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STATE OF OREGON

Public Health Modernization Assessment Report

JUNE 2016

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Specifically, the PHAB's charter requires the body to make recommendations to the Oregon Health Policy Board on the adoption and updating of the statewide public health modernization assessment. In accordance, the PHAB formally recommended this assessment on June 16, 2016.

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TABLE OF CONTENTS

EXECUTIVE SUMMARY i

ASSESSMENT RESULTS AND IMPLICATIONS 1

Assessment Process Overview 2

Overall Assessment Results 11

Policy Implications 35

APPENDICES A-1

Appendix A: Glossary and Acronyms A-2

Appendix B: Functional Area Definitions A-4

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

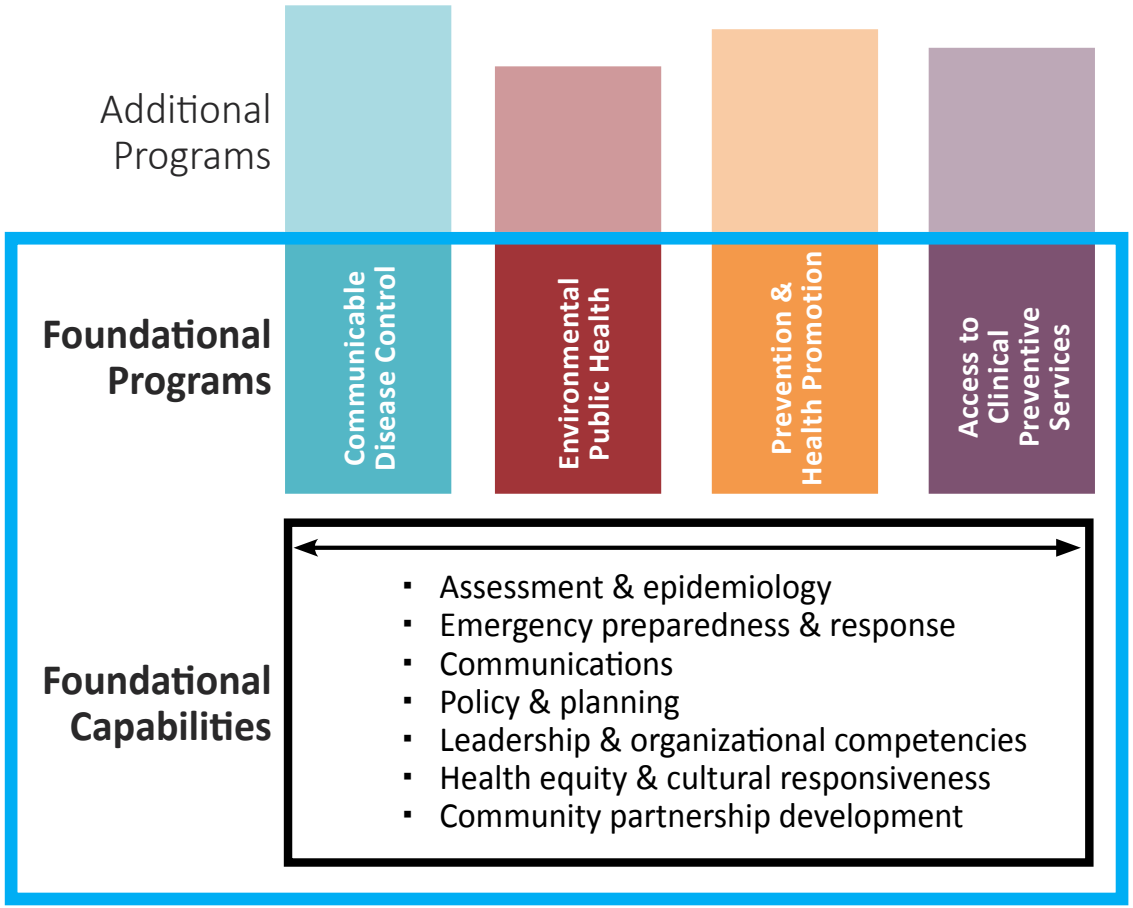
Since 2013, Oregon has been working to modernize its governmental public health system so that a common set of core public health capabilities and programs are present in all communities in the state. The goals of a modern public health system include:

1. Achieving sustainable and measurable improvements in population health;
2. Protecting individuals from injury and disease; and
3. Being fully prepared to respond to any public health threats that may occur.

In July 2015, the Oregon legislature passed House Bill 3100. This bill sets forth a clear path to modernize Oregon's governmental public health system so that it can meet the essential health needs of all people in Oregon.

Public Health Modernization

Foundational Programs and Capabilities present at every health authority



Foundational Programs

Foundational programs are those services that are necessary to assess, protect, or improve public health.

- Communicable Disease Control
- Environmental Public Health
- Prevention and Health Promotion
- Access to Clinical Preventive Services

Foundational Capabilities

Foundational capabilities are the knowledge, skills, or abilities necessary to carry out a public health activity or program. They include:

- Assessment and Epidemiology
- Emergency Preparedness and Response
- Communications
- Policy and Planning
- Leadership and Organizational Competencies
- Health Equity and Cultural Responsiveness
- Community Partnership Development

The public health modernization framework differs significantly from Oregon's existing public health structure. The new framework supports the provision of population-based health services uniformly across the state. With health system transformation in Oregon, the role of governmental public health as a clinical service provider of last resort for residents who do not have access to health care in traditional settings is shrinking. Governmental public health can provide more efficient benefits by focusing on population-based health services and programs.

Key Findings

As part of this path, Oregon's governmental public health authorities were asked to assess their current implementation of the public health modernization framework, shown following, and the cost to fully implement it.

PROGRAMMATIC FRAMEWORK AND ASSESSMENT PROCESS

- The assessment provided LPHAs with detailed exposure to the public health modernization framework and was designed to reinforce a consistent interpretation of the framework and to build on collective understanding of it.
- Implementation of public health modernization is intended to be a transformative process that presents an opportunity to identify innovative solutions to improve the efficiency and effectiveness of the governmental public health system.
- The assessment process, though thorough, was not exhaustive. There are additional features that could be explored to identify opportunities to increase efficiency and effectiveness.

PROGRAMMATIC GAPS IN CURRENT PUBLIC HEALTH SYSTEM

- There are meaningful gaps across the system in all governmental public health authorities. These gaps are not uniform, nor do they appear in the same places in every organization. As such, current implementation of public health modernization can be described as a "patchwork quilt."
    - Because of this, many global implementation decisions could have unintentional service delivery and coverage ramifications.
- There are no foundational programs or capabilities that are substantially implemented universally across all public health authorities.
- Every foundational capability and program within the public health modernization framework includes roles and deliverables with varying levels of implementation.

FULL IMPLEMENTATION COST

- Governmental public health authorities are already significantly executing the public health modernization framework, with $209 million in 2016 dollars being spent annually on the foundational capabilities and programs. This is approximately two-thirds of the cost of full implementation of the framework, with the current service delivery model.
- The preliminary estimated additional spending needed for full implementation is approximately $105 million annually in 2016 dollars. This is a point-in-time, order of magnitude cost estimation based on the current service delivery model, and will require additional analysis and refinement. This preliminary value will be revised as additional efficiencies, like changes to the service delivery model or increased cross-jurisdictional sharing, are implemented.
- For local activities, the largest concentrations of the total additional increment of cost to reach full implementation are in the 4 foundational programs and the Leadership and Organizational Competencies capability.
- For state activities, the highest concentration of the total additional increment of cost to reach full implementation is in the Assessment and Epidemiology capability, which houses the State Public Health Laboratory.
- For all statewide activities, the additional increment of cost to reach full implementation are generally concentrated in the 4 programs and the Leadership and Organizational Competencies capability. However, there is no foundational program or capability that does not have increased additional increment of costs for at least one governmental public health authority.
- An agency with a higher level of implementation of a foundational program or capability does not necessarily need fewer resources to reach full implementation than an agency with lower implementation. Conversely, an agency with limited implementation does not always indicate that a substantial amount of funding is needed to support full implementation.
- The additional increment of spending needed to reach full implementation represents what the incremental increase in capacity and expertise to support full implementation of public health modernization activities will cost. If the current funding paradigm were to change, changing current spending, the additional increment of spending needed would change.

FUTURE IMPLEMENTATION

- Implementation of public health modernization will be a significant undertaking that might require phasing.
- The current governmental public health service delivery model is divided into state activities, provided wholly centrally by PHD, and local activities, provided locally by LPHAs. While this is the current paradigm, there may be more efficient and/or effective service delivery models.
- There are resource-sharing relationships among LPHAs today. These existing sharing arrangements provide examples for future sharing relationships. LPHAs expressed interest in exploring additional opportunities for cross jurisdictional sharing.
- LPHAs have a high degree of local expertise related to their service areas which should

be leveraged to improve the efficiency and effectiveness of implementation. Implementation strategies should allow for some flexibility and local decision making, which could be governed by local implementation plans.

- Implementing public health modernization by waves of LPHAs could be challenging for several reasons, including but not limited to:
  - Risk of creating a two-tiered system (with some LPHAs operating under the public health modernization framework and others not).
  - Potential impacts to health equity (with those served by modernized LPHAs receiving a higher level of service than those being served by non-modernized local public health authorities).
- Implementing by foundational program or capability could also be challenging because current implementation is uneven across LPHAs.
- There are significant service dependencies between state and local public health activities. Some of the state roles and deliverables that support local activities are not fully implemented. If not considered during the implementation process, these service dependencies could become barriers to and inefficiencies in implementation.
- Many of the foundational programs and capabilities support one another. That is, in order to accomplish the goals of one foundational program or capability most effectively and efficiently, one might have to have access to the resources available through implementation of another. This is most intuitive when thinking of the foundational capabilities, for example, communications plays a significant role in addressing tobacco use.

Policy Implications

This public health assessment is the first step of an evolving process, and these results will continue to be refined as implementation progresses. The assessment results presented in this report represent point-in-time, planning-level estimates for the cost of full implementation of the public health modernization framework, as outlined in the December 2015 *Public Health Modernization Manual.* It is important to recognize that that framework is not static because of the evolving nature of public health work, which will need to be reflected. Additionally, these estimates were developed based on the current service delivery model, which may change as opportunities to increase efficiency and effectiveness are identified.

The assessment did identify several policy implications that should be considered throughout the implementation process:

- The assessment was designed to reinforce a consistent interpretation of the public health modernization framework and to build on collective understanding of it. There will be a need to update this collective understanding as the framework evolves.
- Governmental public health authorities should consider additional exploration to identify opportunities for increased efficiency and effectiveness. This may include:
  - Service delivery, including cross jurisdictional sharing
  - Non-governmental public health resources and partnerships that contribute to the implementation of the public health modernization framework
  - Barriers to implementation
  - Short-term or one-time additional costs related to implementation itself

The impacts of any changes related to these opportunities to increase efficiency and effectiveness, especially those that might affect the service delivery paradigm, to the additional increment of spending needed to reach full implementation should be evaluated.

- The current funding paradigm was not evaluated as part of this assessment, however, it is anticipated that it will be as part of the PHAB's work on t**o** develop funding allocation and incentive formulae for public health modernization dollars. The impacts of any changes to the funding paradigm on the additional increment of spending needed to reach full implementation should be evaluated.
- Current implementation varies across governmental public health authorities. Therefore, global strategies for all governmental public health authorities are likely to be difficult and inefficient to implement, and may lead to unintentional consequences like creating service inequities, establishing a tiered system, or creating implementation barriers.
- A flexible implementation strategy that is responsive to specific governmental public health authority contexts is needed. We have identified preliminary criteria for this decision-making strategy, including:
  - **Population Health Impacts:** The degree to which a specific activity will improve population health.
  - **Service Dependencies:** The extent to which state and local governmental public health activities are interdependent.
  - **Coverage Maximization:** The degree to which services are available to the greatest number of Oregonians.
  - **Service Equity:** The degree to which Oregonians living at or below the Federal Poverty Level receive public health services consistent with those received by Oregonians overall.
- There are tensions between these considerations; for example, maximizing coverage by population could be accomplished without increasing the level of implementation of some smaller LPHAs. It will be important to leverage governmental public health authorities' expertise to find balance while using this decision-making framework.

The decision-making framework will allow for flexibility in implementation such that it can be informed by ongoing results, supporting continuous improvement. This framework, and the process by which it is applied, should be refined through a collaborative process that would include all existing governmental public health authorities and other stakeholders.

ASSESSMENT PROCESS

BACKGROUND

Right now, Oregon's communities are not equally equipped to support the health of Oregonians where they live, work, learn, and play. Since 2013, Oregon has been working to modernize its governmental public health system so that a common set of core public health capabilities and programs are present in all communities in the state. The goals of a modern public health system include achieving sustainable and measurable improvements in population health; protecting individuals from injury and disease; and being fully prepared to respond to any public health threats that may occur.

In July 2015, the Oregon legislature passed House Bill 3100. This bill sets forth a clear path to modernize Oregon's governmental public health system so that it can proactively meet the needs of Oregonians. The new law identifies four foundational programs and seven foundational capabilities and that should be present at each public health authority in Oregon.

Foundational Programs

Foundational programs are those services that are necessary to assess, protect, or improve public health.

- Communicable Disease Control
- Environmental Public Health
- Prevention and Health Promotion
- Access to Clinical Preventive Services

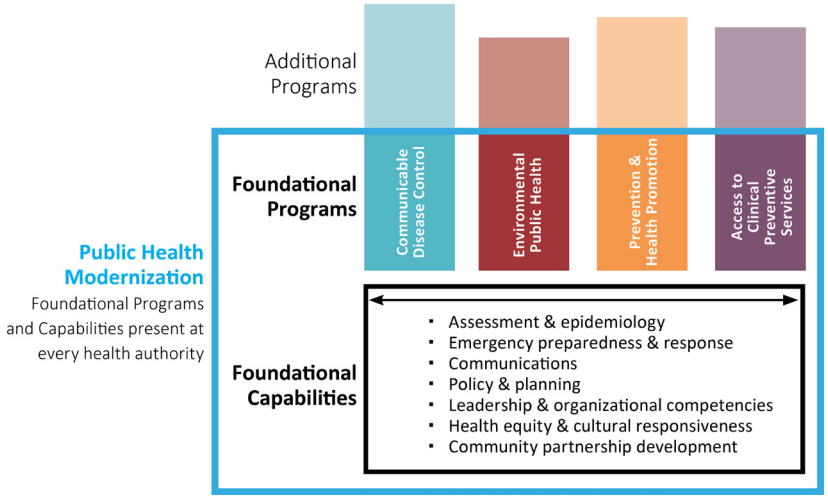
Foundational Capabilities

Foundational capabilities are the knowledge, skills, or abilities necessary to carry out a public health activity or program. They include:

- Assessment and Epidemiology
- Emergency Preparedness and Response
- Communications
- Policy and Planning
- Leadership and Organizational Competencies
- Health Equity and Cultural Responsiveness
- Community Partnership Development

Additional Programs

Additional programs are public health activities and programs implemented in addition to foundational programs to address specific community public health problems or needs.



Public Health Modernization: A New Framework for Health in Every Community

The public health modernization framework differs significantly from Oregon's existing public health structure. The new framework supports the provision of population-based health services uniformly across the state. With health system transformation in Oregon, the role of governmental public health as a clinical service provider of last resort for residents who do not have access to health care in traditional settings is shrinking. Governmental public health can

provide more efficient benefits by focusing on population-based health services and programs. However, governmental public health in Oregon still plays a role in providing some additional programs to meet local needs.

SERVICE DELIVERY

Oregon's governmental public health authorities work as a system to deliver governmental public health services to all Oregonians.

Governmental Public Health Authorities

Governmental public health authorities can be separated into two distinct groups by service area:

- **State Public Health Authorities** provide services that are best delivered centrally for the entire state, for example development and maintenance of statewide data systems. In Oregon, there is one state public health authority, Oregon Health Authority Public Health Division (PHD).
- **Local Public Health Authorities** provide services that are best delivered locally. Oregon has 34 local public health authorities (LPHAs). LPHA service areas each cover one county except for North Central Public Health District, which serves Gilliam, Sherman, and Wasco counties.

It is important to recognize that this governmental public health authority split is how the system is currently structured, but not the only way to structure it. While currently there is one state public health authority providing centralized state public health services, those services could be delivered through decentralized state public health authorities located across the state. Similarly, although local public health services are delivered in a decentralized manner at the county-level (with the exception of North Central Public Health District), there are opportunities to provide some services in a more centralized manner to allow LPHAs to leverage types of expertise that might not be available systemwide.

Cross Jurisdictional Sharing

Some LPHAs have existing service delivery relationships whereby they support each other in delivering public health services. Most often, these relationships are between proximate LPHAs. Cross jurisdictional sharing is an efficient way to deliver public health services while still leveraging local knowledge. Although there are significant sharing relationships within the current service delivery system, we have not reported on those relationships because of a desire to maintain anonymity of the assessment results.

PUBLIC HEALTH MODERNIZATION ASSESSMENT OVERVIEW

PHD was tasked with developing and stewarding the first statewide public health modernization assessment. The assessment seeks to answer two key questions:

1. To what extent are the roles and responsibilities of public health modernization being provided today? (*Qualitative and quantitative*)
2. What will it cost to fully implement the roles and responsibilities of public health modernization? (*Quantitative*)

Programmatic Framework

Oregon's public health modernization framework is organized around seven foundational capabilities and four foundational programs. The *Public Health Modernization*

Manual[1] provides detailed definitions for each foundational program and capability for governmental public health authorities, under the current service delivery model.

The manual defines each foundational program and capability as it applies specifically to state and LPHAs, who in turn work closely with community members and partners to implement them. Each foundational program and capability definition includes:

- **Core system functions:** work that state and LPHAs must do together as a system;
- **State roles:** the unique responsibilities of the OHA Public Health Division;
- **Local roles:** the unique responsibilities of the LPHAs;
- **Deliverables:** tangible work products created by state and LPHAs; and
- **Critical tools and resources:** items necessary for state and LPHAs to fulfill their roles and produce their deliverables.

Some public health services are not included in this framework, for example, direct services and individualized interventions, like Women, Infants, and Children (WIC). These programs are considered additional programs, to be delivered based on local priorities and outside of the public health modernization framework.

To support our work, BERK leveraged the December 2015 version of the manual to inform our programmatic framework for the public health modernization assessment.

The detailed definitions provided in the *Public Health Modernization Manual* also presented challenges to the assessment. For example, it is impractical to require any state or local public health authority to generate resource estimates at the role or deliverable level as there are almost 400 state roles and deliverables and over 300 local roles and deliverables. As the *Public Health Modernization Manual* was being updated at the time of the assessment, we did not use the numbering system in that document.

It was also difficult for governmental public health authorities to generate estimates at the foundational program and capability level because of the range of roles and deliverables in each. To mitigate these challenges, we developed an intermediate level between the foundational programs and capabilities and the roles and deliverables to support local authorities in their assessments. To do this, the legislative definitions of each foundational program and capability were synthesized with the 302 local roles and deliverables which were assigned to the emerging functional areas on a one-to-one basis. The activities at this intermediate level were dubbed "functional areas" and describe how LPHAs might execute this work. There are 40 functional areas, defined in ***Appendix B: Functional Area Definitions.***

For the purposes of state activities, which are provided by only one governmental public health authority (PHD), we did not develop complementary functional areas.

