

Career Ladder Editable Template

This template is meant to be a guideline only, and can be edited to fit your organizational requirements or limitations.

Job Classification: Laboratory Scientist

Brief Description of Job Classification:

Laboratory Scientists work as generalists or specialists in the laboratory, performing analyses of human tissue, body fluids and environmental sources, such as food and water. These tests may range from basic to highly complex, and encompass knowledge of microbiology, chemistry, immunology and other disciplines, all performed under a quality management system. Work includes providing technical guidance and training, troubleshooting instrumentation and testing problems, compiling information, reporting results from analysis/research findings and recommending process improvements. Results of testing are used to aid in the diagnosis, treatment and monitoring of diseases of public health significance as well as investigating other public health and environmental hazards. Work is performed under the general direction of a technical supervisor, and is compliant with regulatory requirements.

Purpose:

Career Ladders formally advance employees through higher levels of job proficiency and responsibility.

A career ladder defines the competencies needed to progress through a job classification by demonstrating increased responsibilities and enhanced knowledge, skills and abilities. A career ladder is intended to encourage and assist staff to further their professional development and recognize them for their commitment and excellence while enabling them to remain within a given job classification. Note that the steps in the career ladder may require competition for advancement.

The competencies illustrate the nature, extent and scope of duties and responsibilities of the job classification. Competencies cannot, and do not, include all of the tasks or functions that might be appropriately performed within a job classification.

Scope:

The *[Public Health Laboratory]* may provide advancement opportunities for *[job classification]* upon completion of standardized requirements. Advancement under this process is based upon successful job performance of the work duties and successful completion of the competency-based career ladder plan for that level of work. Advancement is based on the employee's proficiency within the job classification, their qualifications, and the achievement of the selected competency-based proficiency statements.

This process applies to the *[Public Health Laboratory]* for the progression through the following targeted positions in the job classification:

[Laboratory Scientist I] → [Laboratory Scientist II] → [Laboratory Scientist III] → [Laboratory Scientist IV]

Since the employee and supervisor (including the Laboratory Director) work collectively to advance the employee to higher levels of responsibility, there may be no need for a competitive hiring process.

Although the intention is to provide career advancements when employees complete the stated requirements, there may be times when pay freezes or other budget constraints delay or limit career advancements. In addition, this process may conflict with negotiated labor contracts, which may take precedence to the applicable extent.

Career advancement decisions are not based on upon race, sex, age, religion, national origin, disability, political beliefs, religious beliefs, marital beliefs or any other factor that would be in violation of any state and federal laws and policies.

Eligibility Criteria:

An employee meets eligibility requirements for a Career Advancement if he or she:

- Is a regular (full or part-time) employee who is past the probationary employment period;
- Was rated "Meets Expectations" or better as defined in the performance criteria on the most recent performance evaluation;
- Is not currently under corrective action or disciplinary action; and
- Meets or exceeds the standard qualifications of the job classification

Career Ladder Process:

- An employee may be identified for advancement under this process in two ways.
 - The first method is for the supervisor to assess and document the employee's eligibility and potential for advancement and recommend the career ladder process to the employee.
 - The second method is for the employee to assess and document his or her own eligibility, discuss career plans/goals with his or her supervisor, and mutually decide if they are willing to commit to a successful career ladder process.
- Based on the selected competency statements for the appropriate level of the career ladder (see Competency Statements, below), the employee and direct supervisor will create a Career Ladder Plan using behavioral anchors that includes achievement of proficiencies, goals, and how each will be accomplished, including a documented time frame for completion.
- The Career Ladder Plan is a shared responsibility between the supervisor and the employee, and will include opportunities for feedback and accountability. This plan can be fluid, and updated as needed during the process.
- The supervisor has the right to extend or even cancel the career ladder plan if the employee does not achieve minimal performance and/or demonstrate achievement of the defined competencies within the estimated time frame of the plan.
- Upon successful completion of career ladder plan, the supervisor will recommend advancement to the *[Laboratory Director]*. Documentation will include specific details on how the employee has met the specified competencies and other requirements, including documentation of the employee's most recent performance assessment that rates employee performance at a "successful" level or higher in the current job. Recommendations for approval or denial must be objective and documented.
- The *[Laboratory Director]* will review the documentation, and if in agreement and within budget restraints, will submit the appropriate paperwork to request advancement to the next level in the job classification. Approval or denial must be objective and documented.

Standard Qualifications:

	Laboratory Scientist I	Laboratory Scientist II	Laboratory Scientist III	Laboratory Scientist IV
Minimum Qualifications	Bachelor's Degree in a life science [e.g., microbiology, biology, chemistry, biochemistry, clinical or medical laboratory science]	Bachelor's Degree in a life science and 1 year of recent experience in a clinical, public health, or environmental laboratory setting	Bachelor's or advanced degree in a life science and 3 years of recent experience in a clinical, public health, or environmental laboratory setting	Bachelor's or advance degree in a life science and 5 years of recent experience in a clinical, public health, or environmental laboratory setting
Preferred Qualifications	Experience in a clinical, public health, or environmental laboratory setting	Additional experience in a clinical, public health, or environmental laboratory setting		Specialty certification
Competitive?	Yes	No [Yes]	No [Yes]	Yes
Certification Required?	Technologist or Scientist certification eligible, required after 12 months	Technologist or Scientist certification eligible, required after 12 months	Technologist, Scientist, or Specialty certification such as MT(ASCP) or MLS(ASCP) or MT(AAB) certification or discipline specific certification [e.g., M(ASCP), C(ASCP)]	Technologist or Scientist, or Specialty certification such as MT(ASCP) or MLS(ASCP) or MT(AAB) certification or discipline specific certification [e.g., M(ASCP), C(ASCP)]

Competency Statements by Levels:

To progress from one level to the next, it is expected that the employee will have demonstrated acceptable performance at previous career ladder levels.

