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**Legislative Council
Panel on Food Safety and Environmental Hygiene
and Panel on Health Services**

Preparing for the Peak Season of Avian Influenza Outbreak

INTRODUCTION

This paper briefs Members on the Government's preparation for the upcoming peak season of avian influenza outbreak.

BACKGROUND

2. Avian influenza mostly occurs in birds. The risk of avian influenza in poultry and migratory birds remains high. Although there have been cases of avian influenza in human, there is so far no evidence of efficient human-to-human transmission. Most human cases reported were the result of contact with infected poultry or contaminated surfaces.

3. The peak season of avian influenza outbreak among migratory birds and poultry in the South China region will soon commence. According to experience, large number of migrating waterfowls, which are natural carriers of avian influenza virus, will arrive Hong Kong and stay in the coming months, thereby increasing the risk of avian influenza outbreak. Learning from past outbreaks, Hong Kong has put in place a comprehensive avian influenza preventive and surveillance programme. So far, the programme has been effective in maintaining our commercial poultry avian influenza free despite the outbreaks in the region since 2004.

POLICY OBJECTIVES

4. Our policy objectives are –
- a) to closely monitor the seasonal influenza situation by surveillance and maintain vigilance of our healthcare professions;

- b) to prevent any outbreak of avian influenza in birds and live poultry in Hong Kong and to minimize contact between human and live poultry to prevent human infection; and
- c) to stay alert for any emergent signs of a global pandemic and to put in place a preparedness plan for early detection, containment, treatment and control of outbreak.

PREPAREDNESS ACTIVITIES

5. To prepare for the coming winter, the Administration has taken a multi-pronged approach and consolidated departmental efforts to prevent avian influenza outbreaks in Hong Kong. The measures taken at different aspects are set out below.

(A) Reduce risk of human infections

Reduce infection risk from birds

(i) Poultry Keeping

6. We have imposed stringent biosecurity measures to prevent the introduction of avian influenza viruses to local farms. These include the requirement that all farms should be bird-proof to prevent the spreading of viruses by wild birds; vaccination of all poultry, restricting entry of equipment and vehicles into farms unless properly disinfected, etc. The Agriculture, Fisheries and Conservation Department (AFCD) also conducts virus culture of faecal samples collected from farms regularly and tests every batch of chickens on farm within 5 days of marketing.

7. We introduced a voluntary surrender scheme (VSS) for live poultry farmers, wholesalers, retailers and transporters who choose to receive an ex-gratia payment (EGP) in exchange for their licences/tenancies. Upon the expiry of the VSS in August this year, we received 146 applications from farmers, representing a reduction of local on-farm poultry population from about 4.0 million to about 1.7 million. With less poultry farms in Hong Kong, AFCD will dedicate more efforts to monitoring the remaining farms in accordance with the existing stringent measures. Regular inspections will also be conducted at vacated farms to guard against restarting of business without a licence.

8. Backyard poultry, due to its lack of biosecurity measures, are often less well protected against avian influenza and therefore more vulnerable to infections through contacts with wild birds. To reduce the risk of having poultry infected with avian influenza, we have banned the keeping of unlicensed backyard poultry in Hong Kong since mid-February 2006. To allow a small number of poultry which had been kept as pets before the ban came to operation, we made arrangement to allow these poultry to continue to be kept. So far, AFCD has issued 31 exemption permits for the keeping of poultry being kept as pet. We have also brought racing pigeons under regulatory control by issuing their owners exhibition licences. Up to 6 December 2006, a total of 49 exhibition licences have been issued.

9. Separately, during the discussion of the Public Health (Animals and Birds) (Exhibition) (Amendment) Regulation 2006 in September this year, some Members requested the Administration to provide information on the overseas regulatory regime imposed on racing pigeons. In this connection, we have compiled at *Annex A* a brief summary of overseas regulatory control measures on racing pigeons for Members' reference.

