

# Washington State COVID-19 Vaccination: Strategies for Expediting a Safe and Equitable Recovery

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*Prepared by Evans Student Consultants:*  
Caitlin Bishop, Abby Minor,  
Hanna Peterson, and Maggie Yuse

May 31, 2021

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EVANS SCHOOL  
OF PUBLIC POLICY & GOVERNANCE  

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UNIVERSITY of WASHINGTON



**RESTART**  
COVID-19 RESPONSE FOR PUBLIC GOOD

**RESTART Partners**

**Washington State COVID-19 Vaccination:**  
**Strategies for Expediting a Safe and**  
**Equitable Recovery**

**Final Capstone Portfolio**  
**May 31, 2021**

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**Presented To:**

**Evans School of Public Policy and Governance, University of Washington**  
**RESTART Partners**

# Table of Contents

Consultant Bios	4
Acknowledgements	5
Executive Summary	6
A Note from the Authors	8
Stakeholder Analysis: Washington State COVID-19 Vaccine Distribution	10
Stakeholder Analysis Appendices	25
Stakeholder Analysis References	30
Memo #1: COVID-19 Vaccine Communication Strategies for Wary and Underserved Groups	34
Memo #1 Appendices	41
Memo #1 References	42
Memo #2: Incentivization of COVID-19 Vaccines in WA Workplaces	48
Memo #2 Appendices	59
Memo #2 References	62
Memo #3: Vaccine Passports: Risks and Benefits of Requiring Proof of Vaccination	67
Memo #3 References	74
Conclusion	77

## Consultant Bios



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Caitlin graduated from the University of Arizona in 2017 with a degree in Sociology and Communication. Her professional experience is predominantly in nonprofit fund development working with social service organizations in Washington and Arizona. More recently, Caitlin has also worked as a Research Assistant for the American College of Surgeons where she assisted the Division of Patient Education with drafting a standards manual for trusted medical information.



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After graduating from the University of Oregon in 2016 with a degree in International Studies and Asian Studies, Abby went on to work in the field of global health. She has been employed at PATH for over three years and has worked across several programs including Diagnostics; Maternal, Newborn, Child Health, and Nutrition; and most recently Digital Health.



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After graduating from the University of Washington's Community, Environment, and Planning program in 2019, Hanna Peterson began attending the Evans School to learn about how plant-based alternatives in our food system could become more accessible, sustainable, affordable, and equitable. She is a transportation planner with Jacobs Engineering Group and focuses on ferry, rapid transit, and Link light rail projects throughout the Puget Sound region.



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After graduating from the University of Washington with a degree in Sociology in 2015, Maggie served as a Session Aide and then Legislative Assistant for a Washington State Senator. Between these positions she managed a State House campaign in Puyallup. For the past two years, Maggie has worked full time in the UW's Office of State Relations assisting relations between the university and the legislature.

## Acknowledgements

We would first and foremost like to thank our client contacts at **RESTART Partners** for their expert guidance and support throughout this process. To **Dr. Sandra Archibald, Lisa Goodman, Dr. Akhtar Badshah, Julia Nussenbaum, and Ayshe Memetova**, it has been a pleasure working with you and we thank you for your assistance. Additionally, we would like to recognize the work of **RESTART's Communications Team**, including **Genevieve Tremblay**, who has assisted us in disseminating our work and creating beautiful graphics.

We also want to thank **Dr. Ann Bostrom** whose diligent and thoughtful feedback was instrumental in shaping our final report. We are so grateful for your insights and encouragement. To all of the **Evans School faculty and staff** who supported us throughout the past two years of our MPA program we also extend our gratitude.

This final portfolio was made possible with generous support from all of our **interviewees** who offered their time and expertise to help inform our write-up. For you we are especially grateful and hope that you may find this portfolio useful in your future work.

Finally, we would like to thank our **Evans School peers** who provided us with thoughtful edits, exceptional resources, and constant motivation. We are continually impressed and encouraged by your work, and thank you for your assistance. We would especially like to recognize our **fellow capstone teams working on COVID-19 related topics**. Your collaboration was greatly appreciated and we wish you all the best on your individual projects.

# Executive Summary

The COVID-19 pandemic remains a threat globally, nationally, and locally as vaccines have become widely available in the United States. While many businesses and individuals are eager to return to normalcy, the emergence of highly transmissible variants and vaccine hesitancy in the general public suggest that COVID-19 infections are likely to continue for the foreseeable future. As the prospect of herd immunity becomes less likely, governments and public health officials must transition from elimination to containment strategies. Vaccines, as well as personal protective equipment and social distancing, are a critical part of the solution to return to in-person gatherings. In March 2021, President Biden stated that by May 1 vaccines will be available to all people over the age of 16 living in the US. Significant improvements in vaccine production, distribution and administration have come at a pivotal time, and as of May 2021 all Americans over the age of 12 are eligible for vaccination. The vaccine availability announcement was received by a polarized public that has grown increasingly anxious to return to in-person activities. There have been noted partisan divides over mask mandates, vaccines, and the severity of the pandemic. The resulting fragmented response contributed to one of the highest death tolls from COVID-19 in the world at over 500 million lives.<sup>1</sup>

The following portfolio was assembled on behalf of RESTART Partners in an effort to compile evidence-based best practices and policies for nonprofit and government leaders managing the COVID-19 vaccine rollout in Washington State. The authors investigated communication best practices, workplace strategies to incentivize vaccination, and the implications of requiring proof of vaccination.

## The following portfolio includes four stand-alone documents:

1. [Stakeholder Analysis: Washington State COVID-19 Vaccine Distribution](#)
2. [Memo #1: COVID-19 Vaccine Communications Strategies for Wary and Underserved Groups](#)
3. [Memo #2: Incentivization of COVID-19 Vaccines in WA Workplaces](#)
4. [Memo #3: Vaccine Passports: Risks and Benefits of Requiring Proof of Vaccination](#)

The subsequent memos and stakeholder analysis were informed by a literature review, virtual key informant interviews, data-driven COVID-19 dashboards, and media releases. Key stakeholders in Washington State were grouped into public, private, nonprofit, and healthcare categories. Interviews were conducted with healthcare, governmental, and community stakeholders using snowball sampling. Our findings were coded for main themes, which helped inform all deliverables. The themes identified were vaccine supply, government response, racial inequity, trusted messengers, and access issues. COVID-19 vaccine and test data were used to understand vaccine uptake among populations identified in the stakeholder analysis. Pertinent trackers included Washington State Department of Health (DOH), the King County COVID-19 Dashboard, and the New York Times COVID-19 dashboard. Media releases from WA DOH, Gov. Jay Inslee, and news agencies both local and national were used to understand the current state and guidance to the general public. [The Stakeholder Analysis](#) identifies several geographic regions within Washington State which are at risk of experiencing relatively low levels of vaccine uptake, and recommends leveraging existing partnerships to increase rates of vaccination.

Communication is a critical tool in encouraging COVID-19 vaccine uptake, especially among wary and underserved populations. [The first memo](#) provides six communication strategies to develop trust and enthusiasm for receiving the vaccine. First, all communications must **center equity**. Messages should

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<sup>1</sup> Johns Hopkins University of Medicine. May 12, 2021. "Mortality Analyses." <https://coronavirus.jhu.edu/data/mortality>.

acknowledge health disparities among racial and ethnic groups both at large and during the COVID-19 pandemic and deploy pro-equity strategies to prioritize assisting those at highest risk get the information they need to get vaccinated. Second, any agency implementing vaccinations should **prioritize transparency**. Explaining decision making processes and addressing mistakes will give the public greater confidence in the vaccination process. Vaccine educational materials should be readily available for consumption. The third strategy is **clear and repetitive messages from trusted leaders**. Public officials, primary care providers/doctors, community or religious leaders and others should build messages that are specific to the audience they serve and easy to understand. Fourth, agencies should use **unifying messages** which empower the public, highlight shared values, and humanize “others.” Divisive policies and stances only confuse and fragment the public on appropriate individual actions. The fifth strategy is **positive and non-coercive framing**. Communication strategies should not use shame, guilt or fear. Instead they should invite people to join the conversation and highlight benefits of vaccination. Finally, the sixth strategy outlines how to **debunk misinformation without amplifying it**. This strategy utilizes a four step process to debunk misinformation as framed in the [The Debunking Handbook](#).

[The second memo](#) recognizes the business sector’s powerful role in influencing the COVID-19 vaccine effort in the state and country. Not only do employers wield a significant amount of societal influence, but on an individual level, most US residents receive health insurance through their work. Employers are uniquely positioned to encourage, incentivize, or require their employees to get vaccinated. This memo investigates what incentives, mandates, or encouragement businesses are offering in Washington and other states. Our research identifies six policy options including maintaining the status quo, offering encouragement, instituting a vaccine mandate, incentivizing with time off or financially, and provision of vaccines on site. These policy options are analyzed against employer considerations like equity, cost effectiveness, administrative feasibility, workplace cultural feasibility, health privacy, legal risk, and workplace safety. A key consideration in these policy options are the financial resources of the employer (small versus large businesses) and workplace culture (relationship to employees). As Washington State attempts to vaccinate the majority of the public, various policies and approaches to vaccination must be explored.

[The final memo](#) investigates the implications for use of widely discussed “vaccine passports” as a health and safety solution to aid in the coming economic reopening. This would require people to provide proof of vaccination before traveling, attending crowded in-person events, or conducting daily activities that occur around other people. This memo explores and weighs the potential risks and benefits of requiring vaccine passports or proof of vaccination. Risks identified include exacerbating racial and socioeconomic inequities, providing a false sense of security and overconfidence, and threats to medical privacy, while benefits were determined to be enhancement of public health, increased convenience, improved vaccine tracking, and reopening the economy. While this memo does not offer a recommendation on whether businesses and nonprofits ought to employ a vaccine passport, it does offer strategies for a successful deployment including framing, reduction of barriers, and offering choices.

## A Note from the Authors

The COVID-19 pandemic continues to evolve daily. In reflection, this body of work purposely centered equity. Data continues to show how Black, Indigenous and People of Color (BIPOC) are disproportionately adversely affected. BIPOC populations have less access to general health systems and social services/institutions. Sound policy should include and prioritize equitable vaccine rollout strategies. There is also a need for recognition of intersectionality and resource scarcity. These memos were written for employers of various sizes. Small businesses, particularly those that are minority owned or women owned, do not have the same access to financial support and thus may not have the means to implement some of these policy options. These strategies should be used as a guide and only used as appropriate as there is variation in employers and their respective contexts. These memos were written as new data and information became available. Please keep in mind that this information was collected January through June 2021. It is the author's intention that these strategies continue to be relevant and helpful in addressing the COVID-19 pandemic and other public events.



# Stakeholder Analysis: Washington State COVID-19 Vaccine Distribution

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*As vaccine scarcity becomes less of a challenge in the distribution process, hesitancy and access emerge as the primary barriers to equitable vaccination efforts. This analysis uses national and local data regarding vaccine hesitancy to identify key geographies within Washington State that risk facing low vaccine uptake and recommends leveraging key partnerships to close these gaps.*

# Stakeholder Analysis: Washington State COVID-19 Vaccine Distribution

**To:** RESTART Partners

**From:** Evans Consultants Caitlin Bishop, Abby Minor, Hanna Peterson, and Maggie Yuse

**RE:** Stakeholder Analysis: Washington State COVID-19 Vaccine Distribution

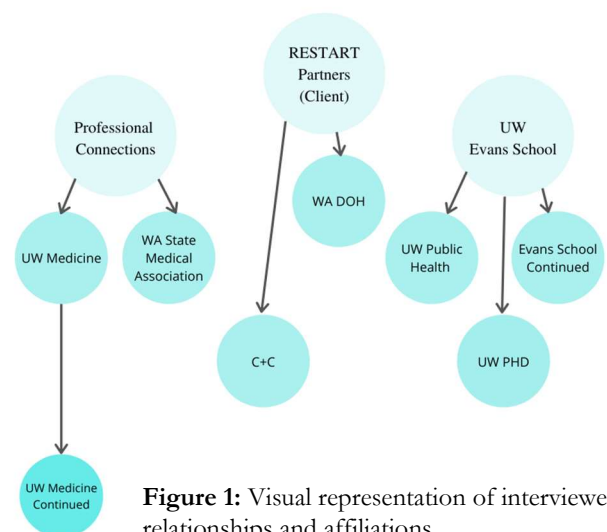
## Introduction

The public health and socioeconomic impacts of the COVID-19 pandemic are far reaching; however, the impacts of COVID-19 are not felt equitably among the population. In Washington State, the vulnerable essential worker population is disproportionately composed of people of color. These same communities face a higher burden of infection and fatalities from the virus. In Washington State people with Latinx or Hispanic heritage make up 13% of the state's population, but 31% of total cases. These racial disparities are also seen in vaccine uptake, as Latinx individuals comprise only 3% of the fully-vaccinated population as of April, 2021 ([DOH, 2021](#)). Black Americans have also faced a disproportionate burden in COVID-19 cases, deaths, and inequitable vaccine uptake: despite comprising only 4% of the state's population, this demographic accounts for 6% of COVID-19-related hospitalizations and only 2% of the vaccinated population (*ibid*).

These disparities warrant a strategic and targeted approach to administering vaccines to marginalized populations and communities that takes into account both vaccine access and institutional distrust. In addition to improving vaccine access and uptake among historically marginalized racial groups, Washington State aims to administer as many vaccines as possible. This stakeholder analysis will clarify racial, socioeconomic, and political disparities in vaccine access and distribution and identify opportunities to partner with organizations to close these gaps. The analysis will also assess other factors indicative of low vaccine uptake which have been substantiated by recent survey results and historical studies. Assessing the landscape of key stakeholders in the COVID-19 vaccine conversation within Washington State will allow for the development of strategies to both increase uptake among marginalized populations through key community partnerships and work toward vaccinating the maximum number of people within Washington State.

## Methods and Sources

This analysis includes a literature review to identify key stakeholders in Washington State grouped into public, private, nonprofit, and healthcare categories. Our sources include interviews with healthcare, governmental, and community stakeholders throughout Washington State using snowball sampling to access interviewees' social networks (seen in Figure 1). Interviews with key informants were coded for main themes, which helped inform the structure and prioritization of the remaining analysis. A summary of our interviews can be found in Appendix A, and example interview questions



**Figure 1:** Visual representation of interviewee relationships and affiliations

can be found in Appendix B. Other main data sources included the Washington State Department of Health (DOH) and their communication guidebook, the King County COVID-19 Dashboard, the New York Times COVID-19 dashboard, the American Community Survey (ACS) and the US Census Bureau. We acknowledge limitations and considerations of these data sources at the end of this analysis.

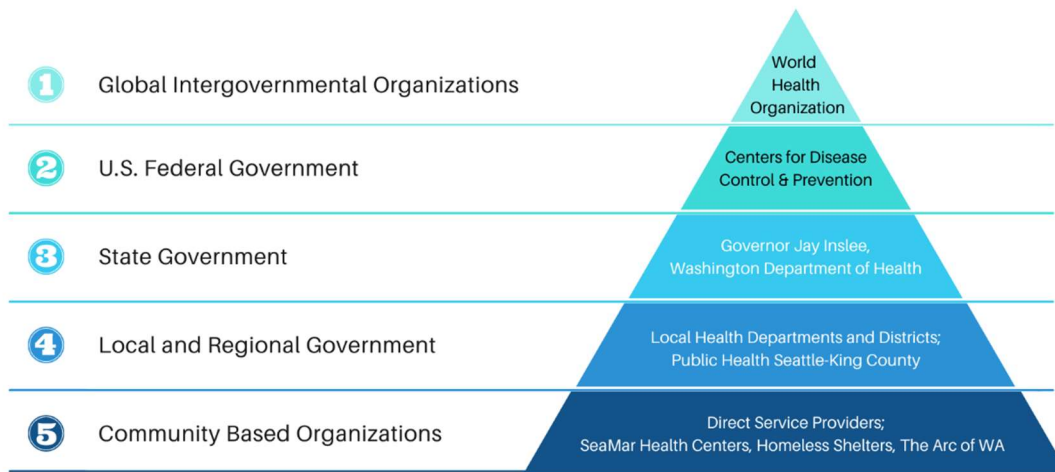
Herd immunity is one way public health experts measure successful mitigation of a virus. Herd immunity is achieved when enough of a population has been exposed to a disease—through infection or vaccination—so that the virus can no longer spread freely (Gavi, 2020). The exact percentage of the population that needs to be vaccinated against COVID-19 in order to achieve herd immunity remains uncertain, with estimates ranging from 60%-95% of adults (Gavi, 2020; Iserson, 2020; Feleszko et al., 2021). These numbers may fluctuate as vaccines become available to younger age groups in the coming months, since children under the age of 16 are not presently eligible for vaccination. Current research is still inconclusive on the feasibility of achieving herd immunity for the SARS-Cov-2 virus, citing concerns that population structures and variants in transmission may make full immunity difficult to reach (Randolph et. al., 2020). Washington State currently does not have a target rate for immunization and is instead aiming to vaccinate as many people as possible. For the purposes of this analysis, we used estimations from the scientific community to set a goal of achieving 80% vaccination among adults in Washington State. By identifying demographic groups that either have the highest barriers to access the vaccine and/or are most likely to feel uncertain whether they will accept the vaccine, this analysis will first identify geographic areas of the state which have the highest risk of not achieving an 80% vaccination rate. Second, we will identify RESTART’s existing community partners within these areas, who could be engaged to deliver targeted messages or services to demographics otherwise unlikely to receive a vaccine.

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| <p><b>Step 1:</b> Identify geographic areas that have a high risk of not vaccinating 80%+ of the population.</p> <p><b>Step 2:</b> Determine existing partners in those counties likely to be trusted by key population groups.</p> |
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## Key Stakeholders

COVID-19 has affected individuals, countries, and organizations across the globe in a way that is unique to a viral pandemic. Due to the urgent and economically damaging nature of COVID-19, vaccine distribution has garnered significant attention as a key strategy for managing the virus worldwide. Understanding the stakeholder landscape in Washington State requires a thorough consideration of stakeholders at the global, national, regional, and local level. Figure 2 illustrates one way in which to consider the key stakeholders involved in the overall distribution of COVID-19 vaccinations.

## Primary Stakeholders and their Purview



**Figure 2:** Visual representation of key stakeholders’ purview in the global response to the COVID-19 pandemic. As shown here, despite states being limited by the federal government in authority, they are the primary authority in the distribution of COVID-19 vaccines. Their partnerships with organizations below them are critical in the effort to vaccinate underserved communities and reach herd immunity.

### Global Intergovernmental Organizations

Organizations such as the World Health Organization (WHO), Gavi, UNOPS, and UNICEF are vital in the dissemination of COVID-19 information and distribution of vaccines to some of the world’s most underserved areas. International organizations have provided guidance to the US government throughout the pandemic and continue to do so as coronavirus variants spread globally. The US government has been operating independently from these organizations. For example, although the United States issued an emergency use authorization (EUA) for the Moderna vaccine on December 18, 2020, WHO did not do so until April 30, 2021, over four months later (WHO, 2021). WHO has also authorized Astrazeneca-SK Bio and Serum Institute of India vaccines which are not yet approved in the United States (ibid). These independent operations have likely been beneficial for Washington State’s vaccination rates, as several hundred thousand Moderna vaccines have been distributed throughout the state before WHO authorization (DOH, 2021).

### The US Federal Government

Federal entities including the Office of the President, Congress, and all federal agencies such as the Centers for Disease Control and Prevention (CDC), National Institute for Health (NIH), and Federal Drug Administration (FDA) are facilitators for the development, manufacturing, and distribution of safe COVID-19 vaccines (HHS, 2021). The FDA has issued three EUAs for three vaccines: Pfizer, Moderna, and Johnson & Johnson (Janssen). They provide recommendations for the prioritization of eligibility, although on May 1, 2021 all adults became eligible. The federal government distributes vaccines 24 hours after the EUA and decides allocations for each state or jurisdiction (ibid). Because of this process, Washington State has received over 100,000 Pfizer vaccines and over 70,000 Moderna vaccines each week since late March 2021 (CDC,

2021). The federal government also sets a precedent for public health messaging and works as a mediator between various sectors and states.

