

LABORATORY SERVICES MANUAL FOR PHYSICIAN OFFICES

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APPENDIXES

Physician (office) Instructions for Community Lab Requisition

Community Lab Requisition (RQHR 217)

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Laboratory Requisitions

1. Laboratory requisitions, designed for use with the Lab Information System in RQHR laboratories, each consist of a single sheet of paper. They serve only as a mechanism for placing an order. Test results are printed on separate report forms by the laboratory computer. The following requisitions are available:
 - Community (general lab and microbiology) blue
 - Surgical Pathology Consultation cream
 - Cytopathology – Non Gynecologic canary
 - Cytopathology – Gynecologic mauve
 - Ova & Parasite Examination green (full page form)
 - Sask. Disease Control Laboratory choose appropriate requisition
(previously Provincial Lab)

2. A supply of RQHR requisitions is available from the Print Shop. To order these requisitions call 766-5290 for a “Print Room Supply Form”.

3. When completing requisitions include all of the following information:
 - patient’s first and last name (as on health card)
 - date of birth (day/month/year)
 - 9 digit provincial health number
 - gender
 - patient’s address, in the case of Community requisitions also include patient’s telephone number
 - name of ordering physician printed legibly, including first name or initial, and the address you wish the reports to be returned to
 - indicate date and time of collection
 - indicate the diagnosis and other relevant information such as anticoagulant therapy, antibiotic therapy, therapeutic drug dosage or patient’s height and weight
 - if required, indicate “copy to” physician(s) including the first name or initial and location

- refer to the appendix *Physician (office) Instructions for Community Lab Requisition* for information on requesting reports by FAX
 - person collecting the specimen must record their signature
 - if the specimen is for surgical pathology or microbiology also record the nature of specimen and complete relevant clinical history
 - if the specimen is for cytology (Pap smear), the clinical history and treatment history section of the requisition must be completely filled out
 - Cytopathology and Surgical Pathology requisitions must be legibly signed by the physician performing procedure
4. Orders for tests which are referred to the Saskatchewan Disease Control Laboratory must be submitted on the appropriate SDCL requisition. **Do not use RQHR requisitions.** To request supplies and requisitions from the SDCL, call 787-3192.

Following is a list of the more common tests referred to the Saskatchewan Disease Control Laboratory:

ACTH (Adrenocorticotrophic hormone)
Aldosterone
ANCA
ASOT
CA 19-9 (Carbohydrate antigen)
Catecholamine
Celiac Screen
Chlamydia
Cortisol
DHEA-SO₄
Fructosamine (Glycosylated Protein)
Hantavirus
Heavy Metals (lead, copper, mercury)
HbsAg
HCV
Hepatitis A, B and C screen
HIV
Insulin
Lipase
Maternal testing (HIV, Rubella, VDRL, Hepatitis screen)
Metanephrines
Mycobacterium Culture
PKU
Progesterone
PTH
TB Testing
Testosterone
Thyroid Antibody
TTG

Urine Drug Screen
VDRL
Viral Culture
Viral Serology – Rubella, Torch Screen, Cytomegalovirus (CMV), Herpes,
Legionella, Epstein- Barr virus
Viral Studies – Influenza
Vitamin D
VMA, Catecholamine, 5HIAA (24 hr. Urines)
West Nile testing

Client Identification and Specimen Labelling

Correct identification of the client is vital. Proper identification includes confirmation of at least two client identifiers through observation of documented identifiers, then requesting the client to recite their first and last name and date of birth when the client is able to participate in the identification process.

Two client identifiers include the first and last names AND a unique identifying number. The unique identifying number consists of the Health Services Number (HSN) or Medical Record Number (MRN).

Clients presenting to a Specimen Collection area, must present their Health Services Number card to confirm their first and last name and HSN. Ensure the identifiers match the corresponding identifiers on the requisition.

Label all specimens at the client's side at the time of collection.

All specimens of blood, urine, stool and other body fluids for **Hematology, Transfusions and Chemistry** must be labelled with:

- patient's first and last name
- provincial health number
- blood for group and Rh must also be labelled with patient's date of birth and the date of collection

Tissue specimens for **Histological** examination must be labelled with:

- patient's first and last name
- provincial health number
- physician
- nature of specimen
- date of procedure

Specimens for **Microbiology** must be labelled with:

- patient's first and last name
- provincial health number
- nature of specimen
- date of collection

Specimens for **Cytology** must be labelled with:

Pap smear:

- first and last name must be written on frosted end of glass slides

Non-gynecological specimens:

- first and last name
- provincial health number
- date of collection
- nature of specimen

Specimens that are labelled incorrectly or illegibly will be assessed according to the Lab Services Specimen Rejection protocol. Depending on the nature of the error, the nature of the specimen and test being performed and the degree of difficulty in obtaining a repeat specimen, the specimen may be rejected and a repeat draw requested.

