

UK Covid-19 public inquiry: module 1 report

Module 1 of the [UK Covid-19 public inquiry](#) (the Inquiry) investigated government planning and preparedness, examining the period between June 2009 (when the World Health Organisation [WHO] announced that scientific criteria for an influenza pandemic had been met) and 21 January 2020 (when the WHO issued the first situation report on what would become the Covid-19 pandemic).

The Inquiry has been considering evidence on this module since 21 July 2022. Evidence was gathered through over 200 witness statements and 68 factual and expert witnesses called to public hearings from 13 June 2023 to 20 July 2023.

On 18 July 2024, the Inquiry chair (the chair), Rt Hon Baroness Hallett, published her [first report](#) on evidence heard in module 1 of the Inquiry. This briefing summarises the findings and recommendations from this report.

You can find our earlier briefings summarising public hearings for modules 1 and 2 on [our website](#).

Key findings

The Inquiry found that the system of building preparedness for the pandemic suffered from several significant flaws:

- Despite planning for an influenza outbreak, the UK's preparedness and resilience was not adequate for the global pandemic that occurred.
- Emergency planning was complicated by the many institutions and structures involved.
- The approach to risk assessment was flawed, resulting in inadequate planning to manage and prevent risks, and respond to them effectively.
- The UK government's outdated pandemic strategy, developed in 2011, was not flexible enough to adapt when faced with the pandemic in 2020.
- Emergency planning failed to put enough consideration into existing health and social inequalities and local authorities and volunteers were not adequately engaged.
- There was a failure to fully learn from past civil emergency exercises and outbreaks of disease.
- There was a lack of attention to the systems that would help test, trace, and isolate. Policy documents were outdated, involved complicated rules and procedures which can cause long delays, were full of jargon and were too complex.

- Ministers, who are often without specialised training in civil contingencies, did not receive a broad enough range of scientific advice and often failed to challenge the advice they did get.
- Advisers lacked freedom and autonomy to express differing opinions, which led to a lack of diverse perspectives. Their advice was often undermined by “groupthink” - a phenomenon by which people in a group tend to think about the same things in the same way.

The Inquiry also concluded that a significant amount of the hospital infrastructure in England was not fit for purpose. This, along with a combination of other factors, had a direct negative impact on infection control measures and on the ability of the NHS and the care sector to “surge up” capacity during a pandemic.

Chair’s comments

The chair paid tribute to the efforts and dedication of health and social care workers and civil and public servants who battled the pandemic. She reiterated the urgent need for radical reform, as expert evidence indicates it is not a question of ‘if’ another pandemic will strike, but ‘when’. The chair stated that if the Inquiry’s recommendations are implemented, the risk of loss and suffering in the future will be reduced and policymakers will be assisted in responding to a crisis.

The executive summary of the report stated that the processes, planning and policy of the civil contingency structures within the UK government and devolved administrations and civil services failed their citizens.

The system – institutions, structures and leadership

Civil emergency response systems in the United Kingdom (UK)

Evidence to the Inquiry highlighted that local resilience structures are not aligned, for example geographic areas covered by directors of public health (DPH) do not always match those of local resilience forums or local health resilience partnerships. The Inquiry states this is a structural flaw, for which the Cabinet Office was ultimately responsible. The Inquiry said there should be far greater involvement of DPHs and local public health teams in developing local civil emergency preparedness and resilience plans.

The Inquiry states the system of resilience and preparedness in the UK was inefficient, with fundamental gaps, a lack of focus, and the system was prone to operating in silos. The Inquiry said there should be fewer entities, working more closely with each other and within more clearly defined roles.

Recommendation: a simplified structure for whole-system civil emergency preparedness and resilience.

The core structures should be:

- A single cabinet-level or equivalent ministerial committee (including the senior minister responsible for health and social care) responsible for whole-system civil emergency preparedness and resilience in the UK government and in each of the devolved administrations, which meets regularly and is chaired by the leader or deputy leader of the relevant government.
- A single cross-departmental group of senior officials in each government (which reports regularly to the cabinet-level or equivalent ministerial committee) to oversee and implement policy on civil emergency preparedness and resilience.

