



Department of Health
2021-23 Regular Budget Session
Policy Level - P1 - COVID-19: Contain the Spread

Agency Recommendation Summary

The Department of Health (DOH) requests funding to support the ongoing statewide effort to control the spread of COVID-19 through diagnostic testing, case investigation and contact tracing, care coordination, outbreak response, data collection and analysis, public communications, and necessary operational and information technology support. Although DOH received spending authority to use COVID-19-related federal funding sources to perform this needed work through the end of calendar year 2020, it is unclear if the federal government will continue funding the COVID-19 response past December 2020 (CARES Act). A 2021 supplemental request will be submitted to acquire funding to continue this work from January 2021 to June 2021. This request asks for funding from July 2021 to June 2022.

Fiscal Summary

Fiscal Summary <i>Dollars in Thousands</i>	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Staffing						
FTEs	223.6	0.0	111.8	0.0	0.0	0.0
Operating Expenditures						
Fund 001 - 1	\$387,461	\$0	\$387,461	\$0	\$0	\$0
Fund 001 - 2	\$50,564	\$0	\$50,564	\$0	\$0	\$0
Total Expenditures	\$438,025	\$0	\$438,025	\$0	\$0	\$0
Revenue						
001 - 0393	\$50,564	\$0	\$50,564	\$0	\$0	\$0
Total Revenue	\$50,564	\$0	\$50,564	\$0	\$0	\$0

Decision Package Description

Problem

At the point of this writing, Congress has not acted to provide COVID-19 response dollars (CARES Act) beyond December 31, 2020. Since the COVID-19 pandemic is an ongoing threat that requires a sustained – all-out public health, whole of government, and whole of society – response to contain the virus, to minimize deaths, to prevent as much illness as possible, and to support full and quick recovery of the state’s economy and in-person education, DOH requests a combination of state and federal spending authority to ensure continued public health response and mitigation efforts. For the public health response, this means implementing tried and true core public health work:

- Delivering a safe and effective vaccine to millions of people (most likely two doses 21 to 28 days apart) when available;
- Testing people for COVID-19 for diagnostic and surveillance purposes;
- Implementing case investigation and contract tracing;
- Providing care coordination to support persons in isolation and quarantine;
- Controlling outbreaks in workplaces/businesses, schools, congregate settings, and places of worship;
- Gathering data on COVID-19 (number of cases, who is getting it, etc.) using electronic data systems that are secure, robust, and modern; and
- Communicating with the public, policy makers, and media about all things COVID-19.

To accomplish this, adequate funding is required.

Background:

In August 2020, the Office of Financial Management and the fiscal committees of legislature approved federal unanticipated receipt funding through December 2020 for the “Box in the Virus” work of public health that provides conditions for suppressing the virus in adequate amounts to allow a reasonably safe reopening of many businesses. The Box in the Virus approach supported comprehensive COVID-19 diagnostic testing, case investigation and contact tracing, and provided support for individuals requiring isolation and/or quarantine. It also included surveillance strategies to quickly identify outbreaks and control hotspots to stop the spread as quickly as possible. It also included a comprehensive outreach approach to inform the public how to protect themselves and others. Last, it included the necessary operational and information technology activities needed to support the plan.

That original request asked for \$899 million for a 24-month response, which would be funded in part through a \$177 million federal

“Epidemiology and Laboratory Capacity (ELC): Enhancing Detection” grant, with the remainder needing to come from another, to-be-determined fund source.

As noted, funding was provided for only the first six months of the plan – from July to December 2020, using a \$73 million appropriation from the state’s Coronavirus Relief Fund pool (from the Coronavirus Aid, Relief, and Economic Security (CARES) “3.0” Act) and the remainder (\$156 million) from anticipated reimbursement from the Federal Emergency Management Agency (FEMA).

This request therefore seeks the spending authority for the remaining 18 months of the two-year plan.

Box In the Virus: the Plan

The “Box In The Virus” plan consists of seven distinguishable strategies, which must all operate in concert with each other in order for any of them to be of value. These seven strategies are:

- Diagnostic Testing;
- Case Investigation and Contact Tracing;
- Outbreak Response;
- Care Coordination;
- Community Outreach;
- Data Collection and Analysis (also called Surveillance); and
- Information Technology and Operations.

DIAGNOSTIC TESTING

This activity develops the statewide testing strategy, assures adequate lab capacity across the state – including the expansion of the Public Health Laboratories (PHL) capabilities – and procures and distributes testing specimen collection supplies in response to outbreaks and local health jurisdiction (LHJ) needs. In addition, this activity ensures testing access to individuals who are uninsured or underinsured.

Any strategy to suppress the virus, prevent deaths and fully reopen the state (businesses, schools, places of worship, recreational and entertainment venues, etc.) requires rapid identification of those persons with COVID-19 infection and an understanding of which counties, cities, and communities have COVID-19 prevalence rates low enough to allow them to safely reopen and stay open. Adequate access to COVID-19 testing is necessary to acquire that understanding. Just as important, adequate laboratory capacity is also paramount to assure adequate statewide testing capacity and acceptable turnaround times. This activity is necessary to meet key performance indicators for the state’s testing strategy:

- Reduce positive test rate to one out of 50 (two percent); and
- Provide access to testing within 24 hours of symptom onset.

