

Protocol for 24-hour Urine Collection

1. The timeline for a 24-hour urine collection begins on an empty bladder. Therefore, you must empty the bladder first thing in the morning into the toilet. Please **do not** collect or save this urine.
2. During subsequent urination, write the date and time on the requisition form. For the next 24 hours, you must collect every urine specimen in the designated storage container. You may use additional containers only if the initial storage container is full.
3. The storage container must be **refrigerated** at all times.
4. At the 24 hour mark, you must attempt to collect one last urine specimen. ***This is the end of your test.*** Write the date and time the test ended on the requisition form.
5. Please bring the storage container(s) back to your physician's office or PSC as soon as possible. Each storage container must be properly labeled with patient's name, collection date and time period and ordering physician. Also, measure and document the total volume of urine on each storage container. You must include the requisition form with the storage container(s).
6. To prevent leaks, make sure the lid is secured tightly, and that the container is transported upright inside a plastic bag. If the weather is warm and you must travel a long distance, transport your urine container on ice or in a cooler.
7. Avoid drinking coffee, tea, caffeinated drinks, and alcoholic beverages.
8. Avoid consuming bananas beginning the night before and during the entire 24 hour collection period.
9. If for any reason some of the urine during this timed period is not deposited into the collection container, the test will be inaccurate and invalid.

Protocol for Blood Culture Collection

Patient Preparation

Bottle Preparation

Direct draw inoculation procedure

Syringe draw inoculation procedure

Patient Preparation

It's imperative to prevent contamination during both bottle preparation and inoculation of the patient sample. Proper skin disinfection is an essential requirement to reduce the incidence of contamination. Scrub the venipuncture site with 70% alcohol for about 30 seconds. Then, apply 10% povidone iodine (betadine) in a circular motion over the venipuncture site (2 inches in diameter) for about 60 seconds until the entire area is saturated. If the patient has an allergic reaction to iodine, immediately scrub the venipuncture area with **ONLY** 70% alcohol and wait until it's completely dry.

Bottle Preparation

1. Label the blood culture bottles with patient's complete name and date of birth or identifier. The icons on the bottle label can be defined by the user.
2. Remove plastic flip-top from culture bottle. Prior to inoculation, disinfect the culture bottle top with an alcohol swab. Allow to air dry.
3. Clean the selected venipuncture site as recommended above.

Direct draw inoculation procedure

Note: If inoculating more than one type of BacT/ALERT blood culture bottle using a butterfly blood collection set and direct draw adapter cap, inoculate first the aerobic culture bottle and then the anaerobic culture bottle so that any oxygen trapped in the tubing will not be transferred to the anaerobic bottle.

Note: Monitor the direct draw process closely at all times during collection to assure proper flow is obtained and to avoid flow of the bottle contents into the adapter tubing. Due to the presence of chemical additives in the culture bottle, it is important to prevent possible backflow and subsequent adverse reactions by following all steps below.

- a. Hold the culture bottle at a position below the patients arm with the bottle in an upright position (stopper uppermost).
- b. Collect the blood using a butterfly blood collection set and the BacT/ALERT Blood Collection Adapter Cap and inoculate directly into the culture bottle at the patient's bedside. Although lower sample volumes can be used, recovery may be improved using a sample volume closer to the recommended 10ml. To prevent over inoculation, monitor the blood volume intake into the culture bottle, using the 5ml incremental markings on the bottle label.
- c. Release the tourniquet as soon as the blood starts to flow into the culture bottle, or within 2 minutes of application.

- d. Do not allow the culture bottle contents to touch the stopper or the end of the needle during the collection procedure. A contaminated culture bottle could contain positive pressure, and if used for direct draw, may cause reflux into the patient's vein. Culture bottle contamination may not be readily apparent. Monitor the direct draw process closely to avoid reflux. Do not use a bottle that contains media exhibiting turbidity, a yellow sensor, or excess gas pressure; these are signs of possible contamination.

