

LABORATORY GUIDE TO SERVICES

THIS IS A CONTROLLED MANUAL
USER'S MANUAL VERSION 4
ISSUE DATE: March 1, 2009
REVISION DATE: August 16, 2013

INTRODUCTION

In producing this manual, it was our hope that it might serve to assist primary care personnel in the selection of appropriate laboratory tests, and in proper preparation of the patient before testing. We also hope to provide information to care givers who collect primary samples, on the proper procedures to be followed for collection, labeling and transporting of samples to the laboratory.

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Results are only as good as the original specimen.

In order for us to offer results that are of the highest quality, it is important that the appropriate tests are selected and that the specimens are of high quality initially. Please always keep in mind that an improperly collected specimen can lead to suspect or un-interpretable results. Our Laboratory has detailed policies to guide our staff in determining whether the specimen is suitable for processing.

As this is our first attempt at a document such as this, if there are points, which require further clarification or suggestions for improvement, we would value your input. Contacts are as listed below.

John O'Donoghue Laboratory Manager 752-7600ext 2830	Darlene Gilby Laboratory Standards Coordinator 752-7600ext4527

RECORD OF CHANGES MADE TO LABORATORY USERS MANUAL

PAGE #	SUMMARY OF CHANGES MADE	DATE
2,5,6,	Change in contact information for Dgilby and update Edith Thomson as LIS	March 1, 2012
7	Hours of Blood Collection Clinic operation	March 1, 2012
8	Removal of Priority Desk information	March 1, 2012
11	Addition of comment	March 1, 2012
	Changes to critical value reporting list to match Meditech targets	March 1, 2012
13	Corrections to coded sample process	March 5, 2012
39	Appendix A 5 removed	August 16, 2013
31-35	Updated test list	August 16, 2013
Various	Updated contact information	August 16, 2013

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ADMINISTRATION AND TEAM LEADERS

DEPARTMENT	NAME	CONTACT INFORMATION
Laboratory Admistration	Laboratory Manager John O'Donoghue	752-7600 ext 2830 john.o'donoghue@pcha.nshealth.ca
Transfusion Medicine	Senior Technologist Betty Parker	752-7600 ext 2800 betty.parker@pcha.nshealth.ca
Microbiology	Team Leader Gale Canning	752-7600 ext 2810 gale.canning@pcha.nshealth.ca
Histology	Team Leader Gale Canning	752-7600 ext 2810 gale.canning@pcha.nshealth.ca
Cytology	J. Sheldon Hewey	752-7600 ext 2820
Hematology	Team Leader Lois MacDonald	752-7600 ext 2880 lois.macdonald@pcha.nshealth.ca
Chemistry	Team Leader Edith Thomson	752-7600 ext 2880 edith.thomson@pcha.nshealth.ca
Laboratory Information System Team leader	Team Leader Edith Thomson	752-7600 ext 2880 edith.thomson@pcha.nshealth.ca
Laboratory Standards Coordinator	Senior Technologist Darlene Gilby	752-7600 ext 4527 Darlene.gilby@pcha.nshealth.ca
Blood Collection	Senior Technologist Darlene Gilby	752-7600 ext 4527 Darlene.gilby@pcha.nshealth.ca
VP Corporate Services	Alan Mongraw	752-7600 ext 4240
Medical Director	Dr, Leon Desormeau	752-7600 ext 2850 Thursday only

ABERDEEN LABORATORY DEPARTMENT PHONE NUMBERS 752-7600

DEPARTMENT	EXTENSION
Laboratory	1600
Laboratory Office	2860
Bacteriology & Urinalysis	2810
Betty Parker	4522
Blood Bank	2800
Chemistry	2870
Collections wireless	1405
Collections wireless	1406
Core lab	2880
Core lab fax	2460
Cytology	2820
Darlene Gilby	4527
Histology	2825
Histology Basement	3025
Lab outpatients registration	4524
Specimen processing/receiving	2890
John O'Donoghue	2830

ABERDEEN LABORATORY FAX NUMBERS

DEPARTMENT	FAX NUMBER
Laboratory Office Main Fax	752-1931
Laboratory outpatient	755-7327
Darlene Gilby	752-1310

SUTHERLAND HARRIS MEMORIAL HOSPITAL LABORATORY CONTACT INFORMATION:
AUTO ATTENDANT 485-5665

AREA	NUMBER
Central Registry	3139
Blood collection	2311
Fax	485-4049

HOURS OF OPERATION
PICTOU COUNTY HEALTH AUTHORITY
BLOOD COLLECTION CENTERS

EAST RIVER ROAD BLOOD COLLECTION CLINIC	SUTHERLAND HARRIS MEMORIAL
Hours of operation Mon – Fri: 7:00am – 2:30pm Excluding Statutory Holidays	Hours of operation Mon, Tue, Thurs and Fri: 7:30 – 10:30am Excluding Statutory Holidays

OUTPATIENT BLOOD COLLECTION:

This is a walk-in service where patients use a numbering system and wait their turn. Patients must have a completed and signed requisition from their physician indicating the tests requested, specimen priority and to whom the results should be reported. Requisitions cannot be altered by the patient. All patients must also have a current health card with them and be prepared to show it to the registration staff.

Physicians who require stat testing to be performed after regular operating hours must contact the laboratory to make arrangements for testing. Phone 902-752-7600-2880

If cancellation of a scheduled clinic is necessary, the Lab will attempt to post advanced notice as a reminder of the cancellation as early as possible.

If due to unforeseen circumstances the Laboratory Blood Collection service must close notification will be posted at the blood collection center and a public notice will be made on 94.1 East Coast FM.

HOURS OF TESTING

- PCHA Lab provides 24 hour coverage 7 days per week.

- Full service is offered Monday – Friday from 0700 – 1500.

- Minimal staff is available Monday – Friday from 1500 – 0700 for STAT or URGENT requests only.

- Minimal staff is available on weekends and holidays (24 hours) for STAT or URGENT requests only.

PROVISION OF SERVICE TO AUTHORIZED REQUESTERS

Laboratory Services of PCHA will perform Laboratory Tests and examinations of specimens at the request of authorized requesters only. The Laboratory must have evidence that the orders received are under the direction of an authorized Healthcare Practitioner. To conform to Laboratory standards, the "request form shall contain information sufficient to identify the authorized requester". To ensure that this standard is met, the test request form (or an electronic equivalent) shall contain a legible name (preferably legible signature) or other unique identifier (stamp pad signature, electronic signature etc.) of the ordering physician or other person legally authorized to request examinations or use medical information.

Authorized requesters include:

- Physicians licensed by the College of Physicians and Surgeons of Nova Scotia
- Physicians listed in the Canadian Medical Directory as published by the Canadian Medical Association
- Physicians who have been granted privileges by the District Health Authority
- Nurse practitioners who have been granted privileges by the District Health Authority
- Dentists who have been granted privileges by the District Health Authority
- Other persons as designated by the District Health Authority
- Agencies as permitted or required by law.

SURGICAL SPECIMEN AND INPATIENT SPECIMEN DROP OFF

Surgical specimens may be dropped off in Specimen Processing Monday – Friday 7am-3pm (excluding holidays) after regular business hours surgical specimens should be delivered to the core lab with the exclusion of amputation specimens, which should be placed in the Histology department refrigerator.

Specimens being delivered to the laboratory from inpatient units should be dropped off in Specimen Processing Monday – Friday 7am to 3:30pm (excluding holidays) after regular business hours stat blood specimens should be delivered to the core lab. Notify a staff member that you are leaving a specimen for processing.

Specimens for Microbiology or urinalysis testing from inpatient units should be delivered to the Bacteriology department between 3:30pm and 5pm. After 5 pm, please deliver specimens to the core laboratory and notify a staff member.

Cytology specimens should be taken to the Cytology department.

PHYSICIAN INSTRUCTIONS TO OUTPATIENTS WHEN ORDERING BLOOD WORK

Patients must be properly prepared when arriving for certain testing provided by the lab. It is recommended that Physicians consider this and provide the **pertinent, necessary** information to their patient. This helps to provide you with useful, clinically relevant results that are often the cornerstone of diagnosis and treatment. It also prevents the patient from being inconvenienced by having to return another day because they were not properly prepared for the test when arriving for blood work. This section deals with frequently ordered tests that may require patient preparation before being performed.

