

UK COVID-19 INQUIRY

WITNESS STATEMENT OF RICHARD HORTON

1. I am responding to your request for a witness statement as the Editor-in-Chief of The Lancet, a general medical journal that has its editorial base in London, UK. The Lancet Group publishes 24 scientific journals ranging across different medical specialties—I am the Editorial Director and Publisher of these journals. Of relevance to this inquiry, we publish, in addition to the weekly Lancet, The Lancet Infectious Diseases, The Lancet Microbe, The Lancet Respiratory Medicine, The Lancet Public Health, and The Lancet Global Health. All of our 24 journals have published some pandemic-related content since January, 2020. On a personal note, I have been Editor-in-Chief of The Lancet since 1995. I qualified in medicine from the University of Birmingham in 1986. I moved to London after completing my initial postgraduate medical training. I joined The Lancet in 1990. During 2020, I wrote a book about the COVID-19 pandemic: *The COVID-19 Catastrophe: What's Gone Wrong and How to Stop it Happening Again*. The second expanded and updated edition was published in early 2021. I have continued to write about the pandemic and its consequences in The Lancet.
2. Module 1 of this inquiry concerns relevant evidence between the dates of June 11, 2009, and January 21, 2020. I should point out that The Lancet's formal scientific engagement with the COVID-19 pandemic began after this time period—specifically, on January 24, the date of the first publications in the journal about the clinical impact of SARS-CoV-2 in China. The Lancet is an independent scientific publication, meaning that we have no direct involvement with government committees or decision-making. Our main role is to publish scientific research, reviews, series, commissions, news, and comment about ongoing issues in global medicine and public health. The views that follow are my own and do not necessarily reflect the views of colleagues working at The Lancet or our publisher.
3. According to independent assessments of the UK's pandemic preparedness, we might reasonably have been considered well prepared for a new and emerging epidemic. For example, the Global Health Security Index, published in 2019, analysed six criteria for preparedness: prevention of the emergence or release of pathogens; early detection and reporting for epidemics of potential international concern; rapid response to and mitigation of the spread of an epidemic; a sufficient and robust health system to treat the sick and protect health workers; commitments to improving national capacity, financing, and adherence to norms; and the overall risk environment and country vulnerability to biological threats. The UK scored the second highest overall figure in

this index (77.9). Only the US scored higher (83.5). The assessment of our preparedness suggested that we were in a better place than many comparable high-income countries, such as France (68.2), Germany (66.0), and Italy (56.2). One may therefore have hypothesised that the UK would have reacted quickly to the external threat of a pandemic and been more successful in averting deaths from a new infectious agent than many of our neighbours. The evidence suggests, however, that there is a poor relation between independently assessed scores of pandemic preparedness and actual health outcomes. We enter the territory of conjecture as to why our performance did not match expectations. But the facts are that genomic studies have described over 1000 separate transmission lineages introduced into the UK in the early weeks of the pandemic. The eight largest lineages were first detected before the UK's national lockdown on March 23. By the time of lockdown it was simply too late to prevent a national public health disaster—80% of detectable importations occurred between February 27 and March 30—although lockdown did subsequently attenuate further introductions of new lineages. The Institute for Health Metrics and Evaluation (IHME) at the University of Washington in Seattle, USA, estimates that total cumulative UK deaths due to COVID-19 were projected to be 219 914 by April 1, 2023, a catastrophe by any reckoning.

4. Why did the UK's predicted advantages in pandemic preparedness not translate into better performance in terms of protecting the population from risk of death from SARS-CoV-2? I would like to propose five intersecting reasons.
5. First, western attention was focused on the risks of an influenza pandemic, not a pandemic caused by another pathogen, such as a coronavirus. To give one example of this overly narrow perspective, The Lancet published a Commission led by Dean Jamison and colleagues in 2013 examining ways to achieve health gains globally by ending preventable mortality among women and children, addressing non-communicable diseases, and delivering universal health coverage (Global Health 2035: A World Converging Within A Generation). In their report, Jamison et al underlined the importance of pandemic preparedness for protecting expected gains in health, writing that, "Concern is growing that the world could soon face an especially deadly global pandemic, similar to the 1918 influenza pandemic, which will disproportionately affect poor populations." They pointed out that twice as many years of life were lost from the 1918 influenza pandemic in one year than from the four years of World War I. They concluded that, "The international community should support the development of new pandemic control methods, such as universal influenza vaccine, and national and international surveillance and response systems." Western scientists were caught in a groupthink around influenza being the only credible pandemic threat. In retrospect, this exclusive focus on influenza was surprising. The

