



Kent

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Covid-19: Long covid risk is lower with omicron than delta, researchers find

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The risk of developing long covid is lower among people with the omicron variant of SARS-CoV-2 than with delta, shows an analysis of self reported data to the UK ZOE covid app.¹

Researchers from King's College London looked at data logged by 56 003 adults who tested positive between 20 December 2021 and 9 March 2022, when the omicron variant was dominant. They compared these with 41 361 who tested positive between 1 June 2021 and 27 November 2021, when the delta variant was most common.

Among the cases in the omicron period, 2501 people (4.5%) reported they had experienced long covid, defined as having new or ongoing symptoms four weeks or more after they had tested positive. This compared with 4469 (10.8%) of people in the delta period, according to the analysis, published as a letter in the *Lancet*.

Overall the study found a reduction in odds of long covid with the omicron variant versus the delta variant of between 0.24 and 0.5, depending on age and time since vaccination. But because far more people have been infected during the omicron wave than during the delta wave, the total number with long covid will be higher. Earlier this month the Office for National Statistics estimated that the number of people experiencing long covid increased from 1.3 million in January 2022 to two million on 1 May 2022.^{2 3}

Lead researcher Claire Steves said, "The omicron variant appears substantially less likely to cause long covid than previous variants—but still, one out of every 23 people who catches covid-19 goes on to have symptoms for more than four weeks.

"Given the numbers of people affected, it's important that we continue to support them at work, at home, and within the NHS."

Slightly more women than men log onto the ZOE app, and fewer people from the most deprived areas, so the samples are not fully generalisable to the UK population. But the researchers said the samples were similar in both study periods, allowing comparison.

The researchers said the strength of the study was the prospective logging of a wide range of symptoms. Limitations included no direct testing of infectious variants and no objective measures of illness duration. There were also insufficient data to estimate the odds of long covid in unvaccinated people, and the study did not estimate effects in children.

David Strain, clinical senior lecturer and honorary consultant at the University of Exeter Medical School, emphasised that these data came from the omicron BA.1 period. "The Office for National Statistics

suggested that the BA.2 variant that has caused much of the recent wave did cause long covid in triple vaccinated people at approximately the same rate as the delta," he said.

Kevin McConway, emeritus professor of applied statistics at the Open University, said, "These are observational data, so there are inevitable questions about cause and effect. The results also come from self reported symptoms in a self selected group of people who submitted data using the Zoe app, who aren't particularly typical of the UK population as a whole."

McConway added that what really counts is how many people get infected. "The potential lower risk of long covid in people infected during omicron is entirely trumped by the much bigger number of new infections during the omicron wave."

- 1 Antonelli M, Capdevila Pujol J, Spector TD, Ourselein S, Steves CJ. Risk of long covid associated with delta versus omicron variants of SARS-CoV-2. *Lancet* 2022;399:2263-4. doi: 10.1016/S0140-6736(22)00941-2.
- 2 Wise J. Covid-19: Two million people in the UK are estimated to be experiencing long covid, says ONS. *BMJ* 2022;377:e1391. doi: 10.1136/bmj.e1391 pmid: 35649534
- 3 Office for National Statistics. Prevalence of ongoing symptoms following coronavirus (covid-19) infection in the UK. Jun 2022. www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/prevalenceofongoingsymptomsfollowingcoronaviruscovid19infectionintheuk/1june2022.

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