

SOM offers these broad principles to deal with issues relating to COVID-19 testing. These are intended to be pragmatic and are aimed at reinforcing the Government's strategy at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/878121/coronavirus-covid-19-testing-strategy.pdf. We note that:

"Our experts are clear that an unreliable test is worse than no test. We need to be led by the evidence. Hence, the Chief Medical Officer discourages in the strongest terms organisations from buying their own unvalidated antibody tests".

Also see <https://www.gov.uk/guidance/guidance-on-coronavirus-covid-19-tests-and-testing-kits> and <https://www.gov.uk/government/publications/covid-19-rapid-tests-for-use-in-community-pharmacies-or-at-home>.

We support and are pleased to see FOM's statement on testing at <https://www.fom.ac.uk/general-news/covid-19-information-sheet-03-04-2020>

There are no CE-marked tests for home use that can be bought yet, e.g. from pharmacies.

Currently there are two tests in use. The **antigen** test, a PCR lab test, looks directly for the virus RNA. There is also a newer **antibody** test, which looks for evidence that the body has been exposed and reacted to the virus.

The **antigen** PCR test is laboratory intensive, 24-48-hour turnaround, and has about 80-85% sensitivity (reliability for identifying the virus antigen) needing competent swabbing. Performing the test is a potentially high-risk procedure for the clinician doing it.

The newer **antibody** test coming online now is a blood sample (finger prick) applied to a reagent strip with immediate result and is being manufactured in high volume. This device is expected to be suitable for wider community use.

The **antibody** device measures IgM (immediate immune response) and IgG (longer term response) to the virus. Good quality devices are 95% sensitive (the ability of the test to identify those with the disease). Repeat testing may be required in a newly sick person.

The use of the **antibody** test may include: -

- Point of care diagnostics in e.g. Emergency Departments, to test for immunity.
- Tests for staff going self-isolating with symptoms of COVID-19 (and may also include taking throat swabs for PCR **antigen** testing to confirm presence, or not, of the virus)
- Tests for staff returning to work to confirm COVID-19 immunity.
- Much more widespread testing to better understand the pandemic and how far it has spread in the community.

It is expected the **antibody** test will begin to be available mid-April. The following is noted:

- This is a rapidly changing area. Antibody tests are already available in the commercial market but there is a lack of clarity as to their sensitivity and specificity - the reliability of the test to identify those who do, and who do not, have the disease¹.
- The Royal College of Physicians ethics guidance regarding COVID-19² is noted and supported; appropriate use of testing is an important element of the ethical approach.

¹ <https://academic.oup.com/bjaed/article/8/6/221/406440>

² <https://www.rcplondon.ac.uk/news/ethical-guidance-published-frontline-staff-dealing-pandemic>

- Presently, there is a lack of knowledge regarding immunity to COVID-19, and how long that immunity lasts.
- Precautionary measures must continue to be emphasised - **social distancing**.
- Occupational Health providers offering testing have a duty to ensure the certification of the test and the appropriate use of testing. Those commissioning tests and those being tested should understand the key facts around testing, including the appropriateness and type of testing (antigen or antibody) and the meaning of positive or negative results.

Advice for Occupational Health professionals

- Tests should not be used that are not reliable, validated, and reproducible.
- Future antibody tests will be more useful for return to work advice rather than a PCR test, both in terms of availability and sensitivity
- There is a lack of clarity as to interpretation of test results, what is a reliable test and return to work certification predicated on test results.
- For the time being, tests should prioritise key and essential workers, such as those employed in critical logistics and in health services.
- Covid-19 is a notifiable disease and the authorities must be informed of a positive result

Advice for employers

- Priority groups include healthcare workers and other key workers who are self-isolating themselves from work (or family members of these workers) with possible infection.
- There is the potential for unreliable and/or unsafe **antigen** testing if not being carried out by a health professional, such as an occupational health professional.
- Which manufacturers **antibody** tests are reliable is not presently clear.
- The implications of the presence or absence of antibodies to the virus will be clarified
- There are gaps in guidance as regards to return to work certification following a test
- Occupational Health services will likely be able to provide secure methods to certify fitness for return to work, using existing methods agreed between employers and their occupational health provider (e.g. portal access to the employer, or emails to the employer copied to employee, with usual consent procedures as for all reports).

Advice for employees

- If you are admitted to hospital and the doctors think you may have the coronavirus (COVID-19), you will be tested for the virus within the hospital (an **antigen** test).
- Newer more widely available **antibody** tests are likely to coming to hospitals and in the community in the coming weeks, from Government sources and commercial suppliers.
- These tests detect if you have developed immunity to the COVID-19 virus, i.e. you have had it a month or more ago, or that your immune system is fighting the disease now.
- You will need medical advice on how to interpret the test result.
- At the moment it is not clear if a positive **antibody** test means that you will have lasting immunity to COVID-19. This is one reason why these tests are being carefully evaluated.