

Iowa Department of Administrative Services – Human Resources Enterprise
Job Classification Description

State Epidemiologist

Definition

Within the Department of Health and Human Services, provides epidemiological direction and oversight, policy recommendations, and representation to the media for all areas under the direction of the State Medical Director; analyzes and prepares statistical data and reports to describe the health status of Iowans; establishes the vision and leadership for agency epidemiologist in applying epidemiological principles to program-level work; performs related work as required.

The work examples and competencies listed below are for illustrative purposes only and not intended to be the primary basis for position classification decisions.

Work Examples

Leads state epidemiology efforts to prevent, surveil, investigate, and control communicable and chronic diseases and other health-related conditions by planning, monitoring, and providing technical assistance to agency epidemiologists.

Collects, analyzes, and interprets epidemiological data to make policy/programmatic recommendations and to plan, evaluate, and determine state epidemiology program needs, priorities, and effectiveness.

Evaluates procedures used in programs in order to revise present programs and develop new initiatives to increase program effectiveness by reviewing program data and conducting assessments.

Coordinates epidemiological and outbreak investigation activities with other units of the Department to provide epidemiological technical expertise, coordination, and leadership.

Explains the agency's epidemiology goals and objectives to promote and educate on disease prevention and control by talking to officials of public agencies and private entities.

Coordinates the development of epidemiology instructional materials for public health practice and by providing advice and direction as required.

Performs public relations activities by preparing and giving risk communication data and information to partners, the public, and media.

Represents the Department by attending seminars, conferences, and other meetings, and by giving speeches to discuss agency epidemiology efforts and to gain knowledge useful to developing improved epidemiology programs for the State of Iowa.

Makes data release decisions that involve the balance of confidentiality risks versus public health benefits, particularly for small counts of events and in small geographic areas. This includes assisting with interpretation and implementation of state and federal confidentiality laws and Department confidentiality guidelines.

Serves on committees to provide technical assistance and recommendations for use and sharing of public health data in surveillance and research.

Competencies Required

Knowledge:

- Administration and Management – Business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.
- English Language – The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Mathematics – Arithmetic, algebra, geometry, calculus, statistics, and their applications.
- Medicine and Dentistry – The information and techniques needed to diagnose and treat human injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures.
- Biology – Plant and animal organisms, their tissues, cells, functions, interdependencies, and interactions with each other and the environment.
- Sociology and Anthropology – Group behavior and dynamics, societal trends and influences, human migrations, ethnicity, cultures and their history and origins.
- Education and Training – Principles and methods for curriculum and training design, teaching and instruction for individuals and groups, and the measurement of training effects.

Abilities:

- Problem Sensitivity – Tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
- Deductive Reasoning – Apply general rules to specific problems to produce answers that make sense.
- Inductive Reasoning – Combine pieces of information to form general rules or conclusions.
- Oral Comprehension – Listen to and understand information and ideas presented through spoken words and sentences.
- Written Comprehension – Read and understand information and ideas presented in writing.
- Oral Expression – Communicate information and ideas in speaking so others will understand.
- Written Expression – Communicate information and ideas in writing so others will understand.
- Originality – Come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem.
- Mathematical Reasoning – Choose the right mathematical methods or formulas to solve a problem.

Skills:

- Science – Using scientific rules and methods to solve problems.
- Critical Thinking – Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- Active Learning – Understanding the implications of new information for both current and future problem-solving and decision-making.

- Reading Comprehension – Understanding written sentences and paragraphs in work related documents.
- Judgment and Decision Making – Considering the relative costs and benefits of potential actions to choose the most appropriate one.
- Writing – Communicating effectively in writing as appropriate for the needs of the audience.
- Speaking – Talking to others to convey information effectively.
- Management of Personnel Resources – Motivating, developing, and directing people as they work, identifying the best people for the job.
- Systems Analysis – Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes.
- Systems Evaluation – Identifying measures or indicators of system performance and the actions needed to improve or correct performance, relative to the goals of the system.

Minimum Qualification Requirements

Applicants must meet all of the following minimum requirements to qualify for positions in this job classification:

- 1) Graduation from an accredited college or university with a doctorate degree in public health, epidemiology, philosophy, medicine, or veterinary medicine; and
- 2) Graduation from an accredited college or university with a graduate degree in public health with a focus on epidemiology; and
- 3) Either of the following (a or b):
 - a. Completion of Epidemic Intelligence Service (EIS) or equivalent training; or
 - b. Six years of experience in applied epidemiology in an infectious, noninfectious, or chronic diseases; environmental poisonings or conditions; injury prevention; or a substance use related epidemiology program.

Effective date: 04/23 SA