



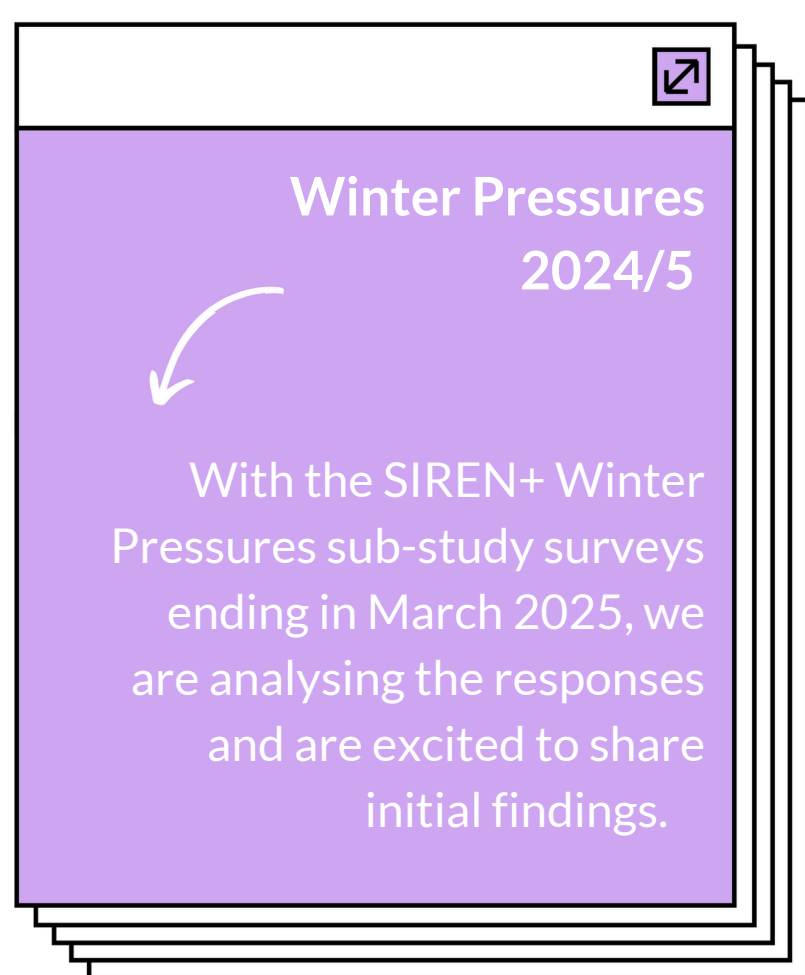
Participant Newsletter

Welcome to the July SIREN newsletter, where we update you on our latest study activities.

The 18th June marked another SIREN birthday, and we are now five years on from the first participant joining the study. While a lot has changed over those years, SIREN is continuing to gather and analyse important data on healthcare worker's health, thanks to continued support and engagement from our participants.

