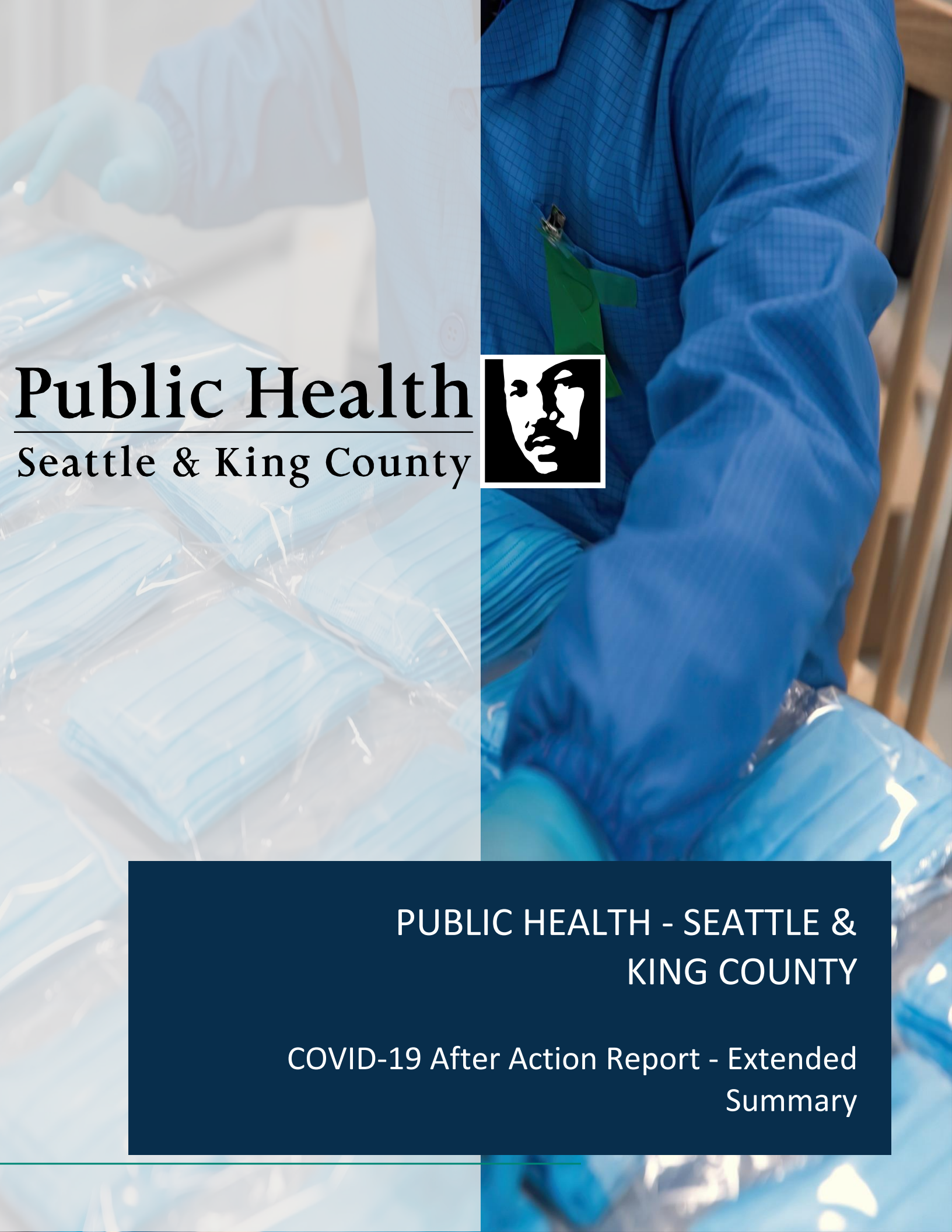


Public Health
Seattle & King County

PUBLIC HEALTH - SEATTLE & KING COUNTY

COVID-19 After Action Report - Extended Summary

INTRODUCTION

The unprecedented nature of the COVID-19 pandemic presented challenges across the globe. It forced leaders in public health to sustain extended response operations while balancing planning for potential incidents and initiating active response measures. The pandemic made historical inequities, including structural ableism and racism, more apparent in both government and healthcare systems.

The disproportionate impact of COVID-19 on communities of color and individuals with disabilities has been documented across the United States. In King County, data analyses show that Hispanic/Latinx, Native Hawaiian/Pacific Islanders, Blacks, and American Indian/Alaskan Natives experienced higher rates of COVID-19 cases and hospitalizations compared to Whites. Historical inequities, prejudicial practices and policies, and continued discrimination and injustices in many institutions contributed to added risk and inadequate access to services for many people. From the beginning of the pandemic, Public Health – Seattle & King County (PHSKC) and community-facing task forces were concerned that COVID-19 could exacerbate health inequities and take the biggest toll on communities already disadvantaged due to a long history of structural racism, systemic oppression, discrimination, and violence. For people with disabilities in King County during this pandemic, these inequities could be truly catastrophic. The need to prioritize addressing impacts on individuals with disabilities was of primary importance due to the disproportionate impacts of COVID-19. Providing healthcare and services that were accessible to all communities was an equity and social justice issue and aligned with PHSKC's mission to serve King County's most vulnerable communities.

Despite the ongoing challenges, personnel from public health, healthcare, and government as well as first responders and community organizations demonstrated immense self-sacrifice and public service. Staff within PHSKC and their internal and external partners continue to rally around each other, supporting one another and filling needs when they arise.

This After Action Report (AAR) was created to better understand the efforts undertaken by PHSKC during the COVID-19 pandemic and identify ways to improve future responses to public health emergencies. An AAR is a document that summarizes key information related to a disaster response to help evaluate activities and memorialize the efforts of those who responded. This report analyzed the response from January 2020 – January 2022 and the findings in the report identified strengths and areas for improvement raised by stakeholders and partners. This report is not inclusive of all work related to COVID-19 but is a sampling of activities collected from PHSKC. The end of this report includes a brief list of recommended actions for PHSKC to address, as areas for improvement. Staff within PHSKC collected a comprehensive list of these actions and recommendations, which are being tracked internally to improve PHSKC's response to future emergencies.

