

Click one of these links to see the Job Description for that class:

Job Code	Title
H74941	Epidemiologist I
H74942	Epidemiologist II
V74943	Epidemiologist III

EPIDEMIOLOGY SERIES

H74941 - H74942 - V74943

DESCRIPTION OF OCCUPATIONAL WORK

Positions in the Epidemiology Series perform investigative and analytical epidemiologic activities related to surveillance, detection, and prevention of diseases and injuries. This series includes three levels and encompasses varying levels of responsibility in designing, developing, integrating, implementing, and conducting epidemiological surveillance studies.

Epidemiologist I

H74941

DISTINGUISHING CHARACTERISTICS: (A position is assigned to this class based on the scope and level of work performed as outlined below.)

Under immediate supervision, positions at this level are assigned entry-level responsibility to design, develop, integrate, implement, and conduct epidemiological surveillance studies. Positions at this level take direction from a senior-experienced epidemiologist. Additionally, positions at this level assists and supports other program staff to complete state required activities, grant deliverables, and assist in the writing of grant applications.

EXAMPLES OF WORK: (A position may not be assigned all the duties listed, nor do the listed examples include all the duties that may be assigned.)

Conducts routine epidemiologic functions of surveillance, data collection, data analysis, and assistance in epidemiologic investigations.

Assists with outbreak or disease outcomes response – includes case investigations, contact tracing, working with external individuals, reviewing datasets.

Assists in the onsite reviews of facilities and procedures.

Interviews patients, health care providers, and others involved.

Assists in the collection of data from local agencies or other health entities.

Uses main data set and generates basic surveillance data (demographic frequencies, other basis statistics).

Performs data review and analysis – uses main data set in analysis, provides basic findings to senior epidemiologist roles, implements new or revises statistical analysis code, and supports evaluation efforts.

Provides basic statistical analysis on up to 3 datasets and provides basic data management skills including data cleaning, standardization, and secure storage of the data. Has basic understanding and coding skill of statistical analysis software, such as R, SQL, SAS, STATA.

Conducts literature reviews and assists in the preparation of reports from analysis of data, literature reviews, and other health and scientific information.

Assists in grant writing or reporting to grants- includes participating in writing grant applications and other funding proposals.

Participates in pulling data and resources together for grant applications. For regular reporting to grantors or funders, pulls basic data elements together, and drafts sections of reports.

Provides basic education of grant or program topics area to community members.

Takes direction of grant activities and deliverables from senior epidemiologist and implements activities. Activities may include educational sessions with community members/coalitions, reviewing and providing basic data management and analysis, assists in the preparation of reports.

Attends training sessions to increase skill sets, participates on internal and external committees and workgroups related to program area, etc.

[KNOWLEDGE, SKILLS, AND ABILITIES REQUIRED: \(These are needed to perform the work assigned.\)](#)

Knowledge of: Epidemiological principles and practices related to the surveillance, investigative techniques, proper prevention and control techniques for diseases, infections and non-communicable conditions; knowledge of data to be collected and analyzed, statistical tools, epidemiological study methodologies and protocols; Nebraska regulations, policies, and statutes involving reportable diseases, infections and non-communicable conditions; and basic understanding of statewide surveillance system structures and operations.

Skill in: Basic skills in SAS, R, or similar statistical analysis software ; basic skills in SQL, Tableau, ArcGIS or similar data management and data visualization tools; identifying appropriate statistical or epidemiologic analysis depending on data collection, data elements, and outcomes to be measured; convey complex models, methods, results, and interpretations to a wide variety of people (both technical and non-technical); using logic and analysis to identify the strengths and weaknesses of different approaches; reading comprehension; active listening.

Ability to: Independently design, develop, and implement basic epidemiological systems, models, and studies; conduct analytical review of data including collection methods; work with health care professionals and a variety of other partners; analyze health data; prepare studies and reports including responding to data requests; explain and defend studies and recommendations.

[MINIMUM QUALIFICATIONS: \(Applicants will be screened for possession of these qualifications. Applicants who need accommodation in the selection process should request this in advance.\)](#)

Bachelor's Degree in Public Health, Statistics, Epidemiology, Informatics, or Health field plus 4 years of experience working in data analysis, statistics, & interpretation of data in a health subject area OR Master's Degree in Public Health, Statistics, Epidemiology, Informatics, or Health field plus 2 years of related experience.

Epidemiologist II

H74942

DISTINGUISHING CHARACTERISTICS: (A position is assigned to this class based on the scope and level of work performed as outlined below.)

Under general supervision, positions at this level are assigned mid-level responsibility to design, develop, integrate, implement, and conduct epidemiological surveillance studies. Positions at this level are responsible for conducting and planning routine and complex epidemiologic functions of surveillance, data collection, data analysis, and assistance in epidemiologic investigations. There is an additional level of autonomy at this level to make lower impact decisions, higher level decisions will be made in conjunction with the Epidemiologist III supervisor and/or Unit Leadership. Additionally, positions at this level complete increasingly complex analyses of datasets including interpretations of findings, collaborates with the supervisor on planning of grant work, and provides mentorship and trainings to Epidemiologist I positions.

