

Witness Name: Sir Christopher Stephen Wormald

Statement No.: 7

Exhibits: CW7/1-CW7/22

Dated: 16 June 2023

UK COVID-19 INQUIRY

SEVENTH WITNESS STATEMENT OF SIR CHRISTOPHER STEPHEN WORMALD

I, Sir Christopher Stephen Wormald, of the Department of Health and Social Care, 39 Victoria Street, London SW1H 0EU (the Department), will say as follows:

1. I make this statement in response to the supplementary Rule 9 request from the UK COVID-19 Public Inquiry (the Inquiry), dated 17 April 2023, requiring the Department to provide the Inquiry with a further witness statement in respect of specified matters relating to Module 1. This statement supplements my initial statement dated 6 June 2023 in response to this Rule 9 request (my initial statement), by answering the remaining applicable questions raised within this request. This statement should therefore be read in conjunction with both my initial statement and my first statement concerning Module 1, dated 19 October 2022 (my first statement).
2. Save for where it is stated otherwise, the contents of this statement are within my own knowledge. This statement is to the best of my knowledge and belief accurate and complete at the time of signing. Notwithstanding this, it is the case that the Department continues to prepare for its involvement in the Inquiry. As part of these preparations, it is possible that additional material will be discovered. In this eventuality the additional material will of course be provided to the Inquiry and a supplementary statement will be made if need be.
3. For matters before 2016, my statement relies on Departmental records. For matters after 2016, I am relying on my own experience and recollection, and Departmental records. I have also consulted with colleagues in the Department, in order to provide as robust an account as possible on behalf of the Department.

Structure of this statement

4. The matters referred to in this statement relate, for the most part, to the date range specified by the Inquiry, namely between 11 June 2009 and 21 January 2020. I will make it clear where I refer to matters outside this range.

5. I have structured this statement based on the format of my first statement:
 - a) DHSC Structures
 - b) Planning for a pandemic
 - c) Public Health Services
 - d) Additional Questions

DHSC Structures

6. Within my first statement (at paragraph 62) I explained that the Department does not directly fund or deliver adult social care, as this takes place locally, but the Department is responsible for setting the national policy and legal framework, and the central funding for local authorities. This includes planning for and responding to national challenges but until recently, due to the devolved nature of the system, was backed by limited powers of intervention. Little operational data was collected and monitored nationally and what was available was not timely or granular.- Similarly, there were limited established mechanisms for the collection of insights and intelligence from the front line on operational matters.

7. The adult social care sector was, however, fully part of a system-wide exercise – Exercise Cygnus (which is explored further below from paragraph 68) to test readiness for a pandemic. In January and February 2018, the Ministry of Housing, Communities and Local Government (MHCLG), in partnership with Other Governmental Departments (OGDs) and Local Resilience Forums (LRFs), ran four pandemic workshops. These workshops brought together over 70 representatives from a wide cross-section of LRFs. The results of these workshops helped to shape national pandemic planning and ongoing engagement with LRFs. The follow-up from Cygnus focused nationally on strengthening pandemic preparedness in the following areas: capacity and surge planning, provision of PPE, data and reporting, and guidance to the sector. The Department also commissioned the Association of Directors of Adult Social Services (ADASS) to provide additional advice and guidance on pandemic planning for Directors of Adult Social Services, this was published in 2018 and is exhibited as CW7/1.

8. Within my first statement (at paragraphs 83 and 84) I explained that I chair the Executive Committee (ExCo) which, among other issues, considers matching resources to priorities. ExCo met on 9 December 2019 at which discussions focused solely on planning for the general election which was held a few days later. ExCo met again on 9 January 2020. At this meeting there was discussion concerning the priorities for the newly elected government. There was no discussion at either meeting concerning emergency preparedness.

9. Within my first statement (at paragraphs 87-89) I explained the civil protection duties which are conferred on the Secretary of State for Health and Social Care (the Secretary of State) under the Civil Contingencies Act 2004 (CCA). During the relevant date range, the Department's emergency preparedness response was delivered by different teams within the Emergency Preparedness and Health Protection Directorate. In 2017, this was the responsibility of the Emergency Preparedness, Resilience and Response (EPRR) team. However, since January 2019 the Operational Response Centre (ORC) has been tasked with this role following the transfer of the EPRR function into ORC. The Department's EPRR function is also supplemented by a Pandemic Preparedness team, which provides support in planning for and response to infectious disease outbreaks. These teams sit within the Emergency Preparedness and Health Protection Directorate.

10. The EPRR/ORC teams have varied in size over time with approximately 10-14 people in each team between 2009 – 2018. Teams were rapidly expanded in size from 2018 to accommodate delivery of the Yellowhammer programme with up to 50 staff in the teams and subsequently the COVID-19 response with up to 90 staff in the teams. The teams have been consistently led by a Deputy Director and a Director, reporting to a Director General within the Department. During the relevant date range, the Department's EPRR function was led by the following Directors:
 - a) Penny Bevan (2009 – 2011);
 - b) Helen Shirley-Quirk (December 2011 – August 2017);
 - c) Nick Adkin [interim] (August 2017 – February 2018); and
 - d) Emma Reed (February 2018 – to date).

11. During the relevant period the Directors General who oversaw the EPRR function were:
 - a) David Harper (2008- March 2012);
 - b) Felicity Harvey (April 2012 to June 2016); and
 - c) Clara Swinson (November 2016 to date).

12. The EPRR teams worked with other teams across the Department who held responsibilities for emergency planning within their policy areas. The focus of this work was, and remains:
- a) identification of risks that could compromise health and care sector resilience;
 - b) ensuring that plans are in place for identified risks, in line with national risk assessments or registers (held by the Cabinet Office (CO)), and gaining assurance of the sector's preparedness to respond;
 - c) providing coordination across the health and care system for severe risks impacting public health;
 - d) recovering from incidents and implementing methods to mitigate risk and improve resilience and response practices; and
 - e) providing a 24/7, 365 day capability to respond to incidents that impact the health and social care sector.
13. In respect of pandemic preparedness, the EPRR function's role was to support the health and social care system's ability to respond to a pandemic. This included ensuring that systems were in place in key areas such as medical evacuation (MEDEVAC) requests and safeguarding the flow of supplies of medicine during a pandemic.
14. The work carried out by these teams provided the emergency planning and preparedness function on behalf of the Department. This, in turn, ensured that the Secretary of State's civic protection duties under the CCA were met. For instance, the work done in identification of and planning for risks allows the Secretary of State to discharge their risk assessment obligations under the CCA. During the relevant period the Department's EPRR function provided support during the 2009 swine flu pandemic, the 2012 Middle East respiratory syndrome (MERS) outbreak and Ebola virus epidemic between 2013 – 2016.
15. Within my first statement (at paragraph 94) I explained that, as part as Operation Yellowhammer, the Department established the National Supply Disruption Response (NSDR) in order to respond to potential disruptions in the supply of medicines or medical products. The NSDR was already operational at the start of the COVID-19 pandemic and so was quickly utilised in support of the Department's response arrangements. This included supply of Personal Protective Equipment (PPE) as well as later supporting the testing and vaccination programmes.