TEST	INSTRUCTIONS TO PATIENTS
AC Glucose	Patients should not have breakfast the morning of the test. (minimum of 8 hour fast)
Lipids	Instruct patient to not eat or drink for a minimum of 12 hours before test. (Small amounts of water are acceptable, if necessary)
PC Glucose	Inform patient they will be returning to the lab for a second blood test after breakfast
Glucose Tolerance Testing (pregnant or non-pregnant)	No breakfast. Inform patient that there will be more than one blood sample taken. Also inform patient that they will be given a concentrated glucose drink while at the Lab and have their blood drawn at different times. Patients are expected to remain at the Blood Clinic during the waiting time between drink and blood collection
50 Gram Trutol or Glucose Load	Inform patient that they will be given a concentrated glucose drink and be required to have their blood drawn 1 hour after finishing the drink. Patients are expected to remain at the Blood Clinic during the waiting time between drink and blood collection
Midstream Urine	Early morning collection is best. Keep urine refrigerated until coming to the lab. Must be received by Lab within 2 hours of collection. (Instructions are included in this manual as APPENDIX A1)
24 hour Urine collections (for any test)	Containers, collection devices and patient instructions are available from the lab. Instruct patient to bring the requisition to the lab when picking up the bottle as some 24 hour collections need special preservatives added. To eliminate the need for recollection, the lab will not give out containers unless they know what tests are ordered. (Instructions are included in this manual as APPENDIX A2)
Occult Blood Testing	Preparation for collection of these specimens may require change of diet and/or medication changes as listed in the instructions that the patient will be given. (Instructions are included in this manual as APPENDIX A3)
Seminal Fluids for complete analysis	Containers and patient instructions are available from the laboratory. (Instructions are included in this manual as APPENDIX A5)
Seminal Fluid Analysis post vasectomy	Containers and patient instructions are available from the laboratory. (Instructions are included in this manual as APPENDIX A6)

MAINTAINING CONFIDENTIALITY OF PATIENT INFORMATION

The Laboratory Services of PCHA recognize the individual's right of privacy in relation to his/her hospital visits.
All PCHA Laboratory staff members are charged with the duty to maintain confidentiality of all patient information obtained as an employee of PCHA. All PCHA Laboratory Staff are required to have signed and have on their employee file a "confidentiality "statement. All information related to an identified individual must be treated as confidential.
Confidentiality extends to everything hospital personnel learn, hear, see, or observe in carrying out their duties.
This extends to include staff maintaining confidentiality of personal information and test results of people known to them such as family, friends and other PCHA staff members.

REQUISITIONING OF LABORATORY TESTS

A **properly completed "Laboratory Services Requisition"** (Appendix C1) must accompany all labeled specimens. The following information must appear on the request form:

a) Patient's full name
b) Date of birth
c) Location
d) Sex
e) Health Care number
f) Family physician (legible full name)
g) Ordering physician (legible full name)
h) Diagnosis
i) Test requested
j) initials or signature of person who drew specimen
k) date and time of collection of specimen
l) all pertinent information as requested by lab

The following additional information is required if the request is for:

MICROBIOLOGY See Appendix C1 for sample of requisition	**HISTOLOGY(tissue)**	**CYTOLOGY**	**BLOOD BANK** See Appendix C4 for sample of requisition
• source of specimen • antibiotics currently in use or to be started • clinical data pertinent to appropriate processing of the specimen	• type of tissue • source of tissue • patient's history • operative findings (if applicable)	• type of tissue • source of tissue • patient's history • operative findings (if applicable)	• type and volume of product required • date product required • history of transfusions and/or pregnancies • any known antibodies

VERBAL REQUEST FOR LAB TESTS

Any Laboratory Personnel receiving verbal orders must obtain the following information

- That the orders were a " Verbal Request"
- Date and time of request
- All necessary patient information (Name with unique identifiers, location)
- The tests being requested
- Health Care practitioner placing the order (also include name of designate placing the call, if not the Health Care Practitioner themselves).
- Name of Laboratory staff taking the order

All verbal request for tests require that the tests ordered be read back to confirm the entire order.

STAFF ARE NEVER PERMITED TO PERFORM ANALYSIS FOR CLIENTS INCLUDING WITHOUT A WRITTEN OR VERBAL ORDER FROM A PHYSICIAN AND RESULTS SHALL NEVER BE GIVEN DIRECTLY TO A PATIENT.

RECURRING TESTS

Laboratory standards require that the physician, **on a yearly basis**, must update orders for "recurring tests. **"**Recurring tests" are tests ordered so that such will be performed periodically with no end date stated. (Example: monthly CBC's, Weekly PT's, etc.)
To meet this standard, 1 year from initial order for recurring tests, patients will be advised that they should schedule a visit to their physician to obtain updated orders. A letter explaining this policy will be given to the patient to present to his or her physician. New orders will be required prior to the next visit for blood collection. (Consult Appendix D2 for sample of form letter that will be given to patient to deliver to physician.)

TECHNICAL AND CLINICAL LABORATORY CONSULTATIONS

Licensed Medical Laboratory Technologists employed by PCHA are available for telephone consult regarding all technical aspects of testing. Appropriate contact numbers are listed in PCHA Laboratory Contact Numbers lists on page 5.

For consultation and advice on medical indications and appropriate selection of available procedures, telephone consult is available from Laboratory Management. Contact Laboratory Management as appropriate, at the phone numbers listed below.

Medical Laboratory Director – Dr. Leon Desormeau **1-902-752-7600-2850 (Friday)**

Laboratory Manager – John O'Donoghue **1-902- 752-7600 ext 2830**

SPECIMEN IDENTIFICATION

Specimens, received by the Lab that are not adequately identified will not be processed. In all cases, a request will be made to recollect the specimen in question.

A single label with **two identifiers** must be attached to each specimen that has been entered in the Meditech system. All identifiers must match those on the requisition – the patient's full name and health card number or other unique ID (such as Hospital Unit Number or Health Card Number) is the required identifiers.

Bar-coded labels are also to be marked as to be able to identify the collector. This can be accomplished by writing the collectors Meditech user name on the large label and initials on each of the small labels. Bar-coded samples must also have the time that the sample was drawn recorded on the bar-coded tube.

If collecting blood, and you do not have a Meditech user name, please place your full name on the Patient requisition and initials on the tube the receiving lab must be able to trace back to who performed the collection.

Specimens collected for use in the Blood Transfusion Department shall have 2 identifiers on the tube consisting of the patients name and at least one other unique identifier (all labeling information on Blood Bank specimens should be completed by hand (bar-coded Meditech labels should not be placed on blood bank tubes). **The two unique identifiers placed on the tube must also be present on the requisition.** The Blood bank requisition must be signed and the date and time of collection stated by the collector. If any of the preceding criteria are not met, the Blood Transfusion Service will reject the specimen.

(In the event of an **improperly labeled irreplaceable specimen**, the ordering physician must issue an order to proceed as described on page 14 of this manual. This will be done through use of a form that can be viewed in Appendix D1 of this manual. Reports issued from the lab will contain a disclaimer that the laboratory will not accept responsibility that the results belong to this patient.)

SUBMISSION OF CODED PATIENT SAMPLES

The physician may chose to identify the patient by a code name, this name will be used to identify the specimens however a code will be assigned to the sample at the specimen processing area:

The following guidelines must be used when submitting coded patient samples to allow easy retrieval of information and comparison with previous results in the computer system.
The code format shall be as follows:

- The first part of the code name should be the collection location example Aberdeen would be A,R
- The second part of the code is the date the sample was drawn (day Month) 2105
- The third part of the code is the first available letter for that day example client #1 would be A etc

The name of the ordering physician must be clearly indicated on the requisition – this is essential so that reports may be communicated to the correct physician/department.

REJECTION OF SPECIMENS

It is the policy of the Laboratory Service to reject laboratory test specimens on the basis of improper identification, unusual biological hazard, or specific technical criteria. These criteria are set out in the following protocol:

SPECIMEN IDENTIFICATION	All specimens must be adequately identified by having attached to the specimen the patient's full name and unique patient ID number or healthcare number. All identifiers must match those on the requisition. Specimens that cannot be adequately identified will not be processed. In all cases a request will be made to recollect the specimen in question. In the event of an improperly labeled irreplaceable specimen, an attempt will be made to contact the ordering physician to issue an order to proceed with testing. Reports will contain a disclaimer that the laboratory will not accept responsibility that the results belong to this patient.
BIOLOGICAL SAFETY CRITERIA	All specimens received in the laboratory must be received in a biologically safe condition. Specimen containers and/or requisitions that have become contaminated through leakage of the biological fluid will be discarded and will not be processed. It is the responsibility of the individual packaging the specimen to ensure that leak-proof containers are being used and to package specimens in such a manner that damage does not occur during transport. Requisitions and paper must be packaged separately under protective plastic to prevent contamination if a biological specimen does leak or spill.
TECHNICAL CRITERIA	All specimens must be technically suitable for the purpose of testing. Specimens that are received in a condition that is deemed unsuitable for testing will be disposed of without being tested. Conditions identified as making a specimen unsuitable for testing include: - Insufficient quantity of specimen - Hemolyzed specimen (depends on test required) - Incorrect type of specimen or specimen container - Whole blood specimens that are clotted - Specimens that are too old - Specimens that did not receive specialized storage. - Microbiology specimens in non sterile container

PROCESSING IRREPLACEABLE SPECIMENS

A specimen is deemed irreplaceable if:

- **a repeat specimen is unattainable by recollection**
  AND
- **not processing the specimen could result in the loss of information that will significantly affect the treatment of the patient.**

Policy: Improperly labeled irreplaceable specimens may be processed and reported as long as the required documentation has been completed by the ordering physician and has been received in the Laboratory. An "Authorization to Proceed with testing" form is the required documentation to be in the Lab's possession before testing can be reported on improperly labeled irreplaceable specimens.
If the completed "Authorization to Proceed with Testing" form is not returned to the Laboratory, no results will be reported on this.

