



IDENTIFICATION

Department	Position Title	
Health and Social Services	Senior Health Analyst	
Position Number	Community	Division/Region
49-5049	Yellowknife	Corporate Planning, Reporting and Evaluation/HQ

PURPOSE OF THE POSITION

The Senior Health Analyst provides accurate, timely and useable statistical information and expertise essential to the management of health and social services, as well as for the benefit of other departments or stakeholders involved who collaborate with health and wellness issues and concerns. The Senior Health Analyst is responsible for analyzing, interpreting, and disseminating data required for decision making by senior management, territorial strategic planning, and identification of emerging issues.

SCOPE

Located in Yellowknife, the Senior Health Analyst (Analyst), reports to the Manager of Planning, Reporting and Evaluation (Manager) and is responsible for the health information needs of the entire Northwest Territories (NWT).

This position is critical for timely surveillance of population health indicators, and for improving the health and wellness of the population and improving the effectiveness and efficiency of health and social programs. The Analyst will be required to assess complex databases and business processes for the development of appropriate methodologies in the use of administrative information for statistical purposes. This will include identifying possible indicators and communication with health and social services divisions to negotiate receipt of the data. Through analysis and collaboration with divisional specialists, the Analyst will be required to develop in-depth knowledge of the administrative data source to fully understand the complexities of the data. This position is responsible for analyzing data using sound statistical methodologies to determine trends and the results will be reported and widely disseminated. The end results are to improve the health and wellness of the population of the NWT, reduce the burden of mortality and morbidity in the population, improve the effectiveness and efficiency of health programs, and thereby reduce the expenditure on acute health care in hospitals and medical travel.



Databases used for incidence data typically include mortality (vital statistics and coroners files), hospitalizations, and health services.

One significant challenge faced by governments is that mainstream organizations, like health and social services, cannot be separated from the legacy of colonialism and anti-Indigenous racism in Canada. In health and social services settings, present data anti-Indigenous racism or systemic racism, impacts access to services, quality of care, and health outcomes for Indigenous peoples. This also results in a system that inherently privileges the ideas, needs and norms of the dominant white settler population, including the privileging of western knowledge over Indigenous approaches and ways of knowing.

The HSS system is committed to addressing anti-Indigenous racism and promoting cultural safety and anti-racism. DHSS staff are expected to honor and promote a culturally safe and anti-racist environment at all times and interact with clients, families, community members, partners, and colleagues in a relationship-based approach. This involves being tactful, respectful, self-aware, and humble in order to develop and maintain ongoing and trusting relationships.

The provision of health information affects the focus, effectiveness, efficiency, evaluation and overall expenditures for budgets of programs and services of the entire Department of Health and Social Service (DHSS) and the regional health and social services authorities in the NWT. The total of these budgets is approximately \$446 million dollars. This information, because of interdepartmental collaboration on key issues, also has the potential to affect the budgets of other departments and organizations. As well as providing information for DHSS and regional health and social services authorities in the NWT, the Analyst, provides information to other departments and organizations that are responsible for, or stakeholders in, health, community wellness, and public safety programs and services, including Indigenous organizations and members of the public. This position may be asked to represent the department in working groups or committees at the Territorial or Federal/Provincial levels.

Subject to broad policies and operational goals of the Government of the Northwest Territories (GNWT), and to managerial direction of a general nature, the Analyst manages and coordinates many diverse projects concurrently and interacts with senior officials in a variety of organizations on sensitive issues where there are frequently changing priorities, conflicting interests and differing perspectives. Responsibilities are undertaken in accordance with priorities, policies, and directives of the DHSS, regional health authorities, other territorial departments, and the Legislative Assembly. This ensures the availability of accurate, valid, timely and useable information as a sound basis for public policy and legislation, and for programmatic activities for policy analysts, decision makers and client groups.

This position requires accuracy, diplomacy, timeliness and political sensitivity due to the nature of the work and availability of public and political scrutiny.



RESPONSIBILITIES

- 1. Develop projects and methods to provide current and projected impacts and monitor the implications of the evolving morbidity and mortality in the NWT including assessing the implications, including economic, of specific determinants and outcomes of mortality and morbidity. Among others these include intentional and unintentional injuries, acute and chronic diseases and social problems, with trends over time.**
 - Identify key determinant and outcome indicators to track general health and wellness, as well as specific diseases, injuries, and other health conditions.
 - Provide analysis and interpretation of data collected.
 - Prepare analysis in the form of briefing notes, reports and correspondence.
 - Design database systems to store, retrieve and assist in the analysis and evaluation of data.
 - Develop and ensure the accuracy of surveillance methods used by the department including surveys, questionnaires and interviews.
 - Collaborate with the department's Epidemiologist, divisional and GNWT departments to obtain the appropriate health and social incidence data for cost analysis.
 - Respond to inquiries from various clients in the department, regional health and social services authorities, federal agencies, and others concerning health costs and the economic impact of major health determinants and outcomes.
 - Assess the economics of alternative health decisions, including relative costs of prevention and clinical care.
- 2. Oversee the development, maintenance and improvement of approaches for data collection, synthesis and reporting in order to ensure information gathered is accurate, timely and useable.**
 - Test, verify and audit data in the database systems.
 - Test the validity of data collection methods such as surveys, questionnaires, and administrative data reporting.
 - Make recommendations on methods to improve the quality, including validity and precision, of data collected.
 - Support and motivate activities and objectives of diverse nature that require analytical, interpretive, evaluative and constructive solutions to ensure the availability of accurate, valid, timely and useable information.
 - Provide expertise and work collaboratively with other departmental or Authority staff with regard to data collection and databases relevant to health information.
- 3. Coordinate and conduct statistical analysis on data collected from various studies in order to ensure the data are valid and reliable.**
 - Direct and develop inter disciplinary teams for special projects to contribute insight to the feasibility of departmental priorities, policies and plans.



