

Tests Now Added to our "In-House" Menu

Effective June/July, 2007, the following tests will now be performed at Physicians Laboratory:

CMV IgG and IgM
DHEA-S
**Thyroid Antibodies (Anti TPO &
Anti Thyroglobulin)**
CA 19-9
CA 15-3
E. Shiga Toxin

Test #1274 CMV (Cytomegalovirus IgG)

Test #1444 CMV (Cytomegalovirus IgM)

Cytomegalovirus (CMV) infection is generally asymptomatic in immuno-competent children and adults, but can cause associated illnesses such as hepatitis, pneumonia or a mononucleosis-like illness with little or no pharyngitis or adenopathy (heterophile antibody negative mononucleosis)

Transmission and diagnosis can occur *in utero* or at birth which may result in congenital abnormalities, including hepatosplenomegaly, deafness and mental retardation.

Blood transfusions can also be a source of CMV and seronegative individuals transfused with blood from seropositive donors have a high risk of developing CMV infection. Serologic testing for CMV is important in screening blood for transfusion to neonates or to immuno-compromised patients

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| Specimen: | 2 mL serum |
| Storage: | Refrigerated for 2 days or Frozen indefinitely |
| Testing: | Performed Tues. and Fri. in Lincoln and reported same day of testing. |
| Reference range: | IgG <0.8 IU/mL IgM <0.90 IU/mL |
| Cost/CPT code: | IgG \$15 86644 IgM \$20 86645 |
| Questions: | Contact Patsi Tobey, Technical Supervisor, Lincoln Corporate Centre - 402 488-7710 |

Test #920 DHEA-S

Dehydroepiandrosterone (DHEA) is produced primarily by the adrenal glands and is a precursor of androstenedione, testosterone, and estrogen. DHEA-S levels are 400-1000 times higher than DHEA and is a more reliable and reproducible measure of adrenal activity. DHEA-S is most commonly measured to evaluate hirsutism. It is also useful to help distinguish origin (adrenal vs. ovary/testis) of androgen secreting tumors. DHEA-S may help determine causes of alopecia, amenorrhea, infertility, acne, increased muscularity and decreased breast size in females.

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| Specimen: | 1 mL serum or plasma (heparin or EDTA) |
| Storage: | Refrigerated 2 days or Frozen 2 months |
| Testing: | Performed two days a week in Omaha Chemistry and reported same day of testing. |
| Reference range: | By report - Age related |
| Cost/CPT code: | \$30 82627 |
| Questions: | Contact Jan Nelson, Chemistry Supervisor |

Test # 2298 Thyroid Antibodies (Anti TPO and Anti Thyroglobulin)

Autoimmune thyroid disorders encompass destruction and stimulation of the thyroid gland. Thyroid Peroxidase (TPO) and Thyroglobulin are considered the major auto-antigens associated with chronic autoimmune thyroiditis. Both the destructive and stimulatory states are associated with predominantly circulating IgG class auto-antibodies. Anti-TPO antibodies are found in other non-thyroid conditions, i. e., pernicious anemia, diabetes mellitus, rheumatoid arthritis, Addison's disease and Sjogren's Syndrome. In addition, anti-TPO antibodies are detectable at low levels in 2 – 8 % of apparently healthy individuals, particularly in the elderly and more often in women than in men. The clinical significance of this is unclear.

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| Specimen: | 1 mL serum |
| Storage: | Refrigerated for 2 weeks or Frozen 1 month. |
| Testing: | Performed in Lincoln on Mon. and Thurs. and reported same day of testing. |
| Reference range: | Anti TPO <10 IU/mL Anti Thyroglobulin <25 IU/mL |
| Cost/CPT codes: | \$40 86376 TPO ab 86800 Thyroglobulin ab |
| Note: | <u>Tests can be ordered individually.</u> Anti TPO = test #7163 Cost \$25 Anti Thyroglobulin = test #7162 Cost \$25 |
| Questions: | Contact Patsi Tobey, Technical Supervisor, Lincoln Corporate Centre - 402 488-7710 |

Test #833 CA 15-3

Test #512 CA 19-9

CA 15-3 antigen, has become a widely recognized breast cancer marker and has been shown to be more sensitive than CEA in detecting recurrence of breast cancer. Increasing CA 15-3 antigen levels may be representative of disease progression; whereas, decreasing antigen levels may be associated with disease regression.

CA 15-3 is not recommended as a screening tool.

