THE ROYAL SOCIETY

The Academy of Medical Sciences

# Summary of oral evidence: Professor Lindsey Davies CBE

**28 July 2006**

Professor Davies was appointed to the newly established post of Director of Pandemic Influenza Preparedness at the Department of Health in April 2006. Her role is to coordinate the Department's work on pandemic influenza and work closely with colleagues in the NHS and social care to ensure that the challenges they face in pandemic planning are fully considered in national policy development.

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, Professor Albert Osterhaus, Dr Geoffrey Schild, Mr Richard Stubbins and Professor Robin Weiss.

**Key points**

***The pandemic plan***

The current version of UK Health Departments influenza pandemic contingency plan was published in October 2005. Professor Davies is coordinating the update to the current plan to ensure it remains up to date. The revised plan is expected to be published Spring, 2007. The plan will be predominantly web-based and will be updated on an annual basis.

***Scientific advice in planning for an influenza pandemic***

Professor Davies told the group that DH's newly-established Pandemic Influenza Management Group group reports through normal DH channels to the three Permanent Secretaries in DH. It is advised by the Pandemic Influenza Scientific Advisory Group (SAG). Professor Davies also works closely with Bruce Mann and the Civil Contingencies Secretariat (CCS) to plan more broadly across Government and to support other agencies in their planning for pandemic influenza. Within DH, Professor Davies is also working closely with Professor Sally Davies and Dr David Harper to ensure that planning is in place to enable research during a pandemic. This includes establishing a new cross-governmental committee of funders and trying to collect data to inform future research where possible.

Professor Davies was asked about the current gaps in research relevant to pandemic influenza planning. She told the group that as she is still relatively new in post she does not know enough about the detail of existing research to give a definitive view on priorities. She was however concerned to ensure that appropriate behavioural and operational research is undertaken. She feels strongly that the evidence base underpinning practical approaches to infection control, including the prevention and control of pandemic influenza, needs to be strengthened. For example, little is known about how the public will respond in a pandemic. There is some information available about the public's response to sudden shocks but there are no data available on how the public, individuals or communities will respond to sustained difficulties such as those that could result from a pandemic

Professor Davies was asked if there are plans to get systematic input from the social science community. She told the group that she believes that the SAG should cover the whole spectrum of science, including advice from the broader community of social, behavioural and management science. The membership of the committee will evolve as necessary.

***Ethical approval of research in a pandemic***
Professor Davies told the group that DH, lead by Sally Davies, are currently considering the problems of ethical approval for research in a pandemic. Ethics can't be disregarded in a pandemic, but approval for protocols takes time and must be granted in advance of a pandemic. Professor Davies is setting up a new ethics committee around pandemic influenza, supported by DH and with a lay Chair. This is not a research ethics committee but, rather, will advise on the ethics of difficult decisions which may need to be taken as part of pandemic planning and response. These are likely to include issues such as prioritisation for treatment and employment policies. There was a discussion about how important it is to systematically collect data early in a pandemic to feed into models to plan early intervention strategies.

***Distribution of antivirals***
Professor Davies was asked if stockpiles of antivirals are likely to increase and what is being done about operational deployment of the existing stockpile. Professor Davies told the working group that DH is currently working on this. The stockpile will be complete by September 2006 and will provide sufficient Tamiflu for treatment of 25% of the UK population. DH are looking at the benefits, risks, practicalities and costs of extending the stockpile of antivirals beyond this.

Current planning is for the use of Tamiflu in treatment only, however they are exploring the implications of recent research which suggests that options such as the use of antivirals in household and healthcare worker prophylaxis might be of benefit if a larger stockpile of antivirals were available. The definition of essential worker is currently considered nationally, however, this is of greater relevance to consideration of prioritisation of vaccines when they become available.

Professor Davies explained that DH is currently working with front-line staff and managers in health and social care to develop a national framework to guide local planning for care of influenza patients in the community setting during a pandemic. Hospital care will only be available for those in greatest need. The model of care will include arrangements to ensure that patients receive antiviral treatment as soon as possible - ideally within 12 hours of developing symptoms. There are significant variations across the country in the extent to which PCTs, Local Authorities and local partners have developed plans and uncertainty regarding the national framework is now impeding progress in some areas. It is, therefore, important that a model of care is agreed quickly.

Professor Davies will be writing to the Strategic Health Authorities (SHA) shortly to ask them to test out the practicalities of a draft model of care with PCTs and colleagues in the field. The preferred model is that patients who suspect they have influenza in a pandemic should stay at home and 'phone a friend'. The friend or patient will then telephone a well-publicised phone number where, after initial screening, they will receive advice on treatment and, if appropriate, will be given a code/identification number on behalf of the patient. The friend will then collect the antivirals using the code number and deliver them to the patient. Professor Davies told the group that there will be a local delivery system for those patients who do not have anyone to collect the antivirals on their behalf and that some environments will also need special plans. Those patients who are in defined high-risk groups (to be determined in advance and adapted in the light of understanding of the nature and activity of the virus once the pandemic strikes) will be asked to contact their GP, initially by telephone, for advice

Professor Davies agreed with the group that the system could be open to abuse but said that whilst the model has its downsides, no better, practical alternative had as yet emerged. Modelling demonstrates, for example, that a model relying upon home-visiting by healthcare professionals to provide triage and treatment would require too many staff to be viable. A public communication programme will be important to stress social responsibility to not abuse the system. The public also need to understand that antivirals will reduce

severity of illness by a couple of days, and may reduce complication rates, but will not be a miracle cure. Professor Davies said we need to better understand people's attitudes and how to influence them in this way and would welcome advice. All SHAs are going to be asked to examine the model over the summer and to look in practical terms about how they would implement it in their own environment. Professor Davies agreed that practical testing in the field would be important.

***Rates of infection***

There were discussions about the assumptions made in the pandemic plan for rates of infection and mortality. Professor Davies said that a range of assumptions have been used based on data from previous epidemics and have been clearly outlined in the UK contingency plan. She agreed with the working group that any pandemic may be worse than the baseline assumption given in the plan, but said that a sensible and realistic framework to help with planning is needed which can be modified in either direction as new data become available

***Vaccines***

Professor Davies spoke about the importance of exploring the potential of adjuvants for use in a pandemic vaccine and possible pre-pandemic vaccine which may allow cross protection. It was highlighted to Professor Davies that investing more money into adjuvant research and clinical trials of vaccines may reduce the need for antivirals and save money. Again, there are public order issues to be considered relating to the distribution and storage of vaccines.

***Pandemic preparedness***

Planning is based on existing systems and will augment existing fragile ones. Professor Davies said that she hoped hat the resources and plans put in place will support other disasters which may occur, not just pandemic influenza. For example, an autumn campaign encouraging people to cover coughs, sneeze into a tissue, dispose of tissues hygienically and wash hands frequently could have an immediate impact on a range of communicable diseases, including seasonal influenza. She is recommending that planners should acknowledge the precautionary principle and should:

- Base plans on the best available evidence
- Build on existing services that work well and are trusted by the public
- Make plans that will meet a range of needs
- Take action now to prepare
- Work to a national framework, adapting it to local circumstances
- Keep themselves and others informed