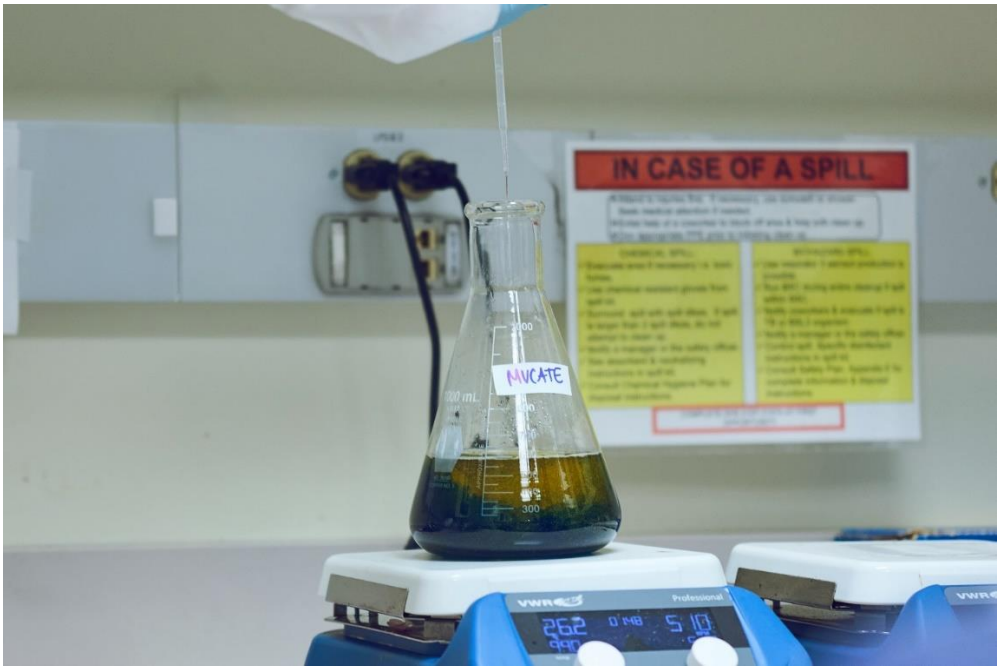
Oregon Laboratory System Improvement Program (L-SIP) Assessment Report

April 3, 2025

Oregon Health Authority – Oregon State Public Health Laboratory
7202 NE Evergreen Pkwy Ste 100, Hillsboro, OR 97124



Acknowledgements

We greatly appreciate the all the hard work that went into putting this event together, and it could not have happened without the following people's hard work and guidance:

- Tina Su, Program Manager of Quality Systems and Analytics, and the Association of Public Health Laboratories for providing the funding, support, and detailed guidance for the reassessment.

- Akiko Saito, OSPHL's Business Director, and Dr. Patrick Luedtke, OSPHL's Medical Director, for their leadership and expertise to help build an equitable laboratory system for the people of Oregon.

- Philip Dykema, Deputy Director of Microbiology at the Washington State Department of Health; Michael Stevenson, Deputy Lab Director at the New Hampshire Public Health Laboratory; and David Silva, Laboratory Manager at Dallas Count Public Health, for traveling from across the country to help facilitate the discussions at our event.

- Amber Gamel Miller, Elizabeth Stelle, Patrice Held, Sarah King, Sheri Hearn, and Valerie Ross, for being our themetakers and meticulously documenting all the discussions.

- Tina Stokes-Gehring, DAS Portland Trades Manager, for providing logistics and facility support to use the Portland State Office Building.

- And finally, thank you, to all the participants. We greatly appreciate your time and feedback as we strive to create a better Public Health System for the people of Oregon.

Introduction

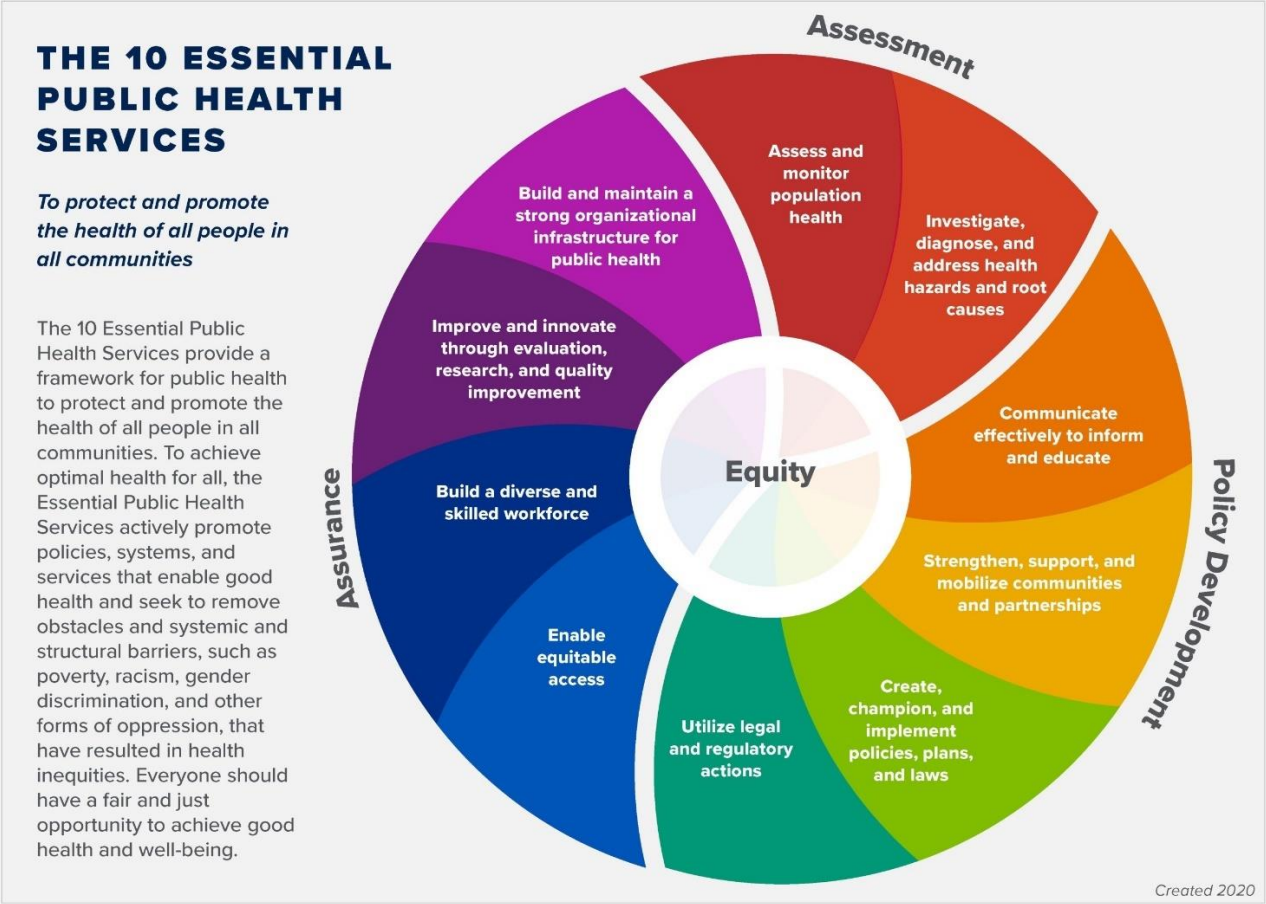
As part of the Oregon Health Authority (OHA) strategic plan goal of eliminating health inequities by 2030, the Oregon State Public Health Laboratory (OSPHL) partnered with the Association of Public Health Laboratories (APHL) to perform a Laboratory System Improvement Program (L-SIP) assessment. The purpose of the L-SIP is to evaluate the Oregon Public Health Laboratory System's performance of the 10 Essential Services of Public Health, developed by the Core Health Functions Steering Committee in 1994.

The assessment was completed on April 3, 2025, by selected representatives of the public health laboratory system. Having last completed an L-SIP assessment in 2010, the goal was to not only reevaluate the system in general, but also in the context of a post-pandemic world. Using the experience of seeing a truly tested health system, the state system collaborated to identify its strengths, weaknesses, and opportunities for improvement.

Executive Summary

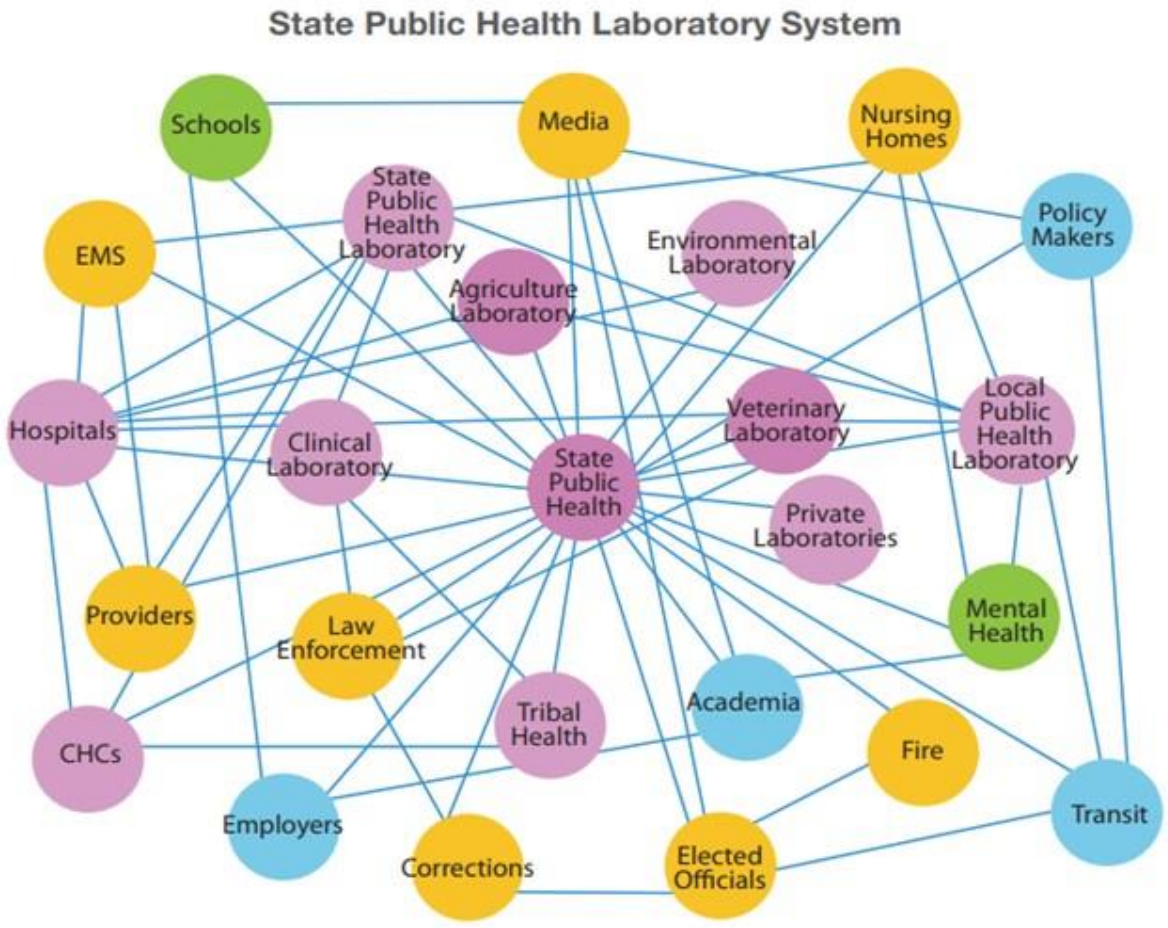
The following report documents the findings from the second L-SIP assessment hosted by the Oregon State Public Health Laboratory on Thursday, April 3, 2025, at the Portland State Office Building, in Portland, Oregon.

Using the APHL L-SIP toolkit and engaging with other partners' diverse perspectives, participants voted on the system's performance of the 10 Essential Services of Public Health:



The 45 public health laboratory system partners were divided into 3 breakout groups, where they discussed, evaluated, and rated each essential service. Each breakout group had a facilitator who led and guided the discussions. To reduce bias, the facilitators were laboratory leaders from the following out-of-state organizations: Dallas County Health and Human Services, New Hampshire Public Health Laboratories, and Washington State Department of Health.

Participants represented county, state, federal, and private public health organizations from across the state public health laboratory system:



Participants were asked to evaluate the system's performance level on each essential service by selecting a score based on the following percentage-based definitions:

No Activity	0% or absolutely none of the performance described is met within the public health laboratory system.
Minimal Activity	Greater than zero, but no more than 25%, of the performance described is met within the public health laboratory system.
Moderate Activity	Greater than 25%, but no more than 50%, of the performance described is met within the public health laboratory system.
Significant Activity	Greater than 50%, but no more than 75%, of the performance described is met within the public health laboratory system.
Optimal Activity	Greater than 75% of the performance described is met within the public health laboratory system.

2025 Oregon L-SIP Assessment Scores:

	None	Minimal	Moderate	Significant	Optimal
ES #1: Assess and monitor population health status, factors that influence health, and community needs and assets.				X	
ES #2: Investigate, diagnose, and address health problems and hazards affecting the population.					X
ES #3: Communicate effectively to inform and educate people about health, factors that influence it, and how to improve it.			X		
ES #4: Strengthen, support, and mobilize communities and partnerships to improve health.					X
ES #5: Create, champion, and implement policies, plans, and laws that impact health.			X		
ES #6: Utilize legal and regulatory actions designed to improve and protect the public's health.			X		
ES #7: Assure an effective system that enables equitable access to the individual services and care needed to be healthy.				X	
ES #8: Build and support a diverse and skilled public health workforce.			X		
ES #9: Improve and innovate public health functions through ongoing evaluation, research, and continuous quality improvement.		X			
ES #10: Build and maintain a strong organizational infrastructure for public health.			X		

Key Findings

- Unsustainable funding, communications, and technology need to be reassessed and updated.
- Partnerships are key in making the system work efficiently together.
    - The Clinical Laboratory Consortium (CLC) was emphasized as a major point of partnership, supply exchange, and communication.
- Rural areas need improved access to laboratory services and med tech programs.
- Lack of awareness of public health and public health programs are detrimental to the system's ability to perform.
- Participants extremely appreciated the space to express their thoughts and opinions through facilitated discussion.

