



IDENTIFICATION

Department	Position Title	
Health and Social Services	Social Epidemiologist	
Position Number	Community	Division/Region
49-10777	Yellowknife	Child and Family Services/HQ

PURPOSE OF THE POSITION

The Social Epidemiologist provides accurate, timely and useable information essential to understanding the incidence, prevalence, distribution and patterns of population health determinants. This is done considering social factors which influence health and outcomes that are important to the population we serve and to the Department of Health and Social Services, and other departments with whom collaboration is required on health and social issues. This role is important toward improving the health and wellness of the population and understanding and influence of social circumstances on health inequalities in order to improve the effectiveness and efficiency of health programs by reducing social inequalities which contribute to the burden of mortality and morbidity in the population.

SCOPE

Located in Yellowknife, the Social Epidemiologist reports to the Manager of Strategic Projects and Initiatives. This role is responsible for understanding social determinants of health which affect the entire population of the Northwest Territories (NWT), under the legislative authority of the Territorial Executive Director of Child and Family Services, also referred to as the “Statutory Director” of both CFS and Adoptions.

The position’s primary responsibility will be to support and advance the strategic direction set out by the Manager of Strategic Projects and Initiatives and of the overall direction of the Statutory Director, through sound epidemiological analysis and interpretation of evidence gathered from a diversity of avenues. While the incumbent will report to the Manager of Strategic Projects and Initiatives and lead epidemiological initiatives and projects for the CFS division, they will also support all other divisions and approved external projects, in conjunction with other epidemiologists as required.



The Statutory Director is responsible for the delivery of the Child and Family Services Program, and the Adoptions Program, under two separate pieces of NWT legislation (the NWT Child and Family Services Act, and the NWT Adoptions Act). Under the Child and Family Services Program, the Statutory Director is accountable for the care and support of approximately 984 children and youth per year (ten year average, 2017-18 Directors' Report).

The Statutory Director is the permanent custodian of approximately 150 children (2017-18 Directors' Report). Between October 2017 and March 31, 2018, CFS conducted 315 investigations on 728 children in the NWT. In 2017-18, 98% of children, youth and families served were Indigenous. The 2014 and 2018 audits completed by the Office of the Auditor General of Canada, as well as the Statutory Director's Audit (completed for the 2016 – 17 fiscal year), indicate a number of significant quality and risk issues in for Child and Family Services, and point to the urgent need to implement significant and far-reaching improvements in the NWT CFS system, and at all levels within the system, including but not limited to the leadership, direction and support provided by the Statutory Director, the Department, and the leadership and frontline operations of the HSSAs.

The Social Epidemiologist collaborates with other Departments' epidemiologists to provide strategic direction, analytical capacity and evidence-based support to a variety of stakeholders involved in the delivery of programs and services that promote, protect and enhance the health and wellbeing of NWT residents. The position participates in interdisciplinary collaboration between Territorial Social Programs, which upholds the *Child and Family Services Act*, and other divisions of the Department, including those whose functions are mandated by other relevant acts, including but not limited to the *Public Health Act*.

This role protects data integrity and confidentiality, in the timely and accurate analysis to support decision-making with regard to program development and/or resource allocation priorities within the NWT. Related key functions include: developing and sustaining close working relationships within the Government of the Northwest Territories (GNWT) as well as linkages with national health information data providers such as the Public Health Agency of Canada, the Canadian Institute for Health Information, Health Canada and Statistics Canada; and collaborative work with other units, divisions, departments and governments with regard to research and analysis of social determinant of health data. The Social Epidemiologist will be expected to manage diverse projects concurrently.

The information and analyses conducted by the Social Epidemiologist can also influence the focus, effectiveness, efficiency, evaluation and overall expenditures for budgets of programs and services of the entire Department and the health and social services authorities (HSSAs) in the NWT. As well as providing information of the Department and HSSAs, the Social Epidemiologist provides information to other departments and organizations that are



responsible for stakeholders in health, community wellness, and social services programs and services, including aboriginal organizations and members of the public.

The position works to strict deadlines and the incumbent is routinely involved in several varied and complex statistical projects simultaneously, which requires prioritization of work to meet competing pressures. Close attention is also required for development of statistical materials.

RESPONSIBILITIES

1. Designs new or improved surveillance or data collection methods and systems in order to effectively and efficiently monitor trends in health, mental health, child services and other social determinants of health and wellbeing.

