



PRIORITIZING EQUITY IN COVID-19 VACCINATIONS

Promising Practices from States to
Reduce Racial and Ethnic Disparities

AUTHORS

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Introduction

Systemic inequities underpin disparities in COVID-19 risk and disease burden among historically marginalized populations across the United States.¹⁻⁵ Black, Latinx, and American Indian populations have borne a disproportionate burden of the pandemic including in risk of exposure, transmission, case rates, severity of illness, and mortality, and those inequities are now extending to disparities in COVID-19 vaccination rates.^{6,7} Despite increased risk and disease burden, data from states reporting race and ethnicity show Black and Latinx populations have received vaccinations at lower rates compared to their shares of total COVID-19 disease burden and population.^{8,9} In contrast, non-Hispanic White populations are over-represented in COVID-19 vaccination rates compared to their share of total COVID-19 disease burden and population.⁸ National data reported by the Centers for Disease Control and Prevention (CDC) shows Black and Latinx individuals represent 7.2 and 7.4 percent of total COVID-19 vaccinations, respectively, as of March 25, 2021.¹⁰ These disparities in COVID-19 vaccination rates illustrate an additional COVID-19 health inequity.

Noting the role of systemic racism in COVID-19 disparities, the Biden Administration has detailed priorities to ensure equitable access to COVID-19 vaccines across the country and Governors continue to refine efforts to center equity in state vaccination plans.^{11,12} In a prior qualitative analysis of publicly available state and territorial COVID-19 vaccination plans, the Duke-Margolis Center for Health Policy and the National Governors Association found some states planned to adopt equity as a guiding principle, established committees to determine equitable allocation, and initiated or strengthened community engagement, including with tribal communities, among other approaches to improve vaccination rates among historically marginalized populations.¹³ In addition, many Governors have appointed health equity taskforces, including state and local agencies and community partners, to plan and reassess COVID-19 response efforts.

As vaccine availability increases and eligibility expands to meet the goal of vaccinating as many individuals as quickly as possible, prioritizing equity along with speed will be essential to ensuring access to and uptake of COVID-19 vaccines across all populations. In this brief, we highlight state-level strategies that aim to improve reporting of race and ethnicity data in vaccine distribution, use data to plan for allocation and distribution according to need, overcome systemic inequities that lead to differential access to COVID-19 vaccinations, and build trust in COVID-19 vaccines and COVID-19 vaccination processes. Governors may consider these strategies as ways to increase equity as they expand eligibility for COVID-19 vaccinations to all population groups.

KEY TAKEAWAYS:

- ▶ State and federal leaders need to strengthen existing collaborations in all three areas – data, access, and community leadership – to meet the goals of equity and speed.
- ▶ Reporting race and ethnicity data is a foundational step to identify allocation and distribution patterns and reassess allocations to reach historically marginalized populations, who are bearing a disproportionate burden of the pandemic.
- ▶ Differential access to COVID-19 vaccination sites is a root cause of disparities in COVID-19 vaccination rates.
- ▶ Strategies that reduce or remove systemic barriers to access, support community leadership to facilitate informed decision-making, and increase data collection, reporting, and use to identify and reassess allocation patterns will help states vaccinate as many people as quickly and as equitably as possible.

Considerations for States

As states receive more COVID-19 vaccines and extend eligibility to all adults, vaccines will need to be delivered and administered as quickly and as equitably as possible.¹⁴⁻¹⁶ While extending eligibility is an important first step, intentional efforts to prioritize community leadership and reduce differential access to COVID-19 vaccinations through place-based approaches are critical to improving vaccination rates among historically marginalized populations. States may consider adopting state-level strategies we highlight in this brief, along with other state strategies described in a recent Kaiser Family Foundation analysis, as they continue to implement and refine their COVID-19 vaccination plans to increase equity in vaccination rates.¹⁷ The illustrative state examples in this brief reflect strategies as of March 23, 2021 (see Appendix A). We summarize state-level strategies into four primary approaches:

- ▶ **Approach 1:** *Collecting and reporting race and ethnicity data to inform allocation and distribution decisions.* Strategies in this approach focus on improving collection and reporting of race and ethnicity data to identify disparities in allocation and distribution.
- ▶ **Approach 2:** *Using race and ethnicity data to allocate COVID-19 vaccines according to need.* Strategies in this approach address inequities in allocation and availability of COVID-19 vaccines among communities exhibiting the greatest need.
- ▶ **Approach 3:** *Reducing or removing systemic barriers to increase access to COVID-19 vaccination sites.* Strategies in this approach mitigate the effect of systemic barriers that result in differential access to COVID-19 vaccines among historically marginalized populations.
- ▶ **Approach 4:** *Enabling community leadership and engagement to increase COVID-19 vaccine confidence and uptake.* Strategies in this approach aim to amplify existing community-based strategies to increase acceptability, trust, and access among historically marginalized populations.



