Grounded in professional relationships, self-directed regional networks (SDRNs) provide a multi-state approach for individual public health laboratories (PHLs) to strengthen the national PHL system. Each SDRN is able to develop and implement changes using identified strategies, established priorities and a governance structure. As a result, SDRNs have a comprehensive view of core functions and essential services specific to their region, as well as opportunities for improvement, including:

- Expanded capacity for continuity of operations and emergency preparedness
- Increased competencies through workforce development and training events
- Shared testing services, resources and samples for validation
- New studies such as emerging technology, method development, and workforce compensation.

The concept of developing SDRNs within the PHL community started with the New England states in the 1970s and then in 2006 with the Northern Plains states. With recent dialogue on the need to find a collective approach to workforce development and continuity of operations—as well as the recognition of unique challenges at the regional level—the interest in forming new SDRNs has grown in the past five years. What started with only 13 states in 2011 has grown to encompass 47 states, the District of Columbia, multiple local PHLs and Guam.

With support from the Centers of Disease Control and Prevention (CDC), APHL assists SDRNs by identifying their needs and resources, providing coordination and facilitation and offering annual innovation grant awards. During 2017-2019, nine innovation grants were funded. APHL also supports the national PHL system by sharing outcomes from SDRNs with the larger PHL community. The following is a snapshot of each regional network.
State Members:
- Dr. Katherine A. Kelley State Public Health Laboratory (Connecticut)
- Maine Health and Environmental Testing Laboratory
- Massachusetts State Public Health Laboratory
- New Hampshire Public Health Laboratories
- New Jersey Public Health and Environmental Laboratories
- New York Department of Agriculture and Markets, Food Laboratory
- New York Wadsworth Center
- Rhode Island State Health Laboratory
- Vermont Public Health Laboratory

Local Member:
- New York City Public Health Laboratory; New York, NY

Established: 1970s

Governance: The chair serves a one-year term and sets the agenda for all group meetings with input from other members. Participants at the quarterly in-person meetings are delegated by each member laboratory, who are encouraged to send a team of attendees to promote institutional continuity. All group decisions are reached by consensus. Responsibility for meeting planning is rotated among member laboratories on a yearly basis. Members’ mutual relationships are based on verbal agreement.

Meeting Frequency: 3-4 in-person meetings per year

“Without NEEPHLD, our laboratories would not have as much knowledge of other state laboratory capabilities in the region. Therefore, we would be less prepared for emergency situations. The network also makes it easy for our staff to solicit expert opinions when purchasing new instrumentation, to recruit new staff from throughout the region and to seek peer support.”
Christine Bean, PhD, MBA, MT(ASCP), administrator, New Hampshire Public Health Laboratories

“As a local public health laboratory (PHL) serving a major East Coast city, having relationships with our regional state PHLs is really important to us. NEEPHLD provides a venue to foster those relationships. We appreciate being able to include our post-doctoral fellows, CDC laboratory service leadership fellow, and our own staff in NEEPHLD meetings. It’s been really helpful for them to see how the broader PHL network functions, how laboratories can work together and what goes on in state PHLs.”
Jennifer Rakeman, PhD, assistant commissioner and laboratory director, NYC Public Health Laboratory
State Members:
- Delaware Public Health Laboratory
- District of Columbia Public Health Laboratory
- Ohio Department of Health Laboratory
- Pennsylvania Department of Environmental Protection, Bureau of Laboratories
- Pennsylvania Department of Health, Bureau of Laboratories
- Virginia Department of General Services, Division of Consolidated Laboratory Services
- West Virginia Department of Health & Human Resources, Office of Laboratory Services

Local Members:
- Allegheny County Public Health Laboratory; Pittsburgh, PA
- Fairfax County Health Department Laboratory; Fairfax, VA
- Philadelphia Department of Public Health, Laboratory Services; Philadelphia, PA
- Public Health Dayton & Montgomery County Laboratory; Dayton, OH

Established: 2017

Mission Statement: The Mid-Atlantic Consortium (MAC) is a network of geographically clustered public health and environmental laboratory leaders dedicated to participating in a collaborative group in order to share best practices, subject matter expertise, emergency testing support and other resources.

Governance: The consortium chair rotates monthly.

