Large Variations in State Flu Vaccination Rates Foreshadow Challenges in Distributing a COVID-19 Vaccine

Joan Stephenson, PhD

When a COVID-19 vaccine becomes available, an “unprecedented vaccination campaign” to immunize the many millions of US residents needed to protect the country against the pandemic would present considerable challenges to health officials, suggests a new analysis of how vaccination coverage for influenza played out last year.

The analysis found flu vaccination rates that were considerably below the federal government’s target rate of 70%, as well as “significant variation” across the states, as well as by race and ethnicity, age, and health status. It also pointed to factors that may contribute to the difference in flu vaccination rates across states and that have the potential to affect the rollout of a COVID-19 vaccine.

Using data obtained from the 2019-2020 Influenza Season Vaccination Coverage Dashboard developed by the US Centers for Disease Control and Prevention, researchers from the Kaiser Family Foundation (KFF) analyzed seasonal flu vaccination rates for that flu season both by state and across states by age, race and ethnicity, and health risk status.

The researchers reasoned that efforts to vaccinate and protect the population from seasonal flu could serve as a model for how quickly and broadly a new COVID-19 vaccine could be distributed and administered across the country, and that “analysis of routine vaccination rates by state may help to shed light on differential uptake across the country as well as inform where more targeted efforts might be needed.”

The Centers for Disease Control and Prevention recommend the seasonal flu vaccine for everyone aged 6 months or older, with rare exceptions (such as severe allergies to the vaccine or any ingredient in the vaccine). Under the Patient Protection and Affordable Care Act, the vaccine is available free of charge to people with insurance and to uninsured children through the Vaccines for Children Program.

Despite this availability, the analysis determined that only 52% of the US population (excluding those younger than 6 months) received the flu vaccine last season; in 12 states, less than half of their populations were vaccinated. Rates ranged from a low of 44% (in Nevada) to a high of 61% (in Rhode Island) and were lowest in the West (51%) and highest in the Northeast (57%).

Flu vaccination rates were highest among seniors (70%) and lowest among nonelderly adults aged 18 to 64 years, ranging from 33% in Florida to 52% in Rhode Island. Coverage among children eligible for vaccination ranged from 52% in Mississippi to 78% in Rhode Island.

The authors noted that attaining a high COVID-19 vaccination rate among people of color “will be particularly important because they are bearing a heavy, disproportionate burden of the disease, and population immunity is not likely to be reached without high vaccination rates across all communities.” Their analysis found lower flu vaccination rates in most states among Black populations (46% on average, ranging from 30% in Nevada to 60% in Nebraska) and Hispanic people (47% on average, ranging from 37% in Florida to 62% in New Hampshire) compared with their White counterparts (averaging 55%, ranging from 45% in Idaho to 71% in Washington, DC), though the size of these gaps varied from state to state.

After health care workers and others whose work is associated with a higher risk of acquiring COVID-19, adults with underlying conditions, such as obesity, diabetes, and heart disease, that heighten their risk of severe illness from the coronavirus are likely to be a priority group for...
vaccination during the rollout of a COVID-19 vaccine. The KFF analysis found that although people with such conditions were more likely than those without these conditions to be vaccinated for flu (51% vs 40%), vaccination rates in all states were still lower than the national 70% target.

Factors that might affect flu vaccination rates include lower rates of insurance coverage among some groups—particularly among people of color—as well as disparities in access to care, the authors noted. The absence of dedicated vaccination programs for uninsured and underinsured adults, whether (and for whom) a state mandates vaccination for flu, and differences between states in vaccine funding and infrastructure might also play a role in vaccine coverage.

In addition, concerns or misconceptions about vaccine safety, side effects, and efficacy may affect influenza vaccination rates, particularly among Black people. A recent survey found that only 17% of Black adults in the United States say they would “definitely” get a COVID-19 vaccine if it was determined to be safe and available for free, compared with 37% of their White or Hispanic counterparts, mostly because of concerns about the vaccine's safety or distrust of the health care system.

Although it is not clear how receptive the US public would be to a COVID-19 vaccine compared with the flu vaccine, the KFF analysis suggests “significant challenges” in achieving equity in distribution of a COVID-19 vaccine and generating sufficient levels of immunity across the nation.

“As states and other stakeholders plan for distribution of a COVID-19 vaccine, targeting those states that already have disproportionately lower coverage rates for routine vaccination, particularly for populations most affected by COVID-19 and who appear to face greater barriers to vaccination, may provide an important avenue for increasing success,” the authors said.