THE ROYAL SOCIETY

The Academy of Medical Sciences

Summary of oral evidence: Bruce Mann

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Bruce Mann is head of the Civil Contingencies Secretariat (CCS) which sits within the Cabinet Office and works in partnership with government departments, the devolved administrations and key stakeholders to enhance the UK's ability to prepare for, respond to and recover from emergencies.

Members of the working group present were: Sir John Skehel, Professor Glynis Breakwell, Professor Neil Ferguson, Dr John McCauley, Professor Andrew McMichael, Professor Karl Nicholson, Dr Geoffrey Schild, Mr Richard Stubbins and Professor Robin Weiss.

Key points

Role of the Civil Contingencies Secretariat (CCS)

Mr Mann gave the group some background on the workings of the CCS. It was set up in 2001 after events such as the Foot and Mouth Disease outbreak and the fuel protests, when it was found that the UK was not as prepared as it could be for dealing with emergencies. A need was identified for the country to be better prepared and to improve the overall management of emergency situations. As well as its core functions of horizon-scanning, risk assessment, capability-building, and assurance and evaluation, the CCS has four other functions: a college that teaches emergency planning, a small team that deals with recently-introduced legislation, a small team dealing with international issues and a communications team engaging stakeholders and the public. The last is particularly important because in an emergency situation, there is a need to communicate with all those that are involved and affected across the Government, practitioners, businesses and the public.

There are seven steps involved in planning emergency response preparedness; risk identification; risk assessment; building generic capabilities applicable to a wide range of risks, as well as capabilities related to specific risks such as pandemic influenza; business continuity; leadership skills; and assurance and evaluation, including ensuring that lessons are learnt from exercises and real-life events, to check that capability is as good as it should be. The master question that needs to be asked throughout is 'Are we ready?'. The higher the risk, the greater the level of certainty that is required.

Mr Mann was asked about the type of information that is fed into the CCS. He explained that many types of information are fed in from many sources. In particular, staff at CCS carry out horizon scanning, through such things as attending seminars and read the literature, to assess future threats. Every three months CCS produces an assessment of near-term risks, on a rolling basis, which is distributed across Whitehall and to responders. All risks over the next five years are fundamentally reviewed on an annual basis.

Pandemic and avian influenza

The CCS first identified the growing risk of spread of avian influenza, with knock-on consequences for the risk of an influenza pandemic, in 2003/2004 with the progressive spread in the far east of the H5N1 virus in poultry. It was not the result of an approach from the Department of Health. The rolling three month assessment of risks by the CCS, and later the annual fundamental review, had tracked both the risk of avian influenza for animal health and then the risk posed by its spread for human health from 2004. Pandemic influenza is now the joint highest risk on the CCS register.

The role of the CCS is to track risk, measured as a combination of probability and impact. Although the probability could not be determined, it was easy to see in 2004 that the potential consequences of pandemic influenza would be so significant that a step change in planning was required.

Behavioural and social science input

Mr Mann was asked about how research into behavioural science is carried out by the CCS and how this information is then input into planning. He explained that in the risk assessment work carried out by the CCS the impact of each risk is assessed against both the relatively quantifiable effects of an emergency (people dying, power shortages, etc) and the psychological effects on society as a whole, covering issues such as fear, outrage and anger generated. The CCS tries to scale measure the level of psychological impact. They are starting to look at this in relation to pandemic influenza. There is no one single mechanism in place to carry out these types of research but the CCS contact a range of organisations that could input into their analysis depending on the nature of the issue.

A mechanism is not fully in place for research into people's behaviour during a flu pandemic but there are plans for some research studies drawn up by the CCS. There are a number of difficult questions to be addressed when facing a potential emergency, not least the amenability of the crisis to intervention (for example, going beyond the number of lives lost immediately as a direct result of the emergency to considering how many lives would be saved as a result of an effective intervention). The CCS team doesn't work on the health sector component of emergency planning; that is the responsibility of the Department of Health.

Dealing with excess deaths

The CCS can help the Department of Health in preparedness planning to deal with excess deaths in the event of a pandemic by mobilising through the relevant lead department a range of organisations throughout the UK. There is already a capability project underway to deal with excess deaths in the UK under a range of scenarios; the worst case scenario is pandemic flu, but it also covers terrorist attacks and how their consequences would be handled. In preparedness planning, the CCS bring together all such projects inside an overall Capabilities Programme. In an emergency, they draw on that planning to pursue with relevant departments (in this case the Home Office) the necessary arrangements to be used.

The CCS put in place different models for assessing the scale of capabilities needed to deal with emergency situations, which depend on the scale of the disaster. For excess deaths, the work looks at what different agencies can cope with within the boundaries of existing work patterns and beyond that what extra steps might be needed after that to increase capacity. So, by way of hypothetical example, were there a limit of, say, 100,000 deaths as a threshold point, up to which point the different agencies involved could cope with the levels of mortality, anything beyond that would require a different model or plan of action. Such an analysis tells the CCS at what level the government has to do something radically different to cope with the situation. And that advice can be put to Ministers in their decision-making for a crisis.

The CCS operate on the assumption that a reasonable worst-case scenario resulting from a pandemic influenza outbreak is some 750,000 excess deaths in the UK over the period of a pandemic. This is the figure supplied by the Department of Health, embedded in the UK Flu Plan. It is taken as the basis for the research, analysis and preparedness activity. Mr Mann was asked whether the CCS would consider what contingency plans would need to be in place if there were a much larger number of deaths, for example up to 20 million. It was pointed out that the current fatality rate of H5N1 in humans is 50% so it could cause a higher number of fatalities than 750,000; and that the US base their contingency planning on a figure of 1% of the population dying over 12 weeks. Mr Mann said that the CCS don't plan for a situation of more than 750,000 fatalities resulting from a pandemic influenza outbreak. They have no basis for separately calculating the

expected number of deaths other than the assessments made by the Department of Health, which are subject to peer review by external scientific experts.

Scientific advisory role of CCS

In peacetime, the CCS draws on two main sources of advice to Government, through the Department of Health and OSI. Mr Mann was asked about any gaps that the CCS had identified in pandemic influenza contingency planning in the UK from the research that they have already undertaken. His view is that there is still a lot of research to do, mostly for the Department of Health. The main areas requiring more research are the virus itself and the medical response measures.

Another area of research for the CCS is public attitudes to public transport and they are looking at what can be done to sustain public confidence in the transport system in the event of a pandemic. The services will undoubtedly be contaminated, but it will be wholly impracticable to keep cleaning them. So the hygiene responsibility will be with the individual. Other issues are absences from work and school closures and research is underway to analyse existing statistical evidence and sociological research on these factors.

An updated version of the UK pandemic influenza contingency plan is currently being produced by the Department of Health. The CCS aims to release material into the public domain as soon as it is becomes available, which will include advice for schools and businesses etc. The co-ordination of contingency planning between the UK and other European and international governments was discussed. Mr Mann expressed his view that, as noted by Coker et al, there would be value in more being done in this area. The UK can do planning nationally but it is not going to be effective without international co-operation. There is real added value in having cross-country co-operation in terms of borders, social distancing, pandemic influenza research, production capacity, trade and keeping the global economy going. This needs to be tackled in an EU and global forum. There is a systemic problem within the EU, because there is no obvious formal mechanism to bring planning together across all of the sectors affected by pandemic influenza. The UK created during its Presidency an *ad-hoc* 'Friends of the Presidency' group to try to do so, which has so far looked at communication with the public during a pandemic.