York and Scarborough Teaching Hospitals NHS Foundation Trust R&D Unit
SOP
SIREN/S03

SIREN Study Procedure for York Trust participants

IT IS THE RESPONSIBILITY OF ALL USERS OF THIS SOP TO ENSURE THAT THE CORRECT VERSION IS BEING USED

All staff should regularly check the R&D Unit's website and/or Q-Pulse for information relating to the implementation of new or revised versions. Staff must ensure that they are adequately trained in the new procedure and must make sure that all copies of superseded versions are promptly withdrawn from use unless notified otherwise by the SOP Controller.

The definitive versions of all R&D Unit SOPs appear online. If you are reading this in printed form check that the version number and date below is the most recent one as shown on the R&D Unit website: www.research.yorkhospitals.nhs.uk/sops-and-guidance-/ and/or Q-Pulse

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Approved by:	Name/Position:	Lydia Harris, Head of R&D
	Signature:	
	Date:	19th October 2021
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	Signature:	
	Date:	19th October 2021

This SOP will normally be reviewed at least every 3 years unless changes to the legislation require otherwise

Version History Log

This area should detail the version history for this document. It should detail the key elements of the changes to the versions.

Version	Date Implemented	Details of significant changes
1.0	17th December 2020	
2.0	30th March 2021	
3.0	19th May 2021	
4.0	30th June 2021	Change of Trust name. Details of moving back into the Trust
5.0	23rd August 2021	
6.0	20th October 2021	

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1 Introduction, Background and Purpose

This SIREN study aims to find out whether healthcare workers who have evidence of prior COVID-19, detected by antibody assays (positive antibody tests), compared to those who do not have evidence of infection (negative antibody tests) are protected from future episodes of infection.

We will recruit healthcare workers to be followed for at least a year and study their immune response to the virus causing COVID-19, called SARS CoV2.

By doing both swab and blood tests together, regularly over time we will be able to assess whether prior infection (measured through an antibody test) protects against future infection (measured through detection of virus on a swab test).

All NHS staff eligible to participate in the study are being asked to have a nose swab every other week, and to provide blood sample every four weeks, in order to detect mild cases or cases that do not have symptoms (for more information see Patient Information Leaflet in **Appendix A**). You will also be asked to complete follow-up questionnaires (2-3 minutes); these will be sent straight to the phone number and/or email address that you provide.

Follow-up will last for 12 months, and the blood and swab tests will happen regularly.

The Principal Investigator (PI) for this study is Dr Neil Todd, Consultant Microbiologist.

This SOP outlines the planned procedure for recruitment and follow-ups of York Trust SIREN participants.

2 Who Should Use This SOP

This SOP applies to current SIREN study participants, and any York Trust staff members interested in participating in the study.

3 When this SOP Should be Used

This SOP should be used by York Trust staff members:

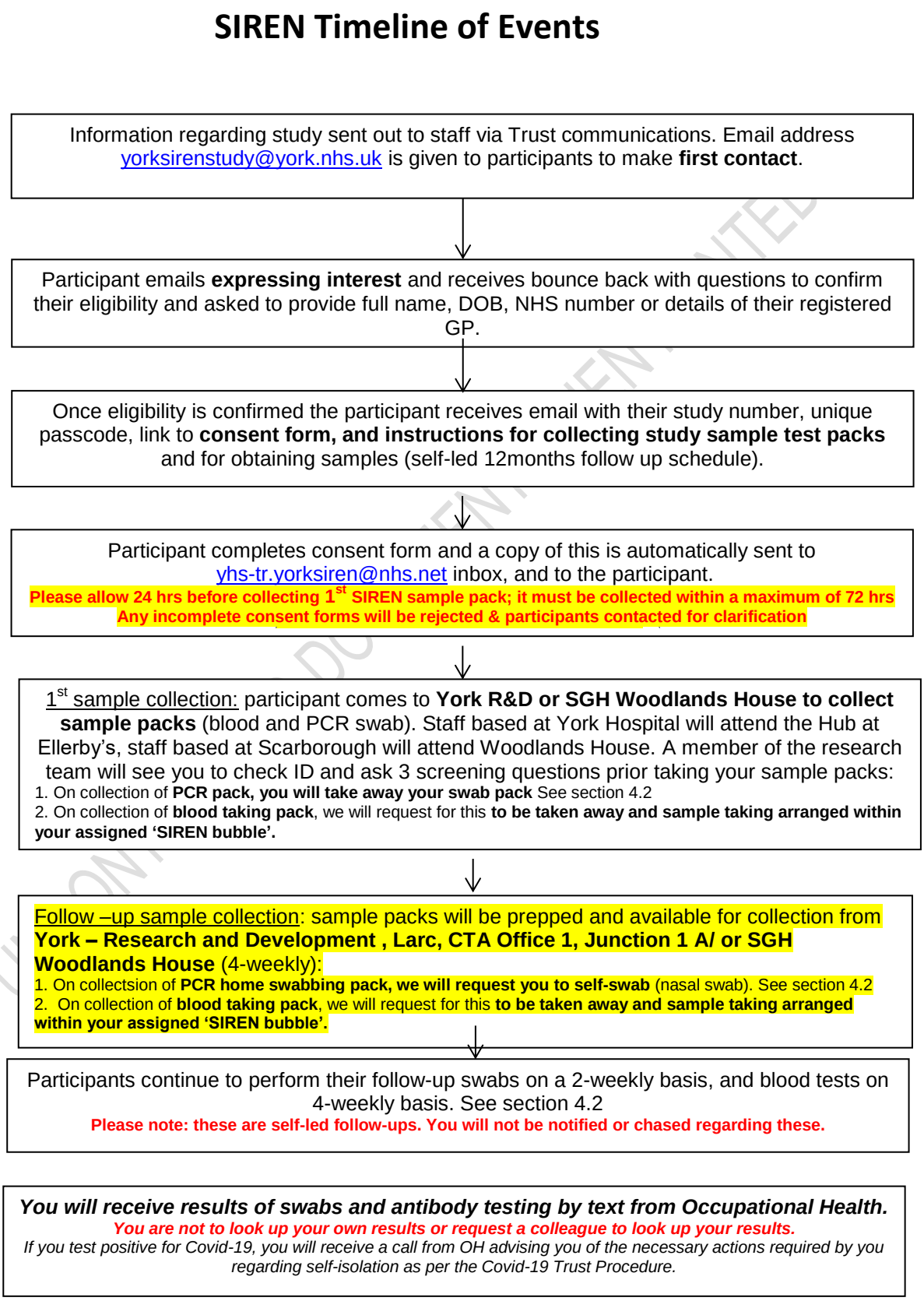
- When interested in joining the SIREN study
- When consented and confirmed eligible to participate in the SIREN project.

Once consented and confirmed eligible, this SOP must be followed for self-led follow up testing regimen.

- When wanting to withdraw from the study

4 Procedure(s)

4.1 Flow chart of SIREN participation



4.2 Procedure for SIREN participants:

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1. <u>How to enrol in the SIREN Study</u>

If you would like to volunteer for the SIREN study, please email yorksirenstudy@YORK.NHS.UK and complete the online consent form. Within this email you will find details for where to access the initial online questionnaire (found at https://snapsurvey.phe.org.uk/siren/). If you have any questions regarding enrolment onto the study please contact yorksirenstudy@YORK.NHS.UK .

The Siren study is an entirely participant self-led programme which is based on peer led sampling within our Trusts individual Care Groups. Follow-ups will last for 12 months; it is the participant's responsibility to complete the sample testing at their required time points.

For most participants the questionnaire and PCR nasal swab tests will be every two weeks and blood tests every four weeks (in addition to the 2-weekly PCR).

The frequency may change if we receive instructions from Public Health England (PHE).

On confirmation and receipt of your consent, your details will be passed to the SIREN Study Coordinator.

You will be assigned to a Care Group 'SIREN Bubble' within your own Care Group settings; you will receive this information via email prior to picking up your first sample pack. This will allow you to contact your peers within your 'SIREN Bubble' and have your blood sample taken at the required time points.

Within 24 hours of consent you will be able to collect your PCR nasal swab & serology blood pack. This must be collected within a maximum of 72 hours from the date on the consent form.
The collection points are:

York: Research and Development, CTA Office 1 Larc, Junction 1 A

Monday, Tuesday, Wednesday and Friday 09:30 – 11:30 and 13:30 – 15:30

Please note venue and times may change. You will be notified by email should this occur and suitable signage for collection points and times will be displayed

Scarborough: Research Office, Top Floor Woodlands House

Tuesday and Wednesday 12:00 – 15:00

Please Note: If there are times when the collection points become overcrowded staff will be asked to wait in the corridor / outside Woodlands House for SGH and called to collect when appropriate.

