

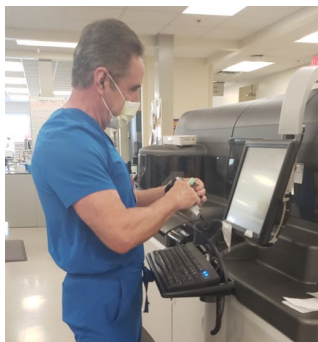


Cary m. Dougherty, M.D.



# WOMAN'S HOSPITAL LABORATORY / PATHOLOGY COLLECTION MANUAL

*Revised 05/01/2022*



<b>Drop off Instructions</b>	<b>Page Number</b>
<b>Laboratory Request Forms/Registration</b>	<b>3</b>
<b>Specimen Handling</b> <ul style="list-style-type: none"> <li>• Labeling</li> <li>• Specimen Handling and Storage</li> <li>• Order of the Draw</li> <li>• Temperature Requirements</li> <li>• Specimen Transport</li> <li>• Specimen Rejection</li> </ul>	<b>5-7</b>
<b>Chemistry</b> <ul style="list-style-type: none"> <li>• Timed Patient Specimens Glucose Tolerance Testing</li> <li>• NBS/PKU – Newborn Screening Card</li> <li>• FFN (Fetal Fibronectin)</li> </ul>	<b>7-10</b>
<b>Blood Bank</b>	<b>10-11</b>
<b>Molecular Biology</b> <b>STDNA Testing</b> (Chlamydia trachomatis, Neisseria gonorrhoeae, Trichomonas vaginalis) <i>Sources: Endocervical, Vaginal, Urine, Rectal, Throat</i>	<b>11-15</b>
<b>Virology</b> <ul style="list-style-type: none"> <li>• Nasopharyngeal Specimens Respiratory Specimens</li> <li>• Herpes</li> </ul>	<b>15-17</b>
<b>Microbiology</b> <ul style="list-style-type: none"> <li>• Urine Collection</li> <li>• MRSA</li> </ul>	<b>17-18</b>
<b>Microbiology (Cultures)</b> <ul style="list-style-type: none"> <li>• Aerobic Culture</li> <li>• Group B Step</li> <li>• Wet Preps</li> </ul>	<b>18-20</b>
<b>Mycoplasma/Urea</b>	<b>20</b>
<b>Anatomic Pathology</b> <ul style="list-style-type: none"> <li>• Tissue Specimens</li> <li>• Biopsies</li> <li>• Fluids for Cytology</li> </ul>	<b>20-23</b>
<b>Cytogenetics</b> <ul style="list-style-type: none"> <li>• Peripheral Blood Specimens for Chromosomes and/or FISH Analysis</li> <li>• Tissue (Products of Conception) for Chromosome Analysis</li> <li>• Urine Specimens for UroVysion FISH Analysis</li> </ul>	<b>23-25</b>
<b>Cytopathology</b> <ul style="list-style-type: none"> <li>• HPV</li> </ul>	<b>25-28</b>

## CLIENT INSTRUCTIONS FOR SPECIMEN PROCESSING

Instructions below describes best practices for the collection and packaging of patient samples to help maintain specimen integrity.

### LABORATORY REQUEST FORMS/REGISTRATION

#### Laboratory Request/Requisition Forms:

Laboratory Request Forms for General Laboratory, CDL (PAP), Cytogenetics, and Pathology are available on the Woman's Website at:

<https://www.womans.org/our-services/laboratory-services> - PROVIDER RESOURCE

#### Registration/Admitting:

In order for Woman's Hospital to bill the patient or a third-party insurer, we ask that the Patient Information and Billing information sections of the test requisition be completed and/or a copy of the patient's insurance card, front and back, be attached to the requisition.

Specimens received by the laboratory must be accompanied by a completed requisition that includes the following information:

- Patient's Full, Legal Name (no nicknames please)
- Patient Address
- Patient's Date of Birth
- Patient's Gender
- Insured's Name
- Insured's Address
- Insured's Policy Number (usually insured's social security number)
- Insured's Employer
- Insured's Group Number
- Date and Time of Specimen collection
- Physician
- Physician Signature

#### Physician/Authorized Person

Laboratory tests at Woman's Hospital can only be performed by licensed physicians or authorized personnel such as a nurse practitioner.

#### ABN (Advanced Beneficiary Notification Form)

Many insurance companies are now requiring pre-authorization for genetic and molecular testing. Payers will only cover testing when used for certain diagnostic conditions. The payer may not cover the testing if it is done as a screening. Woman's Hospital encourages all clients to check with the patient's insurance before ordering genetic and molecular tests, to determine if pre-authorization is needed.

**Woman's Tax ID number: 72-0652905**

**Woman's Laboratory NPI Number: 1912943184**

**Woman's Laboratory BLUE CROSS ONLY NPI Number is: 1992204218**

## Diagnosis Code

We ask that an appropriate ICD-9 diagnosis code be supplied by the ordering physician.

## Rejection Criteria:

Deficiencies in patient paperwork and/or specimens, that result in specimen rejection, are a cause of inconvenience and discomfort to patients. Examples of rejection criteria include the following:

- Incomplete patient demographic information
- Incomplete billing information
- Insurance deems testing must be performed at a different laboratory
- No specimen collection time/date
- Unclear orders
- Missing specimen source
- Inappropriate collection container/tube
- Patient sample(s) collection date and/or time exceeds the time period for testing
- Missing Physician Signature

## DROP OFF INSTRUCTIONS

### Parking Drop Off:

Woman's Hospital Lab is located in the Support Service Building located behind the Physician Office Building. The SSB building is 3 floors high and is designated by a small sign in front of it. You can park in the designated LAB parking spot in the visitor's section at the front of the building. If there is none available you can park in front of the building. Please let security know that you have arrived to drop off specimens for the laboratory. Call the laboratory at 924-8271 or 924-8274 and to notify laboratory that you have a specimen drop off. Laboratory personnel will come down and retrieve patient samples. NOTE: Specimen delivery cutoff time is 16:00pm.

### Support Service Drop Off:

Woman's Hospital Lab is located in the Support Service Building located behind the Physician Office Building. The SSB building is 3 floors high and is designated by a small sign in front of it. You can park in the designated LAB parking spot in the visitor's section at the front of the building. If there is none available you can park in front of the building.