16. Within my first statement (at paragraph 97) I explained that between 2013 and 2018 an EPRR Partnership Group oversaw EPRR working arrangements at a national, strategic level. The EPRR Partnership Group was chaired by the relevant Director General.
17. When the work of the EPRR Partnership Group was taken over by the Operational Response Board in September 2018, along with all other business as usual activities, the EPRR Exercise and Training Programme was paused to concentrate on Operation Yellowhammer. Pandemic preparedness planning continued under the auspices of the dedicated Pandemic Influenza Preparedness Programme (PIPP) Board and the cross-government Pandemic Flu Readiness Board (PRFB).
18. The ORC was established in January 2019 with the objective of delivering the necessary emergency planning and response capability for the Department. It also began to deliver the Secretary of State's responsibilities under the CCA. It brought together the existing EPRR capability in the Department and combined this with the incident response expertise from the Operation Yellowhammer Team.
19. When established, the ORC was led by two Deputy Directors (one focused on policy and the other on operational structure) and a Director. They were as follows:
 - a) Emma Reed (Director);
 - b) Clair Baynton (Deputy Director, Emergency Preparedness, Resilience and Contingency); and
 - c) Nikki Pitt (Deputy Director, ORC Operations Team).
20. The Department's EPRR function was consolidated into the ORC because we recognised the need to expand the size and increase the expertise of our emergency management capability. Although this change was prompted by Operation Yellowhammer, it was intended to improve our wider response capabilities.
21. The enhanced capabilities provided by the ORC in the context of the COVID-19 pandemic are discussed in my initial statement (at paragraphs 92). I am asked to consider any limitations which may have applied to the ORC's capabilities in the context of the COVID-19 pandemic. Clearly all response capabilities will have limitations based on factors such as size and operational practices, however, for the reasons discussed in my initial statement, I consider that the ORC provided us with an enhanced capability with which to respond to the challenges posed by the COVID-19 pandemic.

New and Emerging Respiratory Virus Threats Advisory Group (NERVTAG)

22. Within my first statement (at paragraph 125) I explained that NERVTAG was established to draw on the expertise of scientists and health care professionals to provide scientific risk assessment and mitigation advice on new and emerging respiratory virus threats.
23. The role of NERVTAG is to act as an Advisory Group to provide the Chief Medical Officer (CMO) and, through the CMO, Ministers, the Department and OGDs, with scientific risk assessment and mitigation advice on the threat posed by new and emerging respiratory virus threats and on options for their management. The scope of any advice includes new and emerging respiratory virus threats to human health, including strains of influenza virus (regardless of origin), and other respiratory viruses with potential to cause epidemic or pandemic illness, or severe illness in a smaller number of cases. Within my first statement (at paragraph 96) I explain that pandemic influenza is identified as the risk with the highest potential impact and has been since 2008. Within my sixth statement (at paragraphs 35 and 36), I set out the process for the National Risk Register (NRR) and National Security Risk Assessment (NSRA).

Scientific Pandemic Infections Group on Modelling (SPI-M)

24. Within my first statement (at paragraph 146) I explained that SPI-M provides expert advice to the Department and wider UK government on scientific matters relating to the UK's response to a pandemic. The group may also provide advice on other emerging human infectious disease threats as required. Its advice is based on infectious disease analysis, modelling and epidemiology.

Changes in the role of SPI-M following COVID-19

25. Within my first statement (at paragraphs 148-155) I explained that SPI-M was formally renamed as the Scientific Pandemic Infections Group on Modelling in 2022. Prior to May 2022, and for the duration of the COVID-19 response between January 2020 and February 2022, the non-emergency advisory group and its operational counterpart were known as the Scientific Pandemic Influenza Group on Modelling (SPI-M); and the Scientific Pandemic *Influenza* Group on Modelling, Operational subgroup (SPI-M-O) respectively.
26. The last meeting of SPI-M prior to the COVID-19 pandemic was in July 2019, with its operational counterpart (SPI-M-O) activated as a subgroup of the Scientific Advisory Group on Emergencies (SAGE) to support the COVID-19 response in January 2020. SAGE is responsible for providing COBR meetings with coherent, coordinated advice

and to interpret complex or uncertain scientific evidence in non-technical language. The secretariat for the Group is usually provided by CO or the GO-Science. SPI-M-O is a separate group to SPI-M. Participants may be partly or mostly drawn from SPI-M, but with additional contributors to reflect the specific emergency and expertise required.

27. The Department has sponsorship of SPI-M, is responsible for, and provides the secretariat function to SPI-M, and thus determines the group's programme of work. . I summarised in my first statement (at paragraph 152), the work of the group prior to the COVID-19 pandemic focussed on pandemic influenza and (as stated in 2018 Terms of Reference) included:

- a) Reviewing the available modelling evidence, and where appropriate the implications for policy.
- b) Advising on the possible progression and severity of a future pandemic.
- c) Providing expert challenge to epidemiological models informing procurements or those which might be used to respond to a future pandemic.

28. This advice primarily took the form of a "modelling summary", which was periodically updated as necessary following meetings of the group. This represented the committee's consensus view of the epidemiological modelling evidence available at the time and the possible implications for planning. It was not a statement of the Department or wider government policy. The modelling summary also included a reasonable worst-case scenario (RWCS) for an influenza pandemic. The "reasonable worst-case" is not a prediction or forecast of what will happen or what scenario is most likely, nor the worst theoretically possible scenario, but a scenario to inform planning. By planning for the RWCS, planners are assured that they are able to respond to a wide range of scenarios should the hazard occur.

29. Given the remaining volatility of the COVID-19 situation in May 2022, SPI-M was re-formed on an interim basis, with a review of the committee's longer-term remit, terms of reference, and participants intended at 12 months.

30. As it was immediately prior to the COVID-19 pandemic, the high-level purpose of SPI-M remains to provide expert advice to the Department and wider UK Government on scientific matters relating to the UK's response to a pandemic. In addition, it may provide advice on other emerging human infectious disease threats as required.

31. The current priorities of the group however, reflect not only opportunities for learning and consolidation of insights from the COVID-19 pandemic, but also changes in the broader UK public health landscape. In particular, a key focus of ongoing work within SPI-M involves reviewing the modelling and epidemiological evidence which emerged during the COVID-19 pandemic.
32. The principles for SPI-M's current remit are described in detail in the May 2022 Terms of Reference for SPI-M (CW7/2). Minutes are publicly available online, with those for the first and second meetings on 16 May 2022 and 20 June 2022 exhibited at CW7/3 and CW7/4. Subsequent meetings of the group take place after 28 June 2022 and, as such, fall outside the period within the scope set out by the Inquiry.

Advice provided by SPI-M

33. The group acts as an advisory function to the Department and the UK Health Security Agency (UKHSA). The secretariat co-ordinates with areas of Government that may wish to utilise SPI-M's expertise, as well as liaising with the group's co-chairs on how best to take forward any commissions. Questions of operational practicality, proportionality, non-health factors and value for money of policy options are outside the group's remit. The advice does, however, help to inform planning and policy development within the Department.
34. SPI-M considers a wide and varied range of evidence when formulating consensus advice. This not only includes data and research on previous epidemics, but also information on the population and public behaviours, such as social contact patterns and demographics, socio-economic and health data. International evidence and research, as well as advice from other scientific advisory groups, is also critical.
35. The development of advice provided by SPI-M is supported through multiple routes. For example, epidemiological data from previous epidemics can help to reduce uncertainty and inform parameter values in modelling scenarios, whilst data on the current population is critical to understanding the potential susceptibility of the population, impact and spread of an epidemic. The experience from previous epidemics is also invaluable in informing future data and modelling needs for pandemic strategies.
36. In formulating its advice, individual participants or modelling groups may be asked to contribute to discussion papers or can be commissioned for modelling advice and insights. Advice provided by SPI-M represents a consensus view of the group however, with the

co-chairs responsible for reporting the scientific advice to the Department and ensuring the scientific integrity of the group's discussion and outputs. In forming a consensus, the group will consider a range of views on the discussion papers and available evidence from participants. This may be an iterative process, with the diversity of voices and peer challenge providing additional assurance and collective improvement to the group's overall advice.