### **Washington State**

As indicated in Figure 3, stakeholders at the state level can be further broken down into local and regional governments and community based organizations (CBOs). Given that the scope of this analysis is limited to the state level, the remainder of this assessment will focus on stakeholder groups within these categories. Some of the literature regarding global and federal organizations' roles in informing state and local entities' public health protocol can be found in the following sources: [International Perspectives on COVID-19 Communication Ecologies: Public Health Agencies' Online Communication in Italy, Sweden, and the United States \(Tagliacozzo et al., 2021\)](#), [How the United States Flunked the COVID-19 Test: Some Observations and Several Lessons \(Xu and Basu, 2020\)](#), [Stuck in neutral? Federalism, policy instruments, and counter-cyclical responses to COVID-19 in the United States Rocco et al., 2020](#). Our previous research and key informant interviews identified the following subcategories as key groups within the state of Washington: governments, private companies, unions, nonprofit organizations, healthcare systems/hospitals, health boards, and community clinics. It is important to acknowledge that these are not the only organizations advancing vaccine implementation in Washington State, and future analysis may be required to address additional groups. These specific stakeholder groups have been selected for their direct connections to both policy implementation and community impact.

### **Washington State COVID-19 Vaccine Stakeholders**

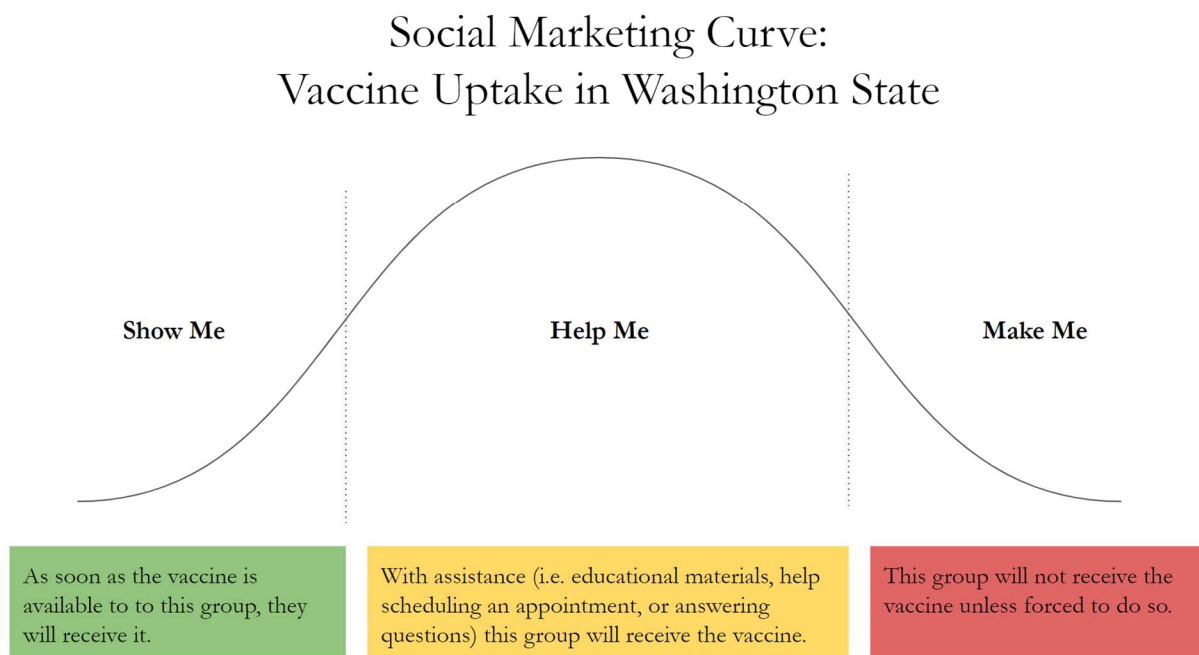
<b>Governments</b>	<b>Private Companies &amp; Corporations</b>	<b>Unions</b>	<b>Nonprofit Orgs</b>	<b>Healthcare systems &amp; Hospitals</b>	<b>Health Boards</b>	<b>Community Clinics</b>
Governor's Office	Costco	UFCW 21	NW Immigrant Rights Project	Kaiser Permanente	Community Health Board	Washington Association for Community Health
Department of Health	Microsoft	SEIU 1199 NW	El Comite	Virginia Mason	Vietnamese Health Board	Sea-Mar Health Centers
WA Legislature	Alaska Airlines	Washington State Nurses Association	Bill and Melinda Gates Foundation	UW Medicine	Somali Health Board	
Washington State OSPI	Amazon	Washington Education Association	The Arc of WA	Assisted living facilities	Seattle Indian Health Board	
Public Higher Education Institutions	Starbucks		Homeless shelters			
City/County Governments	Boeing					
Tribal Governments	Small businesses					

**Figure 3:** This list has been derived from key informant interviews and our previous literature review. This list is not exhaustive. Many other actors not represented here play a key role in COVID-19 vaccine distribution throughout the state (such as the US Army, pharmaceutical companies, FEMA, etc.).

### General Public as a Stakeholder

One key stakeholder group omitted from Figure 2 and Figure 3 is the general public, including those who are or are not vaccinated. The state's diversity means that the general public should not be treated as a monolithic stakeholder. Specific stakeholder groups can be delineated by demographic characteristics such as race, gender, rural/urban, political affiliation, immigration status, and healthcare status, among many others. One key consideration for our analysis is the distinction between those who are uncertain about vaccination (otherwise known as vaccine hesitant) and those who face barriers to access. Vaccine hesitancy is a catch-all term commonly used to describe those who choose to wait or abstain entirely from vaccination (MacDonald, 2015). Recent discussion, however, indicates that focusing only on hesitancy may be damaging to minority populations who have suffered a long history of abuse from medical systems and who experience disproportionate barriers to vaccine access. Relying too heavily on hesitancy language when discussing vaccine gaps for communities of color places blame on the individuals as opposed to systems (Morales, 2021). While vaccine hesitancy due to politicization and pace of development are present, particularly in white conservative circles, this analysis makes a concerted effort to distinguish between hesitancy driven by political ideation and hesitancy due to historical and ongoing medical inequities. Additionally this analysis will attempt to identify where groups possess true hesitancy regarding vaccination as opposed to experiencing access issues, thereby further acknowledging this limitation of "hesitancy" language. We believe this distinction is vital to ensuring that as many Washingtonians are able to be vaccinated as quickly as possible.

Due to the mixed enthusiasm regarding vaccination against COVID-19, social marketing has been used by Washington State's DOH as a tool to understand which groups require outreach. The aim of social marketing is to "influence voluntary behavior" that benefits society or the individual (Andreasen, 1994). As the social marketing curve below demonstrates, with any type of behavior change in a population, reactions tend to fall along an uptake curve that social marketers divide into three categories (Lee, 2017).



**Figure 4:** A visualization of vaccine acceptance according to social marketing theory, adapted from Nancy Lee's guide, *Policymaking for Citizen Behavior Change* and Everett Rogers' *Diffusion of Innovations*.



The first group of recipients on the left will be eager to receive the vaccine. In Washington State, this “show me” group has been quite large, and the demand for vaccines through mid-April outpaced supply. This group simply needs to be told where they can get vaccinated and they will do so. The second group, generally the largest in any social change initiative, is the “help me” group. With appropriate resources, information, and accessibility, this group will receive the vaccine willingly. Vaccinating the entirety of this group will require more resources per capita than the first group, as they may require outreach from the government, public health officials, their employer, or their social networks. Among this group, there will be varying levels of vaccine acceptance. As consumers face fewer barriers due to supply and access, relatively eager individuals within this group will receive vaccines. Those with lower vaccine acceptance will become the primary target in this group and require increased resources to accept the vaccine. Finally, the “make me” group on the right side of the graph includes those who are against vaccination and are very unlikely to get vaccinated. According to social marketing theory, vaccine mandates by employers or vaccine requirements for certain activities may be the only way this group receives the vaccine. However, some officials are concerned that in the case of vaccination, mandates may push the “make me group” off the grid entirely by reinforcing their distrust (Dunn, 2021).

Understanding which populations fall into each of these categories is important to understanding how the state can vaccinate as many people as possible. The [Department of Health’s Social Marketing Plan](#) as assembled by C+C Consulting Firm lays out the behaviors that need to be understood and changed, barriers to these behaviors, benefits of those behaviors, and strategies to change them.

## Step 1:

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The first step of this analysis is to identify a sampling of geographic areas within Washington State that we estimate have a low likelihood of reaching a vaccination rate of 80% or more. To identify key areas, this analysis will pull from various national and local studies of vaccine uptake to determine demographic characteristics which have indicated low intent to receive a COVID-19 vaccination. We then map these key demographics within the state to narrow down areas with low perceived propensity for vaccine uptake.

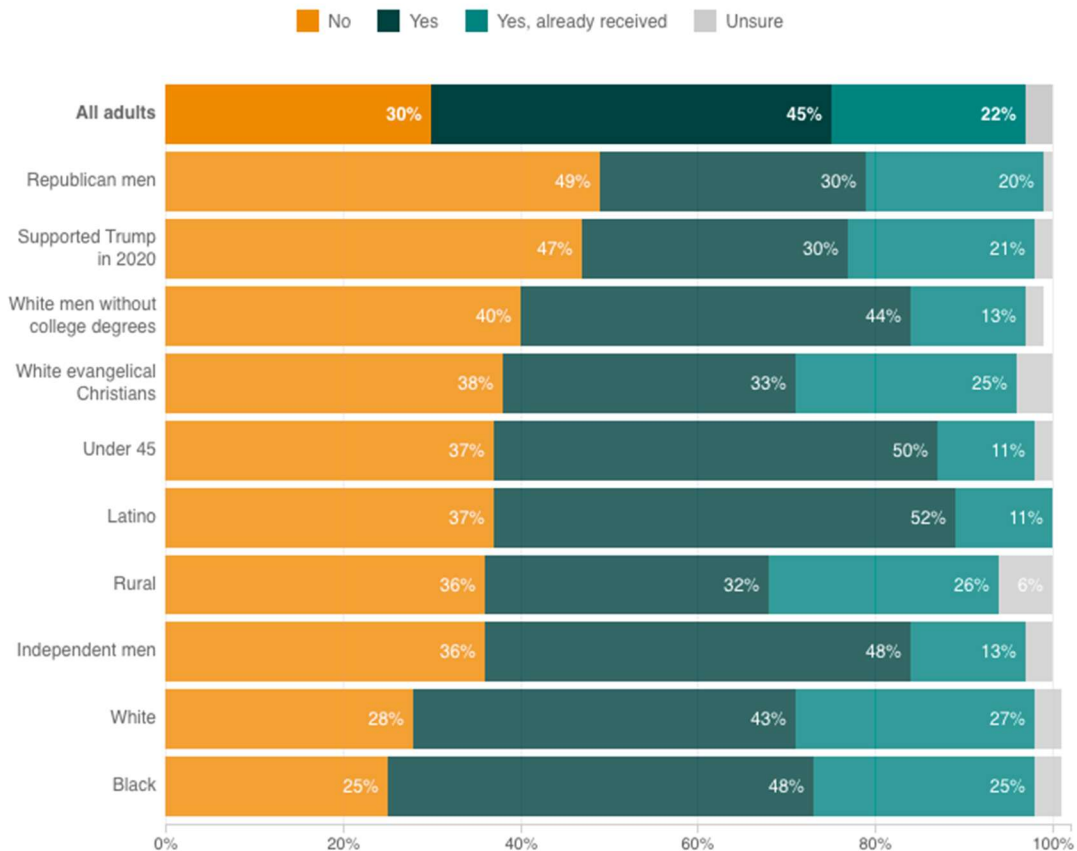
In order to further understand the discrepancy between COVID-19 vaccination rates throughout Washington State we will consider the findings of four recent polls which study the connection between key population groups and vaccine uptake. The data we use to inform our analysis are as follows:

- NPR/PBS/NewsHour/Marist Poll - [Results: The Biden Administration & Covid-19](#); Conducted March 3, 2021-March 8, 2021.
- The Delphi Group at Carnegie Mellon University in Partnership with Facebook - [Topline Report on COVID-19 Vaccination in the United States](#); Conducted January 10, 2021-February 27, 2021.
- Washington State Department of Health - [Covid-19 Vaccine Stakeholder Interview Research Report](#); Conducted December 2020.
- United States Census Bureau - [Week 27 Household Pulse Survey](#); Conducted March 17, 2021-March 29, 2021.

In March 2021, NPR, PBS, NewsHour, and Marist Poll surveyed 1,227 adults across the country to measure trends in government approval and coronavirus experience. They asked individuals “if a vaccine for a coronavirus is made available to you, will you choose to be vaccinated?” The results from this question are depicted below. Population groups most likely to display hesitation when provided an opportunity for vaccination were Republican men, those who supported President Donald Trump in 2020, and white men without a college degree. This contrasts with 14% of Democratic women, 34% of Republican women and

31% of independent women who reported they would not receive the vaccine if it became available to them. Latino respondents were more likely to say that they would not take the vaccine than either Black or white respondents with 37% of Latinos answering “no”. Latino populations may experience greater hesitancy toward receiving vaccines due to lack of access to health insurance, current and historical inequities in medical institutions, and reluctance to share personal information for individuals who are undocumented (NPR, 2021). The following section looks at whether these trends hold in Washington State.

### If a vaccine for the coronavirus is made available to you, will you choose to be vaccinated?



Source: NPR/PBS NewsHour/Marist poll of 1,227 U.S. adults conducted between March 3 and March 8. The margin of error for the overall sample is 3.4 percentage points. Totals may not add up to 100% because of rounding.

Credit: Thomas Wilburn/NPR

**Figure 5:** Screenshot taken from NPR.org on April 15, 2021.

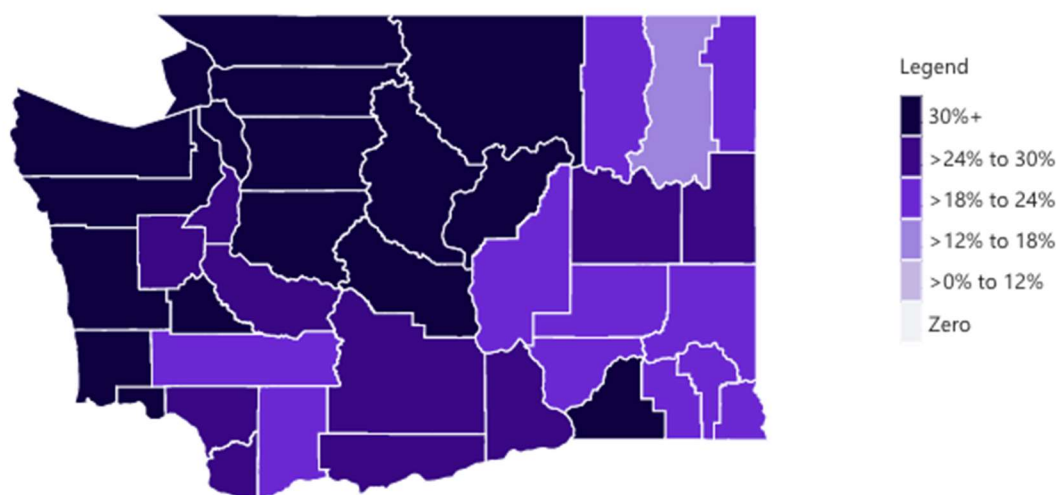
### State Trends in Vaccine Initiation

As vaccines become increasingly available to the public, trends in initiation can be a powerful indicator of vaccine willingness across the state. The Washington State DOH collects data on the percentage of individuals per county that are initiating vaccination, meaning they have received one or more doses of any FDA authorized vaccine. Figure 6 illustrates the large variability between counties in vaccination uptake. As of April 9, 2021, the state average for vaccine uptake was 31.39%, however, some areas continue to fall short of this average (WA DOH, 2021). The Washington State counties with the lowest vaccine initiation as of April 9, 2021 are: Stevens, Garfield, Franklin, Ferry, and Skamania. These counties have an initiation rate



under 20% (WA DOH, 2021). Notably, larger counties such as Pierce, Spokane, Clark, and Yakima County also have a rate that falls below the state average.

#### PEOPLE INITIATING VACCINATION (RECEIVING AT LEAST 1 DOSE)

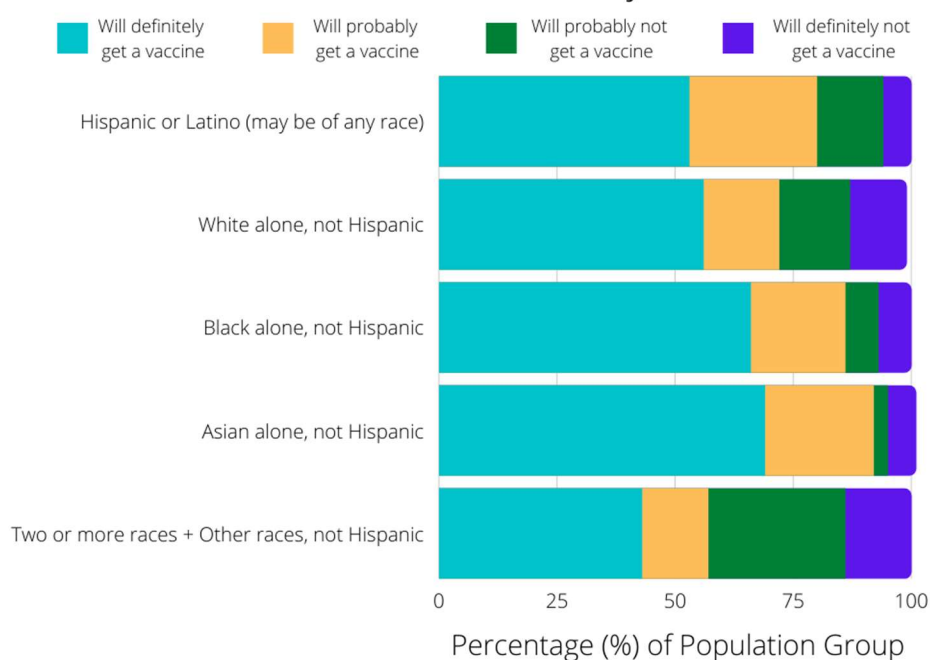


**Figure 6:** Screenshot taken from Washington State DOH COVID-19 Dashboard on April 9, 2021. This map shows the percentage of people in each county who have initiated vaccination against COVID-19. Lighter colors indicate a lower vaccine uptake.

#### Trends by Race/Ethnicity

For those who have not yet received one or more doses, the [Census Bureau's Weekly Pulse Survey](#)<sup>2</sup> asks respondents directly about their intention to receive a COVID-19 vaccine when one becomes available to them. These findings are especially useful because they are captured at a state level and they are updated every few weeks to keep up with emerging trends. The Census Bureau tracks responses by select characteristics which include gender, race, education level, and age. The Census Bureau notes that these data are

#### COVID-19 Vaccination Intention by Race - WA State



**Figure 7:** Informed by the most recent Census Pulse Survey on COVID-19. Data was collected March 17-March 29. Note from the Census Bureau: These data are experimental. Users should take caution using estimates based on subpopulations of the data – sample sizes may be small and the standard errors may be large.\*\*

<sup>2</sup> Find the US Census Bureau's Weekly Pulse Survey here: <https://www.census.gov/data/tables/2021/demo/hhp/hhp27.html#tables>. Accessed April 10 2021.

