



Participant Newsletter

Welcome to the March issue of the SIREN Participant Newsletter.

In this edition we share our findings from SIREN this Winter, with updates from both the SIREN+ Winter Pressures and SIREN+ Prepare studies.

Alongside these, we have continued our ongoing collaboration with the Francis Crick Institute and Wellcome Sanger Institute. We have included a spotlight feature on how analysis on your recent blood samples has supported international efforts to improve this year's flu vaccine. We are also pleased to share updates on new collaborations utilising samples from the SIREN biobank.

Coming up in this issue...

[SIREN+ Winter Pressures 2025/26 study](#)

As Winter closes, we present a snapshot of the data you provided as part of the Winter Pressures sub-study this year

[How SIREN+ samples are being used to help formulate the 2026/27 flu vaccine](#)

Working in collaboration with the World Influenza Centre, your samples have informed national and international activity

[SIREN+ Prepare pathway](#)

A huge thank you to everyone who took part in SIREN+ Prepare, and an update on our research

[Utilising the SIREN biobank for future research](#)

Spotlight on upcoming studies using your blood samples



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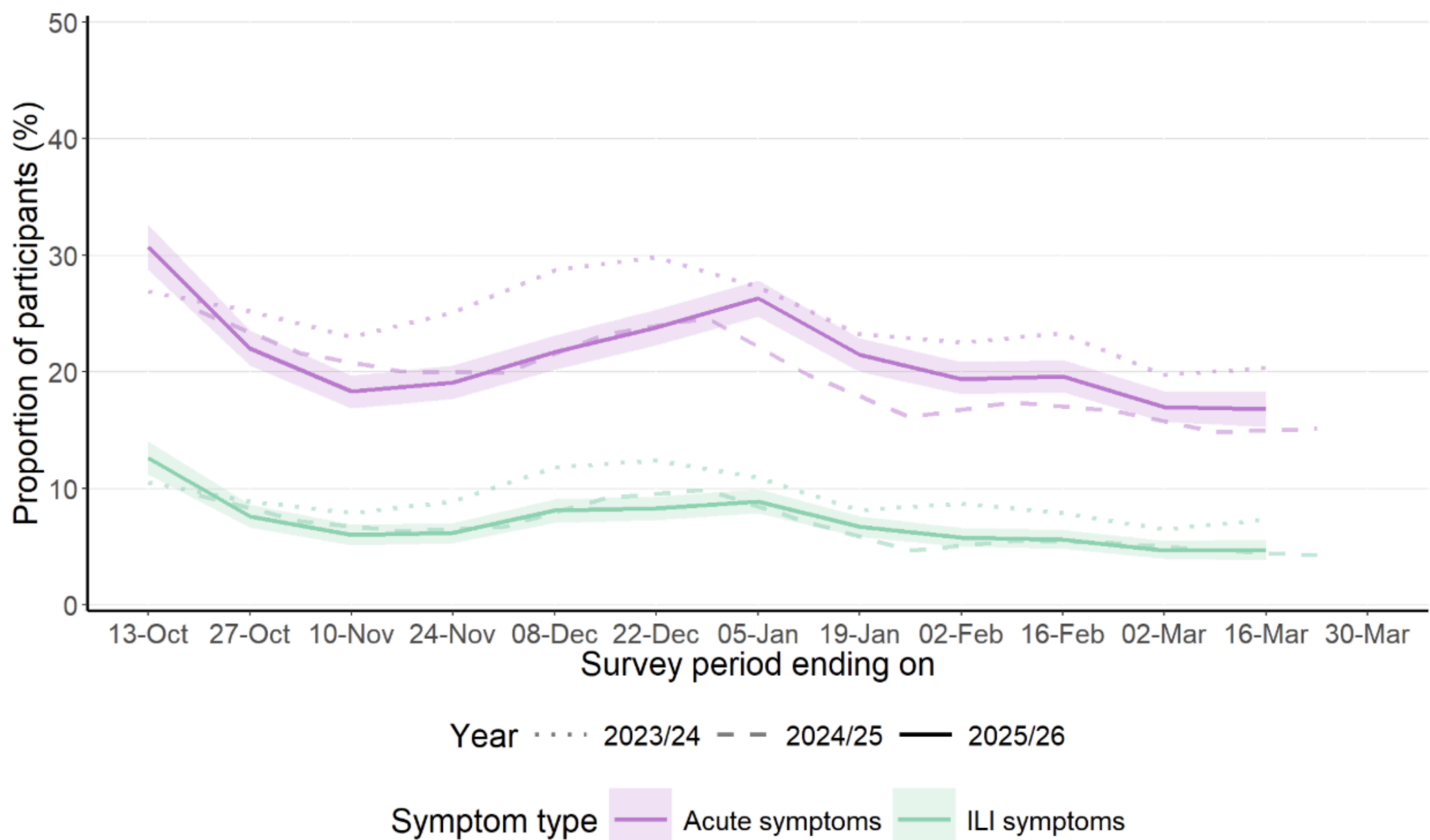
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SIREN+ Winter Pressures 2025/26 study

