


Section 8: Diagnostics

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 Department of Health Government of Nunavut		NURSING POLICY, PROCEDURE AND PROTOCOLS	
		Community Health Nursing	
TITLE:		SECTION:	POLICY NUMBER:
Laboratory Procedures		Diagnostics	08-001-00
EFFECTIVE DATE:	REVIEW DUE:	REPLACES NUMBER:	NUMBER OF PAGES:
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APPLIES TO:			
Community Health Nurses			

POLICY 1:

A Registered Nurse may perform laboratory procedures in the community health centre providing the following conditions are met:

- 1. The Department of Health and Social Services (HSS) shall establish and maintain policies which authorize the registered nurse to perform laboratory procedures.**
- 2. Criteria exist for the selection of laboratory procedures appropriate for implementation by registered nurses:**
 - **Procedures can be safely conducted in a health centre**
 - **Access to suitable instruction in the procedure exists**
 - **The recommended procedures are cost effective**
- 3. Access to laboratory personnel or adequate resources exist where questions arise with regard to laboratory procedures.**
- 4. A Government of Nunavut-approved laboratory manual for community health centre procedures is available to all staff in the community health centre.**
- 5. HSS establishes and maintains a policy for obtaining post-mortem samples.**

POLICY 2:

Nurses shall perform laboratory procedures in accordance with the Government of Nunavut *Community Health Centre Laboratory Manual*.

PRINCIPLES:

- **Safe implementation of laboratory procedures is of primary importance to ensure quality client care.**
- **Nurses must practice within their own level of competence. When aspects of care are beyond his/her level of competence, he/she must seek additional information or knowledge, seek help from their supervisor or a competent practitioner and/or request a different work assignment. In the meantime, nurses must provide care until another nurse is available to do so.**
- **The employer can identify individual expectation or restrictions and is then responsible to ensure competency for the expected procedure(s) by providing education and practical experience as necessary.**



RELATED POLICIES, GUIDELINES AND LEGISLATION:

Policy 05-009-00	Transferred Health Functions
Policy 05-010-00	Competency for Transferred Health Functions
Guideline 08-001-01	Laboratory Procedure Guidelines
Policy 08-002-00	Requisitioning Laboratory Studies
Policy 08-004-00	Post Mortem Samples
Guideline08-004-01	Collecting Post Mortem Samples
Government of Nunavut <i>Community Health Centre Laboratory Manual</i>	

REFERENCES:

Canadian Nurses Association (2002). *Code of Ethics for Registered Nurses: Safe, Competent, and Ethical Care*. CNA: Ottawa.

Registered Nurses Association of the Northwest Territories and Nunavut (2007). *Bylaw: Dispensing, Compounding and Packaging Drugs*. RNANTNU: Yellowknife.

Government of Nunavut *Community Health Centre Laboratory Manual*.



Collecting Sexual Assaults Kits

A timely, well done medical forensic examination can potentially validate and address sexual assault clients' concerns, minimize the trauma they may experience, and promote their healing. It can also increase the likelihood that evidence collected will aid in a criminal case investigation.

1. The *Sexual Assault Kit* is a forensic packaging system that contains:
 - Specific instructions on collecting the physical and trace biological evidence from a particular case.
 - Containers in which to place all the collected physical and trace biological evidence.
 - Instructions on packaging and documenting evidence.
 - Procedure on maintaining the chain of custody.
2. The *Sexual Assault Kit* is provided by the RCMP. Once the Kit is completed, it will be seized by the RCMP as an exhibit in regards to the criminal investigation.
3. The chain of custody shall be maintained from the time the examination is initiated until the collected physical evidence is handed over to the RCMP. The physical evidence collected during the examination must be closely regulated and controlled to maintain accurate continuity and accountability of exhibits and property. All collected specimens must never be left unattended, including being left in the examination room in the presence of the client.
4. After collection, the seized physical evidence is the responsibility of the RCMP.
5. The Registered Nurse examiner shall follow the protocols and guidelines of the Department of Health and Social Services and RCMP *Sexual Assault Kits*.
6. Every effort must be made to contact the RCMP in advance of using the RCMP Sexual Assault Kit. In the event there is no RCMP officer in the community, contact the RCMP detachment responsible for the community.

Coordinated Approach:

- A coordinated, multidisciplinary approach to conducting the exam provides victims with access to comprehensive immediate care and helps minimize trauma they may experience.
- Addressing client's needs may include: evaluating and treating injuries; conducting prompt exams; providing support, crisis intervention, and advocacy; providing prophylaxis against sexually transmitted infections and referrals; assessing reproductive health issues; and providing follow-up contact/care.
- Addressing justice system needs may include obtaining a history of the assault; documenting exam findings; properly collecting, handling and preserving evidence; and interpreting/analyzing findings, and providing factual and expert opinions.



Victim-Centred Care:

- Victim-centered care is paramount to the success of the exam process. Response to the victims should be timely, appropriate, sensitive and respectful.
- Give clients of sexual assault priority as emergency cases and respond in a timely manner. Provide as much privacy as possible.
- Recognize that the medical forensic exam is an interactive process that must be adapted to the needs and circumstances of each client.
- Be respectful of cultural beliefs which may influence/affect a victim and/or the exam process.
- Understand the importance of victim support services within the exam process. Victim service providers/advocates typically offer victims support, crisis intervention, information and referrals, and advocacy to ensure that victims' interests are represented, their wishes respected, and their rights upheld. Victims have the right to accept or decline victim support services.
- Accommodate victims' request for responders of a specific gender as much as staffing limitations permit.
- Prior to starting the exam and before each procedure, describe what is entailed and its purpose to the client (Provide interpreting services as need to ensure information is accurately conveyed). Respect the client's right to decline any part of the exam.
- After the exam, provide the client with the opportunity to wash, change clothes, get food or drinks, and make needed phone calls.

Confidentiality:

- Maintain confidentiality in accordance with territorial and federal policies and legislation.

Informed Consent:

- Clients should understand the full nature of their consent to each exam procedure. The client must be presented with relevant information to make an informed decision to accept or decline a procedure.
- If a procedure is declined, the client should be aware of the impact of declining the procedure with the client's reasons for declining being documented





RELATED POLICIES, GUIDELINES AND LEGISLATION:


Policy 05-010-00 Competency for Transferred Health Functions
Policy 06-001-00 Confidentiality

REFERENCES:

Government of Canada (2006). Royal Canadian Mounted Police, Operational Manual. Ottawa, ON.

Approved by:		11 FEB 2011
Chief Nursing Officer		Date
		
Deputy Minister of Health and Social Services		Date
		Effective Date: April 1, 2011



 Department of Health Government of Nunavut		NURSING POLICY, PROCEDURE AND PROTOCOLS	
		Community Health Nursing	
TITLE:		SECTION:	POLICY NUMBER:
Requisitioning Laboratory Studies		Diagnostics	08-002-00
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APPLIES TO:			
Community Health Nurses			

POLICY 1:

Registered Nurses working as a community health nurse may initiate laboratory studies as per the First Nations and Inuit Health Branch *Clinical Practice Guidelines for Nurses in Primary Care, Pediatric Clinical Practice Guidelines for Nurses in Primary Care*, other territorial / national guidelines and/or in consultation with a physician or nurse practitioner.

POLICY 2:

The name of the person ordering the laboratory tests shall ensure his/her name is entered on the lab requisition form. Only the person's name that is ordering the test should be entered. Do not include a physician's name when the physician did not specifically order that test.

PRINCIPLES:

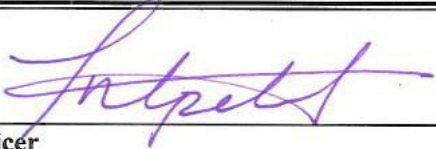
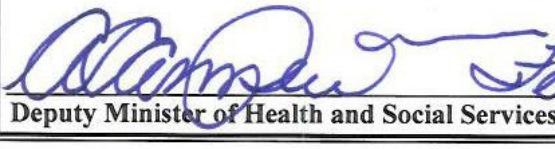
- To make efficient use of the visiting specialist / family physician, relevant laboratory studies should be initiated prior to the physician referral, so the results available at the time of consultation.
- The practitioner must only order laboratory studies which are clinically indicated and are recommended by territorial or national clinical guidelines.
- The nurse ordering any tests is responsible and accountable for reviewing and following up the lab results.

REFERENCES:


First Nations and Inuit Health Branch. (2000). *Clinical Practice Guidelines for Nurses in Primary Care*.

Ottawa, ON.

First Nations and Inuit Health Branch. (2001). *Pediatric Clinical Practice Guidelines for Nurses in Primary Care*. Ottawa, ON.

Approved by:		11 FEB 2011
Chief Nursing Officer		Date
		
Deputy Minister of Health and Social Services		Date
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 Department of Health Government of Nunavut		NURSING POLICY, PROCEDURE AND PROTOCOLS	
		Community Health Nursing	
TITLE:		SECTION:	POLICY NUMBER:
Interpretation of Laboratory Studies		Diagnostics	08-003-00
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APPLIES TO:			
Community Health Nurses			

POLICY:

Registered nurses working in community health centers may interpret basic laboratory studies (e.g. culture and sensitivity results, ova and parasite results, viral studies, pregnancy tests) in order to initiate necessary interventions in a timely fashion.