emergence of a novel coronavirus in 2002, as a US Institute of Medicine report published in 2004 noted, “alarmed populations across the globe, elicited a massive public health response, gave rise to a multinational research network, gripped the news media, wreaked political havoc in China, and struck a blow to tourism and travel industries of several countries.” At the beginning of a new millennium, the outbreak of SARS in 2002-03 gave the world fair warning about the dangers of non-influenza epidemics. How short our memories were. The Institute of Medicine report was subtitled, *Preparing for the Next Disease Outbreak. We didn't*. The threat of a newly emerging coronavirus should have been more conspicuous in our risk estimations and pandemic planning scenarios.

6. Second, even though the UK conducted pandemic response simulations, it remains unclear whether the results of those simulations were taken as seriously as they should have been or whether their recommendations were acted upon with appropriate urgency. Exercise Cygnus was one such simulation that took place in October, 2016. The exercise involved almost 1000 people and lasted for three days. The specific threat being modelled was an influenza pandemic. The scenario that was played out involved multiple government departments and agencies. It identified several critical learning points, not least the need for expanded capacity to manage the undoubted surge in demand that would take place for a range of health services. Exercise Cygnus found that these capacities and capabilities were “currently lacking” in some areas. Social care and schools were identified as particular areas of weakness and concern. The centrality of cross-government coordination in the operationalisation of a pandemic response was also emphasised. Further gaps existed for regional and local planning. Exercise Cygnus concluded that, “the exercise did show that the UK’s capability to respond to a worst case pandemic influenza should be critically reviewed.” The final evaluation report on Exercise Cygnus, “identified a number of aspects of the response that could be strengthened further particularly with respect to surge and triage management in the health and care system, management of excess deaths, and business continuity.” It is not clear that these recommendations were acted on assertively. Indeed, the often confused and sometimes chaotic management we saw in the early weeks and months of the COVID-19 pandemic suggests that the lessons of Exercise Cygnus had not been fully embraced.
7. Third, the threat of SARS-CoV-2 was incorrectly assessed. This module of the inquiry takes us only to January 21, 2020. The first publicly released paper describing the clinical severity of COVID-19 was published on January 24, 2020, in *The Lancet*. I won’t stray into commenting on a time period outside of this module’s mandate. However, the scientific papers submitted to *The Lancet* were in circulation before January 21. That is to say, Chinese clinicians in Wuhan and Beijing had

