



IDENTIFICATION

Department	Position Title	
Northwest Territories Health and Social Services Authority	Medical Laboratory Technologist 1, Microbiology	
Position Number	Community	Division/Region
48-10997	Yellowknife	Laboratory Services / Stanton Territorial Hospital

PURPOSE OF THE POSITION

The Medical Laboratory Technologist 1, Microbiology is required to provide laboratory medicine expertise for the Microbiology section of Stanton Laboratory in accordance with Clinical Laboratory Standards Institute (CLSI), Canadian Society of Medical Laboratory Science (CSMLS) and Accreditation Canada Standards. This position provides information about general microbiology, the intricacies of infectious diseases, collection of specimens and scientific analysis while using investigative skills. A variety of biological and environmental samples are examined using standard microbiology procedure to ensure that medical and non-medical professionals have the test results necessary to diagnose, treat and manage disease and address public health issues.

SCOPE

The Northwest Territories Health and Social Services Authority (NTHSSA) is the single provider of all health and social services in the Northwest Territories (NWT), with the exception of Hay River and Tłıchʼo regions, covering 1.2 million square kilometers and serving approximately 43,000 people, including First Nations, Inuit, Metis, and non-aboriginals. Health and social services includes the full range of primary, secondary and tertiary health services and social services including family services, protection services, care placements, mental health, addictions, and developmental activities, delivered by more than 1,400 health and social services staff.

While the Tłıchʼo Community Services Agency (TCSA) will operate under a separate board and Hay River Health and Social Services Agency (HRHSSA) will in the interim, the NTHSSA will set clinical standards, procedures, guidelines and monitoring for the entire Northwest Territories. Service Agreements will be established with these boards to identify performance

requirements and adherence to clinical standards, procedures, guidelines and policies as established by the NTHSSA. Under the direction of the Minister of Health and Social Services, the NTHSSA is established to move toward one integrated delivery system as part of the government's transformation strategy.

Stanton Territorial Hospital (STH) is an accredited facility, located in Yellowknife, and 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 maintains a tobacco free environment within the building and throughout the property, recognizing the health hazards associated with tobacco in the workplace, both to smokers and non-smokers alike.

Located in Yellowknife, the Medical Laboratory Technologist 1, Microbiology (MLT1, Micro) reports directly to the Technical Supervisor, Microbiology, and delivers Microbiology, Mycobacteriology and Environmental Bacteriology services. Any member of the MLT1, Micro team may be required to provide functional guidance to Medical Laboratory Assistant 1 (MLA1) positions when working within the Microbiology Laboratory.

In addition to providing laboratory services to STH the Microbiology Section provides in-hospital and territorial referral services to: other hospitals within the NWT; 21 Health Centres located in the NWT & Kitikmeot Region of Nunavut; four medical clinics (NTHSSA); the Department of Health and Social Services (DHSS) Health Office of the Chief Public Health Officer and Environmental Health Officer and a variety of businesses located in the north including but not limited to mining, private contracting and public works. Approximately 15,000 samples are processed per month.

Pathology services are delivered through a consulting pathologist in Edmonton, Alberta. In the absence of a resident pathologist the incumbent will refer problems or concerns to designated Technologist II positions who act as a reference (first contact) on Laboratory Medicine related practice for NWT agencies and departments, and provides direction on all Microbiology related matters. Advanced medical laboratory expertise is sought by consulting with pathologist or laboratory medicine specialist by the Technologist II or by incumbent during weekends.

The MLT1, Micro analyzes samples as well as conducts individual patient tests using both complex laboratory instrumentation and manual techniques. While performing analysis the incumbent must be able to recognize normal and atypical findings and initiate the appropriate action. Accurate testing allows a referring physician to accurately diagnose medical conditions and arrange for proper care and treatment which ultimately impacts on a patient's morbidity and public health impacts.

Based on workload and operational demands the MLT1, Micro may be required to provide MLA1 support and coverage in order to ensure efficient and continual flow of samples for analysis.

RESPONSIBILITIES

- 1. Prepare, grow and analyze 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.**
 - Organize, prioritize and verify the accuracy of patient/sample information prior to processing.
 - Prepare samples for analysis (i.e. plants samples and grows them overnight or longer as required).
 - Analyze samples using complex laboratory instrumentation and manual techniques, as well as using investigative techniques to determine pathogen identification and antibiotic treatment options.
 - 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 Technical Supervisor, Microbiology when additional items are required.
 - Determine when samples require special handling and ensure that Stanton adheres to established and international standards for the transportation of dangerous goods.
- 2. Perform, record, interpret and monitor Quality Control (QC) on all instruments and procedures to ensure the precision and accuracy of results reported at internal and external levels.**
 - Conduct QC tests on all equipment prior to analyzing samples.
 - Participate in proficiency testing for having laboratory medicine practice monitored and graded by external agencies, such as the College of American Pathologist (CAP) survey.
 - Calibrate or assist in the calibration of laboratory equipment on a scheduled basis.
 - Perform correlation studies when new methodology or equipment is being implemented.
 - 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) to ordering practitioners.
 - Investigate abnormal results/trends and initiate corrective action.
- 3. Collect laboratory samples and perform diagnostic tests on patients as part of the health care team.**
 - Perform peripheral blood collection for adult, pediatric and neonatal patients using a closed collection system (i.e. Vacutainer), needle with syringe, and/or micro-collection techniques using routine practices and additional precautions as required.