Assessment Process

PHD engaged BERK Consulting, a public policy consultancy with experience and expertise related to public health modernization, to execute the public health modernization assessment.

[1] The latest copy of the *Public Health Modernization Manual* is available at: healthoregon.org/modernization

Based on discussion with LPHAs through the Coalition of Local Health Officials (CLHO), the organization that represents LPHAs, and the CLHO-PHD Joint Leadership Team, PHD determined that an ideal public health modernization assessment would collect data from all 35 governmental public health authorities in Oregon. This presented several challenges:

- Collecting information based on a new framework of which there was a limited and inconsistent understanding
- Collecting information from two different kinds of governmental public health authorities with two different sets of responsibilities as per the *Public Health Modernization Manual*
- Collecting consistent responses from 34 LPHAs

To respond to these challenges, two information collection processes were used:

- A programmatic self-assessment and resource estimation completed by each LPHA
- A programmatic self-assessment and resource estimation completed by PHD

These processes were designed to reinforce a consistent interpretation of the framework and ensure data collected were accurate, consistent, and non-duplicative. Each process is detailed further in the following sections.

LPHA ASSESSMENT PROCESS

Process Design

The LPHA assessment tool was created to:

- Assess each LPHA's current capacity for providing foundational programs and capabilities; and
- Estimate the cost to fully implement foundational programs and capabilities.

Use of such a tool allowed for LPHAs to complete the tool while assuring a certain level of consistency across respondents.

Assessment Tool Development

The development of the assessment tool began in December 2015, and included several opportunities for LPHA feedback and usability review. This feedback helped improve the final assessment tool. The live assessment tool was distributed to LPHAs on January 19, 2016.

PROGRAMMATIC SELF-ASSESSMENT

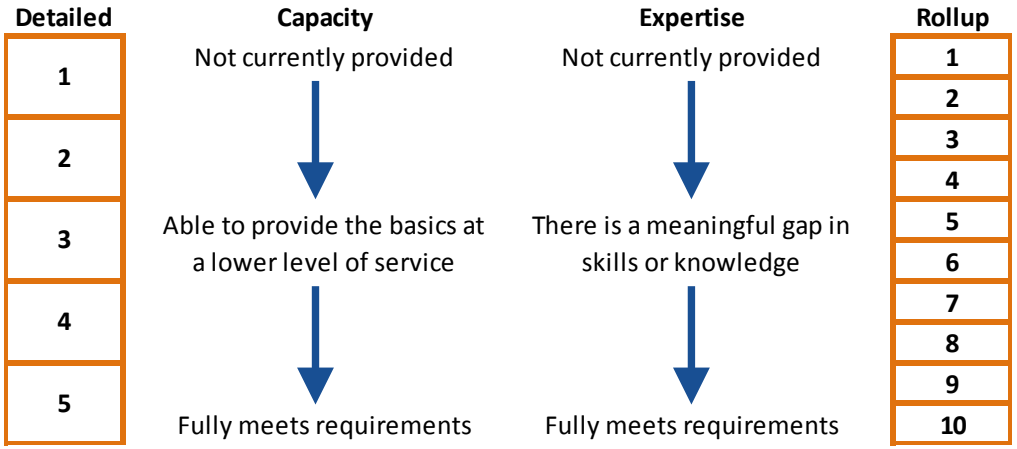
The programmatic self-assessment allowed LPHAs to

1. Assess their current capacity and expertise to meet the requirements of the public health modernization framework;
2. Help LPHAs identify the degree to which they are already executing public health modernization roles; and,
3. Understand the expertise with which they are providing those services as defined as part of public health modernization.

It includes two scales – capacity and expertise.

- **Capacity.** To what degree the organization currently has the staffing and resources necessary to provide the activities dictated. That is, "do I have enough staff to provide the activity for all?"
- **Expertise.** To what degree the organization's current capacity aligns with the appropriate knowledge necessary to implement the services/deliverables dictated. That is, "do I have enough expertise to provide the activity well?"

This section of the tool was a qualitative self-assessment of how closely LPHAs believe they are currently meeting the requirements of the new public health modernization framework.



The programmatic self-assessment had two levels:

- A **detailed assessment** of capacity and expertise for meeting local roles and providing deliverables outlined in the *Public Health Modernization Manual*; and
- A generalized **rollup assessment** for meeting the key functional areas as described in the cost estimation and an overall assessment for this foundational capability or program.

The detailed assessment used a five-point scale, while the rollup assessment used a ten-point scale. These scales are not linear (i.e., a three on the detailed assessment or a six on the rollup assessment do not denote 60% implementation). Rather, the scores map to a scoring rubric provided in the assessment tool, shown on this page.

These scores are used in conjunction with the cost estimations provided by the authorities to help describe the resources needed to fully implement public health modernization.

The programmatic self-assessment results provide an overall indicator of the size, location, and nature of the programmatic gaps that currently exist in providing foundational programs and capabilities in all communities across Oregon.

CURRENT SPENDING

To identify their current annual level of investment in each functional area, LPHA staff reviewed their fiscal year 2015 annual spending and allocated resources to each, generating current spending estimates for each functional area.

FULL IMPLEMENTATION RESOURCE ESTIMATION

Within the assessment tool, LPHAs developed annual cost estimates for each foundational program and capability, as if they were implementing in 2016. These estimates were provided in 2016 dollars.

Cost estimates for 10 of the foundational programs and capabilities (all excluding Leadership and Organizational Competencies) were generated using our basic cost estimation method. Cost estimates for Leadership and Organizational Competencies were generated using our infrastructure cost estimation method. Both cost estimation methods provide initial estimates and an estimation tool powered by an estimation calculator.

The estimation calculator relies on assumptions about:

- The percentage of costs that are fixed, i.e., expenses that do not change as a function of the activity of the foundational capability or program;
- Demand drivers for public health services, factors that cause a change in the overall

demand for a foundational capability or program; and

- The influence each demand driver has in relation to one another.

These variables are used in conjunction with cost factors (units of cost directly proportional to the independent variables; in this case, demand drivers). Cost factors were developed through prior research and cost factor weighting (a general variable that allows you to globally increase the magnitude of cost factors in any given area) to provide high-level, order of magnitude estimates (estimates that are at the right scale) for each functional area.

The initial estimates and estimation tool were provided to aid in the development of final cost estimates; however, use of the tools was optional.

LPHA Assessment Completion

Great care was taken to ensure a smooth and high-quality data collection process that would secure good data to inform public health modernization and fulfill House Bill 3100 requirements.

This context made the tool collection and technical support phases of the work very important. The live tool was deployed to LPHAs on January 19, 2016. The collection process was structured in a wave system, so that half of the LPHA tools were due on March 1, 2016, and the other half were due on March 15, 2016. This phased system enabled a steady data validation process and high-touch technical assistance. Data validation occurred throughout the month of March 2016 with members of the BERK team reviewing data in returned tools and, if data were questionable or unclear, contacting LPHA staff to clarify necessary points. Cost analysis was performed once all data were returned.

Throughout this timeline, robust technical assistance efforts were in place with live and personalized support available to each LPHA. All data collection as well as information sharing for the effort was hosted on a SharePoint site, allowing access to information at any time.

Additionally, a comprehensive set of written materials were available to LPHA staff, a series of webinars were hosted throughout the process to address questions, and live phone assistance was provided upon request. LPHA staff were able to send questions and requests via email, and received responses to those inquiries within one business day, with actual response times often being much quicker. By the end of the data collection process, the technical assistance team had successfully responded to over 200 assistance requests.

CLHO TECHNICAL ASSISTANCE

To further support LPHAs in completing their assessments CLHO hired an outside consultant, Kelly McDonald, who was already well known to many CLHO members. The existing relationships with LPHAs that this consultant had made her an invaluable part of the technical assistance process, as LPHAs already had familiarity with and trust in her.

Kelly buttressed BERK's technical assistance, helping to build understanding around public health modernization, answer questions, and provide strategies for approaching the work.

PHD ASSESSMENT PROCESS

Assessing state activities which are delivered by one governmental public health authority (PHD) with one budgeting and accounting system allowed for a simpler approach but with the added challenge of a statewide organization with a large service area.

Programmatic Self-Assessment

The programmatic self-assessment allowed PHD to assess its current capacity and expertise to meet the requirements of the public health modernization framework, and to help PHD identify the level to which it is already implementing public health modernization roles and deliverables. This programmatic self-assessment was similar to that provided to the LPHAs in their assessment tools, with the exception that it was based on state activities. Like the LPHA programmatic self-assessment, it included two scales – capacity and expertise.

The tool was a qualitative self-assessment of how well PHD is currently meeting the requirements of the new public health modernization framework.

Like the LPHA programmatic self-assessment, PHDs programmatic self-assessment had two levels: a detailed assessment and a rollup assessment. This assessment used the same levels of detail and the same scales as the LPHAs' assessment.

Current Spending

To identify PHD's current level of investment in the foundational programs and capabilities, PHD staff reviewed fiscal year 2015 annual spending and allocated resources that support foundational programs and capabilities.

To do this effectively, PHD reviewed spending across its four centers (Office of the State Public Health Director, Center for Health Protection, Center for Prevention and Health Promotion, and the Center for Public Health Practice) and allocated funds across the foundational programs and capabilities.

Full Implementation Resource Estimation

To estimate the resources needed for PHD to fully implement public health modernization, small groups of staff generated estimations for each foundational program and capability, as if they were implementing in 2016. These estimates were provided in 2016 dollars.

Once resource estimates for each foundational program and capability were complete, estimates were reviewed by the Public Health Division Executive Leadership Team to identify and resolve any gaps or areas of overlap, and approve the estimates.

Limitations

As self-reported data, the information collected through the assessment process has certain inherent limitations. These include respondent biases, an uneven understanding of public health modernization, and differing resource estimation expertise.

With all self-reported data, there is a question of respondent biases, especially if there are perceived benefits, such as favorable future funding decisions. Additionally, attitudes about public health modernization in general and the assessment processes specifically are reflected in the data collected.

Respondents have differing levels of cost estimation backgrounds. Areas of public health modernization are new activities for governmental public health, so some cost estimates had to be done without comparables. This was a particular challenge given the short six to eight week timeline for completion which constrained the time available for staff to learn and understand these complex topics.

Additionally, the assessment tool is a complicated form with over 2,000 data entry points, and completing the tool was a challenge for some respondents. It was also a significant investment of resources for LPHAs that already feel resource constrained.

Completing the assessment tool was an unfamiliar exercise and the public health modernization framework was new for some respondents. This assessment provided LPHAs with detailed exposure to public health modernization as defined in the *Public Health Modernization Manual*.

BERK was aware of these issues before releasing the tool and mitigated wherever possible. In addition to those efforts, there are a number of factors that diminish the data limitations' effects on the final estimate:

- As a high-level, order of magnitude estimate, accuracy at a budget or line-item level is not expected
- We performed some limited standardization using the data set as a whole and external data sources to correct individual inconsistencies
- As all 34 LPHAs responded, we collected data for the whole population of LPHAs, which means we do not have to correct for sampling issues
- Research suggests that managers tend to underestimate the resources needed to perform new job tasks[2]

Additionally, the completed assessments were thorough, but not exhaustive. LPHAs expressed that there is a need to represent the additional capacity supported by partnerships and other shared assets. This should be considered in future assessment efforts.

Findings represent a snapshot in time based on current knowledge of public health needs, capacity and resources, which continue to evolve in real time as new public health issues arise. Public health and its role in protecting the community is highly dynamic; there are likely to be additional foundational roles and deliverables that public health will need to be involved in over time, such as mitigation of environmental health risks and new communicable diseases. As such, it is expected that the public health modernization framework will continue to evolve, at which point additional assessment efforts should be undertaken.

Assessment Results

VALIDATION

Data were validated through a number of methods, some built into the assessment tool and some through post-collection analysis.

As suggested by Glen Mays in his recommended methodology for estimating the cost of foundational public health capabilities,[3] BERK incorporated anchoring questions based upon the work of Gary King and Jonathan Wand[4] to correct for issues of inter-rater reliability. By presenting hypothetical situations to respondents, general attitudes about resource needs can be approximated. Some respondents consistently assessed the anchoring questions higher or lower than their peers, which informed identifying and assessing outliers.

BERK has previous experience with this type of cost estimation, working with the Washington State Department of Health to estimate the cost of implementing Washington's version of public health modernization. This previous work, while not directly comparable because of differences

[2] Whittington et al., "Strategic Methodologies in Public Health Cost Analyses" *Journal of Public Health Management Practice* (2016-02): 1-7.

[3] Glen Mays, "Estimating the Costs of Foundational Public Health Capabilities: A Recommended Methodology" The Robert Wood Johnson Foundation National Public Health Leadership Forum (2014).

[4] King and Wand, "Comparing Incomparable Survey Responses: Evaluating and Selecting Anchoring Vignettes" *Political Analysis* 15, no. 1 (2007): 46-66.

in public health modernization frameworks, was incorporated into initial estimates provided to LPHAs and used as a high-level estimate check.

BERK also reviewed the data for internal consistency. For example, if programmatic self-assessment responses indicated full implementation of the activities included in public health modernization but the respondent also reported a large funding need, this would indicate that further information is needed.

PHD collects projected revenue data from LPHAs annually. In an attempt to reduce reporting burden on LPHAs, PHD requested that BERK include this revenue data collection in the assessment tool. While not part of public health modernization, these data allowed BERK to compare public health modernization current spending totals with projected revenue. PHD provided multiple years of revenue data that allowed BERK to identify inconsistencies and work with LPHAs to correct estimates.

STANDARDIZATION

After working with respondents to validate data, BERK implemented standardization to correct for non-validated outliers. The order of magnitude level used for the total resource estimates largely negated any outliers and standardization provided only an additional check against respondent estimates.

FINAL RESULTS

The validated, standardized assessment results were used to develop generate foundational program and capability and functional area level level of implementation and population service results for all governmental public health authorities. The results were also used to compute estimates for current spending on public health modernization activities, the full implementation cost of those activities, and the additional increment of spending needed to reach full implementation under the current service delivery model. These results are all provided in 2016 dollars.

Current spending captured all spending on public health modernization activities based on the existing funding paradigms. The funding sources supporting this current spending were not specifically identified and may include, but are not limited to: OHA intergovernmental agreement for financing public health services, various state and federal funds, Medicaid, county general funds, fees, donations, and other funds.

The additional increment of spending needed to reach full implementation represents what the incremental increase in capacity and expertise to support full implementation of public health modernization activities will cost. If current spending stayed constant, and the current funding paradigm stayed the same, this amount would also be equal to the additional funding needed to reach full implementation based on the current funding paradigm. However, if the current funding paradigm were to change, changing current spending, the additional increment of spending needed would change.

The assessment results presented in this report represent point-in-time, planning-level estimates based on full implementation of the public health modernization framework, as outlined in the December 2015 *Public Health Modernization Manual.* It is important to recognize that that framework is not static because of the evolving nature of public health work, which will need to be reflected. Additionally, these estimates were developed based on the current service delivery model, which may change as opportunities to increase efficiency and effectiveness are identified.

It is important to recognize that this assessment is the first step of an evolving process, and these results will continue to be refined as implementation progresses.

OVERALL ASSESSMENT RESULTS

PUBLIC HEALTH MODERNIZATION ASSESSMENT OVERALL RESULTS

In the Overall Assessment Results section, we present assessment results at several different levels of detail:

- For all governmental public health authorities
  - Overall assessment results
- For PHD
  - Foundational program and capability level results
- For LPHAs
  - Foundational program and capability level results
  - Functional area level results

For the purposes of this high-level overview, we have extracted data and exhibits that provide information to support our high-level findings from the assessment. Following, we describe features of the analysis, which provides results at each of these altitudes.

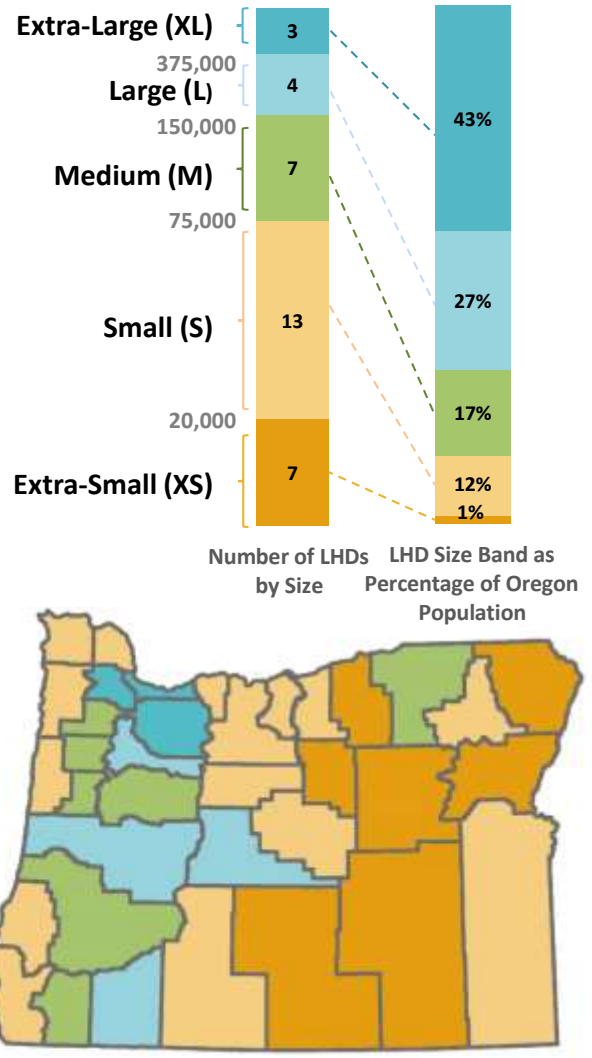
Interpreting Results

Operational Size Construct

We developed an operational sizing construct for LPHAs to allow for a more detailed review of results. The sizing categories were created based on analysis of the self-assessment results. We identified that LPHAs serving similar populations, both in size and demographics, also have similar levels of implementation and common operational characteristics; these trends became the operational size grouping.

This sizing construct is used as an additional categorization to provide a higher level of detail to the assessment results. The sizes are broken down as follows and can also be seen in the image to the right.

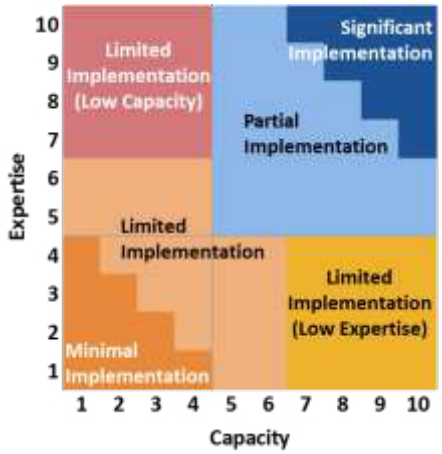
- **Extra-Small:** Population below 20,000
- **Small:** Population between 20,000 and 75,000
- **Medium:** Population between 75,000 and 150,000
- **Large:** Population between 150,000 and 375,000
- **Extra-Large:** Population over 375,000



LEVEL OF IMPLEMENTATION

The level of implementation of foundational programs and capabilities and functional areas, is illustrated throughout the Overall Assessment Results section with both color-coding and charts. The image below illustrates how programmatic self-assessment results are interpreted to provide insight on governmental public health authorities' level of implementation with capacity on the *x*-axis and expertise on the *y*-axis.