LEVEL 1

Communications

COM 2.00 Active listening skills: displays active listening skills when interacting with others

-Defers judgment during dialogue exchanges (B)

COM 3.00 Comprehension of materials: demonstrates comprehension of written documents and directions

-Follows written directions (B)

COM 5.00 Communication professionalism: ensures professionalism in communication with customers and stakeholders

-Uses tone of voice and language tailored to interactions with customers and

stakeholders (B)

-Shares information as directed (B)

COM 6.00 Professional reports: prepares professional written reports and oral presentations

-Organizes information for written reports (B)

-Organizes information for oral presentations (B)

COM 7.00 Risk communication: applies emergency and risk communication principles and techniques to explain information to targeted audiences

-Describes the risk communication process (B)

COM 8.00 Public health laboratory value: promotes the value of the public health laboratory

-Supports the development and distribution of communication materials about the public health laboratory (B)

-Shares approved public health laboratory stories (B)

General Laboratory Practice

GEN 1.00 - General technical and laboratory practice knowledge: demonstrates general knowledge and skills related to the scientific and technical components of laboratory testing

-Applies basic scientific and laboratory concepts and theories related to the specific testing that is conducted in work area (B)

-Applies fundamental mathematical and statistical concepts and practices in work area (B)

-Reads scientific and technical literature relevant to own work (B)

-Applies basic laboratory techniques to laboratory testing (B)

-Identifies routine problems related to technical duties and responsibilities (B)

-Applies knowledge of model laboratory practices (B)

-Documents actions and results using established paper or electronic systems (B)

GEN 2.00 - Reagent Use and Storage: adheres to policies and principles regarding the use and storage of laboratory reagents and supplies

- Adheres to policies, processes, and procedures for use and storage of reagents and supplies (B)

- Adheres to policies, processes, and procedures for preparing reagents (B)

GEN 3.00 - Equipment Use: adheres to policies and principles regarding the use, maintenance, and calibration of laboratory equipment

- Adheres to policies, processes, and procedures for operating laboratory equipment (B)

- Performs routine system checks and maintenance (B)

- Performs calibration of routine instruments and equipment (B)

- Documents maintenance and calibration activities (B)

GEN 4.00 - Pre-examination: performs steps in the pre-examination phase of testing

- Follows policies, processes, and procedures for the management of samples (B)

GEN 5.00 - Examination: performs steps in the examination phase of testing

- Performs sample analyses (B)

- Adheres to policies, processes, and procedures for testing workflow (B)

- Performs QC activities (B)

GEN 6.00 - Postexamination: performs steps in the postexamination phase of testing

- Assembles QC data for evaluation (B)

- Assembles test data for review and action (B)

- Adheres to policies, processes, and procedures related to reporting and release of examination results and notifiable results (B)

- Performs laboratory testing and reporting within specified or expected TAT (B)

- Explains the differences between QA and QC (B)

GEN 7.00 - Regulatory Compliance: complies with regulations and guidelines governing laboratory testing

- Complies with regulatory requirements and guidelines related to laboratory testing (B)

- Performs PT and alternative assessment (B)
- Reports PT and alternative assessment (B)
- Participates in performance of method validation and performance verification (B)
- Complies with policies, processes, and procedures regarding protected information (B)

Microbiology

MCB 1.00 Concepts and techniques: adheres to policies and principles governing actions and behaviors that are essential when working in a microbiology laboratory

- Describes basic microbiological concepts and theories (B)
- Applies basic microbiological techniques to laboratory testing (B)

MCB 3.00 Pre-examination: assesses microbiological samples during the pre-examination phase

- Describes routine sample collection, labeling, and handling policies, processes, and procedures for microbiological examination (B)
- Performs packing and shipping of Category A and Category B infectious substances (B)
- Describes the importance of adhering to established policies, processes, and procedures regarding microbiological material transport (B)
- Describes policies, processes, and procedures for the identification, handling, safety, appropriateness and triage of samples containing agents of concern (B)
- Performs procedures for accessioning and receipt of microbiological samples (B)
- Performs systematic tracking of microbiological samples from receipt to final disposition (B)
- Assesses sample appropriateness for a particular microbiological examination (B)
- Adheres to policies, processes, and procedures regarding testing workflow (B)
- Adheres to policies, processes, and procedures regarding NAAT workflow (B)
- Performs sample set-up procedures for microbiological examinations (B)
- Describes which microbiological examination requests require epidemiologic notification and consultation (B)

MCB 4.00 Examination: assesses microbiological samples during the examination phase

- Prepares culture media according to policies, processes, and procedures (B)
- Selects media according to procedures (B)
- Performs culture inoculation using aseptic techniques (B)
- Recognizes the morphological characteristics of different organisms (B)
- Recognizes growth characteristics of microorganisms (B)
- Performs identification and susceptibility testing using manual methods (B)
- Performs identification and susceptibility testing using automated systems (B)
- Performs antigen detection methods (B)
- Performs NA sequencing of infectious agents (B)
- Performs strain typing (B)
- Explains the policies, processes, and procedures regarding rule-out testing and referral (B)
- Performs QC activities (B)

MCB 5.00 Postexamination: performs postexamination procedures of microbiological testing

