

Laboratory System Improvement Program: Oregon Assessment Report

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**Public Health Division
Oregon Health Authority**

Laboratory System Improvement Program: Oregon Assessment

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EXECUTIVE SUMMARY

Introduction

On June 30, 2010 the Oregon State Public Health Laboratory (OSPHL) hosted 47 partners from a wide variety of organizations to assess the strengths and gaps in the statewide laboratory system that supports public health. Participants compared Oregon's laboratory system with national performance standards, using a tool developed by the Association of Public Health Laboratories (APHL) as part of the Laboratory System Improvement Program (LSIP). This tool is based on the Ten Essential Services of Public Health and the Core Functions and Capabilities of State Public Health Laboratories (Appendices 1 and 2).

For each of the ten essential services, the current laboratory system was scored against national standards, with the following results:

ASSESSMENT SCORES	0	1	2	3	4
	No Activity	Minimal Activity	Moderate Activity	Significant Activity	Optimal Activity
Essential Service #1: Monitor health status of Oregonians					X
Essential Service #2: Diagnose and investigate community health problems and hazards					X
Essential Service #3: Inform, educate and empower people about health issues				X	
Essential Service #4: Mobilize community partnerships to identify and solve health problems		X			
Essential Service #5: Develop policies and plans that support individual and community health efforts				X	
Essential Service #6: Enforce laws and regulations that protect health and ensure safety				X	
Essential Service #7: Link people to needed personal health services and assure the provision of healthcare when otherwise unavailable			X		
Essential Service #8: Assure a competent public health and personal health care workforce			X		
Essential Service #9: Evaluate effectiveness, accessibility, and quality of personal and population-based services			X		
Essential Service #10: Research for insights and innovative solutions to health problems		X			

Oregon was the twenty-fourth state to conduct a statewide laboratory system assessment using the LSIP tool. Our results were similar to those from other states in terms of scores, themes, strengths, and gaps.

BACKGROUND AND ASSESSMENT PROCESS

Background

The Association of Public Health Laboratories (APHL), in conjunction with the Centers for Disease Control and Prevention (CDC) Division of Laboratory Systems, developed the Laboratory System Improvement Program (LSIP). The program includes an assessment tool to determine how well the State Public Health Laboratory System (SPHLS) is functioning within the framework of the standards outlined in the Ten Essential Public Health Services and the Eleven Core Functions and Capabilities of State Public Health Laboratories (Appendices 1 and 2). The standards focus on the overall SPHLS which includes all public, private, and voluntary entities that contribute to public health laboratory activities, rather than a single organization.

Assessment Process

The Oregon State Public Health Laboratory (OSPHL) conducted a one-day LSIP assessment on June 30, 2010, with a wide variety of participants (Appendix 3). These included the Director and Deputy Director of the State Public Health Division (PHD), the Office of Environmental Public Health, the Office of Disease Prevention and Epidemiology, the Office of Family Health, local health departments across the state, large hospital systems and smaller rural hospitals, clinical laboratories, Planned Parenthood, the State Department of Environmental Quality, the State Veterinary Diagnostic Laboratory, the State Department of Agriculture Laboratory, a university student health service, a private environmental laboratory, the FBI, local HazMat, the Oregon National Guard Civil Support Team, the Northwest Portland Area Indian Health Board and the Oregon Public Health Advisory Board.

Professional facilitators from Milne & Associates used the LSIP tool developed by APHL to introduce each essential service along with indicators of optimal activity. The group met first in a plenary session and then in three breakout groups to assess how well the Oregon laboratory system functions compared with national standards. Participants discussed each indicator and evaluated Oregon's activity in comparison to the standard of optimal activity. Ratings were determined by consensus for each indicator, using these categories:

- 9 No Activity
- 1 Minimal Activity (1-25% met)
- 2 Moderate Activity (26-50% met)
- 3 Significant Activity (51-75% met)
- 4 Optimal Activity (>75% met)

These ratings were then multiplied by a calculation factor (zero in the case of a evaluation rating of 9). The ratings were weighted based on the number of indicators evaluated to arrive at a total weighted score for each indicator. The average of the weighted scores for each essential service was calculated to arrive at an aggregate score. A summary of the key ideas discussed in the breakout sessions, the ratings and scores given for each indicator and the next steps identified by group consensus follow.

