

# Age and health factors in COVID breakthrough deaths

November 1 2021

---



Credit: Pixabay/CC0 Public Domain

New findings have identified the characteristics most associated with people who have died from COVID-19 despite being double vaccinated.

The main predictors of post-vaccination COVID-19 deaths were being aged 80 or older, having multiple underlying health conditions and being male.

The results come from the Scotland-wide EAVE II COVID-19 surveillance platform.

## Cause of death

Of the 3.2 million people who had received two [vaccine doses](#) in Scotland by 18 August 2021, 236 had died with COVID-19. Of these, the majority were around 80 years of age and 62 percent were male.

As well as COVID-19, 97 percent of the group had at least one other cause listed on their [death](#) certificate.

The most common causes were chronic heart or [kidney disease](#), diabetes, [chronic obstructive pulmonary disease](#), and/or a fast or irregular heartbeat.

## Data analysis

The study analyzed those fully vaccinated with the Pfizer or AstraZeneca vaccines. There were no deaths registered during the study period in the smaller group of people vaccinated with the Moderna [vaccine](#).

The EAVE II project tracks the COVID-19 pandemic in Scotland in near [real-time](#) using a dataset of all 5.4 million people registered with a GP in Scotland, which is around 98 percent of the Scottish population.

The project is led by researchers at the University of Edinburgh, working in collaboration with the Universities of St. Andrews,

Strathclyde and Aberdeen; Public Health Scotland; and the West of Scotland Specialist Virology Centre.

The results are published as a research letter in *The Lancet*. Research letters are externally peer-reviewed, and their findings are usually preliminary or exploratory.

"Our findings suggest that adults aged 18 to 64 years old who are double vaccinated have almost four times increased protection against dying from COVID-19 compared to those who are unvaccinated. The figures are even more stark for those who are older, with double vaccinated adults aged 65 to 79 years old experiencing 15.5 times greater protection against death than their unvaccinated peers, and for adults over 80, this increased to 30 times higher," says Dr. Josie Murray.

Dr. Murray went on to say it is hugely important that when invited for a COVID-19 vaccine, whether it be a first, second or booster dose, people take the opportunity to bolster your protection.

"Our work has consistently found that vaccines overall are very effective at preventing hospital admissions and deaths from COVID-19. This whole country analysis—one of the first of its kind in the world—does however show that unfortunately some people do die from the virus despite being vaccinated with two doses," says Professor Aziz Sheikh.

**More information:** Zoe Grange et al, Characteristics and risk of COVID-19-related death in fully vaccinated people in Scotland, *The Lancet* (2021). [DOI: 10.1016/S0140-6736\(21\)02316-3](https://doi.org/10.1016/S0140-6736(21)02316-3)

Provided by University of Edinburgh

Citation: Age and health factors in COVID breakthrough deaths (2021, November 1) retrieved 8 May 2024 from <https://medicalxpress.com/news/2021-11-age-health-factors-covid-breakthrough.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.