- Assembles QC data for evaluation (B)
- Assembles test data for review and action (B)
- Adheres to policies, processes and procedures related to reporting and release of examination results and notifiable results (B)
- Explains the differences between QA and QC (B)

MCB 6.00 Regulatory compliance: ensures regulatory compliance

- Recognizes NCEs in laboratory processes (B)
- Performs PT and alternative assessment (B)

- Participates in performance of method validation and performance verification (B)

- Participates in the development of LDTs (B)

- Describes the policies, processes, and procedures related to the federal Select Agent Program, including the securing, safe handling, and testing of select agents and the documentation of activities (B)

Quality Management Systems

QMS 05.00 Purchasing and inventory: ensures that requirements for supplies and services are consistently met

- Describes the inventory management processes used in current work area (B)

QMS 06.00 Laboratory equipment: ensures that laboratory equipment selection, installation, use, maintenance, and troubleshooting meet performance standards

- Describes the policies, processes, and procedures for equipment acquisition and decommissioning (B)

QMS 10.00 Nonconforming event management: ensures that processes are in place for detecting and managing nonconforming events

- Recognizes NCEs (B)

- Participates in NCE investigations and root cause analyses (B)

QMS 11.00 Assessments: ensures that processes are in place to perform internal audits and external assessments

- Adheres to the quality assessment plan (B)

- Participates in external assessment activities (B)

- Participates in internal audits (B)

- Describes the elements of pre-examination, examination, and postexamination quality indicators (B)

- Describes the policies, processes, and procedures related to collecting and analyzing quality indicator data (B)

QMS 12.00 Continual improvement: ensures mechanisms for continuous quality improvement

- Describes the policies, processes, and procedures related to the CQI program (B)
- Participates in CQI activities (B)
- Describes the policies, processes, and procedures related to corrective action (B)
- Describes the policies, processes, and procedures related to preventive action (B)
- Describes the process to change laboratory policies, processes, and procedures (B)

Safety

SAC 3.00 Risk management: manages risks through systematic practices to evaluate, minimize, or eliminate them

- Describes the risk assessment process (B)

SHC 2.00 Safe work practices: designs work practices and procedures to minimize exposure to hazards and to adhere to regulatory requirements

- Describes proper work practices and procedures (B)

SHC 4.00 Systems to track hazards: establishes a system to detect and to control or eliminate the underlying causes of hazards or exposures

- Describes the procedures for reporting hazardous conditions (B)

SHC 5.00 Preventive maintenance: conducts regular maintenance to ensure effective functioning of laboratory equipment and to extend the life of equipment

- Describes troubleshooting methods to determine whether equipment is malfunctioning and the cause (B)

Ethics

ETH 1.00 Professional Code of Conduct: adheres to policies and principles governing professional ethics and rules of conduct when working in a public health

- Aligns personal integrity with organizational culture (B)
- Applies ethical principles and professional rules of conduct to the workplace (B)

ETH 2.00 Scientific Code of Conduct: adheres to policies and principles governing scientific ethics and rules of conduct when working in a public health laboratory

- Verifies scientific integrity of test results and findings (B)

-Applies scientific ethics and rules of conduct to the workplace (B)

LEVEL 2

Communications

COM 2.00 Active listening skills: displays active listening skills when interacting with others

-Provides counterpoints while being respectful of disagreements (C)

COM 3.00 Comprehension of materials: demonstrates comprehension of written documents and directions

-Applies knowledge acquired from written text to situations (C)

COM 5.00 Communication professionalism: ensures professionalism in communication with customers and stakeholders

-Displays professional demeanor in all situations with customers and stakeholders (C)

-Selects information to share (C)

COM 6.00 Professional reports: prepares professional written reports and oral presentations

-Creates drafts of written reports (C)

-Creates drafts of oral presentations (C)

COM 7.00 Risk communication: applies emergency and risk communication principles and techniques to explain information to targeted audiences

-Adheres to the risk communication plan (C)

COM 8.00 Public health laboratory value: promotes the value of the public health laboratory

-Presents communication materials to explain the importance of the public health laboratory (C)

-Incorporates use of stories when communicating the impact of public health laboratory work (C)

General Laboratory Practice

GEN 1.00 - General technical and laboratory practice knowledge: demonstrates general knowledge and skills related to the scientific and technical components of laboratory testing

- Instructs others in concepts and theories related to the specific testing that is conducted in work area (C)
- Instructs others in fundamental mathematical and statistical concepts and practices (C)
- Discusses scientific and technical advances relevant to own work (C)
- Integrates basic laboratory techniques into standard operating procedures and new laboratory practices (C)
- Resolves routine technical problems with methods, procedures, and laboratory equipment including documenting corrective action (C)
- Instructs others in model laboratory practices (C)
- Instructs others in use of paper or electronic methods or systems for documentation (C)

GEN 2.00 - Reagent Use and Storage: adheres to policies and principles regarding the use and storage of laboratory reagents and supplies

- Instructs staff in use and storage of reagents and supplies (C)
- Instructs staff in preparing reagents (C)

GEN 3.00 - Equipment Use: adheres to policies and principles regarding the use, maintenance, and calibration of laboratory equipment

- Instructs staff in the operation of laboratory equipment (C)
- Instructs staff in procedures to ensure equipment function (C)
- Performs calibration of complex instruments and equipment (C)
- Inspects preventive maintenance and calibrations records for completeness (C)

GEN 4.00 - Pre-examination: performs steps in the pre-examination phase of testing

- Instructs others in policies, processes, and procedures for sample management (C)