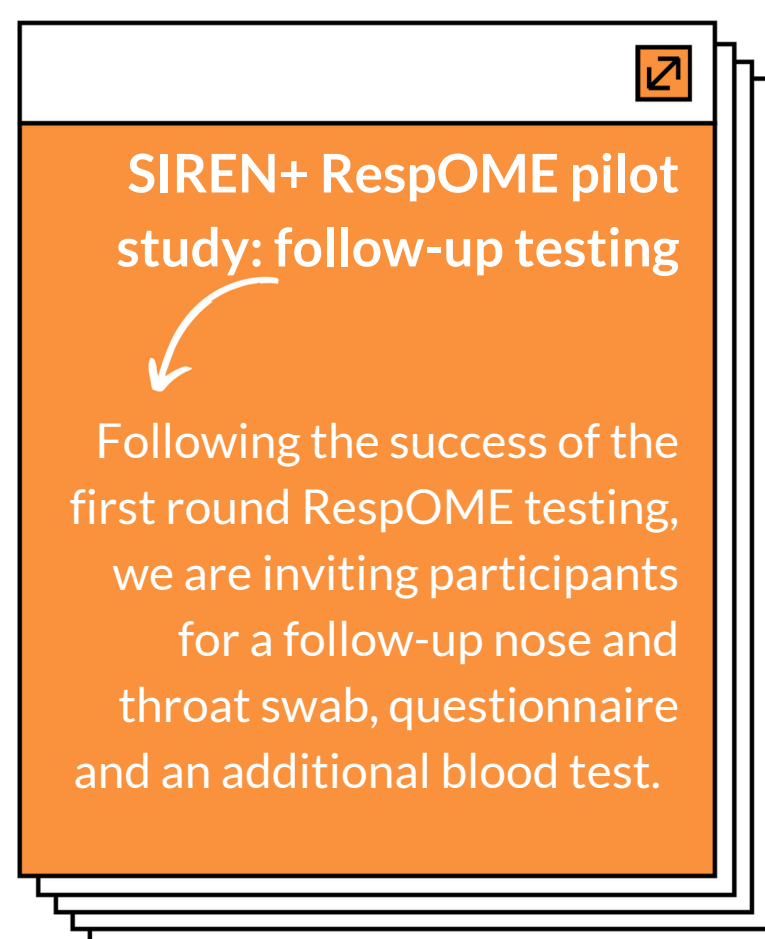
Read on to learn about our latest research, including a second round of testing for the RespOME pilot study, data on long lasting symptoms after COVID-19 infection, and our most recent publications.

Coming up in this issue..



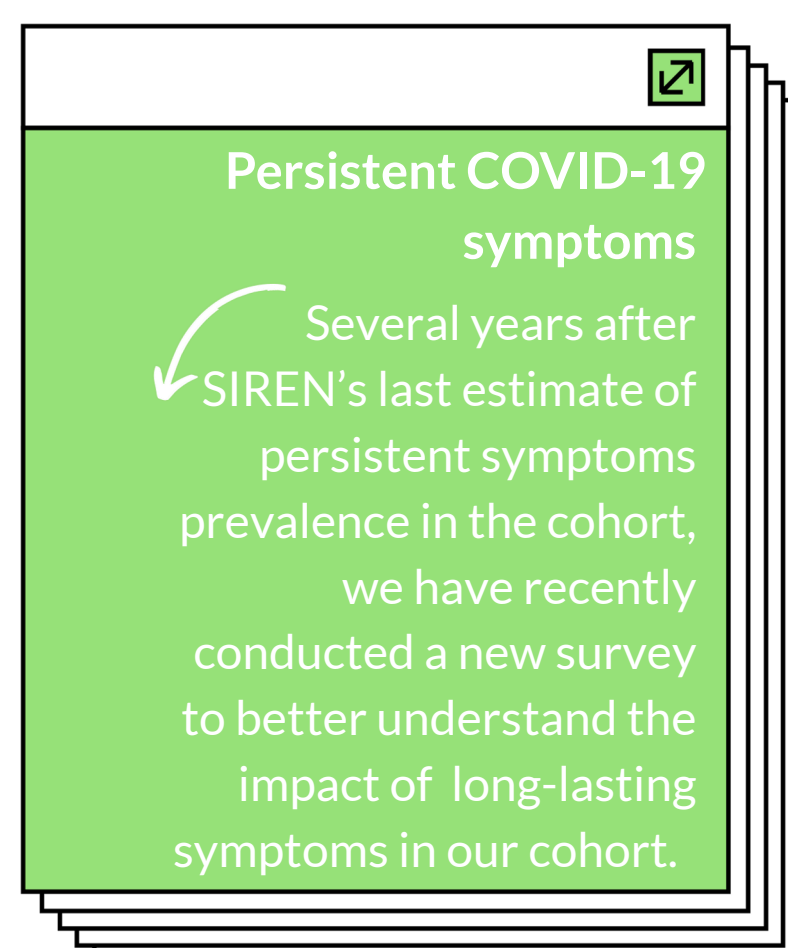
Winter Pressures 2024/5

With the SIREN+ Winter Pressures sub-study surveys ending in March 2025, we are analysing the responses and are excited to share initial findings.