COVID-19 testing technologies are constantly changing, and include molecular, antigen, and serology tests. Most testing methods, at the time of this writing, require laboratory analysis, although some point of care tests are being developed. DOH is looking forward to tests that can be administered at home, similar to pregnancy tests.

DOH expects 2.4 million tests a year, across various sub populations. This estimate is based on daily state testing levels in mid-April 2020 (about 4,000 a day) and assumes that as restrictions continue to lift, testing levels would increase between 10 to 30 percent for six months of the fiscal year. Then, during the typical flu season (the other six months), this model assumes individuals exhibiting COVID-like symptoms would be four times more prevalent than those with seasonal influenza. As a result, COVID-19 testing would pick up significantly during those flu season months.

There are subpopulations that require routine, scheduled testing. Annual test volume estimates assume staff within nursing homes and other adult living facilities need to be tested twice a month, regardless of whether they are exhibiting COVID-like symptoms or not. More details on the subpopulations are included in the table below, as well as in the support document titled, “*FNCAL & Other Backup Support – Diagnostic Testing*”.

Estimated Annual Testing Across Various Sub-Populations

Sub Population	Annual Tests	Percentage of Population Uninsured/Underinsured		Est. Number of Tests to be Covered by the State	
		Uninsured ¹	Underinsured ²	Uninsured	Underinsured
Coronavirus-Like Illness	7,452,000	7%	10%	521,640	745,200
Close Contacts	660,000	7%	10%	46,200	66,000
Nursing Home Staff ³	552,000	14%	20%	77,280	110,400
Assisted Living Facility Staff ³	1,200,000	14%	20%	168,000	240,000
Migrant Populations ³	288,000	14%	20%	40,320	57,600
Inpatient	708,000	7%	10%	49,560	70,800
Other Surveillance Populations	1,200,000	7%	10%	84,000	120,000
Total	12,060,000	8%	12%	987,000	1,410,000
				Total	2,397,000

¹ Uninsured rate in Washington State is 7%; Source: KFF 2018, <https://www.kff.org/other/state-indicator/total-population>

² Underinsured rate in Washington State is 20%, half will require payment support; Source: Commonwealth Fund 2019;

<https://www.commonwealthfund.org/press-release/2019/underinsured-rate-rose-2014-2018-greatest-growth-among-people-employer-health>

³ Higher estimated rates of un/underinsured for these sub populations as compared to general population; Source PHI 2017,

<https://phinational.org/wp-content/uploads/2017/07/aca-impact-dcws-brief.pdf>

Testing

For the purposes of this request, it is assumed the state will be able to perform 2,000 tests per day at \$20 per test and the remainder (about 4,700) at \$100 per test. When including the estimated cost-per-test-kit of \$12, the average unit testing cost used in this estimate is \$87.64 per test. Since DOH is always seeking more cost effective methods to test, the cost-per-test may change in the future.

Staffing

9.0 FTEs are needed to oversee the expansion and testing activities of the agency’s PHL. For clarity, all staff cost estimates are annualized and would be to be sustained on an ongoing basis. All proposed staff would be employed by DOH. Brief descriptions of these positions are provided in the “FNCAL & Other Backup Support – Diagnostic Testing” document that accompanies this request.

DOH Staffing Classifications

Class	FTE
Supervisor (WMS4)	2.0
Administrative Assistant 5	1.0
Health Services Consultant 4	2.0
Health Services Consultant 3	3.0
Management Analyst 3	1.0
Total	9.0

CASE INVESTIGATION AND CONTACT TRACING

This activity supports the timely identification and investigation of cases and contacts. Fully funded, this activity is anticipated to meet the following performance metrics:

- 90 percent of cases reached within 24 hours of receipt of positive lab test report;
- 90 percent of contacts reached within 48 hours of receipt of positive lab test report; and
- 80 percent of cases and contacts contacted daily during their quarantine period.

Successful case investigation and contact tracing for COVID-19 is dependent on a robust and well-trained public health workforce. To be most effective, case investigation and contact tracing requires staff with adequate training, language skills, cultural sensitivity, supervision, and access to social and medical support for clients and their contacts. Scaling up case investigation and contact tracing efforts ideally involves a large

multidisciplinary workforce under the daily oversight and management of a leadership team with subject matter expertise.

This strategy provides the state’s local health jurisdictions (LHJ) with enough resources to perform approximately 1,000 daily case interviews, 6,000 daily contact interviews, and 50,000 daily monitoring check-ins. These figures also include additional supervision and administrative positions which are critical to the successful implementation of case and contact investigation work.

This work must occur 365 days out of the year to ensure that cases and contacts are reached in a timely manner that allows this effort to stop chains of transmission. If communities are unable to effectively isolate patients and ensure contacts can separate themselves from others, rapid community spread of COVID-19 is likely to increase to the point that strict mitigation strategies will again be needed to contain the virus.

These efforts aim to reduce the spread of COVID-19 within the state's communities by identifying contacts early, implementing prevention measures through ongoing guidance and support during isolation and quarantine periods, and supporting ongoing disease detection within communities.

