CLASS TITLE: EPIDEMIOLOGIST III

CHARACTERISTICS OF THE CLASS

Under general supervision, performs senior-level research and analyses of epidemiological data and recommends intervention measures for the cause and control of diseases affecting the Chicago area, and performs related duties as required

ESSENTIAL DUTIES

- Designs surveys for the collection of epidemiological data
- Analyzes surveillance data to track the cause, effect, and course of epidemics (e.g., prevalence, incidence, time trends, risk factors on various populations)
- Uses various software programs (e.g., SAS) to generate complex data summaries, tables, charts, and graphic displays or to perform difficult manipulation of data
- Researches epidemiological literature to obtain information for inclusion in reports and studies recommending methods for reducing morbidity and mortality rates
- Develops and formulates procedures for validating the integrity of data and establishing and modifying databases used to document research
- Identifies new causes and risk factors associated with morbidity and mortality, conducting special studies and researching information from local health agencies
- Evaluates disease intervention programs and recommends program changes to reduce incidents of morbidity and mortality
- Works with City departments to create and maintain shared databases on health-related issues
- Identifies and applies for public health research grants
- Responds to requests for epidemiological data as required
- Monitors the timely collection of data from department clinics (e.g., real-time death surveillance using vital records data), as needed

NOTE: *The list of essential duties is not intended to be inclusive; there may be other duties that are essential to particular positions within the class.*

MINIMUM QUALIFICATIONS

Education, Training, and Experience

- Graduation from an accredited college or university with a Master's degree in Public Health, Statistics, Mathematics, or a directly related field, plus four years of experience performing epidemiological and statistical analysis work.

Licensure, Certification, or Other Qualifications

- None

WORKING CONDITIONS

- General office environment

EQUIPMENT

- Standard office equipment (e.g., telephone, printer, photocopier, fax machine, calculator)
- Computers and peripheral equipment (e.g. personal computer, computer terminals, hand-held computers, scanner)

PHYSICAL REQUIREMENTS

- Ability to operate a personal computer and related equipment

KNOWLEDGE, SKILLS, ABILITIES, AND OTHER WORK REQUIREMENTS

Knowledge

Considerable knowledge of:

- *statistical computer software packages and applications
- *epidemiological research and analytical practices and procedures

Moderate knowledge of:

- applicable federal, state, and local laws, regulations, and guidelines
- medical terminology
- human development and disease theory

Some knowledge of:

- public health care trends, issues, programs, and services
- medical conditions, treatments, standards, and procedures

Other knowledge as required for successful performance in the Epidemiologist class series

Skills

- ACTIVE LEARNING - Understand the implications of new information for both current and future problem-solving and decision-making
- ACTIVE LISTENING - Give full attention to what other people are saying, taking time to understand the points being made, ask questions as appropriate, and not interrupt at inappropriate times
- MATHEMATICS - Use mathematics to solve problems
- PROGRAMMING - Write computer programs using applicable software and computer languages to facilitate analyses of data

Other skills as required for successful performance in the Epidemiologist class series

Abilities

- COMPREHEND ORAL INFORMATION - Listen to and understand information and ideas presented through spoken words and sentences
- SPEAK - Communicate information and ideas in speaking so others will understand
- COMPREHEND WRITTEN INFORMATION - Read and understand information and ideas presented in writing
- WRITE - Communicate information and ideas in writing so others will understand
- REASON TO SOLVE PROBLEMS - Apply general rules to specific problems to produce answers that make sense

- REASON MATHEMATICALLY - Choose the right mathematical methods or formulas to solve a problem
- REACH CONCLUSIONS - Combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events)

Other abilities as required for successful performance in the Epidemiologist class series

Other Work Requirements

- INITIATIVE - Demonstrate willingness to take on job challenges
- DEPENDABILITY - Demonstrate reliability, responsibility, and dependability and fulfill obligations
- ATTENTION TO DETAIL - Pay careful attention to detail and thoroughness in completing work tasks
- ANALYTICAL THINKING - Analyze information and using logic to address work or job issues and problems

Other characteristics as required for successful performance in the Epidemiologist class series

All employees of the City of Chicago must demonstrate commitment to and compliance with applicable state and federal laws, and City ordinances and rules; the City's Ethics standards; and other City policies and procedures.

The City of Chicago will consider equivalent foreign degrees, accreditations, and credentials in evaluating qualifications.

* May be required at entry.

City of Chicago
Department of Human Resources
June, 2009