



Sample Position Description for Tier 1: Entry-Level Epidemiologist

Introduction

Incumbent serves as an entry-level epidemiologist responsible for carrying out a range of investigative and analytical epidemiologic activities related to the surveillance, detection, and prevention of diseases and injuries. Incumbent works as a team or project member, under the direction of a Senior Epidemiologist, conducting routine epidemiologic functions comprising surveillance, data collection, data analysis using basic epidemiologic methods, and assistance with epidemiologic investigations.

Major Duties and Responsibilities

The purpose of this position is to conduct epidemiologic investigations used in preventing and controlling specific communicable and chronic diseases, injuries, and other health conditions and in planning health programs. Results of work efforts aid in the monitoring of health status and its correlates, identifying trends or outbreaks of diseases or other adverse health events, and providing data and information about corrective actions or programs to promote and protect public health.

1. Participation in Epidemiologic Investigations

Participates in developing epidemiologic investigations. Uses established scientific and technical methods and practices to identify and evaluate a wide range of health conditions within an assigned program area, to recognize public health problems pertinent to the population, and to determine feasibility of and approach to epidemiologic investigations.

Participates in conducting outbreak and other epidemiologic investigations by assisting with onsite review of facilities and procedures; interviewing patients, health-care providers, and others involved; and assisting in collecting data from local agencies or other health entities.

Performs analyses by using statistical techniques commonly employed in epidemiologic evaluations to interpret and analyze observed health phenomena. Uses databases for analysis of health problems. Uses surveillance systems to collect disease or health outcome data. Generates descriptive analyses of surveillance data for a variety of audiences.

2. Participation in Surveillance Activities

Identifies surveillance data needs, implements new or revises existing surveillance systems, reports key findings from the surveillance system, and supports evaluation of surveillance systems.

3. Consultation on Scientific and Technical Issues

Provides scientific advice and technical assistance to various public, private, and nonprofit health and health-related state and local agencies and organizations. Advice and assistance relates to epidemiologic expertise in assigned programs or issues where type of resources provided and impact on communities are established and where assistance requires the application of established scientific and technical methods and practices. May also serve as a scientific consultant for a public health program or project where technical and other characteristics pose previously encountered difficulties in carrying out the program.

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4. Presentation, Publication, and Dissemination of Data and Epidemiologic Findings

Conducts literature reviews and assists in preparing reports from analyses of surveillance data, literature reviews, and other information using behavioral science, demographic and epidemiologic analytic techniques, and evaluation. Follows direction from senior scientists and integrates other perspectives. Makes oral presentations to diverse audiences, both scientific and nonscientific. Prepares responses to requests for information.

5. Participation in Administrative and Program Projects and Activities Related to Technical, Scientific, and Programmatic Expertise

Participates in writing grants and other funding proposals. Participates on internal and external committees and workgroups related to areas of expertise.

6. Exercise of Staff Leadership

May provide administrative leadership and technical guidance to lower-level professional, technical, and administrative support staff, as assigned.

7. Performance of Other Duties as Assigned

Supervision Received

Initially works under the close supervision of a senior epidemiologist (Tier 2, Tier 3a, or Tier 3b) or other employee of higher grade; works more independently with acquired experience. The supervisor assigns specific projects in terms of issues, functions, or processes to be studied and sets deadlines for completing the work. The supervisor or senior epidemiologist provides assistance/guidance on controversial issues or assignments for which precedent studies are not available. Incumbent plans, coordinates, and carries out the successive steps in fact-finding and analysis of issues in accordance with accepted program policies, applicable precedents, and accepted methods, procedures, and practices. Work is reviewed for conformance with overall requirements, contribution to the assignment objectives, consistency of facts and figures, choice of analytical methods, and practicality of recommendations.