Syringe draw inoculation procedure

Note: If inoculating more than one type of BacT/ALERT blood culture bottle using syringe draw, inoculate first the aerobic culture bottle and then the anaerobic culture bottle so that any oxygen trapped in the syringe will not be transferred to the anaerobic bottle. Line demarcations on the bottle label should be used to assist in estimating the sample volume.

- a. Perform venipuncture and blood transfer to the BacT/ALERT culture bottle.
- b. Collect the blood using a syringe blood collection set and the BacT/ALERT Blood Collection Adapter Cap and inoculate directly into the culture bottle at the patient's bedside. Although lower sample volumes can be used, recovery may be improved using a sample volume closer to the recommended 10ml. To prevent over inoculation, monitor the blood volume intake into the culture bottle, using the 5ml incremental markings on the bottle label.
- c. Transport the inoculated culture bottle promptly to Foundation Laboratory.

Protocol for Cytology, Gynecological

ThinPrep – Liquid based PAP

Patient Preparation

Requisition form requirements

Preparation of Cervix

Specimen Collection and Submission

ThinPrep – Liquid based PAP

A ThinPrep is a liquid based PAP, which involves the removal of vaginal/cervical cells using a plastic spatula with an endocervical brush and/or a broom-like device. The cells are rinsed into a fixative solution (PreservCyt Solution) and placed on a slide for examination for the detection of cancerous and pre-cancerous changes that may exist within the female genital tract. The PAP smear, when used as part of a routine screening program, has been credited with reducing the incident of cervical cancer worldwide.

Patient Preparation

The optimal time for a PAP smear collection is two weeks after the first day of the last menstrual period (LMP). The patient should be instructed not to use vaginal medications, spermicides or douches 48 hours prior to the collection of the PAP smear. The patient should also abstain from sexual intercourse 24 hours prior to the collection of the PAP smear.

Requisition Form Requirements [CLIA '88 493.1283 and 493.1291]

All cytology specimens must be submitted with a Requisition Form that includes:

- Patient's complete name.
- Patient's date of birth (DOB) or age
- Source of the specimen (Vaginal, Cervical or Endocervical)
- Name of ordering physician
- Date of Last Menstrual Period (LMP)
- Pertinent clinical history —Previous PAP and/or biopsy result, previous therapeutic procedure, oral contraception and etc. Patients with increase risk of cervical cancer should be identified with a statement on the requisition form.

Preparation of the Cervix

The following guidelines are required to obtain a satisfactory specimen for a ThinPrep PAP smear.

- **Lubricant jellies should not be used to lubricate the speculum.** Even though lubricant jellies are water soluble, excessive amount of jelly may compromise the test and possibly lead to an unsatisfactory result. Saline may be used as a lubricant.
- **Remove excess mucus or other discharge present before taking sample, by gently removing with ring forceps holding a folded gauze pad. Allow the gauze to absorb**

the excess mucus or discharge and peel it away. Please note: excess mucus or other discharge may essentially yield a slide with little or no diagnostic material present.

- **Remove inflammatory exudates from the cervical canal before taking the sample by placing a dry 2 x 2 inch piece of gauze over the cervix. Allow the gauze to absorb the exudates and peel it away from the cervix.** Please note: inflammatory exudates may essentially yield a slide with little or no diagnostic material present.
- **The cervix SHOULD NOT be cleaned by washing with saline or it may result in a relatively acellular specimen.**
- **The sample SHOULD BE obtained before the application of acetic acid**

Specimen Collection and Submission

A ThinPrep PAP may be collected using either an Endocervical Brush/Spatula or a Broom-Like Device. Please refer to illustrated reference guide on page A18- A19.