Meeting Frequency: 1-2 in-person meetings per year and monthly conference calls

“MAC provides a venue to share ideas, resources and expertise across our region so we don’t have to reinvent the wheel. One project we worked on collectively was a compensation study, funded by CDC and APHL. Our members are using this data to educate their own state leaders about the salary levels needed to recruit and retain top-notch scientific staff in our region.”
Denise Toney, PhD, director, Virginia Division of Consolidated Laboratory Services

“Our health department has been interested in testing mosquitoes for chikungunya, dengue and Zika viruses, in addition to our current testing for West Nile virus. Thanks to MAC, we were able to easily poll our neighboring state public health laboratories to see what arboviruses they’re testing for and what they’ve found. This helped us decide that it didn’t make sense to devote already scarce resources to test for arboviruses unlikely to be found in DC.”
Anthony Tran, DrPH, MPH, D(ABMM), director, DC Public Health Laboratory
Southeast CoLABorators (SEC)

State Members:
- Alabama Department of Public Health, Bureau of Clinical Laboratories
- Florida Department of Health, Bureau of Public Health Laboratories
- Georgia Public Health Laboratory
- Kentucky Department for Public Health Division of Laboratory Service
- Mississippi Public Health Laboratory
- North Carolina State Laboratory of Public Health
- South Carolina Public Health Laboratory
- Tennessee Department of Health, Division of Laboratory Services

Established: 2015

Governance: The network was previously chaired by the director of the Tennessee Division of Laboratory Services, owing to Tennessee’s receipt of CDC funding for the network. In 2019, the chair will transition to Florida Bureau of Public Health Laboratories, with rotation between the states annually.

Meeting Frequency: 1-2 in-person meetings per year and conference calls as needed

“Because the Southeast CoLABorators is a self-directed group, we can make it what it needs to be and not what it has to be to meet externally-imposed requirements. Right now, we are focused on knowledge sharing to implement new technology. Instead of investing resources in what people have already figured out, we can move on to the next advancement for the good of the PHL community.”

R. Brent Dixon, PhD, HCLD(ABB), FAACC, director, South Carolina Public Health Laboratory

“When individual consortium members have difficulties, there are always other members ready to help. For example, we’ve helped several of our partners with training in parasitology and mycology. On the flip side, when we had difficulty obtaining reagents for newborn screening, Florida stepped up to plate and offered to perform testing for us. Luckily the reagent crisis was solved rather quickly.”

Richard S. Steece, PhD, D(ABMM), director, Tennessee Department of Health Laboratory Services
State Members:
- Arkansas Public Health Laboratory
- Illinois Department of Public Health Laboratory
- Indiana State Department of Health Laboratories
- State Hygienic Laboratory at the University of Iowa
- Kansas Health and Environmental Laboratories
- Michigan Department of Health & Human Services, Bureau of Laboratories
- Minnesota Public Health Laboratory
- Missouri State Public Health Laboratory
- Nebraska Public Health Laboratory
- Oklahoma State Public Health Laboratory
- Wisconsin State Laboratory of Hygiene

Mission Statement: A collaborative network that supports the sharing of expertise, capabilities and capacity to enhance laboratory services.

Governance: The chair and co-chair (who are not required to be laboratory directors) serve one-year terms, with the co-chair ascending to the chair’s position at the end of his/her term. The chair and co-chair positions are rotated among member states in a geographically clockwise direction (i.e., Missouri, Arkansas, Oklahoma, Kansas, Nebraska, Minnesota, Wisconsin, Michigan, Indiana, Illinois, Iowa). Each member state is encouraged to send a team of 3-4 delegates to network meetings, including the state public health laboratory director. Meeting sites are rotated among the member states as funding allows.

Meeting Frequency: 1-2 in-person meetings per year and monthly conference calls.

“One of the standing agenda items for our consortium meetings is to share what’s new. It gives us an understanding of what other laboratories are working on and maybe we should be working on too. And if we pursue those new activities, it makes it easy to get samples and technical assistance. When you have monthly conference calls, you really get to know your colleagues in your region and solidify relationships. And that’s extremely helpful.”
Joanne Bartkus, PhD, D(ABMM), director, Minnesota Public Health Laboratory

“Historically, our laboratory has focused on state issues and national priorities. The consortium adds a whole other layer—the Midwest. It will make us more cognizant of emerging issues in our region.”
Bill Whitmar, MS, director, Missouri State Public Health Laboratory
State Members:
- Idaho Bureau of Laboratories
- Montana Public Health Laboratory
- North Dakota Department of Health, Division of Laboratory Services
- South Dakota State Public Health Laboratory
- Wyoming Public Health Laboratory

Established: 2006

Vision Statement: Serving public health through a collaborative regional laboratory system.

Mission Statement: Combining expertise and resources across peer groups to enhance laboratory quality.

