

# Vaccine effectiveness modest for children, teens during Omicron

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During Omicron predominance, the estimated vaccine effectiveness

(VE) of the BNT162b2 two-dose vaccination among children and adolescents was modest and decreased rapidly, according to a study published online May 13 in the *Journal of the American Medical Association*.

Katherine E. Fleming-Dutra, M.D., from the U.S. Centers for Disease Control and Prevention in Atlanta, and colleagues examined the association of symptomatic infection with prior BNT162b2 vaccination to estimate VE during omicron predominance. The analysis included children aged 5 to 11 and 12 to 15 years with COVID-19-like illness from Dec. 26, 2021, to Feb. 21, 2022.

A total of 30,999 test-positive cases and 43,209 test-negative controls were included from children aged 5 to 11 years, in addition to 22,273 and 25,471 test-positive cases and test-negative controls, respectively, from [adolescents](#) aged 12 to 15 years. The researchers found that at two to four weeks after dose 2, the adjusted odds ratio was 0.40 for both children and adolescents, with estimated VE of 60.1 and 59.5 percent, respectively. During month 2 after dose 2, the corresponding odds ratios were 0.71 and 0.83 among children and adolescents, with estimated VE of 28.9 and 16.6 percent, respectively. Among adolescents, the odds ratio was 0.29 for the two to 6.5 weeks after the booster dose, with estimated VE of 71.1 percent.

"While estimated VE against symptomatic infection is an important end point to inform nonpharmaceutical intervention policy decisions and can provide an early warning signal of declining VE, estimated VE against [severe disease](#) is needed for [children](#) and adolescents during Omicron variant predominance," the authors write.

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