



Alaska Native Medical Center
Department of Pathology
4315 Diplomacy Dr.
Anchorage, AK 99508
907 729-1200

Pathology Manual for Nursing and Clinical Staff

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General Information

The ANMC laboratory is accredited by the Joint commission on Accreditation of Health Organizations, The College of American Pathologists, and The American Association of Blood Banks.

All our Pathologists are board certified in both Clinical and Anatomic Pathology

A. Contact Information:

	Phone	Pager
Dr. James Tiesinga, MD Chief Pathologist, Director of Laboratory Services	729-1242	
Dr. Jeffery Hittson, MD Pathologist	729-1802	
Dr. Lee Astle, MD Pathologist	729-1244	
Dr. Lena Hu, MD Pathologist	729-1234	
Histology Laboratory	Main 729-1810 2nd 729-1804	
After Hours Histotechnician	Check On Call Schedule	
Main Laboratory	729-1200	
Histology Fax	729-1226	

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B. Hours of Operation: M-F, 8:00 am until 4:30 pm

- **Specimens received after 3:00pm will be processed the next working day.**
- **After hours, weekends and holidays the on call Pathologist can be reached through their personal pager.**
- **Pager numbers for the on call staff are available through the Main Laboratory at 729-1200.**

C. Specimens which should never be submitted to Pathology

- **Criminal evidence (including bullets, knives, shrapnel, etc.)**
- **Personal effects (unless submitted with a body for autopsy)**

D. Specimens which are not required to be submitted to Pathology—but may be submitted if desired

- **Bunions**
- **Calculus**
- **Cataract**
- **Ear tube**
- **Loose Body**
- **Mediport**
- **Newborn foreskin**
- **Norplant or similar device (Implantable contraception)**
- **Pacemaker**
- **Placenta from a normal delivery**
- **Rib segment**
- **Tooth**
- **Toenail**
- **Tonsil in patient <14 years old**
- **Adenoid inpatient <14 years old**
- **Surgical/orthopedic hardware**
- **Intrauterine device**
- **Incidental tissue removed during surgical incision or repair**
- **Fluid from therapeutic thoracentesis**
- **Fluid from therapeutic paracentesis**
- **Urine for clinical lab processing**
- **CSF for clinical lab processing**
- **Any other body fluid submitted to the laboratory for clinical lab processing only, where cytology is not specifically requested**

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E. Policy for Rejection of Specimens

- **All specimens received by Surgical Pathology are examined for the following deficiencies:**
 - 1. Absence of a Requisition Form**
 - 2. Absence of Two Patient identifiers on container and/or requisition form**
 - 3. Mislabeling of container or specimen designation that differs from the requisition**
 - 4. Missing specimen container**
 - 5. No tissue in the container**
 - 6. Requisition missing physician's name**
 - 7. No clinical history provided**
 - 8. Incomplete requisition (specimen sites not listed)**
 - 9. Inadequate amount of fixative**
 - 10. Container lid improperly sealed/fluid spill**
- **If a deficiency is noted the ward/clinic will be contacted to report the problem so that the specimen can be properly submitted.**
- **Dried out/damaged but properly labeled specimens are accepted; the Nursing Supervisor, Nurse Manager and requesting physician will be notified as appropriate if the condition of the specimen compromises diagnosis.**

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F. Policy for Release of Tissue

1. In certain cases, patients may request release of their tissue to themselves or designated representative.
 - If patient requests return of tissue directly, assist patient in completing blocks 1 and 2 of the Authorization for Release of Pathology Tissue Specimens form which can be found on the ANMC Intranet page.
 - If patient makes the request through a hospital provider or designee (such as social services), the patient's provider/designee will obtain the completed authorization on Attachment B.
 - Blocks 1 and 2 must be completed, including patient's signature. Incomplete forms will be returned to the patient/provider.
 - Submit form to the Department of Pathology Histology Laboratory.
 - The request will be reviewed and must be approved by the Pathologist responsible for the case and by the hospital administration.
 - If approved, the tissue will be available no earlier than two weeks after the Pathology report is finalized.
2. For fetuses please see specific instructions under gestational age. [\(here\)](#)

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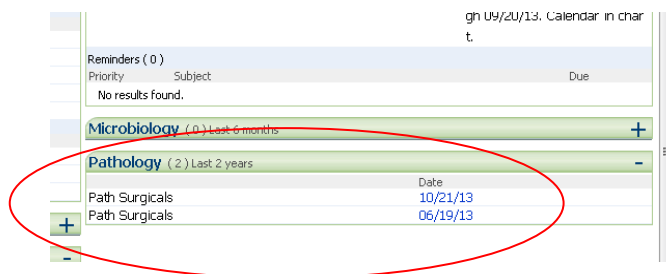
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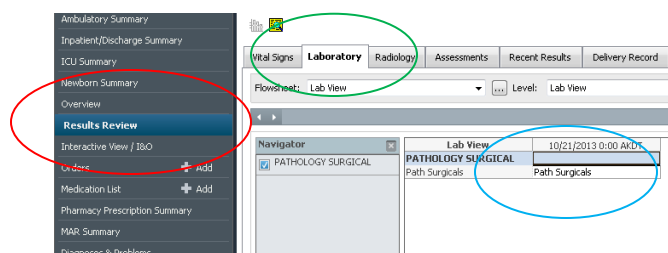
G. Where to Find Pathology Reports

Pathology reports are disseminated in two ways:

- Through the CERNER electronic health record
 - Use the dashboard



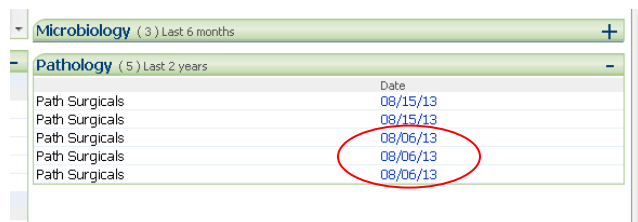
- Or the results section



- Through an auto-fax service to those clinics that do not have access to the CERNER system.

Supplemental Reports:

- Supplemental reports will be reflected as a separate report if accessed through dashboard. The three reports listed below represent a final report and two supplemental reports.



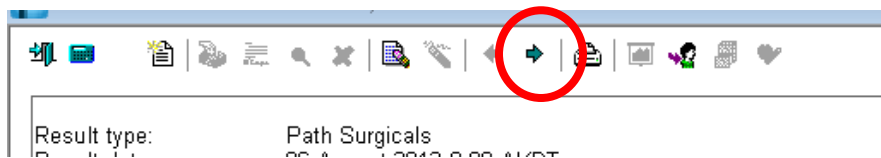
- If using the results section,



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- use the navigation arrows to page through supplemental and find reports.
- Supplemental reports are accessed first, with the final report as the last report



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Genetic testing for inheritable mutations

Any testing done which may identify an inheritable genetic mutation requires an ANMC patient informed consent for genetic testing.

The ANMC patient informed consent for genetic testing form can be found on the laboratory intranet home page.

The form must be completed and a copy provided to the laboratory for inclusion in the request for testing on the tissue before the tissue can be forwarded for testing. As many of these tests are done on fresh tissue, and fresh tissue degrades rapidly, you must ensure that the consent is forwarded to pathology with the tissue. Delays could result in failure of the requested testing.

This policy applies to all tissues submitted to pathology which may require such testing. This includes fetal remains/stillborn fetus, blood and bone marrow, tissue submitted for cytology, and requests for testing on solid tissue specimens.