This should be put in place within 12 months.

The lead government department model for whole-system civil emergencies

Under the lead government department model, the Department of Health and Social Care (DHSC) was and remains the lead government department for pandemic preparedness and resilience in England. The Inquiry finds that there are issues with this model as whole-system civil emergencies, such as a pandemic, require a cross-government approach. The Inquiry highlights the limited ability individual departments, such as DHSC, have to coordinate and direct policy across government. The Inquiry concludes that this model is fundamentally unsuited to preparing for and building resilience to whole-system civil emergencies and should be abolished.

Recommendation: Cabinet Office leadership for whole-system civil emergencies in the UK

The UK government should:

- abolish the lead government department model for whole-system civil emergency preparedness and resilience.
- require the Cabinet Office to lead on preparing for and building resilience to whole-system civil emergencies across UK government departments.

The assessment of risk

Key flaws in risk assessments

There were five major flaws in the approach to risk assessment in the UK which had a material impact on preparedness for and resilience to whole-system civil emergencies, such as pandemics:

- 1** Too much reliance placed on a single scenario – pandemic influenza

- 2 Planning was focused on dealing with the impact of the disease rather than preventing its spread
- 3 Interconnected risks and a “domino effect” were not adequately considered
- 4 There was a failure to appreciate long-term risks and their effects on vulnerable people
- 5 There was insufficient connection between the assessment of risk and the strategy and plan for dealing with it.

Recommendation: A better approach to risk assessment

The UK government and devolved administrations should work together on developing a new approach to risk assessment that moves away from a reliance on single reasonable worst-case scenarios towards an approach that:

- assesses a wider range of scenarios.
- considers the prevention and mitigation of an emergency in addition to dealing with its consequences.
- provides a full analysis of how the combined impacts of different risks may complicate or worsen an emergency.
- assesses long-term risks in addition to short-term risks and considers how they may interact with each other.
- undertakes an assessment of the impact of each risk on vulnerable people.
- takes into account the capacity and capabilities of the UK.

An effective strategy

The UK Influenza Pandemic Preparedness Strategy 2011

The [UK Influenza Pandemic Preparedness Strategy 2011](#) was the only UK-wide strategy in place when the Covid-19 pandemic started. The strategy was underpinned by the principles of precaution, proportionality and flexibility, and recognised the secondary impact a pandemic would have on society and the economy, as well as the immediate effect on health. The module 1 report highlights the following flaws in the 2011 strategy:

- Failure to adequately consider prevention
- Focused only on one type of pandemic
- Failure to consider proportionality of response
- Lack of effective economic and social strategy.

The report notes that in addition to the pandemic preparedness strategy, NHS England (NHSE) had also produced a high consequence infectious diseases programme. It is critical of the differences

between, and the disconnected nature of, these strategies. The consequence was “a major gap in the UK’s strategic plans”.

The Inquiry found the 2011 strategy did not adequately consider the proportionality of responses. It also focused too much on what those involved in the response to a pandemic should expect, instead of what could or should be done. The report specifically notes this will have had a disproportionate negative effect on vulnerable people, as they would have been most affected by attempts to prevent the emergency and the emergency itself. The Inquiry suggests future strategies should consider:

- Cost benefit analysis
- Modelling of impact over short, medium and long term
- Recognition of trade-offs
- Assessment of impact on vulnerable people
- Consideration of the totality of an intervention and possible side effects.

The 2011 strategy had not been updated since its creation, but it was recognised in late 2018 that a ‘refresh’ would be required. The Inquiry states that a refresh would have been inadequate as it would not have tackled the fundamental flaws in the plan. The report is also critical that learnings from the Ebola virus, Middle East respiratory syndrome (MERS) and severe acute respiratory syndrome (SARS) outbreaks were not taken into account.

Abandonment of the 2011 strategy

The Inquiry notes that the 2011 strategy was abandoned at the start of the Covid-19 pandemic and advises that future strategies should ensure the risk of being in unknown territory is reduced, as far as possible. The Inquiry is critical that the 2011 strategy assumed an inevitable outcome instead of recommending steps to prevent or limit the impact. It concludes:

“The Secretaries of State for Health and for Health and Social Care who adhered to the strategy, the experts and officials who advised them to do so, and the governments of the devolved nations that adopted it, all bear responsibility for failing to have these flaws examined and rectified. This includes Mr Hancock, who abandoned the strategy when the pandemic struck, by which time it was too late to have any effect on preparedness and resilience.”

