MULTNOMAH COUNTY

COVID-19 Pandemic Response After-Action Report & Improvement Plan

July 2024

Final

Multnomah County

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ABBREVIATIONS AND TERMS

Abbreviations	Terms
AAR	After-Action Report
BIPOC	Black, Indigenous, People of Color
CDC	Center for Disease Control and Prevention
COOP	Continuity of Operations
EOC	Emergency Operation Center
ICS	Incident Command System
NIMS	National Incident Management System
NPG	National Preparedness Goal
OHA	Oregon Health Authority
OHSU	Oregon Health and Science University
PHEP	Public Health Emergency Preparedness
WA DOH	Washington Department of Health

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1. EXECUTIVE SUMMARY

This After-Action Report (AAR) is a comprehensive analysis on enterprise-wide efforts by Multnomah County to respond to the Coronavirus Disease 2019 (COVID-19) pandemic from January 2020 to June 2022.

The scale and duration of COVID-19 response operations challenged Multnomah County like it did for counties across the United States. The County had to conduct widespread field operations to ensure the community's safety and health while coordinating with the State of Oregon on essential policies and issues and supporting local partners. Additionally, Multnomah County made a concerted effort to protect its workforce from illness while keeping the public informed every step of the way. The primary goal of the county's response was to reduce the harmful impacts of COVID-19 and data suggests our efforts made a difference.

- COVID-19 fatality rate - Multnomah County had a COVID-19 fatality rate of 139.6 per 100,000 by July 23, 2023, well below the state's rate of 206.8 per 100,000 and substantially below the national rate of 335.0 per 100,000.
- COVID-19 case rate - While Multnomah County's COVID-19 case rate was above the State average in 2020 it reduced substantially in 2021 to 5,422.6 cases per 100,000. This was well below the state and federal COVID-19 case rate averages, 7,538.1 per 100,000 and 10,396.1 per 100,000 respectively.
- Vaccination rate - The county also had higher than average vaccination rates and achieved a first dose vaccination rate of 96.55% by December 7, 2022, with the US average of 81% for that same time period.
- Corrections - The county did not experience any fatalities from incarcerated individuals or from people being housed in shelters.

Through various stakeholder interviews, surveys, and document review, EM Partners collected a wealth of information to identify the County's strengths and areas for improvement. (See Appendix 1 for Methodology, Appendix 2 and Appendix 3 for Survey Summaries.) This report provides an evaluation of systems and coordination effectiveness, not an evaluation of public health decisions and actions. The AAR identifies areas of success and opportunities for improvement for the County to take proactive action to enhance preparedness and to respond to any future emergency response.

This report captures insights, identifies critical operational and strategic-level findings, and offers recommendations for the areas summarized below. This summary includes an overview summary table for critical strengths and areas for improvement.

Report Structure

The Multnomah County COVID-19 After-Action Report is organized into the five sections:

1. Executive Summary: Provides an overview of the after-action review scope, methodology, report structure, highlights of the response efforts, and selected strengths and areas for improvement.

2. Incident Overview: Provides a summary of the global pandemic and the County's emergency response, looking specifically at the Emergency Operations Center's support to the Public Health response.

3. Capabilities Analysis: Analyzes six evaluation areas critical to the Multnomah County COVID-19 response operation. Each area includes an overview, strengths, and recommendations identified in the respective focus areas.

4. Improvement Plan: Provides a consolidated list of recommendations identified in this report, along with responsible agencies/organizations. Implementation timelines will be established for each recommendation.

5. Appendices: Provides expanded details and references to support understanding of the After-Action Report.

Multnomah County

COVID-19 EXECUTIVE SUMMARY

RESPONSE DAYS 730+

469 EMERGENCY OPERATIONS CENTER DAYS ACTIVATED

SITUATIONAL REPORTS 152

COVID-19 RELIEF FUNDING

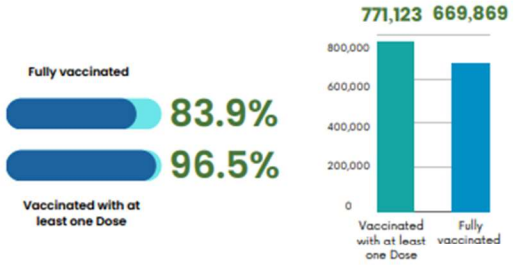
ARPA $146.1 M

$48.2 M **CARES**

FEMA $17 M

PUBLIC HEALTH

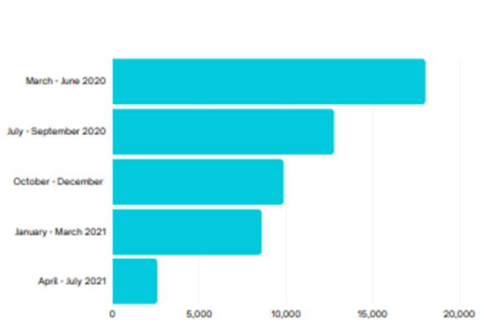
Vaccination Rates As of Dec. 7, 2022



IN PERCENTAGE | IN NUMBERS

COVID-19 Vaccination in Multnomah County

MASS CARE



INDIVIDUALS SHELTERED

Data compiled from Social Distancing Shelters, Medical Motels, or Voluntary Isolation Motels. 51,838 residents used the shelters between March 01, 2020, and July 31, 2021.

PUBLIC INFORMATION

Mar 2020 - Mar 2023: **130,205** Calls & Emails Logged

July - Oct 2022: **15,554** Calls & Emails Logged

COMMUNITY OUTREACH

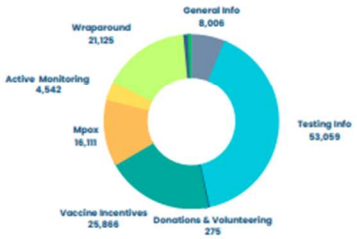
- 4,606 Phone outreach to individuals on waitlist
- 16,05 SMS messages
- 4,559 2nd dose emails
- 1,314 Online signups

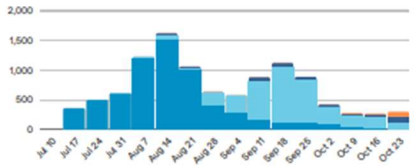
SCHEDULED APPOINTMENTS

- 1ST MPOX 6,242
- 2ND MPOX* 3,429
- COVID 488
- FLU 116

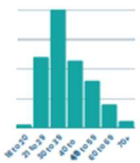
ESTIMATED IMPACT

- 6,109 Individuals scheduled for mpox vaccination
- 2,949 Completed both doses
- 38.6 (Days) Online signups

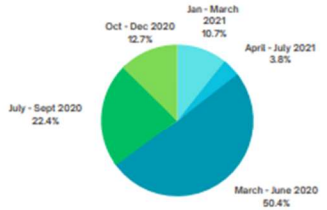




AGE GROUP



LOGISTICS



The county handled over 2,449 resource requests

Quantities of Personal Protective Equipment Distributed in 2020

ITEMS DELIVERED	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
8-24 OZ HAND SANITIZER	20,617	9,330	2,944	10,021	8,062	7,188	4,269	1,385	3,203	67,019
HALF-GALLON HAND SANITIZER	2	137	29	170	6	0	0	203	0	547
GALLON HAND SANITIZER	305	485	2,200	697	205	383	430	440	73	5,117
HANDMADE CLOTH FACE COVERINGS	33,295	4,139	1,284	7,571	963	836	2,208	950	1,000	52,246
COMMERCIAL FACE COVERINGS	0	0	0	0	0	0	40,864	60,755	8,600	110,219
KN95 MASKS	700	25	435,950	144,934	196,126	154,031	170,090	110,445	62,075	1,274,376
N95 MASKS	130,694	21,165	14,947	254	5	2,081	1,720	4,645	4,537	180,048
GOWNS/SUITS	22,673	1,850	5,540	1,156	0	0	2,700	11,390	10,084	55,393
GLOVES (SINGLE)	356,000	318,980	25,400	12,200	200	0	10,400	59,000	47,460	829,640
FACE SHIELDS	11,811	17,518	5,280	1,111	2,625	2,654	1,122	1,675	1,269	45,065
PROCEDURAL MASKS	471,280	230,369	342,785	614	0	200	4,700	4,225	268,790	1,322,963
THERMOMETERS	0	2,000	1,750	0	0	0	0	1	0	3,751
OTHER (TEST KITS, GOOGLES, ETC.)	98,292	12,334	3,822	702	1,784	12	12	730	730	121,373

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Key Findings

The long duration of the COVID-19 pandemic response provided a significant opportunity for Multnomah County to assess what went well and what can be improved moving forward. The following section outlines a selection of strengths and areas for improvement identified during the review.

Strengths

The County successfully achieved high vaccination rates – as of December 7, 2022, 83.88% of the eligible population was fully vaccinated, and 96.55% had at least one dose. The US average for one dose in the timeframe was 81%.
Public Health and Emergency Management could leverage their resources, knowledge, and skills and work together in Unified Command.
Including the Equity Officer and equity positions within the EOC helped ensure that equity was at the forefront of the decisions made in the EOC.
Multnomah County successfully partnered with community-based organizations in providing testing and vaccine assistance.
The Community Health Worker Model was successfully utilized in assisting underserved communities.
The Voluntary Isolation Motels were successful in slowing the spread of COVID-19.
The County built a successful program for wraparound services, including translation services, transportation, and ensuring residents had food and water.
The liaison program evolved into a very strong one with a liaison officer and assistants working with five to seven community sectors.
The County consistently communicated to the public and made information accessible to everyone.
The COVID-19 Call Center took and responded to around 15,000 calls. This allowed the County to give personal attention to the community, answer questions and was the foundation for the state-wide Mpox response occurring during COVID-19.
The EOC logistics team responded creatively and successfully to resource requests.

Areas for Improvement

Expanding the County's ability to staff and operate an Emergency Operations Center for large-scale, long-term activations; and include position-specific training on Incident Command System (ICS) procedures for managers.
Reestablishing the Emergency Preparedness Council as a program for elected and departmental leadership to discuss emergency management on a regular basis.
Engaging County leadership and a regular team of EOC workers before, during, and after an activation.
Executing authorities allowing for the direction of County officers and employees to perform or facilitate emergency services.

Establishing policies for activating continuity of operations or alternative processes for hiring.
Improving availability and access to complete County resources, assets, and relationships.
Identifying and formalizing essential worker designations.
Re-negotiating union contracts to include provisions for emergencies.
Improving worker transition back to regular positions.
Improving health equity and eliminating disparities among the diverse and most vulnerable communities in Multnomah County.
Prioritizing situational awareness and information sharing across all County stakeholders.
Improving the feedback loop between the communications team and the recipients of County messages.
Increasing the role Human Resources plays in the Administration/Finance section in the EOC.

2. Incident Overview

On December 31, 2019, the World Health Organization obtained open-source information indicating several "viral pneumonia" cases in Wuhan, China. The World Health Organization informed its Global Outbreak Alert and Response Network partners of the cluster of pneumonia cases on January 2, 2020. On January 7, 2020, Chinese authorities indicated that the reported outbreak was attributable to a novel coronavirus, and the World Health Organization reported human-to-human transmission of the virus on January 21, 2020. The first confirmed case of the novel coronavirus in the United States occurred on January 21, 2020, in a person who had recently returned from Wuhan, China.

COVID-19 exacts a disproportionate toll on vulnerable populations such as seniors; the immunocompromised; nursing home residents; people who live or spend time in congregate settings; people with disabilities; and individuals with underlying conditions such as obesity, diabetes, heart conditions, chronic obstructive pulmonary disease, and other chronic illnesses. Healthcare workers, first responders, and public transportation employees represented a portion of the "essential workers" who faced an extreme risk of exposure to COVID-19 during the pandemic. Additionally, the pandemic placed a disproportionate burden upon persons with a higher incidence of simultaneous multiple comorbidities within racial and ethnic groups, multigenerational households, people experiencing poverty and underprivileged individuals who may encounter potential barriers to accessing/obtaining healthcare, language obstacles, or decreased ability to maintain strategies.

The State of Oregon informed Multnomah County on January 25, 2020, that approximately 800 people would be repatriated from Wuhan, China, to the United States, potentially in the

greater Portland area. This initiated the County's anticipation of the pandemic and kick-started coordination of the Multnomah County response.

COVID-19 Pandemic Response in Multnomah County

The County's response to COVID-19 was truly remarkable, as evidenced by the extended activation of the Emergency Operations Center (EOC) - a first for the County. The successful formation of Unified Command by both Emergency Management and Public Health was a significant achievement, demonstrating the County's unwavering commitment to addressing the pandemic and ensuring the safety of its residents. During this lengthy response, the County faced numerous challenges while coordinating a vast array of logistically complex and resource-intensive interventions that involved cooperation and collaboration with city, county, and state government departments and offices, community partners, regional partners.

With the declaration of a public health emergency on January 31, 2020, the Federal Government began implementing public health measures to safeguard the American public. The County proactively assessed the looming threat of COVID-19 in advance of the state of emergency being declared. Upon learning the Portland International Airport had been flagged by the Federal Government as a potential landing point for American citizens being repatriated from Wuhan, China, the EOC moved to enhanced operations on January 30, 2020. With the EOC in enhanced operations, monitoring efforts increased and a planning group was established.

The County, anticipating the arrival of these citizens, sprang into action and held a discussion-based exercise in mid-February to review the emergency operations plan and to strategize how to manage a response. Following the exercise, the County's EOC transitioned from "enhanced" to "partial" operations on February 27, 2020. The first presumptive case of COVID-19 in Oregon was announced by the Oregon Health Authority on February 28, 2020.

Emergency Management and Public Health united to organize the COVID-19 response and build the response organization. The knowledge, skills, and abilities of each organization united in an effective partnership. Emergency Management assumed responsibility of the administrative leadership and logistics work, and Public Health took on the role of operationalizing the public health investigation and protective measures required by the infectious disease environment. Public Health moved quickly to establish an outbreak team. With so many unknowns about the disease initially, they were working diligently to be ready to meet the window of time where the spread of the disease could be contained, even if it was doubtful that the disease could be stopped. Case investigation and containment was very important, as was communications with the public. They knew public messaging and outreach would need to be performed in a very culturally-specific way and not just through mainstream media. Emergency Management worked to get the response organization in place. This included recruiting EOC staff, facilitating the planning and reporting systems in the EOC, and coordinating with County senior leadership.

Governor Brown declared a state of emergency for Oregon on March 8, 2020, and Multnomah County announced an executive rule (ER #388) declaring an emergency on March 11, 2020. A national emergency declaration under the Robert T. Stafford Disaster Relief and Emergency Assistance Act was issued on March 13, 2020. Multnomah County placed all staff, except essential staff, on telework, effective March 17, 2020. Information Technology created telework kits and they worked quickly to ensure that all staff had laptops to begin working from home. County employees whose positions were temporarily shut down were able to change positions and work as paid volunteers in the EOC. With COVID-19 continuing for more than two years, the County telework program evolved and disaster incentive pay was offered to encourage County employees to participate in Countywide response activities.

On March 23, 2020, the Governor implemented the "Stay Home, Save Lives," initiative and directed people to stay home as much as possible. As part of this directive, specific retail businesses were ordered to close, and physical distancing measures were established for other public and private facilities and extended to outdoor areas. On April 8, 2020, the Governor closed schools for the remainder of the academic year. The President of the United States declared a major disaster on April 2, 2020.

FIGURE 1. THE GOVERNOR DIRECTS OREGONIANS TO STAY HOME IN AN EFFORT TO REDUCE THE SPREAD OF COVID-19.

The EOC established a response organization that included Unified Command, Liaisons, Mass Care, Public Health, Logistics, Public Information, and Administration. Unified Command worked to keep response efforts coordinated and focused on priorities. They relied on the Planning Section to catalog response information. At least 152 situation reports were created to support operational communication. The Liaison Officers supported 26 sectors, including but not limited to culturally-specific communities, small businesses, event venues, pharmacies, schools, faith-based organizations, and migrant/seasonal farm workers, by answering sector-specific questions, ensuring understanding of local and state guidelines as it pertained to their sector, and managing communication and information sharing between sector organizations and the County EOC. More than 8,500 people actively participated in this effort.

With the stay at home order, care for the unhoused or individuals in unstable living environments became a priority. Physical Distancing Shelters and Voluntary Isolation Motels were established and operated to offer safe accommodation based on eligibility criteria. If someone needed to be isolated due to a COVID-19 diagnosis, they were referred to an isolation motel to stay for the duration of their illness. Over 51,000 people were cared for in these emergency shelter settings. Public Health operations included the Communicable Disease Epidemiology Team who evaluated information from multiple data sources and emerging science related to COVID-19, then considered local, regional, national, and international

information to inform the County's COVID-19 response strategies. Multnomah County Community Testing was designed to help provide testing for people without health insurance, and people without a regular healthcare provider. COVID-19 vaccine clinics hosted by Multnomah County Public Health aimed to vaccinate those not served by the mass vaccination sites in the area.

Public messaging was critical to an effective response, but also incredibly challenging as knowledge about the virus and how to stay safe changed daily. The Public Information team worked tirelessly to craft accurate messages to be distributed in communicating in an equitable and culturally responsive manner. This activity included translating information into multiple languages and sharing on media/platforms preferred by people whose first language is something other than English. County Human Services supported the COVID-19 Call Center, County Communications took the lead for media management, and Public Health communications specialists focused on accurate messaging tailored for specific communities. Later in the response, the Liaison team aligned with the Public Information team, which facilitated much greater information sharing with community groups.

The EOC Logistics team expanded from receiving and storing supplies in a parking garage to securing and running a 12,000 square foot facility. They managed the procurement of supplies at a time when supply chains were disrupted and the whole world was vying for the same items. The volume of resources procured, received, and distributed by the Logistics team in 2020 is represented by Table 1.

Table 1. Quantities of Personal Protective Equipment Distributed in 2020

Items Delivered	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	2020 Totals
8-24 oz hand sanitizer	20,617	9,330	2,944	10,021	8,062	7,188	4,269	1,385	3,203	**67,019**
Half-gallon hand sanitizer	2	137	29	170	6	0	0	203	0	**547**
Gallon hand sanitizer	305	485	2,200	697	205	282	430	440	73	**5,117**
Handmade cloth face coverings	33,295	4,139	1,284	7,571	963	836	2,208	950	1,000	**52,246**
Commercial face coverings	0	0	0	0	0	0	40,864	60,755	8,600	**110,219**
KN95 masks	700	25	435,950	144,934	196,126	154,031	170,090	110,445	62,075	**1,274,376**
N95 masks	130,694	21,165	14,947	254	5	2,081	1,720	4,645	4,537	**180,048**
Gowns/suits	22,673	1,850	5,540	1,156	0	0	2,700	11,390	10,084	**55,393**
Gloves (single)	356,000	318,980	25,400	12,200	200	0	10,400	59,000	47,460	**829,640**
Face shields	11,811	17,518	5,280	1,111	2,625	2,654	1,122	1,675	1,269	**45,065**
Procedural masks	471,280	230,369	342,785	614	0	200	4,700	4,225	268,790	**1,322,963**
Thermometers	0	2,000	1,750	0	0	0	0	1	0	**3,751**
Other (test kits, googles, etc.)	98,292	12,334	3,822	3,685	702	1,784	12	12	730	**121,373**

The County prioritized the distribution of personal protective equipment to support those most in need. As shown in Figure 2 below, nearly 1.3 million face coverings were distributed in the last half of 2020.

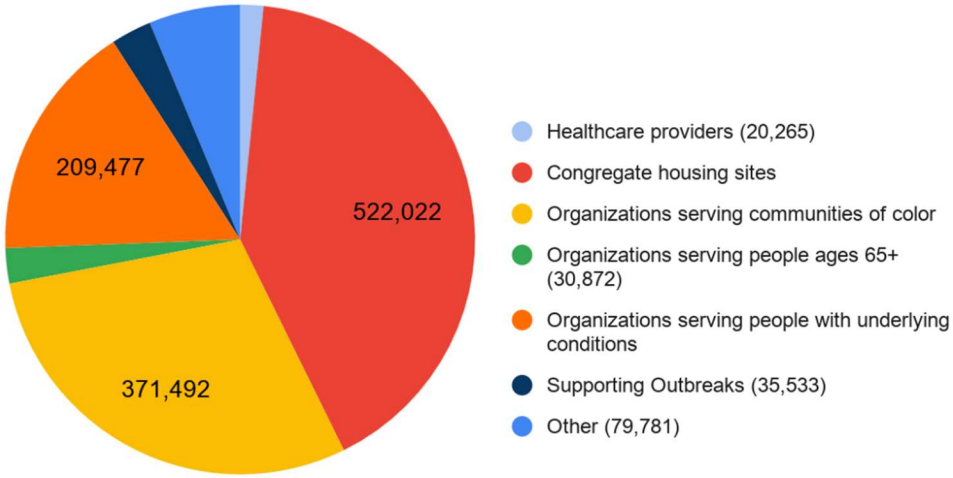
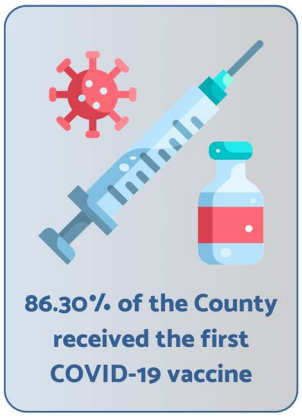


FIGURE 2. FACE COVERINGS DISTRIBUTED IN 2020 FROM JUNE 23 - DECEMBER 18 BY PRIORITY ORGANIZATION

Success of the County's Response

Throughout the COVID-19 response, the County held to its values and made decisions with equity in mind. This broad collection of actions helped prevent and control the spread of COVID-19 in Oregon and increased the state's ability to live with the virus until a vaccine or cure was widely available. It was important that all members of the community were taken care of and that no one was left behind during such trying times. As a result, the County was able to navigate the pandemic with compassion and fairness.



The figures on the next two pages demonstrate the effectiveness of the public health mitigation measures implemented to slow the spread of the disease. In 2020, Multnomah county had one of the higher rates of COVID-19 cases in Oregon. As testing and vaccinations became widely available and social distancing measures were adhered to, the County continued to support those with the most barriers to receiving care and communities hesitant about vaccination. All these efforts combined to provide Multnomah county with one of the lowest case rates in Oregon compared to other counties in 2021. The county was also significantly lower than the national average for cases.

The horizontal bar graph in Figure 3 represents case rates (per 100,000 population) by county in Oregon during 2020. Counties that had case rates above the case rate for the state are displayed in orange. Counties that had a case rate below the case rate for the state are displayed in blue. The state average was 2,845 cases per 100,000 during the year.

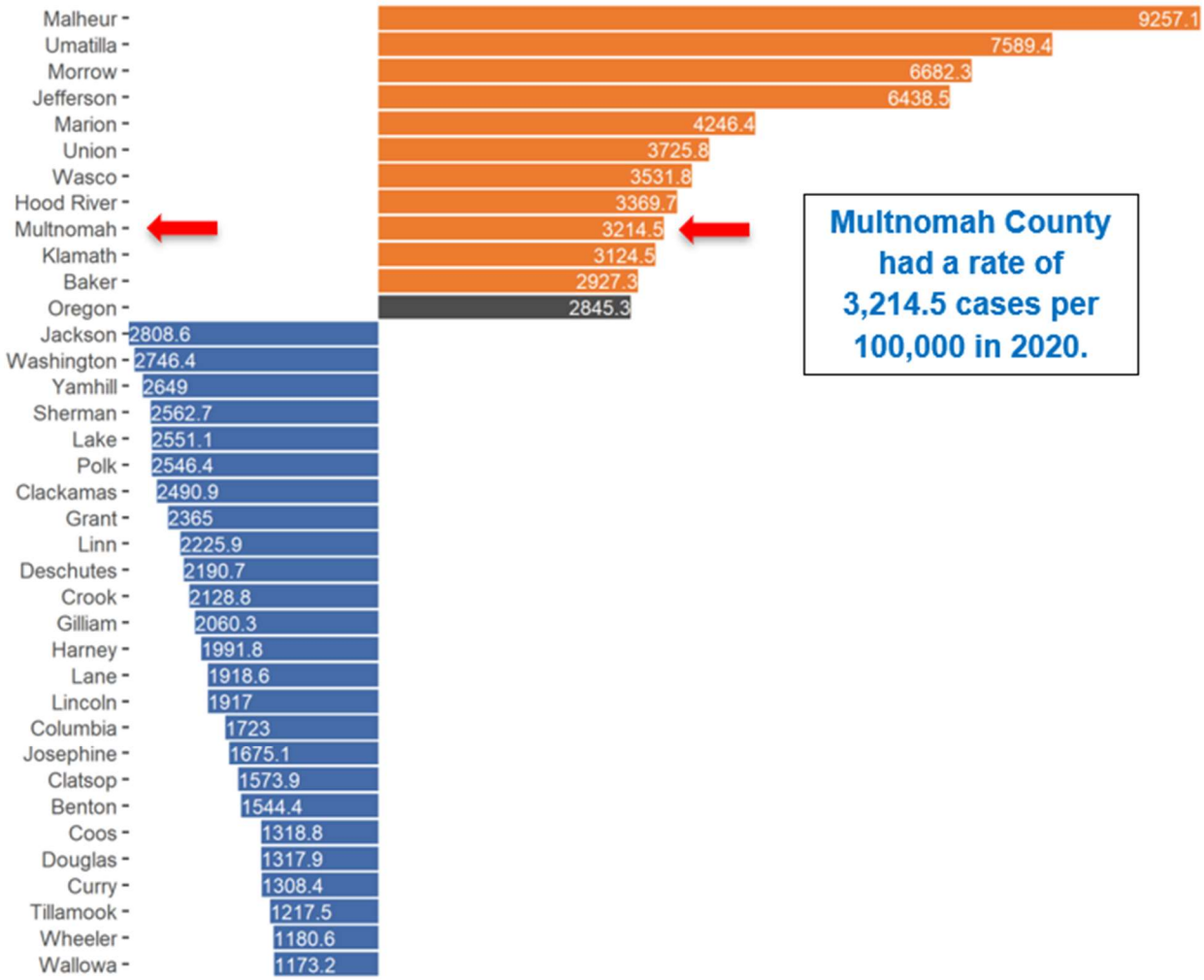


FIGURE 3. COVID-19 CASE RATES (CASES PER 100,000) IN 2020, BY COUNTY.

As in the first figure, the horizontal bar graph in Figure 4 represents case rates (per 100,000 population) by county in Oregon during 2021. Counties that had case rates above the case rate for the state are displayed in orange. Counties that had a case rate below the case rate for the state are displayed in blue. The state average was 7,538 cases per 100,000 during the year, while the national average was 10,396 cases per 100,000 during the year.