gathered detailed information on at least 41 patients who had what came to be known as COVID-19 by early-mid January, 2020. They wrote their findings up in English and sought publication in an international scientific journal in order to alert global authorities and countries to the clinical and public health dangers of SARS-CoV-2. The first report of a cluster of pneumonia cases of unidentified cause was made on January 4, 2020, by WHO's Western Pacific Regional Office. On January 5, WHO notified all country governments about the new outbreak through its IHR Event Information System. This signal would certainly have been picked up by UK public health authorities and communicated to key government committees and medical and scientific advisors. What was the process of evaluation by UK scientific advisors between January 5 and January 24, when the first description of case severity was published? What efforts were made to contact Chinese medical and public health colleagues—the individuals are well known given that the Chinese State is highly centralised and the main actors within the National Health Commission, China CDC, and the Chinese Academy of Medical Sciences are colleagues of many of us in the UK academic medical and public health communities? What information did UK scientific advisors obtain, how was it assessed, and what conclusions were drawn? What information was our Embassy in Beijing able to gather and what was the view of the risk among UK diplomatic officials in China? These questions are important to answer because the information published in *The Lancet* on January 24, which was available to Chinese officials before that time, should have also been available to UK government advisors. And any impartial reading of that information makes it abundantly clear that this new virus was not like influenza at all. On the contrary, this new coronavirus was causing severe multi-organ disease among a subset of those who became infected, leading to hospital admission, intensive care, and death for a significant proportion. These reports should have raised a signal of high alarm among experts advising the UK government. It remains mysterious why this signal of alarm was not more clearly communicated to political decision-makers and to the public. In January, 2020, Chinese doctors and scientists had clearly shown the extraordinary pathogenicity of this coronavirus and they had demonstrated person-to-person transmission. Why were these findings not more forcefully made known? It seems to me that there was an early misreading of the dangers of SARS-CoV-2. The communication of a mix of uncertainty and reassurance by scientific and medical advisors, together with politicians, was a serious failure of the UK's scientific advisory system. The evidence was available through our international scientific networks to make an accurate assessment of the extent of the danger of SARS-CoV-2 before January 20, 2020. Yet, for reasons that remain unexplained to this day, our scientific advisory committee system, Chief Medical Officer, and

Chief Scientific Advisor either didn't know about or misunderstood the severity of the threat. How? Why? No credible explanation has been forthcoming.

8. Fourth, the language of a pandemic creates a crucial misunderstanding about the public health challenge presented by a virus such as SARS-CoV-2. In plain terms, COVID-19 was not a pandemic. It is better understood as a syndemic—that is, a synthesis of multiple epidemics. Politicians, policymakers, and the public—and even scientific advisors and commentators—have commonly viewed the cause of this public health crisis as a newly emerging virus. Our interventions have focused on interrupting lines of viral transmission. The science that has guided government responses has come mostly from infectious disease specialists and epidemic modellers, who understandably frame this health emergency in the terms of their own disciplines. But the story of COVID-19 is more complex. Two disease epidemics are interacting together. One is indeed an epidemic of a new virus. But the second is equally important given the vulnerability it confers—the widespread prevalence of several non-communicable diseases (heart disease, obesity, cancer, diabetes, respiratory disease, among others). Moreover, the interactions between these twin epidemics clustered within populations according to specific social patterns and gradients—for example, age, ethnicity, and inequality. The imprinting of two biological epidemics on multiple social disparities is what made COVID-19 so challenging. I cannot stress enough the importance of viewing COVID-19 as a syndemic rather than as a pandemic. The syndemic nature of COVID-19 means that we need a far more nuanced approach to the prevention of future pandemics. The notion of a syndemic was first conceived in the 1990s by Merrill Singer, an American medical anthropologist. Being prepared for a pandemic like COVID-19 requires attention not only to the early detection of a newly emerging infectious disease, but also to preventing and controlling an array of chronic diseases and reducing social and economic disparities among our communities. It is the overall health of the population and the minimisation of inequality that are the twin coordinates of resilience. The cause of high UK COVID-19 mortality was not only our slow response to a misunderstood threat. It was also because of the high levels of chronic disease within our communities and the social vulnerability of particular groups of people within those communities. If the lesson we draw from COVID-19 is that pandemic preparedness and resilience mean only better and more effective diagnostics, treatments, and vaccines, we will fail again when the next pandemic arrives. To offer a purely biomedical solution to pandemic preparedness is a promise that cannot be fulfilled. Instead, we have to take a more capacious view of the dangers posed by new pathogens, devising policies that attack diseases and disparities that render our communities so acutely vulnerable to these new infectious threats.

