



IDENTIFICATION

Department	Position Title	
Health and Social Services	Territorial Epidemiologist	
Position Number	Community	Division/Region
49-5909	Yellowknife	Population Health / HQ

PURPOSE OF THE POSITION

The Territorial Epidemiologist provides leadership and expertise to the Department of Health and Social Services on the analysis of population health determinants and outcomes and implementation of public health actions to reduce disease and illness burden in accordance with priorities, policies, and directives of the Department.

This position is critical for timely and accurate investigation and surveillance of reportable and notifiable diseases, conditions and immunizations as well as population-level assessment of health status, disease and mortality trends. Through this work, the Territorial Epidemiologist has an important role in improving the health and wellness of the population, reducing the burden of mortality and morbidity in the population, and improving the effectiveness and efficiency of health and social programs.

SCOPE

Located in Yellowknife the Territorial Epidemiologist reports to the Director of Population Health but also receives direction from the Chief Public Health Officer (CPHO) on public health initiatives and time-sensitive actions. The Territorial Epidemiologist is appointed a Public Health Officer under the *Northwest Territories (NWT) Public Health Act* and has a statutory duty to enforce this *Act* and accompanying regulations as delegated by the (CPHO). The position has oversight to the Epidemiology and Surveillance Unit (EPU) including supervising term or casual basis roles and managing finances and interagency agreements.

This position is critical to supporting the function of the Office of the CPHO. The CPHO must rely on the information and analyses prepared by the Territorial Epidemiologist to make appropriate decisions related to the containment and prevention of communicable disease



outbreaks and other public health protection issues. Such analyses and advice have the potential to significantly impact the lives of Northwest Territories (NWT) residents.

The Territorial Epidemiologist provides essential support to the broader mandate of the Department through analyses and interpretation of health and social data which, in turn, supports government programming, priorities, strategies and action plans. The position provides subject matter expertise to the Department and Health and Social Services (HSS) system on analytical and reporting methodology and policy development, including approaches to public reporting for routine and urgent public health work. The incumbent also provides information to other departments and organizations that have a mandate in health, community wellness and public safety programs and services.

The Territorial Epidemiologist works to strict, often competing deadlines, and is routinely involved in several varied and complex statistical projects simultaneously requiring prioritization of work to meet competing pressures. Close attention is also required for development of statistical materials.

Recommendations from the incumbent to the CPHO, other senior management and clinical staff can have an impact on health outcomes and policy development.

The incumbent will be required to travel periodically.

RESPONSIBILITIES

1. Provide expertise and leadership to the Department and HSS system on public health surveillance and epidemiology activities in order that information gathered is analyzed and reported appropriately to drive public health action.

- Test the validity of data collection methods such as surveys, questionnaires, interviews, as well as data integration methods in order to use key data from a range of sources such as medical and laboratory information systems, vital statistics and coroners' death files.
- Coordinate with staff within the HSS system to ensure data provided meets information needs.
- Perform or validate statistical testing on data to determine its reliability, identify and eliminate errors in data, and analyze statistical data from various information systems and databases using programming skills in SAS, SPSS or other analytics software.
- Provide analysis and interpretation of data collected, and prepare findings in the form of interactive dashboards (internal and public), technical and public reports, and presentations for technical and public audiences, briefing notes, and correspondence.
- Respond to inquiries from various stakeholders and management within the Department and HSS authorities, as well as with federal agencies, community and Indigenous governments, media and others concerning public health analytics and surveillance methods, data needs and findings.



- Oversee and conduct chart audits and other field epidemiological investigations in response to communicable disease outbreaks and public health emergencies, or to support evidence-based decision-making.
 - Provide expert advice on the nature and relevance of current or proposed research or applied public health practice being conducted within or external to the Department.
- 2. Design new or improved surveillance methods in order to effectively and efficiently monitor the impact of communicable disease outbreaks, general health determinants / outcomes and non-communicable diseases over time.**
- Identify key determinants for analysis on outcome indicators to track general health and wellness, as well as specific diseases, injuries, and other health conditions.
 - Develop surveillance approaches including surveys, questionnaires and interviews as well as to respond to novel or urgent public health scenarios as directed by the CPHO.
 - Make recommendations on methods to improve data collected, including policies, procedures and tools (forms, software) to ensure and maintain quality, confidentiality and security of the data.
 - Direct the priorities and surveillance data needs for new or enhanced data infrastructure including data sources, linkages, and repository capabilities in collaboration with the Data Systems Developer and Analyst's technical expertise to translate those needs into technical requirements and design.
- 3. Support interagency negotiations and implementation of surveillance agreements and participate in intergovernmental forums.**
- Develop, negotiate and manage inter-agency information sharing and reporting agreements with other national, provincial and territorial governments as well as within the HSS system and with other GNWT agencies.
 - Negotiate, develop and manage third party/federal funding agreements.
 - Provide support and expert counsel to the Director and CPHO for third party/federal reporting and surveillance requirements.
 - Participate as the NWT representative on expert inter-jurisdictional and inter-agency forums and committees, requiring synthesis and presentation of Department views and policy positions.
- 4. Provide strategic and operational leadership to the EPU.**
- Provide strategic leadership and priority setting on a short- and longer-term basis, and participate in Division and Department priority-setting activities.
 - Set strategic direction and priorities for the Unit's surveillance data infrastructure, including the surveillance data repository, databases, and data flows to ensure they meet current and emerging surveillance needs.