Once inside the SSB building you will see a bank of elevators to your left. Take the elevators to the second floor. Once you step out of the elevator you see the Human Resource office on the left-hand side. On the right hand-side you will see a double set of doors with the sign Pathology/Laboratory. Enter through those doors and proceed down the hallway to the core of the laboratory. At that time a laboratory employee can assist you with the patient sample drop off procedure.

## SPECIMENS DRAWN OFF CAMPUS

### SPECIMEN HANDLING

#### Labeling

To avoid any adverse errors made due to improperly labeled specimen, proper labeling criteria should be met at all times. All patient specimens should be labeled legibly with the following information:

- Patient's name (last name, first name)
- Patient's Date of Birth
- Date and time of collection

#### Specimen Handling / Storage

Most laboratory tests are performed on anticoagulated plasma, serum, or whole blood.

Below, lists the most frequently used tubes in the laboratory and their specimen requirements.

- *Green top tube*  
This tube contains lithium heparin used for the collection of heparinized plasma for chemistry tests or whole blood for special tests. After tube has been filled with blood, immediately invert the tube 8-10 times in order to prevent coagulation.
- *Red top tube (plain)*  
This tube is a plain vacutainer containing no anticoagulant used for collection of serum for selected chemistry tests, especially drug levels. Let stand for 30 minutes before centrifugation.
- *Serum Separator tube (SST)*  
This tube contains a clot activator and serum gel separator used for various laboratory tests. Invert the tube 5 times by gentle inversion to activate the clotting and let stand for 30 minutes before centrifugation.
- *Purple top tube*  
This tube contains EDTA as an anticoagulant used for most hematological procedures. After tube has been filled with blood, immediately invert the tube 8-10 times in order to prevent coagulation. Purple top tubes for CBCs may be kept at room temperature for up to 8 hours.  
**NOTE:** After 8 hours, refrigerate until delivery. Stable 36 hours refrigerated.
- *Blue top tube*  
This tube contains sodium citrate as an anticoagulant used for the collection of blood for coagulation studies. After tube has been filled with blood, immediately invert the tube 3-4 times in order to activate the anticoagulant.  
**NOTE:** It is imperative that the tube be properly filled to the fill line. The ratio of blood to anticoagulant is critical for valid coagulation study results. If using a butterfly, it is important to waste a tube of blood before drawing the blue top tube to avoid a short draw.

#### **ADDITIONAL INSTRUCTIONS:**

- **Do not decan specimens from one type of container into another**  
Specimens must be submitted to the laboratory in the container used originally for collection

- **Avoid Hemolysis**

Grossly or even moderately hemolyzed blood specimens may not be acceptable for testing. Erythrocytes contain certain analytes (D, AST, K, ALT) in concentration many times high than in plasma. When red cells are hemolyzed, there is a release of these analytes and dilution of plasma, resulting in erroneous laboratory values. Also, hemolysis may interfere in analytical methodologies. Hemolyzed serum or plasma is pink or red, rather than the normal clear straw or pale-yellow color.

- **Avoid Lipemia**

Cloudy or milky serum, sometimes due to the patient’s diet, may affect patient testing.

**Order of the Draw**

To ensure that blood specimens are collected in the proper order as established by CLSI to avoid cross-contamination of anticoagulants or bacterial contamination of blood cultures.

**Order of the Draw – vacuum-assisted and syringe draw**

1. Sterile – Blood culture tube/bottle
2. Citrate/Light blue top tube (PT, PTT)
3. Serum/Non-additive tube (red, gold, or tiger top tubes)
4. Heparin/Green top tube
5. EDTA/Lavender top tube
6. Oxalate/Gray top (fluoride)

**Order of the Draw – micro collection**

1. EDTA (lavender)
2. Other additive tubes
3. Serum tubes

**Temperature Requirements**

Unless otherwise noted, specimens should be refrigerated before and during transport to the laboratory.

Storage Method	Centigrade (Celsius) Temperature Range
Refrigerated	2-8°C
Frozen	Less than or equal to -20°C
Room/Ambient	20-25°C

**Outdoor Specimen Lockboxes**

Specimen lockboxes, that are placed outdoors, please add a frozen gel pack to the lockbox during warmer weather. This will help provide a moderate temperature inside the lockbox until specimens are collected by the PGL courier service.

Gel packs should be prepared for use by placing them in a freezer for four hours or longer. They should be frozen solid prior to being placed in the lockbox, and they should be frozen solid before each use, even though they may be used with specimens that are not frozen.

### Specimen Transport

All specimens sent to the laboratory must be properly packaged. *Under no circumstances should contaminated needles or other sharp, contaminated objects be transported to the laboratory.*

- Laboratory specimens must be placed in a bio-hazard bag for transport to the laboratory.
- Liquids must be in a leak-proof container and sealed in a secondary, zip-lock biohazard bag to prevent leakage should the primary container fail.

**NOTE: Do not place multiple patient specimens in one bag.**

- Wrap any breakable tubes individual in bubble wrap.

Place requisition form in the outside pocket of the bag. If there is no pocket, place them inside the bag with the specimen.

### Specimen Rejection

Laboratory results depend on the quality and integrity of the specimen collected. Woman's Hospital will not perform testing on patient samples if the specimen received is:

1. Expired Supplies
2. Unlabeled
3. Mislabeled Specimens  
Specimens are considered mislabeled when there is a mismatch between the person-specific identifiers on the specimen and the information accompanying the specimen. This information might include a computer system, requisition form, or additional paperwork.
4. Hemolyzed
5. Insufficient/QNS Sample
6. Clotted Sample
7. Improperly Handled (Example: improper storage & temperature requirements, leakage and/or potential contamination of specimens)

NOTE: If the patient specimen is considered irreplaceable, the laboratory will consult with a pathologist to approve patient testing. The specimen will be run with disclaimer documentation.

## CHEMISTRY

Chemistry is the area of clinical pathology that is generally concerned with analysis of patient's blood, urine and other body fluids to evaluate the health of patient's electrolytes, sugar, lipids, prostate, thyroid, among hundreds of other tests. Examples of tests performed:

- Glucose testing – Glucose/Insulin (2hr GTTINS), Glucose Tolerance testing, Glycosylated Hgb A1C
- Basic Chemistry testing – Bilirubin testing, Iron Protein, Sodium
- Profile Panels- CMP, BMP, LIVER, HELLP Panel, LIPID Panel, General Health Panel, Menopause
- Thyroid Testing- T3 Free, T3 Uptake, T4 Free, T4 Total, T7, TSH
- Immunoassay Chemistry- HCG Titer, HIV, Pregnancy test

- Urine Chemistry- 24 hour or random Urine Creatinine and Protein
- Oncology- CA-125, CA15-3, CA27.29, CEA

## **TIMED SPECIMENS**

A timed specimen is a biologic specimen obtained at a certain time of day or at a certain interval after another event. TIME and proper usage of it can impact test accuracy and quality. There are many important clinical tests, like glucose tolerance testing, drug therapy, etc. where intervals of time are vital to maintain and ensuring accurate results.

