



CLASSIFICATION NO. 658
Established: 3/18
FLSA: Exempt
EEO: 2

PUBLIC HEALTH DATA ANALYST

CLASS CHARACTERISTICS

Under direction, to develop and lead the implementation of geo-spatial research and databases in order to collect disease and health outcome data; to conduct comprehensive research and spatial analysis of public health and demographic data; and to do other work as required.

DISTINGUISHING CHARACTERISTICS

The Public Health Division within the Department of Health, Housing and Human Services promotes and protects the health of County residents through population-based programs and services. These include immunizations, prenatal care and family planning services provided in conjunction with the County's Federally Qualified Health Clinics (FQHC). Other services include nutrition education and support through WIC, emergency planning and response, vital records, community engagement to identify and address health problems, communicable disease control, and food safety measures.

The Public Health Data Analyst is a stand-alone classification within Public Health which develops and implements the geo-spatial research agenda. Incumbents are responsible for using, developing, and interpreting databases to analyze public health data and trends for use in program and policy decision making. The Public Health Data Analyst also provides a variety of advanced level professional data analysis and report writing and may coordinate the work of a project team as it relates to geo-spatial research and analysis.

The Public Health Data Analyst differs from the Epidemiologist which does field investigatory research and also differs from the Epidemiologist series which investigates communicable disease outbreaks and participates in program planning and policy development for the communicable disease program.

TYPICAL TASKS

Duties may include but are not limited to the following:

1. Develops and implements of geo-spatial research to identify and apply spatial analysis; creates spatial analysis outputs, data management, and validation by leveraging and extrapolating diverse sets of data for use in program and policy decision making; creates new data where needed using informatics approaches to enhance public health surveillance and practice; conducts reproducible statistical analyses in the R language, including extensive use of geospatial tool.
2. Designs and maintains databases that link existing public health data; leads the development of mapping digital surveillance capacity of the Public Health Division using a wide range of sources including digital epidemiological approaches, community-produced

data, environment indicators, health related geographic coordinates, and other sources; enhances existing traditional and digital surveillance to gather, display, and manipulate geographic imagery.

3. Coordinates and facilitates work related to public health informatics and population health epidemiology; assesses needs of the team and works with management to obtain resources; provides guidance to program staff on how to integrate informatics and spatial analysis tools in disease and population health surveillance, emergency response, public health programs and interventions, social determinants of health, program, and policy activities; provides oversight of data management and data processing to ensure high quality data across division; may lead the work of division staff, assign daily tasks; leads daily huddles.
4. Leads quality improvement work using Lean process improvement techniques; incorporates feedback and resources and modifies as needed operating procedures for all surveillance, identification, response, and surge activities; ensures compliance with professional standards.
5. Organizes and documents findings; writes clear and concise report narratives, statistical summaries, and spatial data analysis for internal and external stakeholders, including Board of County Commissioners; makes oral presentations to diverse audiences.
6. In coordination with the Technology Services Department, evaluates new software and recommends implementation strategies; researches changes, trends, and technologies related to the needs of Public Health.

REQUIRED KNOWLEDGE AND SKILLS

Thorough knowledge of: Management of data from surveillance, investigations, or other sources; applying informatics to public health to create and manage large datasets; principles, methods, and procedures of epidemiology, biostatistics, surveillance, and sanitation; causes, prevention, and early detection of infectious and preventable diseases; epidemiological assessment and analysis; analytic techniques to evaluate potential and relative risk; advanced statistical measurement (linear, multiple, and logistic regression, factor analysis, and discriminant function analysis, and confidence intervals);

Working knowledge of: Federal, State, and local statutes applicable to control of preventable diseases; analysis of data from an epidemiologic investigation or study; analysis summaries and conclusions; scientific inquiry; principles of ethical and legal practice to Public Health work; clear and effective communication in oral and written form at all levels of the organization and in community settings; computer hardware and systems software in supporting application systems; a variety of software products including Python, R, ArcGIS or equivalent GIS application, SAS or similar application; research methods.

Skill to: Establish and maintain effective working relationships with people of differing perspectives and disciplines in and out of the Division; apply informatics to public health issues; operate informatics, GIS, epidemiology, and statistical computer software and data collection methods; plan, coordinate and oversee the work of professional, technical, and clerical support staff; work autonomously with little or no direct supervision in the development and implementation of a project; confer with community professionals about issues of public health significance; communicate effectively, both orally and in writing; prepare and deliver reports and

presentations to the public, community groups, management and peers, and other health professionals; promote effective teamwork; develop, justify and ensure completion of project within budget, time and legal guidelines; coordinate and review work of assigned project staff; operate computer software and other office equipment.

MINIMUM QUALIFICATIONS

Minimum qualifications are used as a guide for establishing the minimum experience, education, licensure, and/or certifications required for employment in the classification. The following minimum qualifications are established for this classification. Additional minimum qualifications and special conditions may apply to a specific position within this classification and will be stated on the job announcement.

Experience: A minimum of three (3) years of related experience that would provide the required knowledge and skills to perform the responsibilities of this position.

Licenses/Certifications: None Required.

PRE-EMPLOYMENT REQUIREMENTS

Must successfully pass a criminal history check which may include national or state fingerprint records check.

Must pass a pre-employment drug test.

Driving may be necessary for County business. For position(s) with occasional/incidental driving, incumbents must possess a valid driver's license. Accommodation requests for an acceptable alternative method of transportation will be reviewed on an individual basis in compliance with State and Federal legislation. For position(s) with regular driving, incumbent(s) must also possess and maintain an acceptable driving record throughout the course of employment.