- Provide oversight and accountability for the Unit's data systems modernization, ensuring infrastructure work aligns with surveillance goals, reporting obligations, privacy standards, and larger DHSS data initiatives.
- Establish/maintain data governance standards including data quality, documentation, versioning, and reproducibility of surveillance indicators and analytical code.
- Maintain an effective regular forum with management peers, directly reporting staff (both as a team and one-on-one).
- Develop work plans and budgets, assess business continuity and operational risks, and take action to adjust priorities and respond to emerging risks or needs.
- Foster a team approach to service delivery and problem solving within the Division, partners and colleagues within the Department, HSS system, and other partners.
- Perform human resource functions for effective oversight, management and development of Unit staff, including:
 - Ensuring cross-training and business continuity of operations
 - Overseeing staffing, orientation and exiting of staff
 - Adjusting position roles and responsibilities, file assignments and workloads
 - Mentoring and performance management
 - Adhering to and administering provisions of human resource and occupational safety legislation, regulation, policies and procedures
- Provide financial management oversight for the Unit's financial resources, including:
 - Conducting unit budget planning, expenditure approvals, monitoring/variance, and reporting to ensure best value for expenditures
 - Managing contracts to ensure purchasing and financial accounting follows approved government policies and practices
 - Coordinating cost-benefit analyses and identifying short- and long-term resource shortfalls and requirements
 - Ensuring subordinates comply with financial management practices.
- Provide coverage to management positions within the Division, including the Director position as well as peer manager positions.

WORKING CONDITIONS

Physical Demands

No unusual demands.

Environmental Conditions

No unusual conditions.

Sensory Demands

No unusual demands.



Mental Demands

No unusual demands.

KNOWLEDGE, SKILLS AND ABILITIES

- Knowledge in the field of human epidemiology including epidemiological concepts, principles and applications, with specific methodologies in cross-sectional studies, case control studies, health surveillance and risk assessment.
- Knowledge of bio-statistical research and analytical methodologies.
- Knowledge of related research methodology, including survey and questionnaire design.
- Knowledge of specialized and contemporary statistical analysis software (including but not limited to SAS, SPSS) and programming ability.
- Skilled with database management software including database development, evaluation and search, and spreadsheet, desktop publishing and presentation software.
- Knowledge of human public health, including natural histories of common human diseases and determinants of health.
- Knowledge of and/or the ability to acquire and apply knowledge of northern health care systems and structures, public health legislation, public health administration and Indigenous cultures as they relate to health and social service issues.
- Knowledge of and the ability to adhere to policy, ethical and legal issues related to confidentiality, privacy and data security.
- Knowledge of policy and decision making processes and systems.
- Knowledge of geographic information systems and mapping of health conditions.
- Project management, corporate planning and time management skills.
- Analytical, reasoning and problem solving skills.
- Verbal and written communications skills.
- Skilled in the analysis and interpretation of population health surveys, development of research protocols, and interpretation of research.
- Ability to develop work plans and budgets, assess business continuity and operational risks, and take action to adjust priorities and respond to emerging risks or needs
- Ability to provide subject matter expertise on analytical and reporting methodology and policy development, including approaches to public reporting for routine and urgent public health workability
- Ability to develop, coach, mentor and provide oversight and management of Unit staff.
- Ability to assign and prioritize tasks and to work effectively in dynamic work settings and on a variety of teams.
- Ability to commit to actively upholding and consistently practicing personal diversity, inclusion and cultural awareness, as well as safety and sensitivity approaches in the workplace.



Typically, the above qualifications would be attained by:

A Master's level, post-graduate university qualification, in epidemiology, and five (5) years of relevant experience in epidemiological and statistical analysis including one (1) year of supervisory or team lead experience.

Equivalent combinations of education, supervision and experience will be considered.

ADDITIONAL REQUIREMENTS

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