The Manager or Senior Technologist or Team Leader or designate receiving the specimen shall:
Telephone the patient care area or appropriate healthcare provider and:

a. explain the labeling problem
b. Determine whether or not the specimen is irreplaceable by discussion with the appropriate health care professional and in consultation with the ordering physician
c. Advise that the specimen was received improperly labeled and the "Authorization to proceed with testing" form must be completed prior to release of results.
d. Fax the "Authorization to proceed with testing" form to the physician
e. Ensure orders are placed in Meditech and the proper documentation and labeling of all specimens is completed.

The "Irreplaceable Specimen" comment is to be placed in Meditech as a specimen comment when entering the specimen. The mnemonic for this comment is "**IRR**" and the comment states

"This specimen was received in the laboratory with an identification problem. Due to the irreplaceable nature of the specimen it was processed and reported after the necessary laboratory documents were completed and returned by the ordering physician".

f. Deliver specimens to other sections according to the requested test and provide explanation of the situation to the departmental technologists.
g. Process the specimen as usual. (See "Reviewing And Reporting" below)

Reviewing and Reporting:
When reviewing and reporting a specimen that has the "Irreplaceable Specimen" comment, ensure that the necessary documentation is present in the laboratory **before the results are finalized.**

The Manager or Senior Technologist or Team Leader or designate of the department involved with this specimen shall:
Ensure "Authorization to Proceed with Testing" form has been completed before reporting results.

TRANSPORTATION OF SPECIMENS

All specimens should be delivered to the laboratory as soon after collection as possible. In order to provide for the safety of the various people or businesses delivering specimens to our laboratory, and to protect our own staff receiving them, all specimen transport must comply with Transport of Dangerous Goods regulations.

The Transportation of Dangerous Goods (TDG) Act is a federal law created for the protection of humans, animals and the environment. Included under this law is the shipment of diagnostic laboratory samples such as blood, urine, etc. either across the country or across a few blocks up the street. All diagnostic samples including those collected in clinics, doctor's offices, etc., must be packaged and transported in accordance with this law. As the receiving laboratory we have a responsibility to accept only properly packaged samples and to inform individuals who do not comply with this law. Failure to improve the situation will result in a formal report to a Federal Inspector, who can impose significant fines.

The following information has been abstracted from the TDG Act and is provided as a guide to assist you in complying with this law.

Primary container	▪ This is the actual sample container – blood tube, urine container, swab, etc. ▪ Always make sure the container lid/cap is properly closed. ▪ With the exception of Vacutainer type tubes where the seal remains intact, all other tubes containing a liquid sample and/or transport fluid must have the cap/lid sealed (Parafilm® is ideal for this). As an alternative to this, primary sample containers can be placed inside plastic envelopes with each tube heat sealer individually. ▪ Non-liquid samples, e.g. routine culture swabs, do not require sealing.
Secondary container	▪ This can be a plastic bag such as the lab transport bags or large plastic (e.g. garbage) bag ▪ Place around the primary container(s) inside the outer container
Absorbent material	▪ Used to absorb fluids if the primary container should accidentally break ▪ Suggested materials include diapers, absorbent pad (e.g. Depends, etc.) ▪ Absorbent pads may be used with larger samples such as urines or stools ▪ Place inside the secondary container
Cushioning	▪ Used to separate each test tube and/or container (containers <u>should not touch</u> one another – this is especially important for liquid samples) ▪ collection areas may use a test tube rack to separate blood tubes ▪ For small shipments paper towels or newspaper may be used as cushioning between sample tubes ▪ Samples may be placed into individual zip-lock plastic bags
Outer container	▪ All outer containers must be clearly identified as containing biohazardous material ▪ A rigid container such as an insulated box – A "Cooler" is ideal for routine diagnostic specimens ▪ For transportation of a small number of specimens, a soft-sided outer container is acceptable
Packing Procedure:	1. Ensure all caps are secure and seal all non Vacutainer®-type tubes containing liquids with Parafilm®. 2. Place a large plastic bag in cooler. 3. Ensure an absorbent pad is in the bottom of the cooler 4. Stand test tube racks on the absorbent pad. 5. Stand the specimen tubes or urine containers in the cooler. Note: For small shipments, paper towels may be used as cushioning between sample tubes. 6. Close the secondary container 7. Place all the requisitions in a separate plastic bag on top of closed secondary container. 8. Close the cover on the outer container (cooler).

Requisitions

- **Do not wrap requisitions around specimens. Do not tape specimens to requisitions.**
- Place in a separate plastic bag together with other requisitions for the same discipline.
- May be folded to place in envelope

Contamination

- Avoid contaminating the outside of the container. Clean with a disinfectant, such as alcohol or diluted bleach, if contamination occurs.

ENTERING ELECTRONIC REQUESTS IN MEDITECH SYSTEM

Staff with access to the Laboratory module of the HITS (Meditech) system shall enter patients as outlined in the Laboratory Registration Manual located in the Laboratory Outpatient department.

Specimens for Microbiology, Cytology and Histology shall be entered as per departmental procedures.

◆ INSTRUCTIONS FOR STAFF WITH "ORDER ENTRY" MODULE ACCESS◆

PCHA staff who have access to the **"ORDER ENTRY NORTH *LIVE*"** module may enter Laboratory patient test requests electronically. This is done under the "**ENTER ORDERS"** icon of this module.
Complete instructions for entering Laboratory patient test requests may be found in the manual provided by HITS-NS. The manuals currently in use for this module are available on the PCHA intranet link to HITzone at http://hitszone.nshealth.ca/Site_Published/extranet/oedocuments.aspx

- **IMPORTANT (regarding add-on tests):** Before entering add-on tests into the computer a call must be placed to the Laboratory to confirm that the laboratory has the proper collection tube available to perform the test and to ensure that the sample meets laboratory standards for testing. (Example not too old)

CLASSIFICATION OF LABORATORY ORDERS

	STAT	URGENT	ROUTINE	TIMED
Definition	Indicates the results are needed immediately because of a medical emergency	Not a medical emergency, but indicates results are required as soon as possible	Indicates routine processing	Specific time of collection required – use priority of Urgent or Routine
Time of Collection	Enter N for current time	Unless a specific time is required, leave blank	Unless a specific time is required, leave blank	Enter time of collection, e.g. 1600
Labels	Enter Collected By Care Area = Y. Labels will print on unit	To print on unit, enter Collected by Care Area = Y. Enter N if printed by Phlebotomy	Printed by Phlebotomy	Printed by Phlebotomy
How to notify lab	Notify Lab Staff of STAT collections	If labels printed on the unit and Phlebotomy is required, notify lab (use site specific list below) If Phlebotomy prints labels, do not notify	Do not notify	Notify lab of timed collection
Collected	Immediately	As soon as possible	Next routine sweep	Usually within 15 minutes of requested time
Transport of Specimens	Immediately after collection, Blood collector will transport blood to Lab receiving area. Notify receiving that STAT sample has been obtained	As soon as possible after collection, Blood collector will transport blood to Lab Receiving area. Notify Receiving that URGENT sample has been obtained	Will be transported to the lab in batches as time permits	Will be transported to the lab as time permits
Lab Analysis	STATS processed first	Urgent processed ahead of Routine	Processed in routine manner	Processed based on Urgent or Routine priority
Reporting	Report printed to unit as complete	Report broadcast to unit as soon as complete	Report printed to unit at defined print time	Reported based on Urgent or Routine priority

To reach blood collection staff at the Aberdeen Hospital phone extension 1405 or 1406.

DISTRIBUTION OF REPORTS

Only the physicians (or other authorized requesters) whose names appear on the ordering requisition will receive copies of the report. (An exception to this policy will be made if the lab finding is such that it is required to be reported by law.)

