

#### Department of Health

## 2023-25 Regular Budget Session

Policy Level - DA - Sustain Public Health Laboratories

## Agency Recommendation Summary

The Department of Health is requesting funding to to support essential staffing levels to maintain continued WA PHL emergency response preparedness, perform COVID-19 diagnostic testing and sequencing, chemical response testing, vital Quality Assurance activities compliant with regulatory requirements, critical Operations responsibilities including maintenance, safety, training, and support services, and Technical Laboratory Administration functions.

## Fiscal Summary

Fiscal Summary	Fiscal Years		Biennial	Fiscal Years		Biennial		
Dollars in Thousands	2024	2025	2023-25	2026	2027	2025-27		
Staffing								
FTEs	12.0	12.0	12.0	51.0	51.0	51.0		
Operating Expenditures								
Fund 001 - 1	\$8,147	\$7,690	\$15,837	\$7,690	\$7,690	\$15,380		
Total Expenditures	\$8,147	\$7,690	\$15,837	\$7,690	\$7,690	\$15,380		

## **Decision Package Description**

The COVID-19 pandemic has emphasized the importance of maintaining robust Washington State Public Health Laboratories (WA PHL) infrastructure. When emergencies strike, we should rely on our systems, not seek to build them. Since the beginning of the pandemic, we have been challenged with building the capability and capacity needed to properly serve the citizens of Washington State. Significant investment from the Federal Government has been made since 2020 through various cooperative agreements. The WA PHL has leveraged these programs to hire staff, purchase equipment and begin updating outdated IT systems in nearly every section of the laboratory. The WA PHL is now making meaningful and lasting improvements to our laboratory systems. The problem for WA PHL is that funding is not guaranteed beyond July 2023 to support and sustain these critical improvements. Indeed, without continued funding we risk reverting to insufficient levels of infrastructure and capabilities. Specifically, WA PHL will return to an insufficient pre-pandemic workforce, infrastructure, and testing approach with reduced output, longer result turnaround times, regulatory compliance challenges, reduced staff morale and increased health inequity disproportionally impacting marginalized and underserved communities. A critical opportunity now exists to provide adequate funding, thereby sustaining these efforts and continuing to modernize the WA PHL. These efforts will support the agency's goal to provide equitable Public Health services to vulnerable and underserved communities. Resources will be dedicated to support the following priorities:

Emergent Disease Testing Reliability and Responsiveness: The WA PHL has not been prepared to manage an outbreak of this scale. Our test systems and staffing levels were suited to managing small outbreaks of limited time and scope. Supporting a large-scale response required staff to stop performing other critical Public Health testing, putting Washington citizens at risk for foodborne disease, tuberculosis, sexually transmitted infections and a host of other illnesses. Our equipment was purchased to provide maximum flexibility (one instrument able to perform testing for many conditions) to keep costs low. However, we had not invested in high throughput instruments capable of providing the volume of testing needed in the early stages of an epidemic. Our thinking around laboratory preparedness was small. Quality Assurance (QA) Systems Improvement: Public Health Laboratory activities require robust Quality Management systems to ensure compliance with regulatory agencies. Over the years, WA PHL activities continue to expand without parallel growth in QA specialists supporting those services. Continued support is necessary to sustain critical QA resources. Failure to do so will increase the risk of laboratory service disruptions due to possible regulatory actions.

Laboratory Technical Administration Expansion: For many years? these tasks have been the sole responsibility of individual Laboratory Supervisors and Office Directors, which has diverted those individuals from their primary priorities. ? Knowledge gaps have also existed in laboratory contract, grant management, laboratory equipment maintenance contract management, and procurement. ? In addition, undertaking large projects to improve efficiencies and lab service delivery such as LIMS replacement, Electronic Test Ordering and Reporting, and inventory management has lacked sufficient administrative support. As WA PHL activities have expanded these gaps have grown necessitating expansion of technical administration infrastructure.

**Operations Support and Infrastructure:** Without the temporary federal funding, which expires in 2023, WA PHL Operations lacks resources to support essential operational capabilities. As WA PHL activities have expanded, support for these vital positions has not. Without further funding, the WA PHL has only one dedicated Safety Officer, which is insufficient to meet regulatory requirements and the needs of WA PHL staff and visitors. Increases in the scope of laboratory activities also necessitate a commensurate increase in associated support services and maintenance functions (<u>i.e.</u> media preparation, waste management, glassware, building repairs, and HVAC maintenance). WA PHL currently does not have dedicated resources to support Occupational Health programs. Recently, this has become a larger challenge due to the need for vaccinations in staff supporting various outbreaks.