SIREN+ RespOME pilot study: follow-up testing

Following the success of the first round RespOME testing, we are inviting participants for a follow-up nose and throat swab, questionnaire and an additional blood test.



Persistent COVID-19 symptoms

Several years after SIREN's last estimate of persistent symptoms prevalence in the cohort, we have recently conducted a new survey to better understand the impact of long-lasting symptoms in our cohort.



Science Corner

Six new articles have been published by SIREN since our last update. Have a read through the below, or check out our participant portal for a more in-depth overview.



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WINTER PRESSURES

Winter Pressures 2024/5

The SIREN+ Winter Pressures sub-study ended in March 2025, and we wanted to share a huge thank you to everyone who took part.

With your help, we have collected over 5000 surveys, providing invaluable data on the healthcare workforce over the challenging winter period and the impact of respiratory viruses.

Over 5,000 people took part, and analysis into the detailed survey data is currently underway. In the meantime, we are pleased to share some initial findings:

- Approximately half of participants received a COVID-19 booster dose
- The proportion of participants receiving a seasonal influenza vaccine has remained fairly consistent over the last few years, at around 75%
- The peak in influenza-like-illness symptoms was in mid-December
- Participants took over 2000 sick days due to influenza-like-symptoms over the 2024/5 survey period

We also compared our results from the winter pressures sub-study 2024/5 to previous years.





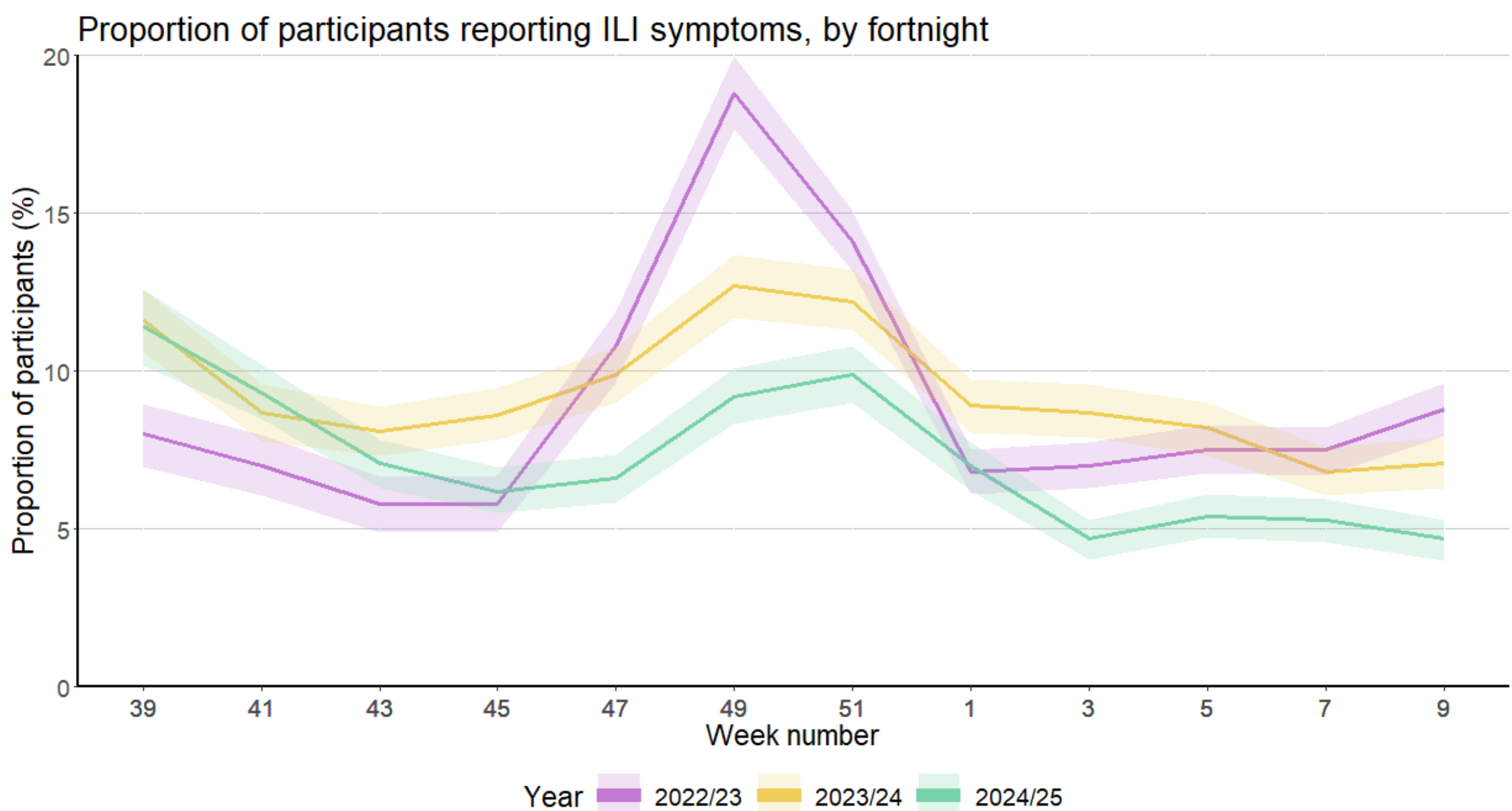
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WINTER PRESSURES