SCOPE OF THE EXTENDED SUMMARY

This Extended Summary of the PHSKC COVID-19 AAR represents key sections of the full report for ease of reading and distribution. The full report is also available to the public. Key differences between this document and the full AAR are that the Extended Summary includes:

- An abbreviated incident overview rather than a detailed overview and timeline.
- Highlighted significant strengths, areas of improvements, and recommendations rather than a complete list of findings and recommendations.
- A condensed version of an overview of PHSKC and the Health and Medical Area Command (HMAC).

The full AAR also includes References, Survey Summary, Incident Statistics, and Timeline.

Translations of this report and the full report are available upon request. Please submit requests for translation to preparedness@kingcounty.gov.

OVERVIEW OF PHSKC

PHSKC works to protect and improve the health and well-being of all people in King County. It measures this by seeking to increase the number of healthy years that people live and eliminate health disparities. It is one of the largest metropolitan health departments in the United States with 1,400 employees (not including COVID temporary employees), 40 sites, and a biennial budget of $686 million. The department serves a resident population of nearly 2.2 million people in an environment of great complexity and scale, with 19 acute care hospitals and over 7,000 medical professionals. Over 100 languages are spoken in the jurisdiction, and King County is an international destination welcoming nearly 40 million visitors annually.[1]

The mission of PHSKC is to eliminate health inequities and maximize opportunities for every person to achieve optimal health. PHSKC department functions are carried out through core prevention programs, environmental health programs, community-oriented personal health care services, emergency medical services, jail health services, public health preparedness programs, and community-based public health assessment and practices.

PHSKC followed federal and state best practices to guide how it would respond to the COVID-19 pandemic as it grew in complexity and scope. In the federal and state systems used to organize emergency responses, Emergency Support Functions (ESFs) are used to group services and organize how they will be managed throughout a disaster. PHSKC's Health and Medical Area Command (HMAC), the department's incident

[1] PHSKC, "About Us," https://kingcounty.gov/depts/health/about-us.aspx.

management and coordination structure, was activated on January 21, 2020, to manage King County's ESF #8 (Health, Medical and Mortuary Services) using the incident command system (ICS).

INCIDENT OVERVIEW

Image 1: PHSKC vaccination site photographs

The first case of novel coronavirus in Washington was identified on January 21, 2020, in Snohomish County, WA. After returning from a trip to Wuhan, China, the patient developed symptoms and sought care at a medical facility within the state. As the first confirmed case of COVID-19 in the United States, the state of Washington immediately moved into the spotlight for COVID-19 coordination efforts early in 2020. PHSKC activated its emergency operations structure, HMAC, at Level 2 - Partial Activation on January 21, 2020. The next day, the state of Washington activated its State Emergency Operation Center (SEOC)[2] to conduct emergency operations and support local jurisdictions responding to COVID-19 cases. PHSKC HMAC activation was elevated to a Level 1 – Full Activation to manage emergency operations on January 24, 2020. At the state level, efforts to contain the disease in January to mid-February 2020 continued by encouraging stay-at-home orders, Personal Protective Equipment (PPE) procurement, and increasing response funding. At the local level, PHSKC began to disseminate key messages and respond to inquiries, including through its *Public Health Insider* blog and a dedicated COVID-19 website. A key focus of the messaging was aimed at reducing stigma and racism aimed towards people of Asian descent.

PHSKC confirmed the first known case of COVID-19 in King County on February 27, 2020. Just one day later, on February 28, 2020, the first recognized COVID-19 death in the United States was recorded in King County, though postmortem testing would demonstrate that undercounted deaths and lack of testing contributed to delays in reporting and that the first COVID-19 death in the United States was actually in January. On February 29, 2020, the Centers for Disease Control and Prevention (CDC) reported this first COVID-19 death in the

[2] State Emergency Operations Center. Situation Report. November 5, 2020. https://lewiscountywa.gov/media/documents/SEOC_COVID19_SitRep_110520-181.pdf

United States and described additional presumptive positive COVID-19 cases in King County with two hospitalized patients originating from a suspected outbreak in a Long-Term Care Facility (LTCF), Life Care Center of Kirkland, where more than 50 individuals associated with Life Care were ill with respiratory symptoms.[3]

Unable to track the source of infection, CDC officials stated that circumstances now suggested person-to-person spread in the community, including in the LTCF. Subsequently, King County activated its Emergency Operations Center (EOC), and Governor Jay Inslee issued a State of Emergency, facilitating the allowance of additional local and state resources to be utilized to respond to the outbreak. Through the end of February and into March of 2020, Life Care continued to be a focus of PHSKC and state cases due to the increased risk to residents with underlying health conditions.[4] Due to the magnitude of the outbreak, collaboration with federal officials was also necessary to support an overwhelmed local infrastructure and augment clinical staffing, particularly because almost a third of Life Care staff tested positive for the virus. This LTCF outbreak was the first of many reported in the United States that led to multiple deaths in this vulnerable population.[5] Thirty-nine residents of this nursing home died in a four-week span.[6]

By March 1, 2020, a King County Proclamation of Emergency was signed that delineated PHSKC's role as lead agency for King County's COVID-19 response, waived procurement protocols, and authorized overtime for hourly county employees. PHSKC also began to add workers to their team in an effort to combat the effects of COVID-19 on the county, and soon after, on March 3, 2020, activated and staffed a call center to provide information to the community.[7] A critical focus during this initial response was also disease investigation and surveillance, which included conducting surveillance for community level transmission and monitoring the impact of disease on King County in terms of containment, community level indicators, and focused case and cluster investigation.[8]

Throughout March 2020, more information became available regarding the potential impact of COVID-19 on different populations. Other populations identified by PHSKC to be at higher risk for severe illness from COVID-19 included people 60 and older, people with underlying health conditions, people who are immunocompromised, and people who are pregnant. Local health officials recommended that those