(ii) Import Control

10. We have imposed stringent requirement for the importation of live poultry. For instance, all imported live chickens must be attested with a valid health certificate certifying, among other things, that the birds in the consignment come from registered farms and are properly vaccinated. We will continue to pay inspection visits to registered poultry farms in the Mainland to ensure that biosecurity measures are fully implemented. At the point of importation, the Food and Environmental Hygiene Department (FEHD) will continue to inspect the birds and collect blood samples and cloacal swabs for testing.

(iii) Wholesale and Retail Markets

11. The Administration has also imposed stringent hygiene requirements for wholesale and retail markets. Examples include thorough cleansing and disinfection of transport cages and vehicles, cleansing of the faecal trays of cages housing chickens at retail outlets after the end of daily business, no overcrowding of live chickens in the cages, etc. We will also continue to strictly implement the requirement of market "Rest Days" imposed twice every month to reduce the virus load in the market.

12. Under the VSS mentioned in paragraph 7, the number of live poultry wholesalers has also been reduced from 86 to 70, and from 814 to 466 for retailers. AFCD and FEHD will continue to closely monitor the remaining wholesaling and retailing outlets to ensure that stringent hygiene requirements are complied with.

13. As regards surveillance of poultry and birds, we tested over 100 samples from wholesale market, 200 samples from pet bird shops and 300 samples from imported pet birds per month, and collected over 4 200 faecal samples from wild bird aggregating places in 2005. As for imported live poultry, they are subject to serological monitoring of vaccine effectiveness as well as virological testing for H5 antigen. More than 22 000 swabs taken from more than 130 000 live poultry have been taken for virological tests since 2004 and all were found negative for H5 antigen. At the retail level, over 6 300 faecal samples were taken from market stalls and fresh provision stalls in 2005. All results were negative of H5 virus.

14. To better understand avian influenza in wild bird population, we have conducted surveillance program on wild bird congregation place such as Mai Po Nature Reserve Area and Wet Land Park as well as recreational bird parks in Hong Kong. Since October 2005, the public can contact AFCD via the Government hotline for door-to-door collection of dead birds. As at November 2006, about 11 000 dead or sick wild birds have been collected and tested by AFCD of which 17 samples were confirmed to contain avian influenza viruses. AFCD has also promulgated guidelines for the closure of Mai Po Nature Reserve, Hong Kong Wetland Park and other walk-in aviaries if a bird is found to be infected by avian influenza viruses within a 3-kilometre radius of these sites in order to reduce public exposure to wild birds. The wild bird surveillance would continue to be improved according to the latest scientific findings and recommendations from international animal health organizations.

Publicity and public education activities

15. Maintaining free and transparent information flow is an effective tool in reducing public anxiety and misunderstanding and would empower the public to play an active role in protecting themselves. We adopt proactive risk communication strategies. Health information on seasonal influenza, avian influenza and influenza pandemic preparedness as well as preventive and response measures, are widely disseminated through television, radio, health education telephone hotline, outreach programmes, seminars and distribution of health education materials. AFCD, FEHD and the Department of Health (DH) organized joint briefings for all District

Councils in November 2006 with a view to educating the public in a holistic manner. The briefings covered personal hygiene, biosecurity measures applied to local poultry farms and wholesale market, disease surveillance on imported birds/ pet birds /wild birds, handling of dead birds and hygiene requirements in retail markets. In addition, we will increase the number of Announcement of Public Interest (API) broadcast on TV and radio, displaying posters, etc. and continue such broadcast at Immigration Control Points and in cross-boundary conveyances, to keep public vigilance to the threat of avian influenza.

