

Risk of death decreases after COVID-19 vaccine but protection wanes after six months, finds study

December 14 2023



A medical assistant prepares a dose of a COVID-19 vaccine to be administered to a patient. Credit: Public domain image courtesy of Lisa Ferdinando, U.S. Department of Defense

The risk of death from COVID-19 decreases significantly after vaccination but this protection diminishes after six months, providing

evidence for continued booster doses, a new study has found.

Researchers from the UK Health Security Agency (UKHSA) analyzed more than 10 million cases of COVID-19 in adults between May 2020 and February 2022. Their findings are published in the *Journal of the Royal Society of Medicine (JRSM)*.

The Case Fatality Risk (CFR)—the proportion of cases that resulted in death—was cross-referenced with [vaccination status](#), revealing a clear association between vaccination and reduced mortality. Notably, the study highlights a crucial timeframe—within six months of the last [vaccine](#) dose—when CFR was consistently at its lowest across all age groups. After this, the protective benefit began to wane and CFR increased.

The research underscores the success of the COVID-19 vaccination program in reducing [mortality rates](#).

Among adults over 50, CFR was 10 times higher in the unvaccinated (6.3%) compared to those who had been vaccinated within six months prior to testing positive (0.6%). The study also reveals a steep decline in CFR in early 2021, aligning with the initial vaccine rollout.

Florence Halford from the UKHSA's COVID-19 Vaccines and Epidemiology Division said, "COVID-19 case fatality risk reduced after vaccination, with the lowest seen across all age bands when vaccinated up to six months prior to the specimen date. This provides some evidence for continued booster doses in older age groups."

More information: Temporal changes to adult case fatality risk of COVID-19 after vaccination in England between May 2020 and February 2022: a national surveillance study, *Journal of the Royal Society of Medicine* (2023). [DOI: 10.1177/01410768231216332](https://doi.org/10.1177/01410768231216332)

Provided by SAGE Publications

Citation: Risk of death decreases after COVID-19 vaccine but protection wanes after six months, finds study (2023, December 14) retrieved 27 April 2024 from <https://medicalxpress.com/news/2023-12-death-decreases-covid-vaccine-wanes.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.