Dear Prime Minister,

COVID-19 pandemic: preparing for winter

I am writing to you on behalf of the House of Lords Science and Technology Committee. We have been taking evidence on the current pandemic as part of our Science of COVID-19 inquiry, and have some interim findings and recommendations that we would like to share with you.

Our overarching recommendation is that the Government should undertake significant preparation over the next two months to reduce the likelihood of a resurgence of the virus over the winter. We have made five specific recommendations below, which we hope will be helpful in planning for the winter.

1. Reducing levels of infection

We have heard from several expert witnesses that it will be vital to suppress infection rates of the virus to as low a level as possible before winter. This will reduce the likelihood of a significant resurgence of transmission and prevent stretching the NHS, and the Test and Trace programme, beyond capacity.

We heard that more could be done to reduce levels of infection over the next two months. Professor Venki Ramakrishnan, President of the Royal Society, told us that the infection rates in other parts of the UK are significantly lower than in England, indicating that more could be done in England to suppress the virus before the winter. Professor Dame Anne Johnson, Vice-President of the Academy of Medical Sciences, noted that reducing transmission in hospitals and care homes will be of crucial importance over this period.

We heard that it is not clear what the Government’s ambition is in reducing levels of infection. Sir Patrick Vallance, Government Chief Scientific Adviser, told us that the “overarching principle” of the pandemic response in England is to “try and keep the levels of infection as low as you can”. However, thus far the Government has not been specific about the level of infection it considers to be “low”, and it has not outlined ambitions to reduce case numbers to a particular level over a particular timeframe, such as by the start of winter. Setting out these details will be important in order to give confidence in the plans for reducing the impacts of the pandemic going into winter.

Recommendation 1: The Government should aim to reduce levels of infection as much as possible over the next two months and should set a target for the level of infection it is aiming for by the start of October.
2. Testing

We have heard that in the winter months the number of people presenting with COVID-like symptoms will increase significantly; Professor Andrew Hayward, Director of the UCL Institute of Epidemiology and Health Care, told us that in a normal winter up to 500,000 people show symptoms of respiratory illnesses on any given day. It is highly likely that transmission of COVID-19 will increase in winter, as is common with respiratory illnesses, because people spend more time indoors. As the current NHS Test and Trace system relies on testing all symptomatic people, it is vital that there is enough testing capacity to diagnose positive COVID-19 cases and return test results within 24 hours, and enough tracing capacity to identify all their contacts.

In addition to testing anybody presenting with symptoms, it will be important to conduct regular testing of individuals in high-risk environments and high-risk occupations, as is taking place to some extent in hospitals and care homes. As more workplaces and public spaces re-open in the coming months, the need for such regular testing will increase. Planning should take into account the possibility that some of these environments are not yet known to be high risk, and so the Government may be underestimating the requirement for testing. On 17 July, you suggested that there would be 500,000 tests available per day by the end of October. The evidence we heard suggests that there should be greater capacity to allow for wider and more regular testing in particular environments, and logistical support to ensure the more rapid return of test results.

The Government should decide whether it intends to develop a “multiplex” testing strategy, whereby people with symptoms are tested for other respiratory illnesses as well as COVID-19. Knowing what specific illness people are suffering from could have important implications for their clinical care, and for reducing transmission in hospitals. If multiplex testing is part of the strategy for winter, a system needs to be developed now in order to be ready in time.

**Recommendation 2:** The Government should ensure that by the start of October testing capacity is available for the likely number of people presenting with COVID-like symptoms, as well as for regular testing of those in high-risk environments and high-exposure occupations, some of which have not yet been identified as such. The Government should decide now whether to pursue a strategy of multiplex testing and, if it decides to do so, should begin preparing for this immediately.

3. National and local public health leadership

The relative roles of national and local public health authorities in responding to the pandemic has been a frequent topic of discussion in our inquiry. The Chief Medical Officer for England, Professor Chris Whitty, told us that “at the beginning of an epidemic … a national response actually is usually the most effective way to deal with [it]”, but as case numbers reduce “a more local response is absolutely critical”.

However, we have heard concerns that in England there is an imbalance between national and local management of the pandemic. Professor Baron Peter Piot, Director of the London School of Hygiene and Tropical Medicine, told us that “countries that have been successful
have all had a good synergy between strong national leadership [and] policies … [and] strong local health authorities and local action.” He gave the example of Germany, which has “delegated … action and authority and data collection and feedback at the local level”, leading it to having the “best track record in Europe” of dealing with the pandemic.

In particular, we heard concerns about the centralised approach to testing and contact tracing in England. Professor Allyson Pollock, Clinical Professor of Public Health at Newcastle University, contrasted the “complex” centralised contact tracing programme in England with Germany, which she said has “reinvested in its 400 public health departments” to deliver contact tracing with more local involvement. Dame Anne Johnson highlighted the need for greater investment to strengthen local public health provision.