This proposal also includes funding to support centralized staffing at DOH provided primarily through a contractor to provide data management, support training, technical assistance for locals, standardized guidance, and surveillance application support.

Resources to LHJs

Based on an estimated state population of over 7.6 million and a staffing ratio of eight staff per 100,000 population, this proposal is estimated to provide sufficient financial resources to the LHJs to employ a total of 608 full-time case investigators, along with an additional 138 full-time support, managerial, data management and epidemiological staff.

These resources will allow the state’s public health system to accommodate about 500 new cases daily, 3,000 new contacts daily, and 25,000 cases and contacts in isolation/quarantine for 14 days. DOH estimates these staff will be necessary for at least 12 to 18 months, providing time for community “herd immunity” to develop and/or the discovery/administration of a vaccine.

LHJ Staffing Classifications

Role	Equivalent State Class	FTE
Case & Contact Tracing	Health Services Consultant 3	608.0
Case & Contact Support	Administrative Assistant 2	73.0
Data Management	Health Service Consultant 2	73.0
Team Lead	Epidemiologist 2	73.0
Office Manager	WMS 1	14.0
Clinical Epidemiologist	Public Health Medical Epidemiologist	15.0
Total		856.0

Brief descriptions of the LHJ positions are provided in the “2021-23 FNCAL & Other Backup Support – Case Invest-Contact Tracing” document that accompanies this request.

Contracted Centralized Support

To provide additional support to the contract tracing and case investigation work of the LHJs, a nationwide contractor has been procured to provide surge capacity when local cases exceed local capacity. Based on the most recent data of the summer months, the costs are trending to about \$10 million for the first six months of this fiscal year. This however does not account for expected case increases in the late fall, winter and early spring. As noted in the testing volume assumptions, COVID-19 testing will pick up significantly during the flu season months. Therefore, for the purposes of this request, DOH estimates the annualized cost for this contractor to be about \$40.0 million. Costs may increase if additional capacity is needed.

DOH Staffing

In addition to LHJ resources, DOH has an ongoing, sustained need to support its COVID-19 staff to oversee, support and expand investigation system functionality and provide quality assurance review of investigations data. Brief descriptions of the DOH positions are provided in the “FNCAL & Other Backup Support – Case Invest Contact Tracing” document that accompanies this request.

DOH Staffing Classifications

Class	FTE
Epidemiologist 3 (Non-Medical)	9.0
Health Services Consultant 3	8.0
Epidemiologist 2 (Non-Medical)	16.0
Health Services Consultant 2	3.0
Epidemiologist 1	5.0
Health Services Consultant 1	3.0
Senior Epidemiologist (Non-Medical)	4.0
Health Services Consultant 4	1.0
Total	49.0

OUTBREAK RESPONSE

As parts of Washington are progressing through reopening phases, supporting local and regional outbreaks of COVID-19 in congregate settings, such as long term care facilities, behavioral health facilities, agricultural worker housing, homeless shelters, hospitals, correctional facilities, and in education settings (early learning, K-12, and universities) is critical to a disease containment and suppression strategy. In order to mitigate impacts to populations at higher risk (including the elderly and the medically frail) and prevent community spread, local outbreak identification and response supplemented with regional and state resources will be an ongoing need until a vaccine is available and widely distributed.

This activity supports the timely identification, follow-up and investigation of local outbreaks. It also includes efforts to ensure the availability and safety of facilities which house the state’s farmworker communities – a population that has been significantly impacted by a recent outbreaks. Fully funded, this activity is anticipated to improve the following performance metrics:

- Number of outbreaks reported by week (defined as two or more non-household cases, epidemiologically linked within 14 days in a workplace, congregate living or institutional setting).

Safe Start targets:

Weekly Outbreak Targets by County

County Size	Population Threshold	Weekly Outbreak Target
Small	<75,000	0
Medium	Between 75,000 and 300,000	1
Large	Between 300,001 and 1,000,000	2
Very Large	Over 1,000,000	3

Overall, these efforts aim to reduce the spread of COVID-19 within communities by identifying outbreaks and providing response support to ensure consistent and flexible mitigation efforts are employed.

DOH Staffing

An ongoing and sustained need of 36.6 FTE will support the regional and state level deployable teams and staffing to cover seven regions across the entire state. This capacity, expected to last between 24 to 30 months, will provide the ability of local and state level public health workforce to support and mitigate impacts to more than 400 outbreaks per year.