37. Advice from SPI-M can include outputs from epidemiological models and other quantitative analyses, but it more commonly takes the form of qualitative modelling insights and principles, as well as the provision of expert views, assurance and challenge based on modelling and other epidemiological insights. A substantial part of the group's remit involves reviewing and synthesising available evidence to develop modelling insights and implications for policy, as set out in the Terms of Reference referred to above (CW7/02).
38. The most appropriate form of epidemiological and/or modelling advice, as well as the available sources of information, will depend upon on the nature and purpose of the request. For example, advice relating to the potential progression and impact of a pandemic for the purposes of informing pandemic preparedness policies may be pathogen agnostic. It is not possible to forecast the exact timing, characteristics and severity of a pandemic, so general modelling insights and theoretical scenarios such as the RWCS, informed by evidence from previous epidemics, are useful.
39. It should be noted that the available evidence, and thus the balance and range of advice provided by SPI-M, will differ to that provided by its operational counterpart (SPI-M-O) during an emergency. Not only would modelling advice relate to a known pathogen in the latter case, but some data will only become available once an epidemic arises. Advice provided by SPI-M-O during the COVID-19 pandemic is best considered within the scope and context of Module 2.

Modelling advice on non-pharmaceutical measures in relation to non-influenza pandemics

40. The modelling subgroup of the Scientific Advisory Group (SAG) on Pandemic Influenza first met in September 2005. In 2008, the SAG was incorporated into a wider group, the Scientific Pandemic Influenza Advisory Group (SPI), covering a wider range of scientific disciplines. The modelling subgroup of SAG became known as SPI-M as a result.

41. Prior to the COVID-19 pandemic, the work of SPI-M and its predecessor focused on pandemic influenza, reflecting the remit of their respective parent groups when established. It was formally agreed in 2018 that SPI-M may provide advice on other areas of infectious disease modelling and epidemiology where appropriate, though the primary focus of the group at this point remained to “provide expert advice to DHSC and wider UK Government on scientific matters relating to the UK’s response to an influenza pandemic”.
42. As such, pre-2020 advice from SPI-M relating to non-pharmaceutical interventions (NPIs), such as travel restrictions and school closures, and the possible implications for planning, was primarily in the context of pandemic influenza. It is not the case however, that such advice from SPI-M is only of relevance to pandemic influenza. As explained, it is not possible to forecast the exact timing, characteristics and severity of a future pandemic. As such, general modelling insights are invaluable and can support planning against a wider range of potential pandemic risks.
43. These types of general modelling insights can be applicable to diseases other than pandemic influenza. This is particularly the case for other respiratory diseases. As explained in my First and Sixth Witness Statement to the Inquiry for Module 1, new pathogens transmitted by the respiratory route will likely share characteristics with influenza, and so a number of responses considered for influenza will remain of relevance.
44. For example, while the focus of the 2018 SPI-M Modelling Summary is on pandemic influenza, many of the insights contained in the paper are applicable more widely. In relation to school closures for instance, the summary paper notes that “the impact of any intervention including closing schools depends critically on the mixing between children and adults, as well as the age dependence of any background immunity” and that closures are most usefully employed “if children are particularly badly affected, or if there is known to be significant background immunity in adults”.
45. As previously explained in my First Witness Statement for Module 1, the operational counterpart of SPI-M (SPI-M-O) has been activated as a subgroup of SAGE on two occasions. It was activated in April 2009 to support the government’s response to the 2009 H1N1 (swine flu) pandemic, and then in January 2020 as part of the COVID-19 response.
46. In addition, an ‘Ebola Modelling Group’ was established in October 2014 to support the government’s response to the 2014-16 Ebola outbreak in West Africa, shortly thereafter

becoming a subgroup of SAGE. This was not an activation of SPI-M-O given the focus on Ebola, but adopted the model previously established by SPI-M-O, sharing a secretariat and much of the same membership. Minutes and consensus advice from the Ebola Modelling Group were disclosed alongside my First Witness Statement.

Engagement with OGDs

47. Within my first statement (at paragraphs 181 to 184) I explained that the Department worked closely with multiple OGDs on pandemic preparedness. This includes the Department for Levelling Up, Housing and Communities (DLUHC) and, by extension, local authorities who are responsible for the local planning and response to health-related emergencies. The objective of engagement via DLUHC has been to share intelligence with partners to inform local planning but also to gain assurance of local areas' readiness to respond to specific risks.

48. The CO holds the policy responsibility for the CCA and therefore the local arrangements set out in Part 1 of the Act. Each relevant Government department holds responsibility for supporting and monitoring its respective agencies (Category 1 and 2 responders). The Civil Contingencies Secretariat (CCS) and DLUHC jointly share responsibility for the local response capability.

49. Within my first statement (at paragraph 186) I explained that DLUHC was a member of the Pandemic Flu Readiness Board (PFRB). One of the PFRB workstreams was for the Department and DLUHC to collaborate on engagement with local government, to ensure robust pandemic influenza planning. DLUHC, through its Resilience and Emergencies Department (RED), acts as the key government interface with LRFs. A representative from MHCLG's RED team also sat on the Department's PIPP Board. DLUHC's continuous role is to help LRFs plan for events and share best practice, utilising communications systems such as Resilience Direct to cascade information. In response, DLUHC provides Government Liaison Officers to support Strategic Coordination Groups (SCGs). DLUHC also helped to broker the production and circulation of guidance to support local planning and response and could secure additional support to SCGs from military planners.

50. Through the DLUHC's RED and its Resilience Advisors, the Department met with LRF Chiefs and representatives at other forums to provide risk briefings, share information and discuss local and national mitigation strategies related to health and social care. The NHS also worked closely with LRFs at the regional and national level, with NHS Trust representatives forming part of LRF membership.

51. The Department is also linked to local resilience capability and LRFs through the network of regional Directors of Public Health who feed into the Chief Medical Officer (CMO) and UKHSA. Directors of Public Health work through LRFs to ensure effective and tested plans are in place for the wider health sector to protect the local population from health risks.
52. Engagement has been built up through a long history of collaborative risk preparedness and incident response – such as EU Exit preparedness, the poisonings in Salisbury, Avian Influenza and Ebola. These enduring relationships enable the Department and its Arm's-Length Bodies (ALBs) to develop a detailed picture of local and national emergency preparedness in the health and social care system.
53. As referred to in paragraph 7 of this statement, the MHCLG ran four pandemic workshops in 2018. The results helped to shape national pandemic planning and ongoing engagement with LRFs. Workshop presentations/discussions included: national overview; pandemic preparedness; Devolved Government pandemic preparedness; exploring local resilience; and ongoing engagement. MHCLG led two follow up meetings with LRFs in May and September 2018 that looked in more detail at: Excess Deaths; Pandemic Resilience Standard; Education; Pandemic content on GOV.UK; and Pandemic Exercising. This supported the development of the national pandemic workstreams and individual planning by LRFs.
54. The 2015 Strategic Defence and Security Review (SDSR) contained a commitment to produce a new set of National Resilience Standards. The standards set out expectations of good and leading practice for LRFs, which build on and complement statutory duties under the CCA and other relevant legislation. The standards do not introduce any new duties on emergency responders. The statements of good and leading practice reflect the consensus view of local emergency responders and the OGDs and agencies who drafted, contributed to and were consulted on these statements. The standards have two functions: the first is a yardstick for assurance through self-assessment and peer review; and the second is providing guidelines for continuous improvement.
55. Within my first statement (at paragraph 188) I explained that, as part of cross-Government engagement, on 15 September 2018, the CMO and I gave a presentation to Permanent Secretaries from OGDs on pandemic preparedness. This presentation focused on the 1918/19 pandemic (Spanish Flu). Changes to social contact patterns, demographics, and improvements in medical care make it difficult to interpret events that occurred many

decades ago. Learning from previous pandemics can also be limited by the availability of reliable contemporary data. Despite this uncertainty, analysing historical pandemics can provide valuable insights into their potential frequency, spread and impact.

