

Public Health Laboratory Position Guide: Respiratory Virus Surveillance Laboratory Liaison



Overview

A respiratory virus surveillance laboratory liaison can play an important role in bolstering the submission of surveillance data and specimens to the public health laboratory and strengthening relationships with the wide array of partners and providers that make up the respiratory virus surveillance system.

The list of key duties, responsibilities and qualifications compiled here can be used to develop a job description for a respiratory virus surveillance laboratory liaison to other laboratories within the jurisdiction to bolster the submission of surveillance data and specimens. Funding dependent, the duties and responsibilities could be the responsibility of a standalone respiratory virus surveillance laboratory liaison position. Alternatively, many duties could be incorporated into existing positions or could be expanded to apply more broadly to a clinical laboratory liaison.

Example position descriptions are included to illustrate how these duties might be incorporated into a variety of positions; [download an editable version of this document](#) to easily adapt these materials to your needs.

Liaison Position Summary

The respiratory virus surveillance laboratory liaison is the primary connection between the public health laboratory and the public health laboratory system partners, including clinical (physician office-based, clinic-based, hospital-based) and other public health laboratories. The person in this position is responsible for communicating and collaborating with laboratory staff and epidemiologists as well as external partners in local clinical laboratories, long term or acute care facilities, and other partners. They will support laboratory and epidemiology staff in encouraging participation in state- and nation-wide surveillance programs.

Duties and Responsibilities

The following are a general summary of potential duties and are not all inclusive:

- Develops and maintains a database of public health laboratory system partners in the jurisdiction.
- Leads outreach activities to public health laboratory system partners including conducting site visits to specimen submitting entities.
- Coordinates with local clinical laboratories to solicit clinical material submission upon request from laboratory or epidemiology partners.
- Provides specimen submission guidance to clinical sites and local health jurisdictions for laboratory testing at the public health laboratory.
- Assists with providing instruction on transport of specimens to the laboratory.
- Conducts data entry and routing of test requests to the appropriate testing units and tracks pending samples.
- Coordinates testing at the public health laboratory and reporting for viral disease surveillance projects.
- Reports test results to submitters and compiles summary reports with surveillance data (e.g., surveillance summaries, dashboard updates) to share with public health laboratory system partners.
- Maintains an inventory database of stored clinical specimens, prepares shipping documents and ships specimens as needed.
- Stays informed of the latest guidelines/recommendations for the respiratory virus surveillance program.

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Required Qualifications

- Proficiency with Microsoft Excel; experience with database programs such as Microsoft Access and knowledge of statistical analysis.
- Experience in maintaining complex and accurate records.
- Effective oral and written communication skills.
- Understanding of medical confidentiality requirements and laws.
- Able to establish and maintain harmonious working relationships with a diverse range of providers and collaborators.
- Possesses analytical and problem-solving skills.
- Completes assignments in a timely and efficient manner.

Preferred Qualifications

- Knowledge of the principles, practices and regulations of safe specimen handling, packaging and shipping.
- Previous experience working or volunteering in a public health setting.
- Possesses keen attention to detail.

Potential Resources to Support a Liaison

Funding to support the responsibilities of this position could come from a combination of sources, such as:

- **Epidemiology and Laboratory Capacity (ELC) Program:** There are multiple projects where this position could be supported, and it is likely that the position would share responsibilities with other program areas (e.g. antimicrobial resistance laboratory coordinator)
- **Public Health Emergency Preparedness (PHEP) Program**
- **Internship and Fellowship Programs:** Interns or fellows may be able to provide additional workforce capacity for some of the responsibilities of this position. APHL supports two public health laboratory-specific programs:
 - [APHL-CDC Public Health Laboratory Internship Program](#)
 - [APHL-CDC Public Health Laboratory Fellowship Program](#)

Example Liaison-focused Position Descriptions

This section includes a variety of position descriptions from public health laboratories that contain elements of a respiratory virus surveillance laboratory liaison's role. Because they are based off real examples, they may not all contain the same level of detail.

