

Coronavirus

UK firm develops coronavirus spit test which could be done at home



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Innovation

By Edward Malnick

Suspected coronavirus patients could be asked to spit into a tube and post the sample to a lab, under plans for a new test being developed by a British firm.

Nonacus, based in Birmingham, is in the process of formally validating a test that it says could be rolled out within the next month. It is asking Public Health England to provide samples from patients who have already tested positive for the disease. The test is intended to get around a global shortage of the swabs currently used by PHE, and to make it easier to take samples from NHS staff, who would otherwise have to travel to drive-through facilities.

Philip Beales, a professor at the University College London Institute of Child Health, who has been helping to coordinate the efforts of Nonacus and other smaller firms, said he had "a lot of confidence" that using saliva tubes to test patients "can work".

However he warned that PHE was still taking a "peacetime" approach to

emerging tests and needed to switch to a "battlefield" mode in order to help provide the level of testing needed in England.

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Urging the body to provide RNA samples from Covid-19 positive patients to help validate the emerging saliva tube tests, he said: "PHE controls the whole pipeline from collection.

"We are in the middle of a pandemic and yet the private sector cannot access the samples that will easily allow them to validate their own tests."

Nonacus's test would involve patients spitting sputum - the mixture of saliva and mucus coughed up during the illness - into a tube that could be posted or couriered to their homes. They would then return the sealed tube for testing. Sputum samples are generally being used only to test patients in hospital.

Nonacus says that samples obtained using their tubes could be examined by a significantly higher number of labs than those processing existing swab tests, as the tube would contain a solution which "inactivates" the virus.

Under government rules, live samples of the virus can only be examined by labs with highly specialised equipment that confirms to its highest "containment level".

Prof. Beales said: "I've got a lot of confidence they can work. "If they do work I think it could completely change the way we do epidemiological testing in this country.

"If you think of disparate communities like in Cornwall or parts of Scotland, they can't necessarily drive to their local Ikea car park for a swab to be shot up their nose."

Prof Beale said the saliva tests could potentially obtain adequate samples more reliably than swabs, which are "operator dependent" because they require those conducting the test to extract a sufficient amount of RNA from the patient's nose and throat.