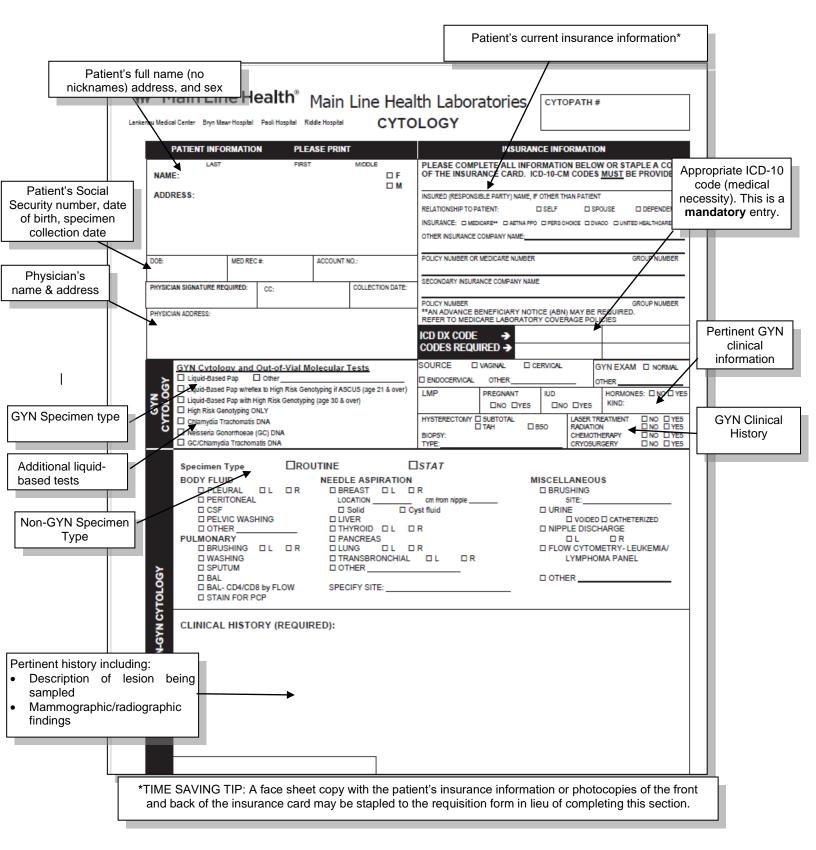
# Main Line Health Laboratories CYTOLOGY Collection Procedures

### **Requisition Completion**



## **Specimen Collection and Preparation**

#### **Specimen labeling**

- Specimen containers must be labeled with the patient's full name, DOB, or unique identifier and source of specimen collected.
- Glass slides must be labeled in pencil with the patient's full name, DOB or unique identifier on the frosted end.
- Improperly labeled specimens will not be accepted for processing.

#### Liquid-based (ThinPrep® ) Gynecologic Specimen Collection

- 1) Label the specimen container.
- 2) Without contaminating the specimen with speculum lubricant, sample the exocervix transformation zone and endocervix/
  - a) Liquid Pap smear specimen collection. The plastic spatula/cervical brush combination or the cervical broom-like device may be used.
    - i) Using plastic spatula, cervical brush combination:
      - (1) Obtain an adequate sampling of the ectocervix using the plastic spatula.
      - (2) Rinse the spatula in the PreservCyt® solution by swirling the spatula vigorously in the vial 10 times. Discard spatula.
      - (3) Obtain an adequate endocervical sampling using the brush by inserting the brush into the cervix until only the bottom-most bristles are exposed. Slowly rotate ¼ or ½ turn in one direction. **Do not over-rotate**.
      - (4) Rinse the brush in the same vial of Preservcyt® by rotating the device in the solution 10 times while pushing against the wall of the container. Swirl the brush vigorously to further release material. Discard brush.
    - ii) Use of the "broom" collection device:
      - Obtain an adequate sampling from the cervix by inserting the central bristles 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 in the PreservCyt® solution 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 device.
      - (3) Tighten the cap of the vial so that the torque line on the cap passes the torque line on the vial.
- 3) Send the labeled ThinPrep® vial or slide(s) with a completed MLHL Cytology requisition form.

#### **One-Slide Conventional Pap smear:**

- Insert the notched cervical applicator into mouth of the cervix and scrape the endoectocervical area in a 360° motion. Place the specimen on center of slide. Swiftly collect the transformation zone/endocervical sample with a brush and pool with the former specimen while spreading the material uniformly and in a thin film over the glass slide. Do not extend the specimen onto the frosted end of slide.
- 2) Fix slide immediately by applying spray fixative or by placing into 95% ethyl alcohol.