DOH Staffing Classifications

Setting	Role	Class	FTE	
Hlthcare Congregate	Outbrk Prevention/Resp Medical Director	Pblc Hlth/Epi 4	1.0	
	Strategic Partners Coordinator	Hlth Svcs Consult 4	1.0	
	Public Hlth or Nursing Student	Hlth Svcs Consult 1	0.8	
	Hlthcare-Assoc Infect (HAI) Surveillance Mgr	Nurse Consult Advisor	0.3	
	Nat'l Hlthcare Safety Network Consultant	Hlth Svcs Consult 3	1.0	
	HAI Lead Epidemiologist (Epi)	Epi 3	0.5	
	Infection Cntrl Assess/Resp (ICAR) Epi	Epi 2	0.8	
	HAI Epi	Epi 1	1.0	
	ICAR Admin Asst	Hlth Svcs Consult 1	1.0	
	Tribal Infection Preventionist	Instit'l Nurse Consult	1.0	
	Occupational Hlth Nurse	Instit'l Nurse Consult	1.0	
	Industrial Hygienist	Industrial Hygienist 3	0.5	
	HAI/AR Administrative Asst	Hlth Svcs Consult 2	0.8	
	ICAR Team Coordinator	Hlth Svcs Consult 2	0.5	
	Non-Hlthcare Congregate	Outbrk/Resp Congregate Prgrm Mgr	Senior Epi	1.0
		Outbrk Resp/Collab Action (ORCA) Students	Hlth Svcs Consult 1	1.0
		Outbrk Lead Epi	Epi 2	4.0
Outbrk Lead Epi		Epi 1	1.0	
COVID-19 Clinical Consultant		Pblc Hlth Nurse Consult	1.0	
Surveillance Team Supervisor		Epi 3	1.0	
Surveillance Team Member		Epi 1	2.0	
Surveillance Team Member		Epi 2	1.0	
Field Deployment Team Member		Indust'l Hygienist 3	0.5	
Capacity Development Coordinator		Hlth Svcs Consult 2	1.0	
Additional		Outbrk Lead Epi	Epi 1	2.0
		Outbrk Action Team Supervisor	Epi 3	1.0
		COVID-19 Medical Epi	Pblc Hlth/Epi 3	0.2
		HAI AR Office Manager	Nurse Consult Advisor	0.3
		ICAR Manager	Nurse Consult Advisor	0.4
		Strategic Partners Coordinator	Hlth Svcs Consult 2	1.0
		Hlthcare Quality/Policy Specialist	Instit'l Nurse Consult	1.0
	NHSN Data Validation Epi	Epi 1	1.0	
	Consultant	Pblc Hlth Nurse Consult	1.0	
	DOH ICAR Education Coordinator	Instit'l Nurse Consult	1.0	
	Admin Assistant	Admin Asst 2	1.0	
	Public Hlth Advisor	Pblc Hlth Advisor 3	2.0	
	Total			36.6

LHJ Staffing

In addition, this request supports regional staff within the LHJs to support local outbreak response efforts. For the purposes of this request, DOH estimates the need for the following.

Regional (LHJ) Staffing Classifications (Estimated)

Role	Equivalent State Class	FTE
West & East Region Outbrk/Resp Team Mgrs	Hlth Svcs Consult 4	2.0
Region Outbrk Prvntion/Resp Admin Asst	Hlth Svcs Consult 1	1.0
Regional Infection Preventionist	Instit'l Nurse Consult	6.8
Region Infect Prvntion/Comm Hlth Educator	Hlth Svcs Consult 3	7.0
Regional Outbrk Prevention/Resp Epi	Epi 2	6.8
Regional Lab Coordinator	Hlth Svcs Consult 3	4.8
Total		28.4

Brief descriptions of the positions are provided in the “2021-23 FNCAL & Other Backup Support – Outbreak Response” document that accompanies this request.

CARE COORDINATION

All components of the “Box In The Virus” strategy for COVID-19 are crucial to reduce the spread of the disease. Diagnostic testing identifies people who are infected, which ensures they get needed care and allows for case investigations. During these investigations, people who have been exposed to disease (contacts) are identified. However, identification of cases and contacts is not enough; it is necessary to protect these individuals in isolation (if sick with COVID) or quarantine (for close contacts) in order to break transmission and reduce the number of people infected.

Some individuals and families have the means and ability to isolate and quarantine with no or limited support (e.g. daily check-in, health education materials). However, case reports indicate that historically marginalized and vulnerable populations are disproportionately infected. Thus, culturally sensitive social support from trusted sources are required to support individuals’ safety, comfort, and adherence with isolation and quarantine guidance. Many of these services can be provided through existing social service programs (e.g. Dependent Care Assistance Program, Medicaid, Supplemental Nutrition Assistance Program (SNAP), etc.) which make use of and augment networks of community-based workers (such as community health workers). Individuals in these systems, however, still may require immediate access to additional support. Individuals outside these programs may require even more comprehensive support. Thus, an equitable and efficient program is needed to triage and respond to individuals’ needs/cultural preferences and engages local communities, employs community-based workforce, builds a sustainable social support system, and can adapt as needs fluctuate.

This proposal requests funding to:

- Replicate, at the state level, infrastructure to support the development and implementation of a Community Health Record based on similar infrastructure used in several regions in the state to address health and social needs outside of COVID-19;
- Support nine regional DOH-based liaisons who will serve as primary point of contact with case investigators/contact tracers from their assigned region to assist with case management and care coordination connections;
- Support a subset of LHJs that would use the centralized data collection system to access pooled resources;
- Support and manage a community-based workforce, including community health workers, tribal supports, and peers;
- Cover the costs of COVID-19 care provision services for those not eligible for state services and/or services that are not readily available for acute needs, such as medical supplies, food, child care, elder care, etc.; and
- Support for strategic coordination, monitoring, quality improvement, and evaluation.