[3] CDC. 2.29.20. Washington State Report First COVID-19 Death. Accessed 5.31.22. https://www.cdc.gov/media/releases/2020/s0229-COVID-19-first-death.html.
[4] Weise, Harmon and Fink, New York Times, *Why Washington State? How Did It Start? Questions Answered on the U.S. Coronavirus Outbreak,* March 4, 2020
[5] CDC Newsroom, *Washington State Report First COVID-19 Death Media Statement,* February 29, 2020, https://www.cdc.gov/media/releases/2020/s0229-COVID-19-first-death.html
[6] History.com, *First confirmed case of COVID-19 found in U.S.,* Accessed May 5, 2021, https://www.history.com/this-day-in-history/first-confirmed-case-of-coronavirus-found-in-us-washington-state
[7] King County. 3.01.20. Proclamation of Emergency. Accessed 5.31.22 https://kingcounty.gov/~/media/operations/policies/documents/PHL104Proclamation_of_Emergency.ashx?la=en
[8] HMAC COVID-19 IAP #18

vulnerable to severe illness from COVID-19 take concerted steps to reduce their risk of exposure.[9] Testing for COVID-19 was important, but access to rapid and reliable testing was very limited in the early months of the pandemic. By March 15, 2020, social distancing was advised in King County and bars, restaurants, events, and other gatherings were ceased for an initial two-week period, [10] The Pandemic Community Advisory Group (PCAG) initially focused on how representatives could share COVID-19-related information and messages internally, within their sectors, and to the public, how organizations could join PHSKC in responding to misinformation and stigma, and how PHSKC could work with these sectors to inform each other of opportunities, successes, and barriers to implementing recommended measures.

The initial COVID-19 outbreak was not confined to merely the Life Care facility, however. Between March 1, 2020, and March 15, 2020, the total confirmed COVID-19 case count grew to 420 and the total number of recorded deaths was 37.[11] In addition to the LTCF outbreaks, tribal communities were affected early on in this pandemic. The state of Washington is home to 29 federally recognized Indian Tribes. DOH, in coordination with a tribally driven non-profit organization, the American Indian Health Commission (AIHC), worked together early in the pandemic on behalf of these tribes to mitigate the risk to their tribal communities.[12] As PHSKC noted when they announced their Principles for Equitable Vaccine Delivery in April 2021, the disproportionate impact of the pandemic was also felt in several high-risk communities because of historical inequities, government distrust, and existing barriers to access. Other communities disproportionately impacted by COVID-19 both during the pandemic's early stages and throughout as attributable to structural racism and social and economic vulnerabilities were service workers, immigrants, Black, and Indigenous People of Color (BIPOC) communities, communities with limited access to health services, people without housing, and people with disabilities and other access and functional needs.

From the end of March 2020 through June 2020, PHSKC and its broader partners continued to expand the response to COVID-19. This included setting up the first COVID-19 testing site in Shoreline, launching a Stand Together, Stay Apart campaign on March 25, 2020, in conjunction with the State's Stay Home, Stay Healthy Order, responding to hundreds of local, state, national and international media inquiries, and launching a public data dashboard. As state and local officials continued to expand the COVID-19 response throughout the summer of 2020 by opening additional testing sites and consistently communicating continued social distancing, PHSKC and the broader County also continued to take actions to equitably serve its community. A King County-wide declaration of racism as a public health crisis was made on June 11, 2020. By September 20, 2020, the PCAG was reestablished as the King County Pandemic and Racism Community Advisory Group

[9] King County. 3.4.20. Local Health Officials Announce New Recommendations to Reduce Risk of Spread of COVID-19. Accessed 5.31.22. https://kingcounty.gov/depts/health/news/2020/March/4-covid-recommendations.aspx
[10] King County. 3.5.20. King County Pandemic Advisory Group. Access 6.14.22. https://kingcounty.gov/depts/health/covid-19/community-faith-organizations/~/media/depts/health/communicable-diseases/documents/C19/parcag/PARCAG-2020-Mar-5-minutes.ashx
[11] King County. 3.15.20. Update on COVID-19 in King County for March 15, 2020. Accessed 5.31.22. https://kingcounty.gov/depts/health/news/2020/March/15-covid.aspx
[12] Lou Schmitz, American Indian Health Commission for Washington State, *AIHC Tribal Communicable Disease Emergency Reponses Planning Project 2019-2020*, March 11, 2020

(PARCAG) and PARCAG's mission was modified to "identify, inspire, and mobilize bold solutions in response to the urgent, interconnected crises of COVID-19 and systemic racism." PHSKC in partnership with King County's Office of Equity and Social Justice (OESJ) also launched several new data dashboards and tracking systems including one to delineate COVID-19 impacts on individuals experiencing homelessness, a Food Finder to encourage support of local farms, and a behavioral health dashboard to evaluate impacts on social, economic, and overall health in King County.

Despite this increase of new daily COVID-19 cases in the fall and winter of 2020, associated with holiday gatherings and colder weather, progress was being made on the vaccination front. On December 14, 2020, Washington's COVID-19 vaccination program began, following the vaccine's Emergency Use Authorization. Healthcare workers (including community health workers), first responders, people who live or work in long-term care facilities, and all other workers in health settings at high risk of exposure to COVID-19 were the first groups eligible for vaccinations. The first doses of the vaccine arrived in King County soon after, on December 16, 2020.[13]

On January 8, 2021, King County announced that it would be allocating $7M for the creation of high-volume community vaccination sites and mobile teams to equitably vaccinate residents, complementing vaccinations provided through the healthcare system and pharmacies.[14] By January 18, 2021, eligibility was expanded to include people ages 65 years of age and older as well as individuals aged 50 years of age or older who lived in a multigenerational household.[15] Extensive challenges managing the vaccination tiers and the associated distribution of the vaccine emerged in Washington and throughout the country. As demand for the vaccine exceeded supply well into the spring of 2021 and guidance from both federal and state authorities was constantly changing, county health officials had to rapidly pivot and decide whether to adopt new recommendations or pursue their original vaccination plans.

By early February of 2021, however, PHSKC set up two high-volume vaccination sites, one at the ShoWare Center in Kent and one at the General Services Administration Complex in Auburn, with more planned. These sites were designed to serve those who may face barriers to accessing the COVID-19 vaccine through traditional healthcare systems, including older adults (ages 75+) in south King County.[16]

As vaccine tiers opened, King County established a goal to vaccinate a minimum of 70 percent of all eligible adults equitably, efficiently, and quickly across all racial and ethnic groups and regions of the county by