Chemical Incident Response (CIRL) Enhancement: The current CIRL team is supported by the Public Health Emergency Preparedness (PHEP) annual cooperative agreement. Currently, staff struggle to maintain proficiency with current methods, operate the 12 instruments and have limited capability to implement new methods to address emerging and ongoing concerns, such as the opioid/fentanyl crisis. As constituted, the CIRL has insufficient staff to perform testing, outreach, training, and other emergency response activities. This has caused unnecessary burdens and is not sustainable.

WA PHL Training Program: WA PHL training program was drastically curtailed in 2008. This led to the creation of gaps in the provision of training to WA PHL staff in a timely fashion. In addition, cutbacks resulted in elimination of WA PHL-facilitated external training programs for clinical laboratories around the state which, in turn, led to degradation of familiarity and cohesiveness of our community-based clinical laboratory network. Consequently, this impacts our ability to offer assistance for laboratories in underserved communities that require technical consultations and support.

Community Access to Laboratory Training Resources: Our efforts to interact with Universities and local colleges has been limited. ?Our

external training program was eliminated due to recent funding cuts. Since then, we have been able to provide only basic support for a small number of students (1-3 students per year). This has had the long-term effect of diminishing student interest in Public Health fields has impacted our workforce development efforts. There are too few resources to adequately support the WA PHL's strategic plan and goal of increasing laboratory capability and capacity. Consequently, Public Health Workforce development via robust training, internship, and fellowship programs is needed to address current staffing shortages.

What is your proposal? What are you purchasing and how does is solve the problem?

The objective of this proposal is to provide funding to sustain WA PHL pandemic response activities, maintain preparedness to respond effectively to future emergencies, and build efficient modernized foundational laboratory capabilities to meet the agency's mandate to improve health equity. Success for the WA PHL mission will rely upon stable investments that ensure sufficient laboratory personnel infrastructure. Funding will ensure ongoing laboratory preparedness, capability and capacity and foster implementation of efficient modern data driven systems to improve services and operational capabilities. Our request will focus on improving relationships and partnerships with academic and clinical institutions which will promote access to high quality equitable Public Health services and support Public Health workforce development. In order to achieve these objectives, we are requesting funding to support staffing in several critical areas at the WA PHL.

**Emergent Disease Testing Reliability and Responsiveness:** Funding will support the retention of staff (refer to the table below) to perform accessioning for the intake of <u>samples</u>, <u>perform</u> diagnostic testing, maintain high-throughput automated lab systems, perform critical sequencing activities to identify variants of interest and concern. Additionally, staff will support outward facing functions and drastically improve submitter engagement. This will greatly improve our efficiency in receiving specimens (a significant bottleneck) and make it easier for our submitters to access our labs services (a consistent challenge).

Quality Assurance (QA) Systems Improvement: Funding will support the retention of staff and allow the QA team to provide essential mission critical support ensuring the delivery of high quality, state-of-the-art Public Health Laboratory service. QA establishes and implements lab-wide policies and procedures that ensure regulatory compliance and delivery of robust and reliable test results. In addition, the WA PHL QA Team coordinates Clinical Laboratory Improvement Amendments of 1988 (CLIA) Accreditation with the College of American Pathologists (CAP) and International Organization for Standardization (ISO) Accreditation with the ANSI National Accreditation Board (ANAB) and ensures regulatory compliance with many other oversight agencies including, Department of Ecology (DOE), US Food and Drug Administration (FDA), Office of Radiation Protection, and the State of California. These accreditations and certifications are essential for maintaining WA PHL's ability to continue offering laboratory services.

Laboratory Technical Administration Expansion: Funding to support Laboratory Technical Administration will alleviate the burden of contract and grant management from individual Laboratory Supervisors and Office Directors. Funds will support staff who help fill knowledge gaps in laboratory contract and grant management and management of laboratory equipment maintenance and procurement. Extending funding for the IT Business Manager and the existing MA3 will be essential for bridging, sustaining, and enhancing existing technical administrative infrastructure and ensuring the success of mission critical objectives such as the implementation of a new Laboratory Information Management System (LIMS) in a timely fashion.

**Operations Support and Infrastructure:** Funding for Operations staffing is critical to support WA PHL infrastructure including safety (1 FTE), facilities maintenance (1 FTE), support services (2 FTE), and occupational health needs (1 FTE). Extended funding will allow Operations to continue to support current and increasing WA PHL staffing levels, additional facilities and equipment associated with several capital projects, systems monitoring, and preparedness to respond to future Public Health emergencies.