APPROACH 1: Collecting and reporting race and ethnicity data to inform allocation and distribution decisions

Incomplete and inconsistent collection and reporting of race and ethnicity data has been a widespread challenge during the pandemic, including the reporting of COVID-19 cases, hospitalizations, and mortality rates.^{18,19} This challenge now extends to reporting of race and ethnicity information for COVID-19 vaccine administration rates due to several contributing factors. First, requirements and workflow capacity to collect and report data elements vary by COVID-19 vaccine provider, including health systems, mass COVID-19 vaccination sites, pharmacies, and federal providers such as the Indian Health Service (IHS) and Veterans Health Administration (VA). There are variations in establishing a “culture” of collecting and reporting this type of data across providers. Some states have reinforced requirements around reporting this type of data, while others have faced regulatory barriers to collecting and reporting the data publicly. In addition, entities such as IHS and VA report data directly to the federal government and, to date, states have had limited insight into COVID-19 vaccination rates for populations served by these entities, resulting in gaps in understanding statewide COVID-19 vaccine uptake. Improvements to systematic data collection and reporting efforts to capture race and ethnicity data and understand gaps will be critical as the country moves to expand eligibility to larger proportions of the population, and states increasingly rely on multiple types of COVID-19 vaccination providers. States may consider the following strategies to improve collection and reporting of race and ethnicity data and identify disparities in allocation and distribution.

STRATEGY 1: Publicly report race and ethnicity data to increase transparency. An analysis conducted by the Kaiser Family Foundation shows, as of March 15, 2021, 44 states are reporting COVID-19 vaccination rates by race and ethnicity.⁸ Publicly reporting county-level and state-level data can show patterns of allocation and administration, including which populations are receiving COVID-19 vaccinations, where access gaps exist, and what type of subsequent allocation adjustments are needed. However, there are significant variations in the quality and completeness of the data. For example, a recent federal study shows race and ethnicity is unknown or not reported for close to 50 percent of people who have received a first dose.²⁰ In addition, many states include race data, but lack ethnicity data.²¹

New Mexico and **Washington** are examples of states that are publicly reporting race and ethnicity data by total population, percent partially vaccinated, and percent fully vaccinated. **Washington** includes an additional stratification by age group, which facilitates identifying coverage gaps among eligible population groups (e.g., age-based priority groups) and informs changes to distribution strategies.²²

STRATEGY 2: Create incentives for COVID-19 vaccine providers to collect and report race and ethnicity data. States can create incentives to encourage providers to improve the collection, reporting, and quality of race and ethnicity data for COVID-19 vaccine administration. Although vaccine systems typically ask about race and ethnicity, vaccine providers or recipients may skip or select the “unknown” race and ethnicity category during intake processes. States may opt to require vaccination providers to collect and report these data.

For example, the **Virginia** legislature enacted a law that requires any person who administers a COVID-19 vaccine to collect data, including race and ethnicity data, and report these data to the Virginia Immunization Information System.²³ To change the “culture” of reporting these data, states are using many strategies to create incentives that encourage reporting among providers. **North Carolina** introduced an “equity bump” and community event allocation strategies to increase supply allotments for counties that have larger populations of historically marginalized populations, particularly older populations when the state was focused on vaccinating those age 65+, and to increase access for historically marginalized populations (see Box 2). In addition, the state is requiring all providers to report race and ethnicity data for COVID-19 vaccination. Due in part to these measures, **North Carolina’s** COVID-19 vaccination race and ethnicity data are the most complete among states. To promote shared accountability, these data are also shared on the state’s public COVID-19 vaccine dashboard, which is updated daily with state and county-level data.²¹



APPROACH 2: Using race and ethnicity data to allocate COVID-19 vaccines according to need