RESULTS

Essential Service 1: Monitor health status to identify community Health problems Aggregate Score: 60.5

Indicator 1.1: Surveillance Information Systems

- 1.1.1 The SPHLS identifies sentinel health events and trends. *Evaluation rating: 3*
 - 1.1.2 The SPHLS participates in national surveillance systems for state and national linkage. *Evaluation rating: 2*
 - 1.1.3 SPHLS partners collaborate to strengthen surveillance systems. *Evaluation rating: 4*
- Total weighted score: 66.7**

Indicator 1.2: Monitoring of Community Health Status

- 1.2.1 SPHLS has a comprehensive system to gather data, organisms and samples to support evaluating community environmental health. *Evaluation rating: 4*
 - 1.2.2 The SPHLS identifies and detects infectious diseases and contributes to a statewide surveillance system. *Evaluation rating: 3*
 - 1.2.3 The SPHLS provides information to support monitoring of congenital, inherited, and metabolic diseases of public health significance. *Evaluation rating: 3*
 - 1.2.4 The SPHLS generates reliable information about chronic diseases of public health significance. *Evaluation rating: 2*
 - 1.2.5 The SPHLS has a secure, accountable and integrated information management system for data storage, analysis, retrieval, reporting and exchange. *Evaluation rating: 1*
- Total weighted score: 54.4**

Discussion summary

- There was general group consensus that we are doing quite a bit with infectious disease testing, reporting and monitoring but not as much in other areas. We need to expand “Systems” to include non-communicable diseases and identify the associated gaps. The discussion included domestic violence, injuries, chronic disease, environmental exposures, and tests such as hemoglobin A1C.
- Currently there is no organized data collection for chronic disease.
- No one has enough resources to address infectious disease, chronic disease and environmental issues. An example was discussed of a local outbreak where the local health department (LHD) doesn’t have the capacity to respond and turns to the state which doesn’t have the resources to assist either.
- No piece of the system has the resources to consistently back up another piece.
- Information systems need to be improved so that critical data can be shared through a common repository of essential data. An example was the inability of WebRad, OSPHL’s remote data access system, to grant access to a LHD for all the swine flu positive results from their county.
- Currently there is no organized data collection system for chronic disease.

Next steps identified

- Environmental data are not located in a single site. Environmental Public Health Toxicology (EPHT) is moving in that direction.
- Need to expand surveillance for non-communicable disease (chronic, injuries, environmental).
- Need a Health Information Exchange that creates a central repository for data access.

Essential Service 2: Diagnose and investigate health problems and health hazards in the community
Aggregate Score: 78.0

Indicator 2.1: Appropriate State of the Art Testing

2.1.1 The SPHLS assures provision of services at the highest level of quality to assist in the diagnosis and investigation of all health problems and hazards of public health significance.

Evaluation rating: 3

Total weighted score: 67.0

Indicator 2.2: Collaboration and Networks

2.2.1 The SPHLS members are actively involved in networks that collaborate in the epidemiological investigation of and response to natural and man-made disasters.

Evaluation rating: 4

Total weighted score: 100.0

Indicator 2.3: Continuity of Operations Plan and Surge Capacity

2.3.1 The SPHLS has the necessary capacity, authority, and other preparations in place to assure a rapid response to public health emergencies. *Evaluation rating: 3*

Total weighted score: 67.0

Discussion Summary

- Oregon's laboratory system has the appropriate scientific expertise to assure the highest quality of laboratory testing including Biosafety Level 3 testing. There is concern that most of the scientific expertise is in the Portland metro area and that rural areas will have extended turn around times for service. The new OSPHL courier service has helped.
- The environmental epidemiologists would like OSPHL to have the capability of doing chemical testing for biomonitoring purposes.
- The FBI would like a laboratory to have the ability to do screening for chemical terrorism substances on environmental specimens. The DEQ laboratory no longer has funding to perform that testing or do hazardous screening.
- Since the DEQ lab and OSPHL are located in the same building, there needs to be a PHL/SPH system approach to wrap around services and policies. May be a good time to do some gap analysis. It was pointed out that sorting out some of these issues might be difficult, since DEQ and the OSPHL are two different agencies and DEQ has no authority to collect fees for testing.
- The Health Alert Network (HAN) and the Laboratory Response Network (LRN) are well developed alerting systems for the laboratory community and other public health partners. The web based LRN allows both IT and communication connectivity with the laboratory community. Not only is there two-way communication with public health, but the laboratories are able to communicate with each other. Training documents and up to date alerts are readily available. The HAN and LRN systems are exercised with laboratories and partners around the state.

