

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) Bureau of Laboratories
4. Civil Service Position Code Description Laboratory Scientist-E	10. Division Chemistry & Toxicology
5. Working Title (What the agency calls the position) Laboratory Scientist	11. Section Newborn Screening
6. Name and Position Code Description of Direct Supervisor WOOD, HEATHER D; LABORATORY SCIENTIST MANAGER-3	12. Unit Operations and Analytics Management
7. Name and Position Code Description of Second Level Supervisor MOLONEY, SHAWN M; STATE ADMINISTRATIVE MANAGER-1	13. Work Location (City and Address)/Hours of Work Lansing, MI 48909, 3350 N. Martin L. King, Jr. Blvd. / 7:00 AM – 5:00 PM, Mon. – Sat., Weekends & Holiday
14. General Summary of Function/Purpose of Position The Laboratory Scientist in this entry through experienced level position, provides technical and analytic support for the Newborn Screening (NBS) Laboratory Section performing a broad range of complex clinical laboratory assignments. Under general supervision and with increasing independent judgment, tests dried blood spot specimens from newborns for evidence of congenital endocrine and exocrine disorders, inborn errors of metabolism, selected hemoglobinopathies, cystic fibrosis, lysosomal storage diseases, peroxisomal disorders, primary immune deficiency, using established procedures and protocols and in accordance with Michigan law and accepted medical practice.	

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

Performs biochemical and molecular analyses of specimen for metabolic, endocrine, hemoglobin disorders and DNA mutations. Technology includes Fluorometry, Fluoroimmunoassay, High Performance Liquid Chromatography, Isoelectric Focusing, Tandem Mass Spectrometry, HPLC-MSMS, DNA Mutation Analysis, Real Time PCR.

Individual tasks related to the duty:

- Ensure receipt of uniquely identified Newborn Screening specimens into the laboratory.
- Assess samples quality and quantity for the array of clinical methodologies and for the accuracy and precision of the results.
- Inspect, monitor, and review all steps of analysis, including identification, punching, processing, and reporting.
- Ensure adequacy of reagents, test kits, and miscellaneous supplies required for testing.
- Monitor instrument and technician performance to ensure accurate and precise results.
- Train to perform technician bench duties.
- Crosstrain and rotate through all test areas to ensure competence.
- Ensure adequate inventory and supplies to perform testing. Complete annual orders in a timely manner.
- Review and revise test protocol annually, certify changes through the Bureau, and circulate revised protocol for review and signatures.

Duty 2

General Summary:

Percentage: 25

Interprets and reports out clinical test results, communicating these results to follow up and medical management staff.

Individual tasks related to the duty:

- Monitor and review assay performance characteristics, ensuring assay and instrument validity.
- Select and/or auto select specific samples to confirm/recheck.
- Determine final result based on quality assurance principles, cutoff levels, demographic factors and other variables.
- Seek consult with supervisor and/or medical management when results are problematic.
- Release final results, assign risk, and alert medical management as indicated by protocol.
- Maintain documentation of decision trees, risk-outcomes, cutoff modifications, and other data significant to result reporting.
- Determine if results are suspect or discrepant. Hold and retest to resolve.
- Perform a "Check Health Status" when circumstance and protocol dictate.

Duty 3

General Summary:

Percentage: 25

Performs Quality Control and Quality Assurance functions to assure accuracy and precision of laboratory instrumentation and resulting assay outcomes.

Individual tasks related to the duty:

- Perform federally mandated Proficiency Testing on clinical specimens provided by the Centers for Disease Control, Atlanta, Georgia, to verify sensitivity and specificity of instruments, assays and LIMS system.
- Maintain daily, weekly, monthly QC records as required by Quality Assurance program. Document all out-of-control values and remedial actions.
- Review technical staff annually for clinical competencies in all test areas, providing documentation to QA office.
- Review instrument maintenance records and schedule preventive procedures with vendor.
- Troubleshoot equipment and instruments, providing documentation of corrective action taken.
- Evaluate assay standard and QC performance, assay means and standard deviations, reagent calibrations and lot verifications.
- Perform lot-specific testing on CDC QC samples twice yearly.
- Perform method validations per CLSI Standard and CAP/CLIA regulations.
- Monitor physical environment for adherence to assay requirements listed in vendor insert.

Duty 4**General Summary:****Percentage: 15**

Maintains communications with vendors, physical plant, supervisors, medical management software engineers, programmers, laboratory management, and others.

Individual tasks related to the duty:

- Meet regularly with colleagues to discuss scientific and administrative concerns.
- Meet regularly with technical staff to address assay concerns, staffing, competencies and updates.
- Maintain cordial relations with vendors, including maintenance scheduling, annual orders, instrument troubleshooting, and assay updates.
- Ensure physical environment is adequate for optimal testing. Become acquainted with DTMB staff to contact for problems.
- Report to unit managers when assay, QC, personnel and other issues arise, for discussion and resolution.
- Develop cooperative working relationships with epidemiology staff and off-site medical management groups.
- Network with other state newborn screening programs for mutual benefit and shared knowledge.

