

**Surgical Collection of Pathology Specimens**

Page 1 of 7

**SURGICAL COLLECTION OF PATHOLOGY SPECIMENS**

- I. PURPOSE:** To provide instructions for the collection and submission of surgical specimens to Rice Memorial Hospital (RMH) Laboratory.

This procedure will cover general requisition and billing information, general specimen requirements, and tissue specific collection and submission requirements.

- II. RESPONSIBILITY:** All personnel responsible for collecting, ordering, and submitting any surgical specimens to RMH Laboratory should be familiar with this procedure.

- III. GENERAL INFORMATION REGARDING REQUISITION COMPLETION AND BILLING:** All specimens must be submitted with a completely filled out handwritten or electronic requisition and billing information (handwritten requisitions only).

- A. Requisition Information: The following information **must be provided**:

- Patient's name
- DOB
- Ordering Provider (include any "copy to" providers as well)
- Specimen source with exact anatomical location.
- Any pertinent clinical information and/or history.

- B. Billing Information: Billing information should be submitted with handwritten requisitions and can be written on the requisition or submitted in a separate document. This information should include:

- Patient's account # (7 digits)
- Insurance information (Policy name and number, Medicare number, or Medical assistance number.
- Patient Address and phone number.
- ICD-10 code(s) **IMPORTANT** See note below.
- Room number and Hospital number (if in-patient).

Incomplete requisition and billing information can delay results. If there are any questions or concerns with requisition completion, ordering, or billing, please contact RMH Laboratory at 320-231-4500.

**NOTE:** It is crucial the proper diagnosis codes are included for any insurance submission billings. This includes Medicare and Medicaid. If any test is deemed as medically unnecessary or not covered by the patient's third party payer, the requesting hospital or clinic is responsible for providing Rice Laboratory with appropriate information so that the patient can be billed (i.e. a completed, dated, and signed Advance Beneficiary Notice (ABN)).

**If the facility does not provide the necessary information to properly bill the patient or the payer, Rice Laboratory will bill the facility for the testing.** Specialty testing charges where a specialty laboratory does not bill Medicare or Medicaid will be charged to the facility account.

- IV. GENERAL SPECIMEN REQUIREMENTS:** The following are general submission requirements for all specimens regardless of source or type:

- A. Specimens must be collected and received only from licensed, authorized sources, such as physicians, nurse practitioners, and physician's assistants. Provider's name must be clearly annotated.

**Surgical Collection of Pathology Specimens**

Page 2 of 7

- B. Specimen Labeling Requirements: **All specimens must be labeled by the either the physician or the assisting nurse/technician before the specimen leaves the collection location.**
1. Specimens must be labeled according to RMH Laboratory procedure, *Zero Tolerance Specimen Labeling Procedure*. This procedure requires 2 unique identifiers. These identifiers may include 2 of the following:
    - Patient Name (*Last Name, First Name, MI*).
    - Date of Birth
    - Medical Record Number
  2. Date and time of collection.
  3. Specimen Source: All submissions must have the exact anatomical site specified to include left or right designations (example: Upper Right Thyroid Biopsy).
  4. Only authorized abbreviations may be used.
  5. The labeling should be checked against a positive patient ID, preferably the wristband attached to the patient.
- C. Clinical Information and History: Specimens should be submitted with any pertinent clinical information and history annotated on the requisition.
- D. Fixation:
1. Routine specimens are normally received in 10% Neutral Buffered Formalin (NBF).
    - a. The volume of formalin should be at least 10 times the volume of the size of the tissue.
    - b. Ensure the container is properly labeled (as stated above) and has a *Hazardous Formalin* label affixed.
  2. Non-Routine Surgical Specimens: See Section IV of this procedure for individual fixation requirements for non-routine specimen requirements:
- E. All specimens should be transported to RMH Laboratory as soon as possible after collection to help aid in timely case turnaround times.
- F. A surgical pathology requisition or electronic order must be submitted for each patient specimen. The information on the requisition or electronic order must match exactly with the specimen information or the specimen will be determined to be unacceptable which can lead to delays in processing and case sign out. Refer to Section III. above for requisition requirements.
- G. Unacceptable specimens include:
- Unlabeled/Mislabeled specimens.
  - Specimen where the requisition and specimen container information do not match.
  - Specimen without a completed histology requisition.
  - Specimen without a complete annotated source.
  - Specimen not collected in an approved manner.