Endocervical Brush and Spatula Protocol

- First use a plastic spatula to scrape the outer area of the cervix, and rinse it as quickly as possible into the PreservCyt Solution vial by swirling the spatula vigorously 10 times.
- Next insert the brush into the cervix until only the bottom most fibers are exposed. Slowly rotate 1/4 or 1/2 turn in one direction. **DO NOT OVER-ROTATE.** Rinse the brush as quickly as possible in the PreservCyt Solution vial by rotating the brush in the solution 10 times while pushing against wall. Swirl the brush vigorously to further release material. Discard the brush. **DO NOT LEAVE IN VIAL.**
- Tighten the ThinPrep PreserveCyt vial so that the torque line on the cap passes the torque line on the vial.
- Document the name of the patient on the space provided on the vial with the patient's date of birth and/or patient identifier.
- Fill out a PAP requisition form with all the required information mentioned above.
- Place the vial and the requisition form in the specimen bag for transport to the laboratory.

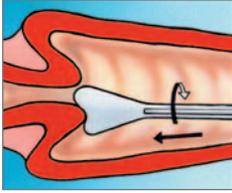
Broom-like Device Protocol

- First insert the central bristles of the broom-like device deep enough to allow the shorter bristles to fully contact the endocervix. 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. **DO NOT BREAK THE BROOM OR LEAVE IN VIAL.**
- Tighten the ThinPrep PreserveCyt vial so that the torque line on the cap passes the torque line on the vial.
- Document the name of the patient on the space provided on the vial with the patient's date of birth and/or patient identifier.

- Fill out a PAP requisition form with all the required information mentioned above.
- Place the vial and the requisition form in the specimen bag for transport to the laboratory.

ThinPrep® Pap Test Quick Reference Guide

Endocervical Brush/Spatula Protocol



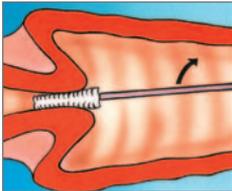
Obtain...

...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.



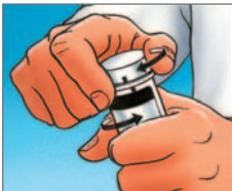
Obtain...

...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.



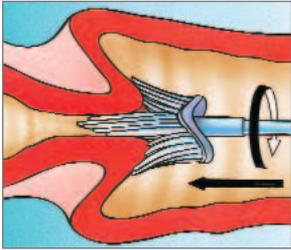
Place...

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



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.

Protocol for Frozen Specimens: Collection for Transport

1. Verify specimen requirement including collection tube and volume of plasma or serum required for each test ordered.
2. Collect, label, and centrifuge the tube(s). Do not exceed more than 10 minutes. Prolonged centrifugation may cause hemolysis.
3. Carefully remove the stopper or cap. Be sure to point the tube away from you when removing the stopper or cap.
4. Slowly separate the serum or plasma from the tube using a separate disposable pipette. Place the tip of the pipette against the side of the tube, approximately ¼ inch above the cell layer or gel barrier.
5. It is very important that you do NOT disturb the cell layer or carry any cells over into the pipette. If cells do enter the pipette, return the sample back into the tube and start from Step 1 again.
6. Transfer the serum or plasma from the pipette into a transport tube. Be sure that the appropriate volume is provided for the test ordered.
7. Replace the stopper or cap back to the original tube. Secure tightly. Discard in the appropriate biohazard container.
8. Label the transport tube with Patient's name, type of specimen (i.e. serum or plasma), and the original tube collected (SST, Lavender, or Blue).
9. The transport tube must be placed in **a separate specimen bag** along with a **separate test requisition** and immediately placed into a freezer (-10 to -20°F).
10. Please note: a separate frozen sample must be submitted for each test requiring a frozen specimen. If more than one test is requested, split the same specimen prior to freezing. You may include all the frozen samples in one separate specimen bag along with a separate requisition form.
11. Notify Foundation Laboratory's Client Services or Logistics Department that you have a frozen specimen for pick up.

