

Study Shows Pfizer and Moderna are Effective in Preventing COVID-19 Among Health Care and Frontline Workers

A new study published in the Centers for Disease Control and Prevention's *Morbidity and Mortality Weekly Report Series* has found that Pfizer-BioNTech and Moderna – two messenger-RNA vaccines – were effective in preventing COVID-19 among health care, first responders, and frontline workers. These interim findings, published on March 29, reinforce the success of current COVID-19 vaccination campaigns and can reassure the public and these workers that they begin gaining protection after their first dose of the vaccines.



Dr. Alberto J. Caban-
Martinez

“Individuals employed as first responders, health care, and essential frontline workers now have evidence on the importance and effectiveness of these new messenger-RNA COVID-19 vaccines,” said Alberto J. Caban-Martinez, D.O., Ph.D., M.P.H., associate professor in the University of Miami Miller School of Medicine’s Department of Public Health Sciences, who was co-author of the [study](#).

Mark Thompson, Ph.D., epidemiologist and deputy branch chief of science at the CDC’s Influenza Division of the National Center for Immunization and Respiratory Diseases, served as the overall study principal investigator.

The study analyzed data from two ongoing national COVID-19 cohort studies – Research on the Epidemiology of SARS-CoV-2 in Essential Response Personnel (RECOVER) and Health Care, Emergency Response, and Other Essential Workers Surveillance (HEROES) – both sponsored by the CDC. In addition to Florida, other study sites were located in Texas, Minnesota, Oregon, Arizona, and Utah. Prospective cohorts of 3,950 health care personnel, first responders, and other essential frontline workers completed weekly SARS-CoV-2 testing for 13 consecutive weeks.

Dr. Caban-Martinez, who served as principal investigator of RECOVER, began to lead the Florida site in May 2020, which included participants from Miami-Dade, Broward, and Palm Beach counties. He and a team of collaborative experts began to track symptomatic and asymptomatic SARS-CoV-2 infection in Florida participants.

After 13 weeks, the national study collectively found that the two recommended doses of messenger-RNA vaccines – Pfizer-BioNTech and Moderna – were 84 percent effective in preventing laboratory-confirmed SARS-CoV-2 infection.

“As we continue to longitudinally follow these high-risk worker groups for COVID-19 infections, we will learn more about factors beyond vaccine administration that limit the spread of coronavirus, such as regular use of personal protective equipment,” Dr. Caban-Martinez said. “The RECOVER and HEROES cohort studies provide critical insight on the COVID-19 pandemic and allow us as public health professionals and occupational health and safety specialists to protect our most vulnerable worker groups.”

Content Type Article