
EDITORIAL

Why Should Vaccinated People Wear Masks Indoors in Areas of High Community Transmission?

Rationale for CDC's Recent Recommendation

On April 27, 2021, the Centers for Disease Control & Prevention (CDC) recommended that individuals who are fully vaccinated do not have to wear their masks when outdoors unless they are in crowded gathering. As more data became available, on June 15, 2021, the CDC updated their advisory further easing masking restrictions for vaccinated individuals. As part of this new advisory, masking was not required (both indoors and outdoors) for vaccinated individuals except for certain conditions in which it was mandatory for all irrespective of their vaccination status. The latter included the requirement to mask while using public transit; in healthcare facilities; correctional and detention facilities; homeless shelters; and in K-12 facilities. This latest CDC advisory was viewed as an affirmative consequence of vaccination placing greater burden on people to get vaccinated.

The recent surge in infections with the SARS-CoV-2 Delta (B.1.617.2) variant and the evolving public health crisis has prompted the CDC to reconsider and reverse its earlier advisory about masking for vaccinated individuals (1). The interim recommendations issued on July 27, 2021, stated that fully vaccinated people wear a mask in public indoor settings in areas of substantial or high transmission which includes all counties in the Greater Rio Grande Valley (2). It was also recommended that fully vaccinated people might choose to wear a mask regardless of the level of transmission, particularly if they are immunocompromised or at increased risk for severe disease from COVID-19, or if they have someone in their household who is immunocompromised, at increased risk of severe disease or not fully vaccinated. Lastly, it was recommended that fully vaccinated people who have a known exposure to someone with suspected or confirmed COVID-19 be tested 3-5 days after exposure, and to wear a

mask in public indoor settings for 14 days or until they receive a negative test result.

It is notable that the majority of those recently diagnosed with COVID-19 fall in two distinct categories; unvaccinated and those who are vaccinated but have complicating risk factors (such as old age, diabetes, obesity, hypertension, immunosuppressed, etc.). The population most seriously affected are those who are unvaccinated. Given its high transmissibility and infectivity, the Delta variant is indifferent to the age of the patient as many newly diagnosed cases are in younger age groups including children. More importantly, majority of patients who are hospitalized with severe COVID-19 disease are those who are unvaccinated. On the contrary, vaccinated patients tend to develop mild SARS-CoV-2 infection which rarely requires hospitalization. In fact, most recent CDC data suggests that if infected, 99.99% of vaccinated individuals do not require hospitalization.

This latest CDC advisory has understandably created some confusion among vaccinated individuals and has given voice to those who oppose vaccination arguing untenably that COVID-19 vaccination is not protective against SARS-CoV-2 infection. However, there is a reasonable scientific rationale for this advisory as various vaccines work differently in providing protection against the disease. For example, after vaccination against measles and mumps, a person is granted immunity for life. On the contrary, in the case of Influenza virus that causes seasonal flu, vaccination must be repeated year after year. Interestingly, even after vaccination against flu, people develop mild disease which rarely progresses to a state that necessitates hospitalization. The reason for this “breakthrough” infection is the inherent ability of the infecting agent (in this case the Influenza virus)

to mutate and escape the vaccinated individual's immune response. This is precisely what is being encountered in vaccinated individuals infected with the Delta variant. The 13-17 mutations endow the Delta variant with the ability to enhance its transmissibility and infectivity and to delude the immune system thus resulting in infection. Like many other vaccines, COVID-19 vaccination also does not prevent the individual from getting infected, but it will most certainly prevent the development of serious disease that may require hospitalization. Therefore, it is important for both vaccinated and unvaccinated individuals to wear mask as recommended by the CDC and for those who are unvaccinated...get vaccinated (if you qualify) as soon as possible...it may save your life!

References

1. Interim public health recommendations for fully vaccinated people. <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated-guidance.html>. (Accessed on August 01, 2021, at 4:20 p.m., Central Standard Time)
2. COVID-19 integrated county view. <https://covid.cdc.gov/covid-data-tracker/#county-view> (Accessed on August 01, 2021, at 4:32 p.m., Central Standard Time)

Sohail Rao, MD, MA, DPhil

Executive Vice President, DHR Health, 5501 S. McColl Road, Edinburg, Texas

President & Chief Executive Officer, DHR Health Institute for Research & Development, 5323 S. McColl Road, Edinburg, Texas

Corresponding author email: s.rao@dhr-rgv.com

Disclosures: None

ORCID: Sohail Rao: <https://orcid.org/0000-0001-5027-9992>

Manish Singh, MD, FACS

Chief Executive Officer, DHR Health, 5501 S. McColl Road, Edinburg, Texas

Disclosures: None

ORCID: Manish Singh: <https://orcid.org/0000-0003-4146-3282>