## Main Line Health Laboratories CYTOLOGY Collection Procedures

#### Non-Gynecologic Specimen Collection

#### **Bronchial Brushing**

- 1) Label a single end frosted slide with the patient's name, DOB, unique identifier, and specimen source in pencil.
- 2) Roll the brush over slide and immediately fix with spray fixative or by placing slide in 95% ethyl alcohol. Use one slide per brushing and/or...
- 3) Place the brush into a ThinPrep Cytolyt<sup>®</sup> tube and agitate to remove as much remaining material as possible. The tip of the brush may be cut off and left in the Cytolyt<sup>®</sup>. Label the tube with the patient's name.
- 4) Send specimen to laboratory with a completed MLHL Cytology requisition form.

#### **Bronchial Washing**

- Submit a fresh specimen with a completed MLHL Cytology requisition form.
- If a delay of greater than 24 hours between collection and transport is expected, refrigerate specimen **or** add an equal volume of Cytolyt®.

#### Effusions (pleural, peritoneal, pericardial fluids)

- Submit fresh specimen with a completed MLHL Cytology requisition form.
- If a delay of greater than 24 hours between collection and transport, refrigerate the specimen.

#### **Gastrointestinal Brushings**

• See "Bronchial brushing"

# Needle Aspiration (breast, thyroid, lymph node, and miscellaneous palpable masses)

- 1) Label a ThinPrep Cytolyt® tube with patient's name, DOB, unique identifier & specimen source being aspirated.
- 2) Clean and anesthetize the skin adjacent to, but not over the lesion with a 25-gauge needle and syringe.
- 3) Discard the 25-gauge needle and replace with the needle to be used for the aspiration. Flush any remaining Xylocaine from the syringe through the needle.
- 4) Insert the needle into the lesion and withdraw the piston to create negative pressure.
- 5) While applying negative pressure, move needle in short, probing motions.
- 6) Release negative pressure and withdraw needle.
- 7) Express contents of needle and syringe into Cytolyt® tube. The same tube may be used for multiple passes into the same lesion. Rinse the needle in Cytolyt® after the last pass.
- 8) Submit the specimen with a completed MLHL Cytology requisition form.

#### Nipple Discharge (Breast Secretion)

- 1) Label a single, frosted-end slide in pencil with the patient's name, DOB, unique identifier, and specimen source.
- 2) Smear a drop of fluid from nipple directly onto glass slide.
- 3) Fix slide(s) by immediately placing in 95% ethyl alcohol or applying spray fixative.
- 4) Submit the slide(s) with a completed MLHL Cytology requisition form.

#### Pneumocystis carinii (PCP)

- Bronchoalveolar lavage is the preferred specimen for the diagnosis of PCP.
- Submit fresh specimen with a completed MLHL Cytology requisition form. Mark the form "STAT" if the results are required immediately.
- If a delay of greater than 24 hours between collection and transport is expected, refrigerate specimen **or** add an equal volume of Cytolyt® to specimen container.

# Main Line Health Laboratories CYTOLOGY Collection Procedures

#### **Spinal Fluid**

- Submit a fresh specimen with a completed MLHL Cytology requisition form.
- If a delay of greater than 24 hours between collection and transport is expected, refrigerate specimen **or** add an equal volume of Cytolyt® to specimen container.

#### Sputum

- 1) Instruct patient to rinse his/her mouth before specimen collection.
- 2) Collect an early morning cough specimen in any clean (not necessarily sterile) leak proof container;
- 3) Submit the fresh specimen with a completed MLHL Cytology requisition form.
- 4) If a delay of greater than 24 hours between collection and transport is expected, refrigerate specimen.

#### Urine

- 1) Instruct the patient to discard the first voided urine of the morning and collect one subsequent specimen in any clean (not necessarily sterile) leak-proof container;
- 2) Submit the specimen with a completed MLHL Cytology requisition form.
- 3) If a delay of greater than 24 hours between collection and transport is expected, refrigerate specimen **or** add an equal volume of Cytolyt® or 70% ethyl alcohol to specimen container.

**Tzanck Smear** (for viral inclusions) for Cytology:

- Write patient's name, DOB, or unique identifier and specimen source on slide frosted end side up
- Use plastic scraper to obtain liquid material (scrape away scabbing)
- Smear slides with material frosted side up.
- Do not let air-dry.
- Immediately place slides in alcohol container.
- If printed patient's labels available, place one on alcohol container.
- Fill out cytology requisition with patient's name and appropriate identifiers, insurance, ICD9 code, Dr.'s name and beeper #, and wound site.

#### **Clinical Information**

Clinical information is required for optimal cytopathologic diagnosis. Please provide the following information on the MLHL Cytology requisition form.

- The specific site from which the specimen was obtained;
- Clinical impression and pertinent clinical history;
- Gross appearance of specimen.
- Gross description of the lesion.

For specific instructions regarding the collection of non-gynecologic specimens, please call the Cytology Laboratory at (484) 476-2623, Monday through Friday.

#### Cytopathology reports are available at (484)476-2623.