



Epidemiology Research Associate

Position Summary:

The Epidemiology Research Associate is responsible for the study and management of diseases and conditions in the health department's jurisdiction. The Epidemiology Research Associate directs and coordinates infectious disease outbreak investigations. This position is responsible for infectious disease surveillance, investigations, interventions, and mitigation. The Research Associate utilizes state-of-the-art methodologies of the science of epidemiology and public health principles.

Essential Duties:

- Ensures 24/7/365 access to infectious disease surveillance data.
- Reviews disease surveillance data daily.
- Provides expert infectious disease consultation.
- Promptly identifies infectious disease outbreaks, and/or surveillance system issues.
- Analyzes data for deviations and assesses infectious disease hazards in the population and in specific groups or locations.
- Determines the priority of case and outbreak investigations based on established protocols.
- Manages outbreak investigations in accordance with department protocols.
- Conducts epidemiology interviews and coordinates the collection of clinical specimens.
- Prepares investigation reports including condition, dates associated with the investigation, and investigation results.
- Follows department protocols for the containment and mitigation of infectious diseases.
- Maintains confidentiality of information.
- Manages, maintains, and accesses complex databases.
- Ensures quality control of surveillance and infectious disease investigations.
- Provides or ensures the provision of epidemiology training for appropriate co-workers.
- Collaborates with Federal, State, regional, and local agencies in infectious disease and other conditions surveillance, epidemiology, and public health activities.
- Coordinates and facilitates the prompt and accurate flow of infectious disease information between Federal, state, regional, and local agencies.
- Prepares and submits documentation to meet Institutional Review Board (IRB) guidelines.
- Conducts epidemiological research and prepares articles for submission to peer-reviewed journals.
- Assists in the preparation of grant applications.
- In coordination with the Epidemiologist, supports the development of the Community Health Assessment.
- Assists in representing the department at professional Federal, national, and State meetings, as appropriate.
- Prepares and delivers educational presentations to selected audiences.
- Performs related work as required.

The above statements reflect the general duties considered necessary to describe the principal functions of the job and shall not be considered as a detailed description of all the work requirements that may be inherent in the job.

Core Competencies for Public Health Professionals:

The Core Competencies for Public Health Professionals contain 56 competency statements that apply across the public health workforce for all those engaged in the practice of public health. All of the Core Competencies are vital for the effective provision of public health activities. While the person in this position may be called on to demonstrate other Core Competencies, below is a list of the most essential for this position.

- 1.1. Describes factors that affect the health of a community.
- 1.2. Accesses existing quantitative and qualitative data.
- 1.3. Collects quantitative and qualitative data.
- 1.4. Analyzes quantitative and qualitative data.
- 1.5. Manages quantitative and qualitative data.
- 1.6. Uses quantitative and qualitative data.
- 1.7. Applies public health informatics in using data, information, and knowledge.
- 1.8. Assesses community health status.
- 2.3. Evaluates policies, programs, services, and organizational performance.
- 2.4. Improves policies, programs, services, and organizational performance.
- 2.6. Engages in organizational strategic planning.
- 3.2. Communicates with internal and external audiences.
- 3.3. Responds to information, misinformation, and disinformation.
- 4.1. Applies principles of ethics, diversity, equity, inclusion, and justice.
- 4.3. Recognizes the diversity of individuals and populations.
- 5.4. Collaborates with community members and organizations.
- 5.5. Shares power and ownership with community members and others.
- 6.3. Uses evidence in developing, implementing, evaluating, and improving policies, programs, and services.
- 6.4. Contributes to the evidence base for improving health.
- 7.13. Engages in performance management.
- 8.4. Creates opportunities for creativity and innovation.
- 8.5. Responds to emerging needs.

Qualifications:

- Master's degree in public health with concentration in epidemiology and/or biostatistics.
- Minimum of 3 years of field experience in detecting, controlling, or reporting illness and diseases preferred.

Required Knowledge, Skills, and Abilities:

- Knowledge of the theory, principles, practices, recent developments, and techniques related to epidemiology.
- Knowledge of occupational diseases and illness.
- Knowledge of the epidemiology of emerging and common communicable diseases.
- Knowledge of public health laws and regulations.
- Knowledge of social and structural determinants of health.
- Knowledge of a wide range of disease conditions and illnesses, including health disparities.
- Knowledge of the functions and resources of federal, state, and local agencies in the field of public health.
- Knowledge of and understanding of modern diagnostic and survey laboratory techniques.
- Knowledge of the methods of Geographic Information System (GIS).
- Working knowledge of statistical software, e.g., SAS, STATA, SPSS, Epi-Info, etc.

- Knowledge of complex surveys and statistical analysis, e.g., CDC NHANES.
- Knowledge of math and statistics.
- Knowledge of the preparation of Institutional Review Board (IRB) and grant applications.
- Statistical analysis skills.
- Analytical and critical thinking skills.
- Data analysis of questionnaires and with large data sets skills.
- Relationship-building skills.
- Verbal and written communication skills.
- Critical thinking skills.
- Interview skills.
- Leadership skills with staff and volunteers.
- Ability to work effectively as part of interdisciplinary teams.
- Ability to simplify complicated findings for others to understand and appropriately apply them.
- Ability to develop and execute generalized epidemiologic studies, planning, directing, and coordinating the work of subordinate and adjunctive personnel.
- Ability to interpret results of studies.
- Ability to interact appropriately and effectively with a wide range of persons.
- Ability to maintain and handle confidential information.
- Ability to follow protocol, procedures, and established guidelines.
- Ability to adapt to changing circumstances and needs.
- Ability to manage a demanding and changing workload.
- Demonstrated strong work ethic.

Physical Demands:

- Driving
- Far visual acuity
- Near visual acuity
- Hearing
- Keyboarding
- Sitting
- Speaking

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