### **Glucose Tolerance Testing**

Screening patients for diabetes requires the proper administration of glucose and correct timing of collection of blood samples. Make sure that each tube is labeled with patient name, patient date of birth, date and time of draw, and hour of draw (Example: Fasting, ½hr, 1hr, 2hr, 3hr).

**NOTE: It is imperative to centrifuge SST tubes for glucose testing. If that can not be accomplished, you will have to refer patients to Woman’s Outpatient Laboratory for collection services.**

### **Patient Instructions:**

We encourage patients to eat a healthy protein-enriched meal the night before they fast. They should have nothing to eat or drink (other than water) for 8-10 hours before the meal. The morning of the test, they can brush their teeth, or take medications with small sips of water.

### **Specimen Drawing Instructions:**

- All drawing times begin from time of Glucola completed
- Patient should be instructed not to eat, drink smoke or chew gum/mints during testing period.
- Stay on timed draw schedule. If a patient is more than 10 minutes late for any time blood draws, comment on patient orders. **IMPORTANT:** If a patient misses or is late for a blood draw, stay on the initial schedule for any remaining draws.

### **Glucose Testing Chart:**

If fasting urine dipstick is positive you will have to draw a fasting glucose ONLY. The specimen is then sent to the laboratory, to determine if the patient is eligible to proceed, with glucose tolerance testing.

NOTE: Patient must drink Glucola within 5 minutes.

TEST	FASTING	URINCE COLLECTION	COLLECTION TUBES	GLUCOLA AMOUNT
<b>Fasting Glucose</b>	Yes	None	SST Yellow Top	None
<b>1 Hour</b>	No	Yes	SST Yellow Top	50 Grams
<b>3 Hour Tolerance - <i>Pregnant</i></b> Fasting, 1hr, 2hr, 3hr	Yes	Yes	SST Yellow Top	100 Grams
<b>Insulin Resistance Panel (GTTINS)- <i>2hr Non- Pregnant</i></b> Fasting, ½hr, 1hr, 2hr	Yes	Yes	SST Yellow Top	75 Grams



## **NBS – Newborn Screening Card**

Newborn screening determines a baby's risk for more than 50 inherited disorders through blood spot samples.



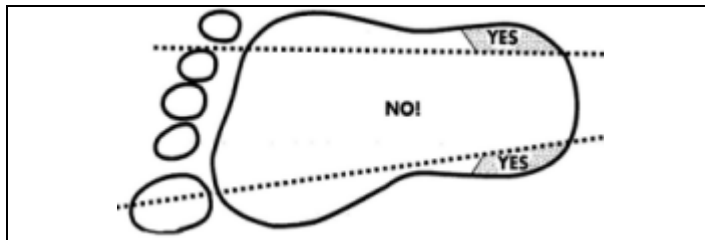
**Collection Criteria:** The blood must fill all 5 printed circles and is applied evenly, free of layering and clots. The specimen must be dried in a horizontal position for at least three hours, away from direct contact with surfaces, heat, and sunlight.

### **Unacceptable Specimens:**

- Possible QNS sample if not enough specimen in circles or blood is not soaked through the filter paper.
- Layering on the card can lead to falsely elevated levels
- Contamination of surface of filter paper circle
- Blood applied improperly with capillary tube or by other means
- Specimen not properly dried before mailing

### **Blood Collection Protocol:**

1. Cleanse infant's heel per unit protocol.
2. Allow heel to air dry
3. Using a sterile lancet, or heel incision device, and wearing gloves, perform the puncture on the plantar surface of the heel (as indicated in the drawing below). the puncture should be made to a depth of less than 2.0 mm.



4. Gently wipe off the first drop of blood with sterile gauze or cotton ball (the initial drop contains tissue fluids that may dilute the sample).
5. Wait for formation of large blood droplet; apply gently pressure with thumb and ease intermittently as drops of blood form.
6. On the Newborn Screen Card:
  - Gently touch the printed side of the filter paper card to the blood drop and, in one step, allow a sufficient quantity of blood to soak through and completely fill a pre-printed circle.
  - Do not press the filter paper against the puncture site on the heel.
  - Fill all required blood circles on the card with a SINGLE application of blood.
  - Do not layer blood drops to fill the circle.

- The filter paper must not touch the baby's skin puncture site.
  - Observe both sides of the filter paper card to ensure that blood uniformly penetrated and saturated the card. Spotting should be done only on the printed side of the card.
  - A circle not filled entirely to the edges using one large drop of blood is preferable to using more than one drop in an attempt to fill, which will result in layering.
7. Label specimen appropriately
  8. Place Newborn Screen Card in a biohazard bag and send to the Lab

**Transportation and Storage:** the specimen should be sent to the appropriate location no more than 24 hours after collection.

### **FFN – Fetal Fibronectin**

*Test is used to rule out preterm labor.*

**TO AVOID A FALSE-POSITIVE RESULT, THE TEST WILL BE DONE BEFORE ANY PELVIC EXAM OR TRANSVAGINAL ULTRASOUND.**



**Collection Device:** Fetal Fibronectin Test

**Test Collected:** Fetal Fibronectin Test

**Source:** cervicovaginal

#### **Collection Procedure:**

1. Wash hands thoroughly with soap and water. Dry completely.
2. Rotate sterile swab across posterior fornix for 10 seconds.
3. Remove swab and place in collection medium. \*Subsequent attempts to saturate the swab may invalidate the test.
4. Break shaft of swab at score line before securing cap on tube.
5. Label container with patient's full name, date of birth, date and time of collection.

**Transportation and Storage:** Transport to lab STAT at 2°-25°.

### **BLOOD BANK**

Inadequate or incorrect identification of patients is a common cause of serious complications associated with blood typing. It is impossible to overemphasize the importance of proper patient identification. All Blood Bank tubes MUST be labeled with patient's full name, date of birth, date and time of collection.