Level of Implementation for Foundational Programs and Capabilities and Functional Areas



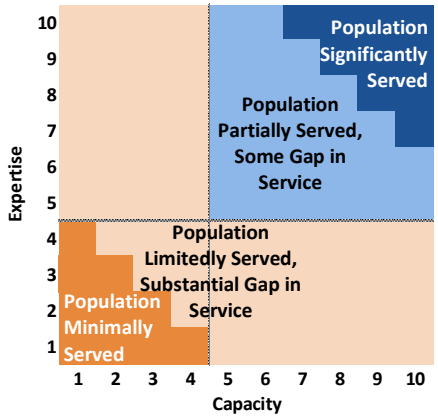
- **Significant Implementation (Dark Blue):** Services are mostly or fully implemented.
- **Partial Implementation (Light Blue):** Services are partially implemented however, some gaps remain.
- **Limited Implementation, Low Expertise (Yellow):** Services are limitedly implemented and, while the governmental public health authority has significant capacity there are substantial gaps related to a lack of necessary expertise.
- **Limited Implementation, Low Capacity (Red):** Services are limitedly implemented and, while the governmental public health authority has significant expertise there are substantial gaps related to a lack of necessary capacity.
- **Limited Implementation (Light Orange):** Services are limitedly implemented and there are substantial gaps in capacity and expertise.
- **Minimal Implementation (Orange):** Services are mostly not or not at all implemented.

POPULATION BY LEVEL OF SERVICE

The Population by Level of Service exhibits describe how the level of implementation of foundational programs and capabilities and functional areas translate to the level of service the population receives.

The graphic to the right illustrates how programmatic self-assessment results are interpreted to provide insight on governmental public health authorities' population service with capacity on the *x*-axis and expertise on the *y*-axis.

- **Population Significantly Served (Blue):** The



population is mostly or fully served.

- **Population Partially Served (Light Blue):** The population is partially served, and there are some gaps in service.
- **Population Limitedly Served (Light Orange):** The population is underserved, and there are substantial gaps in service.
- **Population Minimally Served (Orange):** The population is mostly not or not at all served.

SERVICE DEPENDENCIES

The activities of state and local governmental public health authorities are interdependent. The state directly and indirectly supports many local activities. In addition, some local activities feed back into PHD's work. We identified clear service dependencies, particularly where state activities are needed to support implementation at the local level. These service dependencies should be considered in implementation to prevent them from becoming barriers to and inefficiencies in implementation.

Results by Foundational Program and Capability

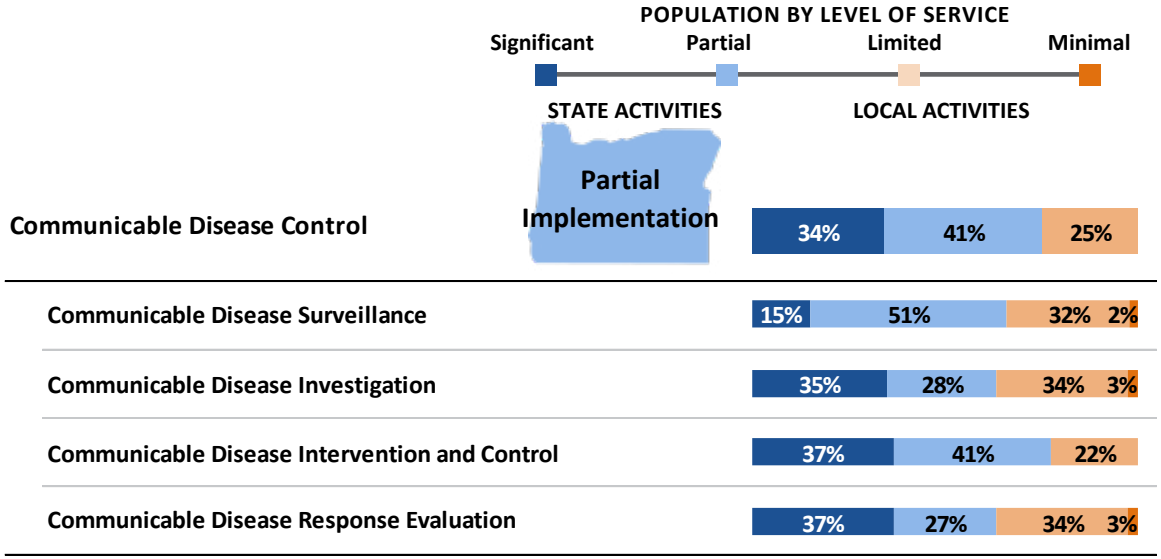
The following pages provide a high-level overview of assessment results by program and capability. Detailed assessment results, which are significantly more granular and reflect additional nuance are available in the "Detailed Assessment Results" section of the full report.

The values presented in these charts were rounded for labeling and those less than 0.5% are not labeled.

Communicable Disease Control

State Communicable Disease Control activities are partially implemented. Additionally, there are several service dependencies where state activities directly support provision of local activities, such as providing technical assistance and surge capacity for LPHAs investigating and controlling reportable diseases and outbreaks.

The level of implementation of local activities is consistent with many other foundational programs and capabilities. Approximately 1 in 4 Oregonians lives in an area where local communicable disease control activities are minimally or limitedly implemented. Service gaps are similar in scale among each of the 4 functional areas.



Environmental Public Health

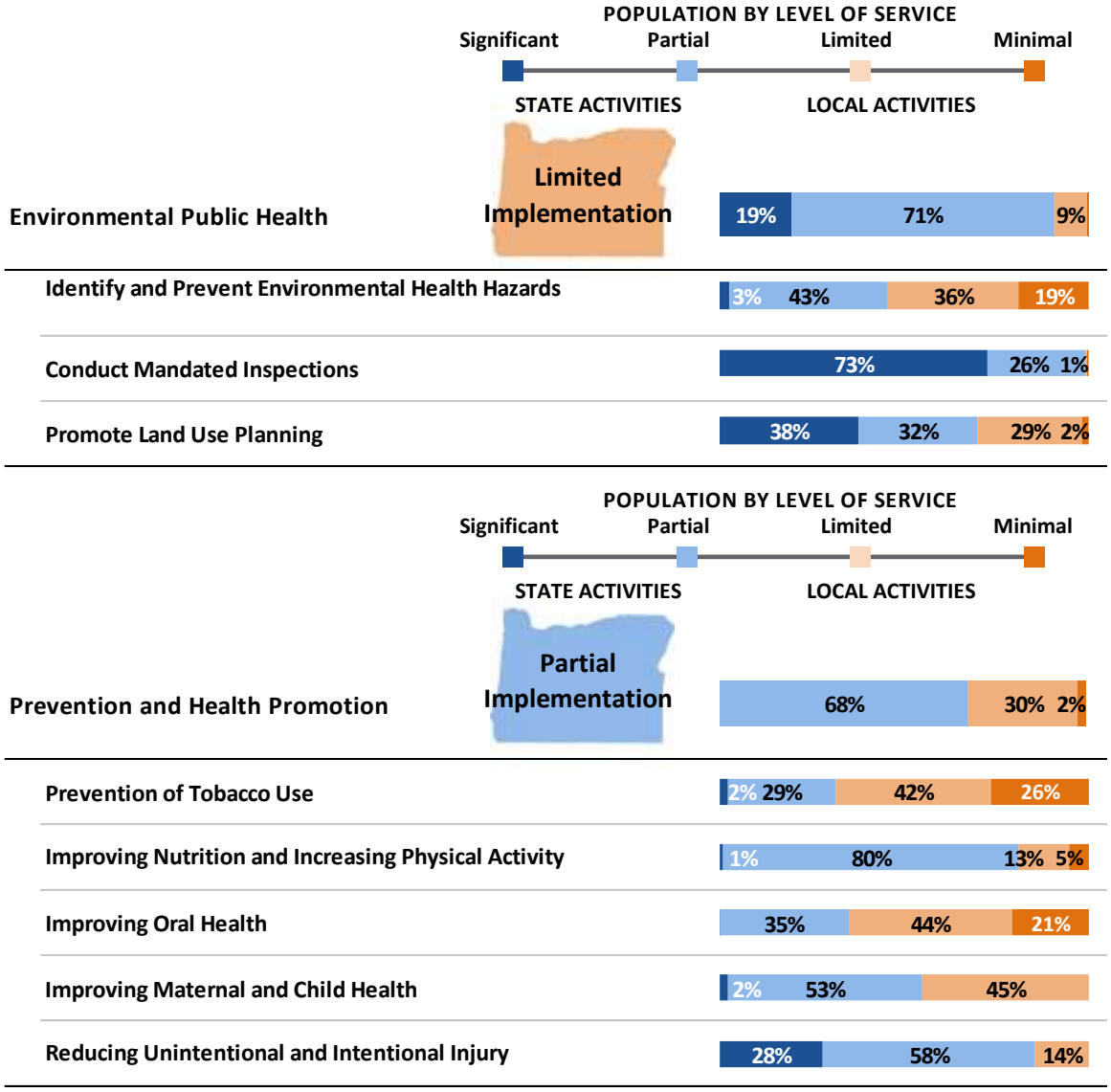
State Environmental Public Health activities are limitedly implemented. However, there are a few service dependencies between state and local governmental public health activities, including the state's maintenance of information systems.

The level of implementation of local activities is higher than that of other foundational programs and capabilities. Only 1 in 10 Oregonians lives in an area where these activities are limitedly or less implemented. While overall implementation of the program is fairly high across all LPHAs, there are sizeable service gaps in 2 functional areas: Identify and Prevent Environmental Health Hazards and Promote Land Use Planning.

Prevention and Health Promotion

State Prevention and Health Promotion activities are partially implemented but there are only a couple of service dependencies related to the less implemented state roles and deliverables.

The level of implementation of local activities is somewhat lower than that of many other foundational programs and capabilities. Approximately 1 in 3 Oregonians live in an area where local Prevention and Health Promotion activities are minimally or limitedly implemented. Service gaps are concentrated in 3 functional areas: Prevention of Tobacco Use, Improving Oral Health, and Improving Maternal and Child Health.



Access to Clinical Preventive Services

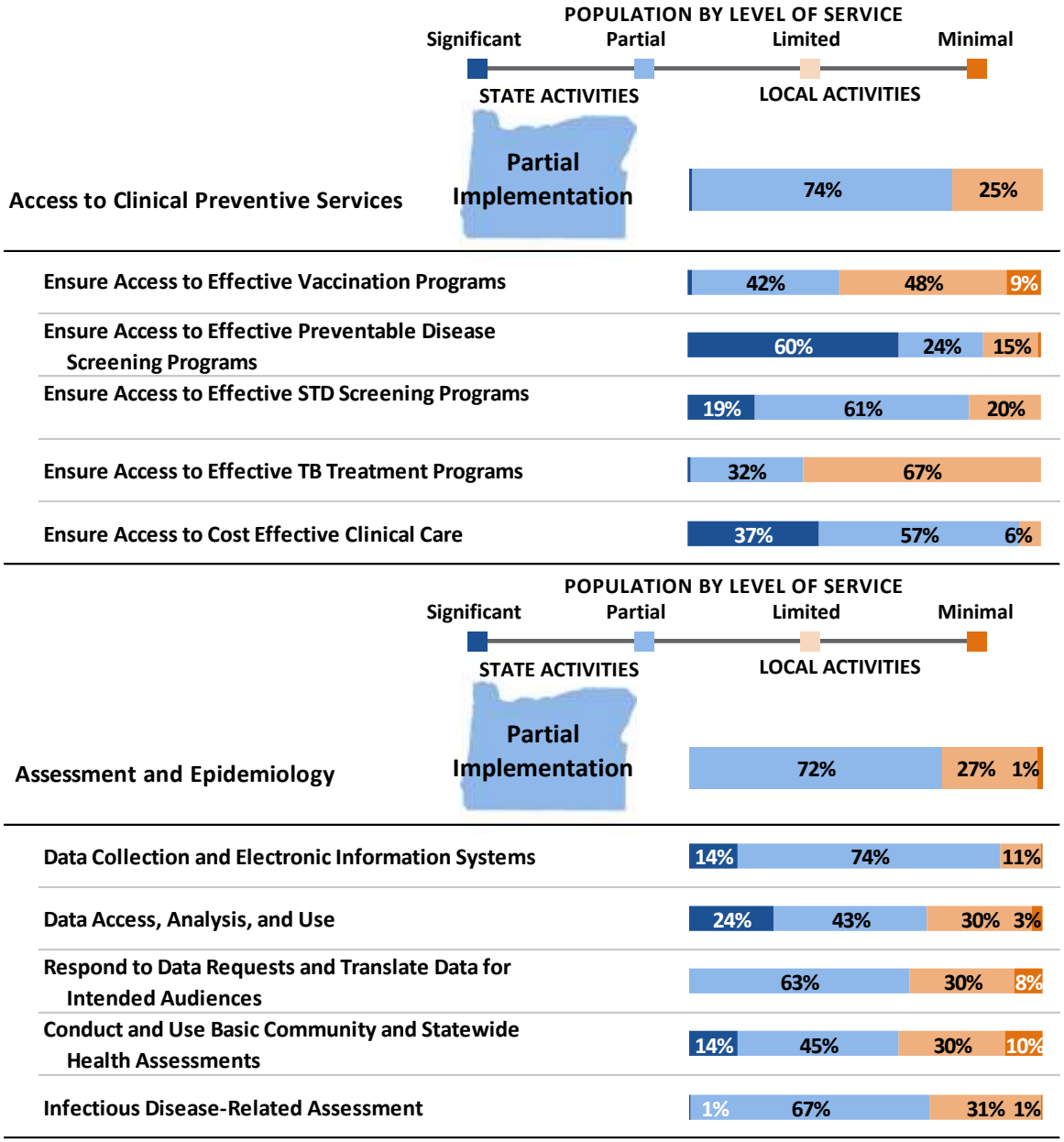
Access to Clinical Preventative Services is partially implemented and there are only a couple of service dependencies related to the less implemented state roles and deliverables.

The level of implementation of local activities is consistent with that of many other foundational programs and capabilities. Approximately 1 in 4 Oregonians live in an area where local Access to Clinical Preventive activities are minimally or limitedly implemented. Service gaps are concentrated in 2 functional areas: Ensure Access to Effective Vaccination Programs and Ensure Access to Effective Tuberculosis Treatment Programs.

Assessment and Epidemiology

State Assessment and Epidemiology activities are partially implemented and include activities performed by the Oregon State Public Health Laboratory.

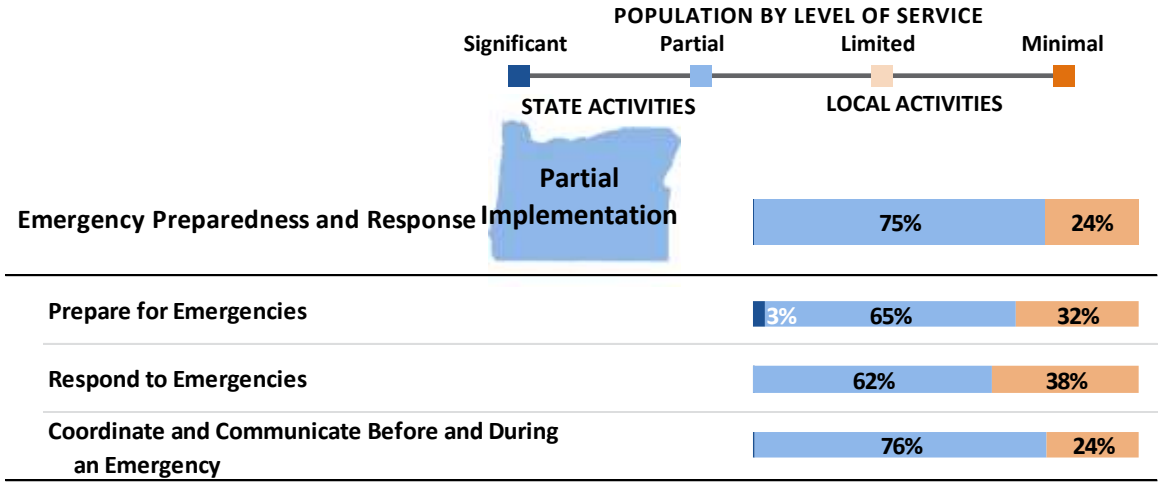
The level of implementation of local activities is similar to that of other foundational programs and capabilities. Approximately 1 in 4 Oregonians lives in an area where Assessment and Epidemiology activities are minimally or limitedly implemented.



Emergency Preparedness and Response

State Emergency Preparedness and Response activities are partially implemented. There are many service dependencies between state and local governmental public health authorities related to this foundational capability.

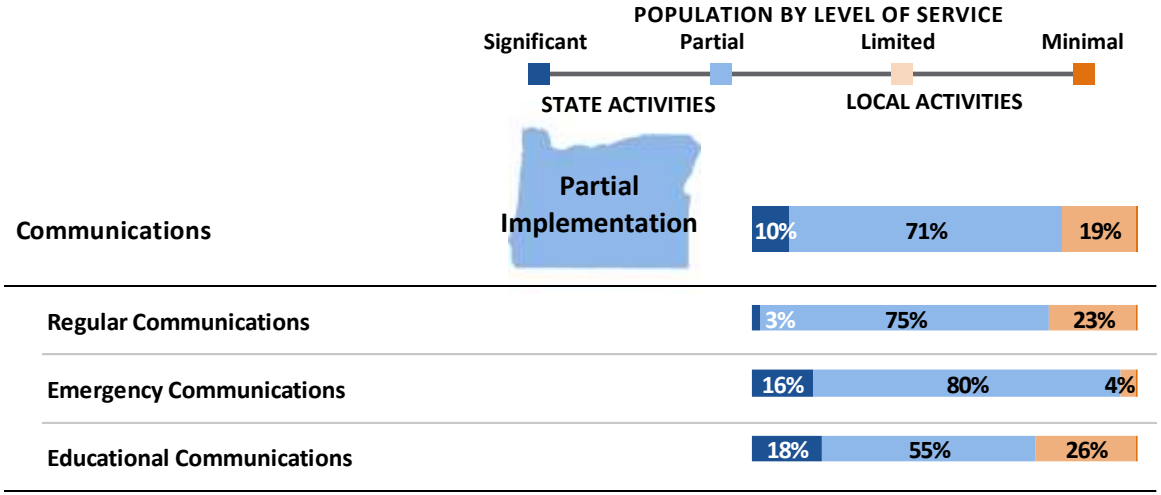
The level of implementation of local activities is similar to that of many other foundational programs and capabilities. Approximately 1 in 4 Oregonians live in an area where Emergency Preparedness and Response activities are minimally or limitedly implemented. Service gaps are fairly similar in scale across each of the 4 functional areas.



Communications

State Communications activities are partially implemented.