Next Steps

- The results generated from the assessment have been used to help build a strategic plan for the Oregon State Public Health Laboratory, which will attempt to address some of the main issues highlighted from the L-SIP.
- OSPHL plans to host another L-SIP in the next 3-5 years.

Essential Service #1: Significant

Assess and monitor population health status, factors that influence health, and community needs and assets.

Indicators	
1.1.1: The System identifies infectious disease and environmental sentinel events, monitors trends, and participates in state and federal surveillance systems.	**Significant**
1.1.2: The System monitors congenital, inherited and metabolic diseases of newborns and participates in state and federal surveillance systems.	**Optimal**
	Moderate

1.1.3: The System has a secure, accountable and integrated information management system for data storage, analysis, retrieval, reporting and exchange. Partners collaborate to strengthen electronic surveillance systems.	

Key Idea 1.1.1: The System identifies infectious disease and environmental sentinel events, monitors trends, and participates in state and federal surveillance systems.

What's working	• System provides **safe drinking water** and does **surveillance** for infectious diseases, lead, algae blooms, and shellfish. • Ability to **share information** with **providers**. • It is in state statute that pregnant individuals get tested at least once for **syphilis.**

What's not	• **Environmental contaminants surveillance**: lacking an interconnected system.
	  ○ State is not doing biomonitoring studies for environmental contaminants.
	  ▪ DEQ & ODA: no capacity to process biological samples.
	  ▪ OSPHL: no capacity to process chemical contaminants.
	  ▪ Universities: do have capacity.
	  ○ Lead levels are reportable, but we aren't monitoring other contaminants well.
	  ▪ Monitoring lead: OHA surveils who is showing up in the emergency room with symptoms and sending out health alerts.
	• **Spore counts during wildfires:** no monitoring program
	  ○ Diversity of fungi infections is elevated during wildfires.
	  ○ EPA and DEQ does some monitoring.
	  ○ California measures increases in valley fever, but there is no established monitoring.
	• **Legionella:** no monitoring program.
	  ○ NRC is the only CDC-accredited lab for this.
	• **Shigella:** everyone is using molecular based tests.
	  ○ Sentinel labs aren't isolating organism because of cost issues, which means we can't give susceptibility advice to clinicians.
	• **Syphilis: increasing positivity rate,** including congenital syphilis.
	  ○ Screening numbers per year has increased from 2023-2024.
	  ○ Positive rate = 4.6%.
	  ○ 500-700 positive cases each year.

	○ Newborn congenital is worse: 2 cases in 2018, 16 cases in 2024. ○ CDC does not have universal screening recommendations. California has made it universal. • **Technology** can be a barrier. ○ Oregon Department of Agriculture Lab does not have a mechanism to share data. • CDC is currently only working with academia and public health for the **expansion of wastewater surveillance** from more than just COVID. ○ State had a grant for this but unsure if it is still active. ○ We can test in water and predict outbreaks before they happen, but wastewater testing is not regulated and is there's not a market for it. Since there is no market, independent labs can gear up.
Way to fill gaps	• Syphilis: **universal screening recommendations**. • **Before an outbreak happens**, allow **independent labs** to do **wastewater testing**, especially since wastewater is already going to them.

Key Idea 1.1.2: The System monitors congenital, inherited and metabolic diseases of newborns and participates in state and federal surveillance systems.

General discussion	• Partners view NBS as a **seamless, clockwork process.** ○ OSPHL tests for over 40 metabolic conditions and has contracts for New Mexico, Guam, Japan, and military bases.
What's working	• Fantastic **NBS advisory committee** that meets routinely. • Overall, **timeliness** meets APHL benchmarks for time from collection to report. ○ Oregon is a 2-screen state so the cut-offs are a little different, allowing us to catch things at the second screen. • **OSPHL NBS Follow Up Team** is doing a great job with **education.** • **Ability to refer** to medical consultants.
What's not	• Difficulty transporting bloodspots and meeting benchmarks in **rural communities**. • National trend: **Newborns aren't being screened at increasing rates.** ○ Could it be lack of funds, education, or not wanting too many interventions?

	○ Likely due to community birth providers and out-of-hospital births. • **Gaps in communication:** Providers didn't know OSPHL switched to a portal even though the switch was made 9 months ago. Don't always know point person to contact. • **Delay in transport:** OHSU legacy systems have transitioned to using LabCorp. ○ Specimens go to a central location, where they are delayed or lost. • Working to **increase courier access** but more difficult for some hospitals. • During CAP inspections, this question always throws CAP inspectors for a loop because of the limited knowledge surrounding Newborn Screening. ○ Accreditation says they need a monitoring system, but NBS samples aren't treated like normal specimens. Labs such as Asante may need to work through this. • Oregon is **4 NBS conditions behind** national recommendations because of lack of available funding.
Way to fill gaps	• More community outreach **working with obstetricians** to do more education for parents before babies are born. • Improve **NBS data exchange.** • By 2026, bring on 2 more nationally recommended NBS conditions.

Key Idea 1.1.3: The System has a secure, accountable and integrated information management system for data storage, analysis, retrieval, reporting and exchange. Partners collaborate to strengthen electronic surveillance systems.

***** *No lab data/informatics representation, missing some key partners in this discussion*

General discussion	• Overall: We are working within what we have but the **initial electronic surveillance systems are not great**. • **Environmental: EPA requirements** ○ EPA requires labs to report drinking water data, but each lab uses a different system. EPA has a program they want all labs to use, but it's a lot of work to set up, and they don't have enough staff to support it. ○ EPA requirements are especially hard on smaller labs serving small communities.

	• **Biggest problem:** No budget for upgrade and management of software. State doesn't like to pay for this type of system maintenance.
	  ○ State must go to outside agency and work with OIT, who doesn't understand the needs of people using systems. So even with staff and budget, we can't use the systems they give us back.
	  ○ **OSPHL LIMS is ineffective**: Can't pull info, entry is tedious/done by hand, and it doesn't communicate across the lab.
	  ▪ There is improvement progress in the works (implementation of a new LIMS), but it's threatened by funding cuts.
	  ▪ System was built on "fumes" left over from federal government. We have to update licenses for state and county staff--we use unspent federal funds to cover this, but it may run out.
	• Manual input
	  ○ **Hospital labs** also have the same issue. Budget is a huge issue. Still have to scan in paper documents for results. Asked IT department to build a system that talks to each other, but this outcome isn't valued.
	  ○ **Nursing**: results must be manually inputted.
	  ▪ They do have good confidentially, so that part is robust.
	• **Technical specs** are on point. IT systems are compliant but not user-friendly for input and receiving.
	• **Drinking water:** requiring mandatory cyber security training
	• **Communicable disease:** pretty good system. Can accept HL7 electronically
	• **Veterinary system:** also uses HL7 to communicate nationally. It works okay, but still some email communication required
	• **Communication for avian flu** between human and veterinary systems is still email
	• It's probably good that we aren't integrated w ICE, criminal justice, etc.

What's working	• **Oregon drinking water services** is doing a great job with keeping track data from different communities. • The **animal diagnostics LIMS system** works well in communication with national partners

What's not	• Trying to get records from systems across the state **that aren't all on Epic** is difficult. • No robust partnership or LIMS for info transfer with dairy, cannabis, etc. • **ELRs can be difficult to interpret**, specifically TB. • **EPA requiring** the use of a specific data system but Oregon labs using a variety of different ones. • **No budget and staff** to support LIMS updates. • Still **scanning** some results.
Way to fill gaps	• Wastewater data is not integrated with drinking water data. There could be more work for **cross-pollination of data**. • Ability for all systems to **talk to each other**, even just within OHA. • **Gap in tribal public health data**. Tribes want specific data for their tribe, not all grouped together. We could do a better job at the state level identifying this for them and are currently working on this.

Essential Service #2: Optimal

Investigate, diagnose, and address health problems and hazards affecting the population.

Indicators	
Key idea 2.1.1: The System assures the effective provision of services at the highest level of quality to assist in the detection, diagnosis and investigation of all significant health problems and hazards.	**Significant**
Key idea 2.1.2: The System assures the effective provision of services at the highest level of quality to assist in the detection, diagnosis and investigation of all significant health problems and hazards.	**Optimal**

Key Idea 2.1.1: The System assures the effective provision of services at the highest level of quality to assist in the detection, diagnosis and investigation of all significant health problems and hazards.

General discussion	• Compared to other states, Oregon does well with **scientific expertise and resources**. We have **capacity** to support Oregon *and* other states.

	○ e.g. NBS program provides screening services to New Mexico, Guam, Saipan, Navajo Nation, and several U.S. military bases. • OHSU lab not sure whose **responsibility it is to report a cluster** of MDROs ○ Provider, Lab, HER, ELR, state epi, or infection prevention? • There seems to be a delay in the **ELR system.** ○ Also, the ELR system is built between the OHSU system and state system: can the state software pick up when there's a cluster? ▪ Doctors, hospitals, and labs are all responsible, but you can agree to have one person take point. State may notice things, but VRE cases, for instance, may not be detected since we don't get the ELR feed. ○ Solution: OHSU needs to work with their hospital to decide and State is okay with whatever they decide. • System does great for **supporting investigations**. However, it is not as great on **timely communications**. It can take a while to get a lab report or for a physician to notify a patient. ○ Chlamydia is major health concern on college campus, so lots of positives reported and process is established, but there is potentially a technical disconnect. Lab receives an email notification that a result has been received, but it seems like the LPHA (Benton) has a delay in the notification or receives the physician report but not the lab report. • **COVID- 19 Pandemic** ○ **Distribution of resources** is difficult across the state (this became clear during Covid) due to factors such as distance and staffing. ▪ Rules have changed since Covid, and smaller hospitals don't always know. ○ Pandemic showed limits of capacity, for both IT systems and lab systems. Need better technology especially. • There is a **BSL-3** outside the Portland Metro area at Asante Rogue Regional Medical Center in Medford, OR. • **Environmental threats don't have great investigation processes** (e.g. drinking water contamination). DEQ mission doesn't always focus resources on this type of thing (must get governor level approval to redirect resources for such investigations). There is also not a good way to use private lab capacity and resources because of contract difficulties. ○ Ever since 9/11, private environmental labs are often asked by governmental organizations (ORELAP, FBI, etc.) to gear up

	for emerging environmental threats, so they will spend money to acquire testing methodology/supplies. However, they often don't end up getting the contract to provide the services--this is costly and alienating to partners. ○ Years of unclear communication or lag in communication between private environmental labs and state. ▪ Private lab is still emailing positive results to established state inbox, but they are unsure who is receiving these results and if they're being disseminated out to LPHAs.
What's working	• **The Clinical Laboratory Consortium (CLC)** network is a "godsend", and the consortium did a great job supporting each other during the Covid-19 Pandemic.
What's not	• **Outdated technology** ○ State lab is stuck with outdated things, sometimes even paper. This hurts partners because we cannot fix communication issues without better technology. i. At OHSU, flu subtyping is all by email. Results must be scanned into electronic medical records for follow up which is labor-intensive and slow. • Lab consortium network isn't widely known, unclear how to join.
Way to fill gaps	• **Clarify** whose responsibility it is to report and communicate clusters of reportables and non-reportables. • **ELR** that communicates more effectively across systems (hospitals, clinics, public health, etc.). • **List of BSL-3s** in state so system can support each other. • ACDP hopes for ways to **target communications to specific healthcare providers** timely. (e.g., OBs, neurology, urgent cares, etc.). • **Blood units and blood bank** could use something like CLC – ○ Currently word-of-mouth, no established network. ○ Partners would like to connect and share inventory before expiration. • Enhanced, modernized **OSPHL LIMS.** • **CLC drills** and tabletop exercises.

Key Idea 2.1.2: The System assures the effective provision of services at the highest level of quality to assist in the detection, diagnosis and investigation of all significant health problems and hazards.

General discussion	• An exercise was recently done in Bend to **assess preparation for Ebola cases** – there were not good options to transport a positive patient to Portland metro area.
	  ○ Potential for Eastern Oregon to explore cross-state partnerships, like Idaho.
	• Other than L-SIP, does entire laboratory system ever get together?
	• Historically, there has been a **disconnect between Emergency Management** (Health Security, Preparedness, and Response at State level) **and laboratory**; would benefit from laboratory being more integrated in planning and participating in discussion.
	• How easy would it be to get **contracts/agreements** in place for **response if threat emerged**?
	  ○ **Emergency declaration from Governor** would considerably speed up process, instrumental in getting agreements in place during COVID-19 pandemic.
	  ○ Even without Emergency Declaration, state has some agreements in place to get supplies quickly – **MMCAP and NASPO** include McKesson, Thermo Fisher Scientific, Concordance, VWR, etc.
	  ○ Supply availability depends on **scope of emergency**.
	  ▪ If it's an **Oregon-centric** emergency, unlikely to be a supply shortage.
	  ▪ If it's a **large-scale event** (e.g. pandemic), unlikely to acquire supplies even with agreements in place.
	• **Trust in partners** is important, and accomplishments depend on trust and high engagement among partners. Might not have established contracts, but relationships with partners can help fill in gaps in an emergency.
	• OHSU had **annual drills for disaster** preparedness post 9/11, but seems to have stopped.
	  ○ Drills included finding out information (e.g. which partner hospitals had how many ventilators on hand, etc.)
	  ○ Washington PHL is returning to drills like this.
	• Most discussion centered around biological threats – what about **chemical, radiological, food**?
	  ○ In 2016, OR passed lead testing mandate for schools, which lead to incredibly heavy caseload of samples – labs had to ramp up accreditation to accommodate numbers.
	  ○ Problems were encountered with communication – mandate required reports to go to Department of Education, but accreditation rules required privacy.