Protocol for Glucose Tolerance Test (GTT)

<u>Test Order</u>	<u>Tubes Required</u>	<u>Recommended Dosage</u>
1. Gestational GTT 1 hour	2 gray tubes	50 g of Glucola
2. Gestational GTT 2 hour	3 gray tubes	75 g of Glucola-verify w/physician
3. Gestational GTT 3 hour	4 gray tubes	100 g of Glucola
4. GTT 2 hour –Adult	3 gray tubes	75 g of Glucola
5. GTT for Children	To be determined	0.5 g of Glucola per kg body weight -Verify w/physician

Procedure:

1. Verify if patient has been fasting for a minimum of 12 hours.
2. Verify if patient is a known diabetic. If not, proceed to next step. If so, you must contact physician and verify the order and the recommended dosage.
3. Collect the specimen in a gray top tube. Immediately label the tube with the patient's name, time, and "Fasting".
4. Patient must drink the appropriate amount of the Glucola within 5 minutes.
5. Another specimen must be drawn an hour after the patient drinks the Glucola. Be sure to label the tube with patient's name, time, and "1hr".
6. If order requires more than 1 hour, you must collect a new specimen on each consecutive hour and label each tube accordingly.
7. Document on the requisition the number of gray tubes collected and packaged for testing.

Note:

1. Patient must remain in the laboratory or PSC during the duration of the test.
2. Patient should not smoke, eat or drink anything except water (minimal amount) during the duration of the test.
3. If patient get nauseated or regurgitates, cancel the test and notify the physician.
4. It is very important that each specimen is properly marked with patient's name, time, and either "fasting", "1hr", "2hr", or "3hr"

Protocol for Occult Blood: Diet and Collection

Part A) SPECIAL DIAGNOSTIC DIET

You must follow the following diet for **TWO** consecutive days prior to collecting stool samples for occult blood.

FOODS TO EAT:

Well cooked pork, poultry and fish
Any cooked fruits and vegetables
High fiber foods (e.g. whole wheat bread, bran cereal, popcorn)

FOODS, DRUGS AND VITAMINS TO AVOID:

Red meat (beef, lamb) including processed meats and liver
Any raw fruits and vegetables (especially melons, radishes, turnips, and horseradish)
Vitamin C in excess of 250mg per day
Iron supplements
Aspirin or other non-steroidal or anti-inflammatory drugs

Patients are encouraged to discuss the above mentioned diet with their physicians. **DO NOT** discontinue any medication unless you have been instructed to do so by your physician. If you have difficulty with strict adherence to the diet, the following modification may be made.

MODERATE AMOUNTS OF THESE RAW FRUITS AND VEGETABLES:

Apples	Celery	Peaches	Raisins	Tomatoes
Apricots	Lettuce	Pears	Raspberries	
Bananas	Oranges	Plums	Strawberries	

Part B) INSTRUCTIONS FOR COLLECTING A “CLEAN” STOOL SPECIMEN

Stool specimens for occult blood testing are submitted by collecting thin smears of stool from 3 consecutive bowel movements on to an occult blood test card.

1. Label each occult blood test card with patient’s name, date of birth and specimen collection date on the space provided in front of the test card.
2. Collect stool sample. You must empty bladder first. The stool sample must not come in contact with urine or water.
3. Put a plastic sheet (i.e. Plastic Wrap) over toilet and pass stool onto the plastic sheet. Stool can also be collected into a clean empty plastic container.
4. Open the front of the occult blood test card. Use the applicator provided and remove a small sample of stool (about the size of a match head) and apply a very thin smear on Box A. Remove a second sample from a different part of the stool and smear it on Box B. Discard applicator.
5. Close the cover flap. Label Specimen #1-#3.
6. Store test cards in room temperature.
7. Return all test cards with requisition form to ordering physician or PSC, immediately.

Please Note: Do not collect stool specimen 3 days prior to and/or during a menstrual period, or while you have bleeding hemorrhoids or blood in the urine.