Introduction

The percent of the U.S. population vaccinated for COVID-19 has increased steadily over the past few weeks alongside of expansion of eligibility. As of June 2, 2021, nearly 63% of U.S. adults 18 years of age and older have received at least one dose of COVID-19 vaccine, nearly 52% are fully vaccinated and everyone 12 years of age and older is now eligible for the vaccine. But this does not tell us the whole story. There are large disparities in vaccine uptake; racial and ethnic minorities, particularly the Black and Latinx communities, are being vaccinated at much lower rates than their white counterparts. These population groups also experience a higher burden of disease and higher COVID-19 hospitalization and death rates than whites. Vaccine uptake rates are also lower among rural populations and people with certain political perspectives. Vaccine equity needs to be prioritized in all counties throughout the United States, not only as a matter of justice and to save lives, but also to reduce the risk of having more dangerous variants emerge.

15 Practices to Improve Vaccination Program Effectiveness by Reaching the People Most at Risk

Figure 4

Percent of Total Population that Has Received at Least One COVID-19 Vaccine Dose by Race/Ethnicity, March 1 to May 24, 2021

NOTE: Persons of Hispanic origin may be of any race but are categorized as Hispanic; other groups are non-Hispanic.
SOURCE: Vaccination data based on KFF analysis of publicly available data on state websites; total population data used to calculate rates based on KFF analysis of 2019 American Community Survey data.
A single, strategic vaccination can save 10 times more lives and prevent 100 times more cases than vaccinating a low-risk person in a low-risk community. To beat COVID-19, we must get vaccines to the people who need them the most as quickly as possible. We must reach the unreached. Following is an overview of promising strategies and tactics being implemented by health departments and community partners to promote COVID-19 vaccine equity and uptake. Many of these insights are drawn from projects led by Franklin County Public Health (OH), Marion County Public Health Department (IN) and Wake County Human Services (NC). Resolve to Save Lives, an initiative of Vital Strategies, wishes to thank these program partners for sharing their experiences and recommendations in the spirit of collaboration.

**Equity and Allocation**

1. **Collect complete race and ethnicity data**
   Local and state health departments can play a key role in collecting race and ethnicity data during vaccine registration. This will help inform the prioritization of racial and ethnic minorities for vaccination and promote equitable distribution. Some consumers may not want to report race and ethnicity. Communication campaigns can reinforce why this is important.

   Additionally, some vaccination providers may need technical assistance, training, incentives and recognition encouraging the collection and recording of these data. The accurate collection of this information will ensure that key data are publicly available and enable ongoing program analysis and improvement. In one state, linking vaccine allocation to completeness of race/ethnicity reporting greatly increased reporting rates.

   Effective programs provide weekly feedback to each facility on both the completeness of reporting, with technical support to improve reporting, and on vaccine distribution compared with the distribution of demographic groups in the catchment area.

2. **Allocate appointments based on vulnerability mapping**
   Local health departments have had success in using data mapping based on COVID-19 case load and Social Vulnerability Indices from the Centers for Disease Control and Prevention (CDC) and Surgo Ventures to prioritize vaccine allocations to individuals who reside in zip codes or census tracts reporting the highest COVID-19 rates.

   Mapping can be used to identify vaccine deserts in the community; inform the equitable allocation of vaccine appointments; establish permanent and pop-up vaccine sites; and identify areas for community outreach and the deployment of strike teams (teams of two to five nurses and two or three logistics staff who register and vaccinate people in the community).

   Data mapping is most effective when the goals of the mapping are defined in advance and include overlaying social vulnerability/COVID-19 rate data with the social determinants of health (e.g., analyzing distance to vaccine sites and/or searching for census tracts with no known vaccine providers). The use of mapping to target vaccine appointments requires robust information systems and vaccine team collaboration.

3. **Mine case investigation and contact tracing databases to identify high-risk individuals eligible for vaccination**
   Using case investigation and contact tracing (CI/CT) data, local health departments can identify people who are eligible for the vaccine but have not been vaccinated.

   CI/CT staff can contact high-risk individuals to help schedule them for vaccine appointments. Hiring dedicated staff with data mining skills to review the databases and other staff to call and schedule appointments will ensure critical human resources are not diverted from core CI/CT activities. This can be done by identifying and reaching out to everyone in social networks surrounding COVID-19 cases, bringing vaccines to those in communities of greatest need.
Community Engagement and Access

4 Establish and deploy strike teams to high COVID-19 prevalence areas and vulnerable communities

Many jurisdictions have discovered that assigning the strike teams to high-need areas based on data mapping is key to ensuring vaccine program effectiveness. Additionally, health departments can make it easy for employers and community- and faith-based organizations (CBO, FBO) that employ and/or serve high-risk populations to request a strike team based on need. Once deployed, the strike teams can help establish systems to simplify the appointment registration process, get people vaccinated and confirm that critical information is captured in vaccination databases.

5 Provide mobile vaccinations

Existing and/or new mobile units (vans, buses) may be utilized for community-based vaccinations to ensure broader coverage. Similar to the approach with strike teams, mobile vaccinations can be rolled out in partnership with CBOs and FBOs, as well as business associations, parks, schools and other community structures.

Mobile vaccinations should be provided in areas prioritized by vulnerability mapping and allow flexibility for people to either walk in or sign up in advance with the support from community health workers (CHW) and navigators.

6 Organize pop-up vaccination sites/events with traditional and non-traditional partners

Many public health teams have learned that pop-up vaccination events are most successful when conducted in collaboration with strike teams or CBOs providing health and social services for vulnerable individuals. Examples of key program partners include shelters for people experiencing homelessness and/or domestic violence and organizations supporting adults with disabilities and homebound seniors, such as Meals on Wheels.