This graph shows the proportion of participants reporting influenza-like illness (ILI) symptoms over time, with each coloured line representing a different year from 2022/3 to 2024/5. Year 2022/3 has the highest peak, indicating a larger proportion of participants reported ILI symptoms that year than in 2023/4 or 2024/5. This coincided with the end of many COVID-19 restrictions (e.g., masking, social distancing) and a particularly high levels of influenza circulating. However, all three years show an increase in symptom reporting over the winter period, highlighting the pressures on the healthcare workforce during this time.

RespOME

RespOME is a pilot study within SIREN+, investigating the respiratory microbiome of healthcare workers, in partnership with the Wellcome Sanger Institute in Cambridge. The study aims to find out if healthcare workers have a different microbiome to the general population, and, in particular, if healthcare workers are more likely to have *Staphylococcus aureus*, a bacterium that is a common cause of infection.

We recruited 252 SIREN participants into this pilot study who provided self-swabs for testing in Winter 2025.



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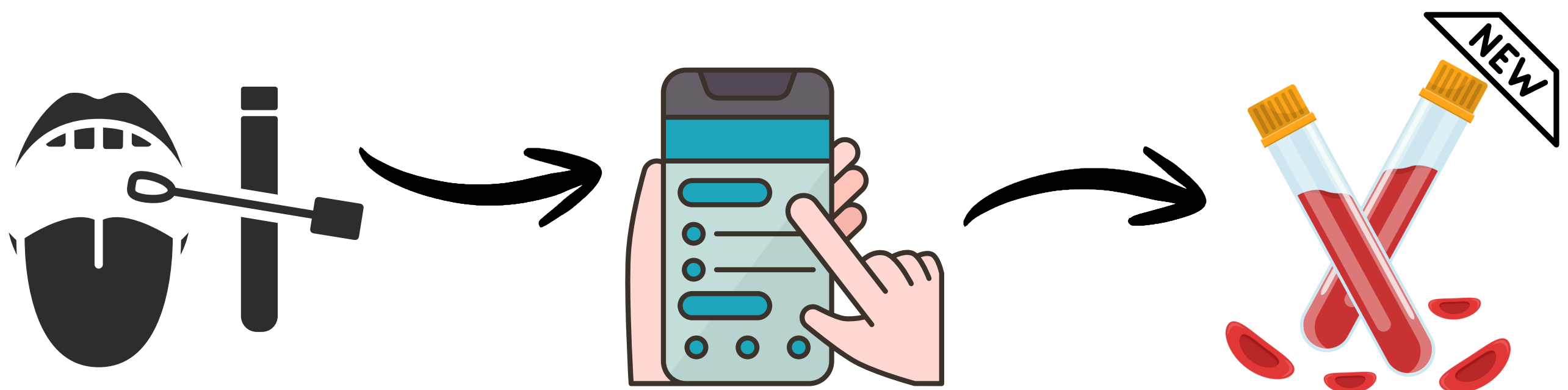
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RESPONSE

We had an outstanding response for this first round of testing - the recruitment target was met within 12 hours, and more than 90% of samples were returned and surveys completed.