Specimen Collection Instructions

Collect the specimen tubes in the following order:

- blood cultures (aerobic then anaerobic)
- red top tube(s) with no additive or gel
- blue top tube(s) with citrate (fill the tube)
- gold (SST with gel) tube(s) and red top serum tube(s) with additive
- green top tubes with heparin
- mauve top tube(s) with EDTA
- tube(s) with other additives (e.g. grey top tube)

Gently invert all the tubes 5 times to mix the blood with the additives. To invert turn the filled tube upside-down and then return it to an upright position.

A. Hematology/Transfusions

1. CBC (with WBC differential), ESR, Retic

For any combination of tests in this group:

- draw one 5 mL EDTA tube (lavender top)
- transport to the testing laboratory within 2 hours of collection
- refrigerate at 4°C until transport; specimens refrigerated for up to 24 hours after collection will be accepted

2. PTT, INR

For any combination of tests in this group:

- draw one 2.7 mL or 5 mL sodium citrate tube (blue top) ensuring that the tube fills completely
- transport to the testing laboratory within 2 hours of collection
- if greater than 4 hours is expected, centrifuge specimen for 10 minutes at 2500 RPM, separate plasma and freeze at -20°C. Send specimen to RGH in frozen state.

3. Monospot (serum), RBC folate

For any combination of tests in this group:

- draw one 5 mL EDTA tube (lavender top) and one 5 mL SST gold top tube (serum separator tube with gel)
- transport specimens to the testing laboratory within 4 hours of collection
- if greater than 4 hours is expected, allow SST specimen to clot (at least 30 minutes), centrifuge for 10 minutes at 2500 RPM and refrigerate EDTA and SST tubes at 4°C until specimen is transported

4. Blood group and Rh, Direct Antiglobulin Test

For any test in this group:

- collect two 5 mL EDTA tubes
- label tubes with patient's first and last name, health services number, the date of birth and date of collection

5. Synovial Fluid

- collect 3-5 mL of specimen in EDTA tube (lavender top)
- mix immediately by inverting tube at least five times and ensure that specimen is not clotted
- transport to RGH laboratory within 4 hours of collection
- specimens refrigerated for up to 24 hours after collection will be accepted but note that a differential may not be possible since there is cellular deterioration after 4 hours

B. Chemistry

Albumin	Glucose
AFP	GGT
ALP – alkaline phosphate	βHCG
ALT	Iron / TIBC
Amylase	LDH
AST	Luteinizing Hormone
B 12	Lipid panel (cholesterol, triglycerides, HDL, LDL)
Bilirubin	Liver panel (ALP, ALT, bilirubin)
Calcium	Magnesium
CA125	Phenobarbital
CEA	Phosphorus
Carbamazapine/Tegretol	Prolactin
CRP	TIBC
CK	Total protein
Creatinine	PSA
Digoxin	Renal panel (Na, K, Cl, urea, creatinine)
Dilantin	Theophylline
Electrolytes (Na, K, Cl)	TSH, FT₄, FT₃
Estradiol	Urea
Ethanol	

Ferritin FSH	Uric Acid Valproic Acid
<p>For any combination of tests in the above table:</p> <ul style="list-style-type: none"> - draw one 5 mL SST gold top tube (serum separator tube with gel) - transport specimen to testing laboratory within 2 hours of collection - if greater than 2 hours is expected, allow specimen to clot (at least 30 minutes) and centrifuge for 10 minutes at 2500 RPM - refrigerate at 4°C until specimen is transported, but no more than 24 hrs. 	

ANA AMA Protein Electrophoresis (PE/IFE) also order Total Protein and Albumin Immunoglobulins Transferrin alpha 1 Antitrypsin RA/RF IFE
<p>For any combination of tests in the above group:</p> <ul style="list-style-type: none"> - draw one 5 mL SST gold top tube (serum separator tube with gel) - transport specimen to RGH for testing within 2 hours of collection - if greater than 2 hours is expected, allow specimen to clot (at least 30 minutes) and centrifuge for 10 minutes at 2500 RPM - refrigerate at 4°C until specimen is transported, but no more than 24 hrs.

