

FLETCHER ALLEN HEALTH CARE

PATHOLOGY & LABORATORY MEDICINE

LABORATORY COMMUNIQUÉ JANUARY 2010

LABORATORY OPERATIONS

Holiday Phlebotomy Hours

Christmas Holiday

Thursday, December 24: Ambulatory Care Center 9:00 a.m. – 1:00 p.m.
Fanny Allen Campus 9:00 a.m. – 1:00 p.m.

Friday, December 25: CLOSED

New Year Holiday

Thursday, December 31: Ambulatory Care Center 7:00 a.m. – 5:00 p.m.
Fanny Allen Campus 7:00 a.m. – 5:00 p.m.

Friday, January 1, 2010: CLOSED

Regularly scheduled hours will apply to any days not specifically addressed above.

STAT and EXPEDITE Stickers Get Attention

With over 1200 samples a day delivered to the laboratory, Specimen Receiving needs to be alerted to samples that require a STAT result. When you have a STAT, you must call Laboratory Customer Service so that they can call a courier to pick up your sample. In addition, Customer Service will alert Specimen Receiving to expect a STAT sample. Please write "STAT" next to the test you are requesting and attach a pink "***STAT*** Red Hot" sticker to the outside of the sample bag.

Additionally, there are times when a sample needs special processing. For these situations we have available yellow stickers that say "Expedite Sample Processing". When you have a sample that is labile, please contact Laboratory Customer Service to arrange for a courier.

The following tests/samples should always have expedited sample processing:

- Platelet Function Analysis (PFA1; please notify lab in advance)
- Partial Thromboplastin Time (PTT; if plasma is not frozen within three hours)
- Bone Marrow samples
- Cytogenetic Testing, including Chromosome Analysis
- Fluid samples (Some fluid testing can be refrigerated; please contact Lab Customer Service)

You can reach Laboratory Customer Service at 847-5121 or 800-991-2799.

Laboratory Operations

Holiday Phlebotomy Hours

STAT and EXPEDITE Stickers

Get Attention

Report of Death

Test News

Coag Sample Temperature Change

Test Updates

Lyme Antibody (*Borrelia burgdorferi*)

Syphilis Serology

25-OH Vitamin D (Total)

Clostridium difficile toxin PCR

Viral Detection

TSH Reagent Change

Compliance Update

Expanded ICD-9–CM

Diagnosis Codes

LAB OPERATIONS

Report of Death at FAHC

Starting on 10/1/09, only attending physicians (not residents) can sign the Preliminary Report of Death (PROD) form found in the yellow manila Death Packet folders on nursing units, as required by new State of Vermont requirements. This must be completed by 9 a.m. at the latest on the morning following the death. An exception to this, requiring immediate completion of the PROD, will be if a funeral home is coming immediately to pick up the body per family request due to religious reasons or cultural death rituals which require immediate body transit.

The PROD form, PROD Completion instruction form, the Decedent Flow Sheet and the updated Process Flow Chart are available on the medical staff website, <https://mso.fahc.org>, and on the Vermont Department of Health website, as well as in paper form in the Death Packets. We hope to soon have the PROD loaded into PRISM.

Please refer to the Physician Checklist in Death Packet for completion info and phone numbers to Fax PRODS. Feel free to call the Autopsy Service @ 847-3570 or Jude Carpenter @ 847-5116 with questions.

TEST NEWS

Coag Sample Temperature Change

In keeping with the new CLSI (Clinical and Laboratory Standards Institute) guidelines, specimens for coagulation testing should now be stored at **room temperature** prior to transport. Please refer to the following chart for specific test requirements.