Chemical Incident Response (CIRL) Enhancement: Funding to provide additional CIRL staff will foster collaboration with the clinical laboratory community, improve local community relationships, and provide technical support to Local Health Jurisdictions (LHJs). It will also strengthen the overall chemical emergency response team for WA State by expanding qualified testing personnel. By using state funds to support these positions, the CIRL team will be able to re-implement and sustain their important work. The positions will share oversight of the missing coordination requirements, such as providing or facilitating access to educational materials/protocols and exercises for relevant stakeholders, for the CIRL team as well as perform analytical testing in clinical and environmental samples.

WA PHL Training Program: Funding would afford the development of important online learning contents for safe and timely training of existing and newly hired personnel. Timely delivery of these training materials will require an online platform to fulfill our mission to train WA PHL Staff and local partners (LHJs) on several critical subjects. Funding is required to provide technical and logistical support with targeted outreach activities, promotion and facilitation of access to clinical laboratory content delivered on WA PHL and CDC training platforms. Internal WA PHL training activities are also critical for maintaining compliance with accreditation standards.

Community Access to Laboratory Training Resources: WA PHL has an outstanding history of fostering partnerships and collaborations with CDC, APHL, Universities, and local Community Colleges. Funding will support WA PHL's ongoing efforts to host interns and fellows. This funding request seeks to provide stipends to facilitate short-term placements in WA PHL's Public Health and clinical laboratory workforce development program. In turn, this program will enhance our Public Health workforce, increase access to Public Health Laboratory services, and promote health equity by reducing health disparities.

This request will improve services for all citizens in Washington State. Public Health Laboratory services provide early detection of emerging and remerging diseases, surge support for clinical laboratories and critical surveillance information to Local, State and Federal stakeholders. This information is critical to maintain situational awareness and make informed decisions to protect Public Health. In addition, the WA PHL supports all counties in Washington State by providing no cost laboratory services for citizens with limited access to health care.

The requested funds will have an immediate Public Health impact. Over the course of the pandemic, the WA PHL has built considerable capacity and capabilities. These funds will allow us to retain sufficient staff to ensure future preparedness. Many of these staff are currently engaged in efforts to modernize our antiquated systems to further improve future responses. Examples of this are our efforts to streamline specimen submission through the enhancement of an Electronic Test Ordering and Reporting (ETOR) system, the continued maintenance of a modern Laboratory Information Management System (LIMS), and conversion of many low throughput assays to higher throughput systems.

Cumulatively, the activities described above will significantly improve the WA PHL's future performance and statewide laboratory service delivery. Initial response functions at the WA PHL will be immediate and limited only by the availability of testing supplies. Administrative, Operations and Quality Assurance functions will be adequate to support the technical demands of the lab enabling a more reliable and robust response. Collaboration between WA PHL and community laboratories will be improved to support a more cohesive laboratory network and rapid response to future Public Health emergencies. Enhanced internal and community training programs will support the Governor's goal of providing World Class Education and foster professional and Public Health workforce development.

What alternative did you explore and why is this option chosen?

The Washington State Public Health Laboratories actively pursues federal funding opportunities as they arise. We will continue to seek funding from these sources in the future. As of this writing, we have no certain federal funding source to support our States need. Further, the federal funds that we have relied upon are volatile and subject to drastic change with little advanced notice. Funding through state sources will improve Washington's ability to manage its own Public Health capabilities and capacity.

The Public Health Emergency Preparedness (PHEP) grant contributions have been continuously decreasing over the years affecting the Chemical Incidence Response Laboratory (CIRL) and the Biological Emergency Response groups and their capabilities. Funding through state sources will provide a mechanism to enhance existing Public Health capabilities and capacity. It will also help improve and sustain the emergency preparedness programs that the residents of WA state rely upon for chemical terrorism events or other chemical exposure incidences.

The consequences of not acting are reverting to an insufficient pre-pandemic Public Health workforce, infrastructure, and testing approach. Limited staff to perform testing results in reduced output, longer result turnaround times, lack of a centralized outward facing team for customer support, poor worker engagement due to burdensome administrative tasks and lack of flexibility for staffing. Recent advancements and creation of a COVID branch has resulted in a 600% increase in sample throughput with turnround times of less than 24-hours and positioning as the highest volume sequencing lab for WA in 2022. Without action, these gains will be lost reducing our ability to respond to future Public Health emergencies, such as COVID-19, other emerging infectious diseases, and chemical incident response.

Lack of action will lead to pre-pandemic Quality Assurance infrastructure resulting in a single Quality Assurance Officer responsible for the entirety of the WA PHL Quality Management Program. Limitations in these resources will increase risks for compromised quality systems, gaps in regulatory compliance, jeopardize accreditation status, reduced confidence and ability to maintain high quality laboratory services. Lack of action will also result in little-to-no Laboratory Technical Administration resources which will further increase silos, jeopardize implementation and maintenance of critical infrastructure enhancements such as the LIMS replacement, delay contract execution, reduce contract optimization, and additionally burden already strained Laboratory Supervisors and Office Directors across WA PHL. Another example is provided by the CIRL team where it will be difficult to sustain the demands of the laboratory with only two FTE. Taken together, a lack of action may result in service disruptions that will reduce access to vital Public Health services and further widen health disparities and inequity.