PRINCIPLES:

- Nurses with specialized competence have the required knowledge to interpret basic laboratory results in order to initiate treatment in accordance with drug and treatment protocols and within the Department of Health and Social Services (HSS) policy.
- Nurses without specialized competence shall have access to resources for the interpretation of laboratory results.

REFERENCES:

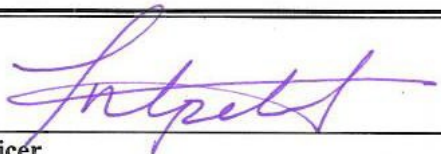
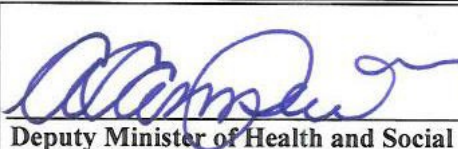
Canadian Diabetes Association. (2008). *Clinical Practice Guidelines*. Toronto, ON.


First Nations and Inuit Health Branch. (2000). *Clinical Practice Guidelines for Nurses in Primary Care*. Ottawa, ON.

First Nations and Inuit Health Branch. (2001). *Pediatric Clinical Practice Guidelines for Nurses in Primary Care*. Ottawa, ON.

Government of the Northwest Territories Department of Health and Social Services. (1999). *Communicable Disease Manual*. Yellowknife, NT.

Public Health Agency of Canada (2006). *Canadian Guidelines on Sexually Transmitted Infections*. Ottawa, ON.

Approved by:  Chief Nursing Officer	Effective Date: April 1, 2011
Date 11 FEB 2011	
 Deputy Minister of Health and Social Services	
Date February 11, 2011	

 Department of Health Government of Nunavut		NURSING POLICY, PROCEDURE AND PROTOCOLS	
		Community Health Nursing	
TITLE:		SECTION:	POLICY NUMBER:
Post Mortem Samples		Diagnostics	08-004-00
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APPLIES TO:			
Community Health Nurses			

POLICY:

Collecting post mortem samples is the responsibility of the Coroner. However, in accordance with the *Coroners Act* and the *Coroners Forms Regulations*, the Coroner may authorize the Registered Nurse to collect post mortem samples. The Coroner will use Form 11 of the schedule to authorize the nurse to obtain the samples.

PRINCIPLES:

Collecting post mortem samples is the responsibility of the Coroner's office and not Health and Social Services. Therefore, if the nurse does not feel comfortable or confident in obtaining post mortem samples, he/she will not be compelled to do so.

RELATED POLICIES, GUIDELINES AND LEGISLATION:

Policy 05-007-00	Nursing Practice - Employee Responsibilities
Guideline 08-004-01	Guidelines for obtaining post mortem samples
Reference Sheet 08-004-02	Coroner's Protocol for Obtaining Post Mortem Samples

REFERENCES:

Consolidation of Coroners Act R.S.N.W.T. 1988, c.C-20, as amended by Nunavut Statutes s.Nu.2007, c.15, s.177

Consolidation of Coroners Forms Regulations R.R.N.W.T. 1990, c.C-19, as amended by R-092-92.

Government of Nunavut. *Community Health Centre Laboratory Manual*.



GUIDELINES 08-004-01

Collecting Post Mortem Samples:

1. It is the usual protocol of the Nunavut Chief Coroner's Office to request fluid samples be taken in cases where an autopsy will not be performed.
2. The coroner may request the assistance of a registered nurse to obtain samples. Authorization to take the samples will be given to the registered nurse by the coroner in the form of an "Authorization to Take Sample of Bodily Fluids" document. This document (*Consolidation of Coroners Forms Regulations R.R.N.W.T. 1990, c.C-19, as amended by R-092-92, Form 11*) is signed and dated by the coroner.
3. Fluid samples are taken as per the Office of the Chief Coroner Protocol *Body Fluid Collection* using standard precautions.
4. Equipment used should reflect the site and amount of body fluids needed according to the Office of the Chief Coroner Protocol *Body Fluid Collection*.
5. The body fluid samples are forwarded to the appropriate examination laboratory as per the direction of the coroner.
6. The registered nurse shall ensure the coroner has provided an "Authorization to Examine Sample of Bodily Fluids" (*Consolidation of Coroners Forms Regulations R.R.N.W.T. 1990, c.C-19, as amended by R-092-92, Form 12*) which shall accompany the samples to the appropriate examination laboratory. This completed form authorizes the toxicologist to perform the required tests.

RELATED POLICES, GUIDELINES AND LEGISLATION:

Policy 05-007-00	Nursing Practice - Employee Responsibilities
Policy 08-004-00	Post Mortem Samples
Reference Sheet 08-004-02	Coroner's Protocol for Collecting Body Fluids Post Mortem

REFERENCES:

Consolidation of Coroners Act R.S.N.W.T. 1988, c.C-20, as amended by Nunavut Statutes s.Nu.2007, c.15, s.177

Consolidation of Coroners Forms Regulations R.R.N.W.T. 1990, c.C-19, as amended by R-092-92.
Dynacare Kasper Medical Laboratories. (2004). *Directory of Services*. Edmonton, AB.

Office of the Chief Coroner (n.d.). *Body Fluid Collection*.



Coroners Protocol for Fluid Collection Post Mortem

Body Fluid Collection Post Mortem

Blood Collection:

1. Do NOT swab area with alcohol.
2. Use the 16 gauge, 1 ½ inch needle for neck region
3. Can also be performed in femoral vein. (Use 16 gauge, 1 ½ inch needle)
4. Extract minimum of 10 ml of blood (50 ml is the preferred amount).
5. Provide samples in at least one (1) gray and/or plain red stopper tubes.
6. Do NOT separate blood phases.

Urine Collection:

1. Do NOT swab with alcohol.
2. Use 15 gauge, 3 ½ inch needle to puncture the bladder.
3. Extract sufficient amount to fill at least 1 gray stopper tube.
4. Place remainder of urine in sterile urine container.
(Obtaining a urine sample may also be attempted with the use of a catheter if desired)

Vitreous Collection:

1. Do NOT swab with alcohol.
2. Use 16 gauge, 1 ½ inch needle.
3. Insert through the lateral surface of the globe near the outside corner of the eye.
4. Extract the clear vitreous fluid, approximately 2-3 cc per eye
5. Place in a plain red stopper tube. If no red top tubes available, then may use grey

Toxicology Testing:

1. Blood samples are used primarily for the testing of ethanol.
2. Drug use is difficult to detect in blood samples.
3. Urine and/or vitreous samples must be taken to test for common recreational drug use and medications.
4. Ethanol can also be detected in urine and vitreous fluid
5. If you wish to test for a specific drug or medication, you must identify the substance to be tested for.

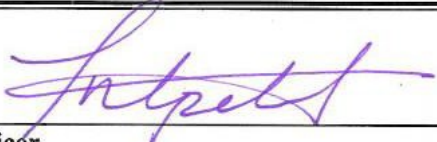

All toxicology samples are to be sent to:

Dynacare Kasper Medical Laboratories
#200, 10150-102 St.
Edmonton, AB
T5J 5E2
Phone: 1-800-661-9876
Fax: (780) 452-8488


Note: A completed copy of the "Authorization to Examine Sample of Bodily Fluids" must accompany the samples to Dynacare Kasper.

REFERENCES:

Office of the Chief Coroner (n.d.). *Body Fluid Collection*.

Approved by:		Effective Date:
Chief Nursing Officer	11 FEB 2011 Date	April 1, 2011
	February 11, 2011 Date	
Deputy Minister of Health and Social Services		



 Department of Health Government of Nunavut		NURSING POLICY, PROCEDURE AND PROTOCOLS	
		Community Health Nursing	
TITLE:		SECTION:	POLICY NUMBER:
Acknowledgement of Diagnostic Test Results		Diagnostics	08-005-00
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APPLIES TO:			
Community Health Nurses			

POLICY:

It is the policy of the Department of Health and Social Services to require acknowledgment of the diagnostic test results performed on all clients. Results of laboratory tests, imaging tests and other diagnostic testing are to be placed in the client's medical record as soon as possible after receipt of the hard copy result.

Once the diagnostic test result is reviewed by the Registered Nurse, he/she shall initial the report once reviewed. No diagnostic report shall be filed in the client's record without a practitioner's initial indicating it has been reviewed.

PRINCIPLES:

- The nurse ordering any tests is responsible and accountable for reviewing and following up the diagnostic test results.

RELATED POLICIES, GUIDELINES AND LEGISLATION:

Guidelines 08-005-01

Guidelines for Acknowledging Diagnostic Tests

GUIDELINES 08005-01

Acknowledging Diagnostic Test Results

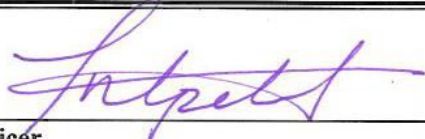

1. When the diagnostic test report is first received in the health centre, the office support staff (Receptionist, clerk interpreter or Records clerk) shall stamp the date the report was received.
2. All reports of diagnostic testing and consultations will be placed in a designated area for nurse and/or physician review while awaiting permanent placement in the medical record by the office support staff.