Following on from the success of this first testing stage, we have recently invited all 252 participants to complete a second round of testing. As before, participants will be asked to take a nose and throat swab, complete a questionnaire and, in addition, will now be asked to provide a blood sample.

These samples will allow us to investigate the stability of the microbiome over a longer period and see if colonisation patterns change over time. The blood samples will be tested at a UKHSA laboratory to explore the serological response to a range of respiratory viruses.





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NEW SURVEY

Persistent Symptoms Survey

For some people, COVID-19 can lead to persistent symptoms, impacting their personal life and work. Understanding more about how many people are affected, and their symptoms and experience, is an important component for understanding the burden of COVID-19. In April 2025, we invited SIREN participants to complete a new survey to investigate this.

Who took part?

We invited all SIREN participants to take part, and by hearing from those both with and without experiences of persistent symptoms, we can gain a more accurate estimate of the number of people affected.

We have had a great response to the survey, with 5,291 people completing it. The survey has now closed.

How was Long-COVID defined?

We considered Long-COVID to be a chronic condition with symptoms experienced for 12 weeks or more following COVID-19 infection. Symptoms could include fatigue, shortness of breath, or cognitive dysfunction, amongst others.



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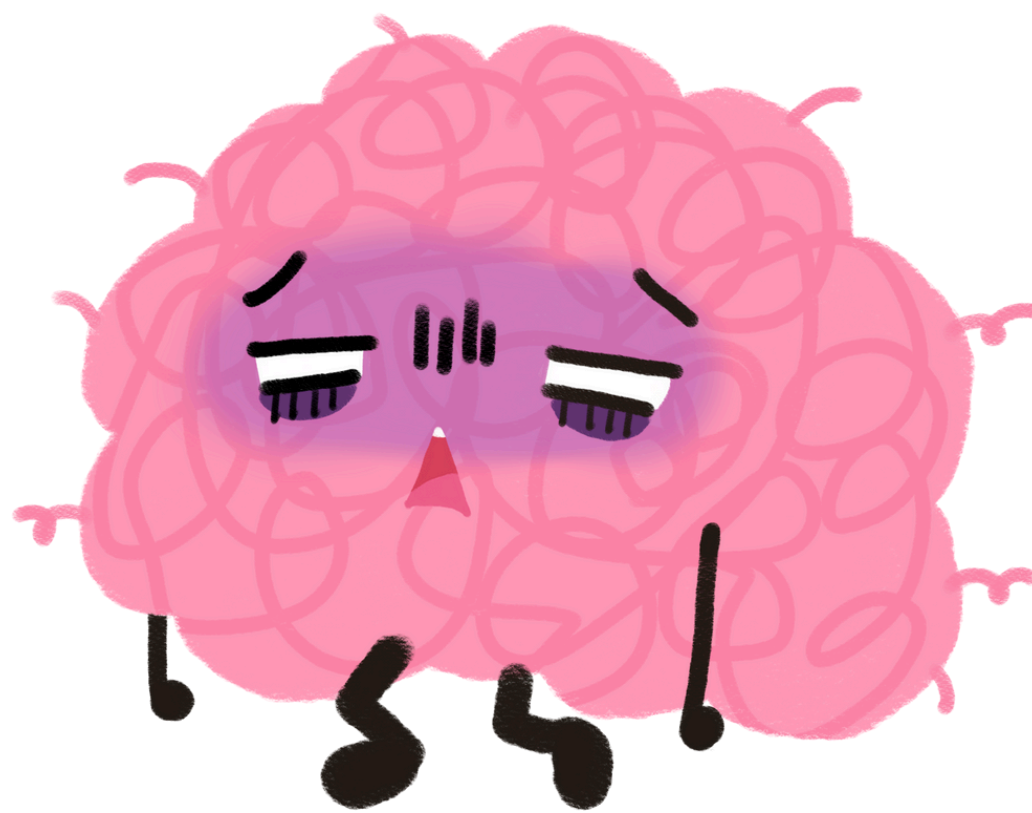
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NEW SURVEY

Why is this survey important?