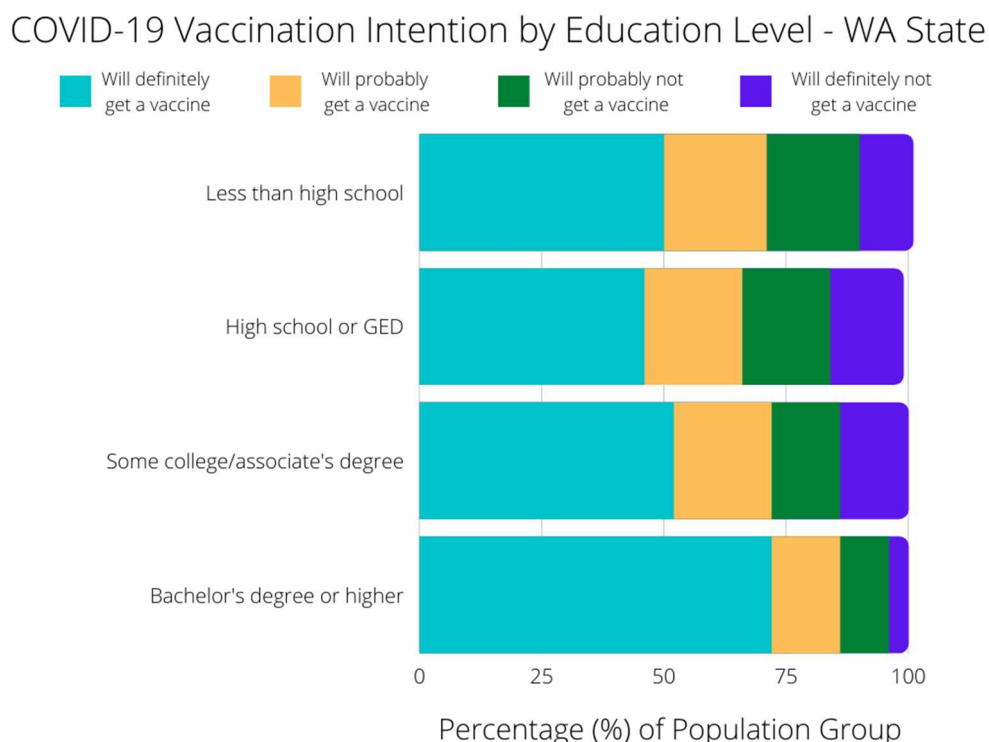
experimental and that standard errors may be large. For the data in Figure 7, standard errors ranged from 7% to 34%. The total number of individuals sampled was 1,447,688 within Washington State, with 181,564 identifying as Hispanic or Latino, 974,123 identifying as white, 42,319 identifying as black, 113,991 identifying as Asian, and 135,691 identifying as being two or more races or another non-Hispanic race. Figure 7 shows COVID-19 vaccination intention in Washington State by race. From this data we can see that in Washington State, Black and Asian individuals are less likely to report hesitancy toward vaccination than their white, Hispanic, or multi-racial counterparts.

While this graphic suggests the importance of placing an emphasis on vaccine efforts directed at white and Hispanic communities, it is important not to let vaccine efforts within Black and Asian communities falter. It is also vital to acknowledge that the reasoning for hesitancy between white and Hispanic populations may differ substantially; a single communication technique or intervention strategy may not suffice. Further discussion of trends by race and ethnicity can be found in the zip code analysis below.

### ***Trends by Educational Attainment***

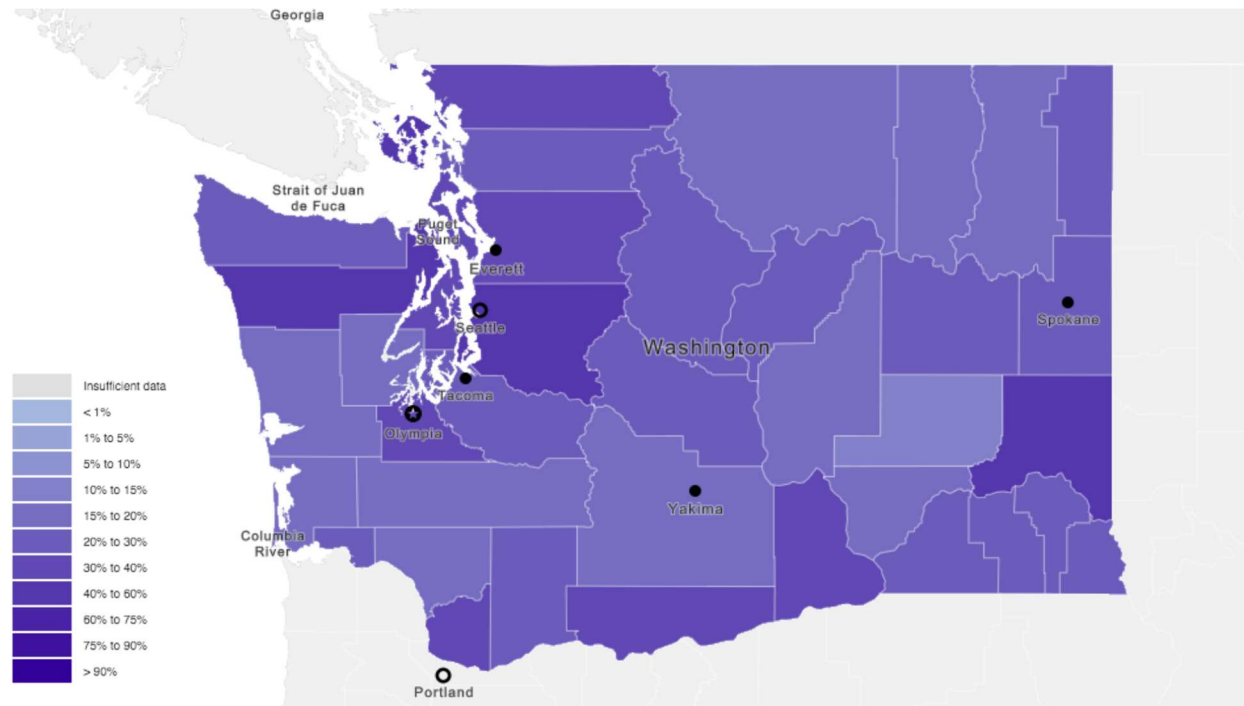
Using the Census Pulse Survey data from March 17- March 29 we can see associations between vaccine hesitancy and educational attainment. As visible in Figure 8, those with higher levels of education are more likely to display vaccine acceptance and even vaccine eagerness. In contrast, individuals with a high school diploma or GED as their highest level of educational attainment are the most likely to say that they will probably not or definitely not get the vaccine. A complete breakdown of vaccine intention by educational level can be found in Figure 8.

These findings have serious implications for Washington State because highly educated individuals tend to congregate in metropolitan areas, creating a geographic gap in educational attainment across the state (Balk, 2019). Figure 9 shows where there are the highest concentrations of males 25 or older with at least a college degree. Darker purple areas have higher percentages of college educated males. This map supports the idea that more highly educated counties tend to have larger metropolitan areas, and many of these regions have had relatively strong levels of vaccine initiation as indicated by Figure 6 above. Some



**Figure 8:** Informed by the most recent Census Pulse Survey on COVID-19. Data was collected March 17-March 29. Note from the Census Bureau: These data are experimental. Users should take caution using estimates based on subpopulations of the data – sample sizes may be small and the standard errors may be large.\*\*

of the counties with the lowest percentage of college educated males over the age of 25 are Adams, Grant, Grays Harbor, Lewis, Stevens, and Yakima.



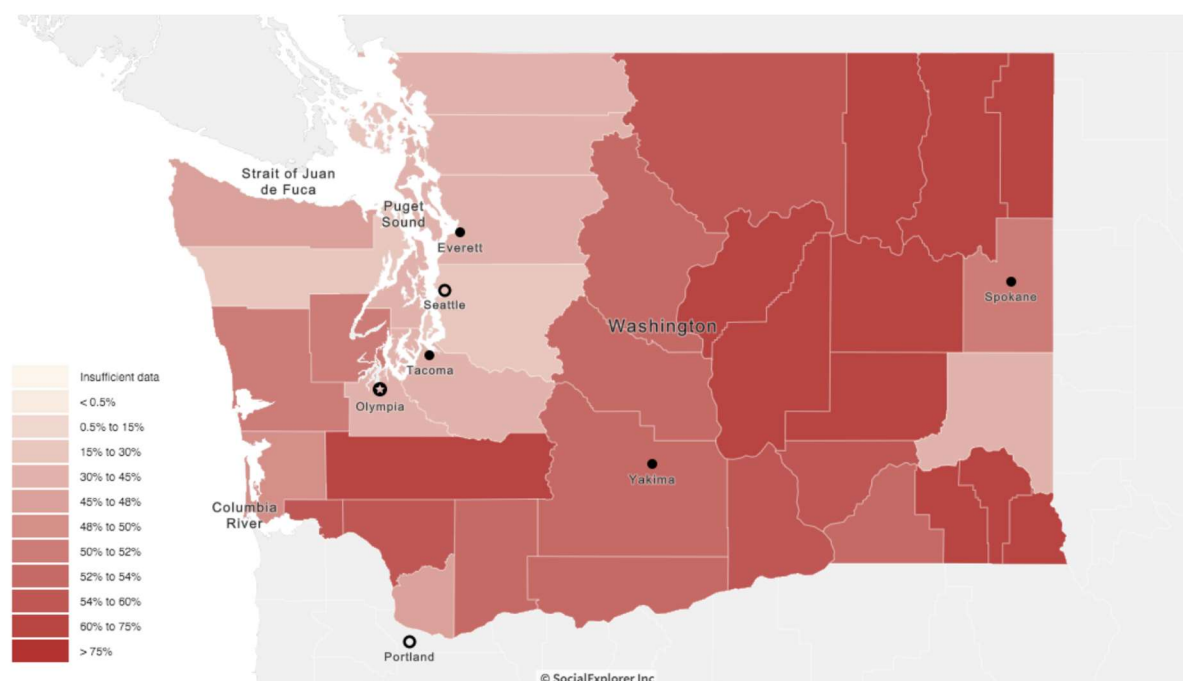
**Figure 9:** Male population 25 years and over: Bachelor's degree or more, created in Social Explorer

### ***Trends by Political Ideology***

Our literature review identified a connection between Republican political preference and an increased tendency for vaccine hesitancy. Findings from the NPR/Marist Poll survey substantiated this claim and indicate that individuals who voted for President Donald Trump in the 2020 presidential election are more likely to display hesitation toward the COVID-19 vaccine. In the NPR survey, 47% of Trump supporters said they would *not* get the COVID-19 vaccine if it were available to them today compared to only 10% of Biden supporters (Marist Poll, 2021). Using this information we have made the assumption that counties which voted for Trump in the 2020 election may face difficulty meeting the vaccination goal of 80%. Figure 10 shows the percentage of each county that voted Republican in the 2020 election. Counties that are darker red have a higher percentage of Trump voters per capita. Given that the national trends found in the NPR poll appear to persist in Washington State, we hypothesize that counties where more than half of eligible voters cast their ballot for Trump in 2020 are at the highest risk of vaccinating less than 80% of their adult population (Westneat, 2021). Overall, the counties with the highest percentage of Trump voters in the 2020 election and a voting population over 20,000<sup>3</sup> are: Lewis, Douglas, Grant, and Stevens. Other large counties such as Benton, Spokane, and Yakima also voted for Trump at a rate over 50% in 2020.

<sup>3</sup> The US Census Bureau identifies “small counties” as having a median population of 23,999 (Nasser, 2017). For our purposes we have rounded this number down to 20,000 for simpler calculations.

*“The No. 1 correlation factor for whether you’ll get the vaccine is whether you voted for Trump”*  
- Jessica Chong, Assistant Professor of Genetics at the University of Washington (Westneat, 2021)



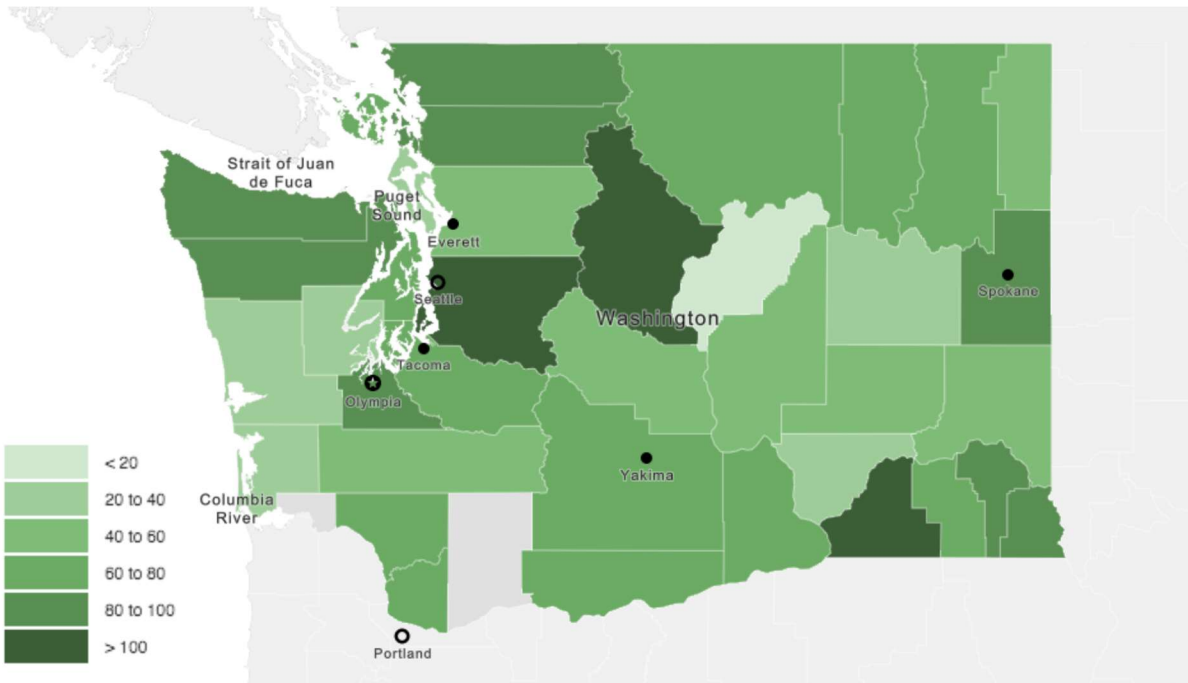
**Figure 10:** Total Republican votes cast in the 2020 Presidential Election by percentage, Created in Social Explorer.

### ***Proximity to Healthcare***

The general public tends to have relatively high levels of trust in their local healthcare providers when it comes to vaccination and coronavirus management. A [stakeholder report](#) conducted by Washington State Department of Health indicates that participants from ten different language groups have a strong trust in their own primary care doctors and healthcare professionals to deliver vaccine information (DOH, 2021). Spanish speaking participants in particular identified that they would feel most comfortable turning to their doctors for relevant information, and Arabic speaking participants said their primary care doctor was a trusted communication channel (ibid).

These findings were further substantiated by a Facebook survey conducted through CMU which found that “the percentage of vaccine-hesitant adults who say they are more likely to get vaccinated if the recommendation comes from local healthcare workers is higher than from other information sources” (CMU, 2021). These findings were collected over a period of four weeks which allowed for certain trends to be monitored. This study found that trust in alternate information sources such as government health officials or politicians has remained relatively consistent (and at times decreased) while trust for local healthcare workers has increased over time (ibid).

Using this information, we have made the assumption that having access to a Primary Care Physician may increase an individual’s exposure to trusted information about COVID-19 mitigation and therefore may lead to an increase in vaccine acceptance. Figure 11 illustrates where primary care providers are concentrated throughout Washington State. Lighter green counties have a lower proportion of providers per 100,000 people. The counties with some of the fewest primary care providers per 100,000 people are Franklin, Lincoln, and Douglas counties.



**Figure 11:** Primary Care Physicians rate per 100,000, Created in Social Explorer

The following discussion builds on this county level analysis by incorporating zip code level data to identify additional areas which may be prone to low levels of vaccine uptake.

### **Zip Code Analysis**

Our [analysis](#) (linked), conducted using vaccine site data from mid-March 2021, closely examines demographic groups using zip codes as a unit of analysis. Zip codes tend to be strongly linked to social determinants of health outcomes, overall life quality, and longevity (Graham, 2016). This correlation results from historical racial segregation and subsequent divestment from US neighborhoods (Benitez, Courtemache, and Yelowitz, 2020). Throughout the pandemic, Latinx and Black communities have faced disproportionately higher rates of COVID-19 infection and COVID-19 related deaths, and this persists at the zip code level, as seen in the positive correlation between Latinx and Black population concentrations and COVID-19 cases per capita in these geographies (ibid; Washington Tracking Network, 2021). Associations between health outcomes and geographic locations warrant a closer look into the current locations of vaccine sites and the socioeconomic and/or demographic characteristics of the surrounding communities. This analysis aims to identify gaps and inform future strategies to address them through organizational partnerships and targeted funding opportunities.

The zip code analysis was performed using American Community Survey (ACS) 2015-2019 5-year data estimates, looking at racial and educational data for all zip codes throughout the state of Washington (ACS, 2019). As identified in the previous section, the demographic groups which are likely to experience the greatest levels of uncertainty about whether to accept a COVID-19 vaccine are white males with an educational attainment of less than a bachelor's degree, the Latinx community, and white males who voted for Donald Trump in 2020 (NPR, 2021). Geographies with high concentrations of these populations face barriers to achieving herd immunity. One limitation of analyzing these populations using zip codes is that counties are the smallest geographic unit for which voting history and political affiliation data is available.

While this characteristic cannot be analyzed beyond the county level, racial, and educational data are available at the zip code level.

This analysis focused on zip codes with higher percentages of people who identify as Hispanic because this group faces higher vaccine uncertainty and/or barriers to access. In addition, educational data for white men was utilized to determine the percentage of the population in each zip code that was composed of white men who had attained an educational level of less than a bachelor's degree. Finally, the Washington State vaccine site dataset determined the location for each site administering vaccines throughout the state, which was then used to identify the quantity of vaccine sites within each zip code. To determine which areas to target for further intervention, the data was filtered to include zip codes with a Hispanic population higher than the state average and which had no vaccination sites. This assumes that geographic access is at least a partial barrier to receiving the vaccine. In addition, to identify which areas would face a higher level of uncertainty due to high populations of white males with an educational attainment of less than a college degree, the data was filtered to select geographies for which 50% of the population was comprised of this demographic. As described in our first memorandum, messaging to increase vaccine uptake among hesitant white male populations must be transparent and non-coercive. Trusted sources among this population include former President Trump and, above all, their own doctors (NPR, 2021).

## Step 2:

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From data available as of mid-March 2021, the zip codes highlighted by our analysis as having the highest need for intervention were primarily located in the City of Tacoma and in Yakima County. Yakima County is particularly vulnerable to COVID-19 as a large portion of the workforce is employed by the agricultural sector, where they have limited ability to distance themselves in the workplace or at home. Zip code [98939](#) in Yakima County was identified as one target zip code, because it has no vaccine sites and over 60% of the population identifies as Hispanic. Additionally, 53% of the population identifies as white or Hispanic and have an educational attainment of less than a bachelor's degree. Additionally, zip code [98921](#) in Yakima County was targeted for intervention in vaccine uptake, as they have no vaccine sites and 100% of the population identifies as Hispanic. The average median household income within this population is approximately \$26,300—less than half that of the state average (US Census, 2019). These locations demonstrate an issue in geographic access for people in Yakima County, of which 50% of the population identifies as Hispanic compared to Washington State's 13%. One organization that is well positioned to lessen these barriers to access for the COVID-19 vaccine is [Centro De Servicios Comunitarios \(CSC\)](#), which focuses on serving Hispanic and non-Hispanic business owners in the community.