Developments following the Covid-19 pandemic

The Inquiry notes the development of the [2022 UK Government Resilience Framework](#), but finds it lacks detail, substance, sense of urgency or ambition, commitment to significant change or new financial resources. The Inquiry notes the [UK Biological Security Strategy](#) was updated in 2023 better

to understand, detect and respond to biological risks, with a focus on leadership and coordination, strengthening of the UK's science base and international leadership and engagement. It notes a number of improvements between 2018, when it was first published, and 2023.

A new whole-system civil emergency strategy

The Inquiry welcomes plans set out in the [UK Government Resilience Framework](#) and [UK Biological Security Strategy](#) to create a lead minister and senior official to oversee implementation, and chief scientific advisors to challenge decisions. The Inquiry does note, however, that a lack of clarity on deadlines makes it difficult for the public to hold the government to account on progress.

The Inquiry also notes the important role of research, particularly rapid research at the start of an emergency and research in advance of future pandemics. It notes that more research could have been done ahead of the Covid-19 pandemic to improve the evidence base around public health measures. Research is commissioned via the National Institute for Health and Care Research (NIHR), but the Inquiry notes a need for a more ambitious and better funded programme.

Recommendation: a UK-wide whole-system civil emergency strategy

This strategy should include learnings from the Covid-19 pandemic, specifically, what worked and what did not, the measures that were worth their cost and those that were not, their timing and future infrastructure requirements. The strategy should not be prescriptive but should advise on trade-offs associated with decision-making.

Recommendation: data and research for future pandemics

The Inquiry recognises the importance of good-quality and timely data, including administrative data (for example, number of hospital beds available) and data from scientific research. It also notes that data compatibility across the four nations of the UK must be improved. The report notes there have been positive developments, including the creation of the National Situation Centre in the Cabinet Office, which is now connected with the Office for National Statistics (ONS). The Joint Data and Analysis Centre was created in the Cabinet Office in 2022.

Learning from experience

The Inquiry considered the learnings from simulation exercises led by the UK government and devolved administrations, and how these can be improved for the future, with a particular focus on learning from international emergencies, including; SARS, MERS, Swine flu (H1N1) and Ebola.

Learnings from the SARS epidemic in 2002/03 included that there would be limited staff capacity within the public health system, that basic public health and infection control measures were effective, and a large outbreak in the UK would require significant surge capacity. The Inquiry states that the swine flu pandemic “lulled the UK government and the devolved administrations into a false sense of security”.

A review of the UK’s response to Ebola recommended a review of legal powers related to port and border controls. An [Ebola Preparedness Surge Capacity Exercise](#) in 2015 demonstrated the NHS would be confident in its ability to treat one Ebola patient, but there were serious concerns about the ability to treat multiple patients at the same time. The high consequences infectious diseases programme, developed in response to Ebola, is noted as a success for tackling a small outbreak, did not consider the response to a more extensive scale outbreak.

In response to the outbreak of MERS the UK conducted [Exercise Alice](#), which resulted in 12 recommended actions. These were left ‘unallocated’, resulting in the actions only being partially enacted by DHSC.

Stress-testing the UK’s pandemic preparedness systems

A number of exercises took place prior to the Covid-19 pandemic to stress test the resilience and capabilities of the UK’s pandemic preparedness systems. [Exercise Cygnus](#) was a cross-government exercise which took place in October 2016 with 950 representatives including those from the Department of Health, NHSE and Public Health England (PHE). The exercise concluded that the UK’s pandemic plans, policies and response capabilities were not sufficient to cope with the extreme demands of a severe pandemic.