9. Finally, I wonder if there was not some inadvertent complacency or bias in our collective assessment of the risks of SARS-CoV-2. Did we overestimate the resilience of our population and health system to the threat of a pandemic? Did we underestimate the evidence emerging from China in those early weeks of January, 2020? These questions are hard to answer with definitive quantitative evidence. Personally, I think government advisors and political leaders did possess a false sense of security about the UK's ability to weather the storm of a pandemic. Statements by members of the Scientific Advisory Group for Emergencies (SAGE) and the Chief Scientific Advisor support that view. During the early weeks of 2020, there was much discussion, led by government ministers, about the benefits of Brexit. I might suggest that this celebration of "taking back control" of our sovereignty bred a degree of UK exceptionalism. That somehow we had won back our independence and strength as a country. What serious harm could an unknown virus from a far-away place do to an island nation that had rediscovered its political and strategic autonomy? I also believe there was some scepticism about the reliability of news about a new virus emerging in China. Advisors and politicians seemed not to take seriously the warnings coming from WHO. It is probably unwise to speculate why that might be. But were there elements of mistrust—even Sinophobia—in what Chinese officials and WHO representatives were saying? The growing (and damaging) anti-China political rhetoric since Xi Jinping became China's President in 2013 has influenced western views about the veracity of information coming out of China. Did politicians simply not trust the reliability of early reports about an outbreak of a new infectious disease in Wuhan? I will return to the issue of trust later.
10. A review of these early events invites several tentative conclusions that deserve further consideration. I draw ten lessons.
11. First, the threat of a newly emerging infectious pathogen is better framed as a syndemic, not a pandemic. As explained in paragraph 8, the human impact of a newly emerging infectious disease, such as COVID-19, is better understood using the concept of a syndemic—a synthesis of epidemics interacting with patterns of social inequality. Pandemic preparedness and resilience mean paying as much attention to the overall health of the population and the socioeconomic disparities experienced by that population as they do to the prevention, detection, and response to a new epidemic pathogen. Improving population health and social inequalities before a crisis intervenes will limit the damage caused by that crisis. Better overall health will also reduce demand for acute services during a pandemic, alleviating pressure on an already strained system.
12. Second, the UK government must strengthen national systems of health security. The International Health Regulations provide a comprehensive framework for monitoring the UK's operational readiness to address a new pandemic; to document our capacities to prevent, detect,

and respond to a new infectious pathogen; and to have in place enabling functions, such as financing and multisectoral coordination mechanisms. Globally, countries vary widely in their capacities to prevent, detect, and respond to new infectious outbreaks. The 2021 Independent Panel for Pandemic Preparedness and Response, chaired by Helen Clark (formerly Prime Minister of New Zealand) and Ellen Johnson Sirleaf (formerly President of Liberia) placed particular emphasis on investing in preparedness now to create fully functional capacities at national, regional, and global levels. There needs to be a transparent independent assessment of the UK's preparedness capacities, which should also be available for public scrutiny. COVID-19 underlined the value and importance of genomic surveillance systems and these should be prioritised in strengthening our national capacities for operational readiness. Also, since the most dangerous future pandemic risk is a highly transmissible and pathogenic respiratory infection, surveillance systems must be especially sensitive to detecting a pneumonia of unexplained aetiology.

13. Third, UK public health authorities must improve the quality, curation, and coordination of data as the foundation for pandemic preparedness and response. The availability of accurate data to guide the pandemic response cannot be taken for granted. We need to be clear now as to what the core information needs are for managing the next pandemic. The nature of the pathogen will need to be precisely defined, including its genome, which will be essential for designing diagnostics, treatments, and vaccines. Pathogenicity and transmissibility will be key sources of uncertainty. Information on both will be critical for modelling outbreak scenarios and for advising decision-makers on the appropriate measures to be taken—for example, isolation, physical distancing, or mask mandates. Rapidly conducted epidemiological studies at scale will be urgently needed to judge which population groups are at particular risk. The risk profile of SARS-CoV-2 will not necessarily be the same for a different pathogen. Clinical case series will be important for defining health service needs. The government should move quickly to devise and implement a national digital infrastructure strategy to gather these data and to enable their use for policy making. Improved access for scientists and policymakers to better data will inevitably and understandably raise concerns about privacy. The government should initiate and lead a cross-party public debate about the collective benefits of enhanced access to personal data as part of our national plan to strengthen health security.