Some communities require that all diagnostic test results first be reviewed by the Supervisor of Health Programs, while other communities have the test results distributed back to the ordering practitioner for review. Follow the process already instituted in the community health centre.


3. The ordering practitioner (or delegate) will initial each test report when received and reviewed.
4. All follow-up interventions should be documented in the client's record and completed as per specific health centre provisions.
5. As soon as possible, the office support staff will file all hard copy results of diagnostic testing and consultations in the medical record under the appropriate section.
6. All test results reported verbally to the nurse will be documented in the client's medical record and then read back to the individual reporting the results to verify accuracy. The entry must also include the name of the person reporting the results, their reporting location (e.g. Dynalife), and their professional designation.
7. The nurse receiving the test results will contact the on call physician to report any critical or significantly abnormal diagnostic test results. All communications or attempts to communicate with the on call physician shall be documented in the client's medical record.

Documentation of the physician notification will include:

- Date and time contacted
- Client's name
- Name of the physician notified
- Reason for notification
- Physician's response
- Action taken and/or orders obtained
- Signature and title of the Nurse reporting the results

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Chief Nursing Officer	Date	
 February 11, 2011		
Deputy Minister of Health and Social Services		Date



 Department of Health Government of Nunavut		NURSING POLICY, PROCEDURE AND PROTOCOLS	
		Community Health Nursing	
TITLE:		SECTION:	POLICY NUMBER:
Follow-Up of Abnormal Diagnostic Test Results		Diagnostics	08-006-00
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APPLIES TO:			
Community Health Nurses			

POLICY:

The nurse will promptly discuss all abnormal test results with the client and an appropriate follow up plan initiated. All communication or attempts to communicate with the client shall be documented in the client's medical record.

PRINCIPLES

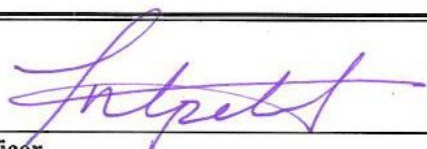

- Healthy communities: people are responsible and accountable for their own well being
- Simplicity and Unity: developing programs and services which are fair, understandable and easy to access and that will encourage public participation and create accountability
- Self-reliance: residents receive every opportunity to benefit from the health services provided to Nunavummiut
- The nurse ordering any tests is responsible and accountable for reviewing and following up the lab results.


REFERENCES:

Government of Nunavut. *Pinasuaqtavut*. GN: Iqaluit.

Follow-up Abnormal Results

1. When diagnostic test results are ordered, the client will be advised to contact their nurse for the results of the diagnostic tests. Follow-up appointments may be arranged in advance according to the client's condition or circumstances.
2. In the event that a result is abnormal, the Registered Nurse shall promptly notify the client. All follow-up actions will be documented in the client record, including the details of the telephone contact with the client.
3. The nurse shall attempt to reach the client initially by telephone. In the event the client could not be reached after three attempts by phone, an appointment card shall be delivered to the client requesting a follow-up appointment at the health centre.
4. If there continues to be no response from the client, a letter will be sent to the client in English and in Inuktitut or Inuinnaqtun (if English is not his/her first language) indicating an abnormal test result and any follow-up actions required.
5. All communications or attempts to communicate with the client shall be documented in the client's medical record.

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Chief Nursing Officer	Date	April 1, 2011
 February 11, 2011	Date	
Deputy Minister of Health and Social Services		

 Department of Health Government of Nunavut		NURSING POLICY, PROCEDURE AND PROTOCOLS	
		Community Health Nursing	
TITLE:		SECTION:	POLICY NUMBER:
Radiological Examination of Pregnant Women		Diagnostics	08-009-00
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APPLIES TO:			
Community Health Nurses			

POLICY:

All staff members employed in the community health centre shall ensure that all reasonable steps are taken to protect an unborn child during radiological exams.

RELATED POLICIES, GUIDELINES AND LEGISLATION:

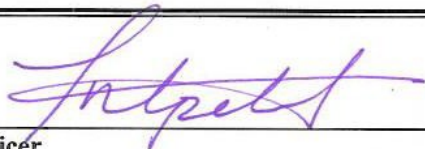

Policy 08-007-00	X-rays
Guidelines 08-009-01	Radiological Examination of Pregnant Women
Policy 08-013-00	Radiation Monitoring System


REFERENCES:

American College of Radiology & The Radiological Society of North America. *Radiology Info: The radiology information resource for patients.*

Radiological Examination of Pregnant Women

1. All female clients will be asked if they may be pregnant prior to any radiological examination. Signs translated in all official languages should also be posted in the x-ray room requesting that potentially pregnant women inform the technologist.
2. The client's last menstrual period should be recorded on the x-ray requisition form and verified by the x-ray technician / assistant. If the client is unsure of last menstrual dates and cannot rule out pregnancy, then a urine pregnancy test shall be performed.
3. If a client is known to be pregnant:
 - The on call physician shall be consulted to discuss a plan of care
 - A written informed consent is required in the event that a radiological exam is clinically essential.
 - A non-abdominal/non-pelvic radiological exam is performed using client protective shielding to the abdominal area.

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	February 11, 2011 Date	
Deputy Minister of Health and Social Services		

 Department of Health Government of Nunavut		NURSING POLICY, PROCEDURE AND PROTOCOLS	
Community Health Nursing			
TITLE:		SECTION:	POLICY NUMBER:
Interpretation of X-Rays		Diagnostics	08-010-00
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APPLIES TO:			
Community Health Nurses			

POLICY:

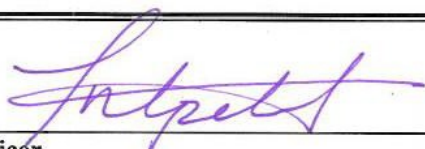

Registered nurses working in the community health centers may provide a preliminary assessment of basic X-ray examinations. All radiological studies undertaken shall be forwarded to a radiologist. A copy of the radiologist's report shall subsequently be filed on the client's health record after reviewed by the ordering Registered Nurse.


PRINCIPLES:

- While registered nurses may make preliminary assessment of an X-ray, it is the responsibility of a radiologist to make a final interpretation.
- It is the responsibility of the registered nurse to consult with a physician in a timely manner when something abnormal is seen on the preliminary assessment of an X-ray or from the radiologists report.
- It is the responsibility of the registered nurse to ensure that x-ray studies are forwarded to a radiologist in a timely manner.

RELATED POLICIES, GUIDELINES AND LEGISLATION:

Policy 08-007-00	X-rays
Policy 08-013-00	Radiation Monitoring System

Approved by:  Chief Nursing Officer	Effective Date: April 1, 2011
Date 11 FEB 2011	
 Deputy Minister of Health and Social Services	
Date February 11, 2011	

 Department of Health Government of Nunavut		NURSING POLICY, PROCEDURE AND PROTOCOLS	
		Community Health Nursing	
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Diagnostic Records		Diagnostics	08-012-00
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APPLIES TO:			
Community Health Nurses			

POLICY:

Each client having an x-ray or ultrasound examination shall have an index card maintained in the health centre's diagnostics index filing system. The index card shall contain a permanent Radiology number and shall be filed accordingly.

Each index card shall contain the following information:

1. Client's name
2. Address
3. Health Care Plan number
4. Date of Birth
5. Health centre chart number
6. Radiology number
7. Date and type of each examination performed

RELATED POLICIES, GUIDELINES AND LEGISLATION:



Guideline 08-012-01

Guidelines for filing diagnostic records


GUIDELINES 08-012-01

Filing Diagnostic Records:

1. Each x-ray study shall be placed in a 14.5 x 17.5 filing envelope along with a copy of the official Radiologist interpretation of the exam.
2. Each ultrasound study shall be placed in a file folder along with a copy of the radiologist interpretation of the exam.
3. All exams, for a single client, shall be placed in a master file for storage. The master file shall contain information regarding client identification, date and type of exam.
4. The master file shall be filed numerically according to radiology number issued on the index card to aid in the retrieval of studies.

Approved by:		11 FEB 2011
Chief Nursing Officer		Date
	February 11, 2011	Date
Deputy Minister of Health and Social Services		
Effective Date:		April 1, 2011



 Department of Health Government of Nunavut		NURSING POLICY, PROCEDURE AND PROTOCOLS	
Community Health Nursing			
TITLE:		SECTION:	POLICY NUMBER:
Preventative Maintenance and Calibration		Diagnostics	08-014-00
EFFECTIVE DATE:	REVIEW DUE:	REPLACES NUMBER:	NUMBER OF PAGES:
February 10, 2018	February 2021		1
APPLIES TO:			
Community Health Nurses			

POLICY:

Preventative maintenance checks of all Diagnostic Imaging equipment shall be performed on a routine basis as indicated by in-house quality control testing and any contractual agreements with the supplier.



Equipment calibrations are performed by the supplier during regular preventative maintenance checks.


PRINCIPLES:

- Preventative maintenance ensures proper functioning of equipment and minimizes the impact of daily operations.