- Identifies key determinants and outcome indicators to track general health, social determinants of health, CFS, and other indicators (i.e. health, population health, mental health and addictions, family violence).
- Develops and ensures the accuracy of surveillance methods used by the Department including surveys, questionnaires and interview.
- Provides analysis in the form of briefing notes, reports and correspondence.
- Responds to inquiries from various clients in the Department, HSSAs, federal agencies, and others concerning database systems, surveillance methods, and data needs.

2. Ensures information gathered by data collection systems is accurate, timely and useable.

- Participates in the design of data collection systems, advising on measures and field parameters.
- Tests, verifies, and audits data collection methods such as surveys, questionnaires, interviews and forms.
- Makes recommendations on methods to improve the quality, including validity and precision, of the data collected.
- Provides support and training to staff or delegated field officers in collecting or inputting data.
- Guides the development and implementation of appropriate data collection tools (forms or software).
- Develops and implements policies and procedures.

3. Coordinates and contributes to the production of reports or reviews.

- Performs or validates statistical testing on data to determine its reliability.
- Identifies and eliminates errors in data.
- Analyzes statistical data via advanced programming skills in SAS or SPSS, and provides interpretations, evaluations and solutions.



- Interlinks large databases.
 - Acts as principal writer for all or significant sections of reports.
 - Works in close collaboration with communications specialists to oversee the editing and publishing process.
- 4. Provides professional advice and expertise to departmental staff at all levels in order to ensure that information provided by the Department meets epidemiological and statistical standards.**
- Advises the Statutory Director, Manager of Strategic Projects and Initiatives, and other staff on the planning and interpretation of epidemiological studies.
 - Provides advice on the nature and relevance of current or proposed research being conducted within, or external to the Department.
 - Assists in the design of research methods, population sampling, interview questions and questionnaire formatting.
 - Evaluates statistical packages and develops strategies for computer-aided analysis.
 - Identifies data and information deficiencies and makes recommendations on how to correct the situation.
 - Designs and delivers training courses, seminars and workshops in the areas of epidemiology, collection of information, analysis of information and interpretation of data.
- 5. Contributes to ongoing reporting systems within the division as well as for initiating research on emerging issues in order to provide accurate and timely information to the division and public.**
- Identifies, develops and leads research projects relevant to the assessment of child and family services, health, mental health, addictions, and social determinants of health.
 - Collaborates over surveillance plans for injuries, tobacco addiction, and other existing and emerging conditions.
 - Conducts research using a variety of methodologies including Internet searches, literature reviews and statistical trend analysis.
 - Keep abreast of technological advances and development.
- 6. The Social Epidemiologist may also be asked to represent the Department in working groups or committees at the Federal/Provincial/Territorial levels.**

WORKING CONDITIONS

Physical Demands

No unusual demands.



Environmental Conditions

No unusual demands.

Sensory Demands

No unusual demands.

Mental Demands

No unusual demands.

KNOWLEDGE, SKILLS AND ABILITIES

- Knowledge in the field of human epidemiology including epidemiological concepts, principals 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 and skills relating to research methodology, including survey and questionnaire design.
- Knowledge and skills relating to statistical analysis software (SAS, SPSS, and Epi-info) including programming ability.
- Knowledge and skills relating to database management software including database development, evaluation and search, and spreadsheet software (Excel and MS-Access).
- Knowledge of social determinants of health and health outcome indicators.
- 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 and/or the ability to acquire and apply knowledge of child and family services and social services programming funded by the GNWT.
- Knowledge and abilities relating to risk assessment.
- Knowledge of and/or the ability to acquire knowledge of northern health care systems and structures, *Public Health Act*, public health administration, *Child And Family Services Act* and northern cultures as they relate to the health and social services issues.
- Knowledge of policy, ethical and legal issues related to confidentiality and data security.
- Human relations skills, including effective communication skills for the interpretation of statistical analysis in lay terms.
- Knowledge and skills relating to project management concepts and practices.
- Knowledge and skills relating to policy and decision making processes and systems.
- Knowledge and skills relating to cost and effectiveness analysis.
- Knowledge and skills relating to desktop publishing and presentation software.



- Knowledge of geographic information systems and mapping of health conditions would be an asset.
- Skills to interpret data, and analytical and strategic thinking skills.
- 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 level degree in social science (i.e., epidemiology, biostatistics, public health, sociology) with two (2) years of experience in statistical analysis.

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