

**EPIDEMIOLOGIST**

**DEFINITION**

Under general supervision, conducts epidemiological studies of occurrences of communicable diseases among residents of Plumas County. Collects, compiles, analyzes and evaluates data to assess the health status of the general population and specific demographic groups; explain the etiology of diseases; predict the occurrence of communicable diseases; and develop plans and strategies to control and /or contain the distribution of communicable diseases. Analyze the occurrence of communicable and chronic diseases, injuries, and mortality among residents of Plumas County; conduct epidemiological studies of disease occurrence; maintain surveillance of communicable diseases and other health conditions.

**DISTINGUISHING**

Primary responsibilities include investigating reported cases, outbreaks and epidemics of communicable and chronic diseases, collects and compiles epidemiological data and maintains databases, selects methods and conducts statistical and quantitative analysis for identification and prediction purposes, to identify and assess health care and health education needs, and to develop plans to extend services to underserved populations, prepares and delivers reports and presentations, and performs other duties as assigned.

**REPORTS TO**

Department Head, Assistant Director, or as otherwise assigned by Department Head.

**CLASSIFICATIONS DIRECTLY SUPERVISED**

None

## **EPIDEMIOLOGIST - 2**

### **EXAMPLES OF DUTIES**

- Investigates reported cases, outbreaks, and epidemics of communicable and chronic diseases.
- Designs, develops, and administers questionnaires and other instruments to obtain epidemiological data.
- Collects and compiles epidemiological data and develops and maintains epidemiological databases.
- Selects appropriate methods of statistical and quantitative analysis to identify demographic, geographic, cultural and other variables linked to the incidence of communicable and chronic diseases; to identify sources of exposure and disease transmission; and to predict the probability of future occurrences of disease.
- Develops and implements protocols for specimen collection and laboratory analysis, ensuring compliance with procedures to prevent contamination of specimen and maintain compliance with MIOSHA standards for occupational health and safety.
- Participates in the development of programs and strategies to control and contain the incidence of communicable diseases in the general public and among high-risk populations, and to prevent further disease transmission and future outbreaks.
- Consult and collaborate with program staff to provide epidemiologic data and analysis.
- Identifies and assesses health care and health education needs of current and underserved client populations and develops plans to extend services to underserved and under-served populations.
- Identifies potential sources of funding for programs and services and develops funding proposals for submission to public and private funding agencies.
- Prepares and delivers reports and presentations to community agencies and community groups, funding agencies, Plumas County Board of Supervisors, and other internal and external constituencies.
- Timely submission of reporting requirements for assigned projects and program areas, including for agency-wide plans such as the Strategic Plan and Accreditation Reports.
- Participation in community events and agency initiatives and projects as assigned by agency or division leadership or direct supervisor, such as QI projects, Reaccreditation activities, staff trainings, vaccination clinics, and community events where agency is represented.
- Frequent contact with various officials, boards, subcommittees, agencies, professional organizations, program staff and the general public related to the incidence, control and prevention of communicable diseases, to provide requested information and present proposals for approval, to exchange information, to monitor quality assurance and occupational health and safety practices and procedures, to provide notification of disease outbreaks and publicize recommended behaviors and practices to avoid exposure to and transmission of communicable diseases, and to participate in continuing education and maintain current knowledge of professional practices.
- Performs other related duties as assigned.

## **EPIDEMIOLOGIST - 3**

### **TYPICAL PHYSICAL REQUIREMENTS**

Sit for extended periods; frequently stand and walk; normal manual dexterity and eye hand coordination; lift and move objects weighing up to 25 pounds; corrected hearing and vision to normal range; verbal communication; use of office equipment including computers, telephones, calculators, and copiers.

### **TYPICAL WORKING CONDITIONS**

Work is usually performed in an office environment; continuous use of computers and electronic equipment; regular contact with staff.

### **DESIRABLE QUALIFICATIONS**

#### **Knowledge of:**

- Thorough working knowledge of principles and practices of epidemiology.
- Thorough working knowledge of the etiology of communicable and chronic diseases.
- Thorough working knowledge of the theoretical and applied statistics and quantitative analysis and statistical methods used in epidemiological studies.
- Thorough working knowledge of the principles and practices of research design.
- Descriptive epidemiology and risk factors of major causes of morbidity and mortality.
- Modes of transmission and epidemiological features of major infectious diseases
- Epidemiological trends and patterns, their characteristics, and possible causation
- Designs and statistical methods used in epidemiological studies.
- Principles and practices of public health surveillance
- Methods of disease outbreak investigation
- Availability and uses of health, demographic, and environmental data
- Computer programming and processing methods to generate, organize, and display complex statistical and other research data.
- Laws, regulations, and policies related to data privacy.
- Maintain Health Insurance Portability and Accountability Act of 1996 (HIPAA)
- Computer-based statistics, graphics, and database software

#### **Ability to:**

- Create, manage, and document health and demographic datasets.
- Select and apply appropriate statistical methods for analysis of public health data.
- Conduct epidemiologic studies using appropriate designs and analytical methods.
- Identify, retrieve, and critically evaluate epidemiologic reports and data.
- Effectively communicate research methods and findings orally and in writing.
- Create numerical and graphical displays of epidemiological and statistical data.
- Work effectively as a member of a multidisciplinary team.
- Advise management and program staff on matters related to epidemiology and statistics.
- Ability to interact positively and professionally with all populations.
- Excellent oral and written communication skills.

## **EPIDEMIOLOGIST - 4**

### **TRAINING AND EXPERIENCE**

#### **Required Qualifications:**

A Master's degree from an accredited college or university in Public Health, Epidemiology, Bio-medical Statistics, or a closely related field. One (1) year of demonstrably successful experience in the design, development and conduct of epidemiological studies; or an equivalent combination of education and experience, is preferred.

#### **OR**

A Bachelor's degree in a relevant field, such as Public Health, Biostatistics, Informatics, or Demography,

#### **AND**

Two (2) or more years of more professional epidemiological experience in a local, state, federal, or international public health agency.

#### **Special Requirements:**

Must possess a valid driver's license at time of application and a valid California Driver's License by the time of appointment. The valid California License must be maintained throughout employment.

All County of Plumas employees are designated Disaster Service Workers through state law (California Government Code Section 3100-3109). Employment with Plumas County requires the affirmation of a loyalty oath to this effect. Employees are required to complete all Disaster Service Work related training as assigned, and to return to work as ordered in the event of an emergency.