Resource Support for Individuals in Isolation & Quarantine

Expenditures assume nine DOH regional liaisons will assist individuals in isolation/quarantine by first helping them navigate through safety net programs such as subsidized healthcare, food banks, unemployment benefits, supplemental nutrition programs, etc. DOH will partner with state agencies (Employment Security Department, Department of Social and Health Services, Department of Children, Youth and Families, etc.) to ensure individuals in isolation/quarantine are given high priority and move to the front of the line for social service approval. In addition, estimates assume other statewide food and medical supplies supports are leveraged using Kroger and MedCap.

Modeling suggests an estimated 78,000 individuals in isolation/quarantine will need this type of support, of which 15,600 (6,000 “high needs”) will not be able to participate in these statewide safety net programs. This proposal assumes DOH will cover these costs at an estimated \$1,554 per person to provide this support.

Care Kits

Care kits will be provided to individuals who are in isolation/quarantine, potentially even before they receive a test result. These care kits include masks, gloves, hand sanitizer, and a thermometer and would be provided to anyone asked to be in isolation or quarantine. In the future, DOH intends to also add a pulseoximeter to the kit at a yet-to-be-determined cost. For the purposes of this request, DOH assumes the cost per kit is about \$15 and would be provided to six percent of whose tests were paid through DOH. This cost will go up once the unit cost for pulseoximeters is determined.

Community Health Worker Training System

In partnership with LHJs and DOH COVID response teams, the existing systems of community-based workers (like community health workers (CHW)) will be leveraged to deliver COVID-19 provisions and provide daily check-ins where needed, and provide in-person follow up to contact tracing in communities where they are trusted members who share culture and language.

Local Care Coordinators

This proposal would require 69 CHWs within LHJs or Federally Qualified Health Centers to serve as a care coordinator to reaching out to folks that need groceries, supplies, housing, unemployment, and any other support services that will allow the individual to stay isolated or quarantined.

Statewide Data Collection System

In order to access pooled state resources, LHJs will be required to use the statewide data collection system. LHJs who maintain care coordination services locally will be offered funding to support usage of the centralized data system. One care coordinator will be stationed at 20 different LHJs to perform this activity.

Other Activities

This proposal also includes funding to support strategic engagement and evaluation, systems to assist in the tracking and coordination of care and services, data and analytics support, and call center support.

More information is provided in the “2021-23 FNCAL & Other Backup Support – Care Coordination” document that accompanies this request.

COMMUNITY OUTREACH (Only included in the 2021 supplemental request)

A robust, multi-faceted and ongoing outreach and education campaign is necessary to help people in Washington State successfully navigate health and wellness issues related to COVID-19 and the Governor’s phased [SafeStart Washington](#) strategy to reopen the state. The campaign must be nimble enough to quickly pivot to emerging issues, flexible in working with state, local and community partners, and manageable enough to be maintained for a long period of time.

The key goals of this effort are:

- Develop positive behavior change by establishing understanding of public health concepts such as the necessity of mask usage and physical distancing;
- Build public trust for testing, contact tracing and isolation/quarantine;
- Bolster local and tribal health outreach efforts, including focused assistance to communities facing outreach challenges and/or COVID-19 outbreaks;
- Reach communities disproportionately impacted by COVID-19 with in-language and culturally appropriate channels and messages, including older adults, vulnerable populations and emerging audience groups (young adults, etc.); and
- Address other indirect adverse impacts caused by COVID-19, such as domestic violence, suicide prevention, and other behavioral health issues.

To achieve these goals, DOH proposes to organize the outreach into three coordinated and concurrent efforts that employ social marketing, risk communication, equity, and community engagement best practices:

- **Safe Start Public Health Social Marketing/Outreach Campaign** – Continue current statewide [Spread the Facts](#) campaign with focus on health and wellness issues. Campaign will include a strengthened social marketing strategy, and additional outreach support for local health and tribal partners. An advisory committee will include key partners from state and local agencies;

- **Community-Driven Messaging Campaign and Outreach** – Continue emergency language and outreach services community contracts for disproportionately impacted and historically marginalized groups, with expanded outreach, messaging, and support designed by, for, and of the community. Individual contracts will be awarded to community-led, community-rooted and community-based organizations across the state; and
- **Quality Assurance and Verification Efforts** – Help audiences feel safe and supported during the case investigation and contact tracing process.

Assumptions

- Coping with COVID-19 is physically and emotionally draining. As the state moves into ongoing response with no clear end in sight, message fatigue will increase. Helping people adjust will mean DOH must regularly monitor message effectiveness and adjust, sometimes on a county-by-county or community-by-community level;
- New tactics, such as working with trusted community sources and finding creative ways to communicate messages relevant to people – both emotionally and physically – is essential;
- Mistrust of government will increase as the COVID-19 restrictions continue. It is reasonable to expect levels of mistrust to drive future waves of COVID-19 spikes and the resulting community restrictions;
- Outreach efforts must include strategies to effectively reach individuals and communities disproportionately impacted by COVID-19;
- As a safe and effective vaccine is developed, messaging will need to focus on vaccine education and communications about where and when to get it, and
- To be successful, DOH must actively engage and collaborate with its partners including state, local and tribal government agencies and affiliated organizations (i.e. Washington State Association of Local Public Health Officials, American Indian Health Commission), partner associations (i.e. Washington State Hospital Association), Federally Qualified Health Centers, community-based organizations and others.