Creatinine Clearance (record patient's height (cm.) and weight (kg.) on requisition) Bence Jones Protein
For tests in this group: collect a 24 hour urine specimen

Microalbumin / Creatinine Ratio
Collect a random urine specimen. Use a 5 – 10 mL plastic aliquot tube to send the specimen. Do not ship in a C and S container.

C. Microbiology

THROAT

Instruct the patient to breathe deeply, depress the tongue gently with a tongue depressor. Swab the areas with exudate, membrane or inflammation and rub tonsillar crypts vigorously. Avoid touching the oral mucosa or tongue with the swab. Have the patient say "Ah", this lifts the uvula and reduces the gag reflex. Place swab in transport media and send to the laboratory.

VAGINA

Use a speculum without lubricant and swab mucosa high in the vaginal canal. Place the swab in transport media.

URINE

NOTE : Duplicate urine specimens on the same patient for routine culture within a 3 day period will not be processed.

A "clean-catch" midstream specimen is adequate for culture provided the urine has been collected after adequate cleansing. The specimen should be sent in a special urine transport tube containing boric acid. If there is to be a delay of over 30 minutes in transporting the specimen, it should be refrigerated.

Collection of Clean-Catch Mid-stream Specimen

- use sterile container
- aseptically transfer to special urine transport tube containing boric acid.

For males (Midstream)

While holding foreskin retracted, begin voiding. After several mL have passed, collect midstream portion without stopping flow of urine. Transfer more than 5 mL of specimen into a urine transport tube containing Boric Acid preservative (add urine up to fill line on Boric Acid container).

For females (Midstream)

While holding labia apart, begin voiding. After several mL have passed, collect midstream portion without stopping flow of urine. Transfer more than 5 mL of specimen into a urine transport tube containing Boric Acid preservative (add urine up to fill line on Boric Acid container).

WOUNDS/SKIN

Wound as a specimen source is inadequate. Always provide a specific anatomical site.

When collecting these specimens, attention to skin decontamination is critical.

- a) Superficial wound – Clean wound surface with 70 % alcohol. Swab or aspirate the affected areas. Avoid touching surrounding skin.
- b) Deep Wound – Clean and decontaminate wound. Swab or aspirate the affected areas.
- c) Burns – Swabs of superficial lesions are inappropriate. Clean wound surface with 70% alcohol. Obtain a 3 mm³ punch biopsy and place into a sterile container.
- d) Decubitus ulcers – Decubitus ulcers, such as coccyx, sacral or ischio rectal, are of limited value, and will not be processed.
- e) Sinus tract – Superficial swabs are unsuitable. Submit aspirated pus in a Porta Cul vial.

STOOLS

Ova and Parasites

For the detection of ova and parasites, specimens should be submitted in special containers with preservative – SAF container, and filled to the line marked on the container. A number of substances can interfere with stool examination: mineral oil, bismuth, barium (radiological), nonabsorbable antidiarrhoeal preparations, antimalarials and antibiotics. After administration of these compounds, specimens should not be submitted for 1 - 2 weeks as they may not reveal parasites for a week to several weeks. The two most commonly used agents are barium and antibiotics which modify normal gut flora, and diminish the number of protozoa, since the growth and reproduction of protozoa are dependent on the presence of the intestinal bacteria.

Duplicate stool specimens on the same patient within a 5 day period will not be processed.

Culture and Sensitivity (C & S)

Approximately 1 g of freshly passed stool should be placed in a sterile container containing Enteric Pathogen Transport Medium when being submitted for culture. There should be no contaminating material e.g. urine, tissue paper, mixed with the specimen. Rectal swabs may be adequate for the detection of pathogens in acute infections but not in carriers.

D. Histology

Routine Processing for Surgical Specimens

- Specimens removed during surgical excision must be placed **immediately** into 10% Neutral Buffered Formalin in a clean, leak-proof, screw-top plastic container.
- Volume of formalin must be a minimum of ten times greater than the size of the tissue specimen.
- Specimen containers must be of adequate size to freely accommodate the specimen and appropriate volume of formalin.
- Label specimen container with patient's first and last name, Health Services Number and the nature and location of the specimen. Unlabelled or improperly labelled specimens will be returned for correction.
- Place specimen container and requisition into separate sealed zip-lock bags.
- Place bags into mailing container or sturdy cardboard box. Use packing materials to cushion contents.
- Seal container/box with packing tape.
- Affix Return Address label.
- Affix Address label for Histology Laboratory
- Ship to: **Histology Laboratory
Pasqua Hospital
4101 Dewdney Ave.
Regina, SK S4T 1A5**

E. Cytology

Pap Smear

The Pap smear is a highly effective tool for detecting cancerous and precancerous cervical lesions but it is considered a screening test only and has been demonstrated to produce false negative rates.

