Purpose: To standardize the collection of pap smears, ARC, HPV, non-gyn cytologies and biopsies.

Educational Note: Cervicovaginal cellular samples are subject to both false negative and false positive findings. This is well documented in the medical literature. The patient's cervicovaginal cellular sample result should be interpreted in the proper clinical context. Correlation with the patient's clinical history and physical findings is recommended. If there is a visible mucosal lesion, a biopsy is recommended regardless of the cytology results.

PAP smear Collections – Liquid based, HPV, HPV Reflex, HPV reflex to Pap Smear:

1. Label specimen vial **legibly** with the patient's legal first and last name, along with the date of birth. 2 patient identifiers are required, and the specimen may be rejected if this is omitted.
2. Obtain specimen in usual manner.
3. Immediately place sample in the **SurePath** collection vial.
4. Depending on the collection device used, both the spatula and brush ***must*** be broken off into the vial or the broom head removed/separated from the blue handle. Recap the vial and tighten to prevent leakage.
5. Place collection vial and completed cytology requisition in plastic specimen bag and submit to the lab. Store at room temperature.

Note: If the specimen is a Vulvar pap, it must be indicated on the requisition.

NOTE: PAP smears are a screening test for which there are several opportunities for a significant cervical lesion to be missed; this may occur either at the time of collection or during screening. Extensive effort is made to never have a false negative test occur by utilizing random rescreens of negative smears. However, national figures indicate that up to 20 % of PAP smears may be reported falsely as negative due to the following: sampling issues, lack of appropriate cells or the sample may be too thick due to mucus and blood.

Anal Rectal Cytology (ARC) collections:

1. **ARC Pap and HPV sample-** A special-order kit from Mayo Medical Laboratories (MML) is needed to collect. These kits are ordered by St. Luke's Lab from MML and will be provided to physicians upon request. Please refer to the MML requirements on Home - Mayo Clinic Laboratories; test code **ATPCO**.
2. **ARC Pap Only** samples- preparation, processing and resulting can be completed at St. Luke's Laboratory.
   - Label the vial with patient's name, date of birth, date of collection and the sample type (ARC pap). The specimen will be rejected if it is unlabeled, and the physician will receive a notification of rejection.
   - Place the collection device (dacron, polyester, cervical or endocervical) into a **SurePath vial** and agitate vigorously several times to release the cells collected. Remove swab from vial and discard. **Cotton swabs on a wooden handle are NOT acceptable collection devices.**

- Complete the Cytology order form as with any laboratory specimen (EPIC order code lab2256), place the specimen in a bio-hazard bag and send it to the lab. Note on order (requisition) the sample type is an ARC pap to alert the prep staff that no collection device should be expected in vial.

HPV only, Self-Collect, Vaginal:

1. A special-order kit from Mayo Medical Laboratories (MML) is needed to collect. These kits are ordered by St. Luke's Lab from MML and will be provided to physicians upon request. Please refer to the MML requirements on Home - Mayo Clinic Laboratories; test code **SCHPV**.
2. Obtain the Evalyn brush from the patient following collection. Uncap **ThinPrep/PreservCyt vial.** Remove pink cap from Evalyn brush. Depress the pink plunger on the Evalyn brush to expose the brush (white bristles). Vigorously plunge the brush, smashing the white brush against the bottom and interior wall of the vial 10 times to maximize sample release. Be careful not to splash. Discard Evalyn brush and tightly recap the ThinPrep/PreservCyt vial.
3. Label the ThinPrep/PreservCyt vial with patient's name, date of birth, date of collection and the sample type (HPV Only Self-collect). The specimen will be rejected if it is unlabeled, and the physician will receive a notification of rejection.
4. **The specimen must be collected by the patient in a healthcare setting.** This test is not intended for symptomatic patients (eg, pelvic pain, abnormal uterine bleeding).

NON-GYN Cytology Collections:

1. Labeling Requirements for Cytology Specimens and Requisitions:
   - Patient's name
   - Patient MRN number and DOB
   - Time and Date of collection
   - Specimen identity (type) or source
   - Surgeon, last **and** first name (required on requisition only)
   - Relevant clinical information (required on requisition only)
2. If a glass slide is the specimen: last name (and preferably first initial) and DOB or MRN of the patient written with a solvent resistant pen. These can be obtained from the laboratory at the physician's office request.
3. All specimens should be sent on either a glass slide or in the container the specimen was collected in (syringe/sterile container). Specimen containers should be brought to Cytology immediately or **refrigerated between 2° – 8° C** until they can be delivered.
4. Smears must be fixed with one of the following:
   - Alcohol-based spray fixative
   - 95% ethanol
   - 5% acetic acid and 95% ethanol
   - Air-dried slides
5. Slides not received in an ethanol-based fixative must be labeled to indicate if they are spray-fixed or air dried. The fixation of a slide will indicate to the cytology staff which stain line to use.

