



## SAMPLE COLLECTION FOR STD TESTING USING NUCLEIC ACID AMPLIFICATION TESTS

*Chlamydia trachomatis*, L serovars of *Chlamydia trachomatis* causing *Lymphogranuloma venereum*, *Neisseria gonorrhoeae*, and *Trichomonas vaginalis*

Specimens should be collected and transported following the manufacturer's instructions and using the manufacturer's collection kits provided by ARUP. For FDA approved tests, use of other transport media (e.g., viral transport media) is discouraged and may result in reduced sensitivity.

**Table 1: Optimal Specimen Types for Screening Women**

	Optimal specimen	Alternative	Reduced sensitivity
<i>C. trachomatis</i> <sup>1</sup>	Vaginal swab	Endocervical swab Rectal swab <sup>5</sup>	First-catch urine LBC specimen <sup>4</sup>
<i>N. gonorrhoeae</i> <sup>2</sup>	Vaginal swab	Endocervical swab Rectal swab <sup>5</sup> Pharyngeal swab <sup>5</sup>	First-catch urine LBC specimen <sup>4</sup>
<i>T. vaginalis</i> <sup>3</sup>	Vaginal swab Endocervical swab LBC (liquid-based cytology) specimen <sup>4</sup>	First-catch urine	

1. Routine screening recommended annually in sexually active females age ≤25 years. All pregnant women under 25 years of age and all pregnant women, aged 25 and older if at increased risk (including retesting during the 3rd trimester). Test-of-cure is recommended in pregnant women 3-4 weeks after treatment. Retesting 3 months after treatment is recommended for all women with *C. trachomatis* infection.
2. Routine screening recommended annually in sexually active females age ≤25 years. All pregnant women under 25 years of age and all pregnant women, aged 25 and older if at increased risk. Retesting 3 months after treatment is recommended for all women with *N. gonorrhoeae* infection.
3. Screening can be considered in women at high risk for infection (e.g., new/multiple partners, history of STDs, exchange of sex for payment, injection drug use).
4. FDA approved only for cervical specimens collected in PreservCyt solution.
5. While screening of extragenital sites is currently not recommended due to a scarcity of published studies, available data suggest that rectal and oropharyngeal infections are not uncommon in women. Consider screening women with known risk factors.

**Table 2: Optimal Specimen Types for Screening Men**

	Optimal specimen	Alternative	MSM <sup>2</sup>
<i>C. trachomatis</i>	First-catch urine <sup>1</sup>	Urethral swab <sup>3</sup>	Rectal swab <sup>2</sup>
<i>N. gonorrhoeae</i>	First-catch urine <sup>1</sup>	Urethral swab <sup>3</sup>	Rectal swab <sup>2</sup> Pharyngeal swab <sup>2</sup>
<i>T. vaginalis</i>	Urethral swab <sup>3</sup>	First-catch urine <sup>3</sup>	

1. Screening of sexually active young men should be considered in clinical settings with high prevalence (e.g., adolescent clinics, STD clinics, correctional facilities).
2. Routine annual screening for all sexually active MSM is recommended, as extragenital infections are common and mostly asymptomatic. Screening every 3 to 6 months is recommended for MSM at increased risk.

3. Nucleic acid amplification tests are more sensitive than culture but have not been FDA approved for testing in men. Culture of urethral swabs, urine, and semen is one diagnostic option. Wet preparation lacks sensitivity with these specimens.

**Table 3: Testing of Symptomatic Patients**

	Women	Men
<b>Urethritis</b>	First-catch urine	First-catch urine Urethral swab
<b>Vaginal discharge</b>	Vaginal swab Endocervical swab First-catch urine	n/a
<b>Cervicitis</b> (including <i>T. vaginalis</i> )	Vaginal swab Endocervical swab First-catch urine	n/a
<b>Proctitis</b>	Rectal swab	Rectal swab
<b>Lymphogranuloma venereum</b>	Vaginal swab Rectal swab Endocervical swab Urine	Urine Rectal swab Urethral swab

Screening recommendations from the Centers for Disease Control and Prevention can be accessed at the following link: <https://www.cdc.gov/std/tg2015/screening-recommendations.htm>

## Instructions for Specimen Collection

### VAGINAL SWAB SPECIMENS

- Partially peel open the swab package (ARUP supply #28907). Remove the the blue-shaft specimen collection swab. Do not touch the soft tip or lay the swab down. If you touch the soft tip, use a new APTIMA Combo 2 Unisex Swab Collection Kit.
- Hold the swab, placing your thumb and forefinger in the middle of the swab shaft covering the score line. Do not hold the swab shaft below the score line.
- Carefully insert the blue-shaft swab into the vagina about 2 inches (5 cm) past the introitus and gently rotate the swab for 10 to 30 seconds. Make sure the swab touches the walls of the vagina so that moisture is absorbed by the swab and then withdraw the swab without touching the skin.
- While holding the swab in the same hand, unscrew the cap from the tube. Take care not to spill the contents of the tube. If you spill the contents of the tube, use a new APTIMA Unisex Swab Specimen Collection Kit (ARUP supply #28907).
- Immediately place the swab into the transport tube so that the score line is at the top of the tube.
- Carefully break the swab shaft at the score line against the side of the tube.
- Immediately discard the top portion of the swab shaft.
- Tightly screw the cap onto the tube.
- Store and transport at 2°C to 30°C until tested.