56. The Spanish Flu pandemic was the most severe pandemic of the 20th century and is estimated to have resulted in 20 – 50 million deaths worldwide. In the UK, the pandemic consisted of three distinct waves. In common with the 1957-58 and 1968-69 pandemics, the Spanish Flu pandemic affected the very young and elderly, but additionally had relatively high mortality rates in young adults. Limited data means the precise properties of the virus and reasons for this three-wave structure are not well understood.
57. The impact of previous pandemics, including the Spanish Flu pandemic, has been used to support the Government's 'defence in depth' approach outlined in the UK Influenza Pandemic Preparedness Strategy 2011. The pandemic influenza RWCS was informed by the historical evidence of pandemic outbreaks from the past century. This can be seen within the 2018 SPI-M modelling summary, exhibited at CW7/5 and CW7/6.
58. The 2011 Strategy notes the potential benefits of school closures if this was for a prolonged period. It does not reference the potential effectiveness of closing borders or schools in relation to a coronavirus outbreak. Following Exercise Cygnus, the Department for Education undertook its own pandemic influenza response planning activity. There was also an education clause drafted within the Pandemic Influenza Bill.
59. Whilst the 2011 Strategy makes reference to the potential need for social distancing measures in extreme circumstances, prior to the COVID-19 pandemic, social distancing measures had not been deployed on a mass scale in recent times. This meant that there was a limited real-world evidence base for considering the secondary and tertiary impacts of implementing NPIs such as social distancing.
60. The UK Influenza Pandemic Preparedness Strategy outlines that there were no plans to close borders in the event of an influenza pandemic. This was informed by modelling advice that a 90% restriction on all air travel would only delay the peak of a pandemic wave by one or two weeks and, given the interconnectedness of the UK, it was likely to be one of the earlier countries receiving infectious individuals. The Strategy noted there was no evidence of the public health benefit to be gained from measures such as thermal scanning or other screening methods.

61. The benefits and precise nature of port of entry screening depend on the nature of the virus and the scale of the disease outbreak. For example, during the 2014 – 2016 Ebola outbreak, Public Health England (PHE) provided port of entry screening for Ebola to travellers arriving from high-risk countries but it was accepted it had limited impact and would not identify all, or even most, cases (CW7/7).
62. The RWCS for an outbreak of an Emerging Infectious Disease (EID) used in the 2022 National Security Risk Assessment (NSRA) suggests within its assumptions that a novel (previously unknown) pathogen will be imported into the UK from overseas and that international travel would result in 10 incursions (imported cases) into the UK before border measures are applied. These “no notice cases” would, in the scenario, lead to the RWCS EID outbreak. EID border measures as part of response capabilities would focus on isolation, disease surveillance and early detection..

Voluntary, community and social enterprise

63. Within my first statement (at paragraph 204) I explained that voluntary organisations were engaged as part of the development of the 2011 UK Influenza Pandemic Preparedness Strategy. In March 2011, the four UK Governments launched a consultation to inform the 2011 Influenza Pandemic Preparedness Strategy. The Department managed the consultation exercise, which ran for 12 weeks, ending on 17 June 2011. The consultation response is exhibited at CW7/8. Annex D lists all the organisations and individuals that were engaged as part of the development of the 2011 Influenza Pandemic Preparedness Strategy. The nature of this engagement was primarily through responding to the consultation.
64. Respondents to the consultation commented that a strong communications strategy was vital to ensure an effective response to a future pandemic. There was agreement that timely and consistent national statements during a pandemic are crucial and that a clearly designated spokesperson, for example the CMO, would ensure consistency. There were calls among several respondents for messages to be delivered in a variety of formats to ensure that individuals with complex needs had access to relevant information. In addition, there were requests to recognise the need for local communications during a pandemic. In light of respondents' comments, the final published version of the UK strategy, which incorporated feedback from the consultation, emphasised the importance of both national and local communications in planning and responding to a future pandemic. In addition, each of the UK Governments developed a Communications Strategy for a future

pandemic, to be maintained on an ongoing basis. The Department's Communications Strategy was subsequently published in 2012, the year after the 2011 UK Pandemic Influenza Preparedness Strategy. This document, as published, is exhibited at CW7/9.

65. At a national level, the learning around the voluntary sector was gathered during Exercise Cygnus, a cross-Government exercise to test the UK's response to a serious influenza pandemic. The Exercise Cygnus Report is exhibited at Feedback from that exercise indicated that there was no national mechanism for coordinating voluntary sector resources, which tend to be highly localised. LRFs were invited to take part in these exercises.

66. Within my first statement (at paragraph 205) I referred to the specific recommendation from Exercise Cygnus that the Department, NHS England (NHSE), the Crown Commercial Service and the voluntary sector and relevant authorities in the Devolved Governments should work together to propose a method for mapping the capacity of and providing strategic national direction to voluntary resources during a pandemic. In light of lessons from Exercise Cygnus and other exercises and emergencies in recent years, CCS and the Department for Culture, Media and Sport worked closely with the voluntary sector to ensure we can make best use of the voluntary sector's valuable expertise and support to those in need which they can bring to emergencies including a pandemic. This included providing support to the establishment of the National Emergencies Trust (NET) in November 2019, a registered charity in England, Wales and Scotland; improvement in national and local coordination of voluntary sector input; and support to the work of the Business Emergencies Resilience Group. As of 21 April 2023, the NET has raised over £35 million since launching their appeal in response to COVID-19 and distributed over £17 million to frontline community organisations. Northern Ireland has made arrangements with the voluntary search and rescue organisations to assist with the local response.

Global Health Security Initiative (GHSI)

67. Within my first statement (at paragraph 216) I explained that the focus of the Global Health Security Initiative (GHSI) extends across the breadth of Chemical, Biological, and Radio-Nuclear (CBRN) threats and hazards and includes a specific Working Group on Respiratory Viral Pandemic Threats.

68. Prior to COVID-19, the Working Group on Respiratory Viral Pandemic Threats was known as the Pandemic Influenza Working Group (PIWG) and was co-chaired by the UK's Deputy Chief Medical Office (DCMO), Jonathan Van Tam. PIWG was responsible for sharing and

comparing respective national approaches to pandemic preparedness, including vaccine and anti-viral stockpiling and use, surveillance and epidemiology, diagnostics, and public health measures. For example, during the H1N1 Pandemic, the Working Group coordinated the regular exchange of information among GHSI members on the status of the pandemic response.

Planning for a pandemic

Governance Structures

69. Within my first statement (at paragraph 231) I explained that the Department is the Lead Government Department (LGD) for pandemic preparedness, response and recovery. The process by which certain risks are assigned to the Department as the LGD is governed by CO. The CO Concept of Operations is exhibited at CW7/10, which defines LGDs at paragraph 2.8, as follows:

2.8 Within UK central government, departments deliver their responsibilities (generally through local agencies) and are accountable to Parliament for their effective delivery. This includes providing, where appropriate, strategic decision making and oversight for emergencies affecting their responsibilities. One department – the Lead Government Department (LGD) – usually takes overall responsibility for assessing the situation, ensuring that its Ministers and other relevant Ministers are briefed, handling media and parliamentary interest, and providing co-ordinated policy and other support as necessary to local responders. Other government departments will provide support to the LGD to ensure a co-ordinated response, however, individual departments will remain responsible, including to Parliament, for their particular policy areas.