The rollout of COVID-19 vaccines has reinforced racial and ethnic inequities and raises ethical considerations about the best strategies to allocate COVID-19 vaccines to address these and other inequities.²⁴ While age-based prioritization captures increased risk of COVID-19 disease burden among older adults, this prioritization strategy does not account for epidemiological patterns among historically marginalized populations. For example, historically marginalized populations have lower life expectancy than non-Hispanic White populations and are experiencing excess COVID-19 mortality rates across all age groups, including among younger adults.²⁵ Recent projections show overall life expectancy has dropped by one year in the US due to the pandemic, yet life expectancy

reductions among Black and Latinx populations are three to four times greater, respectively, than in non-Hispanic White populations.²⁶ In addition, initial phases of vaccine eligibility did not uniformly include groups disproportionately represented by historically marginalized populations, including essential workers, people with high-risk medical conditions, and people who are incarcerated.^{27,28} Recent federal initiatives, including the Federal Retail Pharmacy Program and Community Health Centers Vaccination Program, aim to reach populations with higher risk of exposure and risk of severe COVID-19 including people experiencing homelessness or living in congregate settings, agricultural industry workers, and adults with chronic medical conditions.^{12,14,30} As states are expanding eligibility to all adults, states should consider intentional strategies to reduce inequities in allocation and availability of COVID-19 vaccines to priority locations.

STRATEGY 1: Use CDC’s Social Vulnerability Index and census data to direct resources.

States can use different national data sources, including CDC’s Social Vulnerability Index (SVI) and census data, to identify communities that need additional COVID-19 vaccination sites and resources.

Many states, including **Connecticut, New Mexico, Michigan, Massachusetts, Tennessee, and Kansas**, have used SVI or other indices (e.g., area deprivation index) to identify communities that should receive increased allocations from the outset of the COVID-19 vaccination process. Some states, such as **Connecticut, Kansas, Michigan, and Massachusetts**, include SVI in each state’s weighted allocation calculation to identify communities in the state with the highest COVID-19 disease burden that need additional outreach, allocations of the COVID-19 vaccine, or resources.³¹ In addition, **New Mexico** has reserved 25 percent of the state’s COVID-19 vaccine allocation in an “Equity Reserve” for counties with high SVI. **California** is allocating 40 percent of all vaccinations to 400 ZIP codes with high SVI that have received less than 20 percent of total COVID-19 vaccinations to date.³² In addition, **Kansas** earmarked vaccine supply for meatpacking workers, 60 percent of whom are from Latinx or immigrant communities. **Connecticut** has developed a “targeted ZIP code” dashboard and each week publishes how well vaccine providers are doing in vaccinating the populations living in those ZIP codes. **Alaska** has worked with communities to ensure clinic locations are available in neighborhoods with higher SVI.

STRATEGY 2: Use geographic information systems or ZIP codes to establish COVID-19 vaccination sites in or near communities with the greatest need. Geographic information system (GIS) mapping can help states ensure specific populations have vaccination sites in their neighborhoods.³³ Such sites may include federally qualified health centers (FQHCs), pharmacies and other locations where communities currently receive health care services. Alternatively, states can use ZIP codes to prioritize communities showing greatest disease burden and lowest access to COVID-19 vaccination appointments.³⁴ For example, individuals who live in these ZIP codes can register before other individuals among eligible groups.

Indiana is using GIS mapping to make recommendations for vaccination site locations, and using health information records to identify data on health conditions. Some states, including **Maryland** and **Pennsylvania**, have produced publicly available GIS maps that show where COVID-19 vaccination sites are located.^{35,36} **Michigan** has adopted a distance and time performance measure to track whether all residents are within a 20-minute drive to a COVID-19 vaccination site.³⁷ **Utah** has also used ZIP codes that reflect communities with the greatest economic and social need to prioritize in the state’s vaccine distribution strategy.

STRATEGY 3: Prioritize equity-focused eligibility criteria to align to disease burden: States can track COVID-19 disease burden by race and ethnicity by examining case rates, hospitalization rates, and mortality rates. States can use these data to inform allocation plans to align eligibility to disease burden.

For example, **North Dakota** used COVID-19 hospitalization rates, case rates, mortality rates, and SVI data to identify communities that needed additional allocations of the COVID-19 vaccine and lowered the age limit for American Indian individuals to 50+ (see Box 1). **Rhode Island** identified seven ZIP codes with high-density that represented 20 percent of the population but 40 percent of COVID-19 hospitalizations. In response, the state reduced the age limit to 18+ in one community with a 20 percent COVID-19 testing positivity rate and reported a 70 percent case rate reduction since the launch of the pilot. High-density can often serve as a proxy for poverty and racial and ethnic composition in a state. **Minnesota** and **Washington** lowered the age cut-off to 50+ for people living in multi-generational households, and **Alaska** expanded eligibility to people 16+ living in multi-generational homes or communities where the majority of homes lack running water or access to a septic tank.³⁸ Many states are now moving to open eligibility to all adults; however, continued focus to ensure historically marginalized populations remain a priority group to be vaccinated is needed.