Governance: The consortium is led by the chief Montana Public Health Laboratory representative and comprises public health laboratory and epidemiology leaders from member states. Meeting sites are rotated among member states. Members’ mutual support relationships are formalized in a memorandum of agreement.

Meeting Frequency: 1-2 in-person meetings per year and quarterly conference calls

“In the Northern Plains Consortium, we have really big states and really small labs. We don’t have the luxury of having a lot of laboratory specialists on staff. So the greatest benefit of the consortium for our laboratory tends to be the peer networks for training and problem-solving; for example, working in concert on initiatives like the PulseNet transition to whole genome sequencing.”
Christopher Ball, PhD, HCLD (ABB), chief, Idaho Bureau of Laboratories

“The Northern Plains Consortium has hosted two regional emerging leader programs, based on APHL’s national program; an epi-lab collaborative workshop, focused on multi-locus sequence interpretation; whole genome sequencing and bioinformatics technical skills trainings; and a MALDI-TOF workshop. Without the effective collaboration among NPC states, these workforce development efforts would not have been possible.”
Deborah Gibson, MPH, MT(ASCP), deputy director, Montana Public Health Laboratory
**State Members:**
- Arizona State Public Health Laboratory
- Colorado Department of Public Health & Environment, Laboratory Services Division
- New Mexico Department of Health, Scientific Laboratory Division
- Texas Department of State Health Services, Laboratory Services Section
- Utah Public Health Laboratory

**Established:** 2018

**Mission Statement:** To support and learn through sharing experiences, expertise and best practices to navigate current and future challenges for the maximum benefit of the public health laboratory system.

**Governance:** The chair and co-chair serve one-year terms, with the co-chair ascending to the position of chair at the conclusion of his or her term. Members’ mutual support relationships are based on a written mutual aid agreement.

**Meeting Frequency:** 1-2 in-person meetings per year and quarterly video conference calls

“Our fellow consortium members have our back when we need them. For example, the Utah Public Health Laboratory did TB testing for us when our laboratory was in the midst of renovations. Because of them, we were able to still meet our test turn-around times and keep our customers happy.”
Emily Travanty, PhD, scientific director, Laboratory Services Division, Colorado Department of Public Health and Environment

“The biggest benefit to Utah of the Four Corners and Central Plains Consortium is not feeling alone. Often laboratories are forced to make decisions quickly and it is wonderful knowing there is a group of peers that will share their thought process and experience with a similar situation.”
Robyn Atkinson-Dunn, PhD, director, Utah Public Health Laboratory
State & Territorial Members:
- Alaska State Public Health Laboratories
- California State Public Health Laboratories
- Guam Public Health Laboratory
- Hawaii Department of Health, State Laboratories Division
- Oregon State Public Health Laboratory
- Washington Public Health Laboratories

Local Member:
- Los Angeles County Public Health Laboratory; Downey, CA

Established: 2018

Mission Statement: The Pacific Rim Consortium is a network of public health laboratories established for cooperation and support for mutual benefit of members through a collective voice for technical assistance, training, shared services, mutual support in emergencies and best practices.

Governance: The chair and co-chair set meeting agendas, and each serves a one-year term, with the co-chair ascending to the position of chair after his/her term expires. Both chair and co-chair are selected by consensus or direct vote, if necessary. Decision-making is also by consensus, with the chair making the final determination in areas of disagreement. The Guam Public Health Laboratory representative serves as liaison with other US affiliated Pacific islands and the Pacific Island Health Officers’ Association.

Meeting Frequency: 1-2 in-person meetings per year and quarterly conference calls

“Our consortium is brand new. But we have agreed that one of our top priorities is putting together a region-wide continuity of operations agreement with MOUs to enable mutual assistance. After Alaska’s 7.0 magnitude earthquake last fall, our BSL-3 lab was shut down because of damage. Fortunately, we already had an MOU with Washington and could send our TB specimens there for testing. The consortium will expand that agreement to give us further back-up.”
Bernard Jilly, PhD, director, Alaska State Public Health Laboratories

“At our first consortium meeting in Hawaii, we were sitting around the table discussing what was of interest to us and relevant to our regional needs, which is not something you get to do very often. We discussed next-generation sequencing training, biosafety and continuity of operations. Being self-directed definitely increases the value of the consortium.”
Paul Kimsey, PhD, director, California State Public Health Laboratories
Association of Public Health Laboratories

The Association of Public Health Laboratories (APHL) works to strengthen laboratory systems serving the public’s health in the US and globally. APHL’s member laboratories protect the public’s health by monitoring and detecting infectious and foodborne diseases, environmental contaminants, terrorist agents, genetic disorders in newborns and other diverse health threats.

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