THE ROYAL SOCIETY

The Academy of Medical Sciences

Summary of oral evidence: Fred Landeg, Defra

28 July 2006

Fred Landeg is the Deputy Chief Veterinary Officer at the Department for Environment, Food and Rural Affairs (Defra).

Members of the working group present were: Sir John Skehel, Professor Albert Osterhaus (in part), Professor Glynis Breakwell, Professor Neil Ferguson, Dr John McCauley, Professor Andrew McMichael, Professor Karl Nicholson, Dr Geoffrey Schild and Professor Robin Weiss.

Key points

Science into policymaking

Mr Landeg explained that he was responsible for the development of avian influenza policy within Defra. He explained that there is a heavy engagement with science at all levels of policy development which includes Professor Howard Dalton and Sir David King. The EU avian influenza legislation is the main driver that shapes Defra's policy in the form of the UK's contingency plans and its stakeholder engagement. Mr Landeg explained that the resources for research available to the Department for avian influenza have to be assessed against other priorities in the Department such as climate change.

Defra have recently established projects with the Department of Health and the Health Protection Agency to look at a number of cross cutting issues. One area of interest is the protection operatives in poultry farms. Mr Landeg agreed that such a cross–departmental group could also facilitate the bringing together of work on human and bird vaccines where many synergies could be realised. In response to a question on the capability to carry out research in the UK with limited containment facilities Mr Landeg explained that containment facilities are expensive to build and to maintain and it was therefore important to make best use of the existing resources. The Department is spending £0.7m on specific avian influenza research projects this year. He also noted that the proposed closer working of the Veterinary Laboratories Agency and the Institute of Animal Health would produce many synergies on research efforts.

Epidemiology/surveillance

There are three main methods for surveillance of birds for detection of avian influenza:

1. Live bird surveillance (catch and release).
2. Surveillance of wild birds which have died.
3. Surveillance involving a sample of shot wild birds.

Mr Landeg explained that much of the surveillance relied on voluntary organisations such as the Wetlands and Wildfowl Trust and the Royal Society for the Protection of Birds. The reporting of dead wild bird relied on public reporting. It would be more effective to look for wild bird die out rather than testing of large number of dead birds reported by the public which is a crude tool. An EU expert working group have now produced a list of bird species which are likely to be susceptible to avian influenza linked to places where these birds first land in the UK on their migratory paths and areas where they subsequently gather in the UK. Mr Landeg suggested this targeted approach would increase the likelihood of early detection of the virus should it arrive in the UK. He also said that Defra are currently looking at areas where there is the greatest potential for interactions between the wild bird and poultry populations. He also noted that collection and processing of surveillance data is expensive and could be strengthened by making better use of data collected within the

European Union. The Department estimates that it will spend £5.5m on wild bird surveillance this year (£4.0m on collection and £1.5m laboratory costs).

Vaccine development

Mr Landeg explained that Defra's policy on vaccination still remained that the UK will not vaccinate poultry in advance of an avian influenza outbreak because of the well documented limitations of the vaccines currently available. He explained that the most effective means of protection are the maintenance of a high standard of biosecurity; separating poultry from wild birds; and careful surveillance for signs of disease. Mr Landeg suggested vaccination would be employed if avian influenza became endemic in the wild bird population at a level so high that there was frequent spill over into the domestic poultry population. Controlling the spread of avian influenza in the wild population is not being considered by Defra as an option at present.

Mr Landeg explained that Defra's advice on vaccines for avian influenza comes through Dr Ian Brown at the Veterinary Laboratories Agency. Defra do not have a specific committee to advise them on developments in vaccines and new technologies for the control of avian influenza this is left to industry. It was further explained that the principle for the use of vaccines in Defra was that it would not use a vaccine unless it has specifically received marketing authorisation in the UK or EU. The marketing authorisation is a guarantee that the vaccine has reached an agreed set of standards.

Mr Landeg reported that Defra has invited tenders to supply ten million doses of avian influenza vaccine for potential use in poultry and other captive birds. The tender is for a vaccine which could be used against both H5 and H7 strains of the disease. This is in additional to the 2.3 million doses of vaccine Defra bought earlier this year for a possible risk based preventive vaccination of zoo birds. Defra are also keeping a watching brief on the developments of novel techniques for the control of avian influenza.