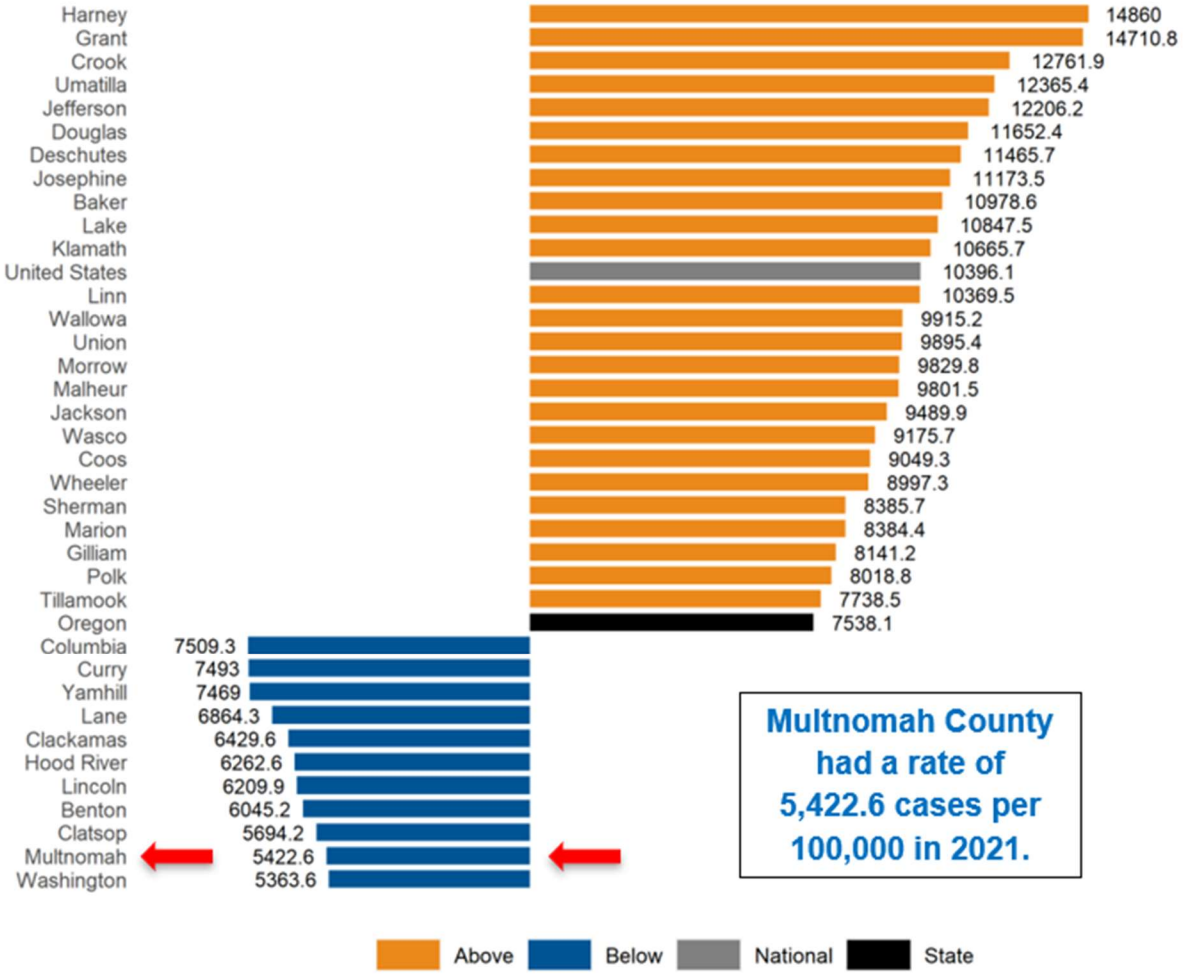


FIGURE 4. COVID-19 CASE RATES (CASES PER 100,000) IN 2021, BY COUNTY.

SOURCE: COVID-19 2021 REPORT - OREGON'S ANNUAL SUMMARY [OHA 2395 (09/07/22)].

Incident Timeline

The timeline on the next page provides a comprehensive overview of major declarations, response actions, and events that took place throughout the COVID-19 pandemic. A comprehensive incident timeline is provided in Appendix 4.

January 2020 - January 2022

Notification
Virus identified as a novel coronavirus by Chinese authorities.
1/7/2020

Declaration
HHS declared public health emergency.
1/31/2020

Case
Oregon Health Authority confirmed Oregon's first presumptive case of novel coronavirus.
2/28/2020

Activation
County logistics section is activated and supporting Multnomah County EOC.
3/2/2020

Case
CDC confirmed Oregon's first case of COVID-19.
3/3/2020

Declaration
Oregon Governor declared a state of emergency.
3/8/2020

1/30/2020
Activation
Multnomah County EOC moved into enhanced operations.

2/27/2020
Activation
EOC moved from enhanced to partial level of operations.

2/29/2020
Response
A regional joint information system was established for information sharing and mutual support for regional stakeholders.

3/2/2020
Response
Multnomah County Communicable Disease activated COVID-19 hotline, EOC began dispersing daily Situation Reports.

3/3/2020
Activation
Regional command centers are activated at all health systems; mostly to address patient surge and supply shortages.

3/10/2020
Case
Multnomah County announced first presumptive positive case.

Response
Governor's Office of Diversity, Equity & Inclusion Published Equity Framework in COVID-19 Response and Recovery (date estimated).
6/1/2020

Declaration
Governor announced plan to reopen the state.
5/7/2020

Response
The first Voluntary Isolation Motel opened this week in Multnomah County.
3/25/2020

PPE
Oregon recieves first Strategic National Stockpile push of Personal Protective Equipment (PPE) supplies.
3/20/2020

Case
Multnomah County suffered first death from COVID-19.
3/14/2020

Declaration
Multnomah County announced an executive rule (ER #388) declaring an emergency in the County.
3/11/2020

5/30/2020
PPE
"PPE Supply Portal" went live.

4/8/2020
Closure
Governor announced that schools will remain closed for the remainer of the academic year.

3/23/2020
Declaration
Governor issued EO ordering all Oregon residents to "Stay Home, Save Lives."

3/17/2020
Closure
Multnomah County placed all staff, except essential staff, on telework.

3/13/2020
Declaration
President declared a national emergency, invoking the Stafford Act.

3/11/2020
Declaration
The World Health Organization declared COVID-19 to be a global pandemic.

Response
State mask mandate for public indoor spaces instead of effect in Multnomah County.
6/24/2020

Response
Local COVID-19 vaccination operations began.
1/3/2021

Response
Vaccination phase 1b began.
1/25/2021

Response
Governor announced $1 Million "Take Your Shot Oregon" vaccination campaign.
5/21/2021

Declaration
Governor issued mask mandate for all indoor public spaces.
8/13/2021

Notification
80% of adults in Oregon vaccinated.
10/28/2021

12/12/2020
Response
Vaccination phase 1a began.

1/21/2021
Response
Port of Portland mass vaccination center opened.

5/1/2021
Declaration
The acting secretary of HHS issued a directive to expand COVID-19 vaccine eligibility to all Americans by May 1, 2021.

7/2/2021
Notification
70% of all adults in Oregon vaccinated.

8/19/2021
Declaration
Governor announced COVID-19 vaccine mandate for Oregon K-12 teachers and staff.

1/31/2022
Declaration
76% of Oregonians have received one vaccination dose; 68% are fully vaccinated.

Emergency Management Coordination

The Multnomah County Office of Emergency Management is responsible for planning, preparing, and coordinating mitigation, response, and recovery for emergencies and disasters in the county. The Public Health division of the Multnomah County Health Department is the lead for infectious disease preparedness, monitoring, and response for the county. With the emergence of COVID-19, Public Health activated its Incident Command team to strategize and prepare for the County's response. As the scope and potential for a long-duration event became apparent, the decision was made to establish a Unified Command with Emergency Management. Both organizations brought different strengths to managing the growing emergency. Public Health offered communicable disease and infection control expertise and established culturally-specific community programming that could serve as the basis for two-way communications, wrap-around services and gap-filling testing and vaccination work not addressed by larger scale operations. Emergency Management knew how to rapidly establish a coordination and planning rhythm, document critical decisions and priorities, and ramp up logistics processes to procure and distribute goods.

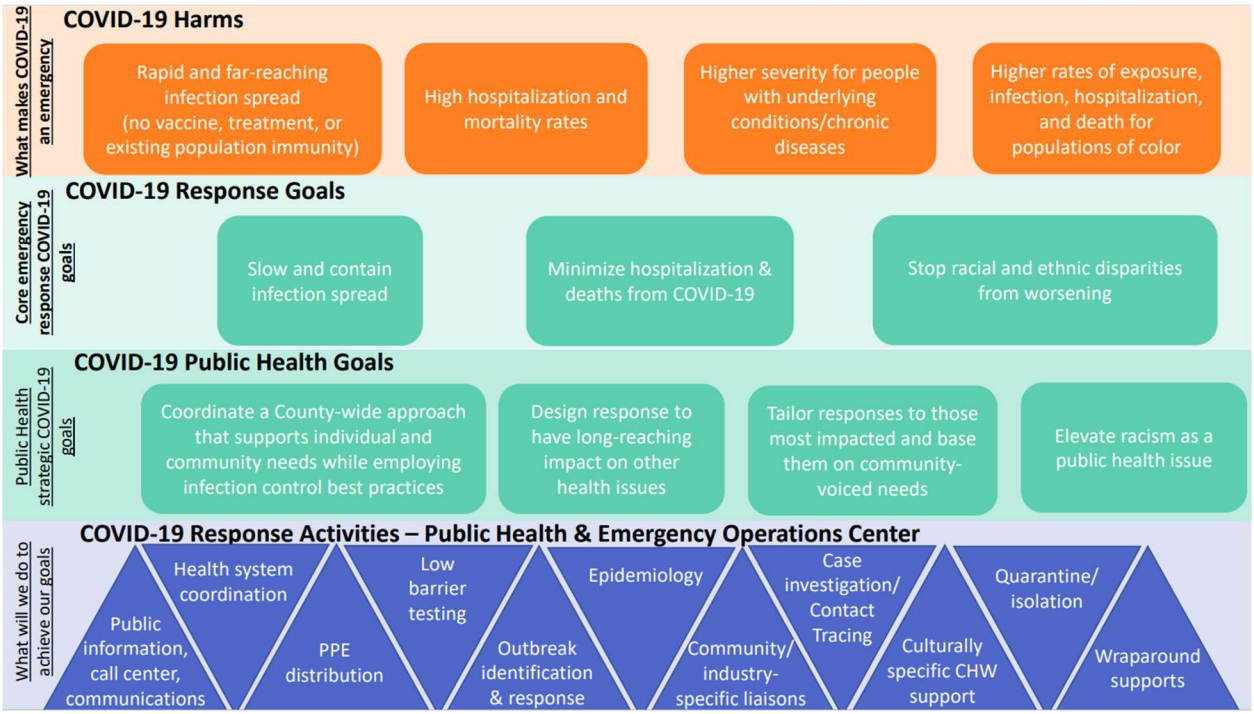


FIGURE 5. REPRESENTATION OF THE RELATIONSHIP BETWEEN RESPONSE ACTIONS AND STRATEGIC GOALS.

Here are some of the key components for emergency management collaboration during the COVID-19 pandemic:

1. **Incident Management:** The COVID-19 response was the first time the Unified Command structure had been established with Public Health and Emergency Management sharing

leadership. Despite challenges with the Unified Command structure during COVID-19, successful collaboration between Emergency Management and Public Health led to successful negotiation of the unfamiliar leadership arrangement.

2. **Operations:** The pandemic required Public Health to leverage staff experienced in communicable disease to operationalize the community response. Mass care efforts engaged the Joint Office of Homeless Services and County Human Services to establish and manage shelter and wrap-around services for community members most at risk.
3. **Planning:** Assuming the organizational administration function in Unified Command, Emergency Management established a schedule of planning and coordination processes to bring critical parties together.
4. **Public Information:** Public Health communications specialists and the County Communications Office collaborated in executing the public information function. With constantly changing guidance, Public Health specialists worked to explain the latest information and distribute information in culturally responsive ways. The County Communications Office assumed the responsibility for media management.
5. **Logistics:** Emergency Management quickly established a logistics function to enable procurement and distribution of the range of personal protective equipment, testing supplies, and vaccination operation requirements.
6. **Liaison:** The liaison function of the EOC expanded in an extraordinary fashion to provide direct support to the community at large by connecting them with resources, discerning State and Federal guidance, solving technical questions, and listening and conveying community concerns to response leadership. The liaison section provided a direct source of information and support from the County and relief to teams that would have been otherwise inundated with community questions, including but not limited to the communicable disease team and the call center. It also created new pathways for relationship building within the community. As the response evolved, the liaisons formed and coordinated workgroups to target outreach in culturally specific and sector specific communities. They also coordinated and hosted COVID-19 information sessions, listening sessions, and vaccine education sessions for schools, culturally specific communities, community-based organizations, faith leaders, and more.

FIGURE 6. LOGISTICS TEAM MOVING SUPPLIES

Public Health Response System

The COVID-19 pandemic served as a catalyst for innovation and collaboration in public health and healthcare systems. With traditional methods no longer sufficient, public health leaders and healthcare stakeholders stepped up to the challenge and found new ways to work

together. The partnerships between state and local public health leaders, healthcare providers, and community-based organizations were essential in ensuring efficient and equitable outreach to communities. While the pandemic brought to light long-standing gaps in public health infrastructure and healthcare access disparities, it also provided an opportunity to address these challenges and develop sustainable approaches for preventing costly conditions that significantly impact individual health and community resilience.

COVID-19 significantly impacted various elements of public health in Multnomah county. Here are some of the key areas that were affected:

1. **Disease Surveillance and Monitoring:** COVID-19 led to the establishment of robust surveillance systems to track the spread of the virus in Multnomah county. This included monitoring and reporting cases, testing efforts, contact tracing, and analyzing data to inform public health strategies.
2. **Vaccination Efforts:** COVID-19 vaccination campaigns were critical to public health response. The Multnomah County government administered vaccines, set up vaccination sites, and implemented strategies to ensure equitable vaccine access for all eligible individuals.
3. **Public Health Messaging and Education:** COVID-19 necessitated extensive public health messaging and education campaigns. Multnomah County health authorities worked to disseminate accurate information about the virus, prevention measures, testing, and vaccination to the public through various channels.
4. **Mental Health and Well-being:** The pandemic profoundly impacted the mental health and well-being of individuals, as well as response workers, in Multnomah county. The stress and anxiety related to the virus, social isolation, and economic challenges adversely affected mental health and caused the need for expanded mental health services.
5. **Economic and Social Disparities:** COVID-19 exacerbated economic and social disparities in Multnomah County. Communities with lower socioeconomic status and marginalized populations were disproportionately affected by the virus, facing higher infection rates, limited access to healthcare, and greater economic hardships.
6. **Community Partnerships and Collaboration:** The pandemic necessitated strong partnerships and collaboration among regional public health partners, healthcare providers, community organizations, and local government in Multnomah county. These

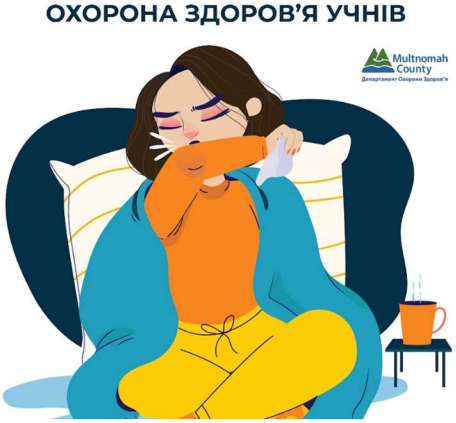


FIGURE 7. EXAMPLE OF CULTURALLY-

collaborations were crucial in coordinating response efforts, addressing community needs, and ensuring effective resource allocation.

7. **Regulations and Enforcement:** Federal and State guidance on protective measures shifted frequently during the pandemic. County and regional public health and communications professionals worked tirelessly to translate guidelines into regulations applicable to affected Multnomah county community sectors. Communication about how to implement safety regulations in various settings was a priority. Enforcing compliance with COVID-19 guidelines and regulation took a back-seat to other response operation priorities, mostly due to lack of staff to conduct enforcement efforts.
8. **Emergency Preparedness and Response:** COVID-19 served as a significant test for emergency preparedness and response coordination systems in Multnomah county. Public health partners had to adapt existing plans, establish emergency operations centers, and coordinate with State and Federal entities to respond to the incident effectively.
9. **Resource Utilization:** The Multnomah County Auditor's Office review of pandemic funds found, "…county management sought to balance the need to get resources out to the community quickly with also maintaining effective policies and procedures to help manage the county's spending of pandemic-related relief funds." The audit report highlights the intentional spending of funds to serve culturally specific community members, including Black, Indigenous, and People of Color (BIPOC) community members, as well as partnering with new providers that had connections to culturally specific community members. Internal policies and procedures were in place to manage pandemic spending.

Health Equity Outcomes

COVID-19 has highlighted and exacerbated existing health inequities in Multnomah County, with certain populations experiencing disproportionate impacts. Here are some of the key impacts on public health equity during the COVID-19 pandemic:

FIGURE 8. THE EQUITY FOCUS PRIORITIZES HEALTH SUPPORT FOR

1. **Health Disparities:** Marginalized communities, including low-income individuals, BIPOC communities, and immigrant populations, faced higher rates of COVID-19 infections, hospitalizations, and deaths than other groups. These disparities were often attributed to underlying social determinants of health, such as limited access to healthcare, crowded living conditions, and systemic racism.
2. **Access to Testing and Healthcare:** Limited access to testing facilities and healthcare services was a significant barrier for vulnerable populations in Multnomah County.

Transportation challenges, language barriers, and lack of insurance coverage made it difficult for some individuals to get tested or receive timely medical care.

3. **Vaccine Equity:** Ensuring equitable access to COVID-19 vaccines was a crucial public health challenge. Multnomah County tried to address vaccine disparities by setting up community-based vaccination sites, partnering with community organizations to reach people who are underserved, and providing translation support. However, barriers such as vaccine hesitancy, misinformation, and limited vaccine supply still impacted equitable distribution.
4. **Social and Economic Impact:** The pandemic had a disproportionate economic impact on people with low incomes. Many individuals in Multnomah county faced job loss, reduced work hours, and financial instability, making it difficult to afford essential resources, including healthcare, nutritious food, and stable housing. These economic challenges further exacerbated existing health disparities.
5. **Mental Health Disparities:** COVID-19 also exacerbated mental health disparities in Multnomah county. Some populations, including those facing economic hardships and systemic inequalities, experienced increased levels of stress, anxiety, and depression due to the pandemic. Limited access to mental health services and culturally-specific care further widened these disparities.
6. **Education and Digital Divide:** The shift to online learning during the pandemic highlighted educational disparities. Students from households with lower income and communities needing access to reliable internet and technological resources faced challenges accessing remote education. This barrier to technology access could potentially widen educational gaps and negatively impact long-term health outcomes.

Addressing public health equity during the COVID-19 pandemic required specifically tailored interventions, such as equitable vaccine distribution, expanded testing in communities underserved by public services, improved access to healthcare services, economic support for households with lower income, and culturally responsive mental health services. Multnomah County health authorities worked to implement strategies to mitigate these disparities and ensure a more equitable response to future pandemics.

Modernization of Public Health Systems

COVID-19 prompted the need for modernization and adaptation of public health systems in Multnomah County. Here were some of the impacts of public health modernization during the COVID-19 pandemic:

1. **Digital Transformation:** The pandemic accelerated the adoption of digital technologies in public health. Multnomah County implemented telehealth services, virtual consultations, and online appointment systems to ensure continuity of care while

minimizing in-person contact. Digital tools also were utilized for contact tracing, data management, and monitoring the spread of the virus.

2. **Data Integration and Analysis:** COVID-19 underscored the importance of data integration and analysis for effective public health response. Multnomah County focused on integrating data from various sources to gain insights into the spread of the virus, identify high-risk areas and populations, and inform decision-making. Analytical tools and dashboards were developed to provide real-time information to public health officials.
3. **Surveillance and Early Warning Systems:** The pandemic highlighted the need for robust surveillance and early warning systems. Multnomah County enhanced its surveillance capabilities to detect and respond to potential outbreaks. These activities included monitoring key indicators, analyzing testing data, and utilizing predictive modeling to anticipate and mitigate the impact of COVID-19.
4. **Public Health Messaging and Communication:** Effective communication was crucial during the public health emergency. Multnomah County leveraged modern communication channels, including social media, email newsletters, and text messaging, to disseminate timely and accurate information about COVID-19. Efforts were made to ensure messaging was accessible - including accurate translations, culturally appropriate, and reached diverse populations.
5. **Collaboration and Partnerships:** The pandemic necessitated collaboration and partnerships across various sectors. Multnomah County worked closely with healthcare providers, community organizations, academic institutions, and other stakeholders to enhance the public health response. Modernization efforts included the development of collaborative platforms, data-sharing agreements, and coordinated strategies to address the pandemic collectively.
6. **Workforce Capacity Building:** COVID-19 highlighted the need to strengthen the public health workforce. Multnomah County invested in training and capacity building to equip public health professionals with the skills and knowledge required to respond to the pandemic effectively. These activities included training on contact tracing, vaccination administration, data analysis, and emergency response protocols.
7. **Preparedness and Response Planning:** The pandemic emphasized the importance of preparedness and response planning. Multnomah County updated its emergency response plans to account for the unique challenges posed by COVID-19. These plans

FIGURE 9. PUBLIC HEALTH MODERNIZATION FOCUS AREAS.

included strategies for surge capacity in healthcare facilities, resource allocation, and coordination with regional and state agencies.

By modernizing public health systems, Multnomah County aimed to improve response capabilities, enhance data-driven decision-making, strengthen communication with the public, and foster collaboration among stakeholders. These efforts played a critical role in the County's response to the COVID-19 pandemic and will continue to shape public health practices.

3. Capabilities Analysis

The Federal Emergency Management Agency (FEMA) National Preparedness Goal (NPG) identified 32 core capabilities spanning five mission areas: prevention, protection, mitigation, response, and recovery. Effective delivery of the core capabilities was necessary to achieve the goal of "a secure and resilient nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk."

Building on FEMA's efforts, the Centers for Disease Control and Prevention (CDC) established 15 capabilities that serve as national standards for Public Health Emergency Preparedness (PHEP) planning. These standards pioneered a national capability-based framework that helped jurisdictional public health agencies structure emergency preparedness planning and further formalize their public health agency Emergency Support Function #8 roles in partnership with emergency management agencies. CDC's capability standards and PHEP cooperative agreement program provided operational support for FEMA's National Preparedness System.

The analysis of the response efforts yielded findings that align with six NPG core capabilities. No core capability was the responsibility of any one party or single level of government and interdependencies existed among many of the core capabilities. Organizing observations from an after-action review by the associated core capability helped link identified strengths, opportunities, and recommendations for improvement to national guidance and helped track progress through incidents and exercises over time. The categories listed below were selected to organize identified strengths and areas for improvement for Multnomah County's EOC response to COVID-19:

- Operational Coordination/Emergency Operations Coordination
- Public Health/Healthcare
- Mass Care Services/Mass Care
- Public Information/Emergency Information Sharing
- Logistics/Medical Material Management and Distribution
- Staffing/Volunteer Management

The definitions for the NPG and PHEP capabilities are provided below along with observations regarding strengths and areas for improvement.

Strengths–Strengths identify actions that went very well or resources that proved valuable given the circumstances of the pandemic. For some strengths, opportunities are highlighted to recommend how these elements can be incorporated into standard procedures to support success in future responses.

Areas for Improvement–Areas for improvement highlight where the County can be more effective. A recommendation associated with areas for improvement is a way to improve the process and prevent the same issue from occurring in future response efforts.

NOTE: The naming convention for each capability is a merge of the titles used in FEMA documentation and CDC documentation and is represented as NPG title/PHEP title.

Capability 1: Operational Coordination/Emergency Operations Coordination

	**NPG Definition:** Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.
	**PHEP Definition:** Emergency operations coordination is the ability to coordinate with emergency management and to direct and support an incident or event with public health or healthcare implications by establishing a standardized, scalable system of oversight, organization, and supervision that is consistent with jurisdictional standards and practices and the National Incident Management System (NIMS).

Strengths

1. **Coordination between Public Health and Emergency Management was a success.**

   Analysis: Both agencies were able to leverage their available resources. Between the knowledge and skills of each agency and the previous training and exercises that they had done together, Emergency Management and Public Health had a great relationship and they worked well together in Unified Command. Each agency was able to see the strengths that the other brought and they had distinct roles within the response.

2. **Daily morning briefings were a great way for leadership to communicate to those involved in the Emergency Operations Center (EOC).**

   Analysis: Since information changed so rapidly, the morning briefings provided EOC staff with important updates and the latest guidelines. This briefing also provided an opportunity to make sure objectives were being met. The morning briefing brought all of the different departments together and encouraged collaboration.

3. **Collaboration improved between different agencies and departments.**

   Analysis: Prior to COVID-19, the various departments and even divisions, programs, and offices within a department were often siloed. During the response, these silos began to break down and there was an increase in collaborative decision-making.

   Opportunity: Continue to foster and find opportunities for collaboration between departments so that it will occur regularly in future emergencies.

4. **Collaboration with regional partners.**

   Analysis: Multnomah County has a strong commitment to building relationships with cities, surrounding counties, and the State of Oregon. There are established partnerships, including the Regional Public Health Leadership Group, the Regional All Hazards Multi Agency Coordination Group, the Health-Medical Multi Agency Coordination Group, and the Regional Disaster Preparedness Organization. These groups are focused on public health and emergency preparedness and were leveraged to support consistency in regional decision-making and messaging for the community. Engagement with the Oregon Health Authority enabled Multnomah County to shape approaches to public health strategies pursued by the state.

   Opportunity: Continue to invest time and effort into sustaining and growing regional and state partnerships to build additional capability to work in concert so regional coordination continues to be a natural process in future emergencies.

   Opportunity: Strive to develop stronger relationships with cities on the eastern side of the county, aiming to establish connections on par with the relationship the County has with the City of Portland.

5. **Having an Equity Officer and equity positions within the EOC benefited the response.**

   Analysis: The Office of Diversity and Equity assigned staff early in the response to serve as an Equity Officer within the command structure to prioritize County values[2] and the Equity and Empowerment Lens[3] in the response, especially social justice and integrity. The response was characterized by an emphasis on equity and prioritizing communities who live or work in settings that put them at higher risk for COVID-19. The Equity Officer helped ensure that equity was at the forefront of the decisions made in the EOC.

   Opportunity: Make the Equity Officer a permanent position within the EOC Command and develop job aid materials to guide and support the execution of the role. Consider if additional equity positions can be integrated deeper in the EOC organizational structure.

6. **The move to telework was a success.**

   Analysis: Information Technology created telework kits and quickly ensured that staff had laptops and other supplies to work from home. An audit on the COVID-19 Pandemic response found the County had, "Telework policy and procedures that provided clear guidance for day-to-day operations and helped to ensure compliance with laws and regulations," Reasonable exceptions to the telework policy were made in March 2020 when the pandemic emergency was declared[4]. The telework policies motivated employees and has made some employees more efficient. Teleworking allows for a smaller footprint, can create a better work-life balance, and can help with employee recruitment and retention by creating a more desirable workplace.

Areas for Improvement

1. **Expanding the County's ability to staff and operate an Emergency Operations Center for large-scale, long-term activations.**

   Analysis: Throughout the pandemic and operational period, there was a difference in training and experience between employees with previous EOC work and many of the employees that responded. Many County employees thought the EOC was the job of Emergency Management and Public Health, but they did not know how the rest of the County employees could help, and they did not think it was the responsibility of the entire County government. For many working in the EOC or in a COVID-19 public-facing

[2] The Multnomah County Mission, Vision, and Values statement can be found online here: https://www.multco.us/board/mission-vision-values-statement

[3] The Equity and Empowerment Lens information can be found here: https://www.multco.us/diversity-equity/equity-and-empowerment-lens

[4] COVID-19 Pandemic Response Audits finding: https://www.multco.us/covid-19-pandemic-response-audits/county-organizational-level-support-telework

service delivery role, not understanding the temporary management structure that the Incident Command System (ICS) establishes to manage the large number of people that are pulled in to support a response was a major challenge. People did not understand how their work fit into the large response effort. They also did not understand how information-sharing informs decision-making, and facilitates nimble adjustments to how services are organized and delivered in an ever-changing emergency environment. A greater number of County employees should be part of developing plans and should be familiar with how to operationalize emergency plans.

Recommendation: Expand EOC training and experience to more County employees. Provide training on ICS, EOC functions, and roles and responsibilities to expand the number of County employees trained to respond and support the EOC. Develop and deliver training to various types of County staff, including County leadership, County personnel staffing the EOC, as well as County staff that will not work in the EOC, but need to be familiar with it. The people identified for EOC positions should participate in annual training and periodic functional exercises.

Recommendation: Establish a working group to formalize EOC position descriptions and the process for activating County staff to fill these positions when the EOC is activated. The Chief Operating Officer's role in activating the County staff to fill EOC positions should be clear. The working group should address the alignment of the EOC position descriptions with human resources pay structures and job classifications, reassignment conditions, and training expectations.

Recommendation: At a minimum, include an annual refresher training with other annual training mandated by the County's Central Human Resources. This type of program can be done virtually and in-person to facilitate more understanding and conversations.