In Tacoma, geographic access in areas with a higher-than-average population of people who identify as Hispanic has also been identified as lacking access and having increased hesitancy. Zip codes [98433](#), [98438](#), and [98439](#) have few vaccine sites nearby and have a relatively high Hispanic population. Zip code 98421 is an area with a high need for policy intervention, as 54% of the population is composed of white-identifying men with an educational attainment of less than a bachelor's degree, 67% of the population is Hispanic, and there are no vaccination sites. Two organizations identified are the [Tacoma Urban League](#), which serves people of color, and [Centro Latino](#), which serves both Latinx and Indigenous populations.

In addition to the organizations identified from RESTART's list of key community partners, the Washington State DOH has created a [Stakeholder Interview Research Report](#) which has identified barriers to access and trusted channels of communication among multicultural and multilingual groups across the state (DOH, 2021). Trusted messengers in the Spanish-speaking population include personal doctors and



healthcare professionals, community organizations and nonprofits, in-language and community media outlets, and social or digital media, such as social networking platforms. Using this information, RESTART should invest in local community organizations or community clinics within these targeted areas. As of May 5, several of the priority zip codes mentioned here have added new vaccine sites, improving vaccine access for these target populations (DOH, 2021).

### ***Further Considerations***

This analysis is intended to be used as a tool by RESTART Partners to inform future messaging campaigns and partnership decisions as COVID-19 vaccinations continue to become available to the general public. However, before utilizing the findings of this analysis there are some important limitations and considerations that should be addressed. In order to understand the stakeholder landscape of Washington State we made an effort to utilize data that was collected from localized studies, and we ensured that all census data was filtered to the state level. However, certain data was extrapolated from surveys conducted at the national level, namely the NPR/Marist Survey. Some of the findings which have driven this analysis are based on national trends and have not been studied directly in the context of Washington State. While ideally all of our findings would come from a state level we recognize that some of the strongest COVID-19 studies have been conducted on a much larger scale. We have opted to utilize some of these larger studies to inform how certain population groups are feeling about vaccination generally, keeping in mind that there may be variation across states or even counties. Additionally, it should be recognized that each of the studies referenced in this analysis have their own methodological limitations, and all data should be considered critically. For example, each of the surveys referenced in this analysis, with the exception of the Census Pulse survey, have relatively small n-values which may result in a large standard error. The NPR/Marist Poll study surveyed 1,227 adults including 1,082 registered voters. Results for the overall sample were found to be statistically significant within  $\pm 3.4$  percentage points while the margin or error for registered voters was closer to  $\pm 3.6$  percentage points (Marist Poll, 2021).

We would also like to acknowledge that this analysis does not directly address access or hesitancy concerns for Indigenous populations in Washington State. This is largely because—as sovereign nations—federally recognized tribes have been coordinating directly with the federal government to conduct vaccination efforts on Tribal lands. The state has a much reduced role in the rollout of vaccines to Native Americans. Indigenous populations within Washington State have been successful in quickly and widely administering the vaccine within their communities, with some tribes aiming to achieve herd immunity by the end of May (Spokesman, 2021). Some tribes have even expanded eligibility and distribution to people outside of the tribe, such as public school teachers and child care employees, allowing for the wider community to more quickly achieve herd immunity (GovTech, 2021).

While conducting this analysis we also relied on the use of assumptions which may not be substantiated in actual vaccine rollout. These assumptions were generally used as a bridge to connect data on vaccine hesitancy with predictions of vaccine uptake in Washington State. For example, we make the assumption that proximity to a primary care provider may impact propensity for vaccination due to our findings that local medical professionals are some of the most trusted sources of vaccine information. We acknowledge that this logic assumes that proximity to healthcare providers is the only or primary barrier to access that individuals face. We recognize this may not be the only barrier to accessing healthcare but maintain that assessing proximity to primary care providers is one way to estimate vaccine access and uptake for certain areas in conjunction with other factors.

Step 2 of this analysis recommends partnerships with community organizations operating in the geographic areas which we have identified as at-risk of low vaccination uptake. These partnerships were

identified intentionally because much of our research supports the claim that community organizations are largely trusted by a wide range of stakeholders. However, it is vital that we acknowledge the burden that has already been placed on community organizations throughout this pandemic. When pursuing these relationships moving forward, adequate time and resources should be allocated to ensuring that undue administrative burden is not placed on those organizations that are already spread thin.

### ***Conclusion***

As more Washingtonians become eligible to receive a COVID-19 vaccine, communication efforts will need to be directed at populations that are experiencing hesitancy and access concerns. Using a county level and zip code level analysis we have identified several geographic regions which we believe are at risk of experiencing low levels of vaccine uptake. In order to overcome this pandemic and reopen our state safely we need as many people as possible to initiate vaccination in the coming months. The following table summarizes the initial findings of this report.

<b>Stakeholder Analysis Summary Table</b>	
Counties with the <i>lowest</i> current rates of vaccine initiation	<i>Overall:</i> Ferry, Franklin, Garfield, Skamania, Stevens
	<i>Largest counties still below average:</i> Clark, Pierce, Spokane, Yakima
Counties with the <i>lowest</i> number of males age 25 or older with at least a college degree	<i>Overall:</i> Adams, Grant, Grays Harbor, Lewis, Stevens, Yakima
Counties with the <i>highest</i> percentage of Trump voters in the 2020 election (pop. over 20,000)	<i>Overall:</i> Douglas, Grant, Lewis, Stevens
	<i>Largest counties above 50%:</i> Benson, Spokane, Yakima
Counties with the <i>lowest</i> number of primary care physicians per 100,000 people	<i>Overall:</i> Douglas, Franklin, Lincoln
<b>Counties represented in more than 1 category</b>	Douglas, Franklin, Grant, Lewis, Stevens, Spokane, Yakima
Zip Codes identified as “at-risk” for low vaccination rates	98939, 98921, 98433, 98438, 98439
Proposed community partners	Centro de Servicios Comunitarios (CSC) - Yakima Tacoma Urban League - Tacoma Centro Latino - Tacoma



## Stakeholder Analysis Appendices

### Appendix A: Key Informant Interview Summary (Main Themes)

12 interviews were conducted February through April 2021. Individuals came from various backgrounds and experiences such as public health, epidemiology, philanthropy, marketing, and psychology. Key themes were extracted through reading transcripts, hearing transcripts, and meeting notes taken. We acknowledge discussion was highly participatory but key themes were identified through continuous and frequent mention of supply, response, inequity, trusted messengers, and access issues.

Theme	Quotes or summary paragraphs/descriptions
Supply	Several of the interviews touched on supply challenges. There has been a lot of media on upcoming new vaccines to add to the US stock. Slowly EUA was granted to Moderna, Pfizer, and now Johnson & Johnson. Supply was frequently mentioned in our earlier interviews: “scarce supply remains the primary issue in vaccinating the public.” Interviewers heard sentiments like “More people want the vaccine than can be supplied” and “People call but don’t have vaccines to distribute... frustrating for many...” (March 2021).
Response	Of the 11 interviews conducted, the response to the government's handling of the pandemic is mixed. About half mentioned that Washington State has done comparably well in the quantity of doses administered. Several interview participants indicated a positive impression of the vaccine roll out and they saw “outstanding cooperation and coordination between public officials and elected officials.” Over half of the interviews had a somewhat less enthusiastic response to government actions. Some felt “WA did not live up to expectations” and many noted frustrations in prioritizing specific populations and the required digital literacy for vaccine appointments. It should be noted that this question asked interview participants their overall perception of the WA COVID-19 response. However, many interviewees felt some things were done well but overall there were many challenges.
Inequity	<p>Inequity was frequently mentioned in all interviews. Most noted that racial equity was not considered when categorizing priority populations. Public health experts who consulted at the state level chose to vaccinate those most at risk from death and those who worked in hospitals. Some interviews mentioned, “we are still seeing racial disparities” and asked “why was race not considered?” in the prioritization exercises conducted by the state. The older populations (65+) in Washington State are predominately white and wealthy, whereas those who work in essential services tend to be people of color. Additionally, one interviewee noted that the vaccines administered to the first priority group of those who were 65 or older were administered in nursing homes, which are again disproportionately occupied by white and wealthy individuals. This allocation excludes older individuals in communities of color, who frequently take care of older family members at home. One interview participant felt these demographics and prioritization have contributed to the widening racial gap.</p> <p>One interviewee commented that the groups receiving priority status were not at highest risk according to the data. While prioritization was reportedly based on having the highest risk of infection, this subject pointed to data on higher infection rates among food workers due to the lack of flexibility in job setting and the lack of access to PPE. Healthcare workers were prioritized above essential food workers despite having a lower</p>

	<p>infection rate due to high prevalence of PPE, illustrating how the sectors of the essential workforce most likely to be comprised of people of color were given lower prioritization despite having a higher risk of infection. An interview with a DOH official mentioned a Seattle Times article that was recently published on how well Seattle handled the pandemic. The interviewee discussed the article's racially-coded language to describe vaccine rollout challenges in Yakima county. The article did not account for the fact that employment in Seattle is largely driven by corporations such as Amazon, Google, and Facebook which tend to hire those with a higher educational attainment who identify as white or Asian, and that the nature of this work is more conducive to working from home, reducing the risk of infection. This evasive language downplayed the extent to which equity issues, especially labor issues, were ignored. Inequitable distribution of the vaccine and the state's explicit neglect of considering race as a defining factor in vaccine rollout has further perpetuated intergenerational, emotional, and physical trauma, literally costing lives within these communities.</p> <p>A few interviewees provided suggestions for racial equity. There was mention of small business loans and grants as a pro-equity strategy. It can be leveraged to proactively address access barriers, especially for small or POC-owned businesses. Another interviewee noted that to achieve racial equity, public health efforts will need to be scaled up to provide greater access to marginalized communities. Additionally, public health officials need to undergo training to deliver effective messaging in door-to-door efforts.</p>
Trusted messengers	<p>Trusted messengers are vital to gaining support of the community. Proposed trusted messengers included the Seattle Seahawks Football team, city officials such as the Mayor, Representatives, and elected officials, religious leaders, and identified community leaders. According to marketing specialists, these messengers are trusted individuals who project confidence and unite people. Interviewees made the important distinction that trusted messengers are co-collaborators, not a media tool. Interview participants noted that health officials should invest money, resources, and time to community organizations throughout the entire vaccine planning and implementation process, not just toward the end. Additionally, interviewees noted efforts are needed to engage ethnic media. One interviewee noted that, "Community organizations have a trauma-informed way of approaching their own communities." Another interviewee noted that historical and current abuse and neglect from medical and governmental institutions have made it so communities of color must take the work upon themselves to save their own lives. Engagement with trusted messengers who are understanding of this context is critical for reaching communities of color.</p> <p>Trust, especially, among BIPOC and marginalized populations is difficult to develop. Once violated, trust takes years to rebuild. One interviewee explicitly pointed out that trust cannot be manufactured. Even with the best intentions, institutions may not be trusted or viewed as trustworthy. In describing the reasons for this another interviewee noted "It isn't being wary, it's being told to trust your abusers." There are power dynamics that continue to place marginalized populations in difficult positions. At least half of interviewees expressed this sentiment, and it was more common among those working directly with communities.</p>
Access issues	<p>Even when supply is sufficient to meet demand, access can still be an issue. Access proves to be a larger challenge as public health officials need to consider historical and current trauma, geographic and linguistic barriers, and current communication strategies. As noted by many interviewees, access is especially critical for reaching the most</p>

	<p>marginalized populations. Communities of color and immigrants generally access the health system at a much lower rate. This is due to historic and current medical injustices and systematic racism, culminating into what one interviewee described as today's medical institutions having a "deficit of trustworthiness", specifically reframing the language around "distrust" or "hesitancy" so as to not blame individuals, but rather the systems which abuse them. Mass awareness and outreach campaigns may fail to address, for example, language and transportation issues that make vaccinations inaccessible for marginalized communities. For example, as one interviewee noted, although essential workers in large businesses such as Costco may be aware of their eligibility, vulnerable essential workers such as those in small, culturally-specific community markets may not receive this information, especially if it is not provided in multiple languages. The interviewee suggested that traditional medical campaigns and communication efforts are not sufficient. The DOH official emphasized that public health workers must work alongside community organizations and go door to door with vaccines and information. Additionally, from the informed opinion of the DOH official, the state must support community pop-up clinics as an efficient distribution method for some community groups.</p> <p>The DOH pro-equity strategy that applied to all vaccine providers had three main requirements: language accessibility, disability access (such as ASL interpreters and logistical layouts), and collecting race and ethnicity data of patients.</p>
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## Appendix B: Example Interview Questions

### General:

1. What's been your impression of Washington State's COVID vaccine distribution so far?
  - a. FOLLOW UP: What are significant communication challenges?
2. Where do you get your COVID-19 resources?
3. From your perspective, who are trusted public leaders in the Washington State context?
  - a. Probing question: Who in King County is a trusted leader? Do you perceive local public health officials as trusted? Are there any specific individuals who come to mind? What about government leaders, doctors, or community leaders?
4. From your research and partners, who do you understand to be the most vaccine hesitant? Why do you imagine this population may be vaccine hesitant?
5. What organizations and initiatives are in place to combat vaccine hesitancy and distrust in the medical system?
6. In your opinion, what messages in your previous campaigns have had the most engagement? Which have fallen short or had responses contrary to the message's intent?
  - a. What platforms have been most successful in engaging the community?
7. What access issues do you expect to see in the vaccine rollout and for whom?
8. What strategies is Restart considering to bridge these access issues?
9. We are interested in conducting additional interviews similar to this one to better understand the stakeholder landscape in Washington State. Do you have any colleagues you would recommend?
10. In the future we will be conducting interviews with small business owners to understand employers' views on their role in vaccine implementation. Do you have any contacts with chambers of commerce or employers you would recommend that we meet with?

### Example Questions for DOH Employee:

1. What has been your role in the COVID-19 vaccine rollout?
2. How did you end up in this role? Was someone else doing it before you started? Are you specifically focused on vaccine rollout?
3. What's been your impression of Washington State covid-vaccine distribution so far? Are you seeing proportional vaccine uptake across racial groups in the state? If not, what are the key reasons?
4. Our analysis is looking at King and Yakima counties as case studies. How are you reaching communities in Eastern Washington? How is the vaccine rollout landscape different on each side of the Cascades?
5. What initiatives is the DOH conducting to reach out to underserved communities to combat institutional untrustworthiness and lack of access in the vaccine rollout? Could you tell us more about these initiatives? Which initiatives have been the most successful?
6. From your perspective, who are trusted public leaders in the Washington State context?
7. From your perspective, how would government or employer incentives/disincentives help or hinder efforts to increase vaccine uptake?
8. Is uncertainty or accessibility a greater barrier to BIPOC populations and low income people receiving the vaccine?
9. What are your impressions of vaccine passports and other mechanisms to allow people to gather safely as more and more people are vaccinated? What equity concerns exist with these potential mechanisms?

10. Anything you'd like to add that we haven't asked about during this interview?
11. We are interested in conducting additional interviews similar to this one to better understand the stakeholder landscape in Washington State. Do you have any colleagues you would recommend?

Example Questions for Physician:

1. ...UW Medicine is conducting (several initiatives) to reach out to underserved communities to combat vaccine hesitancy, distrust, and lack of access in the vaccine rollout. Could you tell us more about these initiatives? Which initiatives have been the most successful?
2. From your perspective, who are trusted public leaders in the Washington State context?
3. Among the Latinx community who are trusted public leaders - and does this differ in King County versus Eastern Washington?
4. Is hesitancy or accessibility a greater barrier to BIPOC populations and low income people receiving the vaccine?
5. From your perspective, how would government or employer incentives/disincentives help or hinder efforts to increase vaccine uptake?
6. What's been your impression of Washington State's covid-vaccine distribution so far? Strengths? Weaknesses? Communication challenges?
7. What are your impressions of vaccine passports and other mechanisms to allow people to gather safely as more and more people are vaccinated?
  - a. What equity concerns exist with these potential mechanisms?
8. Anything you'd like to add that we haven't asked about during this interview?
9. We are interested in conducting additional interviews similar to this one to better understand the stakeholder landscape in Washington State. Do you have any colleagues you would recommend?

This list of questions is non-exhaustive and represents a portion of the total number of interviews conducted. Identifying questions have been redacted from these examples. The questions provided to each interviewee were modified depending on their area of expertise and/or the organization for which they worked.

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# Memo #1: COVID-19 Vaccine Communication Strategies for Wary and Underserved Groups

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*Behavioral science, communication research, and emergency response best-practices were used to develop six strategies for communicating with the public regarding COVID-19 vaccines. Encouraging trust and removing barriers to vaccination were prioritized.*

# Memo #1: COVID-19 Vaccine Communication Strategies for Wary and Underserved Groups

**To:** RESTART Partners

**From:** Evans Consultants, Caitlin Bishop, Abby Minor, Hanna Peterson & Maggie Yuse

**RE:** COVID-19 Vaccine Communication Strategies for Wary and Underserved Groups

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This memo draws on a current literature review of behavioral science, emergency management guidelines, and communication best practices to develop six key messaging strategies for COVID-19 vaccine implementation. While not exhaustive, these strategies highlight key considerations for Washington State public health, government, and community leaders to consider as they craft communications to combat vaccine wariness among various stakeholders.

## Historical Context

Recognizing the historical context of the COVID-19 pandemic is critical to understanding and addressing the virus's disparate impacts and the ongoing challenge of controlling its spread. The pandemic has laid bare systems of inequity that result in Black, Indigenous, and People of Color (BIPOC) in the United States experiencing disproportionately high rates of mortality and morbidity from COVID-19 (CDC, 2021). Systems of poverty and lack of access to healthcare lead Black Americans to have a shorter life expectancy than white Americans (Roberts, 2009). Disparate health outcomes for Black Americans reflect institutionalized racism in medicine today that layers on historical abuses of power and fosters mistrust (Bajaj & Stanford, 2021; Jones, 2001). Minority populations are also disproportionately employed as essential workers and have thus been more exposed to the pandemic (US Bureau of Labor Statistics, 2019).

These existing inequities are coupled with significant levels of misinformation, politicization, and polarization in the United States. The first nine months of the pandemic were marked by a disjointed and frequently dismissive approach to the COVID-19 virus that led many to underestimate the virus's threat (Desai & Sonal, 2020). In addition, the country is experiencing social unrest and racist and xenophobic rhetoric toward the Asian American and Pacific Islander community. In Fall 2020, the COVID Collaborative, in partnership with the NAACP, UNIDOS US, and Langer Research Associates, found that just 4% of Black Americans and 18% of Latinx Americans trusted the previous Administration (Langer Research Associates, 2020). This same study also found that two in three Black Americans "believe the government can rarely/never be trusted to look after their interests" (Langer Research Associates, 2020). These findings have implications for the vaccine rollout and subsequent communication campaigns must address this mistrust. Underlying these social factors, the development of several COVID-19 vaccines represents a new record for the fastest vaccine to ever be produced. This expediency has caused concern among some regarding its safety and efficacy (Ball, 2020; Lazarus, 2020).

## Vaccine Acceptance & Access

In late January, 71% of Americans indicated their intent to get vaccinated or have already received a COVID-19 vaccine, leaving over a quarter unsure or resistant (Gallup, 2021). Groups who identify as Black, Republican, between the ages of 18 and 29 have the highest proportions of vaccine wary individuals (KFF, 2021). In contrast, those most enthusiastic to get the vaccine are disproportionately white, over 65 years of

age, and identify as Democrats (KFF, 2021). Figure 1 below identifies key social, cultural, and political structures that have caused wariness towards the COVID-19 vaccine.

As the burden to manage the virus's spread and vaccine implementation has fallen on individual states, each state's Governor and health department has navigated the challenging trade-offs between population health and economic wellbeing with varied approaches and success. Washington State has followed guidance on vaccine prioritization from the [Committee on Equitable Allocation of Vaccine for the Novel Coronavirus](#) and the [Advisory Committee on Vaccination \(ACIP\)](#) in its vaccine rollout strategy. Washington State's [current vaccination plan](#) prioritizes healthcare workers, the elderly, and essential workers as they are at the highest risk of COVID-19 contraction and death. Initial data, however, suggest that racial disparities persist among those who have received a vaccine in the state with Hispanic populations being the most under vaccinated (Hellman & Reicher, 2021).