Safe Start Public Health Social Marketing/Outreach Campaign – \$8.67 million

Includes a 12-month statewide outreach campaign and accelerated local media buys (as needed); social marketing strategy development in support of helping to change behaviors and ongoing COVID-19 mitigation (including the use of masks, physical distancing, diagnostic testing and contact tracing). Direct assistance is proposed for local and tribal outreach activities. The cost of this effort already assumes a 12-month in-kind donation of 3.0 DOH FTEs will serve as a campaign team.

Community-Driven Messaging Campaign and Outreach – \$4.74 million

Includes the continuation of interpretation and translation services and outreach services community contracts; in-language radio interviews and public service announcements using various media; and alternative format outreach for the deaf and the blind communities; This cost of this effort assumes a 12-month in-kind donation of 7.0 DOH FTEs to lead and execute this strategy, leaving a remaining need for 1.0 FTEs (Health Services Consultant 3) for 12 months.

Quality Assurance and Verification Efforts – \$182,000

Includes a hotline, texting or other tool that could be prominently promoted and would allow those contacted during case investigations or contact tracing to verify that the contact is legitimate, or to share concerns about the process. The cost of this effort assumes an in-kind donation of 3.0 DOH staff (25 percent to 50 percent effort) to serve from the agency's existing communications section, leaving a remaining need for 2.0 FTEs (1.0 Customer Service Specialist 4, 1.0 Customer Service Specialist 3) for 12 months.

INFORMATION TECHNOLOGY AND OPERATIONS

INFORMATION TECHNOLOGY

Meeting the urgent needs of the COVID-19 response in Washington requires quick action to address weaknesses in systems and infrastructure to support testing, case investigation and contact tracing, care management, outbreak response, and surveillance activities across the public

health system. Systems have been unable to keep up with the volume of records and provide timely data needed to inform policy and response decisions. Although DOH has been able to accomplish considerable amount of rapid infrastructure development to react to a myriad of challenges during its COVID-19 response, more work needs to be done. This work requires a cloud environment to increase performance, resilience, and scalability of critical surveillance systems. DOH is investing in the Washington State cloud highway and a secure Azure cloud environment to migrate systems from its on-premises data center in support of outbreak response and in alignment with statewide mandates. DOH and vendor partners are rapidly developing solutions in this environment using the Microsoft Dynamics 365 and Power BI platforms within the Washington State shared tenant, enabling innovation and extensibility. Systems include, but are not limited to REDCap and the Case, Risk and Exposure Surveillance Tool (CREST) for case investigation and contact tracing; QR Portal for shipping of biological samples to public health laboratories; and the Washington Healthcare Emergency and Logistics Tracking Hub (WA HEALTH) which supports hospital preparedness and response. The public health cloud environment is being architected to accommodate a data lake for cloud analytics and equipped with the tools to conduct complex analyses and data modeling. These investments will allow the department to publish accurate and timely data daily in easily understood Power BI dashboards for action by public health, tribes, elected officials, the health care system, school districts, the business community, the media and the public.

The resource estimates in this proposal assume DOH will contract out needed services and purchase necessary licensing since many of the existing IT staff, who would have been able to perform this work, have been diverted to other COVID-19 response activities. Additional support will be needed in the future to maintain, operate and update these investments in the future.

OPERATIONS

DOH needs a variety of staff to help lead all the different aspects of the statewide COVID-19 testing and contract tracing effort. This overarching oversight and coordination is necessary to ensure that all the DOH, local health jurisdictions, and tribal efforts work efficiently together. Functions include staffing resource management, internal epidemiological management, training, local health and tribal coordination, and other administrative and fiscal support.

The staffing requested in this proposal include the following DOH staff positions:

DOH Staffing Classifications

Role	Class	FTE
Staffing Resource Manager	WMS 2	1.0
Office Director/Deputy Office Director	Senior Epidemiologist	2.0
Training Coordinator	Hlth Svcs Consultant 3	5.0
Local Hlth/Tribal Coordinator	Hlth Svcs Consultant 4	5.0
Admin Support	Administrative Asst 2	2.0
Office Manager	Management Analyst 3	1.0
Project Manager	Management Analyst 5	2.0
Budget/Fiscal Support	Fiscal Analyst 4	1.0
Contract Manager	Hlth Svcs Consult 4	4.0
Total	Total	23.0

More information is provided in the “2021-23 FNCAL & Other Backup Support – Info Tech & Ops” document that accompanies this request.

DATA COLLECTION AND ANALYSIS

COVID-19 data collection and analysis (surveillance) is needed to track the impact of the outbreak and inform public health response. Washington State DOH Surveillance applications draw from a combination of data sources from existing influenza and viral respiratory disease surveillance, syndromic surveillance, case reporting, commercial lab reporting, ongoing research platforms, and other new systems designed to answer specific questions. These systems create an updated, accurate picture of COVID-19 spread and its effects in Washington State and provide data used to inform public health response to COVID-19.