Per hospital policy, specific exclusions that do not require a consent are genetic testing:

1. for emergency medical treatment;
2. to screen newborns as required by state or federal law;
3. for a valid law enforcement purpose (e.g. under a valid search warrant or court order for DNA sampling, testing, and copies of medical records); and
4. for routine diagnostic tests that do not analyze or distinguish genetic characteristics, such as a PCR respiratory panel, HSV PCR, HIV DNA/RNA analysis, or Hepatitis DNA/RNA analysis.

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Surgical Pathology

A. Definition of Routine and Rush

Routine—Surgical pathology specimens received in formalin in which there is no **immediate** need for patient results. Most results will be reported within two business days from the date the specimen is received in the Histology laboratory. However, larger specimens or special studies may require extra time for processing.

Rush—Surgical pathology specimens received in formalin that require a 24-hour or less turn-around-time due to an urgent patient care situation in which the pathologic diagnosis will immediately impact or alter the plan of treatment.

B. Pathology Requisition Forms

- Pathology tests cannot be ordered in CERNER
 - For all pathology specimens (Surgical and Cytopathology) please use Pathology requisition form (QM V 304-07-00 Attachment F) which can be found on the Pathology Intranet page.
 - Check appropriate box for either tissue specimen or cytology specimen.
 - Form should include:
 - Patient's Name
 - Date of Birth
 - MRN#
 - Date specimen obtained
 - Proper encounter number
 - To ensure prompt and proper transmittal to the CERNER medical record, please insure that the specimen is entered under the current Cerner encounter, not a past one.
 - Brief clinical history
 - Submitting institution (i.e. Hospital/clinic)
 - Submitting provider
 - Check appropriate ICD-9 code box

Note: In addition, there are special requirements for breast cases (see breast data sheet)

- A completed requisition form must accompany each specimen
- Other forms (i.e. Mayo Clinic, University of Washington forms) are available from the Pathology Internet Page.

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Surgical Pathology Continued

C. Appropriate containers for surgical specimens

- Choose a container that has 2-3 times the volume of the specimen.
- There should be at least 2 times the volume of the formalin as the size of the specimen.



Small specimen containers: colon, skin, gyn biopsies, etc.



Urine cup: Skin excisions, appendix, small resections.



Pint container: Breast lumpectomy, hysterectomy, medium resections.



Quart container: Colon resection, kidney, placenta, larger surgical resections.



Gallon bucket: Mastectomy, total colectomy, larger surgical resections.

Note: All Pathology specimens are biohazardous. Please use universal precautions.

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Routine Surgical Pathology Specimen Submission Guidelines

How to order:

- Fill out Pathology requisition form (QM V 304-07-00 Attachment F) available on the Pathology intranet.
 - Check appropriate box for either tissue specimen or cytology specimen.
 - Form must include:
 - Patient's Name
 - Date of Birth
 - MRN#
 - Date specimen obtained
 - Proper encounter number
 - Brief clinical history
 - Submitting institution (i.e. Hospital/clinic)
 - Submitting provider
 - Check appropriate ICD-9 code box (if applicable)

Labeling:

- Patient's full name
- Chart number
- Date of Birth
- Type of specimen (i.e. colon biopsy, cervix at 9:00, etc.)

Note: This information must be on the container itself, NOT the lid.

Fixation:

- 10% neutral buffered formalin at least 2 times that of the tissue volume.
- (Smaller specimens are generally placed in 10 times the tissue volume of formalin)

Reference: Buesa RJ, Peshkov MV. "How Much Formalin is Enough to Fix Tissues." *Ann Diagn Pathol.* 2012 Jun;16(3):202-9. doi: 10.1016/j.anndiagpath.2011.12.003. Epub 2012 Apr 5.

Note: Proper and timely fixation is a critical step in tissue preparation for diagnosis and the importance of this step cannot be overemphasized

Handling:

- Place specimen immediately in appropriately sized approved container.
- Immerse in a volume of 10% neutral buffered formalin at least 1-2 times that of the tissue volume.
- Make sure each container is labeled with a biohazard/formalin warning
- Place container in sealable Biohazard bag (with side pockets for paperwork)
- Seal the bag prior to delivery



Routine Surgical Pathology Specimen Submission Guidelines Continued

- Improper labeling or packaging may result in delay in diagnosis.
- Additional requirements for breast specimens (see [breast data sheet](#))

Normal Hours (8am until 4:30pm):

- Hand deliver specimens to Histology Laboratory
- Pneumatic tube delivery
 - Please insure that the lid to the container is tightly closed.
 - Container holding the specimen needs to be doubled bagged.
 - Send to station #16

After Hours:

- After 4:30pm or on holidays or weekends deliver specimen to the Main Laboratory window.
- Or use pneumatic tube delivery system #16

Turnaround time:

- 2 working days from the date specimen is received in the Histology Lab
- Exceptions: Specimens needing special studies or more complex or specimens requiring extra processing time.

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Frozen Section Specimen Submission Guidelines

How to order:

- Call the Histology Laboratory at 729-1810
- Notify Histology technician of :
 - the OR room number
 - requesting surgeon
 - provide a phone number to call results to
 - type of tissue being sent
 - if it is infectious (HIV, TB, Hep B/C) and
 - any other special requests
- Submit Picis form with specimen type as “Intraoperative consultation for frozen section.”

Labeling:

- Use green label that says “Frozen Section”
- Patient’s full name
- Chart number
- Date of Birth
- Type of specimen (i.e. colon biopsy, cervix at 9:00, etc.)

Note: This information must be on the container itself, NOT the lid.

Fixation:

- None

Handling:

- Place specimen immediately in appropriately sized, tightly sealed, approved container without fixative.
- Place container in sealable Biohazard bag (with side pockets for paperwork)
- Seal the bag prior to delivery

Normal Hours (8am until 4:30pm):

- Hand deliver to Histology Lab ASAP

After Hours:

- Notify the on call pathologist in advance if possible.
 - Please allow 30 minutes for personnel to arrive at ANMC and another 15 to 20 minutes for processing and results
 - Note: Weather conditions may result in unexpected delays.
- Pager numbers for the “on call” staff are available through the Main Laboratory at 729-1200.
- Hand Deliver specimen to the Main Laboratory window
- Specimen should be fresh, NOT in formalin
- Picis form should accompany specimen

Turnaround time:

- 20 minutes after receipt of tissue during normal working hours
- Results will be phoned to number provided at time of order

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Muscle Specimen Submission Guidelines

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Muscle biopsy specimens are accessioned by the ANMC lab but are sent out to the Oregon Health & Science University for processing and diagnosis.

How to order:

- Fill out Pathology requisition form (QM V 304-07-00 Attachment F) available on the Pathology intranet.
 - Check appropriate box for either tissue specimen or cytology specimen.
 - Form must include:
 - Patient's Name
 - Date of Birth
 - MRN#
 - Date specimen obtained
 - Proper encounter number
 - Brief clinical history
 - Submitting institution (i.e. Hospital/clinic)
 - Submitting provider
 - Check appropriate ICD-9 code box (if applicable)
 - Must also provide the clinical differential diagnosis, as this is used to select the type of testing that is done.

Labeling:

- Patient's full name
- Chart number
- Date of Birth
- Type of specimen (i.e. colon biopsy, cervix at 9:00, etc.)

Note: This information must be on the container itself, NOT the lid.