16. The Centre for Health Protection (CHP) continued to organize forums for different target groups, including government departments, general public, healthcare professionals, non-governmental organizations, Chinese medicine practitioners, social workers, business sector and community leaders, with the aim to raise community awareness and gear up their preparedness. So far, more than 150 forums have been organized since March 2005. Special efforts are made to reach out to ethnic minority groups including migrant workers. Such efforts include outreach programmes (medical and health professionals reaching out to the places they usually gather), public lectures, and disseminating the health messages via the Consulates in Hong Kong, ethnic organization network, ethnic radio channels, newspapers and media interviews. Support and advice have been solicited from the Consulates in producing health education materials in ethnic languages. Sector-specific briefings on sectoral contingency preparedness and response have been held.

17. In addition to the above, DH distributes health education leaflets through airline check-in counters or on board flights to avian flu-affected areas to provide information to travellers on how to prevent avian influenza. Airlines also broadcast health messages on board from avian-flu affected areas to Hong Kong advising travellers to seek early medical attention if feeling unwell. DH continues to keep in contact with and update the travel industry on avian influenza situation through the Travel Industry Council of Hong Kong, and organize talks and seminars for the tour group coordinators.

Preparedness in the healthcare setting

18. In line with the new infectious disease outbreak alert system taken effect from 1 July 2006, the Hospital Authority (HA) has updated its Contingency Plan for Influenza Pandemic and HA Infection Control Plan for Avian Influenza. The plans include enhanced surveillance and notification, laboratory and diagnostic support, hospital and bed mobilization plan, infection control strategy, stockpiles of protective personal equipment (PPE)

and drugs, staff deployment, and communication. A clear command and coordination structure at the overall HA level, in each Cluster and in every hospital is in place. At the front line hospital level, hospital staff works closely with infection control officers to ensure early identification and response actions. HA staff at all levels have been informed of the contingency arrangements and updated information and recent developments are effected through internal channels such as infection control link staff briefing sessions and circulation of the HASLINK Express. As regards hardware, newly constructed, modern isolation facilities with capacity to handle 1,400 patients have now been established in 14 acute public hospitals.

19. The Infectious Disease Control Training Centre, jointly developed by DH and the Hospital Authority (HA) organized training in avian influenza preparedness for around 6,000 healthcare and healthcare-related workers in public and private sectors, selected Government departments, residential care homes for the elderly and disabled, and other stakeholders in the community from January to November 2006.

Influenza vaccination

20. Influenza vaccine cannot prevent avian influenza as the vaccine is developed for seasonal influenza. However, the vaccine can help reduce the chance of complications and hospitalisation resulting from seasonal influenza especially among high risk groups such as elderly and patients with chronic diseases. When administered in high risk groups, such as health care workers and poultry workers, the vaccine will help to maintain a healthy workforce and minimise the chance of avian flu and seasonal flu virus re-assortment.

21. The 2006/07 Influenza Vaccination Programme targets at a number of high risk Groups set out in the **Annex B**. The target groups are drawn up upon the advice of the CHP's Scientific Committee on Vaccine Preventable Diseases comprising renowned experts in related fields. The Vaccination Programme commenced on 6 November 2006. The private medical sector shows strong support and plays an active role in influenza vaccination for the community. Members of the public falling outside the specified target groups are advised to consult their doctors for the need for vaccination for personal protection and/or reducing the risk of transmitting influenza to high risk persons with whom they regularly come into contact.

Laboratory support

22. With the coming influenza season, laboratory support will be strengthened to meet the increasing workload. Rapid diagnosis using molecular methods will be conducted for all suspected avian flu cases. At the present alert response level, CHP, Queen Mary Hospital and Prince of Wales Hospital will perform the rapid test. Queen Elizabeth Hospital, Princess Margaret Hospital and Tuen Mun Hospital will be recruited to conduct the rapid tests if required. Testing arrangements at various response levels have been agreed among all the testing laboratories. Technical capacity of these laboratories has been monitored through a quality assessment programme and reagents stockpile is in place to meet increased demands during the Serious and Emergency Response Levels. As WHO reference laboratories for diagnosis of Influenza A (H5) infection, CHP continue to keep liaison with other influenza reference and collaborating centres to monitor avian flu virus evolution and activity.