**NOTE: Blood specimens will not be accepted in Blood Bank if there is any doubt about the accuracy of patient identification.**

Specimen Volume:

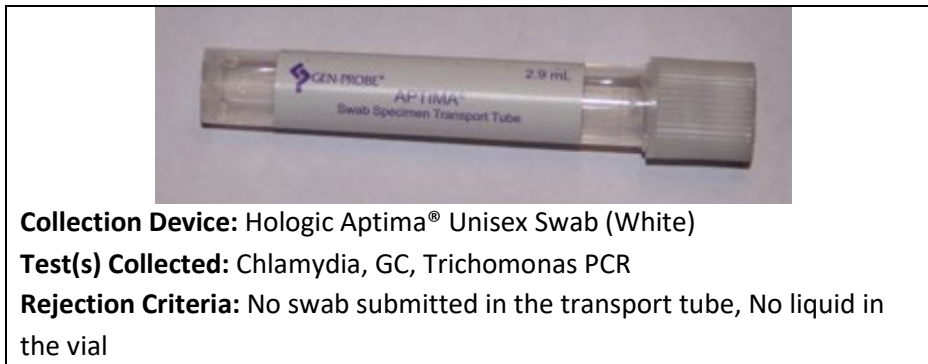
- A 5 ml purple top tube and 5 ml red top tube is preferred specimen for routine tests: ABO and Rh type, prenatal work, etc...
- A minimum sample for antibody id is 5-ml purple top tube in addition to two 7-ml red top tube

**Transportation and Storage:** within 24-hours of collection, stored at room temperature.

## MOLECULAR BIOLOGY

### STDNA TESTING (Chlamydia trachomatis, Neisseria gonorrhoeae, Trichomonas vaginalis)

#### Endocervical



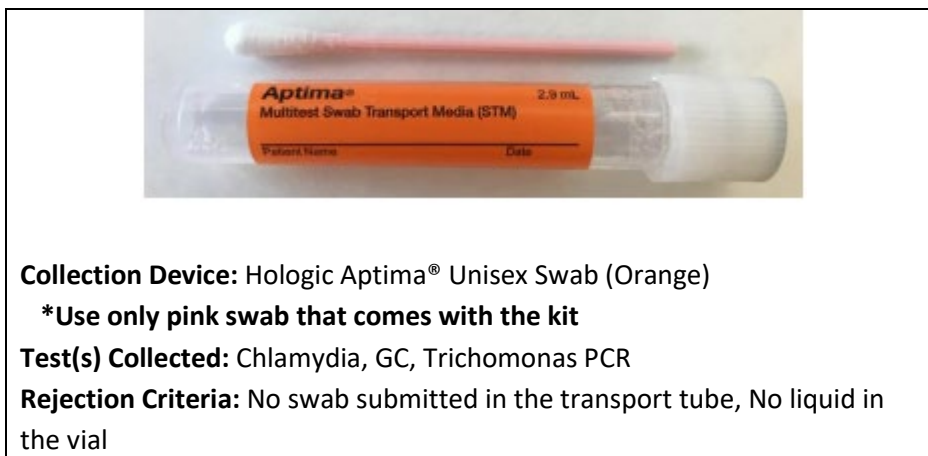
1. Partially peel open the package and remove the swab.  
*Do not touch the soft tip or lay the swab down.*
2. Hold the swab in your hand, placing your thumb and forefinger in the middle of the swab shaft covering the score line (black line).  
*Do not hold the swab shaft below the score line (black line) during collection.*
3. Remove excess mucus from cervical and surrounding mucosa using the cleaning (white) swab.  
*Discard this swab.*
4. Carefully insert the collection swab (blue shaft swab) into the endocervical canal. Rotate the swab clockwise for 10 to 30 seconds in the endocervical canal.
5. Withdraw the swab carefully, avoiding any contact with the vaginal mucosa.
6. While holding the swab in the same hand, unscrew the cap from the tube.

*\*Do not spill the contents of the tube. If the contents of the transport tube are spilled at any time during the collection procedure, use a new Aptima® Kit. Failure to use a new kit may invalidate the test results.*

7. Immediately place the swab into the transport tube so that the score line (black line) is at the top of the tube.
8. Carefully break the swab shaft at the score line (black line) against the side of the tube.
9. Immediately discard the top portion of the swab shaft.
10. Tightly screw the cap onto the tube.

**Transportation and Storage:** Specimens collected in the Multitest Collection Vials are good 2-30°C for up to 60 days from collection.

## Vaginal



1. Partially peel open the swab package. Remove the swab.  
*Do not touch the soft tip or lay the swab down.*
2. Hold the swab in your hand, placing your thumb and forefinger in the middle of the swab shaft covering the score line (black line). *Do not hold the swab shaft below the score line (black line).*
3. Carefully insert the swab into your vagina about 2 inches (5 cm) inside the opening of the vagina (as shown in Diagram 3) 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.
4. While holding the swab in the same hand, unscrew the cap from the tube.  
*\*Do not spill the contents of the tube. If the contents of the transport tube are spilled at any time during the collection procedure, use a new Aptima® Kit. Failure to use a new kit may invalidate the test results.*

5. Immediately place the swab into the transport tube so that the score line (black line) is at the top of the tube.
6. Carefully break the swab shaft at the score line (black line) against the side of the tube.
7. Immediately discard the top portion of the swab shaft.
8. Tightly screw the cap onto the tube as shown.

**Transportation and Storage:** Specimens collected in the Multitest Collection Vials are good 2-30°C for up to 60 days from collection.

## Urine (Male and Female specimens accepted)

**Collection Device:** Tightly capped collection cup free of any preservatives  
**Test(s) Collected:** Chlamydia, GC, Trichomonas PCR  
**Rejection Criteria:** Leaking container, Cath Urine

### Collection Procedure:

**NOTE:** Patient should not have urinated for at least an hour prior to specimen collection. Instruct patient to provide a first-catch, initial-stream specimen.

- Direct patient to provide 20-30 mls of a voided or clean catch urine. Collection of larger volumes of urine may result in reduced sensitivity.