This is to ensure that copies of laboratory results are not distributed to any physician or caregiver other than the one ordering the test and/or those approved by the patient. (**The lab does not give results or copies of results directly to clients)**

REPORT INQUIRIES

All inquiries regarding reports should be directed through the **laboratory office during regular full service hours.** This service is only intended for use when a report cannot be accessed on the patient's chart, through the EMR patient enquiry system or in the physician's office. If the requested test is currently in progress, or if a question requires consultation with a technologist, the call will be transferred to the appropriate laboratory department.

Please allow a minimum of three days for lab results to reach your office. Tests referred to reference laboratories will require more time. Please allow a minimum of five days for pathology reports.

LABORATORY TESTS ELIGIBLE FOR STAT REQUEST

Only the tests listed below will be done on a "STAT" order basis. The tests listed below are available on a "STAT" basis 24 hours a day, 7 days a week as part of PCHA Laboratory Service.

DEPARTMENT	LISTING OF STAT TESTS AVAILABLE
CHEMISTRY	Blood Gases
	Glucose
	BUN and/or Creatinine
	Electrolytes and TC02
	Cardiac Profile Enzymes (AST, LDH, CK, CKMB, Troponin I)
	Liver Enzymes (AST, ALT, Alk Phos, gamma GT,T bili)
	Bilirubin (neonatal)
	Amylase
	Calcium
	Phosphorus
	Magnesium
	Urinalysis (and culture if required)
	Urine Drug Screen
	Emergency and Pre-Operative Pregnancy Tests (urine HCG or serum HCG)
	CSF – Glucose CSF – Total Protein CSF – LDH
	Drug levels such as Acetaminophen, Salicylate, Alcohol, digoxin, lithium, Dilantin, tegretol, or valproate to diagnose and/or treat intoxication or poisoning or overdose
	Gentamicin levels to monitor treatment of infection

	Vancomycin levels to monitor treatment of infection
	Hs-CRP
HEMATOLOGY	CBC Profile
	ESR (only required "STAT" if suspected temporal arthritis)
	INR, PTT
	D-dimer
	Fibrinogen
	PFA-100
	CSF – cell count and differential
MICROBIOLOGY	Direct Strep Screening
	Blood Culture collection and setup
	CSF – Gram Stain and culture
BLOOD TRANSFUSION SERVICES	Blood Grouping, Antibody Screening and Cross matching
	Rh Investigation in cases where mother may require injection of Rh immune globulin. (Where mother is Rh negative and baby is Rh positive)
	Required Kleihauers should be performed and resulted within 48 hours of birth to allow time for report delivery and administration of Rh immune globulin within 72 hours of birth. (If 2 day weekend – testing can be done on Saturday and then subsequently don't have to be done on Sunday If 3-day weekend – Kleihauers can be done on Sunday then would not need to be done on Saturday or Monday of a long weekend.)
	Transfusion reaction – perform initial investigation (DAT, hemolysis check and clerical check) where symptoms suggest a critical situation such as hemolytic transfusion reaction or transfusion mix-up may have occurred.
	DAT's (in cases with clinical symptoms of suspected increased red cell destruction (e.g.: hemolytic anemia's and other Autoimmune disorders etc.)
SEROLOGY	HIV, Hepatitis B and C only done "STAT" in response to "Blood Borne Pathogen Exposure" by PCHA employees when source and employee specimen are both available.

Tests not on this list will not be carried out or reported on evenings, weekends or statutory holidays, except in cases where the physician has consulted the Laboratory Manager and received approval for the test to be carried out and reported.
When this occurs the Laboratory Manager must notify the Technologist of their approval of the requested order so that the Technologist on duty can arrange the workload as necessary and/or arrange for off duty technologist to be called back to perform the requested work as necessary. (For some tests in the Lab, only a small number of Technologists are trained to perform these). If the on duty Technologist is unable to perform the test or locate someone qualified to perform the test, the test cannot be done at that time. Testing will not be performed at any time by unqualified personnel.

PROCESS FOR NOTIFICATION OF CRITICAL LABORATORY VALUES

Policy: The medical laboratory technologist performing a test, the result of which is a critical value as defined and listed below, is responsible for ensuring that this information is communicated to the appropriate physician, nurse practitioner and/or unit in a timely (within 15 minutes of completion) and accurate manner. **The technologist must also document all information regarding this communication in the computer with the critical result(s) report.**

General Notes – Critical Results

- Critical results are entered and verified in the computer system as soon as they are available, thus they may be viewed in the EMR or printed for the patient's chart
- Using a variety of standard texts the name of the person receiving the information, date, time, etc, is documented in the computer by the technologist

In-Patients

- Critical results are phoned to the appropriate nursing unit, the information shall be given to the nurse in-charge of the patient or another individual who will take responsibility to communicate the information to the appropriate physician in a timely and accurate manner
- A copy of the result is broadcast to the unit via the Meditech computer system

Emergency Department

- When the laboratory specimen request is ordered by an Emergency room physician (ERP)working in the Emergency department the technologist is responsible to:
    a) Call the Emergency department,
    b) Inform the person answering the phone that they are transmitting a critical value result to their printer,
    c) Document the date, time and person notified in the computer.

Outpatients

- During the regular working day, the result is called to the physician's office. If the doctor's office has a fax machine, the office is called and informed that a critical value report is being transmitted by fax.
- If the ordering physician's office is closed, the information on that telephone's answering machine/voice mail will be followed to contact a physician to whom the report may be given.
- The ordering physician or his designate on call will accept this result.
- If the answering machine/voice mail does not specify an on call physician, contact switchboard to obtain physicians pager and home phone numbers.
- The technologist will report this result verbally, to the physician and document in the computer the date, time called and the name of the physician who accepted the result.
  Note: The physician is responsible for follow-up with the patient

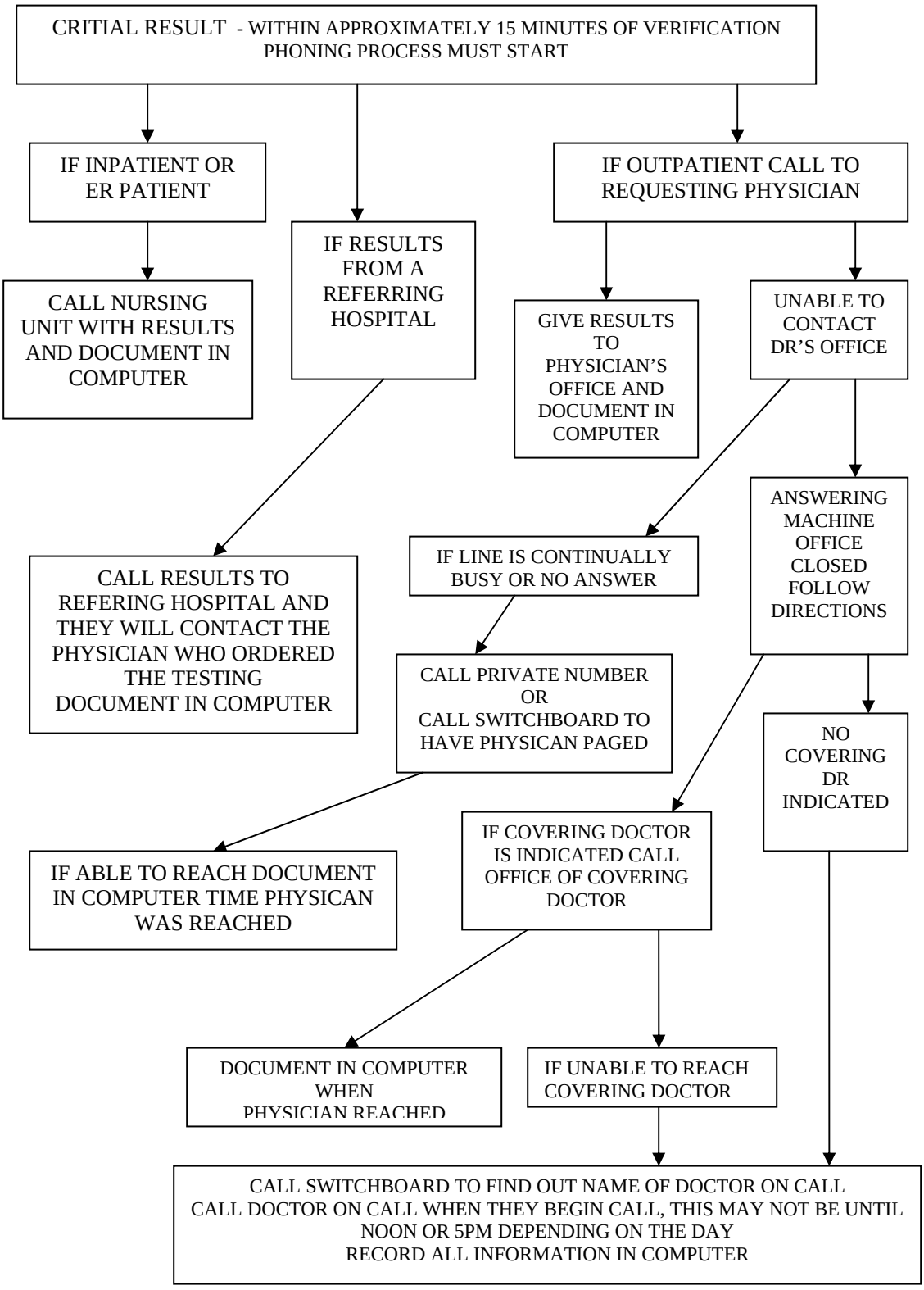
Department of Health (Public Health) Notification

- In accordance with the Public Health Act, the laboratory provides details of patients (including the name of the submitting physician) with laboratory evidence of certain diseases to the DOH. A list is provided to all physicians and the current list from DOH is version issued August 2005 entitled "It's the Law – Reporting notifiable disease and conditions".
- Certain findings are considered critical from a Public Health standpoint and are reported immediately by phone and fax as the results become available, all other results are provided by fax as obtained.