In addition to willingness to get vaccinated, several other barriers stand in the way of receiving a vaccine in Washington State. Booking an appointment requires internet access and competency that some Washingtonians do not possess. Navigating these websites, commuting to a clinic outside of their usual jurisdiction, and awareness of the vaccine all require resources. For those in Washington State who are facing short term needs like housing and food insecurity, the time and energy required to pursue a vaccine is not readily available (Feeding America, 2021). Once vaccine distribution meets current demand, it is likely that vaccine wariness will emerge as a primary challenge for public health officials in their efforts to achieve an adequate vaccination rate in the population (DOH Engagement Session, 2021). Table 1 lays out key factors contributing to individuals being unsure or wary about receiving the vaccine. Understanding the reasoning behind uncertainty is critical to addressing vaccine uptake in the population.

<b>Addressable Causes of Vaccine Wariness</b> Social, Cultural, and Political Structures that Cause Vaccine Wariness	
Racial Injustices	
<ul style="list-style-type: none"> <li>• Health disparities among BIPOC populations</li> <li>• Underrepresentation of BIPOC individuals in medical trials (Stewart, 2018)</li> </ul>	
Erosion of Trust in Political and Pharmaceutical Leaders	
Politics: <ul style="list-style-type: none"> <li>• Rhetoric towards immigrants, BIPOC, LGBTQ+ people and other minorities</li> <li>• Mixed messages in responding to the COVID-19 pandemic</li> <li>• Tokenization of the vaccine as a political achievement</li> </ul> Process: <ul style="list-style-type: none"> <li>• Rapid pace of vaccine development</li> <li>• mRNA vaccine as a new technology (Ball, 2020)</li> </ul> Pharmaceutical Industry: <ul style="list-style-type: none"> <li>• Charging high prices for other drugs creates perception of profit over health</li> <li>• Close relationship with federal government</li> <li>• Role in opioid crisis (McCarthy, 2019; DeAngelis, 2016)</li> </ul>	
Cultural Values	
<ul style="list-style-type: none"> <li>• America's individualistic outlook on health and bodily autonomy leads to viewing vaccines as an individual consumer product (Reich, 2020)</li> <li>• Trait reactance: some people likely to resist any action they perceive as a threat to individual liberty (Finkelstein et al., 2020)</li> </ul>	
Information	
<ul style="list-style-type: none"> <li>• Misinformation circulates widely on social media, internet sources and through social networks</li> <li>• Fear of vaccine side effects and risks, misunderstanding of benefits</li> </ul>	

**Table 1:** Addressable Causes of Vaccine Wariness in the United States

Table 2 below lays out key messaging recommendations based on psychological, behavioral, and communications literature.

## Messaging Strategies to Encourage COVID-19 Vaccine Trust & Uptake

Strategies	Behavioral Insight	Specific Steps
1) Center Equity	<ul style="list-style-type: none"> <li>● Combat intergroup bias – when people prioritize those like them and do not act to help perceived “others”.</li> </ul>	<ul style="list-style-type: none"> <li>● Acknowledge health disparities among racial groups.</li> <li>● Highlight how vaccine rollout prioritizes those at highest risk.</li> <li>● Consider audiences &amp; target certain populations.</li> <li>● Partner with community organizations and leaders.</li> <li>● Work with target audiences to develop messages.</li> </ul>
2) Prioritize Transparency	<ul style="list-style-type: none"> <li>● Unknown risks are more dreaded than known risks.</li> <li>● Public trust in the government is trending down (Pew, 2019)</li> <li>● Combat politicization.</li> </ul>	<ul style="list-style-type: none"> <li>● Build vaccine literacy &amp; educational materials.</li> <li>● Explain decision making processes.</li> <li>● Admit mistakes.</li> <li>● Be honest, even if the truth is hard.</li> <li>● Provide translation of all materials into several languages.</li> </ul>
3) Clear & Repetitive Messages from Trusted Leaders	<ul style="list-style-type: none"> <li>● People learn through repetition.</li> <li>● Combat confirmation bias from interpersonal and online networks.</li> <li>● Reduce cognitive load.</li> <li>● People listen to people they trust.</li> </ul>	<ul style="list-style-type: none"> <li>● Identify trusted leaders: public health officers, community leaders to help craft and disseminate messages.</li> <li>● Partner with trusted leaders in minority communities.</li> <li>● Prioritize simple and easy to understand messages.</li> </ul>
4) Unifying Messages	<ul style="list-style-type: none"> <li>● Combat intergroup bias – when people prioritize those like them and do not act to help perceived “others”.</li> </ul>	<ul style="list-style-type: none"> <li>● Create messages that humanize “others”: vaccine developers, elderly.</li> <li>● Highlight shared values.</li> <li>● Empower the public.</li> </ul>
5) Positive & Non-coercive Framing	<ul style="list-style-type: none"> <li>● Appeal to individualist mindsets (when appropriate).</li> <li>● People are exhausted.</li> <li>● People do not like being told what to do.</li> </ul>	<ul style="list-style-type: none"> <li>● Invite people to join the conversation.</li> <li>● Highlight benefits.</li> <li>● Do not use shame, guilt, or persuasion in messages.</li> </ul>
6) Debunk Misinformation without Amplifying it	<ul style="list-style-type: none"> <li>● Fake articles more likely to go viral than real articles.</li> <li>● Mistaking fluency for truth: illusory truth effect.</li> <li>● Those who feel vulnerable are more likely to spread and believe conspiracy information.</li> </ul>	<ul style="list-style-type: none"> <li>● When debunking, state: 1) the truth, 2) warning about false message, 3) rephrased false message, 4) reiterate the truth.</li> <li>● Use fact-checking labels connected to a trusted source (i.e., research institution).</li> </ul>

**Table 2:** Messaging Matrix

## Messaging Strategies to Build Trust & Increase Vaccine Uptake

It is critical that governments and public health officials carefully curate trust in the vaccine and the organizations administering it while advancing equitable vaccine distribution. The following messaging strategies help build trust between medical professionals and the public and combat misinformation using specific behavioral insights.

### Strategy #1: Center Racial Equity

- Explicitly acknowledge health disparities among racial groups
- Highlight how vaccine rollout prioritizes those at highest risk.
- Consider audiences & target certain populations.
- Partner with community organizations and leaders.
- Work with target audiences to develop messages.

The first strategy aims to bridge gaps in vaccine access and trust among marginalized populations. Race and ethnicity have contributed to disparate health and economic impacts resulting from the virus (CDC, 2020). To combat these inequities, communications must be targeted towards specific groups, explicitly acknowledge injustices, and clearly state intent to implement an equitable vaccine campaign. Communications should be distributed broadly in several languages (Spanish, Vietnamese, Amharic, Mandarin, Japanese, and others) and promote community unity. Messages should not be direct translations but ought to consider cultural feelings towards Western medicine (Care, 2003). Flyers, mailers, and other mediums should provide information on how to access the vaccines locally and within BIPOC communities. Public health messaging is most effective when it comes directly from community organizations or trusted community leaders. A recent study found that Black Americans were two times more likely "to trust a messenger in their own racial/ethnic group compared to their white counterpart", while Latinx individuals indicated they were more likely to trust elected officials if they were a member of the Latinx community compared to officials who are white (Langer Research Associates, 2020). Tailoring messages for specific audiences by partnering with trusted community leaders will improve trust and vaccine acceptance. In addition, by explicitly acknowledging inequities and their commitment to counteracting them, health officials will build confidence among the public that they are working to reduce disparate outcomes in the future.

### Strategy #2: Prioritize Transparency

- Build vaccine literacy & educational materials.
- Explain decision making processes.
- Admit mistakes.
- Be honest, even if the truth is hard.

Strategy Two builds trust by prioritizing transparency in every communication regarding vaccine implementation. Press releases, websites, advertisements, and social media posts must contain information on how the vaccine was created and tested in addition to its safety and efficacy. These government approved messages should be circulated broadly with ample time for populations to absorb them (PolioEradication.org, 2018). It is crucial to build vaccine literacy by allowing space for individual decision making on risk mitigation

(Porat, 2020; Lazarus 2020). This can be achieved by connecting with people at their current level of understanding to help them explore their concerns. Bidirectional communications like these that address misconceptions and instill new concepts result in stronger positive outcomes (Salmon et. al, 2021; The Debunking Handbook, 2020). Medical professionals should be honest about potential risks and convey the benefits of the COVID-19 vaccine. Providing transparent, comprehensive answers to consumer questions regarding vaccine development, potential side effects, and efficacy will help people come to the same conclusion that the government did: that the vaccine is safe, effective, and its benefits outweigh any risks.

In addition to providing transparent information about the vaccine itself, officials should explain decision-making processes and reasoning behind vaccine prioritization schedules, immunization sites, and appointment infrastructure. Government officials, medical and public health professionals, and policy makers should be involved in decision-making and communicating with the public. Education is a vital tool in controlling the disease. Finally, recognizing that in times of crisis uncertainty can be worse than bad news, officials should be honest about negative outcomes (CERC, 2018). These disclosures and promotion of individual empowerment lessen doubt and increase belief in government and public health officials, paving the way for individuals to accept the vaccine (WHO, n.d.).

### **Strategy #3: Clear & Repetitive Messages from Trusted Leaders**

- Identify trusted leaders: public health officers, medical professionals, and community leaders to help craft and disseminate messages.
- Partner with trusted leaders in minority communities.
- Prioritize simple and easy to understand messages.

The third strategy employs frequent, simple, and consistent messages from various trusted sources to help people solidify their understanding of the issue and come to accept the appropriate response measure. Audiences respond better to people they know and perceive to be experts, including public health officers, community leaders, nurses, and medical professionals (Salmon et al, 2020; CERC, 2018; WHO, 2017). Soliciting questions, reviewing expectations, and directly communicating with patients will effectively build trust toward healthcare professionals and vaccine efficacy (Gust et al., 2005). Polls indicate that health messages are taken more seriously when politics are sidelined and trusted medical professionals are speaking directly to the public (Lazarus et al., 2020). To address the disproportionately low expected vaccine uptake rates among Black Americans (approximately 61%) it is critical that the government partner with Black community leaders, especially Black doctors, to create and spread the message (Pew Research Center, 2021). These messages need to be consistent locally, regionally, and nationally.

Paired with Strategy One, these messages can help combat confirmation bias and reduce cognitive load. Social media and the internet make it easy to find different narratives on the safety, effectiveness, and need for a COVID-19 vaccine. Those skeptical about the safety of the vaccine may seek out and more closely identify with messages that affirm their beliefs. The government can help combat confirmation bias by

### **Confirmation Bias**

Tendency to seek out and place higher value on information that reinforces existing outlooks and bias (Charness and Dave, 2017).

### **Cognitive load**

People have limited time and attention: results in use of mental shortcuts, especially in processing new information (Sweller, 2011).

spreading accurate messages and recruiting trusted sources from across the political, social, socioeconomic, racial, gender, and age spectrum. Disseminating information with a simple message from influential leaders will build trust and help the public identify false information. Understanding the development process of a new vaccine is complicated, and people may not have adequate time or resources to learn about it. With limits on cognitive load, mental shortcuts can lead to misunderstandings and oversimplifications. Without accessible and accurate materials, people will be left with uncertainty or misinformation. Considering that unknown risks are considered more dreadful than known risks, it is especially important that people are provided appropriate materials to understand COVID-19 vaccine development processes and safeguards.

#### Strategy #4: Unifying Messages

- Create messages that humanize “others”: vaccine developers, elderly.
- Highlight shared values.
- Empower the public.

Often subconsciously, people sort society (and themselves) into identity groups (Richeson & Sommers, 2016). Fellow group members are considered more trustworthy, and people often make behavioral decisions that prioritize their own group. While there are innumerable group identities, several simplified groups are key to understanding COVID-19 vaccine implementation. The first relationship we explore is the tension between *pharmaceutical companies developing vaccines* and *vaccine takers*. While some vaccine takers are eager to be vaccinated, others may perceive vaccine developers as looking out for their own best interests (i.e., profit from distributing the vaccine) as opposed to the best interests of individuals receiving the vaccine (DeAngelis, 2016). To combat this tension, officials should disseminate messages that humanize vaccine developers, highlight shared values, and empower vaccine takers.

Messages ought to emphasize real people’s stories and reasoning behind their dedication to developing a vaccine. Revealing the motivations of individuals leading the effort to end the COVID-19 pandemic would help the public identify with people who share the same values of saving lives, love for friends and family, and safety. Highlighting these shared values will help people relate to the effort to develop a vaccine. These messages need to be culturally sensitive and inclusive across LGBTQ+ individuals and racial, ethnic, gender, age, and ability groups, with special emphasis on amplifying Black Americans’ voices and values. In addition, underscoring the role of the public in the development of the vaccine would make people feel empowered. Volunteers’ ongoing role in vaccine development is critical, and officials ought to emphasize this so that people feel recognized. Messages also need to acknowledge historical underrepresentation of BIPOC individuals in clinical trials while highlighting the efforts of companies to recruit a diverse participant sample during the development of this vaccine.

A second key intergroup dynamic is between *the elderly* and *all other age groups*. As a high-risk group comprising over 80% of COVID-19 deaths, Americans 65 or older are by far the group most likely to indicate intent to get vaccinated (CDC, 2021; Gallup, 2021). Younger Americans at lower risk may underestimate the danger presented by COVID-19 to elderly populations and not consider their own actions in spreading the virus (Abel et al., 2021). Emphasizing the impacts of individual actions on vulnerable groups can encourage positive social behavior including greater compliance with public health protocols (Abel et al., 2021). Groups that are currently least likely to indicate their intent to get vaccinated (45-64-year-olds) ought to be targeted (Gallup, 2021). Messages that make older people seem more relatable and underscore their relationships in families and society may help other age groups appreciate the magnitude of this crisis from



the perspective of a different group from their own. Highlighting shared values of health, safety, and being in community at important life moments can unite all age groups.

#### **Strategy #5: Positive & Non-Coercive Framing**

- Invite people to join the conversation.
- Highlight benefits.
- Do not use shame, guilt, or persuasion in messages.

Expressing empathy and combatting Americans' individualistic outlook on vaccines through positive, non-coercive messages that emphasize personal benefits are critical components of an effective messaging campaign. Crisis communication best practices state the importance of expressing empathy early (WHO, 2017). As Americans approach one year of living in a pandemic with limited social interaction, people are exhausted. Poor mental health (the dual pandemic) has greatly expanded in isolation as humans are inherently social beings (Mühl, 2018). Communication strategies should validate the public's emotions and emphasize that vaccines are a critical tool in controlling the virus. The distribution of vaccines and getting vaccinated (in addition to maintaining existing public health guidelines) represent a first step towards normalcy. By presenting this information in a positive tone, public health officials are reaffirming their confidence in the impact of vaccines on the course of the COVID-19 pandemic.

Trait reactance theory underscores that messages should be fact-driven, non-coercive, and encouraging of an open dialogue surrounding vaccine concerns to avoid a perception of threat to personal liberties (Reich, 2020). Shame, guilt, and persuasion techniques may backfire, alienating the audience and encouraging them to seek other sources that reinforce their beliefs (UN, n.d.). Instead, public health officials should pair positivity with justice, pride, and interconnectedness (UN, n.d.).

#### **Strategy #6: Debunk Misinformation without Amplifying it**

- When debunking, state: 1) the truth, 2) warning about false message, 3) rephrased false message, 4) reiterate the truth.
- Use fact-checking labels connected to a trusted source (i.e., research institution).

Strategy Six addresses the challenging balance of refuting an incorrect message without amplifying it. Officials will first need to determine whether misinformation is widespread enough to be worth addressing. Entities such as the University of Washington's [Center for an Informed Public](#) may provide insight into the frequency of misinformation. Misinformation without a wide audience should not be given additional attention by highlighting it. However, if the misinformation is widely repeated, it may take on the illusory truth effect and ought to be debunked.

Officials must strategically, aggressively, and proactively address social media's dispersal of falsehoods regarding vaccines. One technique that has proven successful in debunking misinformation on

#### **Illusory Truth Effect**

Information that is often repeated is viewed as more likely to be true (Unkelbach and Rom, 2017).

social media is the use of fact-checking labels placed directly under falsified posts. Officials should use labels that do not reiterate false information and are clearly attributed to a trusted source. Health institutions and research universities are given more credence than news media, fact-checking organizations, or simple algorithms (Zhang et al., 2021). In addition to labels, public officials should refute widespread misinformation following the method laid out by [The Debunking Handbook](#) (2020). Repeating facts more often than the myth is critical to effectively drowning out the misinformation (The Debunking Handbook, 2020).

Suppressing information through censorship or removal is not recommended as an effective strategy to combat misinformation. Much of the conspiratorial thinking that perpetuates vaccine wariness hinges on mistrust of pharmaceutical companies and fear of an overreaching government, so censoring claims may further convince individuals that those in power are threatened by the validity and dispersal of these ideas (Dubé et al., 2013; Mariner et al., 2003; Barkun, 2016).

## Conclusion

The six strategies outlined above provide guidance on effective messaging to increase vaccine uptake among wary populations.

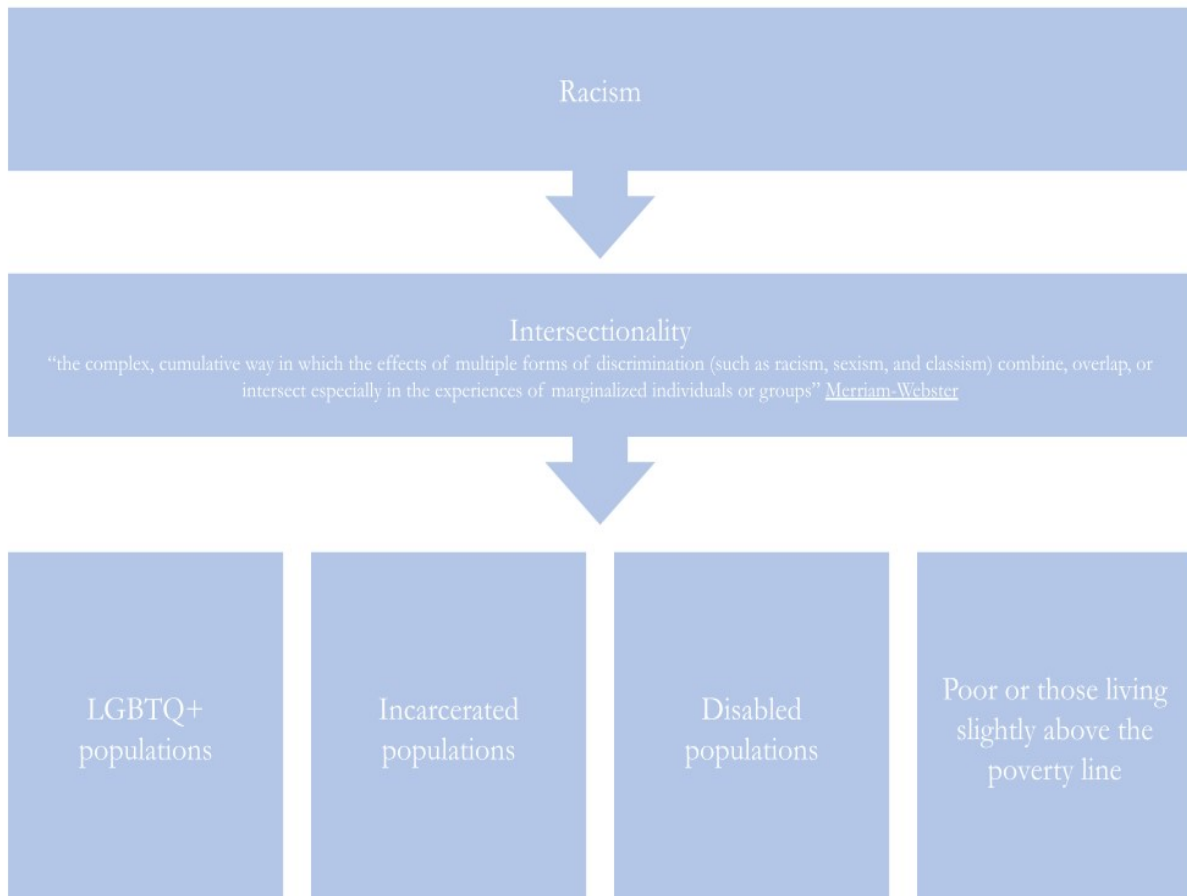
## How to Debunk Misinformation

1. State the fact.
2. Warn audience they are about to hear a falsehood.
3. Rephrase the incorrect claim and point out logical fallacy.
4. Restate the fact.