During this pandemic, DOH has had to redirect its existing surveillance employees to focus on COVID-19 response. The funds requested in this proposal provide the resources to sustain surveillance staff dedicated to COVID-19 response, thus allowing its existing staff to resume their

normal public health practice to prevent the spread of other communicable (i.e. rabies, salmonella, measles, other), sexually transmitted, and other non-communicable chronic diseases. Nationally DOH is seeing the impacts of neglected public health work in the form of increased substance use, expanding and under reported communicable disease events, and need for social and behavioral public health prevention efforts. In order for DOH to do this and respond to COVID, it needs to add these additional resources to continue to sustain the current data reporting demands of COVID. This includes alignment with Safe Start performance metric reporting, sustainment of the data dashboards, and ongoing management of local, tribal, state and federal data reporting requirements. Without these FTEs, DOH will have to deprioritize some of the reporting requirements and stand down some of the reporting requirements for the data dashboards.

Outcomes include, ongoing surveillance:

- To monitor spread of COVID-19 in WA State;
- To understand disease severity and the spectrum of illness due to COVID-19;
- To understand risk factors for severe disease and transmission of COVID-19;
- To monitor for changes in the virus that causes COVID-19;
- To estimate disease burden due to COVID-19;
- To produce data to forecast the spread and impact of COVID-19; and
- To understand how COVID-19 impacts the capacity of the states healthcare system (for example, availability and shortages of key resources).

Surveillance applications and analytics are critical to understanding the impacts of COVID-19 in the communities and information resource and planning efforts to make data-informed public health decisions.

Staffing

The following ongoing DOH staff are required for this activity:

DOH Staffing Classifications

Class	FTE
SURVEILLANCE/ INFORMATICS BRANCH DIRECTOR - WMS03	1.0
INFORMATICS GROUP SUPERVISOR - WMS02	1.0
HEALTH SERVICES CONSULTANT 4	6.0
EPIDEMIOLOGIST 3 (NON-MEDICAL)	13.0
HEALTH SERVICES CONSULTANT 3	17.0
EPIDEMIOLOGIST 2 (NON-MEDICAL)	33.0
SENIOR EPIDEMIOLOGIST (NON-MEDICAL)	5.0
EPIDEMIOLOGIST 1	5.0
HEALTH SERVICES CONSULTANT 2	4.0
HEALTH SERVICES CONSULTANT 1	10.0
Total	95.0

Brief descriptions of the DOH positions are provided in the “2021-23 FNCAL & Other Backup Support – Data Collection Analysis” document that accompanies this request.

VACCINE PREPARATION

Though funding is needed to prepare the state to managed the distribution and administration of an eventual vaccine, this appropriation is requested in a separate request titled, “COVID-19: Administer Vaccines”. More information about the costs of such preparation and the potential federal funding available to partially support the state’s vaccine response is included in that request.

Assumptions and Calculations

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

This request is a large expansion of the department's and entire state's governmental public health system. This funding is needed to create testing and epidemiological capacity that is necessary but did not exist at the onset of the COVID-19 pandemic.

Detailed Assumptions and Calculations:

As aforementioned, DOH received a 30-month, \$177.2 million federal "Epidemiology and Laboratory Capacity (ELC): Enhancing Detection" grant to cover the costs of testing and contact tracing. Along with General Fund-State funding, this budget request also asks for sufficient federal spending authority to implement the grant spending plan DOH submitted to the federal Centers for Disease Control and Prevention (CDC). DOH will revise this spending plan and submit an update to CDC in the near future. Therefore the assumptions on federal spending are subject to change.

In addition, it should be noted that the Community Outreach funding in this biennial request only applies to fiscal year 2021, and spending authority for that outreach will be included in the agency's corresponding 2021 supplemental request. The details of that outreach plan were left in this biennial request for fiscal year 2022 in order to keep that piece visible within the entire context of this strategy.

More details on the calculations are available in the support documents titled,

- 2021-23 FNCAL & Other Backup Support - Diagnostic Testing;
- 2021-23 FNCAL & Other Backup Support - Case Inv Contact Tracing;
- 2021-23 FNCAL & Other Backup Support Outbreak Response;
- 2021-23 FNCAL & Other Backup Support Care Coordination;
- 2021-23 FNCAL & Other Backup Support - Info Tech & Ops; and
- 2021-23 FNCAL & Other Backup Support – Data Collection Analysis.

Workforce Assumptions:

Information regarding the number and type of staffing needed to support this effort are included in Package Description section and within the supporting documents provided.

How is your proposal impacting equity in the state?

It is already well publicized in the media that aged individuals and those with living with existing health complications are more vulnerable to the negative effects of COVID-19. However, DOH data show the suffering was also disproportionate among racial lines:

- Hispanic, Native Hawaiian, or Other Pacific Islander residents are nine times more likely to contract COVID-19 than those of Whites;
- Hospitalization rates are seven times higher for Hispanics and 10 times higher for Native Hawaiians or Other Pacific Islanders than those of Whites;
- Case and hospitalization rates for Blacks and American Indians or Alaska Natives are three times higher than those of Whites; and
- Death rates are over three times higher among Hispanics and Native Hawaiians or Other Pacific Islanders, twice as high among American Indians or Alaska Natives, and over 50 percent higher among Blacks and Asians compared to Whites.