Critical Public Health Reports – those communicated immediately

- Enteric pathogens, e.g., Salmonella, Shigella, E. coli 0157, etc.
- Bordetella pertussis/parapertussis
- Bacterial meningitis
- Neisseria meningitidis – systemic and eye infections only
- Clusters of isolates suggesting a central source
- Others as circumstances suggest

PROCESS FLOWCHART FOR NOTIFICATION OF CRITICAL LABORATORY VALUES



PCHA Laboratory Services Critical VALUES List

TEST	LOW	*Possible Effect*	HIGH	Possible Effect
Biochemistry				
Acetaminophen – 4 hours post ingestion			> 992 umol/l	Liver damage
Acetaminophen – 8 hours post ingestion			> 330 umol/l	Liver damage
Bicarbonate ($CO_{2)}$	=<12 mmol/l	Complex interwoven patterns with acid/base and electrolyte balance	=> 40 mmol/l	Complex interwoven patterns with acid/base and electrolyte balance
Serum Calcium	< 1.5 mmol/L	Tetany & convulsions	> 3.25 mmol/L	Coma
Serum Chloride	< 80 mmol/L	Complex interwoven patterns with acid/base and electrolyte balance	> 120 mmol/L	Complex interwoven patterns with acid/base and electrolyte balance
Digoxin -			> 2.56 nmol/l	
Serum Glucose	< 3.0 mmol/L	Brain damage	> 20.0 mmol/L	Diabetic coma
Magnesium	< 0.41 mmol/l		> 1.93 mmol/l	
Phenobarbital			> 215 umol/l	
Serum Phosphus	< 0.32 mmol/L	Seizures & Coma	> 2.58 mmol/l	
Serum Potassium	< 3.0 mmol/L	Muscle weakness, paralysis, cardiac arrhythmias	> 6.0 mmol/L	Cardio toxicity with arrhythmias
Serum Salicylate	None		> 2.17 mmol/L	Continuing untreated toxicity
Serum Sodium	< 120 mmol/L	Extremes of dehydration, vascular collapse, or edema, hypovolemia, hypervolemia, heart failure	> 160 mmol/L	Extremes of dehydration, vascular collapse or edema, hypovolemia, heart failure

TEST	LOW	*Possible Effect*	HIGH	Possible Effect
Hematology				
Hematocrit	< 0.18	Heart failure and anoxemia	>0.60	
Hemoglobin	<= 70 g/L	Heart failure and anoxemia	>= 200g/L	Venous stagnation, thrombosis and embolization
Platelets	<= 40 x 10^9/L	Hemorrhage	>=900	
PT (INR resulted)	None		>= 4.0 INR	Hemorrhage
PTT (Partial Thromboplastin Time)	None		>= 60 seconds	Hemorrhage
Fibrinogen	<= 1.0 g/L	Hemorrhage	>8.0 g/L	

Infectious Disease Serology	
Positive Test	Action
Confirmed Hepatitis B antigen	Faxed by QEII to Public Health Services.
Confirmed Hepatitis C	Faxed by QEII to Public Health Services.

GENERAL LABORATORY TESTS AVAILABLE AT PCHA LABORATORIES

TEST	MNEUMONIC	ORDER ENTRY CATEGORY	SPECIMEN	CONTAINER	AMOUNT	INSTRUCTIONS
ABO/RH			PLASMA SERUM	EDTA RED TOP	6ML 10ML	MAKE UP BB REQUISITION
ANTIBODY SCREEN/ CROSSMATCH			PLASMA SERUM	EDTA RED TOP	6ML 10ML	MAKE UP BB REQUISITION
DAT			PLASMA SERUM	EDTA RED TOP	6ML 10ML	MAKE UP BB REQUISITION
KLEIHAUER			WHOLE BLOOD	EDTA	6ML	MAKE UP BB REQUISITION
ACETAMINOPHEN (TYLENOL)	ACET	LAB	SERUM Plasma	RED TOP Na Heparin	4ML 4ml	
AHDL	HDL	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML	
ALBUMIN	ALB	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
ALBUMIN – PLEURAL	PLALB	LAB	FLUID	RED TOP	10ML	
ALBUMIN – BODY FLUID	BFALB	LAB	FLUID	RED TOP	10ML	
ALBUMIN-CREATININE RATIO	U AC RATIO	LAB	URINE	URINE	10ML	
ALCOHOL(ETHANOL)	ETOH	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML	DO NOT USE ALCOHOL SWAB
ALKALINE PHOSPHORUS	ALK	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
ALT/SGPT	ALT	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
AMYLASE	AMY	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
APTT	APTT	LAB	PLASMA	NA CITRATE	4.5ML	
ASOT	ASOT	LAB	SERUM	RED TOP	10ML 4 ml	
AST/SGOT	AST	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
BICARBONATE TOTAL CO_2	HCO_3	LAB	PLASMA	NA HEPARIN	4ML	
BILI – DIRECT	BILD	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	PERFORMED AUTOMATICALLY IF T BILI IS OUTSIDE NORMAL RANGE
BILI – TOTAL	BILT	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	D BILI PERFORMED AUTOMATICALLY IF T BILI IS OUTSIDE NORMAL RANGE
BLOOD GAS ARTERIAL	ABG	LAB	BLOOD-ARTERIAL	HEPARINIZED SYRINGE ON ICE	2ML	DELIVER TO LAB ASAP
BLOOD GAS ARTERIAL CORD	ACOBG	LAB	BLOOD ARTERIAL CORD	HEPARINIZED SYRINGE ON ICE	2ML	DELIVER TO LAB ASAP
BLOOD GAS CAPILLARY	CBG	LAB	BLOOD-CAPILLARY	HEPARINIZED CAPILLARY ON ICE	150Ul	DELIVER TO LAB ASAP
BONE MARROW	BMW	LAB	MARROW			MUST BE BOOKED WITH CORE LAB MONDAY-FRIDAY
BUN	UREA	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
CALCIUM	CA	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
CBC	CBC	LAB	WHOLE BLOOD	EDTA	4ML	