GEN 5.00 - Examination: performs steps in the examination phase of testing

- Instructs staff in sample analyses (C)
- Instructs staff in policies, processes, and procedures regarding testing workflow (C)

- Interprets QC data prior to reporting results (C)

GEN 6.00 - Postexamination: performs steps in the postexamination phase of testing

- Evaluates QC data for a given data reporting period (C)
- Analyzes test data (C)
- Instructs staff in the policies, processes, and procedures related to reporting and release of examination results and notifiable results (C)
- Monitors TAT performance (C)
- Collects data for reporting on QA indicators and processes (C)

GEN 7.00 - Regulatory Compliance: complies with regulations and guidelines governing laboratory testing

- Instructs staff on regulatory requirements and guidelines related to laboratory testing (C)
- Reviews PT and alternative assessment results (C)
- Reviews submissions of PT and alternative assessment results (C)
- Compiles results of method validation and performance verification (C)
- Instructs staff in policies, processes, and procedures regarding protected information (C)

Microbiology

MCB 1.00 Concepts and techniques: adheres to policies and principles governing actions and behaviors that are essential when working in a microbiology laboratory

- Relates microbiological concepts and theories to the specific tests that are conducted (C)
- Integrates basic microbiological techniques into new laboratory practices and procedures (C)

MCB 3.00 Pre-examination: assesses microbiological samples during the pre-examination phase

- Consults on nonroutine sample collection, labeling, and handling procedures for microbiological examination (C)

- Instructs others on packing and shipping of Category A and Category B infectious substances (C)
- Instructs others on microbiological material transport policies, processes, and procedures (C)
- Adheres to policies, processes, and procedures regarding the identification, handling, safety, appropriateness and triage of samples containing agents of concern (C)
- Instructs staff in policies, processes, and procedures regarding accessioning and receipt of microbiological samples (C)
- Instructs staff on policies, processes, and procedures for the systematic tracking of microbiological samples from receipt to final disposition (C)
- Instructs others in the appropriateness of routine and nonroutine samples for microbiological examination (C)
- Instructs staff in policies, processes, and procedures regarding testing workflow (C)
- Instructs staff in policies, processes, and procedures regarding NAAT workflow, including pre- and postamplification areas (C)
- Instructs staff in sample set-up for microbiological examinations (C)
- Reports to epidemiologists when microbiological examination requests warrant notification (C)

MCB 4.00 Examination: assesses microbiological samples during the examination phase

- Instructs staff on the preparation of culture media (C)
- Instructs staff in the media selection process (C)
- Instructs staff in how to inoculate cultures using aseptic technique (C)
- Instructs staff in morphological identification and differentiating organisms from artifacts (C)
- Instructs staff in identifying growth characteristics of microorganisms (C)
- Instructs staff in the performance of identification and susceptibility testing using manual methods (C)
- Instructs staff in the performance of identification and susceptibility testing using

automated systems, including how to utilize algorithms to determine additional testing (C)

- Instructs staff in how to perform antigen detection methods (C)

- Instructs staff in the performance of NA sequencing for the identification of infectious agents (C)

- Instructs staff in how to perform strain typing (C)

- Performs rule-out testing and referral for identification, confirmation, and characterization of agents of concern (C)

- Interprets QC data prior to reporting results (C)

MCB 5.00 Postexamination: performs postexamination procedures of microbiological testing

- Evaluates QC data for a given data reporting period (C)

- Analyzes test data (C)

- Instruct staff in the policies, processes, and procedures related to reporting and release of examination results and notifiable results (C)

- Collects data for reporting on QA indicators (C)

MCB 6.00 Regulatory compliance: ensures regulatory compliance

- Documents NCEs on discovery for implementation of corrective actions (C)

- Reviews PT and alternative assessment results (C)

- Compiles results of method validation and performance verification (C)

- Evaluates LDT validation data (C)

- Complies with policies, processes, and procedures related to the federal Select Agent Program, including the securing, safe handling, and testing of select agents and the documentation of activities (C)

Quality Management Systems

QMS 05.00 Purchasing and inventory: ensures that requirements for supplies and services are consistently met

- Follows established inventory management processes, including receipt and inspection

processes (C)

QMS 06.00 Laboratory equipment: ensures that laboratory equipment selection, installation, use, maintenance, and troubleshooting meet performance standards

- Provides input on the processes and procedures for equipment acquisition and decommissioning (C)

QMS 10.00 Nonconforming event management: ensures that processes are in place for detecting and managing nonconforming events

- Responds to NCEs (C)

- Leads the process of investigating NCEs and performing root cause analyses (C)

QMS 11.00 Assessments: ensures that processes are in place to perform internal audits and external assessments

- Ensures the application of the quality assessment plan to laboratory operations (C)

- Performs external assessment procedures (C)

- Performs internal audit procedures (C)

- Employs pre-examination, examination, and postexamination quality indicators (C)

- Complies with policies, processes, and procedures related to collecting and analyzing quality indicator data (C)

QMS 12.00 Continual improvement: ensures mechanisms for continuous quality improvement

- Implements changes identified through the CQI program (C)

- Follows CQI processes and procedures for troubleshooting and documenting required CQI activities (C)

- Implements the processes and procedures related to corrective action (C)

- Implements the processes and procedures related to preventive action (C)

- Participates in the process and procedures related to change management (C)

Safety

SAC 3.00 Risk management: manages risks through systematic practices to evaluate, minimize, or eliminate them

- Implements control measures identified in risk assessments (C)

SHC 2.00 Safe work practices: designs work practices and procedures to minimize exposure to hazards and to adhere to regulatory requirements