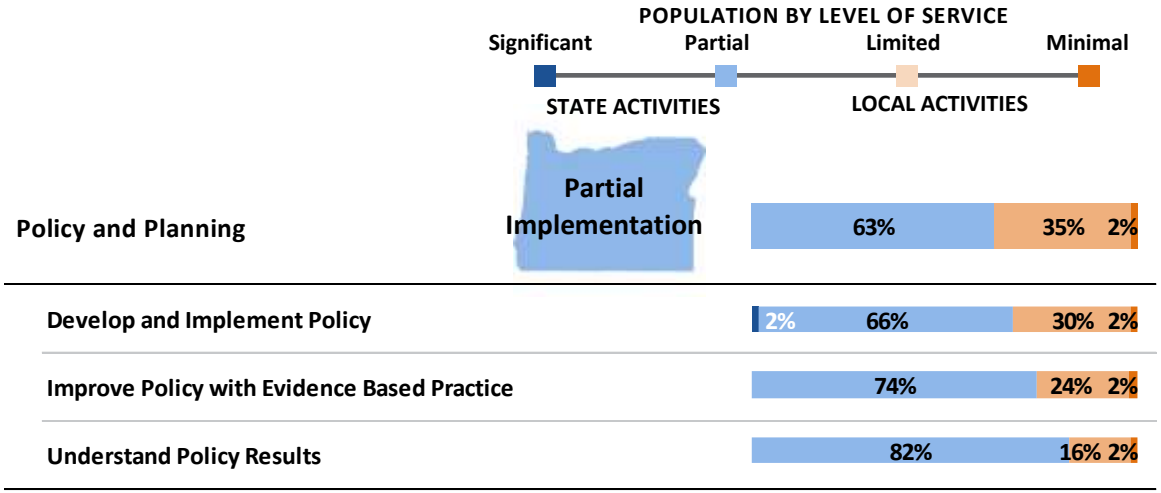
The level of implementation of local activities is somewhat better than that of many other foundational programs and capabilities. Approximately 1 in 5 Oregonians lives in an area where Communications activities are minimally or limitedly implemented. Service gaps are concentrated in 2 functional areas: Educational Communications and Regular Communications.



Policy and Planning

State Policy and Planning activities are partially implemented.

The level of implementation of local activities is somewhat lower than that of many other foundational programs and capabilities. Approximately 1 in 3 Oregonians live in an area where Policy and Planning activities are minimally or limitedly implemented. Development and Implementation of Policies is the functional area with the largest service gap.

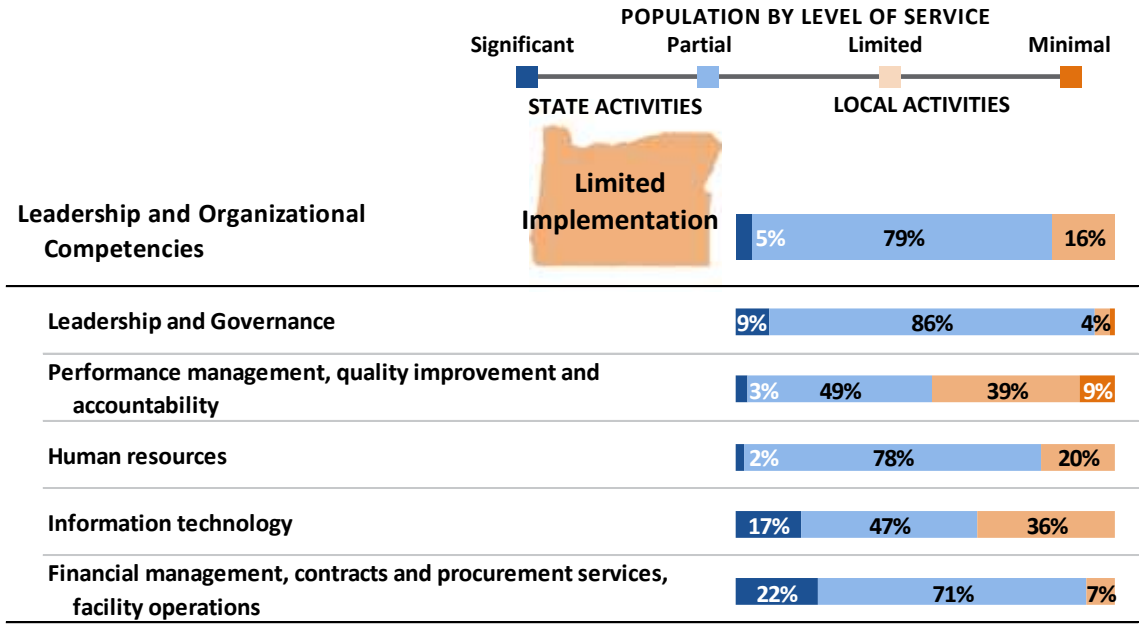


Leadership and Organizational Competencies

State Leadership and Organizational Competency activities are limitedly implemented and there are several service dependencies that are not yet fully implemented, with state roles and deliverables that support local activities.

The level of implementation of local activities is higher than that of many other foundational programs and capabilities. Approximately 1 in 6 Oregonians live in an area where Leadership and Organizational competencies are limited overall. Service gaps are concentrated in 2 functional areas: Performance Management, Quality Improvement and Accountability and Information Technology.

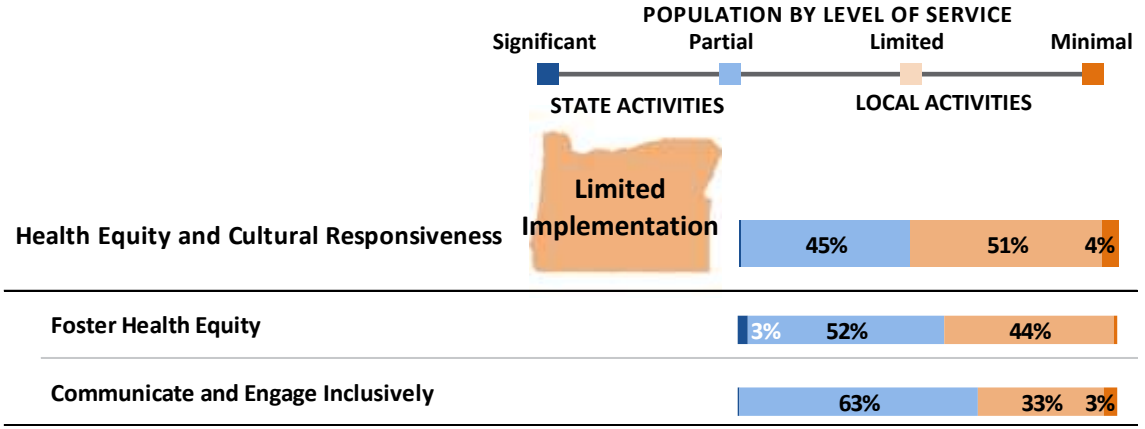
Although this foundational capability is well-implemented, a significant additional increment of resources will be needed to provide infrastructure to support the additional work being done as part of full implementation of public health modernization overall.



Health Equity and Cultural Responsiveness

State Health Equity and Cultural Responsiveness activities are limitedly implemented. This capability has a few service dependencies between the state and local governmenta l public health authorities.

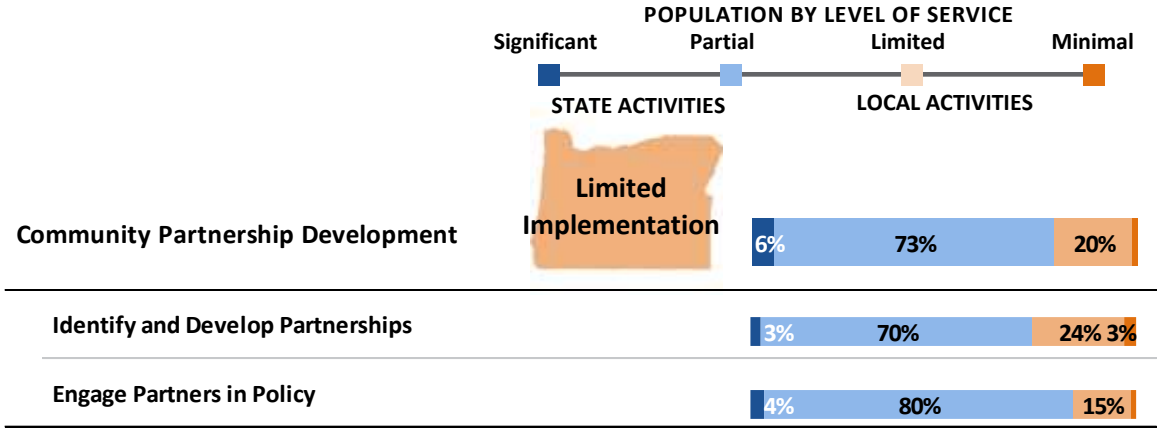
This is one of the least implemented foundational capabilities or programs. More than half of Oregonians live in an area where activities to support Health Equity and Cultural Responsiveness are minimally or limitedly implemented. Service gaps are similar in scale in both functional areas.



Community Partnership Development

State Community Partnership Development activities are limitedly implemented. While there aren't specific service dependences between state and local governmental public health authorities, there are indirect ones such that state activities can augment and support local activities.

The overall level of implementation is somewhat higher than that of many other foundational programs and capabilities. Approximately 1 in 5 Oregonians lives in an area where Community Partnership Development activities are minimally or limitedly implemented. Service gaps are fairly similar in scale among its three functional areas.



Cost of Full Implementation

The public health modernization assessment resource estimates, in 2016 dollars, are presented in the table below.

The $209M in current spending on public health modernization activities represents the best estimate of the money spent by governmental public health authorities on public health modernization activities in fiscal year 2015. The funding sources supporting this current spending were not specifically identified and may include, but are not limited to: OHA intergovernmental agreement for financing public health services, various state and federal funds, Medicaid, county general funds, fees, donations, and other funds.

The preliminary $105M additional increment of cost represents the initial estimate for implementation under the current governmental public health system. This estimate will require additional analysis. This estimate is the first step in an evolving process – it is a point-in-time, planning-level estimate and does not represent the final cost needed to fully implement public health modernization. The preliminary cost estimate will be revised over time as efficiencies in public health service delivery are implemented. The current public health system in Oregon has existing efficiencies; implementation of public health modernization provides an opportunity to leverage and expand upon those efficiencies.

The additional increment of spending needed to reach full implementation represents what the

	Total Estimated Cost of Full Implementation*		Current Spending*		Additional Increment of Cost*	
Foundational Programs	**$ 184,714,000**	**59%**	**$ 129,616,000**	**62%**	**$ 55,098,000**	**53%**
Environmental Public Health	$ 59,647,000	19%	$ 45,214,000	22%	$ 14,433,000	14%
Prevention and Health Promotion	$ 58,351,000	19%	$ 40,908,000	20%	$ 17,443,000	17%
Communicable Disease Control	$ 38,322,000	12%	$ 25,404,000	12%	$ 12,918,000	12%
Access to Clinical Preventive Services	$ 28,394,000	9%	$ 18,090,000	9%	$ 10,304,000	10%
Foundational Capabilities	**$ 129,068,000**	**41%**	**$ 79,602,000**	**38%**	**$ 49,464,000**	**47%**
Leadership and Organizational Competencies	$ 47,860,000	15%	$ 34,959,000	17%	$ 12,901,000	12%
Assessment and Epidemiology	$ 31,984,000	10%	$ 17,504,000	8%	$ 14,479,000	14%
Emergency Preparedness and Response	$ 12,214,000	4%	$ 8,966,000	4%	$ 3,247,000	3%
Community Partnership Development	$ 9,941,000	3%	$ 5,974,000	3%	$ 3,967,000	4%
Policy and Planning	$ 9,617,000	3%	$ 4,415,000	2%	$ 5,202,000	5%
Health Equity and Cultural Responsiveness	$ 9,396,000	3%	$ 4,411,000	2%	$ 4,985,000	5%
Communications	$ 8,056,000	3%	$ 3,373,000	2%	$ 4,683,000	4%
TOTAL	**$ 313,782,000**		**$ 209,218,000**		**$ 104,562,000**	

* All values provided in 2016 dollars.

incremental increase in capacity and expertise to support full implementation of public health modernization activities will cost. If current spending stayed constant, and the current funding paradigm stayed the same, this amount would also be equal to the additional funding needed to reach full implementation based on the current funding paradigm. However, if the current funding paradigm were to change, changing current spending, the additional increment of spending needed would change.

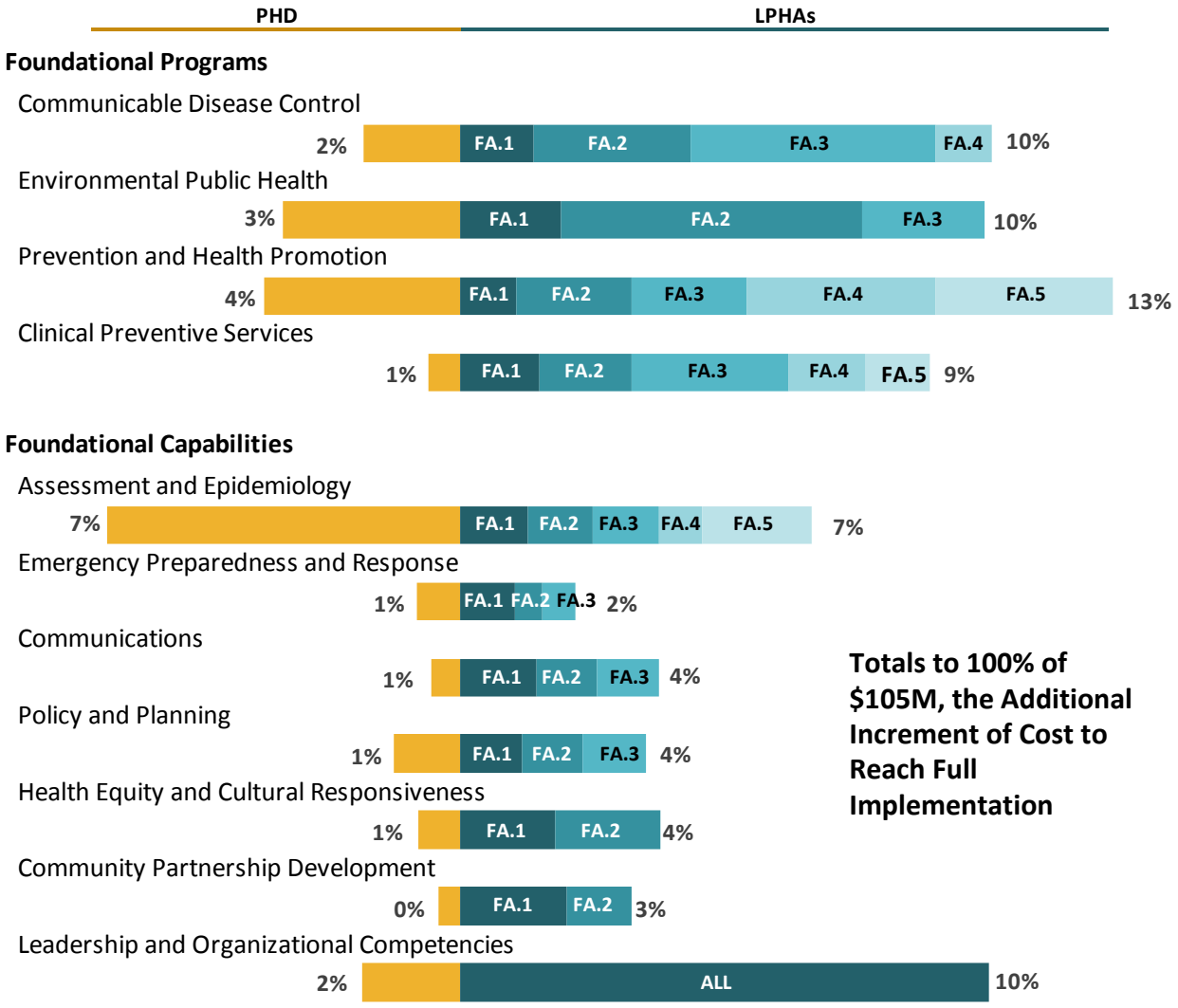
For both current spending and full implementation estimates, foundational programs represent approximately two-thirds of total costs. However, full implementation rebalances some of these costs into foundational capabilities, with a 70% increase in foundational capabilities versus a 35% increase in foundational programs.

To reach full implementation, three capabilities will require doubling current spending – Communications, Health Equity and Cultural Responsiveness, and Policy and Planning.

Distribution of Additional Increment of Service

The distribution of the preliminary $105M in additional increment of costs needed to support full implementation of public health modernization is presented in the graph to the right. The additional increment of cost is split between PHD (yellow, left) and the LPHAs (teal, right). The LPHA cost estimates also include a breakdown for the individual functional areas within each foundational program and capability; each shade of teal represents one functional area. The percentages are that foundational program or capability's share of the additional increment of cost for either PHD or the LPHAs.

It is important to note that state and LPHAs often have very different but mutually-supportive roles in the *Public Health Modernization Manual*, and resource needs vary widely across the state based on current capacity. Public health modernization aims to support the entire governmental public health system in achieving effective and efficient service delivery for everyone in Oregon.



