

# COUNTY OF SOLANO

## CLASS SPECIFICATION

### EPIDEMIOLOGIST

Effective Date: xx/xx/xxxx

Draft date 10/29/18

#### **CLASS SUMMARY:**

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.

**Deleted:** ; serves as a member of the department's management team

#### **DISTINGUISHING CHARACTERISTICS:**

This is the journey level of the Epidemiologist series.

This class is distinguished from the:

- Communicable Disease Investigator in that the Communicable Disease Investigator is a class which is engaged in carrying out part of the County's sexually transmitted and other communicable disease control programs;
- Epidemiologist (Senior), which is the advanced journey level classification in this series, and for which the Epidemiologist (Senior) provides direction and oversight to assigned staff and is responsible for more complex epidemiologic, surveillance and applied research activities.

#### **SUPERVISION RECEIVED AND EXERCISED:**

Supervision is provided by higher level staff in the Department of Health and Social Services.

Exercises no supervision.

**ESSENTIAL DUTIES:** This class specification represents the core area of responsibilities; specific position assignments will vary depending on the needs of the department.

- 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.

**Deleted:** 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.¶

**Deleted:** Receives general direction from

**Deleted:** the Health Officer/Deputy Director of

**Deleted:** **EXAMPLES OF DUTIES**

**Deleted:** Duties may include but are not limited to the following: ¶

• 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.

Formatted: Left, Indent: Left: 0.25", First line: 0", Bulleted + Level: 1 + Aligned at: 0.25" + Indent at: 0.5"

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

Deleted: methodologies

Formatted: Left, Indent: Left: 0.25", First line: 0", Bulleted + Level: 1 + Aligned at: 0.25" + Indent at: 0.5"

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

Formatted: Left, Indent: Left: 0.25", First line: 0", Bulleted + Level: 1 + Aligned at: 0.25" + Indent at: 0.5"

• 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.

Formatted: Left, Indent: Left: 0.25", First line: 0", Bulleted + Level: 1 + Aligned at: 0.25" + Indent at: 0.5"

• 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.

Formatted: Left, Indent: Left: 0.25", First line: 0", Bulleted + Level: 1 + Aligned at: 0.25" + Indent at: 0.5"

• 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.

Formatted: Left, Indent: Left: 0.25", First line: 0", Bulleted + Level: 1 + Aligned at: 0.25" + Indent at: 0.5"

• 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.

Formatted: Left, Indent: Left: 0.25", First line: 0", Bulleted + Level: 1 + Aligned at: 0.25" + Indent at: 0.5"

• 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.

Formatted: Left, Indent: Left: 0.25", First line: 0", Bulleted + Level: 1 + Aligned at: 0.25" + Indent at: 0.5"

## **EDUCATION AND/OR EXPERIENCE**

### 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.

Formatted: Left

## **AND**

### Experience:

- Two years of experience designing, conducting, analyzing, interpreting, and evaluating epidemiological studies with emphasis or specialization in epidemiology. A doctoral degree (PhD, DrPH or equivalent) in epidemiology, public health or other related health science field may be substituted for one year of experience.

Formatted: Left

## **LICENSING, CERTIFICATION AND SUPPLEMENTAL INFORMATION:**

Deleted: **SPECIAL REQUIREMENTS¶**

▼

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

Possession of, or ability to obtain, a valid Class C driver's license issued by the State of California

Deleted: ¶  
**SUPPLEMENTAL INFORMATION¶**

Independent travel is required.

Formatted: Left

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.

▼

## **REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:**

Deleted: Possession of, or ability to obtain, a valid Class C driver's license issued by the State of California¶

Deleted: **JOB RELATED AND ESSENTIAL QUALIFICATIONS¶**

### **Knowledge of:**

- Principles and practices of epidemiology
  - Design and evaluation of epidemiological research, theory, practice, and application of epidemiological methodologies

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

Formatted: Bulleted + Level: 1 + Aligned at: 0.25" + Indent at: 0.5"

Formatted: Bulleted + Level: 2 + Aligned at: 0.75" + Indent at: 1"

| Methods of preparation of scientific research reports.

| [Social determinants of health and root causes of health inequities.](#)

Principles and methods of public health practice.

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

| [Data](#) processing methods to generate, organize, and display statistical charts, graphs and other research data.

Deleted: Computer data

Current developments in epidemiology and general medicine.

| [Skill and/or Ability To:](#)

Deleted: Skill to:  
Ability to:

- Design, direct, and conduct epidemiological activities and research projects, evaluate results, and make conclusions.
- Give an account of the epidemiology of community health disease and apply knowledge to the control of diseases.
- 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 [technology](#) 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.

Deleted: the computer

- [Establish and maintain cooperative relationships with and between people in the department and in the community, both lay and professional.](#)

- [Perform a variety of technical and specialized tasks and functions in an independent, competent and timely manner.](#)

Formatted: List Paragraph, Indent: Left: 0.25", No bullets or numbering, Tab stops: Not at -0.75" + -0.5" + 0" + 0.13" + 0.44" + 0.75"

- Use modern office equipment to include computers and related software applications.
- Operate a motor vehicle.
- Travel independently

**Deleted:** Operate office equipment including a personal computer, copy and fax machines and printers

**Deleted:** Drive

**Formatted:** List Paragraph, Indent: Left: 0.25", No bullets or numbering

#### **PHYSICAL REQUIREMENTS:**

- Mobility and Dexterity: Positions in this class typically require stooping, kneeling, reaching, standing, walking, fingering, grasping, feeling (i.e. sense of touch), and repetitive motion.
- Lifting, Carrying, Pushing and Pulling -- Employees in this class will be exerting up to 20 pounds of force occasionally and/or up to 10 pounds of force frequently, and/or a negligible amount of force constantly to move objects.
- Vision: Positions in this class require the employee to have close visual acuity, with or without correction, to prepare and analyze data and figures, transcribe, view a computer terminal, read, etc. Positions in this class also requires employees to have depth perception in order to operate a motor vehicle.
- Hearing/Talking: Positions in this class require the employee to perceive the nature of sounds at normal speaking levels with or without correction, and have the ability to receive detailed information through oral communication. Positions in this class require the employee to express or exchange ideas by means of the spoken word.
- Requires the ability to work under conditions where exposure to environmental factors poses a limited risk of injury or illness.

**Deleted:** 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.¶

#### **WORKING CONDITIONS:**

- Employees in this class will most often be working in an office setting. However, incumbents will be required to conduct field work, especially during public health outbreaks. Incumbents are also required to go to community meetings and events as they relate to the essential functions of this classification. Employees in this class may be required to operate a vehicle and thus will be subject to traffic hazards while driving.

#### **OTHER REQUIREMENTS:**

- Background Checks: The County may conduct a background check and a reference check on candidates prior to appointment to a position within this class. The background check may include the State of California Department of Justice, the Federal Bureau of Investigation (FBI), the Child Abuse Central Index (CACI), and criminal checks in any City/County where the applicant has lived, worked or gone to school.

- Independent Travel: Incumbents are required to travel independently, for example, to perform work at other work sites, to attend meetings with other County employees, to attend meetings with community organizations, etc.
- Hours of Work: Incumbents may be required to work weekends, holidays, irregular hours, on-call during declared public health emergencies, and after normal business hours.
- Child Abuse Reporting: Selectees 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.

**CLASS HISTORY AND CLASS INFORMATION:**

- Date Approved by the Civil Service Commission: April 1997
- Date(s) Revised: November 2002,
- Date(s) Retitled and Previous Titles of the Class: N/A
- Class Code: 3333170