

# Evaluation of the Patient Sample

**PURPOSE:** This procedure provides instructions for assessing sample suitability prior to processing.

**PROCEDURE:**

| Action  |   |
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| <p><b>Note:</b> Samples are to be centrifuged and separated at the collection site if they cannot be transported to the examination site within the defined time limits to protect the stability of the test.</p>   |   |
| <p><b>1.</b> On receipt of sample, confirm sample integrity has been maintained during transit.</p> <ul style="list-style-type: none"> <li>• Samples may be transported in person, via pneumatic tube system or by ground or air transportation.</li> </ul> |   |
| If samples arrive from  | are to be   |
| <p>Regional hospital or collection site</p> <p>Cerner entered specimen / cooler</p>   | <ul style="list-style-type: none"> <li>• at expected testing or transfer site</li> <li>• inside the expected time (24 hours) and stability limits of shipment</li> <li>• inside the expected temperature range for transport                             <ul style="list-style-type: none"> <li>◦ room Temperature 15°C - 25°C</li> <li>◦ refrigerated 2°C - 8°C</li> <li>◦ frozen -2°C – -20°C In solid state</li> </ul> </li> <li>• appear to be packaged according to: <b>F SAP 0008</b> Packaging Samples for Drop-off at Northern Health Laboratories</li> </ul> |
| <p>NONLAB- collection</p> <ul style="list-style-type: none"> <li>• clinic</li> <li>• other department/ ward</li> <li>• health center</li> <li>• community health</li> <li>• patient self collection</li> </ul>  | <ul style="list-style-type: none"> <li>• within the time and stability limits of the test</li> <li>• within the defined temperature range</li> <li>• collected in the correct container and preservative</li> <li>• centrifuged and separated, if required</li> <li>• appropriately labelled with accompanying requisition</li> <li>• appear to be packaged according to: <b>F SAP 0008</b> Packaging Samples for Drop-off at Northern Health Laboratories</li> </ul>   |

## Action

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| <b>2.</b> | If samples have been received in contrary to the above expectations:   |  |
|           | <b>If samples arrive from</b>  | <b>then</b>  |
|           | Regional or Cerner entered samples   | <ul style="list-style-type: none"> <li>initiate <b>F SAP 0007 F1</b>-Shipment Delay Checklist</li> <li>notify supervisor to ensure timely solution</li> <li>retain samples in the expected temperature for testing until a solution can be found</li> <li>retain samples 7 days or as directed in <b>A APC 0003 S01 v1.1</b></li> <li>Retention of Patient Samples</li> <li>consider performing testing of samples that have been received in error due to shipping</li> <li>proceed to next step</li> </ul> |
|           | NON-LAB collection   | <ul style="list-style-type: none"> <li>store samples in the expected temperature for testing until a solution can be found</li> <li>if required: <b>F SAP 0003 F01</b> Notification of Sample Discrepancy Form</li> <li>proceed to next step</li> </ul>  |
| <b>3.</b> | <p>Surgical and Cytology Samples:</p> <ul style="list-style-type: none"> <li>check that surgical and cytology sample have fixative</li> <li>if required:               <ul style="list-style-type: none"> <li>add fixative and record time and type of fixative on the sample request form</li> </ul> </li> </ul> <p>For information on surgical and cytology sample requirements refer to:</p> <ul style="list-style-type: none"> <li><b>F SAP 0007 J1</b> Histology Sample Submission Criteria</li> <li><b>F SAP 0007 J2</b> Cytology Sample Preservative</li> </ul>   |  |
| <b>4.</b> | <p>Check Sample Rejection and Acceptance Guidelines prior to processing.</p> <ul style="list-style-type: none"> <li><b>F SAP 0007 G01</b> – Specimen Management Sample Acceptance and Rejection</li> <li><b>F SAP 0007 G02</b> – Microbiology Sample Acceptance and Rejection</li> <li><b>F SAP 0007 G03</b> – Hematology Sample Acceptance and Rejection</li> <li><b>F SAP 0007 G04</b> – Chemistry Sample Acceptance and Rejection</li> <li><b>F SAP 0007 G05</b> – Anatomical Pathology Sample Acceptance and Rejection</li> <li><b>F SAP 0007 G06</b> – Transfusion Medicine Sample Acceptance and Rejection</li> <li><b>F SAP 0007 G07</b> – Specimen Not Required for Submission to Pathology for Examination</li> </ul> |  |
| <b>5.</b> | <p>Check Sample Stability charts prior to processing.</p> <ul style="list-style-type: none"> <li>multiple tests on one sample may have multiple stabilities with variable temperature and length of storage requirements               <ul style="list-style-type: none"> <li><b>F SAP 0007 S1</b> Sample Stability – Anatomical Pathology</li> <li><b>F SAP 0007 S2</b> Sample Stability – Chemistry</li> <li><b>F SAP 0007 S3</b> Sample Stability – Hematology</li> <li><b>F SAP 0007 S4</b> Sample Stability – Microbiology</li> <li><b>F SAP 0007 S5</b> Sample Stability – Transfusion Medicine</li> </ul> </li> </ul>   |  |