**NOTE:** Unacceptable specimens will still be processed; however, all submission problems must be resolved before any results are released. RMH Laboratory Client Services personnel will contact the provider to correct any submission problems. A "Specimen Correction" form will be completed and

**Surgical Collection of Pathology Specimens**

Page 3 of 7

electronically linked to the case. See RMH laboratory procedure, *Correction Form Policy* for instructions.

**V. SPECIAL SPECIMEN REQUIREMENTS:**

**A. Frozen Section / Fresh Specimens:**

1. Communication with RMH of a Frozen Section/Fresh Specimen Submission:
  - a. Outreach Specimens: Please call the Pathology Section (320-231-4520) prior to delivering the specimen to RMH. (Most samples will require driving the sample to RMH due to delay of delivery via Rice courier schedules.)
    - 1) Provide as much lead time as possible for RMH to prepare for the specimen.
    - 2) When calling, provide us with the following information:
      - Patient Name
      - Date of Birth
      - Any pertinent case information
  - b. RMH Surgery Specimens:
    - 1) Routine Cases: There is no need to contact Pathology as we monitor the surgery schedule for possible frozen/fresh sections.
    - 2) Special Cases (Muscle, Nerve, Renal biopsies, Skin Immunofluorescence): Please call the Pathology Section as soon as these cases are scheduled so we can ensure appropriate collection kits are available for processing.
  - c. RMH Imaging Department:
    - 1) Routine Specimens: Please call the Pathology section as soon as you know you will be sending a frozen/fresh specimen.
    - 2) Renal Biopsies: Please call the Pathology Section as soon as these cases are scheduled so we can ensure appropriate collection kits are available for processing.
  - d. After Hours Communication: If a frozen section / fresh specimen is going to be collected after normal operational hours (M-F 0700-1600) contact the pathologist on call or the main Laboratory at 320-231-4500. The Laboratory will then page the on-call pathologist.
2. Frozen Section / Fresh Specimen Submission:
  - a. Small needle core specimens should be placed on a tefla pad and put in a dry container. If a tefla pad is not available, the tissue may be place on a saline soaked piece of fine gauze.
  - b. Larger pieces of tissue should be placed in a small sterile container (sterile urine cup) with no fixative.
  - c. The container must be labeled as specified in Section IV. B. above.
  - d. A requisition or Epic order label must be submitted with the specimen.
  - e. If transport time will be more than five minutes, the specimen container should be placed on wet ice. The specimen (plus ice, if necessary) is to be placed in a biohazard bag.
  - f. If the specimen is breast tissue, remember to indicate time breast tissue was removed from the body.

**Surgical Collection of Pathology Specimens**

Page 4 of 7

- B. **Large Specimens (colon, small bowel and uterus):** Large specimens should be opened prior to the addition of fixative to ensure adequate fixation of the entire specimen.
1. Outreach providers should open these specimens themselves and add the fixative due to potential delays in transportation to Rice Pathology.  
**NOTE:** If tumor is present in the specimen, we still request the surgeon open the specimen. If the tumor is close to a margin however, we recommend the end closest to the tumor be kept intact for better evaluation of this margin. This is especially true of any soft tissue margins (e.g. rectal).
  2. In-house specimens are received in the laboratory un-opened and we will open them and add the fixative.
  3. If a large specimen is received after normal pathology hours (0700-1600), the on-call Pathologist should be notified.

- C. **Lymph Node Biopsies:** If a biopsy is performed to evaluate the possibility of lymphoma, the specimen should be sent **UNFIXED** and **STAT** to pathology.
1. The specimen should be placed on a tefla pad or saline soaked fine gauze and then placed in an appropriately labeled specimen container.
  2. Follow the steps in section V. A. 1. c., Frozen Section / Fresh Specimen Submission for handling instructions.