WA PHL Operations will further be disrupted due to lack of resources. Failure to provide adequate support for Operations results in reduced safety for staff, lack of support services for laboratory activities, inadequate training resources, failure to maintain facilities, and absence of community engagement and collaboration. Indeed, the consequences of not acting will impact WA PHL's capability to provide results to its specimen submitters and further increase health inequity through an inability to continue to provide service to marginalized and underserved communities.

WA PHL was unsuccessful in obtaining and securing funds for this critical work through the CDC Strengthening U.S. Public Health Infrastructure, Workforce, and Data Systems Grant.

#### Assumptions and Calculations

#### Expansion, Reduction, Elimination or Alteration of a current program or service:

This request will improve services for all citizens in Washington State. Public Health Laboratory services provide early detection of emerging and remerging diseases, surge support for clinical laboratories and critical surveillance information to Local, State and Federal stakeholders. This information is critical to maintain situational awareness and make informed decisions to protect Public Health. In addition, the WA PHL supports all counties in Washington State by providing no cost laboratory services for citizens with limited access to health care.

## **Detailed Assumptions and Calculations:**

# **Emergent Disease Testing Reliability and Responsiveness Performance outcomes**

Improved turnaround times

Enhanced preparedness to respond to Public Health emergencies

Reduced downtime

Increased capacity for large scale testing of viral pathogens

#### **Performance Metrics**

Percentage of IMT related specimens processed within established turnaround time. Target 90%

Reduce impact for routine WA PHL activities during IMT activation. Target <10% of routine activities impacted

Reduce IMT related testing interruptions. Target < 5 days per year

Increase the number of viral pathogens able to be tested on high throughput platforms. Target N+3 per year until complete

#### Quality Assurance (QA) Systems Improvement

#### **Performance outcomes**

Improved Regulatory Compliance and Audit Performance

Expanded scope of ISO Accreditation

Improved WA PHL Electronic Training and Competency Performance and Compliance

Complete implementation of Document Control system

Complete conversion of paper-based Proficiency Testing Records and Follow-Up to an electronic system

Synthesis of Power BI dashboards to empower staff and supervisors with critical quality data and automation of laboratory quality indicators

#### Performance metrics

Maintaining College of American Pathologists (CAP) Accreditation, ANAB ISO Accreditation, FDA and Department of Ecology Inspections. Target 100% Accreditation/Certification Maintenance with on time responses to inspection findings and Completing Inspection Proof for CAP, ISO and FDA Target 90% Inspection Proof Completion in Media Lab Inspection Proof

Increased number of activities and sections under Scope of ISO Accreditation. Target addition of 2 methods/activities to ISO Scope of Accreditation by January 2025 and 2 additional methods/activities per year thereafter

Improved percentage of training and competency assessments completed on-time. Target 90% Competency Assessments completed on-time

Increased percentage of documents completed and approved in Media Lab (document control software). Target (95%). Periodic Review completion rate improved (90% completion rate)

Implementation and improvement in electronic systems for proficiency testing completion and follow-up. (Target: Implementation of PT Attestation and PT Review forms in Media Lab IQE and all laboratories utilizing by 2025)

Creation and delivery of Quality Assurance Power BI Dashboards. (Target: 1 Dashboard by July 2023; Target 2: Quality Indicator Automation Dashboard by 2025 with Pre-analytic, Analytic, and Post-Analytic data for each section of each office)

#### **Laboratory Technical Administration Expansion**

#### Performance outcomes

#### WA PHL Contract/Grant Management

Create a structured and organized process to the contract and/or grant management system at WA PHL

Perform assessment of the current state and implement lean processes whenever possible

Strengthen interdepartmental relationship and collaboration with Contracts, Procurement and DES

#### **Asset Management**

Implement an up-to-date modern solution for all the assets at WA PHL that contain critical information about asset warranties, repairs and depreciation (STAMS)

#### LIMS Implementation

Implementation of technology-based solutions increasing productivity and efficiency (LIMS)

Enhanced laboratory connectivity, interoperability, and data analysis automation

#### **Performance metrics**

## WA PHL Contract/Grant Management

Establish an average timeline for contract execution by 7/2024

Complete current state analysis and identify opportunities for LEAN solutions by 7/2024

Work with DOH Contracts office and DES to develop supplemental resources (job aids, procedures, diagrams) are complete and readily available for Lab Staff by 7/2025