[13] PHSKC. 12.16.20. First Doses of Vaccine Arrive in King County. Accessed 5.31.22. https://publichealthinsider.com/2020/12/16/first-doses-of-vaccine-arrive-in-king-county/
[14] PHSKC. 1.8.21. King County Announces New Funding for Community Vaccination Efforts. Accessed 5.31.22. https://publichealthinsider.com/2021/01/08/king-county-announces-new-funding-for-community-vaccination-efforts/
[15] Washington State Department of Health. February 10, 2021. COVID-19 Vaccination Coverage by Race and Ethnicity and Age in Washington State. https://doh.wa.gov/sites/default/files/2022-03/348-791-COVID19VaccinationCoverageRaceEthnicityAgeWAState.pdf?uid=6282e74a61b25
[16] PHSKC. 1.29.21. King County Opens Covid-19 Vaccination Sites In Kent And Auburn To Provide Access For Vulnerable Older Adults And Their Caretakers. Accessed 5.31.22. https://publichealthinsider.com/2021/01/29/king-county-opens-covid-19-vaccination-sites-in-kent-and-auburn-to-provide-access-for-vulnerable-older-adults-and-their-caretakers/

June 30, 2021.[17] This included creating and publishing the King County Unified Regional Strategy: COVID-19 Vaccine Delivery and the Principles for Equitable Vaccine Delivery in April 2021. Starting April 15, 2021, all people in Washington ages 16 and older became eligible for the COVID-19 vaccine. By June 15, 2021, 70 percent of King County's residents ages 16+ had completed their vaccine series, prompting an end to PHSKC's mask directive two weeks later alongside lifting of restrictions for the broader State and indicating that the goal outlined in the King County Unified Regional Strategy for COVID-19 Vaccine Delivery was met.

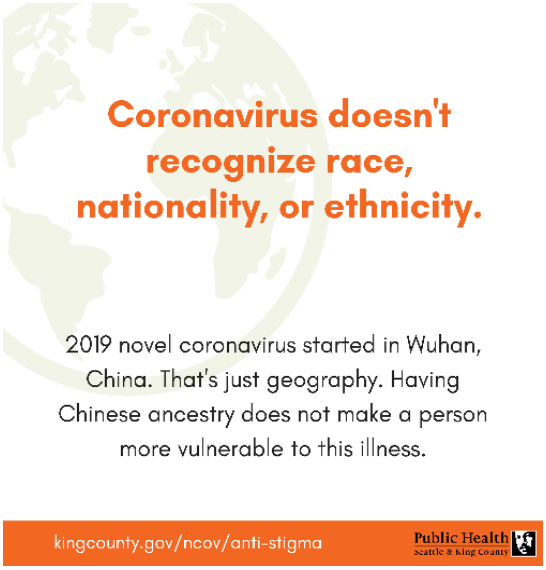
Vaccination rates increased throughout the spring and into the summer of 2021 and new daily COVID-19 cases generally declined until the Delta variant emerged toward the end of July, at which point daily COVID-19 cases generally increased through January 2022 with a few exceptions. The CDC recommended mask wearing in public indoor settings, even for vaccinated individuals. The State of Washington then enacted an indoor mask mandate on August 23, 2021, one that would continue until March 11, 2022.

Declining rates of efficacy for the COVID-19 vaccine in the fall of 2021 drove booster eligibility. By October 22, 2021, individuals statewide at severe risk of COVID-19 illness and/or high risk of exposure were eligible for a booster, followed by the expansion of eligibility statewide to those ages 18+ on November 20, 2021. At the time of the writing of this report (June 2022) 53 percent of King County residents 5+ years of age have received a booster of the COVID-19 vaccine.

RACISM AS A PUBLIC HEALTH CRISIS

Racism is a public health crisis. It threatens communities across the United States by causing health inequity, depriving individuals of vital access to healthcare, and resulting in higher death rates, shorter life expectancy, higher severity of disease, and lack of access to treatment.[18] Structural racism is a root cause of several health disparities, manifesting through laws and policies that create barriers to equitable and high-quality care.[19] In addition to individual acts of discrimination, structural racism invades systems of power, informing decision-making and furthering health inequity. These same structures exclude people with disabilities, resulting in health disparities. People with disabilities are more likely to be denied health care than people without, as inequities are fueled by discriminatory and antiquated views of disability. When understanding the impacts racism has on the health of communities, it is vital to use an intersectional lens – racism often does not occur in a vacuum, but intersects with other forms of discrimination, including discrimination on the basis of ability or socioeconomic status. Using a lens capable of recognizing this layering of discrimination is necessary especially in public health and emergency response.

[17] PHSKC Principles for Equitable Vaccine Delivery.
[18] CDC, "Health Equity," https://www.cdc.gov/chronicdisease/healthequity/index.htm.
[19] Rugaijah Yearby, Brietta Clark, and José F. Figueroa, "Structural Racism in Historical and Modern US Health Care Policy," *Health Affairs* vol. 41:2, https://www.healthaffairs.org/doi/10.1377/hlthaff.2021.01466February 2022.



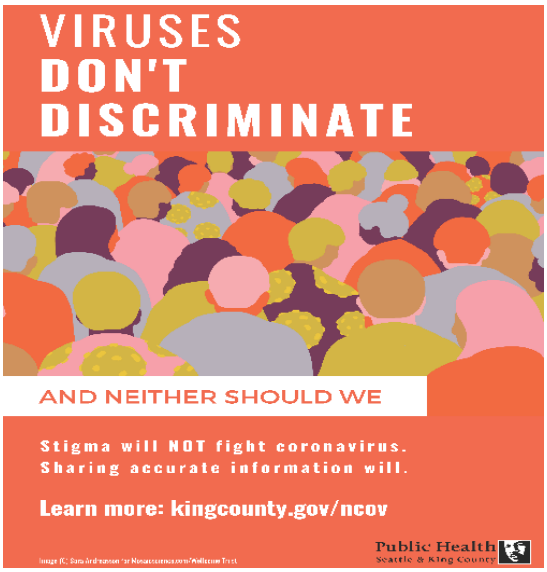


Image 2: Community outreach materials

The COVID-19 pandemic further drew back the curtain on the impact of structural racism in American healthcare. Racism against people of Asian descent significantly increased during the pandemic, with a documented 77 percent rise in hate crimes against Asian people living in the United States between March 2020 and June 2021.[20] Additionally, health inequity in pandemic response was also documented. The CDC states that out of the 65 percent of COVID-19 cases in the United States where race and ethnicity data were available, Black people accounted for 14 percent of deaths related to COVID-19, despite making up only 13 percent of the total population.[21] Hispanic people represent 24 percent of COVID-19 cases, despite only making up 18 percent of the US population. Through June 12, 2022, King County has had 2,850 deaths (0.6 percent of positive cases). Age-adjusted death rates of confirmed cases are highest among residents who are Native Hawaiian/Pacific Islander (749 per 100,000), American Indian/Alaska Native (452 per 100,000), Hispanic/Latinx (260 per 100,000), and Black (219 per 100,000). Rates for most communities of color are higher than among White residents (106 per 100,000). People who are incarcerated also experienced a much higher burden of the disease than non-incarcerated individuals. In 2020, 40 of the 50 widest outbreaks of COVID-19 occurred in prisons.[22] People with disabilities experienced unique impacts due to health inequity during the COVID-19 pandemic, as a lack of appropriate data collection and accessibility barriers in information, testing, and vaccination exposed them to greater disparities in the public health response.[23] As