Fixation:

- Submit fresh on saline moistened telfa pads
- Do not add any fixative
- Do not immerse in saline
- Place wrapped specimen into dry container, e.g. specimen cup, and seal

Handling:

- If specific muscle is not dictated by the clinical presentation, the following muscles are preferred:

In order of preference

Quadriceps

Biceps

Deltoid

- Adequate size: 1cm X 0.5 cm X 0.5 cm



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Muscle Specimen Submission Guidelines Continued

- Needle biopsies are acceptable but not recommended
- Avoid end stage muscle
- No infiltration with local anesthetic
- No clamps or tying to tongue blade
- Do not freeze specimen

Normal Hours (8am until 4:30pm):

- Hand deliver **IMMEDIATELY** to the Histology Laboratory
- Notify laboratory staff at the time of delivery
- It is recommended that procedures are scheduled to ensure delivery of the specimen to the Histology lab **prior to 11:00 am M-Th.**
 - This is to ensure that the specimen can arrive at the reference lab in time to be processed promptly.

After Hours:

- Due to the requirements of the reference lab, muscle specimens are not accepted after normal working hours.

Turnaround time:

- 3-4 weeks

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Renal Specimen Submission Guidelines

Renal biopsy specimens are accessioned by the ANMC lab but Arkana Labs for processing and diagnosis.

How to order:

- **Fill out Pathology requisition form (QM V 304-07-00 Attachment F) available on the Pathology intranet.**
 - **Check appropriate box for either tissue specimen or cytology specimen.**
 - **Form must include:**
 - **Patient's Name**
 - **Date of Birth**
 - **MRN#**
 - **Date specimen obtained**
 - **Proper encounter number**
 - **Brief clinical history**
 - **Submitting institution (i.e. Hospital/clinic)**
 - **Submitting provider**
 - **Check appropriate ICD-9 code box (if applicable)**
 - **Must also provide the clinical differential diagnosis, as this is used to select the type of testing that is done.**
- **Fill out applicable information on the Renal Biopsy requisition form (Available on the Pathology intranet page).**

Labeling:

- **Patient's full name**
- **Chart number**
- **Date of Birth**
- **Type of specimen**

Note: This information must be on vial itself, NOT the lid.

Fixation:

- **There are two vials needed for each biopsy:**
 1. **10% Neutral Buffered Formalin**
 2. **Immunofluorescence (IF): Michel's Transport medium**
 3. **Label each vial**
 4. **Vials of fixative are available in the Histology Laboratory.**

Handling:

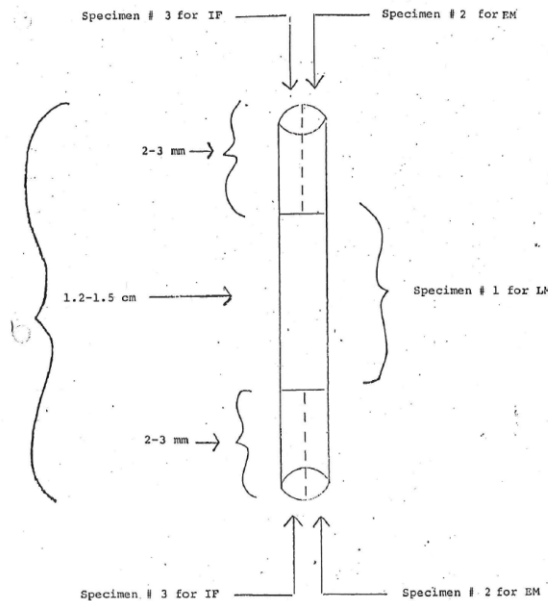
- **Immediately after the biopsy is obtained place cores in each of the two specimen bottles.**



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Renal Specimen Submission Guidelines Continued

- If only a single core is obtained, and if IF and /or EM will be essential for diagnosis, divide in three parts with a clean, sharp blade as indicated in the **diagram below**.



- If wedge biopsy, cut in 1-2 mm blocks. Handle all pieces carefully. Avoid crushing
- Place pieces in containers, as quickly as possible. Priority should be given to: a) light microscopy, b) immunofluorescence, c) electron microscopy.
- Stopper and shake to avoid adherence of specimen to glass.

Normal Hours (8am until 4:30pm):

- Hand deliver IMMEDIATELY to the Histology Laboratory
- Notify laboratory staff at the time of delivery
- It is recommended that procedures are scheduled to ensure delivery of the specimen to the Histology lab **prior to 11:00 am M-Th.**
 - This is to ensure that the specimen can arrive at the reference lab in time to be processed promptly
 - The University of Washington Medical Center does not accept renal biopsy specimens on weekends or holidays.

After Hours:

- M-Th deliver specimen to the Main lab window
- The University of Washington Medical Center does not accept renal biopsy specimens on weekends or holidays.

Turnaround time:

- 3-4 weeks
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Nerve Specimen Submission Guidelines

Nerve specimens are accessioned by the ANMC lab but are sent out to the Oregon Health & Science University for processing and diagnosis.

How to order:

- Fill out Pathology requisition form (QM V 304-07-00 Attachment F) available on the Pathology intranet.
 - Check appropriate box for either tissue specimen or cytology specimen.
 - Form must include:
 - Patient's Name
 - Date of Birth
 - MRN#
 - Date specimen obtained
 - Proper encounter number
 - Brief clinical history
 - Submitting institution (i.e. Hospital/clinic)
 - Submitting provider
 - Check appropriate ICD-9 code box (if applicable)
 - Must also provide the clinical differential diagnosis, as this is used to select the type of testing that is done.

Labeling:

- Patient's full name
- Chart number
- Date of Birth
- Type of specimen (i.e. colon biopsy, cervix at 9:00, etc.)

Note: This information must be on the container itself, NOT the lid.

Fixation:

- 10% neutral buffered formalin

Handling:

- Avoid stretching or crushing nerve
- Keeping the fresh nerve straight, place it on a narrow strip of filter paper cut the paper slightly longer than nerve
- Immerse in 10% neutral buffered formalin
- The nerve will adhere to the paper and this will maintain the orientation of the fibers



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Nerve Specimen Submission Guidelines Continued

Normal Hours (8am until 4:30pm):

- **Hand deliver to the Histology Laboratory ASAP**
- **Notify laboratory staff at the time of delivery**

After Hours:

- **Normally Nerve specimens are not accepted after normal working hours however, if this service is necessary please contact the Pathologist on call.**

Turnaround time:

- **3-4 weeks**

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Specimens for Immunofluorescence Submission Guidelines

Specimens for Immunofluorescence are accessioned by the ANMC lab but are sent out to the Mayo Medical Laboratory for processing and diagnosis

How to order:

- **Fill out Pathology requisition form (QM V 304-07-00 Attachment F) available on the Pathology intranet.**
 - **Check appropriate box for either tissue specimen or cytology specimen.**
 - **Form must include:**
 - **Patient's Name**
 - **Date of Birth**
 - **MRN#**
 - **Date specimen obtained**
 - **Proper encounter number**
 - **Brief clinical history**
 - **Biopsy site; whether biopsy was obtained from sun-exposed vs. unexposed skin; whether it is from perilesional, involved, or uninvolved skin; and date of collection are required**
 - **Submitting institution (i.e. Hospital/clinic)**
 - **Submitting provider**
 - **Check appropriate ICD-9 code box (if applicable)**
 - **Must also provide the clinical differential diagnosis, as this is used to select the type of testing that is done.**

Labeling:

- Patient's full name
- Chart number
- Date of Birth
- Type of specimen

Note: This information must be on the container itself, NOT the lid.

