

COVID-19 Antibody Testing Service

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1 PURPOSE

This document is aimed at NHS staff that will be responsible for setting up the antibody testing service within the organisation. This document will provide the information required for COVID-19 antibody testing.

The document will provide information on:

1. Information about the COVID-19 antibody test
2. Who can request a test?
3. Requesting staff tests
4. Requesting patient tests
5. Viewing results
6. Additional information

2 COVID-19 Antibody Test

COVID-19 antibody testing is a blood test to look at whether the body has produced an immune reaction (antibodies) to the COVID-19 virus.

Antibodies develop in viral infections as part of the body's attempt to fight the virus. An antibody test can tell someone whether they have had the virus that causes COVID-19 in the past. The test works by taking a blood sample and testing for the presence of antibodies to the COVID-19 virus.

It takes time for the body to produce this response. The tests we are offering will look for the two antibodies (IgM and IgG) that are produced by the body after infection. A detailed FAQ on COVID-19 antibody testing can be found in **appendix 1**.

3 Who can request a test?

NHS Staff

This test will be progressively offered to NHS staff who want it, including those working on NHS premises but not directly employed by the NHS, working for the NHS but not on NHS premises, and those in primary, community, and mental health care including community pharmacists.

Patients

The antibody test will be available for clinicians to use in their routine management of NHS patients as appropriate. In circumstances where there is not a specific clinical indication for the test, the Secretary of State has additionally decided that it may be offered to NHS patients already having their blood taken and who want to know whether they have been infected with COVID-19.

4 Requesting STAFF Tests

Staff working in the NHS is entitled to a COVID-19 antibody test, these include staff working in:

- St Helens and Knowsley Hospitals NHS Trust
- Southport and Ormskirk Hospitals NHS Trust
- Primary care
- Community health care
- Mental health care

All staff will be required to complete a 'Staff COVID-19 Antibody Screening Request Form' found in **appendix 2**; a link to this request form will be added to the Trust intranet.

Procedure

1. Complete the 'Staff COVID-19 Antibody Screening Request Form' in **appendix 2**.
2. Ensure an up-to-date mobile number or email address is provided as results will be issued back through this method.
3. Give staff a copy of the 'COVID-19 Antibody Testing FAQ' found in **appendix 1**.
4. If staff consents, ask them to sign and date the bottom of the screening request form.
5. Label the form and bottle with three patient identifiers
 - i. Name
 - ii. Date of birth
 - iii. Address OR NHS number OR hospital number
6. Collect the blood sample into a BROWN GEL bottle
7. Send completed form and sample to the Microbiology Department
8. Results will be available via text message or email (depending on contact information provided) 48-72hrs after receipt in the laboratory.

Please note:

- We will be unable to process requests which do not have signed consent
- Please access ICE, Medway, or the Trust intranet for access to the screening request form.

Checklist:

- | | |
|--|------------------------------|
| 1. 'Staff COVID-19 Antibody Screening Request Form' completed? | <input type="checkbox"/> Yes |
| 2. Three identifiers on form and sample? | <input type="checkbox"/> Yes |
| 3. Mobile number or email address provided for results? | <input type="checkbox"/> Yes |
| 4. Consent and signature obtained from staff member? | <input type="checkbox"/> Yes |

Flow diagram of ordering a test can be found in **appendix 4**.

5 Requesting PATIENT Tests

Requesting on Medway and ICE will be available from 15th June 2020
Patients can request a COVID-19 antibody test if they are having blood taken within hospital. Clinicians may also use this in their routine management of NHS patients as appropriate.

Ordering through Medway and ICE is encouraged as results will link into the patients records.

Procedure

1. Using Medway or ICE, order the 'COVID-19 Total Antibody Test'
2. Give patients a copy of the 'COVID-19 Antibody Testing FAQ' found in **appendix 1**.
3. If the patient provides consent, ask them to sign and date the 'Patient consent form' which is found in **appendix 4**, or alternatively use the link on Medway and ICE to print out the consent form.
4. Label the form and bottle with the Medway or ICE stickers
5. If labels fail to print, ensure three patient identifiers are on the form and sample
 - i. Name
 - ii. Date of birth
 - iii. Address OR NHS number OR hospital number
6. Send completed form and sample to the Microbiology Department
7. Results will be available in Medway and ICE 48-72hrs after receipt in the laboratory.