- Uses proper work practices and procedures (C)

SHC 4.00 Systems to track hazards: establishes a system to detect and to control or eliminate the underlying causes of hazards or exposures

- Implements procedures for reporting and tracking all hazards (C)

SHC 5.00 Preventive maintenance: conducts regular maintenance to ensure effective functioning of laboratory equipment and to extend the life of equipment

- Complies with processes and procedures to ensure equipment repairs (C)

Ethics

ETH 1.00 Professional Code of Conduct: adheres to policies and principles governing professional ethics and rules of conduct when working in a public health

- Exemplifies integrity in interactions and activities (C)

- Serves as a role model of ethical behavior by consistently conforming to the highest ethical standards and practices (C)

ETH 2.00 Scientific Code of Conduct: adheres to policies and principles governing scientific ethics and rules of conduct when working in a public health laboratory

- Instructs others in policies, processes, and procedures regarding scientific integrity of test results and findings (C)

- Serves as a role model of scientific ethical behavior and rules of conduct by consistently conforming to the highest scientific standards and practices (C)

LEVEL 3

Communications

COM 2.00 Active listening skills: displays active listening skills when interacting with others

- Coaches others in techniques of respectful exchange (P)

COM 3.00 Comprehension of materials: demonstrates comprehension of written documents and directions

- Adapts concepts from written text for use in new situations (P)

COM 5.00 Communication professionalism: ensures professionalism in communication with customers and stakeholders

- Monitors interactions with customers and stakeholders to ensure they are conducted professionally (P)

- Develops information to share (P)

COM 6.00 Professional reports: prepares professional written reports and oral presentations

- Revises written reports (P)

- Revises oral presentations (P)

COM 7.00 Risk communication: applies emergency and risk communication principles and techniques to explain information to targeted audiences

- Ensures staff compliance with the risk communication plan (P)

COM 8.00 Public health laboratory value: promotes the value of the public health laboratory

- Develops communication materials to explain the importance of the public health laboratory (P)

- Develops stories that convey information highlighting the impact of public health laboratory work (P)

General Laboratory Practice

GEN 1.00 - General technical and laboratory practice knowledge: demonstrates general knowledge and skills related to the scientific and technical components of laboratory testing

- Ensures that accepted concepts and theories are applied to laboratory testing (P)

- Ensures appropriate utilization of mathematical and statistical concepts and practices (P)

- Integrates scientific and technical advances into laboratory operations (P)

- Ensures that staff are properly trained in the performance of technical skills (P)

- Resolves complex technical problems with methods, procedures, and laboratory equipment, including documenting corrective action (P)

- Implements model laboratory practices (P)

- Ensures utilization of established paper and electronic documentation methods or systems (P)

GEN 2.00 - Reagent Use and Storage: adheres to policies and principles regarding the use and storage of laboratory reagents and supplies

- Ensures staff compliance with policies, processes, and procedures for use and storage of reagents and supplies (P)

- Ensures staff compliance with policies, processes, and procedures for reagent preparation (P)

GEN 3.00 - Equipment Use: adheres to policies and principles regarding the use, maintenance, and calibration of laboratory equipment

- Ensures staff compliance with policies, processes, and procedures for the operation of laboratory equipment (P)

- Determines need for repair or replacement of laboratory equipment (P)

- Develops processes and procedures for calibration of instruments and equipment (P)

- Evaluates the preventive maintenance and calibrations records (P)

GEN 4.00 - Pre-examination: performs steps in the pre-examination phase of testing

- Monitors staff compliance with established sample management policies, processes, and procedures (P)

GEN 5.00 - Examination: performs steps in the examination phase of testing

- Ensures staff compliance with policies, processes, and procedures for sample analyses (P)

- Ensures staff compliance in following established testing workflow (P)

- Examines QC data over time to establish QC ranges and limits (P)

GEN 6.00 - Postexamination: performs steps in the postexamination phase of testing

- Ensures staff compliance with established policies, processes, and procedures for QC evaluation activities (P)

- Interpret complex or ambiguous results (P)
- Ensures staff compliance with policies, processes, and procedures related to reporting and release of examination results and notifiable results (P)
- Identifies process efficiencies to improve TAT (P)
- Evaluates QA indicator data (P)

GEN 7.00 - Regulatory Compliance: complies with regulations and guidelines governing laboratory testing

- Ensures staff compliance with regulatory requirements and guidelines related to laboratory testing (P)
- Monitors to ensure the PT and alternative assessment program meets regulatory requirements (P)
- Ensures staff compliance with reporting of PT and alternative assessment results (P)
- Evaluates method validation and performance verification results (P)
- Ensures staff compliance with policies, processes, and procedures regarding protected information (P)

Microbiology

MCB 1.00 Concepts and techniques: adheres to policies and principles governing actions and behaviors that are essential when working in a microbiology laboratory

- Ensures microbiological concepts and theories are applied in laboratory testing (P)
- Trains staff on basic microbiological techniques (P)

MCB 3.00 Pre-examination: assesses microbiological samples during the pre-examination phase

- Monitors staff compliance with established policies, processes, and procedures regarding microbiological sample collection, labeling, and handling (P)
- Ensures staff compliance with policies, processes, and procedures regarding the packing and shipping of Category A and Category B infectious substances (P)
- Develops microbiological material transport processes and procedures (P)
- Ensures staff compliance with policies, processes, and procedures regarding the

identification, handling, safety, appropriateness and triage of samples containing agents of concern (P)

- Develops processes and procedures for microbiological sample accessioning and receipt (P)