While this proposal will benefit all Washington residents, detecting and preventing the spread of COVID-19 will most benefit those individuals and communities who were disproportionately harmed by this pandemic.

Strategic and Performance Outcomes

Strategic Framework:

In early September 2020, Oxfam America published a report that ranked Washington State as the top state for workers during the COVID-19 pandemic based on worker protections, healthcare access and unemployment supports. This highlights how the pandemic is not just a public health crisis. It has negatively impacted the state's economy and even its K-12 and higher education systems. As a result, this proposal supports number of goal areas and overlapping outcomes in Results Washington:

- Goal 1: World Class Education
 - Making Sure Kids Enter School Ready to Learn;
 - Supporting an Effective K-12 System; and
 - Increasing Access to Living Wage Jobs.
- Goal 2: Prosperous Economy
 - Ensuring Access to Quality Healthcare;
 - Improving Washington's Resiliency;
 - Increasing the Economic Security of Washingtonians; and
 - Increasing Access to Living Wage Jobs.
- Goal 4: Healthy and Safe Communities
 - Ensuring Access to Quality Healthcare;
 - Improving Washington's Resiliency; and
 - Increasing the Economic Security of Washingtonians.

Performance Outcomes:

Various measures have already been discussed throughout this proposal. Some of them include:

Diagnostic Testing

- Reduce positive test rate to one out of 50 (two percent); and
- Provide access to testing within 24 hours of symptom onset.

Case Investigation and Contact Tracing

- 90 percent of cases reached within 24 hours of receipt of positive lab test report;
- 90 percent of contacts reached within 48 hours of receipt of positive lab test report; and
- 80 percent of cases and contacts contacted daily during their quarantine period.

Outbreak Response

- Number of outbreaks reported by week (defined as two or more non-household cases, epidemiologically linked within 14 days in a workplace, congregate living or institutional setting).

Safe Start targets:

Weekly Outbreak Targets by County

County Size	Population Threshold	Weekly Outbreak Target
Small	<75,000	0
Medium	Between 75,000 and 300,000	1
Large	Between 300,001 and 1,000,000	2
Very Large	Over 1,000,000	3

Care Coordination

- Replicate, at the state level, infrastructure to support the development and implementation of a Community Health Record based on similar infrastructure used in several regions in the state to address health and social needs outside of COVID-19;
- Support nine regional DOH-based liaisons who will serve as primary point of contact with case investigators/contact tracers from their assigned region to assist with case management and care coordination connections;
- Support a subset of LHJs that would use the centralized data collection system to access pooled resources;
- Support and manage a community-based workforce, including community health workers, tribal supports, and peers;
- Cover the costs of COVID-19 care provision services for those not eligible for state services and/or services that are not readily available for acute needs, such as medical supplies, food, child care, elder care, etc.; and
- Support for strategic coordination, monitoring, quality improvement, and evaluation.

Data Collection and Analysis

- To monitor spread of COVID-19 in WA State;
- To understand disease severity and the spectrum of illness due to COVID-19;
- To understand risk factors for severe disease and transmission of COVID-19;
- To monitor for changes in the virus that causes COVID-19;
- To estimate disease burden due to COVID-19;
- To produce data to forecast the spread and impact of COVID-19; and
- To understand how COVID-19 impacts the capacity of the states healthcare system (for example, availability and shortages of key resources).

Information Technology and Operations

To meet the targets and outcomes above, proper information technology and operational support is required.

Other Collateral Connections

State Workforce Impacts:

Not applicable

Intergovernmental:

This proposal has broad, statewide impacts. DOH expects strong support from tribal, county and city governments as it supplements the resources they are already investing in their own pandemic response efforts. School districts and higher education systems also would benefit from a robust, statewide testing and contact tracing strategy that ensures the safety of their students and faculty.

State Facilities Impacts:

Not applicable

Changes from Current Law:

Not applicable

Puget Sound Recovery:

Not applicable

Legal or Administrative Mandates:

Not applicable

Stakeholder Response:

Due to the breadth of this proposal, it is difficult to identify any non-governmental entity or any Washington State resident that will not be potentially impacted by this request. DOH expects support from the public health communities, healthcare communities, educational entities, and the business communities since controlling the spread of COVID-19 will improve the health of Washingtonians and allow schools and businesses to reopen and stay open. However, it also expects some resistance from voices that are remain skeptical of the dangers posed by the novel coronavirus.

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 <i>Dollars in Thousands</i>	Fiscal Years		Biennial	Fiscal Years		Biennial
	2022	2023	2021-23	2024	2025	2023-25
Obj. A	\$26,506	\$0	\$26,506	\$0	\$0	\$0
Obj. B	\$9,750	\$0	\$9,750	\$0	\$0	\$0
Obj. E	\$399,553	\$0	\$399,553	\$0	\$0	\$0
Obj. T	\$2,216	\$0	\$2,216	\$0	\$0	\$0

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