- Private laboratory representatives stated that the College of American Pathologists LPX proficiency testing (PT) survey, paid for by the State for the laboratories using federal Preparedness grant funds, was very effective in helping to maintain proficiency in identifying potential bioterrorism organisms. The PT summary report, issued by OSPHL, is especially useful in detailing specifics regarding which organisms were missed and why.
- OSPHL does have a memorandum of understanding (MOU) with the other Region X states, Idaho, Washington and Alaska. They have agreed to perform each other's testing, share reagents and laboratory technical staff if needed during emergencies. The OSPHL does not keep a large stockpile of reagents and supplies other than what is a reasonable. Supply levels are maintained at levels that take into consideration expiration dates of materials and the need to maintain services during potential back order situations. The private laboratories also do not keep a stockpile of reagents. Expiration of reagents and media that cannot be used is of great fiscal concern. All commented on the shortage of supplies during H1N1, not only for specimen collection equipment and reagents but also for personal protective equipment (PPE).
- It was agreed that private laboratories need more MOUs between each other and with OSPHL for emergencies and disasters. The manager of the Oregon Public Health Division Emergency Preparedness Program stated that Oregon should test their assets for a major disaster. However, opportunities to assess capacity and resources are limited. We are not a resource rich state and many experts are at the local level.

Next steps identified

- Expand testing to include biomonitoring for environmental epidemiology and chemical intake screening for FBI.
- Private laboratories need more MOUs between each other and with the OSPHL for emergencies and disasters.
- Oregon should test their assets for a major disaster.

Essential Service 3: Inform, educate, and empower people about health issues
Aggregate Score: 72.5

Indicator 3.1: Outreach and Communication with Partners

- 3.1.1 The SPHLS has an identified system of outreach and communication to inform about relevant health issues associated with laboratory services.

Evaluation rating: 3

Total weighted score: 67.0

- 3.2.1 The SPHLS creates and delivers targeted laboratory information to appropriate health partners. *Evaluation rating: 4*

- 3.2.2 The SPHLS creates and delivers targeted laboratory information to appropriate non-health partners and the public.

Evaluation rating: 3

Total weighted score: 83.5

- 3.3.1 Education and relationship building opportunities are employed to empower community partners. *Evaluation rating: 3*

Total weighted score: 67.0

Discussion Summary

- Need to improve and strengthen the outreach and communication with the private sector.
- Need to bridge communications with the tribal community. Creating a correct contact list would be a first step.
- Targeted information is going out to areas already identified (e.g., CD summary sent to all physicians, Newborn Screening Practitioner's manual and Parent Brochure, OSPHL Guide to Services, Web access to results). Are we getting information on non-traditional items out as well?
- The community outreach works with the counties. We should look at partners not already part of the system.
- We should look at the Public Health Advisory Board's role. Could knowledge and information be funneled through the board to a legislative liaison?
- Is there an ability for a statewide or community campaign? Are there areas of opportunity and a communication source that would distribute information on how programs are working?
- "Cylinders of excellence" are good on the clinical side, but not as well-defined or communicated on the environmental side. There are threads of connections to the environmental system but analysis and trends are not being done.
- The public health system needs to be better at explaining public health and what we do. There has been good continuing education regarding H1N1. Materials need to be in English and Spanish.
- The environmental system doesn't have a good way to communicate their monitoring activities (e.g., beach monitoring). Additional avenues for education and monitoring need to be identified.
- It is easier for the public to see the impact of disease outbreaks on public health than the impact of environmental issues.

Next steps identified

- Empower community partners.
- Break out of traditional public health model (This would involve notable initial investment of time and other scarce resources.)