2. **Engaging County leadership and a regular core team of EOC workers before, during and after an activation.**

Analysis: During a large disaster, each department should lend a portion of their senior staff to the EOC or to a senior policy group which can support the management of the County's response. Leadership across the County did not commit sufficient staffing resources in response to requests for assistance from the EOC.

Both elected and departmental leadership in the County should be familiar with the emergency plans, authorities, departmental commitments (including providing staff to support emergency operations), decision-making processes, and EOC operations. Leaders should learn and practice their roles and responsibilities and commit to

emergency preparedness and response in their department, which will allow a 'whole of government' response.

Recommendation: Reestablish the Leadership Emergency Preparedness Council for elected and departmental leadership to meet with emergency management on a regular basis. Participation in the Emergency Preparedness Council will help department leaders to craft work plans and budgets with dedicated personnel time to participate in training and exercising, and then support response operations when EOC staffing is needed.

Recommendation: Establish an annual schedule for Emergency Preparedness Council training on their incident management role, to discuss collaborative decision-making in emergency situations, and to participate in a regular exercise schedule to practice their role in disasters.

3. **Improving availability and access to full County resources, assets, and relationships.**

Analysis: The total number of County staff who worked in the EOC was not tracked or disaggregated by department, however analysis of rosters with potentially available staff indicated that in 2020 up to 1,355 staff were available to fill EOC positions. Still, the shared assessment is that response operations were not adequately staffed throughout the period the EOC was activated. Understaffing is noted in EOC positions and also in service-delivery positions.

Challenges existed around the clarity of job descriptions, which would assist in identifying people with the proper knowledge and skills to fill a job. Of particular concern was the lack of trained staff to fill positions requiring manager skills. People placed in these positions often did not have the management training to allow them to successfully fulfill the role, leading to frustration and low morale for the manager and staff supporting the work.

Some County staff with EOC training were not designated to support the response, leaving Emergency Management and Public Health to carry the full burden of response leadership. Some issues could have been avoided, and things may have run smoother if these trained staff were enabled to serve in the EOC. For example, staff trained in EOC operations were not designated to work in the EOC by their departments in response to requests for EOC staff. When it came to community outreach, the EOC did not always ask for input from the County employees who already had trusting relationships with the various communities.

County Commissioners had skills and priorities that merged with and supported response efforts. They participated in briefings scheduled by the EOC Command, but wanted to be more directly connected to the EOC response effort. They felt that they

could have been engaged more to support outreach to their constituents. This likely missed an opportunity to leverage their knowledge, networks, and community partnerships for sharing information and also for gathering feedback on community priorities and concerns.

Recommendation: At the beginning of an emergency, leadership in the EOC should do a scan of how the County's current experts and relationships can be leveraged in the response. For a communicable disease outbreak, public health experts should be engaged; for computer or other technological threats, then County Information Technology should be engaged. The experts should be helping inform decisions.

4. **Improving coordination between the EOC and Community Outreach professionals.**

   Analysis: A noticeable contrast was observed between the incident management mindset, characterized by a command structure, directed decision-making, and time sensitivity, and the collaborative, trust-building mindset employed by community engagement professionals. The latter emphasized the importance of fostering relationships and involving the community in decision-making processes. As a result of this contrasting approach, community-focused specialists who were invited to contribute to the COVID-19 response chose not to participate in the EOC operational mechanisms.

   Recommendation: Review existing EOC and ICS concepts to identify opportunities to adjust language and terminology to better fit the culture and core values of the County while maintaining the County's commitment to follow ICS and NIMS in emergency response. Concepts, methods and models associated with equity and empowerment lenses could be useful in examining the ICS and NIMS structures to identify opportunities for change. The goal is to retain the proven incident management framework while being approachable and understandable across the spectrum of technical experts from County departments who may be pulled in to support a response.

5. **Prioritizing situational awareness and information sharing across all County stakeholders.**

   Analysis: The County lacks an information management system that allows many people to view the big picture of the response and all the moving pieces. While County personnel were comfortable relying on Google-based tools, navigating the mountain of documentation created during an emergency was cumbersome and daunting. The lack of a user-friendly information sharing tool resulted in missed opportunities for unification of efforts, be it a testing or vaccination location that could be combined, or a shared public outreach effort.

Recommendation: Commercial off-the-shelf incident information management tools that capture incident information (record keeping), but also showcase critical details to those responding to the incident in a much more visual manner exist. The current process does not take advantage of data visualization, to the organization's detriment. Building on existing groups and relationships, engage County and regional stakeholders to define requirements for an information management system that will allow incident information to be secure, easily updated, shared with vetted partners, integrated with County Geographic Information Systems, and promote a shared understanding of an incident. Research information management systems to find a system that fits the County's needs and pursue procurement of the system.

Recommendation: Incorporate information sharing methods in emergency preparedness training materials and exercises to emphasize the importance of reporting information as it may be useful for other departments.

6. **Defining the engagement of County Commissioners in emergency response.**

Analysis: Throughout the pandemic, County Commissioners worked to maintain communications with their communities and support response as they could, but there was not an established procedure for engaging elected officials in support of emergency response. The Commissioners' desire for the latest information was very high and felt that their access to information from the EOC was limited. Without a shared expectation for how to work together, the EOC missed out on opportunities to leverage each Commissioner's team as a resource for pushing information into communities as well as providing insight into community priorities and gaps in services.

Recommendation: Define what role elected officials play during an emergency response and establish an official activation procedure to include the engagement of Commissioners with EOC operations.

Recommendation: Establish communication linkages and mechanisms to share information in support of two-way communication, facilitated by Commissioners, where information is pushed out to constituents and feedback on community priorities and needs is pulled into the EOC.

Capability 2: Public Health/Healthcare

	**NPG Definition**: Provide lifesaving medical treatment via Emergency Medical Services and related operations and avoid additional disease and injury by providing targeted public health, medical, and behavioral health support, and products to all affected populations.
	**PHEP Definition**: Public health surveillance and epidemiological investigation is the ability to create, maintain, support, and strengthen routine surveillance and detection systems and epidemiological investigation processes. It also includes the ability to expand these systems and processes in response to incidents of public health significance.
	PHEP Definition: Medical countermeasure dispensing and administration is the ability to provide medical countermeasures to targeted population(s) to prevent, mitigate, or treat the adverse health effects of a public health incident, according to public health guidelines. This capability focuses on dispensing and administering medical countermeasures, such as vaccines, antiviral drugs, antibiotics, and antitoxins.
	PHEP Definition: Nonpharmaceutical interventions are actions that people and communities can take to help slow the spread of illness or reduce the adverse impact of public health emergencies. This capability focuses on communities, community partners, and stakeholders recommending and implementing nonpharmaceutical interventions in response to the needs of an incident, event, or threat.

Strengths

1. **Multnomah County successfully partnered with community-based organizations in providing testing and vaccine assistance.**

   Analysis: Trusted community-based organizations were able to provide information to their communities resulting in higher testing and vaccination rates. The County used local places such as churches, barber shops, and fast-food restaurants as vaccine sites, which helped community residents feel more comfortable, resulting in higher vaccination rates.

   Opportunity: Continue to build strong partnerships within the community to be utilized in future events.

2. **Community Health Worker Model was successfully utilized in assisting underserved communities.**

   Analysis: The Community Health Worker model was key to working with communities that consistently experience systemic barriers. During COVID-19, the County trained people who were representatives of their community and equipped them with

information and supplies, which helped in serving communities that are underserved. This effort resulted in building trust among the community and higher testing and vaccination rates in BIPOC communities.

Opportunity: Maintain partnerships, support consistent funding streams, and provide additional training with community-based organization representatives to keep open lines of communication and assistance for future events.

3. **The County achieved high vaccination rates.**

   Analysis: The County used many approaches to encourage residents to get vaccinated, and they were successful in those endeavors. The County utilized community partners to provide accurate medical information and encourage vaccination in communities expressing vaccine hesitancy. Vaccination sites included interpreters who walked through the vaccination process step-by-step with people who did not speak English. An incentive program that gave a cash reward (i.e., gift card) for getting vaccinated helped increase vaccination rates among people experiencing homelessness and BIPOC communities who were deemed more likely to experience disproportionate severe COVID-19 outcomes. An additional incentive was provided to individuals who referred others to Multnomah County vaccination clinics. This community-based strategy levered trusted messengers to encourage community members to get vaccinated and increase the rates of community-wide vaccine protections.

4. **Voluntary Isolation Motels were successful in slowing the spread of COVID-19.**

   Analysis: The approach to isolation and quarantine helped slow the spread of COVID-19 among people experiencing homelessness. The system for referring people to the motels was very clear and worked well.

Areas for Improvement

1. **Leveraging more County resources to set up testing sites.**

   Analysis: Logistics setup for testing could have been more streamlined. Public Health was left to set up testing sites without proper logistical support such as transportation assets and staffing needed to distribute equipment and supplies to multiple locations.

   Recommendation: Incorporate the 'whole of government' perspective into the logistics of setting up of testing sites and utilize County employees to staff testing sites. Leverage the emergency response organizational structure outlined in the County's Emergency Operations Plan to coordinate with other departments for this staffing.

2. **Improving effectiveness of staff training for vaccination assistance roles.**

   Analysis: The availability of skilled medical staff for response operations during the pandemic remained inadequate even during the vaccination phase. As a result, threshold criteria were lowered to broaden the potential staffing pool to include individuals without the desired knowledge, skills, or abilities to staff the clinics. Due to the urgency, non-medical staff were quickly onboarded, which underscored the importance of providing them with proper training for their roles in vaccination clinics.

   Recommendation: Establish a vetting process to ensure staff meet minimum skills requirements before assignment to a task. This could include a just-in-time training process rather than the normal onboarding and training process. Shifting from routine onboarding to rapid onboarding for emergencies should be practiced.

3. **Evaluating site safety considerations at vaccination sites.**

   Analysis: At a certain point in the vaccination effort, vaccination *referrals* were incentivized with the offer of a gift card provided to the person who brought someone in for a shot. In establishing this incentive program, public health personnel with experience in setting incentives were concerned that the amount of money offered was higher than necessary and would potentially lead to problems. There were many instances when a person claimed they brought another person to get vaccinated and therefore deserved the gift card.

   At times this resulted in physical altercations between people seeking the incentive gift card. These fights caused safety concerns for all. It was not unusual for staff to receive verbal threats of violence from community members.

   Recommendation: Adjust plans to reflect the need for appropriate infrastructure, staffing, and skill sets at emergency response sites where supplies and incentives are being distributed. Training to de-escalate a situation should be included in training for these types of operations.

4. **Improving equity in providing support to diverse and underserved communities.**

   Analysis: Community engagement programs did not fit each community according to its needs. This disparity was noticed by affected communities.

   The concept of ‘accountability to affected communities’ is about not only learning how communities want to receive information and who they trust, but also about establishing culturally-specific referral pathways. These referral pathways ensure marginalized communities have access to goods and services. Accountability also requires feedback mechanisms that give impacted communities the opportunity to raise issues and concerns that are followed up on and responded to.

Recommendation: Conduct outreach to individual communities to build understanding of their concerns and develop tailored solutions to address those concerns. This outreach also serves to begin building trust and a stronger relationship. This recommendation is aligned with recommendations identified in the Contract Tracing Audit from July 2022 conducted by the Multnomah County Auditor's Office.

Capability 3: Mass Care Services/Mass Care

	**NPG Definition**: Provide life-sustaining and human services to the affected population, to include hydration, feeding, sheltering, temporary housing, evacuee support, reunification, and distribution of emergency supplies.
	**PHEP Definition**: Mass care is the ability of public health agencies to coordinate with and support partner agencies to address within a congregate location (excluding shelter-in-place locations) the public health, healthcare, mental/behavioral health, and human services needs of those impacted by an incident. This capability includes coordinating ongoing surveillance and assessments to ensure that health needs continue to be met as the incident evolves.

Strengths

1. **Multnomah County prioritized a culturally-specific response.**

   Analysis: Community members were hired into positions to reflect those culturally-specific communities. The County created programs and helped the most vulnerable with this culturally-specific approach. This deliberate hiring approach allowed the County to build trust and bonds with communities. While the County was not well received within the communities initially, people became more comfortable, and the relationship improved.

2. **Isolation shelters provided safe spaces for community members with COVID-19 to recover and limited the spread of disease.**

   Analysis: The County opened shelters for physical distancing to avoid outbreaks for those living in conditions that did not allow them to isolate. People who met the criteria were referred to the voluntary isolation motels. Non-congregate sheltering is not the planned model, challenging the Mass Care team to quickly devise and implement a methodology to do this effectively. The team was given broad latitude to devise a plan that addressed the need for isolation and adhered to public health mitigation guidelines. This effort was thought to have saved lives by providing a safe space for people to isolate when they would not be able to isolate on their own, especially for those experiencing homelessness.

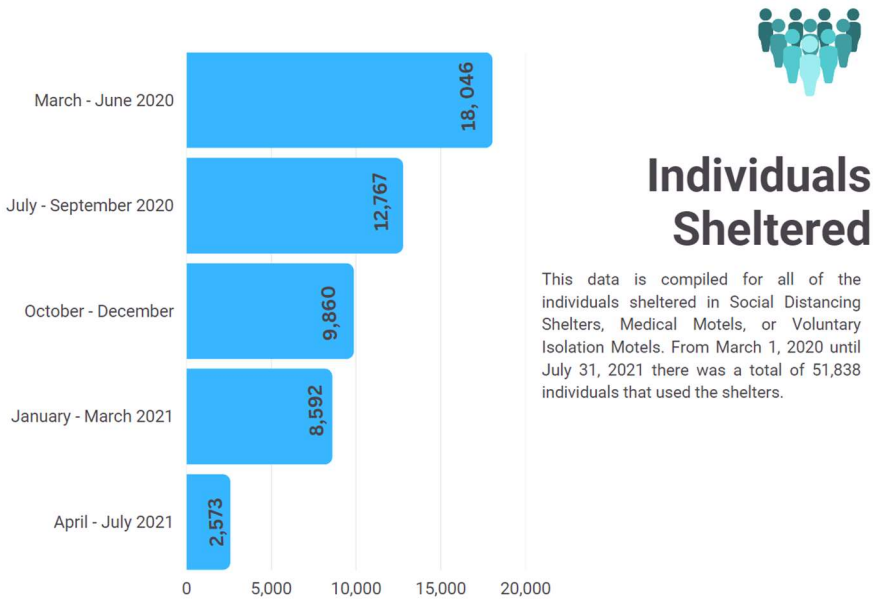


FIGURE 11. INDIVIDUALS SHELTERED IN SOCIAL DISTANCING SHELTERS, MEDICAL MOTELS, AND VOLUNTARY ISOLATION MOTELS.

3. **Wraparound services provided essential services to the community.**

   Analysis: The wraparound team provided essential services to the community allowing people to minimize interactions and decreasing the potential for exposure to COVID-19. They provided translation services, helped with transportation, and helped ensure residents had food and water. Surrounding jurisdictions have recognized the benefit to having wraparound services and are trying to duplicate their efforts.

4. **Funding established to build partnerships to be in a better position for the future.**

   Analysis: The County identified gaps within partner organizations and established a funding source to help build capacity for those organizations and put them in a better position to assist when needed. The County partnered with hundreds of community-based organizations to help the people of Multnomah county and was only as successful as they were with their partners' assistance.

   Opportunity: In addition to funding, the County could provide technical assistance on navigating the funding application process to community-based partners. This effort will grow the partnership and develop mutual trust and commitment.

Areas for Improvement

1. **Improving site selection and services for Voluntary Isolation Motels for people with disabilities, access and functional needs.**

   Analysis: The first iteration of COVID-19 temporary Voluntary Isolation Motel sites were set up as locations to keep people safe and from exposing others in congregate settings, but some of the sites were not compliant with the Americans with Disabilities Act and other requirements for people with disabilities, access and functional needs.

   Recommendation: Identify a lead department or office for shelter site identification. Once a lead is determined, use the shelter suitability checklist to periodically identify and update lists of potentially suitable facilities that meet Americans with Disabilities Act criteria. Establish or refresh agreements with these facilities to ensure the facility can be considered as a shelter site in any future emergency.

2. **Increasing collaboration with businesses to support mass care services.**

   Analysis: Businesses within the county were attempting to assist in the pandemic response as they could. Public Health did not have the capacity to commit staff to the effort of establishing a partnership with the businesses. As a result, businesses were not utilized to their full potential during response operations. The County's emergency operations plan had an emergency support function for the business community, but it lacked a lead agency and was not well structured for current and future needs. The opportunity to leverage the business community in planning prior to an emergency was revealed during COVID-19.

   Recommendation: Establish a team to revise and invigorate the business-focused emergency support function. Leverage relationships built through the EOC liaison work, and tap into existing business associations, Chambers of Commerce, and economic development organizations to engage a broad number of businesses.

Capability 4: Public Information/Emergency Information Sharing

	**NPG Definition**: Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard, as well as the actions being taken and the assistance being made available, as appropriate.
	**PHEP Definition**: Emergency public information and warning is the ability to develop, coordinate, and disseminate information, alerts, warnings, and notifications to the public and incident management personnel.

Strengths

1. **The liaison program provided consistent two-way communication from the County to community and the community to the County**

   Analysis: Multnomah County established a unique and robust liaison program that facilitated two-way communication between the response leadership and the community at large. At its peak, two liaison officers and five deputy liaisons managed relationships with 26 sectors. The liaisons had a pulse on the community, and were able to elevate challenges, concerns, and barriers that were unique to each sector or group, to the response leadership. They were able to support the community by developing outreach plans for hard to reach communities, answering technical questions, discerning COVID-19 guidance, and creating opportunities for leadership and community to connect.

   Opportunity: Utilize the community liaison structure that was built for the COVID-19 response in other types of emergencies going forward.

2. **Consistent communication to the public using multiple formats for information sharing.**

   Analysis: Communication was key to the response. The County started communicating early on with the public, sharing everything they knew about COVID-19. Information was available in many languages, and the communications teams worked hard to make sure it was accessible to everyone in the county. The County also created an 'After Testing Guide' in multiple languages that was ultimately adapted by the State of Oregon. The booklet for migrant farm workers is an excellent example of how the County presented information to communities in various formats.

3. **COVID-19 Call Center provided personal attention to community members.**

   Analysis: The Call Center took and responded to around 15,000 calls. This was a way that the County could give personal attention to the community, answer their questions, and it allowed the community to feel attended to. The County also was able to leverage staff who spoke other languages as Call Center staff and had dedicated lines for translation services. The Call Center staff were able to walk people through vaccination instructions, which took the pressure off of nurses and other staff. While not available early on, Call Center staff were ultimately able to directly schedule vaccination and testing appointments.

   Opportunity: Make the Call Center a permanent part of the County's infrastructure. It would also benefit other types of emergencies, such as wildfires and Mpox.

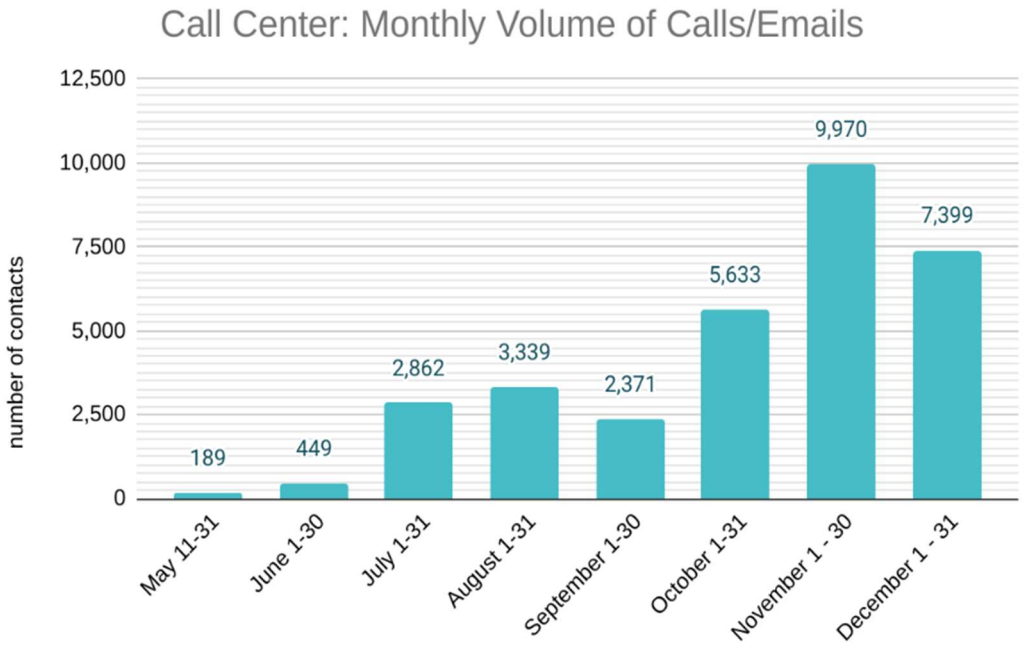


FIGURE 12. CALL VOLUME AT THE COVID-19 CALL CENTER FROM MAY 2020 TO DECEMBER 2020

Areas for Improvement

1. **Prioritizing situational awareness and information sharing across all County stakeholders.**

   Analysis: Throughout the pandemic, there was a need to strengthen the connection between County leadership, including elected officials, Department and Division Directors, Managers, and the EOC in terms of operations and communications. County employees not working in the COVID-19 response had good information about actions

to take to stay safe and what to do if testing positive, but they had little information on what the County was doing in response to COVID. If County staff had more exposure to the actions taken by the County to support residents throughout the response, there could have been more people willing to volunteer to work the response. County staff could also amplify messaging about the County's efforts.

Recommendation: Review and update protocols and mechanisms for updating County leadership on emergency operations. This could include defining essential elements of information County leadership relies on for decision-making and information to share with County staff. Establish a shared expectation between County leadership and Emergency Management about information to be shared, which could include an overview of operations for that day, including what was completed, what is in the process of being completed, and what is still left to be done. A preferred way to raise concerns and requests for guidance should be defined. A delineation of information that supports operational decision-making and information that supports a shared understanding of the County's response for staff knowledge should be included.

2. **Improving online navigation to information resources.**

   Analysis: County residents experienced some difficulties in finding information online. Residents were pointed to the state and County websites for information, but it needed to be more evident where the information lived and would sometimes lead to dead ends. In total, there were 22 webpages managed by the County.

   Recommendation: Review how and where critical information is kept online and consider creating a centralized location for information for the public from all County departments, linking to relevant State and Federal government pages as needed. In the review, consider regional communications points of contact as well.

   Recommendation: Establish a policy or procedure to clearly articulate how and where County communications will be posted.

3. **Creating more user-friendly access to public messaging.**

   Analysis: There was a lot of information, and it was not always user friendly. For Multnomah county residents with limited English proficiency, information may have been hard for some to fully understand. Medical jargon may also have been difficult to understand.

   Recommendation: Continue to utilize translation services and expand them wherever possible. Use plain language so it is easier to understand both in English and through translation.

Recommendation: Create a guideline or procedure to clearly articulate the goal for packaging and writing of public messages, to include use of plain language, reading level, translation, etc.

4. **Improving the feedback loop between the communications team and the recipients of County messages.**

   Analysis: The communications team coordinated well with the liaison program to develop and push out messages, however, it would be valuable for the communications team to receive feedback regarding the recipients of the messages and the effectiveness of their communication efforts.

   Recommendation: Create a program to solicit communication regarding how effective the messaging was and how well the language strategy was in each community. This program should exist outside of the incident management environment.

5. **Improving language access by leveraging multi-lingual County employees to facilitate connections with community members.**

   Analysis: The County has many employees that speak multiple languages. These employees could have been leveraged to help communicate with communities where English was not the primary language. Written translations of COVID-19 information took time to be developed and it would have been helpful to bridge the information gap by engaging multi-lingual County employees to verbally share basic information with their communities.

   Recommendation: Develop a County standard operating procedure for the use of interpreters and translators in extraordinary emergency circumstances where trained, qualified interpreters are not available.

Capability 5: Logistics/Medical Material Management and Distribution

	**NPG Definition**: Deliver essential commodities, equipment, and services in support of impacted communities and survivors, including emergency power and fuel support, as well as the coordination of access to community staples. Synchronize logistics capabilities and enable the restoration of impacted supply chains.
	**PHEP Definition**: Medical materiel management and distribution is the ability to acquire, manage, transport, and track medical materiel during a public health incident or event and the ability to recover and account for unused medical materiel, such as pharmaceuticals, vaccines, gloves, masks, ventilators, or medical equipment after an incident.

Strengths

1. **The Logistics team was creative and resourceful in accomplishing tasks**

   Analysis: When faced with challenges, the Logistics team responded with creativity and were able to complete requests as needed. Resource requests included N95 masks, face coverings, gowns, gloves, hand sanitizer, thermometers, test kits, and more. From the beginning of 2020 when supply chains around the world were disrupted through mid-2021 when supplies were readily available, the Logistics team did not allow needs to go unmet (see Figure 13.). The need for storing and managing response supplies expanded significantly and ultimately required a 12,000-square-foot warehouse.

   Opportunity: It is evident that Logistics is a critical element of any Countywide emergency response and should be made a permanent division.

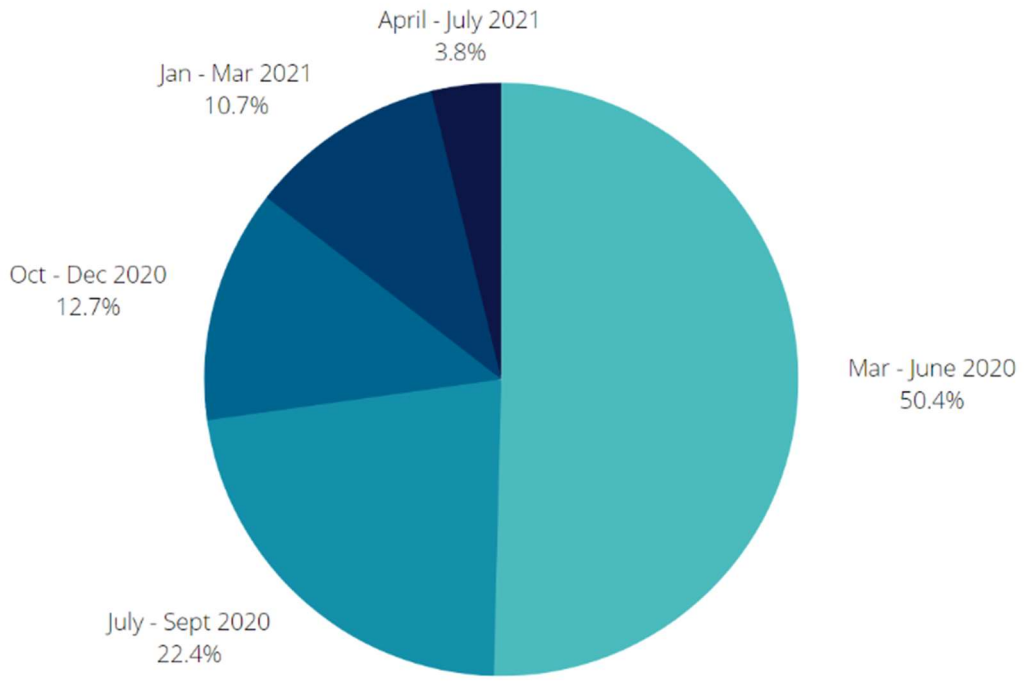


FIGURE 13. THE COUNTY HANDLED OVER 2,449 RESOURCE REQUESTS.

Areas for Improvement

1. **Expanding the finance and administration group's role to include training for departments outside the EOC.**

   Analysis: Within Public Health, there was uncertainty about how to spend money from the Federal Government, including Coronavirus Aid, Relief, and Economic Security Act

funds and American Rescue Plan Act funds. The County created a role within Public Health to mitigate this uncertainty. It would have been beneficial to establish clearer criteria for the expenditure of funds.

Recommendation: Building on the role created in Public Health, formalize and document the roles and responsibilities of this position in the event the County receives Federal funds in the future.