	○ Needed process in place to establish chain of custody and test schedule. Labs were able to rise to the challenge, ORELAP quickly accredited labs to build capacity, etc.
What's working	• OSU has access to **Incident Command System** and sees activity related to support from OHA, including trainings available. • **FBI** has been working with OHA and running **tabletop exercises**, as well as updating processes/trainings on a bi-yearly basis. • Clinical Laboratory Consortium (**CLC**) does tabletop exercises for preparedness (recently for communication outages), but CLC is for clinical labs, not the entire system. Meetings are held via **conference calls** and an annual **in-person meeting**. • Inclusion with **Emergency Management/HSPR planning** has improved in past few years, especially with Akiko Saito joining PHL and networked connections. • Oregon Environmental Laboratory Association (**OELA**) sends out newsletter and conducts a yearly in-person meeting to **connect environmental labs.** • **Oregon Youth Authority w**as provided everything that was needed by OSPHL during COVID pandemic. • **OHA** has a lot of trust with clinical partners, state lab partners, OYA, etc. This helps a lot because we were are all able to collaborate during outbreaks. ○ There are some gaps (e.g. partnership w environmental health) but overall, lots of good relationships. • **NRC** environmental lab supported Asante clinical lab during Covid. • **State environmental lab** also has good system for supply purchasing. • **Radiological response** is provided by FBI – trainings provided to police and national guard across state. ○ **National Guard Civil Support** also test radiological and nuclear.
What's not	• Within established silos, **COOPs** are effective, but there are **gaps** – not comprehensive and could use more cross-pollination. • Seems like there is capacity for known hazards, but there is not much in place to address **unknown/unexpected environmental threats**. DEQ/environmental labs may have some resources, but they are not supported. • Harney County is currently experiencing widespread flooding, and there are mixed messages in the media about availability of support – **clear communication** would be helpful. • **Emerging political climate** could lead to unexpected threats.

	• When first **Candida auris case** was discovered, there were gaps in coordination with environmental health.
Way to fill gaps	• More opportunities for **everyone to come together** to have discussions with the entire lab system. • Work together to **algin COOPs plans** across different agencies, departments, and laboratories. • More opportunities to **engage in emergency management systems at county levels**. • **Clarify roles and responsibilities with tribal partners** since tribal lands border with counties. • Leverage **across-the-state partnerships.**

Essential Service #3: Moderate

Communicate effectively to inform and educate people about health, factors that influence it, and how to improve it.

Indicators	
3.1.1: The System develops and disseminates accurate and consistent information to community partners about relevant health issues associated with laboratory services.	**Moderate**
3.1.2: The System creates and provides educational opportunities to community partners.	**Moderate**

Key Idea 3.1.1: The System develops and disseminates accurate and consistent information to community partners about relevant health issues associated with laboratory services.

General discussion	• **Accuracy** is hard once media picks up a story. ○ What are venues to get accurate info out?
What's working	• **DEQ has an online database** where they publish information, and there's an app for AQI. • There is a **dashboard for syphilis rates.** • **HAI - Quarterly newsletter** that provides education, and information is sent to both healthcare providers and general audience.

	○ Provides **video instructions, pictures,** etc., educating about sample collection and why people need to be tested. • **OHA annual report** got a fair amount of media coverage. • Lot of **food testing** being done on a federal level. • An environment lab is currently developing **AI** for their lab.
What's not	• Info is out there, but how do people know to go looking for it? ○ e.g. Drinking water: there's not awareness that this data is already out there. • Historical delay in having **culturally and linguistical appropriate resources.** ○ Translations into Spanish were slow during Covid--the Latino population had misunderstanding about how Covid was spread. ○ Could make a better effort to have translators available for main languages in Oregon. However, it was acknowledged that we have come a long way from where we were.
Way to fill gaps	• **Training on partnerships** in Oregon for new staff. • **State website** could list all key players. ○ e.g. One participant did not realize there was a water testing lab in Medford. Would be helpful to have an overview of who is doing what. • **AI for blood cultures** would be helpful for reducing mortality rates. • **Proactive communication** would be helpful for staying ahead of media. • Using **newsletters** by HAI as example. • **Informative flyers** with instructions and pictures. • **Dashboards.**

Parking lot issues: Medical lab AI usage

Key Idea 3.1.2: The System creates and provides educational opportunities to community partners.

General discussion	• OSPHL has programs that are attempting to do outreach and education to legislature, healthcare providers, and community partners. ○ However, there could be more work done in using **multiple communication approaches and levels of complexity**. ○ Can also work more proactively with media to **educate partners about laboratory topics**.

	• NRC has budget and are trying to educate and outreach, but it's **costly**. • **Current political climate** makes outreach and education difficult to do. • **Covid** helped to raise awareness of public health, and we could build on that.
What's working	• OSPHL Client Services Coordinator is doing a great job **with filtering for reading level** in communication. • **Tabling** at events such as the county fair that works well to interact with the public. • Veterinary diagnostic lab has been ramping up **media relations** and uses their **animals in outreach materials**.
What's not	• The **process for interning or visiting** OHA often does not work out because the process for both is so complex. • DEQ does not have a **dedicated outreach person**, so outreach is difficult to do effectively.

Way to fill gaps	• **Does the state have any initiatives to work with media?**
	  ○ DEQ is working with media for **AQI outreach**/education.
	  ○ OHA does have a person on the **executive team** who is trying to be more proactive about education.
	  ○ OSPHL is working on **videos and informative materials** to go out.

Essential Service #4: Optimal

Strengthen, support, and mobilize communities and partnerships to improve health.

Indicators	
4.1.1: Partners in the System develop and maintain relationships to formalize and sustain an effective system.	**Optimal**
4.2.1: System members communicate in regular, timely, and effective ways to support collaboration.	**Optimal**
	Moderate

4.3.1: The PH Laboratory System works together to share existing resources and identify new resources to address health issues.	

Key Idea 4.1.1: Partners in the System develop and maintain relationships to formalize and sustain an effective system.

***** *Environment/drinking water lab system is not represented in this discussion.*

What's working	• **Clinical Laboratory Consortium** helps to strengthen system. OSPHL is routinely convening clinical lab partners and currently working on this group's membership, landscape analysis, and defining mission. • Regular check-ins between **state laboratory and state epidemiologists.** • 30+ local public health authorities (**LPHAs**) are connected. • **Communicable Disease/Epi Operations** meetings. • **State Epi meetings** (topical or high-level check-in). • Reviving partnership with **LRN-B.** • **Pacific Rim Consortium.**
What's not	• **Not all clinical labs** attend the consortium meetings. • At times communications are based on personal relationships. **When people move or transition**, the communication may be lost.
Way to fill gaps	• **Solidify the mission** for the Clinical Lab Consortium, which may help define their focus and key partners. • **Lag time with testing results:** there is a potential to improve communication.

Key Idea 4.2.1: System members communicate in regular, timely, and effective ways to support collaboration.

General discussion	• Perhaps the OSPHL does well with communication but there is **more discussion** to be had about the overall system and NBS system specifically. • **Sentinel lab training**?
What's working	• For some services, you can sign up for **text alerts** (Cascadia). • **OSPHL** ○ **Email notifications** is working well enough.

	▪ Information is disseminated in **multiple formats**: shortened and long version. They are also flagged with appropriate labels (e.g. read, respond, FYI). ○ Does not publish a lot to the **general public**. ▪ When it does, it is in collaboration with ACDP and external relations. The forms of media are YouTube videos and press releases. ○ **OSPHL website** posts information. ○ **OSPHL internal newsletter.** ○ **NBS newsletter.** • **Environmental** ○ Beach water outbreaks notices go out to news media and general public alerts. ○ There is a public website for wastewater testing information. • **Tribal letters** are sent when practices change within the state. There is also an MOU with tribes for lab and Epi work. ○ OHA works hard to maintain relations with the nine federally recognized tribes of Oregon. • **ACDP** does **hot topic**, has a list serve.
What's not	• **Disservice** when there is a **focus** on social media. • For the **clinician notifications**, ACDP would like to be pulled in sooner. • Would like more **epidemiological reports** (OSU) related to people living in highly dense areas
Way to fill gaps	• Evaluate **current communication methods**. • OSPHL to focus on more **clinician specific notifications.** • **OSPHL newsletter** to be sent out to the **public**. • **Updating** the OSPHL website. • **LRN** quarterly/semi-annual **newsletter**. • Consider the use of **radio** for communications, especially in rural areas.

Key Idea 4.3.1: The PH Laboratory System works together to share existing resources and identify new resources to address health issues.

General discussion	• Communication requires both ○ 1) Communication, partnerships, and relationships ○ 2) Mechanisms and vehicles for the communication • How do we **obtain new resources?** Is it part of state budgets? Federal budgets?

What's working	• APHL covered costs of **L-SIP and fellowship.** • We do a good job of **exchanging lab supplies** in times of excess or need. • **Shared inbox** amongst key partners. • **Basecamp forum** allows for CLC partners to communicate, ask for support, and exchange ideas.
What's not	• **Funding** is not secure. Challenging to increase fees/funding. • Wish we were more empowered, **instead of waiting** for a declaration of an emergency.
Way to fill gaps	• **Grants to subsidize STI testing** (state/federal), especially in underserved population

Parking lot issues: List serve, reconnecting with CST team, mobile lab tour.

Essential Service #5: Moderate

Create, champion, and implement policies, plans, and laws that impact health.

Indicators	
5.1.1: The System obtains input from diverse partners to develop new policies, plans and laws and modify existing ones, using scientific evidence to inform and influence policy.	**Moderate**

Key idea 5.1.1: The System obtains input from diverse partners to develop new policies, plans and laws and modify existing ones, using scientific evidence to inform and influence policy.

General discussion	• **CLC** increases communications and connection that allows for **collaboration in policy work** to occur. • OSPHL does what it can to **support the public health programs** based on needs, priorities, and resources. • The Public Health Division **policies do include laboratory needs**. ○ When the public asks why the laboratory does not perform specific testing, it is usually due to reportable priorities and funding priorities. • Like any government, **there are a lot of things we can fix, but what can we actually do about it?**

	○ Lots of ideas, but not very many changes can realistically happen. ○ Unsure if partners feel included in policy making. ○ Difficult to implement change in this area – not anyone's fault, but how many complaints result in tangible actions? **How can we make the first steps?** • **How often do outside partners access data from PHL?** ○ PHL very rarely provides data to outside partners because data sharing is limited due to HIPAA protections. ○ Typically, PHL sends reports to Orpheus and state epidemiologists, then ACDP team disseminates the information to stakeholders, including lawmakers. • **How does OSPHL learn about pressing health needs?** What channels are in place to communicate a need? ○ OSPHL usually **relies on public health partners** to notify us about the needs of our community. ○ During the **COVID-19 pandemic**, OSPHL was tracking it as soon as a virus was reported in China and before cases appeared in the US. ○ For a **smaller community-specific outbreak** or threat, OSPHL would need to be informed by the LPHA or OHA/PHD program supporting that community. ▪ e.g. If there's a tuberculosis outbreak on the county level, LPHA will call OSPHL to give warning of increased samples. • **How much of OSPHL's work is focused on policy making?** ○ Depends. ○ **NBS has a dedicated advisory committee** to inform policy. Sometimes policy is put in place, but the advisory board identifies needs for changes. ▪ e.g. NBS brought on testing for Lysosomal Storage Disorders, but partners responded that in cases of positive results, families could not access treatment. OHA needed to provide resources to support the addition of this testing. ○ **Regulatory section** of OSPHL (CLIA and ORELAP) are a small team, but they interact with all labs. ○ During **COVID-19 pandemic**, OSPHL weighed in on policy discussions, like where to provide testing for Migrant and Seasonal Farmworkers. During these discussions, OSPHL pointed out limitations in policy and provided recommendations for improvement.

What's working	• **CLC** is venue to allow discussion and awareness regarding legislature, rulemaking, and the impacts of proposed bills on laboratory. ○ Example: CLIA program was invited to talk about a proposed legislative concept to overhaul Oregon law regarding CLIA processes that looked like it would have significant impacts on labs. In reality, OR CLIA was operating on federal guidelines based on footnote in OR law, so the actual impact was minor. This knowledge helped CLC members be advocates within their organizations and respond to government relations teams' concerns. • OSPHL now has a dedicated role for **legislative liaison** who tracks bills and analyzes impact on laboratory services.
What's not	• Often **responding to policy on the back end** rather than informing the policy ahead of time. • Partners are **not regularly included in policy or rule development** in additional to required inclusion. There is still a long way to go to include everyone – how do we ensure ideas are being heard and there is access to creating change? • Some policies are **difficult to work around.** • Huge amounts of manpower invested, but the **data goes nowhere**. • Lab may also be advocating to bring up certain testing, but often hands are tied by availability of **funding**. • Does OSPHL **provide data** to inform the need for a policy change? ○ Example from COVID-19 pandemic: Labs were asked to gather data from patients (other than REALD, like pregnancy status, residence in a long-term care facility, etc.) and invested staff time in capturing this data for the U.S. Department of Health and Human Services (HHS) that was not ultimately used in any meaningful way. There is a research poster at PHL to show that it was a waste of time.

Way to fill gaps	• **Continue discussion** with CLC and lab system to identify areas of improvement.
	• **Embed laboratory representation** into policy discussions.
	• What about a positive impact? Can we use data from optional asks to show a positive impact and influence a mandate?
	  ○ Depends on policy and political climate
	  ▪ Things like gender can affect normal ranges and whether a result is considered abnormal, but gender is a political issue right now, so it can be difficult to ask for information like this.