## Asset Management

Able to provide periodic reports per department for the respective assets detailing business driven information i.e. repairs and associated costs per given type of equipment, warranty terms for various parts, ownership transfer within departments by 7/2026

#### **LIMS Implementation**

Complete delivery of all laboratory testing modules according to the project schedule Estimated 7/2025 Complete full instrument integration by Estimated 7/2025

## **Operations Support and Infrastructure**

## Performance outcomes

Implement and maintain Chemical Hazard Database through SDS management

Provision of Safety related training

Redesign of Accident and Incident Investigation Program

Develop and maintain safety Share-point page for improved visibility into safety office

Expand staff understanding of laboratory biological and chemical hazard waste

Automate operations databases used for preventative maintenance (PM), purchasing supplies minimum/maximum, inventory control tracking expiration dates and lot numbers for Media Prep, shipping/receiving notifications.

Increase capacity for Media Prep for expanded testing needs in laboratory

Improved tracking of immunizations, consistency in procedural and staff safety and electronic health records system and Occupational Health (OH) database to support program

#### **Performance metrics**

Complete annual Chemical inventory and all new chemicals are entered into Chemical Hazard Database by 08/31 of each year Percentage of staff completing training modules on-time: Target 95%

Percentage of Accident Incident Reports closed within expected time frame: Target 90%

Complete Share-point site by 7/2024

Percentage of Non-Conforming Events associated with waste storage/removal through clean harbors. Target: <5%

Complete implementation of automated system for Operations by 7/2026

Hire and train additional support services staff by 7/2024

Onboard Occupational Health nurse consultant to support staff safety and critical occupational health needs by 7/2024

#### Chemical Incident Response (CIRL) Enhancement

#### **Performance outcomes**

Improved time for various tasks such as: method development, optimization, and implementation of new and/or existing methods on new and/or existing instrument platforms

Enhanced preparedness to respond to Public Health emergencies

Re-establish contact/relationships with first responders and other stakeholders

Increased capacity for testing of clinical specimens and unknown samples

Increased number of staff able to perform critical testing in the CIRL team

#### **Performance metrics**

Reduce timeline for method verification/validation studies Target 2 months

Onboard and train 2 additional staff by 7/2024

Create a new list of contacts and establish outreach with local poison control, HazMat, law enforcement, FBI, Civil Support Teams, etc.

Target: contact each entity by 7/2025

Onboard and train 2 additional staff by 7/2024

Decreased turnaround time for reporting on clinical specimens and/or unknown samples. Target: Results within 2 days

## WA PHL Training Program

#### **Performance outcomes**

Convert existing in person laboratory training modules to on-line/electronic modules which improves the ability to provide just in time training to support emergency preparedness

Trainings presented in a more engaging and focused manner, easily accessible, will improve timely completion rate and information retention

Complete all required trainings for new hires so that they can begin supporting their lab sections sooner

Keeping laboratory staff current with safety, technical and emergency topics will enhance overall facility regulatory compliance

#### **Performance metrics**

Target 90% of all training modules are electronic by 7/2026

Improved completion rate for assigned trainings target: 90% completed on time by 7/2026

New hires complete all required trainings Target: within 90 days of start date by 1/2027

Reduce the number of inspection findings where root cause analysis identifies a training gap. Target: <10% of annual inspection findings by 1/2027

#### **Community Access to Laboratory Training Resources**

#### Performance outcomes

Establish administrative processes (working with HR) for the WA PHL Community Training Program

Develop partnerships with appropriate academic institutions to recruit fellows and interns

Onboard up to one 2-year PhD level fellow and 2 graduate level interns per year

#### **Performance metrics**

Complete program development by 1/2024

Establish relationships with academic institutions and begin recruiting by 7/2024

Complete onboarding of the first 3 students by 9/2024

FY2024 \$8,147,000

FY2025 \$7,690,000

FY2026 \$7,690,000

FY202\\$7,690,000

Estimated expenditures include salary, benefit, and related costs to assist with administrative workload activities. These activities include policy and legislative relations; information technology; budget and accounting services; human resources; contracts; procurement, risk management, and facilities management.