(The Debunking Handbook, 2020)

## Memo #1 Appendices

### Appendix A: Racism and Marginalization in the Healthcare System



## Memo #1 References

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## Memo #2: Incentivization of COVID-19 Vaccines in WA Workplaces

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*Due to health benefits provided through employers, public and private businesses are uniquely positioned to encourage employees to get vaccinated. This memo provides several policy options and approaches for vaccinating the workforce.*

# Memo #2: Incentivization of COVID-19 Vaccines in WA Workplaces

**To:** RESTART Partners

**From:** Evans Consultants Caitlin Bishop, Abby Minor, Hanna Peterson, and Maggie Yuse

**RE:** Incentivization of COVID-19 Vaccines in WA Workplaces

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The COVID-19 pandemic remains a priority in President Joe Biden's administration as US residents approach over a year living in a pandemic. On March 11, 2021, President Biden stated that on May 1, 2021 vaccines will be available to all people over the age of 16 living in the US. The announcement was received by a polarized public that has grown increasingly anxious to return to in person activities. Additionally, local governments and state governments have begun lifting public health restrictions to reinvigorate the economy. Significant improvements in vaccine production, distribution and administration have come at a pivotal time, and now President Biden aims to have 90% of adults eligible for vaccination by April 19, 2021 (Mendez, 2021). Some states have taken the lead and have already opened vaccines to all individuals ages 16 and above. Washington State has announced that everyone 16 and older will be eligible for the vaccine starting April 15, 2021 (DOH, 2021). These eligibility updates alter the US's vaccine timeline substantially.

The business sector constitutes a key stakeholder group with power to influence the COVID-19 vaccine effort in the state and country. As employers partner with the public sector, businesses play an outsized role in vaccinating the public and returning individuals to family gatherings, office buildings, restaurants, and other social settings. Not only do employers wield a significant amount of societal influence, but on an individual level, most US residents receive health insurance through their work. This benefit allows companies to take on the administrative cost of vaccines and remove barriers for workers. Additionally, employers are uniquely positioned to encourage, incentivize, or require their employees to get vaccinated. Vaccine requirements for other immunizations have been upheld by several Supreme Court cases and is currently authorized by the US Equal Employment Opportunity Commission (EEOC), but several legal gray areas specific to the COVID-19 vaccine open businesses to legal liabilities. As Washington State moves closer to mass vaccination efforts, various policies and approaches to vaccination will emerge. This memo details early trends, policy options and tradeoffs, and risks and benefits primarily focusing on incentivization efforts by large and small employers. For the purposes of this memo, we will use the Healthcare.gov definition of small business (1-50 employees). Accordingly, large businesses will be considered those employing more than 50 people consistently for 12 months (HealthCare.Gov, N.D.).

## **Equitable Vaccine Rollout Considerations**

Employer driven vaccinations (either through encouragement, incentivization, or mandates) will contribute to reduced prevalence and risk of COVID-19 but will not be the only tool to drive down cases. Careful and deliberate policies will be needed to reach minors and young children, marginalized communities, and vulnerable populations (e.g. prisons, community housing).

### Employer/Employee Relationship

**Structured workplaces**, defined as office work with normal working hours (9:00am-5:00pm), and insurance offered as a benefit, are easiest to coordinate vaccination for employees. All company efforts to encourage, incentivize, or mandate vaccines will include these white collar workers. However, this leaves those who are considered temporary, custodial service, or any other worker not directly employed by the

company outside of purview. (Consultants have been removed from those listed above due to their willingness to be independent from an organization and procure health insurance.) These workers will receive less benefit of any company policy regarding COVID-19 vaccination. Temporary workers are more likely to be women. For a variety of reasons (both economic and noneconomic), BIPOC identifying women aged 25-55 tend to work part-time when compared to their male counterparts (BLS, 2021). In 2020, over a third of the US workforce had a nontraditional employer-employee relationship through freelancing (Upwork, 2020). Employers ought to consider how to incorporate workers outside the structured workplace into any COVID-19 vaccination policy they implement.

### Disproportionate Negative Outcomes among Racial Minorities in Essential Positions

Reports indicate that risk and death due to COVID-19 are higher among people working in essential services, who are disproportionately Black, Indigenous, or People of Color (BIPOC). The demographics of the structured workplace differ from maintenance, custodial services, and other essential work. In a 2020 study, researchers found Hispanics are overrepresented in building cleaning services by 40%. It is estimated that 38% of these workers are of immigrant status (Rho et al., 2020). While Latinx populations make up a disproportionate number of COVID-19 cases in Washington State, only 7% of the Latinx population has been fully vaccinated as of May, 2021 (Fowler, 2021; Washington State Department of Health, 2021). BIPOC and undocumented immigrant populations in general access health care at a lower rate due to structural barriers and the COVID-19 vaccine is no exception. The federal government is continuing to direct efforts to improve health by prioritizing equity. President Biden is also hoping to achieve greater health equity through the COVID-19 relief package. On a local level, Washington State public health officials are aware of structural inequities and are working alongside trusted messengers and community organizations. To aid vaccine expansion, Washington State plans to roll out mobile vaccine clinics to reach marginalized populations (Land, 2021). Despite these state efforts, it is critical that employers make targeted efforts to vaccinate people in essential positions and those who are employed through contracts and other indirect methods. While companies do not have control over all people in their workplace, they do have immense power to amend contracts to ensure everyone including direct and indirect employees are vaccinated. As mandated by the federal government, vaccines are equally available and distributed to all peoples living within the US, including undocumented immigrants. No personal identifying information is required to get a COVID-19 vaccine (Cava, et al, 2020). DHS has issued a statement that “US Immigration and Customs Enforcement and US Customs and Border Protection will not conduct enforcement operations at or near vaccine distribution sites or clinics” as it is considered a sensitive locations policy (DHS, 2021).

### Organizational Resources

In contrast to larger corporations, smaller companies may lack cash reserves, access to additional banking support, and available funds to buy pandemic materials to weather rough times (Dua et al., 2020; Bartick et al., 2020). Governor Jay Inslee has received criticism from restaurants because indoor dining closures are most harmful to small businesses (Vinh and Clement, 2020). They argue that restaurants are taking proper precautions and this strict limitation is only placed on restaurants and not retail, galleries, etc. These closures are detrimental to small businesses as they often do not have enough liquidity to ensure paychecks are paid and rent is covered while closed. A recent study found that 66% of small businesses had fiscal challenges before the pandemic (ABA Journal, 2020). Restaurants make up a large share of small businesses in Washington State and as of December 2020 about 1,023 had closed permanently (Vinh, 2020). Government and public partners should consider organizational resources available to employers and how to leverage larger corporations’ strengths while uplifting smaller businesses.

## How Employers Can Address COVID-19 Vaccination Among Employees

	<b>Option 0: Status Quo</b>	<b>Option 1: Encourage</b>	<b>Option 2: Mandate</b>	<b>Option 3: Incentivize with Time Off</b>	<b>Option 4: Incentivize Financially</b>	<b>Option 5: Provide Vaccines On Site</b>
<b>Description</b>	Employer does not address COVID-19 vaccine	Employer shares resources; recommends vaccination	Employer mandates vaccination	Employer offers paid leave for vaccine appointment	Employer offers financial incentives for vaccination	Employer provides vaccination appointments at the workplace
<b>Companies</b>	Many organizations have yet to determine their approach to workplace vaccination so would likely be positioned here. This column will evolve as the landscape develops.	Google Rutgers University <a href="#">Amazon</a> <a href="#">Boeing</a> <a href="#">LifeCare</a>	American Steamboat Company Victory Cruise Lines United Airlines <a href="#">Aegis Living</a> <a href="#">Davis Wright Tremaine Law Firm</a> <a href="#">Gravity Payments</a>	American Airlines Apple Chobani Walmart Trader Joe's Tyson Foods Amtrak (2 hrs./shot) Darden Restaurants (2 hrs./shot) Aldi (4hrs) Dollar General (4hrs) Disney World (4hrs) Marriott International (4hrs)	Instacart (\$25) Love's Travel Stops & Country Stores (\$75) Kroger – owns QFC and Fred Meyer (\$100) Lidl (\$200) Gov. of Maryland (\$100) City of Detroit (\$50) <a href="#">PCC (\$25)</a> <a href="#">Starbucks</a>	Safeway Albertsons Haggen Universal Orlando Resort <a href="#">Costco</a>

**Table 1:** Policy matrix of potential policy options employers are taking regarding COVID-19 vaccination among their employees. US companies are in black text, while Washington State-based companies are shown here in blue text. Sources include: (NBC News, 2021; Rutgers University, 2021; Groover, 2021; Morning Consult, 2021; Ives, 2021; Vigdor, 2021; City of Detroit, 2021; Fuller, 2021; Hartmans, 2021; Marriott International, 2021).

## Current Employer Approaches to the COVID-19 Vaccine

Table 1 above demonstrates the variety of approaches companies are using with regards to the COVID-19 vaccine and illustrates their utilization by listing high profile and local companies in Washington State which have adopted each approach. This list, while not exhaustive, was curated through a review of digital news articles. This review was limited in that most employers are not publicly stating their plans with regards to COVID-19 vaccines.

## Policy Analysis

All employers have an obligation, as defined by Occupational Safety and Health Administration, to keep the workplace safe from environmental factors, discrimination, and general health (both physical and mental). Individual employee health is highly protected in most work settings but specific measures exist for employers to maintain a safe working environment. The first [Employer Responsibility](#) listed on the OSHA website is to “Provide a workplace free from serious recognized hazards and comply with standards, rules and regulations issued under the OSH Act” (OSHA, N.d.). COVID-19 vaccinations present a new challenge for employers. Protecting workers as well as customers from the spread of COVID-19 is essential to preserving labor rights and contributing to a prosperous business.

Individual health privacy is essential to workplace safety. One’s health information is often perceived to be highly sensitive so adequate measures must be in place by human resources to protect employee’s sensitive information. In accordance with legal standards related to workplace health records, individual’s health data is required to be kept separate from employment records with the exception of ADA required processes (Briscoe, 2021). This protection must be extended to potential reporting mechanisms. Many organizations are contemplating reopening the offices through self-reporting or documentation reporting of COVID-19 vaccinations. In requesting vaccination status, the employer opens itself to potential leaks of personal health information. Each of the following policy options will impact the health of employees and needs to be considered by employers. To compare policy options, our analysis uses criteria as defined in Appendix A.

Option 0: Status Quo	
<ul style="list-style-type: none"><li>- No mention of the vaccine, neither encouraging or discouraging</li><li>- Culturally feasible and legally contained risk</li><li>- Exacerbates widening disparities in health outcomes and weakens workplace safety, especially for the essential workforce</li></ul>	
Benefits:	Risks:
<ul style="list-style-type: none"><li>- Low profile; not polarizing among staff</li><li>- Low cost</li></ul>	<ul style="list-style-type: none"><li>- Employees may be frustrated by inaction</li><li>- Lack of knowledge about vaccination status of employees</li><li>- Fewer employees may be vaccinated</li></ul>

The first option is that employers do not proactively make any mention of the COVID-19 vaccine—either to encourage or dissuade workers from receiving the vaccine. Several large corporations such as Safeway or Costco with locations in Washington State that offer the vaccine at their in-store pharmacies will provide convenience for their employees. However, this benefit applies to a small portion of employers.

Avoiding addressing vaccination in the workplace is the simplest policy option and avoids excessive costs and potential legal challenges. This leaves employees to their own devices and does not help or hinder

any employees' access to vaccination. Through collective inaction by a company, this policy option proves to be high in equality. However, in relation to equity, leaving employees to their own self-direction does not promote an equitable vaccine rollout because it does not assist those with low personal resources (financial, internet, time, knowledge, etc.) in receiving the vaccine. This strategy also ranks highly because it does not require organizational resources, will not reveal anything about workers' personal health conditions, is unlikely to violate workplace cultural norms, and reduces medical related legal repercussions. This policy option ranks poorly on ensuring workplace safety because employers will have no information regarding the vaccination status of their employees. For industries with many employees working in close proximity, this is a key metric when determining how and when the workplace will transition away from social distancing protocols. Legal conflict cannot be completely ruled out as an employee could bring litigation against an organization for not maintaining a safe workplace. Following the status quo by doing nothing to assist in employees getting vaccinated is not markedly different from many actions being taken today, but could come at the expense of workplace health and safety and exacerbating social inequities.

Option 1: Encourage	
<ul style="list-style-type: none"> <li>- Encourage through educational resources or communicative materials</li> <li>- Inexpensive option with low legal risk</li> <li>- Organization will continue to be uninformed which could lead to premature office reentry and subsequent outbreaks.</li> </ul>	
Benefits:	Risks:
<ul style="list-style-type: none"> <li>- Low cost</li> <li>- More employees get vaccinated, slows spread of COVID-19 in workplace and society</li> <li>- Positive feedback from some employees and customers</li> </ul>	<ul style="list-style-type: none"> <li>- Some employees and customers may disagree with stance on vaccine</li> </ul>

The first alternative policy for employers is to encourage vaccine uptake through educational resources and/or communications that encourage employees to receive the vaccine. Several large corporations in Washington State, including Google, Amazon, and Boeing, have committed to this strategy. Providing educational materials and messages requires minimal investment on behalf of the companies to assemble and disseminate. However, this strategy may result in a delayed office re-entry timeline, which may have implications for production, equity, and workplace feasibility.

Option 1 ranks highly in several criteria including cost effectiveness, health privacy, and legal risks. This option is highly cost effective due to little resources and infrastructure diverted. Many organizations are taking advantage of prepared materials by the CDC, local government, chamber of commerce, etc. One benefit of these [informational resources for employers and their employees](#) are that they are freely available online (CDC, 2021). These materials are able to be shared via email and made available on company websites. If an organization chooses to create tailored messaging or some other type of communication channel, it could become more expensive for the employer. Health privacy remains an important aspect of the workplace environment. This option allows for the organization to maintain compliance with the ADA and



for employees to keep their health data confidential. There are several downsides to this option such as workplace safety and equity. In implementing the Encourage policy without associated tracking or reporting, employers will not be able to track who is vaccinated and confidently say their offices are safe to return to. In the event of an outbreak, Human Resources will be unable to track the virus in the office and may be forced to close the entire office causing further harm to the organization's bottom line and reputation. This option scores low in equity as the organization is not taking proactive measures to ensure their employees who are most at risk are getting prioritized access to vaccines. Intersectionality is crucial to understanding inequity. Many employees, especially BIPOC employees, face multiple scarcities including material objects, time, resources, childcare support, etc. (Feinberg, 2015; anonymous interview, 2021).

Option 2: Mandate	
<ul style="list-style-type: none"> <li>- Require all employees to receive the vaccine</li> <li>- Results in maximum public health safety among all options and high potential for equitable distribution</li> <li>- Very low legal, political, and cultural feasibility. Mandates may also increase likelihood that workers will refuse the vaccine, due to the “boomerang effect”</li> </ul>	
Benefits:	Risks:
<ul style="list-style-type: none"> <li>- Majority of employees return to the workplace with immunity</li> <li>- Office immunity data</li> </ul>	<ul style="list-style-type: none"> <li>- Disagreement among staff and issues of privacy</li> <li>- Backlash effect</li> <li>- Legal risks</li> </ul>

Employers can require that employees get vaccinated. This could either be as a condition of returning to the workplace or simply as a general requirement. Benefits of this policy include ensuring that everyone (or nearly all workers) in the workplace have immunity to the coronavirus. This will protect the health and safety of all employees. In addition, this policy gives the employer valuable information through reporting mechanisms about which workers are vaccinated and which are not. Alienating employees is a concern within this policy alternative. Republican-identifying individuals are among the most likely to have vaccine hesitancy; a mandate would be widely unpopular with the vaccine hesitant. Many are concerned that mandates would actually have a backlash effect, making people more resistant to the vaccines (Betsch et al, 2016). There are also legal risks to imposing a mandate that have not been clarified by federal agencies (EEOC, 2020); employers could receive legal challenges to their mandates.

Mandating vaccination in the workplace is the most difficult policy alternative to implement, but potentially has the highest reward for health, safety and equity. This option ensures equality among staff (except those who sought out medical waivers) to get the vaccine and removes bias due to position level, salary, and any other characteristics. In addition, this option likely yields the highest COVID-19 vaccine coverage among employees, protecting the most people from contracting the virus and speeding up the return to a safe workplace. This should allow workers to feel comfortable in the office environment without fear of spreading or contracting the virus.

This policy ranks poorly due to legal risks that could result in financial loss and potential for employee backlash. As detailed in Appendix B, COVID-19 vaccine mandates contain a number of legal gray

areas that could invite costly and public legal fights for employers. For example, one lawsuit has already been filed in New Mexico against an employer who instituted vaccine mandates (HR Daily Advisor, 2021). Potential lawsuits and opinion polls suggest workers may react negatively to employers requiring vaccination. That COVID-19 vaccines are politically polarized is evidenced by more than 23 Republican legislature states proposing legislation that limits employers' ability to require vaccination of their employees (Quinton, 2021). Further, nearly half of white republican males state they do not plan to receive the vaccine, as compared to 83% of white democratic males (NPR, 2021, Funk and Tyson, 2021). Polls show that 60% of Republicans say that a vaccine should not be mandatory among all workers, and 54% say that the vaccine should not be mandatory for essential workers, as opposed to 27% and 24% of Democrats, respectively (Morning Consult, 2021). Vaccine mandates may not effectively increase uptake or may even result in the opposite of its intended consequence. For example, there was no association between mandates and vaccine uptake in the implementation of Australia's "No Jab, No Pay" and "No Jab, No Play" policies, which withheld multiple childcare-related state benefits for families whose children were not vaccinated. Children of vaccine-hesitant parents were less likely to be fully vaccinated, as only 13% felt prompted to reconsider their stance on vaccinations and 25% of families planned to seek a medical exemption or not enroll their children. However, low-income families reported greater intention to vaccinate, which may indicate that these policies served as a reminder for families with lower health literacy or greater barriers to access (Armiento et al., 2020). This "boomerang effect" decreases the likelihood of vaccine uptake within wary populations. Emerging research suggests continued polarization and politicization of the COVID-19 vaccine. Some might conclude that vaccine mandates as a policy recommendation is risky due to actual or perceived infringements on personal freedoms and workplace cultural norms.