Essential Service #6: Moderate

Utilize legal and regulatory actions designed to improve and protect the public's health.

Indicators	
6.1.1: The System is actively engaged in the review and revision of laws and regulations pertaining to laboratory practice.	**Moderate**
6.1.2: The System promotes compliance by all laboratories with regard to applicable laws and regulations.	**Moderate**

Key idea 6.1.1: The System is actively engaged in the review and revision of laws and regulations pertaining to laboratory practice.

General discussion	• There is **active review, engagement, communication** by the system. However, there is **not a lot of impact** being made to change the legislature. • Manufacturers are pushing for more **waived testing** – what does the state do to make sure all labs apply for CLIA certificate at the appropriate level? ○ OSPHL is funded for compliance, so it does not go to all sites for Waiver and Moderate Complexity.
What's working	• OSPHL **shares bills and rules** with clinical labs for awareness and comment. • Environmental: Labs are kept in the loop about **analyte updates**. • State level is good about saying when a test is a **reportable condition** and when it needs to be reported to public health. ○ Posters are very helpful for communication about reportables. • Oregon has somewhat robust **processes for obtaining public feedback** on legislative and rules actions.
What's not	• Provided input on **FDA LDT rule**, input was not taken, now ruled that the FDA does not have authority to regulate.

	• Due to federal law, labs are immediately released to patients **without provider review.** This leads to patient fears and lots of calls to labs. • **Legislators not reaching out** to labs to improve laboratory practice.

Key idea 6.1.2: The System promotes compliance by all laboratories with regard to applicable laws and regulations.

⋆ *State level = significant*

**Federal level = minimal*

**Overall level = moderate*

General discussion	• So many **accrediting bodies that are not all harmonized**. How do all laboratories perform consistently? National system is not great? • To what extent can the CLIA State Program **truly monitor** every location that is performing laboratory testing? • How do we know and regulate when someone sets up a **pop-up lab?**
What's working	• Effort to **standardize assessments** for environmental and drinking water. • OSPHL offers labs opportunities for **applicable training** (wet lab, pack and ship). • Labs are trying to support each other to do the best for the patients. • Labs are **collaborating to validate i**nstruments and kits.

What's not	• Not empowered to work with the **Joint Commission**.
	  ○ Makes it difficult for a lab to be in compliance.
	  ○ Goal does not focus on collaboration, quality, or patient safety, and feels more like a "gotcha" mentality with accreditation, like they need to find a deficiency.
	• **Inconsistency between assessors** (issue with both clinical and environmental).
	• How is CLIA determining what is a **CMS-regulated analyte** and what is not?
	  ○ This affects reimbursement and other impacts.
	  ○ Hard for labs to track what are CMS-regulated analytes.
	• Labs **cannot call accrediting agencies** for support anymore.
	• Regulatory group at OSPHL is **not fully staffed:** 1.5 surveyors and a few administrative assistants. No policy analyst or communication specialist to communicate federal changes.

	• Oregon **does not require licensure**.
	  ○ Each state can decide whether a clinical lab staff has to be licensed–this doesn't promote quality.
	  ▪ Licensing requirement is a balance between ensuring adequate training and ensuring staffing can be available in rural and frontier areas.
	  ○ Possibility that people are receiving a lower standard of care when licensure isn't being required in labs.
	• **LabCorp** is bringing in untrained staff and giving them 9 weeks training.

Way to fill gaps	• Clarity from CLIA about **CMS-regulated analytes**.
	  ○ Unsure if this is open for public comment
	  ○ Significant area for improvement to ensure labs are notified.
	  ○ State program could communicate what is happening at the federal level.
	• Assess **information** that is going out on a **federal level** and determine if the State needs to communicate additional CLIA information to labs.
	• **State level CLIA licensing fee program** to better resource the program.

Essential Service #7: Significant

Assure an effective system that enables equitable access to the individual services and care needed to be healthy.

Indicators	
7.1.1: The System identifies laboratory service needs and collaborates to fill gaps.	**Significant**
7.1.2: The System provides timely and accessible quality services.	**Significant**

Key idea 7.1.1: The System identifies laboratory service needs and collaborates to fill gaps.

General discussion	• **Availability of services**
	  ○ CAP and CLIA regulate clinical testing quality uniformly and we are doing a good job on this
	  ○ Availability of services in eastern part of state may be more limited.

	○ Southern OR is well supported and covers part of Northern California. They have a decent courier system to get samples. ○ There are drinking water labs in every section of the state which is great, even if some are small. We can ship samples overnight and rural communities are well served. • **OSPHL has couriers** that serve almost all the state ○ Issues: some samples must be transported via restricted Category A or B Shipping. Couriers don't want to transport some of the more hazardous samples, or it will increase costs. • **Funding** prevents both access and future capacity.
What's working	• **New courier sheet**
What's not	• Staffing to support **after hours care** ○ E. coli and shigella are work-restrictable. Lab being closed on weekends makes it difficult to schedule collection of samples, and then people end up off work for a long time, especially those who work in food service. ○ Many environmental labs are closed by 4pm, and most aren't open Saturday or Sunday. The NRC (private environmental lab) has an emergency line, but it is the only one in the state. ▪ Emergency line allows them to open for hazardous spills, etc. • Overall, quality sounds good, but **accessibility and timeliness** are a problem ○ Accessibility ▪ Issues with **correctional population**: Services exist but it is hard to figure out how to provide access at local and state level. ▪ **Houseless population** & congenital syphilis: 75% is associated with people who don't show up for pre-natal visits. We aren't getting testing out to shelters, homeless camps. Tri-county area has some resources, but we are seeing more syphilis out of PDX area in rural areas. ▪ We do have some mobile labs, but again, it is limited by funding ▪ **Rural programs** can be viewed as a drain on resources, rather than as an equity issue. We can get samples transported from rural areas, but the cost is not covered.

	▪ Staff would be willing to come in on weekends, but there's again, not funding to cover this personnel need. ▪ Mechanisms in place if funding provided. ▪ There's no subsidy/monetary support to cover testing for rural people who depend on **private wells**. OHA is doing outreach, but availability of funds is limited. There are also no funds for treatment if the well is contaminated. ▪ Also: no regulatory authority over home wells. Many don't know they're in charge of monitoring/testing their home well. ▪ There is a rule that says well water must be tested when someone sells a home, but there is no strict enforcement of this. o Timeliness ▪ Not sure if **courier system** is robust enough. ▪ Can't get **TB QuantiFERON samples** to lab in time. OSPHL doesn't have staff to cover after hours and weekends. This can be a problem for TB because it requires a fast turnaround time. ▪ Trying to have conversations about **future planning**, but funding is always an issue. ▪ It feels like we are being **reactive not proactive.** • Some gaps in quality of **wastewater accreditation** as it is not required for Oregon. • When people call and give info to Epi, but then we tell them they can't work, they feel punished. This disincentives people from sharing information.
Way to fill gaps	• **Mobile testing** in houseless camps to meet the needs for testing services. • Create **satellite labs** to support rural areas like shigella or E. coli (proficiency testing). (How would it be funded?). • Suggestion: create network of reference labs to help support rural areas. However, billing gets tricky here. • There can be more discussions surrounding **surge capacity** in the CLC. o Surge capacity was discussed during Covid but not for other diseases. This leads to concerns over future issues like measles, since there is no established support or training in place.

Key idea 7.1.2: The System provides timely and accessible quality services.

General discussion	• It would be great to **get key players** together to brainstorm solutions for this type of problem. We have willingness and capacity but need to address more systemically.
	  ○ Exercises like this (LSIP) are useful and having more similar events regularly can encourage discussion and cross-pollination?
	• **Public sharing: What is the goal?**
	• Idea of presenting NBS information to the public, but there is a slow approval process.
	• Lack of broader **public awareness.**
	• Lack of awareness of **med tech as a career.**
	• **Ambassador program** started to outreach to younger generations re lab science as a career.
	  ○ Would be great to spread this/partner outside of Portland area.
	  ○ DEQ is also partnering on some of these.
	• People are mostly aware of DEQ for vehicle inspections but not much else.
	• Is public awareness on social media channels useful?
	  ○ Public awareness is critical.
	  ○ We don't want to be advertising exactly.
	  ○ Providers can be strapped for time, so getting public more aware of testing.
	  ○ Lyme disease.
	• OHSU veterinarian diagnostic lab does not have a lot of systematic testing.

What's working	• Ambassadors program. • Harmful algae bloom education.
What's not	• Need ways to look at a more systemic ways to address gaps in rural areas like the satellite lab idea presented in Key Idea 7.1.1. • Sense that communication and awareness with the public is lacking.
Way to fill gaps	• Have more **regular meetings of stakeholders** • Survey partners to see what **LIMs** are being used to created shared platforms

	• **Negotiating as a group** might be easier to get better rates on LIMS ○ Asante partnered with another hospital and got a better rate by doing so. • Build **contracts** in conjunction with our partners to find shared resources (such as informatics). • **Podcast.** • **Advertise routine** broadly recommended **testing.** • **Survey** of how many people are using **Epic system** would be helpful in exchanging information between partners.

Essential Service #8: Moderate

Build and support a diverse and skilled public health workforce.

Indicators	
8.1.1: The System maintains an environment to attract and retain highly qualified staff.	**Moderate**
8.2.1: The System works to assure a competent workforce by encouraging and supporting staff development through training, education, coaching and mentoring.	**Moderate**
8.2.2: The System identifies and addresses current and future workforce shortage issues.	**Moderate**

Key idea 8.1.1: The System maintains an environment to attract and retain highly qualified staff.
* *Close vote between moderate and significant.*

General discussion	• **Varying trends in pay**.
What's working	• State of Oregon has engaged employees and a pretty good culture of valuing work/life balance. • MLS compensation at university is ~1/3 lower for hourly pay. ○ People who join get to see **softer benefits** (e.g., work/life balance, working with young people) which can be a counter to burnout.

	• Starting trend: Bringing in clinical lab scientists into the **middle school/high school.** • OSPHL can attract and retain qualified staff – mission supports this.

What's not	• **LPHA** has room for strengthening.
	  ○ Transition time with staffing.
	  ○ Job seeking behaviors and compensation remains a challenge for hiring.
	  ○ One staff member waiting to move into clinical position because PD isn't being updated for appropriate clinical pay.
	• Portland Metro area is seeing large shifts due to **LabCorp** taking over two large labs in the area – their pay scale is significantly less than other companies: seeing shift backward within the past year.
	  ○ Previously were seeing starting bonuses and 1-2 dollar pay bumps per hour.
	  ○ Record students' starting compensation every year.
	• **OSU** system is behind the private sector
	  ○ Hard to get them up to speed
	  ▪ E.g.) Title change of MLT to MLS.
	  ○ Difficult to fill positions (about a year to fill the last one) because candidate pool was unqualified. Finding qualified staff 'felt by sheer luck'
	• While college students deciding on careers, the profession is not accessing **career counselors**, which is a missed opportunity.
	  ○ Employers don't support employees to go to job fairs, schools, to promote the profession.
	• **Low compensation**
	  ○ OSPHL pay scales for some lab positions are some of the lowest paid across the entire agency.
	  ○ Compensation for local public health staff is below what it should be.
	  ○ Compensation is quite low for medical laboratory technicians (OSU)
	• **Title changes** from medical laboratory scientists (as compared to technologists) take a while to update.

Way to fill gaps	• **Update position titles** to support the profession. • Bring lab staff into **middle and high schools**. • Employers to **support employees** to promote the profession. • Partner with and educate **career counselors** at universities about the profession.

Key idea 8.2.1: The System works to assure a competent workforce by encouraging and supporting staff development through training, education, coaching and mentoring.

General discussion	• The whole system **relies upon the lab.**

What's working	• There are ample **continuing education opportunities** for all levels of staff.
	• System is doing a good job with **academic partnerships**.
	  ○ Most hospitals can take on students for externships and donate supplies to help the training program.
	  ○ Students graduating have 100% pass rate on national exam. US has 75% pass rate.

What's not	• Struggle with **training and competency**.
	  ○ Can be *dependent on their base knowledge before they start in the laboratory* (e.g., online vs. hands on training).
	  ○ People have a hard time accepting feedback and don't want to re-train.
	  ○ Concerned about lawsuits with assessing competency.
	  ○ Little standard with competency and what the assessor wants the lab to be seeing.
	  ○ Rarely have two surveyors agree on how competencies are to be done. Labs get cited frequently. "Do more with less."
	  ○ Pandemic and online training has reduced hands on training in several professions. Education landscape was disrupted.
	  ○ Training offered depends on setting – some offer training; some staff have to find it themselves.
	• Continuing education
	  ○ **Bench staff** often have a hard time finding time to set aside for continuing education due to short staffing and more and more work to be done in the labs. **Administrative staff** typically have more time to set aside for this activity. Case can be made that bench staff need this more than admin staff.
	  ○ In some labs, lack of completing continuing education can lead to progressive discipline leading up to firing.
	• During **COVID** pandemic, students could only do **short externships** and couldn't take their board exams due to state law during the time. This set the profession back several years.

Way to fill gaps	• **Lab programs to teach basics** (including molecular) that are **transferrable** into the current laboratory setting. • **Continuing education support** across the system. • **Enhancing partnerships** across the system.

Key idea 8.2.2: The System identifies and addresses current and future workforce shortage issues.

**Some of this is noted in the previous two key ideas*

General discussion	• This is a calling. You have to love it and what it brings to serve people.
What's working	• OIT started **MLT to MLS online program** for rural communities. • Do well with **tracking trends** in the workforce. It is dwindling. • School districts are staring to **promote the profession** (clinical and other labs – e.g. water testing). • **OIT** going into schools. • **ASCLS** pushing into high schools in the region. Improving.