**NOTE: Under no circumstances is the specimen to be left unfixed overnight. If immediate transport is unavailable, the node should be bisected and fixed in 10% formalin immediately.**

- D. **Breast Specimens for HER2, Estrogen (ER)/Progesterone (PgR) Analysis:** Breast specimens tested for the predictive markers HER2, ER/PgR must ensure the specimen has been properly fixed for a minimum of 6 hrs and maximum of 72 hrs. **The success of the testing is dependent on this fixation timeframe.**
1. The breast tissue should be placed in 10% formalin within one hour of removal.
  2. Surgical personnel will document the time the tissue is removed from the patient and the time the specimen is placed in formalin.
  3. Breast specimens should be transported to Rice Laboratory as soon as possible for proper handling.
  4. If a breast biopsy is performed on a Friday, please make sure the specimen can arrive at RMH before 4:00pm that day to ensure Saturday morning gross examination.

**NOTE:** Prolonged fixation, especially over a weekend should be avoided whenever possible. If routine processing would lead to excessive fixation, special arrangements will need to be made with RMH Laboratory to handle this specimen.

- E. **Renal Biopsy For Non-Malignant Pathology:** Renal biopsies are sent fresh and handled as in section V. A. above.
1. Renal biopsies must be sent STAT to the Pathology Section as soon as they are removed from the patient so they processed and placed in the appropriate fixatives.

**Surgical Collection of Pathology Specimens**

Page 5 of 7

2. Renal biopsies are sent to Mayo Medical Laboratories (MML) for special studies. The Mayo Renal Panel must be ordered by the collecting location to ensure the results get into the patient electronic chart. The MML test code is "RPCWT".
3. Renal biopsies must be submitted with completed MML form, *Renal Patient Information Form*. This form is available directly from the MML website.

**F. Muscle Biopsies For Non-Malignant Pathology:** Muscle biopsies are sent fresh and handled as in section V. A. above.

1. Muscle biopsies must be sent STAT to the Pathology Section as soon as they are removed from the patient so they can be snap frozen.
2. Muscle biopsies are sent to Mayo Medical Laboratories (MML) for special studies. The Mayo Muscle Panel must be ordered by the collecting location to ensure the results get into the patient electronic chart. The MML test code is "MBX".
3. Contact the Pathology Section as soon as the surgeon enters the operating room to begin the procedure so we can prepare the freezing process.
4. Muscle biopsies must be submitted with a completed requisition and a completed MML form, *Muscle Biopsy Histochemistry Patient Information Form*. This form is available directly from the MML website.

**G. Nerve Biopsies For Non-Malignant Pathology:** Nerve biopsies are sent fresh and handled as in section V. A. above.

1. Nerve biopsies are sent to Mayo Medical Laboratories (MML) for special studies that require special fixatives. Please call pathology as soon as this procedure is scheduled so we can ensure we have the appropriate fixatives on hand.
2. The Mayo Nerve Panel must be ordered by the collecting location to ensure the results get into the patient electronic chart. The MML test code is "PNBX".
3. Nerve biopsies must be sent STAT to the Pathology Section as soon as they are removed from the patient so they can be snap frozen.
4. Nerve biopsies must be submitted with a completed requisition and a completed MML *Nerve Biopsy Patient Information Form*. This form is available directly from the MML website.

**H. Chromosome Microarray (CMA) testing on Placenta, products of conception, fetal demise:**

Coordination between the nursing unit, the laboratory, and the grossing pathologist is important to ensure the specimen is processed in a timely manner.

Specimens may be submitted fresh or fixed in 10% NBF.

1. Fresh Specimens: These are sent to Pathology without fixative.
  - a. The submitting staff will order the EPIC/MML interfaced test code "CMAPC".
  - b. Specimen should be refrigerated if there will be a delay in transport.
2. Formalin Fixed Specimens: These are specimens that the submitter will have added 10% NBF prior to delivery to Pathology.
  - a. The submitting staff will order the EPIC/MML interfaced test code "CMAMT".