EXAMPLES OF WORK: (A position may not be assigned all the duties listed, nor do the listed examples include all the duties that may be assigned.)

Conducts routine and complex epidemiologic functions of surveillance, data collection, data analysis, and assistance in epidemiologic investigations.

Outbreak or disease outcomes response – includes case investigations, contact tracing, working with external individuals, reviewing datasets.

Leads onsite reviews of facilities and procedures and interviews patients, health care providers, and others involved.

Leads the collection of data from local agencies or other health entities.

Data review and analysis – uses main data set with other datasets or databases in analysis, provides findings and complex statistical analysis, provides interpretation of data and findings to supervisors and stakeholders, implements new or revised statistical analysis code, and leads evaluation efforts.

Provides statistical analysis on up to 6 datasets or databases and is able to provide complex analysis of linked datasets and provide accurate interpretations of this data. Proficient to expert understanding and coding skill of statistical analysis software, such as R, SQL, SAS, STATA.

Leads the preparation and development of reports and guidance based off the analysis of the available data, literature review findings, and other health and scientific information.

Provides education/trainings of the topic area to other public health professionals and community coalitions.

Assists Epidemiologist III in the planning and development of grant activities and deliverables and assists in leading the implementation of the activities. Activities may include education or training of other public health professionals or key partners, provides complex statistical analysis, leads, and develops reports and guidance based on the analysis, and assists in identifying other resource needs to complete grant purposes.

Assists in the writing/application of grants or reporting to grants with Epidemiologist III and other funding proposals.

Leads in the analysis of data and resources needed to apply for funding proposals and funding reports.

Provides mentorship, and training duties as assigned to other members of the program teams by the supervisor. Collaborates with supervisor and key skillsets for mentorship and training. This may include working with internal statistical analysis workgroups providing subject matter or skill-based trainings or working with Epidemiologist I positions to develop skillsets for professional development.

KNOWLEDGE, SKILLS, AND ABILITIES REQUIRED: (These are needed to perform the work assigned.)

Knowledge of: Epidemiological principles and practices related to the surveillance, investigative techniques, proper prevention and control techniques for diseases, infections and non-communicable conditions; knowledge of data to be collected and analyzed, statistical tools, complex epidemiological study methodologies and protocols; Nebraska and federal regulations, policies, and statutes involving reportable diseases, infections and non-communicable conditions; multiple statewide surveillance system structures and operations; merging data, matching records across datasets, and other intermediate data management methods.

Skill in: Proficient to expert skills in SAS, R, or similar statistical analysis software; Intermediate skills in SQL, Tableau, ArcGIS or similar data management and data visualization tools; identifying appropriate statistical or epidemiologic analysis depending on data collection, data elements, and outcomes to be measured; convey complex models, methods, results, and interpretations to a wide variety of people (technical and non-technical); using logic and analysis to identify the strengths and weaknesses of different approaches; troubleshooting; developing publications for scientific and non-scientific audiences; identifying gaps in data, data collection, and systems; reading comprehension; grant writing; active listening.

Ability to: Independently design, develop, implement, integrate, and conduct epidemiological systems, models, and studies; provide guidance and technical assistance to others; conduct increasing complex analytical reviews of data including collection methods and provide appropriate interpretations; facilitate discussions with health professionals and professional committees; influence participation of health professionals and other partners; analyze complex health data, prepare studies and reports including responding to data and research requests; explain and defend complex studies and recommendations.

MINIMUM QUALIFICATIONS: (Applicants will be screened for possession of these qualifications. Applicants who need accommodation in the selection process should request this in advance.)

Bachelor's Degree in Public Health, Statistics, Epidemiology, Informatics, or Health field plus 6 years of experience working in data analysis, statistics, & interpretation of data in a health subject area OR Master's Degree in Public Health, Statistics, Epidemiology, Informatics, or Health field plus 4 years of related experience.

[Return to Specification List](#)

Epidemiologist III

V74943

DISTINGUISHING CHARACTERISTICS: (A position is assigned to this class based on the scope and level of work performed as outlined below.)

Under limited supervision, positions at this level are assigned senior-level responsibility to oversee, manage, and supervise the work of epidemiologists and associated staff conducting health surveillance aimed at monitoring health status and its correlates to identify trends or outbreaks of disease or other adverse health events, provide data and information about corrective actions or programs to alleviate adverse health effects, and propose practices or policies based on data and information that will promote and protect public health. Work requires a considerable amount of independent judgement and advanced knowledge of applied epidemiology for public health practice.

EXAMPLES OF WORK: (A position may not be assigned all the duties listed, nor do the listed examples include all the duties that may be assigned.)

Outbreak or disease outcomes response – includes case investigations, contact tracing, working with external individuals, reviewing datasets, presentations to community/health partners of risk and protective factor information

Plans, directs, oversees, and manages epidemiologic studies and outbreak investigations.

Oversees the design of instruments for the collection of surveillance information and data.

Leads the development and conducts epidemiologic studies for program planning.

Conducts and develops methods for advanced descriptive and comprehensive analysis of surveillance data.