In the last fortnight, **17.6%** of participants reported experiencing at least one acute symptom. Influenza-like illness (ILI) symptoms were reported by **5.2%** of those taking part. Overall, trends are similar to previous years.

Among those who reported symptoms, the most common were having a runny nose (**54.9%**), sore throat (**43.9%**), and headache (**41%**).

Trends in acute symptoms and influenza-like illness (ILI) symptoms in SIREN participants over winter, 2023/24 to 2025/26





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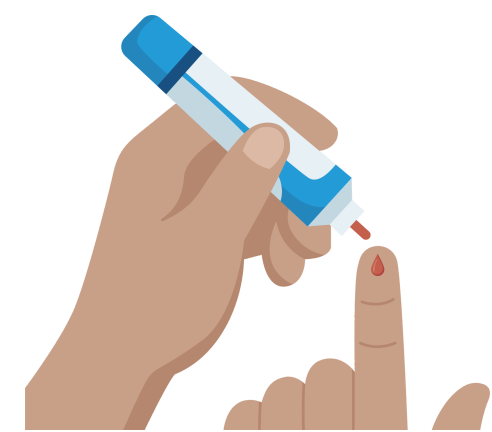
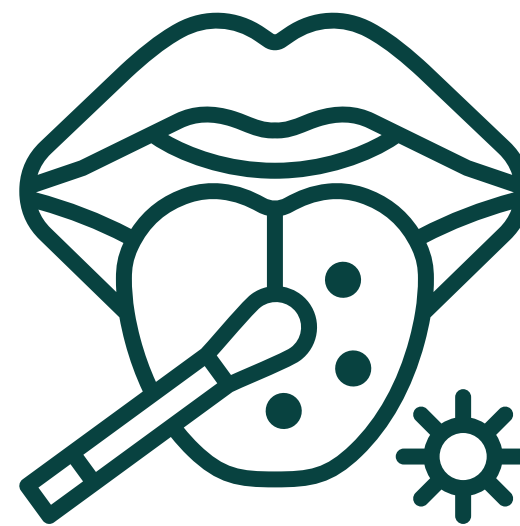
What is SIREN+ Prepare?

Over Winter 25/26, the SIREN+ Prepare Pathway was launched to strengthen our existing SIREN biobank, which allows us to support future research on respiratory viruses. Samples provided via this pathway (both swabs and bloods) will enable us to investigate what is causing respiratory illness during winter, as well as detect potential emerging strains or pathogens.

Why is SIREN+ Prepare important?

By taking part in regular sampling, participants will help us explore different research questions, such as which viruses are causing respiratory

illness and **how long they** remain detectable, and understand **key differences** between people who experience symptoms and those who do not, which will help to develop different interventions and treatments.



The pathway will also help advance our understanding about how the **immune response works** against different pathogens and **healthcare workers' preferences** and experiences with different testing approaches. These are both essential for strengthening future pandemic preparedness.

We would like to say a **huge thank you** too all participants who have provided samples to this pathway.

Your continued involvement in SIREN+ is invaluable.