REFERENCES:

QGH Policy *Preventative Maintenance and Equipment Calibration*

Approved by:  Chief Nursing Officer	11 FEB 2011 Date	Effective Date: April 1, 2011
 Deputy Minister of Health and Social Services	February 11, 2011 Date	



 Department of Health Government of Nunavut	NURSING POLICY, PROCEDURE AND PROTOCOLS		
	Community Health Nursing		
TITLE:		SECTION:	POLICY NUMBER:
Interpretation of ECGs		Diagnostics	08-015-00
EFFECTIVE DATE:	REVIEW DUE:	REPLACES NUMBER:	NUMBER OF PAGES:
February 10, 2018	February 2021		1
APPLIES TO:			
Community Health Nurses			


POLICY:

Registered nurses working in the community health centers may provide a preliminary assessment of ECG tracings. All ECG tracings shall be forwarded to a designated specialist. A copy of the specialist's report shall subsequently be filed on the client's health record after reviewed by the ordering Registered Nurse.

PRINCIPLES:

- While registered nurses may make preliminary assessment of an ECG, it is the responsibility of a specialist to make a final interpretation.
- It is the responsibility of the registered nurse to consult with a physician in a timely manner when something abnormal is seen on the preliminary assessment of an ECG or from the specialist's report.
- It is the responsibility of the registered nurse to ensure all ECG studies are forwarded to the designated specialist in a timely manner.

Approved by:  Chief Nursing Officer	Effective Date: April 1, 2011
Date 11 FEB 2011	
 Deputy Minister of Health and Social Services	
Date February 11, 2011	

 Department of Health Government of Nunavut		NURSING POLICY, PROCEDURE AND PROTOCOLS	
		Community Health Nursing	
TITLE:		SECTION:	POLICY NUMBER:
Venipuncture		Diagnostics	08-016-00
EFFECTIVE DATE:	REVIEW DUE:	REPLACES NUMBER:	NUMBER OF PAGES:
February 10, 2018	February 2021		7
APPLIES TO:			
Community Health Nurses			

POLICY:

A nurse is authorized to perform venipuncture for blood procurement as a result of a direct physician order or transferred function.

If unable to obtain blood after two venipuncture attempts, where possible, another nurse/physician should be consulted for assistance. Avoid using the lower extremities for peripheral venipuncture.

DEFINITIONS:

Peripheral venipuncture is a procedure performed for the purposes of obtaining blood for analysis, culture and sensitivity and transfusion medicine.

PRINCIPLES:

- Collecting and requisitioning blood specimens will be guided by the policies and procedures of the *Health Centre Laboratory Manual*.
- Venipuncture requires special competence and shall not be delegated to unregulated healthcare workers unless directed by the Regional Director and the duty is included in the worker's job description.

RELATED POLICIES, GUIDELINES AND LEGISLATION:

Policy 08-001-00 Laboratory Procedures
 Policy 08-002-00 Requisitioning Laboratory Studies
 Policy 08-004-00 Post Mortem Samples
 Government of Nunavut *Health Centre Laboratory Manual*

Venipuncture for Blood Specimens

Considerations:

1. Mislabelling or wrong client identity can have fatal adverse outcomes.
2. Prolonged application of the tourniquet may make samples unsuitable for some biochemical or haematological tests. If it is necessary to leave the tourniquet on for more than 1 to 2 minutes, release it and re-apply.
3. Never attempt venipuncture in the arm when arteriovenous fistula/graft is present, or when a mastectomy has been performed on the same side.
4. Under filling a vacutainer tubes can affect the test results. All tubes should be filled to the extent the vacuum allows.
5. Therapeutic drug levels are normally drawn pre-dose with the time of draw documented on both the lab form and the client's health record.
 - a. If drawing a post drug level, document the start and finish time of the drug administration in the health record, as well as the time in which blood is drawn.
 - b. Follow the Health Centre Lab Manual for detailed instructions on therapeutic drug levels.
6. Indicate on the requisition if the blood was drawn from below an IV site and what solution was infusing.
7. If venipuncture is unsuccessful, discard the needle and use a new one.
8. The antecubital fossa is the preferred site for blood procurement.
9. Blood samples should be collected as per order of draw: blood cultures, non-additive tubes, coagulation/citrate tubes, additive tubes, EDTA (lavender top) tubes.
10. Check the expiry date on all tubes and blood cultures prior to drawing blood.
11. All vacutainer tubes must be mixed seven to ten times with gentle inversion to ensure sufficient mixing.

Venipuncture for Blood Procurement

Equipment:

- Blood tube holder
- Blood collecting tubes as required
- Requisitions and identification labels (if available)
- Non-sterile gloves
- Winged Blood Collection Set (21G/23G) or Safety Collection Needle
- Alcohol swab
- Tourniquet
- 2x2 gauze/cotton ball
- Sharps container
- Plastic specimen bag
- Tape (optional)

Procedure:

1. Explain the procedure to the client.
2. Confirm the client's identity by ensuring that the client's identifier information matches the requisitions, labels and tubes exactly.
3. Assemble equipment.
4. Perform hand hygiene.
5. Position the client comfortably and ensure that the arm is supported.
6. Apply the tourniquet approximately 5-10 cm above the selected venipuncture site. To avoid pinching the skin, the tourniquet may be applied over the client's clothing.
7. Select the vein; glove.
8. Thoroughly cleanse the area with an alcohol swab. Allow to air dry. Do not re-palpate.
9. Select the appropriate tube and rest it in the tube holder.
10. Immobilize the vein and inform the patient of your intent to insert the needle.
11. Insert the needle with bevel up at a 15-30 degree angle and penetrate the skin in a single, smooth motion (non-traumatic insertion technique). With the winged blood collection set, blood will be seen in the tubing if successful. Push the blood collecting tube(s) onto the rubber-tipped needle and allow the tube(s) to fill.
12. If venipuncture is unsuccessful, gently palpate the needle tip position in relation to the vein. Without removing the needle and depending on client tolerance, attempt to access the vein by making necessary adjustments. If unsuccessful, terminate the procedure.
13. Release tourniquet when last tube is filled and pull the blood tube off the rubber tipped needle.



14. Withdraw the needle at the same angle as insertion. Apply gentle pressure over the venipuncture site with a dry cotton ball/gauze for approximately 1-2 minutes. Securing with tape is optional.
15. Do not bend the client's arm as this can increase the risk of subcutaneous bleeding.
16. Dispose of the needle and holder as one unit immediately into sharps container.
17. Remove any blood droplets from the tube stopper with an alcohol swab. Gently invert any additive tubes as per the procedures contained within the *Health Centre Laboratory Manual*. Remove gloves.
18. Label each tube individually (clearly print client information on the tubes if labels are not available) and complete the requisitions (date, time, and signature). Verify labelled tubes against the requisition(s).
19. Place tube(s) into plastic specimen bag(s) and affix requisition(s).
20. Ensure specimens are stored and sent to the laboratory according to the policies and procedures contained within the *Health Centre Laboratory Manual*.

Paediatric Considerations:

- Explain procedure to child at developmentally appropriate age
- Only use restraints when the risk outweighs not using a restraint. Consider an alternative method first, and document the method.
- When performing venipuncture on children, you need to explore a variety of sources for vein access: scalp, antecubital fossa, saphenous, and hand veins.
- Application of EMLA cream may be ordered to reduce pain in infants and young children
- Vacutainers are not recommended in children under 2 years of age due to possible vein collapse with their use.

Unexpected Outcomes:

1. Hematoma forms at venipuncture site
Intervention:
 - Apply pressure
 - Monitor client for pain and discomfort
2. Bleeding at site continues
Intervention:
 - Apply pressure to site
 - Instruct client to apply pressure
 - Monitor client
 - Notify physician if bleeding persists
3. Signs and symptoms of infection at venipuncture site occur.
Intervention:
 - Swab site for C&S and treat according to clinical guidelines or physician order
 - Apply moist heat to site



4. Client becomes dizzy or faints during venipuncture
Intervention:
 - Assist client into chair or bed
 - Lower client's head between knees
 - Remain with client
5. Laboratory tests reveal abnormal blood constituents
Intervention:
 - Notify physician

REFERENCES:

Perry, A. G. and Potter, P.A. (2010). *Clinical Nursing Skills and Techniques 7th ed.* Mosby.

Weinstein, S. (2007). *Plumer's Principles and Practice of Intravenous Therapy 8th Ed.* Philadelphia: Lippincott.

Government of Nunavut *Health Centre Laboratory Manual*
GUIDELINES 08-016-02

Venipuncture for Blood Cultures

Considerations:

1. For Adults: Two sets of blood cultures should always be drawn even if blood culture "x 1" is ordered. Each set will be a separate venipuncture from a separate site. The first set will consist of one aerobic and one anaerobic bottle. The second set will consist of only one aerobic bottle. The volume of blood to be collected is important. Mark the labels 10 ml above the growth medium to indicate the level of blood to be added. The sets may be drawn one after the other.
2. Neonatal and Paediatric blood cultures should be drawn in the Peds plus bottle. Do not collect two sets of cultures as indicated for adults.
Optimal volume per bottle for Neonates: 1-1.5ml of blood
Optimal volume per bottle for Pediatric: 1-5ml of blood
3. Unless endocarditis is suspected there is no need for a third set. With suspected endocarditis, the third set will consist of only one aerobic bottle. The first, second, and third set should each be drawn 30-60 minutes apart.
4. It is recommended that no more than three sets of blood cultures be drawn on any one client in a twenty four-hour period.
5. Blood cultures are not to be drawn from central venous lines unless ordered by a physician.
6. Each bottle must have its own client label. When placing a patient label on the bottle, do not cover the bar code or the bottom of the bottle.