Recommendation: Ensure appropriate grants management support is available at the program level regarding specific Federal funding requirements.

2. **Improve timeliness of communication to the logistics team.**

   Analysis: There were times that leadership committed to tasks requiring support from the logistics team without timely notification to the team. This included tasks associated with sheltering and vaccinations. Some tasks were not feasible for the logistics team to accomplish, either due to supply or staff limitations.

   Recommendation: Evaluate the communication process associated with resource management and distribution to identify decision points where the logistics team needs to be engaged. Identify who needs to be included, what critical information needs to be shared, and timelines associated with resource deployment and capture in a guide or job aid to support coordinated decision-making and communication.

3. **Pre-plan staging areas using an equity lens.**

   Analysis: Information on vaccination locations was often shared with short notice, requiring a quick deployment of equipment and vaccination supplies. It was difficult getting supplies to each location, sometimes taking up to an hour depending on traffic. Distributing supplies strategically across the County would allow for a timelier response.

   Recommendation: Work with equity and community health specialists to strategically plan resource staging areas for future emergencies. Use an equity perspective to ensure site selection distributes access points close to those most at risk for needing public services following an incident. Planning the distribution and storage of supplies in close proximity to communities likely to have the greatest need will help facilitate a faster response.

Capability 6: Staffing/Volunteer Management

	**NPG Definition:** There is no comparable capability in the NPG Core Capabilities, however, recruitment and incorporation of staff into the incident management structure was a major factor in the effectiveness of the County's response. Therefore, staffing is featured in alignment with volunteer management for the purpose of this analysis.
	**PHEP Definition**: Volunteer management is coordinating with emergency management and partner agencies to identify, recruit, register, verify, train, and engage volunteers to support the jurisdictional public health agency's preparedness, response, and recovery activities during pre-deployment, deployment, and post-deployment.

Strengths

1. **EOC staff were committed and dedicated to serving their community during the pandemic response.**

   Analysis: The staff were committed to getting things done. They worked together, they worked hard, and they wanted to do a good job. Many staff expressed that they volunteered to work in the EOC because they cared about their community, and they wanted to serve.

Areas for Improvement

1. **Executing authorities[5] allowing for the direction of County officers and employees to perform or facilitate emergency services.**

   Analysis: Anticipating the significant workload associated with a pandemic response, Unified Command assessed the expected workload and determined the number of personnel needed to fully and efficiently deliver emergency response services to the community. Requests for staffing were made to County leadership early in the event, as planning to ramp up operations was occurring. County administration chose not to reassign people to the EOC, but rather to allow for staff to voluntarily work in the EOC. This did not generate the number of people or the expertise desired. Initial staffing dedicated to the COVID-19 response was notably inadequate and established a pattern of under-staffing operations and significantly overworking those actively involved throughout the duration of the response. There were serious, lingering, negative consequences for people who supported the response.

[5] Multnomah County – Chapter 25 – Section 25.440 (12)

Recommendation: Review emergency authorities with County leadership to establish understanding of the authorities and the range of circumstances that could call for those authorities to be executed.

Recommendation: Review County continuity of operations (COOP) plan concepts with County administrators, department directors, and other senior leaders to build knowledge and understanding of the role these plans play in continuing critical government work during an emergency and the circumstances with COOP plan implementation is reasonable.

Recommendation: Include emergency management responsibilities in on-boarding or transition plans for County administration, department director, and other senior leadership positions. The goal is to establish a shared understanding among County administrators, department directors, other senior leaders and Emergency Management leadership on managing any emergency or crisis response. Establishing this strong relationship is critical to the County's capacity to serve the community by reacting with a unity of response in any emergency.

2. **Establishing external vendors for County risk, safety, and occupational health support.**

Analysis: In addition to the external facing work that the Public Health Division had to support across the community, there was an expectation that the Public Health would also handle and advise on the internal facing work for the County as a large employer. This included providing advice on testing, vaccinations, and social distancing for staff. There was also an expectation that Public Health would handle contact tracing internally. A more robust approach to internal risk and safety management and occupational health is needed for the County as a large employer. The approach should be separate from the external facing responsibility of a public health division.

Recommendation: Establish adequate internal risk, safety, and occupational health resources for the County as an employer separate from the external role of the public health division.

3. **Re-negotiating union contracts to include provisions for emergencies.**

Analysis: In an emergency, decisions should be made very quickly and adjustments are frequently needed. At the beginning of the COVID-19 response, most staff were willing to adjust to the needs of the response, including changing work roles, work locations, and such. Challenges like, the notification lead time required for a union employee to have a change in job responsibilities, was not enforced at the beginning of the response but was raised as an issue later in the response. This created challenges for the EOC

when adjustments were made to staffing responsibilities based on the latest needs in the response.

Recommendation: The County should work with the unions to create language in employee contracts that can be invoked in an emergency that sends workers to be a part of the EOC, and for their job description and role to be flexible to quickly change if the response demands it.

4. **Expanding the team of knowledgeable and skilled staff available to work in the EOC.**

   Analysis: The EOC did not receive the number of employees they needed to function properly at any point in the response. They did not have enough middle managers, nor experienced managers. The number of skilled workers in key positions was insufficient, so those workers could not rotate in and out and became burned out after two years. Many of the employees that were rapidly hired to fill empty positions did not receive adequate training.

   Recommendation: Resource Multnomah County Emergency Management well enough to allow trained Emergency Management staff to fill core leadership positions in the EOC.

   Recommendation: Add language to contracts to make working in the EOC mandatory instead of voluntary, and cross-train County managers for a role within the EOC.

   Recommendation: Establish limits on the number of hours an employee can work in a week, how many days they can serve in the EOC without required days off, and tracking systems to support enforcement of limits.

   Recommendation: Create an incentive for employees who support emergency response in the EOC.

   Recommendation: Create a mentorship program for training new managers to be able to serve in the EOC.

5. **Increasing the role Human Resources plays in the Administration/Finance section in the EOC.**

   Analysis: The number of Human Resources staff in the Administration/Finance section was not adequate to meet the needs of the response. Many new employees were hired, but they did not receive proper onboarding. There was a lot of uncertainty about what people's roles were. New employees needed to be aware of employee expectations and County policies. There was no limit on overtime and no central oversight of hours; some

employees were working many hours between their regular duties and EOC duties and no one was monitoring them.

Recommendation: For emergencies that require hiring additional staff, additional County personnel who can onboard the new hires should be identified. Specifically, an ability to on-board new hires during a "surge" event should be considered by departments.

6. **Improving worker transition back to regular positions.**

Analysis: As County services returned to a more normal operating posture, staff serving in an emergency response capacity had to return to their regular jobs. The EOC lost experienced EOC workers who were replaced by workers without EOC experience or were not replaced at all when workers were recalled back to their regular positions. Because these actions were taking place while the EOC was actively responding to the emergency, this often left them taking longer to complete the same actions and put additional stress on the few remaining experienced workers.

Recommendation: Maintain adequate bench depth in regular operations to reduce the strain on departments when staff are pulled to support emergency response and eliminate disconnects as staff cycle in and out of emergency support roles.

Recommendation: Build a staffing schedule with longer stints in the EOC plus a staggered transition that allows for an overlap with the people replacing them for at least one week.

7. **Establishing policies for activating continuity of operations or alternative processes for hiring.**

Analysis: Without a formal policy for activating COOP, it was left up to discretion of department leadership on whether or not to activate. Without activating COOP, staffing for emergency operations and onboarding new members to support operations were hindered. Staff already preoccupied with their regular jobs were being pulled into COOP operations and stretched operations thin.

Recommendation: Create a policy to activate COOP plans to formalize the implementation of COOP activities and allow for emergency processes to begin. This action would also allow for streamlined hiring and orientation processes to get staff into positions more quickly.

8. **Identifying and formalizing essential worker designations.**

   Analysis: The Health Department had very few workers designated as 'essential' by Human Resources and some County Departments had none. As a result, very few county employees were compelled and compensated for committed time and effort supporting the response to COVID-19.

   Recommendation: Task departments with formally identifying essential workers in Human Resources systems so operations can maneuver quickly during an emergency. Departments should ensure they identify essential workers for their essential functions.

   Recommendation: Revise the definition of 'essential' in the Human Resources system to allow the ability to adjust what roles are considered essential. If an incident lasts longer than anticipated, departments need the flexibility to work with Human Resources to quickly change or alter the essential workers list.

9. **Improving the use of an equity lens across all domains of training and emergency response.**

   Analysis: There was a perception by some using the ICS structure that it runs contrary to the County's commitment to equity and inclusion. The dissonance between the two concepts led to some staff not feeling adequately represented in leadership, and when BIPOC staff were elevated into leadership roles, some felt they did not receive adequate training to do their jobs effectively. Job postings for EOC positions did not yield many applicants. This created significant challenges for equitable hiring practices in the recruitment process. This finding and the recommendations link to Area for Improvement 4 in Capability 1: Operational Coordination/Emergency Operations Coordination.

   Recommendation: Building on any adjustments to terminology to better fit the culture and core values of the County (Area for Improvement 4 in Capability 1), revise training materials to reflect these changes and conduct training to build understanding across EOC staff.

   Recommendation: Work with the Equity Officer to craft recruitment criteria for use by County leadership in their efforts to identify and designate staff for roles in the EOC. The criteria should be defined with the goal of establishing a core team of people reflective of the diversity of the county and in the community.

4. IMPROVEMENT PLAN

The Improvement Plan is based on the observations, analysis, and recommendations identified during the after-action review process and captures actions to address recognized issues, assigns responsibility, and identifies proposed timeframes for completion.

Area for Improvement Analysis Page Reference	Recommendation	Primary Responsible Organization(s)	Completion Target[6]
Capability 1: Operational Coordination/ Emergency Operations Coordination Page 27-28	Expand EOC training and experience to more County employees. Provide training on ICS, EOC functions, and roles and responsibilities to expand the number of County employees trained to respond and support the EOC. Develop and deliver training to various types of County staff, including County leadership, County personnel staffing the EOC, as well as County staff that will not work in the EOC, but need to be familiar with it. The people identified for EOC positions should participate in annual training and periodic functional exercises.	Central Human Resources, Chief Operating Officer Emergency Management and Health Department working to create job description to give Human Resources	Long
Capability 1: Operational Coordination/ Emergency Operations Coordination Page 27-28	Establish a working group to formalize EOC position descriptions and the process for activating County staff to fill these positions when the EOC is activated. The Chief Operating Officer's role in activating the County staff to fill EOC positions should be clear. The working group should address the alignment of the EOC position descriptions with human resources pay structures and job classifications, reassignment conditions, and training expectations.	Emergency Management working with Human Resources	Long

[6] Short (3-9 months) Mid (9-18 months) Long (18 months or longer)

Area for Improvement Analysis Page Reference	Recommendation	Primary Responsible Organization(s)	Completion Target[6]
Capability 1: Operational Coordination/ Emergency Operations Coordination Page 27-28	At a minimum, include an annual refresher training with other annual training mandated by the County's Central Human Resources. This type of program can be done virtually and in-person to facilitate more understanding and conversations.	Emergency Management working with Human Resources	Long
Capability 1: Operational Coordination/ Emergency Operations Coordination Page 28-29	Reestablish the Leadership Emergency Preparedness Council for elected and departmental leadership to meet with emergency management on a regular basis. Participation in the Emergency Preparedness Council will help department leaders to craft work plans and budgets with dedicated personnel time to participate in training and exercising, and then support response operations when EOC staffing is needed.	Chief Operating Officer with Emergency Management facilitating	Short
Capability 1: Operational Coordination/ Emergency Operations Coordination Page 28-29	Establish an annual schedule for Emergency Preparedness Council training on their incident management role, to discuss collaborative decision-making in emergency situations, and to participate in a regular exercise schedule to practice their role in disasters.	Chief Operating Officer with Emergency Management facilitating	Short
Capability 1: Operational Coordination/ Emergency Operations Coordination Pages 29-30	At the beginning of an emergency, leadership in the EOC should do a scan of how the County's current experts and relationships can be leveraged in the response. For a communicable disease outbreak, public health experts should be engaged; for computer or other technological threats, then County Information Technology should be engaged. The experts should be helping inform decisions.	Chief Operating Officer with Emergency Management facilitating	Short

Area for Improvement Analysis Page Reference	Recommendation	Primary Responsible Organization(s)	Completion Target[6]
Capability 1: Operational Coordination/ Emergency Operations Coordination Page 30	Review existing EOC and ICS concepts to identify opportunities to adjust language and terminology to better fit the culture and core values of the County while maintaining the County's commitment to follow ICS and NIMS in emergency response. Concepts, methods and models associated with equity and empowerment lenses could be useful in examining the ICS and NIMS structures to identify opportunities for change. The goal is to retain the proven incident management framework while being approachable and understandable across the spectrum of technical experts from County departments who may be pulled in to support a response.	Emergency Management with Chief Operating Officer	On going
Capability 1: Operational Coordination/ Emergency Operations Coordination Page 30	Commercial off-the-shelf incident information management tools that capture incident information (record keeping), but also showcase critical details to those responding to the incident in a much more visual manner exist. The current process does not take advantage of data visualization, to the organization's detriment. Building on existing groups and relationships, engage County and regional stakeholders to define requirements for an information management system that will allow incident information to be secure, easily updated, shared with vetted partners, integrated with County Geographic Information Systems, and promote a shared understanding of an incident. Research information management systems to find a system that fits the County's needs and pursue procurement of the system.	Department of County Assets, GIS working group	Mid
Capability 1: Operational Coordination/ Emergency Operations Coordination Page 30	Incorporate information sharing methods in emergency preparedness training materials and exercises to emphasize the importance of reporting information as it may be useful for other departments	Emergency Management	To be determined

Area for Improvement Analysis Page Reference	Recommendation	Primary Responsible Organization(s)	Completion Target[6]
Capability 1: Operational Coordination/ Emergency Operations Coordination Page 31	Define what role elected officials play during an emergency response and establish an official activation procedure to include the engagement of Commissioners with EOC operations.	Emergency Management with the Chair's Office and Chief Operating Officer	To be determined
Capability 1: Operational Coordination/ Emergency Operations Coordination Page 31	Establish communication linkages and mechanisms to share information in support of two-way communication, facilitated by Commissioners, where information is pushed out to constituents and feedback on community priorities and needs is pulled into the EOC.	Emergency Management with the Commissioners' Chiefs of Staff and the Chief Operating Officer	To be determined
Capability 2: Public Health/Healthcare Page 33	Incorporate the 'whole of government' perspective into the logistics of setting up of testing sites and utilize County employees to staff testing sites. Leverage the emergency response organizational structure outlined in the County's Emergency Operations Plan to coordinate with other departments for this staffing.	Emergency Management, Logistics	Short-Mid
Capability 2: Public Health/Healthcare Page 34	Establish a vetting process to ensure staff meet minimum skills requirements before assignment to a task. This could include a just-in-time training process rather than the normal onboarding and training process. Shifting from routine onboarding to rapid onboarding for emergencies should be practiced.	Human Resources, representatives from every Emergency Support Function primary agency	Mid-Long
Capability 2: Public Health/Healthcare Page 34	Adjust plans to reflect the need for appropriate infrastructure, staffing, and skill sets at emergency response sites where supplies and incentives are being distributed. Training to de-escalate a situation should be included in training for these types of operations.	Risk Management	Short: Establishing Risk Management ownership of this responsibility Mid: Addressing the planning and training

Area for Improvement Analysis Page Reference	Recommendation	Primary Responsible Organization(s)	Completion Target[6]
Capability 2: Public Health/Healthcare Page 34	Conduct outreach to individual communities to build understanding of their concerns and develop tailored solutions to address those concerns. This outreach also serves to begin building trust and a stronger relationship. This recommendation is aligned with recommendations identified in the Contract Tracing Audit from July 2022 conducted by the Multnomah County Auditor's Office.	County Health Department	To be determined
Capability 3: Mass Care Services/Mass Care Page 37	Identify a lead department or office for shelter site identification. Once a lead is determined, use the shelter suitability checklist to periodically identify and update lists of potentially suitable facilities that meet Americans with Disabilities Act criteria. Establish or refresh agreements with these facilities to ensure the facility can be considered as a shelter site in any future emergency.	Department of County Assets lead	Mid
Capability 3: Mass Care Services/Mass Care Page 37	Establish a team to revise and invigorate the business-focused emergency support function. Leverage relationships built through the EOC liaison work, and tap into existing business associations, Chambers of Commerce, and economic development organizations to engage a broad number of businesses.	Emergency Management in Coordination with the Chair.	Short: Finding responsible party Mid-Long: Resource the effort

Area for Improvement Analysis Page Reference	Recommendation	Primary Responsible Organization(s)	Completion Target[6]
Capability 4: Public Information/ Emergency Information Sharing Page 39-40	Review and update protocols and mechanisms for updating County leadership on emergency operations. This could include defining essential elements of information County leadership relies on for decision-making and information to share with County staff. Establish a shared expectation between County leadership and Emergency Management about information to be shared, which could include an overview of operations for that day, including what was completed, what is in the process of being completed, and what is still left to be done. A preferred way to raise concerns and requests for guidance should be defined. A delineation of information that supports operational decision-making and information that supports a shared understanding of the County's response for staff knowledge should be included.	Emergency Management with the Chief Operating Officer	To be determined
Capability 4: Public Information/ Emergency Information Sharing Page 40	Review how and where critical information is kept online and consider creating a centralized location for information for the public from all County departments, linking to relevant State and Federal government pages as needed. In the review, consider regional communications points of contact as well.	Public Information Office	Short
Capability 4: Public Information/ Emergency Information Sharing Page 40	Establish a policy or procedure to clearly articulate how and where County communications will be posted.	Public Information Office	Short
Capability 4: Public Information/ Emergency Information Sharing Page 40	Continue to utilize translation services and expand them wherever possible. Use plain language so it is easier to understand both in English and through translation.	Public Information Office and Health Department Communications	To be determined

Area for Improvement Analysis Page Reference	Recommendation	Primary Responsible Organization(s)	Completion Target[6]
Capability 4: Public Information/ Emergency Information Sharing Page 40	Create a guideline or procedure to clearly articulate the goal for packaging and writing of public messages, to include use of plain language, reading level, translation, etc.	Public Information Office	To be determined
Capability 4: Public Information/ Emergency Information Sharing Page 41	Create a program to solicit communication regarding how effective the messaging was and how well the language strategy was in each community. This program should exist outside of the incident management environment.	Public Information Office	To be determined
Capability 4: Public Information/ Emergency Information Sharing Page 41	Develop a County standard operating procedure for the use of interpreters and translators in extraordinary emergency circumstances where trained, qualified interpreters are not available.	Human Resources	To be determined
Capability 5: Logistics/Medical Material Management and Distribution Page 42-43	Building on the role created in Public Health, formalize and document the roles and responsibilities of this position in the event the County receives Federal funds in the future.	Finance and Grants	To be determined
Capability 5: Logistics/Medical Material Management and Distribution Page 42-43	Ensure appropriate grants management support is available at the program level regarding specific Federal funding requirements.	Finance and Grants	To be determined
Capability 5: Logistics/Medical Material Management and Distribution Page 43	Evaluate the communication process associated with resource management and distribution to identity decision points where the logistics team needs to be engaged. Identify who needs to be included, what critical information needs to be shared, and timelines associated with resource deployment and capture in a guide or job aid to support coordinated decision-making and communication.	Emergency Management, Health Department with the Department of County Management	To be determined

Area for Improvement Analysis Page Reference	Recommendation	Primary Responsible Organization(s)	Completion Target[6]
Capability 5: Logistics/Medical Material Management and Distribution Page 43	Work with equity specialists to strategically plan resource staging areas for future emergencies. Use an equity perspective to ensure site selection distributes access points close to those most at risk for needing public services following an incident. Planning the distribution and storage of supplies in close proximity to communities likely to have the greatest need will help facilitate a faster response.	Emergency Management, Health Department with the Department of County Management	To be determined
Capability 6: Staffing/Volunteer Management Page 44	Review emergency authorities with County leadership to establish understanding of the authorities and the range of circumstances that could call for those authorities to be executed.	Emergency Management	To be determined
Capability 6: Staffing/Volunteer Management Page 44	Review County continuity of operations (COOP) plan concepts with County administrators, department directors, and other senior leaders to build knowledge and understanding of the role these plans play in continuing critical government work during an emergency and the circumstances with COOP plan implementation is reasonable.	Emergency Management with County Administrators and Department Directors	To be determined
Capability 6: Staffing/Volunteer Management Page 44	Include emergency management responsibilities in on-boarding or transition plans for County administration, department director, and other senior leadership positions. The goal is to establish a shared understanding among County administrators, department directors, other senior leaders and Emergency Management leadership on managing any emergency or crisis response. Establishing this strong relationship is critical to the County's capacity to serve the community by reacting with a unity of response in any emergency.	Emergency Management with the Chief Operating Officer	To be determined

Area for Improvement Analysis Page Reference	Recommendation	Primary Responsible Organization(s)	Completion Target[6]
Capability 6: Staffing/Volunteer Management Page 45	Establish adequate internal risk, safety, and occupational health resources for the County as an employer separate from the external role of the public health division.	Risk Management	To be determined
Capability 6: Staffing/Volunteer Management Page 45-46	The County should work with the unions to create language in employee contracts that can be invoked in an emergency that sends workers to be a part of the EOC, and for their job description and role to be flexible to quickly change if the response demands it.	Human Resources and County Administration	Long
Capability 6: Staffing/Volunteer Management Page 46	Resource Multnomah County Emergency Management well enough to allow trained Emergency Management staff to fill core leadership positions in the EOC.	Emergency Management	Long
Capability 6: Staffing/Volunteer Management Page 46	Add language to contracts to make working in the EOC mandatory instead of voluntary, and cross-train County managers for a role within the EOC.	Human Resources, with training from Emergency Management	Long
Capability 6: Staffing/Volunteer Management Page 46	Establish limits on the number of hours an employee can work in a week, how many days they can serve in the EOC without required days off, and tracking systems to support enforcement of limits.	Human Resources	To be determined
Capability 6: Staffing/Volunteer Management Page 46	Create an incentive for employees who support emergency response in the EOC.	Human Resources	To be determined
Capability 6: Staffing/Volunteer Management Page 46	Create a mentorship program for training new managers to be able to serve in the EOC.	Human Resources	Long
Capability 6: Staffing/Volunteer Management Page 46-47	For emergencies that require hiring additional staff, additional County personnel who can onboard the new hires should be identified. Specifically, an ability to on-board new hires during a “surge” event should be considered by departments.	Human Resources	Depends on the recommendation (see comment in C21)

Area for Improvement Analysis Page Reference	Recommendation	Primary Responsible Organization(s)	Completion Target[6]
Capability 6: Staffing/Volunteer Management Page 47	Maintain adequate bench depth in regular operations to reduce the strain on departments when staff are pulled to support emergency response and eliminate disconnects as staff cycle in and out of emergency support roles.	Emergency Management	To be determined
Capability 6: Staffing/Volunteer Management Page 47	Build a staffing schedule with longer stints in the EOC plus a staggered transition that allows for an overlap with the people replacing them for at least one week.	Emergency Management	To be determined
Capability 6: Staffing/Volunteer Management Page 47	Create a policy to activate COOP plans to formalize the implementation of COOP activities and allow for emergency processes to begin. This action would also allow for streamlined hiring and orientation processes to get staff into positions more quickly.	Emergency Management with the Chief Operating Officer	Long
Capability 6: Staffing/Volunteer Management Page 48	Task departments with formally identifying essential workers in Human Resources systems so operations can maneuver quickly during an emergency. Departments should ensure they identify essential workers for their essential functions.	Human Resources	To be determined
Capability 6: Staffing/Volunteer Management Page 48	Revise the definition of 'essential' in the Human Resources system to allow the ability to adjust what roles are considered essential. If an incident lasts longer than anticipated, departments need the flexibility to work with Human Resources to quickly change or alter the essential workers list.	Human Resources	To be determined
Capability 6: Staffing/Volunteer Management Page 48	Building on any adjustments to terminology to better fit the culture and core values of the County (Area for Improvement 4 in Capability 1), revise training materials to reflect these changes and conduct training to build understanding across EOC staff.	Emergency Management	To be determined

Area for Improvement Analysis Page Reference	Recommendation	Primary Responsible Organization(s)	Completion Target[6]
Capability 6: Staffing/Volunteer Management Page 48	Work with the Equity Officer to craft recruitment criteria for use by County leadership in their efforts to identify and designate staff for roles in the EOC. The criteria should be defined with the goal of establishing a core team of people reflective of the diversity of the county and in the community.	Diversity, Equity, and Inclusion Office, Human Resources	Long

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APPENDIX 1: REPORT METHODOLOGY

To conduct the review, information was collected from individuals and organizations identified as stakeholders, i.e., persons or groups who had an interest and direct involvement during the COVID-19 response, by the AAR Advisory Committee[7]. Data gathering methods included interviews with individuals and small group discussions, as well as an online survey and review of documentation related to the response operations for this event. These documents included situation reports, incident action plans, internal audits, and guidance documents. Given the turnover in staff there were some key players who had significant roles in the pandemic response who were not available for interviews or input. Efforts to connect with those no longer with the County were unsuccessful.

Stakeholders in the Review

Representatives from the following County organizations participated in a total of 48 interviews and facilitated hotwash discussions during this project:

- Health Department - including Behavioral Health, Public Health, and the Health Officer
- Community Justice
- County Chair's Office
- County Human Services
- Emergency Management
- Human Resources
- Joint Office of Homeless Services
- Library

[7] Advisory Committee Members include representatives from the Health Department, Health Officers, Behavioral Health, Public Health, Emergency Management, County Human Services, Joint Office of Homeless Services, IDEA - Including Disability in Equity and Access, Chief Diversity and Equity Office, and County Communications.

The following stakeholders responded to surveys outreach during this project:

Multnomah County Employees involved in COVID-19 Response Operations Survey

A survey was sent to Multnomah County staff that participated in the County's COVID-19 response to gain insight on their roles, strengths of the response, and areas for improvement. The survey was completed by 26 County employees.

- Health Department - including Behavioral Health and Public Health
- County Communications
- County Leadership
- Emergency Management
- Office of Diversity and Equity
- Library

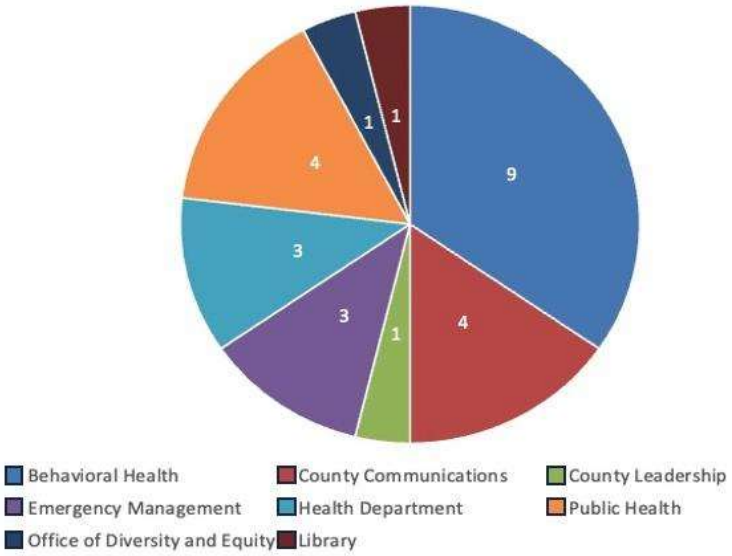
Multnomah County Emergency Operations Center Staff Survey

A survey was sent to people that worked in the County's Emergency Operations Center (EOC) during the COVID-19 response. The survey gathered information on readiness for the EOC work, communication and coordination in the EOC, strengths of the response, and areas for improvement. The survey was completed by 22 EOC workers, a 35% response rate.