EST	mEUMONIC	ORDER ENTRY CATEGORY	SPECIMEN	CONTAINER	AMOUNT	INSTRUCTIONS
CEA	CEA	LAB	SERUM	RED TOP Gold top	10ml 4ml	
CHOLESTEROL	CHOL	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
CK	CK	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
CKMB	CKMB	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
COLD AGGLUTININS	COLD	LAB	SERUM	RED TOP	10ML	
CREATININE	CREAT	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
CREATININE- 24 HR URINE	U24CREAT	LAB	URINE	24 HR URINE CONTAINER	TOTAL VOLUME	
hsCRP QUANTITATIVE	HS-CRP	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML	
CRYOGLOBULINS (referred out to QEII)	CRYOG	LAB	SERUM	RED TOP	3- 4ML	ALLOW TO CLOT IN WATERBATH AT 37ºC FOR AT LEAST 1 HR BEFORE CENTRIFUGING.
D-DIMER	DD	LAB	WHOLE BLOOD	NA CITRATE	4.5ML	PERFORM BEFORE PTINR,APTT TESTING
DIGOXIN	DIG	LAB	SERUM	RED TOP NA HEPARIN	4ML	JUST PRIOR TO THE NEXT DOSE(TROUGH) OR AT LEAST 6 HOURS AFTER DOSE(PEAK)
DRUG SCREEN	UDR	LAB	URINE	URINE	1ML	
ESR	ESR	LAB	WHOLE BLOOD	BLACK	2ML	
FERRITIN	FER	LAB	SERUM	RED TOP Gold top	4ML 3.5 ml	
FIBRINOGEN	FIB	LAB	PLASMA	NA CITRATE	4.5ML	
FOLATE SERUM	FOL	LAB	SERUM	RED TOP GOLD TOP	4ML 4ML	
FSH	FSH	LAB	SERUM	RED TOP GOLD TOP	4ML 4ML	
FT4	FT4	LAB	SERUM	RED TOP GOLD TOP	4ML 4ML	
GAMMA GT	GGT	LAB	PLASMA SERUM	NA HEPARIN Red top	4ML 4ML	
GENTAMICIN – EXT	GENTEXT	LAB	Plasma SERUM	NA HEPARIN Red top	4ML	TAKE BLOOD 6 HOURS BEFORE THE NEXT DOSE IS ADMINISTERED.
GENTAMICIN – PRE	GENTPRE	LAB	Plasma SERUM	NA HEPARIN Red top	4ML	30 MINUTES BEFORE NEXT DOSE (TROUGH)
GENTAMICIN – POST	GENTPOST	LAB	Plasma SERUM	NA HEPARIN Red top	4ML	30 MINUTES AFTER COMPLETION OF IV DOSE OR 60 MINUTES AFTER IM DOSE(PEAK)
GLUCOSE – 50g Trutol	GTTLOAD	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
GLUCOSE – AC	GLUAC	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
GLUCOSE – PC	GLUPC	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
GLUCOSE – RANDOM	GLUR	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	

TEST	MNEUMONIC	ORDER ENTRY CATEGORY	SPECIMEN	CONTAINER	AMOUNT	INSTRUCTIONS
GLUCOSE TOLERANCE TEST (USE FOR PREGNANT LADIES)	GTTG	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
GLUCOSE TOLERANCE TEST (USE FOR EVERYONE EXCEPT PREGNANT LADIES)	GTT	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
GLUCOSE –CSF	CSFALB	LAB	CSF FLUID	STERILE TUBE		
GLUCOSE – PLEURAL FLUID	PLGLU	LAB	Fluid	RED TOP	4ML 4ML	
GLUCOSE – SYNOVIAL FLUID	SYGLU	LAB	Fluid	RED TOP	4ML 4ML	
GLUCOSE BODY FLUID	BFGLU	LAB	Fluid	RED TOP	4ML 4ML	
H. PYLORI (SERUM TESTING	HYPA	LAB	SERUM	RED TOP	4ML	
Hemoglobin A1C (GLYCOSYLATED HEMOGLOBIN)	A1C	LAB	WHOLE BLOOD	EDTA	4ML	
HEPATITIS B ANTIBODY	HEPSAB	LAB	SERUM	RED TOP	10ML 4ml	
HEPATITIS B ANTIGEN	HEPBSAG	LAB	SERUM	RED TOP	10ML 4ml	IF POSITIVE SENT TO REFERRENCE LAB FOR CONFIRMATOR TESTING
HEPATITIS C	HEPC	LAB	SERUM	RED TOP	10ML 4ml	IF POSITIVE SENT TO REFERRENCE LAB FOR CONFIRMATOR TESTING
HIV	HIV	LAB	SERUM	RED TOP	10ML 4ml	IF POSITIVE SENT TO REFERRENCE LAB FOR CONFIRMATORY TESTING
HCG	HCGSQ	LAB	SERUM Plasma	Red top Na heparin	4 ml	
IGG	IGG	LAB	SERUM	RED TOP	4ML	
IGA	IGA	LAB	SERUM	RED TOP	4ML	
IGM	IGM	LAB	SERUM	RED TOP	4ML	
INR	PT-INR	LAB	PLASMA	NA CITRATE	,4.5ML	
IRON	IRON	LAB	SERUM	RED TOP	4ML	
LDH	LDH	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
LH	LH	LAB	SERUM	GOLD TOP Red top	4ML 4ml	
LIPID	LIPID	LAB	PLASMA	NA HEPARIN Red top	4ML 4ml`	
LITHIUM	LI	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	Time of LAST AND NEXT DOSE REQUIRED
LYTES	LYTES	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
MAGNESIUM	MG	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
MICROALBUMIN	UMALBR	LAB	URINE	URINE	10ML	
MONO	MONO	LAB	SERUM	RED TOP	4ML	
OCCULT BLOOD – STOOL	STOB	LAB	STOOL	OB CARD		
PHENOBARBITOL	PHEN	LAB	SERUM	Red top	10 ml	6-18 HOURS AFTER LAST ORAL DOSE

TEST	MNEUMONIC	ORDER ENTRY CATEGORY	SPECIMEN	CONTAINER	AMOUNT	INSTRUCTIONS
PHENYTOIN (DILANTIN)	PHNY	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	4-8 HOURS AFTER LAST ORAL DOSE OR IMMEDIATELY BEFORE THE NEXT DOSE
PHOSPHORUS	PHOS	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
PLATELET FUNCTION ANALYSIS	PFA	LAB	WHOLE BLOOD	NA CITRATE	4.5ML	FASTING, LIST ALL PRESCRIBED AND UNPRESCRIBED DRUGS DELIVER TO LAB IMMED
PROLACTIN	PROL	LAB	SERUM	GOLD TOP	4ML	
POTASSIUM 24 HR URINE	U24K	LAB	URINE	24 HR URINE CONTAINER	TOTAL VOLUME	
PSA	PSA	LAB	SERUM	RED TOP Gold top	4ML 3.5ml	
RA SCREEN	RA	LAB	SERUM	RED TOP	4ML	
RETIC	RETIC	LAB	WHOLE BLOOD	EDTA	4ML	
RUBELLA	RUB	LAB	SERUM	RED TOP	10ML	
SALICYLATE (ASA OR ASPIRIN)	SAL	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
SEMINAL FLUID – COMPLETE	SA	LAB	SEMINAL	URINE		SEE SPECIAL PROCEDURE
SEMINAL FLUID – POST VAS	SAPV	LAB	SEMINAL	URINE		SEE SPECIAL PROCEDURE
SERUM FOLATE	FOL	LAB	SERUM	GOLD TOP	4ML	
SODIUM 24 HR URINE	U24NA	LAB	URINE	24 HR URINE CONTAINER	TOTAL VOLUME	
TEGRETOL CARBAMEZAPINE	CARB	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	6-18 HOURS AFTER LAST ORAL DOSE
THEOPHYLLINE **Referred out**	THEO	LAB	SERUM	RED TOP.	10 ml	2-3 HOURS AFTER LAST ORAL DOSE OR 3-6 HOURS AFTER LAST DOSE OF SLOW RELEASE THEOPHYLLINE OR 15 MINUTES AFTER IV INJECTION
TRIGLYCERIDE	TRIG	LAB	PLASMA serum	NA HEPARIN Red top	4ML 4ml	
TIBC	TIBC	LAB	SERUM	RED TOP	4ML	ORDER IRON
TOTAL CO2	CO2	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
TOTAL PROTEIN	TP	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
TROPONIN	TROPI	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
TSH	TSH	LAB	SERUM	GOLD TOP	4ML	
URIC ACID	URIC	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	
URINALYSIS	UA	LAB	URINE	URINE	90 ml	AUTOMATICALLY SENT FOR C&S IF CONDITIONS INDICATE
URINE C&S	URNC	LAB	URINE	C&S PRESERVE TUBE	90 ml 10 ml	
URINE DRUG SCREEN	UDR	LAB	URINE	URINE CONTAINER	10ML	
URINE HCG	HCG	LAB	URINE	URINE container	10ML	

TEST	MNEUMONIC	ORDER ENTRY CATEG	SPECIMEN	CONTAINER	AMOUNT	INSTRUCTIONS
VALPROIC ACID	VALP	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	1-3 HOURS AFTER LAST DOSE OR IMMEDIATELY PRIOR TO NEXT DOSE
VANCOMYCIN – PRE	VANPRE	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	IMMEDIATELY PRIOR TO DOSE
VANCOMYCIN - POST	VANPOST	LAB	PLASMA SERUM	NA HEPARIN RED TOP	4ML 4ML	2 HOURS AFTER FINISH OF DOSE
VDRL	RPR	LAB	SERUM	RED TOP	4ML	IF + SENT TO REFERRENCE LAB FOR CONFIRMATORY TESTING
VITAMIN B12	B12	LAB	SERUM	GOLD TOP	4ML	

MICROBIOLOGY TESTS:

Detailed information on collection, storage and transport of Microbiology tests available through PCHA laboratories can be found in the **"PCHA LAB SERVICES – MICROBIOLOGY USERS MANUAL"** issued by the PCHA Microbiology Department.

