

Written Evidence Submitted by Dr Andrew Watt (C190109)

This document is submitted to the House of Commons Science and Technology Select Committee as Written Evidence to the Committee's Inquiry entitled "UK Science, Research and Technology Capability and Influence in Global Disease Outbreaks".

The Inquiry expressly sought *inter alia* to scrutinise "the UK's readiness for future [Global Disease] outbreaks".

In this Written Evidence I set out the reasoning that leads me to conclude that in excess of 40,000 avoidable Covid-19 deaths in the United Kingdom resulted from predictable, deadly mistakes by the United Kingdom Government and/or its advisers.

Further inquiry by the Committee is necessary to distinguish whether the failures which caused more than 40,000 avoidable deaths from Covid-19 in the UK were failures by Government advisers (including the Chief Medical Officer, the Chief Scientific Adviser, the Scientific Advisory Group on Emergencies and the committees which feed into it), were failures by the Prime Minister and other politicians or were failures by both advisers and politicians.

The approach taken to Covid-19 taken by the UK Government, mirroring the approach expressed in the "UK Pandemic Influenza Preparedness Strategy 2011", can be expected to cause preventable deaths on a massive scale in the event of a future pandemic caused by a novel virus if it has the characteristics of what I term a "Perfect Storm Virus".

In other words, the UK is not ready for future Global Disease Outbreaks.

Background

On 31st December 2019 the World Health Organisation became aware of an outbreak of pneumonia of unknown cause in Wuhan, Hubei Province, China.

The organism causing what became known as Covid-19 was identified on 7th January 2020 as a novel coronavirus.

See the WHO Situation Report at https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200121-sitrep-1-2019-ncov.pdf?sfvrsn=20a99c10_4 .

The choices facing the UK Government in January 2020

I assume that the UK Government was informed or otherwise became aware that Covid-19 was caused by a novel coronavirus on or shortly after 7th January 2020.

Once the organism causing the Wuhan outbreak of pneumonia of unknown cause had been identified as a novel coronavirus the UK Government was faced with the question of how to keep a susceptible population in the UK protected.

In my view, the UK Government and its advisers have a duty of care to protect life in the UK.

The options to protect life in the UK were narrowed because the cause of Covid-19 was a novel coronavirus.

The following list summarises considerations applying to the options available to the UK Government to protect the British public:

- The Public Health tools to fight a viral disease are vaccines, antivirals and separating the infected from the susceptible.
- On 7th January 2020 the cause of Covid-19 was identified as a previously unknown coronavirus, later designated as the SARS-CoV-2 virus.
- On 7th January 2020 there was no vaccine against the SARS-CoV-2 virus nor was there any prospect of a vaccine for at least several months.
- On 7th January 2020 there was no antiviral medicine known to be effective against the SARS-CoV-2 virus.
- In the absence of a vaccine and of effective antivirals the principal Public Health tool¹ available to the United Kingdom Government to fight the SARS-CoV-2 virus was to separate the susceptible from the infected.

Given that as of 7th January the Chief Medical Officer and Chief Scientific Adviser should have realised that separation of the infected from the susceptible was the only realistic Public Health strategy available short-term there existed an urgent need for the UK Government and its advisers to consider the level(s) at which separation of the infected from the susceptible could best be applied.

Broadly, the options to separate the infected from the susceptible include the following:

- National – Close the UK Border or severely restrict entry through the UK Border
- Intra-hospital – Hospitals have proved in the past to be a mixing bowl that encourages viral spread, for example as occurred in the SARS outbreaks in 2003. A strategy to keep Covid-19 patients separate from patients susceptible to Covid-19 was essential.
- Inter-household – What has become familiar as lockdown, keeping infection confined to one household and/or reducing spread to other households.
- Intra-household – Keeping an individual who is self-isolating from infecting other members of the household
- Inter-individual – Personal protective equipment in hospitals and care homes. Cough hygiene.

It seems to me that separating the infected from the susceptible at a National level is potentially a complete solution.

Later in this document I will briefly explore that potentially complete approach under the heading of the “Keep it out! Kill it off! Strategy”.

However, I know of no evidence that the UK Government took any steps towards a “Keep it out! Kill it off! Strategy”.