The CA 19-9 antigen test is used mainly for pancreatic cancer monitoring. CA 19-9 is not sensitive or specific enough to be considered useful as a tool for cancer screening. Its main use is to help differentiate between

cancer of the pancreas and bile ducts and other non-cancerous conditions, such as pancreatitis, to monitor a patient's response to pancreatic cancer treatment and to watch for pancreatic cancer recurrence. CA 19-9 may be ordered along with other tests, such as CEA, bilirubin, and/or a liver panel when a patient has symptoms that may indicate pancreatic cancer. Symptoms may include abdominal pain, nausea, weight loss, and jaundice. Conditions such as gallstones, cirrhosis, pancreatitis, and cholecystitis can also cause elevated levels of CA 19-9 in the blood.

Specimen: 1 mL serum or plasma (EDTA or heparin)
 Storage: Refrigerated 5 days or Frozen 3 months.
 Testing: Performed 2x/week and reported day of testing
 Reference range/CPT code:
 CA 15-3 0-31 U/mL
 Cost/CPT code: \$25 86300
 CA-19-9 0-37 U/mL
 Cost/CPT code: \$35 86301
 Questions: Contact Jan Nelson
 Chemistry Supervisor

Test # 675 E. COLI SHIGA TOXIN

Current CDC guidelines recommend testing all liquid and bloody stools for Shiga Toxin. This is a test for the qualitative detection of Shiga toxins 1 and 2 produced by serotypes of E. Coli in stool specimens in varying quantities. ***This test will replace culture requests for E. Coli 0157:H7 in our laboratory.***

Specimen: **Place a portion of the stool specimen into each vial of the 3 vial Para-Pak Collection System within one hour of collection.** (See "Stool Collection" below for instructions).
 Note: **The Para Pak C&S vial (orange cap) is the only vial that can be used for this test.**
 Storage: **Refrigerated – Must be received within 72 hrs. of collection**
 Testing: Performed daily and reported 48 hrs. after receipt in the lab.
 Reference range: Shiga Toxin 1 = Negative
 Shiga Toxin 2 = Negative
 CPT code: 87899, 87899-59, 87015
 Cost: \$55
 Questions: Contact Shari Talbert
 Microbiology Supervisor

STOOL COLLECTION

Many stool specimens for Microbiology are not being submitted in the 3 vial Para-Pak collection system. Testing may be compromised or cancelled due to this oversight. **All stools for Microbiology testing must be submitted in the Para-Pak system, and all three vials need to be filled according to directions as follows:**

Stools should be apportioned within one hour of collection.

1. Place a portion of the stool into the **Para-Pak Clean Vial (white-cap).**
2. Place a portion of the stool into the **Para-Pak C&S Vial (orange-cap)** until the liquid rises to the red fill line.

3. Place a portion of the stool into the **Para-Pak Ecofix Vial (green cap)** until the liquid rises to the red fill line.
4. **Label all vials with the patient's name, date, collection time, and refrigerate.**

The 3 vial Para-Pak can be obtained by contacting our Supply Dept.

Questions: Contact Shari Talbert
 Microbiology Supervisor

WEBSITE TEST DIRECTORY

Just a reminder our Website (www.physlab.com) has been recently updated and provides the most current specimen requirements. You may look up by using "test name" or "test number".

REQUISITION INFORMATION

To aid in evaluating test results, please indicate on the requisition and specimen label if the specimen was collected under special circumstances. For example, the specimen was a "line draw", the urine specimen was catheterized, or a "clean catch", etc. This information helps the technologists and/or pathologists evaluate any unusual results.

NPI NUMBERS

If you have not submitted your physicians' NPI numbers, please do so. Insurance claims may be delayed until this information can be obtained.

Contact Erin Johnson at (402) 731-4145 or 1-800-642-1117

SOURCE INFORMATION FOR CULTURES AND HISTOLOGY SPECIMENS

When submitting specimens for cultures or anatomic pathology (Histology), please write the **source on the requisition and the specimen label.** Testing may be delayed until this information is provided.

"ROYAL BLUE" TUBES

Which "royal blue" tube should be used?

1. One "royal blue" tube label reads "No Additive" and has a small **red stripe.** This tube is used for:
 #807 Zinc, serum
 #918 Copper, serum
2. Another "royal blue" tube label reads "EDTA Anticoagulant" and has a small **purple stripe.** This tube is used for:
 #79 Zinc Protoporphyrin, Blood
 #627 Mercury, Blood
 #806 Lead, Whole Blood
 #811 Lead and Zinc Protoporphyrin
 #820 Arsenic, Blood
 #1788 Heavy Metals Whole Blood Panel
 #1937 Cadmium, Blood