- [Lab Program Advisor](#)
- [Public Health Educator \(Clinical Laboratory Network Outreach Specialist\)](#)
- [Laboratory Liaison](#)
- [Research Associate](#)
- [Research Scientist I](#)
- [Research Scientist II](#)
- [Microbiology Senior Liaison](#)

Download an editable version of this document to easily adapt these position descriptions and the summaries above to your needs.

Laboratory Program Advisor

Position Summary

The laboratory program advisor (LPA) exists to support the State Public Health Laboratory System (SPH Laboratory System) by serving as a system coordinator of a variety of laboratory and non-laboratory partners (including local public health officials, epidemiologists, environmental health professionals, etc.). The LPA is the primary liaison between the State Public Health Laboratory and the partnering network laboratories, including clinical (physician office-based, clinic-based, hospital-based), agricultural, environmental, veterinary and public health laboratories. The LPA serves as the “face of the public health laboratory system.” He or she focuses on promoting the concept of collaboration among clinical and public health partners.

Applicant Requirements and Qualifications

Essential Requirements

- A baccalaureate degree in a laboratory science or equivalent, such as medical technology/clinical laboratory science, biology, microbiology, molecular biology, chemistry, biochemistry
- A minimum of 2 years clinical or public health laboratory experience
- Strong communication and interpersonal skills

Desirable Requirements

- Experience in a clinic- based or hospital-based laboratory setting
- Experience in a public health setting

Position Duties and Responsibilities

These are a general summary and not all inclusive. Functions of the LPA may include:

- Evaluating the system
- Promoting quality systems
- Building relationships
- Communicating with partners
- Assuring laboratory best practices

System Evaluation

- Identify SPH Laboratory System stakeholders
- Develop and maintain a database of SPH Laboratory System laboratories in the state.
- Periodically assess the SPH Laboratory System laboratories’ capabilities as they relate to the Core Functions and Capabilities of State Public Health Laboratories.
- Identify the needs of SPH Laboratory System laboratories; develop and implement strategies to address the needs.

Quality Systems

- Facilitate continuous improvement of quality laboratory practice of SPH Laboratory System laboratories, specifically as it relates to the Core Functions and Capabilities of State Public Health Laboratories.
- Facilitate the assessment and improvement of pre- and post-analytical processes (e.g., specimen acquisition and result reporting) both internally and externally.

Relationship Building

- Lead and oversee outreach activities to SPH Laboratory System laboratories.
- Coordinate a Laboratory Advisory Committee (LAC) of SPH Laboratory System stakeholders and solicit their input.
- Serve as a liaison to the state epidemiology program, emergency response program and other relevant programs.
- Promote the SPH Laboratory System and National Laboratory System concepts through site-visits, speaking opportunities, and other means.

Communication

- Assure a redundant rapid laboratory messaging system to communicate with SPH Laboratory System partners
- Disseminate periodic information (e.g., newsletters, websites and ListServ) to SPH Laboratory System partners.

Laboratory Best Practices

- Facilitate the implementation of non-regulatory approaches, such as state-specific challenges, to benchmark and measure competency of SPH Laboratory System laboratories.
- Facilitate the development and promotion of laboratory training and education events to SPH Laboratory System laboratories in collaboration with the State Laboratory Training Coordinator and the National Laboratory Training Network.
- Share strategies, processes and best practices with other state Laboratory Program Advisors.
- Assist in developing and promoting student internship opportunities
- Seek funding support for SPH Laboratory System activities, both outside of and within the health department.