REFERRAL OF TESTS TO REFERENCE LABORATORIES:

Tests not included in the list above (or when circumstances beyond our control warrant) will be referred to a preapproved Reference Laboratory chosen by the referring Laboratory.

APPENDIX A1
PATIENT INSTRUCTIONS
Instructions for the Collection of a Mid Stream Urine Sample

For specimens collected in the Lab

The container:

- Use a dry sterile container.

How to collect a mid stream urine:

- Wash your hands before urinating.
- Remove the cap of the sterile container(s). Do not touch inside the cap or the bottle.
- The urine must pass into the container without touching the skin. **Females** should separate the labia and **males** should retract the foreskin.
- Pass a small amount of urine into the toilet. **Stop** the flow and then begin urinating directly into the container until half full. **Stop** the flow. Finish urinating in the toilet. If you are requested to collect two samples, then use bottle #1 to collect the first part of your urine and bottle #2 for the remainder.
- Replace the cap of the container(s) tightly, again being sure not to touch inside the cap or the bottle.
- If you wish, you may use a brown paper bag to bring your sample to the bench. Paper bags can be found on the counter tops in the washroom.

Note the following: Please inform the technologist if you have any difficulty or questions.

For specimens not collected in the Lab

- Follow the same instructions as above.

Make sure the specimen container label includes:

- Your legal name
- Your Health Card Number or another unique identifier (not date of birth)
- Date and time of collection.

Make sure the requisition form includes:

- Your legal name
- Your date of birth
- Your Health Card Number or another unique identifier (not date of birth)
- Physicians full name and address
- Date and time of collection.

If the specimen or requisition is not complete the specimen may not be processed

Deliver the specimen within 2 hour to: East River Road Blood Collection Clinic during regular hours.

APPENDIX A2

PATIENT INSTRUCTIONS

COLLECTION OF 24-HOUR URINE SPECIMEN

The following collection instructions are intended to help you collect the correct specimen for the test your clinician has requested.

First read the instructions carefully, make sure you are prepared, and then follow each of the steps to ensure proper collection.

Notes:

It is essential that this procedure be followed very carefully. Test results are based on the total amount of tested substance excreted by your body over a 24-hour period. The results provided to your clinician depend upon the collection of all urine excreted during an entire 24-hour period.

For some tests there are dietary and drug restrictions.

Check with your clinician or the laboratory before beginning the specimen collection. You may drink as much fluid as you normally would during the 24-hour collection period.

Instructions:

• Obtain the proper 24 hour urine container for the test requested. **DO NOT** remove any liquid preservatives that may be in the container. Note any warnings or instructions, which may be printed on the outside of the urine container.

• Write your full name and date of birth on the container label.

• **DO NOT** void directly into the 24 hour container. Collect urine in another container and pour it into the 24 hour container.

DAY 1

• First thing in the morning at a designated time (for example 7:00 AM) completely empty your bladder and DISCARD this first morning specimen. Record this 'exact' start time and date on the container.

• Collect ALL specimens during the remainder of the day, evening and night for the entire 24-Hour period. And add ALL the specimens to the container. Replace the cap and tighten it firmly.

Gently shake the container after each urine specimen is added. Keep the urine container **refrigerated** during the collection period and until you bring it to the laboratory for testing.

DAY 2

• Exactly 24 hours later (for example 7:00 a.m.) completely empty your bladder and add this specimen to the container. This is the last specimen and completes your 24-hour collection.

• Record the 'exact' end time on the container. If you have a requisition, write the date and time on the requisition.

• Replace the cap and tighten it firmly.

Refrigerate the specimen until you can bring it to the laboratory. Bring specimens and doctors orders to the laboratory as soon as possible during business workday hours and not on weekends.

If you were on a special diet for this test, you may resume your normal diet after the specimen is collected.

APPENDIX A3

COLLECTION OF STOOL FOR OCCULT BLOOD (HEMOCCULT ®) TEST

The following collection instructions are intended to help you collect the correct specimen for the test your clinician has requested. First read the instructions carefully, make sure you are prepared, and then follow each of the steps to ensure proper collection.

Notes:

The occult blood test looks for very small amounts of blood in your stool. If you are bleeding from a condition, such as hemorrhoids or menstruation, which could contaminate your stool with blood, you should not be tested while the bleeding is active.

Diet and drug restrictions:

There are some foods and drugs that interfere with this test.

• For seven (7) days before and during the stool collection period avoid non-steroidal anti-inflammatory drugs such as Ibuprofen, Naproxen or Aspirin (no more than one adult aspirin a day). Acetaminophens (Tylenol) can be taken as needed.

• For three (3) days before and during the stool collection period avoid Vitamin C in excess of 250 mg a day from supplements, citrus fruits or juices. The recommended daily amount of Vitamin C for an adult is 60 mg a day. Some Iron supplements also contain Vitamin C in excess of 250 mg.

• For three (3) days before and during the stool collection period avoid red meats (including beef, lamb, liver). Eat a well balanced diet including fiber such as bran cereals, non-citrus fruits and vegetables.

• If you have any questions regarding your regular medication, discuss this with your clinician or your pharmacist.

Instructions:

1. The specimen cards will be labeled with appropriate laboratory labels when you pick up the cards at the laboratory registration desk.
2. Fill in sample collection date and time just prior to a bowel movement.
3. Pass urine into the toilet if you feel the need.
4. Using a clean, dry container, collect stool before it contacts the toilet bowl water. Let stool fall into collection container.
5. Open front of section #1. Use one stick to collect a small sample. Apply a thin smear covering Box A. Collect second sample from a different part of the stool with the same stick. Apply a thin smear covering Box B. Discard stick in a waste container. Do not flush it down the toilet.

6. Close and secure front flap. Store card at room temperature until returned to the laboratory.
7. Repeat steps 2 -6 for the next two days using cards #2 and #3. After completing the last card return the specimen to the laboratory during regular business hours of Monday – Friday 6am to 1:30pm (excluding holidays)
8. Remember to wash your hands well after collecting the specimen.

Keep the test kit at room temperature until you bring it back to the Laboratory Registration Area. Bring labeled specimens to desk #3 at the laboratory.

Protect the kit from light. Bring the completed test kit back to the laboratory as soon as possible. The collected specimen is stable for up to 14 days. After the specimen is collected, you may resume your normal diet.

APPENDIX B1

Procedures relating to the collection of blood specimens and proper specimen processing technique are available in the Laboratory Collection areas and specimen processing area.

For document control the procedures will not be included in this manual.

SUMMARY: The following are the DO'S and DON'TS in phlebotomy:

DO	• Identify the patient correctly • Explain why you are there • Position the patient in a comfortable lying or sitting down position • Prepare your equipment • Apply tourniquet • Palpate for suitable vein • Cleanse arm • Recleanse arm if vein is palpated after cleansing • Insert the needle to approx. 15 degree angle • Release the tourniquet before removal of the needle • Hold gauze on the venipuncture for 2-3 minutes • Mix tubes containing blood and anticoagulant • Label specimen tubes correctly • Dispose of used equipment properly
DON'T	• Use the name card on the wall or bed for patient information • Tell the patient phlebotomy wont hurt • Draw a patient while they are standing up • Leave the tourniquet on in place for more than 1 minute. • Enter the arm on blind chance without seeing or feeling a vein • Reuse a needle or a syringe • Attempt to draw blood from the same patient more than twice • Pre-label blood tubes • Dispose of used needles or syringes in ordinary waste baskets • Recap needles • Draw blood from the same arm in which there is a haematoma or an IV hanging unless no choice • Attempt venipuncture on a structure that is pulsating, (could be an artery). • Collect blood from an arm that has a dialysis shunt inserted into it

APPENDIX C1
PCHA LABORATORY SERVICES OUTPATIENT REQUISITION

PICTOU COUNTY HEALTH AUTHORITY LABORATORY REQUISITION

Patient Name _____ Gender: _____
HCN#_____Exp. Date: _____ DOB: _____
Requesting Provider _____ PMB# _____
Copy to: _____
Date Requested_____Provider's Signature_____
Indicate if requests are for uninsured services: WCB.; Insurance; DND; Corr.Car.; Corporate

