

# Cytology Specimen Collection Guide

## Table of Contents

<u>Specimen Type</u>	<u>Page</u>
Preface .....	1
Female Genital Tract	
<i>Pap Smear (Conventional)</i> .....	2
<i>Liquid-Based Pap Test</i> .....	3
<i>Vagina</i> .....	4
Respiratory Tract	
<i>Sputum</i> .....	5
<i>Bronchial Wash</i> .....	6
<i>Bronchial Brush</i> .....	7
<i>Bronchoalveolar Lavage</i> .....	8
<i>Wang Needle</i> .....	9
<i>Pneumocystis (PCP) specimens</i> .....	10
Fine Needle Aspiration.....	11
Urine.....	12
Cerebrospinal Fluid .....	13
Body Cavity Fluids.....	14
Pelvic Wash Specimens .....	15
Breast nipple discharge .....	16

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- Click **Departments** (left column)
- Scroll down and click **Pathology & Laboratory Medicine**
- Click **Clinical Lab Services**
- Click **Test Index**
- Click **Cytology Specimen Collectio**

## **Preface**

This specimen collection guide has been designed to answer common questions and inquiries related to proper specimen submission for cytologic evaluation. It includes information on proper fixation, quantity of specimen, storage instructions, and reasons for specimen rejection. ***Clinical history is of utmost importance.*** Any patient history that influences the microscopic evaluation of the specimen you have submitted is as important as the specimen itself. This information includes: prior history of cancer, history of abnormal Pap smears, specific location of specimen sample, and any condition that places a patient in a high risk category for malignant or pre-malignant disease.

Demographic information is also important and impacts the efficient processing of cytology specimens and turn-around time. Patient age, sex, address, submitting physician, and insurance information is required. Failure to provide this information results in delayed processing of that specimen.

*The Cytology Laboratory will accept only those specimens accompanied by official request from a physician or other authorized personnel. This information must be provided on an official Cytology GYN or Non-gyn requisition. **Specimens submitted without a Cytology requisition will not be processed.***

Please contact the Cytology laboratory if you have any questions regarding cytology specimens. You may contact the Cytology specimen preparatory lab directly by calling 275-0979 (5-0979 SMH). You may leave a voicemail message if your call cannot be taken immediately.

## PAP SMEAR (Conventional)

**CPT Code:** 88164

**Specimen Type:** Female genital tract-Cervical/Endocervical canal.

**Laboratory:** Cytopathology

**Request form:** Strong Health-Beige or yellow Gyn requisition. Short or long form.

**Phone:** (585) 275-5656

**Laboratory Hours:** Mon – Fri 8:30 – 5:00

**Turnaround time:** 5-8 working days

**Supplies:** one microscopic glass slide, bottle of 95% alcohol (blue Pap fixative), Cervex Brush®, or, wooden spatula, endocervical brush.

**Collection:** the Cervex Brush® (Broom) sampling device is the preferred method of collection for this laboratory. After cervix is prepared for sampling the Cervex Brush® is inserted onto the face of the cervix with the long central bristles inserted firmly into the endocervical canal. Rotate the Cervex Brush® 2-3 times around the face of the cervix. Once specimen is collected, material is deposited on glass slide using a painting action. Swipe one side of the Cervex Brush® across the slide, rotate Cervex Brush® and make a second swipe *OVER* the first swipe. This action removes material from both sides of the Cervex Brush®. Place slide immediately in 95% alcohol to prevent air-drying.

**Labeling Instructions:** Label patient name and sample site on frosted end of glass slide.

**Special Instructions:** a separate slide from the endocervical canal is **NOT** required.

**Volume:** one slide per patient.

**Storage Instructions:** may be stored indefinitely in 95% alcohol.

**Cause for Rejection:** Unlabeled or mislabeled slides, broken slides, mislabeled requisition.

**Comments:** The Pap Smear is not a diagnostic test, it is a screening test utilized to identify the presence of pre-malignant, and malignant disease, and various infectious agents.

**After Hours & Weekends:** Place specimen in Microbiology refrigerator located in Room 2-5246, phone (585) 275-7801.

## Liquid Based Pap Test

**CPT Code:** 88142

**Specimen Type(s):** Pap test.

**Synonyms:** *ThinPrep, SurePath*

**Laboratory:** Cytopathology

**Request Form:** Strong Health-Beige or yellow Gyn requisition.

**Phone:** (585) 275-5656

**Laboratory:** Mon - Fri 8:30-5:00

**Turnaround Time:** 5-8 working days

**Supplies:** Vial of PreservCyt®, Cervex Brush®

**Collection:** **ThinPrep** - Collect sample in routine fashion using the Cervex Brush (Broom). Aggressively rinse sampling device in PreservCyt® vial. **SurePath** – Remove tip of cervix brush and deposit in specimen vial.