Equipment:

- Blood culture bottles (verify expiry date)
- Requisition and identification labels (per set)
- Non-sterile gloves
- Winged Blood Collection Set or Safety Collection Needle
- Blood Collection Set with Male Adapter (holder for culture bottles)
- Chlorhexidine Alcohol swab
- Alcohol swab
- Tourniquet
- 2x2 gauze/cotton ball
- Sharps container
- Plastic specimen bag
- Tape (optional)

Procedure:

1. Refer to Procedure steps 1 through 7 as described in Guideline 08-016-01: Venipuncture for Blood Collection.
2. If using Winged Blood Collection Set, connect butterfly needle to blood collection set ensuring no contamination of equipment occurs.
3. Lines denoting 5 ml increments are present on the culture bottle labels. Mark the labels 10 ml above the growth medium to indicate the level of blood to be added.
4. Snap off the cap(s) from the culture bottle(s) and cleanse rubber stopper with an alcohol swab.
5. Apply the tourniquet approximately 5-10 cm above the selected venipuncture site. To avoid pinching the skin, the tourniquet may be applied over the client's clothing.
6. Select the vein; glove.
7. Thoroughly cleanse area with alcohol/ chlorhexidine swab. Allow to air dry. Do not re-palpate.
8. Perform the venipuncture in the usual manner.
9. Firmly push the aerobic culture bottle first onto the rubber tipped needle and allow 10 mls of blood to be drawn into the bottle. Do not allow the vacuum to draw more than this amount.
10. Follow with the second bottle (if appropriate) and allow approximately 10 mls of blood to be drawn into the bottle. Remove the spike from the bottle.
11. Remove the tourniquet and the needle from the vein and with one hand press shield over needle until it locks into place. Apply gentle pressure over the venipuncture site with a dry cotton ball/gauze for approximately 1-2 minutes. Securing with tape is optional.
12. Dispose of the needle and holder as one unit immediately into sharps container
13. Label each bottle individually but do not cover the bar code or the bottom of the bottle. The label may be applied around the bottom 1/3 of the bottle. Complete the requisition including the time the culture is taken and verify the labelled bottles against the requisition.



14. Invert bottles 8-10 times.
15. Place tube(s) into plastic specimen bag(s) and affix requisition(s).
16. Ensure specimens are stored and sent to the laboratory as outlined in the policies and procedures of the *Health Centre Laboratory Manual*.

Pediatric Considerations:



- Explain procedure to child at developmentally appropriate age
- Only use restraints when the risk outweighs not using a restraint. Consider an alternative method first, and document the method.
- When performing venipuncture on children, you need to explore a variety of sources for vein access: scalp, antecubital fossa, saphenous, and hand veins.
- Application of EMLA cream may be ordered to reduce pain in infants and young children
- Vacutainers are not recommended in children under 2 years of age due to possible vein collapse with their use.

REFERENCES:


Perry, A. G. and Potter, P.A. (2010). *Clinical Nursing Skills and Techniques* 7th ed. Mosby.

Weinstein, S. (2007). *Plumer's Principles and Practice of Intravenous Therapy* 8th Ed. Philadelphia: Lippincott.

Government of Nunavut *Health Centre Laboratory Manual*

Approved by:  11 FEB 2011		Effective Date: April 1, 2011
Chief Nursing Officer	Date	
 February 11, 2011		
Deputy Minister of Health and Social Services		Date



 Department of Health Government of Nunavut		NURSING POLICY, PROCEDURE AND PROTOCOLS	
		Community Health Nursing	
TITLE:		SECTION:	POLICY NUMBER:
Unregulated Healthcare Workers Performing Laboratory Procedures		Diagnostics	08-017-00
EFFECTIVE DATE:	REVIEW DUE:	REPLACES NUMBER:	NUMBER OF PAGES:
February 10, 2018	February 2021		2
APPLIES TO:			
Community Health Nurses			

POLICY 1:

Unregulated Healthcare Workers, who have completed additional training, may perform the following laboratory procedures:

1. Urinalysis
2. Urine pregnancy tests
3. Hemocue tests (haemoglobin)
4. Glucometer tests (glucose)
5. Occult blood tests

These procedures shall be performed under the direction and supervision of a Registered Nurse and in accordance with the *Health Centre Laboratory Manual*.

POLICY 2:



Venipuncture may only be performed by an Unregulated Healthcare Worker after successful completion of a certification program and under the supervision of a Registered Nurse or Registered Laboratory Technician. The duty to perform venipuncture must also be included in the worker's job description.

PRINCIPLES:


- Collecting and requisitioning laboratory specimens will be guided by the policies and procedures of the *Health Centre Laboratory Manual*.
- Venipuncture requires special competence.

RELATED POLICES, GUIDELINES AND LEGISLATION:

Policy 07-009-00	Unregulated Healthcare Workers: Employer's responsibilities
Policy 07-010-00	Unregulated Healthcare Workers: Nurses' responsibilities
Policy 07-011-00	Unregulated Healthcare Workers: Employee's responsibilities
Policy 08-001-00	Laboratory Procedures
Policy 08-002-00	Requisitioning Laboratory Studies
Government of Nunavut <i>Health Centre Laboratory Manual</i>	

Approved by:		Effective Date:
Chief Nursing Officer	11 FEB 2011 Date	April 1, 2011
	February 11, 2011 Date	
Deputy Minister of Health and Social Services		



 Department of Health Government of Nunavut		NURSING POLICY, PROCEDURE AND PROTOCOLS	
		Community Health Nursing	
TITLE:		SECTION:	POLICY NUMBER:
Performing X-Rays – CHN, NP and BRT		Diagnostics	08-018-00
EFFECTIVE DATE:	REVIEW DUE:	REPLACES NUMBER:	NUMBER OF PAGES:
September 8, 2017	September 2020	08-007-00 / 08-008-00 / 08-011-00 / 08-013-00	6
APPLIES TO:			
All community health staff and physicians			

1. BACKGROUND:

Basic radiography services are considered an essential part of the basic health care services that must be available in each community. As it is not feasible to have a certified medical radiation technologist in every community, Community Health Nurses, Nurse Practitioners and Basic Radiography Technicians are delegated the authority to perform basic radiography exams under the circumstances outlined in this policy. Quality assurance practices are established in each region to ensure safe operation of equipment and limit unnecessary patient and staff exposure to radiation.

2. POLICY:

A limited range of x-ray procedures may be performed in the community health centre setting under specific conditions by authorized personnel:

2.1 Authorized staff to perform x-ray procedures in the health centre setting:

- i. Certified Medical Radiation Technologist (MRT)
- ii. Community Health Nurses (CHN) and Nurse Practitioners (NP) who have successfully completed a program of instruction on x-ray procedures
- iii. Staff member who has completed the Basic Radiography Technician (BRT) training program (or similar GN approved training program)

2.2 Authorized radiological examinations which can be performed by the CHN, NP and BRT:

- i. Chest (including ribs)
- ii. Extremities (excluding hips)

2.3 Authorized providers for ordering x-rays:

- i. Patients < 6 years of age: No x-rays in this age group are to be performed; exceptions may be made by a physician (only) in cases of trauma, intubation in the health centre, and TB work up. X-rays are only to be ordered when they are anticipated to have a direct and significant impact on the immediate management of the case. The practitioner must be aware that due to the equipment and resources available in the health centre setting, the films may be suboptimal and care must be exercised in using them for clinical decision making. When required, the patient may be transferred to an appropriate referral site for the x-ray, where an MRT and proper equipment are available to support quality imaging.
- ii. Patients 6 to 11 years of age: Physician or NP order required. X-rays are only to be ordered when they are anticipated to have a direct and significant impact on the immediate management of the case. The practitioner must be aware that due to the equipment and resources available in the health centre setting, the films may be suboptimal and care must be exercised in using them for clinical decision making.
- iii. Patients ≥ 12 years of age: Physician or NP order. CHN may also order an x-ray as authorized through the GN Policy: *CHN Initiated X-ray Requests*.

2.4 Each health centre is required to participate in Health Canada's Radiation Monitoring Program through National Dosimetry Services and maintain an x-ray log book.

3. PRINCIPLES:

- 3.1 X-ray procedures may be performed in the health centre when the result is anticipated to have a direct and significant impact on the management of the case.
- 3.2 Safe implementation of X-ray procedures is critical to ensure quality client care and safety is maintained. The CHN, NP and BRT will have access to appropriate radiology resources:
 - i. Radiology personnel when questions regarding X-ray procedures exist.
 - ii. An X-ray manual in each community health centre.

