



EMPLOYMENT OPPORTUNITY

CLASS: 2803 **TITLE: EPIDEMIOLOGIST II**
(jw2)

SALARY: \$ 3,005 - \$ 3,653 Biweekly

DEADLINE: Open Until Filled
POSTED: September 11, 2009

JOB DESCRIPTION:

The Department of Public Health's **Environmental Health Section (EH)** is accepting applications for **one (1) full-time** position in class 2803 Epidemiologist II. **SHIFT:** Monday – Friday, Day shift. May include evening hours and weekends/holidays.

This is a time limited position, for which funding is secured through June 30, 2011.

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

Appointment Type: Permanent and Provisional applicants encouraged to apply. Provisional applicants must participate in a Civil Service examination for this job classification to become permanent.

ESSENTIAL DUTIES:

Under the supervision of the Senior Epidemiologist, the Epidemiologist II will identify and develop partnerships with health care provider institutions for implementation of a rapid query system for syndromic case finding. In collaboration with participating hospitals and health system partners, the Epidemiologist II will develop the query systems, devise protocols and methods for running queries, exercise the query systems, analyze performance, and develop guidance for developing data sharing agreements with partners. Data analysis will include testing sensitivity and specificity of chief complaints or admission diagnosis search strategies to detect diseases or conditions that may be caused by drinking water contamination.

The essential job functions include the following:

- Identify and develop partnerships with health care provider institutions for implementation of a rapid query system for syndromic case finding. Develop data sharing agreements with partners;
- Evaluate existing hospital and health system databases and data sources for usefulness in case finding for disease outbreaks and waterborne contamination;
- Design, implement, and test a rapid query system for hospital admissions or emergency care encounters. Collaborate with the Communicable Disease Control Program to identify appropriate data elements for the query system. Work with IT specialists to plan and implement secure electronic transmission of data;
- In collaboration with the Communicable Disease Control Program, develop pre-event queries that can be used in likely waterborne contamination events to identify cases that seek medical care;
- Evaluate quality of incoming electronic data obtained from the query system for completeness,

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timeliness, and accuracy;

- Evaluate system performance, including sensitivity and specificity of chief complaint or admission diagnosis search strategies to detect diseases or conditions that may be caused by drinking water contamination, using medical record review and other methods;
- Collaborate with Communicable Disease Control program to investigate outbreaks and test the query system;
- In collaboration with Communicable Disease Control program epidemiologists, develop protocols for data management, sharing, storage, and analysis during the response to a waterborne disease outbreak;
- Develop and implement data collection protocols for waterborne outbreak investigations and epidemiologic studies; develop and implement survey instruments for outbreak investigations and epidemiologic studies;
- Develop and implement relational database management systems for outbreak investigations and epidemiologic studies;
- Participate in and coordinate multidisciplinary project meetings. Communicate frequently with partners to share project decisions and status updates;
- Provide technical support to complete all tasks associated with the Public Health Surveillance Component of the EPA Water Security Initiative grant;
- Participate in local, state, and national conferences related to the Public Health Component of the Water Security Initiative; attend research meetings and participate in continuing education seminars;
- Publish and/or disseminate research and investigation findings. Activities include: preparation of reports for local distribution; preparation of manuscripts for local distribution; preparation of manuscripts for submission to scientific peer-reviewed journals; critically review manuscripts, reports, and research protocols; present research findings at local, state, and national conferences and meetings;
- Perform other related duties as assigned/required.

MINIMUM QUALIFICATIONS:

1. Completion of a master's degree program at an accredited college or university in Epidemiology **OR** related field that includes a minimum of two (2) graduate level courses in Epidemiology or two (2) comparable graduate level classes in advanced research methodology **AND** two graduate level courses in statistics or biostatistics; **AND** one (1) year of experience within the field of Epidemiology performing study design, implementation or analysis; **OR**
2. Completion of a master's degree program at an accredited college or university **AND** four (4) years of experience within the field of Epidemiology performing study design, implementation or analysis.

Verification/Waiver: Verification of qualifying experience, education, and/or training is required at the time of filing. Candidates unable to do so may submit a letter requesting a waiver of this requirement indicating the reason(s) verification cannot be obtained. Failure to submit verification or request for waiver will result in application rejection.

DESIRED QUALIFICATION(S):

- Knowledge of principles, theories, and procedures of epidemiology, including design and evaluation of epidemiology research and methods of collecting and analyzing data. Knowledge of principles and methods of demography, biostatistics and database systems;
- Five (5) or more years of public health work experience in the practice and application of epidemiologic and analytical methods used in infectious and waterborne disease epidemiology and of methods appropriate to collection and analysis of infectious disease data from field outbreak investigations and surveillance;
- Experience in using the statistical software packages SAS and STATA and spreadsheets to analyze and

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- present data; interpretation of complex epidemiologic analyses; and graphical presentation of data;
- Knowledge of public health surveillance methods and systems. Knowledge of planning and design principles and evaluation methods for public health surveillance systems;
- Ability to apply statistical algorithms to surveillance data to detect aberrations in patterns of disease and to interpret results;
- Experience in designing, developing, and maintaining relational database systems for disease surveillance, case and contact management;
- Experience in developing large databases;
- Familiarity with Public Health Information Network data standards such as Health Level 7 protocols and SNOMED coding schemes;
- Experience using Structured Query Language in relational database systems such as Microsoft Access or MySQL to retrieve data;
- Ability to write proposals and technical reports;
- Ability to create and maintain effective relationships with coworkers, research organizations, community groups, etc.;
- Ability to communicate clearly and effectively both verbally and in writing and to establish and maintain effective relationships with a wide variety of colleagues, supervisors, IT vendors, the general public, and other stakeholders;
- Ability to function independently.

APPLICATION PROCEDURE:

Interested individuals must submit a resume and [City and County of San Francisco \(CCSF\) employment application](#) to **June Weintraub, Sc.D., San Francisco Department of Public Health Environmental Health, 1390 Market Street, Suite 910, San Francisco, CA 94102 june.weintraub@sfdph.org. Open Until Filled.** CCSF employment applications may be obtained from DPH Human Resources Services, 101 Grove Street, Room 210, SFGH Human Resource Services, 2789 – 25th Street, LHH Human Resource Services, 375 Laguna Honda Boulevard, or at the site listed below. Applicants with disabilities requiring reasonable accommodation during the interview process may contact the person/department listed. www.sfdph.org

**PLEASE NOTE: APPLICANTS MEETING THE MINIMUM QUALIFICATIONS
ARE NOT GUARANTEED AN INTERVIEW**

*The Department of Public Health is an Equal Opportunity Employer
Women, Minorities, and Persons with Disabilities are encouraged to apply*