What's not	• **Not ready** to do an online MLS-only program – concerned about having unprepared students.
	  ○ Would also not be supported by the members of this group.
	  ○ These students understand basic skills but lack skills to connect results to the patient disease state (additional notes above).
	• Can't take a lot of students into a training program.
	• **Environmental**: Lab managers talk about training new graduates who don't know how to hold a pipette.
	• Portland area laboratory landscape changes mean trained laboratorians are **leaving the state** if they cannot find work or work at appropriate compensation.
	• This year, OIT program: **50% unplaced new graduates in first 1.5 months**, typically 100% in first 2 months.
	• Too many **search terms** for a position description to find an open position.
	• **Generational differences** in how employees think they can make money and communicate with employers.

Way to fill gaps	• Need for **more training programs** in Oregon. • Need to do more work to **promote the profession in schools** in the rural areas.

Essential Service #9: Minimal

Improve and innovate public health functions through ongoing evaluation, research, and continuous quality improvement.

Indicators	
9.1.1: The effectiveness, accessibility and quality of the individual- and population-based laboratory services provided throughout the state is regularly evaluated.	**Moderate**
9.2.1: The System has adequate expertise and capacity to plan research and innovation activities.	**Minimal**
9.2.2: The System promotes research and innovative solutions.	**Minimal**

Key idea 9.1.1: The effectiveness, accessibility and quality of the individual- and population-based laboratory services provided throughout the state is regularly evaluated.

General discussion	• **ELR and lab reporting**.
	• **LPHA cannot get results directly from Copia** and has to wait for Orpheus. Although technology is part of the problem, there are some cases where there is **policy** that prevents notifications from being delivered efficiently.
	• Another example: sending second results to LPHA requires manual process at lab.
	• Available laboratory services depend on **legislature and legal requirements.** Fees are vetted by legislature, and availability may depend on region.
	  ○ Eastern OR more likely to encounter Colorado spotted fever and Lyme Disease. Western OR may not be prepared to support that.
	• When **need is first identified**, often PHLs are first to bring up testing (e.g. cryptococcus and giardia), but when private labs start doing testing, PHLs often discontinue.
	• Often decisions to **discontinue testing** is focused on money.
	  ○ Assays dropped from menu because of **funding** or low quantity of testing performed – even if test is inexpensive, it costs money to maintain instrumentation and do regular quality control required to offer testing.

	○ As end user at LPHA, received test discontinued letters from OSPHL, hopes that there's a **formal assessment to determine need to discontinue**. • What do clinical laboratories hear back from us? Are clinical laboratories getting what they need from us? • How do we capture the range of testing services needed from the state public health laboratory? • Assumption that there is a systematic review of testing services when we receive notifications. ○ Maybe it would be better if there was a more systematic process. • Would like to have specimens sent to the **OSPHL for validation**?
What's working	• **CLC** members receive needed **communication from OSPHL** and know who to contact if additional support is needed. ○ Ex: lab was contacted about blood bottle by several partners, although unable to help. • Conducted a **review** a few years ago that included many voices from **PH lab sphere** (lab staff, managers, PH partners) and looked at needs, funding, numbers, alternative availability.
What's not	• When tests are identified to be brought online to support public health needs, OSPHL often has **equipment/methodology**, but not the **staffing/funding to validate**, etc. • Need funding to support **reviews** and **policy implementation**. • Need a larger **data** set for **what testing** is being done.
Way to fill gaps	• Process for systematic review would be helpful to determine if others are having **similar issues with methodology or tests.** ○ (Ex: ID card test giving false positives). • Overdue for reassessment, would be good to expand to larger lab system and include environmental health, etc. • **Policy discussions** about how to access information are taking place at PHD/OHA level that might be able to provide help for accessing information.

Parking lot issues

- Request that lab be brought into conversations regarding policy to hear needs and provide input.
- Is there validation of test results? Specimens sent to OSPHL to validate results from LabCorp – would love standardization.

- PH subsidized programs utilize OSPHL for testing, but didn't receive data from OSPHL, no data analysis until recently (expansion of Informatics team) – is data sharing on the program or the lab or is it collaborative?

Key idea 9.2.1: The System has adequate expertise and capacity to plan research and innovation activities.

General discussion	• From experience, laboratories have the **expertise and skill** to support research, but are **limited by resources**, especially staff time.
	• **Challenges in research** due to **HIPAA requirements** on laboratories – PHL can't send samples with data attached (often included in ask). Unclear **if patients consented** to samples and data being used in research if study not established ahead of time.
	• May be **grant opportunities** for research/studies, but state grant applications (ELC, EIP, etc.) are written by lab staff with **limited capacity.**
	• How often are laboratories reaching out to the **FBI** or to community partners for **collaboration**?
	  ○ FBI does not receive requests often.
	  ○ National Guard collaborates more with the Department of Agriculture, not so much with Public Health, but they are connected to the LRN and communicates with OSPHL LRN Coordinator.
	• Post-COVID-19 pandemic, 'lessons learned' identified – but did we learn? Seems like **silos are reforming**. We should not wait for a crisis to form relationships with partners.
	• Department of Agriculture has already requested **training** from National Guard for **Avian flu**.
	• Example provided: Fentanyl deaths, but something abnormal about them – potentially include an unknown chemical or contaminated with biological agent like Salmonella – how would we respond?
	  ○ FBI utilizes LRN for **biological threat**, but **chemical threats** mostly handled by FBI lab on east coast.
	  ▪ Two steps – **investigation and public safety**. For investigation, trying to identify substance – bulk of specimens sent to FBI labs on east coast. For public safety, likely work with local labs and law enforcement to contain the threat. Hazardous Evidence does testing for chemicals but works with Hazmat.
	  ○ **National Guard** has a **mobile lab** that can identify chemicals using Gas Chromatography/Mass Spectrometry in

	less than 24 hours. Their focus is identifying substances and making safety decisions – all legal issues are booted back to the FBI.
What's working	• OSPHL collaborates with **CDC and Kaiser Foundation** for studies. • Oregon is better at **collaboration** than many other states. • Lots of **training** with public health.

What's not	• There is a lack of resources and capacity to perform **formal/comprehensive assessments**.
	• No established vetting process in place for determining if research study has followed correct processes – often cold calls to PHL.
	  ○ There isn't enough knowledge about **research regulations, IRB requirements, and HIPAA.**
	• Is there **training in grant writing** available to OHA employees? Even if there is, lab staff do not have time to access and complete trainings.
	  ○ Staff capacity does not allow time to search for additional grant opportunities outside of established/known grants from federal government/CDC.
	• An **administrative level is missing** – can't fully take advantage of opportunities for funding without administrative support.
	• Even within the system, there are not resources to explore opportunities for funding or partnership.
	• No established process in place for **recommending research** to partners or to state.

Way to fill gaps	• This work is limited by **funding availability**. • Get **dedicated grant writers**. • **Partnership** within the system is lacking. Collaborations we could do before a crisis occurs. • Training opportunity: **mail safety training**.

Parking lot issues

- National Guard often works with first responders to identify unknown chemicals. It's shocking to learn how many threats/potential threats are not communicated higher.
- Civil service can provide support for influenza pandemic response. OSPHL can ask for training activities with them.

Key idea 9.2.2: The System promotes research and innovative solutions.

General discussion	• Promoting **research and innovation requires funding**. • Innovation success is achieved by thinking about what can be done in the current environment with **current tools**, rather than in an ideal world. • System does **invite ideas** for innovation, but **doesn't** provide ability to **utilize** them, even if partners work together. • Do we promote opportunities? Partnering and sharing ideas would be helpful. • PHL has recently been offered free money, but to accept it, we must get a **contract fully executed in 3 months** – fighting for priority with contracting staff and navigating bureaucratic roadblocks will make that turnaround extremely tight, bordering on impossible. • How can we close these gaps? PHL depends on federal grants to support testing and instrumentation needs. **Is there an opportunity to utilize resources by networking?**
What's working	• A win for PHD recently – CLC helped identify a website called **Basecamp** that can be used to track who is doing what where and keep communication open between partners. This was a state resource already that could be applied to this situation – there are plans to expand. • PHL has recently collaborated successfully with Kaiser Foundation for some studies on **Norovirus** (MAAGE, SAGE studies). ○ Significant work was required to establish an agreement for these studies with Kaiser – state bound by laws and statutes, but Kaiser is such a big corporation that they are used to dictating their own terms and don't want to negotiate. This makes establishing research partnerships difficult.
What's not	• **Bureaucratic systems** seem designed to slow down work, and it's a constant fight with state programs like Office of Contracts and Procurement to get what is needed in a timely manner. • **State policies were not designed to include the laboratory** – what works for many programs/offices in OHA do not work for the lab due to the nature of the work, and it's an uphill battle to show that the lab should be considered an exception. • **Lack of awareness** about laboratory needs and processes in other state programs/agencies – constant advocacy needed. • Programs often get locked into original plans for funding that were submitted on grant applications – funding may last for multiple years, and needs change, but it's **difficult to change funding requests.** Programs may have innovative ideas to address problems

	but are blocked from accessing funding and can't implement innovative ideas. End up relying on partners often. • Discouraging to look at research opportunities and ask if we can spare the time/capacity to meet the heavy administrative lift required to respond. • **Cloud system** and **IT contracts** are very difficult. • The agency does not support innovation. • **Contracts** are **not working**. • Policies are **not supportive of collaboration and research**.
Way to fill gaps	• Recommended to look at how much it costs to meet the administrative lift – how many staff hours to jump through hoops, etc. – to establish a better visual of current process's ineffectualness. ○ Ex: Would it cost $450k in staff time to apply for a $100,000 grant? • Partnership within the system is lacking, identify potential areas of collaboration.

Parking lot issues

- Civil service can provide support for influenza pandemic response. OSPHL can ask for training activities with them.

Essential Service #10: Moderate

Build and maintain a strong organizational infrastructure for public health.

Indicators	
10.1.1: The System is composed of different entities that work together effectively on public health activities and are transparent and accountable to the community it serves.	**Moderate**
10.1.2: The System's leadership acts ethically and strategically and communicates proactively to the public through different mechanisms.	**Moderate**
10.1.3: The System has the necessary resources (e.g. financial, technological, physical (facilities), human) to perform and sustain public health activities.	**Minimal**

Key Idea 10.1.1: The System is composed of different entities that work together effectively on public health activities and are transparent and accountable to the community it serves.

General discussion	• **Partnerships** currently exist, but they are **threatened by federal funding** being withdrawn. COVID-19 pandemic established tentative relationships that filled in some gaps, but a **lack of trust** in the system infrastructure is causing some to actively withdraw from those relationships. • There is not funding resources or support within organization to support and sustain collaborations and community engagement. ○ Collaboration and community engagement take time, money, and staffing to maintain. • **MOUs** are in place but maintaining them will be difficult. • Are we able to meet the needs of our community? • There are bubbles of collaboration, but it's not enough or systematic and **doesn't meet the wide needs** of community members. • Policies, processes, and systems are not in place on a solid foundation.

What's working	• **Clinical Laboratory Consortium**
	  ○ Helps to sustain relationships, provide transparency, and **build trust between clinical lab partners** virtually and in-person.
	  ○ Funding allocated in **ELC Core grant**, including the annual in-person meeting.
	  ○ **Word of mouth** has been sustaining CLC membership through significant turnover post-COVID-19 pandemic. New people who have joined heard about it from their organizations or partnerships.

What's not	• **Relationships built up during the COVID-19 pandemic** largely depend on a specific person in a role and that person's ability to maintain relationships or knowledge of the right people – this is not a solid foundation for maintaining partnerships. ○ If people leave their positions, how will incoming staff get connected? Once outside of the bubble of personal relationships, there is no mechanism to sustain and/or form new collaborative relationships. • Relationships with **Community Based Organizations** for Public Health programs are often dependent on **CLIA-waived testing**

	○ Oregon's CLIA website has been insufficient to educate and support these CBOs on the CLIA waiver process. Needs more support. • Public **lacks communication** and clarity on **how to access available resources.**
Way to fill gaps	• Do an **assessment of agencies and partners** to identify gaps. ○ However, there is a concern that there would not be enough staff to do such an assessment. Additionally, even if needs were identified, participants questioned the system's ability to adapt to new processes and support the needed work to close identified gaps. • Dedicate **staffing to support community engagement** activities would help them be sustainable.

Key Idea 10.1.2: The System's leadership acts ethically and strategically and communicates proactively to the public through different mechanisms.

General discussion	• Does PHL communicate directly to the public? ○ No, notifications go to submitters as needed, and OHA utilizes HAN system to push updates to healthcare partners. ○ Anything communicated to general public **goes through Communications teams.** • Are communication limitations a **funding issue, a policy issue, or a legislative issue?** ○ Probably all 3. • Barriers prevent effective collaboration, especially when it comes to governance, policies, and rules – whose rules are we following? Whose terms and conditions take precedence? • Leadership cares too much what the public and press think about things.
What's working	• Health communication at Multnomah County includes Community Partnership and Capacity Building (CPCB) ○ A **two-way street** between LPHAs and CBOs **that serve the same communities.** • FBI has focus on forensic laboratory work but do have **access to multiple national labs** and could help coordinate collaboration. • Oregon has a lot of **ethically motivated people.** ○ Across the IT space, we have a lot of systems we all rely on – Oregon strives to be the most **ethical state**.