Previous SIREN research found that, by 2022, among 5,053 survey respondents, 32% of participants had experienced symptoms for more than 12 weeks after being infected with COVID-19.

A lot has changed since 2022, with people experiencing new COVID-19 variants, multiple reinfections and successive booster vaccinations. This new cross-sectional survey provides an up-to-date picture of Long-COVID experiences in our cohort of healthcare workers.



Survey Responses

We closed the survey on 6th June 2025 with 5291 surveys completed - which was a great response.

We are currently analysing the responses to the survey, and look forward to sharing more results shortly.



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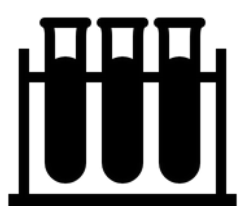
SCIENCE CORNER

Since our last newsletter, we have published **six new academic papers** using SIREN research. These look at topics from what blood sampling strategies work best in SIREN, to understanding what factors influence healthcare worker vaccination.

To read brief summaries of our latest research, organised by theme, take a look at our participant portal by clicking the link below:

[Click here to visit our study portal](#)

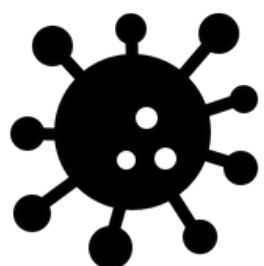
SIREN's latest publications, summarized in our study portal



Evaluating blood sampling strategies within the SIREN study: the experience from a large cohort of healthcare workers in the UK



A qualitative study exploring the barriers and facilitators of conducting the SARS-CoV2 Immunity & Reinfection Evaluation (SIREN) study during the COVID-19 pandemic: Implications for developing resilient NHS research structures.



Adapting COVID-19 research infrastructure to capture influenza and respiratory syncytial virus alongside SARS-CoV-2 in UK healthcare workers winter 2022/23: Results of a pilot study in the SIREN.



Understanding occupational and attitudinal factors influencing UK healthcare worker decisions for COVID-19 and influenza vaccination: A cross-sectional survey within SIREN.



Healthcare worker attitudes to lateral flow device testing and sick leave for influenza-like illness in the UK: A hypothetical scenario-based study.



Adapting COVID-19 research infrastructure to capture influenza and RSV alongside SARS-CoV-2 in UK healthcare workers winter 2022/23: Evaluation of the SIREN Winter Pressures pilot study.



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Evaluating blood sampling strategies within the SIREN study: the experience from a large cohort of healthcare workers in the UK

Research questions

- How do different blood sampling methods used by the SIREN cohort compare?

Methods

- A process evaluation of blood sample collection within the study, since June 2020 to March 2024.
- We also compared two methods of blood sampling: phlebotomy (hospital-based) and capillary sampling (at-home).

What did the study find?

- Compared to hospital samples, samples taken at home were more likely to be returned (80% vs 71%), took less time to arrive at the laboratory for testing (2 vs 6 days), and cost less.
- However, at-home samples were more likely to be considered void (4% vs 0%) and had smaller sample volumes (8 ml vs 600 μ l) than hospital samples.

Why is this significant?

- Large-scale blood testing in research studies is complex, so understanding the pros and cons of each option supports better, more cost-effective research.

Take home messages

- At-home blood sampling is efficient and cheaper than hospital-based sampling, and should be considered as an alternative sampling method in future research.
- You can read the full article [here](#).



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Thank you for your continued engagement with SIREN, which makes this research possible.

Thank You

If you have any questions or want to get in touch, please email
phe.siren.participants@ukhsa.gov.uk