STRATEGY 4: Reassess staff capacity to evaluate data and inform allocations: State public health agencies have played a critical role in the country's COVID-19 response efforts, but remain underfunded and understaffed. While increasing workforce capacity benefits the overall state's COVID-19 response, some states have increased capacity to support continuous improvement of data monitoring and evaluation to inform allocation decisions.

For example, **Virginia** has added five full-time staff to a preexisting health equity team of over 60 people to support state-level data and enrollment efforts. **North Carolina** has established a team whose responsibility is to track and monitor COVID-19 vaccination data. **New Mexico** has developed a data-focused team to monitor and evaluate progress toward equity in COVID-19 vaccine distribution. **Wisconsin** has established the COVID-19 Response Corps Training and Service Program to increase workforce capacity, including for data analysis, among local health departments across the state.³⁹

BOX 1 | State Spotlight: North Dakota – Aligning vaccine allocations to COVID-19 disease burden among American Indian populations

As part of its statewide vaccine rollout effort, **North Dakota** has focused on strategies to increase allocations to American Indian communities in the state. Below are two key strategies they implemented to meet this goal.



- ▶ **Adjusting age-related eligibility to reach American Indian populations:** North Dakota convened a COVID-19 vaccination ethics committee when developing the state's COVID-19 vaccination allocation and distribution plan. During this process, the committee reviewed COVID-19 disease burden data and noted that American Indian individuals were hospitalized and dying at younger ages compared to the general population, and represented 40 percent of COVID-19 mortality in the state. In earlier phases of the pandemic, the state diverged from the federal recommendations to lower the age requirement for American Indian populations to 50+ to account for the increased risk of COVID-19 disease severity and mortality.
- ▶ **Ensuring predictable supply to providers and increasing supply to providers serving American Indian populations:** North Dakota has enrolled providers at 402 sites across the state, including pharmacies, rural health centers, colleges, tribes and other providers. The state has a central warehouse where they receive COVID-19 vaccines, which arrive in packs of 100 or 975 doses depending on the vaccine, and break down shipments to smaller allotments to reach all parts of the state, including low-population density areas. The state is rotating weekly delivery of COVID-19 vaccine allotments by type of provider (e.g., health system, local public health, and pharmacy), but distributing weekly COVID-19 vaccine allocations to providers in tribal communities to ensure consistent, readily available supply. The state also used the CDC's SVI to identify three counties with disproportionate COVID-19 disease burden and risk and applied a multiplier to increase vaccine allocations to these counties, which include tribal communities.



APPROACH 3: Reducing or removing systemic barriers to increase access to COVID-19 vaccination sites

Differential access to COVID-19 vaccinations among historically marginalized populations illustrates the role of systemic inequities and barriers in the health care system and beyond.^{4,5,40,41} Systemic barriers include limited to no access to: transportation options to reach COVID-19 vaccination sites, Wi-Fi access for online registration, linguistically and culturally accessible COVID-19 vaccination providers, paid time off to go to a vaccine appointment during business hours, and existing health care networks, including pharmacies and health systems. Additional access barriers can result from the way COVID-19 vaccines are allocated, which determine who is eligible to begin the process of registering and seeking a COVID-19 vaccination appointment (see Approach 2). Furthermore, increasing availability of COVID-19 vaccination sites without partnering with trusted leaders may not translate to accessibility. For example, reports show that a majority of individuals accessing COVID-19 vaccination sites in neighborhoods with a high proportion of low-income residents or historically marginalized populations are individuals living outside of these communities.^{42,43} Increasing vaccination sites that are at trusted locations or organized by trusted members of the community is a key component to addressing disparities in access for historically marginalized populations. States should consider the following strategies to reduce systemic barriers and ensure historically marginalized populations are able to access COVID-19 vaccination sites.

