

# Vaccine effective against hospitalization over 24-week period

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(HealthDay)—The effectiveness of mRNA vaccination against

COVID-19-associated hospitalization is sustained over a 24-week period, according to research published in the Aug. 18 early-release issue of the U.S. Centers for Disease Control and Prevention *Morbidity and Mortality Weekly Report*.

Mark W. Tenforde, M.D., Ph.D., from the CDC COVID-19 Response Team, and colleagues assessed the duration of mRNA [vaccine effectiveness](#) (Pfizer-BioNTech or Moderna) against COVID-19-associated hospitalization among adults aged 18 years and older in an evaluation at 21 hospitals in 18 states.

Data were included for 3,089 hospitalized adults (1,194 COVID-19 case patients and 1,895 non-COVID-19 controls) with a median age of 59 years; 21.1 percent had an immunocompromising condition. The researchers found that 11.8 and 52.1 percent of case patients and controls were fully vaccinated (receipt of second dose  $\geq$ 14 days before illness onset), with a median interval of 65 days after receipt of the second dose. During the full surveillance period, [vaccine effectiveness](#) against COVID-19-associated hospitalization was 86 and 90 percent overall and among adults without immunocompromising conditions, respectively. Vaccine effectiveness against COVID-19-associated hospitalization was 86 and 84 percent at two to 12 weeks and 13 to 24 weeks from receipt of the second vaccine dose, respectively. In whole-genome sequencing of 454 case-patient specimens, 53.3 and 16.3 percent belonged to the alpha and delta lineage, respectively.

"To reduce their risk for hospitalization, all eligible persons should be offered COVID-19 vaccination," the authors write. "Continued monitoring of vaccine effectiveness against infection and severe disease is needed as the elapsed time since vaccination increases and new SARS-CoV-2 variants emerge."

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

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