It is the individual participant's responsibility to follow the testing regimen and arrange sample taking.

2. **The 1st SIREN sample collection:**

On collection of your SIREN sample collection pack you will be asked three questions at your initial visit:

1. *Have you ever had a positive **COVID-19 PCR (swab) test** prior to participating in the SIREN Study (please specify the date, where you had the test and what type of test it was)?* ***You do not need to inform us if you have had a positive lateral flow COVID-19 test.***

2. *Have you ever had a positive **COVID-19 antibody (blood) test** prior to participating in the SIREN Study (please specify the date and where you had the test)?*

3. *Have you received a **COVID-19 vaccine** (please specify the date)**?***

If you answer 'yes' to any of the questions the information will be forwarded to our R&D Laboratory Service so they know which blood samples need to be saved and send to PHE for further testing. If you have opted out of this, your blood samples will not be sent. You will still eligible to partake in the study regardless of the answers you give.

- **On collection of your PCR nasal "take home" swab pack please follow the guidance and instructions below on how to perform and package your sample. This will be performed every two weeks.**

Everything required to collect your swab sample will be provided in your pack.
On receipt of the PCR sample pack, please ensure that the obtained sample is labelled correctly

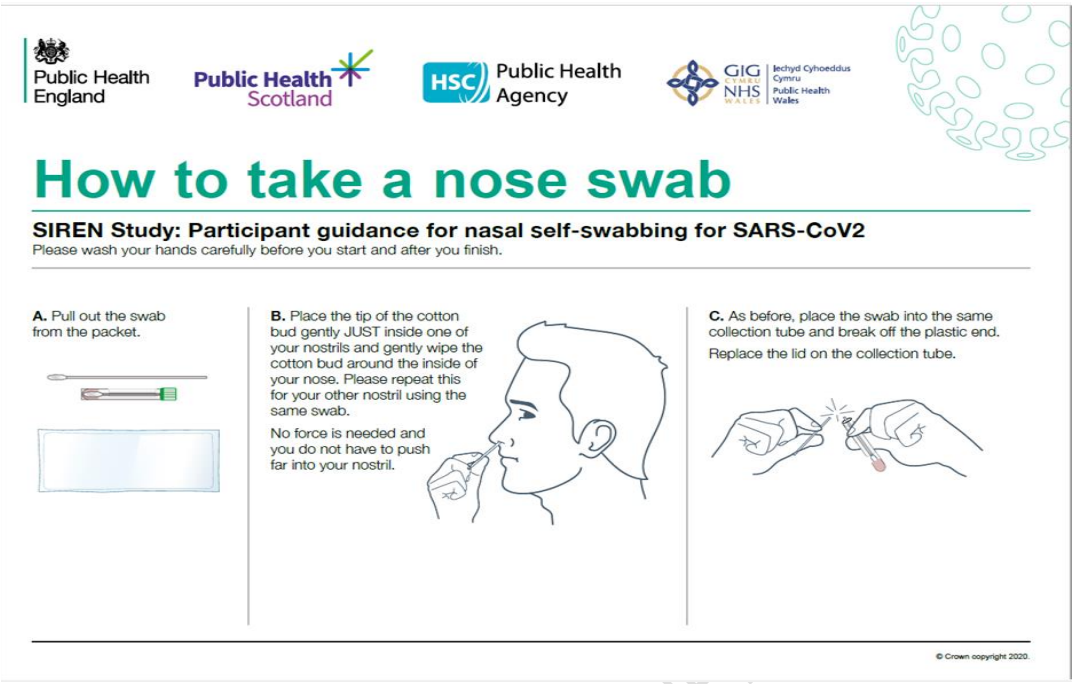
SIREN Home Swabbing Kit Instructions

You should collect a nasal swab sample every 2 weeks and return it to the Trusts Specimen Reception within 24 hours of collection. If you experience COVID-19 symptoms, do not use this swab kit. Instead follow the Trusts procedure and contact your line manager to arrange a test.