[20] Mary Finding, "COVID-19 Has Driven Racism and Violence Against Asian Americans," *Health Affairs,* April 12, 2022.
[21] CDC, "Demographic Trends of COVID-19 Cases and Deaths in the US Report," updated May 27, 2022, https://covid.cdc.gov/covid-data-tracker/#demographics.
[22] Alexandria Macmadu et al., "COVID-19 and Mass Incarceration," *The Lancet* vol 5:11, October 9, 2020.
[23] The National Institute for Health Care Management, "Disability, Health Equity, and COVID-19," updated October 14, 2021, https://nihcm.org/publications/disability-health-equity#:~:text=Risk%20of%20Poor%20Outcomes%20from,other%20members%20of%20the%20population.

recovery efforts continue, historically marginalized populations continue to face greater challenges due to racism and its intersection with other forms of discrimination.

The COVID-19 pandemic centered what many professionals, advocates, and communities have known for a very long time: racism threatens the livelihoods of millions by causing health inequity and must be addressed as a public health crisis. King County, alongside three states and several other municipalities, declared racism a public health crisis in June 2020, establishing core values, measurable goals, policy priorities, and budget allocations to support its commitment to being intentionally anti-racist and accountable to BIPOC.[24] As part of the Whole Community approach to all-hazard response, health inequity must be at the forefront of planning and response efforts to support resiliency in the face of public health crises.

SCOPE OF THE COVID-19 AFTER-ACTION REPORT

This AAR focuses on the PHSKC response to the COVID-19 pandemic. The intent of this COVID-19 AAR is to comprehensively collect best practices and lessons learned from January 2020 – January 2022 to strengthen the capabilities of PHSKC. This AAR reflects the emerging practices that have benefitted the pandemic response, and which should be continued or enhanced for future pandemic responses. It is the hope of the authors of this document that this COVID-19 AAR will present recommendations for implementation to further improve future PHSKC emergency response efforts. This report is not inclusive of all work related to COVID-19 but is a sampling of activities collected from PHSKC.

THE AFTER-ACTION REPORT METHODOLOGY

This COVID-19 AAR was compiled using a mixed method data gathering approach. This included a comprehensive review of stakeholder interview notes and facilitated discussion summaries from PHSKC. Additionally, the data was reviewed and approved by the PHSKC AAR Project Management Team. All data was reviewed and analyzed by a third-party emergency management and public health consulting firm, Constant Associates (CONSTANT), contracted by Public Health - Seattle & King County to conduct a fair and independent review of response efforts and to develop this report. CONSTANT's team of emergency management and public health professionals aimed to conduct a transparent and honest analysis of the response and develop realistic and actionable improvement recommendations that align with Homeland Security Exercise and Evaluation Program (HSEEP) doctrine and other standard incident response evaluation principles and best practices.

PHSKC Collected Data

A variety of data was collected by PHSKC to ensure response teams, staff, and volunteers participated in the creation of the AAR. The following data types were the primary sources used to create this report.

[24] King County, "Racism as a Public Health Crisis," June 11, 2020. https://kingcounty.gov/elected/executive/constantine/initiatives/racism-public-health-crisis.aspx#values.

Interviews

One hundred eleven stakeholder interviews were conducted by PHSKC to review major events that determined the critical areas for improvement and strengths related to the response efforts. Interviewees were identified by PHSKC as key stakeholders and teams during the COVID-19 response period covered by this AAR. All interviews were conducted in 2021. The first series of interviews were with PHSKC management, leadership, and select response area leads. The second set of interviews were with a broader range of response area leads. These interviews allowed participants to outline critical preparedness activities and describe self-identified response strengths, areas for improvement, and recommendations for future implementation. Transcripts of these interviews were analyzed by CONSTANT for the purpose of this AAR.

Facilitated Discussions

PHSKC staff facilitated 48 discussions with each of the response teams within the organization. These sessions are often called “hotwashes.” Through these discussions, participants detailed strengths, areas for improvement, and recommendations based on their experiences during the response. The sessions allowed teams to express their perspectives and opinions, while fostering awareness of the best practices implemented and challenges faced during different phases of the COVID-19 response. Summary reports of these meetings were compiled by PHSKC and analyzed by CONSTANT for inclusion in this report.

Surveys

Two surveys provided a forum for respondents to contribute to the AAR and enabled CONSTANT to identify key issues and themes. An electronic survey to capture PHSKC staff perspectives regardless of their response role was developed and distributed widely by PHSKC. CONSTANT conducted an analysis of the 414 responses received for the purpose of this AAR. A full summary report is included in the appendices and data from the survey informed the construction of emerging and common themes. A second survey was created by PHSKC to solicit feedback from its Public Health Reserve Corps (PHRC) volunteers. This survey was launched from May – June 2021. A summary report of the 462 responses was created by PHSKC and the data was reviewed and incorporated where appropriate by CONSTANT.

Document Review

An extensive library of documents related to the COVID-19 response was compiled and managed by PHSKC. CONSTANT reviewed the collected documentation and resources to identify supplemental information to complement interview, facilitated discussion, and survey findings. Additionally, CONSTANT researched online and publicly available references, as needed. The documents consisted of 15 reports related to lessons learned and partner AARs, 25 HMAC Incident Action Plans, Situation Reports, and messages, and 9 blogs and media articles detailing PHSKC response efforts. A list of the documents reviewed and included within this AAR can be found in the references list within the appendices.

