

## DINNER/DISCUSSION SUMMARY

### Is the UK well prepared for an influenza epidemic?

Held at The Royal Society on Wednesday 22<sup>nd</sup> June, 2005

We are grateful to the following for support for this meeting:

**Health Protection Agency**  
**The Wellcome Trust**

**Chair:**           **The Rt Hon the Lord Jenkin of Roding**  
Chairman, The Foundation for Science and Technology

**Speakers:**   **Professor the Baroness Finlay of Llandaff**  
House of Lords

**Dr Jeremy Farrar OBE**  
Director, Oxford University Clinical Research Unit, Viet Nam

**Dr David Harper CBE**  
Director of Health Protection, International Health and Scientific Development, Department of Health

**Bruce Mann**  
Head, Civil Contingencies Secretariat, Cabinet Office

The invited speakers agreed that there was no simple way to prevent or control a major outbreak of influenza if a new and highly virulent strain emerged.

In discussion it was observed that in a future outbreak Ministers were likely to be under pressure to close the UK. Some countries had escaped Asian flu in 1957, but the results of retrospective modelling, to be published in peer-reviewed journals shortly, suggested that anything short of a total ban on international travel would have made little difference. At first sight it was puzzling that in 1918 Spanish flu appeared in many countries at the same time, given that flying was in its infancy, but there was extensive sea travel. A lot of people were returning home after war service abroad. None of the measures adopted in 1918 seemed to have made a difference to the course of the pandemic, and it still seemed likely that stopping international or domestic travel in a future outbreak would spread the peak of mortality without significantly reducing the total number of deaths. It was to be hoped that future policy would be driven by science and modelling, not by public pressure.

Vaccines were not currently seen as the answer because of the lead time for producing them when a new strain emerged. Work was under way in Europe and America to develop cell-based cultures as an alternative to injecting eggs, though one speaker took the view that the benefit would go to the United States because that was the major source of funding. One suggestion was that it might be worth modelling the effects of using existing vaccines, even if they were of low efficacy against a new strain, to reduce

the rate of transmission. It might do more good than banning football matches.

Antiviral drugs, in particular the neuraminidase inhibitors, had a major part to play in controlling a new outbreak, but the drawback was the rapid development of resistance. The Government was preparing to build up stocks of oseltamivir (Tamiflu). A good deal was known about the efficacy of zanamivir (Relenza) in seasonal flu, but there were no plans to stockpile it. It was suggested that the use of zanamivir in a pandemic was worth considering, because resistance to the one drug did not necessarily go with resistance to the other.

Avian flu being a zoonosis, it was argued that resources should be put into animal health and surveillance systems working at the interface between human and animal disease. Capacity in the human health sector in underdeveloped countries was described as limited, and in animal health it was woeful. In the third world bright people were not inclined to make a career in animal health. International organisations, notably the Office Internationale des Épizooties, the World Health Organisation and the Food and Agriculture Organisation, had a vital part to play, but WHO and FAO were criticised for not working together and for communicating with the media in a way that did not promote openness.

Given that the lack of easy answers was generally acknowledged, a speaker wanted to know just what defences were available and what would be done in the event of a major outbreak. One response to this

was that a whole range of public health interventions was available, such as closing schools and advising people on basic hygiene and staying in. When SARS emerged the media conveyed a lot of information on how it was spread, notably by the infected businessman who transmitted the virus by touching door handles, and it would be necessary to communicate similar messages in relation to flu. There were many response measures for public bodies and individuals to take but no single solution.

There were different views on public communication. One speaker recalled that when SARS hit the headlines the relevant websites were swamped and she had seen people fighting in a supermarket as they stocked up on food. By contrast, the recent interruption in the supply of diamorphine in the UK was kept quiet and clinicians were briefed on what to do without the public realising how low stocks had run. Another participant argued that what mattered was to get information to the people who needed it and not let communication impair other important control activities. Daily reports to Ministers might be futile. Against this it was argued that most people would get information on a future flu outbreak from the internet, which was an open book.

A speaker wondered who would take the lead at the political level and act as a public focus. He recalled that there was no panic when Aberdeen was shut down as a result of a typhoid epidemic, with schools closed and people living off tinned food and returning to wartime habits. It was a stable society, and Aberdonians were undemonstrative people. Nevertheless, when the Queen visited the city the bottled-up emotion was released. It was suggested in response that different people were needed for different messages. One lesson from 9/11 was that people were needed who were good at communicating the science, not the politics. An important message would be that individuals were responsible for their own welfare and that of those around them, and that it was no good looking to the Government to do everything.

Concern was expressed over what seemed to be a gulf between the planning and modelling in progress at the centre and the clinicians in primary care and other local people who would carry the main burden in an outbreak. It would be important to harness the expertise which was available in the primary care system, but the leaflets which were said to have gone out to GPs did not seem to have reached their target. In response it was said that the Government had never before published such extensive information in advance of an emergency, and that there had been four regional exercises. In fact the UK was regarded as in the lead in Europe and had been commissioned to run similar exercises in other member states. The UK had done a lot behind the scenes but did not make it public for fear of raising the temperature in the media.

This defence provoked strong reactions. One speaker claimed that big international companies were taking their own precautions, notably in order to maintain the supply of petroleum products, because they did not believe that governments would do it. The British Government had not yet signed a contract for the supply of antiviral drugs, yet it was spending a lot of money to protect eight politicians from their voters at the G8 summit in Gleneagles. The chances of one of them being assassinated were similar to those of a flu pandemic happening. The question was what the UK could do in south east Asia. In answer to this it was said that the Wellcome Trust was doing a lot but that more investment was needed to build human capacity for identifying an outbreak and isolating the viral strain. A scientific structure was also needed in order to develop a trans-strain vaccine. If avian flu got out of SE Asia there would not be much anyone could do except buy body-bags.

Another contributor reminded the meeting that the invited speakers had talked about the need for transparency and good communications. It was disappointing that no prospectus had been offered for how the media would be encouraged to deal with a major outbreak. Of course it would not be desirable to cause panic, but what had been said so far about the Government's preparations was short on substance. Another speaker recalled that pandemic flu was described as the number one priority for contingency planning, yet the measures in place amounted only to mitigation.

In conclusion it was observed that the debate had indicated some disquiet about the arrangements in hand at the top, as compared to what seemed to be effective arrangements at local level.

Jeff Gill

The presentations are available on our web site [www.foundation.org.uk](http://www.foundation.org.uk)

Background information:  
[www.jr2.ox.ac.uk/ndm/Tropical\\_Medicine/VNFrameset.htm](http://www.jr2.ox.ac.uk/ndm/Tropical_Medicine/VNFrameset.htm)  
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[www.wellcome.ac.uk](http://www.wellcome.ac.uk)

**Hansard Report on the House of Lords Debate:**  
[www.parliament.the-stationery-office.co.uk/pa/ld199697/ldhansrd/pdvn/lds05/text/50623-02.htm](http://www.parliament.the-stationery-office.co.uk/pa/ld199697/ldhansrd/pdvn/lds05/text/50623-02.htm)