NO Medway or ICE access

1. Complete the 'Patient COVID-19 Antibody Screening Request Form' in **appendix 3**.
2. Give patients a copy of the 'COVID-19 Antibody Testing FAQ' found in **appendix 1**.
3. If the patient provides consent, ask them to sign and date the bottom of the screening request form.
4. Label the form and bottle with three patient identifiers
 - i. Name
 - ii. Date of birth
 - iii. Address OR NHS number OR hospital number
5. Collect the blood sample into a BROWN GEL bottle
6. Send completed form and sample to the Microbiology Department
7. Results will be available in Medway and ICE 48-72hrs after receipt in the laboratory.

Checklist:

1. Medway or ICE request completed? Yes
2. Three identifiers on form and sample? Yes
3. If no Medway or ICE access, ordered via form in **appendix 3**? Yes

Flow diagram of ordering a test can be found in **appendix 4**.

6 Viewing Results

6.1 Staff Results

Staff results will be sent via text message or email depending on the method that was given on the request form. The method below describes how results can be viewed.

1. Staff will receive a message asking them to login to the Patient Hub to view the results.
2. Using their DOB and mobile number OR email login to the Patient Hub.
3. If successful, a unique 6-digit code will be issued, and this can then be used to access the results
4. There are three possible results from this test:

Positive COVID antibody test

Consistent with SARS-CoV-2 infection at some time

Degree of immunity to reinfection is unknown at the present time so must not be assumed.

Staff must continue to use appropriate infection prevention precautions.

Equivocal COVID antibody test

The weakly reactive antibody result is difficult to interpret. Please send a repeat clotted blood in two weeks.

Negative COVID antibody test

No serological evidence of previous SARS-CoV-2 infection.

This test may be negative in early infection. Please send a combined nose and throat swab for SARS-CoV-2 PCR if infection in the past week is suspected.

6.2 Patient Results

Patient results can be accessed via Medway or ICE and will be listed under 'COVID-19 Total Ab'. There are three possible results from this test:

SARS-CoV-2 antibody DETECTED.

Consistent with SARS-CoV-2 infection at some time

Degree of immunity to reinfection is unknown at the present time so must not be assumed.

Staff must continue to use appropriate infection prevention precautions.

SARS-CoV-2 antibody EQUIVOCAL

The weakly reactive antibody result is difficult to interpret. Please send a repeat clotted blood in two weeks.

SARS-CoV-2 antibody NOT detected.

No serological evidence of previous SARS-CoV-2 infection.

This test may be negative in early infection. Please send a combined nose and throat swab for SARS-CoV-2 PCR if infection in the past week is suspected.

7 Additional Information

If results are not received within seven days

Staff

STHK please contact COVID support line on 0151 676 5530

SOHT please contact Occupational Health and Wellbeing on 01695 656872

Primary and community care please contact the Microbiology Department on 0151 430 1837

In-patients and Out-patients

The consultant and / or care team should check Medway for the result, and if not available please contact the Microbiology Department on 0151 430 1837 to request the result.

Arranging transportation to the Microbiology Department

It is your responsibility to arrange for the secure transportation of your blood samples into the St Helens and Knowsley Teaching Hospitals NHS Trust - Pathology.

The delivery address is:

Microbiology Department
Nightingale House (lower ground floor)
Whiston Hospital
Warrington Road
Prescot
Merseyside
L35 5DR

Department opening hours

The department is open 24/7 to accept samples. However, COVID-19 antibody testing will only be run during routine hours Mon-Fri; any samples received outside of these hours will be stored before processing.

Consumables

Please contact Pathology.Support@sthk.nhs.uk for a supply of BROWN GEL containers, if required.