**Transportation and Storage:** Transport in primary collection container at 2-30°C. Good for 24 hours from collection.

## Rectal (Male and Female specimens accepted)



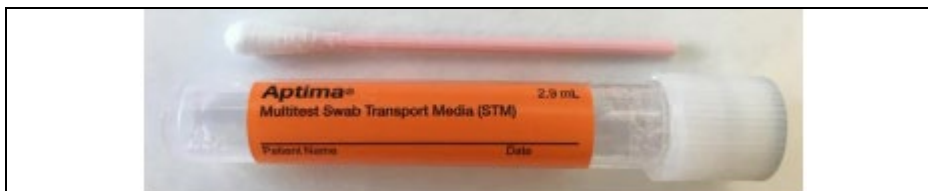
**Collection Device:** Hologic Aptima® Unisex Swab (Orange)  
**\*Use only pink swab that comes with the kit**  
**Test(s) Collected:** Chlamydia and GC testing ONLY  
**Rejection Criteria:** No swab submitted in the transport tube, No liquid in the vial

### Collection Procedure:

1. Partially peel open the package and remove the swab.  
*Do not touch the soft tip or lay the swab down.*
2. Hold the swab in your hand, placing your thumb and forefinger in the middle of the swab shaft covering the score line (black line).  
*Do not hold the swab shaft below the score line (black line) during collection.*
3. Carefully insert the swab in the rectum about 1-2 inches past the anal margin and gently rotate the swab for 5-10 seconds.
4. While holding the swab in the same hand, unscrew the cap from the tube.  
*\*Do not spill the contents of the tube. If the contents of the transport tube are spilled at any time during the collection procedure, use a new Aptima® Kit. Failure to use a new kit may invalidate the test results.*
5. Immediately place the swab into the transport tube so that the score line (black line) is at the top of the tube.
6. Carefully break the swab shaft at the score line (black line) against the side of the tube.
7. Immediately discard the top portion of the swab shaft.
8. Tightly screw the cap onto the tube.

**Transportation and Storage:** Specimens collected in the Multitest Collection Vials are good 2-30°C for up to 60 days from collection.

## Throat (Male and Female specimens accepted)



**Collection Device:** Hologic Aptima® Unisex Swab (Orange)

**\*Use only pink swab that comes with the kit**

**Test(s) Collected:** Chlamydia and GC testing ONLY

**Rejection Criteria:** No swab submitted in the transport tube, No liquid in the vial

### Collection Procedure:

1. Partially peel open the package and remove the swab.  
*Do not touch the soft tip or lay the swab down.*
2. Hold the swab in your hand, placing your thumb and forefinger in the middle of the swab shaft covering the score line (black line).

*Do not hold the swab shaft below the score line (black line) during collection.*

3. Carefully insert the swab into the throat ensuring contact with bilateral tonsils (if present) and the posterior pharyngeal wall, then withdraw the swab without touching the inside of the cheeks or tongue.
4. While holding the swab in the same hand, unscrew the cap from the tube.  
*\*Do not spill the contents of the tube. If the contents of the transport tube are spilled at any time during the collection procedure, use a new Aptima® Kit. Failure to use a new kit may invalidate the test results.*
5. Immediately place the swab into the transport tube so that the score line (black line) is at the top of the tube.
6. Carefully break the swab shaft at the score line (black line) against the side of the tube.
7. Immediately discard the top portion of the swab shaft.
8. Tightly screw the cap onto the tube.

**Transportation and Storage:** Specimens collected in the Multitest Collection Vials are good 2-30°C for up to 60 days from collection.

## VIROLOGY

### **Nasopharyngeal Specimens:**

#### Nasopharyngeal Swab Collection

#### Respiratory Panel (including coronavirus SARS-CoV2 testing)

Collection Supplies- Swabs should be collected using polyester, rayon or nylon tipped swabs.

- Mini-flocked swab  
*\*Cotton-tipped or calcium alginate swabs are not acceptable. PCR assays may be inhibited by residues present in these materials.*
- Universal Transport Medium

#### Nasopharyngeal Culture

#### Collection Supplies

- Mini-flocked swab  
NOTE: If gram stain is desired, please collect 2 culturettes.

#### **Collection Procedure:**

1. Insert dry swab through one nostril straight back (not upwards), along the floor of the nasal passage until reaching the posterior wall of the nasopharynx. The distance from the nose to the ear gives an estimate of the distance the swab should be inserted.
2. Rotate swab gently on nasopharyngeal membrane 5-6 times and leave in place for up to 10-15 seconds.

3. Immediately place swab into the transport container.
4. Label container with patient's full name, date of birth, date and time of collection and INDICATE SOURCE.

#### Transportation and Storage:

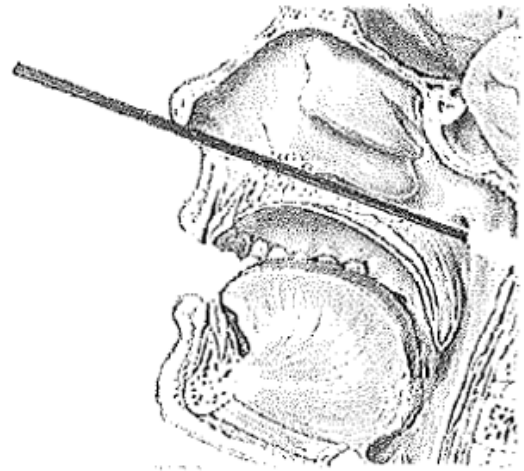
- Respiratory Panel testing: must be received in laboratory within 48 hours of collection, refrigerate at 2 to 8 degrees C.
- Nasopharyngeal Culture: is acceptable for 24-hours after collection, stored at room temperature.

#### Tip:

The patient will usually gag or show other signs of discomfort. Instruct patients to sit with their head against a wall to reduce the tendency of pulling away during this procedure.

#### Note:

Do not force swab. If resistance is encountered during swab insertion, remove it and attempt insertion in the opposite nostril.



#### HERPES Specimens:

Specimen is best collected within the first three days after appearance of lesion but no more than seven days.

Patient sample should be collected as aseptically as possible using sterile flocked, Dacron, or rayon tipped swabs with plastic or aluminum shafts. DO NOT use cotton, calcium alginate or wooden-shafted swabs.

#### Collection device acceptable for patient testing:

- Mini-flocked swab
- M4-RT liquid transport medium



**Collection Device:** M4-RT liquid transport medium (Substitute: Universal Transport Media or equivalent transport media).

**Test(s) Collected:** for viral specimens such as Herpes PCR, viral culture, Chlamydia culture



**Source example:** Eye, nasal, lesion, vulva, rectum, tissue

**Rejection Criteria:** Patient sample will be rejected if there is no swab in transport vial, leaking vial, or there is no liquid in the transport vial.

### Collection Procedure:

**Lesion:** Wipe vesicle with saline. Disrupt vesicle, collect fluid with swab, then collect cells from base of the lesion.