Fixation:

- **Transport medium (Michels or Zeus media)**



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Specimens for Immunofluorescence Submission Guidelines

Handling:

- **Container/Tube:** Transport medium (Michels or Zeus media)
- **Specimen Volume:** 4 mm
- **Collection Instructions:**
 1. **Collect punch biopsy**
 - Use a sharp 4-mm punch. If biopsy specimen is to be divided, use at least a 5-mm punch. Divided biopsies are submitted half in formalin for light microscopy, and half in transport media for immunofluorescence.
 - An excisional biopsy may be needed.
 - In dividing the specimen, cut with a very sharp razor blade. Do not squeeze or twist the specimen. Make a clean cut.
 - Specimens larger than 5 mm in diameter should be divided for adequate fixation in transport medium
 2. **Immediately drop specimen into provided vial of transport medium and seal tightly.**
- **Specimen Stability Information:** Store at room temperature until transmitted to the lab.
- Do not place on ice, dry ice or freeze

Normal Hours (8am until 4:30pm):

- Hand deliver to the Histology Laboratory ASAP
- Notify laboratory staff at the time of delivery

After Hours:

- After 4:30pm or on holidays or weekends deliver specimen to the Main Laboratory window.
- Or use pneumatic tube delivery system #16

Turnaround time:

- 2 weeks

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Flow Cytometry Specimen Submission Guidelines

Specimens for Flow Cytometry are accessioned by the ANMC lab but are sent out to the Mayo Medical Laboratory for processing and diagnosis.

How to order:

- Fill out Pathology requisition form (QM V 304-07-00 Attachment F) available on the ANMC intranet.
 - Check appropriate box for either tissue specimen or cytology specimen.
 - Form must include:
 - Patient's Name
 - Date of Birth
 - MRN#
 - Specimen source
 - Date specimen obtained
 - Proper encounter number
 - Pertinent clinical history
 - Submitting institution (i.e. Hospital/clinic)
 - Submitting provider
 - Check appropriate ICD-9 code box (if applicable)
 - Must also provide reason for referral or clinical indication
- Fill out Mayo Form-Hematopathology Patient information Sheet (available on the pathology intranet site).

Labeling:

- Patient's full name
- Chart number
- Date of Birth
- Type of specimen (i.e. colon biopsy, cervix at 9:00, etc.)

Note: This information must be on the container itself, NOT the lid.

Fixation:

- See chart under handling



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Flow Cytometry Specimen Submission Guidelines Continued

Handling:

Specimen	Container	Volume	Stability	Other	Instructions
Blood	Yellow top (ACD (solution A), Heparin, EDTA	10 mL	Ambient/ Refrigerated ≤ 96 hours		1 Do not transfer blood to other containers 2. Include 5-10 unstained blood smears, if possible 3. Label specimen as blood
Bone Marrow	Yellow top (ACD solution B)	1-5 mL	Ambient/ Refrigerated ≤ 96 hours	If cytogenetics are also desired and additional specimen should be submitted See cytogenetics	1 Submission of bilateral specimens is not required. 2. Include 5-10 unstained bone marrow aspirate smears 3. Label specimen as bone marrow
Fluid: Serous effusions	Body fluid container	20 mL	Ambient/ Refrigerated ≤ 72 hours		1. Anticoagulated with heparin (1 U/ml of fluid) 2. Cell counts are important. Usually 20 ml of pleural or peritoneal fluid is sufficient. Smaller volumes need a high cell count. 3. Label specimen with fluid type
Spinal fluid	Sterile vial	1-1.5 mL	Ambient/ Refrigerated ≤ 48 hours	Spinal fluid cell and differential counts are required	An original cytopspin preparation (preferably unstained) must be included with the spinal fluid specimen so correlative morphologic evaluation can occur. 2. Depends on cell count. Cell count should be submitted with the specimen. If cell count is <10 cells/mcL a larger volume may be required. When cell count drops below 5 cells/mcl immunophenotypic analysis may not be successful 3. Label as spinal fluid



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Flow Cytometry Specimen Submission Guidelines Continued

Normal Hours (8am until 4:30pm):

- Hand deliver to the Histology Laboratory **prior to 11:00 am M-F**
- Friday collection is not recommended due to the need to send promptly to reference lab.
- Notify laboratory staff at the time of delivery

After Hours:

- Specimens for Flow Cytometry are not accepted after normal working hours.

Turnaround time:

- 2 working days from the date specimen is received in the Histology Lab

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Cytogenetic Specimen Submission Guidelines

Specimens for Cytogenetic studies are accessioned by the ANMC lab but are sent out to the Mayo Medical Laboratory for processing and diagnosis.

Cytogenetics is generally ordered on:

- **Bone Marrows**
- **Blood**
- **Fetus/placenta**

Cytogenetics may include traditional cytogenetics or molecular FISH studies.

Cytogenetics that may identify an inheritable condition require an ANMC patient consent for genetic testing. Please see section [1.h.](#) in this manual for more information.

How to order:

- **Fill out Pathology requisition form (QM V 304-07-00 Attachment F) available on the Pathology intranet.**
 - **Check appropriate box for either tissue specimen or cytology specimen.**
 - **Form must include:**
 - **Patient's Name**
 - **Date of Birth**
 - **MRN#**
 - **Specimen source**
 - **Date specimen obtained**
 - **Proper encounter number**
 - **Pertinent clinical history**
 - **Submitting institution (i.e. Hospital/clinic)**
 - **Submitting provider**
 - **Check appropriate ICD-9 code box (if applicable)**
 - **Must also provide reason referral or clinical indication**

Labeling:

- **Patient's full name**
- **Chart number**
- **Date of Birth**
- **Type of specimen (i.e. colon biopsy, cervix at 9:00, etc.)**

Note: This information must be on the container itself, NOT the lid.



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Fixation:

- None
- Keep at room temperature

Handling:

Specimen	Container	Volume	Store	Instructions
Bone Marrow	Green Top (Sodium heparin)	2-3 mL	Ambient (preferred)/ Refrigerated	<ol style="list-style-type: none"> 1. It is preferable to send the first aspirate from the bone marrow collection. 2. Invert several times to mix bone marrow. 3. Other anticoagulants are not recommended and are harmful to the viability of the cells.
Blood	Green Top (Sodium heparin)	5-10 mL	Ambient (preferred)/ Refrigerated	<ol style="list-style-type: none"> 1. Invert several times to mix blood. 2. Other anticoagulants are not recommended and are harmful to the viability of the cells.
Fetus	Specimen container	1 cm³	Ambient	Generally collected by the pathologist at time of fetal examination
Placenta	Specimen container	1 cm³	Ambient	Chorionic plate preferred, collect using sterile technique



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Cytogenetics Specimen Submission Guidelines Continued

Normal Hours (8am until 4:30pm):

- **Hand deliver to the Histology Laboratory**
- **Notify laboratory staff at the time of delivery**

After Hours:

- **If possible cytogenetic specimens should be collected during normal working hours.**
- **For rare cases (i.e. fetal death) that occur after hours, please notify the pathologist on call (729-1200)**
- **Hand deliver to the Main Laboratory window.**

Turnaround time:

- **2 weeks**

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Bone Marrow Specimen Submission Guidelines

How to order:

- Call the Histology Laboratory at 729-1810
 - notify them of the
 - patient's name
 - specimen type
 - room number
 - contact information
- Please schedule at least one hour in advance if possible, so that staffing arrangements can be made.
 - A Histotechnologist will assist with these cases.
 - Fill out Pathology requisition form (QM V 304-07-00 Attachment F) available on the Pathology intranet.
 - Check appropriate box for cytology specimen.
 - Form must include:
 - Patient's Name
 - Date of Birth
 - MRN#
 - Date specimen obtained
 - Proper encounter number
 - Brief clinical history
 - Submitting institution (i.e. Hospital/clinic)
 - Submitting provider
 - Check appropriate ICD-9 code box (if applicable)
 - Additional forms may be needed for Flow Cytometry or Molecular studies (available on the Pathology intranet).

