Update

Ministry

Health

Describe: Basic Job Details

Position

Position ID

Position Name (30 characters)

Manager,Infectious Disease Epi

Current Class

Job Focus	Supervisory Level
Policy	

Agency (ministry) code

Cost Centre

Program Code: (enter if required)

Employee

Employee Name (or Vacant)

Organizational Structure

Division, Branch/Unit

☐ Current organizational chart attached?

Supervisor's Position ID

Supervisor's Position Name (30 characters)

Supervisor's Current Class

Design: Identify Job Duties and Value

Changes Since Last Reviewed

Date yyyy-mm-dd

Responsibilities Added:

Updates to key competencies.
Change responsibilities related to public health data systems as input rather than leadership role.

Responsibilities Removed:

Job Purpose and Organizational Context

Why the job exists:

Reporting to the Director, Public Health Analytics, this position leads, manages, and coordinates the surveillance and evaluation of communicable disease and immunization activities in Alberta. This position provides epidemiological leadership to programs to ensure evidence is available to inform and evaluate public health actions and policies. This position provides expert advice to the Chief Medical Officer of Health, Assistant Deputy Minister, and Executive

Director related to communicable disease burden and risk. Also, this position works with internal and external stakeholders to provide epidemiological expertise for specific project areas. This could include off-site meetings and/or deployment to multiple locations to lead or assist in outbreak response.

The position contributes to the effective use of health information in priority setting, quality assurance, and knowledge creation activities for internal and external stakeholders within and outside the health sector including federal, provincial, and regional authorities and academic collaborators.

Responsibilities

Job outcomes (4-6 core results), and for each outcome, 4-6 corresponding activities:

Working within the framework of general Alberta Health policies and principles, this position is accountable for setting and deciding on goals for communicable disease surveillance and epidemiology. Working with general guidelines to determine the most appropriate way to accomplish the goals, this job is also responsible for producing ideas, options, recommendations, plans, and project work. Specific accountabilities include:

1. Provide direction and leadership for communicable disease epidemiology and surveillance:
- Provide epidemiological leadership, direction and coordination that impacts both internal and external stakeholders;
- Investigate, evaluate and analyze the incidence and trends of reportable diseases in Alberta;
- Monitor the disease reporting process and flow of surveillance information between the department and external stakeholders;
- Ensure congruency with national standards for diseases under national surveillance;
- Ensure the highest standard possible of data input, data analysis, and epidemiological reporting including data auditing;
- Produce annual reports for notifiable diseases in Alberta;
- Reconcile data with other stakeholders including the Public Health Agency of Canada and the Provincial Laboratory of Public Health;
- Manage the production of epidemiological reports and data products including, but not limited to, routine surveillance reports, outbreak summaries and selected data requests;
- Support the notifiable disease process by ensuring compliance with the *Public Health Act* and the *Communicable Disease Regulations* and Alberta Case Definition Manual for Notifiable Diseases;
- Process and monitor epidemiological data requests/transfers in accordance with the *Health Information and Public Health Acts*, and existing data sharing agreements;
- Detect emerging trends and report on measurable achievements of program goals;
- Lead outbreak investigations, including tool design, statistical analysis and relevant epidemiological study as required;
- Provide epidemiological expertise for enteric and non-enteric outbreak investigation and response.

2. Provide direction and leadership for vaccine preventable disease epidemiology and surveillance within Alberta:
- Develop and implement methods for reporting on immunization coverage rates;
- Develop and implement methods for the reporting of adverse events following immunization;
- Develop and implement methods for the reporting of vaccine effectiveness;
- Lead applied investigations related to understanding disease incidence in relationship to vaccine use.

3. Provide epidemiological leadership and direction to the development of infection prevention and control strategies and initiatives:
- Provide epidemiological expertise in the development of a surveillance system for antimicrobial resistance organisms;
- Provide epidemiological and methodological expertise for the development of appropriate indicators related to infection prevention and control (e.g. ventilator associated pneumonia);
- Provide epidemiological support to ensure the collection of appropriate laboratory data for the surveillance of antimicrobial resistant organisms;
- Support the evaluation of the architecture of disease databases to make recommendations for present and future database needs for the surveillance of antimicrobial resistant organisms;

- Provide direction to key performance measures;
- Where possible make recommendations for the structure of information systems related to the surveillance of antimicrobial resistant organisms.