**Mucosal Swab:** Swab back and forth across affected surface.

**Conjunctival Swab:** Swab lower conjunctiva with flexible fine shafted swab, premoistened with sterile saline.

**Nasopharyngeal Swab:** Insert flexible fine-shafted swab through nostril into nasopharynx and rotate the swab gently a few times.

1. Remove cap from the transport media tube and insert swab aseptically into transport tube.
2. Break swab shaft.
3. *Replace cap so that swab will not interfere with closure and allow tube to leak.*
4. Label container with patient's full name, date of birth, date and time of collection and INDICATE SOURCE.

**Transportation and Storage:** Must be received in lab within 48 hours of collection, refrigerated at 2°-8°.

## MICROBIOLOGY

Proper specimen collection is a must for the recovery of pathogenic organisms. A poorly collected specimen can lead to failure to isolate the pathogenic organism, which could affect treatment for recovery.

The ideal circumstance is to have the specimen for microbiology collected prior to antimicrobial therapy. This may not always be possible, so rapid handling of the specimen can lessen the effect of the therapy.

### Urine

For culture and routine urinalysis, please follow the clean catch midstream instructions listed below:

1. Wash hands thoroughly with soap and water. Dry completely.
2. Open towelettes.
3. Spread labia (folds of skin) apart with one hand and wipe **front to back** with the first towelette. **Repeat** with second and third towelettes.
4. Continue holding the labia part. As you start to urinate, allow a small amount of urine to fall into the toilet first. (This clears the urethra of contaminants.) **Do not touch inside of cup.** Container should not touch the genital area.

5. After the urine stream is well established, urinate into the cup. Once urine fills cup (try to fill cup to  $\frac{3}{4}$  full), remove cup from urine stream.
6. Pass remaining urine into toilet. Discard towelettes into trashcan, not toilet.
7. Screw lid onto cup tightly, trying not to touch inside of lid or cup. Wipe/dry outside of cup with paper towel.
8. Label container with patient's full name, date of birth, date and time of collection.

**Transportation and Storage:** Keep refrigerated until it can be transported to the laboratory.

## **MRSA**

Collection device acceptable for patient testing: COPAN Duo-Swab



**Collection Device:** COPAN Duo-swab

**Test Collected:** MRSA PCR

**Source:** anterior nares is primary source to screen

### **Collection Procedure:**

1. Peel apart package.
2. Aseptically, remove swab holding the plastic cap.
3. Ask patient to tilt her/his head back.
4. Insert swabs approximately 1-2 cm into each nostril.
5. Rotate firmly against nasal mucosa several times for at least 3 seconds. NOTE: Apply slight pressure with a finger on the outside of the nose to help assure good contact between the swab and the inside of the nose.
6. Using same swabs, repeat for second nostril, trying not to touch anything but the inside of the nose.
7. Remove the plastic transport tube. Twist off the tube cap and discard it. Place the swabs into the plastic transport tube. The swabs should go all the way into the tube until they rest on top of the sponge at the bottom of the tube. NOTE: Make sure the red cap is on tightly; the swabs should stay attached to the red cap at all times.
8. Label container with patient's full name, date of birth, date and time of collection.

**Transportation and Storage:** Maintain at room temperature. Specimen should be processed within 24hrs; will be rejected if >24hr old.

## **MICROBIOLOGY CULTURE SAMPLES**

Collection device acceptable for patient testing:



**Collection Device:** EZII Culturette

**Test(s) Collected:** aerobic & anaerobic bacterial cultures

### **Aerobic Culture:**

Typical sources are throat, ear, aerobic wound, cervical or genital specimens for routine bacterial culture, yeast screens, wet mounts.

#### **Collection procedure:**

1. Peel apart package.
2. Aseptically, remove swab holding the plastic cap.
3. Collect specimen on swab.
4. Replace the swab into the transport container.
5. Label container with patient's full name, date of birth, date and time of collection and INDICATE SOURCE.

**Transportation and Storage:** Maintain at room temperature. Specimen should be processed within 24hrs; will be rejected if >24hr old.

### **Group B Strep**

For the detection of Group B Streptococci in women at 35-37 weeks of gestation.

**NOTE:** Cervical, perianal, perirectal or perineal specimen are NOT acceptable, and a speculum should NOT be used for culture collections. *It is not necessary to submit anal and vaginal swabs separately.*

#### **Collection procedure:**

1. Wipe away excessive amounts of secretion or discharge.
2. Remove both marked swabs from the transport container.
3. Carefully insert both marked swabs in the patient's vagina. Rotate the swabs three times to ensure uniform sample on both swabs.
4. Using the same marked swabs, carefully insert both swabs approximately 2.5 cm. beyond the anal sphincter, and gently rotate to sample anal crypts.
5. Place both marked swabs in the transport container.

6. Label container with patient's full name, date of birth, date and time of collection and INDICATE SOURCE.

**Transportation and Storage:** Maintain at room temperature or refrigerated. Specimen should be processed within 12hrs; will be rejected if >24hr old.

### **Wet Mounts**

Vaginal wet mounts will be examined for the presence of yeast, clue cells, Trichomonas, and WBCs.

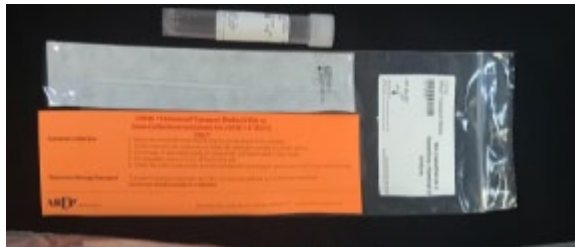
1. Collect vaginal secretions in routine transport swabs.
2. Label container with patient's full name, date of birth, date and time of collection and INDICATE SOURCE.

**Transportation and Storage:** Transport at room temperature within 36 hours.

### **Mycoplasma / Ureaplasma**

Collection device acceptable for patient testing: UTM WITH FLOCKED SWAB

\*\* Call laboratory for supplies\*\*



#### **Collection procedure:**

- Place swab or 0.5mL of fluid (Min 0.3 mL) in Mycoplasma/Ureaplasma.
- Label container with patient's full name, date of birth, date and time of collection and INDICATE SOURCE.

**Transportation and Storage:** Must be received in lab, ASAP, refrigerated at 2 to 8 degrees C, same day as collected.

## **ANATOMIC PATHOLOGY**

Woman's Hospital offers a full range of AP services in the sections of histology, cytopathology, dermatopathology, surgical pathology, and immunohistochemistry.