Labeling:

- Patient's full name
- Chart number
- Date of Birth
- Type of specimen

Note: This information must be on the container itself, NOT the lid.

Fixation/Handling:

- Core goes in B Plus
- Aspirate in Formalin
- Smear (Histotechnologist will assist with slide preparation)
- Tubes for additional studies
- **Cytogenetics that may identify an inheritable condition require an ANMC patient consent for genetic testing. Please see section [1.h.](#) in this manual for more information.**



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Bone Marrow Specimen Submission Guidelines Continued

Normal Hours (8am until 4:30pm):

- A Histotechnologist will attend the procedure
- Due to the necessary support needed for this procedure, please schedule before 3pm M-F.

After Hours:

- Bone marrows are not performed after hours, on weekends or holidays

Turnaround time:

- 2 working days, longer if diagnostic tests are required.

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Extra Large Specimen Submission Guidelines (i.e. limb Amputations)

How to order:

- Fill out Pathology requisition form (QM V 304-07-00 Attachment F) available on the Pathology intranet.
 - Check appropriate box for either tissue specimen or cytology specimen.
 - Form must include:
 - Patient's Name
 - Date of Birth
 - MRN#
 - Date specimen obtained
 - Proper encounter number
 - Brief clinical history
 - Submitting institution (i.e. Hospital/clinic)
 - Submitting provider
 - Check appropriate ICD-9 code box (if applicable)
 - Write "In Morgue" on form

Labeling:

- Patient's full name
- Chart number
- Date of Birth
- Type of specimen (i.e. Amputated limb)

Note: This information must be on the outside of the bag.

Fixation:

- Refrigeration

Handling:

- Double bag specimen in two large red biohazard bags

Normal Hours (8am until 4:30pm):

- Deliver to hospital mortuary refrigerator
- Deliver paperwork to histology laboratory
- Notify laboratory staff that specimen is in the morgue

After Hours:

- Deliver to hospital mortuary refrigerator
- Deliver paperwork to main laboratory window

Turnaround time:

- 2 working days from the date specimen is received.

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Breast Specimen Submission Guidelines

Breast biopsies (other than routine skin biopsies) require additional documentation.

How to order:

- Fill out Pathology requisition form (QM V 304-07-00 Attachment F) available on the Pathology intranet.
 - Check appropriate box for either tissue specimen or cytology specimen.
 - Form must include:
 - Patient's Name
 - Date of Birth
 - MRN#
 - Proper encounter number
 - Date and **TIME** specimen obtained
 - **Time specimen is placed in formalin** (if specimen is sent fresh only time obtained is necessary)
 - Brief clinical history
 - Submitting institution (i.e. Hospital/clinic)
 - Submitting provider
 - Check appropriate ICD-9 code box (if applicable)

Labeling:

- Patient's full name
- Chart number
- Date of Birth
- Type of specimen (i.e. Right breast lumpectomy, etc.)

Note: This information must be on the container itself, NOT the lid.

Fixation:

- Place specimen in 10% normal buffered formalin within 60 minutes after it has been removed from the body. (CAP/ASCO requirement)
- If specimen is sent fresh then fixative will be added in the lab.

Handling:

- The time the tissue is obtained and the time the tissue is placed in formalin must be noted on the surgical requisition form. The difference in these two times is called the cold ischemic time, and should be minimized to ensure integrity of the specimen,
- In no case should the cold ischemic time exceed 1 hour.



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Breast Specimen Submission Guidelines Continued

- **Due to the complicated nature and need for proper fixation it is strongly recommended that breast cases be scheduled M-Th during normal working hours. On Thursdays please have the specimen to the lab prior to 12:50pm.**
- **Friday resections are not recommended.**
- **If a resection specimen is sent first to radiology for imaging, pathology will add formalin on receipt in the lab. Please attempt to deliver to the lab within 1 hour of the time the specimen was obtained.**

Normal Hours (8am until 4:30pm):

- **To ensure proper fixation hand deliver to the Histology Laboratory ASAP**
- **Notify laboratory staff at the time of delivery**

After Hours:

- **In the event that a breast case would need to come to the laboratory after hours, please place the specimen in at least 2-3 times its volume of formalin and hand deliver to the main laboratory ASAP**

Turnaround time:

- **2 working days from the date specimen is received in the Histology Lab**

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Oncotype DX

Specimens for Oncotype DX studies are accessioned by the ANMC lab but are sent out to Genomic Health for processing and diagnosis.

How to order:

- **Fill out Genomic Health Oncotype DX Requisition Form and Statement of Medical Necessity (Available on the Pathology intranet page)**
 - **Ensure that referring physician has signed the form in box VII**
- **Deliver signed form to the Histology Lab**
- **The histology lab will select an appropriate block and forward to Genomic.**
- **In some cases, the biopsy or resection will have been performed at another institution, and we will not have a tissue block here. In this case, check the box under section VI, specimen retrieval, for Genomic to request the specimen, and provide the location information for the specimen.**

Turnaround time:

- **14 working days**

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Products of Conception, Placenta, and Fetuses < 20 weeks Submission Guidelines

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How to order:

- **Fill out Pathology requisition form (QM V 304-07-00 Attachment F) available on the Pathology intranet.**
 - **Check appropriate box for either tissue specimen or cytology specimen.**
 - **Form must include:**
 - **Mother's Name**
 - **Mother's Date of Birth**
 - **Mother's MRN#**
 - **Date specimen obtained**
 - **Proper encounter number**
 - **Brief clinical history**
 - **Submitting institution (i.e. Hospital/clinic)**
 - **Submitting provider**
 - **Check appropriate ICD-9 code box (if applicable)**

Labeling:

- **Mother's full name**
- **Mother's Chart number**
- **Mother's Date of Birth**
- **Type of specimen**

Note: This information must be on the container itself, NOT the lid.

Fixation:

- **10% neutral buffered formalin**
 - **In the case of a fetus, formalin fixation should be considered in light of the family's intent to reclaim for burial. In this case, refrigeration in lieu of formalin fixation may be appropriate. Please coordinate with the pathology department.**
- **If cytogenetics have been ordered send specimen fresh**

Cytogenetics that may identify an inheritable condition require an ANMC patient consent for genetic testing. Please see section [1.h.](#) in this manual for more information.

Handling:

- **Place specimen immediately in appropriately sized, approved container.**
- **Immerse in a volume of 10% neutral buffered formalin at least 1-2 times that of the tissue volume (or refrigerate if appropriate).**



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Products of Conception, Placenta, and Fetuses <20 weeks Submission Guidelines Continued

- **Make sure each container is sealed tightly and labeled with a biohazard/formalin warning**
- **Place Specimen in sealable Biohazard bag (with side pockets for paperwork)**
- **Seal the bag prior to delivery**

Normal Hours (8am until 4:30pm):

- **Hand deliver to the Histology Laboratory**
- **Notify laboratory staff at the time of delivery**

After Hours:

- **After 4:30pm or on holidays or weekends deliver specimen to the Main Laboratory window.**
- **Or use pneumatic tube delivery system #16**

Turnaround time:

- **2 working days from the date specimen is received in the Histology Lab**

Release of Tissue:

- **Products of conception and placenta follow normal release of tissue procedures**
- **In order for the laboratory to release a fetus back to the family a burial transmittal permit is required as well as the ANMC tissue release form**
- **Burial transmittal permits must be requested and obtained through a mortuary**
- **Selection of the mortuary is solely the responsibility of the family**
- **In the case of fetal remains for burial the two week waiting period will be waived**
- **Please reference hospital procedure 300.05B2**

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Fetuses \geq 20 Weeks Submission Guidelines

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Includes stillborn, liveborn status and fetuses \geq 500 grams. These are legally considered autopsies, rather than examination of products of conception.