Facilitated Feedback Sessions With Partners (i.e., Townhalls)

To ensure community partners were also offered an opportunity to contribute their perspectives, PHSKC and CONSTANT worked together to identify groups to invite to facilitated feedback sessions (also called "townhalls"). CONSTANT hosted four of these sessions with 31 participants attending. These discussions served as an opportunity to elicit input from community-based organizations, faith-based organizations (FBO), governmental and tribal partners, healthcare providers, and other key partners. Participants provided their perspectives on strengths, areas for improvements, and recommendations based on their experiences during the COVID-19 pandemic response. CONSTANT then incorporated the findings into the AAR. Community and Faith-Based Organizations were provided incentives for participating in sessions. The sessions were held in English with Communication Access Real-time Translation (CART) and live interpretation for multiple languages. A detailed table of Townhall participation can be found in the full report.

ORGANIZATION OF THE AAR

The report is organized to include an Incident Overview, HMAC, and Incident Management Structure summary, and Analysis of Key Findings related to response efforts. Given the length and breadth of the pandemic and the unprecedented scope of the response efforts for PHSKC, **this report is not meant to be comprehensive of all activities conducted in response to the pandemic**. Instead, this report is meant to focus on major strengths and areas for improvement noted by stakeholders to identify opportunities for impact on future emergency responses.

The major findings make up the core content of the report and are found in the Analysis of Findings Section. There are 14 focus areas that are intended to group the findings by similar topics and, to the extent possible, are in chronological order by when related efforts started during the pandemic. A few examples of these focus areas include public information, resource management, equity and community partnerships, testing, vaccination, and PHSKC internal operations.

Each focus area links to at least one CDC Public Health Emergency Preparedness and Response (PHEP) capability which serves as a framework to evaluate the ability of public health preparedness programs to prepare for, respond to, and recover from public health emergencies such as COVID-19. Within each focus area the findings are presented as strengths or areas for improvement. However, throughout the public health response to the pandemic, many findings were not strictly strengths or areas for improvement, but a combination of both. Findings were recorded as mixed where stakeholders shared information that was positive but also expressed there were challenges and room for growth. The duration of the response also led to the resolution of some areas of improvement as PHSKC worked to continuously improve.

SIGNIFICANT STRENGTHS AND INNOVATIONS

- PHSKC's collaboration across departments, including the prominent leadership role it played for the nation in the pandemic response, was award-winning. Leadership steps included creating the nation's first civilian isolation and quarantine system that served over 2,300 residents by January 2022. They also set and met ambitious vaccination goals focused heavily on equity while creating strategies to support the vaccination of older adults and BIPOC. They also maintained the lowest death rate due to COVID-19 of the 20 largest metropolitan areas in the country.

- PHSKC's COVID-19 dashboards, such as those created by the Analytics and Informatics (A&I) Team, enabled public health decision-making supported by data. The dashboards showed cases counts, community transmission, syndromic surveillance, and vaccination uptake overlayed with demographics and geographic information. Dashboards, such as the Communities Count COVID-19 Vulnerable Communities Data Tool, also revealed very early in the pandemic the disproportionate impacts of COVID-19 on BIPOC populations and were recognized for their effectiveness and innovation by the National Association of County and City Health Officials (NACCHO). The use of these dashboards allowed PHSKC to focus its response on specific communities and provide additional services to those most impacted by the pandemic.

- Community navigators were consistently seen as a strength by PHSKC staff, partners, and stakeholders. The community navigators represented diverse populations dealing with a lack of transportation, job loss, food insecurity, and loss of housing. Imbedded in their communities, navigators served as conduits to get resources to their communities, dispel misinformation, and highlight the known fears and barriers to resources and healthcare. Additionally, community navigators provided important information and feedback to PHSKC staff to help shape and improve their response work to better serve their communities. There are numerous examples throughout this report detailing the community navigators bridging the gap between public health efforts and communities that needed it the most.

> *"They showed up and listened first asking 'What kinds of questions are you getting from community members you're serving?' and then provided information." - Townhall Participant*

- PHSKC's Language Access Team raised the standard for language accessibility through innovation and collaboration with key partners. The team demonstrated that translating public health information into forty languages with short turnarounds is achievable and can be done in a cost effective and culturally sensitive manner. The team partnered with Washington State Coalition for Language Access (WASCLA) to develop a system of just-in-time locally certified and experienced translators allowing for same day, 24-hour, and 48-hour turnaround times. To elevate the effectiveness of the system, PHSKC opened the system to partners who were able to leverage the language capability for their roles in the public health response.

Image 3: Public health guidance examples

SIGNIFICANT AREAS FOR IMPROVEMENT

- There remain numerous barriers to achieving equity in PHSKC's response. There were delays in leadership decisions that compromised work, including an emphasis on urgency over equity, decisions made without community input, occasional difficulties identifying how to influence work in established coordination structures, and a lack of equity training across activated staff. While proud of the organizations and communities they were able to engage, teams primarily focused on ensuring equity noted there were connections with community members left untapped and groups that were missing from the conversation. There was a noted lack of BIPOC providers in the Public Health Reserve Corps which raised concerns about the ability for those systems to serve communities disproportionately impacted by the pandemic.

- Access and Functional Needs (AFN) planning was noted as a significant area for improvement throughout the response. Many of the people at highest risk of infection and death from COVID-19 were unable to access early interventions such as testing and then later vaccines until substantial communication and assistance was provided by Community-Based Organizations (CBOs) and advocacy groups. PHSKC had an Equity Response Annex but did not have an Access and Functional Needs plan or an Americans with Disabilities Act (ADA) coordinator. This highlighted gaps in translation and interpretation services for residents with disabilities, testing and vaccine site accessibility, representation on public health dashboards, and transportation to make use of COVID-19 resources and support.

- PHSKC teams widely agreed that they were overwhelmed with workload, and response demands dramatically outpaced their resources. Many employees, particularly early in the response, worked 80-100-hour work weeks, often going months without a day off. Aside from taking time away from the job, many felt they could not reduce their workloads, take needed breaks, or address their physical, emotional, or mental health. PHSKC employees expressed they felt they were not adequately compensated for the exponential increase in responsibilities. This was compounded for some staff by the fact that they were ineligible for overtime pay and are unable to use additional compensation in the form of paid vacation due to response demands. Staff recognized and appreciated that leaders encouraged teams to work less and practice self-care, but many felt it was not feasible because the encouragement was not reflected by a reduction in workload or adequate staffing to meet needs.