- Develops processes and procedures for the systematic tracking of microbiological samples from receipt to final disposition (P)

- Develops processes and procedures for assessment of routine and nonroutine sample appropriateness for microbiological examination (P)

- Ensures staff compliance with policies, processes, and procedures related to testing workflow (P)

- Ensures staff compliance with policies, processes, and procedures regarding NAAT workflow (P)

- Develops processes and procedures regarding sample set-up for microbiological examinations (P)

- Ensures staff compliance with policies, processes, and procedures for notification and consultation with epidemiologists regarding microbiological examination requests (P)

MCB 4.00 Examination: assesses microbiological samples during the examination phase

- Ensures staff compliance with policies, processes, and procedures regarding quality practices for media preparation (P)

- Ensures staff compliance with policies, processes and procedures regarding quality practices for media selection (P)

- Ensures staff compliance with policies, processes and procedures regarding quality practices for culture inoculation (P)

- Ensures staff compliance with policies, processes and procedures regarding quality practices for morphological identification (P)

- Ensures staff compliance with policies, processes and procedures regarding quality practices for identifying microorganism growth characteristics (P)

- Ensures staff compliance with policies, processes, and procedures regarding quality practices for performing identification and susceptibility testing using manual methods (P)

- Ensures staff compliance with policies, processes, and procedures regarding quality practices for performing identification and susceptibility testing using automated systems (P)
- Ensures staff compliance with policies, processes, and procedures regarding quality practices for antigen detection methods (P)
- Ensures staff compliance with policies, processes, and procedures regarding quality practices for NA sequencing of infectious agents, including the selection and utilization of databases (P)
- Ensures staff compliance with policies, processes, and procedures regarding quality practices for strain typing (P)
- Ensures the laboratory responds quickly to needs for rapid testing with timely notification and secure messaging of results (P)
- Examines QC data over time to establish QC ranges and limits (P)

MCB 5.00 Postexamination: performs postexamination procedures of microbiological testing

- Ensures staff compliance with established policies, processes, and procedures for QC evaluation activities (P)
- Interprets complex or ambiguous results (P)
- Ensures staff compliance with policies, processes and procedures related to reporting and release of examination results and notifiable results (P)
- Evaluates QA indicator data (P)

MCB 6.00 Regulatory compliance: ensures regulatory compliance

- Analyzes NCEs for corrective actions and documentation (P)
- Monitors to ensure the PT and alternative assessment program meets regulatory requirements (P)
- Evaluates method validation and performance verification results (P)
- Creates processes and procedures for the development and validation of LDTs (P)
- Implements policies, processes, and procedures regarding select agent security, biosafety, testing, and incident response plans (P)

Quality Management Systems

QMS 05.00 Purchasing and inventory: ensures that requirements for supplies and services are consistently met

- Develops inventory processes for laboratory supplies, reagents, and verification of performance (P)

QMS 06.00 Laboratory equipment: ensures that laboratory equipment selection, installation, use, maintenance, and troubleshooting meet performance standards

- Develops the processes and procedures for equipment acquisition and decommissioning (P)

QMS 10.00 Nonconforming event management: ensures that processes are in place for detecting and managing nonconforming events

- Investigates NCEs, including the creation of a corrective action plan (P)
- Assesses NCE investigations and root cause analyses to improve processes (P)

QMS 11.00 Assessments: ensures that processes are in place to perform internal audits and external assessments

- Develops the quality assessment plan (P)
- Develops the processes and procedures to select, enroll, and participate in external assessments (P)
- Develops the processes and procedures for internal audits (P)
- Develops processes and procedures for determining pre-examination, examination, and postexamination quality indicators (P)
- Develops the processes and procedures for collecting and analyzing quality indicator data (P)

QMS 12.00 Continual improvement: ensures mechanisms for continuous quality improvement

- Develops the processes and procedures of the CQI program (P)
- Documents staff compliance with CQI activities that support the CQI monitoring, evaluation, and review processes (P)
- Develops corrective action processes and procedures to address quality improvement (P)

- Develops the processes and procedures related to preventive action (P)
- Implements the change management process, including communication of changes made to established policies, processes, and procedures (P)

Safety

SAC 3.00 Risk management: manages risks through systematic practices to evaluate, minimize, or eliminate them

- Manages the risk assessment process (P)

SHC 2.00 Safe work practices: designs work practices and procedures to minimize exposure to hazards and to adhere to regulatory requirements

- Develops proper work practices and procedures (P)

SHC 4.00 Systems to track hazards: establishes a system to detect and to control or eliminate the underlying causes of hazards or exposures

- Develops procedures to report, track and investigate hazards in their workspace (P)

SHC 5.00 Preventive maintenance: conducts regular maintenance to ensure effective functioning of laboratory equipment and to extend the life of equipment

- Implements the processes and procedures to ensure equipment repairs (P)

Ethics

ETH 1.00 Professional Code of Conduct: adheres to policies and principles governing professional ethics and rules of conduct when working in a public health

- Coaches staff in behaviors that exemplify integrity (P)
- Ensures staff compliance with policies and procedures related to ethical principles and professional rules of conduct (P)

ETH 2.00 Scientific Code of Conduct: adheres to policies and principles governing scientific ethics and rules of conduct when working in a public health laboratory

- Ensures staff compliance with policies and procedures regarding scientific integrity of all results and findings (P)
- Ensures staff compliance with policies and procedures related to scientific ethics and rules of conduct (P)

LEVEL 4

Communications

COM 2.00 Active listening skills: displays active listening skills when interacting with others