Duty 5**General Summary:****Percentage: 10**

Participates in continuing education, safety awareness in the clinical laboratory, and research and development in Newborn Screening

Individual tasks related to the duty:

- Attend annual health and safety training.
- Monitor physical environment of laboratory for possible changes, health risk assessment and assay requirements.
- Attend classes as appropriate for professional development.
- Consult with fellow scientists over common laboratory and database issues.
- Maintain file relevant professional literature and/or internet directory.
- Attend meetings with medical management and follow up as requested.
- Investigate new or alternate technologies for current and future screening.
- Perform pilot studies as indicated for expansion of newborn screening test menu.

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

The entry through experienced level laboratory scientist makes some independent decisions regarding the validity of assays, soundness of quality control methods, and the accuracy and precision of all reported results in compliance with CDC, CLIA and Departmental and Bureau guidelines as they advance through the levels. Newborn Screening Laboratory results have important implications for all children born in the State of Michigan. Affected infants are at risk of significant health consequences, including mental retardation and death. Timely testing, reporting, treatment and follow up are essential goals of the program.

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

Supervisor review is appropriate when guidelines are not sufficient to solve the problem. These instances include validation and recurring QC problems, employee competency, personnel conflicts, and time and attendance issues.

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.

An employee working with specimens of human origin is required to employ "Universal Precautions" in the laboratory; that is, to treat each specimen as if it were capable of disease transmission and to use personal protection devices, such as, gloves, safety glasses, and lab coats to prevent contamination.

Physical Activities: Standing, lifting, carrying, kneeling, bending, squatting, using tools, stocking, keyboard entry – daily

Conditions/Hazards: Exposure to biohazards, dust, odors, fumes, hazardous chemicals, noise – daily

Must have ability to work at a computer and operate normal office equipment

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):

N	Complete and sign service ratings.	N	Assign work.
N	Provide formal written counseling.	N	Approve work.
N	Approve leave requests.	N	Review work.
N	Approve time and attendance.	N	Provide guidance on work methods.
N	Orally reprimand.	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?

The employee, under unit supervision, performs a full range of professional clinical laboratory assignments as outlined above. In addition to the analysis of newborn screening samples, all attendant quality assurance, maintenance, instrumentation, and data management duties are the responsibility of the laboratory scientist. All instrumentation is integrated with a Laboratory Information Management System (LIMS) in which this position must have a good working knowledge of how to operate and troubleshoot.

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

New establishment.

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

The function of the Newborn Screening Laboratory is to ensure the health and well-being of all infants born in the State of Michigan as mandated by Michigan law and accepted medical practice. This is accomplished by screening dried blood spot specimens for inborn errors of metabolism, congenital endocrine and exocrine disorders, selected hemoglobinopathies, cystic fibrosis, primary immune deficiency, lysosomal storage diseases, and peroxisomal disorders. This position participates in that process by testing and reporting results to follow up staff and medical management centers in a timely and efficient manner.

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

EDUCATION:

Possession of a bachelor's degree in chemistry, biochemistry, biology, microbiology, forensic science, or a related pure or applied science.

EXPERIENCE:

Laboratory Scientist 9

No specific type or amount is required.

Laboratory Scientist 10

One year of professional experience carrying out a variety of tests, analyses, or production and research activities involving chemical, biochemical and biological samples, specimens, and products equivalent to a Laboratory Scientist 9.

Laboratory Scientist P11

Two years of professional experience carrying out a variety of tests, analyses, or production and research activities involving chemical, biochemical and biological samples, specimens, and products equivalent to a Laboratory Scientist, including one year equivalent to a Laboratory Scientist 10.

KNOWLEDGE, SKILLS, AND ABILITIES:

As listed on the Civil Service job specifications. In addition:

Meticulous work habits and attention to detail.

Reliable attendance and willingness to work off-shift hours.

Ability to organize, prioritize and coordinate high-volume workload, in time-constrained environment.

Basic knowledge of chemistry, physics, mathematics, and statistics.

Fundamental knowledge of data management and word processing software.

Ability to communicate orally and in writing.

Knowledge of basic instrumentation and mechanics.

Some knowledge of laboratory practices.

Some knowledge of laboratory safety.

Some knowledge of computer software.

The MDHHS mission is to provide opportunities, services, and programs that promote a healthy, safe, and stable environment for residents to be self-sufficient. We are committed to ensuring a diverse workforce and a work environment whereby all employees are treated with dignity, respect and fairness.

CERTIFICATES, LICENSES, REGISTRATIONS:

Must meet Medicare, CMS-CLIA, and CAP requirements.

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

5/15/2026

Appointing Authority

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