The Government opted, whether by conscious choice or omission remains to be clarified, not to close the UK Border on 31st January 2020 (or shortly thereafter).

Indeed, as far as I can ascertain, the possibility of protecting the UK population from Covid-19 by closing the UK Border on or shortly after 31st January 2020 was never seriously considered.

In excess of 40,000 deaths resulted from that fundamental mistake.

¹ Clinical tools for the treatment of individual patients are not considered here.

The UK Government and its advisers made the wrong choice.

In that wrong choice the UK Government followed many aspects of the UK Pandemic Influenza Preparedness Strategy 2011 which I will briefly analyse in the next section of this Written Evidence.

The UK Pandemic Influenza Preparedness Strategy 2011

The UK's approach to Covid-19 had many similarities to the approach expressed in the UK Pandemic Influenza Preparedness Strategy 2011. Indeed, SAGE accepted that the 2011 document would provide appropriate planning assumptions.

The 2011 document remains the top-level strategy for a UK response to a pandemic disease, in this case influenza, at least in terms of documents which are in the public domain.

The 2011 Strategy document is long, poorly structured and conceals the serious defects inherent in its approach.

The 2011 Pandemic Influenza Preparedness Strategy can reasonably be viewed as a

- Let it in!
- Let it spread!
- Let it kill!

Strategy.

It is fair to term the 2011 strategy a "Let it in!" strategy since on page 57 of the document we read,

"The UK Government does not plan to close borders, stop mass gatherings or impose controls on public transport during any pandemic."

It is also fair to term the 2011 strategy a "Let it spread!" strategy since on page 28 of the document it is stated,

"It will not be possible to halt the spread of a new pandemic influenza virus, and it would be a waste of public health resources and capacity to attempt to do so."

However, the 2011 strategy document provides no clear or compelling evidence to support such passivity and defeatism.

It is reasonable to term the 2011 Strategy a "Let it kill!" Strategy since a strategy which allows a dangerous infection to enter the UK and to spread within the UK will inevitably kill many in the United Kingdom in the absence of effective antivirals and a vaccine which is safe, effective and available in quantities to ensure vaccination of a substantial proportion of the UK population.

The 2011 document was explicit in that large numbers were expected to die in the UK in a pandemic since it took around 300,000 UK deaths as a reasonable worst case planning assumption.

The 2011 document assumed that a pandemic would kill in the UK on a massive scale.

The United Kingdom's strategy for pandemic infectious disease is disastrously misconceived and its deficiencies have caused thousands of avoidable Covid-19 deaths in the UK and will predictably cause deaths on a massive scale in a future pandemic, subject to the biological characteristics of the infective agent.

A "Keep it out! Kill it off!" Strategy

The better option to protect the UK population from ill health and death due to Covid-19 was to close the UK Border completely on 31st January 2020.²

The Civil Contingencies Act 2004 seems to me to provide the legal framework in which a complete (or quasi-complete) closure of the UK Border could have been imposed on 31st January 2020.

Strictly limited exceptions to a 100% UK Border Closure would have allowed for entry of food supplies and other essential supplies. Measures to minimise transmission of the SARS-CoV-2 for example between, for example, drivers of food lorries and those they would come in contact with at supermarket depots would have been put in place as a matter of urgency.

Such an approach applies the principle of separating the infected from the susceptible at a national level, a separation which the 2011 Pandemic Influenza Preparedness Strategy and the Government's Covid-19 "Action Plan" of 3rd March 2020 fail to do.

It would not be appropriate to attempt "Keep it out!" alone, without an element of contact tracing and isolation, "Kill it off!", since the possibility of entry of Covid-19 cases before 31st January 2020 had to be acknowledged as had the possibility of illegal entry into the UK.

UK Border Closure on 31st January 2020 would have potentially intimidating up front costs.

Air travel would be seriously disrupted.

However, air travel was the means by which Covid-19 could enter the UK.

It is not unreasonable that air travel being the vector of infection is a target for action.

However, air travel would inevitably be catastrophically affected by the risks of infection involved in air travel in a pandemic situation, as evidenced by the 90-95% reduction in air travel due to Covid-19.

However, those up front costs are, in my assessment, much less than the costs of a "Let it in! Let it spread! Let it kill! Strategy".