The objective of an adequate Pap smear is to provide a sampling of the Squamocolumnar junction between the ectocervix and endocervix utilizing the one slide technique. Combinations of various types of sampling are possible and can vary. Both the spatula (ectocervix) and brush (endocervix) should be used. The cervical brush alone should not be used.

A cervical smear should not be taken at the time of menstruation. The optimal time is mid-cycle. As well, the patient should be advised not to douche 48 hours prior to the examination.

Use of cotton tipped applicators and lubricating jelly on the speculum are NOT recommended.

a. Wooden Spatula Technique: Ectocervix scrape

- Insert and rotate one full turn
- Spread material over **top-half** of slide
- Spray immediately with fixative, holding spray bottle 3-4 inches away from the slide
- Pump 5-6 times or until slide is saturated
- The spray will contact the bottom half of the slide. This will not jeopardize the remainder of the procedure

b. Cytobrush Technique: Endocervical sampling (inform patients that some spotting may occur with use of the Cytobrush)

- Gently insert the Cytobrush into the endocervix
- Rotate slowly one turn only
- Remove the Cytobrush
- Spread the material on the **bottom-half** of the slide by rolling and twisting the Cytobrush
- Spray immediately as described above. There is no need to direct spray away from material already on the slide. **Additional spray will not alter the specimen.**
- Place the slide in the blue plastic slide mailer, leaving open until the slides are completely dry

c. When the slides are completely dry, close the slide mailer. Wrap the requisition around the blue mailer and secure with a rubber band

d. Mail or deliver to the Regina Qu'Appelle Health Region- Pasqua Hospital Cytology Laboratory.

Non-Gynecological Specimens

The Thin Prep instrument has become the optimal choice for preparing cell samples for Cytology. Specimens include pleural, peritoneal, pericardial, urine, sputum, cyst contents, washings, brushings and needle aspirates collected for cytologic examination.

The addition of 50% ethyl alcohol to the specimen will prefix cells during transport. The specimen can then be prepared in the Cytology lab.

1. Sputum

- The first specimen of the morning is considered to be the most representative. It is also recommended that the patient produce a sputum sample after at least one hour of consuming food in order to avoid contamination of the sputum by food particles. A sputum series (i.e. repeated once a day for three days) is generally recommended.
- Specimen should be collected in a labelled, leak proof container. Add an equal volume of 50% ethyl alcohol to the specimen.

2. Urine Specimens

- This includes voided urine, bladder washing and catheterized urine
- Voided urine: patient should be hydrated. A midstream specimen is recommended. First morning specimen is not recommended.
- All of the above specimens should be collected and submitted in a labelled, leak proof container with the addition of an equal volume of 50% ethyl alcohol

3. Synovial (Joint) Fluids

- The specimen should be aspirated into a sterile leakproof tube
- **DO NOT ADD ETHYL ALCOHOL to the specimen**
- Indicate on the requisition if the test is for crystals

4. Breast Secretions (Nipple Discharge)

- Label slide with patient's first and last name
- Secretion is expressed by gently squeezing the areolar area between the thumb and forefinger
- Secretion is smeared across a glass slide
- The smear should be immediately sprayed with fixative
- If the secretion is thick. Place another labeled glass slide on top and gently pull apart slide; fix with spray fixative
- Prepare as many slides as there is secretion
- Place slides when completely dry, into a blue slide mailing container
- Attach the requisition to the mailing container

5. Solid/Cyst Lesion Fine Needle Aspiration (Fine Needle Aspirate Biopsy)

- Cellular material extracted by fine needle aspiration from any solid or cystic lesion
- If the specimen is cystic, the fluid as well as the cyst wall should be aspirated.

- After removing the needle from the lesion, detach the needle from the syringe, fill the syringe with air, reattach the needle and express the contents in a clearly labelled leak proof screw top tube (i.e. Falcon tube) that contains 50% ethyl alcohol.
- A needle rinse should be performed as well. This is done by aspirating and expressing the alcohol to remove any cells or tissue fragments from the syringe.

Related documents

1. LABRegOP7900 *Laboratory Services Manual General Information*
2. LABCytoOP7000 *Diagnostic Cytology Lab Services Manual and Testing Compendium*
3. LABMicOP7204A2 *Microbiology Collection and Test Compendium*

Appendixes

1. LABLisOP7102J1 *Physician (office) Instructions for Community Lab Requisition*
2. LABLisOP7102A1 *Community Lab Requisition*

Revision History

Found in SoftTech Health Lab QMS™ Document Management System

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