Test	Sample Time
<u>NON-HEPARINIZED PATIENT</u>	
PTT or PTT 50-50 Mix	Deliver capped room temperature whole blood within 3 hours of collection. For delayed delivery, send frozen plasma. Prothrombin Time can be included with this collection and sample time.
D-Dimer	
Fibrinogen	
Prothrombin Time or Prothrombin 50/50 Mix	Deliver whole blood specimens within 22 hours of collection. Submit frozen plasma if not received in the laboratory within 22 hours of collection.
Other Coag Testing	Deliver within 1-hour of collection. For delayed delivery send plasma in individual frozen aliquots for each test requested.
Platelet Function Analysis	Deliver capped whole blood samples at room temperature within 3 hours. Requires separate tube.
ProTime only (no other coagulation-testing requested)	Delivery capped room temperature whole blood within 22-hours of collection, if delayed, send frozen plasma.
<u>**HEPARINIZED PATIENT**</u>	
Heparin Assay (Unfractionated or low molecular weight)	Deliver immediately; sample must be processed as soon as possible after draw, preferably within 30 minutes. For delayed delivery, send frozen plasma. <u>**Samples from patients receiving heparin must be processed immediately**</u>
PTT, D-Dimer, Fibrinogen, Prottime, Other Coag testing.	

Coagulation Specimen Handling

Specimen Requirements for Light Blue Top Tubes (3.2% Sodium Citrate)

1. Please indicate on laboratory requisition if patient is on heparin or coumadin.
2. Under-filled or over-filled tubes are unacceptable for coagulation testing.
3. Samples from patients receiving heparin should be processed immediately.

TEST UPDATES

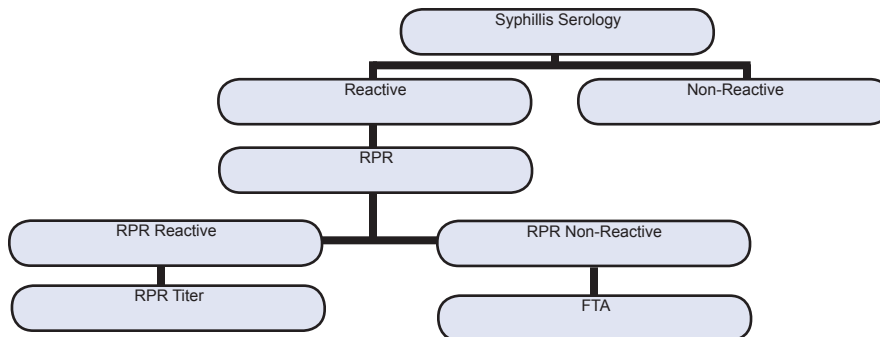
Chemistry Laboratory

The Chemistry Laboratory has acquired the DiaSorin Liaison analyzer and moved several tests to this new automated random access platform on **November 3, 2009**. This new analyzer allows us to perform 25-OH Vitamin D(Total) testing in-house, which will decrease our turn around time.

Test Name	New Test Code	New Method
Lyme Antibody (<i>Borrelia burgdorferi</i>)	LYMAB	Indirect chemiluminescence immunoassay
Syphilis Serology	SYPH	Sandwich chemiluminescence immunoassay
25-OH Vitamin D (Total)	VITD	Direct competitive chemiluminescence immunoassay

Lyme Antibody (*Borrelia burgdorferi*) is performed using an indirect chemiluminescence immunoassay. This replaces the current method, which is the Immunetics C6 *Borrelia burgdorferi* ELISA assay.

Syphilis Serology or Treponema assay is the initial screening for syphilis. The new method utilizes a sandwich chemiluminescence immunoassay for the qualitative determination of total antibodies directed against *Treponema pallidum* in serum. If the Treponema assay is reactive, an RPR (CPT 86592) will be performed, and if the RPR is reactive, a titer (86593) will be performed. If the RPR is non-reactive, an FTA Antibody (99001) will be performed. You have the option to decline reflex testing if you believe that it is not medically necessary.



25-OH Vitamin D (Total) is performed using a direct competitive chemiluminescence immunoassay for the quantitative determination of total 25-OH Vitamin D. While both Vitamin D2 and D3 are measured, only total 25-OH Vitamin D is reported.

All assays are performed Monday – Friday, with the result available the same day. If you have any questions concerning this change, please contact Dr. Greg Sharp in the laboratory (847-5115) or by email at greg.sharp@vtmednet.org. Please refer to the Test Update for more information.

