



# PUBLIC HEALTH LABORATORY OUTREACH MODEL PRACTICES FOR INFECTIOUS DISEASE PROGRAMS

This publication is a compilation of information gathered from nine interviews with public health laboratories that have sustained an outreach program focused on infectious diseases. The sections below are organized based on the topics covered during the interviews and incorporate strategies to address the challenges surrounding resource limitations.

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## Within the public health laboratory, who is engaged in outreach and how is a public health laboratory outreach program structured?

The outreach program can be coordinated through dedicated staff, or, most commonly, using a team approach where subject matter experts provide input; the method will depend on the outreach focus and need. Establishing an Outreach Committee within the public health laboratory allows for a formal structure with clearly defined roles, responsibilities and priorities, with knowledge sharing and lessons learned.

Subject matter experts can include: LRN coordinators, BT/CT coordinators, biosafety officers, program supervisors (such as within microbiology, TB, molecular biology, newborn screening, etc.), administrative services managers and state training coordinators. The Outreach Committee can also include associate directors, deputy directors and program managers.

LRN or BT/CT coordinators most commonly lead a team or committee.

Creating a triage central call center or duty officer page is also used, with SOPs and guidelines for commonly asked questions.

## How is a public health laboratory outreach program funded?

Most outreach programs are funded through a combination of state general appropriations, federal funds and APHL grants. Federal funds include CDC-PHEP, CDC-ELC, CDC-COVID, CDC-Biowatch or HRSA- HPP.

## Who within the public health laboratory system is engaged?

- Hospitals, clinics, veterinary, environmental and commercial diagnostic laboratories, and key staff and/or programs such as laboratory directors, managers and supervisors (including microbiology), lead and bench scientists, physicians, safety personnel, infection prevention programs and emergency managers.
- Academic partners including MLS, MT, CLS, MLT and CLA programs to provide training and representation on advisory committees and workgroups
- Local and state epidemiologists
- Local public health officials and departments
- Non-traditional testing and point-of-care sites: schools, nursing homes, prison systems, long-term care facilities, pharmacies
- Associations, such as ABSA, APHA, ASM, CLMA, etc.
- First responders (police officers, firefighters, hazmat technicians and bomb squads)
- Federal response partners (FBI, WMD Coordinators, CDC, EPA, FDA, USDA, DHS and National Guard Civil Support Teams )



It is essential to build a relationship and make people feel the importance of engagement and presence. Promoting a sense of sharing and learning from each other (two-way learning) can go a long way.”

— Wisconsin State  
Laboratory of Hygiene

## What topics are covered in an outreach program?

Outreach covers many different topic areas, focused on providing technical assistance, networking and relationship building, resources, training, hands-on wet workshops, conferences, drills and exercises. **Training is provided at no charge**, includes continuing education credits, and is offered at the public health laboratory, on-site, or through a venue such as a conference. Common examples of topics include:

- The role of the public health laboratory and laboratory services
- Sample collection, packaging and shipping
- Public health reporting
- Supply chain management
- Biosafety information and model practices, including biosafety and biological risk assessments, use of biosafety cabinets and safety equipment, PPE and lab exposure investigation
- BT exercises and awareness, including the LRN, sample submission, use of the ASM protocols to recognize/rule-out/refer (presumptive identification of select agents), packaging and shipping infectious substances
- CT exercises and awareness with emergency response partners, including the LRN, sample collection and submission, evidence preservation, use of field screening devices, exposure and symptom awareness
- COOP development and surge capacity testing support
- Program focused topics, such as foodborne pathogen surveillance and outbreak response, influenza surveillance, antibiotic resistance, Hepatitis C, childhood lead and newborn screening
- Serology, virology, microbiology and molecular biology
- Competency assessments, quality assurance, quality control and quality laboratory practices
- Emerging pathogens and high-consequence infectious diseases, new methods and technology (such as ABR, whole genome sequencing, bioinformatics)
- Participation at state or local public health laboratory-sponsored Laboratory System Improvement Program (L-SIP) assessment
- Gram stain and quadrant streaking
- Phlebotomy and finger stick
- K-12 science outreach in schools



We can never do enough training and outreach due to turnover, ... new technologies and the need for new approaches.”

— Virginia Division of Consolidated Laboratory Services

## What methods of communication are commonly used for outreach?

Many different communication methods are employed to support outreach efforts, with **in-person identified as the most effective to support relationship building, networking and training.**

Commonly used communication methods include:

- Email, such as e-blasts, listservs, the Health Alert Network, including distribution of newsletters
- Conference calls and webinars
- Association meetings and conferences with visible presence to increase awareness of the public health laboratory
- Remote communications using Skype, MS Teams, ZOOM, phone calls and triage call center
- In-person meetings, such as site visits, meetings, workshops and conferences
- YouTube

## What are the benefits to performing outreach?

Outreach reaps significant benefits through fostering strong relationships, enhancing communications and building trust with open dialogue. System partners become more familiar with the role of the public health laboratory, the services provided and the resources available. This leads to outcomes such as earlier notifications and outbreak detection, improved sample submissions, higher quality samples, consistency across laboratories and increased response to data collection needs.

System partners can identify a point-of-contact and subject matter experts within the public health laboratory. This conduit allows them to receive quick and reliable assistance and gain access to timely resources, job aids and information of which they were not previously aware. The public health laboratory can also serve as a liaison to connect them to other subject matter experts across the country. Clinical laboratories, for example, often receive free education, outreach, educational credit and new opportunities to engage with other laboratorians. This support improves their own training, biosafety and testing programs.

Through this awareness and collaboration, the public health laboratory system—including the LRN and other networks—is strengthened and the quality of services are improved to better meet population needs. This is particularly true and beneficial for outbreaks and other emergencies, such as the COVID-19 pandemic.



The needs and people are always changing and the need for information never ends.”

— Michigan Department of Health and Human Services, Bureau of Laboratories

## Recommendations for public health laboratories that want to expand their outreach program:

- Build a multi-faceted outreach team and provide them with as many resources as can be afforded, including time, staff and independence.
- Start small and focus on easy wins, such as strengthening health alert communications, building a listserv to expand the reach and diversity or offering a mentorship program.
- Establish a community of practice portal where the public health laboratory and system partners, such as clinical laboratories, can share resources and information in real-time.
- Request that the public health department partners (epidemiology, emergency preparedness, immunization programs, etc.) share public health laboratory-related information or announcements through their own outreach mechanisms.

To support outreach capacity—particularly during surge—consider utilizing practicums, interns, associates and fellows.

**TIP**



Engage professional organizations and associations within the state. Attend their meetings and get added to the agenda so that they hear from the PHL directly. Deliver a presentation. These meetings raise awareness and demonstrate the reputation and expertise of the public health laboratory.”

— New Hampshire Public Health Laboratories

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