

CYTOLOGY GENERAL INFORMATION

OPERATING HOURS

The Cytology Laboratory is open Monday through Friday from 8:00 a.m. until 5:00 p.m. Specimens received after 3:00 p.m. will not be processed and read until the next working day.

RECEIVING AREAS FOR CYTOLOGY SPECIMENS

Memorial Hospital: Inpatients, outpatients and clinic patients - specimens are delivered or mailed to the Cytology Laboratory.

General Hospital: Deliver to Laboratory Receiving area. Prompt delivery is important. Courier will bring specimens to Memorial Division.

Women and Children's Hospital: Deliver to Laboratory Receiving area. Prompt delivery is important. Courier will bring specimens to Memorial Division.

TYPE OF SPECIMENS ACCEPTED FOR DIAGNOSIS

1. Cervical Smears (Pap Smears for Cancer Screening).
2. Vaginal Smears (For hormonal evaluation).
3. Thin Prep (Liquid based, thin-layer cell preparation of Pap Smears used for cancer screening. HPV typing, CT, NG and HSV testing may be requested and will be sent to the "~~Molecular Pathology Laboratory~~." appropriate area for testing.
4. Respiratory Tract:
 - a. Sputum
 - b. Induced Sputum
 - c. Bronchial Washings, **BALs**, and Brushings
5. Urine (Mainly for cancer screening, occasionally for cytomegalic inclusions).
6. Effusions of serosal cavities ("Fluids").
7. Breast smears (Including nipple secretions or aspirations).
8. Spinal fluid for tumor screening or leukemic cells.
9. Skin and oral lesions.
10. "Imprints" from surgical specimens (through the pathologist only).
11. Aspiration biopsy material (different body sites).
12. Esophageal, gastric, and Common Bile Duct (CDB) brushings.

PROCEDURE FOR SUBMISSION OF MATERIAL

PAP SMEAR SUPPLIES FOR INPATIENTS:

The following materials are obtained from Material Management:

- a. 1 x 3 Frosted slides

- b. Spray-Cyte fixative
- c. Cardboard slide holders
- d. Arye spatulas
- e. Cervical brushes
- f. Cytopathology Request #17-7492

Additional supplies obtained from Central Services:

- a. Urine bottles
- b. Tight lid sputum jars
- c. Collection containers

Fixative should be ordered from the Pharmacy:

- a. A 50% Alcohol solution is used as a fixative for Non Gynecologic specimens unless otherwise noted.

Additional supplies obtained from the Cytology Laboratory upon request:

- Thin Prep Test Pack used for liquid based pap smears

PAP SMEAR SUPPLIES FOR OUTPATIENT (PHYSICIAN'S OFFICES):

The following materials are obtained for physician's offices from the CAMC Cytology Laboratory or **SVI LabWorks** Client Services Department upon request by telephone or mail without charge:

- a. 1 x 3 frosted slides
- b. Spray-cyte fixative
- c. Cardboard slide holders
- d. Ayre spatulas
- e. Cervical brushes
- f. Cytopathology Request Slips #17-7492
- g. Mailing Envelopes
- h. Thin Prep test pack

Supplies may be picked up in the Cytology Department, mailed to physician's office or delivered by **SVI LabWorks** Courier Service.

RECEIVING AREA

~~MEMORIAL Inpatient, outpatient and clinic patient specimens are delivered or mailed to the Cytology Laboratory, or to the main Laboratory Receiving Area. Prompt delivery is important.~~

~~GENERAL Deliver to the Laboratory Receiving Area. Prompt delivery is important.~~

~~WOMEN AND CHILDREN'S Deliver to the Laboratory Receiving area. Prompt delivery is important.~~

*All specimens not fulfilling general or specific requirements of the Cytology Laboratory will be returned to the originating physician and/or nursing unit for clarification or recollection.

ACCEPTANCE OF SPECIMENS PROCEDURE

Specimens must meet the following criteria to be accepted for processing and interpretation in the Cytology Laboratory.

