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The Independent Scientific Advisory Group for Emergencies (SAGE)

The Independent SAGE Report 31

Halting geographic spread of COVID-19

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Submitted to The UK Government and the People of Great Britain
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Halting geographic spread of COVID-19

Summary

- The UK has relied too much upon what is, in effect, voluntary self-isolation as a means of preventing the importation of new cases of the virus.
- The emergence of new COVID-19 variants with higher infectivity, both in the UK and elsewhere, has refocused attention on international travel as a gaping hole in the UK's response to the pandemic.
- In order to prevent transmission of the virus, it is not only necessary to ensure that measures are taken in local communities to prevent person-to-person transmission; it is also necessary to place restrictions, where possible, on people who may import the virus travelling into those communities.
- A revised and more effective system for people arriving in the UK is required. Similarly, within the UK a better system for using geographical boundaries to mount a response to the virus would be helpful in bringing the virus under control.

Introduction

The virus causing COVID-19 spreads readily between people and it is this characteristic that makes it particularly difficult to control. Measures such as the wearing of face coverings, social distancing, hand hygiene, and improved ventilation all combat interpersonal spread. However, another significant way that the virus spreads is that people who are infected, particularly asymptomatic individuals, may carry it with them as they move about in the course of their activities. We should be paying attention to situations where people who are infected travel to other communities, or arrive in the UK from abroad, and spread the virus after they have arrived.

Within communities, we take measures to prevent transmission by limiting the access that people have to opportunities to mix with others who are outside their normal household. Retail outlets may be closed for periods, employees may be required to work from home, opportunities for spending leisure time in pubs, restaurants, cafés, gyms, or at sporting events may be severely restricted. But there has been little focused attention on travel across within and across national borders and it has taken the emergence of new variants to highlight the issue.

SARS CoV-2 genetic analysis demonstrates how rapidly the virus, and its variants, emerge and spread. Importation occurs many weeks or months before detection of these variants, and from a range of countries, illustrating the urgent need to establish a comprehensive border control policy.¹

The UK and halting travel-related spread of COVID-19

¹ <https://science.sciencemag.org/content/early/2021/01/07/science.abf2946>

The initial stages of this pandemic were driven by international travel and, since then, travel has continued to introduce the COVID-19 virus, including new variants, to new locations and increased level of infections in places where there is already virus circulating. Air travel, in particular, has been implicated directly in outbreaks, including to the islands of Britain and Ireland.^{2 3} Incoming travellers carrying the infection, whether returning UK and Irish citizens or citizens of another country, may pose a particular risk when levels of the circulating virus are low. It therefore follows that putting in place restrictions during the period that action is being taken to reduce the virus circulating will assist both in the reduction of the current level and help prevent it rising again after it has been brought under control. The UK has been unusual in the minimal extent to which it has curbed personal travel in order to restrict the transfer of the virus between communities or countries. Although a restriction has been placed on most passengers travelling into the UK (this restriction has been operated slightly differently in the four parts of the UK) the restriction, for the most part, been confined to a requirement to self-isolate unsupervised in a location of the traveller's choosing for a period after arrival. The period of self-isolation was reduced from 14 to 10 days across the UK on the 14th of December.

The large number of travellers involved and the lack of routine checks on those who are supposed to be self-isolating has meant that it has been, in effect, voluntary rather than compulsory. The absence of data on compliance with self-isolation has been criticised by the House of Commons Home Affairs Committee⁴.

The poorly functioning self-isolation system is also undermined by the very large number of exemptions that are available under the current government guidance. There are a total of 58 different categories of people who are, or have been, exempt to a greater or lesser degree from the requirement to self-isolate⁵. These include company executives, bus and coach drivers, and people competing to run the National Lottery.

An Effective Approach to International Travel

The successful prevention of the importation of new cases of COVID-19 is a task that needs to be addressed. Taking firm domestic action to bring COVID-19 under control without addressing the issue of importation of new cases of the infection is akin to mopping up

² Freedman, D.O. and Wilder-Smith, A., 2020. In-flight Transmission of SARS-CoV-2: a review of the attack rates and available data on the efficacy of face masks. *Journal of Travel Medicine*.

³ Murphy, N., Boland, M., Bambury, N., Fitzgerald, M., Comerford, L., Dever, N., O'Sullivan, M.B., Petty-Saphon, N., Kiernan, R., Jensen, M. and O'Connor, L., 2020. A large national outbreak of COVID-19 linked to air travel, Ireland, summer 2020. *Eurosurveillance*, 25(42), p.2001624.

⁴ House of Commons Home Affairs Committee. *Home Office preparedness for COVID-19 (coronavirus): management of the borders*. 5 August 2020. <https://committees.parliament.uk/publications/2250/documents/20957/default/>

⁵ Coronavirus (COVID-19): jobs that qualify for travel exemptions - Updated 8 January 2021 <https://www.gov.uk/government/publications/coronavirus-covid-19-travellers-exempt-from-uk-border-rules/coronavirus-covid-19-travellers-exempt-from-uk-border-rules>

water from the floor of your house without fixing the hole in the roof that let water enter in the first place.

Independent SAGE advises that the existing system of, in effect, voluntary self-isolation of international arrivals is replaced as a matter of urgency by a managed isolation system which will ensure that the full period of isolation is completed without putting people at risk. This system should include the following components:

1. Prior agreement from the traveller that, on arrival, they will undertake a period of managed isolation under official supervision
2. Prior notification to the border authorities of the intention to travel to the UK.
3. Production of a negative COVID-19 PCR test taken not more than three days prior to the date of departure from country of origin, together with a further test on arrival.
4. The costs of managed supervision would be met by the traveller. Financial assistance would be available to UK citizens who were able to show that their travel was non-optional and that they lacked the means to afford managed isolation.

Of these four components, the first is by far the most critical

Travel within and between Britain and Ireland

Each jurisdiction should have the clear right to restrict, on grounds of public health, access to incoming travellers from abroad and from other parts of Britain and Ireland. For these purposes, the island of Ireland should be regarded as one epidemiological unit.

Within country travel

Each part of the UK should develop regional or local zones which can be used to restrict travel if required. In some parts of the UK, this can be instituted, in most cases, by using existing county boundaries. There may also be a case in England for the adoption of the standard government regional boundaries that were used for emergency planning purposes prior to 2010. These should not, however, supersede the boundaries of the areas covered by elected regional mayors, such as Greater Manchester, Liverpool Metro Region and West Midlands.

At a more local level, there should be the power to implement and enforce travel restrictions where there is a localised outbreak that needs to be brought under control. Local authorities, advised by Directors of Public Health, should be given, and make use of, the power to impose a cordon sanitaire in order to suppress the virus within communities. Similarly, local authorities should also have the power and obligation to allocate financial and other necessary resources to support people within such restricted areas.

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