> *Onboarding is an essential part of bringing new staff into Public Health. Things like obtaining an ID badge, gaining computer access, and learning about standard Public Health benefits and processes continue to need to be standardized and easier to access (for both supervisors and newly onboarded team members). When staffing is stretched thin, training and onboarding of new staff members also burdens the supervisory staff, who work heroically to ensure that their team is well trained.*
>
> *- Survey Respondent*

- Hiring and onboarding was critical to scale up the workforce to meet the public health response needs. While recognizing the unprecedented nature of the pandemic, there were notable administrative burdens and a significant amount of time required to fill positions. This limited scalability and contributed to staff burnout. Many staff noted that potential hires were lost as a result, and they were forced to use staffing agencies to temporarily fill gaps. The staffing agencies exacerbated inequities with PHSKC because those individuals were paid a lower rate and did not have the benefits that PHSKC employees were offered. Many of the new hires were also engaged in temporary positions making job security a constant concern. This created uncertainty and stress for both new employees and PHSKC teams to which they were assigned. Furthermore, some staff expressed worry that since new hires were in temporary positions, the added diversity they brought to the workforce would be lost at the end of their employment with the county.

RECOMMENDATIONS

Synthesis and analysis of the data collected through the after-action process resulted in 43 high-level recommendations grouped across seven cross-cutting themes. These were identified to help prepare PHSKC for future emergencies by building on learnings from successes and challenges experienced through the COVID-19 pandemic response. Efforts to address these items are highly encouraged and are aligned with a culture of quality improvement but require significant time and resources to accomplish fully. Competing

priorities, including emerging incidents, and limited staffing and resources may necessitate prioritization and recalibration of these recommendations.

Relationship Building

Image 4: Partners supporting PHSKC vaccination efforts

- Capitalize on the collaboration and relationships built with community partners during the COVID-19 response and continue to convene regularly with these organizations to foster a deeper partnership with PHSKC and sustain built relationships.
- Develop process to link philanthropic organizations and businesses with CBOs, FBOs, healthcare, and other partners. When funding is made available that community partners could use for disaster response activities, take steps to share the information and link partners with funding opportunities.
- Formalize relationships forged during COVID-19. Embrace these relationships and develop a program to ensure the valued partnerships are maintained and strengthened. Consider:
    - Establishing a formal process where stakeholders and partners are officially recognized.
    - Inviting stakeholders and partners to become involved in emergency planning meetings.
    - Encouraging the participation of these groups in training and exercises.

- Seeking their counsel in areas where they possess a unique knowledge of the issue, problem, or question.
- Continuing to pay community members, stakeholders, and partners for their work with PHSKC.
- When appropriate, formalizing relationships with agreements, charters, or memorandums of understanding (MOUs).

Standardization of Processes

- Evaluate innovations that worked during COVID-19 to determine if/how they could be documented for use in the future, including during an infectious disease response. Incorporate revised standard operating procedures into relevant response plans for programmatic areas (e.g., vaccination, testing, contact tracing, public information), as well as departmental coordination of incident management functions (e.g., centralized financial systems).
- Establish dedicated Logistics Unit to cover inventory tracking, shipping, and handling needs, and establish clear process prior to initiating distribution.
- Clearly define decision-making capacity for each role and who needs to sign off on various types of decisions and document in relevant standard operating procedures (SOPs), job descriptions, and staffing plans.
- Develop and document a policy that outlines clear expectations around existing PHSKC staff participating in emergency responses to Division leadership.
- Formalize ICS refresher training and just-in-time training for all personnel participating in response operations or who may be called upon to contribute.
- Explore using systems other than WebEOC to capture resource requests from non-traditional emergency management partners.

Hiring and Onboarding

- Develop and document standardized classifications in advance by selecting basic bodies of response work and documenting potential appropriate classifications.
- Develop job responsibilities and roles needed for human resources (HR) as part of the workforce mobilization team. This may include identifying a trigger for assigning HR staff or outlining necessary subject matter expertise needed around employment types.

- During responses, continue to offer HR a platform to reinforce the expectation that response teams should involve HR in their staffing conversations early and often. Ensure that HR is included in the agenda and standard attendees for relevant meetings.
- Document the protocol and lessons learned from working with staffing agencies during the response.
- Prioritize activities targeted at improving the ability of Public Health Reserve Corps (PHRC) to attract and retain diverse volunteers. Efforts should strive to significantly improve the diversity of newly recruited PHRC members and active participation of BIPOC volunteers.
- Update or create policies which address maintaining or increasing diversity of PHSKC staff. Develop deliberate policies engaging diversity and equity issues from the lessons learned in the response. For example, prioritize activities targeted at improving the ability of PHSKC to attract and retain diverse applicants and hires.

Team or Staffing Capacity

- Develop and document a staffing model including number of staff needed during surges.
- Hire and cross-train additional program staff to enable the use of vacation without fearing their absence will create more workload and stress for colleagues on their team.
- Identify reliable funding for public health to effectively respond to public health emergencies.
- Identify bridge funding between infusions of federal and state emergency response money to avoid disruptions in response activities and prevent staff layoffs and rehires.
- During steady state, maintain open continuous recruitments for rosters of surge staff on standby until deployment during an emergency.

Safety or Wellbeing Concerns

- Consult with Employee Assistance Program (EAP), Balanced You, Safety Officer, and other relevant groups to develop and document plans to ensure targeted access to culturally competent mental health/well-being resources for responders.
- Develop and document plans to allocate time and space for training and professional development so that staff feel supported in their role and can maintain a balanced workload between ongoing and response duties during longer responses.
- Create plans that focus on making structural changes, such as establishing response priorities, cross-training staff members so people are able to cover for others going on break, hiring staff more quickly,

and allowing responders to rotate out of the response more frequently, in order to allow staff to take advantage of individual self-care needs.

- Explore making safety and wellbeing resources available to all responders, not just those who are King County employees.

