

# **EPIDEMIOLOGIST**

## **JOB PURPOSE AND SUMMARY**

Position incumbents serve as key staff members who work closely with the division manager and health officer and contribute to the department's ability to provide population based assessment and research activities. Individual positions that meet WA State Registered Nurse qualifications may initiate, conduct and coordinate communicable disease (CD) investigations including bioterrorist (BT) threats or events. Incumbents may function as part of an interdisciplinary team that examines the health status of groups, neighborhoods, or populations in the community and identifies populations potentially affected or at risk for communicable disease or bioterrorist activity. Typical activities include providing research support, technical knowledge and science based theory to Division Managers, Program Managers, and staff for the purpose of surveillance, assessment and research activities. Functional responsibilities include contributing to and participating in planning, developing, structuring and conducting Community Health Assessments, program evaluation studies, research and extensive report writing.

## **KEY OR TYPICAL TASKS AND RESPONSIBILITIES:**

- Writes health status reports.
- Compiles, maintains, and provides analysis for health care. Assists and participates in interpreting epidemiological data for planning and department policy development.
- Contributes to planning, prioritization, and execution of community health assessment projects, program effectiveness evaluations, and intervention research.
- Provides public health data interpretation to the community and general public.
- Conducts internal and community meetings.
- Participates in and/or conducts disease outbreak and cluster investigations. Participates in the identification of causative agents and environmental conditions contributing to the health issue and identifies corrective actions for morbidity and mortality in an appropriate and timely way.
- Trains interviewers, data collectors and data entry operators in needed work for the conduction of investigations, research activities, evaluations and assessments.
- Conducts seminars and trainings in epidemiologic methodology and investigative techniques for health department staff, local practitioners and professional meetings.
- Designs, maintains and monitors quality of disease surveillance databases. Recommends design and management of surveillance systems for problems of public health importance.

- Maintains disease response protocols; assures protocols are based on sound epidemiological evidence.
- Prepares public health information releases for findings from health information collection and analysis work in coordination with the health officer and other designation staff.
- May provide on-call coverage for Communicable Disease and Bioterrorist response, as assigned to individuals with WA State RN licensure.
- Prepares appropriate grant applications and acts as the principle investigator on grants received and develops opportunities for funded research.
- Submits appropriate documentation for human subjects review.
- Participates in statewide meetings for assessment (Health Assessment Work Group).
- Makes recommendations for health policy changes based on findings from local epidemiologic studies and research.
- Develops public health risk assessment models to forecast effects of exposure to physical, chemical or biologic agents.
- Participates as a team member in the Department's Epi Team.
- Performs other staff duties and tasks as assigned that are consistent with the job class.

## **QUALIFICATIONS**

**Education and Experience:** Masters degree from an accredited school of Public Health, plus evidence of completion of a series of coursework in biostatistics, epidemiology, research methodology, behavioral science, environmental science, and health services administration.

Three years of experience in applied epidemiology and research in a public health environment is required. Incumbents must have conducted epidemiologic investigations or scientific and social research in a public health area of concern.

Incumbents must have knowledge and demonstrated competence in the practice of epidemiology in a public health setting, and working knowledge of the principles of scientific inquiry and with the statistical measures used in the practice of epidemiology.

Position incumbents are required to hold a valid driver's license and have the ability to work flexible hours, which may extend into evening and weekend time. Maintenance of WA State RN licensure may be required for some positions in this classification.

All combinations of education, experience and training that demonstrate the ability to perform the work will be considered.

**Knowledge of:** federal and state infectious disease reporting requirements; knowledge of and comfort with research methodology and sampling frames; knowledge of epidemiologic study design including prevalence surveys, case control and cohort studies, and population sampling techniques. Knowledge of general principles of toxicology, microbiology, genetics, and biology; knowledge of and comfort with advanced statistical measurement (linear, multiple, and logistic regression; factor analysis and discriminant function analysis; confidence intervals).

**Skill in:** verbal and written presentation (publications); different methodologies for data collections (quantitative and qualitative); data collection instrument development; analytic techniques to evaluate potential and relative risk; software products: word processing, graphics design, spreadsheets, data bases, and statistical packages.

**Ability to:** maintain confidentiality and adhere to the highest of ethical and moral standards in the conduction of a scientific inquiry process; work effectively with people of differing perspectives and disciplines in and out of the department; work autonomously with little or no direct supervision in the development and implementation of a project. Ability to demonstrate use of good judgment and the knowledge of when to seek additional help; ability to confer with community professionals about issues of public health significance.

### **WORK ENVIRONMENT AND PHYSICAL DEMANDS**

The position is at low risk for exposure to blood products, human biohazards, laboratory chemicals, toxic materials, or environmental hazards. There is some risk of exposure to human infectious agents. The position is regularly exposed to chemicals used in copiers, printers, and graphics productions, as well as long periods of direct work with computers. This position is expected to carry up to thirty pounds of materials, papers, and equipment in the performance of the job duties.

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