**Essential Service 4: Mobilize community partnerships to
identify and solve health problems**
Aggregate Score: 14.3

Indicator 4.1: Constituency Development

4.1.1 Partners in the SPHLS develop and maintain positive relationships with each other and with other key constituencies. *Evaluation rating: 2*

Total weighted score: 33.0

Indicator 4.2: Communication

4.2.1 The SPHLS communication plan is fully integrated with partners' and collaborators' communication plans. *Evaluation rating: 1*

4.2.2 The SPHLS communicates in a regular, timely, and accurate way to support collaboration. *Evaluation rating: 1*

Total weighted score: 5.0

Indicator 4.3: Resources

4.3.1 The SPHLS works together to share existing resources and/or to identify new resources. *Evaluation rating: 1*

Total weighted score: 5.0

Discussion Summary

- There is no relationship between the tribes and the SPHLS. There needs to be a strengthening of the connection with the tribes, possibly a face-to-face meeting.
- There is very little information exchange or formal collaboration between the Department of Agriculture and OSPHL.
- Who is responsible for organizing the SPHLS?
- A constituency that involves community partners needs to be created which would define issues and roles, needs and identify gaps in the SPHLS. A communication plan needs to be developed with a more global view and definition of the audience. There are different levels of communication needed. Emergency Response Plans need to include contact information.
- A systematic way to access the SPHLS needs to be developed. Some rural areas are not sure whom to call when they need information.
- There needs to be active coordination of information exchange between state agencies.
- The SPHLS is associated with specific focus areas. There are a lot of other system areas that utilize the laboratory data but do not contribute to it or share resources.

Next steps identified

- Convene a meeting of system partners.
- Define essential elements of a communication plan, including the roles and requirements of constituent members.
- Develop a "Communication Resource Guide".

Essential Service 5: Develop policies and plans that support individual and community health efforts
Aggregate Score: 72.2

Indicator 5.1: Role in Laboratory Related Policy Making

- 5.1.1 OSPHL and system partners contribute their expertise and resource to inform and influence policy. *Evaluation rating: 4*
 - 5.1.2 Policies and plans are informed by science and data. *Evaluation rating: 3*
- Total weighted score: 83.5**

Indicator 5.2: Partnerships in Public Health Planning

- 5.2.1 Develop policies and plans that support individual and community health efforts. *Evaluation rating: 4*
 - 5.2.2 SPHLS issues are represented in state-level plans and policies. *Evaluation rating: 4*
- Total weighted score: 100.0**

Indicator 5.3: Dissemination and Evaluation

- 5.3.1 Plans and policies are widely disseminated to inform members of the SPHLS, other stakeholders and the public. *Evaluation rating: 2*
 - 5.3.2 SPHLS plans and policies are routinely evaluated and updated. *Evaluation rating: 2*
- Total weighted score: 33.0**

Discussion Summary

- The SPHLS works well with federal and state partners to help assure that tests performed at the OSPHL meet the needs of Oregonians.
- Oregon worked with CDC to resolve issues relating to chemical terrorism preparedness policies and to assure CDC that a single individual could plan and oversee the development of the sentinel LRN for biological testing and chemical clinical specimen transport. Ultimately, Oregon's policies are now accepted policies in other states.
- The environmental and clinical laboratory compliance section staff work well with federal partners to help assure that policies for compliance meet Oregon's needs.
- The laboratories in the SPHLS do not have processes to gather sufficient and appropriate laboratory data for analysis to inform the policy making process. Data from the public and private laboratories are not readily available and useful.
- There are insufficient environmental data from pesticide testing. There are some data for lead testing. DEQ laboratory should help with testing and policy development. An effort should be made to work more with physicians to do a better job of data collection to help epidemiology and policies. Need more Health Information Technology (HIT) and physician involvement to help optimize data gathering.
- The OSPHL works with partners in public health epidemiology and county partners to assure that appropriate testing is available. There needs to be mapping and gap analysis of laboratory services in the state (e.g., DEQ, Radiation Protection Services, Department of Agriculture, and the State Veterinary Diagnostic Laboratory).

Next steps identified

- Expand partners that receive information about SPHLS.
- There should be consistent and timely dissemination of policies – especially during significant public health events (e.g., H1N1).
- Expand customer satisfaction surveys to help develop policy.

