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For Discussion on the Special Meeting on 21 May 2001

## **LegCo Panel on Food Safety and Environmental Hygiene**

### **PRECAUTIONARY MEASURES TAKEN TO ARREST THE SPREAD OF AVIAN FLU VIRUS AMONG POULTRY**

#### **Purpose**

This paper briefs Members on the precautionary measures taken by the Government to arrest the spread of avian flu virus among poultry and to protect public health.

#### **Existing Surveillance Mechanism for Avian Flu**

2. Since 1998, the Government has adopted a comprehensive surveillance system for avian flu. All imported or local poultry have to be tested for antibodies of H5 avian flu virus before they are released to the market for sale. In addition, since ducks and geese are natural carriers of H5 avian flu virus, they are segregated from chickens and other birds at all levels from importation to slaughtering. We have also introduced a surveillance system to monitor the presence of H5 virus in the wholesale and retail markets. Under the system, we monitor the mortality rate of poultry in the markets. In case an abnormal mortality rate is detected among chickens, post-mortem examination on the chickens will be carried out. Besides, faecal samples of chickens are taken from the wholesale and retail markets for culturing of H5 virus. We cooperate closely with the University of Hong Kong (HKU) in the surveillance of markets. If H5 virus is detected by HKU's surveillance system, HKU will inform the Government of the result. Tests and research would then be jointly carried out.

#### **Discovery of the Spread of the H5N1 Virus among Chickens**

3. In early May, HKU detected H5N1 virus in the faecal samples collected from the Yeung Uk Road Market, Fa Yuen Street Market and Smithfield Road Market. We immediately conducted an investigation at the chicken stalls in these Markets but no clinical signs were detected

among the chickens. Faecal samples were taken again for testing. In order to ensure the hygiene standard of the Markets was satisfactory, the Food and Environmental Hygiene Department (FEHD) conducted large scale cleansing operations in these Markets.

4. On 11 May, we were notified of the results of the gene sequence analysis of the virus found in the Yeung Uk Road Market and Fa Yuen Street Market. According to the results, the H5N1 virus concerned was not the same as the kind of virus found in 1997 that would infect humans. It was a Goose 96-type virus but the genes had started to mutate.

5. On the morning of 15 May, FEHD found that over 200 chickens had died in the Yeung Uk Road Market. As the figure exceeded the normal daily number of dead chickens, the Agriculture, Fisheries and Conservation Department (AFCD) immediately carried out post-mortem examination on the dead chickens found in this market as well as in the other two markets. The test results confirmed that the chickens had died of avian flu.

6. Based on the fact that the number of dead chickens was greater than the normal figure, that the post-mortem examination showed that the chickens had died of avian flu and that there were signs of mutation of the virus, we decided, upon careful deliberation and discussion with academics and experts, to take decisive precautionary measures. On the following day, the Director of Agriculture, Fisheries and Conservation declared the poultry stalls in the three markets as infected places in accordance with the Public Health (Animals and Birds) Ordinance (Cap. 139). With the assistance and guidance of FEHD, the poultry stalls were depopulated. The carcasses were then sent to a landfill. Subsequently, FEHD thoroughly cleansed and disinfected all the poultry stalls concerned. All these actions were completed on the same night. At the same time, AFCD immediately conducted post-mortem examination on the dead chickens collected from all markets.

7. On 17 May, the Government also found an extraordinary number of chicken deaths in the Tai Shing Market in Wong Tai Sin. On the morning of 18 May, the same situation was found in the Pei Ho Street Market in Shamshuipo. Post-mortem examination of dead chickens from

both markets confirmed that avian flu was the cause of death. In addition, we took dead chickens from another five markets and found that the chickens also died of avian flu. These five markets are the Po On Road Market in Shamshuipo, Ngau Tau Kok Market in Kwun Tong, San Hui Market in Tuen Mun, Yan Oi Street Market in Tuen Mun, and Bowrington Road Market in Wan Chai.

8. Although there was no evidence that the H5N1 virus would affect human health, the virus had spread rapidly among chickens and we could not rule out the possibility that the virus would reassort with other viruses and develop a new virus that could affect public health. Therefore on 18 May, we decided to take further precautionary measures -

- (a) To arrest the spread of the virus amongst the chicken population and to prevent the virus from re-assorting with other viruses, we decided to close all retail outlets of live chickens, and thoroughly disinfect and cleanse the outlets. All the work has been completed within three days, i.e., on 20 May.
- (b) Although there was no sign of infection of avian flu virus among chickens in the wholesale market and local farms, the chickens in the wholesale market and the mature chickens in the local farms could not be released for sale due to the complete closure of the retail outlets. According to the advice of veterinary surgeons, these chickens could not be kept in cages for too long. We have therefore decided to slaughter these chickens. Cleansing of the wholesale market was completed on 19 May. The depopulation in the local farms has also started on 21 May and is expected to be completed within two weeks.
- (c) As advised by the experts, we could not rule out the possibility that the H5N1 virus detected in the incident existed in the Western Poultry Wholesale Market. We therefore had to slaughter the ducks and geese there and cleanse the Wholesale Market thoroughly in order to break the virus cycle. Cleansing of the Western Poultry Wholesale Market was completed on 20 May.

By the end of the operation on 20 May, we had destroyed about 440 000 poultry.

9. After thorough cleansing and disinfection of the retail outlets, AFCD has to conduct examinations to ensure that the virus is eradicated. We expect that the retail outlets will have to be closed for about three to four weeks for the process. We have informed the relevant authorities in the Mainland to suspend exporting live chickens to Hong Kong.

10. As we have in place a comprehensive surveillance system, we are able to take decisive and prompt actions to prevent the spread of the avian flu virus before any significant sign of mutation. The timely detection of the virus in the retail outlets has proved the effectiveness of the existing surveillance system.

### **Ex-gratia Payment**

11. We will provide the affected trades with financial assistance. The package will be along the lines of the one given in the 97 avian flu incident. We will seek funding approval from the Finance Committee on 25 May 2001.

Environment and Food Bureau  
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