8 ABBREVIATIONS

Abbreviation	Expansion
SOHT	Southport and Ormskirk Hospitals NHS Trust
STHK	St Helens and Knowsley Hospitals NHS Trust

9 LINKED SOPS/DOCUMENTS

[COVID-19 antibody testing information website](#)

10 APPENDIX 1 – COVID-19 Antibody Testing FAQs

What is an antibody (or serological) test?

COVID-19 antibody testing is a blood test to look at whether the body has produced an immune reaction (antibodies) to the COVID-19 virus.

Antibodies develop in viral infections as part of the body's attempt to fight the virus. An antibody test can tell someone whether they have had the virus that causes COVID-19 in the past. The test works by taking a blood sample and testing for the presence of antibodies to the COVID-19 virus.

It takes time for the body to produce this response. The tests we are offering will look for the two antibodies (IgM and IgG) that are produced by the body after infection.

Do I have to have an antibody test?

The Trust intends to offer every staff member an antibody test, at present this is on a voluntary basis.

How does an antibody test differ to a virus test (PCR test)?

Antibody test:

Antibody tests are used to detect antibodies to the virus as a marker of past infection. A positive test result indicates that a person has previously had the virus and has developed some form of immune response.

PCR test/virus test:

In contrast, a PCR test aims to find out if you currently have the virus. A positive result does not necessarily indicate that you will go on to develop antibodies to the virus and an immune response. It is possible that around 10% of people who test positive will not develop an immune response.

What do antibody test results mean?

A positive antibody test demonstrates that someone has developed antibodies to the virus. The presence of antibodies signals that the body has staged an immune response to the virus. This usually happens about two weeks after the first day of infection.

COVID-19 is a new disease, and our understanding of the body's immune response to it is limited. We do not know, for example, how long an antibody response lasts, nor whether having antibodies means you can't transmit the virus to others. Our understanding of the virus will grow with new scientific studies as evidence emerges.

An antibody test result can only tell an individual whether or not they have had the virus in the past. Antibody tests are also being used currently in surveillance studies, to understand what proportion of the population has already had the virus.

Can this antibody test tell me if I have an infection now or had a recent infection?

The test for antibodies is only reliable for detecting that you had the infection more than two weeks ago.

If you test positive for antibodies, can you ignore lockdown restrictions and/or infection prevention and control precautions?

No. There is no evidence yet to suggest that those who have been proven to have had the virus are immune. This is the position of the World Health Organisation.

As the presence of antibodies does not necessarily mean you are immune, you should continue to comply with social distancing measures and government guidelines. You must also continue to adhere to appropriate infection prevention and control measures (such as hand hygiene and use of appropriate PPE) irrespective of the presence of antibodies.

What does a negative antibody test mean?

For most people a negative test will mean that they have not had the infection, if the test was done more than two weeks after the first day of infection. However, not all infected individuals make enough antibodies to be detected by the current tests, so, for a small number of people, a negative result may not mean they have not had the infection, especially if there were no symptoms or very mild symptoms.

How will I be informed of the result?

Communication of the result is the responsibility of your employing organisation or for patients, the organisation that provided the test. Staff member results will be communicated via text message. The results will not go on employment record and your GP should be able to access the result if required and according to local information sharing protocols.

Are there any risks to having the test?

There are some risks related to having a blood test, such as feeling dizzy and faint during and after the test but nothing specific to this antibody test. Risks can also include bruising at the venepuncture site. Serious complications such as an infection at the site where blood was taken and phlebitis (swelling of the vein) are possible but generally extremely unlikely.

How will my information be used?

The anonymised results across the testing programme will provide information on the prevalence of COVID-19 in different regions of the country and help us better understand how the disease spreads. The information will be shared with Public Health England and other NHS bodies.

11 APPENDIX 2 - Staff COVID-19 Antibody Screening Request Form

STAFF COVID-19 Antibody Screening Request Form

Please use an individual **BROWN GEL** container to collect sample.
 Label the sample using **three patient identifiers**, complete the form below, and send to Microbiology.
 Please contact Pathology.Support@sthk.nhs.uk for a supply of forms and brown gel containers, if required.