STRATEGY 1: Establish community-led mobile and pop-up COVID-19 vaccination clinics to reach people in their communities. Establishing COVID-19 vaccination sites at trusted spaces where people go regularly, including churches, schools, parks, and community centers, can increase the likelihood of individuals accessing COVID-19 vaccines and result in better uptake. Mobile or pop-up COVID-19 vaccination sites can supplement mass COVID-19 vaccination sites and pharmacy- or hospital-based sites to better serve communities or priority population groups who have reduced access to pharmacies, FQHCs, and health systems. For example, a recent community-based pop-up COVID-19 vaccination clinic in North Carolina showed that facilitating access to COVID-19 vaccination sites can increase COVID-19 vaccination rates among historically marginalized populations (see Box 2).⁴⁴

California has implemented mobile sites to vaccinate individuals who are unable to access existing sites, including farmworkers and meatpacking workers.⁴⁵ **Michigan** has deployed emergency medical technicians to vaccinate many communities, including immigrant and other historically marginalized populations. **Kansas** piloted use of mobile sites to prepare for larger scale rollout of mobile sites to vaccinate individuals in communities with high SVI. Many localities, including Baltimore, Washington, D.C., Philadelphia and New York City, have also started implementing mobile or pop-up COVID-19 vaccination strategies that prioritize reaching individuals in their homes or communities.

STRATEGY 2: Reserve appointments for community-based organizations to make appointments on behalf of individuals and reduce barriers to registration. The digital divide—meaning the gap between individuals who have access to internet and computer and individuals who lack access—is a reality for many people in the US. Many states have implemented vaccine provider locators, eligibility tools to inform the public, pre-registration sites, and multi-lingual online or hotline platforms, but these strategies require additional efforts to increase vaccine access among historically marginalized populations. For example, efforts to reduce registration barriers by providing digital codes to community-based organizations (CBOs) have resulted in misuse by individuals who are not part of the intended population group accessing reserved appointments.⁴⁶ States may also consider walk-up sites, which would remove the need for registration, but this strategy may inadvertently worsen equity without additional strategies that mitigate systemic barriers to access. In addition to overcoming the digital divide, strategies should consider reducing other registration barriers, such as time to register for appointments when they are first released.

In **Colorado** and **North Carolina**, community organizations have received funding to support registration activities, including for door-to-door registration for vaccine appointments. In addition, both states have reserved vaccine allotments for community-based organizations to host community events that reach historically marginalized populations. In **North Carolina**, a portion of the state's vaccine allocation are set-aside for vaccine events where appointments are often set-aside for individuals from historically marginalized populations (see Box 2). In addition, the state has reserved half of appointments at a FEMA site for historically marginalized populations. Localities, such as Washington, D.C., have used ZIP codes to increase access to appointments among Black and Latinx individuals who reside in neighborhoods with a high proportion of historically marginalized populations and the lowest vaccination rates. In addition to using a centralized pre-registration system, **Virginia** recently piloted on-site registration staffed by volunteers.

STRATEGY 3: Build on lessons learned and partnerships developed to increase equitable access to COVID-19 testing. Systemic inequities that lead to differential access to COVID-19 vaccination sites mirror many of the barriers historically marginalized populations continue to experience with access to testing.^{47,48} States can adapt lessons from their experiences expanding community-based testing to reach populations experiencing disproportionate risk and disease burden.

States like **Connecticut** and **Michigan** are using existing testing networks to reduce or remove access barriers among community members. **Connecticut's** robust testing infrastructure is divided into regions, with each including a regional coordinator who reports testing and COVID-19 vaccination targets and data with other regional coordinators across the state. The state is using this testing infrastructure, including existing partnerships with community and faith-based leaders, to increase awareness of opportunities to receive the COVID-19 vaccine among community members. In July 2021, **Oregon** directed \$9 million of CARES Act dollars to more than 170 CBOs to provide culturally and linguistically accessible testing services through community engagement, education and outreach, contact tracing, and social services and wraparound supports.⁴⁹ The state is using this existing community-based testing infrastructure to increase COVID-19 vaccinations. **Alaska** is using existing testing infrastructure to reach remote communities, including Alaska Native communities, for COVID-19 vaccinations.⁵⁰ **Kansas** has partnered with two local leaders — a non-profit focused on leadership and community engagement and a NIH grant-funded learning collaborative led by community partners and the University of Kansas Medical Center — to translate lessons learned from COVID-19 testing efforts & grassroots engagement to COVID-19 vaccinations.

