

POSITION DESCRIPTION

This position description serves as the official classification document of record for this position. Please complete the information as accurately as you can as the position description is used to determine the proper classification of the position.

2. Employee's Name (Last, First, M.I.)	8. Department/Agency MDHHS-COM HEALTH CENTRAL OFF
3. Employee Identification Number	9. Bureau (Institution, Board, or Commission) Environmental Health Bureau
4. Civil Service Position Code Description EPIDEMIOLOGIST SPECIALIST-3	10. Division
5. Working Title (What the agency calls the position) Epidemiologist Specialist	11. Section Office of Strategy
6. Name and Position Code Description of Direct Supervisor WARD, MELANIE; STATE ADMINISTRATIVE MANAGER-1	12. Unit
7. Name and Position Code Description of Second Level Supervisor CHAMBERS, MICHELLE A; STATE DIVISION ADMINISTRATOR	13. Work Location (City and Address)/Hours of Work 333 South Grand Ave, Lansing, MI 48913 / M-F 8:00am – 5:00pm

14. General Summary of Function/Purpose of Position

This third-level specialist position provides epidemiologic expertise to the Bureau and Department for the investigation and response to hazardous chemical exposures in Michigan. This includes statewide responsibility for the design and application of complex epidemiologic methodologies to areas and populations with environmental chemical exposure concerns, including study design and planning, policy and program development, program evaluation, and technical expertise and training. In response to significant or suspected exposures to toxic chemicals near sites of contamination, this position will lead the capture of relevant data and statistics from existing literature, health registries and surveys as well design and implement protocols for appropriate epidemiologic surveys or studies in these areas. All special epidemiologic data collection and analysis projects related to sites of environmental contamination are designed, implemented and monitored by this position.

15. Please describe the assigned duties, percent of time spent performing each duty, and what is done to complete each duty.

List the duties from most important to least important. The total percentage of all duties performed must equal 100 percent.

Duty 1

General Summary:

Percentage: 25

Environmental Epidemiology Program Leadership: Establish leading-edge applied environmental public health epidemiology strategy and practices, as it relates to chemical exposures, throughout Michigan.

Individual tasks related to the duty:

- Provide DEH with applied environmental public health epidemiology strategic vision on how either to develop new or to modify existing surveillance methods for the purpose of evaluating patterns in health outcomes in relation to environmental stressors.
- Write guidance documents describing the implementation of environmental public health surveillance science and practice.
- Oversee the develop written materials to train Environmental Health Bureau and Local Public Health staff on the purpose and implementation of surveillance methods.
- Conduct presentations and/or workshops to implement training materials with state and local colleagues.
- Attend one national meeting per year, as funding allows, that will provide leading-edge concepts and strategies to the Bureau in this field of public health.
- Monitor scientific literature for emerging methods or concept that can be applied in to Michigan environmental public health challenges.
- Works with Bureau staff, university clinical and epidemiology staff, local health department epidemiology teams, and others in the development of epidemiologic studies and surveillance systems at sites of environmental contamination.
- Attend and present at epidemiological seminars and meetings.
- Provide guidance and consultations to other epidemiologists in environmental epidemiology or special techniques.

Duty 2

General Summary:

Percentage: 25

Epidemiologic Study Design and Analysis: provide statewide expertise in the conceptualization, design, planning, conduct and analysis of epidemiologic studies at sites of environmental contamination.

Individual tasks related to the duty:

- Design and oversee to completion the implementation of new epidemiologic studies to promote DEH understanding of human exposure and risk at sites of chemical contamination in collaboration with other Michigan government departments and local health departments.
- Review site-specific human exposure and toxicological data associated with sites of contamination statewide to determine whether the occurrence of adverse human health impacts in the exposed populations might be biologically plausible.
- Provide quality assurance oversight of epidemiologic study design including sample size, power analysis, written program data summary and analyses, reliability and validity of measures, and complex analytic methods (e.g., single and multiple linear and/or logistic regression) and address biases (e.g., selection, information, and other biases) and problems in epidemiologic analyses (e.g, ecologic fallacy) to assure the Department produces replicable, defensible, and conclusive epidemiologic findings.
- Provide technical expertise on epidemiologic design, sample size estimation, complex analysis and presentation of data analyses.
- Build collaborative relationships with and provide technical consultation to local health departments, major universities, and federal agencies.
- Compile and review literature and other resources on field studies, needs assessments, and exposure investigations necessary to describe or provide context to investigation findings.
- Document in a written report the summary findings of biomonitoring results, questionnaire responses, and medical information at sites of chemical contamination.
- Present findings on the results of such studies at epidemiologic seminars and meetings including those for state and local public health personnel.
- Participate in public meetings, citizen information committees, and availability sessions to discuss epidemiologic principles and the strengths and weaknesses of various epidemiologic techniques for evaluating whether excess disease is occurring in communities exposed to chemicals from chemical contamination sites.
- Identify environmental epidemiology topics of emerging concern in Michigan.