**Labeling Instructions:** Label vial with patient's name.

**Special Instructions:** Complete clinical history on test requisition. Patients who are not covered by their insurance must sign a waiver accepting payment responsibility.

**Volume Preferred:** **One vial per patient-Do NOT send a separate ECB sample/vial or a separate vial for HPV testing.**

**Storage Instructions:** None

**Causes for Rejection:** Unlabeled or mislabeled specimen vials.

**Comments:** Used to evaluate for pre-malignant, malignant, or inflammatory conditions.

**After Hours & Weekends:** Place specimen in Microbiology refrigerator located in Room 2-5246, phone (585) 275-7801.

**Human Papilloma Virus (HPV) Testing:** May be requested as a reflex test with a diagnosis of atypical squamous cells of undetermined significance (ASCUS) or, as an adjunctive test if the diagnosis is within normal limits.

## VAGINAL SMEAR

**CPT Code:** 88150

**Specimen Type(s):** Four quadrant vaginal scrape

**Laboratory:** Cytopathology

**Request Form:** Strong Health-Beige or yellow Gyn requisition.

**Phone:** (585) 275-5656

**Availability:** Mon - Fri 8:30-5:00

**Turnaround Time:** 3-5 working days

**Supplies:** 5 microscopic glass slides, 95% ethanol, Cervex Brush®, cervical spatula.

**Collection:** Scrape each of the four quadrants of the lateral vaginal wall . Transfer the cells to a microscopic glass slide (see procedure for conventional pap smear) and fix immediately in 95% ethanol. Samples from each quadrant should be placed on a separate glass slide. Submit a sample from the cervix as well.

**Labeling Instructions:** Label each glass slide with the patient's name in pencil and the location of the scrape, left, right, etc.

**Special Instructions:** Indicate clinical history on test requisition and reason for test

**Volume Preferred:** 5 slides , 1 for each quadrant, and one from the cervix.

**Storage Instructions:** None.

**Causes for Rejection:** Unlabeled or mislabeled specimens.

**Comments:** Used to evaluate for the presence of vaginal adenosis on patients with a history of DES exposure.

**After Hours & Weekends:** Place specimen in Microbiology refrigerator located in Room 2-5246, phone (585) 275-7801.

## SPUTUM

**CPT Code:** 88161 / 88112 (TP)

**Specimen Type(s):** Spontaneous or induced – may be processed in cytology as liquid-based preparation.

**Laboratory:** Cytopathology

**Request Form:** Non-Gyn requisition.

**Phone:** (585) 275-5656

**Laboratory Hours:** Mon - Fri 8:30-5:00

**Turnaround Time:** 24 hours

**Supplies:** Twist top, leak proof specimen cups, 50-100 ml

**Collection:** Fresh specimens: Do not add any fixative.

**Special Instructions:** Indicate clinical history on test requisition and reason for test

**Volume Preferred:** 0.5 - 20 ml

**Storage Instructions:** Refrigerate, no fixative required

**Causes for Rejection:** Unlabeled or mislabeled specimens

**Comments:** Used to evaluate for pre-malignant, malignant, inflammatory conditions, and micro-organisms such as Pneumocystis (PCP), Candida etc..

**After Hours & Weekends:** Place specimen in Microbiology refrigerator located in Room 2-5246, phone (585) 275-7801.

## BRONCHIAL WASH SPECIMEN

**CPT Code:** 88161 / 88112

**Laboratory:** Cytopathology

**Request Form:** Non-Gyn requisition,

**Phone:** (585) 275-5656

**Laboratory Hours:** Mon - Fri 8:30-5:00

**Turnaround Time:** 24 hours

**Supplies:** Twist top, leak proof specimen cups, 50-100 ml

**Collection:** Fresh specimens: Do not add any fixative.

**Special Instructions:** Indicate clinical history on test requisition and reason for test

**Volume Preferred:** 0.5 - 50 ml

**Storage Instructions:** Refrigerate, no fixative required

**Causes for Rejection:** Unlabeled or mislabeled specimens

**Comments:** Used to evaluate for pre-malignant, malignant, inflammatory conditions, and micro-organisms such as Pneumocystis (PCP), Candida sp. etc.