(B) Early detection and containment of pandemic influenza

23. Influenza A(H5, H7 and H9) are notifiable infectious diseases in the First Schedule to the Quarantine and Prevention of Disease Ordinance (QPDO). The CHP provides free laboratory support for confirmation / exclusion of these avian influenza infections. In addition to statutory notifications, the CHP also maintains close monitoring of the influenza situation locally through collaboration with HA and private hospitals, general practitioners on sentinel surveillance, laboratory surveillance, investigation of influenza-like illness outbreaks and monitoring of hospital admissions data. DH has implemented temperature screening for in-bound travellers in all Immigration Control Points. A protocol has been developed for investigation of any suspected case in line with international guidelines. This includes elements of case investigation, contact tracing, health education, quarantine, antiviral prophylaxis, medical surveillance and other public health measures. Results of influenza surveillance are uploaded weekly on the CHP website for public knowledge.

24. To further enhance and integrate the functional and analysis capabilities of computer systems for surveillance of avian influenza and other infections, DH is developing a Communicable Disease Information System (CDIS). The Feasibility Study for the CDIS was completed in October 2006.

(C) Enhance emergency preparedness and response for pandemic influenza

Exercise and drills

25. Effective response requires coordinated intersectoral actions. Regular exercises and drills are being conducted to enhance the emergency preparedness of government departments. Further to the drills conducted last year, DH conducted an exercise (code-named Cypress) on avian influenza, which involved ground movement, in September 2006 in collaboration with the Health, Welfare and Food Bureau, HA and Fire Services Department. Besides, health authorities in Hong Kong, the Mainland and Macao organized a joint exercise (code-named Great Wall) in November 2006 to review the emergency response and notification mechanism of the three places in handling cross-boundary public health emergencies. On animal side, AFCD conducted a poultry culling exercise (code-named Lily) which focus on the overall planning, preparation and implementation of poultry culling operation with Department of Health in October 2006. Similarly, FEHD will carry out a drill in the morning of 12 December 2006 to test the readiness, preparedness and coordination among the departmental staff for the culling operation.

26. In addition, Hong Kong also took part in the Asia Pacific Economic Co-operation (APEC) Pandemic Response Exercise in June 2006. This one-day desk-top exercise, being the first regional exercise on influenza pandemic, aimed to test the emergency response and communication efficiency among the 21 member economies of APEC.

27. Apart from providing guidelines and training to conveyance operators and other related parties on handling of suspected cases of avian influenza on board, DH also participated in the avian influenza exercises organised by the Hong Kong Airport Authority and Shun Tak China Travel Ship Management Limited in March and November 2006 respectively.

Antiviral stockpiling

28. The CHP has been stockpiling antiviral as part of its Preparedness Plan. The antiviral stockpile strategy is designed on the basis of the recommendations of the Scientific Committee on Emerging and Zoonotic Diseases. The current antiviral stockpile level of DH and HA is around 14 million doses. We expect that our target level of about 20 million doses will be in place by 2007. Arrangement has been made with the pharmaceutical companies to deliver the antivirals in batches.

Surge capacity

29. DH is working closely with professional organisations in the recruitment of volunteers from nurses, doctors, pharmacists, allied medical personnel, and social workers in the private sector as well as non-governmental organisations (NGOs). They will be invited to assist the Government when the pandemic strikes to maintain the provision of essential services. Relevant infection control or emergency response training has been provided to those volunteers.

(D) Foster collaboration with the Mainland and international health authorities

30. The Government maintains close communication with overseas health authorities to acquire updated information of avian influenza in the region (e.g. via the WHO, consulates and health ministries of foreign countries). Local expert teams have been deployed where avian influenza outbreaks have occurred to better understand the situation in these places. We also participate actively in global endeavours to share experience with international partners, step up preparedness and explore opportunities for multilateral collaboration within the WHO framework.