Duty 3

General Summary:

Percentage: 20

Surveillance Systems: Develop and implement surveillance systems to support needs of an Environmental Epidemiology Program. Oversee the collection, analysis, interpretation and dissemination of environmental health information to support needs of state and local public health at sites of environmental contamination.

Individual tasks related to the duty:

- Write guidance documents for implementation of environmental health surveillance practice, including data collection, analysis, interpretation and dissemination for use by EH staff, local public health and other partners.
- Conduct surveillance system evaluations for data associated with populations with suspected or confirmed exposure to sites of environmental contamination, making use of federal guidelines when appropriate.
- Oversee the development of written materials to train Bureau and local public health staff on surveillance methodology for environmental health.

Duty 4

General Summary:

Percentage: 10

Develop and expand skillsets of EHB Environmental Epidemiology staff.

Individual tasks related to the duty:

- Train and mentor staff in environmental public health epidemiology methods and protocols.
- Develop and foster staff to become highly knowledgeable in a relevant, applied environmental epidemiologic area.
- Pursue funding sources to develop capacity in area of applied environmental epidemiology and address gaps in capacity.

Duty 5

General Summary:

Percentage: 10

Provide guidance and direction to the Bureau on the design, implementation, and coordination of epidemiologic studies and effective surveillance systems and analysis activities at sites of environmental contamination. Provide similar assistance to other agencies interested in human health exposures at sites of contamination.

Individual tasks related to the duty:

- Works with Bureau staff, university clinical and epidemiology staff, local health department epidemiology teams, and others in the development of epidemiologic studies and surveillance systems at sites of environmental contamination.
- Attend and present at epidemiological seminars and meetings.
- Provide guidance and consultations to other epidemiologists in environmental epidemiology or special techniques.
- Respond to telephone inquiries about health problems believed to be associated with toxic chemical exposures.

Duty 6

General Summary:

Percentage: 5

Participate in national workgroups and serve as a recognized resource on the topic of environmental epidemiology for the Department, as well as other federal, state, and local government agencies, independent organizations, and academia.

Individual tasks related to the duty:

- Provide consultation to other groups outside MDHHS as appropriate.
- Work with the Council for State and Territorial Epidemiologists and other national forums on matters of environmental health epidemiology and surveillance, particularly related to human health exposures at sites of environmental contamination.
- Represent the Bureau or Department at in-state, regional, and national meetings. Successfully communicate mission and activities.

Duty 7

General Summary:

Percentage: 5

Design and implement processes for the Bureau that ensure that personal identifying information and personal health data are secured and managed in a manner that complies with all MDHHS PII and HIPAA requirements.

Individual tasks related to the duty:

- Maintain current knowledge of MDHHS PII and HIPAA compliance requirements for hard copy and digitally stored data and associated information.
- Develop and implement monitor procedures for maintaining confidentiality and security of sensitive and protected information under the Michigan Public Health Code, HIPAA, and the Federal rules on protection of human subjects as interpreted by the MDHHS Privacy Office and Institutional Review Board.

16. Describe the types of decisions made independently in this position and tell who or what is affected by those decisions.

Independent judgment is used in all areas of epidemiologic data and evaluation planning, design, analysis and management. Decisions regarding project design, research methodologies, analysis of data, conclusions to be drawn from data or information, and content and style of presentation of data for reporting and presentation are all done independently. Independent judgment is also used in providing consultation to department staff and external agencies. These decisions affect professional staff, support staff, and operational activities of the Environmental Health Bureau and numerous outside agencies, in addition to the populations being served by the Bureau. They will also affect policies and procedures within the Bureau.

17. Describe the types of decisions that require the supervisor's review.

Guidance is required of the supervisor and the Bureau Director regarding political and financial feasibility of data acquisition, analysis, and reporting efforts and for issues where policy, procedure or guidance materials do not address or are unclear. The overall plan of work and decision on priorities will be done in concert with supervisor and the Bureau Director. Any document with political or institutional ramifications must be reviewed by supervisor and the Bureau Director to determine the appropriate dissemination plan. Any decisions related to funding must be discussed with the supervisor prior to implementation.

18. What kind of physical effort is used to perform this job? What environmental conditions in this position physically exposed to on the job? Indicate the amount of time and intensity of each activity and condition. Refer to instructions.