TEST UPDATES

Microbiology Laboratory

Viral Detection

Viral detection is performed by various methods, including molecular detection, spin-amplification, and cell culture. We have introduced a new test code (VIRD) for ordering viral testing. This change means that when you order a viral detection study, we will need to know which virus(es) you suspect in order to perform testing.

Viral Detection for:

Virus	Method	Analytical Time
Adenovirus	Shell-vial	5 days
Cytomegalovirus	Shell-vial	2 days
Enterovirus	Molecular method	1 day
Herpes simplex virus	Molecular method	1 day
Influenza virus	Molecular method	1 day
Metapneumovirus	Molecular method	1 day
Parainfluenza	Cell culture	10 days
Varicella zoster virus	Shell vial	7 days

The following tests are no longer orderable:

- Cytomegalovirus Culture, Urine
- Enterovirus PCR
- Herpes Simplex Virus Molecular Detection
- Viral Antigen Detection
- Viral Culture Respiratory, Immunosuppressed Patients
- Viral Culture, Non-Respiratory
- Virus Detection, Respiratory

Samples for Viral Detection

For swab samples, please use the Copan swabs. If samples are delayed more than 24 hours, please submit swab in VCT broth. Copan swabs and VCT broth are available from Lab Customer Service 847-5121 or 1-800-991-2799.

Clostridium difficile Toxin by PCR

On October 19, 2009, the microbiology laboratory changed from an enzyme immunoassay to a molecular (PCR technology) assay for detection of *C. difficile* toxin. The sensitivity of this new assay is greatly improved from our old method. The sensitivity of the PCR assay is 93%, and the specificity approaches 100% (enzyme immunoassay sensitivity is 32%-72%).

Samples for *C. difficile* toxin

The stool sample must be soft or liquid (must take the shape of the container); formed stools are not accepted without the approval of a pathologist.

The test will be performed Monday – Saturday, and results will be available within 24 hours.

TEST UPDATES

TSH Reagent Change

On December 16, 2009, the Chemistry Laboratory will change the reagents used for TSH to the "TSH ultra". This product is from the same manufacturer, and correlation studies showed the results to be the same. The change should be transparent to users; the advantages are a smaller sample volume, which is of particular importance to pediatric patients, and a greater precision near the low end of the reportable range (0.02 – 125.00 uIU/mL). There will be no change in the reference range or reported result range.

Mayo Test Sample Changes

Start Date	Test Name	MML Test #	FAHC Test Code	New Sample Requirement
10/27/2009	Amitriptyline and Nortriptyline, Plasma	500510	AMICNE	Draw blood in a plain red-top tube(s). (Serum gel tube is not acceptable.) Spin down and send 2 mL of serum refrigerated.
10/27/2009	Doxepin and Nordoxepin, Plasma	500168	DOX	Draw blood in a plain, red-top tube(s). (Serum gel tube is not acceptable.) Spin down and send 3 mL of serum refrigerated.
10/27/2009	Phenytoin, Total &Free	9993	FDIL	Draw blood in a plain, red-top tube(s). Spin down and send 2 mL of serum refrigerated.
10/27/2009	Flecainide	9243	FLEC	Draw blood in a plain, red-top tube(s). (Serum gel tube is not acceptable.) Spin down and send 3 mL of serum.
11/05/2009	Hepatitis C Quantitation by RT PCR	83142	HCVPCR	Draw blood in a serum gel tube(s). Heparinized specimens or serum drawn in a plain red top is not acceptable. Spin down within 4 hours of draw and send 2.2 mL of serum frozen in a screw-capped, round-bottom, plastic vial.
10/23/2009	Insulin Antibodies	8666	INSUAB	Draw blood in a plain, red-top tube(s). Spin down and send 1 mL of serum refrigerated.
10/27/2009	Desipramine, Plasma	500516	MDES	Draw blood in a plain, red-top tube(s). (Serum gel tube is not acceptable.) Spin down and send 2 mL of serum refrigerated.
10/27/2009	Mexiletine	9245	MEXIL	Draw blood in a plain, red-top tube(s) after patient has been receiving mexiletine for at least 3 days and just before administration of the next dose. (Serum gel tube is not acceptable.) Spin down and send 3 mL of serum refrigerated.
10/27/2009	Nortriptyline, Plasma	500511	MNORT	Draw blood in a plain, red-top tube(s). (Serum gel tube is not acceptable.) Spin down and send 2 mL of serum refrigerated.
10/27/2009	Procainamide	8683	MPROC	Draw blood in a plain, red-top tube(s). Spin down and send 1 mL of serum refrigerated.
10/27/2009	Primidone and Phenobarbital, Plasma	500500	PRIMI	Draw blood in a plain, red-top tube(s). Spin down and send 1 mL of serum refrigerated.
10/27/2009	Warfarin, plasma	8760	WARF	Draw blood in a plain, red-top tube(s). Spin down and send 3 mL of serum refrigerated.