Functional Area Code Key

Communicable Disease Control
FA.1: Communicable Disease Control Surveillance
FA.2: Communicable Disease Investigation
FA.3: Communicable Disease Intervention and Control
FA.4: Communicable Disease Response Evaluation

Environmental Public Health
FA.1: Identify and Prevent Environmental Health Hazards
FA.2: Conduct Mandated Inspections
FA.3: Promote Land Use Planning

Prevention and Health Promotion
FA.1: Prevention of Tobacco Use
FA.2: Improving Nutrition and Increasing Physical Activity
FA.3: Improving Oral Health
FA.4: Improving Maternal and Child Health
FA.5: Reducing Unintentional and Intentional Injuries

Access to Clinical Preventive Services
FA.1: Ensure Access to Effective Vaccination Programs
FA.2: Ensure Access to Effective Preventable Disease Screening Programs
FA.3: Ensure Access to Effective STD Screening Programs
FA.4: Ensure Access to Effective TB Treatment Programs
FA.5: Ensure Access to Cost Effective Clinical Care

Emergency Preparedness and Response
FA.1: Prepare for Emergencies
FA.2: Respond to Emergencies
FA.3: Communicate and Coordinate Before and During an Emergency

Functional Area Code Key, Continued

Assessment and Epidemiology
FA.1: Data Collection and Electronic Information Systems
FA.2: Data Access, Analysis, and Use
FA.3: Respond to Data Requests and Translate Data for Intended Audience
FA.4: Conduct and Use Basic Community and Statewide Health Assessments
FA.5: Infectious Disease-Related Assessment

Communications
FA.1: Regular Communications
FA.2: Emergency Communications
FA.3: Educational Communications

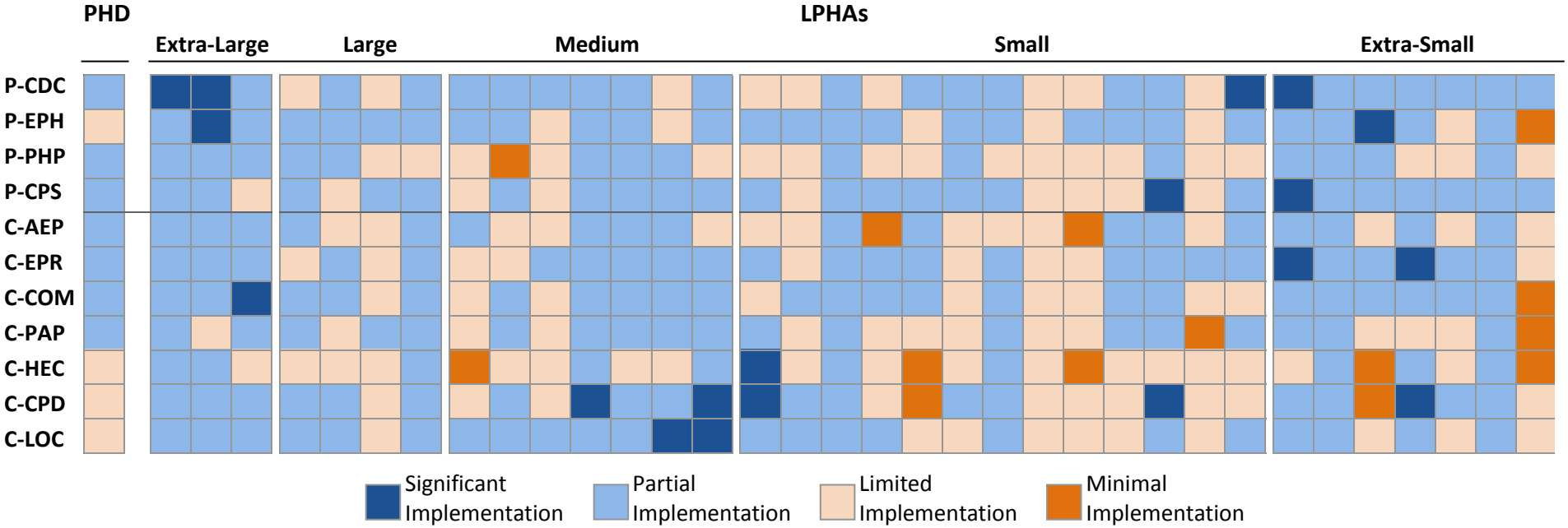
Policy and Planning
FA.1: Develop and Implement Policy
FA.2: Improve Policy with Evidence-Based Practice
FA.3: Understand Policy Results

Health Equity and Cultural Responsiveness
FA.1: Foster Health Equity
FA.2: Communicate and Engage Inclusively

Community Partnership Development
FA.1: Identify and Develop Partnerships
FA.2: Engage Partners in Policy

Leadership and Organizational Competencies
FA.1: Leadership and Governance
FA.2: Performance Management, Quality Improvement, and Accountability
FA.3: Human Resources
FA.4: Information Technology
FA.5: Financial Management, Contracts and Procurement Services, Facility Operations

Current Implementation of Foundational Programs and Capabilities



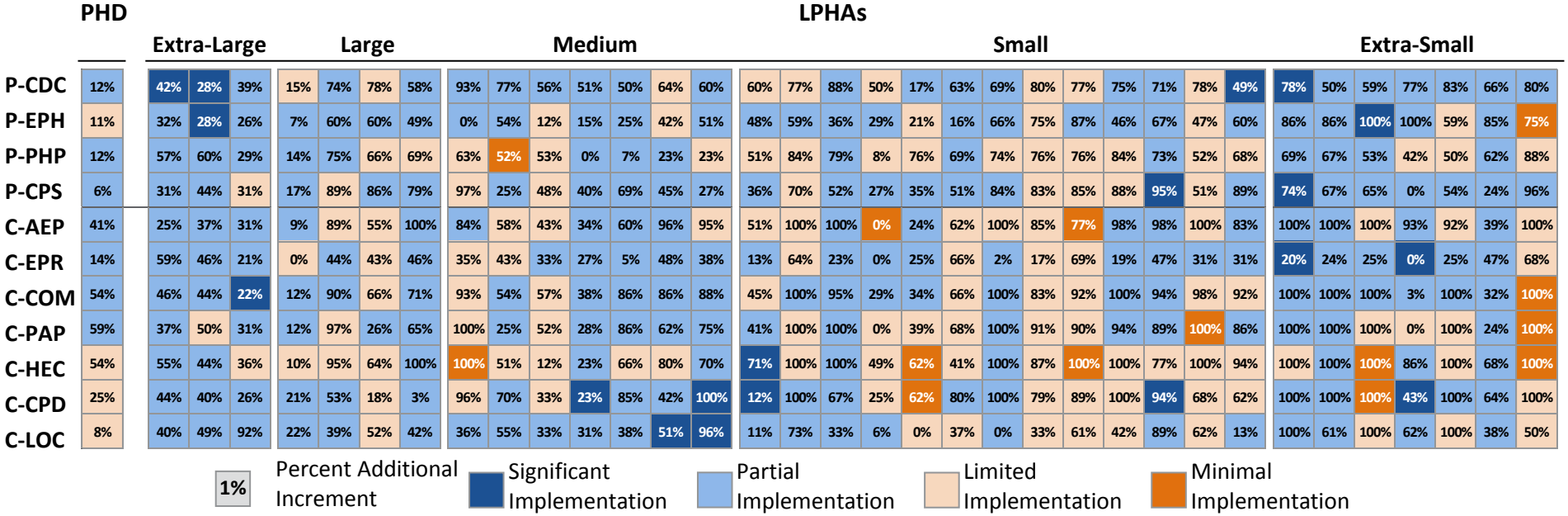
Above are the foundational program and capability implementation levels for PHD and a randomized ordering of the LPHAs by size bands.

Each vertical set of boxes represent one public health authority. There are no foundational programs or capabilities that are significantly implemented universally across all governmental public health authorities. There are some areas with a higher concentration of limited and minimal implementation, such as the Health Equity and Cultural Responsiveness capability and the Prevention and Health Promotion program. Additionally, some governmental public health authorities have larger programmatic gaps than others. However, there are gaps across the system in every size category.

Foundational Programs and Capabilities Code Key

P-CDC: Communicable Disease Control
P-EPH: Environmental Public Health
P-PHP: Prevention and Health Promotion
P-CPS: Access to Clinical Preventive Services
C-AEP: Assessment and Epidemiology
C-EPR: Emergency Preparedness and Response
C-COM: Communications
C-PAP: Policy and Planning
C-HEC: Health Equity and Cultural Responsiveness
C-CPD: Community Partnership Development
C-LOC: Leadership and Organizational Competencies

Current Implementation of Foundational Programs and Capabilities and Percent Increase in Cost to Reach Full Implementation



Above are the foundational program and capability implementation levels and percent of full implementation additional increment of cost for PHD and a randomized ordering of the LPHAs by size bands.

Each vertical set of boxes represent one public health authority. The percentage within each box is the estimated additional increment of cost as a percentage of the full implementation cost for that foundational program or capability.

For example, in the upper left corner, PHD estimated that an additional 12% is needed for full implementation of Communicable Disease Control.

The chart demonstrates that areas with a higher level of implmentation do not necessarily need fewer resources than those areas with lower implementation. On the other hand, limited implementation does not always indicate that a substantial amount of funding is needed.

Foundational Programs and Capabilities Code Key

P-CDC: Communicable Disease Control
P-EPH: Environmental Public Health
P-PHP: Prevention and Health Promotion
P-CPS: Access to Clinical Preventive Services
C-AEP: Assessment and Epidemiology
C-EPR: Emergency Preparedness and Response
C-COM: Communications
C-PAP: Policy and Planning
C-HEC: Health Equity and Cultural Responsiveness
C-CPD: Community Partnership Development
C-LOC: Leadership and Organizational Competencies

Foundational Programs and Capabilities as a Percent of Each Governmental Public Health Authority's Additional Increment of Cost

| | PHD | LPHAs | | |

Summary Findings

This report presents an initial assessment of PHD and LPHAs' current execution of public health modernization; capacity and expertise needs to fully implement; and the costs associated with full implementation. It is important to remember that these data represent a starting place for public health modernization implementation; however, using these data, we were able to generate the following findings, which will be useful for the planning and executing of implementation:

Programmatic Framework and Assessment Process

- The assessment provided LPHAs with detailed exposure to the public health modernization framework as defined in the *Public Health Modernization Manual*. The assessment was designed to reinforce a consistent interpretation of the framework and to build on collective understanding of it.
- The assessment process was designed to be highly detailed and required the participation of all LPHAs. However, many LPHAs found supplying this high level of detail burdensome and the response schedule challenging to manage over six to eight weeks with their existing workloads.
- Implementation of public health modernization is intended to be a transformative process that will reform public health based on the post-Affordable Care Act health context and align funding to a core set of public health services available universally and uniformly statewide. Breaking out of current paradigms to allow for innovative solutions to improve the efficiency and effectiveness of the governmental public health system will be an ongoing process.
- The assessment process, though thorough, was not exhaustive. There is a need to continue exploring particular features of the existing system, to identify opportunities to increase efficiency and effectiveness. These features include:
  - Service delivery, including cross jurisdictional sharing
  - Non-governmental public health assets, resources, and partnerships that contribute to the accomplishment of public health modernization roles and deliverables.
  - Barriers to implementation
  - Short-term or one-time additional costs related to implementation itself
- The "functional areas" defined as part of this process seem to accurately define how the foundational programs and capabilities, as defined through core system functions, roles, and deliverables in the *Public Health Modernization Manual*, will be operationalized by LPHAs.

Programmatic Gaps in Current Public Health System

- There are gaps across the system in all governmental public health authorities. These gaps are not uniform, nor do they appear in the same places in every organization. As such, current implementation of public health modernization can be described as a "patchwork quilt."
  - Some governmental public health authorities have larger programmatic gaps than others.
  - However, there are gaps in implementation across governmental public health authorities of all sizes.
- There are no foundational programs or capabilities that are significantly implemented universally across all governmental public health authorities.

- There are some foundational programs and capabilities with a higher concentration of limited and minimal implementation, such as the Health Equity and Cultural Responsiveness capability and the Prevention and Health Promotion program.

- Every foundational program and capability within the public health modernization framework includes roles and deliverables with varying levels of implementation.
  - There are some functional areas that include roles and deliverables that are well established as governmental public health activities. For some of these activities, LPHAs generally rated themselves highly in expertise, although often lower in capacity.
  - There are other functional areas that are dominated by roles and deliverables that may represent new governmental public health activities. In these areas, LPHAs indicated that they were minimally or limitedly implemented.
- PHD has partially implemented or limitedly implemented all of the foundational programs and capabilities. The least implemented (limitedly implemented) state activities programs are Environmental Public Health, Health Equity and Cultural Responsiveness, Community Partnership Development, and Leadership and Organizational Competencies.
- For each foundational program and capability, over 60% of the population is receiving services from a LPHA that has at least partially implemented it, with the exception of Health Equity and Cultural Responsiveness.
  - The most implemented foundational programs and capabilities across the system are Environmental Public Health and Leadership and Organizational Competencies.
  - The most implemented functional areas are Conduct Mandated Inspections and Ensure Access to Cost Effective Clinical Care.
  - The least implemented are Health Equity and Cultural Responsiveness and Policy and Planning.
  - The least implemented functional areas are Ensure Access to Effective Tuberculosis Treatment Programs and Prevention of Tobacco Use. LPHAs communicated that the latter is an ongoing challenge that will take significant resources, perhaps beyond those this assessment identifies, to solve.

Full Implementation Cost

- Governmental public health authorities are already significantly executing the public health modernization framework, with $209 million in 2016 dollars being spent annually on the foundational programs and capabilities. This is approximately two-thirds of the cost of full implementation of the framework.
- The preliminary estimated additional spending needed for full implementation is approximately $105 million annually in 2016 dollars. This is a point-in-time, order of magnitude cost estimation based on the current service delivery model, and will require ongoing analysis and refinement. This preliminary value will be revised as additional efficiencies, like changes to the service delivery model or increased cross-jurisdictional sharing, are implemented.
- The full implementation cost of public health modernization was developed based on the current service delivery paradigm. Expanding it to allow for additional cross jurisdictional service delivery options could reduce full implementation costs and, therefore, the additional increment of spending needed for full implementation.
- Similarly, while there is some cross-jurisdictional and resource sharing among

LPHAs today, there are opportunities to increase cross-jurisdictional sharing increasing the efficiency of the existing system, also reducing full implementation costs and, therefore, the additional increment of spending needed for full implementation.

- There are existing resource-sharing relationships among LPHAs today. These existing arrangements provide examples for future relationships. LPHAs expressed interest in exploring additional opportunities for cross jurisdictional sharing.
- To reach full implementation, three capabilities will require doubling current spending – Communications, Health Equity and Cultural Responsiveness, and Policy and Planning.
- For local activities, the largest concentrations of the total additional increment of cost to reach full implementation are in the 4 foundational programs and the Leadership and Organizational Competencies capability.
- For state activities, the highest concentration of the total additional increment of cost to reach full implementation is in the Assessment and Epidemiology capability, which houses the State Public Health Laboratory.
- While, for all statewide activities, the additional increment of cost to reach full implementation are generally concentrated in the 4 programs and the Leadership and Organizational Competencies capability, there is no foundational program or capability that does not have increased additional increment of costs for at least one governmental public health authority.
- An agency with a higher level of implementation of a foundational program or capability does not necessarily need fewer resources to reach full implementation than an agency with lower implementation. Conversely, an agency with limited implementation does not always indicate that a substantial amount of funding is needed to support full implementation.
- The additional increment of spending needed to reach full implementation represents what the incremental increase in capacity and expertise to support full implementation of public health modernization activities will cost. If current spending stayed constant, and the current funding paradigm stayed the same, this amount would also be equal to the additional funding needed to reach full implementation based on the current funding paradigm. However, if the current funding paradigm were to change, changing current spending, the additional increment of spending needed would change.

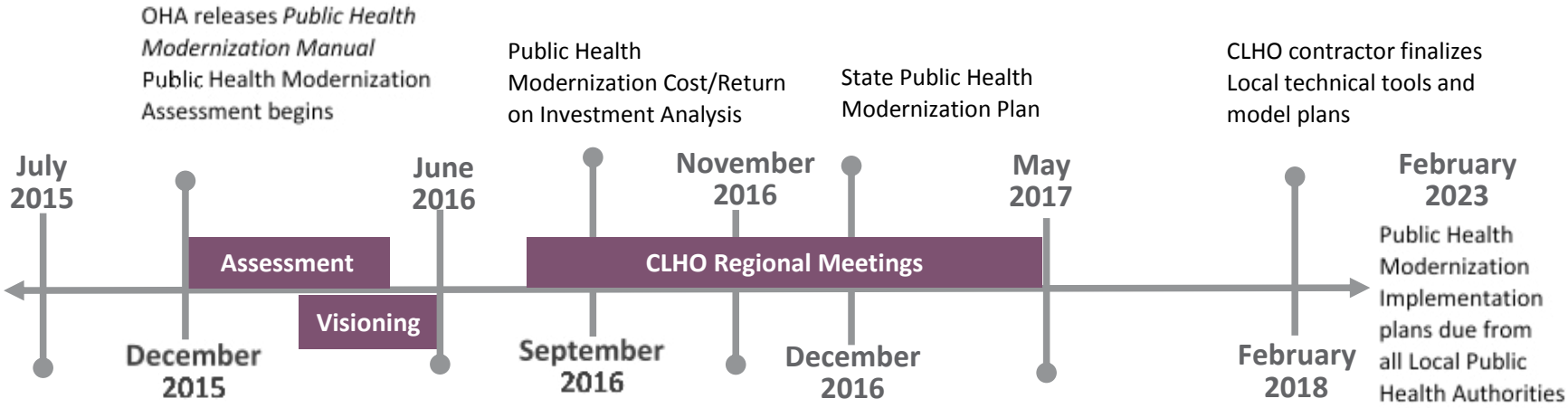
Future Implementation

- The current governmental public health service delivery model is divided into state activities, provided wholly centrally by PHD, and local activities, provided locally by LPHAs. While this is the current paradigm, it could be expanded to allow for additional cross jurisdictional service delivery options.
- There are existing resource-sharing relationships among LPHAs today. These existing arrangements provide examples for future relationships. LPHAs expressed interest in exploring additional opportunities for cross jurisdictional sharing.
- Implementation of public health modernization will be a significant undertaking that might require phasing.
- LPHAs have a high degree of local expertise related to their service areas which should be leveraged to improve the efficiency and effectiveness of implementation. Implementation strategies should allow for some flexibility and local decision making, which could be governed by local implementation plans.

- Implementing public health modernization by waves of LPHAs could be challenging for several reasons, including but not limited to:
  - Risk of creating a two-tiered system (with some LPHAs operating under the public health modernization framework, and others not).
  - Potential impacts to health equity (with those served by modernized LPHAs receiving a higher level of service than those being served by non-modernized LPHAs).
- Implementing by foundational program or capability could be challenging because current implementation is uneven across LPHAs.
- There are significant service dependencies between state and local governmental public health activities. Some of the state roles and deliverables that support local activities are not fully implemented. If not considered during the implementation process, these service dependencies could become barriers to and inefficiencies in implementation.
- Many of the foundational programs and capabilities support one another. That is, in order to accomplish the goals of one foundational program or capability most effectively and efficiently, one might have to have access to the resources available through implementation of another. This is most intuitive when thinking of the foundational capabilities, for example, communications plays a significant role in addressing tobacco use.

POLICY IMPLICATIONS

Development of this assessment is one of many ongoing activities related to public health modernization implementation, as shown in the timeline below.

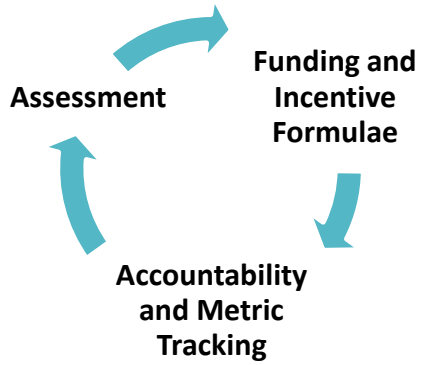


POLICY IMPLICATIONS

The assessment results will provide data to support many of these other activities, including:

- **Public Health Modernization Funding Allocations and Incentives Formulae.** As required under House Bill 3100, PHD, under the guidance of the Oregon Public Health Advisory Board, is developing a funding formula allocation and local funding incentive formulae for any new funds received to support public health modernization.
- **Public Health Modernization Cost/Return of Investment Analysis.** This analysis is being undertaken by Program Design and Evaluation Services to quantify the financial benefit and the benefit to health outcomes of implementation of public health modernization. The assessment results presented in this report and the data collected as part of the assessment process will support this effort.
- **Statewide Public Health Modernization Plan.** The Statewide Public Health Modernization Plan will provide detailed strategies for the implementation of public health modernization in Oregon. The assessment results herein will be used to inform those strategies. Required by House Bill 3100, this plan will be complete by January 1, 2017.
- **CLHO Regional Meetings.** CLHO has received grant funds to host ten regional meetings with LPHAs to discuss and gather perspectives on public health modernization implementation strategies.
- **Local Public Health Modernization Plans.** Each LPHA will develop a Local Public Health Modernization Plan. Required by House Bill 3100, these plans are due no later than December 2023. However, House Bill 3100 also allows that PHD may establish a schedule by which LPHAs will submit their local plans for implementation.