Option 3 & 4: Incentivize with Time Off or Financial Benefits	
<ul style="list-style-type: none"> <li>- Provide paid time off, cash payment, or a cash equivalent (i.e. gift cards)</li> <li>- Helps provide maximum amount of flexibility for employees with nontraditional work schedules and improves workplace safety</li> <li>- Incentivizing employees comes at a significant cost to employers</li> <li>- Organizations take on legal liabilities which may result in costs incurred</li> <li>- Size of incentive must be carefully selected to avoid increased skepticism that may arise from having too large of a benefit</li> </ul>	
Benefits:	Risks:
<ul style="list-style-type: none"> <li>- Employees appreciate the payment/time off</li> <li>- Remove barriers to vaccination</li> <li>- Worker receives additional benefits</li> </ul>	<ul style="list-style-type: none"> <li>- Inequity for those who cannot get a vaccine due to health or religious reasons</li> <li>- High cost for employers</li> <li>- Unintentionally removing moral motivation behind getting vaccinated</li> <li>- Potential violation of EEOC rules if incentive is not considered "de minimis"</li> </ul>

A number of national brands are encouraging vaccine uptake by offering paid leave to get the vaccine (Table 1). Many of the organizations researched were willing to provide a range of two to three hours per vaccine. This policy option allows employees flexibility to schedule a vaccine appointment during their 9:00-

5:00 working hours and give them time to cope with any side effects. Alternatively, a cash payment or gift certificate can be used as a financial incentive for employees to receive both vaccine doses. Several employers have begun offering small and medium payments to encourage people to get vaccinated (Table 1).

Equity and workplace safety are positive aspects of policy option four. Once an employee receives the vaccine, there are no position, title, or salary barriers to accessing this incentive. However, there are equity risks for employers who do not offer the incentive to people who cannot receive the vaccine due to health or religious reasons. Employers have an obligation to maintain a safe office environment, and this policy option allows for employers to track who has received the vaccine and to better protect the office from COVID-19 outbreaks. The Incentivize option does come at a significant cost to the employer and puts the organization in legal risk. Employers will have to pay for incentives and promised time off. Additional costs will be incurred to staff providing logistical support and to find coverage for those taking additional paid leave. Finally, the legality of incentives is unclear because the US Equal Employment and Opportunity Commission's guidelines on limiting value of incentives to "de minimis" have not been clarified between the outgoing and incoming administrations (Thelon & Kitson, 2021). Without clear guidance, incentives (especially large ones) may open the organization to potential coercion and discrimination lawsuits. Employees could be considered vulnerable to workplace power dynamics. Thus, employers must be sensitive to coercion and obstructing an employee's own decision-making. Understanding workplace culture will be critical to understanding how incentives will be received, and the employer/employee relationship will greatly influence the risk of legal conflict.

The research is mixed on the effectiveness of incentives. Kuvaas et al. defines extrinsic motivations as the desire to perform an activity with the intention to attain positive consequences or to avoid negative consequences. Some studies have found that promotion of reward and punishment, which target extrinsic motivations, reduce the employee's intrinsic motivation, that is, their self-determination and willingness to perform the task for its own sake (Kuvaas, et al., 2017; Underhill, 2016). Too much of an incentive or promotion can also result in increased wariness and hesitation (Kuvaas, et al., 2017; anonymous interview, 2021). Those in a promotional position need to carefully examine the risk and benefit of under or over promoting a vaccine. Researchers at UCLA and UW have found that "low-personal-value, high-social-value" objects are motivators to complete a task. These objects can range from a sticker pronouncing "Protected!" or "I got my Fauci ouchie", to free workplace swag and small gift cards to Starbucks, Subway, etc. (Ives and Jiménez, 2021). Some organizations are broadcasting larger rewards for receiving the vaccine.

The laws surrounding employer vaccine incentives are hazy. Making matters more confusing, the US Equality Employment Opportunity Commission has not issued guidance for employers providing incentives. As discussed in Appendix B, two major legal areas of inquiry are whether incentives are considered coercive or discriminatory.

Option 5: Providing Onsite Vaccination	
<ul style="list-style-type: none"> <li>- Administer vaccinations to employees at their workplace</li> <li>- Eliminates barriers to access and promotes workplace safety</li> <li>- Resource-intensive and the potential for legal issues due to lack of privacy. Employees who work remotely or during times vaccinations are not being administered may be overlooked</li> </ul>	
Benefits:	Risks:
<ul style="list-style-type: none"> <li>- Convenient and time efficient</li> <li>- Removes external barriers to vaccination</li> <li>- More workers will be vaccinated, leads to</li> </ul>	<ul style="list-style-type: none"> <li>- Logistical coordination with vaccine provider may require resources</li> <li>- May overlook employees who do not work</li> </ul>

safer workplace	normal schedules or work remotely <ul style="list-style-type: none"> <li>- Lack of privacy</li> <li>- No downtime for recuperation as employees are expected to return to work immediately</li> </ul>
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For companies like Costco, Haggen, and Walgreens that have onsite pharmacies, providing COVID-19 vaccines to employees is logistically simple. However, other employers without healthcare resources at their disposal are able to contract local health departments or insurer health professionals to host mobile clinics and “vaccination days” in the workplace. This would enable workers to get vaccinated during the workday and eliminates barriers like transportation and time spent traveling to a vaccination site.

The CDC asserts that employers and employees both benefit from improved morale due to providing vaccination in the workplace (CDC, 2021). Importantly, this policy promotes safety and the reduction of COVID-19 spread in the workplace. This policy option is likely to use workplace resources such as finances, office space, and time on the job. As described in Appendix B, if the employer themselves is administering the vaccine, there are possibilities for litigation based on health privacy regulations regarding the vaccine screening questions. In addition, some workplaces like offices may have limited ability to provide privacy. Finally, this process may unintentionally exclude employees who do not work normal schedules or employees who work remotely.

The following policy matrix ranks each policy option as Satisfactory, Neutral, or Unsatisfactory. This three point scale was chosen to clearly indicate which policy options accomplish the goal of the criterion at hand (satisfactory), makes no change as opposed to the status quo (neutral) or work against the criterion at hand (unsatisfactory) as compared to Option 0: Status quo.

### Policy Matrix and Potential Criteria for Employers

	Option 0: Status quo	Option 1: Encourage	Option 2: Mandate	Option 3/4: Incentivize	Option 5: Onsite vaccination
Equity	Neutral	Neutral	Satisfactory	Satisfactory	Satisfactory
Cost effectiveness	Satisfactory	Satisfactory	Satisfactory	Unsatisfactory	Unsatisfactory
Workplace cultural feasibility	Satisfactory	Satisfactory	Unsatisfactory	Satisfactory	Satisfactory
Health privacy	Satisfactory	Satisfactory	Neutral	Neutral	Neutral
Legal risk	Satisfactory	Satisfactory	Unsatisfactory	Unsatisfactory	Neutral
Workplace safety	Neutral	Neutral	Satisfactory	Satisfactory	Satisfactory

**Table 3:** This policy matrix lays out six criteria as defined in Appendix A used to measure the equity and effectiveness of each policy option.

## Discussion

### *Considering the Policy Alternatives:*

The policy alternatives presented here are not mutually exclusive, and several of them ought to be considered in tandem. For example, if a business chooses to mandate vaccination, it is important that reasonable accommodations are given to allow employees to get vaccinated. Offering paid time off (option 4), or hosting a vaccine clinic at the workplace (option 5) would help employees accomplish the goal of the policy. Without doing so, the burden of getting vaccinated will remain higher for workers with lower personal resources. Similarly, encouraging workers (option 1) could be used to supplement any other policy option to make them more effective. In addition, there are several other logistical factors to be considered like reporting, procedures to ensure equitable outcomes for those who cannot take the vaccine, and support structures to protect personal information. Reporting employees' vaccination can be conducted voluntarily or as a requirement of working or receiving an incentive. One risk of the incentivize option is that it could result in some employees being ineligible for the incentive due to medical or religious exemptions. To avoid discriminating against these employees, employers may need to provide an alternative action that will qualify workers to receive the incentive. For example, instead of getting vaccinated, the employee could take a COVID-19 prevention training course. Finally, if employees are required to be vaccinated or the employer hosts a vaccine clinic, it is important that adequate personal privacy protection measures are put in place to safeguard individuals' information.

One unanticipated consequence of policies meant to increase vaccine uptake may include workplace bullying against individuals who either cannot or choose not to receive the vaccine (HRD, 2021). Legally, individual's health data is required to be kept separate from employment records with the exception of ADA required processes (Briscoe, 2021). However, if maintaining a safe work environment in the wake of COVID-19 means companies must prioritize vaccinated employees for high-contact roles, they run the risk of conflating health data with employment opportunities (Briscoe, 2021). The unintended and extensive reach of these vaccine policy impacts serve as important lessons for private corporations to consider as they continue to grapple with vaccine incentivization or mandate decisions for their employees.

In the above analysis, our research denotes that employers have a desire to vaccinate their employees. It should be noted that this is not the case for all and some employers may have moral, religious, or other objections to vaccination. An example of such employer thinking is the alternative Miami-based Centner School. The school founders report that vaccines are dangerous for teachers and children. While many of these claims have been scientifically debunked, this private employer has vast freedom to hire and fire employees as they see fit.

### *Avenues for Government Support:*

Small businesses usually represent more minority populations and their subsequent livelihoods (Fairlie, 2020). They are also at a disadvantage for implementing policies raised above due to financial resources (see Appendix C). Intersectional research has found that women owned businesses saw about a 25% drop in revenue, and immigrant owned businesses saw approximately 36% loss over the past year as compared to a 17% drop in white owned small businesses in the same time period (Fairlie, 2020; Santellano, 2021). Due to marginalization by the banking system, women and BIPOC business owners are more likely to take on personal financial risk and possess little liquidity, putting these small businesses in a precarious financial position (Bartik, et al., 2020). The [Paycheck Protection Program](#) sought to support many small businesses but was not purposeful in considering racial equity. As such this program was ineffective and led to increased distrust of government. This program has been renewed under the Biden Administration with the objective of reaching communities of color. One intervention that may prove salient for minority owned small businesses are small business loans (SBL) for the purposes of vaccine incentivization. For small

businesses operating on extremely tight margins, offering incentives or other policy alternatives that require resources may not be feasible. However, government grants to fund these types of policies could be instrumental in achieving the state's collective goal of 90% immunity. While available to the general public, SBL is considered a pro-equity option because grants will serve those businesses and workers most affected by the pandemic.

Incentivization is growing in popularity for workplaces and has expanded to government-led policies to incentivize residents. Several states such as Ohio, New York, Maryland, and Oregon are embracing COVID-19 registries which enroll citizens into a lottery for large sums of money. Respectively, \$1 million to five Ohioans, \$5 million to one New Yorker, \$40,000 per day to a different individual for 40 days plus one \$400,000 giveaway on July 4, and \$10,000 to one individual in each Oregon county (Waldrop, et al., 2021; Williams, 2021). Ohio and Oregon also have a separate drawing for individuals in the age range of 12 to 17. Ten lottery winners across the two states would receive college tuition assistance, with Ohio offering a full-ride scholarship to any Ohio university, and Oregon offering \$100,000 in a college savings plan. (Brito, 2021; Williams, 2021). In New Jersey as part of the Jersey Summer campaign, the governor is offering special passes to state parks and dinner at the Governor's Mansion with the Governor and his wife (State of New Jersey, 2021). Preliminary data has indicated that these government incentives are increasing vaccination rates among young citizens aged 18 and older (Waldrop, et al., 2021). The Ohio Department of Health reports that vaccinations increased by 53% between the week before and the week after the lottery was announced (Ohio Department of Health, 2021). These lotteries are available to all but engage key demographics (young adults and teenagers) to help control the virus. Governments should be aware of over incentivizing the vaccine. As discussed in the first memo, increased financial incentive may lead some to believe that the vaccine is not safe and thus governments have to incentivize citizens.

## Memo #2 Appendices

### Appendix A: Criteria Definitions

Criteria definitions	
Equity	<p><b>Description:</b> This option provides support to all employees and implements equity based solutions. Employees that are at higher risk due to their position and responsibilities are prioritized. This criterion is ranked satisfactory when high risk groups are prioritized within an organization.</p> <p><b>Facilitation Question:</b> <i>Does this policy option prioritize workers most at risk?</i></p>
Cost effectiveness	<p><b>Description:</b> This option balances expected costs with expected outcomes. Some costs are needed and expected, however, this criterion is ranked satisfactory when costs are kept to an acceptable amount as compared to any risks that might occur.</p> <p><b>Facilitation Question:</b> <i>Is this policy able to be implemented with appropriate costs?</i></p>
Workplace cultural feasibility	<p><b>Description:</b> This option accounts for company culture/values and willingness to accept direction by management. This can be further described as workplace culture, environment, or personality. This criterion is ranked satisfactory when a policy is likely to make most employees happy.</p> <p><b>Facilitation Question:</b> <i>Is this policy feasible when considering employee culture?</i></p>
Health privacy	<p><b>Description:</b> This option is rooted in employer obligation and general sentiment toward health data privacy. This criterion is ranked satisfactory when the employer is able to protect private health information from employers and colleagues.</p> <p><b>Facilitation Question:</b> <i>Does this policy option protect individual health information and data?</i></p>
Legal risks	<p><b>Description:</b> Legal risks and financial loss are a component of employer oversight and are thus interlinked. Potential for litigation could cause significant financial loss for companies. This criterion ranks satisfactory when the organization takes on an acceptable amount of risk and maintains low legal liability.</p> <p><b>Facilitation Question:</b> <i>What amount of risk is the organization willing to take on?</i></p>
Workplace safety	<p><b>Description:</b> Workplace safety is also an employer obligation as set forth by OSHA. Workplaces must account for general health and wellbeing of employees. This criterion is ranked satisfactory when employees' basic health and safety are met.</p> <p><b>Facilitation Question:</b> <i>Does this provide a safe work environment for employees?</i></p>



## Appendix B: Legality of Vaccine Incentives and Mandates

Few companies have instituted a vaccine mandate either company-wide or as a requirement to return to the office. While statements from the federal government indicate that vaccine mandates are legal, several gray areas exist for employers (EEOC, 2020).

Area of Potential Conflict	Explanation
<a href="#"><u>Emergency Use Authorization (EUA)</u></a>	The COVID-19 vaccine was granted an Emergency Use Authorization and is therefore not formally approved by the Federal Drug Administration (FDA) at this time, although it is currently in the approval process. It remains unclear whether the EUA statute allows vaccine mandates.
<b>Pre-Screening Questions</b>	Companies that have the capacity and expertise to do so are considering vaccinating their own employees. However, while a COVID-19 vaccine is not considered a medical exam, the pre-screening questions could potentially violate the Americans with Disabilities Act (ADA) unless these questions are considered “job related and consistent with business necessity.” This consideration is open to interpretation and has not been litigated or clarified by the federal government. Voluntary vaccinations do not trigger this requirement.
<b>Reasonable Accommodations</b>	Employees may abstain from mandatory vaccination for health or religious reasons. In this case, employers are required to provide a reasonable accommodation to protect the safety of the individual employee and the workplace. However, the definition of a “reasonable” accommodation is not available, and many other worker protection laws protect high risk workers from termination.
<b>Workers Compensation</b>	If an employee becomes ill from a mandated vaccine, they can file a workers compensation claim.
<b>Violation of Union Contracts</b>	For employers with unionized employees, mandates would need to be considered in collective bargaining agreements with unions before implementing. The Washington State Labor Council and UFCW 21, which represents grocery, retail, and healthcare workers, prefer voluntary vaccine uptake.

Without additional EEOC guidance, companies are hesitant to institute vaccine mandates in their workplaces. The Occupational Safety and Health Administration (OSHA) currently recommends making vaccines accessible and low cost, while providing educational resources on the benefits of the vaccines (OSHA, 2021).

## Appendix C: Business Size Comparison

### Comparing the Impacts of Vaccination Options on Businesses by Size of Business

	Option 0: Status quo	Option 1: Encourage	Option 2: Mandate	Option 3/4: Incentivize	Option 5: Onsite vaccination
Small Business implementation	Satisfactory	Satisfactory	Unsatisfactory	Unsatisfactory	Neutral
Large Business implementation	Satisfactory	Satisfactory	Unsatisfactory	Satisfactory	Satisfactory

**Table 2:** Due to resource restraints and capacity, small and large businesses are impacted differently across policy options.

This table reflects the differences in policy options based on the size of the business. Business size determines how many employees the policy applies to as well as generally the amount of resources the business has access to. For the purposes of this analysis, small businesses refer to those that employ fewer than 50 people, and as discussed above, many are minority or women-owned and have been hit hardest by the COVID-19 pandemic. Assuming that these businesses have smaller profit margins and less liquidity, the options are determined to be satisfactory, neutral, or unsatisfactory. We compare this directly with large businesses to understand which policy options are more feasible for small businesses versus large businesses. As shown here, the Status Quo, Encourage, and Mandate options are comparably attainable in terms of access to resources. In contrast, the Incentivize option is far more attainable for large businesses as opposed to small. These cash payments or paid leave are difficult to offer as a small employer with limited resources. Finally, Onsite Vaccination is slightly more difficult for smaller businesses. While local health jurisdictions have been doing their best to support employers to provide vaccines at workplaces, larger businesses are more likely to have pharmacies embedded in their business model or simply have resources to absorb arranging an onsite clinic.

## Memo #2 References

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# Memo #3:

## Vaccine Passports:

### Risks and Benefits of

### Requiring Proof of Vaccination

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*As public and private entities contemplate how to move forward with the next phase of the COVID-19 pandemic many decision makers have considered the idea of a "vaccine passport". This memo discusses the risks and benefits of such a policy option using a behavioral science lens, and reflects on recent related events and policies.*



# Memo #3: Vaccine Passports: Risks and Benefits of Requiring Proof of Vaccination

**To:** RESTART Partners

**From:** Evans Consultants Caitlin Bishop, Abigail Minor, Hanna Peterson & Maggie Yuse

**Subject:** Vaccine Passports: Risks and Benefits of Requiring Proof of Vaccination

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## Definition and National Landscape

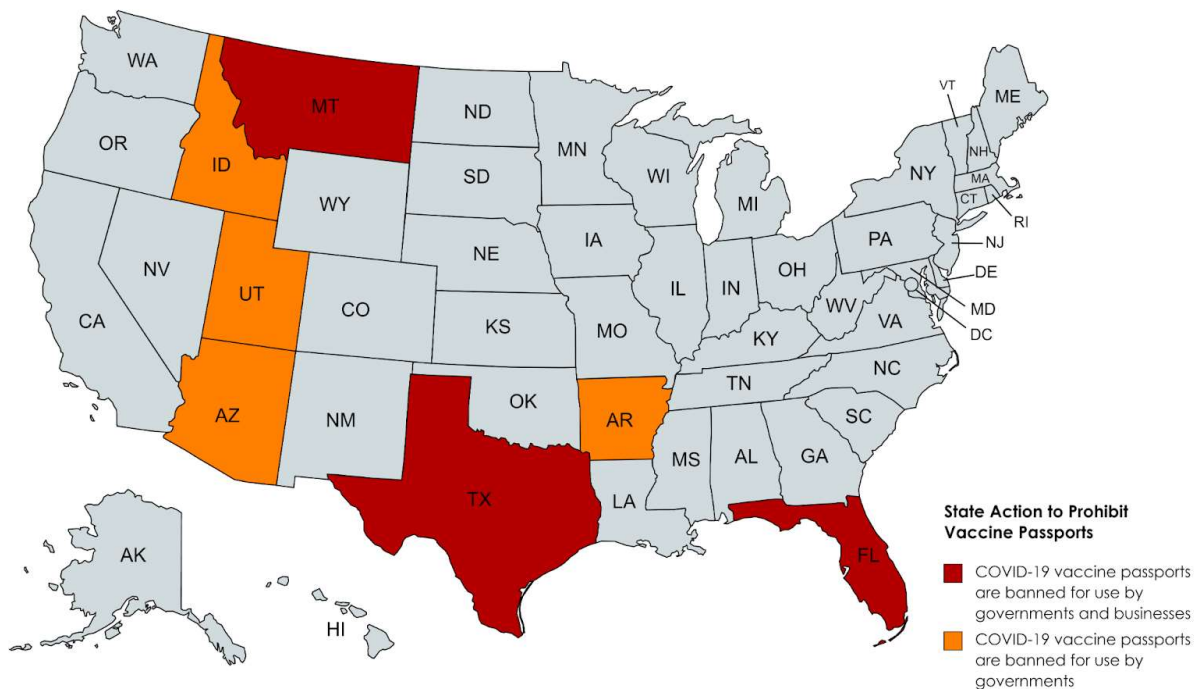
As COVID-19 vaccination rates increase across the US, public health and elected officials are determining next steps to reopen the economy and permit human mobility while protecting lives. One concept that has been commonly termed “vaccine passports” would require people to provide proof of vaccination before traveling, attending in-person events with high possibilities of virus transmission, or conducting daily activities that occur around other people. Throughout this memo, we use the term “vaccine passports,” which is one of a long list of potential names for these requirements including “vaccine credential” or “digital health pass.” As of May 7, 2021, there has not been any guidance on the use of these requirements from the federal government. White House Press Secretary Jen Psaki has stated that the federal government has no intention of requiring proof of vaccination and will leave vaccine credentialing up to private businesses and nonprofits ([Psaki, 2021](#)). Despite, or perhaps because of, the federal government’s hands-off approach, several states and cities have begun using some form of vaccine passports or have initiated measures to prevent the use of vaccine passports in their jurisdiction.

