## Tests used in UK schools "not fit for purpose"

Helen Clarke 24 March 2021

Mass testing of staff and students has been central to the UK government's justification for the reopening of all schools in England. All secondary school pupils and primary and secondary school staff are being advised to self-administer lateral flow tests twice a week.

The differences between lateral flow tests and the coronavirus polymerase chain reaction (PCR) tests used since the start of the pandemic are significant. PCR tests are looking for the presence of the genetic material of the virus. The lateral flow kit contains antibodies that stick to any spike proteins of the virus in the test sample. A positive result is produced if a sufficient quantity of antibodies attach to the sample.

The PCR test requires the sample to be sent to a laboratory, because the sample has to be copied a large number of times, before it can be analysed, and the presence of the coronavirus detected. The lateral flow tests can deliver a result in 30 minutes because there is no need to copy the sample in a laboratory. This comes at the cost of significantly reduced accuracy.

In February, the *British Medical Journal* reported on a pilot study in Liverpool of the lateral flow test produced by Innova. The study found that 60 percent of infected asymptomatic people went undetected, as did 33 percent of those with high viral loads. During a time of high rates of infection in the city and when secondary age children were showing the highest rates of infection nationwide, teachers reported whole schools being tested and every test result coming back negative. There have been numerous reports since of workers such as teachers getting a negative lateral flow result followed by a positive PCR within the same 24-hour period.

The tests were also used at universities around the UK in December to ensure that students were not COVID-positive before they returned home to their families. Data from the University of Birmingham showed a sensitivity of 3 percent, meaning the tests

pick up just three in 100 of people with COVID-19. Meanwhile, universities in Scotland found that 58 percent of all positives were false positives. Professor Jon Deeks, a biostatistician at the University of Birmingham who leads the Cochrane Collaboration's COVID-19 test evaluation activities, said of tests in response to the data: "They're not fit for purpose. I'd rather they hang these tests on a Christmas tree in Trafalgar Square, that would be better."

According to the government's own report, produced by Public Health England, the Innova test has a false negative rate of 21 percent when used by laboratory scientists, 27 percent when used by trained healthcare staff and 42 percent when used by members of the public. The World Health Organisation (WHO) recommends that rapid diagnostic tests should miss no more than 30 percent of positive cases.

The Innova Lateral Flow test is only approved for use by professionals, but the Medicines and Healthcare products Regulatory Agency (MHRA) has issued an exemption for it to be distributed for self-testing under the National Health Service testing programme. This test is also not authorised as a 'test-to-enable'—that is, a test that allows someone to take an action they would not otherwise have taken in the absence of a negative test result

In January, the *Guardian* reported on some leaked email correspondence between the Department for Education and the MHRA. This culminated in the regulator reiterating with capital letters that its authorisation "ONLY allows for the test to be used to 'find' positive cases. MHRA HAVE NOT approved the test for use in a 'test to enable' scenario". Professor Jon Deeks commented, "This clarification from the MHRA is very welcome—that they have not approved this lateral flow test as a test-to-enable—such as repeated testing of contacts in classrooms, or any situations where negative results allow an activity

which otherwise would not happen. This is in line with the available science."

His point was echoed by Professor Adam Finn of the University of Bristol, a member of the government's Joint Committee for Vaccinations and Immunisation: "These are 'red light' tests. If they come positive that means you are potentially infectious to others and must self isolate. They are not 'green light' tests. You cannot be sure that if the test is negative you are not infectious and you must continue to take the usual precautions."

The government's Scientific Advisory Group for Emergencies (SAGE) Evidence Summary on the subject states that lateral flow tests "are effective at detecting a high viral load". Asymptomatic cases of COVID-19, however, which testing is especially important for picking up, tend to have lower viral loads. According to Mike Gill, former regional director of public health for the South East of England, "Asymptomatic people have a viral load peak that looks to be, on average, lower than the viral load peak of people with symptoms, and it stays at that peak for less long."

SAGE conclude that "any negative [lateral flow] test should not be considered a 'green light'." The WHO recommends confirmatory testing with PCR after a negative lateral flow test.

These warnings forced the government to junk its original plan, announced in December, to replace the system of self-isolation for close contacts of a positive case. Under these plans, close contacts would continue attending school while being tested daily. In late January, the Department for Education announced that a positive case would still lead to the isolation of close contacts. The mass testing scheme has nonetheless served as a propaganda ploy to justify sending millions of children and staff back to school with next to no safety measures in place, and with a dangerous false sense of security.

As Jon Deeks and Dr Clare Davenport, also of the University of Birmingham, say in their most recent article on the subject, "schools and parents may take some convincing regarding potential population gains relative to harms from mass testing... there is a commonly circulating argument that any test is better than no test if it detects at least some cases of infection that would otherwise have gone undetected... However,

there are important costs to be quantified, not least the possibility for increased transmission from changing behaviour patterns in those with false negative results."

In the last weeks, as pupils returned to the classrooms, multiple newspapers and broadcasters reporting on the inaccuracy of lateral flow tests focussed exclusively on the problem of false positives leading to large groups of children self-isolating. The *Guardian*, *Telegraph*, *Evening Standard* and BBC Radio 4's *Today* programme all reported that positive results were very likely to be false, resulting in unnecessary absence from school. The BBC news website carried two claims that whole classes of children were isolating after a child had tested positive with a lateral flow test only to test negative with PCR.

There has been no media coverage at all of the problem of false negatives. Right across the country, schools and families are in the bizarre and dangerous situation where one class is at home isolating due to a false positive result whilst several others remain in school due to false negatives.

Besides these problems, the government's schools testing strategy excludes primary school pupils entirely and tests are not mandatory for secondary school pupils or primary and secondary staff. Many employers do not pay workers who are isolating or caring for children required to isolate, and the government has repeatedly refused to make any financial provision for people in these circumstances, meaning some families in severe financial hardship may be reluctant to take the tests.



To contact the WSWS and the Socialist Equality Party visit:

wsws.org/contact