Procedures are based on:

- ANMC Administration Policy 300, 06A, entitled Postmortem Examinations
- ANMC 300C, end of Life Policy
- ANMC 300-05B Hospital Death and Disposition (Human and Fetal Remains) Procedure
- ANMC 300-06E Postmortem Examinations and Medical Examiner's cases procedure
- State Laws
- Pathology Service Procedures

How to order:

- Fill out Pathology requisition form (QM V 304-07-00 Attachment F) available on the Pathology intranet.
 - Check appropriate box for either tissue specimen or cytology specimen.
 - Form must include:
 - Mother's Name
 - Mother's Date of Birth
 - Mother's MRN#
 - Date specimen obtained
 - Proper encounter number
 - Brief clinical history
 - Submitting institution (i.e. Hospital/clinic)
 - Submitting provider
 - Check appropriate ICD-9 code box (if applicable)
 - Write on form "In Morgue"
- ANMC Autopsy Consent
 - You must have the legal next-of-kin fill out and sign the Autopsy Authorization
 - Be sure to clearly and in detail list any restrictions such as "no brain" or "chest and abdomen only" directly on the autopsy consent.
 - Autopsy permits can be obtained only after the patient has died.
 -



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Fetuses > 20 Weeks Submission Guidelines

- Preauthorized permits are not acceptable. If consent has been pre-authorized, phone consent must still be obtained (and witnessed) from the legal next-of-kin after the patient's death to verify that an autopsy is still desired and to confirm any restrictions.

Labeling:

- Follow hospital nursing procedures

Fixation:

- Refrigerate in mortuary refrigerator

Handling:

- Deliver to morgue, properly identified and put in the cooler (face up)
- Make an entry in the morgue log book.
- Initiate the "Disposition of body form" SF523A
- Notify Social Services as appropriate
- Have provider requesting autopsy notify Pathology (729-1810) that an autopsy is requested.
- Pathology must review and concur on the necessity for autopsy before committing to the procedure.

Cytogenetics that may identify an inheritable condition require an ANMC patient consent for genetic testing. Please see section [1.h.](#) in this manual for more information.

Normal Hours (8am until 4:30pm):

- Deliver to hospital mortuary refrigerator
- Deliver paperwork to histology laboratory
- Notify laboratory staff that specimen is in the morgue
-

After Hours:

- Deliver to hospital mortuary refrigerator
- Deliver paperwork to main laboratory window (with note on form that specimen is "In Morgue").
- Notify laboratory staff that specimen is in the morgue
- Post-mortem examinations are not performed after hours, on weekends or holidays except in exceptional circumstances.
- Since a post-mortem examination is not an urgent patient care need, we ask that you avoid calling at night if possible
- On a "weekend death", the actual post-mortem would have to wait until it could be scheduled during a normal workday. (Due to staffing, this



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Surgical Pathology Specimen Collection Guidelines—Quick Reference

can take several days to schedule and perform. Please notify the family that this could significantly delay the release of the body for burial).

Turnaround time:

- Body will be released to the mortuary in 1-5 working days depending on staffing, workload and testing required.
- Autopsy report in 30 days

Release of Fetuses \geq 20 weeks:

- Fetuses 20 weeks and over are treated like an adult autopsy and are released to the mortuary in 1-5 working days.

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Surgical Pathology Specimen Collection Guidelines—Quick Reference

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Specimen	Fixative	Quantity	Deliver to	After Hours Deliver to
Routine	10% Formalin At least 2 x volume of tissue	varies	Histology Lab M-F **8:00am-4:30pm	Main lab
Muscle	Fresh on saline moistened telfa pads	1cm X0.5 cm X 0.5 cm	Histology Lab prior to 11am M-Th	Nerve specimens are not accepted after normal working hours
Nerve	10% Formalin At least 2 x volume of tissue		Histology Lab M-F **8:00am-4:30pm	Nerve specimens are not accepted after normal working hours
Renal	1. Light Microscopy (LM): Sorenson's fixative 2. Electron Microscopy (EM): ½ strength Karnovsky's fixative 3. Immunofluorescence (IF): Michel's Transport medium (Discard any vials with ppt.)	Cut in 1-2 mm blocks	Histology Lab M-TH **8:00am-4:30pm	Main lab
Immunofluorescence	Transport medium (Michels or Zeus media)	4 mm	Histology Lab M-F **8:00am-4:30pm	Main lab
Flow Cytometry				
Blood	Yellow top (ACD (solution A), Heparin, EDTA	10 mL	Hand deliver to the Histology Laboratory prior to 11:00 am M-F	Specimens for flow Cytometry are not accepted after normal working hours.
Bone Marrow	Yellow top (ACD solution B)	1-5 mL		
Body Fluid	Fresh	20 mL		
Spinal Fluid	Fresh	1.5 mL		

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Surgical Pathology Specimen Collection Guidelines—Quick Reference Continued

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Specimen	Fixative	Quantity	Deliver to	After Hours Deliver to
Cytogenetics				
Blood	Green top (sodium heparin)	5-10 mL	Histology Lab M-F **8:00am-4:30pm	Cytogenetic specimens should be collected during normal working hours. For rare cases (i.e. fetal death) that occur after hours, please notify the pathologist on call (729-1810)
Bone Marrow	Green top (sodium heparin)	2-3 mL		
Placenta	10% Formalin At least 2 x volume of tissue	1cm ³		
Fetus < 20 weeks	Refrigerate	1cm ³		
Bone Marrow	B Plus core Formalin Clot Aspirate tubes as needed	Varies	Histology Lab M-F **8:00am-4:30pm	Main lab
Extra-large specimens	Refrigerate		Morgue refrigerator/ paperwork to histology lab	Morgue refrigerator/ paperwork to Main lab
Breast	10% Formalin At least 2 x volume of tissue		Histology Lab M-F **8:00am-4:30pm	Main lab
Products of Conception	10% Formalin At least 2 x volume of tissue		Histology Lab M-F **8:00am-4:30pm	Main lab
Fetuses < 20 weeks	10% Formalin At least 2 x volume of tissue		Histology Lab M-F **8:00am-4:30pm	Main lab
Fetuses ≥ 20 weeks	Refrigerate		Morgue refrigerator/ paperwork to histology lab	Morgue refrigerator/ paperwork to Main lab

****Note: Any specimen received in the Histology Lab after 3pm will be processed the next working day.**

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FNA Specimen Submission Guidelines

How to order:

- Call the Histology Laboratory at 729-1810
 - notify them of the
 - patient's name
 - specimen type
 - room number
 - contact information
- Please schedule at least one hour in advance if possible, so that staffing arrangements can be made.
- A Histotechnologist will assist with these cases.
 - Fill out Pathology requisition form (QM V 304-07-00 Attachment F) available on the ANMC intranet.
 - Check appropriate box for cytology specimen.
 - Form must include:
 - Patient's Name
 - Date of Birth
 - MRN#
 - Date specimen obtained
 - Proper encounter number
 - Brief clinical history
 - Submitting institution (i.e. Hospital/clinic)
 - Submitting provider
 - Check appropriate ICD-9 code box (if applicable)

Labeling:

- Patient's full name
- Chart number
- Date of Birth
- Type of specimen

Note: This information must be on the container itself, NOT the lid.