STRATEGY 4: Remove requirements for proof of residency to reduce fear. Having to present state- or government-issued identification to receive a COVID-19 vaccine is a barrier for people without legal status or families with mixed status, people experiencing homelessness, others who do not have state- or government-issued identification, and those who fear and distrust the health system. Though vaccine tourism may present a challenge in certain states or localities, turning individuals away because they cannot prove residency can limit the number of vaccinated individuals, which runs counter to public health objectives. Given these dynamics, some pharmacies, such as Walgreens, are not checking identification at the point of vaccination.

Through Public Health Order 21-01, **Colorado** informed enrolled COVID-19 vaccine providers to not require state- or government-issued identification. Other states including **Virginia** are not requiring proof of residency as a requirement to receive a COVID-19 vaccine, and both **Virginia** and **North Carolina** have specified that COVID-19 vaccination providers cannot turn people away for lack of identification. In addition to not requiring proof of residency, some states including **Utah** are not requiring proof of citizenship, insurance or provision of a social security number.

STRATEGY 5: Increase funding and other supports to ensure access to transportation. Supporting efforts to address social determinants of health, including access to transportation, can mitigate some of the systemic inequities that are apparent even when localities have established COVID-19 vaccination sites in neighborhoods with a high proportion of low-income residents or historically marginalized populations.⁵¹ A recent study of potential COVID-19 vaccination sites found Black residents were more likely to need to drive greater than one mile in 69 counties and greater than 10 miles in 94 counties across the US.^{33,52}

North Carolina has allocated \$2.5 million to local transit authorities to offset the cost of helping people reach vaccination sites that require a car or public transport to access. **Connecticut** will also offer transportation assistance to under-resourced communities to access vaccination sites. **Michigan** has deployed ride sharing to bridge the transportation gap. In **Massachusetts**, Blue Cross Blue Shield of Massachusetts partnered with the Massachusetts League of Community Health Centers to cover \$1 million in transportation costs among community members.⁵³ Many localities are also offering free or subsidized public transit rides or curb-to-curb services for vaccine appointments.^{54,55} Lyft and Uber have also committed to providing free or reduced rides for individuals to reach vaccination appointments.



APPROACH 4: Enabling community leadership and engagement to increase COVID-19 vaccine confidence and uptake

Many social and demographic groups in the US have limited confidence in COVID-19 vaccines for varied reasons including the absence of community engagement during the COVID-19 vaccine development process, limited representation in COVID-19 vaccine trials, and misinformation.⁵⁶ Among historically marginalized populations, historical traumas are often cited as the main explanation for mistrust in the medical system; however, current experiences with racism when interacting with health systems are an underlying root of cause of limited confidence or acceptability rates.⁵⁷⁻⁵⁹ Increasingly, data show that low confidence in COVID-19 vaccines is less of a barrier to vaccinations among historically marginalized populations than access to vaccinations.⁶⁰ For example, while studies in 2020 showed low COVID-19 vaccine acceptability rates among Black, Latinx, and American Indian communities, recent polling shows vaccine confidence ranges between 63 percent and 73 percent among all racial and ethnic groups.⁶¹ In addition, recent community-based COVID-19 vaccination efforts show how reducing access barriers while building trust in COVID-19 vaccines can lead to increased vaccination rates.^{44,62} States may consider the following strategies to amplify existing community-based strategies and partnerships that increase acceptability, trust, and access among historically marginalized populations.^{59,63,64}

STRATEGY 1: Increase funding for trusted community leaders, including clinical providers, community health workers, community-based organizations, and other trusted voices, to lead community-based strategies. Funding CBOs and community leaders who are already leading townhalls, outreach strategies, and COVID-19 vaccination events supports a community-oriented approach that can help increase uptake among historically marginalized populations. For example, including community representatives in COVID-19 vaccination events supports linguistically and culturally accessible promotion of the COVID-19 vaccine and builds confidence among community members. In addition, community organizations can help people register for their vaccine appointments.

Rhode Island used existing health equity zones within the state to increase collaboration among community organizations and the Department of Health. The state used this network to direct \$10 million to community-based COVID-19 response efforts. Local governments in **Nevada, Colorado, North Carolina, and Louisiana** have funded or partnered with community health workers to increase education or support COVID-19 vaccine navigation, including scheduling appointments for individuals that lack access to a computer or Wi-Fi or exhibit lower digital literacy. **Massachusetts** has directed \$1 million to the Massachusetts League of Community Health Centers to fund community-based organizations operating in 20 cities and towns with high COVID-19 disease burden.³¹

STRATEGY 2: Provide clear and science-based information to support informed decision-making. Efforts to reduce misinformation should focus on providing timely, fact-based information that answers questions and concerns and facilitates informed decision-making. Many states are ensuring materials, including FAQs and other resources, are linguistically, culturally, and ADA accessible for communities with limited English proficiency or people with disabilities.