**After Hours & Weekends:** Place specimen in Microbiology refrigerator located in Room 2-5246, phone (585) 275-7801.

## BRONCHIAL BRUSH SPECIMEN

**CPT Code:** 88161 / 88112

**Laboratory:** Cytopathology

**Request Form:** Non-gyn requisition.

**Phone:** (585) 275-5656

**Laboratory Hours:** Mon - Fri 8:30-5:00

**Turnaround Time:** 24 hours

**Supplies:** Cytolyt fixative.

**Collection:** Localize and sample lesion. Snip off tip of the sampling brush and deposit in container of Cytolyt fixative.

**Labeling Instructions:** Label Cytolyt container with patient name and date of birth.

**Special Instructions:** Indicate clinical history on test requisition, and the specific site sampled.

**Storage Instructions:** None

**Causes for Rejection:** Unlabeled or mislabeled specimen containers.

**Comments:** Used to evaluate for pre-malignant, malignant, inflammatory conditions, and micro-organisms such as Pneumocystis (PCP), Candida, etc.

**After Hours & Weekends:** Place specimen in Microbiology refrigerator located in Room 2-5246, phone (585) 275-7801.

## BRONCHOALVEOLAR LAVAGE

**CPT Code:** 88161 / 88112

**Synonyms:** BAL

**Laboratory:** Cytopathology

**Request Form:** Non-gyn requisition.

**Phone:** (585) 275-5656

**Laboratory Hours:** Mon - Fri 8:30-5:00

**Turnaround Time:** 24 hours

**Supplies:** Twist top, leak proof specimen cups, 50-100ml

**Collection:** Fresh specimens: Do not add any fixative.

**Special Instructions:** Indicate clinical history on test requisition and reason for test

**Volume Preferred:** 0.5 - 100 ml

**Storage Instructions:** Refrigerate, no fixative required

**Causes for Rejection:** Unlabeled or mislabeled specimens

**Comments:** Used for diagnosis of opportunistic infections, cancer, and to evaluate for *Sarcoidosis*.

**After Hours & Weekends:** Place specimen in Microbiology refrigerator located in Room 2-5246, phone (585) 275-7801.

## WANG NEEDLE ASPIRATION

**CPT Code:** 88161 / 88112

**Laboratory:** Cytopathology

**Request Form:** Non-gyn requisition

**Phone:** (585) 275-5656

**Laboratory Hours:** Mon - Fri 8:30-5:00

**Turnaround Time:** 24 hours

**Supplies:** microscopic glass slides, 95% ethanol fixative, Cytolyt fixative

**Collection:** After lesion is localized and sampled, aspirate specimen on two glass slides, and fix rapidly in 95% ethanol. Then, aspirate remaining specimen into Cytolyt fixative for further processing. Label Cytolyt container with patient name and second identifier – usually patient date of birth.

**Labeling Instructions:** Label each glass slide with the patient's name in pencil.

**Special Instructions:** Indicate clinical history on test requisition, reason for test, and the specific site sampled.

**Storage Instructions:** None

**Causes for Rejection:** Unlabeled or mislabeled specimens.

**Comments:** Used to evaluate for pre-malignant, malignant, inflammatory conditions, and micro-organisms such as Pneumocystis (PCP), Candida etc.

**After Hours & Weekends:** Place specimen in Microbiology refrigerator located in Room 2-5246, phone (585) 275-7801.

## PCP (PNEUMOCYSTIS)

**CPT Code:** 88161, 88312

**Specimen Type(s):** *Sputum, Bronchial wash, Bronchoalveolar Lavage, Bronchial Brush*

**Laboratory:** Cytopathology

**Request Form:** Non-gyn requisition.

**Phone:** (585) 275-5656

**Laboratory Hours:** Mon - Fri 8:30-5:00

**Turnaround Time:** same day service (Stat) or 24 hours maximum

**Supplies:** Twist top, leak proof, specimen collection cup, Cytolyt fixative (Bronchial Brush Specimens).

**Collection:** Collect routine sample, per instructions. Fresh specimen recommended.

**Labeling Instructions:** Label as to type of specimen

**Special Instructions:** **Physician** must call cytology laboratory to notify staff if the request is *Stat*. Indicate clinical history on test requisition and reason for test.

**Volume Preferred:** 10 -50 ml

**Storage Instructions:** Refrigerate specimens over night if necessary.

**Causes for Rejection:** Unlabeled or mislabeled specimens

**Comments:** Used to evaluate for the presence of *Pneumocystis carini* (PCP), or other opportunistic infections such as *Candida* sp, *Cryptococcus*, *Histoplasma*, etc.. Liquid-based preparations may also be performed.