The full SIREN study procedure for York Teaching Hospitals NHS Foundation Trust Participants is available: https://www.research.yorkhospitals.nhs.uk/sops-and-guidance-/study-specific-sops/

For help and advice, please contact the SIREN Study Coordinator:
SIRENStudyCoordinator@york.nhs.uk 07971656226

1.  **A SIREN Home Swabbing Kit will include:** **- a sealed viral transport media swab** **- one Ordercomms bag and attached form** **- a ShuttlePouch bag for the sample** **- a return outer bag with hazard symbol**	**2.**  **Collect your nasal sample (according to the instructions on the reverse of this sheet), attach the sample label to the tube, place the tube in the ShuttlePouch bag and seal. Please try to expel any residual air.**
3.  **Place the ShuttlePouch bag inside the green Ordercomms bag and seal the bag by removing orange tape and pressing the flap shut. Please try to expel any residual air.**	**4.**  **Check you have recorded the date and time of sample collection on the Ordercomms form.**
5.  **Place the packaged sample in the return outer bag by removing the tap and pressing the flap shut. Please try to expel any residual air.**	**6.**  **Hand your sample in to Specimen Reception at York Teaching Hospital or Scarborough General Hospital. Please leave your sample in the designated COVID-19 swab box. Out of hours, leave your sample at the main reception desk (York) or in the sample box outside Specimen Reception (Scarborough).**



Public Health England | Public Health Scotland | HSC Public Health Agency | GIG CYMRU NHS WALES Iechyd Cyhoeddus Cymru Public Health Wales

How to take a nose swab

SIREN Study: Participant guidance for nasal self-swabbing for SARS-CoV2

Please wash your hands carefully before you start and after you finish.

A. Pull out the swab from the packet.

B. Place the tip of the cotton bud gently JUST inside one of your nostrils and gently wipe the cotton bud around the inside of your nose. Please repeat this for your other nostril using the same swab.

No force is needed and you do not have to push far into your nostril.

C. As before, place the swab into the same collection tube and break off the plastic end.

Replace the lid on the collection tube.

- **On collection of your serology blood taking pack we will request for you to take the pack away and organise blood collection within your assigned 'SIREN Bubble'.**

Everything required to collect your blood sample will be provided in your blood sample pack. Your blood sample will be collected in 2 x 3.4 mL SST (brown top) blood collection tubes**.**

On receipt of the blood sample pack, please ensure that the obtained sample is labelled correctly and delivered to the Specimen Reception (York or Scarborough) within 24 hours from collecting the pack. Incorrectly labelled samples will be rejected and will not be analysed.

Please note: Blood samples are to be collected through normal venepuncture. These can be collected by a variety of staff as long as they have received appropriate training approved as per the Trust procedure.

It is up to the participants to find a suitable Covid safe and clinically suitable area to obtain required samples.

We have a designated email address SIRENStudyCoordinator@YORK.NHS.UK for you to contact the SIREN Coordinator should you not be able to find someone within your Care Group 'SIREN bubble' to take your blood sample; we can provide you with a list of blood taking participants on request.

3. Follow –up SIREN sample collection & visit diary:

Testing regimen
Two antibody (blood) samples two weeks apart at enrolment into the study
Thereafter serology (blood) testing frequency is monthly (unless a positive sample is identified)
Fortnightly samples for 8 weeks following a positive PCR (swab) test
PCR (swab) tests two weekly throughout the study period

A note on appointment timeframes

We are aware that due to shift patterns, annual leave etc., you may not be able to get your samples collected exactly every 2 weeks. Unless there is a clinical reason to do so, please do not get tested more than once in a 7 day period.
For more details see the section below.

- **PCR follow-up testing will continue two weekly throughout the study period**

- **Antibody testing:**

1. Participants have **two blood (antibody) samples two weeks apart at enrolment into the study**
2. **Thereafter blood (serology) testing frequency is monthly**
3. If a participant has a **positive PCR (swab) test**, **they should then have 2 weekly blood samples for 8 weeks** (from the date of their first positive test). Participants are not expected to obtain blood when are self-isolating.

Below is a participant diary/tracker to assist you – **See appendix B**.
The Sample taken box is for your reference should samples not be obtained.

4. SIREN test results

When your sample reaches the Trust's Laboratories, located at York and Scarborough, your sample will be booked into the Laboratory Information Management System (LIMS).