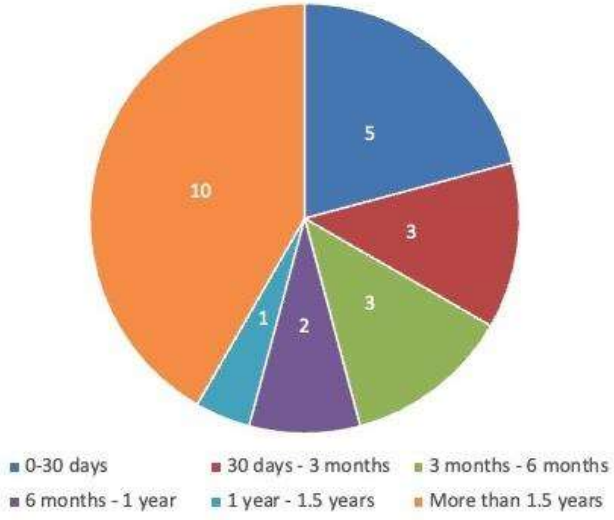
APPENDIX 2: MULTNOMAH COUNTY INTERNAL STAFF SURVEY HIGHLIGHTS

Multnomah County Internal Staff Survey: A survey was sent to Multnomah County staff that participated in the County's COVID-19 response to gain insight on their roles, strengths of the response, and areas for improvement. The survey was completed by 26 County employees. The included charts indicated the number of responses, and respondents did not answer questions that were not applicable to their role in the response.

Select the organization you were with for most of your time between January 2020 through January 2022.



Did you work at least one shift in the Emergency Operations Center (EOC) for the Multnomah County COVID-19 response? Of the 26 responses, 14 had worked in the EOC and 12 had not.
Approximately how long did you work in EOC-related roles for the COVID-19 response?



What existing plans (county-wide or department-level) did you use for the response? Were they helpful in accomplishing your response work? Why or why not?

Existing plans and training included:

- ICS training from previous responses
- County Emergency Operations Plan and Emergency Support Function annexes
- Disease intervention processes/systems
- Questionnaires and templates used from previous responses that were revised for quarantine periods, motel availability templates, and other mass sheltering questionnaires.
- Mass sheltering plans
- Disaster Resource Center Trainings

New operations and procedures had to be created including:

- IT inventory tracking system
- COVID-19 modeling research group for Oregon Health Authority (OHA) and relationships with other researchers (e.g., Institute for Disease Modeling, WA DOH, OHSU), and the surveillance systems for mobility metrics and indirect effects of COVID-19 without existing plans

Some respondents noted that they felt there were no specific policies, procedures, or platforms that they were able to use.

Could you successfully coordinate and communicate with other staff working within the EOC but outside of your branch/group/section? Why or why not?

Overall, staff felt they were able to communicate with staff outside of their branch/group/section. Below are some of the comments:

- Yes, I felt like collaboration was at an all-time high throughout, constant communication.
- Yes. I worked at the EOC during the time we were located in McCoy and since other EOC staff were onsite, it was easier to coordinate and communicate.
- Mostly yes. At times there were competing priorities within the various branches, groups and sections, but I did not find that to pose an insurmountable barrier to coordination.
- Yes, though at times it was difficult to reach my contacts due to their overcapacity.

Could you accomplish tasks assigned to your branch/group/section? What barriers existed to performing tasks? How can they be removed for future responses?

Employees largely felt they were able to accomplish tasks, but not without some barriers. Barriers included staffing challenges, continuously changing guidance, and challenges with external partners. Below are some of the comments from respondents:

- Yes, I could accomplish tasks. Barriers included inability to go into hospitals to meet patients, lack of services to connect clients to. My main role is connecting clients discharging from inpatient psychiatric care to outpatient providers - there were none, or very few- and they did not have adequate appointments to offer. Barriers also included lack of access to prescribers. Another barrier is how difficult it is to work with the County Medical Clinics - almost impossible

to reach someone without being on hold for 45min-1hr. No care coordinator has that time to waste. The County clinics were horrible to work with during this time.
- The barriers we faced were external - the data-gathering system run by OHA was too slow/nonfunctional, etc.
- Yes. Since this was a new process, it took some time to ramp up and our treatment facilities were very worried about COVID-19 spread in their sites, so were somewhat impatient. Other barriers, though relatively easy to overcome, included identifying/scheduling providers qualified to administer the vaxx (vaccine) including County staff who were being used to high capacity at other sites, new partners such as Safeway pharmacy and Portland Fire and Rescue. At times we were slowed by lack of vaxx (vaccine) availability, and I believe some vaxx (vaccine) was likely wasted due to some confusion on the sites' part in understanding when their clinics were scheduled. We also had a pretty clunky system of tracking which clients/staff at each facility signed up for a specific clinic. Names were eventually included in the official record-keeping (outside my purview) but the one we used as the clinics were being planned was rudimentary. Would suggest improving that if need to repeat.
- The challenges I experienced were primarily around sustaining efforts on projects amidst rapidly changing aspects of the COVID-19 response and fluctuations in staffing levels within the EOC.
- We were asked to stand up programs and large groups of staff who never received proper onboarding for even basic aspects of being an employee at MultCo. We should have an emergency orientation plan for standing up programs in a crisis.

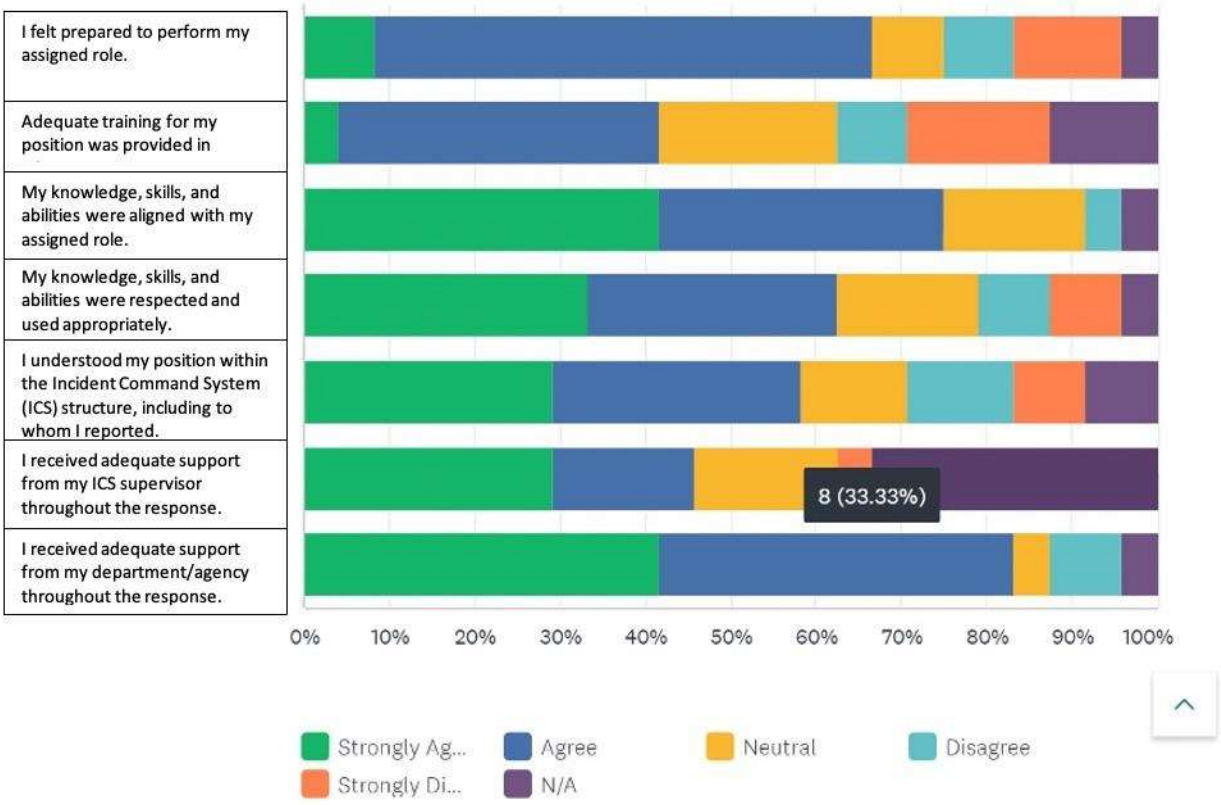
Were there innovations or partnerships fostered during the COVID-19 response that should be maintained? If so, please describe and share why they should be kept.

Some of the innovations identified include the pivot to virtual meetings to protect staff, partnerships with county organizations, and partnerships with State agencies. Below are some of the comments from respondents:

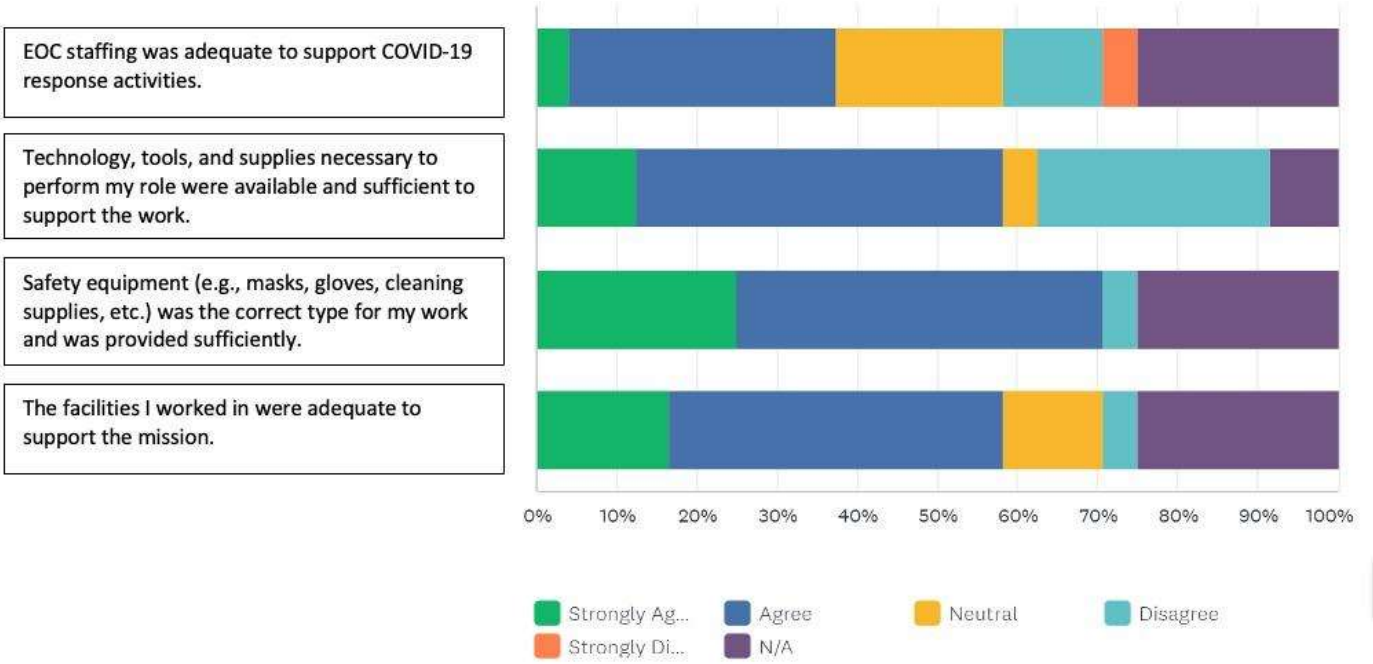
- Partnerships with ambulance companies, motels, shelters, hospitals, COVID-19 line, Call Center, and some community partners etc. were all very valuable and should be kept.
- We developed brief partnerships with the vaccination providers (Safeway, PRF) but have not been in contact since for BHD specifically. May be being maintained at the EOC level but it makes sense to keep relationships in case of a similar need (and hear from them about barriers, etc.).
- Innovations included developing messages around shutting down the County, which had never been done, communicating safety messages around masks, etc., directly to the public and moving County communications online, including conducting hundreds of press availabilities, and thousands of media interviews on Zoom.
- Yes. The partnership between Health and Emergency Management leadership, creating a dedicated role for Equity within the EOC Org Chart, larger wellness tool for EOC staff.
- Yes, OHA's collaboration with WA DOH, OHSU, Fred Hutch, CDC/CSTE infectious disease modeling workgroup, and Oregon hospital forecasting workgroup -- important ID modeling infrastructure to maintain for preparedness.

Please respond to the following questions based on your readiness for and experience participating in COVID-19 response-related activities. If a specific statement is not related to your experience, please choose N/A.

a. I felt prepared to perform my assigned role.
b. Adequate training for my position was provided in advance.
c. My knowledge, skills, and abilities were aligned with my assigned role.
d. My knowledge, skills, and abilities were respected and used appropriately.
e. I understood my position within the Incident Command System (ICS) structure, including to whom I reported.
f. I received adequate support from my ICS supervisor throughout the response.
g. I received adequate support from my department/agency throughout the response.



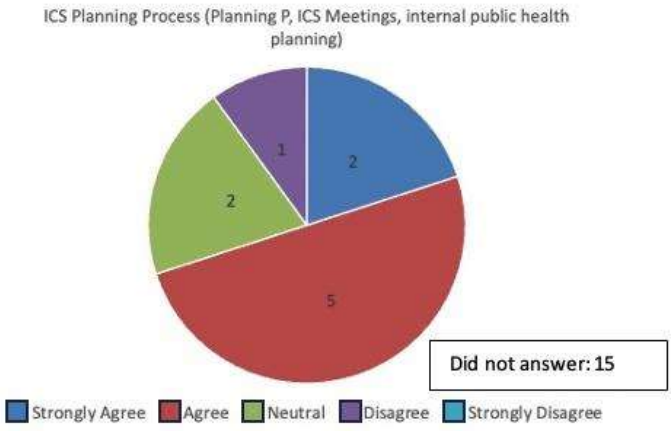
Please respond to the following questions about the availability and quality of resources during the COVID-19 response. If a specific statement is not relevant to your experience, please choose N/A.

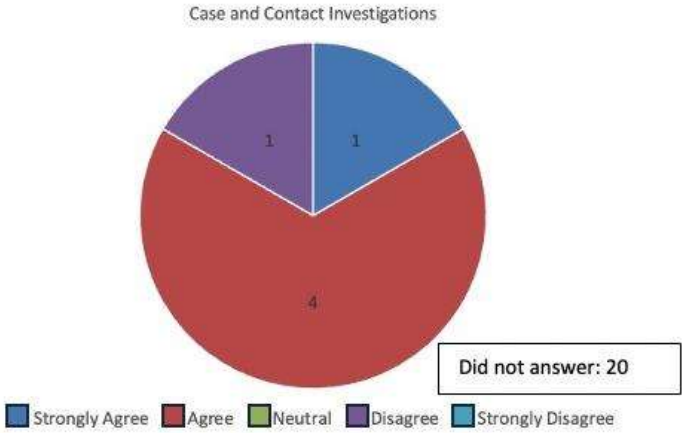


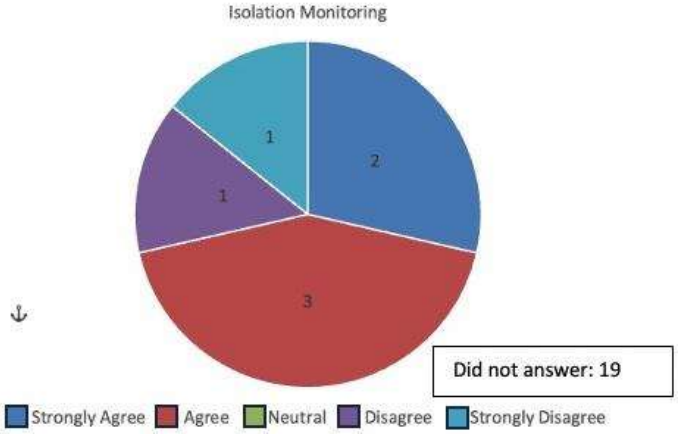
Additional comments regarding ratings:

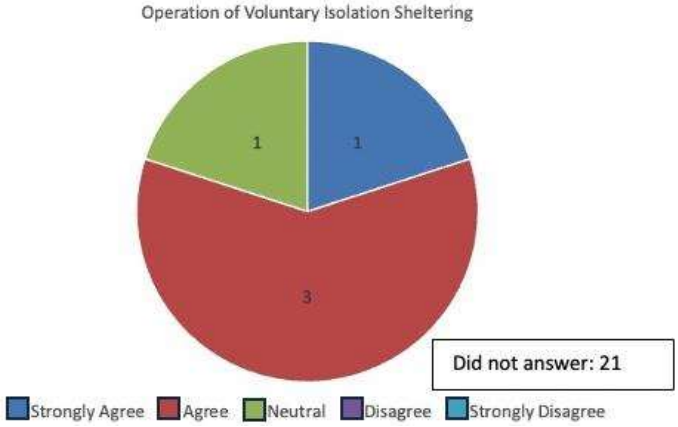
- During surges it was very hard for staffing to be considered adequate; also, the system Opera/Orpheus was unable to handle the users.
- EOC staffing fluctuated during my time in the EOC, with many staff being called back to their regular County jobs.
- My role was as project manager and did not include any on-site responsibilities, so no need for safety equipment and I can't speak to facility adequacy (the treatment sites were responsible for their facility prep). As mentioned above, we did not have tools per se for the project management and tracking needs (at the BHD level). I also volunteered at several vaxx (vaccination) clinics for the general population and was provided adequate safety equipment, and the facilities seemed well set-up for the work.
- Unified Command had to beg for County leadership (specifically HR and County administration) to support the EOC. Eventually, they did so with palpable disdain.
- I worked early on (March to May 2020) and recommendations about masks, social distancing, etc. were still evolving. Also, the ICS was still being built out to support the long-term incident. Given the information we had at the time, I felt safe and supported. In retrospect, of course we should have been wearing masks and we should have been more socially distant and we needed more resources. But we didn't know at the time.

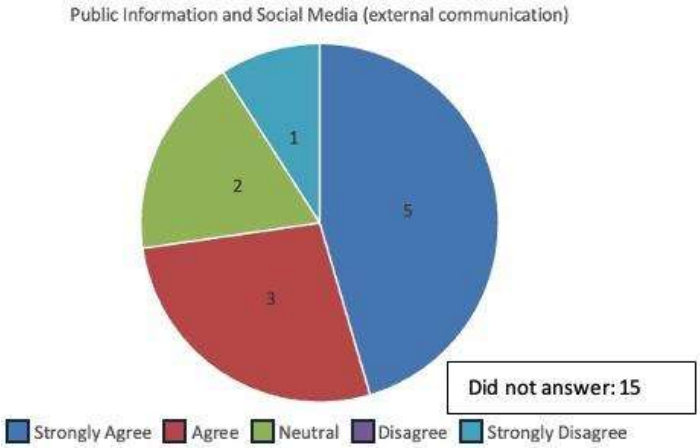
Please indicate your level of agreement with the following statements. Overall, I felt the _____ process went well, was generally well-run, and accomplished its mission. If you were not involved in or aware of a specific area, please choose N/A.

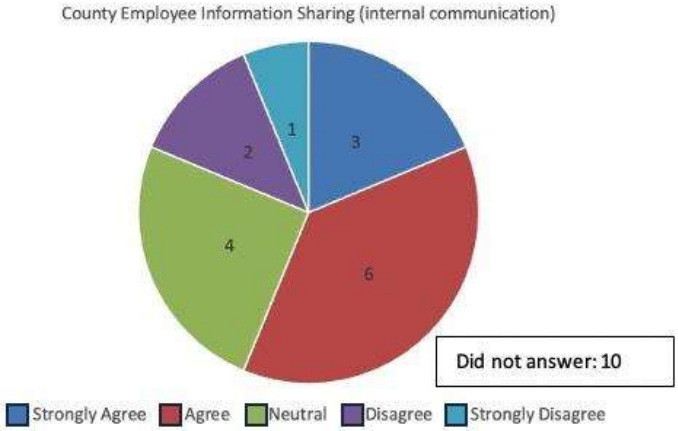


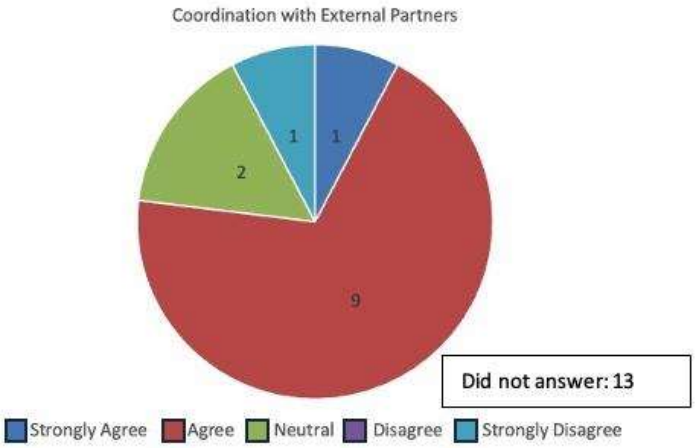


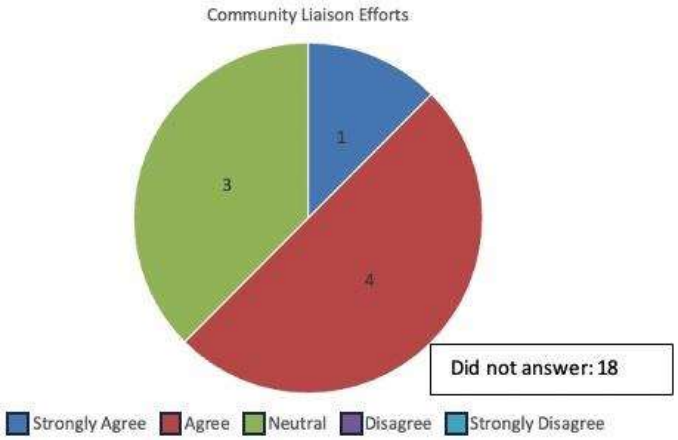


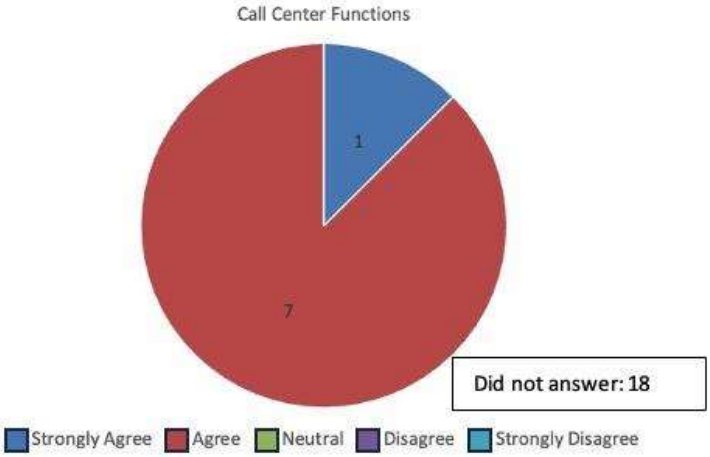


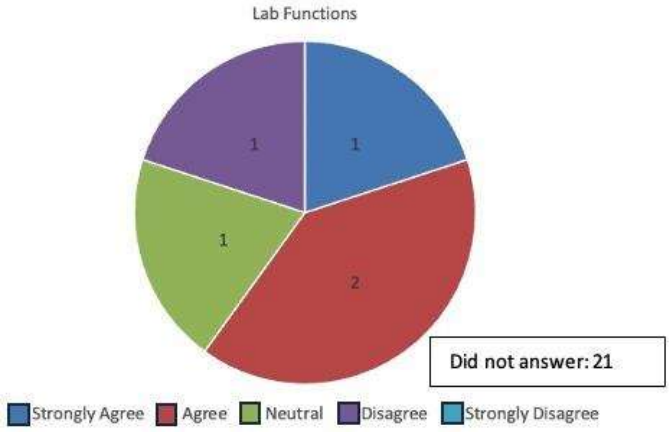





Coordination with External Partners
1
1
2
9
Did not answer: 13
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree


Community Liaison Efforts
1
3
4
Did not answer: 18
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree


Call Center Functions
1
7
Did not answer: 18
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree


Lab Functions
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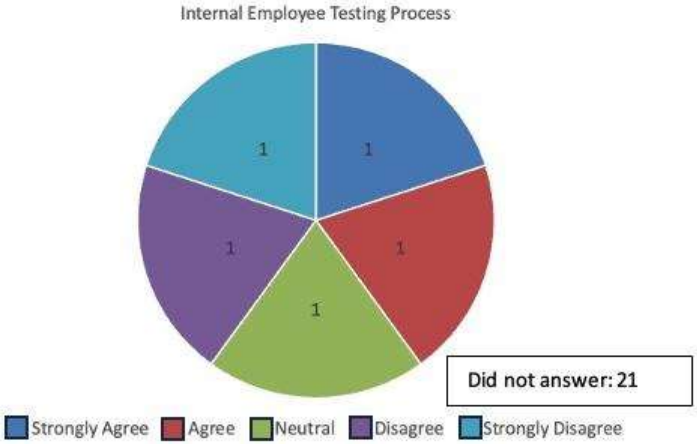
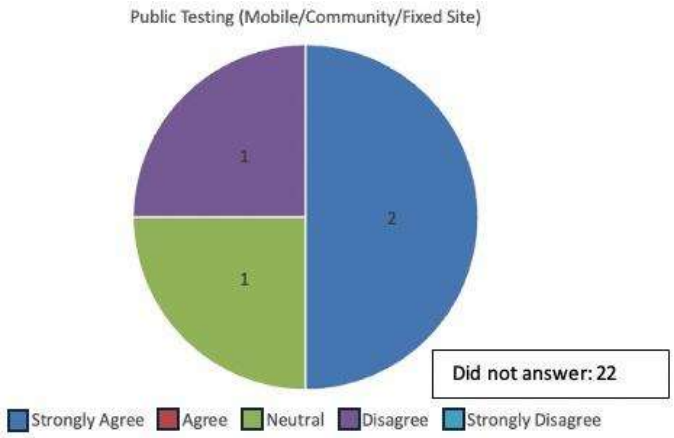
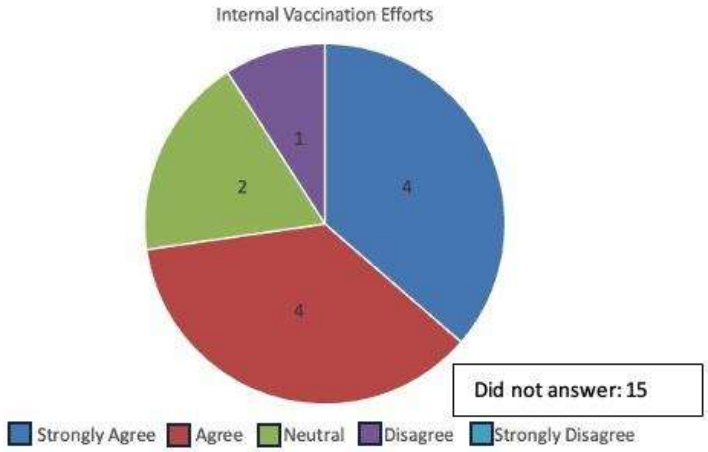
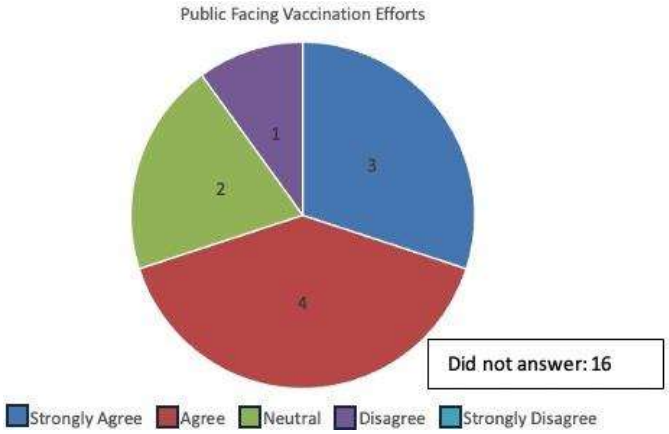
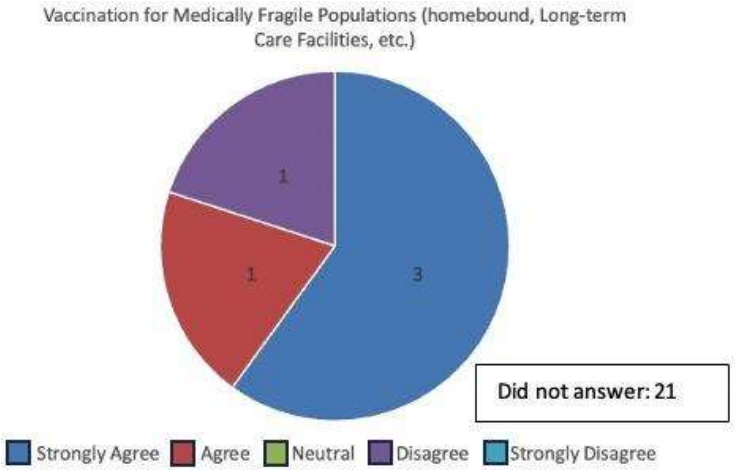
1
1
2
Did not answer: 21
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