Professor Sir Paul Nurse, Director of the Crick Institute, told us that the Government has not been utilising effectively the significant testing capacity in universities and medical schools. Instead it has focused on centralised facilities such as the Lighthouse Labs while smaller facilities have been “lying idle”. Professor Baron Peter Piot contrasted the “hyper-centralised” approach in England with countries that have instead brought testing to scale by engaging with all types of lab, including private and university labs. Utilising these types of labs will increase the testing capacity, and will allow for better coordination with local public health teams, faster problem solving and faster turnaround time for testing.

Similarly, we heard that the centralised approach has not made good use of local health practitioners. In preparing for winter, there should be much greater involvement of primary health care services and general practitioners.

**Recommendation 3: The Government’s plans for the winter and possible future waves of the pandemic should include greater delegation to, and resources for, local public health authorities. The Government should better utilise local healthcare services and testing capacity in university, hospital and private labs.**

**4. Transparency, openness and responsibility**

We echo concerns raised by the House of Commons Science and Technology Committee, in its letter to you of 18 May, regarding the transparency of scientific advice. We are pleased that SAGE has become more transparent, including by publishing its membership and the minutes of its meetings. However, we heard evidence that further transparency is needed on how this advice informs policies and on responsibility for implementing these policies.

Some members of SAGE, and its sub-groups SPI-M and SPI-B, have expressed concern to us about lack of transparency in the process of obtaining and using scientific advice. Some did not know who formulates the questions asked of the advisory group, and were not confident that those who set the questions understood the issues sufficiently or the nuances between different options. One witness said that “often the wrong question is asked in the first place” and another that “the answer you get depends exactly on the question you ask”.

We heard that advisers do not know who uses their advice or how. Professor Susan Michie, Director of the UCL Centre for Behaviour Change, told us that there is “lack of transparency in the flow of scientific advice through to policymakers”, and that advisers receive “no feedback as to where [papers presented to SAGE] go or whether the advice is used”.
Several witnesses raised concerns about communication with the public regarding scientific advice and its role in deciding policy. Sir Paul Nurse told us that it is unusual for the public to hear scientists debating uncertainty and emerging evidence. He advised that scientists need to be clear with policy makers, and policy makers with the public, about “what is known, what is partially known, what is unknown, and what is unknowable”. He said that “honesty, transparency [and] humility” are essential for public trust to be earned and maintained, and cautioned that complex issues cannot be reduced to simple one-line statements.

We heard about the need for clear accountability in decisions and their implementation. It is not clear where responsibility for different aspects of the management of the response lies, amongst the NHS, Public Health England, the Joint Biosecurity Centre, local authorities, and other organisations. Sir Paul Nurse called for “clarity in the governance” of scientific advice and policy making. Dame Anne Johnson noted that challenges have also arisen whilst implementing policy decisions. Sir Paul Nurse cited the establishment of Lighthouse Laboratories as an example of a decision that was taken “behind closed doors”, and which has “failed to help in the pandemic itself”.

**Recommendation 4:** There should be fuller explanations to the public of uncertainty in the evolving scientific evidence, greater transparency in how scientific advice is used in making policy, and greater clarity on who is responsible for implementing policies. This is essential for improving public trust in the Government’s response to the pandemic.

**5. Public messaging**

Reducing levels of infection over the next two months and continuing to suppress transmission during the winter will rely on the public recognising symptoms, requesting a test and isolating if necessary. However, on 6 July Baroness Harding of Winscombe, Executive Chair of NHS Test and Trace, told us that “less than half the population in England are aware that they are eligible for a test”. We also heard that the messaging around NHS Test and Trace does not emphasise the importance of self-isolation to the strategy, and does not assure people that they will be supported (including financially) if they need to isolate for two weeks.

It is vital that the Government delivers a concerted public health campaign over the next two months to ensure the public understands what is being asked of them. We heard from experts in behavioural science that some of the messaging at the start of the pandemic (such as “Stay Home, Protect the NHS, Save Lives”) was successful because it was clear, simple and explained to the public the rationale behind what they were asked to do. However, as the pandemic has progressed and more complex behaviours are asked of the public, such as self-isolation, the messaging has become less effective. To ensure continued buy-in from the public it will be necessary to tailor messaging to different audiences, and to work in partnership with local communities. To ensure public trust, it will be important to be open and clear about the rationale behind what they are being asked to do.

**Recommendation 5:** The Government needs to reinforce to the public, through a concerted public health campaign, the importance of driving down infection rates before winter, focusing on the behaviours required to reduce transmission. The Government will also need to ensure there is a public health campaign ready by
October, for use in the event that there is a significant resurgence of the virus over the winter months requiring further changes in behaviour. It should be open and clear about the rationale behind the steps it is asking the public to take.

The Committee hopes that these interim conclusions and recommendations will be useful to you and your colleagues in Government over the next two months. We will continue to take evidence for this inquiry in the autumn and will publish a full report in due course. We would be grateful for a response to our interim recommendations by the end of September, such that your response can inform the rest of our inquiry.

I am copying this letter to the Secretary of State for Health and Social Care, the Chief Medical Officer for England, the Government Chief Scientific Adviser, The Lord Speaker, and The Senior Deputy Speaker. I will be publishing this letter on the Committee’s webpages.

Yours sincerely,

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Chair, House of Lords Science and Technology Select Committee