High uptake of vaccines for coronavirus disease 2019 (COVID-19) is needed to protect the US population, but experience from past vaccination efforts against influenza indicates that many states will likely require strong support from the federal government to accomplish a successful rollout, according to an issue brief by the Commonwealth Fund. “The success of a future COVID-19 vaccination program rests on achieving high rates of uptake, especially in states with higher case counts and states with larger Black, Latino, and American Indian populations,” the authors wrote.

Historically, states are responsible for organizing public health interventions during disease outbreaks. The federal government’s role is to deploy a coherent national strategy to ensure that vaccination across states is both effective and equitable—a strategy that includes offering guidance to states in allocating a vaccine, bolstering infrastructure for vaccine distribution, and providing additional resources.

Although the precise percentage of the US population that would need to be immune to the COVID-19 coronavirus to achieve herd immunity is unknown, early estimates suggest a figure of at least 70% (immunity from vaccination or previous infection). The authors describe historical adult vaccination rates for seasonal influenza as “suboptimal”—43% in 2019, the highest rate in the past decade, falling well short of the population goal of 70% outlined in the US government’s Healthy People 2030 campaign.

To help predict how the COVID-19 vaccine rollout could unfold across states, the researchers examined past vaccination efforts for the seasonal flu and the 2009 influenza A (H1N1) pandemic, using Centers for Disease Control and Prevention (CDC) data.

State vaccination rates against seasonal flu among adults in 2019 were as low as 33.5% to 41.2% in 13 states, and no state vaccinated more than 50.5%. Many states that now have high COVID-19 case levels also reported some of the lower flu vaccination rates, including states in the Rocky Mountain and southern regions, the report notes.

During the H1N1 pandemic, the national uptake of the vaccine among adults from October 2009 through May 2010 was also low (about 23%, in part because the vaccine was in short supply early in the pandemic). Many states that had low vaccination rates for seasonal flu in 2019—such as Florida, Georgia, Louisiana, Mississippi, and Texas—also vaccinated residents of their states at below-average rates during the H1N1 pandemic.

Nearly all states reported substantial racial and ethnic disparities in vaccination; most communities of color were less likely than White residents to be vaccinated for seasonal flu in 2019, including several groups severely affected by COVID-19—specifically Black, Latino, American Indian, Alaska Native, and Native Hawaiian or Pacific Islander communities. Similar disparities were seen for H1N1 vaccination efforts in 2009 and 2010.

“To ensure that the most affected communities are adequately protected, states will need to acknowledge and address these and other inequities when developing distribution plans for COVID-19 vaccines once they come online,” the Commonwealth Fund authors wrote.

The report outlines steps that the federal government and states can take to overcome issues that signal possible problems ahead, such as historically weak vaccination rates, racial and ethnic disparities in vaccination, and growing public skepticism about the safety and effectiveness of vaccines.
First, states will need strong federal support. A coordinated response by federal agencies to boost vaccination capacity by expanding state funding, standardize distribution strategies for the states, and operate centralized storage and administration facilities will help overcome obstacles in achieving high and equitable levels of immunization.

Other suggested strategies include eliminating vaccine cost-sharing in public vaccination programs and prioritizing racial and ethnic equity in allocation.

“States can work with the CDC to design a vaccine allocation plan that accounts for these inequities by specifying protocols for prioritizing distribution to at-risk populations,” the authors wrote. “States also can take steps to reduce financial barriers and other impediments to access as well as partner with community organizations to maximize vaccination rates.”

Acknowledging vaccine safety concerns, the authors said that launching a strong media campaign, including sponsorship and support of state and local vaccine awareness efforts, is critical to shoring up the public trust needed to reach target vaccination levels. Partnering with communities that are less likely to be vaccinated is particularly important in this effort.

“To move new vaccines to authorization so quickly is an unprecedented scientific achievement, but it is merely a first step,” the authors said. “Until a substantial percentage of the population is vaccinated, the virus will continue to circulate and wreak havoc on the health of Americans and the economy.”

ARTICLE INFORMATION

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Author Affiliation: Consulting Editor, JAMA Health Forum and JAMA.