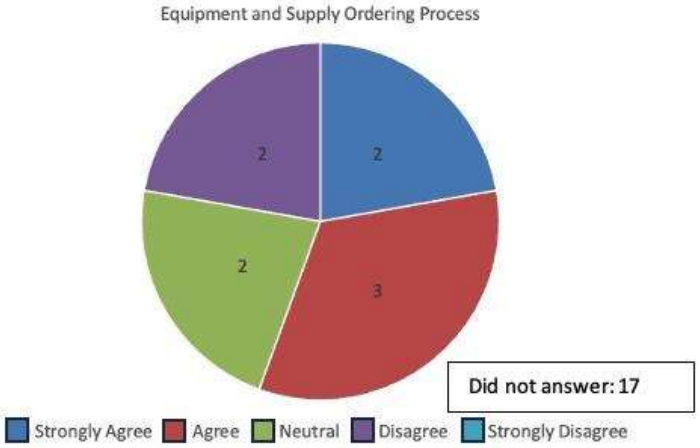

Internal Employee Testing Process
1
1
1
1
1
Did not answer: 21
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

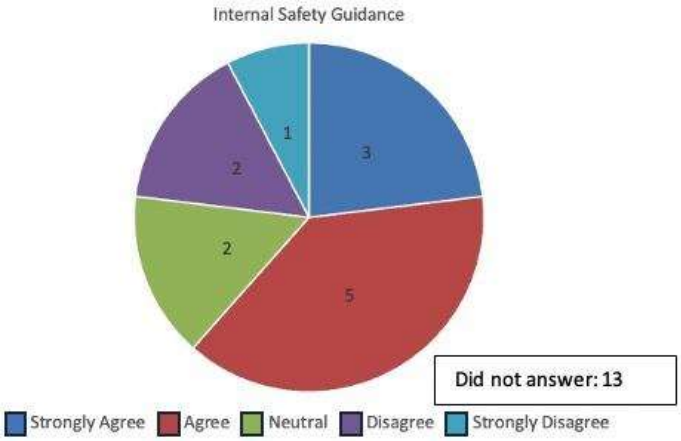

Public Testing (Mobile/Community/Fixed Site)
1
2
1
Did not answer: 22
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

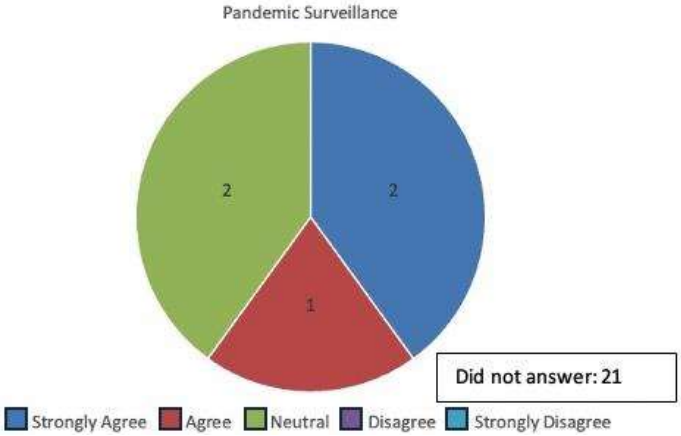

Internal Vaccination Efforts
4
4
2
1
Did not answer: 15
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

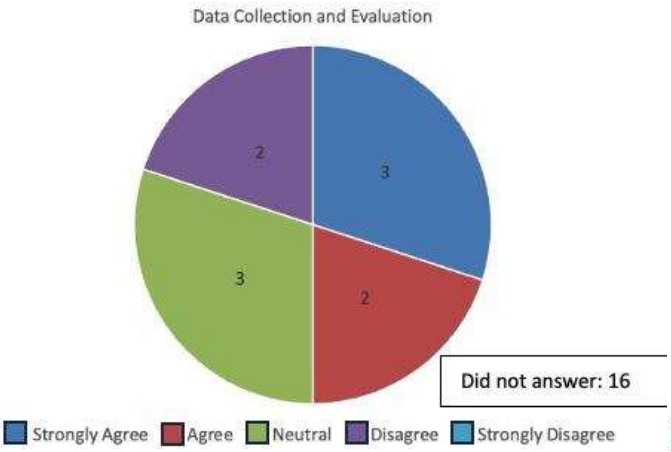

Public Facing Vaccination Efforts
3
4
2
1
Did not answer: 16
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

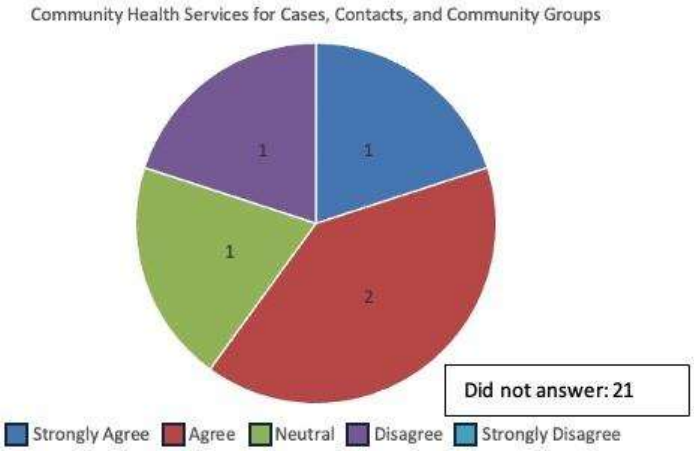

Vaccination for Medically Fragile Populations (homebound, Long-term Care Facilities, etc.)
3
1
1
Did not answer: 21
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree


Equipment and Supply Ordering Process
2
3
2
2
Did not answer: 17
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree


Internal Safety Guidance
3
5
2
2
1
Did not answer: 13
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree


Pandemic Surveillance
2
1
2
Did not answer: 21
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

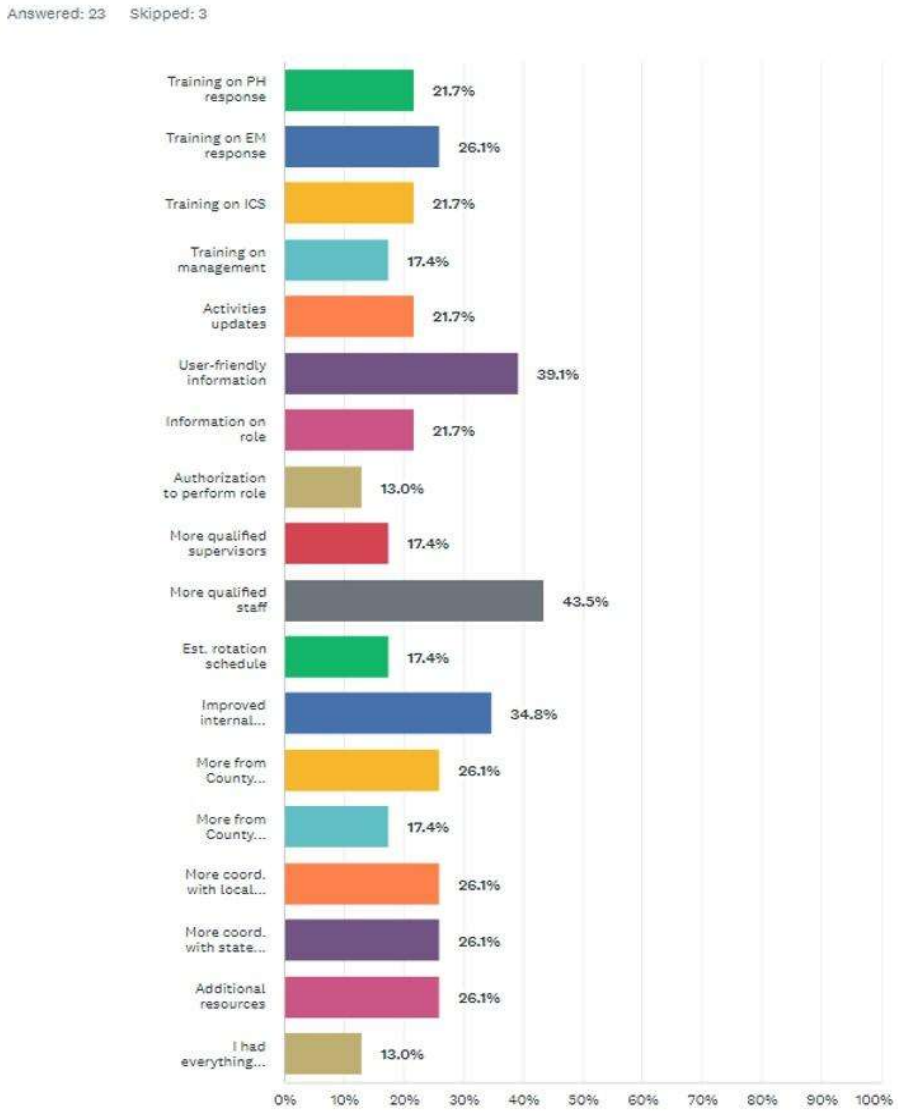




Additional comments regarding ratings:

- Frustration with resources related to high-risk populations getting to hotels or isolation sites, or rooms available - particularly in homeless camps; especially when lab-verified testing is needed with no transportation /resources to testing. High risk/limited English information not adequately provided for isolation with little ability to outreach when not knowing language; testing pop ups needed in high spread areas as identified in data with limited English-speaking population centers; rules on supply ordering policies/amounts sometimes inconsistent; on-site testing often delayed.
- At vax clinics, some of the County staff did not wear their masks properly.
- Internal communication from County leaders to employees was lagging and lacking.

Based on your role and job duties, which of the below would have helped you be more successful in your role? Select all that apply.



What about the County's response to COVID-19 makes you proud?

Many of the respondents to this question were proud of how hard County employees worked, how they were able to come together quickly to address the pandemic, and that their efforts ultimately saved lives. Below are some comments received from respondents:

- People were sometimes asked to do the impossible, and stepped up to do it. People sacrificed a lot in their personal lives in order to work long hours in this response for many, many months.
- The willingness of so many employees to be redeployed to the Emergency Operations Center to support a community wide response. Front-line workers in call centers, on our DIS and Outbreak

team, vaccine clinic workers. The people who answered the call to work on the front-lines of the pandemic were courageous, empathetic, and hardworking.
- I think we have done a great job stepping up to the challenge. This was not planned and I don't think we were truly prepared, but we were able to come together, create a plan and move to action quickly.
- The people who stepped up to literally "answer the call" to support public health in this effort.
- Being the largest health jurisdiction in the state, we had to come up with processes prior to the state coming up with them. This allowed us to be more innovative, and impact the rest of the state.

What would you change or improve based on the County's response to COVID-19?

Recurring responses of ways to improve the County's COVID-19 response included increasing staffing, cross training staff, improving the integration of emergency management and public health. Below are some comments received from respondents:

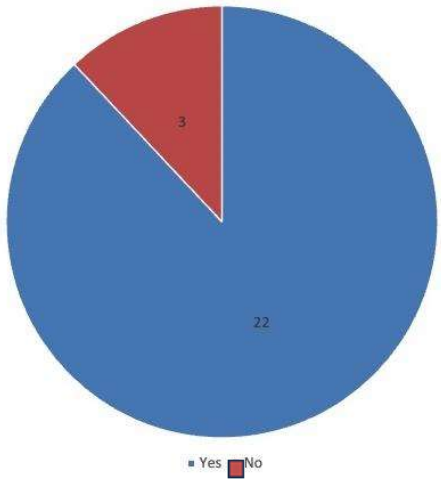
- I would have doubled the staff for everything. It often felt like there were 12 people doing everything and it was hard to know, for instance, that entire sections of the County were home and not working when the EOC and the COVID-19 responders felt so overwhelmed.
- Don't use LDA positions during emergency responses. Hire folks full time as a showing of how the County cares about its employees while they work with possible exposure to COVID-19. My coworkers are able to work from home while I have to use sick pay or vacation pay to stay home if I encounter a possible exposure. While other co-workers from different departments are getting overtime for the same work and effort as myself.
- Integrate emergency management training into the regular training offerings.
- Value your front-line workers and more proactively seek to retain them in the County after the response is over. Even better, embed a team of people who can nimbly respond at the onset of a disaster so that all the institutional knowledge is not lost in between responses and a new response can benefit from employees who have done it before.
- I would simply try to codify this element of the work so it does not need to be reinvented if ever another need comes up.
- Have multiple people trained in every area, so people can rotate off the response regularly. It was exhausting and not good for our health to be in an emergency response mode for so long.

What response capabilities need improvement? Why?

- Stronger IT support is needed in any incident, we were adapting to new buildings, and new needs and were literally borrowing equipment and frustrated by the slowish adaptation to new platforms like Zoom, etc.
- Agreements about duration of redeployment to emergency response should be clear up front. Stability of the emergency response should be given equal weight as stability of ongoing County operations.
- The ICS structure, as it is, does not work for an infectious disease pandemic. It needs to be adapted.
- BHD/HD should probably have a long-term plan about how we support our (contracted) facilities in the event of a major emergency.

- We need more help reducing barriers to meeting short-term crisis goals from the whole County. We need to be better prepared to orient and onboard new staff brought in for crisis response.
- More ICS training for a broader range of employees, including people in management and leadership positions.
- The state needs to be more connected with the local health jurisdictions on creating policies and procedures that we implement. They created policies and procedures that weren't practical or achievable.

Based on your COVID-19 experience, would you be willing to work in the EOC (or in support of the EOC) to support the County's response to future emergencies?



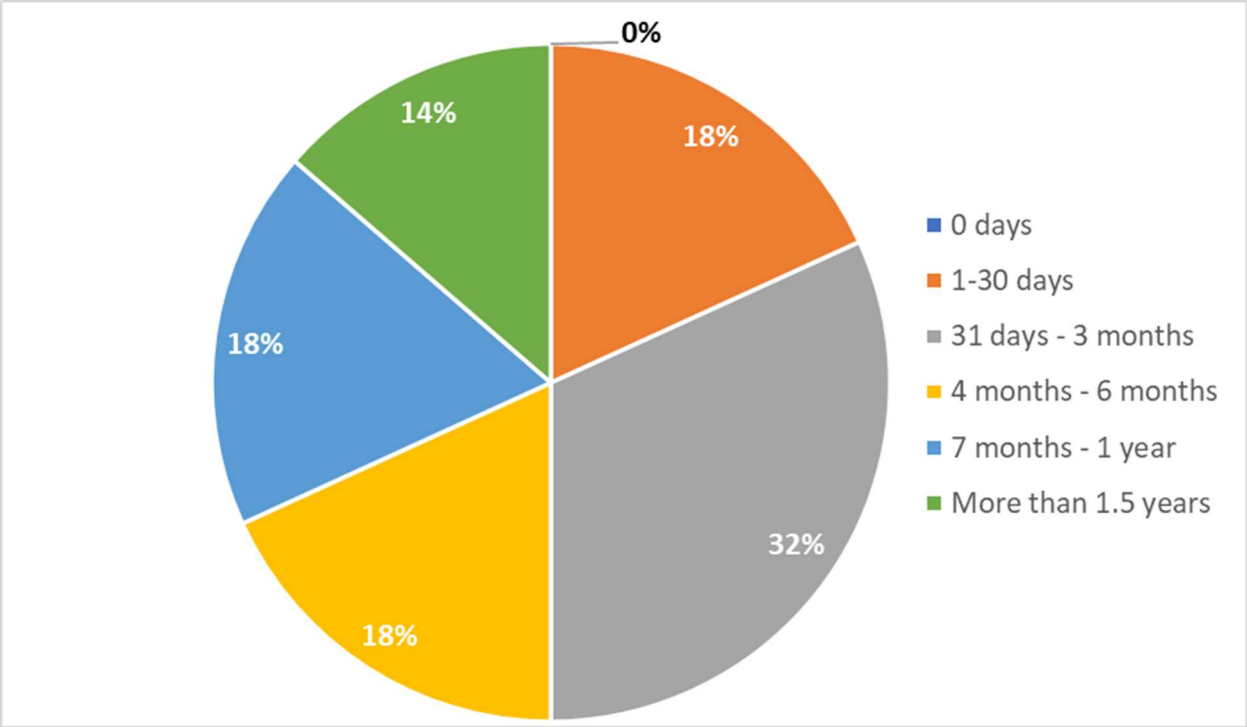
Additional Comments:

- The COVID-19 response team was united in the mission and worked effectively as a group. With additional coordination from above, I suspect that compassion could have spread further and affected even more lives. I have confidence that each team member assisted our residents compassionately and as competently as possible.
- I genuinely thought I was going to lose my mind at many points throughout the EOC. It was stressful, difficult, maddening and exhausting. I was not at my personal nor at my professional best. Still, I witnessed my valued colleagues step up in amazing and inspiring ways. I am proud to have been a part of it and to know that the EOC, as a public response to an unprecedented emergency, supported the community in the manner that it did. The Emergency Management leadership team should be particularly commended.
- I am not sure if I am the person who should be answering these questions. I made videos, and I tried very hard to help EOC and the community. That being said, I am a big proponent of planning ahead, especially because video takes time. We would have meetings every Monday to get an update on how to proceed for the week. That was helpful in the constantly changing environment. People worked without ego -- and that was huge.

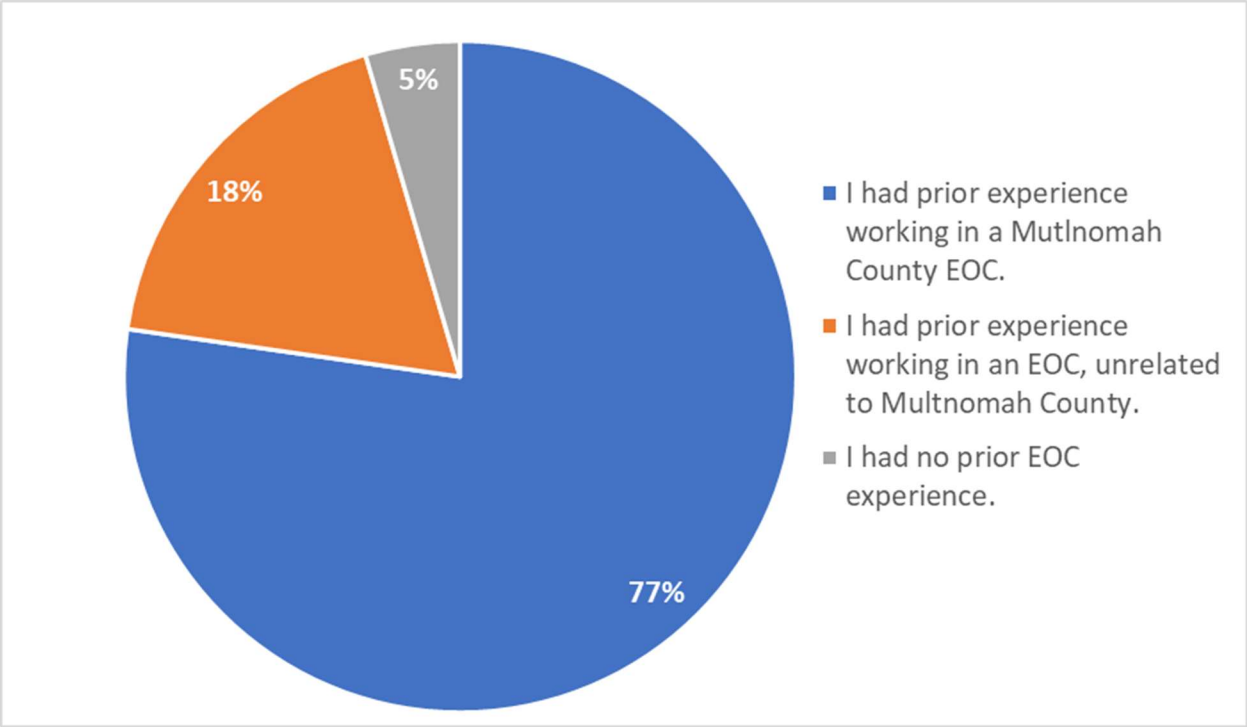
Appendix 3: Multnomah County Emergency Operations Center Staff Survey Highlights

Multnomah County Emergency Operations Center Staff Survey: A survey was sent to people that worked in the County's Emergency Operations Center (EOC) during the COVID-19 response. The survey gathered information on readiness for the EOC work, communication and coordination in the EOC, strengths of the response, and areas for improvement. The survey was completed by 22 EOC workers, a 35% response rate. The included charts indicate the percentage of responses aligning with each response option.

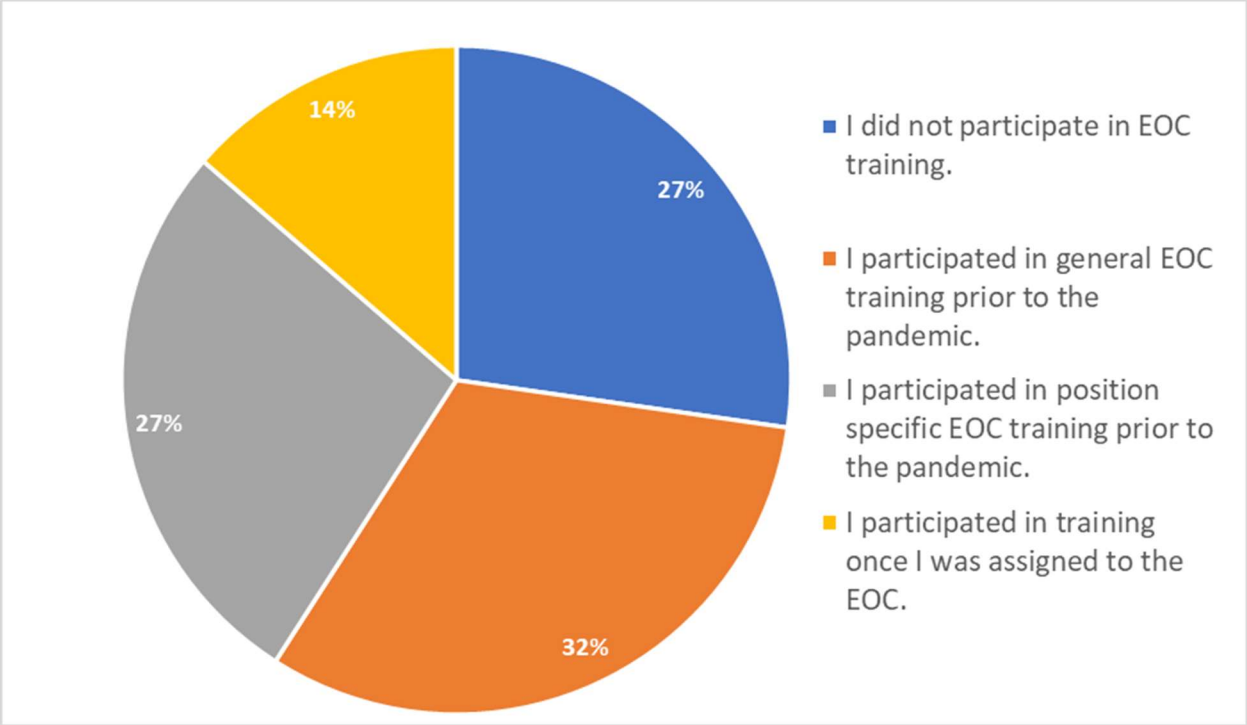
Approximately how long did you work in the Emergency Operations Center (EOC) for the COVID-19 response? If you served in more than one role, how long did you serve in the EOC cumulatively.



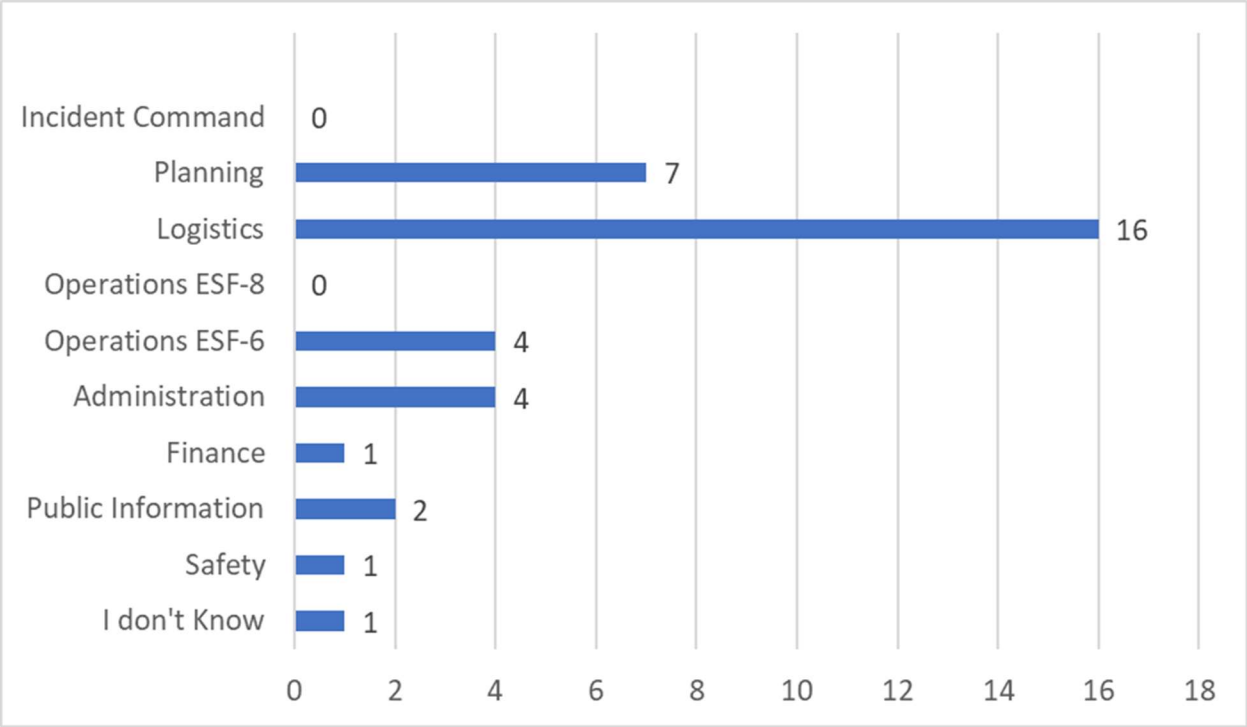
What prior experience did you have before working in the EOC?



What training did you have to work in the EOC?



What EOC organizational section/unit did you support? Select all that apply.



Were EOC guides, job aids, protocols, and other documents helpful in accomplishing your response work? Why or why not?

Observations: It seems that respondents working in the logistics sections made effective use of forms to assist them in the response. However, the consensus appears to be that job aids and protocols were either nonexistent or not useful for the EOC positions. Multiple respondents noted that they were asked to build or restructure the format of forms as the response progressed. This section contains a selection of the most impactful responses to the above survey question.

