



IDENTIFICATION

Department	Position Title	
Northwest Territories Health and Social Services Authority	Lab Technologist – Core Laboratory	
Position Number(s)	Community	Division/Region(s)
17-11243	Yellowknife	Operations and Information Services/Stanton

PURPOSE OF THE POSITION

The Lab Technologist - Core Laboratory collects and analyzes a variety of biological samples within the Core Laboratory in accordance with recognized international laboratory practices as well as the philosophy and objectives of the Northwest Territories Health and Social Services Authority (NTHSSA) to ensure that medical and non-medical professionals have the test results necessary to diagnose, treat and manage disease.

SCOPE

Stanton is an accredited facility, located in Yellowknife, Northwest Territories (NWT). Stanton is the referral center for approximately 43,000 NWT residents and 5,900 residents from the Kitikmeot Region of Nunavut. Stanton provides health care services to adults and children on an inpatient/outpatient and outreach basis in order to restore health with dignity. Stanton recognizes the health hazards associated with tobacco in the workplace, both to smokers and non-smokers alike. Therefore, Stanton maintains a tobacco free environment within the building and throughout the property.

Located within Stanton and reporting directly to the Laboratory Supervisor, the incumbent analyzes samples and conducts individual patient tests using both complex laboratory instrumentation and manual techniques. The incumbent does routine laboratory analysis in chemistry, hematology, transfusion medicine and specimen receiving/processing services. While performing analysis the incumbent must be able to recognize normal and atypical findings and initiate the appropriate action. Accurate testing allows the practitioner to accurately diagnose medical conditions and arrange for proper care and treatment which

ultimately impacts on a patients morbidity. This accurate and timely testing also assists public health address regional or territorial health issues in an effective manner.

Based on workload and operational demands the Laboratory Technologist - Core Laboratory may be required to provide Laboratory Assistant and Bacteriology support and coverage In order to ensure efficient and continual flow of samples for analysis.

The incumbent will be required to share standby with all Laboratory staff (4-5 days per month), as well as providing rotational weekend and evening coverage. These services are provided on a seven-day per week rotational basis, 06:30 hrs. – 23:00 hrs. Services required after regular working hours are covered on an on-call basis. The incumbent may be required to provide functional guidance to 5 Laboratory Assistants when working within the Core Laboratory.

In addition to providing laboratory services to Stanton, the Core Laboratory Section provides services to:

- 3 hospitals within the Northwest Territories (NWT);
- 21 Health Centres located in the NWT;
- 4 medical clinics Northwest Territories Health and Social Services Authority (NTHSSA);
- the Department of H&SS-Health Protection Unit;
- Stanton-Environmental Health Unit; and
- a variety of businesses located in the north including but not limited to mining companies and public works

Approximately 15,000 samples are processed per month.

Unlike most major laboratories in southern Canada Stanton Laboratory lacks a local Pathologist. Pathology services are delivered through a consulting pathologist in Edmonton, Alberta. In the absence of a resident pathologist the incumbent acts as a resource on Laboratory related practice. The remoteness of Stanton from major referral centres requires that the incumbent has a comprehensive understanding in the Core Laboratory disciplines of Laboratory Medicine as well as instrument maintenance and repair.

As the largest laboratory in the NWT, the laboratory is often chosen to participate in National Programs and committees; in the absence of a local pathologist, the incumbent collaborates with the Laboratory Supervisor to ensure that Stanton conforms with internal and external policies/standards.

RESPONSIBILITIES

- 1. Examines and analyzes a variety of biological samples using recognized international laboratory practices to ensure that medical and non-medical professionals have laboratory results required to diagnose, treat and manage disease.**
 - Organizes, prioritizes and verifies the accuracy of patient/sample information prior to processing.
 - Prepare samples for analysis.
 - Analyze samples using complex laboratory instrumentation and manual techniques,
 - Review, verify and release patient results through the Laboratory Information Systems (LIS).
 - Ensure all lab results are accurately entered into the LIS to track patient information.
 - Track stock items (laboratory products and supplies) used and notify the Technologist II - Core Laboratory when additional items are required.
 - Determine when samples require special handling and ensure that Stanton adheres to established National and International standards for the transportation of dangerous goods.

- 2. Performs, records, interprets and monitors Quality Control (QC) on all instruments and procedures to ensure the precision and accuracy of results reported.**
 - Conduct QC tests on all instruments prior to analyzing samples.
 - Calibrate or assist in the calibration of laboratory equipment on a scheduled basis,
 - Continually review test results to ensure that the findings are realistic and not compromised in any way.
 - Decide whether to release, delay or repeat testing prior to the reporting of patient results (reported results must be accurate).
 - Investigate abnormal results/trends and initiate corrective action.
 - Report QC issues to the Laboratory Supervisor.

- 3. Collects biological samples and performs diagnostic tests/exams on patients as part of the health care team.**
 - Run blood gas and capillary/venous gas tests.
 - Collects blood using a closed collection system (i.e. Vacutainer), needle with syringe, and/or micro-collection techniques following universal precautions.
 - Performs ECGs, bleeding times, glucose tolerance testing following established standards of practice.
 - Collection and analysis is often done in stressful situations (timing is paramount in life and death presentations), as well as functioning in emotionally challenging situations.

- 4. Due to the absence of a local Pathologist, Laboratory Technologists - Core Laboratory will assist in the interpretation of results to medical and non-medical personnel, impacting on patient care and addressing Public Health Issues.**

5. **Assists in the continued maintenance of approximately \$500,000.00 worth of complex laboratory equipment in order to minimize downtime and maintain productivity. This will aid in extending the life expectancy of the instruments thus avoiding costly repair and/or replacement.**

- Performs and documents routine preventative maintenance on a scheduled basis.
- Due to the remoteness of the community, the incumbent troubleshoots and is required to perform complex repairs on instrumentation, either unassisted or in telephone consultation with instrument repair specialists as required.
- The incumbent notifies the supervisor of repairs that are outside the scope of the incumbents training or require further intervention.