**Essential Service 6: Enforce laws and regulations that
protect health and ensure safety**
Aggregate Score: 61.0

Indicator 6.1: Revision of Laws and Regulations

- 6.1.1 The SPHLS regularly and periodically reviews and recommends revisions of federal and State laws and regulations pertaining to laboratory practice. *Evaluation rating: 2*
Total weighted score: 33.0

Indicator 6.2: Encourage Compliance

- 6.2.1 The SPHLS has mechanisms in place to encourage or promote compliance by all laboratories in the system with all applicable state and federal regulations.
Evaluation rating: 4
- 6.2.2 All laboratories in the SPHLS comply with all applicable laws and regulations.
Evaluation rating: 2
Total weighted score: 66.5

Indicator 6.3: Enforcement of Laws and Regulations

- 6.3.1 The SPHLS has the appropriate resources to support enforcement functions for laws and regulations. *Evaluation rating: 3*
- 6.3.2 OSPHL and other appropriate government agencies collaborate to fulfill their enforcement functions. *Evaluation rating: 4*
Total weighted score: 83.5

Discussion Summary

- There is no collaborative energy for bringing the laboratory system together to deal with legislative changes that are needed. Newborn Screening partners do work closely together to decide testing on babies and the appropriate cut off levels for testing.
- We need to make sure partners are informed of relevant issues and pending legal changes. Some of the private laboratories were consulted in recent communicable disease reporting rules changes.
- There are partnerships in place with the Conference of Local Health Officials (CLHO) and the professional clinical and environmental laboratory community, but how effective are the partnerships?
- There is a SPHLS, but it is not organized as a system. There are silos at the lab level and a lot of dots to connect. The system has a big job to educate the small laboratories. There could be e-mail lists that are shared. It was noted that the LRN has e-mail addresses that could be used to contact laboratories about emergency public health issues or new regulations.
- There is concern that many environmental testing laboratories have no oversight other than for drinking water testing. What about waste water testing laboratories? There was particular concern from the preparedness staff about the lack of oversight of environmental testing laboratories.
- There was concern that only 2% of the 1800 clinical waived and Provider Performed Microscopy (PPM) laboratories are inspected to validate the scope of testing and teach good laboratory practices.

- For the most part, the OSPHL and other organizations within the SPHLS have necessary authority and resources to enforce laws and regulations. However, waived laboratories under the Clinical Laboratory Improvement Amendments (CLIA), need more oversight and possible enforcement.
- Environmental laboratories not currently regulated, should have oversight. Deficiency in system around resources for environmental labs, for example DEQ's inability to collect fees.

Next steps identified

- Timely communication with partners about regulatory needs and changes.
- More oversight of small clinical laboratories and environmental laboratories performing non-drinking water testing.
- Need a DEQ/PHL systems approach for wrap around services, polices and laboratory oversight.

Essential Service 7: Link people to needed personal health services and assure the provision of health care when otherwise unavailable
Aggregate Score: 33.0

Indicator 7.1: Availability of Laboratory Services

7.1.1 The SPHLS identifies laboratory service needs and collaborates to fill gaps.

Evaluation rating: 2

Total weighted score: 33.0

Discussion Summary

- We need a way to be able to divert specimens of public health interest easily from private labs when necessary.
- We need a database to link births with NBS tests to make sure no baby falls through the cracks.
- We need to consider the groups who fall outside those with health care services (the underserved) including special populations such as the Tribes.
- We need a system to screen people coming into the health care system from the outside (refugees, immigrants) for major health issues at the beginning (HIV, TB, etc.).
- There needs to be a network of communications between all parts of the system so that information is readily available and consistent (example was the inconsistent specimen requirements for swine flu specimens depending on which lab you asked, OSPHL, hospital, private, etc.).
- There is interest in a database of all tests and which labs offer them – comment goes to assessment of the available menu and capacity of the system. How do people know what services are available?
- Who is responsible for assessing the overall system including the interface between public health and personal health?
- How do we assure that the Public Health System has the authority to respond when necessary and doesn't get overridden by politicians or local concerns?

Next steps identified

- Assessment of laboratory capacity, access and timeliness.
- Systematic collaboration.
- Underserved populations.