Public Health Educator (Clinical Lab Network Outreach Specialist)

Position Summary

The Communicable Disease Division (CDD) is seeking a public health educator to support and optimize outreach activities for the Clinical Laboratory Network (CLN). The CLN is a unique partnership between the State Public Health Laboratory and clinical laboratories. Formed to facilitate emergency response, the CLN has grown and expanded to bridge the gap between clinical and public health throughout the state focusing on effective exchange of clinical and public health information (emergency preparedness, disease surveillance, diagnostics, etc.), communication, and education. The successful candidate will collaborate with the CLN Outreach Coordinator to lead the Laboratory Technical Advisory Group of the CLN, deliver educational and conference content to the CLN (e.g. presentations, teleconferences and webinars), enhance modes of communication between the State Public Health Laboratory and clinical laboratories in the state, strengthen relationships between the CLN and the CDD through on-site and virtual visits and other modes, create and deliver messages to laboratory and public health partners, and more.

Position Duties and Responsibilities

These are a general summary and not all inclusive:

- 30%** Advocates for and disseminates health resources, policies and safety information with educational materials and programs to appropriate entities to educate the public and health professionals.
- 30%** Collects and analyzes data by conducting research to improve public health programs and services.
- 35%** Develops materials, resources and policies that support healthy behaviors and environments and informs, educates and empowers the campus and community about environmental health and mental health issues.
- 2.5%** Participates in public health committees as needed.
- 2.5%** Directs grant and grant-funded public health programs and campaigns on established topics. May research, write and manage grants as needed to support outreach, policies and programming.

Applicant Requirements and Qualifications

Required

- Bachelor's Degree in bacteriology, microbiology, Medical Laboratory Science (MLS) or related allied health sciences
- 3 years of clinical or public health laboratory experience
- Strong ability to work independently and meet deadlines

Preferred

- MLS(ASCP), MLT (ASCP) or M(ASCP) certification
- Conference or event program management experience
- Strong customer service skills

- Strong verbal and written communication skills
- Strong basic computer skills including Microsoft Access, Excel, Power Point Outlook, and Word
- Experience with a variety of platforms, including but not limited to: virtual meeting/ learning apps like Teams, Zoom, etc.; podcasting; polling/survey technology; customer and event database management; social media
- Public health laboratory experience

Laboratory Liaison

Position Summary

The State Department of Public Health (DPH) seeks a hard-working and detail-oriented person with both laboratory science knowledge and excellent personal relations skills. The person in this position will be responsible for communicating and collaborating with laboratory staff and epidemiologists as well as external partners in local clinical labs and long term or acute care facilities. This person will maintain line lists of persons needing pathogen screening as part of foodborne or HAI investigations. They will support lab and epidemiologist staff in ensuring all isolates mandated for submission are both reported to surveillance and received in the lab. This person will also assist in ensuring data is transferred and reported as needed.

Position Duties and Responsibilities

These are a general summary and not all inclusive:

- Communicates between laboratory and epidemiology partners to develop, import and maintain patient rosters for testing in support of epidemiologic investigations.
- Coordinates with local clinical labs to request isolate submission upon request from lab or epi partners.
- Assists with providing instruction on transport of specimens to the lab.
- Maintain databases and tracking systems and other records associated with patient management during investigations.
- Utilize data systems to track the distribution of statements and capture billing and return information.
- Performs other duties as determined by the Division Director/management in response to program needs.

Applicant Requirements and Qualifications

Required Qualifications

- Capable of gathering information from documents, records and interviews
- Ability to maintain accurate records
- Means to communicate effectively both orally and in writing
- Capacity to exercise discretion in handling confidential material
- Able to establish and maintain harmonious working relationships with a range of providers

Preferred Qualifications

- Knowledge of the principles and practices of epidemiologic investigations.

Research Associate

Position Summary

The research associate (RA) will assist in the management of patient records and specimens submitted for testing to the Viral and Rickettsial Diseases Laboratory (VRDL). The primary responsibilities of this position will include coordinating testing of specimens submitted for diagnostic and surveillance testing primarily for SARS-CoV-2 (COVID-19) and the SARS-CoV-2 and Respiratory Virus Sentinel Surveillance (SRVSS) Program and may include mpox (MPX) and other viruses, reporting of test results, laboratory and patient data management, clerical/administrative work, and serving as a liaison between VRDL and its partners and stakeholders including epidemiologists and other public health laboratories. The RA may also perform basic/limited laboratory duties, as assigned.