For example, **Massachusetts** has allocated \$2.5 million to a public awareness campaign in 10 languages, reflecting different immigrant communities in the state. The state consulted a 19-person advisory group, including community leaders, to develop the campaign. **Colorado** has partnered with trusted community organizations including FQHCs, CBOs, and faith-based organizations (FBOs) to host weekly events that address the specific concerns among historically marginalized populations, and to organize COVID-19 vaccination events with leaders from the communities these events intend to serve. Many community education events are co-hosted with CBOs that provide wraparound services to address other systemic inequities community members are experiencing. Furthermore, the state has assembled a team of “promotoras” (community health workers) to improve COVID-19 vaccine literacy and answer specific questions about COVID-19 vaccines.

STRATEGY 3: Establish multi-sector partnerships to bolster community-oriented strategies.

While working with trusted community leaders is critical to ensure equitable COVID-19 vaccination strategies, the goal of attaining health equity should be prioritized by both the public and private sectors. Community-driven, multi-sector partnerships can increase capacity and funding to enhance efforts and facilitate access to COVID-19 vaccination sites. In addition, employer-based measures, such as increasing paid time off, can make it easier for individuals to take the time needed to get vaccinated. The federal Community Health Centers Vaccination Program aims to support community health providers who represent one of many community partners to build trust and trustworthiness.

Washington has established the COVID-19 Vaccine Implementation Collaborative (VIC) to create a space for partners to exchange knowledge and build on existing efforts to prioritize communities who have experienced disproportionate burden of COVID-19. VIC includes COVID-19 vaccination providers (e.g., pharmacies, accountable care organizations and communities, and community health centers, among others), the Department of Health, and community leaders. The state has also partnered with members of the private sector for support with logistics and supply management.

BOX 2 | State Spotlight: North Carolina – Ensuring COVID-19 vaccination rates among historically marginalized populations align to share of total population

In an effort to achieve racial and ethnic equity in COVID-19 vaccination, **North Carolina** has set a goal to ensure COVID-19 vaccination rates among historically marginalized populations equal or exceed the proportion these populations represent in each county across the state. Below are three key levers to meet this goal.



- ▶ **Allocating an above baseline allocation “equity bump” based on population and to providers who can help meet equity-based COVID-19 vaccination targets:** The state increased supply allotments for counties that have larger populations of historically marginalized populations, particularly older populations when the state was focused on vaccinating those age 65 and over. The goal for these doses is for vaccine providers to use many strategies to increase access to and uptake of vaccine among historically marginalized populations, including working with community partners to bring vaccine events to trusted, accessible sites, or reserving vaccine spots for historically marginalized populations. In addition, it is clearly communicated that providers are accountable for their equity metrics, and providers receive weekly equity data reports that indicate whether they are reaching historically marginalized populations at appropriate rates. After three weeks of using these strategies, 93 percent of counties that received an equity allocation showed improvement in share of vaccinations going to individuals from historically marginalized populations. However, improvements in vaccination rates have varied among the Black and Latinx communities.
- ▶ **Enabling community leadership to increase access to the COVID-19 vaccine among community members through “special events” and other strategies:** The state has prioritized community-based approaches that aim to earn trust and serve historically marginalized populations, including funding community health workers, as a key strategy to increase access. Community leaders in both the Black and Latinx communities have conducted individual level outreach to sign up community members for COVID-19 vaccination appointments and organized COVID-19 vaccination events, including through partnerships with health systems and local churches, food banks, and Historically Black Colleges and Universities (HBCUs). Community health workers have been instrumental in providing canvassing, vaccine education, appointment scheduling, and onsite support for vaccination events. Vaccine providers can apply for additional vaccine doses for “special events.” The state reviews these requests based on equity (e.g., will the vaccine provider increase access in underserved communities?), community partnerships (e.g., will the vaccine provider coordinate with multiple community partners?), and operational readiness and speed. Recent success includes collaborating with 16 churches and health systems to provide COVID-19 vaccinations to nearly 2,000 people and organizing a community COVID-19 vaccination event that included bilingual COVID-19 vaccine providers to vaccinate 150 Latinx community members.^{44,65–67} In both examples, Black or Latinx community members represented the majority of COVID-19 vaccine recipients.
- ▶ **Removing systemic barriers to access:** North Carolina has allocated \$2.5 million to local transit authorities to offset costs of getting to and from COVID-19 vaccination sites that require a car or public transport to reach. Furthermore, the state has clarified that any person regardless of legal status can receive the COVID-19 vaccine, which is not considered a public charge benefit, to reduce fears among Latinx and other immigrant community members who may be living in North Carolina.⁶⁸ The state has also issued clear guidance that vaccine providers should not require a person to present a government-issued identification card, like a driver’s license, to be vaccinated. Instead, vaccine providers are encouraged to use other ways to confirm that they are vaccinating the right person (e.g., ask people to pre-register, to fill out a form on-site with their name, address and date of birth, or ask for a bill or other document with a person’s name and address on it).