31. We also seek to maintain effective communication and cooperation with the Mainland. An arrangement has been in place since 2003 among the Guangdong Province, Macao and Hong Kong to ensure prompt and timely exchange of important information about infectious disease outbreaks and incidents. We signed a "Cooperation Agreement on Response Mechanism for Public Health Emergencies" with the Mainland Ministry of Health and the Macao Special Administrative Region in late 2005. Under the Agreement, in case of cross-boundary serious public health emergencies in the Mainland, Macao or Hong Kong, the three places may form a joint emergency response group to facilitate sharing of intelligence, expertise and resources, thereby furthering prompt response against infectious disease outbreaks. Furthermore, a mechanism has been established whereby the Mainland and Macao communicate with Hong Kong about any sudden surge of infectious diseases with public health significance on a timely basis. We also signed a notification agreement with the Mainland Ministry of Agriculture (MoA) on animal diseases, including avian influenza. MoA will notify us of outbreaks of avian influenza among poultry and other major animal diseases. Since mid 2005, the MoA has issued over 40 such notifications to us. Experience shows that the arrangement under this cooperation agreement has been working well.

PLANNING AHEAD

Fortifying our legislative framework against avian influenza

32. We have conducted a review of the QPDO to bring its legislative provisions in line with the requirements in the new International Health Regulations promulgated by the WHO and to update the legal framework in respect of the performance of our disease prevention and control functions and duties. We aim to introduce amendments to the Ordinance in the 2006-07 legislative session.

Poultry Slaughtering Plant

33. To further reduce the risk of human infection of avian influenza so as to achieve the policy objective of separating humans from poultry, the government has decided to develop a poultry slaughtering and processing plant at Man Kam To Road, Sheung Shui to put together slaughtering activities. With an area of about 15 000 m², the site is currently used as a public carpark and vehicle-repairing depot on short-term tenancies. The site has the advantage of being close to the border and distant from major residential areas. The slaughtering plant will operate throughout the year with a maximum daily slaughtering capacity of 60 000 live chickens and 3 000 pigeons and other small poultry. Upon the completion of the plant, live poultry from the Mainland and local farms will be brought to the plant direct without routing through wholesale poultry market. Sale of live poultry in retail outlets will be prohibited.

34. The plant will be developed by the private sector selected through open tender under a Build, Own, Operate and Transfer (BOOT) arrangement. To avoid any monopolistic situation, the plant operator will be required to reserve sufficient capacity for the slaughter of chickens produced by local poultry farms and to provide poultry slaughtering services for importers of poultry from the Mainland on request.

35. We will conduct an Invitation for Expression of Interest exercise shortly to ascertain market interest and to collate the views of prospective operators on the operational and commercial arrangements for the project. We will invite tender next year and we expect the plant could come into operation in 2009/2010.

36. We will introduce legislation next year to put in place a licensing regime to regulate the management/operation of the plant, and to set out the general requirements including hygiene requirement for the licensed poultry slaughtering plant.

CONCLUSION

37. The widespread occurrence of avian influenza outbreaks in Asia and Europe in the past years indicated that the threat of avian influenza still persists. Hong Kong must maintain our vigilance on this matter. The Government will continue to work with the academia, trade and general public in its efforts to better protect public health.

Health, Welfare and Food Bureau
December 2006

Regulation of Racing Pigeons in Other Countries

PURPOSE

This paper summarizes the regulatory measures on keeping racing pigeons in other jurisdictions.