- Review data to ensure they meet statistical standards.
 - Perform statistical testing on data to determine their validity.
 - Identify and eliminate errors in data.
 - Analyze health data via advanced programming skills R, or other programming software, and provide interpretations, evaluations and solutions.
 - Select and use appropriate methods to estimate direct and indirect costs, such as human capital cost, willingness to pay, friction cost, etc.
 - Interlink large databases.
 - Evaluate statistical packages and develop strategies for computer-aided analysis.
- 4. Design, develop, conduct and assist other staff with the design of studies to ensure that health information gathered and analyzed is accurate and meaningful and meet standards.**
- Design or assist in the design of research methodologies, sampling, interview questions and questionnaires.
 - Identify appropriate technical data and data sources.
 - Oversee the administration of studies. Provides advice to the HIA's in the administration of studies if required.
 - Summarize and analyze results and prepare reports.
 - Coordinate or participate with other provinces/territories on studies deemed relevant to NWT health and wellness. Helps the HIA's with summarizing and analyzing results, and preparing reports if required.
 - Design and analyze economic studies, including cost of life studies.
- 5. Provide advice and expertise to departmental staff at all levels in order to ensure that information provided by the department meets statistical standards. Provide statistical expertise to the Manager and the Department to assist in the creation of policies and proposals.**
- Advise the Manager and other departmental staff on the development planning and interpretation of health analytics.
 - Provide advice on the nature and relevance of current or proposed research being conducted within, or external to the department.
 - Identify data and information deficiencies and make recommendations on how to correct the situation.
 - Design and deliver training courses, seminars and workshops in the areas of health analytics, collection of information, analysis of information and interpretation of data.
 - Train, oversee and assist the Department's health information analysts, casual staff and students for specific projects and ongoing monitoring as required.



6. Contribute to ongoing reporting systems within the Unit including monitoring and forecasting program and policy implementation, as well as for initiating research on emerging issues to ensure the availability of accurate, valid, timely and useable information.

- Identify, develop and lead research projects relevant to population health and service utilization.
- Collaborate with other health analysts to understand prevalence of addictions, hospitalizations, unintentional and intentional injuries, and other existing and emerging health conditions and priorities for the unit, department, and health authorities.
- Contribute to the planning and content of the departmental website.
- Conduct research using a variety of methodologies including Internet searches, literature reviews and statistical trend analysis.
- Remain current with technological advances and development.

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 health data analytics including concepts, principles and applications, as well as opportunity costing of alternative health service delivery options.
- Knowledge of related research methodology, including survey and questionnaire design.
- Knowledge in the field of human epidemiology including epidemiological concepts, principles and applications; specific methodologies of priority include principles and practice of cross-sectional studies, case control studies, and health surveillance.
- Knowledge of bio-statistical research and analytical methodologies.
- Knowledge of statistical analysis software (R, SAS or SPSS), S-plus, Egret and Epi-info, including programming ability.



- Knowledge of database management software.
- Knowledge of natural histories of common human diseases, injuries, and addiction.
- Knowledge of human public health, including knowledge of environmental health, occupational health and health problems associated with nutrition, foods, tobacco use and physical activity. Knowledge of interrelationships between the development of diseases, and the agent, host, and environmental factors.
- Knowledge of health determinant and health outcome indicators.
- Knowledge of risk assessment.
- Knowledge of the World Health Organization's International Classification of Diseases (ICD) coding
- Knowledge of and/or the ability to acquire and apply knowledge of northern health care systems and structures, *Public Health Act*, public health administration and northern cultures as they relate to health and social service issues.
- Knowledge of project management concepts and practices; project management skills including supervision and management of varied and diverse activities and objectives..
- Knowledge of policy and decision-making processes and systems.
- Knowledge of cost estimates for loss of life at different ages; knowledge of methodology for indirect cost estimates, including human capital costs, willingness to pay, friction costs.
- Knowledge of cost and effectiveness analysis.
- Knowledge of geographic information systems and mapping of health conditions.
- Presentation software and facilitation skills.
- Organizational planning and strategic planning / development skills.
- Verbal and written communications skills.
- Skills to interpret data, and analytical and strategic thinking skills.
- Familiarity with the development of research protocols, interpretation of research, and community health or social services
- Evaluation, assessment and problem-solving skills.
- Ability to provide analysis and interpretation of population health surveys.
- Ability to meet client requests, and to understand and influence people to achieve job objectives.
- 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 Bachelor's degree in social sciences, health, health economics or a related field, and three (3) years of experience in health analytics, with emphasis on analysis of population health.

Equivalent combinations of education 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