

Welcome to the first issue of *Laboratory Lines*. This quarterly newsletter will provide information on new services and tests available at St. Luke's Laboratory.

Medical Director: S.J. Eastep, MD (218) 249-3092

Admin Director: Jean Elton Turbes, MT (218) 249-5299

Outreach Manager: Sue Bachinski, MT (218) 249-2445

NEW TEST METHODS

TSH:

New Reference Range 0.350-5.500

Free T3 :

New Reference Range 2.20-4.20 mg/mL

Vitamin B12:

New Reference Range 211-911 pg/mL

Estradiol :

New Reference Ranges:

Males: Not detectable -52 pg/mL

Menstruating Females:

(Follicular phase -12 days): 11-69 pg/mL

Menstruating Females:

(Follicular phase -4 days): 63-165 pg/mL

Menstruating Females (midcycle -1 day): 146-526 pg/mL

Menstruating Females (luteal phase +2 days):

33-150 pg/mL

Menstruating Females: (luteal phase + 6 days):

68-196 pg/mL

Menstruating Females Luteal phase + 12 days):

36-133 pg/mL

Postmenopausal Females (untreated):

Not detectable -37 pg/mL

PSA METHODOLOGY CHANGE

Beginning November 9, 2009, St. Luke's Laboratory will use a new PSA methodology. If results differ significantly from previous testing, the sample will be run on the old method and resulted as a comment. All PSA samples will be retained for one week. Please phone Laboratory Customer Service with questions at (218) 249-5200.

NEW D-DIMER ASSAY

By Steven J. Eastep, MD

Medical Director, St. Luke's Laboratory

St. Luke's has a new, improved D-Dimer assay.

This improved test has a different (lower) reference range and Negative Predictive Value Cutoff (NPVC) than the test it replaces.

The D-Dimer result will be reported as follows:

Expected values for D-Dimer are less than 0.59 mg/L for normal, healthy subjects according to the manufacturer, and in St. Luke's own limited reference range study of 31 healthy adults, was less than 0.51 mg/L. **The Negative Predictive Value Cutoff (NPVC) is 0.50 mg/L.** Patients with a low clinical probability for PE/DVT and a D-Dimer assay result less than or equal to the NPVC likely do not have thromboembolic disease and diagnostic studies are not usually necessary. For patients with a low clinical probability of thromboembolic disease and a D-Dimer result above the NPVC, diagnostic studies should be considered.

D-Dimer levels are of little clinical utility for patients with a moderate to high clinical probability of thromboembolic disease, since diagnostic studies will be performed on this group regardless of the D-Dimer result.

Measurement of D-Dimer should not be used as an aid to the diagnosis of PE/DVT in patients with therapeutic dose anticoagulant therapy for greater than 24 hours, fibrinolytic therapy within previous seven days, trauma or surgery within previous four weeks, disseminated malignancies, aortic aneurysm, sepsis, severe infections, pneumonia, liver cirrhosis or pregnancy.

DRUG OF ABUSE TESTING

On July 15, 2009, St. Luke's Laboratory began offering a Drug of Abuse Screen with Confirmation.

Confirmation testing will be sent to Mayo Medical Laboratories. St. Luke's offers "Drug screen with confirmation" and "Drug screen without confirmation."

NEW GLUCOSE PROTOCOL CRITICAL AND REFERENCE INTERVAL CHANGES

Effective October 13, 2009, St. Luke's Laboratory revised current glucose testing procedures and reference ranges to comply with the American Diabetes Association (ADA) diagnostic criteria.

Updated reference intervals and tests are as follows:

- Glucose reference interval:** 60-99 mg/dl
- Glucose critical low:** 40 mg/dl
- Glucose critical high:** 400 mg/dl
- Fasting Plasma Glucose <100 mg/dl:** Normal
- Fasting Plasma Glucose 100-125 mg/dl:** Impaired
- Fasting Plasma glucose \geq 126:** Provisional diagnosis of diabetes

The following oral glucose tolerance test protocols are available at St. Luke's:

- Oral Glucose Tolerance 2 hour (GTT2)**
- Gestational Glucose Screen (GLUCCHAL)**
- Prenatal Glucose Tolerance 3 hour (GTTPRENAT)**

LIPID REFERENCE INTERVAL UPDATE FOLLOWING NATIONAL CHOLESTEROL EDUCATION PROGRAM (NCEP) GUIDELINES

Cholesterol

< 200 mg/dL	Desirable
200 – 240 mg/dL	Borderline
> 240 mg/dL	Undesirable

HDL Cholesterol

> 60 mg/dL	Desirable
40 - 59 mg/dL	Borderline
< 40 mg/dL	Undesirable

Triglycerides

< 150 mg/dL	Desirable
150 - 499 mg/dL	Borderline
\geq 500 mg/dL	Undesirable

LDL Cholesterol, Calculated

\leq 100 mg/dL	Desirable
130-159 mg/dL	Borderline
160-189 mg/dL	Undesirable

LDL Cholesterol, Direct

\leq 100 mg/dL	Desirable
130-159 mg/dL	Borderline
160-189 mg/dL	Undesirable

NEW LAB WEB PAGE

We are very proud to announce our web page! You will soon be able to view our test catalog on-line.

Watch for more information!

<http://www.slhduluth.com/hospital/laboratoryservices/>



LABORATORY MEDICAL DIRECTORS

Our experienced staff of board-certified pathologists is available to answer your questions. Feel free to give them a call.

Steven J. Eastep, MD Hematology & Coagulation	(218) 249-3092
Kristin Baer, MD Clinical Chemistry	(218) 249-5751
Krista U. Warren, MD Microbiology	(218) 249-6914
Jon Steinhauer, MD Transfusion Services	(218) 249-5749
Sarah Lundeen, MD Cytopathology	(218) 249-6310

TIPS FOR OUR MEDITECH/LSS USERS



ORDERING FROM AMBULATORY ORDER MANAGEMENT (AOM)

If you are a staff member that floats between clinics, please do not use "favorites." Favorites is keyed to the user's primary location, therefore it will cause errors if used at a temporary location. Please use the category or name option.

CHECK-OUT TASKS

Please watch your "check-out task" work list on your desktop. If an order is missing *required information* or *service date*, it will not complete. The check-out task flags an incomplete order, allowing you to fill in the blanks.