Workforce Ass	umptions:		

FTE	Job Classification	Salary	Benefits	Startup Costs	FTE Related Costs
1.0	ADMINISTRATIVE ASST 3	\$53,000.00	\$26,000.00	\$4,000.00	\$8,000.00
1.0	CHEMIST 1	\$65,000.00	\$28,000.00	\$4,000.00	\$8,000.00
1.0	CHEMIST 2	\$75,000.00	\$30,000.00	\$4,000.00	\$8,000.00
5.0	HEALTH SERVICES CONSULTANT 2	\$349,000.00	\$146,000.00	\$21,000.00	\$38,000.0
1.0	HEALTH SERVICES CONSULTANT 3	\$79,000.00	\$31,000.00	\$4,000.00	\$8,000.00
1.0	HEALTH SERVICES CONSULTANT 4	\$87,000.00	\$33,000.00	\$4,000.00	\$8,000.00
1.0	CHEMIST 3	\$87,000.00	\$33,000.00	\$4,000.00	\$8,000.00
2.0	TECHNICAL TRAINING CONSULTANT	\$166,000.00	\$64,000.00	\$8,000.00	\$15,000.0
2.0	LABORATORY TECHNICIAN 1	\$112,000.00	\$52,000.00	\$8,000.00	\$15,000.0
6.0	LABORATORY TECHNICIAN 2	\$361,000.00	\$163,000.00	\$25,000.00	\$45,000.0
2.0	LABORATORY TECHNICIAN 3	\$129,000.00	\$56,000.00	\$8,000.00	\$15,000.0
3.0	MANAGEMENT ANALYST 3	\$225,000.00	\$91,000.00	\$12,000.00	\$23,000.0
1.0	MAINTENANCE MECHANIC 2	\$63,000.00	\$28,000.00	\$4,000.00	\$8,000.00
12.0	MICROBIOLOGIST 2	\$901,000.00	\$365,000.00	\$50,000.00	\$91,000.0
7.0	MICROBIOLOGIST 3	\$609,000.00	\$231,000.00	\$29,000.00	\$53,000.0
4.0	MICROBIOLOGIST 4	\$404,000.00	\$144,000.00	\$17,000.00	\$30,000.0
1.0	OCCUPATIONAL NURSE CONSULTANT	\$112,000.00	\$38,000.00	\$4,000.00	\$8,000.00
1.0	SAFETY OFFICER 3	\$77,000.00	\$31,000.00	\$4,000.00	\$8,000.00
2.0	WMS02	\$240,000.00	\$80,000.00	\$8,000.00	\$15,000.0
54.0		\$4,194,000.0	<b>%</b> 1,670,000.0	<b>6</b> 222,000.0	08412,000.

## Strategic and Performance Outcomes

## Strategic Framework:

This request supports the following goal areas as defined in the Governors Results Washington Plan.

Healthy and Safe Communities (Goal 4). The Public Health Laboratories fill a unique role in the State by providing a broad suite of lab services to all communities. Diagnostic testing services are provided to Local Health Jurisdictions at no cost. Specialty lab services for rare and dangerous pathogens are provided to all labs in Washington State. Providing this testing in State provides results quickly improving patient outcomes and mitigating exposures for lab staff in Washington State. The Bioterrorism Response Team and CIRL team provides clinical and environmental testing for first responders, law enforcement, clinicians, schools, and others to identify suspected exposures. Data generated by the WA PHL supports overall situational awareness for Local State and National Epidemiologists.

World Class Education (Goal 1). The WA PHL has a long history of supporting the educational development of scientists pursuing a career in Public Health. We have hosted many post doctorate fellows, student and intern rotations from local community colleges and universities as well as international cultural enrichment programs. Objectives of this request will empower WA PHL to provide enhanced training and workforce development and collaboration with community partners. This request will also improve our curriculum and allow us to increase the number of students we can reach. We will also develop and offer enhanced continuing education for Public Health professionals at the Local and State level.

**Efficient, effective and accountable Government (Goal 5).** Much of the work currently underway seeks to leverage technology solutions to reduce reliance on manual error prone processes. Many of these requests seek to provide resource which will ensure delivery of high-quality services with enhanced productivity and reliability by further replacing manual processes with higher efficiency automated processes and data delivery. This will lead to a much more efficient Public Health System capable of doing more with fewer staff.

This request aligns with the following elements of the agency's tranformation plan.

HEALTH SYSTEMS AND WORKFORCE TRANSFORMATION All Washingtonians are well served by a health ecosystem that is robust and responsive, while promoting transparency, equity, and trust. This request seeks to diversify our funding away from federal sources. Currently, all emergency response functions at the WA PHL are funded by Federal sources set to expire in 2023 or beyond. Diversifying these sources is essential to fund necessary supplies, service contracts, equipment, and essential staff to support continued ability to respond to emerging threats.