The sample will be tested and the result will be reported on the LIMS. Your swab sample will usually be analysed within 24 hours of receipt in the laboratory and your blood sample will usually be analysed within 2 working days of receipt in the laboratory. The results are then sent to Occupational Health (OH).

Your blood (antibody) result and swab (PCR) result, if negative, will be communicated to you via text message.

If you have positive swab (PCR) test, you will receive a telephone call from Occupational Health advising you of the necessary actions required by you regarding self-isolation. The Trust Covid-19 standard operating procedure will be followed.

5. Missed samples

If you are unable to complete your samples at the required time points, please either contact your SIREN Coordinator SIRENStudyCoordinator@york.nhs.uk who will be able to advise you, or refer to the sample schedule below:

- Follow-up visits should not occur more than 2 days before the scheduled date or more than 5 days afterwards.

- If you are delayed or early for your swab/blood you can start on a new 14-day test cycle.

- Unless there is a clinical reason to do so, please do not get tested more than once in a 7-day period.

- We would ideally like the follow-up questionnaires to be aligned with the samples, however if they get out of 'sync' it is not a problem, as long as the participant continues on the 14 day cycle as defined above.

Please note: If you test positive for Covid-19 please (within or outside the study) refer to the Trust policy regarding self- isolation and do not attend the hospital for SIREN sample taking till your isolation period is completed.

6. Reportable events - it is your responsibility to inform us (positive PCR swab or antibody blood test outside of the study, or Vaccinated for SARS-COV2)

During the study, if one of the following events occurs, **it is your responsibility to inform the SIREN Study Coordinator immediately** via email SIRENStudyCoordinator@york.nhs.uk

The questions below are to guide you when informing the Siren Coordinator. You are still eligible to remain on the study.

1. *Have you had a positive **COVID-19 PCR (swab) test since your last SIREN sample outside of the SIREN Study** (please specify the date, where you had the test and what type of test it was)? **You do not need to inform us if you have had a positive lateral flow COVID-19 test.***

2. *Have you had a **positive COVID-19 antibody (blood) test since your last SIREN sample outside of the SIREN Study** (please specify the date and where you had the test)?*

3. *Have you received a **COVID-19 vaccine** (please specify the date)?*

Please note:

There is no need to inform us about your SIREN test results, the above only applies to test results outside of the study. Please let us know as soon as you receive the result.

SIREN sampling should only resume once you will have completed your required self-isolation period. If you are isolating or unwell, you will not be expected to attend the hospital for the collection of SIREN sample packs.

Upon your return to work it is your responsibility to contact the SIREN Study Coordinator to discuss and restart your PCR nasal swab and serology blood sampling.

Fortnightly swab & blood testing for eight weeks from the date of your positive PCR test will be required post positive PCR.

7. How to withdraw

You can withdraw from the study without giving a reason at any time by accessing the study page through the unique link sent to you at consent either by email or text.

Once you submit a request to withdraw, PHE will send you a link via email or text and you will be asked to fill in an online form to withdraw from the study, they will only ask if PHE can continue to use your existing samples and data.

You will only be withdrawn once you have answered all the questions on the form and clicked submit.

Please contact the SIREN Coordinator should you not be able to find the unique link sent to you at consent: SIRENStudyCoordinator@YORK.NHS.UK

Please note: Any lateral Covid-19 testing additional to the SIREN study must continue irrespective of your SIREN participation status.

8. Key contact details:

If you have any questions or queries relating to the SIREN Study at York or Scarborough please contact:

- Claire Brookes – SIREN Coordinator SIRENStudyCoordinator@YORK.NHS.UK
  Monday - Friday 09:00 – 17:00
  Based in Outpatient Room 6, Learning and Research Centre (Larc), Junction 1a, York Hospital

- If you have any concerns about any aspect of this study, you should ask to speak to the Senior Research Nurse Team via SeniorResearchNurse@YORK.NHS.UK who will do their best to answer your questions. Alternatively, please contact the study Principal Investigator Dr Neil Todd via neil.todd@york.nhs.uk.

- If you remain unhappy and wish to complain formally, you can do so via PALS. Details can be obtained from Patient advice and Liaison Service (01904) 726262

9. New SOP/ Updates to the SIREN study procedures

All updates regarding the SIREN Standard Operating Procedure or other communication from the SIREN study team at PHE will be emailed sent by the Siren Coordinator.

