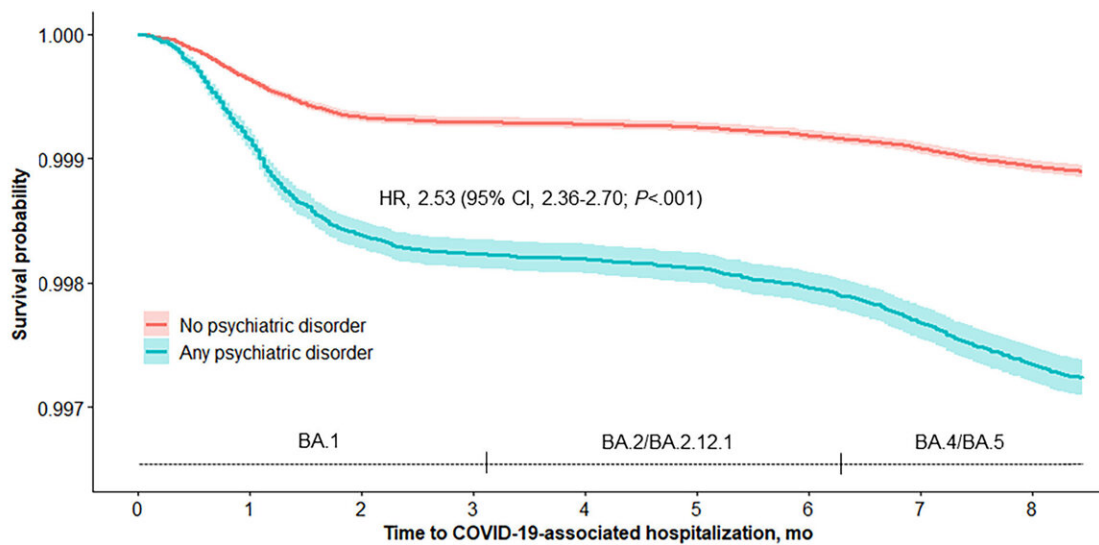


COVID-19 vaccination as effective for adults with common mental disorders as for those without, finds study

April 3 2024



No. at risk

No psychiatric disorder	972223	1860585	1875832	1874224	1864984	1865439	1864039	1860380	1859319
Any psychiatric disorder	245184	523879	528771	528327	525316	524995	524095	522447	521614

Kaplan–Meier survival curve of time to COVID-19-associated hospitalization, stratified by psychiatric disorder status. Time 0 is December 16, 2021, which was the earliest date a patient could start contributing eligible follow-up. Sites had staggered entries from December 16 to 26, 2021 based on the date on which the SARS-CoV-2 Omicron variant first accounted for $\geq 50\%$ of all sequenced specimens at each site. Individual patients could also enter the cohort at a later date if they became eligible based on a new COVID-19 vaccination status. The large majority of patients (2,322,169; 95.3%) contributed follow-up starting from their site-specific start date in December 2021 through August 30, 2022. Smaller proportions entered the analytic cohort mid-study (59,473; 2.4%) and/or

were censored (53,164; 2.2%) either due to departure from the health network (33,403; 1.4%), exclusionary vaccine doses (8919; 0.4%), or death (10,842; 0.4%). Periods of estimated $\geq 50\%$ BA.1 sublineage predominance (as early as December 16–26, 2021), $\geq 50\%$ BA.2/BA.2.12.1 sublineage predominance (as early as March 19–24, 2022), and $\geq 50\%$ BA.4/BA.5 sublineage predominance (as early as June 19–29, 2022) are displayed. The shaded areas indicate 95% confidence intervals (CIs). The unadjusted hazard ratio (HR), 95% CI, and log-rank p-value that are shown were obtained from comparing patients with any psychiatric disorder to patients with no psychiatric disorder (reference group). Credit: *Influenza and Other Respiratory Viruses* (2024). DOI: 10.1111/irv.13269

A large multi-state electronic health record-based study from the Centers for Disease Control and Prevention's (CDC's) VISION Network has found that COVID-19 vaccines are as effective for adults with anxiety, depression, or mood disorders as for individuals without these common diagnoses. This is one of the first studies to evaluate COVID-19 mRNA vaccine effectiveness for those living with mental illness.

While vaccination provided similar protection regardless of psychiatric diagnosis (none, one, or multiple conditions), in contrast, unvaccinated adults with any of these conditions had a higher rate of hospitalization for COVID-19—a marker for [severe disease](#)—than did those without a psychiatric diagnosis.

Both these findings held true whether two, three, or four vaccinations were received for ages 18-49, 50-64, and 65 and older.

"Although mental health conditions can tax the immune system, putting stress on the body, we saw similar COVID-19 [vaccine effectiveness](#) in people with psychiatric diagnoses compared with those without. That's encouraging," said study co-author Shaun Grannis, M.D., M.S., Regenstrief Institute vice president for data and analytics.

"But we also found that the risk of COVID-19-associated hospitalization is higher among unvaccinated patients with a psychiatric diagnosis," added Dr. Grannis. "For patients with a diagnosis of depression, anxiety, or [mood disorders](#) who are wondering if the COVID-19 vaccine would be valuable, this paper gives us evidence that the vaccine maintains its effectiveness even in the face of mental illness. So, I would encourage vaccination because it reduces the risk of hospitalization significantly."

Psychiatric disorders have been associated with lower antibody positivity and reduced [immune response](#) to other vaccines. Prior to this study, it was not known whether anxiety, depression, or mood disorders influence COVID-19 vaccine effectiveness.

"While the evidence on vaccine effectiveness for the overall population is well-established, many people still have questions about whether someone like them should get the vaccine or whether people like them benefit from the vaccine," said study co-author Brian Dixon, Ph.D., MPA, interim director of Regenstrief Institute's Clem McDonald Center for Bioinformatics.

"Studies like this one help answer those questions for large segments of society. Our network will continue to pursue rigorous studies on important, vulnerable populations. That is, after all, the work we do in [public health](#)."

"Risk of COVID-19 hospitalization and protection associated with mRNA vaccination among US adults with psychiatric disorders" is [published](#) in the journal *Influenza and Other Respiratory Viruses*.

More information: Matthew E. Levy et al, Risk of COVID-19 Hospitalization and Protection Associated With mRNA Vaccination

Among US Adults With Psychiatric Disorders, *Influenza and Other Respiratory Viruses* (2024). [DOI: 10.1111/irv.13269](https://doi.org/10.1111/irv.13269)

Provided by Regenstrief Institute

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