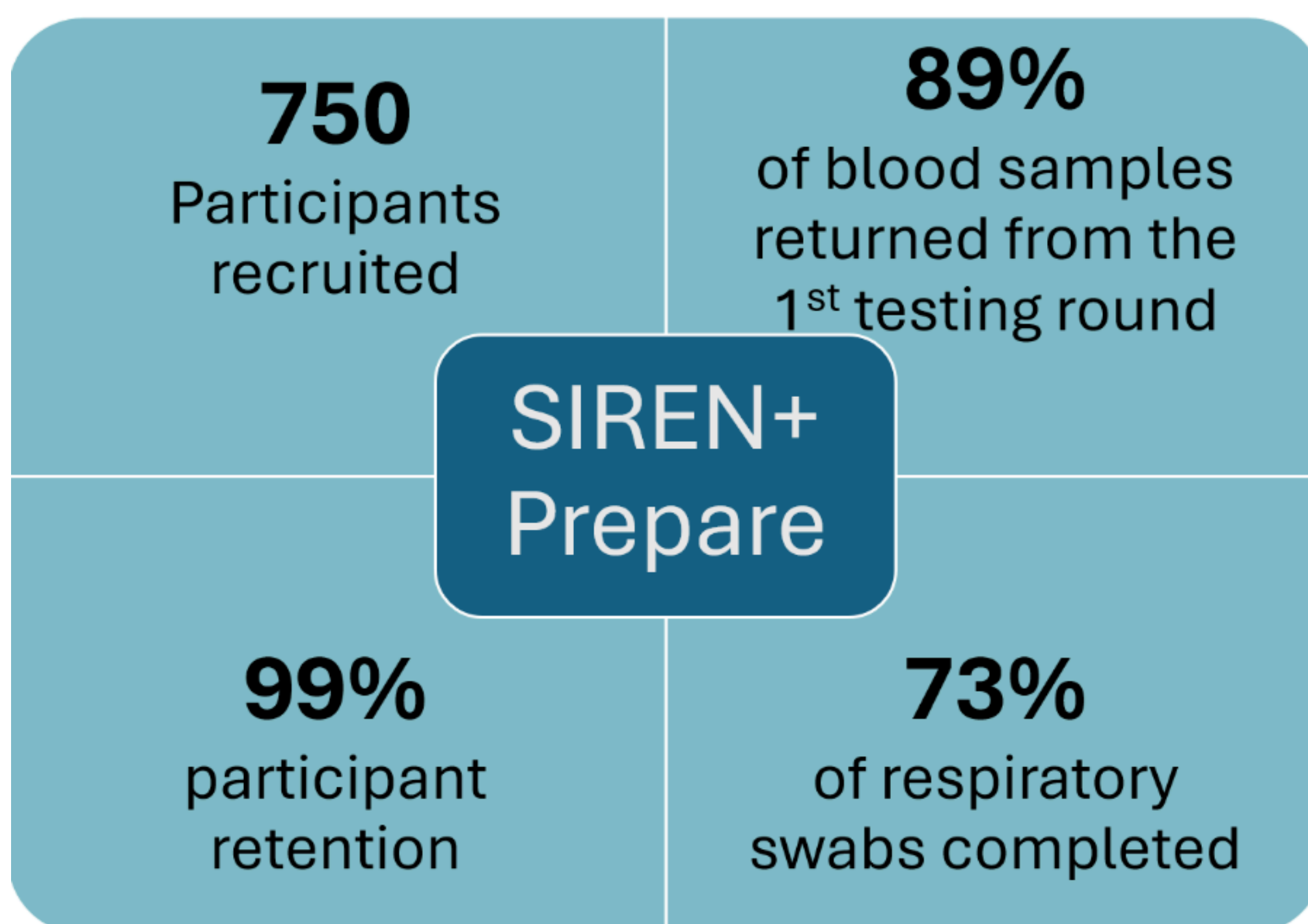
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SIREN+ Prepare in numbers



The numbers above demonstrate the high level of engagement from participants, which has made this pathway a success so far. Thank you to everyone who has taken part, we really appreciate your time and effort!