	• CLC ○ CLC scope is fairly narrow – specifically formed to address clinical laboratory managers and needs. It can be isolating in a clinical lab, as staff are often separate and not connected to other areas of healthcare administration, doctors, and nurses. Allies and people in similar career positions are often in different organizations, which can be difficult to bridge. **CLC provides mechanism to connect clinical labs.**

What's not	• Often **communication to public is performative** – OHA has established public meetings and forums to include the public, but it's difficult to access the schedules, minutes, etc.
	  ○ I.e. Standing meetings where a time for public comment is built into the agenda, but the meeting is always held at 7 am – **no public comment** ever received because time is inaccessible.
	  ○ We're striving to do it, but we're **not openly communicating** about the work.
	• Environmental labs are not included in CLC – maybe need a **group with a broader scope** to include others in the lab system.
	  ○ This would require resources (funding, staff capacity).
	  ○ Might also be difficult to coordinate a larger group and identify a shared purpose to focus discussion and justify funding.
	• OHA does have social media accounts, but communication is not as effective as it could be – often behind the times.
	  ○ Followed OHA on twitter – External Relations has a team for social media, but this isn't being used effectively.
	• OHA doesn't adequately spread **awareness of PHL or Public Health services**
	  ○ Latinx and Migrant Seasonal Farm Worker (MSFW) groups don't have any idea what services are available. **Communications** need to take audience into account and understand the nuance of population–**new immigrants and MSFWs** may not have a baseline knowledge of standard services, etc.
	  ○ OHA looks to Community Partner Outreach Program (CPOP) to bridge gaps, but **CPOP lacks resources** to fully support this – should be embedded in **OHA's policies.**

Way to fill gaps	• PHL would benefit by the **External Relations Division** assigning a dedicated person (who understands laboratory work) to do outreach and communication for lab.

	○ External relations should help bridge the gaps between community and the public health laboratory. • Local public health has some groups to help **bridge the gap** between **CBO's and the State PHL.**

Parking lot issues

- Agency doesn't allow communication to the public from the lab – lab techs value truth and accuracy and are not concerned about optics.
- Lack of laboratory personnel in communication procedures/roles – people who are drawn to the lab as a career are overwhelmingly not interested in public speaking or communications, which has led to gap in promotion of lab/public health as a vital service.

Key Idea 10.1.3: The System has the necessary resources (e.g. financial, technological, physical (facilities), human) to perform and sustain public health activities.

General discussion	• There is some **technology** being utilized, but it could be vastly **improved**. • Within OHA, PHL must **compete** with ACDP for **funding opportunities.** • The shift in technology has been exponential – from the invention of the first car to space exploration in the 1960s to now where new versions of phones are available yearly. **We can't implement new technology fast enough to utilize i**t – by the time all approvals are received and purchase is made, something newer has replaced it. • OSPHL has been working on replacement of Laboratory Information Management System (**LIMS**) since 2017, and despite going through the solicitation process in the last year, it will still be at least another year from a fully executed contract with the selected vendor. • Does OSPHL get a say in what is deemed **reportable** and requires **reflex testing** (and being sent to OSPHL)? ○ Some – conversations happen between ACDP and PHL to address what it would look like, what's needed, etc., but often lab just has to figure out how to make it happen. • Sometimes it is determined that testing can be sent out to **reference lab** or partner who is already doing that testing (e.g.: Washington Dept of Health) – but this relies on time, funding, and existing partnerships.

	• **Lack of awareness** in public about laboratory services, disorders tested, impact, etc., and lack of awareness of process to establish new services.
	  ○ Example: Crabbe A slated to be added to NBS panel, but approximately 10,000 samples have to be tested before the process can be approved, normal ranges can be set, and billing can be established.
	• **CDC sets standards** to incorporate new tests and validate reference ranges. This is also based on the population of Oregon – standard curve is set for population of 4.3 million.
	  ○ When you set a standard curve, you do a large amount of testing.
	• Process also depends on incidence of disorders – often NBS is screening for disorders that are rare but devastating.
	• Are there programs for **ambassadorship** and/or outsourcing **advocacy**?
	  ○ Yes – to an extent. APHL Ambassador Program started recently (Sept 2023), but more to spread awareness on a small scale and empower laboratory staff to conduct outreach. Not so much support for partnering outside the lab.
	• Oregon has the most anti-federal government sentiment in nation, but that has pushed state to **collaborate internally**. Despite being a large state, there is the feel of a small or medium state, as relationships are readily available and easy to form.
	• **Cross-agency coordination** is working well between LRN, WMD Coordinator, and National Guard.
	• Is there anything being tracked in the **legislature** for **increasing funding?**
	  ○ There's a $4m bill currently to add 5 tests to the NBS panel – onerous process to get changes like this implemented, despite support from elected officials and advisory boards.

What's working	• Staff expertise and available methodology **can often respond to needs,** but depends on availability of resources (supplies, funding, etc.). • Lots of good is happening **despite constraints** from funding, policy, etc. • Oregon has a more **positive mindset** (compared to 20+ states) – at least there are people who care and are working on the same side. • We have personnel that have the expertise. We need money to know how far we can go.

What's not	• State systems do not allow us to **respond to technology needs**.
	• **Infrastructure** is seriously out of date, so even if we receive approvals and funding to bring on new technology, the network can't support it.
	• **Funding system** in Oregon is broken
	  ○ Example from Utah where 100% of gas tax was applied to public safety, none to environmental labs, or other mitigators of pollution. Lane County is currently considering a public safety levy, but there has never been a public health levy considered.
	  ○ State of Oregon has not invested in growth of services and technology – rely heavily on federal funding.
	  ○ Process to get additional funding and increase fees is onerous.
	  ○ Funding changes at the federal level is profoundly impactful to public health laboratories.
	  ○ Adding new testing is very expensive.
	• **No one knows** what is happening in Public Health programs – why would anyone care about supporting PH if nothing is known about programs?
	  ○ If Public Health does its job right, no one hears about it.
	  ○ New reality is that we can't be silent.

Way to fill gaps	• Lesson learned – **advocating** for public health is best done by **community partners**. PH/lab staff need to be allowed and encouraged to spread awareness and form partnerships. ○ Example from Multnomah County: RSTI clinics faced funding cuts, but partners flocked to courthouse to show support.

Parking lot issues

- NBS is overlooked and not well known to general public – even with outreach and providers supplying information, birth is surrounded by so many forms to fill out and so many people poking and prodding the baby, that families don't realize NBS is part of that unless they are notified of an abnormal result – which isn't the case for most.
- Culture does not allow for levies to support public health.
- Why would anyone invest in public health if they don't know what we do?
- Advocacy is difficult for laboratorians. We go into the profession because we don't want to talk to people. Very few people trying to do this. We need buy-in from the system.
- Nurses have been able to be loud to get resources, but medical laboratorian are not good at advocating.

Evaluation Results

Comments

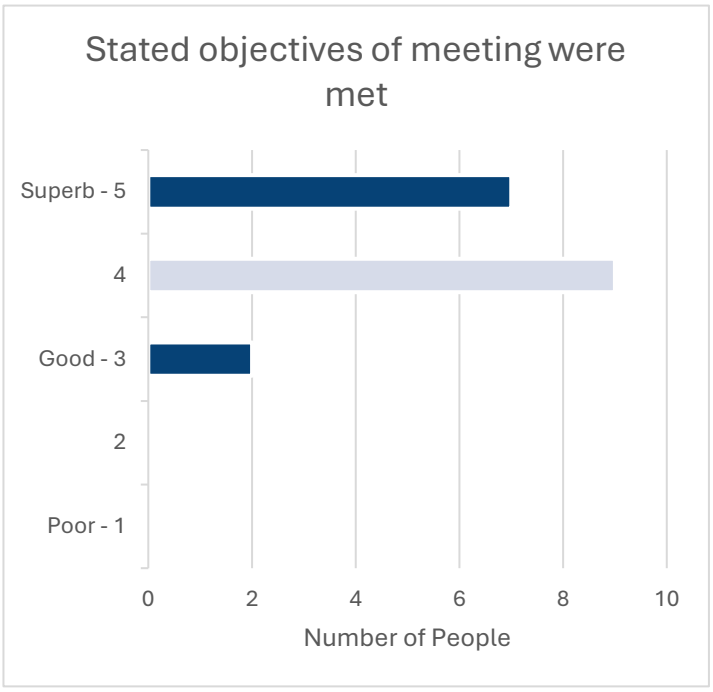
- I am unsure about what the follow-up is from this. Some great ideas and discussions were there, but significant effort would be needed to meet those ideas. Hopefully some great things come out of this. More frequent meetings of these groups would be great.
- It was fantastic to come together in a large group of colleagues. Sharing experiences, challenges, and insights with others in our field was both valuable and inspiring.
- Once a year at the minimum at the current pace of infectious diseases and climate change.
- Looking forward to the report, next steps, and actions from the meeting!
- I did not appreciate the general facilitator pushing to get out early. If the goal is a quality assessment and time together as partners, let's use our own time to the fullest.

What worked?

- The structure of the meeting very much facilitated participation. I felt my comments were heard. Everything ran on time and was well organized. Good job!
- Small groups allowed robust conversation.
- Great group of folks
- Very well organized and great participation from attendees. Great conversations.
- Excellent avenue for discussion and provided good structure for evaluation.
- People are passionate and care for what we do.
- The collaboration between different people was great! Also, the chance to network with people from different backgrounds was awesome.
- Well done organizing the meeting.
- Group break outs.
- Great outlines for discussion.
- Good facilitator.

What could be improved?

- Including some key stakeholders that felt missed – more food side, cannabis, legislators
- Would have liked to see legislature, tribes, and healthcare providers
- Nothing!
- I think it would have been helpful to have some legislators present. Perhaps some media as well for outreach discussions.
- Unclear on how results will be leveraged to create change. Limited by time constraints in some areas.
- Improve on the attendees roster to minimize abbreviations show more of what people do.
- Overall, I do not have any areas that need improvement.
- Wanted more discussion time with some topics felt short and that we couldn't finish or do the topic justice.


Stated objectives of meeting were met
Superb - 5
4
Good - 3
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Poor - 1
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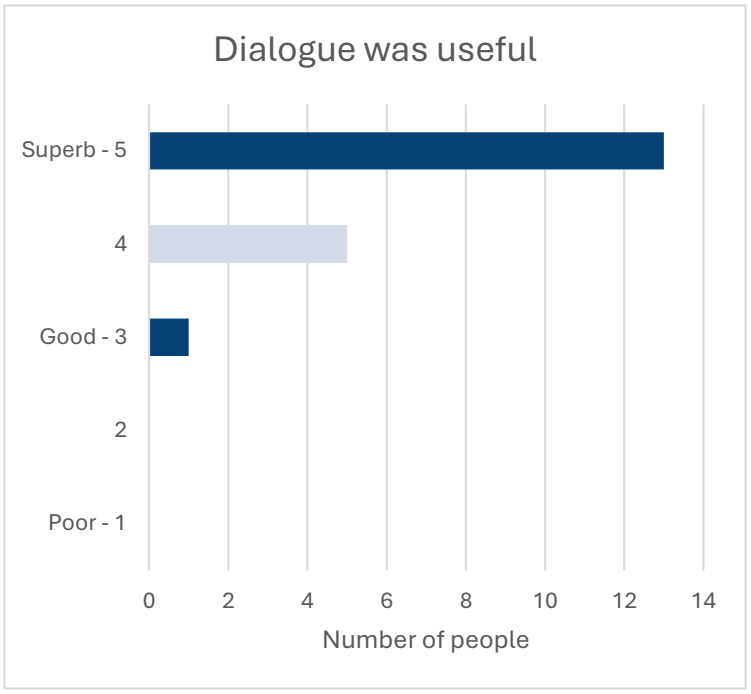
Number of People


Dialogue was useful
Superb - 5
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Good - 3
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Poor - 1
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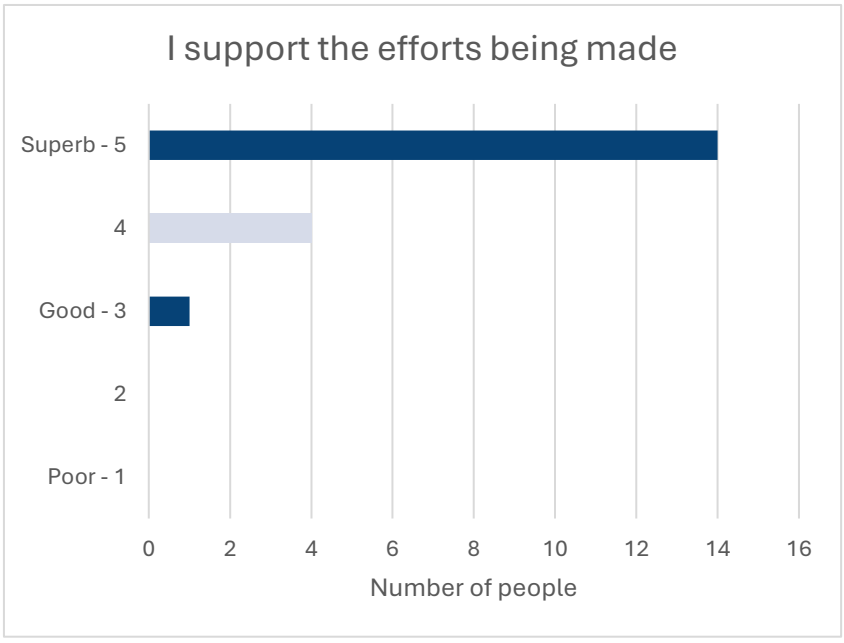
14
Number of people


I support the efforts being made
Superb - 5
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Good - 3
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Poor - 1
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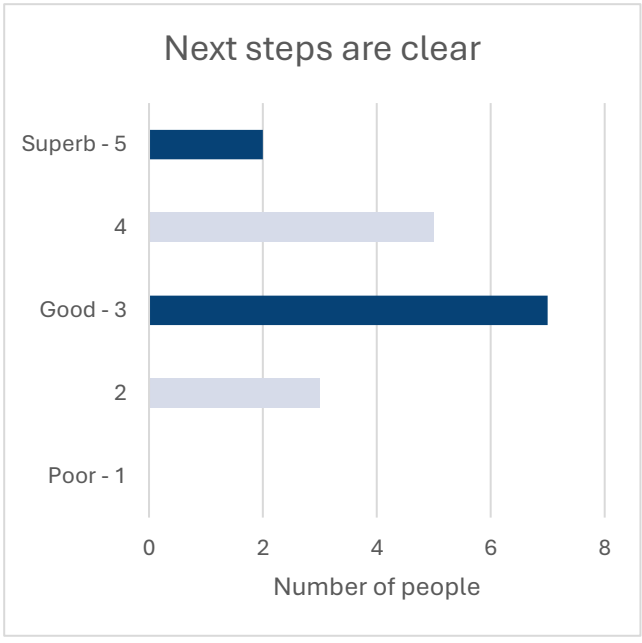
16
Number of people