4. **Due to the absence of a local Pathologist, Laboratory Technologists - Microbiology will assist in the interpretation of results to medical and non-medical personnel, impacting on patient care and addressing Public Health Issues.**
5. **Assist 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.**
 - Perform and document 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.
 - Notify the supervisor of repairs that are outside the scope of the incumbents training or require further intervention.
6. **As part of the laboratory team provide exceptional customer service to all laboratory clients.**
 - Maintain a professional appearance and demeanor at all times when engaging with laboratory clients including patients, ordering practitioners, nursing staff and hospital administration.
 - Comply with the organizational dress code policy.
 - Provide patient instructions and advice only within the scope of the role of a Medical Laboratory Technologist as identified by the Canadian Society of Medical Laboratory Technology.
 - Ensure that all interactions with colleagues and clients are in accordance with the Government of the Northwest Territories (GNWT) Harassment Free and Respectful Workplace Policy.
7. **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 STH environment,
 - Provide 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.),
 - Represent the Laboratory on a variety of hospital committees related to the Microbiology Laboratory when required.

WORKING CONDITIONS

Physical Demands

4 - 7 hours per day will be spent providing direct hands on analysis, monitoring and preparation of bacteriology samples. Incumbent will experience standing in awkward positions, bending over patients and work benches, lifting and moving equipment (ranging in weight from 2 - 10kg) and working in confined spaced with limited access.

Environmental Conditions

Working within a laboratory setting the MLT1-Micro 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 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. In addition, within STH Laboratory the incumbent will handle level 3 organisms in a concentrated form not usually handled by a routine microbiology department.

Sensory Demands

The incumbent will experience continuous periods of intense visual concentration in order to check the integrity of the samples (i.e. growth levels, color, density, presence of contamination, volume) to determine if they are suitable for analysis or are growing properly which may cause moderate levels of stress on the sense of sight. Much of the incumbent's time will be spent analyzing samples through microscopes.

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 can be significant lack of control over the work pace, with frequent interruptions (i.e. processing of STAT samples (results are required for immediate treatment decisions - gram's) or samples collected from patients with life threatening conditions (i.e. meningitis, flesh eating disease, etc.).

Collection and analysis is often done in situations where timing is paramount in life and death presentations.

KNOWLEDGE, SKILLS AND ABILITIES

- Knowledge of Laboratory Technologies (with a focus on Microbiology), principles, and standards of Practice including venipuncture, medical processes and the ability to operate and understand complex laboratory instrumentation is required in order to analyze and interpret results to aid medical and non-medical professionals in the diagnosis, treatment and management of disease.
- Ability to prepare samples and put them onto media to encourage growth and an ability to identify growth when present.
- 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 (LIS).
- Ability to operate desktop computers in order to produce written documents (word-processing), send and receive electronic mail and conduct research over the internet.
- Communication skills and the ability to get ones point across to both medical and non-medical individuals.
- Ability to answer questions as a functional expert when asked. This includes telling people about current understanding of technical issues where appropriate.

Typically, the above qualifications would be attained by:

A recognized Medical Laboratory Technology Program at a minimum of a diploma or degree level from an accredited Canadian Post-Secondary Institution. Internationally trained Medical Laboratory Technologists must have at least three (3) years of working experience in a Canadian Hospital Laboratory as a Medical Laboratory Technologist working in a core laboratory.

Applicants must have recent, relevant experience (within the past five years) in a Canadian Hospital Microbiology Laboratory.

These are bona fide requirements, equivalencies will not be considered.

ADDITIONAL REQUIREMENTS

Proof of immunization in keeping with current public health practices is required.

Applicants must be registered with the Canadian Society of Medical Laboratory Science at the General Registered Technologist designation. New graduates waiting to write their certification examination will be considered however; registration must be achieved prior to beginning employment with Laboratory Services. Registration must be maintained throughout the period of employment with Laboratory Services.

Stanton Territorial Hospital Requirements

New Laboratory staff members must complete the following training activities within the first two weeks of employment.

- Aboriginal and Cultural Awareness Training
- Workplace Hazardous Material Information System (WHMIS).
- RL6 Incident Reporting Training.
- Workplace Safety Awareness Training
- N95 Mask Fit Testing.
- French Active Offer Training.
- Infection Prevention and Control.
- Fire Safety and Fire Extinguisher Training.
- Biosafety and Biosecurity Training.
- Transportation of Dangerous Goods Certification

- Privacy and Confidentiality Training
- Emergency Response Codes.
- Information Security Awareness Training.
- Hand Hygiene Training.

All training must be maintained current throughout the period of employment. Additional training modules may be required depending on the changing needs of the department or organization.

Position Security

- ☐ 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 if applicable)

- ☐ French required (must identify required level below)
 - Level required for this Designated Position is:
 - ORAL EXPRESSION AND COMPREHENSION
 - Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐
 - READING COMPREHENSION:
 - Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐
 - WRITING SKILLS:
 - Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐
- ☐ French preferred

Indigenous language: Select language

- ☐ Required
- ☐ Preferred