70. In relation to Pandemic Preparedness, the role of the LGD is outlined at paragraph 2.16 – 2.18, as follows:

2.16 Where COBR is activated, the role of the Lead Government Department, in consultation with other government departments and with support from the Cabinet Office as necessary, will be to:

Produce a handling plan as soon as possible;

ii. Act as a focal point for communication between central government and the multi-agency, Regional and/or Strategic Co-ordinating Groups on the ground involving relevant government offices in the English regions or the devolved administrations as appropriate;

iii. Produce a brief, accurate situation report on the nature and scale of the emergency and submit this promptly to feed into the production of the Common Recognised Information Picture (CRIP) – along with the central briefing for media purposes – to their Minister, copied to the Cabinet Office who will advise on wider

distribution (of course, the public will already be receiving briefings from the statutory response agencies through the media and other mechanisms, especially where issues of public safety need to be urgently addressed;

iv. Ensure that responders and affected communities have access to the resources they need to manage the emergency and where shortfalls are required ensure they are addressed;

v. Draw upon and apply relevant capabilities applicable to the emergency at hand;

vi. Co-ordinate and disseminate information for the public and the media at the national level, collaborating with other government departments including the Cabinet Office, and the News Co-ordination Centre (NCC) when activated;

vii. Ensure recovery issues are considered throughout and that arrangements are in place to ensure a smooth transition to the recovery phase;

viii. Account to Parliament and lead in the submission of evidence to any subsequent Government-appointed or independent inquiry; and

ix. Identify, learn and share the lessons from the planning and response to the emergency.

2.17 The LGD for the response phase would need to work closely with the LGD for the recovery phase (where different) from the outset to ensure a smooth transition of responsibilities at the appropriate time and to ensure that response and recovery activities are undertaken in concert.

Role of the Lead Government Department for Recovery

2.18 In England, the role of the LGD for Recovery, in consultation with other government departments, and if appropriate the devolved administrations will be to:

i. Act as the focal point for communication between central government and the multi-agency Recovery Co-ordinating Group(s) at local level involving relevant government offices in the English regions or the devolved administrations as appropriate;

ii. Agree, across government, clear aims and objectives for the recovery process, including criteria for standing down recovery mechanisms and structures;

iii. Produce brief, accurate situation reports feeding, as appropriate, into the Common Recognised Information Picture (CRIP) on the nature and scale of the recovery issues; using the agreed recovery reporting framework and principles

iv. Ensure that strategic recovery issues are identified and acted on during the response phase of an emergency and that there is a smooth and effective handover from response to recovery;

v. Produce a handling plan as soon as possible. This should offer a clear assessment of whether the recovery issues are within the scope of the LGD or whether support is needed and, if so, what degree of central co-ordination is required;

vi. Draw upon and apply the relevant capabilities applicable to recovery from the emergency in hand and, if required, co-ordinate the support needed from other government departments and agencies and if appropriate the devolved administrations, through the establishment of a Recovery Group;

vii. Use its authority decisively to take whatever executive decisions and actions are needed from the centre to help the local responders in the recovery effort;
viii. Co-ordinate and disseminate information on recovery for the public and the media at national level, collaborating with OGDs, including the News Co-ordination Centre (NCC) when activated, and the Cabinet Office;

ix. Account to Parliament for the recovery process and lead in the submission of evidence on the recovery process to any subsequent inquiry; and

x. Identify, learn and share the lessons from the recovery process.

71. Within my first statement (at paragraph 239) I explained that, during the proposed date range, pandemic influenza was one of the identified risks on the Department's High Level Risk Register (HLRR). This was still the case in January 2020.

72. The Department refreshed the HLRR in summer 2019 and took it to the Audit and Risk Committee to clear at the 18 September 2019 meeting. The decision to refresh had come from the Audit and Risk Committee (ARC), as it is good practice. The Portfolio, Performance, Investment and Risk team ran an HLRR workshop with the Permanent Secretary and all Directors General on 14 May 2019 to identify and discuss the Department's top risks. The Department's refreshed top 12 risks were agreed. The 2019 HLRR is exhibited at CW7/11.

73. 'Infectious diseases' was selected for deep dive discussion in the Departmental board meeting on 29 September 2016. The Board discussed likely risks, preparedness and planning for a pandemic in the UK. The presentation and the minutes are exhibited at CW7/12 and CW7/13.

Availability and supplies of clinical countermeasures

74. Within my first statement (at paragraph 250), I set out the level of supplies of PPE items and other clinical countermeasures that were available within the pandemic stockpiles as of October 2019. The COVID-19 pandemic posed significant challenges to the PPE stockpile; nonetheless it provided important resilience in the early stages of our response.

75. Whilst this will be explored in more detail in later Modules, the key drivers of the high requirements for PPE during the COVID-19 pandemic are set out below. The volumes for PPE stockpiled prior to COVID-19 were calculated on the assumption that the normal supply chain would continue to support demand from business-as-usual services, and stockpiled PPE would only be needed to meet additional demand over and above this level for the first 15 weeks of an influenza pandemic. In reality, disruption to the business-as-usual supply chain meant that stockpiled PPE was needed to replenish such usage. This

supply chain disruption also prevented the fulfilment of just-in-time contracts, which were intended upon delivery to make up a proportion of our volumes for pandemic preparedness PPE. Furthermore, PPE volumes were modelled on the management of symptomatic influenza patients; because COVID-19 can be present and spread even when patients are asymptomatic, PPE was required in the treatment of a greater proportion of patients than allowed for in an influenza pandemic RWCS. As noted in my second statement at paragraph 5(j), the Government's modelling for pandemics was based on pathogens with limited or no asymptomatic transmission.

76. In my third witness statement (at paragraph 203), I stated that the pandemic influenza stockpile did not contain any surgical gowns, and that a recommendation had been made by NERVTAG to include gowns in the stockpile. This recommendation was accepted by the Department and was in the process of being actioned but not completed by the time of the outbreak of the pandemic. Procurement of gowns to add to the stockpile had not been completed by the time of the outbreak of the pandemic.

77. In addition, we quickly assessed that the logistical arrangements for delivering the PPE to health and social care providers were not adequate, with a single warehouse holding the stockpiles. This was again addressed at the time through setting up additional logistical arrangements, working with the military and by contracting private companies to provide storage and distribution.

78. Whilst the Department considers that the stockpiles were proportionate to the advice about likely usage that we received from expert committees at the time, it is also clear that the experiences during the COVID-19 pandemic highlighted areas for improvement, some of which we addressed during the pandemic. We are currently scoping the new medium and longer-term approaches to PPE pandemic preparedness stockpiles, with the Department actively considering the findings and recommendations of the countermeasures review, which made recommendations in relation to both the product types to hold and the governance and management of those stockpiles (CW7/14).

79. Centralising procurement and supply of PPE during the pandemic allowed for data to be gathered and analysed about how PPE was being used across the acute and non-acute sectors. In the future, NHS Supply Chain will retain a central role in procuring, holding and supplying PPE to a large number of NHS Trusts and non-acute settings including care homes, with the online portals established in the pandemic remaining available for use.

The continuing flow of PPE usage data will be in contrast to the historic shortage of centralised data and the challenges to demand modelling that this presented.

Assessment of likelihood for an influenza-type disease pandemic

80. Within my first statement (at paragraph 275), I explained that the scientific evidence base on pandemic influenza made clear that a new virus with pandemic potential would emerge at some stage. The Government's likelihood assessments for an influenza-type disease pandemic included in the NRR and NSRA were based on the empirical evidence that one influenza pandemic with a similarly high case fatality ratio and impact to the RWCS had occurred in the past century (1918-19). Therefore, it was judged that the likelihood of the RWCS occurring was approximately 1% per year.

81. The economic analysis conducted by the Department to support the procurement of pandemic countermeasures and consumables assessed the impact of an intervention across a range of plausible pandemic scenarios, and not only a severe pandemic. The likelihood of these scenarios occurring was assessed using the same approach as the likelihood assessment in the NSRA. To align with the empirical evidence that four influenza pandemics have occurred over the past century (1918-19, 1957-58, 1968-69, and 2009-10), the analysis typically assumed a 4% probability of an influenza pandemic with any severity occurring in any year, emphasising high uncertainty.

82. These likelihood assessments are consistent with CO's analysis of the scientific evidence base on pandemic influenza in 2011 (CW7/15). The review noted that it is not possible to quantitatively estimate the probability of a pandemic virus emerging; therefore the likelihood of a pandemic cannot be predicted beyond empirical assessment.

