Standard Screening Test for Syphilis: Anti-Treponemal Enzyme Immunoassay (EIA)

**Specimen Requirements**
2 mL of serum in the original Autosep™ vacutainer tube; do not submit plasma.

**Information Required**
A completed *sexually transmitted disease (STD) requisition form* is required. It is essential to properly fill out the form completely using black ink. Use clear capital letters only. Print letters and numbers completely inside the boxes. Be sure to mark the test requested and appropriate source.

**Collection Materials**
See the *Clinical Supplies Requisition Form* for supplies.

**Test Methodologies**
Qualitative Anti-Treponemal EIA screening test, quantitative Rapid Plasma Reagin (RPR) titer when EIA is repeatedly reactive, Fluorescent Treponemal Antibody-Absorption Double Stain (FTA-ABS-DS) when RPR is negative.

**Criteria for Rejection**
Insufficient quantity; hemolyzed, lipemic or contaminated serum; specimen more than 10 days old (off-clot); specimen more than five days old (on-clot); specimen not labeled; incomplete sexually transmitted disease requisition form.

**Interfering Substances**
Gross hemolysis; gross lipemia; bacterial contamination.

<table>
<thead>
<tr>
<th>Test Procedure</th>
<th>Specimen Performed at</th>
<th>TAT (Days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIA</td>
<td>Serum/clotted blood</td>
<td>Ca, Ch</td>
</tr>
<tr>
<td>RPR</td>
<td>Serum/clotted blood</td>
<td>Ca, Ch</td>
</tr>
<tr>
<td>FTA-ABS DS</td>
<td>Serum/clotted blood</td>
<td>Ca, Ch</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disease or Agent</th>
<th>Specimen Performed at</th>
<th>TAT (Days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlamydia</td>
<td>Female endocervical, male urethral, or urine</td>
<td>Ca, Ch</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>Female endocervical, male urethral, or urine</td>
<td>Ca, Ch</td>
</tr>
</tbody>
</table>

**Instructions for Syphilis**

**Chlamydia/ Gonorrhea** Nucleic Acid Amplification Testing

**Specimen requirements**
Female endocervical swab or urine (swab preferred), male urethral swab or urine.

**Information Required**
Completed *sexually transmitted disease requisition form* - it is essential to properly fill out the requisition completely; use clear capital letters only; print letters and numbers completely inside the boxes; be sure to mark the test requested.

**Collection Materials**
See *Clinical Supplies Requisition Form* for supplies.

**Criteria for Rejection**
Swab specimen more than 30 days old; urine specimen more than 30 days old; expired collection kit; improper collection kit; specimen not labeled; no date of collection; empty urine transport tube; multiple swabs; no swab.

**Test Methodology**
Nucleic acid hybridization with DNA extraction and amplification.

**Interfering Substances**
Overabundance of blood in specimen.

**Results**
Positive, negative, unsatisfactory (with a comment explaining the reason), and inconclusive.

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</tr>
</tbody>
</table>

**Urine-based Chlamydia/Gonorrhea Testing**

**Specimen Requirements**
Collect first 15 mL to 60 mL of voided urine (first catch urine). Carefully transfer 2.0 mL to 3.0 mL urine to the urine.
specimen transport tube making sure that it is filled to the “Fill Window” on the tube. DO NOT over or under fill the tube. Tighten the cap and invert three to four times to ensure the specimen and reagent are well mixed. Maintain at 2 C to 30 C after collection. The specimen must reach the laboratory in enough time to allow for testing within 30 days of collection. Specimens arriving at the laboratory after 3 p.m. will be tested the following workday.

**Information Required**
Completed STD requisition. It is essential to properly fill out the STD requisition; be sure to mark the test requested (GC/CHLAMYDIA Nucleic Acid Amplified Testing) and the date collected.

**Test Methodology**
Nucleic acid hybridization with amplification

**Interfering Substances/Conditions**
Overabundance of blood in specimen; urine preservatives

**Criteria for Rejection**
Grossly bloody specimen; specimen not labeled; collection with a preservative; no date of collection

**Urine Specimen Collection for Chlamydia trachomatis and Neisseria gonorrhoeae – Instructions for Patient**
Do not urinate for at least one hour prior to specimen collection.
Write your name, date of birth and the date of collection on the side of the specimen cup prior to urine collection. Do not write on the lid.

**Instructions for Males**
1. Wash hands with soap and water, then dry hands.
2. Avoid touching the inside of the urine collection container.
3. If uncircumcised, withdraw the foreskin.
4. Begin urinating into the collection container.
5. Collect the first 20 mL to 60 mL of voided urine.
6. Pass the remaining urine into the toilet.
7. Securely fasten the screw-on cap to the urine container.
8. Wash hands with soap and water, then dry hands.
9. Return container to health care provider.

**Instructions for Females**
1. Wash hands with soap and water then dry hands.
2. Avoid touching the inside of the urine collection container.
3. Sit on the toilet and spread genital lips apart with one hand. Hold the urine container in the other hand.
4. Begin urinating into the collection container.
5. Collect the first 20 mL – 60 mL of voided urine.
6. Pass the remaining urine into the toilet.
7. Securely fasten the screw-on cap to the urine container.
8. Wash hands with soap and water, then dry hands.
9. Return container to health care provider.

**Instructions for BD ProbeTec™ Q5 Specimen Collection and Submission for Chlamydia**

**Gonorrhea Cultures**

**Specimen Requirements**
Inoculated modified Thayer Martin plates or Martin Lewis media. Within one hour of collection, cultures must be placed in a 3 percent -10 percent CO₂ atmosphere, and incubated for 24 to 48 hours at 35 C to 37 C before shipping. Pure isolates for confirmation must be submitted on Chocolate slants or modified Thayer Martin plates.

**Information Required**
Completed Communicable Diseases Laboratory Test Requisition

**Collection Materials**
Contact Sexually Transmitted Diseases Program - Phone 217-782-2747

**Test Includes**
Presumptive testing for Neisseria gonorrhoea; confirmation done if specimen is from a minor or from any source other than urogenital.

**Criteria for Rejection**
Swabs, clinical specimen not on Martin-Lewis media or modified Thayer Martin plates; media dehydrated; specimen overgrown with mold or other organisms; expired media; media not inoculated; plate more than 10 days old; specimen not
incubated 24 to 48 hours before shipping; specimen not labeled properly; no collection date

**Test Methodology**
Presumptive identification includes gram stain and oxidase tests; confirmation by co-agglutination tests and/or carbohydrate utilization procedures.

**Interfering Substances**
Overgrowth of yeast or bacterial contaminants on plates can inhibit successful growth of *Neisseria* species.

### Table 8. Gonorrhea Culture Testing

<table>
<thead>
<tr>
<th>Disease or Agent</th>
<th>Presumptive ID</th>
<th>Confirmation</th>
<th>Antibiotic Susceptibility</th>
<th>Performed at</th>
<th>TAT (Days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gonorrhea</td>
<td>X</td>
<td></td>
<td></td>
<td>Ch</td>
<td>2</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td></td>
<td>X</td>
<td>X</td>
<td>Ch</td>
<td>4</td>
</tr>
</tbody>
</table>