The advantages of a "Keep it out! Kill it off!" Strategy

The Public Health advantage of a "Keep it out! Kill it off! Strategy is that it would have saved lives.

If Covid-19 had been prevented from entering the UK, it couldn't have infected large numbers of the UK population and so couldn't kill them.

In my view, in excess of 40,000 avoidable deaths have been caused by the failure of the UK Government to impose a UK Border Closure on or around 31st January 2020.

One effect of the Government opting for a "Let it in! Let it spread! Let it kill! Strategy" is that huge numbers of Covid-19 cases occurred in the UK and hospital services for health needs other than Covid-19 were seriously disrupted.

In addition, while some emergency hospital services were maintained by the National Health Service, members of the public stayed away from hospitals, very sensibly realising that they could contract Covid-19 in what ought to have been a safe place.

² A UK Border Closure on 31st January 2020 would ideally have been implemented in cooperation with the Government of Ireland in view of the open land border between Ireland and Northern Ireland.

A “Keep it out! Kill it off! Strategy” would also have allowed life in the UK unrelated to international travel to continue largely as normal.

There would, for example, have been no need to close schools. If schools had not been closed there would have been no need to cancel examinations for secondary school pupils. If exams had not been cancelled the current furore regarding exam grades would not have occurred.

Tourism within the UK could have continued as normal. With no circulating Covid-19 there would have been no need to, effectively, close down domestic tourism during the lockdown.

The financial advantages of a “Keep it out! Kill it off! Strategy” would have saved the UK Treasury tens of billions of pounds, since many businesses including restaurants, pubs and theatres could have continued operating as normal.

Tens of thousands of UK residents have lost their jobs or lost part of their income because the Government opted for a “Let it in! Let it spread! Let it kill! Strategy” rather than opting for a “Keep it out! Kill it off! Strategy”.

Many thousands more are likely to lose their jobs later this year due a lockdown which was avoidable, had the UK Border been closed in a timely manner on 31st January 2020.

A future pandemic and a “Perfect Storm Virus”

Earlier in this document I expressed my view that the Government’s Pandemic Strategy as expressed in the UK Pandemic Influenza Preparedness Strategy 2011 and as applied in the Covid-19 “Action Plan” of 3rd March 2020 would predictably cause deaths on a grand scale in a future pandemic, subject to the biological characteristics of the pandemic infective organism.

In this section I will briefly examine the possibility of a hypothetical “Perfect Storm Virus” arising and demonstrate the likely vast number of deaths in the UK which such a hypothetical virus would cause, if there is not a radical change to the UK Government’s predictably deadly pandemic strategy.

Let me first briefly describe the hypothetical “Perfect Storm Virus” in the following list:

- A novel virus for which no vaccine or known antivirals exist
- A novel virus which to a significant extent can be transmitted asymptotically and/or paucisymptomatically
- A novel virus which has high mortality e.g. 10% or 30%
- A novel virus which is a respiratory virus

A material respect in which the SARS-CoV-2 virus differs from the hypothetical “Perfect Storm Virus” is that the mortality associated with the SARS-CoV-2 virus is of the order of 1%.

The hypothetical “Perfect Storm Virus” I envisage as having an associated mortality of perhaps 10% (as occurred with the SARS-CoV virus also now known as the SARS-CoV-1 virus) or 30% (as occurred with the MERS-CoV virus which causes Middle East Respiratory Syndrome).

Higher mortalities are known with other viral diseases, currently not capable of respiratory transmission.

I make no assumption that the hypothetical “Perfect Storm Virus” is a coronavirus, simply that it is a respiratory virus.

It seems to me that the likelihood of a hypothetical “Perfect Storm Virus” is increased due to the ongoing Covid-19 pandemic.

The chance of exchange of viral material between the SARS-CoV-2 virus and some other (potentially higher mortality) virus is increased.

For example, during the Covid-19 pandemic in the area in which the MERS-CoV virus is found the likelihood of one individual being infected by the SARS-CoV-2 virus and the MERS-CoV virus at the same time is increased.

The possibility of the SARS-CoV-2 virus and the MERS-CoV virus infecting the same cell and exchanging genetic material arises.

