



Clinical Practice Change Alert

Implementation of Liquid-Based Cytology for Non-Gynecological Specimens

Date Effective: March 25, 2015

Background Information:

- In fall 2014, Diagnostic Services Manitoba (DSM) announced the introduction of Liquid-Based Cytology (LBC) with Provincial funding support from Manitoba Health. DSM is preparing to 'go live' with LBC for non-gynecological specimens using ThinPrep technology beginning April 13, 2015.
- The introduction of LBC technology is a step toward achieving the goals of Manitoba's *In Sixty: Cancer Patient Journey* initiative.

Change in or New Test Procedure:

- As of April 13, 2015, certain non-gynecological specimens will be collected and sent to DSM laboratories in a new transport medium called CytoLyt.
- To implement CytoLyt, most clinics will not need to make any changes; see **Appendix A** for a detailed list of collection/transportation methodology for various sample types.
- **Appendix B** provides procedural information on specimen collection and transport.
- Clinics will need to order CytoLyt collection cups from DSM; see **Appendix C** for instructions on ordering supplies.

Patient Impact:

- The ThinPrep technology offers improved quality in specimen preparation, which reduces obscuring elements and enhances the ability of cytopathologists to detect precancerous changes, malignancies and infectious diseases.
- The speed, reliability and ease of use will result in streamlined specimen processing, cytotechnologist screening and review by the cytopathologist; all leading to improved timeframes for reporting of patient results.

Education Sessions:

The DSM Pathology Team is available to offer education and information sessions across Manitoba as we implement this practice change. If you wish to have a session at your clinic, please contact Karen Cormier (contact information below).

DSM Contact Information:

Lisa Manning
Technical Director
(204) 926-1416
lmanning@dsmanitoba.ca

OR

Karen Cormier
Provincial Pathology Coordinator
(204) 926-1428
kcormier3@dsmanitoba.ca

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Appendix A

CytoLyt and Non-Gynecological Specimen Collections

What is CytoLyt and what are its benefits?

CytoLyt is a methanol based preservative and used as a transport medium. Its benefits include lysing red blood cells; preventing protein precipitation and dissolving mucus.

How do clinics implement LBC?

Implementation of LBC using CytoLyt will not require any significant changes at clinics. Please see below for details on how to perform various types of collections:

Fine Needle Aspirations (FNAs)

- For clinics without cytology services on-site, all FNA's should be collected directly into CytoLyt and sent to the laboratory.
- Health Sciences Centre, St. Boniface Hospital, and Brandon Regional Hospital will continue to receive on-site cytology services.

Lymphoma Protocol – RPMI

- If you suspect lymphoma or other hematopoietic neoplasm in your patient:
 - FNAs - Collect specimen directly into 20 mL of RPMI. If RPMI is not available, sterile saline is an acceptable alternative.
 - Body Fluids - Send to the laboratory fresh.
- Send to the laboratory immediately.

Effusions/Body Fluids - FRESH

- Body fluids will no longer be submitted to the laboratory with EDTA added.
- Please send all body fluids to the laboratory fresh.

Urines - FRESH

- Please submit all urines to the laboratory fresh. If transport is to be delayed please submit specimen in a CytoLyt collection cup.

All Other Specimens - FRESH

- Please submit all other specimens to your laboratory fresh. If you have any questions regarding how to transport a specimen please contact your referral laboratory.
- Refer to chart, 'Non Gynecological Specimen Collection and Handling Requirements' for further instructions on the fixation and handling of non-gynecological cytology specimens. Please refer to **Appendix D**.

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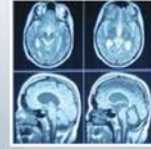
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Appendix B

Procedural Notes for Specimen Collection & Transport

- Please ensure that one requisition is submitted per sample.
- Affix the patient addressograph on the container, trying not to cover the volume markings on the container.
- Physician signature is required.
- Ensure the specimen type is written on both the patient requisition as well as the specimen container.
- Ensure the collection cup is not expired. Specimens received in expired vials will be rejected as per the DSM specimen acceptance policy.
- Ensure the specimen container lid is securely tightened and place the container in a specimen bag for transport.
- Place corresponding completed requisition in the outer pocket of bag.
- Keep specimen refrigerated until transported.
- Transport specimen to your referral laboratory in a cooler or at room temperature. Do Not Freeze.
- Visit the [Laboratory Information Manual](#) (LIM) online at www.dsmanitoba.ca for further information.



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Appendix C

Ordering Supplies for Non-Gynecological Specimen Collection

Supplies can be requested from your referral Cytology laboratory.

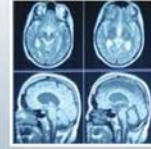
Please refer to DSM SOP #[170-10-19](#), 'Requesting Reagents and Supplies from Referral Pathology Laboratories', for further instructions.

Please complete the 'Cytology' section only for your non-gynecological collection supplies and fax the request to your referral laboratory.

The following supplies will be required for non-gynecological cytology in your clinic:

1. CytoLyt Collection Cups

Please refer to the following [MSDS](#) for the CytoLyt collection cups.



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Appendix D

NON-GYNE CYTOLOGY SPECIMEN COLLECTION AND HANDLING REQUIREMENTS ALL SITES

Specimen Type	Specimen Requirements	Additional Instructions
Body fluid Pleural (thoracic), peritoneal (ascites), pelvic wash, pericardial, cyst, and synovial	Submit FRESH specimen; 50-100 mL of specimen in a labelled sterile specimen collection container.	Keep refrigerated until sent to laboratory. Send to lab immediately.
Brushing (Bronchial, gastroesophageal, tracheal, urethral)	Immediately agitate brush vigorously in the CytoLyt collection cup. Remove sheath, detach brush and place into the collection cup.	
Breast Secretion (nipple discharge)	Submit in CytoLyt collection cup.	
Fine Needle Aspirate	Rinse needle in CytoLyt collection cup. See SOP #170-110-86 for further directions on how to collect a Fine Needle Aspirate.	<u>Lymphoma:</u> DO NOT rinse in CytoLyt if suspecting or trying to rule out lymphoma. Rinse needle in RPMI. Sterile saline is an acceptable alternative. Send to lab immediately .
Spinal Fluid (Cerebrospinal fluid, CSF)	Submit specimen fresh. Minimum 2 ml preferred.	Collect in plastic tube and transport immediately to the lab on ice.
Sputum	Submit 3 to 10 ml of fresh Deep Cough specimen in a sterile specimen container.	Patient should be instructed to clear throat of post nasal secretions and to gargle and rinse mouth to remove food residue. If the specimen is delayed, keep refrigerated until it is sent.
Urine Specify source: Voided Catheterized	Submit fresh in sterile specimen collection container. 50 – 100ml preferred. 24 hour urine collections are NOT acceptable due to degeneration.	Do not send first morning voided urine specimens. Have the patient void and discard first early morning urine. If the specimen is delayed, keep refrigerated until it is sent.
Washing (bronchial, bladder, GI tract, pelvic wash, cyst fluid, synovial fluid)	Submit specimen fresh in sterile specimen collection container.	If the specimen is delayed, keep refrigerated until it is sent.
Vitreous Fluid	Submit fresh and send immediately to lab.	

** Fixatives include: CytoLyt collection cups