Outreach at homeless encampments and to people who use drugs can be done in partnership with mobile vaccination and/or strike teams. Non-traditional partners (e.g., employers and/or day care providers serving highly vulnerable individuals) can also help access populations otherwise unreached by health departments.

Key logistics regarding event space, registration, vaccine storage and other plans must be coordinated in advance with the community and/or non-traditional partners.

7 Promote walk-up vaccinations

Local health departments have helped facilitate vaccine equity by offering people the convenience of walk-up vaccination. This has been promoted through targeted outreach strategies in partnership with key community partners (e.g., distributing flyers to local stores and service providers; disseminating key messages and information via partner social media channels).

For efficiency, mass vaccination sites should provide a separate line for walk-ups and these individuals (and their companions) should be greeted and assisted in a timely manner. Talking points should be provided for vaccination staff to address potential vaccine hesitancy, confusion or misinformation that may surface and encourage greater vaccine confidence among the walk-ups.

8 Utilize community health workers as vaccine navigators

Local health departments have been leveraging pre-pandemic relationships with key community leaders, structures and community health workers (CHW) to promote COVID-19 vaccination. CHWs are effective in connecting communities to vaccine sites, generating referrals and reaching and supporting people who are experiencing barriers to health care. CHWs that receive adequate training, are trusted by the communities they serve and have adequate supervision are the most successful.
Increase vaccine access by eliminating key structural barriers – transportation, hours and identification

COVID-19 vaccine equity and uptake can be improved by removing key structural barriers that are making it difficult for many people to get vaccinated, such as a lack of transportation, limited vaccination site hours and identification requirements.

Many local health departments are working with CBOs and service providers to offer free transportation services that align with the needs and preferences of communities. Some community members are comfortable using shuttles, while others prefer taxis or ride shares. Uber, for example, is partnering with the National Urban League, the Morehouse School of Medicine and the National Action Network to provide free or discounted rides to help ensure that those in greatest need can get to and from their vaccination appointments.

Vaccination sites should provide adequate staffing for lunch-time, evening and weekend operations, enabling those who work during traditional business hours greater and more convenient opportunities to get vaccinated.

In addition, various state and local health departments are making a concerted effort to vaccinate individuals without requiring them to present a government-issued identification card, and they are training their staff on this policy. Pre-registration, providing a bill with a name and address and/or filling out a form at check-in can be used as proxy for identification.

Provide food and other supportive services at vaccination events

Local health departments, CBOs and FBOs can partner to provide food and other wrap-around services at vaccination events to help incentivize vaccination. In addition to addressing critical individual and family needs, this can create a supportive environment that facilitates community engagement. Community leaders can help ensure that these incentives are offered in ways that avoid potential stigmatization.

Create innovative public/private partnerships

There are many creative ways to build public-private partnerships to promote vaccine equity and uptake among key communities.

For example, CDC is exploring a partnership with Dollar General to get vaccinations to individuals living in rural communities. CDC also is working closely with small businesses to encourage vaccination among essential workers at greater risk for COVID-19. In addition, strategic partnerships among states and the corporate sector are helping to increase vaccinations among those facing systemic barriers, including the Black, Indigenous, Latinx, low-wealth and immigrant communities. Vaccination at worksites, either by health staff of the workplace or a partner, such as a local health care provider or the health department, can further increase vaccine uptake.

Customize vaccine communication and grassroots outreach campaigns

Local health departments have had success in working with specialized marketing agencies and CBOs to design and promote media and grassroots outreach campaigns targeting the populations disproportionately affected by COVID-19. Successful initiatives are data-driven, created through a lens of equity and cultural humility and use traditional and non-traditional approaches.

Host vaccination townhalls

Many local health departments and CBOs have organized live, interactive, multilingual townhall meetings to address COVID-19 vaccine-related topics. These events allow for questions to be answered by experts in real time and provide an open forum where members of the community can engage.

Townhalls typically feature a panel of local subject matter experts who are enlisted by the local health departments and/or CBOs. Communications and community engagement staff help plan the events, coordinating logistics and developing the agenda and discussion guides in partnership with the panelists. If panelists are unable to address specific questions during the events, staff are quick to follow up with the requested information to maintain community engagement and confidence.
Identify and employ trusted ambassadors

Local health departments are working with communities to identify information gaps and better understand barriers to vaccination. Trusted ambassadors, such as community leaders, physicians and health care staff, have proven helpful in bolstering vaccine confidence.

In determining which individuals to enlist as trusted ambassadors, it is important to consult with local equity councils and/or CBOs reaching key communities to ensure inclusivity and appropriate racial, ethnic and cultural representation.

Many agencies and organizations have developed comprehensive toolkits—in multiple languages—to help trusted ambassadors deliver scientifically accurate and culturally appropriate messages encouraging vaccine confidence. CDC’s Best Practices for Community- and Faith-based Organizations provides an overview of key ways to work with these messengers.

Perform community canvassing

Conducting door-to-door canvassing in targeted communities prior to vaccine events is an effective way to assess the need for vaccines in real time, assist with scheduling and address vaccine hesitancy. For greater efficiency, teams can utilize CI/CT staff and engage others who have been involved in door-to-door Census and “get out the vote” initiatives.

Conclusion

By optimizing COVID-19 vaccine distribution, we can save more lives and help bring an end to the pandemic. Investing in an equitable vaccination program that targets the communities disproportionately affected by COVID-19 will help achieve a greater impact. Promising practices from jurisdictions across the U.S. can help health officials promote vaccine equity and uptake with greater speed. The strategies and tactics in this report, which focus on equity and allocation, community engagement and access, and communication and community education, are showing promise in various jurisdictions. Other counties and cities can reference these practices when designing and refining their own equitable COVID-19 vaccination approaches to reach the people at greatest risk.