Assessment of risk in the NRR and NSRA

83. The risks on the register are assessed based on their impact and likelihood of occurring. The pandemic influenza RWCS had the highest score of all risks on the NRR, this was driven by having the highest magnitude of impact, combined with a modest probability of occurring in comparison to other risks.

84. Government Departments were encouraged to use the Economic Impact Assessment tool provided by CCS to assess the economic impact of the risks included in the 2016 NRR and 2019 NSRA. As an example, for the 2019 NSRA Departmental officials inputted the estimated number of fatalities and casualties from the pandemic influenza RWCS into the tool. Based on this information the tool subsequently calculated the economic impact of these fatalities and casualties by applying the assigned cost values for each type of harm.

A similar approach was taken to value the potential cost of lost tourism based on the geographic area impacted and severity of effect. This approach sought to ensure consistency of estimates to allow comparability of impacts across the risks identified in the register.

85. The population health impacts (number of casualties and fatalities) of the “pandemic influenza” and “emerging infectious diseases” risks are based on the assumptions outlined in their respective RWCS.

86. For pandemic influenza, the number of casualties is calculated by multiplying the size of the UK population with the proportion of the population who experience symptoms. The number of fatalities is calculated by multiplying the number of symptomatic individuals (cases) and the case fatality ratio.

Pandemic Preparedness “sleeping” research contracts

87. Within my first statement (at paragraph 284) I explained that, following review of the 2009 swine flu pandemic, the National Institute for Health and Care Research (NIHR) commissioned a sleeping pandemic portfolio of seven projects to be activated in the event of new influenza pandemic.

88. Setting up clinical research from the beginning can take some time, including getting ethical and regulatory approvals. In the context of pandemic research, a sleeping research contract is for research that has previously been planned for agreed priorities, with the necessary preparations and approvals already in place for the work to be activated. The research itself does not normally start until a pandemic occurs. Sleeping contracts are one way of helping to speed up research in the event of a pandemic so potential new treatments and best care pathways can be identified as quickly as possible, informing the response to the pandemic in real time.

89. Once a pandemic has been announced or is anticipated, approval to activate projects within the pandemic sleeping portfolio is given by the DCMO in the Department. The research teams are then notified to activate the research. Four of the seven projects were activated. Of the three not activated one was combined into another study, and two were not feasible due to testing capability and capacity for COVID-19 infection. The activated projects are as follows:

- a) On 3 February 2020, the following project was activated: “11/46/21: Evaluating and improving communication with the public during a pandemic, using rapid turnaround telephone surveys”
- b) On 20 March 2020 the following projects were activated:
 - i) “11/46/07 - Pandemic Respiratory Infection Emergency System Triage” (PRIEST)
 - ii) “11/46/12 - Maternal and perinatal outcomes of pandemic influenza in pregnancy”
 - iii) “11/46/22 - Real time refinement and validation of criteria and tools used in primary care to aid hospital referral decisions for patients of all ages in the event of surge during an influenza pandemic”

90. The NIHR looked at the possible repurposing of projects for non-flu pandemics in 2018. It tested the readiness of the pandemic portfolio to activate. This was in effect a ‘mock’ activation of the portfolio for one week. Following this exercise, feedback included thoughts as to the repurposing of the original stated work to enable activation for other pathogens. All but one research team said the projects could be adapted to other pathogens, with five of these saying the research could be adapted easily. One research team had done some work on adapting to other pathogens and they felt additional work was required. A schedule of the researchers’ responses to the NIHR request is exhibited at CW7/16 and CW7/17.

Operational delivery agencies (PHE and the NHS)

91. Within my first statement (at paragraphs 292 and 295) I explained that the Department’s Pandemic Preparedness Programme is delivered in partnership with its ALBs, primarily UKHSA (formerly PHE) and NHSE.

92. The CCA requires NHS organisations, and providers of NHS-funded services, to show that they can deal with emergency incidents while maintaining services. Under the CCA, NHSE is a Category 1 responder and as such, they have a responsibility to assure themselves that NHS organisations and providers have adequate emergency preparedness, resilience and response plans in place. The Department has no direct involvement in the development or maintenance of the NHSE Incident Response Plan. However, in its role as sponsor of NHSE, the Department has a responsibility to be assured that adequate emergency preparedness, resilience and response plans are in place.

93. The NHS Clinical Commissioning Groups (until their closure in 2022) would have been assured by NHSE. The NHS Core Standards for Emergency Preparedness, Resilience and Response would apply to all providers of NHS-funded services and commissioners, aligning with CCA 2004 and NHA 2006.

94. There was an annual assessment process that was managed at a local, regional and national level by NHSE. For this, there was a specific line on the assessment for pandemic flu preparedness (among other EPRR topics) and a national report was presented to a Department-chaired group (EPRR-Health Delivery Group or EPRR-Partnership Group).

Incidents and exercises – lessons learned

95. Within my first statement (at paragraph 309), I explained that learnings from Exercise Cygnus included developing the draft Pandemic Influenza Bill, which formed the initial basis of the CVA 2020, and developing draft plans to surge capacity in the NHS and adult social care sector in the event of an extreme rise in demand for services and pressure on the workforce. I produce these draft plans as CW7/18. In total, Exercise Cygnus identified 4 key learning outcomes and 22 recommendations, which were accepted by Government.. The main mechanism for taking forward the recommendations from Exercise Cygnus was the work programme overseen by PFRB; five workstreams were agreed covering the following areas: Healthcare; Adult community and social care; Excess deaths; Sector resilience, and Cross-cutting enablers.

96. A summary of the status of the work (taken from the analysis above) as at January 2020 is as follows:

- (a) eight lessons identified had been fully addressed by Government;
- (b) six lessons identified had been partially addressed by the development of new plans and policies, but some work was ongoing; and
- (c) work to address eight lessons identified was still ongoing.

Establishment of Moral and Ethical Advisory Group (MEAG) in 2019

97. Within my first statement (at paragraph 331) I explained that the Department established MEAG in October 2019, and this was the only time MEAG met before January 2020. This is because the group, according to its Terms of Reference (CW7/19), were expected to have face-to-face meetings no more than twice a year unless there was a specific incident that warranted a full meeting.

Exercise Alice (2016)

98. Within my first statement (at paragraph 351) I explained that Exercise Alice was delivered on 15 February 2016, and was supported by the Department, NHSE and PHE. This exercise considered the planning and resilience arrangements required to respond to an outbreak of Middle East Respiratory Syndrome (MERS), a High Consequence Infectious Disease (HCID) in England. The exercise was not a Ministerial level exercise and was not designed to test a pandemic scale response, given its focus on an outbreak of a high consequence infectious disease with a small number of cases. It was held to advise the then CMO, officials in the Department and its ALBs.