Additionally, House Bill 3100 requires that assessment results be updated as necessary. The assessment, or a scaled and simplified version, has the potential to be a critical implementation tracking and accountability tool. This will be invaluable to implementation as it will allow tracking of implementation results and continuous improvements, and, as necessary, course correction of implementation processes. The cycle in which updated assessment results might help to support implementation tracking and accountability are as follows.



- **Assessment.** Updated assessment results will help to identify current level of implementation at future points in time, which will allow for longitudinal review of the impacts of implementation strategies and the remaining gaps in implementation.
- **Funding and Incentive Formulae.** Initial public health modernization dollars are expected to be distributed through the public health modernization funding and incentive formula; updated assessment results will allow for midstream allocation decisions to align funding with implementation strategies.

- **Accountability and Metrics Tracking.** PHD has undertaken work that will identify the economic and health outcomes of implementation of public health modernization, which will help to identify metrics for tracking implementation and its effects on population health. This will help to tie assessment results to population health outcomes to ensure that implementation is creating meaningful change, and also to help inform funding decisions to support implementation strategies.

  PHD's metrics and accountability work will also present an opportunity to ensure that service dependencies are adequately identified and that there is accountability among governmental public health authorities to ensure that those service dependencies do not become barriers to implementation.

Implications for Implementation

This public health assessment is the first step of an evolving process that will continue to be refined as implementation progresses. The assessment results presented in this report represent point-in-time, planning-level estimates for the cost of full implementation of the public health modernization framework, as outlined in the December 2015 *Public Health Modernization Manual.* It is important to recognize that that framework is not static because of the evolving nature of public health work which will need to be reflected. For example, as new communicable diseases and environmental health threats are identified, or as new communications tools are deployed. Additionally, these estimates were developed based on the current service delivery model, which may change as opportunities to increase the efficiency and effectiveness of this work are identified. These realities illustrate why these numbers will necessarily change.

The assessment did identify several policy implications that should be considered throughout the implementation process:

- The assessment was designed to reinforce a consistent interpretation of the public health modernization framework and to build on collective understanding of it. This shared understanding should continue to be reinforced throughout the implementation process. Additionally, there will be a need to update this collective understanding as the framework evolves.
  - The *Public Health Modernization Manual*, which defines the public health modernization framework, is not static and will continue to be updated. This provides an excellent tool for updating governmental public health authorities' understanding of the framework.
- Assessment participants from both PHD and LPHAs expressed a lack of clarity as to who will provide the critical tools and resources (those items necessary for state and LPHAs to produce their deliverables) outlined in the *Public Health Modernization Manual*. Although many of these resources are provided online (and their web addresses provided in the *Public Health Modernization Manual*) many participants asked who would provide those tools and resources. This presents an easy opportunity to improve clarity around public health modernization implementation.
- Many LPHAs communicated that further clarity is needed as to what constitutes additional programs (public health activities implemented locally outside of the foundational programs and capabilities to address specific identified community public health problems or needs). Participants expressed some concerns about their particular local priorities not being included in the public health modernization framework and were unclear as to how that might change support or funding for those services in the future.

- There is a need to continue exploring features of the existing governmental public health system to identify opportunities for increased efficiency and effectiveness. This may include:
  - Service delivery, including cross jurisdictional sharing
  - Non-governmental public health resources and partnerships that contribute to the implementation of the public health modernization framework
  - Barriers to implementation
  - Short-term or one-time additional costs related to implementation itself

As this assessment was the first step in an evolving process, we expect to see ongoing implementation work that refines the programmatic understanding and cost estimates presented in this report.

Service Delivery

One of the primary ways in which these estimates may continue to evolve is through the identification and implementation of additional efficiencies, especially those related to service delivery. Two opportunities for efficiencies include:

- Cross jurisdictional sharing
- Cross jurisdictional delivery

At the time of the assessment, conversations about additional cross jurisdictional sharing had just begun in some regions of the state.

This estimate reflects the current understanding of governmental public health, but true public health modernization will involve all stakeholders engaging in a dialogue about alternative service delivery options and funding.

Cross Jurisdictional Sharing

Many LPHAs reported significantly sharing resources, both with each other and with nonprofits and other local agencies. The public health modernization assessment process catalyzed some conversations between LPHAs around how they might develop future cross jurisdictional relationships.

There is need for additional time and resources to support further conversations. While LPHAs should have autonomy in developing new cross jurisdictional sharing relationships, PHD and CLHO should explore how to facilitate those discussions.

Looking for a venue to document these conversations, CLHO developed a survey to be distributed to LPHAs for them to discuss additional opportunities for cross jurisdictional sharing. The results of this survey are forthcoming and will provide additional data to support the continued evolution of the assessment results published in this report.

Cross Jurisdictional Delivery

In addition to cross jurisdictional sharing, PHD and LPHAs might find additional efficiencies through cross jurisdictional delivery, which allows for more flexibility for both state and LPHAs in the level of centralization of services of the activities they are charged with completing. Currently, public health activities can be separated into two distinct groups by service area and level of centralization of services:

- **State Public Health Activities are** provided centrally to the whole state by a state public health authority, PHD.
- **Local Public Health Activities** are provided on a county basis by a decentralized network of LPHAs.

The cross jurisdictional delivery concept recognizes that there are other options for service delivery, and that the current split is merely one way to structure the system. For example, while currently there is one state public health authority providing centralized state public health services, those services could be delivered through decentralized state public health authorities located across the state. Similarly, although local public health services are delivered in a decentralized manner at the

county-level (with the exception of North Central Public Health District), there are opportunities to provide some services in a more centralized manner to allow LPHAs to leverage types of expertise that might not be available system wide.

PHD and LPHAs should review their current activities to determine whether there are roles and deliverables that may be appropriate for cross jurisdictional delivery.

Funding

This assessment established the additional increment of spending needed to reach full implementation which represents what the incremental increase in capacity and expertise to support full implementation of public health modernization activities will cost in addition to current spending under the current funding paradigm. If the current funding paradigm were to change, changing current spending, the additional increment of spending needed would change.

The current funding paradigm was not evaluated as part of this assessment, however, it is anticipated that it will be as part of the PHAB's work on t**o** develop funding allocation and incentive formulae for public health modernization dollars. The impacts of any changes to the funding paradigm on the additional increment of spending needed to reach full implementation should be evaluated.

Phasing

Implementation can be phased in many ways, some of which may be influenced by statewide and local priorities. However, public health modernization is complex with many service dependencies among foundational programs and capabilities and state and local governmental public health activities. There are also inconsistencies in the existing implementation. Therefore, global strategies for all governmental public health authorities or relating to full implementation are likely to be difficult and inefficient to implement, and may lead to unintentional consequences like creating service inequities, establishing a two-tiered system, or creating implementation barriers.

To minimize these risks and establish the most efficient, effective implementation process possible, a flexible implementation strategy that is responsive to specific governmental public health authority contexts is needed. The variation in the assessment results suggests that a decision-making framework should be developed to support making implementation decisions as implementation proceeds. We have identified preliminary criteria for this decision-making strategy, including:

- **Population Health Impacts:** The degree to which a specific activity will improve population health. This is challenging to measure, as all foundational programs and capabilities are foundational and therefore necessary to support population health. Another approach is comparing the relative severity of the population-wide consequences of inaction on each foundational program and capability, which do vary. Additionally, it is important to remember that many of the cross-cutting capabilities will likely increase the effectiveness of the foundational programs, so their population health impact should be identified accordingly.
- **Service Dependencies:** The activities of state and local governmental public health authorities are interdependent. Many of PHD's roles and deliverables support local activities, and some local activities feed back into the PHD's work. It is necessary to understand service dependencies as part of overall implementation process.
- **Coverage Maximization:** This assessment found that some roles and deliverables are not widely implemented by LPHAs, but are available to significant portions of the population because a few LPHAs with large populations have existing services that meet the modernization requirements.

- **Service Equity:** How services are implemented could greatly affect service equity. For example, implementation by wave could benefit higher resourced agencies, likely in areas with low poverty rates, while hurting those with limited resources, likely in areas with higher poverty rates.

There are tensions between these considerations; for example, maximizing coverage by population could be accomplished without increasing the level of implementation of some smaller LPHAs. It will be important to leverage governmental public health authorities' expertise to find balance while using this decision-making framework.

The decision-making framework will also allow for flexibility in implementation such that it can be informed by ongoing results, supporting continuous improvement. It will also incentivize continued evaluation of opportunities to increase efficiency and effectiveness, which could be disincentivized or even penalized if strict implementation strategies were already in place.

This decision-making framework and the process by which it is applied should be refined through a collaborative process that would include all existing governmental public health authorities and groups identified as part of service delivery conversations. This process would also provide a venue to determine how this decision-making framework will be reconciled with Statewide and Local Implementation Plans.

APPENDICES

APPENDIX A: GLOSSARY AND ACRONYMS

Abbreviations/Acronyms

Term	Abbreviation/Acronym
State Governmental Public Health Authorities	State Public Health Authorities
Local Public Health Authorities	LPHAs
Oregon Health Authority Public Health Division	PHD
Coalition of Local Health Officials	CLHO
Additional Increment of Spending to Reach Full Implementation	Additional Increment
Full Time Equivalents	FTE

Definitions

Term	Definition
Public Health System	All public, private, and voluntary entities that contribute to the delivery of essential public health services within a jurisdiction. These systems are a network of entities with differing roles, relationships, and interactions that contribute to the health and well-being of the community or state.
Governmental Public Health System	State and local governmental public health authorities
Current Spending	The amount of resources supporting existing public health modernization activities.

Full Implementation	The amount of resources needed to support full implementation of public health modernization activities.
Capacity	To what degree the organization currently has the staffing and resources necessary to provide the services/deliverables dictated.
Expertise	To what degree the organization's current capacity aligns with the appropriate knowledge necessary to implement the services/deliverables dictated.
Detailed Self-Assessment	Assesses capacity and expertise for meeting roles and providing deliverables as outlined in the *Public Health Modernization Manual*.
Rollup Self-Assessment	Assesses capacity and expertise for meeting foundational capabilities and programs, and where applicable, functional areas.
Drivers	Demand factors that causes a change in the overall cost of a foundational capability or program.
Cost Factors	Units of cost directly proportional to the independent variables (in this case, cost drivers).
Fixed Costs	Costs that that do not change as a function of the activity of the foundational capability or program.
Variable Costs	Costs that change as a function of the activity of the foundational capability or program.
Labor Costs	The salaries and benefits of staff that are employed within each program.
Non-Labor Costs	The costs of supporting the program's functions. Examples include materials, supplies, small equipment such as computers or lab equipment, professional services, and other contracted services.
Overhead Costs	Facility costs such as rent, maintenance, or utilities and other overhead costs like fleet.

APPENDIX B: FUNCTIONAL AREA DEFINITIONS

In 2015, the Oregon legislature passed House Bill 3100 which created a new framework for governmental public health services. This framework, known as public health modernization, includes four foundational programs and seven foundational capabilities. To support implementation of this framework, a workgroup produced a manual outlining the necessary activities and tools for state and local governmental public health authorities to operationalize it. This document, the *Oregon Public Health Modernization Manual*, established over 800 roles and deliverables for both the state and local public health authorities (LPHAs).

To assist LPHAs in estimating their resource needs to meet the requirements of public health modernization, BERK Consulting created an intermediary structure between their 302 roles and deliverables and the 11 foundational programs and capabilities. This structure defined 40 functional areas which were designed to group the roles and deliverables in a way similar to the way LPHAs execute their work. To do this, we synthesized the legislative definitions of each foundational program and capability with the 302 local roles and deliverables, which were assigned to the emerging functional areas on a one-to-one basis. For readability, and to minimize duplication, the full text of each role and deliverable may not appear in the functional area definition.

Following are the 40 functional areas, grouped by foundational program and capability, as they appeared in the assessment tool completed by each LPHA.

Foundational Programs

Communicable Disease Control

Communicable Disease Surveillance

Produce timely reports of notifiable diseases.

- Ensure timely and accurate reporting of reportable diseases, and educate local providers on reportable disease requirements.
- Monitor occurrence and distinguishing characteristics of infectious diseases and outbreaks.
- Develop, engage, and maintain local strategic partnerships with hospitals, health systems, schools, day care centers, and others to prevent and control communicable diseases. Ensure engagement of priority/focal populations in efforts to prevent and control communicable diseases.

Communicable Disease Control (continued)

Communicable Disease Investigation

Develop and deploy a communicable disease investigative process.

- Document implementation of investigative guidelines appropriately.
- Provide individual communicable disease case and outbreak data, consistent with Oregon statute, and rule and program standards.
- Maintain protocols for proper preparation, packaging, and shipment of samples of public health importance (e.g., animals and animal products).

Communicate with the public about ongoing communicable disease outbreaks and investigation. Ensure confidentiality through communications.

- Provide communications to the public about outbreak investigations. Communicate clearly with members of the public about identified health risks.
- Maintain protocols and systems to ensure confidentiality throughout investigation, reporting, and maintenance of data.
- Summarize and share data to determine opportunities for intervention and to guide policy and program decisions.
- Secure personally identifiable data collected through audits, review, update, and verification.

Communicable Disease Intervention and Control

Provide timely, statewide, locally relevant, and accurate information to the state and community on communicable diseases and their control. Promote immunization through education of the public and through collaboration with schools, health care providers, and other community partners.

- Provide health education resources for the general public, health care providers, long-term care facility staff, infection control specialists, and others regarding vaccine-preventable diseases, healthcare associated infections, antibiotic resistance, and other issues.
- Provide vaccination interventions for communities that are disproportionately non-immunized.
- Use information about immunization proportions to increase immunization overall for citizens in local jurisdictions.
- Ensure equitable access to immunizations among people of all ages. Implement culturally responsive strategies to improve access to immunizations.

Identify statewide and local communicable disease control community assets, develop processes for information sharing between providers to reduce disease transmission, and maintain emergency/outbreak plans.

- Develop protocols or process maps for information sharing between providers to reduce disease transmission.
- Maintain plans for the allocation of scarce resources in the event of an emergency or outbreak.
- Produce reports about acute and communicable disease gaps and opportunities for mitigation of identified risks.
- Provide technical support for enforcement of public health laws (e.g., isolation and quarantine, school exclusion laws).
- Ensure timely and accurate reporting of reportable diseases and educate local providers on reportable disease requirements.
- Develop, engage, and maintain local strategic partnerships with hospitals, health systems, schools, day care centers, and others to prevent and control communicable diseases. Ensure engagement of priority/focal populations in efforts to prevent and control communicable diseases.
- Provide subject matter expertise to inform program design, policies, and communications that educate providers, the public, and stakeholders about public health risks.
- Provide disease-specific and technical expertise regarding epidemiologic and clinical characteristics to health care professionals and others. Advise health care practitioners about evidence-based practices for communicable disease diagnosis, control, and prevention.
- Work with partners to enforce public health laws, including isolation and quarantine.
- Work with the OHA Public Health Division to provide guidance for the control and prevention of rare diseases and conditions of public health importance.

Assure the appropriate treatment of individuals who have active communicable diseases, including HIV, STD, and TB cases. Develop reporting and partner notification services for relevant diseases.

- Provide appropriate screening and treatment for HIV, STD, and TB cases, including pre- and post- exposure prophylaxis for HIV.
- Collaborate with the state in a culturally responsive way on disease prevention and control initiatives such as antibiotic resistance, sexually transmitted disease prevention messaging, infection control protocols, hand hygiene, field investigations of outbreaks and epidemics, and statewide and local health policies.
- Provide input into what diseases should be reportable to the state and subsequent disease investigation and control guidelines.
- Assure the availability of partner notification services for newly diagnosed cases of syphilis, gonorrhea, and HIV, as recommended by OHA.

Communicable Disease Control (continued)

Communicable Disease Response Evaluation

Evaluate and assess communicable disease outbreak response, and document distinguishing characteristics of outbreaks.

- Document assessments of outbreak investigation and response efforts, both conducted by state and by local public health.

Assess process improvement initiatives, including materials.

- Document results of quality and process improvement initiatives.
- Evaluate presentations and publications developed by the LPHA.
- Monitor occurrence and distinguishing characteristics of infectious diseases and outbreaks.
- Work with the OHA Public Health Division to evaluate disease control investigations and interventions. Use findings to improve these efforts.

Environmental Public Health

Identify and Prevent Environmental Health Hazards

Prevent and investigate environmental health hazards, including radioactive materials, animal bites, and vector-borne diseases.

- Develop, implement, and enforce environmental health regulations.
- Ensure consistent application of health regulations and policies.
- Implement state-mandated programs where appropriate (i.e., small drinking water systems, septic oversight).
- Provide evidence-based assessment of the health impacts of environmental hazards or conditions.
- Ensure that environmental health is included in the community health assessment every five years.
- Measure the impact of environmental hazards on the health outcomes of priority/focal populations. Analyze and communicate environmental justice concerns and disparities.
- Assure the development and maintenance of the ambulance service area plan.
- Monitor, investigate, and control infectious and noninfectious vector nuisances and diseases.
- Maintain expertise in relevant environmental health topics.
- Provide consultation and technical assistance, including establishing best practices related to vector control.
- Inform decision makers of the impacts to environmental public health based on program, project, and policy decisions.
- Use environmental health expertise to address accident and disease prevention in institutional environments (longer-term care, assisted living, child care, etc.)
- Use environmental health expertise to reduce hazardous exposures from air, land, water, and other exposure pathways.
- Deliver effective and timely outreach on environmental health hazards and protection recommendations to regulated facilities, the public, and stakeholder organizations.
- Ensure meaningful participation of communities experiencing environmental health threats and inequities in programs and policies designed to serve them.

Environmental Public Health (continued)

Conduct Mandated Inspections

Perform inspections and educate recipients of inspections, including for: restaurants and other food service establishments; recreation sites, lodges, and swimming pools; septic systems; portable water systems; radiological equipment; and hospital and other health care facilities.

- Conduct timely inspection and review of regulated entities and facilities.
- Enforce regulations through inspections.
- Perform and assist with outbreak investigations that have an environmental component.
- Conduct ongoing environmental and occupational health surveillance.
- Document communications on environmental health hazards and protection recommendations to regulated facilities, the public, and stakeholder organizations.
- Consult for the food service industry and the general public.
- Document provision of licensing and certification of recreational facilities, food service facilities, and tourist accommodations.
- Document reports of inspection and review of regulated entities and facilities.
- Document enforcement of regulations.

Promote Land Use Planning

Promote land use planning and sustainable development activities that create positive health outcomes.

- Conduct health analyses for other organizations and recommend approaches to ensure healthy and sustainable built and natural environments.
- Understand and participate in local land use and transportation planning processes.
- Maintain relationships with partners in local economic development, transportation, parks, and land use agencies.
- Provide consultation and technical assistance to the food service industry and the general public.
- Provide technical assistance to integrate standard environmental public health practices into facilities that present high risk for harmful environmental exposures or disease transmission.
- Produce community health assessments, including environmental health, at least every five years.
- Prepare health analyses for other organizations and recommend approaches to ensure healthy and sustainable built and natural environments.
- Communicate environmental justice concerns and disparities.
- Write best practices related to vector control.
- Document integration of standard environmental public health practices into facilities that present high risk for harmful environmental exposures or disease transmission.