We ask that you check your emails on a regular basis.

10. Protocol deviations and adverse events/incidents

Participants' safety and quality of study data remains a priority for the SIREN project. Protocol deviations (i.e. unable to access participant's blood, bruising from blood sampling or any risk of harm) must be reported via DATIX as per the Trust AIRS Policy.

Please mark the incident as 'occurred on a research study'.

11. PPE

As per the Trusts guidance (COVID-19 PPE requirements in non-ward clinical areas (e.g. outpatients, radiology, antenatal clinic v 3.1) all staff will wear FFP2 (Gloves, Plastic Aprons, Fluid Resistant Surgical Mask, eye protection).

5 Related SOPs and Documents

COVID-19 PPE requirements in non-ward clinical areas
(e.g. outpatients, radiology, antenatal clinic) v 3.1

6 Appendix A

Public Health England

SIREN- SARS-COV2 immunity and reinfection evaluation

Impact of detectable anti SARS-COV2 antibody on the incidence of COVID-19 in healthcare workers

INFORMATION LEAFLET FOR PARTICIPANTS

We would like you to invite you to take part in this study to understand whether prior infection with SARS-CoV2 (the virus that causes COVID-19) protects against future infection with the same virus. *Before you decide, it is important that you understand why the research is being done and what it would involve for you. Please take time to read this information, and discuss it with others if you wish.* Please also ask the research nurse if there is anything that is not clear.

Why are we doing this study?

The coronavirus (COVID-19) pandemic is having a major impact across the UK.

COVID-19 is caused by a virus, called SARS-CoV2, and the main way we can diagnose infection with it is to take a swab from a person's nose or throat and look for presence of genetic material from the virus. Once someone has recovered from the infection, the virus is no longer present in the nose or throat. But one way the body fights infections like COVID-19 is by producing small particles in the blood called "antibodies". It takes 2-3 weeks for the

body to make enough of these antibodies to fight the infection. When someone gets better, these antibodies can still stay in their blood at low levels – this may help protect against future infections with the same virus.

By doing both swab and blood tests regularly together over time we will be assessing whether prior infection (measured through an antibody test) protects against future infection (detection of virus on a swab).

We will also be trying to improve our understanding of other important areas:

- The blood tests will allow us to understand the number of healthcare workers infected by COVID in the last few months and allow us to understand whether there are differences related to age, ethnicity and other factors.
- By taking regular samples (both swabs and blood), we can measure what proportion of frontline NHS staff that are exposed to SARS-CoV-2 and improve our understanding on how quickly it spreads over the coming months
- By taking blood samples we will understand how the antibody levels change over time and the different types of antibodies that may be present.
- We will also attempt to see how viruses from different individuals relate to each other by comparing the genetic make-up of the viruses.
- If individuals are admitted to hospital, we will explore how individual and virus factors may impact on the illness that people suffer.

Why have I been asked to take part?

You are being asked to take part because you are a healthcare worker and are being offered swabs and blood tests for COVID-19. This study allows us to collect more details about your personal history and symptoms of COVID-19 which allows us to understand the results of the test in more detail. Taking part is voluntary and you should not be placed under any pressure - it is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and asked to sign a consent form. If you decide to take part, you are still free to withdraw at any time and without giving a reason.

What do you want me to do?

If you decide to take part, you will be asked to complete a registration questionnaire and provide an updated symptom review, nose and throat swabs, blood samples regularly (usually once every 2 or 4 weeks) for up to 12 months. The frequency of the samples will vary related to the amount of virus circulating in the population.
If you have fever, cough or any other respiratory symptoms or you are a contact of a confirmed case of COVID-19 are currently being asked to self-isolate at home, then please access swabbing and complete as you would normally within your organisation. If that is the case, please reschedule your appointment for a later date when you are well and back at work.

What will happen to my sample?