PATIENT INFORMATION	
Surname:	NHS number:
Forename:	Mobile number:
Date of birth: / / (dd/mm/yyyy)	Job role:
Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female	Department:
Address:	GP:
.....	GP address:
Postcode:
	Postcode:

REQUESTING LOCATION	
<input type="checkbox"/> St Helens and Knowsley Hospitals	<input type="checkbox"/> Southport and Ormskirk Hospitals
<input type="checkbox"/> GP/Community care:	
Sample collected by: (Please print name)	

SAMPLE DETAILS – Clotted blood (Brown serum bottle)		
Date collected:	Time:	Sample reference: <i>Laboratory use only</i>

CLINICAL DETAILS	
Previous symptoms? <input type="checkbox"/> Yes: Date:	Previous exposure to COVID-19? Tick if applies
Previous PCR positive? <input type="checkbox"/> Yes: Date:	<input type="checkbox"/> House hold contact Date:
	<input type="checkbox"/> Other: Date:

EPIDEMIOLOGY – Used to help us understand the result, all responses will be <u>confidential</u>
Which best describes your ethnicity?
<input type="checkbox"/> White <input type="checkbox"/> Black <input type="checkbox"/> Asian <input type="checkbox"/> Prefer not to say <input type="checkbox"/> Other:

CONSENT
<ul style="list-style-type: none"> I confirm I have read the above information; I understand that my participation is voluntary and I consent for this procedure. I have had the opportunity to consider the information and can confirm that I understand the nature and purpose of this procedure, together with the benefits and risks. I am aware that if the test is positive, based on the information available at this point in time, it may not indicate I am immune and confirm that I will continue to adhere to appropriate infection prevention practices. My information will be shared with PHE and other NHS bodies. I declare that the information I have given on this form is correct and complete.

Sign:

Date:

12 APPENDIX 3 – Patient COVID-19 Antibody Screening Request Form

PATIENT COVID-19 Antibody Screening Request Form

Please use an individual **BROWN GEL** container to collect sample.
 Label the sample using **three patient identifiers**, complete the form below, and send to Microbiology.
 Please contact Pathology.Support@sthk.nhs.uk for a supply of forms and brown gel containers, if required.

PATIENT INFORMATION	
Surname:	Ward:
Forename:	Consultant:
Date of birth: / / (dd/mm/yyyy)	Address:
Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female
NHS number:
Hospital number:	Postcode:

REQUESTING LOCATION
<input type="checkbox"/> St Helens and Knowsley Hospitals <input type="checkbox"/> Southport and Ormskirk Hospitals
Sample collected by: (Please print name)

SAMPLE DETAILS – Clotted blood (Brown serum bottle)	
Date collected: Time:	Sample reference: <i>Laboratory use only</i>

CLINICAL DETAILS	
Previous symptoms? <input type="checkbox"/> Yes: Date: Previous PCR positive? <input type="checkbox"/> Yes: Date:	Previous exposure to COVID-19? Tick if applies <input type="checkbox"/> House hold contact Date: <input type="checkbox"/> Other: Date:

EPIDEMIOLOGY – Used to help us understand the result, all responses will be <u>confidential</u>
Which best describes your ethnicity? <input type="checkbox"/> White <input type="checkbox"/> Black <input type="checkbox"/> Asian <input type="checkbox"/> Prefer not to say <input type="checkbox"/> Other:

CONSENT
<ul style="list-style-type: none"> I confirm I have read the above information; I understand that my participation is voluntary and I consent for this procedure. I have had the opportunity to consider the information and can confirm that I understand the nature and purpose of this procedure, together with the benefits and risks. I am aware that if the test is positive, based on the information available at this point in time, it may not indicate I am immune and confirm that I will continue to adhere to appropriate infection prevention practices. My information will be shared with PHE and other NHS bodies. I declare that the information I have given on this form is correct and complete.

Sign:

Date:

13 APPENDIX 4 – Requesting Flow Chart