FEMALE GENITAL SMEARS

1. Specimen should be spread evenly on slide, which is labeled with lead pencil on frosted end of slide with patient's first and last name.
2. Specimen must be fixed with cell fixative in order that cellular detail is preserved (Genital smear should be held 12 inches from can when spraying). Place in cardboard folder and secure with tape or a rubber band.
3. Specimen submitted in ThinPrep vial must be labeled with patient's name. The brush is NOT to be left in the vial.
4. Make sure the requisition has been completely filled out with the following information:
 - A. Patient's full name (Husbands name if married).
 - B. Patient's Address or Room Number (If inpatient).
 - C. Patient's pertinent clinical history. Answer question: Is patient at risk?
 - D. Patient's age.
 - E. Patient's last menstrual period or menstrual history, i.e., menopause/pregnant/postpartum/hysterectomy.
 - F. Doctor's name and address.
 - G. Billing information – If patient's insurance is to be billed, a copy of the insurance card or the insurance information should be completed on requisition slip. If Medicare/Medicaid is to be billed, the social security number is required (for both patient and person under whom they are covered, along with a copy of the Medicare/Medicaid card. An ICD 9 Code is required on all patient or Medicare/Medicaid billing. Incomplete billing information causes a delay in the processing of the specimen.
5. Name on frosted end of slide and requisition must match or specimen will be rejected.

NON-GENITAL AND ASPIRATIONS

1. All non-genital specimens must arrive in the laboratory in quantities of no more than 50 ml. Do not send large quantity of a specimen.

2. Specimen should be in a tightly capped container in a plastic specimen bag with request slip in separate pocket.

3. Specimen containers should be identified with patient's name and type of specimen.

EXAMPLE: Sputum - Urine.

4. All specimens should arrive in the laboratory fresh without fixative or preservative, unless otherwise noted.

5. Requisition slip containing all pertinent information such as listed for genital smears must accompany specimen in separate pocket of plastic specimen bag.

6. No specimen will be accepted if the container has leaked or specimen spilled out in bag, on requisition, bottle or slide container. The floor will be called and asked to pick up rejected specimen (if inpatient) or the specimen will be sent back to doctor's office.

7. Specimens will not be accepted in a vacuum bottle.

ACCEPTANCE OF SPECIMENS PROCEDURE

Every attempt will be made to clarify any information so that a specimen can be accepted without causing any risk to the patient.

CYTOLOGY SPECIMEN REJECTION PROCEDURE

Numerous specimens are received in the Cytology Laboratory daily. Occasionally there is reason for specimen rejection. Listed below are some of the instances when specimens will be considered unacceptable.

UNACCEPTABLE

1. Specimen sent to Cytology without the proper Cytology requisition is not acceptable.

2. Unlabeled slides are unacceptable. Slides submitted for cytologic evaluation must have the last and first name of the patient etched or written with lead pencil on the frosted end of the slide.

3. Labeling on specimen (i.e., patient's name) does not correspond with the labeling on the cytology requisition.

4. Specimens not identified with site of origin are not acceptable.

5. Specimens which are not sealed in plastic bags with the requisition in the separate pocket cannot be accepted.

6. Specimens that have spilled out of container on the requisition are not acceptable.
 7. Incomplete billing information will cause a delay in the process of cytological specimens.
 8. Any fluid collected in a glass vacuum (vacutainer) bottle is not acceptable.
 9. Syringes with attached needles are not acceptable. If sending syringe, please remove needle and apply cap.
- Specimens that are rejected are recorded in the Specimen Rejection Book.

All of the following specimens will be excluded from testing and an unacceptable report will be generated when one of the specimens are received in the department.

- a. 24 hour urines
- b. Blood
- c. Semen
- d. Feces

RETURN OF IMPROPERLY IDENTIFIED SPECIMENS PROCEDURE

1. Specimen sent to Cytology for interpretation will be returned to point of origin if not properly labeled and requisitioned. The specimen will be returned for the following reasons:

- A. Slides not identified with lead pencil on frosted or etched on glass end with diamond point pencil.
- B. Wrong requisition sent with specimen.
- C. Name on slides and requisition slip does not match.
- D. Physician name not included on inpatient requisition.

