

Clinical Testing Routine Serology

Table 12. Routine Serology

| Disease or Agent | TAT (Days) | Comments |
|---|------------|----------|
| Hepatitis B Surface Antigen (HbsAg) | 3 | 1 |
| Antibody to Hepatitis B Surface Antigen (anti-HBs) | 3 | 1 |
| Total Antibody to Hepatitis B Core Antigen (anti-HBc) | 3 | 1 |
| IgM Antibody to Hepatitis B Core Antigen (anti-HBc IgM) | 3 | 1 |
| Rubella, IgG Antibody (Prenatal) | 3 | 2 |
| Syphilis (Prenatal) | 3 | 2 |
| <i>Toxoplasma gondii</i> , IgG Antibody* (Prenatal)* | 7 | 2 |

Performed at the Chicago Laboratory

Comments

- Specimens for Hepatitis B testing accepted only through the Chicago Department of Health (CDOH) and Illinois Department of Public Health Immunization programs. Contact the Illinois Department of Public Health's Chicago laboratory before submitting specimens.
- Prenatal specimens for rubella, syphilis and toxoplasmosis are accepted only through the Chicago Department of Health.

Specimen Requirements

5 mL Autosep® vacutainer tube of blood for Syphilis, Rubella and/or Toxoplasmosis testing

A separate 5 mL Autosep® vacutainer tube of blood for Hepatitis testing

Information Required

Completed Routine Serology Submission form (11508)

Collection Materials

See Appendix C for supplies

Test Methodologies

Syphilis – Anti-Treponemal Enzyme Immunoassay (EIA), quantitative Rapid Plasma Reagin (RPR) when EIA is repeatedly reactive, Fluorescent Treponemal Antibody-Absorption Double Stain (FTA-ABS DS) when RPR is negative

Rubella – Enzyme Immunoassay

Hepatitis B- Qualitative Enhanced Chemiluminescence Assay

Toxoplasmosis – Chemiluminescence Assay for *Toxoplasma gondii* IgG Antibodies

Criteria for Rejection

Insufficient quantity; hemolyzed, lipemic or contaminated serum; specimen more than 10 days old;

specimen not labeled; incomplete Routine Serology requisition form

Interfering Substances

Gross bacterial contamination and anticoagulants

*Toxoplasmosis testing performed at a reference laboratory

Hepatitis C – Screening for anti-HCV is available on a fee-for-service basis. Contact the Chicago laboratory for information.

Instructions for Hepatitis Specimen Submission

- Collect at least 5.0 mL of whole blood in the Auto-sep™ tube provided.
- Attach the Illinois Department of Public Health provided bar code label lengthwise on the specimen tube. The specimen must be labeled with the patient's full name and/or identification number.
- Place the matching Department provided barcode label on the requisition form; look for the instruction "Place testing facility barcode label in the box below."
- Allow the blood to clot at room temperature. Centrifuge at 2000 to 3000 rpm for 10 minutes.
- Complete all information on the test requisition. The patient's identifier on the test requisition must match the identifier on the specimen. If both the name and barcode label are placed on the specimen, both must match the test requisition.
- By ground transport
 - Wrap specimen(s) individually in absorbent material.
 - Place wrapped specimen(s) into a biohazard labeled bag and seal securely.
 - Place the test requisition(s) in the biohazard bag outside pouch so that it does not come in contact with the specimen sealed inside the bag.
 - Place the sealed biohazard bag and test requisition(s) inside the shipping container.

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- v. The shipping container must be rigid such as a cooler and labeled with the UN 3373 Biological Substance Category B marking.
- vi. Close securely.
- b. Commercial carrier by ground/air transport
 - i. Wrap specimen(s) individually in absorbent material.
 - ii. Place the wrapped specimen(s) inside a biohazard labeled 95 kPa bag and seal following the instructions on the bag.
 - iii. Place the test requisition(s) in the 95 kPa bag outside pouch so that it does not come in contact with the specimen sealed in the bag.
 - iv. Place the sealed 95 kPa bag and completed test requisitions(s) inside the outer shipping container and close securely.
 - v. Label the outer shipping container with the appropriate Illinois Department of Public Health laboratory address.
 - vi. Complete the return address section to include the name of the person shipping the package, business name and address and a business phone number.
 - vii. The shipping container must include the UN3373 Biological Substance Category B marking.
- 7. If the specimen(s) cannot be transported immediately, store at 2 C to 8 C (refrigerator).
- 8. **Hepatitis specimens must reach the laboratory within 10 days of collection.**

Ship to:

Illinois Department of Public Health Laboratory
2121 W. Taylor St.
Chicago, IL 60612-4224
Phone: 312-793-4760
Fax: 312-793-1322