6. **Act as a resource for Laboratory Medicine to ensure established procedures and policies are followed as well as to enhance the awareness of the profession.**

- Provide orientations to new laboratory staff on laboratory equipment, policies and procedures and Stanton environment.
- Provides orientation to medical and non-medical personnel in the proper collection and transport of biological samples. (i.e. including but not limited to venipuncture techniques, slide preparation, etc.).
- Provide Point of Care testing (POC) and instrument maintenance.
- Represent the Laboratory on a variety of hospital committees (ie. Occupational Health & Safety and Blood Transfusion Subcommittee) related to Core Laboratory when required.

WORKING CONDITIONS

*(Working Conditions identify the **unusual and unavoidable**, externally imposed conditions under which the work must be performed and which create hardship for the incumbent.)*

Physical Demands

The majority of the incumbent's time (4 - 7 hours/day) will be spent providing direct hands on analysis and collection of biological samples. This will involve standing in awkward positions, bending over patients and work benches, lifting and moving equipment (ranging in weight from 2 - 10kg) and walking to nursing units to collect samples which may cause significant levels of physical stress on the incumbent.

Environmental Conditions

Working within a laboratory setting the Technologist II - Core Laboratory works with and is continuously exposed (4 - 7 hours/day) to infectious agents as a result of exposure to biological samples, human waste and sharps disposal (i.e. hands on delivery of services as well as during training, orientation and review of samples (QC)).

There is continuous risk of injury or ill health from exposure to toxic/corrosive agents used doing the performance of duties.

The incumbent is exposed daily on an on-going basis to unpleasant odors from urine, feces, culture plates and chemical reagents which can lead to headaches and/or nausea. In addition, within Stanton Laboratory the incumbent will handle level 3 organisms in a concentrated form not usually handled by a routine microbiology department.

Within Stanton Laboratory there is a significant amount of "white noise" resulting from a large number of fans and loud equipment which may cause headaches and distraction within the work unit.

Sensory Demands

The incumbent will experience continuous periods of intense visual concentration in order to check the integrity of the samples (i.e. color, density, presence of contamination, volume) to determine if they are suitable for analysis that may cause moderate levels of stress on the sense of sight. Many of these analyses will be conducted through microscopes (4 - 5 times a day).

Mental Demands

Within the Laboratory there is pressure to thoroughly and accurately analyze patient samples within a set length of time. This is hampered by: large number of samples, instrument limitations, testing outside of the laboratories scope, contaminated or unusable samples, etc.

In addition, within the health care setting there is a significant lack of control over the work pace, with frequent interruptions and unrealistic demands (i.e. complete tests in unreasonable time frame) that may lead to mental fatigue or stress (i.e. Processing of STAT samples where results are required for Immediate treatment decisions. This usually involves a life-threatening situation.)

The incumbent is also required to work two seven-day stretches in a 7-week period in order to accommodate weekend coverage. The incumbent will be required to share standby with staff (4 - 5 days per month). While on standby the number of call backs is high (2 - 3 call backs per standby day) resulting in a significant impact on the incumbent's personal and private life as well as normal sleeping patterns.

The incumbent is exposed to emotionally disturbing situations and is expected to remain calm, controlled and professional, regardless of the situation and demonstrate care and compassion to the client/patient and other members of the health care team.

KNOWLEDGE, SKILLS AND ABILITIES

- Advanced knowledge of Laboratory Technologies with a focus on core laboratory functions, principles, and standards of practice including venipuncture, ECGs, medical terminology and the ability to operate and understand complex laboratory instrumentation is required in order to provide direct hands on laboratory services, provide direction and leadership to Technologists, and in order to analyze and interpret

results to aid medical and non-medical professionals in the diagnosis, treatment and management of disease.

- An ability to operate computerized and mechanical laboratory equipment in order to complete analysis of biological samples.
- Knowledge of and an ability to input and retrieve information from Laboratory Information Systems.
- An ability to operate desktop computers in order to produce written documents (word-processing), send and receive electronic mail and conduct research over the internet.
- The incumbent must be able to communicate effectively. This includes being able to get one's point across to both medical and non-medical individuals.
- The incumbent must be aware of the importance of confidentiality and be able to keep personal and medical information private and confidential at all times.
- An ability to manipulate small samples and repair delicate instruments in confined spaces (i.e. well-developed motor skills).
- An ability to quickly recognize atypical laboratory findings and initiate the appropriate action.
- Knowledge of education principles related to adult learners in order to develop and deliver subject specific training and development.
- A demonstrated ability to effectively organize workflow, assist with identifying individual training needs and staff training.

Typically, the above qualifications would be attained by:

This level of knowledge is typically acquired through the successful completion of a recognized Medical Laboratory Technology Program at a minimum of a diploma or degree level and certification and registration with the Canadian Society of Medical Laboratory Sciences (CSMLS) as a General Medical Laboratory Technologist.

ADDITIONAL REQUIREMENTS

Stanton Regional Requirements

Within the Stanton Region all health care providers must be able to acquire within a reasonable time frame and remain current with the following mandatory certifications:

- Workplace Hazardous Material Information System (WHMIS).
- N95 Fit Testing.
- Fit Testing.
- Internet and E-mail application.
- Fire training.
- Privacy and Confidentiality Quiz
- Emergency Response Codes
- SafeStart (not mandatory but advised)

Position Security (check one)

- No criminal records check required
- Position of Trust – criminal records check required
- Highly sensitive position – requires verification of identity and a criminal records check

French language (check one)

- French required
- French preferred
- French not required