99. The final report from Exercise Alice recommended 12 actions. I produce this report as CW7/20. These actions, as listed at appendix A of the report, are as follows:

- 1. The development of MERS-CoV specific instructional video on PPE level and use;*
- 2. Develop a protocol to enable the arrangement and conduct of timely clinical trials for new or experimental treatments;*
- 3. Develop a set of guidelines to prioritise treatments when there are limited stocks/doses available;*
- 4. Develop a MERS-CoV serology assay procedure to include a plan for a process to scale up capacity;*
- 5. Produce a briefing paper on the South Korea outbreak with details on the cases and response and consider the direct application to the UK including port of entry screening;*
- 6. Produce an extensive summary of the EVD lessons identified with a section on applicability to MERS-CoV;*
- 7. Produce an options plan using extant evidence and cost benefits for quarantine versus self-isolation for a range of contact types including symptomatic, asymptomatic and high risk groups;*
- 8. Develop a plan for the process of community sampling in a MERS-CoV outbreak;*
- 9. Develop a live tool or system to collect data from MERS-CoV contacts;*
- 10. Research, review and identify good practice for definitions for close/high risk contacts and recommend a definition for MERS-CoV;*
- 11. Prepare a FAQ for MERS-CoV close/high risk contacts;*
- 12. Produce a briefing paper that considers a range of communication options to interface with NHS staff to gain staff engagement*

100. As at January 2020, all the recommendations had been fully incorporated into ongoing work, save for the following, with reasons given:

1. *The development of MERS-CoV specific instructional video on PPE level and use;* - This was partially completed. Guidance on MERS that included PPE requirements was updated following Exercise Alice. It was decided to take this action forward via guidance rather than a video. This guidance is exhibited at CW7/21.
2. *Produce a briefing paper on the South Korea outbreak with details on the cases and response and consider the direct application to the UK including port of entry screening;* - This was also partially completed. PHE provided regular briefings on the situation in South Korea at the time, however, these did not specifically include port of entry screening.
3. *Produce an options plan using extant evidence and cost benefits for quarantine versus self-isolation for a range of contact types including symptomatic, asymptomatic and high risk groups;* - This was not completed. This was partially completed through a draft options paper, but work was discontinued in 2017.
4. *Produce a briefing paper that considers a range of communication options to interface with NHS staff to gain staff engagement;* - This was not completed and was discontinued in 2017. However, lessons were taken from this recommendation and a range of internal communication options to increase staff engagement were taken forward for the COVID-19 response. NHSE were engaged to anticipate possible media queries.

101. There were no exercises concerning coronaviruses that followed Exercise Alice. Since Exercise Alice in 2016 and prior to the COVID-19 pandemic, there was one case of MERS in the UK in 2018. EPRR teams must balance their limited resources against preparedness for a range of possible scenarios, including the threats posed by malicious attacks and infectious diseases.

Economic analysis to support pandemic countermeasure procurements

102. Within my first statement (at paragraph 388) I explained that the Department conducted economic analyses to support procurements for pandemic programme clinical

countermeasures, in line with the guidance on economic appraisal and evaluation set out in the HM Treasury Green Book.

103. Economic appraisal aims to assess the expected cost and benefits of a policy, or range of policy options, and inform decision-makers on the potential impacts, trade-offs and overall impact (e.g. whether it is likely to generate a net benefit for society), by providing an objective evidence base. This assessment is concerned with the societal costs and benefits, rather than the impacts for a particular organisation or to Government. It does not relate purely to the financial implications of a set of options and will include consideration of wider economic and societal impacts.
104. Where possible, the expected impacts are valued and monetised to provide a common metric for assessment. Sometimes, due to significant uncertainty or a lack of data or evidence, it is not possible to quantify or monetise all the potential impacts of a policy; some impacts may be left un-monetised and described qualitatively instead.
105. The Department's economic analysis often built on the outputs from detailed epidemiological modelling conducted by PHE. Where this was the case, a description of the modelling and the results would typically be included in the economic case that was produced to support the procurement.
106. Inherent uncertainty about the timing, characteristics and severity mean it is not possible to predict what the next influenza pandemic will look like. To reflect this, the Department's economic analysis considers the impact of an intervention across a range of plausible pandemic scenarios, and not only a severe pandemic. PHE's modelling used several different parameters to model the number of influenza cases, hospitalisations and deaths that might occur in these scenarios. The modelling results could then be used to estimate the potential impact of an intervention and produce a best estimate of the societal benefits it might generate.
107. In contrast, the size of the pandemic preparedness stockpiles were based on the number of cases, hospitalisations, or deaths specifically outlined in the RWCS. These numbers are combined with assumptions about the usage of different items (e.g. the number of doses of medication which make up a course of treatment) to estimate stockpile target volumes.

Impact of EU Exit

108. Within my first statement (at paragraphs 408 to 409) I explained that, following the scale-up of EU Exit-related work that took place across Government in 2018, the Department's ExCo agreed to deprioritise other work in order to move resource to focus on EU Exit. In October 2018, the PIPP Board was notified of the Department's decision to scale back some work related to pandemic preparedness and HCID.

109. Following high-level consultation with the then CMO and Chief Social Worker, draft discussion papers on how to triage NHS and adult social care services were developed under the PFRB programme. These papers considered how to prioritise services in the extreme event that a peak pandemic wave overwhelmed service capacity. Further work to consider operational guidance to deliver these plans was paused meaning that the work remained at draft stage. Population-level triage guidance was not required during COVID-19.

110. Work had been started to refresh the 2011 UK Influenza Pandemic Preparedness Strategy and associated communications plan as stated in my first statement (paragraph 320). Draft plans continued to be based around the demands of an influenza pandemic but included various updates to reflect policy developments since 2011.

111. Prior to the emergence of COVID-19, the Department also developed proposals for a Tier 1 (national-level) exercise focusing on pandemic flu to test the improvements made to preparedness since Exercise Cygnus. The draft objectives for this exercise, as of January 2020, were to:

- (a) assess progress against the issues initially identified by Exercise Cygnus;
- (b) re-energise cross Whitehall engagement in pandemic flu preparedness; identify any continued gaps and/ or new gaps in our preparedness;
- (c) increase our preparedness and that of local partners; and
- (d) Maintain and build a strong understanding across Whitehall of the impacts and effects of pandemic flu.

112. In March 2022, the PIPP Board (now called the Pandemic Preparedness Programme Board) reviewed actions from the PIPP Risk Register; lessons learned from pandemic-specific exercises including Exercise Cygnus and Winter Willow; actions under the departmental High Level Risk Register (HLRR); and progress made at that date across pandemic influenza preparedness activities. The assessment concluded that, with the exception of work on NHS and adult social care service triage in the event of an extreme

pandemic scenario, all work was either complete, part of planned work programmes or had been superseded by activities taken forward during the COVID-19 pandemic. Work on triage is now being considered as part of the design of the new pandemic preparedness portfolio. The minutes from and documents considered at the PIPP Board meeting on 22 March 2022 are exhibited at CW7/22.

Public Health Services

Structure and responsibilities of public health services

113. Within my first statement (at paragraph 423d) I explained that the Department and PHE worked together to provide assurance that PHE's responsibilities were being discharged. To that end, the Department and PHE (with other bodies) developed a protocol on assurance for emergency planning, resilience and response. The protocol was reviewed at least annually.

114. As explained in my first statement (at paragraph 418) from 2009 to 2013, responsibility for public health services in England rested primarily with the Health Protection Agency (HPA). The HPA was created on 1 April 2003 as a special health authority in England and Wales. Under the Health Protection Agency Act 2004, the HPA was established as a UK-wide non-departmental public body on 1 April 2005, incorporating the National Radiological Protection Board. The HPA was sponsored by the Department and was accountable to the Secretary of State and the respective Devolved Governments, in respect of its exercise of devolved health responsibilities. The functions, duties and powers of the HPA were set out in the Health Protection Agency Act 2004 and in the Health Protection Agency Regulations 2005.

115. From the HPA's inception, it sought to be a public-facing body that provided independent, authoritative, evidence-based advice. For example, section 7(1) and section 7(2) of the Health Protection Agency Act 2004 made provision for the HPA to publish advice and information. This approach also guided the HPA's research and development programme, allowing scientists to work on projects that made a difference to people's health.

116. More specific aims were agreed with the Department as part of the annual corporate and business planning process and as part of HPA's 5-year Corporate Plan. The Secretary of State was accountable to Parliament for the activities and performance of the HPA. In consultation with the Devolved Government, the Secretary of State's responsibilities included approving the HPA's strategic objectives and the policy and performance

framework within which the HPA operated, and keeping Parliament informed about the HPA's performance.

117. The Department ensured that financial and management controls applied to the HPA were sufficient to safeguard public funds and that this was monitored. 'Public funds' included not only funds granted to the HPA by Parliament but also other funds generated by approved activities or which fell within the stewardship of the HPA.