- I have been involved since the Health Department started emergency management training in 2002-3. So, I have had a lot of general and position specific training. I would say my PSC and IC training has been most helpful.
- There were very little to no job aids and other various training documents available for me to be able to accomplish my response work.
- I don't remember using guides during the response, but they were certainly useful during previous training and exercises.
- Yes, somewhat helpful. They helped provide a bigger picture understanding of EOC org structure.
- Not very helpful. I did the best I could but there was no guidance in advance for setting up the logistics unit itself while we were dealing with sudden and urgent community needs. There were large binders with information that was about setting up field sites for fires, not for standing up a work unit in an office setting.

- I worked in the EOC at the very beginning of the pandemic, so there was no documentation specifically for this activation. However, the general EOC training I had prior to the pandemic, which included study materials, was very useful in understanding the EOC framework.
- Yes, some forms were extremely useful for completing the work (order forms, schedules, etc.) but guides, job aids, and protocols were mostly being developed as we went (I worked in the middle of 2020).
- Sometimes. The nature of the Pandemic was that the guidance from above (nationally and locally) often changed quickly and there was little time to create new guides or resources. Within the County itself it was obvious that different teams that were supposed to be working within shared priorities and protocols, had different ones.

Were you able to effectively communicate and coordinate with staff in the EOC who were not in your branch, group, or section? Why or why not?

Observations: Respondents noted that while they found communications accessible and useful, the virtual nature of the EOC added an additional barrier to communication and coordination. This section contains a selection of the most impactful responses to the above survey question.

- Yes, most people in leadership roles were part of my normal communications channels.
- Yes and no: when I was logs lead, I was always given contact info to reach staff in other sections, even on evenings and weekends; early on, when I was a shelter lead (PIC), I had a hard time reaching people in other sections and wasn't provided complete contact info.
- Yes. It was easy to walk around and ask questions or communicate via email.
- I think so. I had effective working relationships with members of incident command, which helped.
- The inability to meet in person (made necessary by the nature of this EOC) made it difficult to explain how the warehousing and distribution of necessities worked. Overall, I understood the structure and lead folks of each EOC section, which was useful.
- Somewhat. It could be difficult to get a response to questions, and leadership often wasn't available to review the draft Sit Report during normal business hours. I would get comments and revisions from leadership late at night (between 9-11pm) that I had to resolve and respond to before I could send the report out that night.
- Somewhat. It was difficult to communicate with folks sometimes due to the frequency that people changed positions, folks were new to communicating virtually, and everyone had to wear masks, so it was much more difficult to remember people's faces/names/positions.
- Mostly, yes. But there was so much turnover in EOC staff that a significant number of staff were left without guidance, and some were happy to get lost in the confusion.

Were you able to complete tasks assigned to you? If any barriers impeded your performance, what strategies can be employed to eliminate them for future responses? Please provide details on any potential impediments and proposed solutions.

Observations: While respondents felt that they were able to complete their tasks, multiple respondents reported that they felt under-supported in their roles or were not given the tools needed to complete all tasks. Some respondents felt that they were ill-equipped to handle the role given to them in the EOC. This section contains a selection of the most impactful responses to the above survey question.

- Yes, at first, issues arose when EOC shifted from emergency response to operational response. The grey area between what should be a departmental focus and what was an emergency management focus was often a confusing area.
- There were no training materials, I had no prior experience working in the EOC. I was given the extremely broad task of "recruiting" employees to work in the EOC.
- The only performance barrier I can think of was my own inability. My skills were ill-suited for the tasks initially assigned to me. I was less capable at adapting to the EOC environment and responsibilities than I would have hoped for myself.
- I did the best I could to help get the logistics unit going. I have experience in operational start-ups, but I was mostly responsible for direct administrative and financial tasks which I had never done before and had no training. I was heaped with kitchen and clean-up duties on top of that, and I was treated very poorly and felt humiliated on more than one occasion by some management staff. Nobody could tell me who could help me get reassigned to another EOC role, so I left, and I will not be volunteering again. I would recommend having a designated "ombudsman" contact who can help troubleshoot and resolve problems for volunteer staff.
- I was able to develop and send out the report, but the late-night revisions were stressful. As far as solutions are concerned, it is difficult to say given that it was the nature of the emergency response that made it difficult for leadership to review the draft during normal business hours. But the cadence and expectations could have been reevaluated to better match capacity and the impact/need for a report with the level of detail that was expected.
- I was able to complete most tasks assigned to me. Barriers included: lack of knowledge / experience with the state's ordering system for supplies; the lack of sufficient electrical outlets / capacity in McCoy Room 850; and the lack of an EOC Logistics designated p-card for paying for food and supplies.

What about the County's response to COVID-19 makes you proud?

Observations: Respondents highlighted the quick response of Multnomah County to COVID-19 as a strength during the response. Multiple respondents also noted the collaborative efforts of county staff willing to work in the EOC and work with departments outside of their typical stakeholders. This section contains a selection of the most impactful responses to the above survey question.

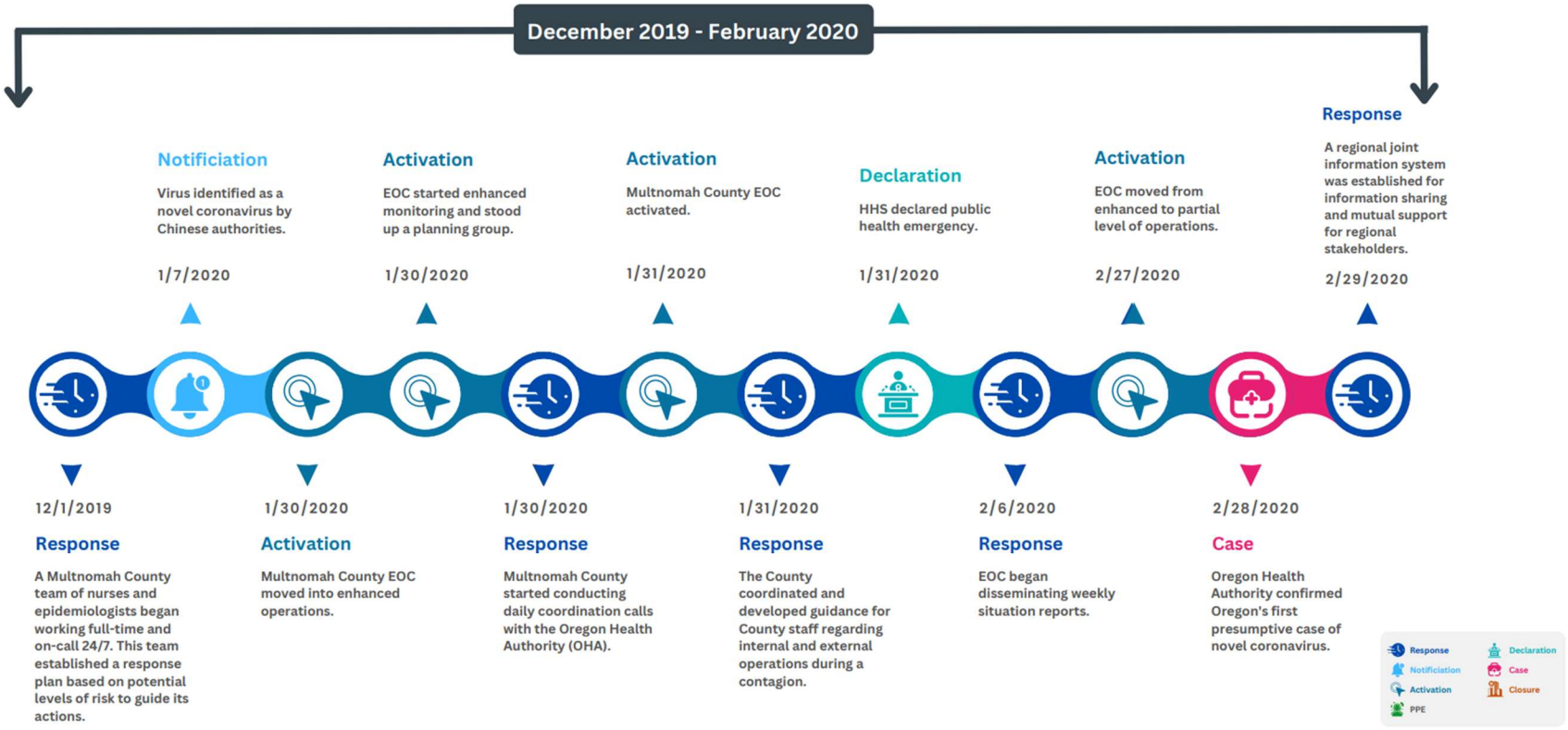
- We started early and had great people working on the planning/leadership processes
- How quickly we were able to get the EOC up and running with such quickly changing news/updates. We were also able to implement shelters fairly quickly.
- We were able to pivot the County much faster than I was expecting.
- We did our best to help everyone in the community as we were able, and it felt like we largely succeeded.
- Seeing people volunteer to work in a terrifying situation when there was very little reliable information about what was happening.

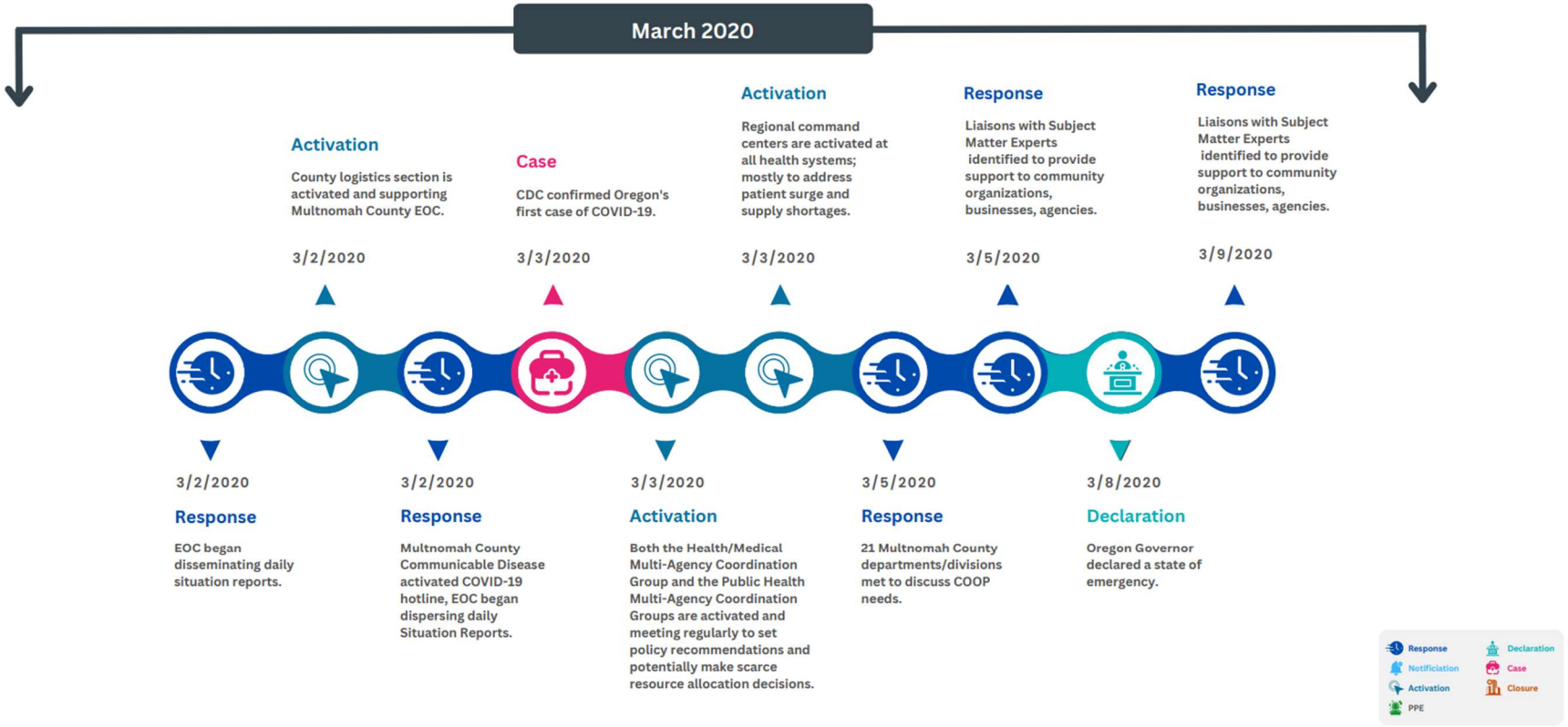
What would you change or improve based on the County's response to COVID-19?

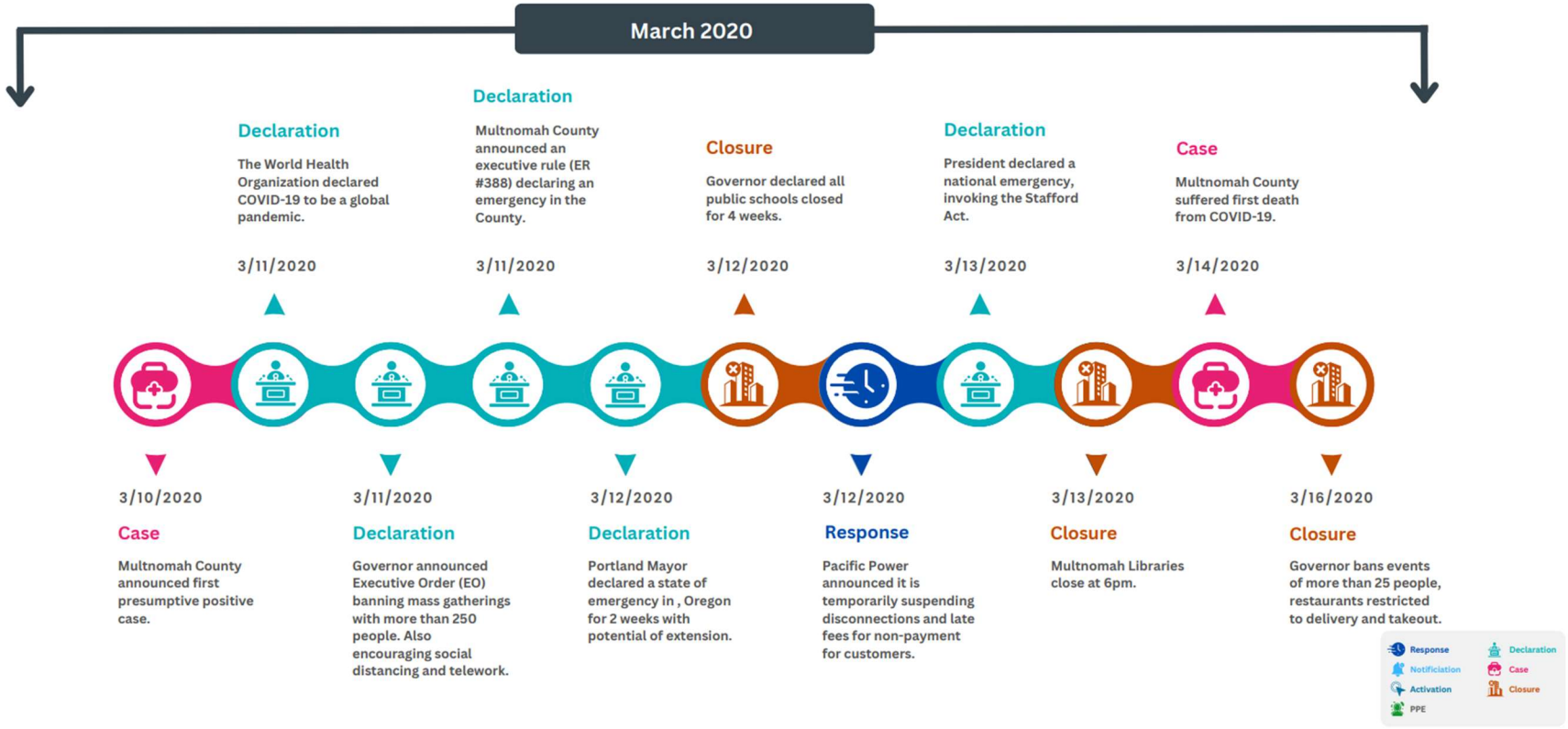
Observations: Increased training for all staff is a recurring theme in response to this question. Respondents also highlighted the need for the county to be proactive during emergencies. This section contains a selection of the most impactful responses to the above survey question.

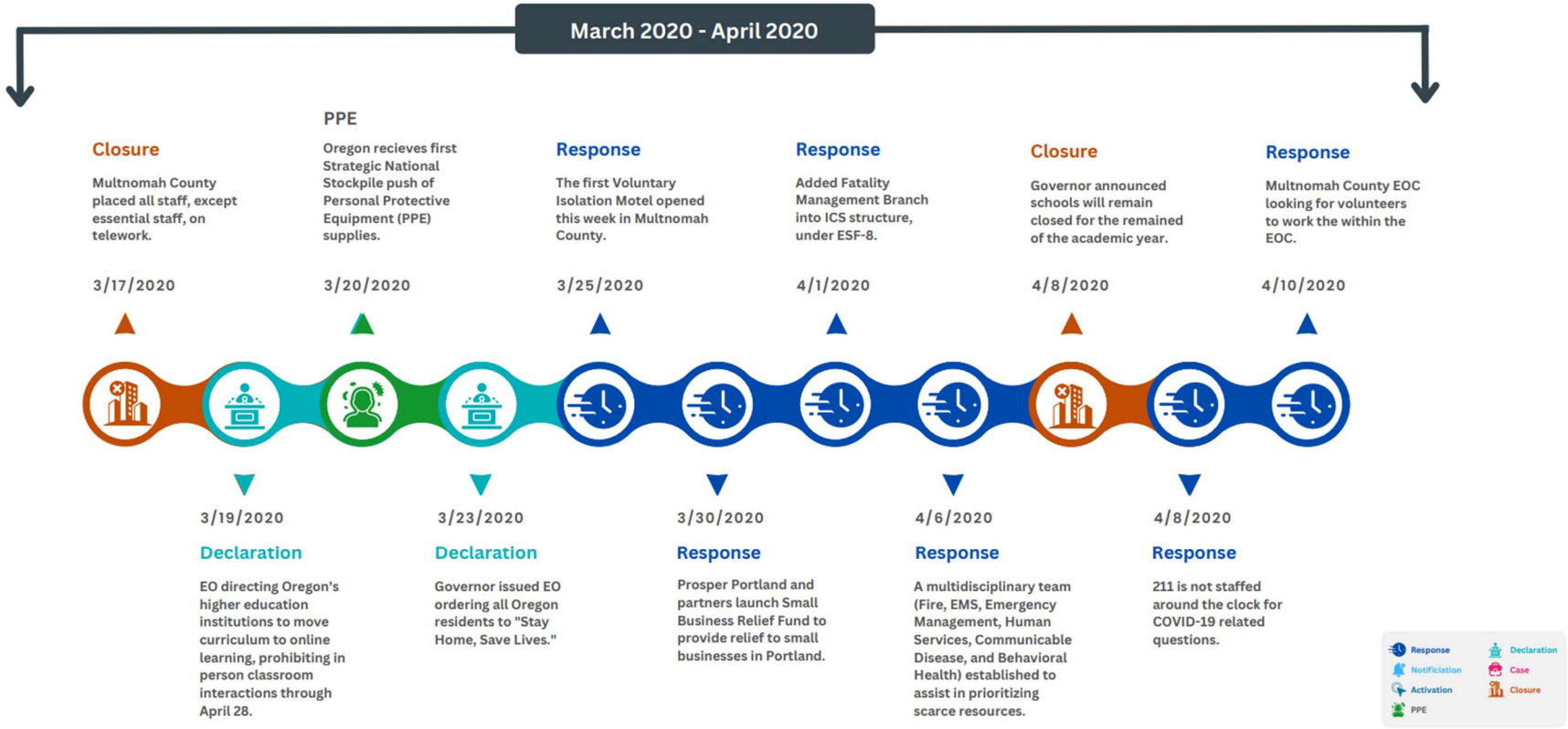
- Much better training and assistance when activated.
- Find ways to get ahead of the needs, instead of just responding, both before the emergency and at the beginning of it, as we start to see what's coming. Too often we were waiting until proverbial fires were big and difficult to control, instead of seeing a small flame and starting to act immediately. We need to be able to act on some educated guesses about what is going to happen. Examples of this include the delayed acceptance of donated cloth masks (this was during my time in the EOC), as well as the delayed purchase of vaccine freezers (this was after I left the EOC but was still providing admin support to the Communicable Disease program).
- As I also happened to see the finance side of things - suggest more training for staff at shelters on the importance of following spending policies and procedures. We had some challenging conversations with shelter staff (many brand new to working for County) on basic backup / delivery confirmations for daily food beverage and laundry services
- Clear communication that is timely, proactive, and strategic. There was a lack of leadership and big vision shared.
- I would like to see the County be better prepared for a future response - we had to build the plane while flying it, and it led to a lot of stress and burnout. We need to modernize our systems, streamline our processes, continue to strengthen the capacity of our community organizations, and partner with Community Health Workers (CHWs) to reach culturally specific communities in the ways that work best for them - so that the pathways and resources are in place when we need them most.
- I would not lay people off in the middle of a global health crisis.