4. PROCEDURE:

4.1 *Requesting an X-ray:*

- i. Authorized provider stated in Policy statement 2.3 completes an x-ray requisition.
NOTE: only the name of the provider directly ordering the xray is to be entered on the requisition. Do not enter the MD or NP name if a verbal or written order was not directly received; otherwise, enter the name of the CHN who initiated the request as per the medical directive: *CHN initiated x-rays*.

4.2 *Women of Child Bearing Age:*

- i. Pregnancy status must be verified prior to imaging for all females of child bearing age
- ii. If the patient is unsure of the date of last menstrual cycle, then the CHN or NP shall be notified and a urine pregnancy test obtained prior to imaging
- iii. X-ray exams are not to be performed on pregnant women and the physician must be consulted.

4.3 *Fulfilling an X-Ray Request:*

- i. CHN, NP and BRT are delegated the authority to perform a limited range of x-ray procedures. When the patient requires an x-ray test not listed in policy statement 2.2, the patient will require transfer to another facility where the test can be performed –physician consultation is required to facilitate travel.

Practice Point: If a patient had the same procedure performed previously, reviewing the exposure technique documented in the log book for that patient may help achieve good image quality and reduce the need for repeat exposures.

- ii. X-ray procedures will be delivered in accordance with legislation, policies and procedures outlined by the technician's regulatory body and the Department of Health.

4.4 Protective and proper positioning equipment must be used for all x-ray procedures (e.g. lead aprons, piggy-o-stat equipment).

4.5 When the BRT, NP or CHN are unsure of what equipment or positioning is required, they must consult a MRT, as per established regional consultation protocols.

4.6 All x-rays are to be sent to the radiologist as per established regional operating procedures.

4.7 *Poor Image Quality*

If the quality of the x-ray image is deemed to be inadequate for safe interpretation:

- i. Pediatric patients: Do not repeat the x-ray before consulting the physician. If the physician requests the x-ray be repeated, consult an MRT prior to repeating exposure for guidance on how to improve image quality.
- ii. Adult patients: The x-ray may be repeated one time only without physician consultation; however, the MRT must still be consulted first before repeating the exam.

4.8 Following up on X-ray Results

- i. The nurse initiating any test is responsible and accountable for reviewing and following up the diagnostic test results, as per CHN Manual Policies: *Interpretation of X-Rays, Acknowledgement of Diagnostic Test Results, and Follow up of Abnormal Diagnostic Test Results*.
- ii. The MD / NP is responsible and accountable for reviewing and following up on diagnostic test results initiated by him/herself.

4.9 Documentation

- i. It is the responsibility of the staff member performing the x-ray to ensure all mandatory information is recorded in the log book, on the requisition and on the film or digital image.
- ii. The following information is to be recorded in the logbook:
 - Date
 - Radiology number
 - Client Name
 - Number of examinations performed
 - Number of films used
 - Type of examination
 - Patient measurement
 - Focal field distance (i.e. distance from tube to film)
 - Patient position (e.g. supine, upright, semi-upright, AP/PA)
 - Exposure factors used
 - Referring community health centre (if applicable)
 - Name of the person who took the x-ray

4.10 Dosimetry:

- i. It is mandated by federal law that all practitioners who are exposed to x-ray radiation be monitored for radiation exposure. Every employee who participates in the process of taking X-Rays must be registered with the National Dosimetry Service.
- ii. Each health care worker who performs x-ray procedures shall be assigned a radiation monitor badge. The badge is to be worn at all times when working in the clinical area and should not be worn outside of the immediate area. When not in use, all badges are securely stored in the x-ray area where it will not be exposed to radiation.
- iii. Each health centre shall retain a minimum of 2 badges assigned to visitors which are to be utilized by relief staff.
- iv. The SCHP or designate will collect all badges on a quarterly basis and replace the monitoring disks as assigned by the Radiation Protection Bureau.
- v. All used and un-used disks for each quarter will be forwarded immediately to the Radiation Protection Bureau.
- vi. Returned reports from the Radiation Protection Bureau should be retained on file at the health centre for two years.

NOTE: If a Nurse is pregnant, she should inform the SCHP so that appropriate precautions can be taken to limit the exposure to radiation.

5. RELATED POLICIES, GUIDELINES AND LEGISLATION:

Appendix A: Guidelines for X-ray Instruction for CHNs and NPs

Appendix B: Guidelines on safe use of Pigg-O-stat

CHN Manual Policy: Radiation Monitoring System

CHN Manual Policy: CHN initiated x-rays






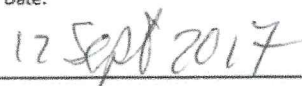
CHN Manual Policy: Acknowledgement of Diagnostic Test Results

CHN Manual Policy: Follow-up of Abnormal Diagnostic Test Results

CHN Manual Policy: Interpretation of X-Rays

6. REFERENCES:

Health Canada. (2008). National Dosimetry Services from http://www.hc-sc.gc.ca/ewh-semt/occup-travail/radiation/dosim/index_e.html

Approved By: 	Date: 
Colleen Stockley, Deputy Minister – Department of Health	
Approved By: 	Date: 
Jennifer Berry, Chief Nursing Officer	
Approved By: 	Date: 
Dr. William MacDonald, Medical Chief of Staff, on behalf of the Medical Advisory Committee	

Background: Performing X-ray procedures is not part of the RN scope of practice and instruction is not included in the basic nursing program curriculum. Therefore, each CHN responsible for performing x-ray procedures must attend a program of instruction. The following guideline outlines the X-ray instruction that the CHN and NP shall receive during orientation. This includes, but is not limited to:

1. Care and use of equipment, including quality assurance practices
2. Underlying principles
3. Special considerations
4. Performance of X-rays
 - Loading film
 - Exposing film
 - Developing film
 - Anatomical positioning (including proper use of pigg-o-stat equipment)
5. Processor Training
6. Identification, handling, and forwarding of X-rays for radiological interpretation
7. Preliminary assessment of films
8. Radiation protection and monitoring systems
9. Safety Measures
 - *lead aprons*
 - *lead spot blockers*
lead gloves
 - *lead gonad screen*
lead screen
 - *lead collar*
 - *coning*
 - *logbook*
 - *dosette*

REFERENCES:

Health Canada. (2008). National Dosimetry Services from http://www.hc-sc.gc.ca/ewh-semt/occup-travail/radiation/dosim/index_e.html

Health Canada. (1999). *X-Ray Equipment in Medical Diagnosis Part A: Recommended Safety Procedures for Installation and Use - Safety Code 20A*.


APPENDIX B: Guidelines on the Use of Pigg-o-stat

The Pigg-o-stat is to be used for pediatric clients who require immobilization during x-ray examinations.

1. Prepare x-ray machine controls, position and film.
2. Remove the child's clothing, except for the diaper.
3. Open the supports on the Pigg-o-stat immobilizer (like opening a book).
4. Adjust the seat to the lowest level possible so the child's mouth is at the level of the opening in the front.
5. Place the child on the seat and instruct someone (may be the parent) to hold the child's arms in a vertical position touching the ears. The arms should firmly immobilize the head.
6. Then adjust the supports firmly against the child and fasten locks on the base and leather straps at the top.
7. Re-adjust the child if he/she is not in a perfectly erect position.
8. The child must be completely immobilized before letting go of the arms and head. If it is required for the parent to remain with the child during the test, he/she must be given appropriate protective equipment.
9. Avoid using device for children who are too large.
10. Adjust film to the proper height and in contact with supports.
11. Remove child from the immobilizer.
12. Disinfect after each use.



Note: Use care to avoid hard blows or dropping the supports.

 Department of Health Government of Nunavut		NURSING POLICY, PROCEDURE AND PROTOCOLS	
		Community Health Nursing	
TITLE:		SECTION:	POLICY NUMBER:
CHN Initiated X-Ray Requests		Diagnostics	08-019-00
EFFECTIVE DATE:	REVIEW DUE:	REPLACES NUMBER:	NUMBER OF PAGES:
September 9, 2017	September 2020	08-007-00 / 08-008-00	6
APPLIES TO:			
Community Health Centres			

1. BACKGROUND:

X-rays can provide valuable information to help differentiate a client's diagnosis; assess the clinical response to treatment, or rule out a potential diagnosis that would require further consultation out of the community. This policy provides an authorizing mechanism for Community Health Nurses to initiate orders for basic radiography exams under the circumstances outlined in this policy.

2. MEDICAL DIRECTIVE:

Community Health Nurses (CHN) may initiate a chest x-ray or extremity x-ray without a direct Physician or Nurse Practitioner (NP) order for children 12 years of age and older **and** when any of the following patient condition(s) apply:

- i. Traumatic injuries of the extremities or clavicles when the x-rays are anticipated to have a direct and significant impact on the immediate management of the case; or
- ii. Routine screening chest x-ray under TB surveillance protocols; or
- iii. Diagnostic chest x-ray in periods of acute illness, as directed by the First Nations and Inuit Health Branch (FNIHB) Clinical Practice Guidelines or Department of Health (DH) protocols.

PRACTICE NOTE: The practitioner must be aware that due to the equipment and resources available in the health centre setting, the films may be suboptimal and care must be exercised in using them for clinical decision making.