Equity

- Work with emergency response leadership to hold more conversations about white supremacy and white dominance in the workplace.
- Continue collaborative work on disability equity/accessibility. Integrate and institutionalize successful practices from COVID-19 response into public health services and future emergency responses.
- Consult with leadership from the Equity and Community Partnerships team to designate one group (e.g., Equity Response Team) of internal staff as the official body for conducting initial equity reviews of proposed policies and programs.
- Develop and document a clear, consistent process for conducting initial equity reviews of proposed policies and programs. Delineate the procedures for doing an initial, internal-only equity review vs. a secondary review that involves feedback from external stakeholders.
- Hire more career service equity positions and build equity work into job descriptions. Add accountability for racial justice and equity goals into job descriptions and performance evaluations.
- Advocate for the adoption of common service delivery and accessibility standards across PHSKC programs to accommodate diverse communities. The standards should be met day-to-day as well as during disasters. This may include training for staff to review accessibility and health literacy standards of written materials (plain language, considerations for images, etc.), maintaining documented Americans with Disabilities Act (ADA) accessibility best practices for programs/services, or creating protocols and training for incorporating ADA standards into operations.
- Ensure all plans for continued work with CBOs, community navigators, and other community leaders include compensation.
- Invest time for each public health program to better align with the values established by the declaration of Racism as a Public Health Crisis. The declaration identifies a shared vision for equity to strengthen engagement of all staff in the department's equity and anti-racist agenda, unify efforts, and better center community needs.
- Address pay disparities between Special Duty Assignments and incoming higher negotiated amounts for Temporary Limited Term which created structural inequity among new hires.

Coordination/Collaboration

- Review structures to promote greater internal, cross-team coordination to help various response teams stay aligned with changing guidance and awareness of activities being led by other teams. Identify ways to support common operating picture to increase collaboration in efforts. Continue broad information sharing between internal teams by disseminating relevant materials and developing plans on a knowledge management driven shared portal.
- Perform an in-depth equity analysis of the burden and administrative barriers county business processes present to critical (small) partners like navigators, translators, and presenters. Work with Equity Response Team to review analysis and prioritize barriers for removal.
- Establish a quarterly or annual meeting to bring equity teams from key partner organizations together to connect and share best practices.
- Establish and maintain regular systems to continue relationships and planning in advance of an emergency with partners (e.g., municipalities and state agencies, businesses, healthcare systems and laboratories) that supported and/or would have a key role in collaborating during future response operations, such as testing, vaccination, or emergency medical services. This could include regular communications, meetings, contributions to emergency planning, and opportunities to train or practice response plans together.
- Recommend teams such as CBOs task force, FBOs task force should have a consistent seat at the table early on in response planning. Ensure avenues of participation for community partners who may not have the capacity to engage via comment periods, sharing of meeting content, and accessibility to meetings via means other than in-person.
- Seek ways to include direct community participation in ICS structures for smaller, less complex, or shorter duration events, to center community voices and empower the community to allocate response resources. Document these enhancements in the ESF #8 plan.
- Consider adopting a formal shadowing/mentoring process for departments seeking to launch community-led projects in the future to learn from PHSKC divisions that successfully engaged the community during COVID-19. For example, community-driven models for decision-making and ways to engage the community in programmatic design and implementation.
- Model with community members our willingness to engage in uncomfortable conversations. While being aware of our “county hat” and our shared humanity, make space to talk about barriers impacting our communities. This could include training or guidance for staff on active listening, conflict mediation, or receiving critical feedback during community meetings.
- Continue to support and further incorporate language access capabilities facilitating broader coordination and collaboration.

- Support purchasing and support of auxiliary devices for people accessing county services. Auxiliary devices are often labeled as supports for people with disabilities such as people who are deaf or hard of hearing but are useful to many community members.

CONCLUSION

Image 5: COVID-19 vaccination sites

The COVID-19 pandemic is an unprecedented public health emergency, testing health systems at all levels of government. To add to the already complex nature of the COVID-19 response, local governments across the country simultaneously responded to civil unrest, extreme weather, and catastrophic fires throughout 2020, further straining the already overwhelmed response infrastructure and complicating the COVID-19 response. With this complex disaster landscape, PHSKC acknowledged the importance of critically evaluating their disaster response to date and identified corrective actions to improve response efforts going forward, continuing this process as the COVID-19 response endures.

This AAR details the strengths and areas for improvement exhibited during PHSKC's response to COVID-19 in the operational period of assessment from January 2020 – January 2022. All recommendations identified during the creation of this report are synthesized into a COVID-19 Improvement Plan, which provides a roadmap for PHSKC to guide efforts to improve their response to future communicable disease outbreaks and other public health emergencies.

ACKNOWLEDGEMENTS

We are grateful to the many individuals, organizations, and our community that responded to the COVID-19 pandemic - their time, expertise, and tireless efforts were instrumental to PHSKC's whole of community emergency response.

The list below is reflective of the agencies who participated in an after-action review interview, facilitated discussion/hotwash, or a town hall event. Many thanks to the incredible PHSKC staff, King County departments, volunteers, community organizations, trusted leaders, healthcare organizations, and public and private sector response partners that provided insights and feedback into the after-action review process. We are grateful for all that you have done to support PHSKC's COVID-19 response and for sharing your reflections and expertise.

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Allegro
Altius
American Indian Health Commission for Washington State
Amigos de Seattle
Atlas Genomics
Center for Multicultural Health

Central Area Senior Center
Church of Mary Magdalene at Mary's Place
Evangelical Lutheran Church in America
EvergreenHealth
Fred Hutchinson Cancer Research Center
HealthierHere
HealthPoint
Hopelink
India Association of Western Washington
International Community Health Services
Kaiser Permanente
King County Promotores Network
Latino Community Health Advocates team
Neighborcare Health
Northwest Healthcare Response Network
Public Health Reserve Corps
Puget Sound Regional Fire Authority
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ACRONYMS

A&I	Analytics and Informatics
AAR	After Action Report
ADA	Americans with Disabilities Act
BIPOC	Black, Indigenous, People of Color
CBO	Community-Based Organization
CDC	Centers for Disease Control and Prevention
COVID-19	Coronavirus Disease – 2019
DOH	Washington State Department of Health
EAP	Employee Assistance Program
EOC	Emergency Operations Center
ESF	Emergency Services Function
FBO	Faith-Based Organization
HMAC	Health and Medical Area Command
HR	Human Resources
IAP	Incident Action Plans
ICS	Incident Command System
LTCF	Long- Term Care Facility
MOU/MOA	Memorandum of Understanding/Agreement
PCAG	Pandemic Community Advisory Group
PARCAG	Pandemic and Racism Community Advisory Group
PHSKC	Public Health - Seattle & King County
PHRC	Public Health Reserve Corps
PPE	Personal Protective Equipment
SEOC	State Emergency Operations Center
SOP	Standard Operating Procedure
WASCLA	Washington State Coalition for Language Access