

CLASSIFICATION NO: 509

Established: 3/03

Revised: 1/06, 8/11, 9/24 FLSA: Exempt

EEO: 2

EPIDEMIOLOGIST

CLASS CHARACTERISTICS

Under direction, to analyze reportable diseases, health status of populations, and data related to determinants of health; to serve as a data analysis consultant to other Division staff; to respond to and investigate communicable disease outbreaks; to respond to and investigate matters of short and long-term concern to Public Health Division leadership; and to do other work as required.

DISTINGUISHING CHARACTERISTICS

The Public Health Division within the Health, Housing and Human Services Department promotes and protects the health of County residents. The services include health care treatment and referral, outreach services, immunizations, prenatal care, family planning, nutrition education and counseling, migrant farm worker health care, emergency medical services, inspection and licensing of restaurants, monitoring communicable diseases, assessment of population health status, and policy development to promote community health.

The Epidemiologist is a significant contributor to the Division's ability to provide population based assessment and research activities. The Epidemiologist works closely with the Health Officer to provide research support, technical knowledge and science based theory to Division management and staff for the purpose of surveillance, assessment and research activities. Functional responsibilities include contributing to and participating in planning, developing, structuring and conducting health assessments, program evaluation studies, research and reports.

The Epidemiologist differs from the Epidemiologist, Senior which leads and coordinates the work of staff. It also differs from the Communicable Disease Registered Nurse which focuses on epidemiology, surveillance, and specialized communicable disease investigation and prevention, and case management treatment responsibilities.

TYPICAL TASKS

Duties may include but are not limited to the following:

- Analyzes reportable disease data; develops plan to respond to and investigate communicable disease outbreaks; travels to outbreak sites as needed; provides assistance in the development and implementation of epidemiologic response exercises; compiles, maintains, and provides analysis for health care; writes health status reports.
- 2. Conducts disease reporting, surveillance and quality assurance audits; researches community health and intervention needs and available resources; recommends program changes; recommends design and management of surveillance systems for problems of

public health importance.

- 3. Develops public health risk assessment models; makes recommendations for health policy changes based on findings from local epidemiologic studies and research.
- 4. 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; submits appropriate documentation for human subjects review.
- 5. Acts as project lead when assigned; develops project definitions; estimates time to complete projects; organizes staff and resources; trains interviewers, data collectors and data entry operators in support activities for the conduction of investigations, research activities, evaluations and assessments; conducts seminars and training in epidemiologic methodology and investigative techniques for health division staff, local practitioners and professional meetings; promotes cooperative team efforts among staff and with other County departments.
- 6. Prepares public health information releases in coordination with the health officer and management; provides public health data interpretation to the community and general public.
- 7. Prepares appropriate grant applications; acts as the principal investigator on grants received and develops opportunities for funded research.
- 8. Conducts community meetings and needs assessments; participates in statewide meetings; participates as a member of the Division's team to support and promote efficient tracking and analysis of data; conducts internal and community meetings.

REQUIRED KNOWLEDGE AND SKILLS

<u>Thorough Knowledge of</u>: Federal, state and local infectious disease reporting requirements; research methodology and sampling frames; general principles of toxicology, microbiology, genetics, and biology; different methodologies for data collections (quantitative and qualitative); data collection instrument development; analytic techniques to evaluate potential and relative risk.

<u>Working Knowledge of</u>: Scientific inquiry; epidemiologic study design, including prevalence surveys, case control and cohort studies, and population sampling techniques; advanced statistical measurement (linear, multiple and logistic regression, factor analysis and discriminant function analysis, and confidence intervals); a variety of software products including word processing, graphics design, spreadsheets, data bases and statistical packages; principles and practices of project management.

Skill to: Maintain confidentiality and adhere to the highest of ethical and moral standards in the conduction of a scientific inquiry process; establish and maintain effective working relationships with people of differing perspectives and disciplines in and out of the Division; work autonomously with little or no direct supervision in the development and implementation of a project; demonstrate use of sound judgment in determining when to seek additional help; confer with community professionals about issues of public health significance; communicate effectively, both orally and in writing; communicate detailed verbal and written presentations;

promote effective teamwork; develop, justify and ensure completion of project within budget, time and legal guidelines; coordinate and review work of assigned project staff.

WORKING CONDITIONS

This 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.

MINIMUM QUALIFICATIONS

Minimum qualifications are used as a guide for establishing the minimum experience, education, licensure, and/or certifications required for employment in the classification. The following minimum qualifications are established for this classification. Additional minimum qualifications and special conditions may apply to a specific position within this classification and will be stated on the job announcement.

Experience: A minimum of one (1) year of related experience that would provide the required knowledge and skills to perform the responsibilities of this position. Experience in applied epidemiology, communicable disease-related program management, and research in a public health environment is required. Applicants must have conducted epidemiologic investigations or scientific and social research in a public health area of concern.

Education: Master's degree from an accredited school of Public Health, with completed coursework in biostatistics, epidemiology, research methodology, behavioral science, environmental sciences, and health services administration.

Licenses/Certifications: None required.

PRE-EMPLOYMENT REQUIREMENTS

Must successfully pass a criminal history check which may include national or state fingerprint records check.

Edited: 4/17