The value of these exercises was undermined by their limitations. Prior to the Covid-19 pandemic, there were no exercises of measures such as mass testing, mass contact tracing, mandated social distancing, or lockdowns. Exercise Cygnus did not provide an opportunity for participants to test their ability to stop or suppress transmission. The role of local authorities, local responders, the voluntary, community and social enterprise sectors were not adequately considered in exercises. The issue of exacerbated health inequalities was also not routinely addressed within preparedness exercises. In many cases, learning and recommendations from exercises, while nominally recorded in documentation, were not acted upon or were forgotten. A possible cause of inaction was a lack of openness: the Inquiry recommends the results of simulation exercises should be shared and open to public and parliamentary scrutiny.

Pandemic exercises prior to the Covid-19 highlighted a number of actions that could and should have been taken to prepare. These include actions on:

- **Surge capacity in health and social care:** The Inquiry heard that there were severe staff shortages and that a significant amount of the hospital infrastructure in England was not fit for purpose. England's social care sector faced similar issues. This combination of factors had a direct negative impact on infection control measures and on the ability of the NHS and the care sector to "surge up" capacity during a pandemic. The Inquiry states it remains the case that the surge capacity of the four nations' public health and healthcare systems to respond to a pandemic was constrained by their funding.
- **Personal protective equipment (PPE):** It was clear that PPE needed to be stockpiled in advance of a pandemic, in sufficient quantities, fit-tested and connected to an effective distribution network. The Inquiry will be examining procurement and PPE more fully in subsequent modules.
- **The protection of vulnerable people:** There was a failure to: identify those who were vulnerable; put in place effective plans to mitigate the social and economic impacts of the pandemic and potential responses to it; and to involve voluntary organisations that were well placed to advise on how to help vulnerable people. These failures left the most vulnerable people in society exposed to the effects of a pandemic.
- **Testing and contact tracing:** The UK government could and should have invested in testing and contact tracing infrastructure in advance of the Covid-19 pandemic but had not done so.

Recommendation: a regular UK-wide pandemic response exercise

The UK government and devolved administrations should together hold a UK-wide pandemic response exercise at least every three years. The exercise should:

- test the UK-wide, cross-government, national and local response to a pandemic at all stages, from the initial outbreak to multiple waves over a number of years.
- include a broad range of those involved in pandemic preparedness and response.
- consider how a broad range of vulnerable people will be helped in the event of a pandemic.

Recommendation: publication of findings and lessons from civil emergency exercises

For all civil emergency exercises, the governments of the UK, Scotland, Wales and Northern Ireland should each (unless there are reasons of national security for not doing so):

- publish an exercise report summarising the findings, lessons and recommendations, within three months of the exercise concluding.

- publish an action plan setting out the specific steps that will be taken in response to the report's findings, and by which entity, within six months of the exercise concluding.
- keep exercise reports, action plans, and emergency plans and guidance from across the UK in a single, UK-wide online archive, accessible to all involved in emergency preparedness, resilience and response.

Recommendation: published reports on whole-system civil emergency preparedness and resilience

The governments of the UK, Scotland, Wales and Northern Ireland should each produce and publish reports least every three years on whole-system civil emergency preparedness and resilience. The reports should include as a minimum:

- the risks identified that are likely to result in whole-system civil emergencies.
- the recommendations that have been made to mitigate those risks, and whether these recommendations have been accepted or rejected.
- a cost–benefit analysis setting out the economic and social costs of accepting the risks as against taking action to mitigate the risks.
- who may be vulnerable to the risks and what steps are being taken to mitigate those risks
- a plan setting out the timescales for implementing the recommendations that have been accepted.
- an update on the progress that has been made on implementing previously accepted recommendations.

A new approach

Advice to ministers

The report states that ministers within government often do not have professional experience in the policy areas of their departments. They must provide leadership to their department and decide complex matters of policy. Ministers should challenge the advice they receive from experts and officials, as the quality of their decision-making will only be as good as the depth and range of advice they receive, and the interrogation of that advice. The Inquiry also says it is essential that expert advice is commissioned, provided and considered before an emergency, so there is time to properly analyse and consider the possible consequences of policy options.

