

**MENDOCINO COUNTY GOVERNMENT
CLASS SPECIFICATION**

CLASS TITLE: PUBLIC HEALTH MICROBIOLOGIST
DEPARTMENT: PUBLIC HEALTH LABORATORY
REPORTS TO: LABORATORY DIRECTOR

CLASS CODE: 45836
FLSA STATUS: N
DATE: 11/03

JOB SUMMARY AND DISTINGUISHING FEATURES:

Under general supervision, performs specialized and routine microbiological, chemical, serological and other tests in the Public Health Laboratory for the detection of disease-causing microorganisms in human body fluids, food, water, and animal tissues; analyzes laboratory data, prepares reports, performs proficiency testing and quality control procedures, and maintains laboratory equipment; and performs related duties as assigned.

SUPERVISION EXERCISED

Exercises no supervision. May provide training and work oversight to other ancillary staff.

ESSENTIAL JOB FUNCTIONS: *(This class specification may not include all the duties listed, nor do the examples cover all the duties that may be performed.)*

Complete difficult and routine microbiological examinations by administering enzyme immunoassay and/or other testing methods to qualitatively detect and identify microbial agents to assist in the detection, definition and control of disease.

Complete difficult and routine serological examinations to assist in the detection, definition and control of disease.

Prepare or direct the preparation of stains, culture media and reagents used in diagnostic procedures to ensure the integrity of the diagnostic testing.

Train ancillary staff in job skills by overseeing the work performed and by instructing staff in proper laboratory methods and techniques; report problems to supervisor.

Analyze and interpret laboratory data to verify the integrity of the testing procedures used; keep records and make reports.

Incorporate new diagnostic procedures and apparatus into the laboratory's repertoire by authenticating reliability through the completion of varied and specialized trials using parallel procedures in order to meet and maintain CLIA certification.

Use a personal computer and various software programs by entering and manipulating data to produce testing results, created worksheets and reports.

Participate in proficiency testing programs and perform quality control/assurance procedures to ensure that test results are valid and that the CLIA certificate of compliance is maintained for the facility.

Maintain adequate inventory by determining necessary standing stock levels in order to adjust and replenish stock, which supports public health laboratory activities.

Perform preventive maintenance of laboratory equipment including changing filters, cleaning/sterilizing instruments and calibrating temperature gauges to maintain the integrity of testing results.

MATERIAL AND EQUIPMENT USED:

Vironostika Sample Processor	GenProbe Leader Luminometer	Rotator for RPRs
ELX 800 Plate Reader	CO ₂ Measuring Device	Pipettes and Dispensing Devices
Dissecting Microscope	Refrigerated Centrifuge	Light Microscope/Fluorescent
Microscope		
Incubators	Freezers	Biological Safety Cabinet
Gas Bunsen Burners	Bacti Cinerator	Refrigerators

MINIMUM QUALIFICATIONS REQUIRED: *(A combination of education, experience and training that would provide the same or an equivalent set of knowledge, skills, and abilities. Typical qualifying experience would be:)*

Education and Experience:

One year experience in an approved Public Health Laboratory; or,

Any combination of education, training and experience which provides the required knowledge, skills, and abilities to perform the essential functions of the job.

Licenses and Certifications:

Certification as a Public Health Microbiologist in the state of California.

KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of:

Bacteriological, serological, mycological, parasitological and other microbiological principles, techniques, equipment and terminology used in the laboratory diagnosis of disease.

Applicable state, federal and local ordinances, laws, rules and regulations.

Methods and techniques of research, statistical analysis and report presentation.

All computer applications and hardware related to performance of the essential functions of the job.

Sterile techniques and the consequences of contaminations on safety and accuracy in the laboratory.

Protocols for blood-borne and other pathogens.

Ability and Skill to:

Prepare clear and concise reports, correspondence and other written materials.

Research, compile, and summarize a variety of informational and statistical data and materials.

Apply logical thinking to solve problems or accomplish tasks.

Understand, interpret and communicate complicated policies, procedures and protocols.

Organize work, set priorities and follow up on assignments with a minimum of direction.

Use initiative and independent judgment within established guidelines.

Perform public health laboratory tests, observing proper safety precautions while adhering to established protocols.

Train ancillary staff in area of assignment.

Accurately compute fractions, percentages, ratios and proportions.

Operate laboratory equipment and tools.

Speak effectively and respond to questions, tailoring the message to the target audience.

Communicate clearly and effectively, both orally and in writing, using tact and discretion, as circumstances require.

Establish and maintain effective working relationships with those encountered in the course of work.

Working Conditions: *(Essential duties require the following physical skills and work environment.)*

While performing the duties of this position, the employee is required to regularly speak, listen, smell, exercise shape perception and discrimination, color perception, sound perception, texture perception and discrimination.

While performing the duties of this position, the employee is frequently required to sit, stand, walk, use fingers and hands, handle and/or feel objects, tools and/or controls, reach with hands and arms.

While performing the duties of this position, the employee may be required to lift and/or move objects weighing up to 50 pounds.

While performing the duties of this position, the employee works indoors.

While performing the duties of this position, the employee is exposed to moving mechanical parts of equipment, tools or machinery.

While performing the duties of this position, the employee is exposed to fumes, toxic or caustic chemicals and infectious diseases.

While performing the duties of this position, the employee is exposed to fluctuating temperatures due to laboratory environment requirements.

The noise level while performing these duties is generally loud due to the variety of laboratory equipment in use.