#### **Performance Outcomes:**

# **Emergent Disease Testing Reliability and Responsiveness Performance outcomes**

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#### **Performance Metrics**

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## Quality Assurance (QA) Systems Improvement

## Performance outcomes

Improved Regulatory Compliance and Audit Performance

Expanded scope of ISO Accreditation

Improved WA PHL Electronic Training and Competency Performance and Compliance

Complete implementation of Document Control system

Complete conversion of paper-based Proficiency Testing Records and Follow-Up to an electronic system

Synthesis of Power BI dashboards to empower staff and supervisors with critical quality data and automation of laboratory quality indicators

#### **Performance metrics**

Maintaining College of American Pathologists (CAP) Accreditation, ANAB ISO Accreditation, FDA and Department of Ecology Inspections. Target 100% Accreditation/Certification Maintenance with on time responses to inspection findings and Completing Inspection Proof for CAP, ISO and FDA Target 90% Inspection Proof Completion in MediaLab Inspection Proof

Increased number of activities and sections under Scope of ISO Accreditation. Target addition of 2 methods/activities to ISO Scope of Accreditation by January 2025 and 2 additional methods/activities per year thereafter

Improved percentage of training and competency assessments completed on-time. Target 90% Competency Assessments completed on-time

Increased percentage of documents completed and approved in MediaLab (document control software). Target (95%). Periodic Review completion rate improved (90% completion rate)

Implementation and improvement in electronic systems for proficiency testing completion and follow-up. (Target: Implementation of PT Attestation and PT Review forms in MediaLab IQE and all laboratories utilizing by 2025)

Creation and delivery of Quality Assurance Power BI Dashboards. (Target: 1 Dashboard by July 2023; Target 2: Quality Indicator Automation Dashboard by 2025 with Pre-analytic, Analytic, and Post-Analytic data for each section of each office)

## **Laboratory Technical Administration Expansion**

#### Performance outcomes

## WA PHL Contract/Grant Management

Create a structured and organized process to the contract and/or grant management system at WA PHL

Perform assessment of the current state and implement lean processes whenever possible

Strengthen interdepartmental relationship and collaboration with Contracts, Procurement and DES

## **Asset Management**

Implement an up-to-date modern solution for all the assets at WA PHL that contain critical information about asset warranties, repairs and depreciation (STAMS)

## LIMS Implementation

Implementation of technology-based solutions increasing productivity and efficiency (LIMS)

Enhanced laboratory connectivity, interoperability, and data analysis automation

#### Performance metrics

#### WA PHL Contract/Grant Management

Establish an average timeline for contract execution by 7/2024

Complete current state analysis and identify opportunities for LEAN solutions by 7/2024

Work with DOH Contracts office and DES to develop supplemental resources (job aids, procedures, diagrams) are complete and readily available for Lab Staff by 7/2025

## **Asset Management**

Able to provide periodic reports per department for the respective assets detailing business driven information <u>i.e.</u> repairs and associated costs per given type of equipment, warranty terms for various parts, ownership transfer within departments by 7/2026

## **LIMS Implementation**

Complete delivery of all laboratory testing modules according to the project schedule Estimated 7/2025

Complete full instrument integration by Estimated 7/2025

## **Operations Support and Infrastructure**

## Performance outcomes

Implement and maintain Chemical Hazard Database through SDS management

Provision of Safety related training

Redesign of Accident and Incident Investigation Program

Develop and maintain safety Sharepoint page for improved visibility into safety office

Expand staff understanding of laboratory biological and chemical hazard waste

Automate operations databases used for preventative maintenance (PM), purchasing supplies minimum/maximum, inventory control tracking expiration dates and lot numbers for Media Prep, shipping/receiving notifications.

Increase capacity for Media Prep for expanded testing needs in laboratory

Improved tracking of immunizations, consistency in procedural and staff safety and electronic health records system and Occupational

Health (OH) database to support program

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#### **Performance metrics**

Complete annual Chemical inventory and all new chemicals are entered into Chemical Hazard Database by 08/31 of each year Percentage of staff completing training modules on-time: Target 95%

Percentage of Accident Incident Reports closed within expected time frame: Target 90%

Complete Sharepoint site by 7/2024

Percentage of Non-Conforming Events associated with waste storage/removal through clean harbors. Target: <5%

Complete implementation of automated system for Operations by 7/2026

Hire and train additional support services staff by 7/2024

Onboard Occupational Health nurse consultant to support staff safety and critical occupational health needs by 7/2024

#### Chemical Incident Response (CIRL) Enhancement

#### Performance outcomes

Improved time for various tasks such as: method development, optimization, and implementation of new and/or existing methods on new and/or existing instrument platforms

Enhanced preparedness to respond to Public Health emergencies

Re-establish contact/relationships with first responders and other stakeholders

Increased capacity for testing of clinical specimens and unknown samples

Increased number of staff able to perform critical testing in the CIRL team

#### **Performance metrics**

Reduce timeline for method verification/validation studies Target 2 months

Onboard and train 2 additional staff by 7/2024

Create a new list of contacts and establish outreach with local poison control, HazMat, law enforcement, FBI, Civil Support Teams, etc.