Prevention and Health Promotion

Prevention of Tobacco Use

Prevent and control tobacco use.

- Use surveillance data collected by the OHA Public Health Division and use assessment and epidemiology methods to prevent and control tobacco use.
  - Include prevention and health promotion programs identified on the community health improvement plan or other local priorities;
  - Include surveillance of behavioral health issues that impact health outcomes for the areas listed above (e.g. trauma, chronic stress, addiction or violence).
- Monitor knowledge, attitudes, behaviors, and health outcomes around tobacco use.
- Use community health assessment data and other relevant data sources to inform or identify priorities and develop planning documents around tobacco use.
- Educate consumers about health impacts of the health impacts of unhealthy products like tobacco products.
- Demonstrate to communities, partners, policy makers, and others the connection between early prevention and educational achievement, health outcomes, intergenerational outcomes, and other outcomes (i.e. individuals who experience a disproportionate burden of death, injury and disease).
- Convene and engage communities and organizational partners, and cultivate leadership and vision for prevention and health promotion policies, programs, and strategies.
- Develop strategic, cross-sector partnerships and collaborations, across systems and settings.
- Work with partners and stakeholders to develop and advance a common set of priorities, strategies, and outcome measures, employing coalition building, community organizing, capacity building and providing technical assistance to partners.
- Build relationships with community partners who work with priority/focal populations.
- Work with partners, stakeholders, and community members to identify community assets and understand community needs and priorities.
- Work with communities to build community capacity, community empowerment, and community organizing. Support community action to assure policies that promote health and protection from unhealthy influences.
- Provide program funding to community partners to implement identified work.
- Collaborate with the OHA Public Health Division to maintain subject matter expertise in:
  - Policy, systems, and environmental change
  - Evidence-based and emerging best practices
  - Social determinants of health and the health impact of prenatal/early childhood experiences
  - Prevention and health promotion areas
- Develop multi-faceted strategies to address social determinants of health.
- Implement local policies, programs, and strategies to improve social, emotional, and physical health and safety at the level supported by existing funding.
- Implement programs and interventions around this area. As part of this:
  - Develop prevention and health promotion programs identified on the community health improvement plan or other local priorities
  - Integrate efforts to address population-level behavioral health issues that impact health outcomes for the areas listed above (e.g. trauma, chronic stress, addiction or violence)
- Collaborate with partners and engage community leaders to identify and seek funding for prevention and health promotion programs and interventions.
- Adhere to local, state, and federal guidance, standards, and laws (e.g. guidance from CDC's Office on Smoking and Health, or state guidelines for healthy eating and active living).
- Develop policy, systems, and environmental change strategies to improve health outcomes using problem identification, policy analysis, strategy and policy development, policy enactment, policy implementation, and policy evaluation.
- With stakeholders, develop and implement an evaluation plan for this area.
- Develop, use, and disseminate innovative, emerging, and evidence-based best practices.

Prevention and Health Promotion (continued)

Improving Nutrition and Increasing Physical Activity

Improve nutrition and incentivize increased physical activity.

- Use surveillance data collected by the OHA Public Health Division and use assessment and epidemiology methods to improve nutrition and increase physical activity.
  - Include prevention and health promotion programs identified on the community health improvement plan or other local priorities.
- Monitor knowledge, attitudes, behaviors, and health outcomes around nutrition and physical activity.
- Use community health assessment data and other relevant data sources to inform or identify priorities and develop planning documents around nutrition and physical activity.
- Educate consumers about the health impacts of unhealthy products like tobacco and sugary drinks.
- Demonstrate to communities, partners, policy makers, and others the connection between early prevention and educational achievement, health outcomes, intergenerational outcomes, and other outcomes (i.e. individuals who experience a disproportionate burden of death, injury, and disease).
- Convene and engage communities and organizational partners, and cultivate leadership and vision for prevention and health promotion policies, programs, and strategies.
- Develop strategic, cross-sector partnerships and collaborations across systems and settings.
- Work with partners and stakeholders to develop and advance a common set of priorities, strategies, and outcome measures, employing coalition building, community organizing, capacity building, and providing technical assistance to partners.
- Build relationships with community partners who work with priority/focal populations.
- Work with partners, stakeholders, and community members to identify community assets and understand community needs and priorities.
- Work with communities to build community capacity, community empowerment, and community organizing. Support community action to assure policies that promote health and protection from unhealthy influences.
- Provide program funding to community partners to implement identified work.
- Collaborate with the OHA Public Health Division to maintain subject matter expertise in:
  - Policy, systems, and environmental change
  - Evidence-based and emerging best practices
  - Social determinants of health and the health impact of prenatal/early childhood experiences
  - Prevention and health promotion areas
- Develop multi-faceted strategies to address social determinants of health.
- Implement local policies, programs, and strategies to improve social, emotional, and physical health and safety at the level supported by existing funding.
- Implement programs and interventions around these areas. As part of this:
  - Develop prevention and health promotion programs identified on the community health improvement plan or other local priorities
  - Integrate efforts to address population-level behavioral health issues that impact health outcomes for the areas listed above (e.g. trauma, chronic stress, addiction or violence)
- Collaborate with partners and engage community leaders to identify and seek funding for prevention and health promotion programs and interventions.
- Adhere to local, state, and federal guidance, standards, and laws (e.g. guidance from CDC's Office on Smoking and Health, or state guidelines for healthy eating and active living).
- Develop policy, systems, and environmental change strategies to improve health outcomes using problem identification, policy analysis, strategy and policy development, policy enactment, policy implementation, and policy evaluation.
- With stakeholders, develop and implement an evaluation plan for these areas.
- Develop, use, and disseminate innovative, emerging, and evidence-based best practices.

Prevention and Health Promotion (continued)

Improving Oral Health

Improve oral health.

- Use surveillance data collected by the OHA Public Health Division, and use assessment and epidemiology methods to improve oral health.
  - Include prevention and health promotion programs identified on the community health improvement plan or other local priorities.
- Monitor knowledge, attitudes, behaviors, and health outcomes around oral health.
- Use community health assessment data and other relevant data sources to inform or identify priorities and to develop planning documents around oral health.
- Educate consumers about the health impacts of unhealthy products like tobacco and sugary drinks.
- Demonstrate to communities, partners, policy makers, and others the connection between early prevention and educational achievement, health outcomes, intergenerational outcomes, and other outcomes (i.e. individuals who experience a disproportionate burden of death, injury and disease).
- Convene and engage communities and organizational partners, and cultivate leadership and vision for prevention and health promotion policies, programs, and strategies.
- Develop strategic, cross-sector partnerships and collaborations across systems and settings.
- Work with partners and stakeholders to develop and advance a common set of priorities, strategies, and outcome measures, employing coalition building, community organizing, capacity building, and providing technical assistance partners.
- Build relationships with community partners who work with priority/focal populations.
- Work with partners, stakeholders, and community members to identify community assets and understand community needs and priorities.
- Work with communities to build community capacity, community empowerment, and community organizing. Support community action to assure policies that promote health and protection from unhealthy influences.
- Provide program funding to community partners to implement identified work.
- Collaborate with the OHA Public Health Division to maintain subject matter expertise in:
  - Policy, systems, and environmental change
  - Evidence-based and emerging best practices
  - Social determinants of health and the health impact of prenatal/early childhood experiences
  - Prevention and health promotion areas
- Develop multi-faceted strategies to address social determinants of health.
- Implement local policies, programs, and strategies to improve social, emotional, and physical health and safety at the level supported by existing funding.
- Implement programs and interventions around this area. As part of this:
  - Develop prevention and health promotion programs identified on the community health improvement plan or other local priorities
  - Integrate efforts to address population-level behavioral health issues that impact health outcomes for the areas listed above (e.g. trauma, chronic stress, addiction or violence)
- Collaborate with partners and engage community leaders to identify and seek funding for prevention and health promotion programs and interventions.
- Adhere to local, state, and federal guidance, standards, and laws (e.g. guidance from CDC's Office on Smoking and Health, or state guidelines for healthy eating and active living).
- Develop policy, systems, and environmental change strategies to improve health outcomes using problem identification, policy analysis, strategy and policy development, policy enactment, policy implementation, and policy evaluation.
- With stakeholders, develop and implement an evaluation plan for this area.
- Develop, use, and disseminate innovative, emerging, and evidence-based best practices.

Prevention and Health Promotion (continued)

Improving Maternal and Child Health

Improve prenatal, natal, and postnatal care, maternal health, and the health of children.

- Use surveillance data collected by the OHA Public Health Division and use assessment and epidemiology methods to improve prenatal, natal, and postnatal care, maternal health, and the health of children.
  - Include prevention and health promotion programs identified on the community health improvement plan or other local priorities.
- Monitor knowledge, attitudes, behaviors, and health outcomes around maternal and child health.
- Use community health assessment data and other relevant data sources to inform or identify priorities and develop planning documents around maternal and child health.
- Educate consumers about health impacts of health-protective products for pregnant women and children and the health impacts of unhealthy products like tobacco and sugary drinks.
- Demonstrate to communities, partners, policy makers, and others the connection between early prevention and educational achievement, health outcomes, intergenerational outcomes, and other outcomes (i.e. individuals who experience a disproportionate burden of death, injury, and disease).
- Convene and engage communities and organizational partners, and cultivate leadership and vision for prevention and health promotion policies, programs, and strategies.
- Develop strategic, cross-sector partnerships and collaborations across systems and settings.
- Work with partners and stakeholders to develop and advance a common set of priorities, strategies, and outcome measures, employing coalition building, community organizing, capacity building, and providing technical assistance to partners.
- Build relationships with community partners who work with priority/focal populations.
- Work with partners, stakeholders, and community members to identify community assets and understand community needs and priorities.
- Work with communities to build community capacity, community empowerment, and community organizing. Support community action to assure policies that promote health and protection from unhealthy influences.
- Provide program funding to community partners to implement identified work.
- Collaborate with the OHA Public Health Division to maintain subject matter expertise in:
  - Policy, systems, and environmental change
  - Evidence-based and emerging best practices
  - Social determinants of health and the health impact of prenatal/early childhood experiences
  - Prevention and health promotion areas
- Develop multi-faceted strategies to address social determinants of health.
- Implement local policies, programs, and strategies to improve social, emotional, and physical health and safety at the level supported by existing funding.
- Implement programs and interventions around this area. As part of this:
  - Develop prevention and health promotion programs identified on the community health improvement plan or other local priorities
  - Integrate efforts to address population-level behavioral health issues that impact health outcomes for the areas listed above (e.g. trauma, chronic stress, addiction, or violence).
- Collaborate with partners and engage community leaders to identify and seek funding for prevention and health promotion programs and interventions.
- Adhere to local, state, and federal guidance, standards, and laws (e.g. guidance from CDC's Office on Smoking and Health, or state guidelines for healthy eating and active living).
- Develop policy, systems, and environmental change strategies to improve health outcomes using problem identification, policy analysis, strategy and policy development, policy enactment, policy implementation, and policy evaluation.
- With stakeholders, develop and implement an evaluation plan for this area.
- Develop, use, and disseminate innovative, emerging, and evidence-based best practices.

Prevention and Health Promotion (continued)

Reduce Unintentional and Intentional Injuries

Decrease the occurrence and impacts of both unintentional and intentional injuries, such as motor vehicle accidents and suicide.

- Use surveillance data collected by the OHA Public Health Division and use assessment and epidemiology methods to decrease the occurrence and impacts of injuries.
  - Include prevention and health promotion programs identified on the community health improvement plan or other local priorities
  - Include surveillance of behavioral health issues that impact health outcomes for reducing unintentional and intentional injuries (e.g. trauma, chronic stress, addiction, or violence)
- Monitor knowledge, attitudes, behaviors, and health outcomes around injury prevention and suicide.
- Use community health assessment data and other relevant data sources to inform or identify priorities and develop planning documents around maternal and child health.
- Educate consumers about health impacts of health-protective products like car seats.
- Demonstrate to communities, partners, policy makers and others the connection between early prevention and educational achievement, health outcomes, intergenerational outcomes, and other outcomes (i.e. individuals who experience a disproportionate burden of death, injury and disease)
- Convene and engage communities and organizational partners, and cultivate leadership and vision for prevention and health promotion policies, programs, and strategies.
- Develop strategic, cross-sector partnerships and collaborations across systems and settings.
- Work with partners and stakeholders to develop and advance a common set of priorities, strategies, and outcome measures, employing coalition building, community organizing, capacity building, and providing technical assistance to partners.
- Build relationships with community partners who work with priority/focal populations.
- Work with partners, stakeholders, and community members to identify community assets and understand community needs and priorities.
- Work with communities to build community capacity, community empowerment, and community organizing. Support community action to assure policies that promote health and protection from unhealthy influences.
- Provide program funding to community partners to implement identified work.
- Collaborate with the OHA Public Health Division to maintain subject matter expertise in:
  - Policy, systems, and environmental change
  - Evidence-based and emerging best practices
  - Social determinants of health and the health impact of prenatal/early childhood experiences
  - Prevention and health promotion areas
- Develop multi-faceted strategies to address social determinants of health.
- Implement local policies, programs, and strategies to improve social, emotional, and physical health and safety at the level supported by existing funding.
- Implement programs and interventions around this area. As part of this:
  - Develop prevention and health promotion programs identified on the community health improvement plan or other local priorities
  - Integrate efforts to address population-level behavioral health issues that impact health outcomes for the areas listed above (e.g. trauma, chronic stress, addiction, or violence)
- Collaborate with partners and engage community leaders to identify and seek funding for prevention and health promotion programs and interventions.
- Adhere to local, state, and federal guidance, standards, and laws (e.g. guidance from CDC's Office on Smoking and Health, or state guidelines for healthy eating and active living).
- Develop policy, systems, and environmental change strategies to improve health outcomes using problem identification, policy analysis, strategy and policy development, policy enactment, policy implementation, and policy evaluation.
- With stakeholders, develop and implement an evaluation plan for this area.
- Develop, use, and disseminate innovative, emerging, and evidence-based best practices.

Access to Clinical Preventive Services

Ensure Access to Effective Vaccination Programs

Immunizations

- Ensure access to all vaccines required by Oregon law for school attendance. This includes ensuring that vaccines are provided at convenient times and locations, and that no child is denied immunizations due to inability to pay. (ORS 433.269)
- Ensure access to all immunization-related services necessary to protect the public and prevent the spread of vaccine preventable disease.
- Work with local providers and public health delegate agencies to ensure access to immunization services.
- Ensure access to vaccines as appropriate during public health emergencies.
- Document meetings with partners to recommend strategies for improving access to clinical preventive services.
- Produce jurisdictional reports on access to clinical preventive services.
- Provide resources for clinical and community partners on evidence-based guidelines for the delivery of clinical preventive services.
- Plan for improved access to clinical preventive services, particularly for vulnerable populations.
- Document implementation of these plans.
- Produce evaluations of policies implemented to improve access to clinical preventive services.

Ensure Access to Effective Preventable Disease Screening Programs

- Provide screening for preventable cancers and other diseases.
- Document meetings with partners to recommend strategies for improving access to clinical preventive services.
- Produce jurisdictional reports on access to clinical preventive services.
- Provide resources for clinical and community partners on evidence-based guidelines for the delivery of clinical preventive services.
- Plan for improved access to clinical preventive services, particularly for vulnerable populations.
- Document implementation of these plans.
- Produce evaluations of policies implemented to improve access to clinical preventive services.

Ensure Access to Effective STD Screening Programs

- Provide screening for sexually transmitted infections.
- Ensure access to treatment for sexually transmitted infections, either as a component of primary care or as specialty care.
- Document meetings with partners to recommend strategies for improving access to clinical preventive services.
- Produce jurisdictional reports on access to clinical preventive services.
- Provide resources for clinical and community partners on evidence-based guidelines for the delivery of clinical preventive services.
- Plan for improved access to clinical preventive services, particularly for vulnerable populations.
- Document implementation of these plans.
- Produce evaluations of policies implemented to improve access to clinical preventive services.

Access to Clinical Preventive Services (continued)

Ensure Access to Effective TB Treatment Programs

- Provide evaluation of and treatment for tuberculosis and latent tuberculosis infections.
- Ensure that TB cases are diagnosed and treated using directly observed therapy.
- Ensure diagnosis and treatment of those with latent TB infection (including contacts of people with TB, new immigrants, other high-risk populations).
- Investigate contacts, including testing and treatment.
- Submit data on TB cases, contacts, and new immigrants ("B waiver").
- Produce jurisdictional reports on access to clinical preventive services.
- Provide resources for clinical and community partners on evidence-based guidelines for the delivery of clinical preventive services.
- Plan for improved access to clinical preventive services, particularly for vulnerable populations.
- Document implementation of these plans.
- Produce evaluations of policies implemented to improve access to clinical preventive services.

Ensure Access to Cost-Effective Clinical Care

- Work with health care providers to support provision of evidence-based programs and treatments that are proven to reduce the impact and costs associated with the leading causes of disease and disability in Oregon (e.g., Tobacco Quit Line, chronic disease self-management programs, expedited partner therapy, non-opioid therapies for chronic non-cancer pain, appropriate prescribing guidelines).
- Document meetings with partners to recommend strategies for improving access to clinical preventive services.
- Produce jurisdictional reports on access to clinical preventive services.
- Provide resources for clinical and community partners on evidence-based guidelines for the delivery of clinical preventive services.
- Plan for improved access to clinical preventive services, particularly for vulnerable populations.
- Document implementation of these plans.
- Produce evaluations of policies implemented to improve access to clinical preventive services.

Foundational Capabilities

Assessment and Epidemiology

Data Collection and Electronic Information Systems

Ability to collect sufficient statewide data to develop and maintain electronic information systems to guide public health planning and decision making at the state and local level.

- Access statewide information and surveillance systems and report into these systems in a timely manner.
- Use applied research and evaluation techniques to ensure that interventions meet the needs of the community to be served.
- Use relevant data to implement, monitor, evaluate, and modify state health improvement plans or community health improvement plans.
- Evaluate the efficacy of public health policies, strategies, and interventions.
  - Evaluate the effectiveness, accessibility, and quality of population-based health services.
  - Perform or access expertise needed to conduct economic analysis of public health strategies (e.g. economic analyses including the cost/risk of non-investment, return on investment).
  - Assist in the development of and evaluate public health interventions.
- Provide local public health informatics capability, or access statewide capability.

Data Access, Analysis, and Use

Process data from a variety of sources (e.g. including vital records, health records, hospital data, insurance data, and indicators of community, environmental health) in a manner that is accurate, timely, statistically valid, actionable, usable, and meaningful by the requester.

- Collect, process, and analyze data to assess population health priorities, patterns, and needs in the local authority.
- Collect, maintain, and analyze vital records and statistics.
- Input local data in state data systems to support a statewide understanding of population health and coordination between health authorities.
- Analyze key indicators of a community's health.
- Use demographic information (e.g. census, vital records) to understand the population and the characteristics of that population.
- Conduct and assess surveys about health behaviors and practices.
- Analyze data related to the causes and burdens of disease, injury, disability, and death.
- Identify populations experiencing a disproportionate burden of death, injury, and disease. Identify how disease, injury, disability, and death disproportionately affect certain populations, including populations specific to sex, race, ethnicity, and socioeconomic status.
- Using quantitative and qualitative data, identify how disease, injury, disability, and death disproportionately affect specific populations (e.g. populations grouped by sex, sexual orientation, gender identity, race, ethnicity, urban/rural residence, immigration status, and socioeconomic status).