**After Hours & Weekends:** Place specimen in Microbiology refrigerator located in Room 2-5246, phone (585) 275-7801.

## FINE NEEDLE ASPIRATION

**CPT Code:** 10021 / 88173

**Specimen Type(s):** Superficial and Deep Seated lesions

**Synonyms:** FNA, FNAB

**Laboratory:** Cytopathology

**Request Form:** Non-gyn requisition.

**Phone:** (585) 275-5656

**Laboratory Hours:** Mon - Fri 8:30-5:00

**Turnaround Time:** **Stat** upon request.

**Supplies:** microscopic glass slides, 95% ethanol fixative, 22-25 gauge fine needle, 10-20 ml syringe, lidocaine optional.

**Collection:**

- For deep seated lesions that need ultrasonic, CT, or fluoroscopic guidance, call the Cytology laboratory and a cytotechnologist will be sent to the site to assist with the collection of the specimen. Call **5-5656** to request a cytotechnologist.
- For superficial or palpable lesions two options are available; 1) the Cytopathology laboratory offers a fine needle aspiration service on-site in the Cytopathology laboratory (2-2100 area SMH). In Cytology, fine needle aspirates are performed by a Cytopathologist. All results are **Stat**. Call the Cytology laboratory for more information on how to refer patients to the fine needle aspiration clinic, or 2) call the laboratory and a cytotechnologist will be sent to the site to assist in the collection of the sample.

**Labeling Instructions:** If performed *without* cytology assistance: Label each glass slide with the patient's name in pencil. Indicate individual sites if multiple sites are sampled.

**Special Instructions:** Indicate clinical history on test requisition and reason for test. Indicate each site sampled if multiple sites are sampled. Fix all slides in 95% ethanol. *If opportunistic infection is suspected, air-dry two or more slides.*

**Volume Preferred:** 4-10 slides

**Causes for Rejection:** Unlabeled or mislabeled specimens

**Comments:** Used to evaluate for pre-malignant, malignant, inflammatory conditions, and microorganisms.

**\*Flow Cytometry:** May be requested in suspected or confirmed cases of *Lymphoma*.

**Special Instructions:** When requesting on site assistance of a cytotechnologist please indicate clinical history of lymphoma. The cytotechnologist will bring a flow media fixative vial to the procedure. If cytology assistance is not required flow cytometry collection media may be obtained by calling the Flow Cytometry lab at **5-3713**.

**Collection instructions:** After fine needle aspiration of lesion is performed, aspirate flow cytometry media into the needle and syringe to rinse any residual specimen remaining in the collection device. Re-aspirate *back into the flow media vial* and repeat 3-4 times to get a thorough rinse of specimen from the needle and syringe. This technique may be done after smears are prepared for microscopic examination, or, a dedicated aspiration may be done exclusively for flow cytometry. When assisted by a cytotechnologist, the specimen in flow media will be brought back to Cytopathology and sent to Flow Cytometry for processing. Flow cytometry specimens acquired without cytology assistance may be sent directly to Flow Cytometry via the pneumatic tube system (**Station #113**).

**After Hours & Weekends:** Specimens not received during normal work hours should be placed specimen in Microbiology refrigerator located in Room 2-5246, phone (585) 275-7801. Specimens will be transported to Cytology the next working day morning for processing.

## URINE CYTOLOGY

**CPT Code:** 88142 / 88112

**Specimen Type(s):** Voided and Catheterized urine. Bladder wash specimens.

**Laboratory:** Cytopathology

**Request Form:** Non-gyn requisition.

**Phone:** (585) 275-5656

**Laboratory Hours:** Mon - Fri 8:30-5:00

**Turnaround Time:** 24 hours

**Supplies:** Twist top leak proof plastic specimen cups, 50 -100 ml.

**Collection:** Fresh specimens **only**, do not add any fixative. *Do **not** submit a 24 hour urine sample.*

**Special Instructions:** Indicate clinical history on test requisition and reason for test. Include complete insurance information.

**Volume Preferred:** 20-100ml

**Storage Instructions:** Refrigerate overnight if necessary

**Causes for Rejection:** Unlabeled or mislabeled specimens; incomplete demographic information.

**Comments:** Tests for pre-malignant, malignant, and inflammatory conditions

**After Hours & Weekends:** Place specimen in Microbiology refrigerator located in Room 2-5246, phone (585) 275-7801.

## CEREBROSPINAL FLUID CYTOLOGY

**CPT Code:** 88106 / 88142 / 88112

**Specimen Type(s):** Cerebral spinal fluid, lumbar puncture, ventricular tap.

**Synonyms:** CSF

**Laboratory:** Cytopathology

**Request Form:** Non-gyn requisition.

**Phone:** (585) 275-5656

**Laboratory Hours:** Mon - Fri 8:30-5:00

**Turnaround Time:** 24 hours

**Supplies:** Red top test tube

**Collection:** Fresh specimens only, do not add any fixative or heparin to bloody specimens.

**Special Instructions:** Indicate clinical history on test requisition and reason for test

**Volume Preferred:** 0.5 - 20 ml

**Storage Instructions:** Refrigerate overnight if necessary, the cells are sensitive to temperature and cellular degeneration occurs if left at room temperature for extended periods of time.