Conclusion

State and federal leaders need to strengthen existing collaborations in all three areas – data, access, and community leadership – to meet the dual goals of equity and speed in administering COVID-19 vaccinations. Reporting race and ethnicity data is a foundational step to identify and reassess allocation and distribution patterns to reach historically marginalized populations, who are bearing a disproportionate burden of the pandemic. Differential access to COVID-19 vaccination sites is a root cause of disparities in COVID-19 vaccination rates. Reducing or removing systemic barriers to access among historically marginalized populations, along with supporting community leadership to facilitate informed decision-making, will help states vaccinate as many people as quickly and as equitably as possible. The state-level strategies highlighted in this brief provide potential solutions that other states and territories can tailor and adopt as they continue to implement and refine their COVID-19 vaccination plans.

Appendix A: List of State Examples by Strategy Area as of March 23, 2021

Approach Area	Definition	Strategy	Illustrative State Examples in this Brief
Approach 1: Collecting and reporting race and ethnicity data to inform allocation and distribution decisions	Strategies in this approach focus on improving collection and reporting of race and ethnicity data to identify disparities in allocation and distribution.	Strategy 1: Publicly report data to increase transparency	NM, WA
		Strategy 2: Create incentives for COVID-19 vaccine providers to collect and report race and ethnicity data	NC, VA
Approach 2: Using race and ethnicity data to allocate COVID-19 vaccines according to need	Strategies in this approach address inequities in allocation and availability of COVID-19 vaccines among communities exhibiting the greatest need. Availability of COVID-19 vaccination sites may not translate to accessibility.	Strategy 1: Use CDC Social Vulnerability Index and census data to direct resources	AK, CA, CT, KS, MA, MI, NM, TN
		Strategy 2: Use geographic information systems or ZIP codes to establish COVID-19 vaccination sites that are in or near communities with the greatest need	IN, MD, MI, PA, UT
		Strategy 3: Prioritize equity-focused eligibility criteria to align to disease burden	AK, MN, ND, RI, WA
		Strategy 4: Reassess staff capacity to evaluate data and inform allocations	NC, NM, VA, WI
Approach 3: Reducing or removing systemic barriers to increase access to COVID-19 vaccination sites	Strategies in this approach mitigate the effect of systemic barriers that result in differential access to COVID-19 vaccines among historically marginalized populations.	Strategy 1: Establish community-led mobile and pop-up COVID-19 vaccination clinics to reach people in their communities	CA, KS, MI, NC
		Strategy 2: Reserve appointment allocations for community-based organizations to make appointments on behalf of individuals and reduce barriers to registration	CO, NC, VA
		Strategy 3: Build on lessons learned and partnerships developed to increase equitable access to COVID-19 testing	AK, CT, KS, MI, OR
		Strategy 4: Remove requirements for proof of residency to reduce fear	CO, NC, UT, VA
		Strategy 5: Increase funding and other supports to ensure access to transportation	CT, MI, MA, NC
Approach 4: Enabling community leadership and engagement to increase COVID-19 vaccine confidence and uptake	Strategies in this approach amplify existing efforts to enable community-based strategies that increase acceptability, trust, and access among historically marginalized populations.	Strategy 1: Increase funding for trusted community leaders, including clinical providers, community health workers, community-based organizations, and other trusted voices, to lead community-based strategies	CO, LA, MA, NC, NV, RI
		Strategy 2: Provide clear and scientific-based information to support informed decision-making	CO, MA
		Strategy 3: Establish multi-sector partnerships to bolster community-oriented strategies	WA

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