You will be given all your results as they are performed at your local laboratory and the results will be shared with PHE who are conducting the study and also monitor the number of infections in the country. Your sample will be processed as normal to look for active virus from nose and throat swabs; if these samples are positive then you will be asked to follow the public health and government advice and stay at home for at least seven days. The blood samples will be processed in a laboratory to collect the serum and the part containing the majority of cells will be discarded. Your blood samples will be tested for antibodies against SARS-CoV-2. Testing will be done at your local hospital, or a PHE lab. Any remaining serum sample at the end of the survey will be anonymised and incorporated into the PHE Seroepidemiology Unit (SEU) collection, unless you ask us to destroy your sample as soon as it has been tested. Samples stored at the PHE SEU will be used to perform a range of different national serosurveys in the future. If you do not want us to transfer your sample to the PHE SEU collection, this will not prevent your taking part in the surveillance, this is marked on the consent from. Your personal data will be stored in accordance with the General Data Protection Regulations (GDPR) and the Data Protection Act 2018. The donated samples will be treated as a gift meaning that we will not be able to return them to you.

What are the benefits to me?

The study will not benefit you directly, but your participation will help provide important information about SARS-CoV-2 re-infection among clinical NHS healthcare staff and provide a stronger evidence base to inform national guidance and policy. You will be informed of you swab test and blood test results from the hospital as soon as they are available. At the end of the surveillance, the overall results will be published in national reports.

What are the disadvantages?

For some, blood sampling may cause momentary discomfort at the site of the blood draw, possible bruising, redness, and swelling around the site, bleeding at the site, feeling of lightheadedness when the blood is drawn, and rarely, an infection at the site of blood draw

What if I change my mind?

If you no longer want to be involved, you can withdraw from the survey at any time by contacting us at SIREN@phe.gov.uk

Will I be given my results?

Yes, you can be given your results according to your local Trust procedures. If you have SARS-COV2 detected on your nose/throat swab, you must follow the self-isolation guidance as you would usually. If you have SARS-COV2 antibody detected in your serological test, you should remember that this does not necessarily protect you against future infection, and you should not change your behaviour. You should take all usual precautions against COVID-19 at home and at work.

What should I do now?

If you would like to volunteer, please go online https://snapsurvey.phe.org.uk/siren/ and complete the online consent form and initial questionnaire. If you have any questions regarding the study, please contact us (contact details below)

Who has reviewed the study?

All research in the NHS is looked at by an independent group of people, called a Research Ethics Committee, to protect participants' interests. This study has been reviewed and given favourable opinion by Berkshire Research Ethics Committee.

How have healthcare workers been involved in the study?

This study has been reviewed by healthcare workers who have participated in other PHE studies (including swab and blood test studies for COVID-19)

What should I do if I have any concerns?

Public Health England as Sponsor, has appropriate insurance in place in the unlikely event that you suffer any harm as a direct consequence of your participation in this study.

If you wish to complain about any aspect of the way in which you have been approached or treated, or how your information is handled during the course of this study, you should contact Dr Susan Hopkins (study email address SIREN@phe.gov.uk) or if you are still unhappy, you can contact the Complaints Manager, Strategy Directorate, Wellington House, 133-155 Waterloo Road, London, SE1 8UG *or email:* complaints@phe.gov.uk

Who is funding the study?

The Department of Health is funding the study through COVID-19 grant in aid monies to Public Health England.

Thank you for reading this information and considering taking part.

Appendix B

SIREN Participant diary/tracker

Please allow 24 hrs before collecting 1st SIREN sample pack; it must be collected within a maximum of 72 hrs from the consent date.

Testing regimen
Two antibody (blood) samples two weeks apart at enrolment into the study
Thereafter serology (blood) testing frequency is monthly (unless a positive sample is identified)
Fortnightly (blood) samples for 8 weeks following a positive PCR test
PCR (swab) tests two weekly throughout the study period
A note on appointment timeframes We are aware that due to shift patterns, annual leave etc., you may not be able to get your samples collected exactly every 2 weeks. Unless there is a clinical reason to do so, please do not get tested more than once in a 7 day period. For more details see section 4.2

The Sample taken box is for your reference should samples not be obtained

Samples required	**Sample due date**	**Sample taken**
		(Yes or No)
Baseline Sample – Antibody Blood and PCR nasal swab	e.g 03/11/2020	e.g 03/11/2020
2nd Baseline Sample – Antibody Blood and PCR nasal Swab, (Samples to be obtained 2 weeks after Baseline sample)	e.g 17/11/2020	e.g 19/11/2020
PCR Nasal Swab	e.g 01/12/2020	e.g 01/12/2020

Antibody Blood and PCR Nasal Swab	☐	☐
PCR Nasal Swab	☐	☐
Antibody Blood and PCR Nasal Swab	☐	☐
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