14. Fourth, the UK government must review and upgrade its system of science advice to government. In addition to more robust data gathering, we need to review the means by which those data are scientifically assessed. The UK has some of the most talented scientists and most internationally distinguished scientific institutions in the world. And yet, despite these comparative advantages (second only to the US), we were unable to accurately define the risk of SARS-CoV-2 at an early

stage in the evolving pandemic. This preventable delay allowed multiple importations of virus before the first lockdown on March 23, 2020, was implemented. Given the manifest human and economic damage from COVID-19, we must ensure that we have the assessment systems in place to act quickly to stem spread of a new and deadly infectious agent. We should review the terms of reference and composition of SAGE. We should ask whether we had the right balance of expert knowledge on this committee. We should also consider whether the existence of multiple expert groups, including the offices of the Chief Medical Officer and Chief Science Advisor, offer an optimal structure for rapidly assessing threats and providing advice to government. Have we made the system of science advice unnecessarily complicated? Have we created a regime where each part of the system of science advice avoids making a risk judgement since that group knows that another part of the system has their own responsibility for advising on risk to government? In other words, have we inadvertently created a system where decisions are deferred, with no one taking final responsibility for assessing risk? These questions raise possible explanations for why scientific advice to government faltered during the early stages of COVID-19. Answers may yield opportunities for optimising the UK's science advisory system. Personally, I do believe that the status quo in our science advisory process is not an option. In my view, the UK needs a simplified and more responsive system, one that can pivot quickly when a new threat emerges.

15. Fifth, the UK government must investigate and improve its health, and public health, system capacities for pandemic preparedness. Health systems were underprepared, understaffed, and suffered from underinvestment. While the NHS provided essential life-saving services throughout the worst moments of the pandemic, it was unable to absorb the shock of the crisis. The NHS did not provide a resilient health system. The postponement of thousands of elective procedures and the diversion of primary care and specialist resources to dealing with the pandemic has had an adverse effect on non-COVID-19 disease diagnosis and management among the UK population. Hospital trusts were directed to adapt their infrastructure to be able to admit and manage patients with COVID-19. Intensive care capacity almost doubled. Whether even the most resilient health system could have coped with the surge in demand occasioned by COVID-19 is open to question. Still, there is no disagreement that the UK had a shortage of health workers and bed capacity to accommodate the high clinical demand triggered by COVID-19 and the existing non-COVID-19 needs of populations. Future pandemic preparedness therefore means promoting workforce retention and recruitment, as well as expanding hospital capacity. The OECD found that a proportionately larger number of health and social care workers was associated with better COVID-19 outcomes. Moreover, shortages of personal protective equipment, insufficient staff training, and uneven geographical distribution of health workers all contributed to the less

than optimal immediate health system response as cases of COVID-19 rapidly grew in number. A review should also include capacities for testing and tracing contacts of those infected, including the geographical distribution of laboratory facilities. The UK's complete inability to mount a test and trace system as soon as the pandemic struck (the first UK cases of COVID-19 were diagnosed on January 30, 2020) was a tragic indictment of the way in which our public health system has been systematically eroded over recent decades. Worse, the Health Foundation has recently reported that cuts to public health services have been greater in more socially and economically deprived areas—exactly the communities that proved to be most vulnerable to COVID-19. In discussions with the President of Germany's Robert Koch Institute, Lothar Wieler, one explanation he advanced for Germany's early success in responding to the pandemic was the country's widely devolved and well-coordinated public health laboratory testing systems. Building a national network of public health laboratory services should be a key part of the UK's future pandemic preparedness measures. Care homes in the UK were another point of vulnerability and were not properly or effectively safeguarded.

