General Information For Submitting Material For Cytological Examination

A requisition form completely filled out with pertinent clinical information must accompany all specimens submitted for examination. For Thin Prep pap Tests and conventional Pap Smears, please use the generic green/white FAHC Laboratory requisition. For non-gynecologic samples and Fine Needle Aspirations, please use the blue/white Surgical Pathology/Non-GYN Cytology form.

All slides submitted for cytological examination are required to have the patient's name (in pencil) on the frosted end of the slide. For non-gynecological specimens and Thin Prep Pap tests, label the specimen container (not the lid) with the patient's name and source of the material. In cases where specimens are taken from several sources at the same time (i.e., right ureter and left ureter) it is very important to label each specimen bottle and requisition accordingly.

Deliver all fresh unfixed specimens to the laboratory immediately after collection. When laboratory is closed, all non-gynecological cytology specimens need to be refrigerated. These include urines, sputum, bronchial washings, pleural fluid, abdominal fluid, gastric, and all miscellaneous fluids. If CSF specimens are collected on Friday after 2 p.m. or any time Saturday or Sunday, an equal amount of 50% ethanol will need to be added to the specimen by Laboratory personnel prior to refrigeration. All cytology specimens should be handled following Universal Precautions.

The collection procedures described in the following sections should be followed. If you have any questions, please call Porter Hospital Lab (388-4747) or FAHC Cytopathology Department (1-802-847-5121) before you collect the specimen.

**Bronchial Brushings for Cytology**

For optimal cellular preservation, it is strongly recommended that the brush used to collect the specimen be rinsed immediately in a container of 50% alcohol or a container of liquid fixative (Cyto Lyt). Due to problems with air drying (which can distort cellular detail and render the specimen unsatisfactory for evaluation) the preparation of glass slides on-site is no longer recommended. Slide preparation is performed in the Cytopathology Department. The accompanying FAHC laboratory requisition should contain all pertinent clinical information.

**Bronchial Washings for Cytology**

Bronchial wash specimens submitted for cytological examination should be free of lidocaine. Deliver fresh specimens to the laboratory immediately after collection. Specimen containers (not the lid) need to be labeled with the patient's name and site of collection. Samples collected should be delivered to the laboratory immediately so the sample can be preserved with equal amounts of liquid preservative (Cyto Lyt or 50% alcohol) and then refrigerated. The accompanying FAHC laboratory requisition should contain all pertinent clinical information.

**Cerebrospinal Fluid for Cytology**

Deliver fresh specimens to the laboratory immediately after collection. Samples that cannot be delivered to FAHC the same day of collection must be fixed with equal amounts of 50% ethanol upon receipt in the laboratory and then refrigerated. The accompanying FAHC laboratory requisition should contain all pertinent clinical information.

**Endoscopic Brushings for Cytology**

For optimal cellular preservation, it is strongly recommended that the brush used to collect the specimen be rinsed immediately in a container of 50% alcohol or a container of liquid fixative (Cytolyt). Due to problems with air drying (which can distort cellular detail and render the specimen unsatisfactory for evaluation) the preparation of glass slides on-site is no longer recommended. Slide preparation is performed in the FAHC Cytopathology Department. The accompanying FAHC laboratory requisition should contain all pertinent clinical information.
Endoscopic Washings for Cytology
Deliver fresh specimens to the laboratory immediately after collection. Specimen containers (not the lid) need to be labeled with the patient's name and site of collection. Samples collected should be delivered to the laboratory immediately so the sample can be preserved with equal amounts of liquid preservative (Cytolyt or 50% alcohol) and then refrigerated. The accompanying FAHC laboratory requisition should contain all pertinent clinical information.

Fine Needle Aspiration Cytology: All Body Sites
Fine needle aspiration cytology is a relatively non-invasive procedure for the percutaneous collection of cells from a suspected tumor mass using a 25-gauge needle. Lesions of the lung, mediastinum, pancreas, liver, kidney, retroperitoneum, lymph nodes and bone are being done in the Porter Radiology Department using various localizing techniques. Palpable thyroid nodules, breast masses and head/neck lesions may be biopsied using fine needle aspiration.

Porter’s pathologist also performs aspirations of palpable masses. Arrangements for Fine Needle Aspirations should be made through the above departments or by calling the laboratory at 388-4716 and speaking with the Laboratory Supervisor.

Fine needle aspirate samples should be collected and processed by one of the following two techniques:

1. For physicians who perform aspirate procedures less frequently the recommended procedure is: Express all of the aspirate material into a container of liquid cytology fixative (Cytolyt) or in a tube of 50% ethanol. Aspirating a small amount of the fixative into the barrel of the syringe and "rinsing the needle" into the specimen container is also recommended.

2. For physicians who perform frequent FNA procedures and are comfortable preparing fixed slides: Hold stationary slide firmly in one hand, rest edge of spreader that is closer to you on stationary slide and tilt spreader slide until the aspirated material begins to spread. Move the spreader slide toward you, applying slight pressure to aspirated material. Do not lift either end of spreader slide until smear is complete. Slides can either be fixed immediately with Cytology spray fixative or air-dried. Please label frosted end of the slide with patient name and whether slide is fixed or air-dried. Needle rinses can be submitted in Cytolyt as described below. The accompanying FAHC laboratory requisition should contain all pertinent clinical information.