Position Duties and Responsibilities

These are a general summary and not all inclusive:

Essential Functions

- Use databases such as StarLIMS and Access for data entry, locating patient information, routing samples for testing, and tracking pending samples.
- Provides specimen submission guidance to SRVSS clinical sites and local health jurisdictions for laboratory testing at VRDL.
- Perform data cleaning and geocoding of metadata for specimens prior to accessioning and routing for testing. Reviews laboratory results for accuracy and completeness, reports results to submitters, and answers questions about appropriate specimen type(s) to submit and the method of packaging and transport.
- Preparing specimens and shipping documents for send out to partners.
- Serves as a liaison between VRDL and its partners and stakeholders to obtain, retrieve, and maintain epidemiological information for patient and specimen tracking.
- Prepares and presents summary reports and updates to internal staff, DPH partners, and stakeholders.

Non-essential Functions

- Perform routing technical and non-technical laboratory procedures for processing specimens, including receiving and organizing the storage of specimens.
- Coordinate communications and testing for other COVID-19 enhanced surveillance projects including Whole Genome Sequencing, as needed.
- Perform other duties as directed by the DTEQS supervisor in the office and laboratory setting.

Applicant Requirements and Qualifications

Incumbent must:

- Effectively communicate orally and in writing with public health and healthcare professionals, and other DPH employees
- Possess analytical and problem-solving skills
- Complete assignments in a timely and efficient manner
- Adhere to departmental policies and procedures regarding attendance, leave and conduct
- Have proficiency with MS Excel; experience with database programs such as MS Access; knowledge of statistical analysis preferred
- Possess effective communication and writing skills

Education/Experience

- **Required:** Bachelor's degree in public health, biological sciences or related field
- **Preferred:** Previous experience working or volunteering in a public health setting

Other Skills, Knowledge and Abilities

- Knowledge of and skilled in the use of Microsoft Office products including Word, Excel, Access, Outlook and Power Point
- Strong organizational and communication skills
- Possesses keen attention to detail

Research Scientist I

Position Summary

This position supports the State Public Health's (PH) mission and strategic plan by analyzing and drawing conclusions from research studies of the microbial, viral, and immunologic aspects of infectious diseases. The employee will: plan, organize and carry out studies of limited scientific scope and complexity such as the gathering and analysis of testing data for enhanced virologic surveillance projects to share with PH and US Centers for Disease Control and Prevention (CDC) partners; will serve as team member on larger public health projects within the program and will act as a technical scientific consultant; maintain compliance with the State Public Health and Viral and Rickettsial Disease Laboratory Branch (VRDL) quality assurance and quality control (QA/QC) program and applicable regulations, as well as make decisions and address problems using established guidelines and procedures. Work will be reviewed periodically to ensure that it conforms to established policies and procedures.

Position Duties and Responsibilities

These are a general summary and not all inclusive, and include a percentage of time:

Essential Functions

- 40%** Reviews and incoming laboratory submittal forms and clinical samples. Conducts data entry and routing of test requests to the appropriate testing units and tracking pending samples. Coordinates testing and reporting for microbial, viral, and immunologic disease surveillance projects, such as for COVID-19, zoonotic and vector borne diseases, and/or vaccine preventable diseases. Collaborates with Viral and Rickettsial Disease Laboratory Branch (VRDL) staff on the interpretation of findings for internal and external partners and compiles data from surveillance studies. Reviews laboratory results for accuracy and completeness, reports results to submitters, and answers questions about specimens submitted. Interacts with internal and external partners and stakeholders to communicate laboratory data from testing and analysis, reports and presents data obtained from specific viral surveillance projects. Prepares summary reports relating to the progress of data analysis stemming from assigned projects. Prepares technical reports and updates information on the Viral and Rickettsial Disease Laboratory Branch (VRDL) website and assists principal investigators with presentations and publications. Troubleshoots data transfer and transmission problems.
- 25%** Supports Viral and Rickettsial Disease Laboratory Branch (VRDL) staff including but not limited to: pre-analytical and post-analytical review of patient data and results. Maintains databases of laboratory results for surveillance and other projects as assigned; uses Laboratory Information Management System (LIMS) and State Reportable Disease Information Exchange (REDIE) to review relevant data. When requested, the incumbent will query databases, compile and analyze data on an as-needed basis for the Program Chief and Division administration regarding testing volume, assessment and trends of laboratory data. Reviews testing data and reports to ensure they are sent out in a timely manner and that results and reports meet federal and state reporting requirements.
- 20%** Receives and organizes clinical samples, maintains inventory database of stored samples, prepares shipping documents, and ships specimens according to need. Serves as a liaison between Viral and Rickettsial Disease Laboratory Branch (VRDL) and stakeholders/partners to obtain, retrieve, and maintain epidemiological information for samples submitted for testing. Participates in and coordinates internal and external training activities including but not limited to the virology module of the public health microbiology (PHM) training course, state and national webinars, CDC training activities/teleconferences, and State Public Health training opportunities. Reviews VRDL related testing guidance and manuals to ensure that information is up to date and accurate to describe current procedural functions and testing guidelines.
- 10%** Participates and interacts with local health jurisdictions and CDC for further testing and consultation as necessary. Assist in and coordinates emergency preparedness and response, including but not limited to planning, training and drills or exercises; completes hot wash and after-action reports; updates surge response manual as needed and drafts situation reports.

Marginal Functions

- 5%** Other applicable duties as assigned, including assisting other units or sections as needed for surge capacity.

Research Scientist II

Position Summary

This position exists to research, develop, implement, evaluate and maintain a statewide program in which the public health laboratory (PHL) coordinates and collaborates with the Laboratory System (LS) laboratories, which includes hospital- and clinic-based laboratories, as well as agricultural and veterinary labs serving state residents. This position will use research methods to create a system for identifying, surveying, and collaborating with laboratories and healthcare personnel. This employee will serve as the laboratory liaison between the PHL, other state public health laboratories, CDC and the Association of Public Health Laboratories (APHL). They will be intimately involved with researching the optimal way to design and maintain a program that creates a sustainable network of clinical laboratories, whose ultimate goal will be quality laboratory practice and adequate emergency response. This position will collaborate with the Bioterrorism Response Coordinator and Chemical Terrorism Response Coordinator on the research and development of plans and other documentation pertinent to the PHL role in emergency response. In addition, they will research issues affecting the LS laboratories and design an all-encompassing laboratory survey tool, followed by educational information that will be administered on-site at each LS laboratory in the state. In addition, the person in this position is the Priority Area Lead at PHL for the Health Resource and Service Administration (HRSA) Bioterrorism Hospital Preparedness Program (BHPP) grant.

Clientele: Internal customers include the Public Health Laboratory, Environmental Health, and the Division of Infectious Disease Epidemiology Prevention and Control (IDEPC). External customers include clinical, laboratories that serve state residents, CDC, APHL, the emergency response community and other health care providers.

Position Duties and Responsibilities

LS Statewide Emergency Coordination

Coordinate the development, implementation and evaluation of the statewide LS as part of the PHL Emergency Preparedness and Response program and the HRSA BHPP grant.

Tasks:

- Research and investigate ways in which to create and maintain a system to coordinate, communicate, and collaborate with the clinical laboratories, including clinic- and hospital-based laboratories serving state residents. Perform independent research, including collaborating with national partners, on development of a sustainable network of clinical laboratories.
- Populate and maintain a data base of all clinical laboratories serving state residents, Department of agriculture, and veterinary laboratories. The database would include pertinent contact information (e.g., phone, fax, email), laboratory capabilities and capacities, etc.
- Act as the Laboratory Priority Area Lead of the HRSA BHPP grant for the PHL. Integrate LS and HRSA priorities.
- As a subject matter expert, research current topics of clinical laboratory practice, bioterrorism and other emerging health threats to develop training documents and educational outreach curricula directed to all LS laboratories and other partners.
- Research issues affecting clinical laboratories in the LS and develop and coordinate challenge set of micro-organisms to be sent to appropriate LS laboratories, on a yearly basis.
- Research issues affecting LS clinical laboratories and design and administer a comprehensive survey including, but not limited to: contact information, computer and laboratory capacity, priority bioterrorism agent awareness and reporting practices.
- Lead in the development and administration of on-site survey at all LRN Sentinel laboratories.
- Analyze surveys and share information with appropriate IDEPC, other epidemiology unit staff and other partners, as deemed necessary.
- Develop education material based on feedback from laboratory surveys and site visits. Monitor external training for the LS to ensure safe and rapid recognition, handling, and transport of suspected priority agents.
- Research, develop, implement, and analyze follow-up surveys of LS laboratories to determine effectiveness of educational intervention.
- Report findings to National partners including APHL and CDC.

Emergency Response Planning

Collaborate with the Chemical Terrorism Response and Emergency Preparedness and Response Coordinators on the research and development of plans and other documentation pertinent to the PHL role in emergency response.

Tasks:

- Contribute subject matter expertise and research efforts to the writing of various laboratory response- related documents including operation plans and standard operating procedures.
- Participate in ongoing internal cross-training of laboratory personnel to ensure continuous analytical coverage.
- Practice ongoing QC/QA measures.
- Participate in an emergency on-call system to respond to threats of bioterrorism and chemical terrorism, as well as equipment monitoring.
- Participate in periodic drills and proficiency testing to evaluate the ability of the state bioterrorism response network.

Research and Special Projects

Research studies and special projects related to building laboratory infrastructure.

Task: Conduct independent investigational studies at the request of the unit leader, Epidemiology department or CDC.

Applicant Requirements and Qualifications

Knowledge, Skills and Abilities

Minimum education requirement for this position is a BS degree in Microbiology, Medical Technology or related science. The candidate must have at least two years of directly related microbiology experience in a clinical laboratory at the BS level. Experience in a CLIA or CAP certified laboratory is preferable. The candidate will have the technical skills to perform high complexity testing in microbiology.

The person in this position must possess strong interpersonal skills, including effective written and verbal communication involving a broad range of clients, both within and outside the agency. They must demonstrate effectiveness in engaging, leading and sustaining multiple diverse relationships.

Relationships

The person in this position has an extensive network of working relationships both in the agency and outside the agency. Internally, this employee coordinates and oversees the comprehensive operations and activities of the Laboratory System. This involves training and leading other bacteriologist in the Unit. This employee frequently interacts with other groups within the agency and state.

Externally, this employee is responsible for developing and maintaining relationships with all of the clinical laboratories serving state residents to secure the infrastructure and maintain the efficacy of the state Laboratory System. These partnerships include the CDC, APHL, clinic- and hospital- based laboratories, clinicians and other health care workers.

Microbiology Senior Liaison

Position Duties and Responsibilities

- Attends and administers training, when requested by program directors, so that department staff is aware of current testing guidance with no valid complaints to the supervisor.
- Performs specimen/sample processing, testing, and reporting results so skills and proficiencies are maintained, and these duties can be performed as determined by supervisor observation and review.
- Interprets and disseminates laboratory results generated and received so that the appropriate section of the Bureau of Communicable Diseases is accurately informed as determined by supervisor observation and review.
- Performs data exchange projects to include validation of ELR messages, the annual laboratory survey, and department use of REDCap so that data is properly collected as determined by supervisor observation and review.
- Provides guidance as the point of contact so that clinical and environmental specimen collection and delivery is coordinated during an investigation as determined by supervisor observation and review.
- Communicates with others so accurate information is given in a courteous, knowledgeable, and helpful manner as determined by supervisor observation, review, and feedback from others.
- Responds to emergency and disaster assignments in a timely manner when called to duty as determined by supervisor observation, review, and feedback from others.