If you wish to consult with a Pathologist or for more information, please call the Pathology Department at 225-924-8368.

## Anatomic Pathology Forms

Request form for Anatomic Pathology are available on the Woman's Website at:  
<https://www.womans.org/our-services/laboratory-services> - PROVIDER RESOURCE

### Send Us a Case

[Second Opinion/Pathology Outside Slide Consultation](#)

FORM WH7020-3639

[Pathology Request Form/Histology Tissue for Examination](#)

FORM WH7020-0430

## Specimen Handling and Transportation

All patient specimens should be labeled with the patient's name, physician, specimen source, and date of collection. Specimens should be accompanied by a Pathology Request Form/Tissue for Examination with all patient information completed including HISTORY.

### **TISSUE SPECIMENS:**

Tissues not requiring special handling should be placed in 10-percent buffered formalin. Use adequately sized containers to allow formalin: specimen ratio of at least 5:1 whenever possible. Please ensure that the container is closed securely.

*Note: A 10% Formalin caution sticker should be placed on the container.*

## **Colposcopy**

Colposcopy is done to detect cervical cancer and changes that may lead to cervical cancer.

### Patient preparation

Patient preparation before the procedure. Before the exam please ask the patient to do the following:

- Do not douche
- Do not place any products into the vagina
- Do not have sex for 24 hours before the exam

NOTE: This test should not be done during a heavy period.

## **Products of Conception**

(Stillborn, Fetus, Cured Products of Conception, Placentas)

The general purpose of these evaluations is to establish the mechanism of fetal loss and to determine whether or not there are implications for future reproduction or immediate implications for the care of the post-partum patient.

## **Fetal Chromosome Studies**

*Specimens should be submitted fresh in a sterile container **without fixative**. Refrigerate at 4°C (Keep cold during transport). Indicate on the specimen container as well as the Pathology Request Form/Histology Tissue Examination "Chromosome Analysis".*

**BIOPSIES:**

Biopsy specimens should be placed in containers with 10% formalin solution as soon as possible after collection.

Specimen Type	Collection and Transport
<b>Breast</b>	Place specimen in 10% buffered formalin within one hour of the procedure.
<b>Lymph Nodes</b>	Transport on a wet saline gauze in a sterile container. Deliver STAT to laboratory.
<b>Tumor</b>	Fresh specimen in sterile container. Deliver STAT to laboratory.
<b>Skin</b>	Fresh specimen. Keep moist on Telfa pad. Do not immerse in saline or wrap in soaking gauze. Deliver STAT to laboratory.

**FLUIDS FOR CYTOLOGY:**

Fluids for Cytology should be brought to the histology laboratory as soon as possible after the specimen is collected. Should there be a delay in delivery, the patient specimen needs to be refrigerated. No additives such as heparin, EDTA, etc. are desirable. Collect in appropriate size sterile container.

Please note on the [Pathology Request Form/Histology Tissue for Examination Form](#) the amount of fluid sent and the color of the fluid.

Minimum Non-Gyn Cytology Specimen Quantities:	
<b>Body fluids</b>	10 mL
<b>Pleural fluid</b>	50 - 60 mL
<b>Peritoneal fluids</b>	5 - 20 mL
<b>Washings</b>	7 mL
<b>Urine for Cytology ONLY</b>	15 mL

**Nipple Discharge**



**Supplies:**

- Frosted glass slide(s)
- 95% Ethanol Alcohol containers

**Call Histology at 924-8282 for supplies.**

### **Specimen Collection:**

1. Label slide with patient information.
2. Have 95% ethyl alcohol vial open and ready on the counter.
3. Gently express on the nipple and subareolar area of any secretions lying in the collecting ducts. If no secretion appears at the nipple with gentle compression, do not manipulate further.
4. Allow a “pea-sized” drop of fluid to collect upon the nipple tip.
5. Immobilize the breast. Using the nipple, smear the material across a glass slide.
6. Immediately drop the slide into the bottle/vial of 95% ethyl alcohol. Quickly smear the material across the slide and drop the slide into the liquid fixative.
7. Make as many smears as the amount of material allows.

**Rejection:** No patient labeling, specimens not properly preserved, and slides broken beyond repair on receipt.

### **Results**

The turnaround time for pathology is 48 hours after receipt in lab (two working days). Complex cases requiring extensive dissection, decalcification, special stains, and consultations will require additional time.

## **CYTOGENETICS**

The Cytogenetics Laboratory provides comprehensive testing services including: chromosome analysis for prenatal, peripheral blood samples and tissue samples

If you have questions or need more information, please call the Cytogenetics Department at 225-924-8516 or 225-924-8474.

### **INSURANCE INFORMATION/PRIOR AUTHORIZATION**

Plan prior authorization is required for all chromosomal genetic testing.

### **Cytogenetics Request Form**

**Cytogenetics Request form for cytogenetic analysis, and fluorescence in situ hybridization (FISH) tests are available on the Woman’s Website at: <https://www.womans.org/our-services/laboratory-services> - PROVIDER RESOURCE**

*[Cytogenetics Request Form](#)*

**FORM WH7020-2020**

### **Peripheral Blood Specimens for Chromosomes and/or FISH Analysis:**

**Call Cytogenetics personnel to interview patient during regular hours. If after hours, cytogenetics personnel will contact clinician’s office for pertinent history.**

**Specimen Collection Requirements:**

Sodium heparin tube (Dark green top)

Adults: 3ml minimum

Babies: 2ml preferred

**Sterile technique is essential:**

- Vacutainer method may be employed; use a sodium heparin vacutainer which has a sterile interior.
- A plastic syringe without heparin may be employed. The contents are to be added to the sterile sodium heparin vacutainer immediately; remove the cap of vacutainer and the needle from the syringe; enter the contents directly into the vacutainer.
- Processing: Invert tube immediately upon completion of blood collection to prevent formation of clots.

**Transportation and Storage:** Specimens for chromosome and FISH studies must be set up within 24 hours. Specimen can be retained at room temperature.

**Rejection Criteria:**

Peripheral blood samples for cytogenetic analysis that are more than 4 days old, clotted, or collected in the wrong specimen collection tube, frozen or on ice, may be rejected. Specimens from patients recently transfused (<1 week) with whole blood are discouraged.

**Tissue (Products of Conception) for Chromosome Analysis:**

**Chromosome analysis performed on products of conception (POC) can provide insight into why a pregnancy loss may have occurred. In cases where POC chromosome analysis has shown a structural rearrangement of chromosomes, parental chromosome analysis follow-up studies are recommended.**

**Specimen Collection Requirements:**

Products of conception. Minimal specimen requirements are 1-2 grams of tissue.