In late March 2021, New York City launched the country’s first vaccine passport program, which they named the Excelsior Pass (Fowler, 2021). This digital pass is a free app that individuals can voluntarily download to prove their vaccination status or current negative COVID-19 test result when entering crowded businesses or large public events. In February, Governor Cuomo began authorizing the limited reopening of stadiums and arenas with the condition that attendees be able to provide a negative COVID-19 test result or proof of vaccination (Millman, 2021). Madison Square Garden, for example, has been using the Excelsior Pass to abide by this regulation and streamline entry for recent games (*ibid*). Currently, the use of this passport is voluntary and developers claim that the app should not be thought of as a “standalone identification document” (Fowler, 2021).

New York is not the only state considering vaccine passports for private businesses or inter-state travel. As of May 7, 2021, Hawaii residents are able to upload their vaccine information to [Safe Travels Hawaii](#), which allows inter-island travel without a negative COVID-19 test result or mandatory quarantine (Morales, 2021). Hawaii Governor Ige has previously said the state is working on testing the technology for wider use (i.e. for tourists), but as of early May no definite plans have been made (Drees, 2021). In addition to New York and Hawaii, states such as North Carolina, Illinois, Connecticut, and California have been contemplating varying levels of vaccine passports (*ibid*). However, most states appear to agree that it is too early to implement vaccine passports while people are still in the process of getting vaccinated (Amobi, 2021).

To prevent similar programs from occurring in their states, a number of governors and legislatures have signed executive orders or passed legislation in 2021 to prohibit the use of vaccine passports. The map below displays the states as of May 21, 2021 that have passed a ban on vaccine passports. Despite the relatively few states that currently have bans, legislation to implement similar bans has been introduced in the majority of state legislatures across the country (Negovan, 2021). The strictest bans in Montana, Texas, and Florida prohibit both governments and private companies from requiring proof of vaccination, while the remaining states simply ban the government from requiring proof of vaccination.

While concerns over vaccine passports exist across the political spectrum, the issue has become politicized, with Republican leaders acting to prevent their use. Citing concerns over personal liberties and discrimination based on vaccine status, several Republican governors and legislatures have enacted bans on vaccine passports (see Figure 1). The only states in which vaccine passports have been implemented are Democratically controlled. Those who advocate for vaccine passport use tend to point to the health and safety benefits of these passports as the country reopens the economy while the COVID-19 virus continues to circulate.



**Figure 1:** States with vaccine passport bans. Created with mapchart.net.

### Washington State Landscape

On May 3, 2021, Governor Jay Inslee presented new regulations for “vaccinated sections” which apply to sporting venues, graduations, churches, and other large venues. The concept allows vaccinated individuals to sit together without social distancing regulations (Westneat, 2021). This new guidance is only for counties in Phase 2 or 3 of reopening and can be applied to both indoor and outdoor venues. The announcement enables venues and religious institutions to increase their capacity to 50% or up to 22,000 people, whichever is smaller. This new policy outline does emphasize that capacity is limited to 9,000 people for unvaccinated people and is applicable only to venues, not restaurants (Q13 News Staff, 2021). Individuals in vaccinated sections must provide proof of vaccination by showing documentation. Acceptable forms of proof of vaccination include vaccine cards, photos of a vaccine card, electronic health records, or state immunization information system records (Inslee, 2021). Recently, state and private universities have taken steps to clarify the process to return to in-person teaching and learning. UW, WSU, Seattle University, Pacific Lutheran University, Whitman College, and other institutions have issued a COVID-19 vaccine requirement for students to return to campus in the fall (KIRO 7 and Ko, 2021). This vaccine requirement is being added to the existing requirements for MMR, Meningococcal, rabies, and other vaccines that are already required to enroll in university (WA DOH, n.d.).

Requiring proof of vaccination under current guidelines is logistically complex for venues, places of worship, airlines, and campuses. Implementing a system with digital vaccine passports would require appropriate technology for tracking and scanning passports as well as increased personnel time for managing requirements and troubleshooting technological difficulties. As of early May, at least 17 private companies are launching mobile, digital vaccine passport applications. Washington State is unlikely to choose one single mobile system, which might lead to different companies using different systems.

### **Types of Vaccine Passports in Washington State**

As of May 3 2021, the Governor’s Office has provided guidance to safely increase capacity for spectator events and faith-based organizations. The following table summarizes the accepted methods of proving vaccination status for attendees of these events (Inslee, 2021). No additional forms of identification are required.

<b>Type</b>	<b>Description</b>
Paper Vaccination Card	The paper card must include the name of the vaccine recipient, the type of vaccine received, and the last dose administered.
Photocopy of Paper Vaccination Card	The same rules apply as above.
Electronic Photo of Vaccination Card	The same rules apply as above.
Digital Documentation from Healthcare Provider	This digital proof would need to come from a healthcare provider electronic health record or state Immunization Information System record.

### **Risks and Benefits of Vaccine Passports**

The current political climate has rendered vaccine passports challenging to implement within the public sector. As a result, passports would likely only be required by businesses or nonprofits within the private sector. Requirements like these carry unique risks and benefits as outlined below.

## **Risks**

### **1) Widening Inequities**

Vaccine distribution has been inequitable, as distribution prioritized those in living situations or occupations which are disproportionately composed of people who are white, rather than essential workers who are more likely to identify as a person of color (DOH, 2021; Rogers et al., 2020). In Washington State, vaccine prioritizations that were intended to protect highly vulnerable groups ultimately favored white and wealthy populations, exacerbating inequities that have persisted throughout the pandemic. Communities of color have faced disproportionately high infection rates and low vaccination rates, while white communities with greater access and mobility have been disproportionately overserved in the vaccine rollout (DOH, 2021; anonymous interview, 2021).

At least until Covid-19 vaccines have been widely available and accessible for several months to allow people to become fully vaccinated, a vaccine passport mandate will continue to widen societal socioeconomic and racial gaps between those with the resources and knowledge to access the vaccine and those without. Widening this gap will cause greatest harm to those most affected by the pandemic (Li, 2021; Herlitz et al., 2021). Even as vaccines become widely available, communities of color may still be more reluctant to accept the vaccine due to historical and current medical and institutional abuse. Requiring proof of a vaccine to participate in essential activities may infringe upon the autonomy of marginalized groups and become a de

facto mandate. In addition, vaccine passports may impose on personal privacy in a way that is especially dangerous to people who are undocumented. One user of New York's Excelsior Pass noted that fraudulent activity was prevented by presenting identification with the passport, posing a barrier to those who do not have identification and possibly presenting an invasion of privacy (Fowler, 2021).

## **2) Vaccine Passports May Inadvertently Encourage Overconfidence and Stigmatization**

Implementing vaccine passports in heavily trafficked areas may give individuals a false sense of security, potentially resulting in an increase in risky behavior. Those who are allowed access to locations that are controlled through vaccine passports may neglect to take additional precautions such as wearing masks and washing hands. As of May 2021, research has found that vaccination reduces the risk of transmission by approximately 50% (Harris et al., 2021). Although current research finds that the risk of transmission is reduced when compared to non-vaccinated individuals, passports may instill a false sense of safety and facilitate public gathering when it may not be safe to do so. Additionally, research shows that if a vaccinated individual contracts COVID-19, the chances that the recipient will experience severe symptoms is significantly reduced (ibid). This means that the virus could continue to circulate undetected. There is also uncertainty surrounding the vaccine's immunity durability, with current research suggesting the vaccine is effective for six months. Vaccine passports may circumvent these issues by including expirations and updating policy restrictions as further studies are conducted to understand the vaccine's efficacy. Finally, variants of the virus are constantly evolving across the globe, and research has only recently begun to emerge on the vaccine's effectiveness at reducing transmission or symptoms of these variants (CDC, 2021).

Another potential effect of implementing vaccine passports is stigmatization of those who are unable or unwilling to receive the vaccine. Passports would require individuals to admit their vaccine status whenever they go to a public space with these requirements. This could result in the formation of in-groups and out-groups based on vaccination status and access to certain events. Facilitating group formation could lead to additional intergroup conflict between those who have and have not been vaccinated. Behavioral scientists suggest that being publicly stigmatized in this way may lead to negative emotional and behavioral outcomes for individuals (Bos, 2013).

## **3) Threatening Medical Privacy**

Because the creation and implementation of vaccine passports are at the discretion of private entities, this sector has significant potential for collecting and protecting users' private medical data. To ensure this is done voluntarily, consumers ought to be able to control the type and quantity of data they share when presenting their vaccine passports. In addition, private entities must be transparent with their use of consumer data, including whether they will retain or collect it (Bloomberg Law, 2021). Additionally, whether vaccine passports violate the Health Insurance Portability and Accountability Act (HIPAA) is determined by whether there is healthcare provider involvement. If consumers upload their own medical information, including their vaccination status, app developers may be exempt from HIPAA protocol (Bloomberg Law, 2021). Lack of federal guidance in the vaccine passport sphere may also create issues with medical privacy. States independently creating requirements may result in a hodgepodge of vaccine passports, leading to multiple digital applications. Since each app provides an opportunity for personal data breaches security risks increase with the number of apps

### **Privacy: A Global Issue**

In a collaboration to study the impacts of the vaccine, the Israeli government has agreed to trade the population's medical data in exchange for millions of Pfizer vaccines (US News, 2021). Israeli citizens do not have the choice to opt out of this agreement (ibid). Despite the benefits of having one of the highest vaccination rates in the world as of May 8 2021 (Our World In Data, 2021), Israeli health officials have raised concerns about the privacy repercussions of pharmaceutical corporations possessing identifying medical information (NPR, 2021).

(ibid). Security, privacy, and safety must be prioritized in each engineering processes, which would be more easily facilitated by federal vaccine passport standards.

#### **4) Increasing Vaccine Skepticism**

Since mid-April, when COVID-19 vaccines became available to all United States residents, the average number of vaccine doses administered per day has been decreasing despite only 60% of US adults having received at least one dose as of May 21, 2021 (The New York Times, 2021). Many are considering whether COVID-19 vaccine hesitancy is to blame. As discussed in the Communication Strategies memo, vaccine hesitancy is caused by politicization, misinformation, distrust in medical institutions and pharmaceutical companies, and concerns about the rapid development of the vaccine. All three vaccines currently administered in the US are done so through an emergency use authorization (EUA) and are not approved by the Food and Drug Administration (FDA) at this time (HHS, 2021). Although the vaccines will apply for formal Federal Drug Administration approval in the coming months and years, and all vaccines currently being administered in the US have been through clinical trials, some are concerned that they have not been tested rigorously enough. A direct corollary of this is that mandating vaccine passports may increase skepticism among those who are wary of the vaccines' long-term effects.

## **Benefits**

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### **1) Encouraging Vaccine Uptake**

Businesses requiring vaccine passports may be able to incentivize some individuals to receive the vaccine. After 14 months of pandemic related closures and restrictions, people are eager to return to in person activities with their social networks. Requiring a vaccine for desirable activities may be a necessary nudge for some individuals, potentially increasing vaccine uptake as the push for encouraging as many people as possible to be vaccinated continues. Vaccine passports are one tool for businesses and nonprofits to increase vaccine uptake. Higher levels of vaccine uptake will protect more people from the virus and allow the economy to grow.

### **2) Expediting Reopening of Economy**

The pandemic has devastated the economy, and impacts have been disproportionately felt by communities of color. In Washington State, unemployment claims peaked at 711,945 claimants in May 2020, which is over twice as many claims filed during the height of the great recession over a decade earlier (Washington State Employment Security Department, 2021). The sector that faced the most significant impact was leisure and hospitality with over a 20% decrease in employment. Other sectors hit the hardest include manufacturing and customer-facing service positions, which still face a relatively slow recovery when compared to those which are more conducive to working from home, such as tech (ibid). As of December 2020, 2,369 businesses within the food service industry have permanently closed in Washington State since the beginning of the pandemic, with small and immigrant-owned businesses being hit the hardest (King 5, 2020). Some public leaders assert that implementation of vaccine passports will allow local economies to reopen more quickly. For example, by May 19, 2021, New York State plans to reduce many of its restrictions on public gatherings with the stipulation that large events (defined as more than 250 people inside and more than 500 people outside) require vaccine passports for entry ([forward.ny.gov, n.d.](https://www.forward.ny.gov/n.d)). Reopening the economy safely will help decrease unemployment and improve US residents' mental health.

### **3) Increasing Convenience for Certain Groups**

One of the biggest arguments in favor of app-based vaccine passports is their ability to centralize individuals' passports in a digital setting, which is easier to keep track of than the paper vaccination card provided by the CDC. A digital passport would also allow users to easily update their vaccine history as they

received booster shots. However, this method favors those who are tech savvy and requires reliable access to a mobile device. Even those who traditionally have access to technology may face problems if their device fails or they experience other technical difficulties. Even so, a digital credential could reduce the administrative burden on local health clinics by limiting the number of patients frequently requiring replacement vaccine cards, and facilitating an easier and more convenient vaccine tracking system. Additionally, vaccine passports allow people who have been vaccinated to enjoy benefits not afforded to those who have not received the vaccine. For example, the Seattle Mariners have added vaccinated seating sections, which can be seated at a higher percentage capacity with no social distancing restrictions (Washington State Governor's Office, 2021). Washington State's spectator event guidelines specify that facilities should not prohibit separate seating areas to unvaccinated individuals (ibid). This rewards-based approach, which provides additional benefits for vaccinated individuals, is a stronger motivator for reinforcing desired behavior (such as receiving the vaccine) in comparison to a punishment-based approach which removes the benefits or the rights of those who are not vaccinated (Guitart-Masip et al., 2014).

#### **4) Improving Vaccine Tracking Within the US**

Compared to peer countries, the US currently has an inadequate tracking system to account for those who have received vaccinations (AMA, 2021). There is already a market for counterfeit or blank white paper cards, which are currently the country's only form of individualized vaccine tracking. A well-designed digital vaccine passport could more accurately and reliably identify vaccine recipients and make forgery more difficult. As noted above, the federal government has no plans to require vaccine passports or to even provide technical assistance for jurisdictions that wish to do so (ibid). The absence of federal guidance increases the likelihood that there will be a heterogeneous patchwork of policies throughout the country. Current versions of vaccine passports within the United States, such as the Excelsior pass, have been digitized. Until there are federal-level efforts to build a "digital infrastructure" that would more accurately and consistently track vaccine uptake across a variety of sectors and geographies, there will be issues with falsification resulting from having only physical cards to track vaccines, leaving the potential benefits of digital vaccine passports unrealized.

### **Strategies for Successfully Implementing Vaccine Credentials**

#### *Framing*

How vaccine requirements are discussed and marketed can greatly influence the way they are perceived by the public. Both the specific language used to describe these requirements and the historical context of vaccine requirements could be used to accurately describe them in a positive way. First, several different names for these policies have been circulated. The word "passport" has an international connotation, yet these permits would also be used to regulate behavior within US borders. One phrase recommended by the American Medical Association is the term "digital health pass." Another recommended phrase is "licensing," since this practice would be akin to how drivers' licenses are used to better assure that a driver is minimizing danger to those in the vicinity (AMA, 2021). Alternatives include "credential," "safe pass," or "certificate." Names that include "safe" or "health" would help people draw the connection between the requirement and their own health and safety.

Another key framing lens includes reminding the public that vaccine requirements are commonly used tools for international travel and safety in public schools. The concept of requiring a vaccination to prevent disease before traveling and potentially exposing others has been safely and effectively used for decades. Reminding users of these historical practices will help people understand that this is a routine and normal action for participating in society.

### *Remove Barriers and Connect People with Vaccines*

To best address some of the equity concerns outlined above, it is critical that a business or nonprofit make it as easy as possible for patrons to demonstrate their proof of vaccination. This means both that the vaccine proof should be simple and present few barriers to provision or verification, and that vaccines should be fully available and accessible to all patrons and target populations. Accepting proof of vaccination through multiple platforms before the event or service, as well as allowing proof to be shown upon arrival either digitally or with a hard copy would all improve accessibility. Transparency and access will also be improved when businesses are clear in their expectations for use of these credentials, posting such expectations on their websites for people to consult before they attempt to comply. In addition to making proof of vaccination simple, businesses benefit from reducing barriers to vaccination itself by offering resources to get vaccinated.

### *Offer Choices*

Finally, behavioral science shows that how service providers offer choices affects how people behave. As previously discussed, the Seattle Mariners and other sporting venues have begun setting aside discounted seats specifically for people who are fully vaccinated. In theory this system incentivizes people to change their behavior and use vaccine credentials if they deem it important to be in that section of the park. Offering this option to customers when they purchase their tickets ahead of time can serve as a “nudge” to encourage people to get vaccinated.

### **Conclusion**

The risks and benefits laid out above are meant to guide organizations as they weigh the potential for implementing vaccine passports in their places of business. We do not offer a blanket recommendation because our analysis does not find that a one size fits all approach is appropriate for all businesses in the current climate. Without federal guidance and considering the highly charged political climate on this issue, organizations will need to determine the best way to move forward. Organizations should evaluate the positionality of their business, the geographical location in which they operate, and what their industry partners are doing to determine the best way to move forward to protect customers and employee health and reopen their businesses. This will look different across regions, and different approaches to vaccination will be received differently across populations. We hope this memo provides useful considerations in making this decision.



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## Conclusion

As of May 12, 2021, more than 58% of adults in the United States have received at least one dose of a COVID-19 vaccine<sup>4</sup>. Earlier this week, 12-15 year olds were approved to receive the Pfizer-BioNTech vaccines, widening the scope of the country's vaccination campaign. To reach President Biden's goal of vaccinating 70% of US adults by July 4 and achieving vaccine uptake levels adequate to return to in person activities safely, it is critical that every resident be engaged and encouraged to receive a COVID-19 vaccine. Since the height of peak mass vaccination in mid-April, average daily doses administered have fallen by over one million doses per day (ibid). This slowdown likely means that the remaining US residents are wary of vaccines or have little incentive or motivation to get a vaccine.

Governments and employers have a role to play in encouraging their constituents and employees to protect themselves and their communities from COVID-19. Both can employ the six communication strategies outlined above to improve trust and relationships now and in the future. Using trusted groups identified in the stakeholder analysis, institutions can work to empower communities to protect themselves from COVID-19. In addition, employers of all sizes have a number of tools at their disposal to protect their workforce and encourage their employees to get vaccinated. These include offering information and resources, paid time off or financial incentives, vaccine mandates, or hosting vaccine clinics in their workspaces. Employers also have room to explore the potential for requiring proof of vaccination among their customers. Ultimately, the decision to pursue these strategies will depend on the positionality of the company and the landscape they are operating in. Considering how these strategies will be perceived by their target audience (whether that is their employees or customers) and what resources the business has available will determine what strategy is appropriate for their unique business.

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<sup>4</sup> The New York Times. May 12, 2021. "See How Vaccinations Are Going in Your County and State." <https://www.nytimes.com/interactive/2020/us/covid-19-vaccine-doses.html>.