Dataset/database design, implementation, and analysis- oversees the design and use of datasets and databases for analysis of health problems. Includes the design of public health data collection instruments and elements to collect.

Works with vendors, IT, and informatics staff on system updates and enhancements.

Provides complex analysis of linked dataset and provide accurate interpretations of a wide variety of datasets and databases within the Health Data Section of Public Health. Expert understanding and coding skill of statistical analysis software, such as R, SQL, SAS, STATA.

Oversees the preparation and the development of reports and guidance based on the analysis of data, and other health and scientific information.

Provides contextual awareness for cultural, social, political, legal, and ethical implications of the release of data.

Directs state program planning efforts with respect to surveillance data and evaluation. Develops, implements, and monitors organizational performance measures that show program effectiveness.

Reviews and conducts literature reviews and data analysis to evaluate program progress and performance.

Provides overall direction of grant work. Participates in grant writing or other funding proposals.

Develops requests for proposals and contracts for data analysis and evaluation projects and directs and reviews contract work.

Develops and evaluates methods of training for health care providers and local staff about appropriate methods of preventing or controlling disease and/or preventing injury.

Provides and reviews technical assistance to communities and outside partners with respect to surveillance and other epidemiologic data and evaluation.

Works as a liaison to outside data generating entities to develop and maintain partnerships for sharing and using data.

Develops and implements policies.

Provides scientific, administrative, and program direction and leadership for the assigned program units within the section of the epidemiology unit.

Plans, assigns, schedules, prioritizes, directs, and coordinates the work of the assigned epidemiologists and other staff within the section of the epidemiology unit, ensuring the accuracy and quality of work and the overall performance of work.

Participates in the selection and assignment of epidemiology and other professional and administrative staff. Approves leave and participates in annual performance reviews.

Provides advice and counsel to staff and instructs them on work and administrative matters.

Resolves complaints from employees, works with Human Resources and Unit Leadership on disciplinary actions, and identifies developmental needs and arranges for necessary training.

Responsible for improving operating practices and procedures, promoting team-building, and effectively integrating and coordinating with officials of other units or organizations.

KNOWLEDGE, SKILLS, AND ABILITIES REQUIRED: (These are needed to perform the work assigned.)

Knowledge of: Supervisory techniques; epidemiological principles and practices related to the surveillance, investigative techniques, proper prevention and control techniques for diseases, infections and non-communicable conditions; needs assessment and evaluation techniques; knowledge of data to be collected and analyzed, statistical tools, complex epidemiological study methodologies and protocols; Nebraska and federal regulations, policies, and statutes involving reportable diseases, infections and non-communicable conditions; multiple statewide surveillance system structures and operations; merging data, matching records across datasets, and other advanced data management methods; cultural, social, political, legal, and ethical implications of the collection and release of data.

Skill in: Advanced skills in SAS, R, or similar statistical analysis software; advanced skills in SQL, Tableau, ArcGIS or similar data management and data visualization tools; complex modeling and epidemiologic methodologies; identifying gaps in data, data collection, and systems; facilitation to solve problems and troubleshooting; identifying appropriate statistical or epidemiologic analysis depending on data collection, data elements, and outcomes to be measured; convey complex models, methods, results, and interpretations to a wide variety of people (technical and non-technical); using logic and analysis to identify the strengths and weaknesses of different approaches; developing publications for scientific and non-scientific audiences; reading comprehension; active listening.

Ability to: Supervise others (including hiring, evaluating performance, counseling, disciplining, investigating, and training staff); provide guidance, consultation, advice, instruction, and technical assistance to others; think creatively; draft, develop, and submit grant/funding applications; plan, develop, and implement grant workplans; prepare, review, and finalize reports and presentations; combine separate pieces of information from disparate sources to form general rules, processes, procedures, or solutions; independently design, develop, implement, integrate, and conduct epidemiological systems, models, and studies and provide guidance to others; grant and technical writing; conduct analytical review of data including collection methods and provide appropriate interpretations; influence participation of health professionals and other partners; analyze complex health data, prepare studies and reports including responding to data and research requests; explain and defend complex studies and recommendations for a variety of audiences; lead a team of epidemiologists and statisticians.

MINIMUM QUALIFICATIONS: (Applicants will be screened for possession of these qualifications. Applicants who need accommodation in the selection process should request this in advance.)

Bachelor’s Degree in Public Health, Statistics, Epidemiology, Informatics, or Health field plus 8 years of experience working in data analysis, statistics, & interpretation of data in a health subject area OR Master’s Degree in Public Health, Statistics, Epidemiology, Informatics, or Health field plus 6 years of related experience.

[Return to Specification List](#)

SPECIAL NOTES APPLICABLE TO ALL LEVELS:

State agencies are responsible to evaluate each of their positions to determine their individual overtime eligibility status as required by the Fair Labor Standards Act (FLSA).

Established: 09/24

Note: Classification-specification is subject to change. Please refer to the Nebraska State Personnel Job Specification website at <https://das.nebraska.gov/personnel/classcomp/jobspecs/jobspecs.html> to ensure this represents the most current copy of the description.

The following is a summary of changes made to this class specification.

Section	Change Description	Effective Date