3. RECIPIENT PATIENTS:

Patients 12 years of age and older

4. CONTRAINDICATIONS TO THIS MEDICAL DIRECTIVE:

Consult the Physician or NP before initiating an x-ray when any of the following conditions exist:

- i. Patient is < 12 years of age
- ii. Patient is suspected or known to be pregnant
- iii. The CHN cannot confirm all conditions of this directive have been met.
- iv. The patient's history or physical exam does not match the criteria set forth in a corresponding DH protocol or FNIHB clinical practice guideline.
- v. The x-ray test is not recommended as part of the diagnostic investigation within the FNIHB guideline or DH protocol, or the guideline recommends physician consultation first.

5. AUTHORIZED IMPLEMENTERS:

- 5.1 Community Health Nurses or Supervisors of Community Health Programs who possess the knowledge, skill and judgment to do so. The CHN is required to demonstrate competency to implement this medical directive through the standard orientation process.
- 5.2 Sub delegation is not permitted to another health care provider or staff.

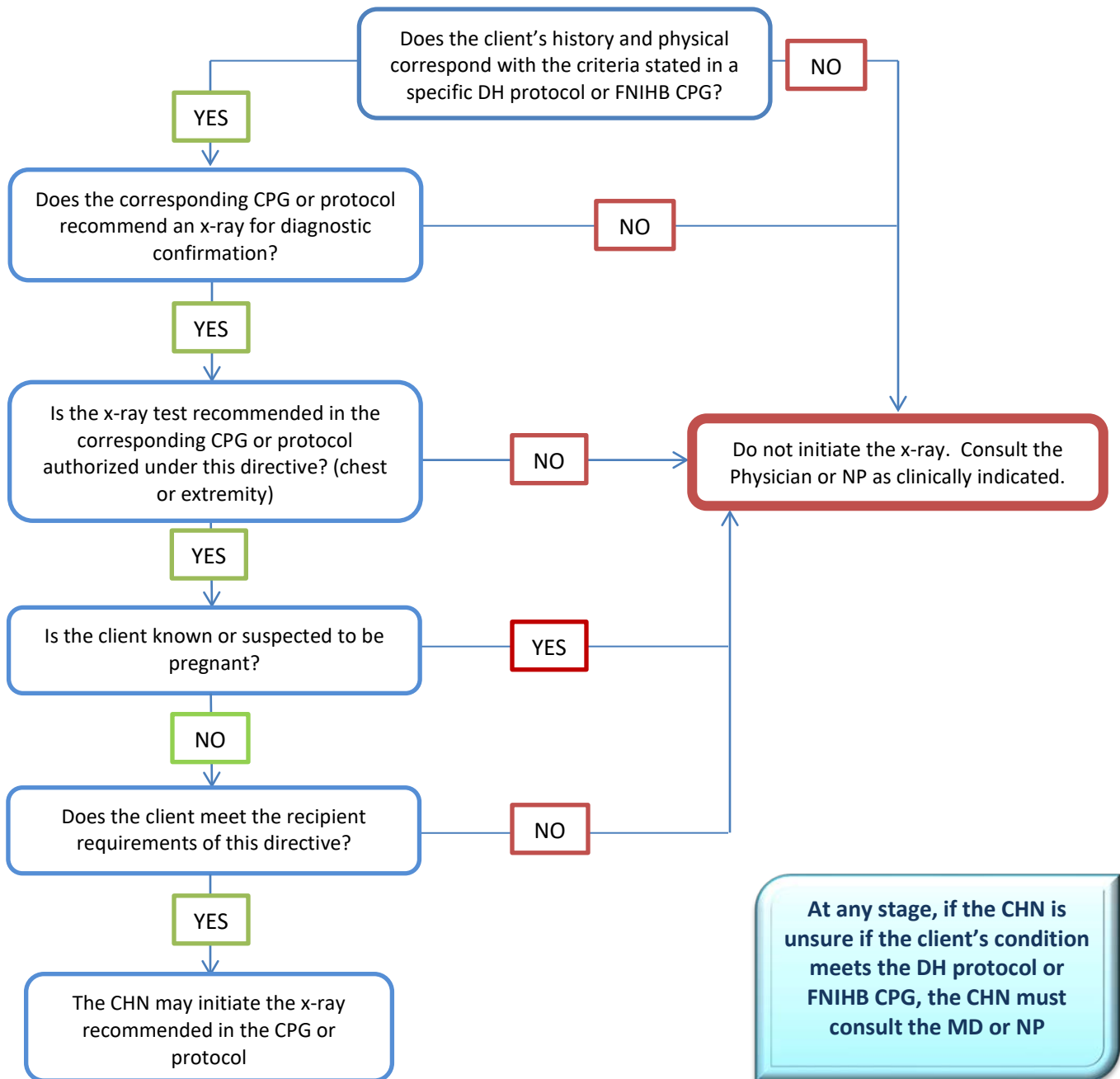
6. PRINCIPLES:

- 6.1 CHNs are expected to practice within their own level of competence and seek guidance from their supervisor, physician or NP as needed.
- 6.2 Guidelines do not replace clinical judgement. Management decisions must be individualized.
- 6.3 Children and fetuses are more radiosensitive and thus require additional consultation.
- 6.4 X-rays of children's limbs should include both limbs in the exact same position for comparison and a more accurate preliminary assessment.
- 6.5 The *Ottawa Knee Rules* and the *Ottawa Ankle Rules* allow nurses to be more selective and efficient in their use of radiography for clients with acute knee and acute ankle injuries in patients 18 years of age and older.

7. PROCEDURE:

- 7.1 The CHN conducts a comprehensive history and physical assessment.
- 7.2 The CHN is responsible for determining if the conditions of this directive have been met before enacting it. If the findings of the initial assessment suggest an x-ray is warranted for diagnostic determination or guiding treatment decisions, the CHN will reference the corresponding FNIHB clinical practice guideline or DH protocol to verify whether a specific x-ray test is recommended. Algorithm in *Figure 1* provides guidance to the CHN when determining if the medical directive is appropriate to enact.
- 7.3 The guidelines included in the appendices of this policy are approved references to assist the CHN in the decision making process for acute injuries in patients 18 years of age and older. These include:
 - i. The Ottawa Ankle and Foot Rules
 - ii. The Ottawa Knee Rules
- 7.4 The CHN will explain the procedure to the client and/or family, including any potential adverse outcomes. Obtain verbal consent.
- 7.5 Complete all required fields on the x-ray requisition (enter in Meditech where available):
 - i. Client identifiers
 - ii. Reasons for requesting the x-ray exam (clinical findings and initial differential diagnoses)
 - iii. Ensure the name of the CHN who is initiating the x-ray is clearly stated as the ordering provider. Do not include the MD or NP name if a direct order was not obtained.
- 7.6 The CHN ordering an x-ray test is accountable for providing timely follow up of test results, in accordance with CHN Manual Policies: *Interpretation of X-rays*; *Acknowledgement of Diagnostic Test Results*; and *Follow up of Abnormal Diagnostic Test Results*.
Note: The MD on call must be consulted when there is an urgent need for an x-ray to be read.
- 7.7 At minimum, the following must be documented in the client's health record:
 - i. The client history and physical assessment findings
 - ii. The x-ray test ordered
 - iii. The indication / rationale for requesting the x-ray. The CHN must cite the Medical Directive Name PLUS the CPG or protocol used in enacting this medical directive.
Example: "PA/LAT chest x-ray ordered as per FNIHB CPG: Community Acquired Pneumonia under the CHN Initiated X-rays Medical Directive".

FIGURE 1: Algorithm for Assessing Appropriateness of the Medical Directive



8. RELATED POLICIES, PROTOCOLS AND LEGISLATION:

Appendix A: Ottawa Ankle and Foot Rules

Appendix B: Ottawa Knee Rules

Community Health Nursing Manual: Performing X-rays

Community Health Nursing Manual: Interpretation of X-rays

Community Health Nursing Manual: Acknowledgement of Diagnostic Test Results

Community Health Nursing Manual: Follow up of Abnormal Diagnostic Test Results

Community Health Nursing Manual: Radiographical Examination of Pregnant Women

Community Health Nursing Manual: Documentation Standards Policy

Community Health Nursing Manual: Transferred Functions Policy

FNIHB Clinical Practice Guidelines for Nurses in Primary Care.

FNIHB Pediatric Clinical Practice Guidelines

Government of Nunavut Tb Manual

9. REFERENCES

Health Canada (2011). *First Nations and Inuit Health Branch Pediatric Clinical Practice Guidelines for Nurses in Primary Care*.


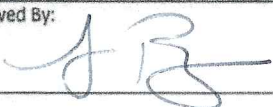
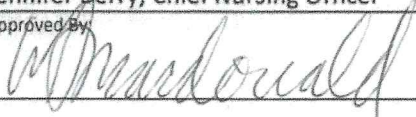
Government of Nunavut. *Tuberculosis Manual*.

Stiell, I.G., Wells, G. A., Hoag, R. H., Sivilotti, M. L., Cacciotti, T. F., Verbeek, P. R., et al. (1997).