Collected Date_____Time_____ Collector Name: _____

CHEMISTRY
- ❑ Glucose AC (GLUAC)*
- ❑ Glucose Tolerance (GTT)*
  *No food or drink except water after midnight or 8 hours prior to test:
- ❑ Glucose Random (GLUR)
- ❑ Hgb A1C (A1C)
- ❑ Creatinine (CREAT)
- ❑ BUN (UREA)
- ❑ Sodium (NA)
- ❑ Potassium (K)
- ❑ Chloride (CL)
- ❑ Calcium (CA)
- ❑ Phosphorus (PHOS)
- ❑ Magnesium (MG)
- ❑ Bilirubin (BILT)
- ❑ AST (AST)
- ❑ ALT (ALT)
- ❑ Alk Phos (ALK)
- ❑ Gamma GT (GGT)
- ❑ Total Protein (TP)
- ❑ Albumin (ALB)
- ❑ LDH (LDH)
- ❑ CPK (CK)
- ❑ Amylase (AMY)
- ❑ Uric Acid (URIC)
- ❑ Iron (IRON & TIBC)
- ❑ Lipids (LIPID)**
  (Chol, Trig, HDL, LDL)

** No food or drink except water – 12 fast

MISCELLANEOUS
- ❑ Ferritin (FER)
- ❑ TSH (TSH)
- ❑ Free T4 (FT4)
- ❑ PSA (PSA)
- ❑ Folate-serum (FOL)
- ❑ Vit. B12 (B12)

OCCULT BLOOD: Date Collected
- ❑ (STOB1) _____
- ❑ (STOB2) _____
- ❑ (STOB3) _____

HEMATOLOGY
- ❑ CBC No Diff (CBCND)
- ❑ CBC with Diff (CBC)
- ❑ INR (PTINR)
- ❑ PTT (PTT)

SEROLOGY
- ❑ Mono (MONO)
- ❑ ASOT (ASOT)
- ❑ RA/RAQ (RA)
- ❑ RPR (rpr)
- ❑ Rubella (RUB)
- ❑ Hep.B Surf.Ag (HEPBSAG)
- ❑ Hep.B Antibody (HEPBSAB)
- ❑ Hep. C Antibody (HEPC)
- ❑ HIV (HIV)
- ❑ H pylori (HPYA)
- ❑ CRP (HSCRP)

PRENATAL
- ❑ Initial Prenatal Screen
  (RUB, RPR (VDRL) HepBsAg, CBC, UA, URNC)
  Group & Rh (Blood Type) (GRRH)
  Antibody Screen (ABS)

Transfused/Preg in last 3 months Y ___ N ___
Antibody Card Info _____
- ❑ Varicella Zoster if indicated (VZ)
- ❑ HIV (HIV)
- ❑ 28 week Prenatal, non- fasting
  (GTTLOAD, ABS, CBC, UA, URNC)
- ❑ Gestational GTT (GTTG)

RANDOM URINE COLLECTION
- ❑ Urinalysis (UA)
- ❑ HCG Screen (HCG)
- ❑ Microalbumin (U AC Ratio)

24 HOUR URINE COLLECTION
- ❑ Creat. Clear (CRECL)
  Ht_____cm. Wt_____kg
- ❑ Creatinine (U24CREAT)
- ❑ 5HIAA (U245HIAA)
- ❑ Total Protein (U24TP)

SEMEN ANALYSIS
- ❑ Post Vasectomy (SAPV)
- ❑ Complete Fertility (SA)

Date Received _____
Time Received _____

MICROBIOLOGY
Diagnosis: _____ Antibiotics: _____
- ❑ Urine Culture (URNC)
  Midstr ___ Indwel.Cath.___In/Out Cath___Other___

STOOL
- ❑ Stool Culture (STOC)
- ❑ C. Diff Cytotoxin (CDIFF)
- ❑ Ova & Parasites (OPSR)

RESPIRATORY
- ❑ Throat Culture (THRC)
- ❑ Sputum (SPUC)
- ❑ Ear (EARC)
- ❑ Eye (EYEC)

GENITAL REQUEST
- ❑ Cervical / Urethral for Chlamydia & Gonorrhoeae (CHLGCPCR)

Vaginal Swab (VAGC)
- ❑ Vaginosis Screen /Vaginal Nugent
- ❑ Group B Strep Vaginal / Rectal

MISCELLANEOUS
- ❑ Dermatophytes/Fungal scraping (FUCD)
  Source: _____
- ❑ Misc.Cult Aerobic (MISC) Site: _____
- ❑ Other: _____

TRANSFUSION MEDICINE:
- ❑ Group & Rh (Blood Type) (GRRH)
- ❑ Antibody Screen (ABS)

Transfused/Pregnant in last 3 months: Yes ___ No ___
Antibody Card Info _____
Date last transfused _____
- ❑ Crossmatch (RC) #units _____

Date Required: _____

DRUG MONITORING
Last Dose Date _____ Time_____
Next Dose Time _____
- ❑ Digoxin (DIG)
- ❑ Lithium (LI)
- ❑ Phenytoin / Dilantin (PHNY)
- ❑ Carbamazepine / Tegretol (CARB)

Any Other Tests: Please Print Below

_____
_____
_____
_____
_____

PCHA - Specimen Collection at Pictou SHMH available from 7:30 AM to 10:30AM each week day except for Wednesdays & Holidays
PCHA – Specimen Collection at 678 East River Road available from 7 AM to 2:30 PM each week day except for Holidays (24 May 2013)

PICTOU COUNTY HEALTH AUTHORITY - BLOOD BANK LABORATORY

LOCATION:

BB 035782 LABORATORY ACCESSION NO:

CLINICAL NOTE:

DIAGNOSIS:

MEDICATIONS:

CONSENT SIGNED: ☐

REQUISITION COMPLETED BY: _____

FULL NAME:

HOSPITAL NO:

NSHCN:

DOB (YY/MM/DD):

FAMILY PHSYCIAN:

ORDERING DOCTOR:

☐ URGENT ☐ ROUTINE STAT ☐

PREVIOUS TRANSFUSION? DATE:

REACTION? YES ☐ NO ☐

PREVIOUS PREGNANCIES? DATE:

KNOWN ANTIBODIES?

☐ PRENATAL EDC

☐ PREOP SURGERY - DATE:

FOR LAB USE ONLY

✓	TEST REQUIRED	RESULTS	✓	TEST REQUIRED	RESULTS
	GROUP & RH			ANTIBODY SCREENING	
	SCREEN & HOLD SERUM				
	DIRECT ANTIGLOBULIN TEST (DAGT)			ANTIBODY IDENTIFICATION	
	INDIRECT ANTIGLOBULIN TEST				

☐ X - MATCH _____ UNITS ☐ ROUTINE ☐ URGENT ☐ STAT

_____ UNITS AVAILABLE WILL BE HELD UNTIL _____ DATE/TIME

SERUM ON HOLD UNTIL _____ DATE/TIME

BLOOD PRODUCTS	# REQ'D	BLOOD PRODUCTS	# REQ'D
IMMUNE GLOBULIN		PLASMA	
ALBUMIN 5%		PLATELETS	
ALBUMIN 25%		WinRho 120ug	
FACTOR VIII		WinRho 300ug	

DONOR GROUP	UNIT NUMBER	EXPIRY DATE	ISSUED & CHECKED BY

COMMENTS:

BLOOD COLLECTOR | TIME & DATE OF COLLECTION

PATIENT WITNESS | TIME & DATE OF WITNESS

TECHNOLOGIST SIGNATURE: _____ DATE & TIME REPORTED: _____

BB FORM NO 004 NOV/08

Appendix D1

AUTHORIZATION TO PROCEED WITH TESTING

Please fax completed and signed copy to: Name_____ **Fax#** _____

Date: _____

Dear Dr. _____,

Please note that: Laboratory policy requires that all specimens are labeled with two identifiers (patient's full name + Healthcare number or unique patient ID) on both the specimen and requisition. Your departmental/office process and procedure for identification of specimens should be reviewed and revised to ensure this requirement is fulfilled.

An improperly labeled specimen was received from (location) _____

After discussion with the personnel involved in the procurement of the specimen, it has been determined that the specimen ***may be*** from _____ (patient name).

Labeling problem is_____

_____

_____

Please provide the identifying information which is missing regarding this specimen, and sign and date the statement below:

	Verify Information
Name	
Healthcare Number	
Hospital Number	
Date of Birth	
Type of Specimen	

Due to the irreplaceable nature of the specimen, processing has been initiated, however <u>laboratory policy requires that you provide</u> further information, and authorize the release of the report.

I understand that this specimen will be processed and results released on my order and that the laboratory cannot accept the responsibility for the results belonging to this patient.

Dr. _____

Please Print

*Signature*_____ *Date:* _____

APPENDIX D2

PICTOU COUNTY HEALTH AUTHORITY
LABORATORY SERVICES

Notice for Standing Order Renewal

Standing Orders for Laboratory Testing must be renewed each year. This patient requires an updated laboratory requisition for further testing.

Without an updated requisition, we will not be able to perform further testing for this patient.

Thank You
Darlene Gilby
Team Leader Specimen Procurement
Pictou County Health Authority