

New research reinforces the efficacy of COVID-19 vaccines

The [UKHSA-backed study](#) is the world's biggest study into COVID-19 antibodies and regularly tests a large cohort of healthcare workers to answer the most important questions about the virus.

The latest paper focuses on the protection provided against COVID-19 infection in those who have had 2 doses of the vaccine, as well as those who have previously been infected with COVID-19.

The results show that 2 doses of vaccine provide significant short-term protection against infection among those who had not had a previous infection – but that this protection wanes significantly after 6 months.

Analysis was also carried out on participants, both unvaccinated and vaccinated, who had been previously infected with COVID-19.

Unvaccinated participants who had been previously infected with COVID-19 were found to have 86% reduced risk of reinfection, when compared to the risk of primary infection in those who had no previous infection and were also unvaccinated. This protection waned to 69% after a year.

Dual protection in people who had been previously infected and subsequently double vaccinated was even greater and more durable, standing at over 90% after 2 doses. This protection remained strong over a year after infection and over 6 months following vaccination.

Susan Hopkins, SIREN study lead and Chief Medical Advisor at the UK Health Security Agency (UKHSA), said:

This research demonstrates why it is crucial to get vaccinated, as it provides a significantly greater level of protection against infection from COVID-19, whether or not you have been previously infected.

However, the analysis also clearly shows that this protection from just 2 doses wanes significantly within months, which is why the rollout of booster jabs has been an instrumental part of our efforts to contain COVID-19.

To avoid infection and illness, it is vital that everyone eligible takes up the offer of a booster as soon as it is offered.

Vaccine effectiveness for Pfizer, where the second dose was administered 6 weeks or more after the first dose, stood at 85% from 14 to 73 days after, falling to 51% after 6 months.

Vaccine effectiveness for 2 doses of Pfizer, where both doses were administered within 6 weeks of each other, stood at 89% 14 to 73 days after dose 2, decreasing to 53% after 6 months.

Results from this SIREN study were gathered between 7 December 2020 and 21 September 2021.