**Essential Service 8: Assure a competent public health and
personal health care workforce**
Aggregate Score: 35.8

Indicator 8.1: Workforce Competencies

- 8.1.1 All laboratories within the SPHLS identify position requirements for all laboratory workforce categories. *Evaluation rating: 4*
- 8.1.2 The SPHLS has tools to assess competency of the laboratory workforce.
Evaluation rating: 3
- Total weighted score: 83.5**

Indicator 8.2: Staff Development

- 8.2.1 Laboratories within the SPHLS identify staff development needs. *Evaluation rating: 2*
- 8.2.2 Laboratories within the SPHLS promote the availability of resources for staff development. *Evaluation rating: 1*
- Total weighted score: 19.0**

Indicator 8.3: Assuring Laboratory Workforce

- 8.3.1 The SPHLS maintains an environment that attracts and retains exceptional staff.
Evaluation rating: 1
- 8.3.2 The SPHLS addresses workforce shortage issues. *Evaluation rating: 1*
- Total weighted score: 5.0**

Discussion Summary

- We need to educate and communicate with the waived labs as a way to help ensure they have an interest in assuring their folks are competent
- Discussion about high turnover of staff and its effect on trying to maintain well-trained staff (e.g., LHD who have staff coming and going or have lab personnel cut and nobody else who is lab-trained available as a resource).
- There are no real tools available for waived labs to help them with this (followed from a discussion of some of the tools that the represented labs use to accomplish this ES including on-line training).
- Discussion about succession planning - labs are facing massive retirements and few have resources to prepare new workers, particularly in management.
- Difficult, particularly in smaller facilities, to have people cross-trained or adequate backup.
- Competition between labs potentially interferes with cooperation for purposes of staff development.
- Everyone is so busy doing their work that there is no time to share knowledge, work with interns, etc.
- Fear of liability issues limits opportunities.
- Staff development needs to be a part of the framework in the OHA development process – group felt very strongly about this
- We need to better market to the outside world (medical community, students) and attract people to these jobs.
- Compensation is an issue – not only amount but also discrepancies between public and private sector, biologists and chemists.

Next steps identified

- Assurance that waived and PPM labs are also maintaining a competent workforce.
- Lab force sustainability.
- Lack of time and resources to accomplish the essential service.

**Essential Service 9: Evaluate effectiveness, accessibility, and
quality of personal and population-based health services**
Aggregate Score: 29.3

Indicator 9.1: System Mission and Purpose

- 9.1.1 The SPHLS range of services, as related to its mission and purpose, are evaluated on a regular basis. *Evaluation rating: 1*
- 9.1.2 The SPHLS has a process in place for periodic review and evaluation of the test menus and technologies in use by laboratories within the system. *Evaluation rating: 2*
- Total weighted score: 19.0**

Indicator 9.2: System Effectiveness, Quality and Consumer Satisfaction

- 9.2.1 The accessibility and effectiveness of personal and population-based laboratory services provided throughout the state is regularly determined. *Evaluation rating: 1*
- 9.2.2 The quality of personal and population-based laboratory services provided throughout the state is regularly determined. *Evaluation rating: 3*
- Total weighted score: 36.0**

Indicator 9.3: SPHLS Collaboration

- 9.3.1 The level and utility of collaboration among members of the SPHLS is measured and the results are shared.
Evaluation rating: 2
- Total weighted score: 33.0**

Discussion Summary

- We need to convene an overarching body of partners to assist in guiding the system but still allow partner autonomy. Development of a mission statement would be a first step.
- The system also needs to be defined; members, roles and responsibilities, areas of expertise identified; and contact person/key driver for a particular issue identified. Oregon has done well as an informal system but may have reached a tipping point. Evaluation of the system on a regular basis is important including its capacity.
- The rural counties need to know who to contact for information.
- Better management of the system is needed. Work is currently focused on “individual trees” or “small groves”, not on the “forest”.
- Purchasing power of the system could provide leverage for buying volume discounts, economies of scale and pricing negotiations.
- A system website may answer many of the gaps.

Next steps identified

- Use data being collected for evaluation, raising and recommending policies to achieve better population based health protection.
- Maintain new and developing partnerships.
- Develop a system mission statement.