The Next Steps

The samples returned to the laboratory are being stored securely. We are excited to share that we have been funded to test a selection of SIREN+ Prepare swab samples in collaboration with the Wellcome Sanger Institute using metagenomic sequencing. This approach allows us to investigate which respiratory viruses were circulating in healthcare workers over winter 2025/26.

We look forward to sharing study updates as this work progresses.



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How SIREN blood samples are being used to formulate the flu vaccine

Influenza, or flu, is a respiratory virus that is continually evolving over time, as it circulates and infects people. Due to this, the flu vaccine needs to be regularly updated to make sure it stays effective against the latest strains of the virus.

How are changes to the flu vaccine decided?

For the northern hemisphere, this is decided at the World Health Organisation (WHO) Vaccine Composition Meeting, which took place between 23rd to 27th February 2026 in Istanbul, Turkey. Here, experts meet to discuss what should go into next year's (2026-27) flu vaccine.

Many different types of data are reviewed, including information from researchers around the world.



Group photo of attendees at the WHO Vaccine Composition Meeting, Istanbul February 2026



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How SIREN blood samples are being used to formulate the flu vaccine

How was SIREN data used?

SIREN has a longstanding collaboration with the Worldwide Influenza Centre at the Francis Crick Institute. Researchers at the Crick Institute have studied blood samples from SIREN participants taken before and after flu vaccination, as part of the SIREN+ RespOME sub-study and SIREN+ Prepare pathway.

Crucially, they found that antibodies against influenza generated by the 2025-26 flu vaccine would not be as effective as we would like in recognising newly emerging influenza strains next winter. This key information formed part of the evidence base for deciding to update two components of the vaccine. Without your contributions, we would not be able to present this timely and important data to the WHO.

Thank you to all participants who provided blood samples over the last year. The samples that you have given are an essential tool to be able to assess how effective the current flu vaccines are against the continually evolving influenza viruses that circulate globally.



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Utilising the SIREN biobank for future research

We are pleased to announce two upcoming studies, following collaborations with University of Edinburgh and UKHSA Virus Reference Department, that will utilise anonymous residual serum (blood) samples from the SIREN biobank.

Both studies have been presented to the SIREN Participant Involvement Panel, with positive reviews, and feedback from participants was incorporated into the studies' design and protocol.

↙ *Check below for more details:* ↘

Understanding the impact of the immune response to COVID-19 infection and vaccination on cardiac troponin measurements (University of Edinburgh)

Researchers at University of Edinburgh will evaluate how cardiac protein levels (named troponin) may be affected by the immune response following COVID-19 infection and vaccination. To investigate this, a selection of serum samples from the SIREN biobank collected at different timepoints will be selected and tested for cardiac troponin.

This work has the potential to impact real world clinical decisions.





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Investigating the prevalence of HTLV infection in healthcare workers

Researchers at the UKHSA Virus Reference Department team aim to better understand how common HTLV is among healthcare workers in the UK.



HTLV is a bloodborne virus that can be transmitted through sex, from mother to baby, or through exposure to infected blood. Although a rare condition in the UK, there is limited information on how common HTLV is among healthcare workers, a group who may both be at risk of acquiring and, in rare circumstances, transmitting bloodborne viruses during invasive clinical procedures.

Selected serum samples from the SIREN biobank will be tested anonymously for HTLV antibodies to estimate the prevalence of HTLV in this workforce and support additional guidance to protect both patients and healthcare workers living with HTLV.

We are completing the final steps to initiate these studies, and more information will be shared with you soon. In the meantime, if you have any questions, please feel free to get in touch with us at phe.siren.participants@ukhsa.gov.uk

Latest updates from SIREN updates

Please check the [SIREN participant portal](#) for up-to-date information on our latest publications and collaborations.

Our latest publication is a [cohort profile of SIREN](#), describing the origins of the study, the data collected, and reflecting on how this has adapted over time.



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thank
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*Thank you, as always, for being an essential part of the
SIREN community.*