- Facilitates respectful dialogue among participants in the exchange (E)

COM 3.00 Comprehension of materials: demonstrates comprehension of written documents and directions

- Extrapolates information from written text to develop new ideas that enhance work processes (E)

COM 5.00 Communication professionalism: ensures professionalism in communication with customers and stakeholders

- Establishes policies for professional customer and stakeholder interactions (E)

- Creates opportunities for sharing information (E)

COM 6.00 Professional reports: prepares professional written reports and oral presentations

- Establishes policies, processes, and procedures for written reports (E)

- Establishes policies, processes, and procedures for oral presentations (E)

COM 7.00 Risk communication: applies emergency and risk communication principles and techniques to explain information to targeted audiences

- Establishes policies, processes, and procedures related to the risk communication plan (E)

COM 8.00 Public health laboratory value: promotes the value of the public health laboratory

- Manages the policies, processes, and procedures regarding communication materials to explain the importance of the public health laboratory (E)

- Evaluates the impact of storytelling in promoting the public health laboratory (E)

General Laboratory Practice

GEN 1.00 - General technical and laboratory practice knowledge: demonstrates general knowledge and skills related to the scientific and technical components of laboratory testing

- Oversees that laboratory practices are in accordance with accepted scientific and laboratory concepts and theories (E)

- Oversees the policies, processes, and procedures regarding the use of mathematical and statistical concepts and practices (E)
- Critiques scientific and technological advances to evaluate possible impact for the laboratory (E)
- Oversees the application of technical skills to laboratory practices (E)
- Oversees the policies, processes, and procedures related to troubleshooting technical problems (E)
- Manages policies, processes, and procedures to ensure staff comply with model laboratory practices (E)
- Oversees the policies, processes, and procedures for the creation and use of paper and electronic methods or systems for documentation (E)

GEN 2.00 - Reagent Use and Storage: adheres to policies and principles regarding the use and storage of laboratory reagents and supplies

- Oversees the use and storage of reagents and supplies (E)
- Oversees the policies, processes, and procedures for reagent preparation (E)

GEN 3.00 - Equipment Use: adheres to policies and principles regarding the use, maintenance, and calibration of laboratory equipment

- Oversees the policies, processes, and procedures for the operation of laboratory equipment (E)
- Oversees the policies, processes, and procedures for the maintenance, repair, and replacement of laboratory equipment (E)
- Oversees the policies, processes, and procedures for calibration of instruments and equipment (E)
- Oversees the preventive maintenance and calibration program (E)

GEN 4.00 - Pre-examination: performs steps in the pre-examination phase of testing

- Oversees sample management policies, processes, and procedures (E)

GEN 5.00 - Examination: performs steps in the examination phase of testing

- Oversees the policies, processes, and procedures related to sample analyses (E)

- Oversees the policies, processes, and procedures that optimize and improve testing workflow (E)

- Oversees the policies, processes, and procedures related to QC activities, including staff compliance (E)

GEN 6.00 - Postexamination: performs steps in the postexamination phase of testing

- Oversees the policies, processes, and procedures related to QC evaluation activities (E)

- Oversees the policies, processes, procedures and algorithms related to data analysis and results interpretation (E)

- Oversees the policies, processes, and procedures related to reporting and release of examination results and notifiable results to partners (E)

- Oversees the policies, processes, and procedures related to TAT (E)

- Oversees the policies, processes, and procedures related to QA (E)

GEN 7.00 - Regulatory Compliance: complies with regulations and guidelines governing laboratory testing

- Oversees the policies, processes, and procedures regarding regulatory requirements and guidelines related to laboratory testing (E)

- Oversees the policies, processes, and procedures related to PT and alternative assessments (E)

- Oversees the policies, processes, and procedures related to PT and alternative assessment reporting (E)

- Oversees the policies, processes, and procedures related to method validation and performance verification (E)

- Oversees that organizational policies, processes, and procedures related to protected information align with laws and regulatory requirements and guidelines (E)

Microbiology

MCB 1.00 Concepts and techniques: adheres to policies and principles governing actions and behaviors that are essential when working in a microbiology laboratory

- Evaluates laboratory practices for adherence to accepted microbiological concepts and theories (E)

- Ensures implementation of basic microbiological techniques into laboratory practices (E)

MCB 3.00 Pre-examination: assesses microbiological samples during the pre-examination phase

- Oversees the policies, processes, and procedures for sample collection, labeling, and handling for microbiological examination (E)

- Develops policies, processes, and procedures to ensure staff compliance with packing and shipping regulations concerning Category A and Category B infectious substances (E)

- Oversees the policies, processes, and procedures regarding microbiological material transport (E)

- Oversees the policies, processes, and procedures regarding the identification, handling, safety, appropriateness and triage of samples containing agents of concern (E)

- Oversees the policies, processes, and procedures regarding microbiological sample accessioning and receipt (E)

- Oversees the policies, processes, and procedures for the systematic tracking of microbiological samples from receipt to final disposition (E)

- Oversees the policies, processes, and procedures regarding assessment of routine and nonroutine sample appropriateness for microbiological examination (E)

- Establishes policies, processes, and procedures related to testing workflow (E)

- Establishes policies, processes, and procedures for NAAT workflow (E)

- Oversees the policies, processes, and procedures regarding sample set-up for microbiological examinations (E)

- Oversees the policies, processes, and procedures for notification and consultation with epidemiologists regarding microbiological examination requests (E)

MCB 4.00 Examination: assesses microbiological samples during the examination phase

- Oversees the policies, processes, and procedures for media preparation (E)