Next steps are clear
Superb - 5
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Good - 3
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Poor - 1
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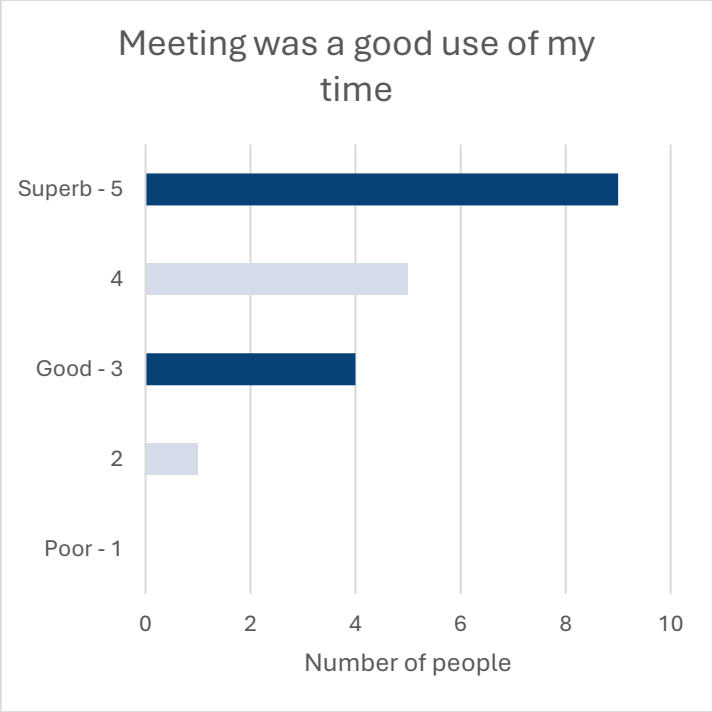
Number of people


Meeting was a good use of my time
Superb - 5
4
Good - 3
2
Poor - 1
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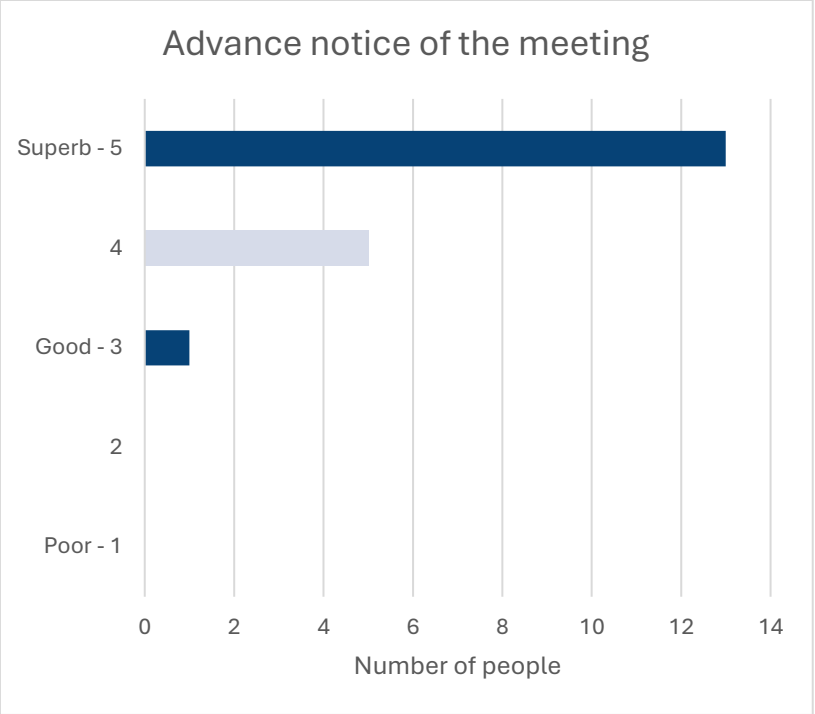
Number of people


Advance notice of the meeting
Superb - 5
4
Good - 3
2
Poor - 1
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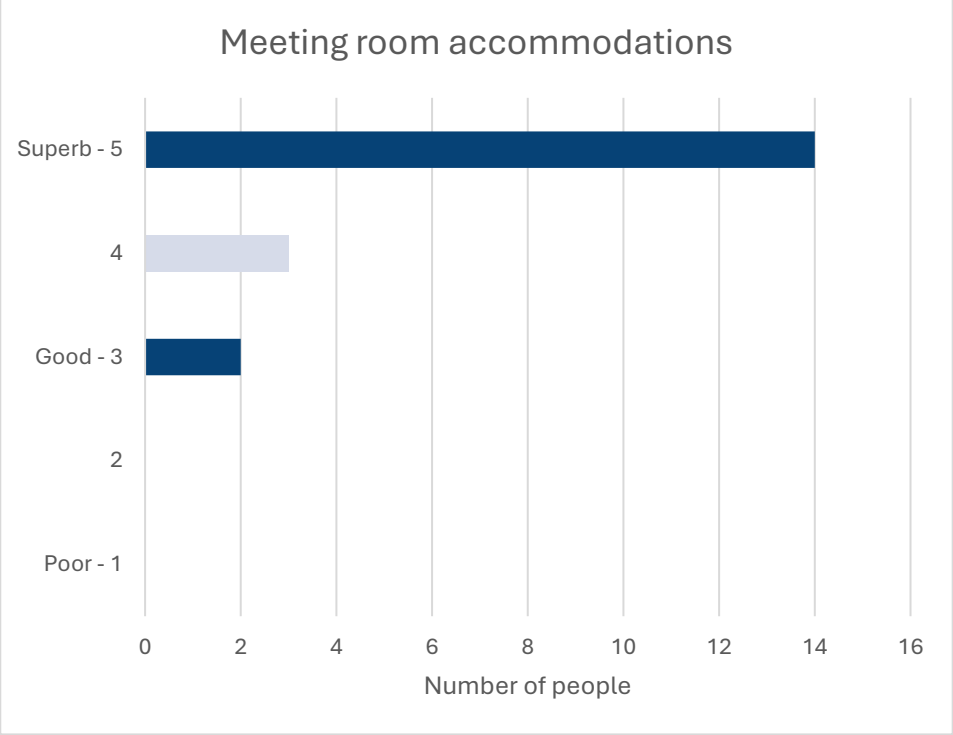
Number of people


Meeting room accommodations
Superb - 5
4
Good - 3
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Poor - 1
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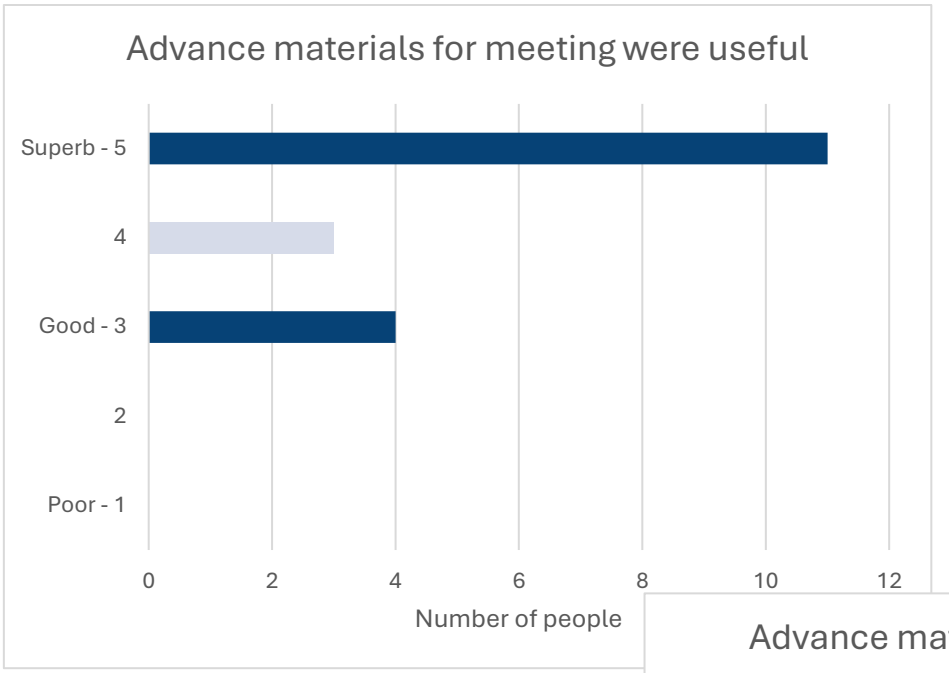
Number of people


Advance materials for meeting were useful
Superb - 5
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Good - 3
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Poor - 1
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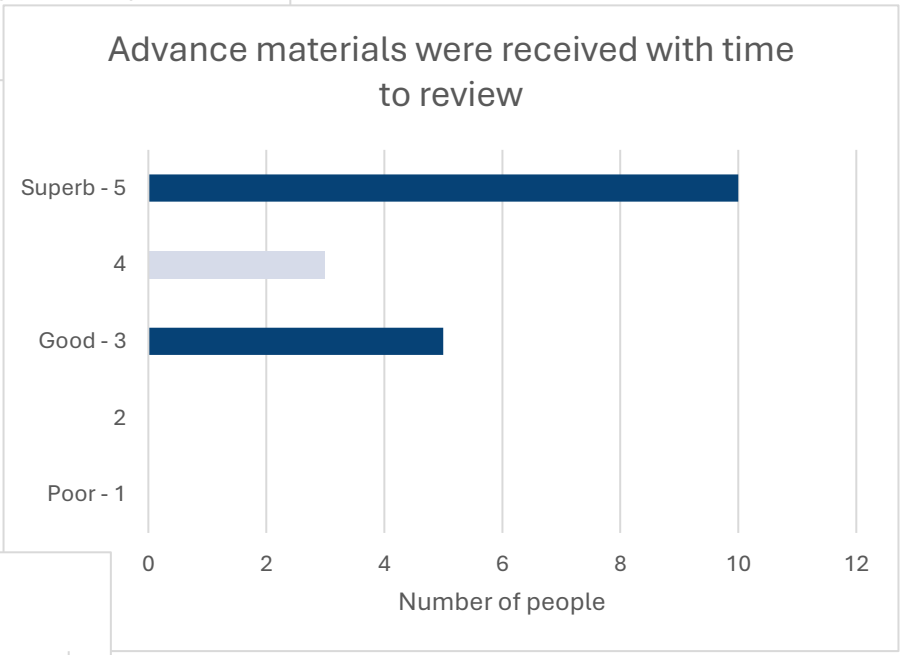
Number of people


Advance materials were received with time to review
Superb - 5
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Good - 3
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Poor - 1
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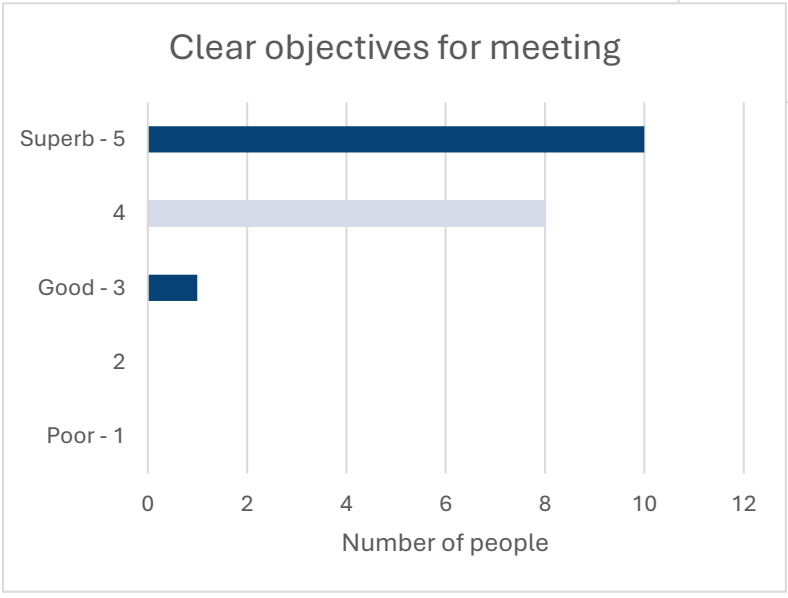
Number of people


Clear objectives for meeting
Superb - 5
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Good - 3
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Poor - 1
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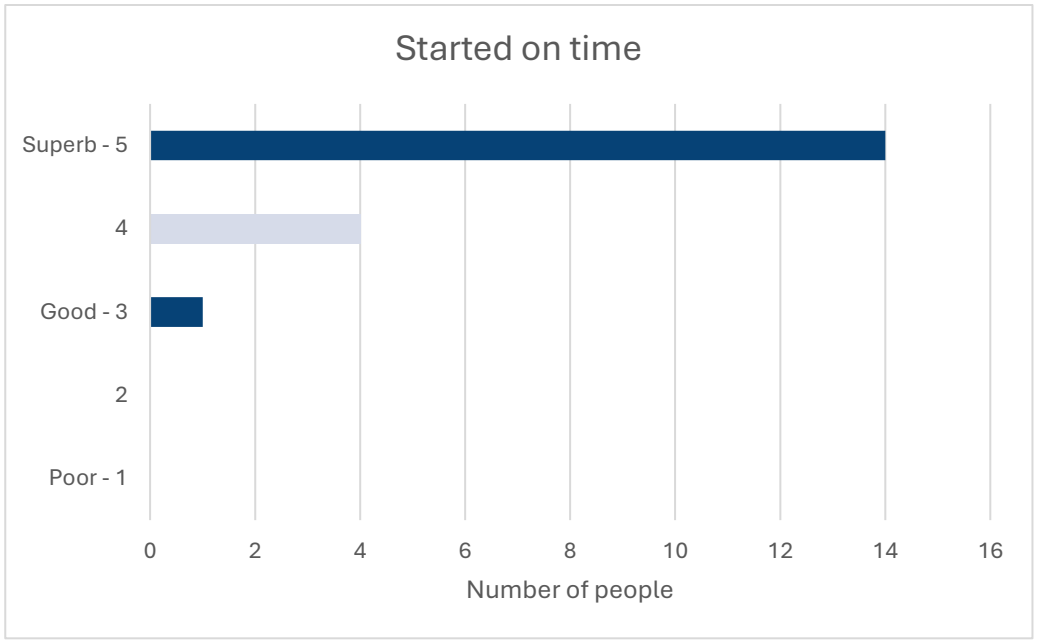
Number of people