The nightmare scenario is that a “Perfect Storm Virus” results which, in that context, has the ability of the SARS-CoV-2 virus to spread rapidly and often asymptotically and the ability of the MERS-CoV virus to kill 30% of those it infects.

Had such a hypothetical “Perfect Storm Virus” reached the UK early in 2020 with the same transmissibility as Covid-19 and the mortality of MERS around 1,200,000 people in the UK might have died by August 2020.

A new strategy is needed

The UK’s pandemic strategy as expressed in the UK Pandemic Influenza Preparedness Strategy 2011 and as applied in the UK Government’s Covid-19 “Action Plan” of 3rd March 2020 is dangerous and will predictably kill large numbers of people in the UK, given a pandemic organism whose characteristics approximate to the hypothetical “Perfect Storm Virus”.

I propose that, as a matter of urgency, the UK Government explores a better strategy that would prevent a highly dangerous pathogen entering the UK, while making detailed preparations for ongoing entry of food supplies and other essential supplies in a way which would pose minimal risk to the Public Health.

The International Health Regulations

The UK’s current pandemic strategy was developed in the context of the International Health Regulations 2005.

For reasons beyond the scope of this Written Evidence there is an urgent need to revise the International Health Regulations, not least because the misconceived International Health Regulations 2005 have contributed in large measure to in excess of 700,000 avoidable deaths globally due to Covid-19, a number of avoidable deaths which I expect to rise markedly in the next few months.

Questions which remain to be asked

The Oral Evidence and Written Evidence considered by the Committee hitherto has largely concentrated on events around and subsequent to the publication of the Government’s “Action Plan” on 3rd March 2020.

To establish how the UK’s response to the Covid-19 epidemic went so disastrously wrong I suggest that that Committee needs to inquire more deeply than it has hitherto into events beginning on 7th January 2020.

The following questions are suggested as worthwhile for the Committee's consideration.

Did the Chief Medical Officer and/or Chief Scientific Adviser recognise on or shortly after 7th January 2020 the limited palette of Public Health tools available to them to deal with a novel coronavirus?

Did the Chief Medical Officer and/or the Chief Scientific Adviser consider separating the infected from the susceptible by UK Border Closure or severe restriction of entry into the UK?

Did the Chief Medical Officer and/or Chief Scientific Adviser commission a detailed cross-Government examination of the Public Health effects and economic effects of separating the infected from the susceptible at various levels (as listed earlier in this Written Evidence)?

Did the Chief Medical Officer and/or Chief Scientific Adviser examine in detail the choice between a "Keep it out! Kill it off! Strategy" (which applies separation of the infected and the susceptible at the UK Border) and a "Let it in! Let it spread! Let it kill! Strategy" (which requires multiple actions inside the UK)?

Did the Chief Medical Officer and/or Chief Scientific Adviser compare the deaths which could be expected to result in the UK from a "Keep it out! Kill it off! Strategy" versus a "Let it in! Let it spread! Let it kill! Strategy"?

Did the CMO and/or CSA advise the Prime Minister which Strategy would better protect the Public Health?

Did the CMO and/or CSA advise the Prime Minister of the beneficial economic effects of a "Keep it out! Kill it off! Strategy" versus a "Let it in! Let it spread! Let it kill! Strategy"?

Was the conclusion of SAGE on 3rd February 2020 that a 95% reduction of infected individuals entering the UK would produce a month's delay in the development of the Covid-19 epidemic presented to the Prime Minister later that day? If so, by whom and in what form? Were the advantages of achieving a month's delay in the progress of the Covid-19 epidemic presented to the Prime Minister?

Did the Prime Minister's reference to coronavirus in his Greenwich speech on the evening of 3rd February 2020 signify the Prime Minister's refusal to countenance even a partial UK Border Closure?

If the Prime Minister refused on 3rd February 2020 to countenance even a partial UK Border Closure had he been informed that this could be expected, applying the assumptions in the UK Pandemic Influenza Strategy 2011 to Covid-19, to result in many tens of thousands of deaths in the UK from Covid-19?

In other words, did the Prime Minister know on 3rd February 2020 that in refusing to impose a closure of the UK Border that tens of thousands of UK residents would die as a result?

(17 August 2020)