16. Sixth, UK universities and nursing schools must redesign health professional education programmes to equip the health workforce with the knowledge and skills to respond to a pandemic. COVID-19 has had a substantial disruptive impact on the education of health workers. Julio Frenk, President of the University of Miami and a former Minister of Health in Mexico, together with a team of education experts, have reviewed the challenges and opportunities for educating health professionals after the pandemic. COVID-19 led to an increase in online learning, expanded the provision of telehealth, and thereby increased the required competencies of medical graduates. These developments in competency-based education, interprofessional education, blended information-technology-facilitated education, situational leadership, collaboration across disciplinary boundaries, and the creation of academic-community partnerships need to be further embedded in the UK's medical and nursing schools in order for the health workforce to be better prepared for a future pandemic. Beyond these innovations in pedagogy, the UK's health workforce will also need to be more aware of the global risks to domestic health service provision. That will require a more advanced understanding of how global health affects national health. Frenk et al call this approach "education for life." Given the syndemic nature of present and future pandemic threats, the importance of advocacy for health equity and for attacking the social determinants of health will become ever more important, as will understanding concepts such as planetary health and One Health. A revolution in medical and nursing education is a necessary part of preparing for the next pandemic.

17. Seventh, the UK government must implement a set of performance metrics to hold its systems of pandemic preparedness accountable. Clear goals are a powerful means for mobilising commitment and action to improve health outcomes. An example: the UK's Towards Zero HIV Action Plan for England, which sets the goal of an 80% reduction in new HIV infections in England by 2025, is a bold and ambitious objective that is mobilising resources and services nationwide. Tom Frieden, a former Director of the US Centers for Disease Control and Prevention, has written that, "Generating enthusiasm and support for a public health programme is easier if it has a performance metric that is straightforward, easily remembered, and will catalyse progress on the problem being addressed." He has proposed such a performance metric to make the world safer from pandemics—7-1-7. This metric means 7 days to detect the suspected outbreak; 1 day to notify public health authorities and initiate an investigation; and 7 days to put effective response measures in place. The requirements for suspected outbreak detection include access to medical care and treatment, trained health workers who can detect outbreaks and formulate case definitions, and laboratory diagnostic capacity. For public health authority notification and investigation, clear reporting structures, adequate data systems (linking laboratory, clinical, and public health systems), and a responsive public health workforce are all necessities. Finally, for an effective response, capacities include epidemiological investigation, laboratory confirmation, medical treatment, communication, public engagement, and response coordination. As Frieden notes, "We are at a now-or-never moment to improve global readiness for disease threats...The urgent need to improve speed and completeness of detection and reporting, and quality and timeliness of response, is clear." Transparently defined and monitored performance indicators are a vital means to hold governments and public health services accountable for their promises and commitments.

18. Eighth, the UK government must make strengthening trust one of its principal instruments for pandemic prevention. In a 2022 study by the COVID-19 National Preparedness Collaborators, based at IHME at the University of Washington, Seattle, USA, measures of trust in government and interpersonal trust had large and statistically significant associations with lower standardised infection rates. Trust is a complex idea. It cannot be reduced to a simple set of mechanical operations or interventions that are available to public health authorities. Trust embodies notions of effective leadership, political competence, and lack of government corruption. Trust enhances adherence to public health guidance. And interpersonal trust is linked to levels of inequality. High levels of inequality lead to lower levels of interpersonal trust (the "one rule for me, another for them" effect). As the authors of this report on trust conclude, "Efforts to improve pandemic preparedness and response for the next pandemic might benefit from greater investment in risk

communication and community engagement strategies to boost the confidence that individuals have in public health guidance.”

19. Ninth, the UK government must recognise that investments in science are a vital bulwark against future pandemics. Although not specifically the remit of Module 1 of this inquiry, I think it is still important to say that as SARS-CoV-2 began to spread in those early weeks of January, 2020, the response of the scientific community to pivot towards research on vaccines, antibody therapies, and antivirals was built on decades of investment in the basic and applied science of viruses and vaccine platforms. Public-private partnerships have been essential to this rapid response. Looking ahead, an important part of future pandemic preparedness is to scale up investment into potential vaccines for all viruses with pandemic potential. The same long-term thinking applies to antivirals. Investment in research to design broad-spectrum antiviral agents for viruses with pandemic potential is also a priority. It is important that negotiated agreements are in place in advance to ensure vaccine and antiviral equity of access and distribution. Manufacturing capacity globally must be increased and the UK government has an important role in ensuring that the fruits of their scientific investments benefit everyone, not only UK citizens. The broader lesson of COVID-19 is that the UK government must invest widely and substantially in basic and applied research on viruses with pandemic potential. Although these costs may be great, they are trivial by comparison with the calamitous impact of a pandemic on the economy.