- Oversees the policies, processes, and procedures regarding media selection (E)

- Oversees the policies, processes, and procedures regarding culture inoculation (E)
- Oversees the policies, processes, and procedures regarding morphological identification (E)
- Oversees the policies, processes, and procedures for interpretation of microorganism growth characteristics (E)
- Oversees the policies, processes, and procedures regarding the performance of identification and susceptibility testing using manual methods (E)
- Oversees the policies, processes, and procedures regarding the performance of identification and susceptibility testing using automated systems (E)
- Oversees the policies, processes, and procedures for antigen detection (E)
- Oversees the policies, processes, and procedures regarding NA sequencing and sequence-based identification (E)
- Oversees the policies, processes, and procedures regarding strain typing (E)
- Oversees the policies, processes, and procedures regarding rule-out testing and referral (E)
- Ensures the QC program adheres to regulatory requirements (E)

MCB 5.00 Postexamination: performs postexamination procedures of microbiological testing

- Oversees the policies, processes, and procedures related to QC evaluation activities (E)
- Oversees the policies, processes, procedures, and algorithms related to data analysis and results interpretation (E)
- Oversees the policies, processes, and procedures, related to reporting and release of examination results and notifiable results to partners (E)
- Oversees the policies, processes, and procedures related to QA (E)

MCB 6.00 Regulatory compliance: ensures regulatory compliance

- Designs a management system for NCEs (E)
- Oversees the policies, processes, and procedures related to PT and alternative assessments (E)

- Oversees the policies, processes, and procedures related to method validation and performance verification (E)
- Oversees the policies, processes, and procedures regarding the development and validation of LDTs (E)
- Oversees select agent security, biosafety, testing, and incident response plans to ensure alignment with select agent regulations (E)

Quality Management Systems

QMS 05.00 Purchasing and inventory: ensures that requirements for supplies and services are consistently met

- Oversees inventory management plan (E)

QMS 06.00 Laboratory equipment: ensures that laboratory equipment selection, installation, use, maintenance, and troubleshooting meet performance standards

- Oversees the policies, processes, and procedures for equipment acquisition and decommissioning (E)

QMS 10.00 Nonconforming event management: ensures that processes are in place for detecting and managing nonconforming events

- Oversees the policies, processes, and procedures related to NCEs (E)
- Oversees the policies, processes, and procedures for investigating NCEs and performing root cause analyses (E)

QMS 11.00 Assessments: ensures that processes are in place to perform internal audits and external assessments

- Oversees a comprehensive quality assessment plan (E)
- Oversees the policies, processes, and procedures related to external assessment (E)
- Oversees the policies, processes, and procedures related to internal audits (E)
- Oversees the policies, processes, and procedures related to developing and assessing quality indicators (E)
- Oversees the policies, processes, and procedures related to the collection and analysis of quality indicator data (E)

QMS 12.00 Continual improvement: ensures mechanisms for continuous quality improvement

- Oversees the policies, processes, and procedures related to the quality improvement program (E)
- Oversees the policies, processes, and procedures related to CQI activities (E)
- Oversees the policies, processes, and procedures related to corrective action (E)
- Oversees the policies, processes, and procedures related to preventive action (E)
- Oversees activities related to policy, process, and procedural change management, including evaluation of impact on organizational processes and services (E)

Safety

SAC 3.00 Risk management: manages risks through systematic practices to evaluate, minimize, or eliminate them

- Oversees the policies, processes, and procedures related to risk assessment to ensure controls are appropriate for activities, agents and materials used in laboratory (E)

SHC 2.00 Safe work practices: designs work practices and procedures to minimize exposure to hazards and to adhere to regulatory requirements

- Ensures staff knowledge and use of proper work practices and procedures (E)

SHC 4.00 Systems to track hazards: establishes a system to detect and to control or eliminate the underlying causes of hazards or exposures

- Ensures staff compliance with reporting, tracking, and investigating hazards in the workplace (E)

SHC 5.00 Preventive maintenance: conducts regular maintenance to ensure effective functioning of laboratory equipment and to extend the life of equipment

- Develops the policies, processes, and procedures to ensure repairs are conducted in accordance with organizational safety and health procedures (E)

Ethics

ETH 1.00 Professional Code of Conduct: adheres to policies and principles governing professional ethics and rules of conduct when working in a public health

- Creates a culture where integrity is the foundation for all interactions and activities (E)

-Oversees the policies, processes and procedures related to ethical principles and professional rules of conduct (E)

ETH 2.00 Scientific Code of Conduct: adheres to policies and principles governing scientific ethics and rules of conduct when working in a public health laboratory

-Oversees the policies, processes and procedures to ensure practices are consistent with guidelines for scientific integrity (E)

-Oversees the policies, processes and procedures related to scientific ethics and rules of conduct (E)

Definitions:

Behavioral Anchor: A specific, easy-to-apply example of a behavior that demonstrates the mastering of the competency statement and proficiency level.

Career Ladder: A series of steps within a job classification, each with increasing responsibility as expertise is developed, allowing for recognition of professional growth. The steps in the career ladder may require competition for advancement. For example, progressing through the Federal GS system, or moving from a Laboratory Scientist I to Laboratory Scientist II to Laboratory Scientist III. A Career Ladder is designed to encourage and assist staff to further their professional development and to reward them for their commitment to professional growth and excellence without moving to a new career path.

Career Ladder Plan: An agreement between the supervisor and the employee for documenting the achievement of the applicable competency statements, using behavioral anchors. This plan is developed by both the supervisor and the employee and will include time frames, accountability and feedback opportunities.