**Surgical Collection of Pathology Specimens**

Page 6 of 7

- b. Specimen can remain at room temp until transported.
- 3. Submission of maternal blood sample: Although not required, a maternal blood sample is requested by MML when ordering CMA. The maternal blood sample is used to rule out maternal blood contamination in the fetal sample.
  - a. If submitting the maternal blood sample, the submitting staff will order the EPIC/MML test code "PPAP". This is a separate order in addition to the CMAPC or CMAMT.
  - b. The blood sample should be sent with the tissue sample to ensure they can be paired prior to shipment to MML.
- I. **Skin for Direct Immunofluorescence:** Skin for direct immunofluorescence is sent fresh and handled as in section V. A. above. Do not fix with formalin as immunofluorescence cannot be performed on formalin fixed tissue. Please contact pathology when scheduling this biopsy so we can ensure we have the appropriate fixatives on hand.
  - 1. Skin for immunofluorescence is sent to MML and requires special transport media.
  - 2. The cutaneous direct immunoassay test must be ordered by the collecting location to ensure the results get into the patient electronic chart. The MML test code is "CIB".
  - 3. Submit fresh, unfixed skin.
  - 4. If collection will be done at an outreach site, the client should contact RMH Pathology Section to have the transport media sent to them to collect the specimen. Send collected specimen back to RMH refrigerated but not frozen.
- J. **Kidney and bladder stones:** Must be sent dry, without fixative (fixative alters stone chemical analysis).
- K. **Insects or Parasites:** Should be received in a clean, sealed, properly labeled container. Do not submit in an envelope.
  - 1. Scabies:
    - a. Submit skin scrapings on a glass microscopic slide.
    - b. Cover with a clean slide and fasten down to transport. (Rubber bands work well).
    - c. Submit in a sterile, sealed container.
  - 2. Worms- (whole and segments): Submit in properly labeled container of 10% NBF or 70% alcohol.
  - 3. Arthropods- (ticks, lice, nits, bedbugs, etc.) Submit in clean dry **SEALED** container (example- Urine specimen container).
  - 4. For all requests, please indicate on the requisition the reason for the request (ex: bugs found on bedding, suspect worm in stool etc.).

## Surgical Collection of Pathology Specimens

Page 7 of 7

- L. **Creutzfeldt-Jacob Suspected Tissue:** These specimens are not accepted for testing at RMH. Please phone CDC for questions: 800-CDC-INFO. (See Morgue Manual – Autopsy and Morgue Infection Control for further instructions if an autopsy is requested.).
- M. **Bullets:** Should be given directly to the investigating officer. If none is available, **follow a written chain of custody, even if no foul play is suspected.** Call the pathology lab or pathologist on call for more information. Bullets can be saved dry.
- N. **Glass, Metal, and Other Foreign Body Objects:** May be sent without fixative in an appropriately labeled container.

**NOTE:** Keep in mind that any tissue may be sent to the lab unfixed, if sent immediately. Once the specimen is fixed, certain special studies cannot be performed.

If you have any questions on any specimen, please call! If after normal operating hours (0700-1600) contact the main laboratory who will contact the pathologist on call.

### Rice Memorial Hospital Laboratory Phone Numbers

- RMH Main Laboratory: 320-231-4500
- RMH Laboratory Client Services: 320-231-4814
- RMH Laboratory-Pathology Section: 320-231-4520

## VI. SITES OF PATHOLOGY SPECIMEN COLLECTION:

- A. Rice Memorial Hospital: Operating Room, Imaging Department, and Emergency Department personnel will transport routine specimens to RMH Laboratory Client Services. Frozen/fresh samples will be delivered directly to the pathology section located on the 2<sup>nd</sup> floor.
- B. Outreach Hospitals and Clinics: Outreach clinics bring their specimens to the hospital in their city. The RMH courier will pick up all outside clinic and hospital specimens in the hospital laboratory,
- C. Carris Willmar Clinic specimens are delivered by both clinic personnel and RMH couriers at the clinic.
- D. Carris Surgery Center specimens are picked up by the RMH courier at least twice a day.
- E. Carris Lakeland Clinic specimens are picked up by lab personnel at 10:30 AM and 1:30 PM.

## VII. RELATED PROCEDURES:

- A. RMH Laboratory procedure, *Correction Form Policy*.
- B. RHM Laboratory procedure, *Laboratory Specimen Labeling Policy*
- C. RMH Laboratory procedure, *Zero Tolerance Specimen Labeling Procedure*.

## VIII. REFERENCES:

- A. College of American Pathologists (CAP) Accreditation Program, All Common Checklist, COM.06000-06300, 7/28/2015