For Slides:

- Patient's full name
- Record number
- Pass

(Histology technologists will usually prepare and label the slides)



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FNA Specimen Submission Guidelines Continued

Fixation:

- FNA fixative

Handling:

- A Histotechnologist will attend the aspiration procedure to prepare the slides.
- 1 to 3 passes with 2 slide preps per pass (direct smears)
- All additional material obtained after the 3 passes to be placed in FNA fixative.

Normal Hours (8am until 4:30pm):

- Performed between the hours of 8am and 3pm.
- Call Histology Laboratory at 729-1810

After Hours:

- N/A
- Due to the necessary support and complicated nature of these specimens, FNAs are only performed during normal working hours.

Turnaround time:

- 2 working days from date of procedure

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CSF Specimen Submission Guidelines

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General Information: A separate specimen in addition to the tubes sent for clinical laboratory tests and cultures is necessary for pathology.

How to order:

- Fill out Pathology requisition form (QM V 304-07-00 Attachment F) available on the ANMC intranet.
 - Check appropriate box for either tissue specimen or cytology specimen.
 - Form must include:
 - Patient's Name
 - Date of Birth
 - MRN#
 - Date specimen obtained
 - Proper encounter number
 - Brief clinical history
 - Submitting institution (i.e. Hospital/clinic)
 - Submitting provider
 - Check appropriate ICD-9 code box (if applicable)

Labeling:

- Patient's full name
- Chart number
- Date of Birth
- Type of specimen

Note: This information must be on the container itself, NOT the lid.

Fixation:

- Specimen should be sent fresh
- Fixative will be added in the Histology Laboratory
- Specimens should be sent to the lab as quickly as possible; if a time lapse of 1 hour or more is expected the specimen should be refrigerated

Handling:

- The specimen tube should consist of at least three (3) mL of CSF
- Deliver fresh to histology lab as soon as possible
- Diagnostic material disintegrates very quickly in spinal fluid

Normal Hours (8am until 4:30pm):

- Deliver specimen immediately to the histology lab.

After Hours:

- Deliver specimen immediately to the main lab.

Turnaround time:

- 2 working days from the date specimen is received in the laboratory.

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Sputum Specimen Submission Guidelines

Sputum can be used to detect malignancies as well as some infectious agents.

How to order:

- **Fill out Pathology requisition form (QM V 304-07-00 Attachment F) available on the ANMC intranet.**
 - **Check appropriate box for either tissue specimen or cytology specimen.**
 - **Form must include:**
 - **Patient's Name**
 - **Date of Birth**
 - **MRN#**
 - **Date specimen obtained**
 - **Proper encounter number**
 - **Brief clinical history**
 - **Submitting institution (i.e. Hospital/clinic)**
 - **Submitting provider**
 - **Check appropriate ICD-9 code box (if applicable)**

Labeling:

- **Patient's full name**
- **Chart number**
- **Date of Birth**
- **Type of specimen**

Note: **This information must be on the container itself, NOT the lid.**

Fixation:

- **Specimen should be sent fresh**
- **Fixative will be added in the Histology Laboratory if needed**
- **Specimens should be sent to the lab as quickly as possible; if a time lapse of 1 hour or more is expected the specimen should be refrigerated**

Handling:

- **Specimen should be expectorated from deep within the respiratory tract**
- **An early morning deep cough specimen is optimal**
- **Sputum is expectorated into a sterile container (urine cup)**
- **Optimal volume is 2-3 mL**
- **If multiple collections over a period of time is ordered, instruct patient to expectorate sputum at the same time everyday**



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Sputum Specimen Submission Guidelines Continued

Normal Hours (8am until 4:30pm):

- Deliver specimen to the Histology lab within 1 hour

After Hours:

- Deliver specimen to the main lab within one hour.

Turnaround time:

- 2 working days from the date specimen is received in the laboratory.

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BAL Specimen Submission Guidelines

How to order:

- Fill out Pathology requisition form (QM V 304-07-00 Attachment F) available on the ANMC intranet.
 - Check appropriate box for either tissue specimen or cytology specimen.
 - Form must include:
 - Patient's Name
 - Date of Birth
 - MRN#
 - Date specimen obtained
 - Proper encounter number
 - Brief clinical history
 - Submitting institution (i.e. Hospital/clinic)
 - Submitting provider
 - Check appropriate ICD-9 code box (if applicable)

Labeling:

- Patient's full name
- Chart number
- Date of Birth
- Type of specimen

Note: This information must be on the container itself, NOT the lid.

Fixation:

- Specimen should be sent fresh
- Specimens should be sent to the lab as quickly as possible; if a time lapse of 1 hour or more is expected the specimen should be refrigerated

Handling:

- Place capped collection tube into sealable biohazard bag (with side pockets for paperwork)
- Seal bag and immediately deliver to the lab for processing
- Keep at room temperature if specimen is delivered upon collection (up to 1 hour)
- If delivery is delayed refrigerate to prevent bacterial growth

Normal Hours (8am until 4:30pm):

- Deliver specimen immediately to the histology lab.

After Hours:

- Deliver specimen to the main lab within one hour.

Turnaround time:

- 2 working days from the date specimen is received in the laboratory.

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EBUS Specimen Guidelines

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How to order:

- Fill out Pathology requisition form (QM V 304-07-00 Attachment F) available on the ANMC intranet.
 - Check appropriate box for either tissue specimen or cytology specimen.
 - Form must include:
 - Patient's Name
 - Date of Birth
 - MRN#
 - Date specimen obtained
 - Proper encounter number
 - Brief clinical history
 - Submitting institution (i.e. Hospital/clinic)
 - Submitting provider
 - Check appropriate ICD-9 code box (if applicable)

Labeling:

- Patient's full name
- Chart number
- Date of Birth
- Type of specimen
- Note: This information must be on the container itself, NOT the lid.

Fixation:

- 10% neutral buffered formalin

Handling:

- Place specimen immediately in tightly sealed approved container.
- Place container in sealable Biohazard bag (with side pockets for paperwork)
- Seal the bag prior to delivery
- Deliver specimen to Histology Lab as soon as possible.

Normal Hours (8am until 4:30pm):

- Deliver specimen immediately to the histology lab.

After Hours:

- Deliver specimen to the Histology lab within 1 hour

Turnaround time:

- 2 working days from the date specimen is received in the laboratory.

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Urine Specimen Submission Guidelines

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How to order:

- Fill out Pathology requisition form (QM V 304-07-00 Attachment F) available on the ANMC intranet.
 - Check appropriate box for either tissue specimen or cytology specimen.
 - Form must include:
 - Patient's Name
 - Date of Birth
 - MRN#
 - Date specimen obtained
 - Proper encounter number
 - Brief clinical history
 - Submitting institution (i.e. Hospital/clinic)
 - Submitting provider
 - Check appropriate ICD-9 code box (if applicable)

Labeling:

- Patient's full name
- Chart number
- Date of Birth
- Type of specimen

Note: This information must be on the container itself, NOT the lid.