118. As set out in my first statement (at paragraphs 422 and 423) the HPA was abolished, and its functions were transferred to the Secretary of State. To support the Secretary of State's new functions, PHE was established in 2013 as an Executive Agency of the Department.

119. From its establishment, PHE was a distinct delivery organisation with operational autonomy. PHE's Framework Agreement (published in 2013 and updated in 2018) sets out its accountabilities, governance arrangements and the relationship between the Department and PHE.

120. As an Executive Agency PHE had public accounting responsibilities, and the way in which these responsibilities were fulfilled was agreed with the Department. At times cross-government clearance was required before information could be published, and PHE adhered to any conditions applied through the clearance process which the Secretary of State was responsible for obtaining.

121. Priorities for PHE were set out in an annual Remit Letter issued by the Minister with responsibility for public health. PHE produced an annual business plan before the start of each financial year, setting out how it would deliver its objectives, core functions and the government's priorities within the annual Remit Letter. The business plan also reflected other public health and organisational priorities set and agreed by PHE's Chief Executive.

122. PHE was responsible for the delivery of its priorities within an accountability framework set by the Department and PHE's Chief Executive was personally accountable to, and line-managed by, the Department's Permanent Secretary. PHE's Chief Executive and members of his senior team had quarterly accountability meetings chaired by the DHSC sponsor Director General, to review PHE's corporate performance. PHE's Chief Executive also had an accountability meeting with the public health Minister to review organisational performance over the preceding year.

123. On 1 April 2021, UKHSA was formally established as an Executive Agency of the Department. As set out in my first statement (at paragraphs 106 and 107) UKHSA officially operationalised in October 2021, replacing the health protection responsibilities of PHE. UKHSA works within the same Executive Agency framework as PHE, as set out in the corresponding Framework Document.

124. As was the case with PHE, the responsible Minister sets out the Department's priorities for UKHSA by issuing an annual Remit Letter. Again, as set out in the Framework Document, UKHSA is required to produce an annual business plan demonstrating how it will deliver its overall objectives, core functions and the government's priorities as per the Remit Letter.

125. The Senior Departmental Sponsor chairs quarterly accountability meetings to review progress, performance and strategic challenges; UKHSA is represented by its Chief Executive and key members of the Agency's senior leadership team. The Framework Document also identifies the requirement for an annual accountability meeting with the responsible Minister. As with PHE, the UKHSA Chief Executive is accountable to the Department's Permanent Secretary.

Additional questions

UK Biological Security Strategy (UKBSS)

126. The UK's Biological Security Strategy was published by the Home Office on behalf of Government in July 2018. Delivery of the commitments within the Biological Security Strategy was overseen by a cross-Government director-level governance Board, which included representation from the Department of Health and Social Care, and which was established under the chairmanship of the Home Office. The cross-Government Board was intended to report to the Threats, Hazards, Resilience and Contingencies Subcommittee of the National Security Council, through the Security Minister. The Board ceased to meet when the Government's focus switched to Operation Yellowhammer.

127. The 2018 strategy did not seek to duplicate or replace the work set out in other strategies, including the UK Influenza Pandemic Preparedness Strategy 2011, but rather to set out an overarching narrative for how the cross-Government effort fitted together, and to highlight those areas where collective government action was required.

128. In that respect, the UKBSS should not be viewed as a replacement for the specific actions within the PIPP or those undertaken by the PFRB. Instead, the UKBSS sought to strengthen related capabilities that had applicability to a broad range of biological risks including but not limited to naturally occurring pandemics.

129. The 2023 Biosecurity Strategy was published on 12 June 2023 and the Department will engage fully in the work of the strategy and governance structures that are established to oversee its delivery.

High Consequence Infectious Disease (HCID) programme

130. The NHSE High Consequence Infectious Disease Programme Board (HCID PB) is the governance forum that provides overall direction and relevant approvals to NHSE's HCID Programme of work. The overall objective of the HCID PB is to:

- (a) Set the strategic direction and provide the relevant approvals for the programme;
- (b) Provide advice and direction as necessary and to make decisions in relation to risks and issues escalated by the Programme Director and the relevant other parties;
- (c) Assure delivery of the programme and monitor achievement of programme objectives;
- (d) Ensure ongoing alignment with the overall objectives of NHSE and the Department in relation to HCIDs; and
- (e) Review and provide oversight of NHS costs associated with the programme.

131. The Department's role within this context has been to assure or challenge any gaps that are in the end-to-end HCID system, including support on cross-Government decision-making.

132. The HCID PB worked towards delivering the following outcomes:

- (a) A defined, proportionate and tiered, operational response including defined secondary/tertiary care units to be commissioned as first and second tier units for high hazard infections;
- (b) Response arrangements for first contact agencies, General Practice, Ambulance and Emergency Departments;
- (c) Defined arrangements for command, control, coordination and communication in the event of such an incident or outbreak;
- (d) Protocols setting out communications arrangements with NHS professionals and the public in the event of an incident or outbreak;

- (e) A governance framework for the use of novel and experimental therapies for treatment of HCID in line with NHSE governance policies;
- (f) Standards and mechanisms for responsive clinical research protocols to be implemented rapidly and effectively;
- (g) Development of agreed protocols and processes in place to support the UK government response to a HCID in any overseas response, including; a coordinated response plan for health provision in the event of an HCID, and, agreed arrangements in place for the provision and governance of expertise to support events in the UK, for example, Mutual aid;
- (h) Development of any associated commissioning products, including service specifications and clinical policies, dovetailing with the agreed NHSE governance arrangements; and
- (i) The production of clinical risk-based standards, by the Infectious Diseases Clinical Reference Group, governing the provision of care for a range of HCID, grouped under two main headings relating to their mode of transmission: contact and airborne.

The Health Protection (Notification) Regulations 2010

133. Regulation 2(1) of the Health Protection (Notification) Regulations 2010 (HPNR 2010) places a statutory duty on registered medical practitioners in England to notify the 'proper officer' at their local council or local health protection team if they treat a patient they know or have reasonable grounds to suspect to be infected or contaminated with specific infectious diseases. These are 'notifiable diseases' and are listed in Schedule 1 of the HPNR 2010. The HPNR 2010 also place a statutory duty on all laboratories in England performing a primary diagnostic role to notify the UKHSA of any notifiable organisms. These are 'causative agents' and are listed in Schedule 2 of the HPNR 2010.

134. Work was taken forward prior to the pandemic to add certain diseases (including MERS) and causative agents to Schedule 1 and Schedule 2 of the HPNR respectively but was paused following the reprioritisation of work across the department to focus on Operation Yellowhammer and further delayed due to the impacts of the COVID-19 pandemic. This worked was subsequently resumed in 2021. Since then, the Department and UKHSA have been working to finalise the list of proposed amendments. In November 2022, Ministerial clearance was received to progress with amendments to the HPNR 2010, subject to a public consultation. This includes adding MERS to Schedule 1 and 'Middle East Respiratory Syndrome Coronavirus' (MERS-CoV) to Schedule 2 of the HPNR 2010.

Training and Exercise Programme

135. The Department's understanding is that the training and exercising programme for the Tripartite Group (the Department, PHE and NHSE) was always focussed on the risks and threats set out in the NRR because these were the key risks that Government says should be prepared for.

Pandemic stockpile

136. Countermeasures policy has been guided by the NRR and its associated RWCS. Whilst there is uncertainty regarding when the next pandemic might occur and which virus could cause it, the gap between the start of influenza pandemics has been 11-41 years in the last century from the relatively mild 2009 swine flu pandemic to the devastating 'Spanish Flu' pandemic in 1918 which is estimated to have killed between 20-50 million people. It is therefore critical that the UK continues to prepare for influenza by including countermeasures for influenza as part of its pandemic stockpile. Currently, the Government is continuing to wind down the capabilities built up for COVID-19 and has not yet determined the size and shape of its future pandemic stockpiles.

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: 16 June 2023