Target: contact each entity by 7/2025

Onboard and train 2 additional staff by 7/2024

Decreased turnaround time for reporting on clinical specimens and/or unknown samples. Target: Results within 2 days

#### WA PHL Training Program

#### **Performance outcomes**

Convert existing in person laboratory training modules to on-line/electronic modules which improves the ability to provide just in time training to support emergency preparedness

Trainings presented in a more engaging and focused manner, easily accessible, will improve timely completion rate and information retention

Complete all required trainings for new hires so that they can begin supporting their lab sections sooner

Keeping laboratory staff current with safety, technical and emergency topics will enhance overall facility regulatory compliance

## Performance metrics

Target 90% of all training modules are electronic by 7/2026

Improved completion rate for assigned trainings target: 90% completed on time by 7/2026

New hires complete all required trainings Target: within 90 days of start date by 1/2027

Reduce the number of inspection findings where root cause analysis identifies a training gap. Target: <10% of annual inspection findings by 1/2027

#### **Community Access to Laboratory Training Resources**

#### Performance outcomes

Establish administrative processes (working with HR) for the WA PHL Community Training Program

Develop partnerships with appropriate academic institutions to recruit fellows and interns

Onboard up to one 2-year PhD level fellow and 2 graduate level interns per year

#### **Performance metrics**

Complete program development by 1/2024

Establish relationships with academic institutions and begin recruiting by 7/2024

Complete onboarding of the first 3 students by 9/2024

## **Equity Impacts**

#### Community outreach and engagement:

The WAPHL provides services to other community facing entities within the Public Health ecosystem (DOH programs and LHJ's). The WAPHL does not routinely perform community outreach directly. Our services are responsive to the needs of these community facing groups and programs. However, an additional focus of this proposal would be to strengthen community outreach and partnerships with Universities, Community Colleges throughout the state in a way that fosters and develops future Public Health workforce through provision of WA PHL teaching and training programs including modernized Public Health Laboratory data processing, analysis, and bioinformatics. Developing the next generation Public Health workforce will be pivotal in further addressing health inequity.

## **Disproportional Impact Considerations:**

The proposal to improve WAPHL infrastructure has the potential to benefit all populations within Washington state. The services are not directed towards any particular group or geographical location. The laboratory services are available upon request and in collaboration with numerous public facing entities in the State. In short, the services rendered by the WAPHL will be as equitable and inclusive as the programs and organizations that we serve.

#### **Target Populations or Communities:**

The data and services provided by WA PHL directly support DOH programs and local health departments and are frequently used to direct resources and interventions to vulnerable and underserved populations. Enhanced WA PHL infrastructure will directly benefit groups that have been historically and disproportionally impacted and marginalized such as native tribes, socio-economically challenged communities and remote areas of the state. Additionally, WA PHL often serves economically disadvantaged segments of the population by providing no cost, high-quality, rapid testing services to underserved groups and LHJs.

## Other Collateral Connections

## **Puget Sound Recovery:**

N/A

## State Workforce Impacts:

N/A

## Intergovernmental:

If funded, the WA PHL would significantly improve services offered to Local Health Jurisdictions.

If funded we would seek to further engage academic institutions in the state to improve our student internship program. This will have the dual effect of supporting the development of future Public Health professionals and supporting the academic goals of Washington residents. We believe that the request would be generally supported and do not anticipate any opposition.

## Stakeholder Response:

Association of Public Health Laboratories
College of American Pathologists
American National Standards Institute National Accreditation Board
Clinical laboratories in Washington State
Environmental Testing Laboratories in Washington State
Clinical Laboratory Advisory Council
Marginalized communities with limited access to health care

## **State Facilities Impacts:**

N/A

## **Changes from Current Law:**

N/A

## Legal or Administrative Mandates:

N/A

## Reference Documents

Sustainable Public Health Laboratories FNCAL 07 28 22 REVISED.xlsm

## IT Addendum

Does this Decision Package include funding for any IT-related costs, including hardware, software, (including cloud-based services), contracts or IT staff?

No

## Objects of Expenditure

Objects of Expenditure  Dollars in Thousands	Fiscal Years		Biennial Fiscal		Years	Biennial
	2024	2025	2023-25	2026	2027	2025-27
Obj. A	\$5,149	\$4,902	\$10,051	\$4,902	\$4,902	\$9,804
Obj. B	\$2,134	\$2,023	\$4,157	\$2,023	\$2,023	\$4,046
Obj. C	\$103	\$90	\$193	\$90	\$90	\$180
Obj. E	\$308	\$289	\$597	\$289	\$289	\$578
Obj. J	\$45	\$0	\$45	\$0	\$0	\$0
Obj. T	\$408	\$386	\$794	\$386	\$386	\$772

# Agency Contact Information

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