Physical effort is typical of an office position. Requires valid vehicle operator's license and occasional travel within the State, including overnights. Less occasionally, travel may be required outside the State. There may be times when work outside of regular hours is necessary for the completion of a project. The employee may need to conduct site visits and attend public events around the state. Survey materials and supplies can be bulky and may weigh up to 40lbs. Site visits may require door-to-door work. The employee would be exposed to local weather conditions. The employee may be exposed to unpleasant and noxious fumes and odors when conducting site visits. Site visits and events may occur up to two to three times a month.

19. List the names and position code descriptions of each classified employee whom this position immediately supervises or oversees on a full-time, on-going basis.

Additional Subordinates

20. This position's responsibilities for the above-listed employees includes the following (check as many as apply):

- | | | | |
|----------------------------|------------------------------------|----------------------------|-----------------------------------|
| <input type="checkbox"/> N | Complete and sign service ratings. | <input type="checkbox"/> N | Assign work. |
| <input type="checkbox"/> N | Provide formal written counseling. | <input type="checkbox"/> N | Approve work. |
| <input type="checkbox"/> N | Approve leave requests. | <input type="checkbox"/> N | Review work. |
| <input type="checkbox"/> N | Approve time and attendance. | <input type="checkbox"/> N | Provide guidance on work methods. |
| <input type="checkbox"/> N | Orally reprimand. | <input type="checkbox"/> N | Train employees in the work. |

22. Do you agree with the responses for items 1 through 20? If not, which items do you disagree with and why?

Yes.

23. What are the essential functions of this position?

This third-level specialist position provides epidemiologic expertise to the Bureau and Department for the investigation and response to hazardous chemical exposures in Michigan. This includes statewide responsibility for the design and application of complex epidemiologic methodologies to areas and populations with environmental chemical exposure concerns, including study design and planning, policy and program development, program evaluation, and technical expertise and training. In response to significant or suspected exposures to toxic chemicals near sites of contamination, this position will lead the capture of relevant data and statistics from existing literature, health registries and surveys as well design and implement protocols for appropriate epidemiologic surveys or studies in these areas. All special epidemiologic data collection and analysis projects related to sites of environmental contamination are designed, implemented and monitored by this position.

24. Indicate specifically how the position's duties and responsibilities have changed since the position was last reviewed.

This position description was updated to reflect the current focus of the Bureau.

25. What is the function of the work area and how does this position fit into that function?

The work area functions to investigate patterns of disease outcomes in relation to sites with hazardous chemical releases. The work can include characterizing actual environmental contaminant exposures of people who had contact with the hazardous chemical released. This position provides statewide expertise in environmental epidemiologic methods within the Bureau and to local public health officials for the purpose of responding to emergency, time-critical, or long-existing environmental public health hazards.

26. What are the minimum education and experience qualifications needed to perform the essential functions of this position.

EDUCATION:

Possession of a master's degree in epidemiology or public health, with a minimum of 8 semester (12 term) graduate-level hours in epidemiology and biostatistics courses.

EXPERIENCE:

Epidemiologist Specialist 14

Five years of professional experience as an Epidemiologist, including three years of experience equivalent to an Epidemiologist P11, two years equivalent to an Epidemiologist 12, or one year equivalent to an Epidemiologist Specialist 13.

KNOWLEDGE, SKILLS, AND ABILITIES:

- Thorough knowledge of the principals and methods of epidemiology, biostatistics and public health surveillance.
- Thorough knowledge of the methods used to organize, analyze, and maintain large and complex data sets.
- Knowledge of the principals of environmental health preferred.
- Ability to use statistical, geospatial, and database software; SAS and ArcGIS preferred.
- Ability to plan, direct, and coordinate program and administrative activities of a complex, interrelated, and interdependent nature where unknowns and numerous contingency factors are involved.
- Ability to formulate policies and procedures relevant to program areas based on information of a conceptual nature from varied and complex sources.
- Ability to organize complex data and maintain quality control, privacy and security of the data.
- Ability to design field studies, including development of protocols and data collection instruments.
- Ability to analyze surveillance data and other information for the purposes of determining the need for epidemiologic investigations.
- Ability to design and implement surveillance and conduct analytic studies.
- Ability to formulate policies and practices for interventions indicated by epidemiologic analyses.
- Ability to plan and conduct research projects.
- Ability to organize raw data in forms suitable for epidemiologic analysis.
- Ability to prepare technical reports, records, and papers related to the work.
- Ability to communicate with others verbally and in writing.

CERTIFICATES, LICENSES, REGISTRATIONS:

None.

NOTE: Civil Service approval does not constitute agreement with or acceptance of the desired qualifications of this position.

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Supervisor

Date

TO BE FILLED OUT BY APPOINTING AUTHORITY

Indicate any exceptions or additions to the statements of employee or supervisors.

None.

I certify that the entries on these pages are accurate and complete.

LIBERTY IRWIN

Appointing Authority

6/25/2026

Date

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Employee

Date