Essential Service 10: Research for new insights and innovative solutions to health problems
Aggregate Score: 2.9

Indicator 10.1: Planning and Financing Research Activities

10.1.1 The SPHLS has adequate capacity to plan research and innovation activities.

Evaluation rating: 1

10.1.2 The SPHLS collaborates to finance research activities. *Evaluation rating: 9*

Total weighted score: 2.5

Indicator 10.2: Implementation, Evaluation, and Dissemination

10.2.1 The SPHLS research efforts draw on diverse perspectives and expertise to stimulate innovative thinking. *Evaluation rating: 9*

10.2.2 The SPHLS research is evaluated to foster improvement and innovation.

Evaluation rating: 1

10.2.3 The SPHLS disseminates research outcomes, best practices, and recognition of research activities. *Evaluation rating: 1*

Total weighted score: 3.3

Discussion Summary

- Discussion centered mostly around the question of how to define research in the context of labs – is it test verification or beta testing of samples for a manufacturer where the lab is essentially being used as a tool to generate data, or should the labs have more of a role in identifying questions that need to be answered and planning a research agenda? Do they want to do primary research? (yes)
- Agreed that there is no time built in for anyone to plan or design research at the lab level.
- There needs to be system collaboration where protocols and resources for developing an ongoing agenda for research about lab methodological practices that are different from merely studying diseases.
- There is no State Research Committee or agenda.
- Overall there was agreement that there are no resources and this essential service is currently not happening except in a very limited way.

Next steps identified

- Lack of capacity and time.
- Defining the labs' role – are labs doing primary research or just supplying the tools?
- Lack of an overarching agenda and research committee.

CONCLUSIONS AND NEXT STEPS

Oregon's LSIP event was highly successful in terms of participation, engagement, and results. Attendees appreciated the opportunity to participate, and they felt the event was an excellent first step toward building a stronger statewide laboratory system to support public health.

The day was also an opportunity for networking, relationship building and becoming aware of system partner activities. There was a strong commitment to take the process forward and to address the gaps that were identified.

The LSIP event was the first step in a long-term process that will explore the gaps identified in the assessment and take steps to address them. Workgroups composed of LSIP participants will be formed to continue the process and developing strategic directions followed by specific action plans. The OSPHL will provide leadership.

A review of the next steps for each essential service reveals several common themes: Communication, Partnership, Expansion of Services, and Workforce. Before any improvements in these areas can be made, the statewide laboratory system that supports public health in Oregon must be characterized to define roles, responsibilities, and its overarching mission.

APPENDIX 1

Ten Essential Services of Public Health

The Ten Essential Services of Public Health provide the fundamental framework for the practice of public health by delineating the general activities that should be undertaken in all states and communities. They also serve as one of the framing constructs for the LSIP. The Essential Public Health Services were first set forth in a statement titled *Public Health in America* and were developed by the Core Public Health Functions Steering Committee in 1994 (convened by US Department of Health and Human Services). The statement identifies the essential functions of public health. The ten essential services are:

1. Monitor health status to identify community health problems.
2. Diagnose and investigate health problems and health hazards in the community.
3. Inform, educate, and empower people about health issues.
4. Mobilize community partnerships to identify and solve health.
5. Develop policies and plans that support individual and community health efforts.
6. Enforce laws and regulations that protect health and ensure Safety.
7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable.
8. Assure a competent public health and personal health care Workforce.
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services.
10. Research for new insights and innovative solutions to health problems.

APPENDIX 2

The Eleven Core Functions and Capabilities Of State Public Health Laboratories

A task force assembled by APHL, in collaboration with and with support from CDC's Public Health Practice Program Office, Division of Laboratory Systems (PHPPO/DLS), developed a set of core functions of state public health laboratories. The term *core function* is defined as "a role assumed by the laboratory that underlies the laboratory's ability to support public health." They describe the broader functions and elements that are necessary to ensure the laboratory capability to execute the core functions. APHL adopted the core functions at its 2000 annual meeting as the consensus position of the association.

According to the report, all state public health laboratories should be capable of performing:

1. Disease Prevention, Control and Surveillance
2. Integrated Data Management
3. Reference and Specialized Testing
4. Environmental Health and Protection
5. Food Safety
6. Laboratory Improvement and Regulation
7. Policy Development
8. Emergency Response
9. Public Health Related Research
10. Training and Education
11. Partnerships and Communication

APPENDIX 3

LSIP ASSESSMENT PARTICIPANTS

Rocky Baker	Oregon State University, Veterinary Diagnostic Laboratory
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