

Rt Hon Grant Shapps MP
Department for Transport
Great Minster House
33 Horseferry Road
London
SW1P 4DR

12 October 2021

Dear Mr Shapps,

New system for international travel: decision to replace day two PCR test with lateral flow tests

I am writing to you regarding the Department for Transport's [update](#) on the decision to allow eligible fully vaccinated passengers returning from abroad to take a lateral flow test instead of a PCR test by day two of their arrival in the UK.

Part of the mission of the Royal Statistical Society (RSS) is to support the proper use of evidence in decision-making. Throughout the pandemic we have argued that decisions around testing should be informed by evidence of the effectiveness of tests in a particular context. It seems to us that the primary purpose of testing people who have entered the UK is active surveillance: to identify as quickly as possible any new variants of the virus that might be imported into the country. We are concerned that the change to the use of lateral flow tests risks compromising this important goal.

There is still a lack of clear evidence about how accurate lateral flow tests are – especially in the context of asymptomatic testing. The only evidence that we have about this is not encouraging. The mass screening of asymptomatic people in Liverpool with the Innova lateral flow test included a dual swabbing evaluation (LFT and PCR), of around 6,000 people and this reported a sensitivity of 40%. That means that only 40% of the positive results identified by PCR tests were picked up by lateral flow tests.¹ A [more recent study](#), looking at contacts of Covid cases in schools, found that the sensitivity of the Orient Gene lateral flow test was 53%. This is enough to strongly suggest that moving to lateral flow tests for all inbound travellers risks missing a substantial proportion of coronavirus cases.

While this change will only apply to people who are fully vaccinated, we know that they can still carry and transmit the virus. The sensitivity of lateral flow tests is sufficiently low that, even only among fully vaccinated passengers, a substantial number of cases will be missed and not subjected to genomic analysis. This risks slowing our identification of new variants and reducing our ability to stop any new potentially dangerous variant taking hold first in England and then the rest of the UK – potentially undermining the effectiveness of the testing programme of inbound travellers as a surveillance tool.

There are steps that could be taken to reduce the number of false negatives. Evidence suggests that self-administered lateral flow tests are less reliable than those administered by someone who is trained in their use. So, if people reported to a specific location, for example a pharmacy or testing site, to have their test administered that would reduce the number of false negatives. It would also reduce the risk of people not reporting their results honestly – whatever evidence of a negative result is required, it is not hard to conceive of ways that it could be obtained dishonestly.

We believe that there is also an important opportunity to evaluate the effectiveness of lateral flow tests once the policy goes ahead. The government should identify a group of passengers to receive both PCR and

¹ The RSS has published a [report on diagnostic tests](#) that details the evidence around lateral flow tests.



lateral flow tests to gather evidence about the sensitivity of lateral flow tests *in this context*. This could be done as the policy is being rolled out and would provide valuable evidence that could usefully inform future decisions about border policies.

Finally, after this change has come into effect, surveillance of the virus at the border could be improved by administering PCR tests to a random sample of passengers when they enter the country. This would mitigate the risk we have outlined. The Royal Statistical Society would be pleased to help design such a programme if it is of interest.

I would be very happy to meet with you to discuss these issues and our proposals if it would be helpful to you.

Yours sincerely,



Professor Sylvia Richardson CBE
President of the Royal Statistical Society