20. Finally, the UK must make global health security one of its central foreign policy objectives. The pandemic challenge is not only domestic. National health security is a necessary precondition for global health security. And global health security depends on the health security of all nations. The UK’s health security is only as strong as that of the weakest nation-state. The central lesson of COVID-19 is the interdependence between nations and peoples—the UK’s health depends on the health of other nations, and vice versa. The UK therefore has a strong national interest in ensuring that all countries have early warning systems to detect newly emerging infectious threats. The strengthening of national preparedness systems is best mediated through the International Health Regulations and a strong and effective World Health Organisation. The UK must be an energetic contributor—financially, technically, and diplomatically—to WHO and its work on global health security. The agency has found itself under considerable political attack during the pandemic. While there are legitimate criticisms of WHO’s response to COVID-19, WHO is the only global coordinating body we have to monitor, review, and hold accountable countries for their surveillance, early warning, and preparedness systems. It is in our domestic interests to make sure that the International Health Regulations are acted upon, that WHO is a success, and that new instruments, such as the Financial Intermediary Fund, are supported. At a global level,

there is also a need for improved threat assessment. No such global threat assessment process exists today, an important weakness in the international institutional architecture. In March, 2023, The Lancet launched a Commission on 21st Century Threats to Global Health, chaired by Natalia Kanem (Executive Director, UNFPA) and Christopher Murray (Director, IHME). The threats facing the UK population go well beyond a newly emerging virus. They include climate change, anti-microbial resistance, air pollution, biodiversity loss and environmental degradation, uncontrolled non-communicable diseases, mental ill-health, unhealthy diets and obesity, economic crises, adverse effects of digital technologies (including the spread of misinformation), demographic change, fragile and unsustainable institutions, political polarisation, and conflict, among many more. How does a government make accurate judgements about the importance of these threats? How reliable are the data on which those judgements are made? How does one build confidence among the public in these threat assessments and the actions that will be needed to address them? Our Commission plans to work over the next two years— with technical experts, policymakers, and politicians—to identify possible threats, but more importantly to propose policy options for how to address those present and future dangers. We hope to create a mechanism for annual and scientifically rigorous global assessments of threats to assist and guide decision-makers in government.

21. To conclude: is the UK more or less prepared today if another pandemic was to strike? Based on these ten recommendations, I do not believe we are materially better prepared than we were in January, 2020. To be sure, we now have a generation of politicians, policymakers, health workers, scientists, and a public who have first-hand experience of what to do in such a crisis. Many of the understandable mistakes made in the early phase of COVID-19 would likely not be made again. However, consider these facts. The syndemic nature of pandemics has not been widely embraced. Our surveillance and data systems have not been substantially upgraded. We have not initiated a review to overhaul our science advisory system. We have not fixed the gaps and weaknesses in our health and public health systems. We have not educated our health workforce to be better prepared for a future pandemic. We have not implemented a set of performance metrics to monitor our pandemic preparedness. We have not significantly improved trust between the government and the public. If anything, public trust in government has diminished since 2020. Our investments in science and networks of scientific collaboration are currently unstable. And there is no sign of the UK using its diplomatic weight to lead internationally on strengthening systems of global health security. For a country that has such a respected history in medicine, medical science, and public health, this stagnation is as extraordinary as it is disappointing.

Statement of Truth

I believe that the facts stated in this witness statement are true. I understand that proceedings may be brought against anyone who makes, or causes to be made, a false statement in a document verified by a statement of truth without an honest belief of its truth.

Signed:

Personal Data

Dated: April 12, 2023 ENDS