### FIRST-CATCH URINE COLLECTION

- Do not urinate for at least one hour prior to collecting specimen.
- Collect approximately 20 to 30 mL of first-catch urine (i.e., initial urine stream) into a urine collection cup free of any preservatives. Collection of larger volumes of urine may result in rRNA target dilution, which may reduce test sensitivity. Female patients should not cleanse the labial area prior to providing the specimen.
- Remove the cap and transfer 2 mL of urine into the urine specimen transport tube (ARUP supply #28908) using the disposable pipette provided. The correct volume of urine has been added when the fluid level is between the black fill lines on the urine specimen transport tube label.

- Urine sample must be transferred into the APTIMA Urine Specimen Collection tube (ARUP supply #28908) within 24 hours of collection.
- Recap the urine specimen transport tube tightly.
- Store and transport at 2°C to 30°C until tested.

#### MALE URETHRAL SWAB SPECIMENS

- Do not urinate for at least one hour prior to collecting specimen.
- Insert the specimen collection swab (**blue-shaft swab in the package with the green printing**) 2 to 4 cm into the urethra.
- Gently rotate the swab clockwise for 2 to 3 seconds in the urethra for adequate sampling.
- Withdraw the swab carefully.
- Remove the cap from the APTIMA Unisex Swab Specimen Collection Kit (ARUP supply #28907) and immediately place the specimen collection swab into the transport tube.
- Carefully break the swab shaft against the side of the tube at the score line and discard the top portion of the swab shaft; use care to avoid splashing of contents.
- Recap the swab specimen transport tube tightly.
- Store and transport at 2°C to 30°C until tested.

#### FEMALE ENDOCERVICAL SPECIMENS

- Remove excess mucus from the cervical ostium and surrounding mucosa using the cleaning swab (white-shaft swab in the package with red printing). **Discard this swab.** Note: A large-tipped swab (not provided) may be used to remove excess mucus from the cervical ostium.
- Insert the specimen collection swab (**blue-shaft swab in the package with the green printing**) into the endocervical canal.
- Gently rotate the swab clockwise for 10 to 30 seconds in the endocervical canal to ensure adequate sampling.
- Withdraw the swab carefully; avoid any contact with the vaginal mucosa.
- Remove the cap from the APTIMA Unisex Swab Specimen Collection Kit (ARUP supply #28907) and immediately place the specimen collection swab into the transport tube.
- Carefully break the swab shaft against the side of the tube at the scoreline and discard the top portion of the swab shaft; use care to avoid splashing of contents.
- Recap the swab specimen transport tube tightly.
- Store and transport at 2°C to 30°C until tested.

#### ANAL/RECTAL SWABS

- Use APTIMA Unisex Swab Specimen Collection Kit (ARUP supply #28907).
- **Discard the large white-shaft cleaning swab.**
- Insert the blue-shaft specimen collection swab approximately 3 to 5 cm into the anal canal
- Rotate the swab for 5 to 10 seconds against the rectal wall (at least three times) to sample the mucosal surface.
- If the swab is grossly contaminated with feces, discard and repeat the collection.
- Withdraw the swab carefully, remove the cap from the swab specimen transport tube, and immediately place the specimen collection swab into the transport tube.
- Carefully break the swab shaft against the side of the tube at the scoreline and discard the top portion of the swab shaft; use care to avoid splashing of contents.
- Recap the swab specimen transport tube tightly.
- If needed prior to insertion, the swab can be moistened with water or saline solution.

#### THROAT/PHARYNGEAL SWABS

- Use APTIMA Unisex Swab Specimen Collection Kit (ARUP supply #28907).
- **Discard the large white-shaft cleaning swab.**
- Using the blue-shaft specimen collection swab, sample the bilateral posterior pharynx, both tonsils, and the uvula.

- Withdraw the swab carefully, remove the cap from the swab specimen transport tube, and immediately place the specimen collection swab into the transport tube.
- Carefully break the swab shaft against the side of the tube at the scoreline and discard the top portion of the swab shaft; use care to avoid splashing of contents.
- Recap the swab specimen transport tube tightly.