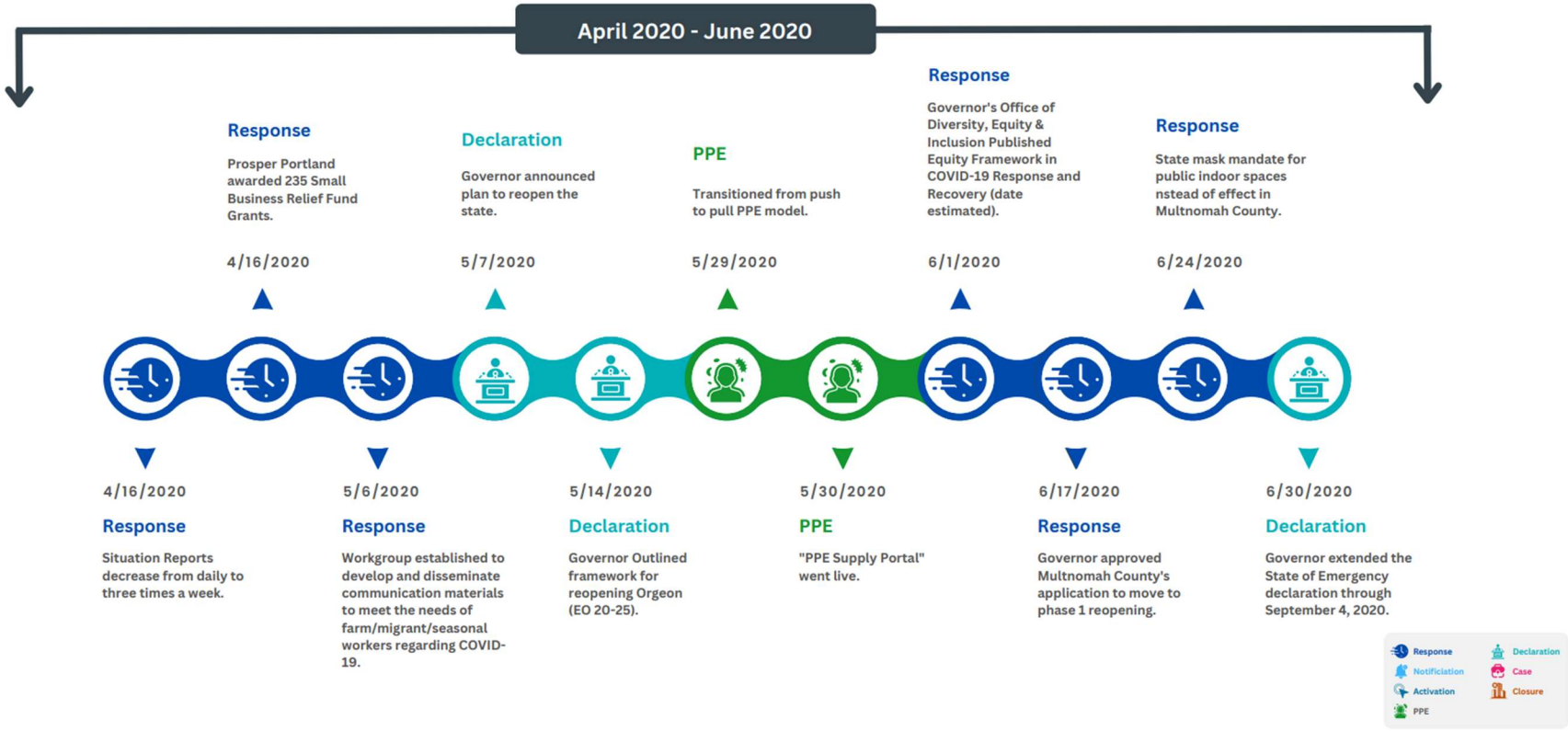
Appendix 4: Incident Timeline

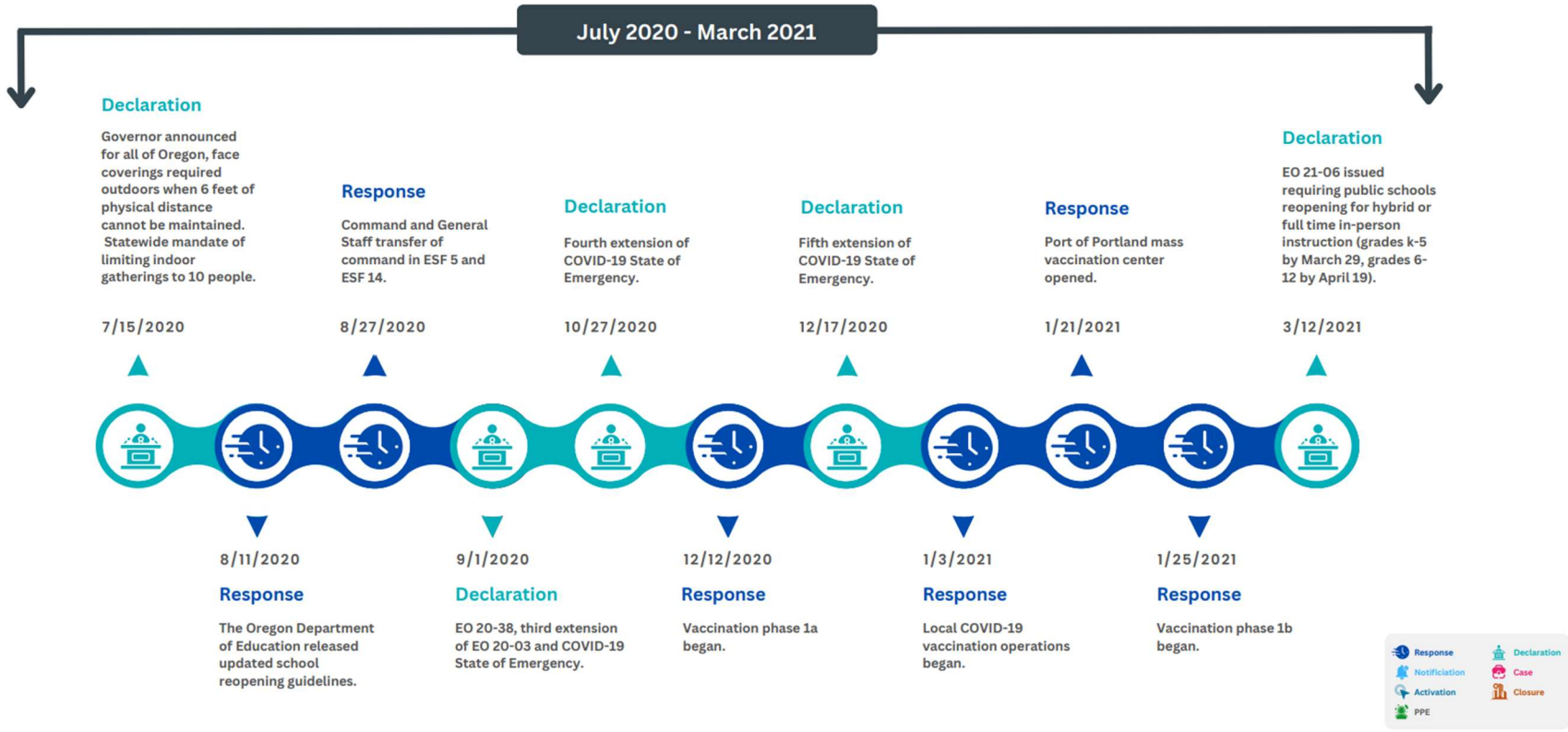


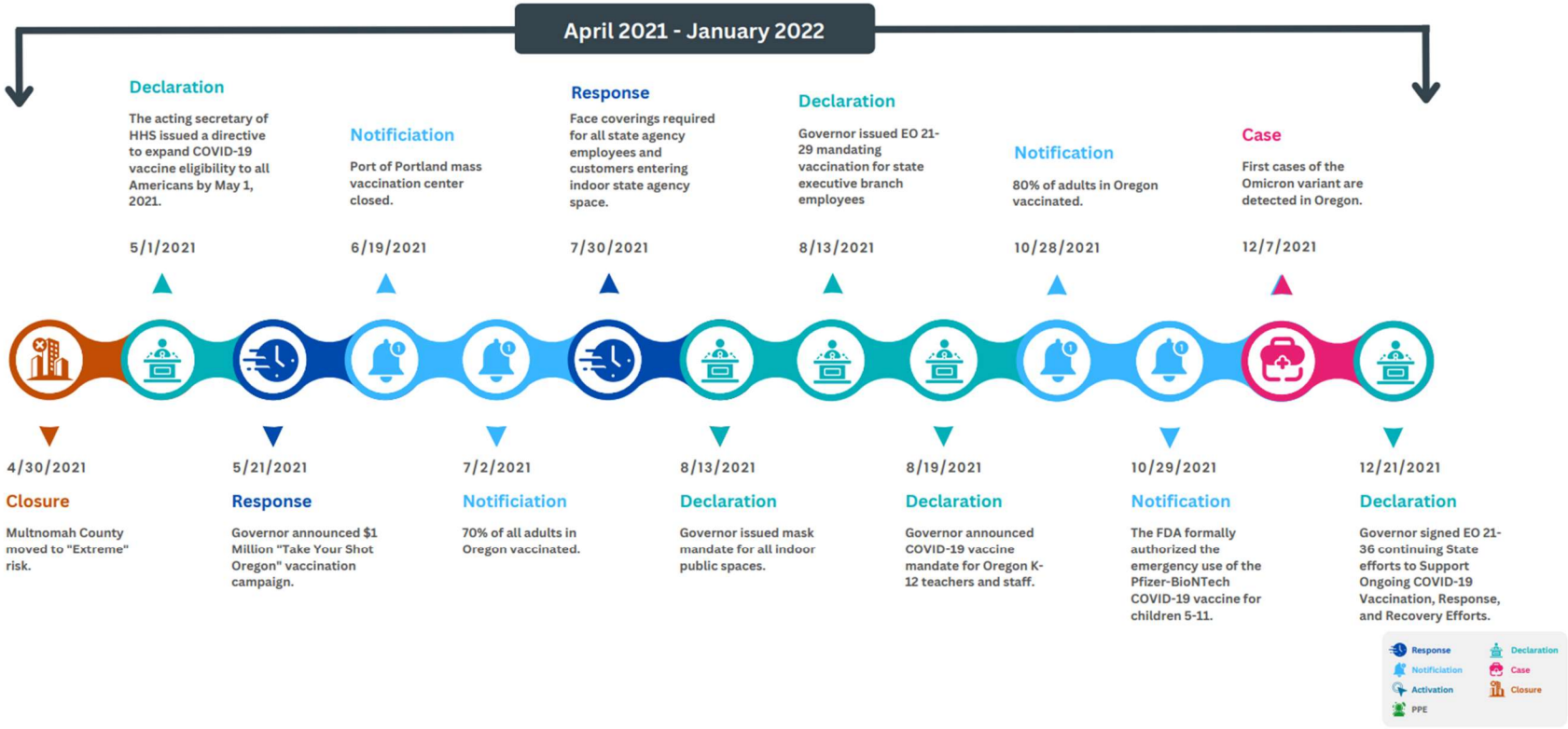

March 2020
Activation
County logistics section is activated and supporting Multnomah County EOC.
3/2/2020
Case
CDC confirmed Oregon's first case of COVID-19.
3/3/2020
Activation
Regional command centers are activated at all health systems; mostly to address patient surge and supply shortages.
3/3/2020
Response
Liaisons with Subject Matter Experts identified to provide support to community organizations, businesses, agencies.
3/5/2020
Response
Liaisons with Subject Matter Experts identified to provide support to community organizations, businesses, agencies.
3/9/2020
3/2/2020
Response
EOC began disseminating daily situation reports.
3/2/2020
Response
Multnomah County Communicable Disease activated COVID-19 hotline, EOC began dispersing daily Situation Reports.
3/3/2020
Activation
Both the Health/Medical Multi-Agency Coordination Group and the Public Health Multi-Agency Coordination Groups are activated and meeting regularly to set policy recommendations and potentially make scarce resource allocation decisions.
3/5/2020
Response
21 Multnomah County departments/divisions met to discuss COOP needs.
3/8/2020
Declaration
Oregon Governor declared a state of emergency.
Response
Notification
Activation
PPE
Declaration
Case
Closure


March 2020
Declaration
The World Health Organization declared COVID-19 to be a global pandemic.
3/11/2020
Declaration
Multnomah County announced an executive rule (ER #388) declaring an emergency in the County.
3/11/2020
Closure
Governor declared all public schools closed for 4 weeks.
3/12/2020
Declaration
President declared a national emergency, invoking the Stafford Act.
3/13/2020
Case
Multnomah County suffered first death from COVID-19.
3/14/2020
3/10/2020
Case
Multnomah County announced first presumptive positive case.
3/11/2020
Declaration
Governor announced Executive Order (EO) banning mass gatherings with more than 250 people. Also encouraging social distancing and telework.
3/12/2020
Declaration
Portland Mayor declared a state of emergency in , Oregon for 2 weeks with potential of extension.
3/12/2020
Response
Pacific Power announced it is temporarily suspending disconnections and late fees for non-payment for customers.
3/13/2020
Closure
Multnomah Libraries close at 6pm.
3/16/2020
Closure
Governor bans events of more than 25 people, restaurants restricted to delivery and takeout.
Response
Notification
Activation
PPE
Declaration
Case
Closure


March 2020 - April 2020
Closure
Multnomah County placed all staff, except essential staff, on telework.
3/17/2020
PPE
Oregon recieves first Strategic National Stockpile push of Personal Protective Equipment (PPE) supplies.
3/20/2020
Response
The first Voluntary Isolation Motel opened this week in Multnomah County.
3/25/2020
Response
Added Fatality Management Branch into ICS structure, under ESF-8.
4/1/2020
Closure
Governor announced schools will remain closed for the remained of the academic year.
4/8/2020
Response
Multnomah County EOC looking for volunteers to work the within the EOC.
4/10/2020
3/19/2020
Declaration
EO directing Oregon's higher education institutions to move curriculum to online learning, prohibiting in person classroom interactions through April 28.
3/23/2020
Declaration
Governor issued EO ordering all Oregon residents to "Stay Home, Save Lives."
3/30/2020
Response
Prosper Portland and partners launch Small Business Relief Fund to provide relief to small businesses in Portland.
4/6/2020
Response
A multidisciplinary team (Fire, EMS, Emergency Management, Human Services, Communicable Disease, and Behavioral Health) established to assist in prioritizing scarce resources.
4/8/2020
Response
211 is not staffed around the clock for COVID-19 related questions.
Response
Notification
Activation
PPE
Declaration
Case
Closure


April 2020 - June 2020
Response
Prosper Portland awarded 235 Small Business Relief Fund Grants.
4/16/2020
Declaration
Governor announced plan to reopen the state.
5/7/2020
PPE
Transitioned from push to pull PPE model.
5/29/2020
Response
Governor's Office of Diversity, Equity & Inclusion Published Equity Framework in COVID-19 Response and Recovery (date estimated).
6/1/2020
Response
State mask mandate for public indoor spaces nstead of effect in Multnomah County.
6/24/2020
4/16/2020
Response
Situation Reports decrease from daily to three times a week.
5/6/2020
Response
Workgroup established to develop and disseminate communication materials to meet the needs of farm/migrant/seasonal workers regarding COVID-19.
5/14/2020
Declaration
Governor Outlined framework for reopening Orgeon (EO 20-25).
5/30/2020
PPE
"PPE Supply Portal" went live.
6/17/2020
Response
Governor approved Multnomah County's application to move to phase 1 reopening.
6/30/2020
Declaration
Governor extended the State of Emergency declaration through September 4, 2020.
Response
Notification
Activation
PPE
Declaration
Case
Closure


July 2020 - March 2021
Declaration
Governor announced for all of Oregon, face coverings required outdoors when 6 feet of physical distance cannot be maintained. Statewide mandate of limiting indoor gatherings to 10 people.
7/15/2020
8/11/2020
Response
The Oregon Department of Education released updated school reopening guidelines.
Response
Command and General Staff transfer of command in ESF 5 and ESF 14.
8/27/2020
9/1/2020
Declaration
EO 20-38, third extension of EO 20-03 and COVID-19 State of Emergency.
Declaration
Fourth extension of COVID-19 State of Emergency.
10/27/2020
12/12/2020
Response
Vaccination phase 1a began.
Declaration
Fifth extension of COVID-19 State of Emergency.
12/17/2020
1/3/2021
Response
Local COVID-19 vaccination operations began.
Response
Port of Portland mass vaccination center opened.
1/21/2021
1/25/2021
Response
Vaccination phase 1b began.
Declaration
EO 21-06 issued requiring public schools reopening for hybrid or full time in-person instruction (grades k-5 by March 29, grades 6-12 by April 19).
3/12/2021
Response
Notification
Activation
PPE
Declaration
Case
Closure


April 2021 - January 2022
Declaration
The acting secretary of HHS issued a directive to expand COVID-19 vaccine eligibility to all Americans by May 1, 2021.
5/1/2021
Notificiation
Port of Portland mass vaccination center closed.
6/19/2021
Response
Face coverings required for all state agency employees and customers entering indoor state agency space.
7/30/2021
Declaration
Governor issued EO 21-29 mandating vaccination for state executive branch employees
8/13/2021
Notification
80% of adults in Oregon vaccinated.
10/28/2021
Case
First cases of the Omicron variant are detected in Oregon.
12/7/2021
4/30/2021
Closure
Multnomah County moved to "Extreme" risk.
5/21/2021
Response
Governor announced $1 Million "Take Your Shot Oregon" vaccination campaign.
7/2/2021
Notificiation
70% of all adults in Oregon vaccinated.
8/13/2021
Declaration
Governor issued mask mandate for all indoor public spaces.
8/19/2021
Declaration
Governor announced COVID-19 vaccine mandate for Oregon K-12 teachers and staff.
10/29/2021
Notification
The FDA formally authorized the emergency use of the Pfizer-BioNTech COVID-19 vaccine for children 5-11.
12/21/2021
Declaration
Governor signed EO 21-36 continuing State efforts to Support Ongoing COVID-19 Vaccination, Response, and Recovery Efforts.
Response
Declaration
Notificiation
Case
Activation
Closure
PPE

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Appendix 5: Multnomah County Board of Commissioners COVID-19 Actions

Date	Action	Link
3/11/2020	Declaration of Emergency.	Executive Rule 388
3/17/2020	Additional Measures to the Declaration of Emergency.	Executive Rule 388 Addendum
3/19/2020	Ordinance to Address COVID-19 Eviction Moratorium and Declaring an Emergency.	Ordinance 1282
4/09/2020	Resolution Continuing the Emergency Declared in Executive Rule 388.	Resolution 2020-019
4/16/2020	Ordinance Adopting an Eviction Moratorium Six-Month Repayment Grace Period and Suspending Enforcement of Ordinance No. 1282 to Align with the Governor's Statewide Residential Eviction Moratorium.	Ordinance 1284
5/14/2020	Proclamation proclaiming May 2020 as Mental Health Month in Multnomah County.	Proclamation 2020-031
7/02/2020	Resolution to Adopt and Extend the Emergency Declared in Executive Rule 388, its Addendum and Resolution 2020-019 to 9/30/2020 or Until Rescinded.	Resolution 2020-059
9/24/2020	Resolution to Adopt and Extend the Emergency Declared in Executive Rule 388, its Addendum, and Resolution 2020-059, to 1/8/2021, or Until Rescinded.	Resolution 2020-080
9/24/2020	Ordinance Repealing and Replacing Ordinance Nos. 1282 and 1284 to Provide Continued Renter Protections in Multnomah County in Response to COVID-19 and Declaring an Emergency.	Ordinance 1287
12/17/2020	Resolution to Adopt and Extend the Emergency Declared in Executive Rule 388, its Addendum and Resolution 2020-080 to 7/2/2021 or Until Rescinded.	Resolution 2020-110
1/14/2021	Ordinance Rescinding Ordinance No. 1287 to Align with the Statewide Residential Eviction Moratorium and Declaring an Emergency.	Ordinance 1292

Date	Action	Link
1/28/2021	Resolution Establishing Fees, Charges, and Penalties for Chapter 21, Health, of the Multnomah County Code, and Repealing Resolution No. 2019-101. (This will provide much needed financial relief to the Hospitality industry that has been impacted by COVID-19).	Resolution 2021-005
6/24/2021	Resolution to Adopt and Extend the Emergency Declared in Executive Rule 388, its Addendum and Resolution 2020-110 to 12/31/2021 or Until Rescinded.	Resolution 2021-058
7/8/2021	Ordinance Extending the 60 Day Protection Period in SB 278 (2021) to 90 Days and Declaring and Emergency.	Ordinance 1296
12/16/2021	Resolution to Adopt and Extend the Emergency Declared in Executive Rule 388, its Addendum and Resolution 2021-058 to 03/31/2022 or Until Rescinded.	Resolution 2021-092

APPENDIX 6: OREGON EXECUTIVE ORDERS RELATED TO COVID-19

EO Year-#	Executive Order[8] Description
2020-03	Declaration of Emergency due to Coronavirus (COVID-19) outbreak in Oregon.
2020-05	Prohibiting Large Gatherings Due to COVID-19 Outbreak in Oregon.
2020-06	Declaration of Abnormal Disruption of the Market due to COVID-19.
2020-07	Prohibiting On-Premises Consumption of Food or Drink and Gatherings of More Than 25 People.
2020-08	School Closures and the Provision of School-based and Child Care Services in Response to COVID-19 Outbreak.
2020-09	Suspension of In-Person Instructional Activities at Higher Education Institutions in Response to COVID-19 Outbreak.
2020-10	Conserving personal protective equipment and Hospital Beds, Protecting Healthcare Workers, Postponing Non-urgent Healthcare Procedures, and Restricting Visitation in Response to COVID-19 Outbreaks.
2020-11	Temporary Moratorium on Residential Evictions for Nonpayment, in Response to COVID-19 Outbreak.
2020-12	Stay Home, Save Lives: Ordering Oregonians to Stay at Home, Closing Specified Retail Businesses, Requiring Social Distancing Measures for Other Public and Private Facilities, and Imposing Requirements for Outdoor Areas and Licensed Childcare Facilities.
2020-13	Temporary Moratorium on Certain Evictions and Terminations of Rental Agreements and Leases, in Response to COVID-19 Outbreak.
2020-14	Extending the Duration of Executive Order No. 20-07 (Prohibiting On-Premises Consumption of Food or Drink).
2020-15	Extending the Duration of Executive Order No. 20-06 (Declaration of Abnormal Disruption of the Market Due to COVID-19).
2020-16	Keep Government Working: Ordering Necessary Measures to Ensure Safe Public Meetings and Continued Operations by Local Governments During COVID-19 Outbreak.
2020-17	Extending Executive Order No. 20-09 (Suspension of In-Person Instructional Activities at Higher Education Institutions).
2020-18	Protecting Cares Act Recovery Rebate Payments from Garnishments, so those Funds can be Used for Essential Needs.
2020-19	Extending Directives Regarding Closure of Licensed Childcare Facilities, in Response to COVID-19 Outbreak.
2020-20	Continued Suspension of In-Person K-12 Instructional Activities and the Provision of School-Based Services in Response to COVID-19 Outbreak.

[8] Source: https://www.oregon.gov/gov/pages/executive-orders.aspx

EO Year-#	Executive Order[8] Description
2020-22	Allowing Measured Resumption of Non-Urgent Healthcare Procedures using Personal Protective Equipment, and Continuing Restrictions on Visitation in Response to COVID-19 Outbreaks.
2020-24	Extending the COVID-19 Declaration of Emergency (Executive Order No. 20-03) for an Additional 60 Days, through July 6, 2020.
2020-25	A Safe and Strong Oregon: Maintaining Essential Health Directives in Response to COVID-19, and Implementing a Phased Approach for Reopening Oregon's Economy.
2020-27	A Safe and Strong Oregon (Phase II): Maintaining Essential Health Directives in Response to COVID-19, and Continuing to Implement a Phased Approach for Reopening Oregon's Economy.
2020-28	Operation of Higher Education Institutions during Coronavirus Pandemic.
2020-29	Ready Schools, Safe Learners: K-12 Instructional Activities and the Provision of School-based Services During 2020-2021 Academic Year in the Face of the Ongoing COVID-19 Outbreak.
2020-30	Second Extension of Executive Order 20-03 and COVID-19 State of Emergency; Rescinding Executive Order 20-13 and Executive Order 20-18.
2020-37	Extending House Bill 4204's Mortgage Foreclosure Moratorium until December 31, 2020.
2020-38	Third Extension of Executive Order 20-03 and COVID-19 State of Emergency; Rescinding Executive Order 20-16.
2020-56	Temporary Moratorium on Residential Evictions for Nonpayment, in Response to COVID-19 and Wildfire Emergencies.
2020-58	Enhanced Health and Safety Requirements for Certain Employer-Provided Housing During Agricultural Off Season in Response to COVID-19 Outbreak.
2020-59	Fourth Extension of Executive Order 20-03 and COVID-19 State of Emergency.
2020-65	Temporary Freeze to Address Surge in COVID-19 Cases in Oregon.
2020-66	Risk and Safety Framework: County-By-County Metrics-Based Approach to Controlling COVID-19 Transmission to Conserve Hospital Capacity and Protect Human Health and Human Lives.
2020-67	Fifth Extension of Executive Order 20-03 and COVID-19 State of Emergency.
2021-10	Seventh Extension of Executive Order 20-03 and COVID-19 State of Emergency.
2021-14	Extending House Bill 2009's Mortgage Foreclosure Moratorium until September 30, 2021.
2021-15	Rescinding all Remaining COVID-19 Restrictions; Continuing State Efforts to Support Ongoing COVID-19 Vaccination, Response, and Recovery Efforts.
2021-29	COVID-19 Vaccination Requirement for State Executive Branch.
2021-30	Extending House Bill 2009's Mortgage Foreclosure Moratorium Until December 31, 2021.

EO Year-#	Executive Order[8] Description
2021-31	Extending Emergency Regulatory Flexibility for Child Care Licensing; Amending Executive Order 21-15.
2021-36	Continuing State Efforts to Support Ongoing COVID-19 Vaccination, Response, and Recovery Efforts; Extending Executive Order 20-03; Rescinding Executive Order 21-15 and Executive Order 21-31.
2021-5	Sixth Extension of Executive Order 20-03 and COVID-19 State of Emergency.
2021-5	Sixth Extension of Executive Order 20-03 and COVID-19 State of Emergency.
2021-6	Ordering Public Schools to Offer Fully On-Site or Hybrid In-Person Instruction, Requiring All Schools to Continue to Comply with Health and Safety Protocols to Control COVID-19.
2022-3	Terminating COVID-19 State of Emergency; Rescinding Executive Order 20-03, Executive Order 21-29, and Executive Order 21-36.

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APPENDIX 7: FEDERAL COVID-19 RELATED PROCLAMATIONS AND EXECUTIVE ORDERS

The President of the United States issued the following Proclamations and Executive Orders to facilitate the national response to the pandemic[9].

Proclamation/ Executive Order	Description	Effective Date
COVID-19 National Emergency Proclamation	● President Trump declares the COVID-19 outbreak in the United States is a national emergency. ● Proclamation grants emergency authority to the U.S. Department of Health and Human Services to temporarily waive or modify certain requirements of the Medicare, Medicaid, and State Children's Health Insurance programs throughout the duration of the public health emergency.	March 1, 2020
Executive Order 13909	● Prioritizing and allocating health and medical resources to respond to the spread of COVID-19. ● Allocation of materials, services and facilities deemed necessary or appropriate to promote national defense is delegated to the Secretary of Health and Human Services may identify additional specific health and medical resources that meet the criteria of personal protective equipment and ventilators.	March 18, 2020
Executive Order 13910	● President Trump delegated to the Secretary of Health and Human Services authority to prevent hoarding of health and medical resources necessary to respond to the spread of COVID-19 within the United States.	March 23, 2020
Executive Order 13917	● Delegating Authority Under the Defense Production Act with Respect to Food Supply Chain Resources During the National Emergency Caused by the Outbreak of COVID- 19.	April 28, 2020
Executive Order 13922	● Delegating Authority Under the Defense Production Act to the Chief Executive Officer of the United States International Development Finance Corporation to Respond to the COVID-19 Outbreak.	May 14, 2020

[9] Source: The Federal Register

Proclamation/ Executive Order	Description	Effective Date
Executive Order 13924	● To combat the economic consequences of COVID-19 with the same vigor and resourcefulness with which the fight against COVID-19 itself has been waged. Agencies should address this economic emergency by rescinding, modifying, waiving, or providing exemptions from regulations and other requirements that may inhibit economic recovery, consistent with applicable law and with protection of the public health and safety, with national and homeland security, and with budgetary priorities and operational feasibility.	May 19, 2020
Executive Order 13927	● Accelerating the Nation's Economic Recovery From the COVID-19 Emergency by Expediting Infrastructure Investments and Other Activities.	June 4, 2020
Executive Order 13945	● Fighting the Spread of COVID-19 by Providing Assistance to Renters and Homeowners. ● To minimize, to the greatest extent possible, residential evictions and foreclosures during the ongoing COVID-19 national emergency.	August 8, 2020
Executive Order 13962	● Ensuring Access to United States Government COVID-19 Vaccines. ● To ensure Americans have priority access to free, safe, and effective COVID-19 vaccines. After ensuring the ability to meet the vaccination needs of the American people, it is in the interest of the United States to facilitate international access to United States Government COVID-19 Vaccines.	December 8, 2020
Proclamation 10138	● Terminating Suspensions of Entry into the United States of Aliens Who Have Been Physically Present in the Schengen Area, the United Kingdom, the Republic of Ireland, and the Federative Republic of Brazil.	January 18, 2021

Proclamation/ Executive Order	Description	Effective Date
Executive Order 13987	● Organizing and Mobilizing the United States Government to Provide a Unified and Effective Response to Combat COVID-19 and to Provide United States Leadership on Global Health and Security. ● Creates the position of Coordinator of the COVID-19 Response and Counselor to the President and takes other steps to organize the White House and activities of the Federal Government to combat COVID-19 and prepare for future biological and pandemic threats.	January 21, 2021
Executive Order 13991	● Protecting the Federal Workforce and Requiring Mask-Wearing. ● To protect the Federal workforce and individuals interacting with the Federal workforce, and to ensure the continuity of Government services and activities, on-duty or on-site Federal employees, on-site Federal contractors, and other individuals in Federal buildings and on Federal lands should all wear masks, maintain physical distance, and adhere to other public health measures, as provided in CDC guidelines.	January 20, 2021
Executive Order 13994	● Ensuring a Data-Driven Response to COVID-19 and Future High-Consequence Public Health Threats. ● Heads of all executive departments and agencies (agencies) shall facilitate the gathering, sharing, and publication of COVID-19-related data, in coordination with the Coordinator of the COVID-19 Response and Counselor to the President, to the extent permitted by law, and with appropriate protections for confidentiality, privacy, law enforcement, and national security. These efforts shall assist Federal, State, local, Tribal, and territorial authorities in developing and implementing policies to facilitate informed community decision-making, to further public understanding of the pandemic and the response, and to deter the spread of misinformation and disinformation.	January 21, 2021

Proclamation/ Executive Order	Description	Effective Date
Executive Order 13995	• Ensuring an Equitable Pandemic Response and Recovery. • A Government-wide effort to address health equity to identify and eliminate health and social inequities resulting in disproportionately higher rates of exposure, illness, and death. The Federal Government must take swift action to prevent and remedy differences in COVID-19 care and outcomes within communities of color and other underserved populations.	January 21, 2021
Executive Order 13996	• Establishing the COVID-19 Pandemic Testing Board and Ensuring a Sustainable Public Health Workforce for COVID-19 and Other Biological Threats. • To control COVID-19 by using a Government-wide, unified approach that includes: establishing a national COVID-19 testing and public health workforce strategy; working to expand the supply of tests; working to bring test manufacturing to the United States, where possible; working to enhance laboratory testing capacity; working to expand the public health workforce; supporting screening testing for schools and priority populations; and ensuring a clarity of messaging about the use of tests and insurance coverage.	January 21, 2021
Executive Order 13997	• Improving and Expanding Access to Care and Treatments for COVID-19. • To improve the capacity of the Nation's healthcare systems to address coronavirus disease 2019 (COVID-19), to accelerate the development of novel therapies to treat COVID-19, and to improve all Americans' access to quality and affordable healthcare.	January 21, 2021
Executive Order 13998	• Promoting COVID-19 Safety in Domestic and International Travel. • Implementing public health measures consistent with CDC guidelines on public modes of transportation and at ports of entry to the United States to save lives and allow all Americans, including the millions of people employed in the transportation industry, to travel and work safely.	January 21, 2021

Proclamation/ Executive Order	Description	Effective Date
Executive Order 13999	● Protective Worker Health and Safety. ● Ensuring the health and safety of workers is a national priority and a moral imperative. Healthcare workers and other essential workers, many of whom are people of color and immigrants, have put their lives on the line during the coronavirus disease 2019 (COVID-19) pandemic. It is the policy of my Administration to protect the health and safety of workers from COVID-19.	January 21, 2021
Executive Order 14002	● Economic Relief Related to the COVID-19 Pandemic. ● Directs all executive departments and agencies to identify and take actions within existing authorities to address the current economic crisis resulting from the pandemic.	January 21, 2021
Executive Order 14001	● A Sustainable Public Health Supply Chain. ● Directs immediate actions to secure supplies necessary for responding to the pandemic, so that those supplies are available, and remain available, to the Federal Government and State, local, Tribal, and territorial authorities, as well as to America's healthcare workers, health systems, and patients.	January 21, 2021
Executive Order 14042	● Ensuring Adequate COVID-19 Safety Protocols for Federal Contractors. ● Promotes Federal procurement with contractors that provide adequate COVID-19 safeguards to their workers. Safeguards will decrease the spread of COVID-19, which will decrease worker absence, reduce labor costs, and improve the efficiency of contractors and subcontractors at sites where they are performing work for the Federal Government.	September 9, 2021

Proclamation/ Executive Order	Description	Effective Date
Executive Order 14043	● Requiring Coronavirus Disease 2019 Vaccination for Federal Employees. ● In light of the public health guidance regarding the most effective and necessary defenses against COVID-19, to promote the health and safety of the Federal workforce and the efficiency of the civil service, it is necessary to require COVID-19 vaccination for all Federal employees, subject to such exceptions as required by law.	September 9, 2021
Proclamation 10294	● Advancing the Safe Resumption of Global Travel During the COVID-19 Pandemic. ● It is in the interests of the United States to advance the resumption of international travel to the United States, provided necessary health and safety protocols are in place to protect against the further introduction, transmission, and spread of COVID-19 into and throughout the United States.	October 25, 2021

Appendix 8: Related Audits

Department	Audit
Health	Wraparound Services Audit
Auditor's Office	COVID-19 Audit Recommendation Status Evaluation Recommendation Status Evaluation #2 Employee Experiences During the Pandemic, Survey Results Pandemic Funds Audit Report Congregant Settings and Organizational-level Support Contact Tracing Audit

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