TEST UPDATES

Start Date	Test Name	MML Test #	FAHC Test Code	New Sample Requirement
09/15/2009	Apolipoprotein A-1	460421	APA1	Draw blood in a lavender-top (EDTA) tube(s) following an overnight (12-14 hour) fast. Patient must not consume any alcohol for 24 hours before the specimen is drawn. Spin down and send 1 mL of EDTA plasma refrigerated in plastic vial.
09/15/2009	Hepatitis B Core Antibody IgM	200806	HBCORM	Draw blood in a serum gel tube(s). Spin down, remove serum from clot within 24 hours, and send 1 mL of serum frozen in plastic vial.
09/15/2009	Hepatitis Be Antigen and Antibody	200901	HBEAGB	Draw blood in serum gel tube(s). Spin down, aliquot 1.5 mL of serum immediately, and send specimen frozen in plastic vial.
09/15/2009	Hepatitis D Total Antibody	9209	HDAB	Draw blood in a serum gel tube(s). Spin down, remove serum from clot within 24 hours, and send 1 mL of serum frozen in plastic vial.
09/15/2009	HIV 1 Antibody, IF	81758	HIV1IF	Draw blood in a serum gel tube(s). Spin down and send 1.2 mL of serum frozen in plastic vial.
09/15/2009	HTLV I/II Antibody	9539	HTL	Draw blood in a serum gel tube(s). Spin down and send 1 mL of serum frozen in plastic vial.
11/09/2009	Clomipramine	80902	CLOMP	Draw blood in a plain, red-top tube(s). (Serum gel tube is not acceptable.) Spin down and send 3 mL of serum refrigerated.
11/09/2009	Sertraline	81782	SERT	Draw blood in a plain, red-top tube(s). (Serum gel tube is not acceptable.) Spin down and send 3 mL of serum refrigerated.
11/09/2009	Topiramate	81546	TOPIR	Draw blood in a plain, red-top tube(s). (Serum gel tube is not acceptable.) Spin down and send 1 mL of serum frozen in plastic vial.
11/09/2009	Trazodone	9624	TRAZ	Draw blood in a plain, red-top tube(s) 12 hours after the last dose following a minimum of 5 days on trazodone. (Serum gel tube or specimen is not acceptable.) Spin down and send 2 mL of serum frozen in plastic vial.
11/09/2009	Mycophenolic Acid, Serum	81563	MYCOPH	Draw blood in a plain, red-top tube(s). (Serum gel tube is not acceptable.) Spin down and send 1 mL of serum refrigerated.

COMPLIANCE UPDATE

New ICD-9–CM Diagnosis Codes

As of October 1, 2009, Code **V72.6** (Laboratory Examination) has been expanded to a fifth digit sub-classification to provide more specific codes to describe the reason for the laboratory service. These codes are acceptable as first-listed or additional diagnoses.

The new codes are as follows:

- V72.60** **Laboratory examination, unspecified**
- V72.61** **Antibody response examination**
- V72.62** **Laboratory examination ordered as part of a routine general medical examination**
- V72.63** **Pre-procedural laboratory examination**
- V72.69** **Other laboratory examination**

Example-

A foreign adoptee presents for antibody testing to assess immunization status needs.

Code assignment: V72.61 – Antibody response examination

Please use these more specific codes as applicable. Contact the FAHC Laboratory Compliance staff at 847-5121 if you have specific questions regarding use of these new codes.



*In alliance with
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