Assessment and Epidemiology (continued)

Respond to Data Requests and Translate Data for Intended Audiences

Prioritize and respond to requests for data, information, and reporting. Communicate the response in a manner that is accurate, statistically valid, and usable by the requester.

- Support the appropriate use and timely communication of the data to support community health and resiliency.
- Produce summaries of local epidemiology of disease of public health importance.
- Make data, reports, and information available to policy makers, stakeholders, community members, and other partners at least annually.
- Produce local summaries for the following four categories, and include any relevant analyses of statewide surveys on health attitudes, beliefs, behaviors, and practices:
  - Disease occurrence, outbreaks, and epidemics.
  - Impact of public health policies, programs, and strategies on health outcomes, including economic analyses when appropriate.
  - Key indicators of community health, which include information about upstream or root causes of health.
  - Leading causes of disease, injury, disability, and death, which include information about health disparities.
- Review evidence-based literature and conduct research on innovative solutions to health problems to inform public health practice.

Conduct and Use Basic Community and Statewide Health Assessments

Conduct a basic community and statewide health assessment and identify health priorities arising from that assessment, including analysis of health disparities

- Ensure collaboration between state and local public health authorities when conducting assessment and epidemiological efforts.
- Conduct a community health assessment and identify priorities arising from that assessment, at least every five years.
- Use relevant data to implement, monitor, evaluate, and modify community health improvement plans at least every five years. Update the community health improvement plan annually using local data.
- Conduct or inform health impact assessments.
- Ensure that meaningful and accurate metrics are used to evaluate community health improvement plan.

Infectious Disease-Related Assessment

Identify and respond to disease outbreaks and epidemics.

- Ensure local public health capacity to respond to emerging threats to health by maintaining flexibility related to staffing and information systems.
- Promptly identify and lead outbreak investigations that initiate or primarily occur in the local authority and actively participate in outbreak investigations that cross multiple authorities. Incorporate standards and standard case definitions.
  - Investigate and develop appropriate interventions to mitigate local/jurisdictional outbreaks and epidemics.
- Analyze and respond to information related to disease outbreaks and epidemics.

Maintain the capacity and staff to provide laboratory services including diagnostic and screening tests, and follow protocols established by the OHA Public Health Division.

Emergency Preparedness and Response

Prepare for Emergencies

Develop, exercise, improve, and maintain preparedness and response plans in the event that either a natural or man-made disaster or an emergency occurs.

- Conduct jurisdictional assessment of risk, resources, and priority of public health preparedness capabilities.
- Maintain public health surveillance and response plans inclusive of disaster epidemiology and an active epidemiological surveillance plan.
- Plan for the distribution of pharmaceuticals in the event of an emergency.
- Prepare and maintain public health preparedness plans in accordance with the 15 core public health capabilities, including but not limited to public health surveillance and disaster epidemiology, identifying and initiating medical countermeasures dispensing strategies, communications with the public and partners, outlining public health's role in fatality management, and monitoring mass care/population health.
- Maintain a public health preparedness training and exercise plan, including but not limited to the coordination of public health staff training to support the system in public health /medical surge events and community empowerment and engagement in preparedness efforts.
- Plan emergency preparedness exercises.
- Document emergency preparedness exercises.
- Develop public health short-term and long-term goals for recovery operations.
- Maintain and execute a plan providing for continuity of operations during a disaster or emergency, including a plan for accessing resources necessary to recover from or respond to a disaster or emergency.
- Maintain continuity of operations plan for the authority.
- Produce continuity of operations plan for the local health authority.
- Maintain pharmaceutical access.
- Address the needs of vulnerable populations during a disaster or emergency.

Respond to Emergencies

Be notified of and respond to potential disasters and emergencies. Activate emergency response personnel during a disaster or emergency, and recognize if public health has a primary, secondary, or ancillary role in response activities.

- Provide efficient and appropriate situation assessment; determine objectives to address the health needs of those affected, allocating resources to address those needs; and return to routine operations.
- Develop situational assessments and resulting operational plans, including objectives, resources needed, and how to resume routine operations.
- Document participation in emergency response efforts.
- Produce disaster epidemiology reports.
- Issue and enforce emergency health orders.
- Document enforcement of emergency public health orders.

Coordinate and Communicate Before and During an Emergency

Communicate and coordinate with health care providers, emergency service providers, and other agencies and organizations that respond to disasters and emergencies.

- Build community partnerships to support health preparedness, and recovery and resilience efforts, including training and exercising with community partners per federal guidelines, and the ongoing training and support provided by local public health authorities (e.g. schools, hospitals, emergency medical, community organizations, organizations serving priority/focal populations, etc.).
- Maintain a portfolio of community partnerships to support preparedness and recovery efforts.
- Act as the jurisdictional administrator of public health notification systems (e.g. alert networks, hospital capacity programs, etc.), Oregon's logistical ordering system, and syndromic surveillance system.

Use communications systems effectively and efficiently during a disaster or emergency.

- Deliver health alerts and preparedness communications to partners and the general public.

Communications

Regular Communications

Local public health authorities shall develop and implement a strategic communication plan that articulates the local public health authority's mission, value, role, and responsibilities.

- Engage in two-way communications with the public through the use of a variety of accessible communication channels:
  - Effectively use mass media and social media to transmit communications to and receive communications from the public.
  - Local public health authorities shall maintain a public-facing website with updates made to content no less than annually.
  - News releases and public meeting notices.
  - Policy briefs and other policy-related communications.
- Engage in two-way communications with the public through the use of a variety of accessible content:
  - Local public health authorities shall develop and disseminate communications on emerging public health issues.
  - Local public health authorities shall develop and disseminate print and media materials in accordance with the strategic communications plan and risk communication needs.
  - Local public health authorities can also adopt or customize statewide print and media materials provided by the OHA Public Health Division. Materials shall be in compliance with ADA Section 508 and consider health literacy needs, and communications for the public shall consider the end user and use appropriate communication format(s) and language(s). Communications shall be tailored for specific audiences, such as policy makers, stakeholders, local public health authorities, health care providers, the public, and specific population groups.
  - Local public health authorities shall be a reputable source of health information, through public health branding, by disseminating news releases and public meeting notices in a timely and transparent fashion. Local public health authorities shall support ongoing interaction with the public by offering and inviting two-way communications with the public (e.g. contact information, surveys, comment boxes, etc.).
- Communicate with specific populations in a manner that is culturally and linguistically appropriate.
- Local public health authorities shall regularly evaluate the effectiveness of communications efforts using tools such as web analytics, surveys, panel surveys, and polls. Local public health authorities shall use evaluation findings to adjust communications and communications strategies accordingly.
- Communication training and capacity building.
- Document communications support for any staff beyond the public information officer who communicate with the public about public health issues (e.g. media content reviewed by the public information officer).
- Document two-way communications with the OHA Public Health Division. Evaluation Communications evaluation plan that is structured around health equity and literacy.

Emergency Communications

- During a disease outbreak or other disaster or emergency, provide accurate, timely, and understandable information, recommendations, and instructions to the public.
- Local public health authorities shall engage with the OHA Public Health Division when an outbreak or significant public health risk is identified to determine the scope of the health risk and all potential populations impacted (i.e., neighborhood or county-level risk versus statewide risk). Based on this risk assessment, local public health authorities and the OHA Public Health Division will inform which agency shall take the lead role in coordinating communications to the public.

Educational Communications

- Develop and implement educational programs and preventive strategies.

Policy and Planning

Development and Implement Policy

Provide guidance and coordinate planning for the purpose of developing, adopting, and implementing public health policies. Develop public health policy options necessary to protect and improve the health of the public and specific adversely impacted populations.

- Develop policy, systems, and environmental change strategies to improve health outcomes, using an established policy change framework that includes problem identification, policy analysis, strategy and policy development, policy enactment, policy implementation, and policy evaluation. Activities include:
  - Identify, analyze, and develop statutory changes that are necessary to address an identified public health issue or are in response to a change in regional, state or federal statute, regulation or rule.
  - Identify, analyze and develop proposed systems or environmental changes that are necessary to address an identified public health issue or are in response to a change in federal statute, regulation or rule.
  - Evaluate the effectiveness of policy change, in coordination with staff, with assessment and epidemiology skills and capacity.
- Develop a strategic policy plan for the authority that includes specific strategies to reduce or eliminate health disparities. A strategic policy plan is a document that identifies and guides the strategic policy priorities and policy goals for the authority and can align with other local public health plans (e.g. CHIP or strategic plan), but can also include policy goals not related to other plans, if appropriate.
  - This plan must be reviewed and updated at least once a year.
- Develop policy concepts, as appropriate, for public health issues to be addressed by city and county governments in the authority.
- Monitor and respond to state and local public health issues that impact local authorities and, upon request, participate in policy initiatives that include multiple authorities.
- Interpret, respond to, and implement federal, state, and local policy changes. Coordinate enforcement of federal and state policy and regulatory activities when delegated to do so.
- Develop and amend as needed rules to implement local ordinances.

Understand and use the principles of public health law to improve and protect the health of the public.

Improve Policy with Evidence Based Practice

Enable the Oregon Health Authority and local public health authorities to serve as a primary and expert resource for using science and evidence-based best practices to inform the development and implementation of public health policies

- Coordinate with the state on development of economic analyses (e.g. analysis of cost/risk of non-investment return on investment) for proposed policy changes in the authority.
- Provide coordination among local agencies and other organizations on policies that impact health, including those that address health equity and the social determinants of health.
- Inform federal policy work through NACCHO or other organizations.
- Coordinate enforcement of federal, state, and local policy and regulate activities when delegated to do so.
- Coordinate local public health policy agendas with the state policy agenda and support the state public health position on legislation, when appropriate.
- Share information about implementation of public health best practices or innovative strategies that may be relevant to the OHA Public Health Division or other local public health authorities.
- Participate in state-led discussions to identify, analyze, and develop or revise systems or rules that are needed to address an identified public health issue (e.g. review of existing rules).
- Respond to policy initiatives that may impact health.

Policy and Planning (continued)

Understand Policy Results

Analyze and disseminate findings on the intended and unintended impacts of public health policies

- Assume a leadership role for communicating with the community about how policy changes may impact health.
- Engage traditional and nontraditional partners in conversations about efforts to improve health outcomes.
- Implement, monitor, evaluate and modify state health improvement plans or community health improvement plans
- Ensure communication with the governing body (e.g. Board of Commissioners or sub designee) to whom the health authority is accountable for progress on the CHIP at least twice a year.
- Make information about the community health improvement plan available to the public.

Heath Equity and Cultural Responsiveness

Foster Health Equity

Support public health policies that promote health equity.

- Develop and promote shared understanding of the determinants of health, health equity, and lifelong health with local partners and the community.
- Make the economic case for health equity, including the value of investment in cultural responsiveness.
- Engage with the community to identify and eliminate health inequities.
- Implement processes within public health programs that create health equity.
- Promote a common understanding of cultural responsiveness.
- Promote understanding of the extent and consequence of systems of oppression.
- Recognize and address health inequities that are specific to certain populations, including differences stemming from race, class, gender, disability, and/or national origin
- Collect and maintain data, or use data provided by the OHA Public Health Division that reveal inequities in the distribution of disease. Focus on information that characterizes the social conditions (including strengths, assets, and protective factors) under which people live that influence health.
- Compile local data on health resources and health threats (e.g., schools, parks, housing, transportation, employment, economic wellbeing, and environmental quality) with local partners, or use information collected and provided by the OHA Public Health Division.
- Identify local population subgroups or geographic areas characterized by either (i) an excess burden of adverse health or socioeconomic outcomes; or (ii) an excess burden of environmental health threats.
- Foster shared understanding and will to achieve health equity and cultural responsiveness.
- Make available data and information on health status and conditions that influence health status by race, ethnicity, language, geography, disability, and income. Consider health literacy, preferred languages, cultural health beliefs and practices, and other communication needs when issuing data and information.

Communicate and Engage Inclusively

Communicate with the public and stakeholders in a transparent and inclusive manner.

- Make clear and transparent communications easily and quickly available to constituents on issues related to the health of their authority, especially regarding policies and decisions relating to health equity priorities.
- Provide technical assistance to communities with respect to analyzing data, setting priorities, identifying levers of power, and developing policies, programs, and strategies.
- Enhance people's capacity to conduct their own research and participate in health impact assessments based on the principles of Community-Based Participatory Research, CDC's Community Engagement Principles and the National Environmental Justice Advisory Council's community collaboration principles.
- Engage the community, including diverse populations, in community health planning.
- Engage with community members to learn about the values, needs, major concerns, and resources of the community in order to effectively prioritize resources and services to best address health inequities.
- Learn about the culture, values, needs, major concerns, and resources of the community. Respect local community knowledge and seek to understand and formally evaluate it.
- Promote the community's analysis of and advocacy for policies and activities that will lead to the elimination of health inequities. Share, discuss, and respond to feedback on civil rights implementation using tracked findings to report ways to decrease civil rights violations.
- Promote community engagement task forces to develop and recommend strategies to engage low income, racial/ethnic minorities, and disabled community members in state and local government.
- Routinely invite and involve community members and representatives from community-based organizations in public health authority planning, procedures, evaluation, and policies. Offer means of engagement that respond to unique cultures of community members.
- Increase racial and ethnic representation on councils and committees.

Community Partnership Development

Identify and Develop Partnerships

Convene and sustain relationships with traditional and nontraditional governmental partners and stakeholders, and traditional and nontraditional nongovernmental partners and stakeholders.

- Coordinate programmatic activities with those of partner organizations to advance cross-cutting, strategic goals.
- Promote the use of evidence-based strategies to improve population health by providing training, technical assistance, and other forms of support to partners.
- List all community partners involved in local and regional health needs, health impact, and health hazard vulnerability assessments; include descriptions of partners involved, their roles, and contributions to the effort.
- List all key regional health-related organizations with whom the health department has developed relationships with about public health issues of mutual interest. Document these efforts, resulting areas of collaboration, and benefits to the public's health resulting from the collaboration in relevant grant progress reports and other summaries of activities.
- Document training, technical assistance, and other forms of support provided to partners, along with evaluation of the effectiveness of this support in promoting population health.
- Evaluate reports on the effectiveness of partnerships.
- Develop, strengthen, and expand connections across disciplines, such as education and health care, and with members of the community who work in those disciplines.
- Support and maintain cross-sector partnerships with health-related organizations, organizations representing priority/focal populations, private businesses, and local government agencies and non-elected officials.
- The portfolio of cross-sector partnerships should include a description of partnering organizations and how the partnership supports population health. If applicable, specifically describe how the partnership addresses health disparities.
- List all local community groups or organizations representing priority/focal populations, including private businesses, healthcare organizations, and relevant tribal, regional, and local government agencies the local public health authority has developed relationships with, so that public health goals are effectively and efficiently attainable for all populations. As part of program evaluation efforts, address successes, lessons learned, recognized barriers to such collaboration, and strategies to overcome these barriers.

Engage Partners in Policy

Foster and support community involvement and partnerships in developing, adopting and implementing public health policies.

- Earn and maintain the trust of community residents by engaging them at the grassroots level.
- Ensure that community partners can participate fully in local and state public health planning efforts.
- Join with partners in health assessments, using their input to develop a community health improvement plan to guide implementation work with partners and to coordinate activities and use of resources.
- Specifically engage priority/focal populations so they can actively participate in planning and funding opportunities to address their communities' needs.
- Document engagement through meetings, communications, or other means with communities disproportionately affected by health issues so they can actively participate in planning and funding opportunities to address their communities' needs.
- Engage members of the community in implementing, monitoring, evaluating, and modifying state health improvement plans or community health improvement plans

Leadership and Organizational Competencies

Leadership and Governance

Define the strategic direction necessary to achieve public health goals, and align and lead stakeholders in achieving goals:

- Develop and implement a strategic plan for local governmental public health.
- Work with the state and other local and tribal authorities to improve the health of the community.
- Collaborate with systems and organizations in developing a vision for a healthy community.
- Provide evidence of engagement in health policy development, discussion, and adoption with the OHA Public Health Division to define a strategic plan for public health initiatives.
- Provide evidence of engagement with appropriate governing entity about public health's legal authorities and what new legislative concepts, laws, and policies may be needed.

Performance Management, Quality Improvement, and Accountability

Use the principles of public health law, including relevant agency rules and the constitutional guarantee of due process, in planning, implementing, and enforcing public health initiatives

- Promote and monitor organizational objectives while sustaining a culture of quality of service.
- Ensure the management of organizational change (e.g., refocusing a program or an entire organization, etc.).
- Use performance management, quality improvement tools, and coaching to promote and monitor organizational objectives and sustain a culture of quality.
- Implement a performance management system to monitor achievement of public health objectives using nationally recognized framework and quality improvement tools and methods.

Human Resources

Maintain a competent workforce necessary to ensure the effective and equitable provision of public health services.

- Collaborate and share workforce development planning resources with the state, and tribal and other local authorities.
- Coordinate, or convene when necessary, efforts to assess leadership and organizational capabilities within their local authority to understand capacity and to identify gaps.
- Develop and implement a workforce development plan that identifies needed technical and/or informatics skills, competencies, and/or positions. The plan should include strategies for recruiting, hiring, and/or developing existing staff to meet the needs.
- Assess staff competencies; provide individual training, professional development, and a supportive work environment.
- Ensure a high quality public health workforce by promoting workforce development and capacity building.
- Provide continuing education and other training opportunities necessary to maintain a competent workforce.
- Ensure nimble human resources support for public health work, including composition and maintenance of up-to-date job classifications suitable for the above listed roles and activities, use of temporary staffing, and other methods to expand and contract staff to meet immediate public health demands.
- Develop partnerships with institutions of higher education necessary to maintain a competent workforce.
- To the extent practicable, ensure that local public health administrators, local health officers, and individuals who work in the field of public health reflect the demographics of the community being served and the changing demographics of this state.

Leadership and Organizational Competencies (continued)

Information Technology

Implement and maintain the technology needed to support public health operations while simultaneously protecting personally identifiable information and other confidential health information.

- Develop and maintain local public health technology and resources to support current and emerging public health practice needs. Document how information technology supports public health and administrative functions of the department.
- Ensure privacy and protection of personally identifiable and/or confidential health information in data systems and information technology.
- In collaboration with health systems and other partners, use the information assets/needs assessment to develop and implement a vision and strategic plan. The plan should include a funding strategy and appropriate governance processes to address information management and supportive information systems.
- Implement current, interoperable technology that meets current and future public health practice needs and maintenance of those resources. Ensure that technology systems and resources are sufficient to support current and future local public health practice needs and ability to maintain those systems.
- Implement a technical support plan that provides users of local public health technology systems and resources with appropriate training.

Financial Management, Facility Operations, and Contracts and Procurement Services

Use accounting and business best practices in budgeting, tracking finances, billing, auditing, securing grants, and other sources of funding and distributing moneys to governmental and nongovernmental partners.

- Ensure use of financial analysis methods to make decisions about policies, programs, and services, and ensure that all are managed within current and projected budgets.
- Work with partners to seek and sustain funding for additional public health priority work.