Fluids and Effusions for Cytology
Deliver fresh specimens to the laboratory immediately after collection. Specimen containers (not the lid) need to be labeled with the patient's name. Specimens should be refrigerated upon receipt in laboratory. If evacuated glass plasma bottles are used for collection, 3 units of heparin per mL of anticipated fluid should be added to the bottle prior to collection. For safety reasons, no specimen should be submitted with a needle attached to the collection container or syringe. The samples should be refrigerated during storage and transport to FAHC Cytopathology Department. Do not preserve with Cytolyt or 50% alcohol. The accompanying FAHC laboratory requisition should contain all pertinent clinical information.
Gynecologic Specimens

- Sample collection during active menses should be avoided whenever possible.
- No lubricant should be used on the speculum prior to insertion.
- Copious cervical mucus should be discarded before sample collection (do not place in Thin Prep vial).
- Cellular material should represent an adequate sample of the ecto- and endocervix for the detection of cervical and endocervical abnormalities.
- Vaginal pool material, which occasionally collects cells shed from the endometrium, fallopian tubes and ovaries, may also be collected.

Specimen Adequacy:

Satisfactory for Evaluation – Sample must have appropriate labeling and identification, relevant clinical information (minimum of LMP, when clinically necessary for interpretation) and adequate numbers of well visualized, well-preserved squamous cells.
- Assessment of transformation zone component requires the presence of a total of 10 endocervical and/or metaplastic cells on either conventional Pap smears or ThinPrep slides.
- Assessment of cellularity requires well visualized, well preserved Squamous epithelium covering >10% of a conventional slide, or >40 squamous epithelial cells/10 HPF (or >600 squamous epithelial cells/10 LPF) on ThinPrep slides.
- Limiting factors are reported when the factor obscures 50-75% of the epithelial cells on conventional slides. A limiting factor is also reported when there is scant cellularity, which falls short of meeting the guidelines for unsatisfactory (as listed below).

Unsatisfactory for Evaluation – Unacceptable specimen identification, a slide broken beyond repair, obscuring factors which cover >75% of the epithelial cells or scant cellularity with squamous cells covering <10% of a conventional slide, or <40 squamous cells/10 HPF (or <600 squamous cells/10 LPF) on ThinPrep slides. If abnormal cells are detected, the specimen is NEVER categorized as Unsatisfactory, but is reported as Satisfactory (with limiting factors) along with the appropriate diagnostic interpretation.

Diagnostic PAP

Diagnostic PAP Is ordered by the referring physician when one or more of the following circumstances apply: Medicare covers Pap smears ordered as diagnostic with no time restrictions.
- The patient has been previously diagnosed with cancer of the vagina, cervix, or uterus that has been or is presently being treated.
- The patient has had a previously abnormal Pap smear.
- The patient presents any current abnormal findings of the vagina, cervix, uterus, ovaries, or adnexa.
- The patient presents any significant complaint referable to the female reproductive system
- The patient shows any sign or symptom that might, in the referring physician's judgment, reasonably be related to a gynecologic disorder.

Use the diagnosis code(s) that best describes the patient's acute problem.
Screening PAP — HIGH risk

Is based on the physician's recommendation and the patient's medical history or other findings, which indicate the Pap should be done on a more frequent basis. Medicare will cover a high risk screening Pap on an annual basis. An Advanced Beneficiary Notice must be completed if the patient has had a Pap smear within the last year. High risk patients are those who are at high risk to develop cervical or vaginal cancer due to risk factors below:

- Early onset of sexual activity (under 16 years)
- Multiple sexual partners (5 or more in a lifetime)
- History of sexually transmitted disease (including HIV)
- Fewer than 3 negative Pap smears within the last 7 years
- DES exposed daughters
- Is of childbearing age and has had a Pap smear during the preceding 3 years indicating the presence of cervical or vaginal cancer or other abnormalities.

Screening — high risk appropriate diagnosis codes:

- V72.6 (Laboratory examination) AND (Use Both)
- V15.89 (other specified personal history presenting hazards to health)

ThinPrep Pap Test

The FDA has approved the ThinPrep Pap test as significantly more effective than the conventional Pap smear. Currently there are two FDA approved methods for sample collection with the Thin Prep Pap test. Providers may select the method of their preference, or the one that is most suited to their individual patient. The first method utilizes a broom device; the second employs a cytobrush/plastic spatula combination. Both methods are described on the following page.

ThinPrep Pap Test Sample Collection Utilizing the Broom Device

1. Obtain an adequate sampling from the cervix using the 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.
2. Rinse the broom 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.
3. Tighten the cap of the PreservCyt vial so that the torque line on the cap passes the torque line on the vial.
4. Record the patient's full name on the vial. Place the vial and requisition in a specimen bag for transport to the laboratory.

ThinPrep Pap Test Utilizing the Cytobrush/Plastic Spatula Combination

1. Obtain an adequate sampling of the ectocervix using the plastic spatula.
2. Rinse the spatula into the PreservCyt Solution vial by swirling the spatula vigorously in the vial 10 times. Discard the spatula.
3. Obtain an adequate sampling from the endocervix using an endocervical brush device. Insert the brush into the cervix until only the bottommost fibers are exposed. Slowly rotate the brush 1/4 or 1/2 turn in one direction. DO NOT OVER ROTATE.
4. Rinse the brush in the PreservCyt Solution vial 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.
5. Tighten the cap of the PreservCyt vial so that the torque line on the cap passes the torque line on the vial.
6. Record the patient's full name on the vial. Place the vial and requisition in a specimen bag for transport to the laboratory.