve stool in Total Fix preservative.

Contact Laboratory Customer Service to obtain Total Fix vials if needed at (802)847-5121.

UVM Medical Center Leukemia/Lymphoma Panel is NY State Approved

Effective 9/28/22, the UVMMC Flow Cytometry Laboratory will begin accepting Leukemia/Lymphoma Panel (LAB9911) testing originating from New York. This means that these flow cytometry samples will no longer need to be sent to Mayo Medical Laboratories to be performed. For more information regarding this testing, please refer to our Joint Test catalog: LEUKEMIA/LYMPHOMA PANEL BY FLOW CYTOMETRY - University of Vermont Medical Center Laboratory Test Catalog

Orderable Name	Epic Code
Leukemia/Lymphoma Panel by Flow Cytometry	LAB9911

Notable Specimen Stability differences:

UVMMC			Mayo Medical Lab		
Specimen	**Media**	**Stability**	**Specimen**	**Media**	**Stability**
Fluids, Peripheral Blood, Marrow	EDTA	48 hours	Fluids	N/A	72 hours
Fluids, Peripheral Blood, Marrow	RPMI	72 hours	Peripheral Blood, Marrow	EDTA/NaHep	96 hours
Peripheral Blood, Bone Marrow	NaHep	72 hours	Bone Marrow	EDTA/NaHep	72 hours
Tissue, Lymph Node, Biopsy	RPMI	72 hours	Tissue	RPMI	96 hours
CSF	N/A	48 hours	CSF	N/A	48 hours

Mayo Tests to be replaced by UVMMC's Leukemia/Lymphoma Panel:

Mayo Test ID	Mayo Test Name	Specimen Type
LLPT	Leukemia/Lymphoma Immunophenotyping, Flow Cytometry, Tissue	Tissue
LCMS	Leukemia/Lymphoma Immunophenotyping, Flow Cytometry, Varies	Blood, Bone Marrow, Fluid
MYEFL	Myelodysplastic Syndrome by Flow Cytometry, Bone Marrow	Bone Marrow

Please reach out to the Medical Director of Flow Cytometry at Katherine.Devitt@uvmhealth.org with questions or concerns about this change.

Previously Distributed Test Updates

Change in Submit Temperature for Parathyroid Hormone (PTH), Intact

Effective 10/12/2022, the preferred submission temperature for specimens for PTH Intact testing will change from frozen to **refrigerated**, as UVMMC has validated the stability for refrigerated (2-8°C) specimens from 24 hours to 72 hours. This means that specimens should no longer be placed on a frozen packing list, but, instead, should be placed on a ***refrigerated packing list***. This change is being made to avoid missing specimens for PTH Intact testing when the sample was not placed on the frozen packing list. This will also help clients/providers with workflow since it will no longer be necessary to make a frozen aliquot for PTH.

Orderable Name	Epic Code	Atlas Code	Mayo Access ID
Parathyroid Hormone (PTH), Intact	LAB813	PTHIN	FAH304

Reminder: *Specimens should be centrifuged within 4 hours of collection.*

This change will allow us to inactivate the PTH Intact Dialysis Only order code, LAB14459. Dialysis staff will no longer need to collect an additional SST for just the PTH.

Orderable to be Inactivated	Epic Code	Atlas Code	Mayo Access ID
PTH, Intact - Dialysis Only	LAB14459	N/A	N/A

If you have any questions about this change, please reach out to UVMMC Laboratory Customer Service at (802) 847-5121 or UVMMC Chemistry at (802) 847-5117.

Outpatient Laboratory Service / Phlebotomy Area Hours and Locations

BURLINGTON: MAIN CAMPUS
111 Colchester Avenue, Main Pavilion, Level 2
Hours: Monday—Friday, 7:00 am to 6:00 pm
Saturday & Sunday, 7:00 am to 1:00 pm
Number of Collection Chairs: 6

COLCHESTER: FANNY ALLEN CAMPUS
792 College Parkway, Medical Office Building, Suite 104; Appointment only (802) 847-8864
Hours: Monday—Friday, 6:30 am to 6:00 pm
Number of Collection Chairs: 4

BURLINGTON: 1 SOUTH PROSPECT STREET
1st Floor Lobby
Hours: Monday—Friday, 7:00 am to 4:00 pm
Number of Collection Chairs: 4

THE University of Vermont MEDICAL CENTER

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PATHOLOGY & LABORATORY MEDICINE COMMUNIQUÉ

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FAX LABORATORY CUSTOMER SERVICE
(802) 847-5905

WEBSITE
UVMHealth.org/MedCenterLabs

Syringe Disposal

The University of Vermont Medical Center does not accept sharps for disposal from patients. Chittenden Solid Waste District (CSWD) will accept needles that are packaged according to the instructions outlined in their pamphlet “GET THE POINT: Be safe with syringes and other sharps”. CSWD also has bright orange stickers to attach to a syringe container to warn handlers to be careful. These items are available at any CSWD location. You can also order them so that they are available for patients at your office 872-8111 or visit www.cswd.net

Patient Instruction Brochures

We have several brochures for patients that need to collect samples at home. The following are available on online by visiting UVMHealth.org/MedCenterLabServices or you can contact Lab Customer Service to receive some via mail.

- Feces Sample Collection
- Fecal Occult Blood Collection
- Sputum Sample Collection
- Urine Sample Collection