**Causes for Rejection:** Unlabeled or mislabeled specimens.

**Comments:** Tests for pre-malignant, malignant and inflammatory conditions

**After Hours & Weekends:** Place specimen in Microbiology refrigerator located in Room 2-5246, phone (585) 275-7801.

## BODY CAVITY FLUID CYTOLOGY

**CPT Code:** 88142 / 88112

**Specimen Type(s):** Pleural, Peritoneal, and Pericardial fluid

**Synonyms:** *Thoracentesis fluid, Ascites, Ascitic fluid*

**Laboratory:** Cytopathology

**Request Form:** Non-gyn requisition.

**Phone:** (585) 275-5656

**Laboratory Hours:** Mon - Fri 8:30-5:00

**Turnaround Time:** 24 hours

**Supplies:** Twist top leak proof plastic specimen cups, 50 -100 ml., 500ml glass Evacuated containers.

**Collection:** Fresh specimens only, do not add any fixative or heparin to bloody specimens.

**Special Instructions:** Indicate clinical history on test requisition and reason for test

**Volume Preferred:** 10-500 ml

**Storage Instructions:** Refrigerate overnight if necessary

**Causes for Rejection:** Unlabeled or mislabeled specimens

**Comment:** Tests for pre-malignant, malignant, and inflammatory conditions

**After Hours & Weekends:** Place specimen in Microbiology refrigerator located in Room 2-5246, phone (585) 275-7801.

## PELVIC WASH

**CPT Code:** 88112 / 88142

**Specimen Type(s):** *Diaphragm wash, Gutter wash, Cul de sac wash*

**Laboratory:** Cytopathology

**Request Form:** Non-gyn requisition.

**Phone:** (585) 275-5656

**Laboratory Hours:** Mon - Fri 8:30-5:00

**Turnaround Time:** 24 hours

**Supplies:** Twist top leak proof specimen cups, 50-100ml.

**Collection:** Fresh specimen, no fixative.

**Labeling Instructions:** label each container to exact location of wash, left/right diaphragm etc.

**Special Instructions:** Indicate clinical history on test requisition and reason for test

**Volume Preferred:** 10-100ml

**Storage Instructions:** Refrigerate overnight if necessary.

**Causes for Rejection:** Unlabeled or mislabeled requisitions or specimen.

**Comments:** Typically used to diagnose metastatic disease or evaluate course of recurrent disease.

**After Hours & Weekends:** Place specimen in Microbiology refrigerator located in Room 2-5246, phone (585) 275-7801.

## BREAST NIPPLE DISCHARGE

**CPT Code:** 88112

**Laboratory:** Cytopathology

**Request Form:** Non-gyn requisition.

**Phone:** (585) 275-5656

**Laboratory Hours:** Mon – Fri 8:30-5:00

**Turnaround Time:** 24 hours

**Supplies:** Microscopic glass slides, 95% alcohol, or spray fixative.

**Collection:** Gently massage subareolar area and nipple with thumb and forefinger. When secretion occurs, allow a pea-sized drop to accumulate. Touch the secretion with a clean glass slide and withdraw quickly. Slides should be fixed rapidly by immersing in bottle of 95% alcohol or by spray fixation. Repeat procedure until all secretions from nipple are collected.

**Labeling Instructions:** Pre-label frosted end of glass slide with patient name.

**Special Instructions:** If nipple secretion is thick make additional slides using the “pull-apart” method. Hold a second slide gently on top of the first, allow weight of the slide to spread the specimen, then quickly pull the slides apart. Fix immediately before specimen dries.

**Volume Preferred:** Whatever procedure will yield.

**Storage Instructions:** May stay in fixative indefinitely.

**Causes for Rejection:** Unlabeled or mislabeled specimens.

**Comments:** Tests for pre-malignant, malignant, and inflammatory conditions.

**After Hours & Weekends:** Place specimen in Microbiology refrigerator located in Room 2-5246, phone (585) 275-7801.