Improving provision of scientific advice

The Inquiry heard evidence from a range of scientists about how expert advice was commissioned and heard by government ministers, departments and public bodies. The Inquiry identified eight issues:

1. There were differences between the roles of expert advisers to the UK government and to the devolved administrations.
2. The way experts were asked to advise limited their freedom to advise.
3. There was not enough feedback on how their advice was received.
4. Expert advice on pandemic preparedness put too much emphasis on biomedical science and did not include socio-economic advice from comparable experts.
5. There was a lack of coordination and leadership.
6. The advice was not commissioned at the appropriate time.
7. Advice may have been affected by 'groupthink', a phenomenon by which people in a group tend to think about things in the same way.
8. There was too little challenge of the advice provided.

Recommendation: regular use of "red teams"

"Red teams" are groups of people from outside the advisory and decision-making structures involved in developing policies, strategies and plans. The government should introduce the use of red teams in the civil service to scrutinise and challenge the principles, evidence, policies and advice relating to preparedness for and resilience to whole-system civil emergencies. The red teams should be brought in from outside of government and the civil service.

New approach to preparedness and resilience

The ways in which risk was assessed, strategy designed, and advice provided were flawed. The institutions, structures and systems of the UK that oversaw preparedness and resilience were too complex and not properly focused. Lessons from past epidemics and exercises were not properly heeded and actions were not implemented. The Inquiry concluded that there must be a fundamentally new approach to pandemic and whole-system civil emergency preparedness and resilience.

Recommendation: a UK-wide independent statutory body for whole-system civil emergency preparedness and resilience

The UK government should, in consultation with the devolved administrations, create a statutory independent body for whole-system civil emergency preparedness and resilience. As an interim measure, the new body should be established on a non-statutory basis within 12 months of the module 1 report, so that it may begin its work in advance of legislation being passed.

Recommendations

Below is a summary of the 10 UK-wide recommendations outlined in the report:

Table of recommendations	
1	Each government [the UK government and the devolved administrations] should create a single cabinet-level or equivalent ministerial committee (including the senior minister responsible for health and social care) responsible for whole-system civil emergency preparedness and resilience, to be chaired by the leader or deputy leader of the relevant government. There should also be a single cross-departmental group of senior officials in each government to oversee and implement policy on civil emergency preparedness and resilience.
2	The lead government department model for whole-system civil emergency preparedness and resilience is not appropriate and should be abolished.
3	The UK government and devolved administrations should develop a new approach to risk assessment that moves away from reliance on reasonable worst-case scenarios towards an approach that assesses a wider range of scenarios representative of the different risks and the range of each kind of risk. It should also better reflect the circumstances and characteristics particular to England, Scotland, Wales, Northern Ireland and the UK as a whole.
4	A new UK-wide whole-system civil emergency strategy should be put in place and it should be subject to a substantive reassessment at least every three years to ensure that it is up to date and effective, and incorporates lessons learned from civil emergency exercises.
5	The UK government and devolved administrations should establish new mechanisms for the timely collection, analysis, secure sharing and use of reliable data for informing emergency responses, such as data systems to be tested in pandemic exercises. In addition, a wider range of 'hibernated' and other studies should be commissioned that are designed to be rapidly adapted to a new outbreak.
6	The UK government and devolved administrations should hold a UK-wide pandemic response exercise at least every three years.
7	Each government should publish a report within three months of the completion of each civil emergency exercise summarising the findings, lessons and recommendations, and should publish within six months of the exercise an action plan setting out the specific steps to be taken in response to the report's findings. All exercise reports, action plans, emergency plans and guidance from across the UK should be kept in a single UK-wide online archive, accessible to all involved in emergency preparedness, resilience and response.

8	Each government should produce and publish a report to their respective legislatures on whole-system civil emergency preparedness and resilience at least every three years.
9	External “red teams” should be regularly used in the civil service of the UK government and devolved administrations to scrutinise and challenge the principles, evidence, policies and advice relating to preparedness for and resilience to whole-system civil emergencies.
10	The UK government, in consultation with the devolved administrations, should create a UK-wide independent statutory body for whole-system civil emergency preparedness, resilience and response. The body should provide independent, strategic advice to the UK government and devolved administrations, consult with the voluntary, community and social enterprise sector at a national and local level, as well as with directors of public health, and make recommendations.