## Action

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| <b>6.</b>  | Process sample.  |  |
| <b>If sample</b>   | <b>then</b>  |  |
| Acceptable   | Deliver sample to appropriate department.  |  |
| <p>Regional transfer or sample is difficult to re-collect</p> <p>For a list of difficult to collect samples refer to <b>Appendix A: Difficult to Collect Sample List</b></p> <p>For samples from regional hospitals refer to <b>F SAP 0007 J3 FlowChart – Escalation Algorithm</b></p> | <p><b><u>DO NOT</u></b> cancel test. <b><u>DO NOT</u></b> discard samples</p> <ul style="list-style-type: none"> <li>• if possible perform testing at current site rather than delay testing by further shipping</li> <li>• determine if test is reportable with a disclaimer about condition of sample                             <ul style="list-style-type: none"> <li>◦ Check analyte guides and package inserts for additional disclaimers not found in the stability charts or rejection criteria.</li> <li>◦ Consult with supervisor, reference laboratory and/or pathologist to determine what examinations could be performed on the suboptimal sample</li> <li>◦ Critical samples may need to be processed offline while waiting pathologist approval.</li> </ul> </li> <li>• if reportable with a disclaimer,                             <ul style="list-style-type: none"> <li>◦ process sample and report result as per: <b>R RRP 0003 Reporting Patient Results</b></li> </ul> </li> <li>• add the disclaimer in the result comment, explaining sample condition and any possible impact on results or the patient<br/>For example:                             <ul style="list-style-type: none"> <li>◦ <b>BF8</b> – Specimen greater than 8 hours old and differential count may be inaccurate due to cellular degeneration.</li> <li>◦ <b>CB12</b> – Cord Blood over 12 hours old.</li> <li>◦ <b>CSF1</b> – Specimen greater than 1 hour old and cell count and differential may be inaccurate due to cellular degeneration.</li> <li>◦ <b>DIT</b> – Results may be compromised due to delay in transit.</li> <li>◦ <b>SRPT</b> – Suggest repeat if indicated.</li> <li>◦ <b>TEMP</b> – Result may be affected due to improper storage temperature or handling</li> </ul> </li> </ul> |  |



## Action

**7.** If samples are not acceptable  
**AND**  
 not approved by Pathologist, supervisor or testing site to verify/ forward

| Sample is from   | then  |
|--|---|
| Cerner entered specimen <ul style="list-style-type: none"> <li>• regional hospital</li> <li>• collection site</li> </ul>   | <ul style="list-style-type: none"> <li>• notify collection site for resubmission of stored sample aliquot, if possible               <ul style="list-style-type: none"> <li>◦ Aliquots do not require a new accession number.</li> </ul> </li> <li>• select appropriate cancel reason and attach a result comment regarding cancellation of the test               <ul style="list-style-type: none"> <li>◦ Refer to cancellation instructions in Specimen Management User Guide section <b>CIS SM 220</b> Cancel Orders.</li> </ul> </li> <li>• phone and fax for recollection of test if clinically indicated</li> <li>• contact regional site, to schedule patient recollection               <ul style="list-style-type: none"> <li>◦ Request recollection of unacceptable samples with new accession number.</li> <li>◦ Ordering providers will be notified of cancellation in writing through the patient report.</li> </ul> </li> <li>• notify health care provider of cancelled test               <ul style="list-style-type: none"> <li>◦ Ordering providers will be notified of cancellation in writing through the patient report.</li> </ul> </li> </ul> |
| NON-LAB Collection <ul style="list-style-type: none"> <li>• clinic</li> <li>• other department/ward</li> <li>• health center</li> <li>• community health</li> <li>• patient self collection</li> </ul> | <ul style="list-style-type: none"> <li>• cancel tests affected and recollect sample as required</li> <li>• notify collection site for recollection</li> <li>• select appropriate cancel reason and attach a result comment regarding cancellation of the test               <ul style="list-style-type: none"> <li>◦ Refer to cancellation instructions in Specimen Management User Guide section CIS SM 220 Cancel Orders.</li> </ul> </li> <li>• notify health care provider of cancelled test               <ul style="list-style-type: none"> <li>◦ Ordering providers will be notified of cancellation in writing through the patient report</li> </ul> </li> </ul>  |