Fixation:

- Specimen should be sent fresh
- Fixative will be added in the Histology Laboratory if needed
- Specimens should be sent to the lab as quickly as possible; if a time lapse of 1 hour or more is expected the specimen should be refrigerated

Handling:

- The second voided specimen in the morning is preferred, after the patient has been up and active.
- For males, a simple voided specimen is satisfactory.
- For females, a mid-stream clean catch (after cleaning urethra with alcohol wipe) specimen is preferred.
- 50-80 mL of urine is considered optimal
- Place in appropriate container and seal tightly



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Urine Specimen Submission Guidelines Continued

- Specimens should be sent to the lab as quickly as possible; if a time lapse of 1 hour or more is expected the specimen should be refrigerated

Normal Hours (8am until 4:30pm):

- Deliver specimen immediately to the Histology Lab

After Hours:

- Deliver specimen immediately to the Main lab.

Turnaround time:

- 2 working days from the date specimen is received in the laboratory.

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Body Fluids Specimen Submission Guidelines

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Body Fluids include: Peritoneal, pleural, pericardial, pelvic washings, synovial fluids, etc.

How to order:

- Fill out Pathology requisition form (QM V 304-07-00 Attachment F) available on the ANMC intranet.
 - Check appropriate box for either tissue specimen or cytology specimen.
 - Form must include:
 - Patient's Name
 - Date of Birth
 - MRN#
 - Date specimen obtained
 - Proper encounter number
 - Brief clinical history
 - Submitting institution (i.e. Hospital/clinic)
 - Submitting provider
 - Check appropriate ICD-9 code box (if applicable)

Labeling:

- Patient's full name
- Chart number
- Date of Birth
- Type of specimen

Note: This information must be on the container itself, NOT the lid.

Fixation:

- Specimen should be sent fresh
- Fixative will be added in the Histology Laboratory
- Specimens should be sent to the lab as quickly as possible; if a time lapse of 1 hour or more is expected the specimen should be refrigerated

Handling:

- Specimens may be sent to histology in a plastic 60 mL capped syringe (no needle), a 120 mL screw top specimen cup, an 80 mL screw top urine cup or other type of non-glass container
- If specimen is collected in a larger container and must be divided.
 - Gently agitate the specimen by inverting the container 5-10 times prior to aliquoting for cytology testing
 - Do not add anticoagulant or fixative
- Deliver fresh to histology lab as soon as possible



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Body Fluid Specimen Submission Guidelines Continued

- Volume of at least 150 mL of specimen is optimal
- Specimens in Pleur-Evac containers will not be accepted
- Specimens with needles will not be accepted

Normal Hours (8am until 4:30pm):

- Deliver specimen immediately to the histology lab.

After Hours:

- Deliver specimen immediately to the main lab.

Turnaround time:

- 2 working days from the date specimen is received in the laboratory.

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Cytology Specimen Collection Guidelines—Quick Reference

Specimen	Fixative	Quantity	Special Handling	Deliver to	After Hours Deliver to
FNA	FNA Fixative		FNAs are only preformed. 8 am -3 pm M-F.	Histology Tech will attend procedure to prepare slides. Please schedule in advance.	Not performed
CSF	None/ will be added in lab	3-5 mL	If unable to deliver to lab within 1 hour, please refrigerate	Histology Lab M-F 8:00am -- 4:30pm	Main Lab
Sputum	None/ will be added in lab	2-3 mL	Deep cough specimen	Histology Lab M-F 8:00am -- 4:30pm	Main Lab
BAL	None		If unable to deliver to lab within 1 hour, please refrigerate	Histology Lab M-F 8:00am -- 4:30pm	Main Lab
EBUS	10% neutral buffered formalin			Histology Lab M-F 8:00am -- 4:30pm	Main Lab
Urine	None/ will be added in lab	50-80 mL	If unable to deliver to lab within 1 hour, please refrigerate	Histology Lab M-F 8:00am -- 4:30pm	Main Lab
Body Fluids (peritoneal, pleural, pelvic washings, synovial, pericardial)	None/ will be added in lab	150 mL	If unable to deliver to lab within 1 hour, please refrigerate	Histology Lab M-F 8:00am -- 4:30pm	Main Lab

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Adult Autopsy

General Information:

This information is meant to be a quick reference guide. Please refer to hospital instruction for definitive guidance.

Hospital instructions take precedence over any conflict with these instructions.

Procedures are based on:

- ANMC Administration Policy 300, 06A, Postmortem Examinations
- ANMC 300C, end of Life Policy
- ANMC 300-05B Hospital Death and Disposition (Human and Fetal Remains) Procedure
- ANMC 300-06E Postmortem Examinations and Medical Examiner's cases procedure
- State Laws
- Pathology Service Procedures

Pathologists will perform an autopsy only:

- If requested and deemed medically necessary after review
- If the case is a non-medical examiner case (policy 300,06A)
- If proper authorization was given by the next of kin

Note: It is the responsibility of the requesting healthcare provider to notify the pathologist that an autopsy is requested. Pathology must review and concur on the necessity for autopsy before committing to an autopsy procedure.

Pathologists will not perform an autopsy:

- for social reasons
- simply because the family is angry or upset
- if the death occurred outside of ANMC
 - This includes cases where the patient is brought in under resuscitation and is pronounced dead on arrival.
 - This also includes death in bush hospitals
- If the death is possibly non-natural (i.e. homicide, suicide, accident, unclassified), these must be reported to the state medical examiner.

How to order:

- Notify Pathologist of request (729-1810).
 - Obtain Consent: ANMC Autopsy Consent form
 - You must have the legal next-of-kin fill out and sign the Autopsy Consent form
 - Be sure to clearly and in detail list any restrictions such as "no thorax" or "brain only" directly on the autopsy consent.



Autopsy Continued

- Autopsy consent can be obtained only after the patient has died.
- Preauthorized permits are not acceptable. If consent has been pre-authorized, phone consent must still be obtained (and witnessed) from the legal next-of-kin after the patient's death to verify that an autopsy is still desired and to confirm any restrictions.

- Request for Autopsy must also be accompanied by:
 - The specific question that the autopsy needs to answer
 - The clinical chart (if not contained in CERNER)

Labeling:

- Follow hospital nursing procedures

Fixation:

- Refrigerate in mortuary refrigerator

Handling:

- Do not remove any medical devices (lines, catheters, etc.) prior to delivery to the morgue.
- Deliver to morgue, properly identified and put in the cooler (face up)
- Make an entry in the morgue log book.
- Initiate the "Disposition of body form" SF523A
- Notify Social Services as appropriate
- Have provider requesting autopsy notify Pathology (729-1810) that an autopsy is requested.
- After 4:30 call the main lab (729-1200) and request a Pathologist be called.
- **Pathology must review and concur on the necessity for autopsy before committing to the procedure.**

Normal Hours (8am until 4:30pm):

- Deliver to hospital mortuary refrigerator
- Deliver paperwork to histology laboratory
- Notify laboratory staff that specimen is in the morgue

After Hours:

- Deliver to hospital mortuary refrigerator
- Deliver paperwork to main laboratory window
- Notify laboratory staff that specimen is in the morgue
- Post-mortem examinations are not performed after hours, on weekends or holidays except in exceptional circumstances.



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Autopsy Continued

- Since autopsies are not an urgent patient care need, we ask that you avoid calling at night if possible.
- If the Pathologist decides an autopsy is necessary on a “weekend death”, the actual autopsy would have to wait until it could be scheduled during a normal workday. (Due to workload and staffing, autopsies can take several days to schedule and perform. Please notify the family that this could significantly delay the release of the body for burial).

Turnaround time:

- 1-5 working days depending on staffing, workload and testing required.
- Please notify family that body may not be returned for burial for up to 5 days.
- Final Report 30 days

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