

SIREN

SARS-CoV2 Immunity & Reinfection Evaluation

Participant Newsletter - Issue 2: July 2021

Dear SIREN participants,

SIREN has completed more than 12 months now, and we would like to thank you for your participation and valuable contribution, which has allowed us to obtain essential information on SARS-CoV-2 infection.

The initial objective of SIREN was to evaluate potential COVID-19 reinfections, which we are actively accessing and will continue to do so. Thanks to your collaboration, we have learnt that reinfections may happen, but they are rare events. In our first published study [\[link\]](#), the risk of someone getting COVID for a second time was 84% lower than someone who had never had the disease. However, in this study, we only had the chance to analyse the data you provided to us from June/20 to January/21, including participants who were not vaccinated. The next questions we are looking forward to answering now are: For how long could someone be protected after being infected by the SARS-CoV-2 virus? And how will their antibody response behave in the long run?

With vaccines roll-out, we also started to investigate how effective vaccines are in real life. We published one study on the Pfizer vaccine [\[link\]](#) and concluded that one dose of this vaccine reduced the risk of getting infected with SARS-CoV-2 by 70%, compared to those who had not been vaccinated. After the second dose, protection was even higher, with an 85% reduced risk of infection. We are currently performing the same analysis for the AstraZeneca vaccine, and results will be published soon.

As you may be aware, SIREN is extending its follow-up for up to 12 months. And why are we doing this?

There are still many questions we would like to answer, such as:

- What are the chances of someone getting COVID after one or two doses of vaccine?
- How will our antibodies behave after vaccination? Is it similar to when you are infected by the virus?
- Are two doses of vaccine enough? Will we need to be re-vaccinated after a period?
- How long immunity from vaccines last? Does it differ depending on the vaccine?

These are just a few questions that we are working on, and to address them, your continued contribution is essential. With the extension and your support, we will be able to follow you up for another year and develop robust data to better understand the immune response against COVID-19.

We really appreciate your help so far and hope you continue with us, so we can come out of this pandemic stronger. Thank you for making SIREN happen!

All the best,
The SIREN team at PHE