

COUNTY OF SOLANO

EPIDEMIOLOGIST

DEFINITION

Plans, conducts, and evaluates epidemiological activities to determine patterns of disease and of the conditions that affect the health of the County or targeted populations; implements and coordinates local surveillance and research activities within the department; makes recommendations regarding programs and procedures for the control and prevention of disease and of the conditions that affect health; provides consult to the department, other divisions, community based organizations, other agencies and the public; publishes and disseminates information to interested parties and the public; serves as a member of the department's management team.

CLASS CHARACTERISTICS

This class is characterized by the responsibility for planning, conducting and evaluating epidemiological activities, including the coordination of activities and direction of staff involved with the field work, data collection, related support aspects, and the publication and dissemination of collected information. This class is distinguished from the Public Health Nurse Class in that the latter works in the community making home visits, conducting specialty clinics, promoting community health maintenance, and counseling in the detection, prevention, and control of disease.

SUPERVISION RECEIVED AND EXERCISED

Receives general direction from the Health Officer/Deputy Director of Health and Social Services.

Exercises no supervision.

EXAMPLES OF DUTIES –*Duties may include but are not limited to the following:*

Collects, reviews and evaluates data including case reports, health statistics, demographic information, vital statistics and laboratory results to identify epidemiological trends, locations and sources; coordinates data collection activities with other divisions of Health and Social Services and outside agencies.

Conducts and evaluates epidemiological activities including the determination of the methods, target populations and data collection techniques required for the evaluation of disease

patterns and general health conditions in the community; establishes and maintains surveillance systems to identify and monitor disease trends among various population groups.

Develops and implements statistical analysis methodologies to assess the health status of the community and to evaluate the effectiveness of departmental activities in improving community health indicators.

Analyzes morbidity and mortality reports, birth and death statistics, other community health indicators, program evaluation plans, workload and productivity factors, and service delivery systems.

Reviews findings of epidemiological investigations, interprets results, assesses risks of epidemics, communicable diseases or environmental hazards; advises departmental officials about potential or active epidemic trends, characteristics, possible causation and control procedures; serves as a resource and technical consultant on epidemiology to departmental officials, physicians, nurses and the public.

Prepares reports and analysis on community health indicators; prepares a variety of statistical reports, and narratives; prepares materials for presentation of epidemiological findings, including graphs, maps, slides or overheads; publishes documents, including journal articles to educate the County and scientific community; prepares scientific and technical papers, and participates in the development and preparation of project proposals for state, federal, and private funding.

Collects, evaluates, and maintains professional, technical, and scientific literature and reports relating to communicable disease for the purpose of keeping current with developments in the field and solving communicable disease problems.

Establishes and maintains effective working relationships with health professionals in the community such as physicians, veterinarians, nurses, laboratory personnel and representatives of other appropriate agencies in order to facilitate the reporting of communicable diseases and other reportable events.

Serves as a member of the County's epidemic/outbreak team; attends meetings to collaborate and plan strategies, provide expertise, network and help coordinate activities to improve the health of residents; participates in statewide epidemiological efforts to address health concerns; participates on various committees, study groups and task forces in the community; makes technical and informational presentations to professionals and the public.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

Knowledge of:

Principles and practices of epidemiology including design and evaluation of epidemiological research, theory, practice, and application of epidemiological methodologies.

Methods of preparation of scientific research reports.

Principles and methods of public health practice.

Principles and practices of statistics and its applications in epidemiological research and studies.

Computer data processing methods to generate, organize, and display statistical charts, graphs and other research data.

Current developments in epidemiology and general medicine.

Skill to:

Operate office equipment including a personal computer, copy and fax machines and printers.

Drive a motor vehicle.

Ability to:

Design, direct, and conduct epidemiological activities and research projects, evaluate results, and make conclusion.

Give an account of the epidemiology of community health disease and apply knowledge to the control of disease.

Evaluate clinical and preventive procedures.

Perform, direct, and coordinate the collection, analysis, interpretation, and evaluation of health data.

Identify and apply sophisticated statistical techniques.

Understand and apply the important uses of the computer in epidemiology.

Read epidemiological literature critically and identify possible sources of bias and error in published data.

Communicate clearly and concisely, both orally and in writing; use tact and persuasion in eliciting information, explaining, and advocating research objectives and methods.

Establish and maintain cooperative relationships with and between people in the department and in the community, both lay and professional.

Prepare scientific, technical reports and project proposals.

EXPERIENCE AND EDUCATION/TRAINING

Experience:

Two years of experience designing, conducting, analyzing, interpreting, and evaluating epidemiological studies with emphasis or specialization in epidemiology.

Education/Training:

A Master's degree is required from an accredited college or university, in epidemiology, public health or a health science field with emphasis or specialization in epidemiology. A doctoral degree (PhD) in epidemiology, public health or other related health science field may be substituted for one year of experience.

SPECIAL REQUIREMENTS

Possession of, or ability to obtain, a valid Class C California driver's license is required.

SUPPLEMENTAL INFORMATION

Independent travel is required.

Incumbents must be able to work in an environment which may include exposure to communicable disease.

Candidates for employment must as a condition of employment sign a statement agreeing to comply with Section 11166 of the California Penal Code relating to child abuse reporting.

ADA COMPLIANCE

Physical Ability: Tasks require the ability to exert moderate, though not constant physical effort, typically involving some combination of climbing and balancing, stooping, kneeling, crouching, and crawling, and which may involve some lifting, carrying, pushing and/or pulling of objects and materials of moderate weight (12-20 pounds).

Sensory Requirements: Requires the ability to recognize and identify similarities and differences between shade, degree or value of colors, shapes, sounds, forms, textures or physical appearance associated with job-related objects, materials, tasks or people.

Environmental Factors: Requires the ability to work under conditions where exposure to environmental factors poses a limited risk of minor injury or illness.

Director of Human Resources

Established Date: April 1997

Revised Date: November 2002

BOS Date: June 30, 2003

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