NOTE: If specimen is collected in a syringe, remember to remove the needle and use a syringe cap to seal the specimen. This is a safety requirement. If the specimen is stuck or housed within the needle itself, it is recommended to rinse the needle in a small amount of saline and send saline rinse to the laboratory.

NOTE: Inadequate and suboptimal specimens appear to occur more frequently when small volume specimens are received in the laboratory. The minimum *recommended* volume for urine cytologies is 30mLs. The minimum *recommended* volume for effusion-based fluid cytologies (Peritoneal, Pleural, Pericardial) is 75mLs.

NOTE: Brushing specimens (bronchial, common bile duct, etc.) must be placed in saline for transportation to the laboratory. A minimal amount to cover the brush is acceptable. "Dry" brushes result in severely dehydrated cells that are not freely removed from the brush for processing.

NOTE: CSF specimens will be processed as STAT cases as they must be prepped within 24 hours. Slides do not need to be read within 24 hours by a Pathologist unless the physician makes a special request.

Urine Specimens for Cytology:

1. Collect voided or catherized urine in the same container used for routine urinalysis (submit different specimens for each test). **DO NOT USE THE FIRST MORNING VOIDED SPECIMEN. Refrigerate until sent to lab.**
2. Urine from infants may be sent in U-bags placed inside a closed urine container.
3. Label specimen **legibly** following the labeling requirements provided above.
4. Send the specimen to the laboratory as soon as possible.

NOTE: The minimum recommended volume for urine cytologies is 30mLs.

Sputum Specimens for Cytology:

1. The container used for the sputum should have a secure closure and should not be filled more than halfway.
2. The most acceptable sputum specimen for exfoliated cells is the specimen collected when the patient first awakens in the morning. Do not wait until the patient has eaten breakfast, for this will contaminate the specimen with food particles.
3. The patient may drink some water or rinse the mouth to clear away excess oral epidermal cells; however, this is not absolutely necessary.
4. The patient should then take several deep breaths, exhaling the last with an expulsive cough into the specimen container.
5. Label specimen **legibly** following the labeling requirements provided above.
6. Send the specimen to the lab as soon as possible. **Refrigerate until delivered to lab.**

Tzanck smears for Cytology:

1. To be collected by the provider by using a lancet to un-roof the vesicle. Touch a glass slide to the vesicle, with the frosted (labeled) side toward the vesicle.
2. Immediately spray-fix the slide with cytology spray-fixative and indicate on the cytology requisition that the slides were spray fixed. If the slides were allowed to air-dry instead, indicate that on the requisition.
3. Label the slide **legibly** following the labeling requirements provided above.

Biopsies

1. Biopsies only: Specimens should be placed in a formalin container. Make sure the container is closed securely. Store at room temperature. Label the specimen **legibly** with the patient's legal first and last name, date of birth, collection date and source.
   NOTE: Labeling the specimen is very important. Incorrect labeling will result in a delay in processing as a representative from the provider office MAY be required to come to the lab and label the specimen.
2. Complete the requisition with the following information:
   - Patient's name
   - Patient MRN number and DOB
   - Time and Date of collection
   - Specimen identity (type) or source
   - Surgeon, last **and** first name
   - Relevant clinical information
3. Culture and Biopsy: Place the specimen in a clean, sterile container that has a small amount of sterile saline added to prevent drying. Culture will be set up first and then the specimen will be processed for biopsy. **No formalin** is added when a culture is ordered as the formalin will kill bacteria. Make sure container is closed securely. **Deliver to lab ASAP.**

Kidney stone(s):

1. The kidney stone(s) should be collected in a clean, empty container. Label the container with the complete first name, last name, date of birth and source. Store at room temperature until delivered to lab.
2. Complete a requisition with the following information:
   - Patient's name
   - Patient MRN number and DOB
   - Time and Date of collection
   - Specimen identity (type) or source
   - Surgeon, last **and** first name
   - Relevant clinical information

For Cytology and Histology specimens:

- If the specimen is a **suspected/known high risk specimen** (tuberculosis, covid, etc.) the container/specimen should be double bagged with a large note indicating this for the lab staff. Laboratory staff follows safe work practices, preparation of specimens and disposal upon preparation completion.

- If **additional testing is requested** on any specimen submitted to the lab, it must be indicated on the requisition and collected appropriately. If there are questions regarding collection and/ or ordering, please contact the laboratory.
    - Examples of additional testing: Hemosiderin evaluation, crystal identification, Parathyroid testing on FNAs, evaluation for Gout, Immunostaining or special stains, Pneumocystis/GMS staining, Flow Cytometry, CD4CD8, etc.