

# STATE OF OREGON AFTER-ACTION REVIEW OF PERSONAL PROTECTIVE EQUIPMENT FOR COVID-19



## Executive Summary

This after-action review (AAR) focuses on efforts by the State of Oregon to provide personal protective equipment (PPE) to healthcare providers, essential personnel and vulnerable populations from the beginning of the COVID-19 pandemic through May 31, 2020. The AAR identifies areas of success and opportunities for improvement for Oregon to take proactive action in helping the state better prepared to respond to any event.

## Methodology

Information was collected from individuals and organizations identified as stakeholders by the State Resilience Officer. Data gathering methods included a series of online surveys, specific to each stakeholder group that was surveyed, as well as interviews with individuals or small groups, and review of documentation related to the response and recovery operations of this event and previous events. These documents included but were not limited to situation reports, after-action reports, articles, incident action plans, and executive orders.

## Preparedness

Several elements stand out as essential to Oregon's preparedness to respond to COVID-19. The Oregon Health Authority (OHA), Public Health Division (OPHD) created the Public Health High-Impact Pathogen Plan of Operations (HIPPO) to expand planning beyond the pandemic flu scenario and to be better prepared to respond to a spectrum of pandemic situations. While the HIPPO was not officially signed until March 1, 2020, the plan served as a guide to the OHA response to COVID-19 prior to that date. OHA's previous responses and exercises led to a strong, informed blueprint, as outlined in the HIPPO, even for such an unprecedented response. At the executive leadership level, the creation of the Governor's Disaster Cabinet (Executive Order 16-07) and subsequent training exercises created a learning experience to allow agency personnel to understand the roles and responsibilities and created increased competency and engagement for response decision making. Oregon was one of the first states to have a FEMA staff assigned to its emergency management agency. The FEMA Integration Team (FIT) is embedded full-time with the Office of Emergency Management (OEM) and from the moment

the COVID-19 response involved OEM, FIT personnel were facilitating information sharing, response coordination, and resource requests between the state and FEMA. Finally, OHA had been maintaining control of excess supplies from previous responses, including H1N1. OHA inventoried the supplies in 2019 and had a good handle on what supplies were available and could be quickly deployed to meet immediate needs as procurement efforts for additional PPE began. This preparedness posture set the foundation for the PPE mission of the response to COVID-19.

## Response

The State of Oregon reacted very quickly in response to the threat of COVID-19. On January 21, OHA activated its incident management team (IMT) to prepare for and respond to COVID-19 cases. By February 7, OHA recognized the need to make sure PPE was available for frontline workers. On March 2, the Emergency Coordination Center (ECC) was activated, engaging broader state agency support and on March 8, 2020, Governor Brown declared a state of emergency to address the spread of the coronavirus with EO 20-03.

Ordering PPE from the federal government occurred in three ways: 1) request for supplies from the Strategic National Stockpile, managed the Department of Health and Human Services; 2) request for supplies through FEMA Region 10; and 3) request directly to the White House Coronavirus Taskforce. In total, Oregon requested 1 million each of N-95 respirators, surgical masks, gowns, gloves and face shields and 140 ventilators. The state received 134,159 N-95 respirators, 319,100 procedural/surgical masks, 64,642 face shields, 52,949 gowns, 1,904 coveralls, 281,324 gloves, and 140 ventilators, or 17 percent of the requested amount.

Requesting supplies from the federal government was not meeting demand and national procurement strategies were not implemented, so state procurement efforts began. It became clear that the global supply chain for PPE and testing supplies was inoperative and traditional mechanisms for sourcing, vetting, procuring, and shipping PPE and testing supplies would not meet demand. Oregon worked aggressively to procure and distribute PPE. What started as a discrete public health response quickly expanded to an enterprise-wide response engaging senior leaders across state government and personnel across many state, tribal, and local agencies.

## Findings

The federal National Response Framework defines 31 core capabilities that in general must be accomplished in incident response. Observations on Oregon's PPE efforts can be organized into these core capabilities: Planning, Situational Assessment, Operational Coordination, Operational Communications, and Logistics and Supply Chain Management.

## Areas of Success

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| <b>Preparedness</b>                          | <b>Training and Exercises</b> —Executive leadership and agency-specific training and exercises increased competency in and engagement in response decision-making.  |
| <b>Situational Assessment</b>                | <b>Initial Response</b> —OHA acted in response to a health intelligence briefing in January recognizing the rising risk of a pandemic by standing up the incident management team, allowing Oregon to lean into preparations for response.  |
| <b>Operational Coordination</b>              | <p><b>Executive Collaboration</b>— The Governor quickly established the Coronavirus Response Team (CRT) to engage agency directors in the evaluation of situational information and response actions to determine priorities for the state.</p> <p><b>Incident Management Teams</b>—Integration of IMT teams helped the CRT/Multi-Agency Coordination (MAC) group, OHA and OEM coordinate and transition from an agency focused response to an enterprise response.</p> <p><b>Relationship with Partners</b>—Relationships with HHS partners assisted with the initial response to and the distribution of the warehoused PPE. As the sourcing and procuring effort grew, partnerships between FEMA and the private sector yielded good results.</p> <p><b>ESF 7 Problem-solving Mindset</b>—Strong executive leadership and flexibility allowed DAS to embrace common day-to-day practices, adjust operations as the situation required, and engage team members to get the work done.</p>   |
| <b>Operational Communication</b>             | <b>Commitment to Information Sharing at Executive Level</b> —When a sub-set of agency directors was pulled into the CRT for efficient decision-making, executive leadership leveraged existing teams and meetings to share COVID-19 information, including the Enterprise Leadership Team and weekly ‘All agency director’ meetings.  |
| <b>Logistics and Supply Chain Management</b> | <p><b>PPE Branch</b>— Establishing the PPE Branch within the incident management structure demonstrated the priority of the operation and created a focal point for that effort.</p> <p><b>Push Allocation</b>—Reserving a portion of the PPE supply as a state cache during push allocation implementation created nimbleness to respond to emerging issues, such as a long-term care facilities or migrant worker programs needing PPE.</p> <p><b>Sourcing</b>—Partnering with Business Oregon to vet potential suppliers created efficiency as DAS vetted product quality only from legitimate businesses. Public-private coordination yielded some of the productive leads, as known business leaders vouched for contacts.</p> <p><b>Procuring</b>—DAS Procurement had direct access to decision makers allowing for quick decision making. A temporary increase in budgetary authority and flexibility in procurement rules minimized the number of times purchasing approval was needed.</p> <p><b>Receiving and Distributing</b>—Moving the PPE operations to the NVC-Wilsonville warehouse was crucial to success, as was engaging the National Guard to run shifts around the clock, ensuring products were received, inventoried, picked and distributed quickly and efficiently.</p> <p><b>Ordering and Inventory Tools</b>—As the response grew, systems were developed to accurately track product information and allow visibility into the inventory.</p> |