**Specimen of Choice:** small part of the fetal side of the placenta or a part of the fetus itself. If the fetus is used, a portion of the fascia or the cord is preferred.

**NOTE:** Tissue specimen should be collected under sterile conditions and must be received in the fresh state.

**Transportation and Storage:** Specimen should be kept moist by wrapping with sterile gauze and placed in a sterile container. A small amount of sterile saline may be used to moisten the sterile gauze; however, the specimen should not be placed or immersed in saline.

The specimen must be retained at 2-8°C and should be received in the laboratory within 24 hours of collection. **DO NOT** freeze. Use cold pack for transport, make sure cold pack is not in direct contact with specimen.

**Rejection Criteria:**



Specimens placed in fixatives, such as formalin, formaldehyde and alcohol are unacceptable. We will not be able to culture cells as fixatives kill the cells. We cannot accept frozen specimens since freezing kills the cells.

Specimens received after 48 hours after collection will be subject to rejection.

### **Urine Specimens for UroVysion FISH Analysis:**

**May aid in diagnosis of urothelial carcinoma and monitoring for tumor recurrence.**

#### **Specimen Collection Requirements:**

Collect at least 30 mls of urine in centrifuge tubes or other tightly-capped plastic container.

Acceptable Sources: voided urine, bladder washings, or ureteral washings

**NOTE:** First morning void is preferred.

**Transportation and Storage:** If urine is not shipped immediately after collection, refrigerate immediately and ship within 24 hours. Samples should be shipped on ice packs.

#### **Rejection Criteria:**

Specimens received later than 4 days after collection will be subject to rejection.

## **CYTOPATHOLOGY**

The Cytology Lab offers testing and result interpretation to help diagnose, monitor and treat cancerous and pre-cancerous lesions. Our cytology services include processing, evaluating and performing diagnostic interpretation on submitted specimens. We utilize advance testing methodologies, including:

- ThinPrep® Pap tests
- Gynecologic high-risk HPV testing

Collection device acceptable for patient testing:



**Collection Device:** PreservCyt Solution

**Test(s) Collected:** ThinPrep Pap Test, HPV, STD testing (Chlamydia trachomatis, Neisseria gonorrhoeae, Trichomonas vaginalis).

**Rejection Criteria:** Leaking vial

## PAP Order Form

PAP Order Forms are available on the Woman's Website at: <https://www.womans.org/our-services/laboratory-services> - PROVIDER RESOURCE

### Pap Order Form

FORM WH7170-1556

The Pap Order Form includes the following information on the requisition for accurate result reporting, record keeping and billing:

- Patient demographic information
- Patient History: Optimal patient information to assist the laboratory in accurate assessment of pap smears is:
  - Age
  - LMP
  - Other: treatment, condition, or procedures that could alter the cells or the cellular pattern, i.e. hormones, postpartum, cryotherapy, abnormal bleeding, prior abnormal cytologies or biopsies, etc.

Please note that the Pap test is a screening test for cervical cancer and its precursors with an inherent false-negative rate.

- In premenopausal patients, obtain specimens during the second half of the menstrual period to avoid contamination by obscuring blood.
- Instruct the patient not to douche or engage in sexual intercourse within 24 hours of the procedure.
- Place the patient in lithotomy position. Visualize the cervix as fully as possible using a non-lubricated vaginal speculum.
- Follow the instructions for the specific collection kit used.

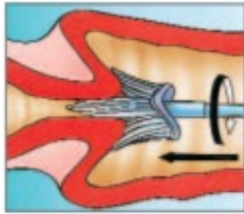
**Transportation and Storage:** May be stored 2-30°C for up to 6 months after collection.

## HPV- Human Papilloma

HPV Virus testing can be performed off the ThinPrep® collection vial should the findings of the pap smear screen show Atypical Squamous Cells of Undetermined Significance (ASCUS). To set up a standing order for reflexed HPV testing contact the Molecular Research Lab at 225-924-8559 or 225-231-5563.

# ThinPrep® Pap Test Quick Reference Guide

## Broom-Like Device Protocol



### Obtain...

...an adequate sampling from the cervix using a broom-like device. Insert the central bristles of the broom into the endocervical canal deep enough to allow the shorter bristles to fully contact the ectocervix. Push gently, and rotate the broom in a clockwise direction five times.



### Rinse...

...the broom as quickly as possible into the PreservCyt® Solution vial by pushing the broom into the bottom of the vial 10 times, forcing the bristles apart. As a final step, swirl the broom vigorously to further release material. Discard the collection device.



### Tighten...

...the cap so that the torque line on the cap passes the torque line on the vial.



### Record...

...the patient's name and ID number on the vial.

...the patient information and medical history on the cytology requisition form.



### Place...

...the vial and requisition in a specimen bag for transport to the laboratory.

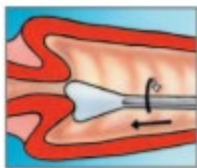
[www.thinprep.com](http://www.thinprep.com)

THE  
**ThinPrep**  
PAP TEST

The Test You Trust

# ThinPrep® Pap Test Quick Reference Guide

## Endocervical Brush/Spatula Protocol



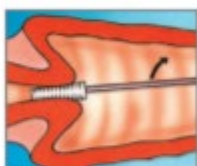
### Obtain...

...an adequate sampling from the ectocervix using a *plastic* spatula.



### Rinse...

...the spatula as quickly as possible into the PreservCyt® Solution vial by swirling the spatula vigorously in the vial 10 times. Discard the spatula.



### Obtain...

...an adequate sampling from the endocervix using an endocervical brush device. Insert the brush into the cervix until only the bottom-most fibers are exposed. Slowly rotate  $\frac{1}{4}$  or  $\frac{1}{2}$  turn in one direction. DO NOT OVER-ROTATE.



### Rinse...

...the brush as quickly as possible in the PreservCyt Solution by rotating the device in the solution 10 times while pushing against the PreservCyt vial wall. Swirl the brush vigorously to further release material. Discard the brush.



### Tighten...

...the cap so that the torque line on the cap passes the torque line on the vial.



### Record...

...the patient's name and ID number on the vial.  
...the patient information and medical history on the cytology requisition form.



### Place...

...the vial and requisition in a specimen bag for transport to the laboratory.



The Test You Trust  
© 2004, Cytoc Corporation