Started on time
Superb - 5
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Good - 3
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Poor - 1
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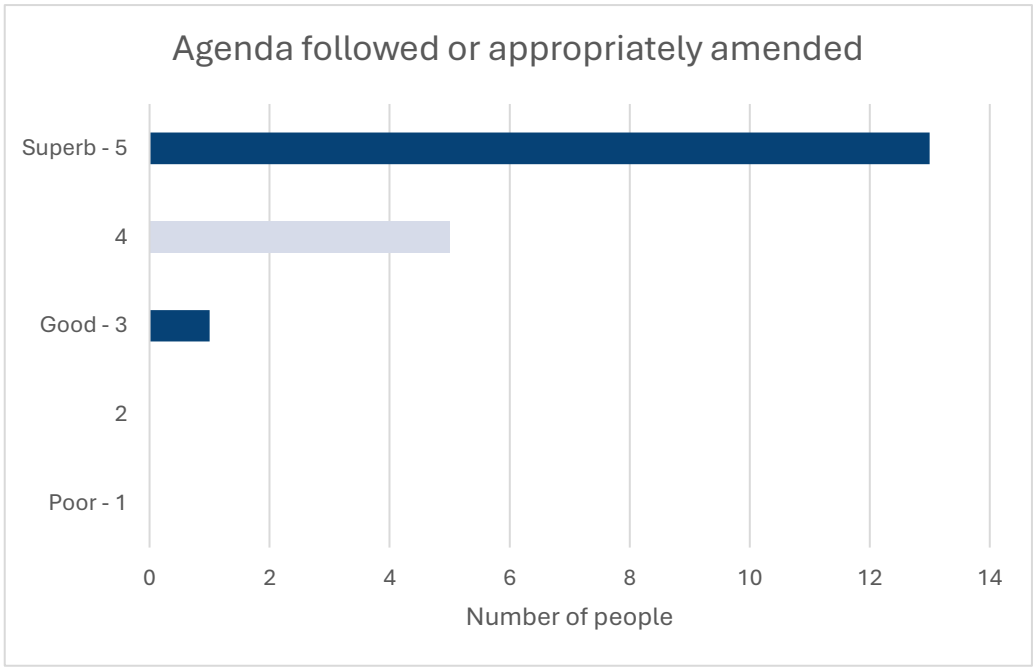
Number of people


Agenda followed or appropriately amended
Superb - 5
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Good - 3
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Poor - 1
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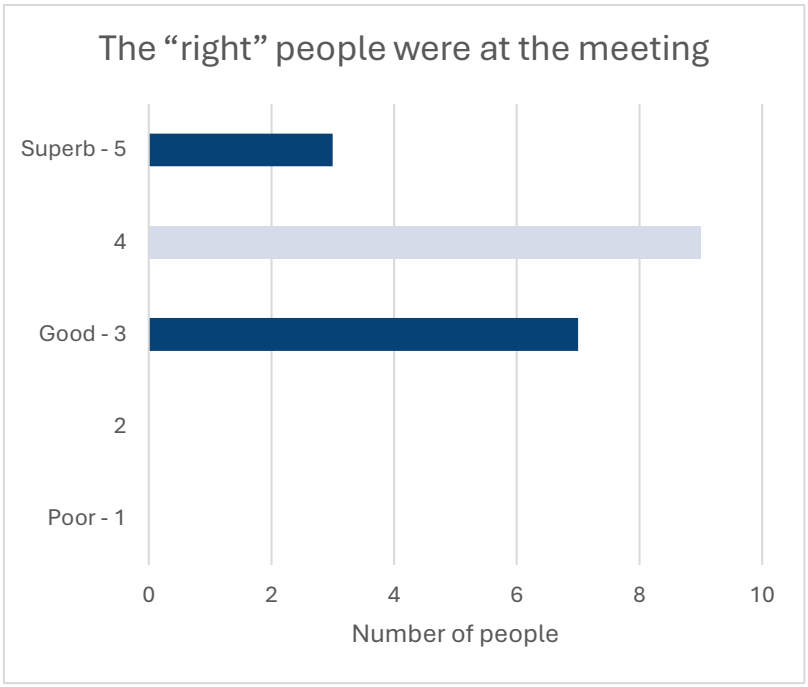
Number of people


The “right” people were at the meeting
Superb - 5
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Good - 3
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Poor - 1
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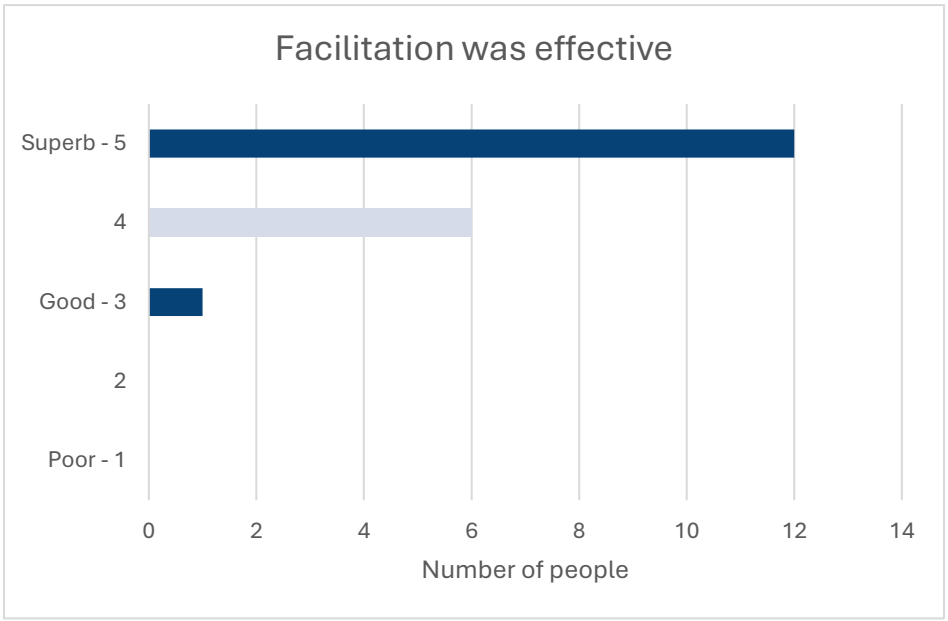
Number of people


Facilitation was effective
Superb - 5
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Good - 3
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Poor - 1
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Number of people

Agenda for Oregon L-SIP (Laboratory System Improvement Program)

Date: April 3, 2025

Time: 8am-4:30pm

Location: Portland State Office Building – 800 NE Oregon St, Portland OR 97232

8:00	**Registration (light breakfast provided)**
8:15	Welcome and introductions
8:30	Overview of assessment day
9:15	Plenary: Essential Service (ES) #2: Investigate and Diagnose Health Problems
10:15	**Break**
10:30	Breakouts: • Group A—ES #1: Monitor Health • Group B—ES #9: Improve and Innovate Public Health Functions • Group C—ES #8: Build and Support Workforce
11:30	**Lunch (provided)**
12:30	Breakouts: • Group A—ES #7: Assure Equitable Access to Health Services • Group B—ES #10: Build and Maintain Infrastructure • Group C—ES #4: Strengthen, Support and Mobilize Partnerships
1:30	**Break**
1:45	Breakouts: • Group A—ES #3: Inform and Educate • Group B—ES #5: Create, Champion and Implement Policies and Plans • Group C—ES #6: Utilize Legal and Regulatory Actions
2:45	Summary, Evaluation, and Next Steps
4:30	**Adjourn**

L-SIP Invitation Flyer

You are invited!
The Oregon Laboratory System Improvement Program (L-SIP) Assessment

OREGON HEALTH AUTHORITY

OSPHL OREGON STATE PUBLIC HEALTH LABORATORY
PROTECTING THE PUBLIC'S HEALTH SINCE 1903

APHL ASSOCIATION OF PUBLIC HEALTH LABORATORIES

Date: Thursday, April 3, 2025
Time: 8am-4:30pm
Location: Portland State Office Building, 800 NE Oregon St, Portland, OR 97232
RSVP: Please RSVP by March 3, 2024 by completing the form found here.

Why Participate in an L-SIP assessment?

- It provides a benchmark for public health laboratory system practice improvements, by setting a "gold standard" to which public health systems can aspire.
- Improves communication and collaboration by bringing partners (e.g., public health professionals, educators, local environmental and clinical laboratories, first responders and key constituencies) together.
- Educates partners about the public health laboratory system and the interconnected activities that lead to collaborative system solutions.
- Strengthens the diverse network of partners throughout the federal, state, and local systems, leading to cohesive partnerships and better coordination of activities and resources.

For any questions, please email hanna.nguyen@odhsoha.oregon.gov

Participant List

Name	Organization	Job Title
Anthony Bernabo	102nd CST	Nuclear Medical Science Officer
Ryan Siggins	102nd CST	Medical NCO
Jacob Blair	Asante Health System	Laboratory Operations Manager
Bertina Su	Association of Public Health Laboratories	Program Manager – Quality Systems and Analytics
David Silva	Dallas County Health and Human Services	Quality Manager, Public Health Laboratory
Emily Porter	Douglas Public Health Network	Communicable Disease Epidemiologist
Craig Mueller	FBI- Portland	Special Agent Bomb Technician
Beth Ann Beamer	Jefferson County Public Health	Public Health Nurse
Sara McCall	Multnomah County Health Dept	Communicable Disease Nurse Manager
Kim Ramsay	Neilson Research Corporation	President
Kyle Grogan	Neilson Research Corporation	Laboratory Director
Michael Stevenson	NH Public Health Laboratories	Microbiologist V – Deputy Lab Director
Christin Maurer	Northwest Point of Care	Board Member
Kathleen Wickman	ODA - Laboratory Services	Laboratory Manager
Adelina Mart	OHA	HAI MDRO Operations Manager
Pete Singson	OHA	HST Section Medical Director
Jillian Garai	OHA	STI/HIV Prevention Nurse Consultant
Orion McCotter	OHA	Senior Epidemiologist

Name	Organization	Job Title
Tasha Martin	OHA - ACDP	Epidemiologist 3
Jorge Martinez	OHA - CPOP	Strategist
Ayo Ojebode	OHA - OSPHL	Lab Manager
Amber Gamel Miller	OHA - OSPHL	NBS Follow-up Manager
Matthew Burns	OHA - OSPHL	Microbiology Section Manager
Valerie Ross	OHA - OSPHL	Management Executive Assistant
Elizabeth Stelle	OHA - OSPHL	Contracts Coordinator
Pat Luedtke	OHA - OSPHL	OSPHL Clinical Lab Director
Sheri Hearn	OHA - OSPHL	Policy and Informatics Manager
Akiko Saito	OHA - OSPHL	Business Director
Macey Henning	OHA - OSPHL	LRN Coordinator
Patrice Held	OHA - OSPHL	Manager, NBS Program
Sarah King	OHA - OSPHL	Client Services Coordinator
Steve Jetter	OHA - OSPHL	Regulatory Section Manager
Hanna Nguyen	OHA - OSPHL	APHL-CDC-OSPHL Fellow
Ifeanyi Ukaumunna	OHA - OSPHL	APHL-CDC-OSPHL Fellow
Jenae Bakke	OHA - OSPHL	Management Executive Assistant
Stephen Wilcox	OHA - OSPHL	Strategics Project Lead
Dean Sidelinger	OHA - PHD	Health Officer and State Epidemiologist

Name	Organization	Job Title
Paul Cieslak	OHA - PHD	Medical Director, Communicable Diseases & Immunizations
Charina Walker	OHA - PHD	Legislative Policy Lead
Carey Palm	OHA - PHD- HSPR	ESF8 Tribal Preparedness Liaison
Heidi Behm	OHA - TB Program	TB Nurse Consultant
Michelle Barber	OHA-PHD-CPHP-ACDP	Informatics Manager
Xuan Qin	OHSU	Director, Microbiology and Molecular Lab
Caroline Doty	OHSU and Oregon Institute of Technology	Dept Chair and Associate Professor of Medical Laboratory Science Dept
Lori Pillsbury	Oregon DEQ Laboratory	Laboratory & Environmental Assessment Division Administrator
Kurt Williams	Oregon Veterinary Diagnostic Lab	Lab Director
Ann Hingson	Oregon Youth Authority	Nurse Manager
Maria Dalrymple	Oregon Youth Authority	Nursing Supervisor
Mark Hornabrook	OSU Student Health Services Medical Laboratory	Medical Laboratory Manager
Jamie Rouse	Salem Health Hospitals/Clinics	Director of Laboratory Services
Carrie Wilson	St. Charles Medical Center	Microbiology/Serology Technical Supervisor
Shauna McGuire	VA Health System Laboratory	Deputy Lab Manager/Quality, Compliance, and Safety Manager
Philip Dykema	Washington State Department of Health	Deputy Director, Microbiology