EPIDEMIOLOGIST II*

DEFINITION OF CLASS:

This is senior level professional work as an Epidemiologist studying the occurrence and causes of health effects in the County population. Employees in this class provide leadership and coordination in the conduct of major, complex research studies to identify and report on patterns of disease and conditions that affect the health of the community; and, as appropriate, provide recommendations regarding disease prevention/health promotion aspects of new public health initiatives and existing public health programs. Contacts are with the County Health Officer, County government officials and managers, representatives of County hospitals and laboratories, state and local area jurisdiction health departments, other private partner organizations, community groups, and individuals for the purpose of planning and implementing collaborative epidemiologic data collection/analysis efforts, providing technical advisory services, and/or coordinating emergency preparedness efforts. Work involves meeting with citizens or groups, but does not require providing daily, direct public service or assistance on a one-to-one basis.

An employee in this class applies thorough knowledge of the principles, concepts, and practices of the field of epidemiology as well as skill in biostatistics, data management and analysis software, and survey design and analysis to plan, design, develop, conduct, and prepare reports on major and complex epidemiologic studies. The employee is recognized as an expert in the field of epidemiology, exercises full technical responsibility for the work, and generally reports to a public health administrator who sets overall objectives and available resources. Completed work is subject to review only for effectiveness in meeting expected results. Work is performed within the parameters of established principles and practices of public health; the requirements, standards, and methodology of epidemiologic research and investigation; accepted data analysis and reporting methods; and, administrative constraints. These guidelines establish the framework for the work; however, factors such as globalization, immigration, and bio-terrorism threat combined with changing technology applied to statistical data collection and analysis present new and changing situations for which new standards, criteria, and procedures must be developed. The work is made complex by the following factors: the presence of multiple functions, (i.e., data collection, validation, and analysis; data reporting and dissemination; and consultation and liaison services to technical and non-technical consumers); the large volume of complex and different types of data; the presence of conflicting, uncertain, and/or changing data and conditions; the requirement to develop/refine data management systems and analytical protocols; and, the requirement for performing highly specialized analysis in the complex and evolving science of syndromic surveillance. The purpose of the work is to provide complete, accurate, and applicable epidemiologic data and reports which contribute to the development and implementation of public health programs that prevent/respond to disease outbreak and promote health. The work is primarily sedentary, is performed in an office environment, and presents no significant hazards.

EXAMPLES OF DUTIES: (Illustrative Only)

- Conducts major, complex epidemiologic studies (i.e., studies of significant health issues, surveillance of newly emerging health problems, and investigations of major, dangerous outbreaks such as Anthrax or West Nile); identifies the subject of the study; plans the study, including determination of parameters, sources, and statistical/epidemiologic methods appropriate for the investigation/study and analytical design; conducts the study, including training of participants (i.e., disease investigators) in project specific procedures and protocols as necessary, verifying accuracy and validity of data received, and conducting epidemiologic analyses of disease data using current or newly developed computer software and/or configurations specifically designed for the study by the employee; documents analytic work and prepares reports, including description of methods used, the findings, the interpretation of the findings, and recommendations for appropriate public health response.
- Develops enhancement and implementation of epidemiologic protocols to characterize outbreak and disease cluster investigation and reporting in order to ensure readiness for responding to bio-terrorism, other outbreaks of infectious diseases, and other public health threats and emergencies; advises the County Health Officer on health status indicators.
- Develops and maintains collaborative relationships with State, Federal, regional, and local partners as well as County departments and agencies to provide consultation, to establish mechanisms for the exchange of epidemiologic and health-related data and information, and to coordinate the conduct of epidemiologic studies; obtains large electronic data bases from State and Federal agencies, hospitals, and other sources of health statistics in order to determine patterns of disease and conditions that affect the health of the community.
- Presents health-related data and graphical illustrations of program data to County, professional, community, and medical groups; replies to requests for data from the general public regarding disease occurrence, risk factors, and control of those factors.
- Performs related duties as assigned.

KNOWEDGE, SKILLS AND ABILITIES:

- Thorough knowledge of principles and practices of public health.
- Thorough knowledge of the principles, practices, current developments, and techniques of epidemiology including study design, analytical procedures, and interpretive methods.
- Considerable knowledge of the principles and methods of bio-statistical analysis.
- Considerable knowledge of and ability to use computer software to manage, manipulate, and analyze large and complex data bases and to deploy IT resources required for epidemiologic data collection.
- Ability to identify project scope and complexity and lead/train inter-disciplinary team members on large-scale epidemiologic projects.
- Knowledge of current Federal and State health data collection practices.
- Knowledge of medical terminology and health information.
- Ability to gather, to organize, and to present facts and statistical data in a clear, concise, and logical manner, both orally and in writing, to technical and non-technical audiences.
- Ability to provide technical consultation to County public health department staff and local public/private sector partners.
- Ability to maintain confidentiality.
- Ability to attend meetings or perform other assignments at locations outside the office as necessary.

MINIMUM QUALIFICATIONS:

Experience: Six (6) years of experience as an Epidemiologist subsequent to receipt of a Masters Degree.

Education: Masters Degree in public health with four graduate courses in epidemiology and two graduate courses in biostatistics.

Equivalency: A Dr.P.H. or Ph.D in Public Health, including four graduate courses in epidemiology and two graduate courses in biostatistics, and four years of experience may be substituted.

LICENSE: None.

PROBATIONARY PERIOD:

Individuals appointed or promoted to this class will be required to serve a probationary period of six (6) months, during which time performance will be carefully evaluated. Continuation in this class will be contingent upon successful completion of the probationary period.

MEDICAL EXAM PROTOCOL: Medical History Review.

Class Established: June, 2005 March, 2007 April, 2007 August, 2013