## Areas of Improvement

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| Preparedness                          | <p><b>HIPPO</b>—The lack of an enterprise response linkage contributed to the difficult transition of the PPE management work to OEM.</p> <p><b>Policy-making Responsibility</b>—There was frustration that the CRT meetings were more about reporting out than policy setting. Throughout the enterprise response there was a lack of clarity regarding who establishes policy for execution.</p> <p><b>Equity</b>—Decision-making about who qualified as ‘first responders,’ ‘frontline workers,’ or ‘essential personnel’ left many feeling overlooked and potentially at-risk as PPE was allocated and distributed.</p>  |
| Situational Assessment                | <p><b>Burn Rate</b>—It was unclear what burn rate meant and guidance on calculating burn rate changed regularly. Inadequate tracking of information on the amounts of PPE received and distributed contributed to problems in calculating burn rate</p> <p><b>Data Management</b>—The OpsCenter process for ordering PPE was confusing, slow, and did not meet the expectations of a timely process for localities.</p> <p><b>Information Sharing</b>—Since this was a state-wide event from the outset, the state was the key situational information manager. Communication with the public and government entities was not as clear or streamlined as it could have been.</p>   |
| Operational Coordination              | <p><b>Leveraging the Enterprise</b>—OHA needs to take the role as the lead in pandemic response but pull in support for tasks outside the public health lane.</p> <p><b>Responsibility Transitions</b>— The decision to move PPE management from OHA to the enterprise response system was good and necessary, but each hand-off added complexity and confusion to the response.</p>   |
| Operational Communication             | <p><b>Warehouse Communications</b>—Inconsistent information from the NVC-Wilsonville in the first few months of operations reduced clarity and confidence on the status of PPE procurement and distribution efforts.</p> <p><b>Equity</b>—The PPE effort did not take steps to understand vulnerable populations resulting in poor communication about request and distribution mechanisms.</p> <p><b>OHA/OEM Communication</b>—Before the Governor declared a state of emergency, OEM was not actively engaged with OHA efforts, creating an information gap as PPE operations transitioned. Challenges were exacerbated by differing information organizing structures and incompatible information systems.</p> <p><b>State to Counties Communication</b>—The state needed better communication with end users on how the push allocation of PPE supplies would be conducted.</p> <p><b>State to Tribes Communication</b>— Tribes were frustrated by not always being engaged with as sovereign entities.</p> |
| Logistics and Supply Chain Management | <p><b>Product Specifications for Procurement and Distribution</b>—Changes in Food and Drug Administration (FDA) approved products caused great frustration and required great vigilance, adjustments to protocols, and halting of previously approved purchases when FDA or CDC guidelines changed.</p> <p><b>Push Model</b>—The shift to the push-based strategy mid-incident resulted in changes to request and delivery mechanisms. Multiple information requirements and queries left many overwhelmed.</p> <p><b>Testing</b>—The state public health lab has very limited capacity that is far from adequate when swift test results are critical for infection control.</p>  |

## Opportunities and Recommendations

The State of Oregon’s management of the PPE operation during the COVID-19 response revealed opportunities and recommendations for the state to pursue further. These include:

- Leveraging recognition that a state-wide incident requires significantly personnel to cover a function and recruiting additional staff to fill emergency response roles.
- Updating the HIPPO to reflect the connection to the enterprise-wide response system.
- Evaluating enterprise emergency management systems and structures and determining how to layer these systems so they work together effectively.
- Building tools for future activations to guide policy and operational teams into the situational assessment and decision-making rhythm required for effective response.
- Refining of the inventory tracking and ordering instruments to address future incident needs.
- Establishing of an in-state supply chain and catalog of providers for PPE, medical supplies, and other capabilities.
- Examining barriers to success for local businesses when pivoting to meet an emergency need, and then considering investments to help local businesses to be able to respond in the future.
- Establishing an active planning and maintenance process for protective equipment.
- Engaging health equity staff and local partner organizations to better serve vulnerable populations.
- Defining requirements for an effective information management system, then finding a system fits the state’s needs.
- Expanding NVC-Wilsonville capabilities to support COVID-19 vaccine distribution efforts.
- Exploring distributed warehousing around the state to ensure supplies are available in multiple locations.
- Examining the capacity of the state lab and determining if additional investment in the lab is needed.