

31 March 2021

BRIEF19

A daily review of covid-19 research and policy

RESEARCH BRIEFING

More evidence of vaccine efficacy among essential workers. Real world data matches trials.

Evidence continues to favor the efficacy of the covid-19 vaccines, most recently in the form of data from the HEROES-RECOVER network, [released](#) this week in the CDC's *Morbidity and Mortality Weekly Report*. This confidence boost adds to last week's letters [published](#) in the *New England Journal of Medicine* that touted vaccines amongst healthcare workers in the United States. The results from this new data set focus not only on healthcare workers, but also first responders and essential frontline workers, such as teachers, hospitality staff, delivery people and retail personnel.

Promisingly, the data showed that there was a 35-fold difference in infection rates when comparing those who were vaccinated to those who were not. In other words, the vaccines demonstrated 90 percent effectiveness at preventing SARS-CoV-2 infection, as measured 14 days after the second dose. Even after the first dose, an 80 percent efficacy rate was achieved.

Data were collected between December and March from nearly 4,000 research subjects from a diverse group of jurisdictions around the United States, including Arizona, Florida, Oregon, Minnesota, Texas and Utah, some of which experienced critically high levels of covid-19 disease during the time that the study covered. However, Arizona was by far the most tested region. At the time of analysis, nearly 64 percent of the cohort of people being followed had received two doses of an mRNA vaccine and another 12 percent had received one shot. Subjects tended to be more often female, between the age of 18-49 year, and White.

These data should be easily applicable to the general population and should provide further reassurance of vaccine importance, assuming that major changes in these dynamics do not emerge due to new SARS-CoV-2 variants. Nevertheless, given the preponderance of White subjects in this study, future studies showing effectiveness among Hispanic, Black, and other populations may help increase vaccine interest in non-White groups.

—*Christopher Sampson, MD, FACEP*

POLICY BRIEFING

With 100 million vaccine doses given, Biden announces goal to have “90/90” percent plan.

On Monday, President Biden [announced](#) an expansion to his national vaccine policy, [surpassing](#) the previous plan of one hundred million shots in the first one hundred days. This new plan calls for ninety percent of Americans to be eligible for vaccines by April, and ninety percent of Americans to have a vaccine center within five miles of their home. To achieve this, the administration is increasing the pool of participating pharmacies from seventeen thousand to forty thousand, adding a dozen mass vaccination centers to the existing pool, and pledging \$100 million to fund community transportation programs to help the elderly and disabled get to a site.

These efforts come as President Biden and Centers for Disease Control and Prevention Director Dr. Rochelle Walensky both [urged](#) state and local leaders to pause the lifting of non-pharmacologic protections in the face of a possible covid-19 surge this spring.

In recent days, the United States has seen a plateau in the number of new infections, following a period of drastic declines from the peak that occurred on January 8th, when over 300,000 new documented cases were recorded. The most recent nadir (i.e. the day with the lowest number of new cases) was March 21, when 34,000 new cases were reported. In the past,

plateaus after decreases have prefigured a pending uptick. Data from recent days supports that pattern with daily cases once again frequently topping 70,000.

While vaccinations are becoming more and more widely available, administration leaders are asking for citizens to hold on just a while longer with respect to physical distancing, mask wearing, and avoiding densely populated situations until more at-risk people have had the opportunity to receive the potentially life-saving vaccine. *Various.*

—*Brief19 Policy Team*

Kimi Chernoby, MD, JD, Policy Section Founder, Joshua Niforatos, MD Research Section Editor, Frederick Milgrim, MD, Editor-at-Large, Joshua Lesko, MD Lead Policy Analyst, Barb Cunningham, Copy-editor, Benjy Renton, Thread-of-the-Week, Anna Fang, Week-in-Review, Megan Davis, social media, Kane Elfman PhD, Publishing and Design, Jeremy Samuel Faust MD MS, Editor-in-Chief. <http://www.brief19.com/> Twitter: [@brief_19](https://twitter.com/brief_19) submissions@brief19.com. Brief19 is a daily executive summary of covid-19-related medical research, news, and public policy. It was founded and created by frontline emergency medicine physicians with expertise in medical research critique, health and public policy.