4. Provide recommendations on communicable disease and immunization reporting requirements and information systems development:
- Lead epidemiological analysis of data and use the results to make recommendations to program leads;
- Provide expertise on the architecture of disease databases to make recommendations for present and future database needs (includes consideration of data requirements, updated IT systems, and potential for electronic reporting);
- Provide input associated with maintenance, enhancements, and the development of new electronic database for communicable diseases (e.g. Communicable Disease Reporting System (CDRS), Communicable Disease / Outbreak Management (CDOM), Imm/ARI);
- Provide input to staff responsible for managing, entering, and/or reporting public health data, to maximize data quality, reliability, and validity.

5. Collaborate with key stakeholders at the local, provincial, and national levels to ensure evidence is available to guide decision making pertaining to communicable disease control and prevention:
- Represent the department on national committees and working groups related to communicable diseases;
- Provide the link between the Health Analytics Branch and other branches, and to key stakeholders regionally and nationally to ensure enhanced data analysis of communicable diseases in Alberta is conducted in a coordinated fashion;
- Lead applied studies and investigations related to the epidemiology of communicable disease in Alberta and contribute, where appropriate, to national objectives.

Problem Solving

Typical problems solved:

- Assess competing priorities, mediate differing perspectives and arrive at win-win situations for all parties.
- Establish and adhere to operational goals and establish project timelines.
- Identify information requirements and develop effective strategies for addressing these requirements.
- Build effective alliances and teams with individuals who possess different perspectives and represent diverse agendas.
- Facilitate planning, consensus building, and decision-making processes.
- Analyze complex information and identify strategic options.

Example: Epidemiological analysis of methicillin resistant staphylococcus aureus (MRSA) in Alberta. Routine monitoring showed that the number of MRSA cases appeared to be increasing in a particular geographic area. To fully assess the impact and scope of the outbreak, an investigation was set up with multiple collaborators from within and outside of the department. The Manager had to coordinate data collection from multiple sources, organize and analyze the data, and provide interpretation of the findings to multiple stakeholders. The analysis showed that the particular strain of MRSA was also found in other geographic areas. This information led to discussions about strategies to control MRSA in Alberta, the development of provincial policies and guidelines, and recommendations for the creation of a laboratory-based surveillance system.

Types of guidance available for problem solving:

The majority of guidance will come from the supervisor and/or leadership within the branch

Some guidance may come from leadership in other programs areas such as the Chief Medical Officer of Health or Public Health policy areas

Other stakeholders may provide advice and/or recommendations with highly collaborative tasks between ministries, organizations, communities, and/or academic institutions

Familiarity with OCAP principles is required for successful collaboration on projects, analysis, and/or requests that may come from Indigenous partners.

Training in analytical software programs and methods can be obtained from formal sessions and/or within the branch.

Direct or indirect impacts of decisions:

The Manager, Infectious Disease Epidemiology has a significant amount of autonomy in guiding surveillance systems for monitoring communicable disease. This position is also responsible for investigating disease outbreaks and must not only provide solid epidemiological skills, but must coordinate with key stakeholders (e.g., Alberta Health Services, Public Health Agency of Canada, Health Canada, and Alberta Precision Laboratories) during the investigations. The choice of methodology to be used and the interpretation of the results has a direct impact on the how the outbreak will be managed and what interventions, if any, will be used to control the outbreak and reduce the risk to the population. Routine analysis of data and its interpretation are used as part of the evidence base for communicable disease control strategies and policies as well as the evaluation of these actions. Applied investigations will provide the evidence base needed to evaluate the safety of vaccines and whether or not a vaccine may need to be withdrawn as a means of protecting health.

Key Relationships

Major stakeholders and purpose of interactions:

Internal:
Executive Director, Health Analytics - Daily to weekly - Advice/Recommendations/Analytic Results
Director, Public Health Analytics - Daily - Advice/Direction/Recommendations/Results
Branch Program Staff - Daily - Advice/Direction/Recommendations/Results
Division Executive Directors, Directors, Managers, Program Staff - Daily to Weekly - Advice/Recommendations/Epidemiological Results

External:
Academic Centres - Daily to Monthly - Provision of Advice/Analytic Results/Student Mentorship
Alberta Health Services - Daily - Provision of Advice/Epidemiological Results/Coordination
Government of Canada (Public Health Agency of Canada, Health Canada, Indian Affairs and Northern Development) - Daily to Monthly - Provision of Advice/Epidemiological Results/Coordination
Alberta Precision Laboratories- Daily - Communicable Disease Epidemiology and Surveillance

Required Education, Experience and Technical Competencies

Education Level	Focus/Major	2nd Major/Minor if applicable	Designation
Master's Degree	Other	Science	

If other, specify:

Epidemiology, public health, or biostatistics

Job-specific experience, technical competencies, certification and/or training:

This position requires an advanced level of knowledge of epidemiology, public health surveillance, research methods, statistics, and outbreak management. In addition, knowledge of principles and practice of population and public health including health promotion, disease and injury prevention and control, and health protection.