2. Cytology technician will note that specimen has been returned in the Specimen Rejection Book.

3. Cytology technician will note reason for return on a separate sheet and include it with the specimen.

4. Outpatient specimen will be delivered to offices by courier service or mailed to the respective physicians.

5. Inpatient specimens will be taken to Central Lab Receiving Office and clerk on duty will be asked to notify the nursing messenger to return specimen to the proper nursing station.

6. Specimens should be corrected at point of origin and returned to Cytology.

7. Log Book for "Improperly Labeled Specimens" sent to Cytology will be checked periodically for proper return of specimen to Cytology. Log Book will also be checked to see if there is a

certain Nursing Station/Physician with multiple returned specimens and their information will be reported to Quality Assurance.

FIXED SPECIMENS THAT HAVE BEEN BROKEN

When slides are received broken:

- A letter of explanation is sent to the patient along with his/her check.
- Physician's office is notified by mail and also by telephone.

WEEKEND AND AFTER 4:00 P.M. PREPARATION POLICY

The following procedure should be followed for specimens for Cytology, which are collected on weekends or after hours.

BRONCHIAL SPECIMENS Not processed on Weekends. However, if specimen is collected leave as is and refrigerate.

SPUTUMS: Leave as is and refrigerate.

URINES: Leave as is and refrigerate.

PLEURAL FLUIDS AND ANY OTHER FLUID EXCEPT SPINAL AND BRAIN FLUIDS

- Should be collected on floor. No more than 50-100 mLs should be sent in a screw top bottle. No vacuum bottles accepted. If large container of fluid arrives from which several tests must be completed, including cytology, 100 mLs should be removed and refrigerated.

SPINAL AND BRAIN FLUIDS -

4:00 PM - Midnight and Weekends: Take CSF specimens for Cytology to the Automated Procedures Lab. Slides will be made in APL. Do not add alcohol to these fluids as it is to be cytocentrifuged immediately

SLIDE RELEASE

Slides are considered the property of CAMC, Department of Pathology. Slides will be released only under the following conditions:

A. A physician has requested the material for the purpose of guiding medical treatment of the patient.

B. MUST have proper release form signed by the patient AND the physician who collected material.

For those situations not meeting both criteria A and B, the inquiring party may examine tissue preparations in CAMC Laboratories under supervision of a CAMC pathologist, provided that appropriate release of confidentiality documents have been signed by the patient and that the materials examined are not removed from CAMC Laboratories.

PROCEDURE FOR REPORTING GENITAL CASES WHICH ARE INTERPRETED AS MALIGNANT

- ~~1. All reports indicating the presence of abnormal or malignant cells are marked by the computer printed word ... "ALERT" ... before the final diagnosis.~~
- ~~2.~~ 1. All inpatient reports indicating the presence of ~~pre~~malignant (HGSIL or worse) or malignant cells are called to the appropriate floor and faxed to the floor as requested. A copy of this report will be mailed to the physician's office (physicians whose name appear on the requisition).
- ~~3.~~ 2. A copy of outpatient ~~abnormal (ASCUS or worse) or~~ malignant cases will be sent to the physician's office by mail the following day. ~~These reports will be marked by the computer printed word ... "ALERT" ... before the final diagnosis.~~
4. 3. All ~~pre~~malignant (HGSIL or worse) and/or malignant reports are called to the physician's office as soon as the results are known. The person receiving this information, the time and date the call is made and the person making the call is noted under "Physician Notification" QA Program. Also noted will be the number of times this physician's office was called.
- ~~5.~~ 4. If the physician's office cannot be reached before 5:00 p.m. by the cytology section, the office will be notified the following day except for weekends.
- ~~6.~~ 5. If, after three working days, the physician's office cannot be reached by telephone with the malignant results, the Departmental Chairman will be notified.

