

New saliva test for coronavirus piloted in Southampton

- New coronavirus saliva test to be trialled in Southampton
- Weekly tests can be completed by transferring saliva into a sample pot
- Over 14,000 GP staff, other essential key workers and university staff and their households will participate in the first phase of the trial

Participants will be able to complete coronavirus tests at home by putting their saliva into a sample pot to be tested for current infections of the virus.

GP staff, other essential key workers, university employees and members of their households will be among the first groups to participate in the pilot, with test kits delivered either to their home or place of work for them to complete every week.

Samples will be collected safely from homes by University of Southampton staff or returned to an agreed location on a weekly basis and participants will receive test results within 48 hours.

Health and Social Care Secretary Matt Hancock said:

Saliva testing could potentially make it even easier for people to take coronavirus tests at home, without having to use swabs. This trial will also help us learn if routine, at-home testing could pick up cases of the virus earlier.

I am very grateful to everyone involved in the trial who is helping us develop our understanding of the virus which will benefit not only our but the global response to it.

The new saliva test will be significant to increasing testing capacity and accessibility as it does not require the use of a swab, which some people find uncomfortable. The test has already been shown to be highly promising and the pilot is undertaking further validation against polymerase chain reaction (PCR) nasal swabs.

Weekly testing as part of the pilot will help to identify coronavirus cases early on, including for those with no or minor symptoms, meaning those who test positive can isolate within their households. The details of those who test positive will be shared with the NHS Test and Trace programme so contact tracing can start immediately.

This comes on top of the routine testing of asymptomatic staff in health and care settings already taking place using existing testing capacity.

The pilot will be jointly led by Southampton City Council, the University of

Southampton and the NHS, alongside a wider network of public services in Hampshire.

In addition to the new application of using saliva from Optigene being piloted in Southampton, we are currently exploring the potential of other no-swab saliva-based coronavirus tests with companies, including Chronomics, Avacta, MAP Science and Oxford Nanoimaging (ONI). We are also working with a number of suppliers, including DNA Genotek, International Scientific Supplies Ltd, Isohelix and other leading manufacturers, to develop bespoke saliva collection kits and scale up manufacturing for products that can be used with existing PCR tests.

Southampton City Council Director of Public Health Debbie Chase said:

We will initially invite Southampton's 800-strong GP practice workforce and their households to take part, followed by some other essential key workers and some University of Southampton staff and students as we evaluate the logistics needed for regular testing of large population groups.

Professor Keith Godfrey, University of Southampton, said:

The health, social and economic impacts of lockdown cannot be underestimated. Through this initiative we believe we can contribute to safely restoring economic activity within the city and region during national relaxation measures, whilst enabling people to regain their lives, work and education.

The pilot will run for up to 4 weeks testing people on a weekly basis. Participants for the pilot are currently being registered with self-testing due to start next week.

When participants are enrolled in the trial they will be informed that their details will be shared with the NHS Test and Trace programme so contact tracing can start immediately if there is a positive test.

The need for self-isolation if participants test positive is stated in the introductory information for the pilot and the NHS Test and Trace programme will be contacting everyone who tests positive.

Up to 2,000 saliva tests using Direct RT-LAMP have been completed and the results will be used in the pre-programme validation of the saliva sample test.

The groups we will be rolling out sampling to include GP practice staff with their households, staff of 2 big employers and their households and university students in halls of residence:

- week 2 to 4: initial GP staff and household members (200 tests per week)

for 3 weeks

- week 3 to 4: wider GP staff (2,300 tests/week), some University of Southampton employees (10,000 tests per week) and some key workers at Southampton City Council (2,200 tests per week) for 2 weeks, including their household members
- week 4: university students in halls of residence (about 1,300 tests)

Total tests carried out: 33,000 to 40,000 LAMP assays (depending on household sizes).