The position must also have a broad understanding of the Ministry business especially as this relates to the use of evidence in decision making. Effective communication skills, verbal and written for communication variously to scientific, technical, government and public audiences; proven skills in technical management, and proven skills in problem solving, both scientific and managerial are required.

Postgraduate training in the health or social sciences, combined with progressively increasing management responsibilities in a public health setting, or an equivalent combination of education and experience.

This position leads in providing and applying knowledge of epidemiology to the surveillance and control of communicable disease in Alberta. The position must ensure that this support is provided in an efficient and timely manner. Outbreaks often require immediate attention and the ability to prioritize activities is critical. Because the information will be used to support decisions for the control of communicable disease, attention to detail is required.

The position facilitates relationships on behalf of the branch/department and participates in collaborative projects with provincial and federal government departments, as well as academic stakeholders where these involve activities that lead to a better understanding of communicable diseases and subsequent control activities.

Behavioral Competencies

Pick 4-5 representative behavioral competencies and their level.

Competency	Level A B C D E	Level Definition	Examples of how this level best represents the job
Creative Problem Solving	○ ○ ○ ○ ◉	Creates the environment for innovative problem solving: • Generates new ways of thinking; ensures right questions are being asked about a problem • Eliminates barriers to creativity and innovation • Encourages a culture of innovation	This position requires problem-solving skills and the ability to develop innovative solutions related to addressing questions about infectious diseases and immunizations. There are a multitude of stakeholders impacted by the work in the position and the person will need to know which person to notify or seek advice from.
Systems Thinking	○ ○ ○ ◉ ○	Integrates broader context into planning: • Plans for how current situation is affected by broader trends • Integrates issues, political environment and risks when considering possible actions • Supports organization vision and goals through strategy • Addresses behaviours that challenge progress	This position must have a broad understanding of infectious diseases and immunizations, including how social determinants of health impact the epidemiology and health of the population. The position must understand broader surveillance goals and planning to adapt to changes in epidemiology and/or rare and emerging disease
Develop Networks	○ ○ ○ ○ ◉	Builds trust to fairly represent every party: • Uses network to identify opportunities • Establishes credibility and common purpose with a range of people • Actively represents needs and varying groups • Creates strategic impression by inspiring and connecting with values and beliefs	This position requires extensive collaboration with internal and external stakeholders. Maintenance of existing relationships including completing requests is required. As new projects/tasks arise, new impression by inspiring and connecting with values and beliefs collaborations may need

			to be created. This position requires the ability to develop and maintain existing/new networks. Often clear and concise communication, project management, and the ability to resolve conflicts is needed.
Build Collaborative Environments	○ ○ ○ ○ ◉	Creates an open environment of communication: • Promotes sharing of expertise • Initiates strategic communication systems • Anticipates and addresses potential conflict areas • Inspires with a bold, complete and shared vision • Leads cross-functional collaboration	Numerous stakeholders are generally required to effectively complete required tasks. Coordination is required within Alberta Health and between Alberta Health Services, academic institutions, and external stakeholders. Promoting collaboration within the team and across internal and external groups prevents duplication and maximizes the ability to effectively address population health questions.
Agility	○ ○ ○ ◉ ○	Proactively incorporates change into processes: • Creates opportunities for improvement • Is aware of and adapts to changing priorities • Remains objective under pressure and supports others to manage their emotions • Proactively explains impact of change on roles, and integrates change in existing work • Readily adapts plans and practices	Priorities often shift depending on the current situation. Priorities can be urgent and required quickly, especially in highly sensitive cluster investigations. Be able to identify ways to efficiently complete tasks given shifting and changing priorities.

Benchmarks

List 1-2 potential comparable Government of Alberta: Benchmark

M410-19

Assign

The signatures below indicate that all parties have read and agree that the job description accurately reflects the work assigned and required in the organization.

_____   _____   _____
                                             Date yyyy-mm-dd

_____   _____   _____
Supervisor / Manager Name   Date yyyy-mm-dd   Supervisor / Manager Signature

_____   _____   _____
Director / Executive Director Name   Date yyyy-mm-dd   Director / Executive Director Signature

_____   _____   _____
ADM Name   Date yyyy-mm-dd   ADM Signature