PROCEDURE FOR REPORTING MALIGNANT CSF

- ~~1. All reports indicating the presence of abnormal, suspicious and/or malignant cells are marked by the computer printed word ... "ALERT" ... before the final diagnosis.~~
- ~~2. All inpatient reports indicating the presence of suspicious or malignant cells are taken to the floor via charting clerks.~~
3. 2. A copy of this report ~~marked by the computer printed word ... "ALERT" ... before the final diagnosis~~ will be sent to the physician's office by mail (physicians whose name appear on the requisition).

~~4.~~ 1. All malignant reports are called by telephone as soon as the result is known and the result given to the attending physician and/or consulting physician who performed the procedure.

~~5.~~ 3. Each call notifying the physician of a malignant report is noted under the “Physician Notification” QA Program. The following information is recorded: the date and time call is made, person to whom information is given, also noted will be the number of times this physician was called or paged.

~~6.~~ 4. If a physician cannot be reached before 5:00 p.m. by the cytology section, the pathologist on evening call will notify the physician of this malignant cytology report on his/her patient if the pathologist deems it urgent that the attending should have the report that night. Otherwise, they will see that the attending is notified the following day.

*If the attending or the consulting physicians cannot be reached by telephone within a reasonable time (1-2 hours) because they are out of town or not on call, the switchboard will be contacted to see who is taking call for the physician and this individual will be notified. If there is no one on call, the pathologist on call for the laboratory will contact the Chief of Department of the attending physician.

REPORTING RESULTS

The Laboratory Director and Pathologist in charge of Cytology are responsible for the final laboratory report, but each report or requisition shall be signed and initialed by the Cytopathologist and/or Cytotechnologist who examined the preparation and delivered the final interpretation. Names of all persons who examined the specimen must be on the front of the requisition, especially if there is an inconsistency in the reporting.

Charleston Area Medical Center Cytology Section uses a modified Bethesda System for reporting specimens.

1. All diagnostic specimens have priority over screening specimens. All material will be reported with utmost possible speed. Clinician should have the majority of their patient reports within 48 to 72 hours.

2. All reports are computer reports and will contain essay-type evaluations. Cytology reports are individually done for each patient. The numerical classification is no longer used. All non-genital material is interpreted and reported by a pathologist. All genital material containing any kind of reactive - atypical cells (or worse) are reported by a pathologist.

3. ~~All reports indicating the presence of abnormal or malignant cells are marked by the computer generated word...“ALERT”... above the final diagnosis.~~ All malignant Pap Smear or CSF reports ~~containing the word “ALERT” signifying the presence of premalignant (HGSIL or worse) malignant cells~~ are called to the physician's office or hospital unit of the patient. The person receiving this information, the time the call is made and the date the call is made is noted under the “Physician Notification” QA Program. A monthly report is sent to each physician containing his/her patient’s name and diagnosis that have been reported as abnormal or

malignant in that month. For further information of reporting critical values, see "Critical Value Response for Clinical Laboratories" located in the Laboratory Policy and Procedure Manual.

4. All material is submitted to the rules of Quality Control as issued by the College of American Pathology, the American Society of Cytopathology, American Society of Clinical Pathology and CLIA 88.

5. For the protection of patients, such material, which is technically inadequate or non-representative, will be reported out as "Unsatisfactory for Interpretation". Whenever possible, financial allowance will be made to avoid hardship on patients. A monthly report is sent to each physician containing his/or her patients name and diagnosis that have been reported as Unsatisfactory for that month.

6. Maturation Index: Results are reported as the distribution of parabasal, intermediary and superficial cells - in this order, counted in 100 consecutive cells of a vaginal smear.

EXAMPLE: Parabasal 4% - Intermediate 15% - Superficial 81%.

Reporting Cytology When Computer is Down:

- If the computer is down for less than eight hours, the cytology reporting policy will not be affected.

- Upon being informed that the computer will not be working for more than eight hours, the following system will be used.

1. Cytotechnologists will read slides as usual and make usual notation and diagnosis on request slip.

2. Cytology report will be typed on 8 1/2 x 11 white report form.

3. The following message will be typed across the top of report:

PRELIMINARY REPORT, PERMANENT REPORT WILL FOLLOW IN NEAR FUTURE.

4. As soon as the computer is in operation, all cytology tests are entered and permanent computer reports generated.