**8.**

- Do Not Delay Samples if possibility of Patient injury is in question
- When in doubt always process samples for testing offline and wait further instruction.
- Initiate troubleshooting steps and inform supervisor or pathologist for direction with in 60 mins of discovery to ensure no further cancelations are required.
- Submit PSLS



# Appendix

## APPENDIX A: DIFFICULT TO COLLECT SAMPLE LIST

### Forms/ Schedules

|                       |  |
|-----------------------|--|
| <b>F SAP 0007 F1</b>  | Inter Hospital Shipment Delay Checklist                            |
| <b>F SAP 0007 G01</b> | Specimen Management Sample Acceptance and Rejection                |
| <b>F SAP 0007 G02</b> | Microbiology Sample Acceptance and Rejection                       |
| <b>F SAP 0007 G03</b> | Hematology Sample Acceptance and Rejection                         |
| <b>F SAP 0007 G04</b> | Chemistry Sample Acceptance and Rejection                          |
| <b>F SAP 0007 G05</b> | Anatomical Pathology Sample Acceptance and Rejection               |
| <b>F SAP 0007 G06</b> | Transfusion Medicine Sample Acceptance and Rejection               |
| <b>F SAP 0007 G07</b> | Specimens Not Required for Submission to Pathology for Examination |
| <b>F SAP 0007 S1</b>  | Sample Stability – Anatomical Pathology                            |
| <b>F SAP 0007 S2</b>  | Sample Stability – Chemistry                                       |
| <b>F SAP 0007 S3</b>  | Sample Stability – Hematology                                      |
| <b>F SAP 0007 S4</b>  | Sample Stability – Microbiology                                    |
| <b>F SAP 0007 S5</b>  | Sample Stability – Transfusion Medicine                            |
| <b>F SAP 0007 J1</b>  | Job Aid – Histology Sample Submission Criteria                     |
| <b>F SAP 0007 J2</b>  | Job Aid – Cytology Sample Preservatives                            |
| <b>F SAP 0007 J3</b>  | Flow Chart – Escalation Algorithm                                  |

## Related Documents

|                       |  |
|-----------------------|--|
| <b>F SAP 0003</b>     | Evaluation of Requisition, Sample Label and Order Entry        |
| <b>A APC 0003 S01</b> | Retention of Patient Samples                                   |
| <b>F SAP 0008</b>     | Packaging Samples for Drop-off at Northern Health Laboratories |
| <b>A APC 0001 G1</b>  | NH Test Directory  |

## References

1. Diagnostic Accreditation Program Accreditation Standards 2015, Laboratory Medicine; General Standards: Pre-Examination and Sample Collection, British Columbia (Canada): DAP2015
2. International Organization for Standardization. Medical laboratories – particular requirements for quality and competence. ISP 15189:2003(e). Geneva (Switzerland): ISO; 2003.

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|                       |  |
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| Vera Roy, MLT, CMQ/OE | Regional Lead, Laboratory Quality, NH                        |



## Appendix A: Difficult to Collect Sample List

- Samples collected in the operating room
- CSF samples
- Tissue samples
- Sterile fluid samples (i.e. joint fluid)
- Aspirate samples
- Culture swabs.
- Samples collected from infants/pediatrics (Age: birth to 5 years old)
- Surgical pathology samples