Implementation of the Ottawa Knee Rule for the use of radiography in acute knee injuries. *JAMA* 278(23), 2075-2079.

Stiell, I., Wells, G., Laupacis, A., Brison, R., Verbeek, P., Vandernheer, K. et al. (1995). Multicentre trial to introduce the Ottawa ankle rules for use of radiography in acute ankle injuries. *BMJ* 311, 594-597.

CNO (2014). Reference Document: Legislation and Regulation. RHPA: Scope of Practice, Controlled Acts Model.

Approved By: 	Date: Sept 11/17
Colleen Stockley, Deputy Minister – Department of Health	
Approved By: 	Date: Sept 12/17
Jennifer Berry, Chief Nursing Officer	
Approved By: 	Date: 12 Sept 2017
Dr. William MacDonald, Medical Chief of Staff, on behalf of the Medical Advisory Committee	

APPENDIX A: Ottawa Ankle and Foot Rules

PRINCIPLES

- Ottawa Ankle and Foot Rules are applied to acute ankle injuries with the intention of reducing the excessive use of ankle x-rays.
- Fractures are diagnosed in only 7% to 36% of ankle injuries, even though most clients undergo a radiographic evaluation. Decreasing excessive radiographs would decrease client exposure to radiation and health care costs.
- Rules can only be applied to clients who are alert and are able to appropriately communicate their pain.

OTTAWA ANKLE RULES

A series of ankle x-ray films is required only if there is any pain in the malleolar zone **and** any of these findings:

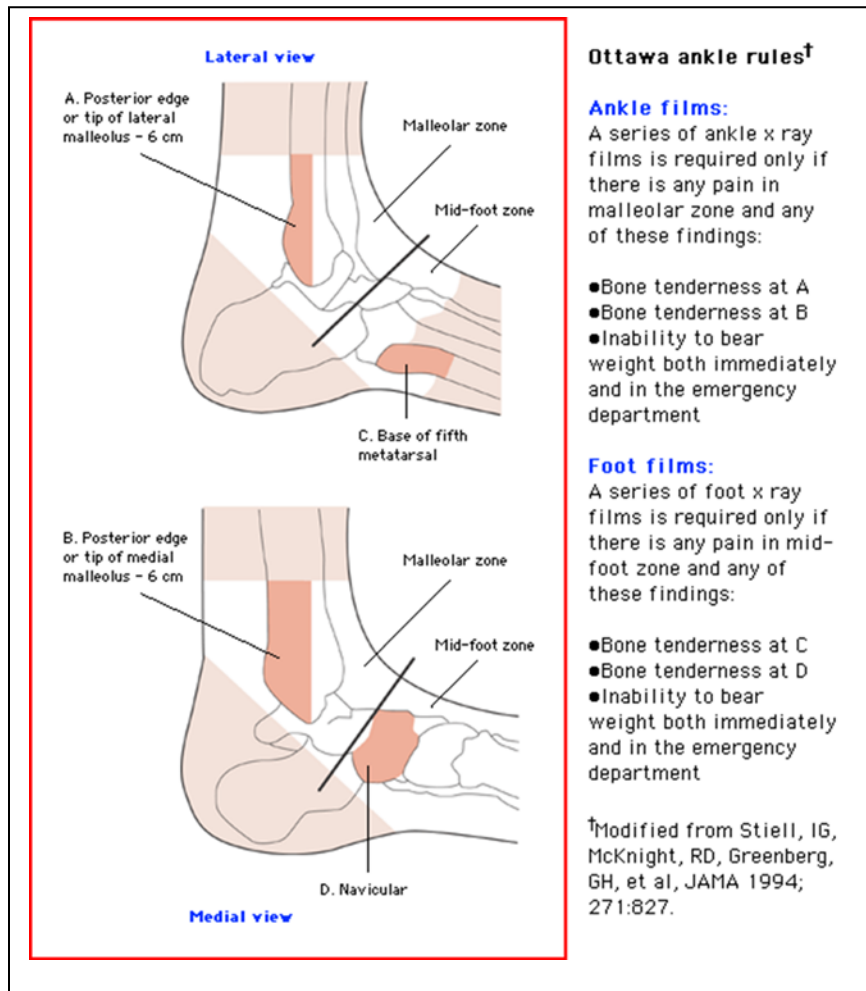
The client has pain near the malleoli, **and** if any of the following are true:

1. Bone tenderness at posterior edge or tip of lateral malleolus (identified as **A** on the figure below)
2. Bone tenderness at Posterior edge or tip of medial malleolus (identified as **B** on the figure below)
3. Inability to bear weight both immediately and in the emergency department.

OTTAWA FOOT RULES

A series of foot x-ray films is required only if there is any pain in mid-foot zone **and** any of these findings:

1. Bone tenderness at the base of the fifth metatarsal (identified as **C** on the figure below)
2. Bone tenderness on the navicular bone (identified as **D** on the figure below)
3. Inability to bear weight both immediately and in the emergency department.



APPENDIX B: Ottawa Knee Rules

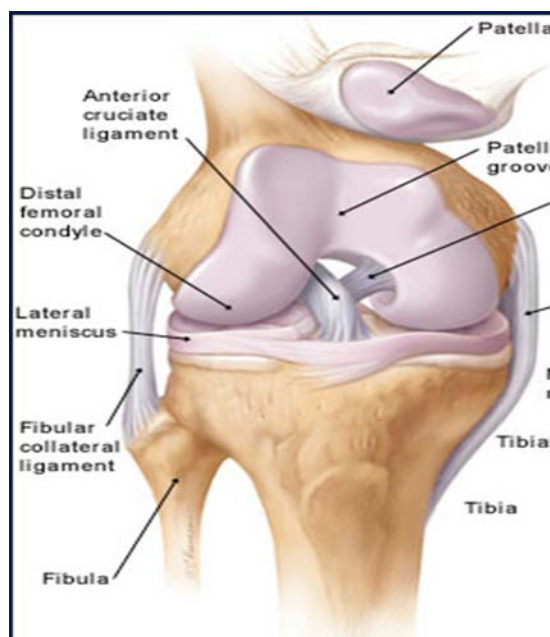
PRINCIPLES


- Ottawa Knee Rules are applied to acute knee injuries with the intention of reducing the excessive use of knee x-rays, by assisting the nurse or physician in the decision to use radiography.
- Decreasing excessive radiographs would decrease client exposure to radiation and health care costs.
- Rules can only be applied to clients who are alert and are able to appropriately communicate their pain.

OTTAWA KNEE RULES

A knee x-ray series is only required for knee injury patients with **any** of these findings:

1. Age 55 or older; **OR**
2. Isolated tenderness of patella (no bone tenderness of knee other than patella); **OR**
3. Tenderness of the head of fibula; **OR**
4. Inability to flex to 90°; **OR**
5. Inability to bear weight both immediately and in the emergency department for 4 steps (unable to transfer weight twice onto each lower limb regardless of limping)



 Department of Health Government of Nunavut		NURSING POLICY, PROCEDURE AND PROTOCOLS	
		Community Health Nursing	
TITLE:		SECTION:	POLICY NUMBER:
Troponin Point of Care Tests in Pediatric Patients		Diagnostics	08-020-00 08-010-00
EFFECTIVE DATE:	REVIEW DUE:	REPLACES NUMBER:	NUMBER OF PAGES:
January 11, 2018	January 2020		1
APPLIES TO:			
All Health Centre Staff			

1. BACKGROUND:

Chest pain is a commonly encountered problem in children and adolescents. Literature consistently describes the prevalence of chest pain due to cardiac pathology as being relatively low- approximately 1-5%.

Nunavut health centres are equipped with qualitative point of care Troponin I Kits, which are a valuable tool in assessing adults presenting with chest pain in the community setting. Conversely, in the pediatric population, the utility of using point of care Troponin tests as a routine tool for assessing chest pain is much lower. This is due to the low incidence of ischemic cardiac events in children and adolescent patients, and not due to the test kits themselves.

2. POLICY:

Community Health Nurses require a Physician or Nurse Practitioner order before performing both qualitative and quantitative point of care Troponin tests in the pediatric population, ages 0-18 years.

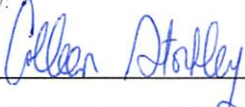
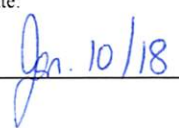

3. PRINCIPLES:

3.1 The Department of Health is dedicated to providing excellent care to patients of all ages, which is rooted in evidence-informed practice.

3.2 Health care providers demonstrate resource stewardship by using resources wisely and thoughtfully. Ordering tests 'just in case' has the potential to cause more harm than good. In cases with high number of false positives, pursuing additional investigations can cause unnecessary costs, increased anxiety for patients, and even harm to patients.

4. RELATED POLICIES, PROTOCOLS AND LEGISLATION:

5. CHN Policy: 08-002-00 *Requisitioning Laboratory Studies*
 CHN Policy: 08-006-00 *Follow-up of Abnormal Diagnostic Test Results*

Approved By:		Date:	
Colleen Stockley, Deputy Minister – Department of Health			
Approved By:		Date:	January 12, 2018
Jennifer Berry, Chief Nursing Officer			