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Applied Epidemiology Competencies – Work Applications

Under the direction of a senior epidemiologist, the Tier 1 Epidemiologist may be expected to learn, demonstrate, and attain the following skills¹, as appropriate to his or her position:

1. Perform Epidemiologic Assessment and Analysis
 - A. Recognize public health problems pertinent to the population
 - B. Conduct surveillance activities
 - C. Identify acute and chronic conditions or other adverse outcomes in the population
 - D. Apply principles of good ethical/legal practice as they relate to study design and data collection, dissemination, and use
 - E. Organize data from surveillance, investigations, or other sources
 - F. Analyze data from an epidemiologic investigation or study
 - G. Summarize results of the analysis of an epidemiologic investigation and draw conclusions
 - H. Assist in developing recommended evidence-based interventions and control measures in response to epidemiologic findings with appropriate cultural/social/political framework
 - I. Assist in evaluation of programs
2. Apply Basic Public Health Sciences to Public Health Practice
 - A. Know how causes of disease affect epidemiologic practice
 - B. Identify the role of laboratory resources in epidemiologic activities
 - C. Use identified informatics tools in support of epidemiologic practice
3. Use Basic Epidemiology Communication Skills
 - A. Prepare written and oral reports and presentations that communicate necessary information to agency staff
 - B. Recognize the basic principles of risk communication
 - C. Incorporate interpersonal skills in communication with agency personnel, colleagues, and the public
 - D. Use effective communication technologies
4. Integrate Community Dimensions into Epidemiologic Practice
 - A. Provide epidemiologic input into epidemiologic studies, public health programs, and community public health planning processes at the state, local, or tribal level
 - B. Participate in development of community partnerships to support epidemiologic investigations
5. Work in a Culturally Competent Manner
 - A. Describe population by race; ethnicity; culture; societal, educational, and professional backgrounds; age; gender; religion; disability; and sexual orientation
 - B. Establish relationships with groups of special concern (e.g., disadvantaged or minority groups, groups subject to health disparities, historically underrepresented groups)
 - C. Describe surveillance systems that include groups subject to health disparities or other potentially underrepresented groups (using standard categories where available)
 - D. Conduct investigations using languages and approaches tailored to population
 - E. Use standard population categories or subcategories when performing data analysis
 - F. Support public health actions that are relevant to the affected community
6. Support Financial and Operational Planning and Management of the Program
 - A. Conduct epidemiologic activities within the financial and operational plan of the agency

¹ From the CDC/CSTE Competencies for Applied Epidemiologists in Governmental Public Health Agencies (AECs). For more information visit www.cste.org/competencies.asp or www.cdc.gov/AppliedEpiCompetencies.

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- B. Describe the financial planning and budgetary process of the epidemiology program
 - C. Implement operational and financial plans
 - D. Use skills that foster collaborations, strong partnerships, and team building to accomplish epidemiology program objectives
7. Develop and Support Systems Thinking
- A. Support the organization's vision in all programs and activities
 - B. Use performance measures to improve epidemiology program effectiveness
 - C. Promote ethical conduct in epidemiologic practice
 - D. Practice professional development
 - E. Prepare for emergency response
8. Support the Application of Epidemiologic Knowledge to the Development and Analysis of Public Health Policies

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Recommended Qualification Requirements

Education and Experience:

- A master's degree in public health (MPH) or a master's of science degree in public health (MSPH) with a focus on epidemiology or analysis and assessment

OR

- Bachelor's or other non-epidemiology professional degree or certification (e.g., RN, MD/DO, DDS/DMD, DVM, PhD, RS) without formal academic epidemiology training and with ≥ 2 years experience performing epidemiology work under the guidance of a Tier 2 or Tier 3 epidemiologist

Special Requirements That May Apply:

- Incumbent must be willing to receive vaccinations for communicable diseases, as necessary and appropriate.
- Incumbent may be required to gain security clearance with local, state, and federal agencies for emergency preparedness.
- Incumbent may be required to travel.

Career Progression

The next higher class in this career series is Tier 2 Epidemiologist (mid-level epidemiologist)