

# COVID-19 vaccine effectiveness changing with Delta predominance

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(HealthDay)—With increasing prevalence of the delta variant of severe

acute respiratory syndrome coronavirus 2 (SARS-CoV-2), there was a decline in vaccine protection against SARS-CoV-2 infection, while protection remained stronger against hospitalization and death, according to research published in the Sept. 10 early-release issue of the U.S. Centers for Disease Control and Prevention *Morbidity and Mortality Weekly Report*.

Heather M. Scobie, Ph.D., from the CDC COVID-19 Response Team, and colleagues analyzed reported COVID-19 cases, hospitalizations, and deaths among persons aged 18 years and older during April 4 to July 17, 2021, by [vaccination status](#) across 13 U.S. jurisdictions using linked case surveillance and immunization registry data.

The researchers found that the age-standardized incidence rate ratios (IRRs) for cases among those who were not fully vaccinated versus those who were fully vaccinated decreased from 11.1 to 4.6 between two periods when the prevalence of the delta variant was lower (April 4 to June 19) and higher (June 20 to July 17) when averaged weekly; between the same periods, the IRRs for hospitalizations and deaths decreased from 13.3 to 10.4 and from 16.6 to 11.3, respectively. These findings were consistent with a suggested reduction in vaccine protection against infection and continued protection against COVID-19-associated hospitalization and death.

"The data might be helpful in communicating the real-time impact of vaccines (e.g., persons not fully vaccinated having >10 times higher COVID-19 mortality risk) and guiding prevention strategies, such as vaccination and nonpharmacologic interventions," the authors write.

**More information:** [Abstract/Full Text](#)

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