BACKGROUND

2. On 13 February 2006, in order to further reduce the risk of an avian influenza outbreak in Hong Kong, the regulation to ban backyard poultry keeping came into operation. As the definition of poultry stipulated in the relevant legislation includes, inter alia, pigeons, local pigeon racing activities fell within the ambit of the law. About 200 local pigeon racing owners appealed to the Administration and requested special consideration for keeping racing pigeons. Taking into consideration overseas experience and our own veterinary assessment that the risk of an avian influenza outbreak in pigeons is low, the Agriculture, Fisheries and Conservation Department (AFCD) considered that it would be justifiable for the Government to permit the keeping of racing pigeons - provided that the necessary bio-security requirements, which may be imposed by the relevant authorities from time to time, are complied with. After careful deliberation, the Administration decided that DAFC may, issue Exhibition Licenses under Cap. 139F to cover racing pigeon activities.

3. Since the keeping and exhibition of racing pigeons is different from traditional keeping and exhibition of animals and birds, the license fee for the former was reviewed by the Administration and substantially reduced accordingly. In the course of working out a regulatory regime for racing pigeons with the LegCo, the administration also undertook to conduct a survey on the regulatory measures implemented in other jurisdictions. These measures are summarized below for members' information.

SITUAION IN ASIA

4. In Singapore, pigeon owners are required to take out a license for keeping pigeons and pay a license fee of SGD\$ 50 (HKD \$ 245), which is similar to the permit for keeping “pet poultry” in Hong Kong. It is an offence for the owner to let loose any pigeons in a public place and the maximum penalty for the offence is SGD\$ 500 (HKD \$ 2450). Licensees are also required to ensure that the pigeons will not pose any nuisance to neighbours and members of the public. Most important of all, the pigeons are not allowed to fly outside their lofts for exercise or competition.

5. In Macau, a ban on the keeping of pigeons and any other birds for flying purposes was imposed with effect from 7 March 2006.

6. In Japan, there is no regulatory system in place for keeping racing pigeons.

SITUAION IN USA AND CANADA

7. In the USA, pigeon racing keeping is mainly regulated at local municipal government level. The regulatory measures of a few selected cities are outlined below.

8. In the White Bear Lake City of USA, pigeon owners must take out a license for keeping pigeons for a fee which is USD\$ 30 (HKD \$ 234). Pigeons must be kept at a distance of at least 50 feet away from any place of residence and are not allowed to cause nuisance to its neighbours. A maximum of 100 pigeons are allowed to be kept, and only pigeons belonging to members of the local pigeon racing association are allowed to fly outside.

9. In the city of Beaverton of USA, pigeon owners must obtain a permit for a fee of USD\$ 100 (HKD \$ 780). No owner shall keep or maintain more than 200 pigeons on any one lot, parcel or tract of land in the City, subject to the following conditions:

- a) not more than 50 pigeons may be kept if they are confined in an enclosure located not less than 30 feet from any dwelling;
- b) not more than 100 pigeons may be kept if they are confined in an enclosure located not less than 50 feet from any dwelling;

- c) not more than 150 pigeons may be kept if they are confined in an enclosure located not less than 100 feet from any dwelling;
- d) two hundred pigeons may be kept if they are confined in an enclosure located not less than 150 feet from any dwelling.

10. In the city of Iowa Park, USA, pigeon owners must obtain a permit and the permit fee is USD\$ 5 (HKD \$39). Pigeons must be kept at a distance of at least 50 feet away from any place of residence.

11. In the City of Los Angeles USA, pigeon owners must obtain a permit for keeping pigeons and the fee is USD\$ 50 (HKD \$390). Pigeon lofts must be kept clean and hygienic, and cleansed 3 times per week. Pigeons are allowed to fly freely outside.

12. In the City of Merritt, Canada, pigeon owners must also obtain a permit for keeping pigeons and the permit fee is CAD\$ 10 (HKD \$70).

EUROPE

13. In the United Kingdom, a permit is required for the organization of pigeon races, but no permit is required for keeping the bird itself. There is also no fee charged for the racing permit.

OBSERVATIONS

14. Countries surveyed have adopted different control measures on the keeping of racing pigeons having regard to their particular circumstances, such as population density, etc., and respective risk and public health situations. Control measures for racing pigeons in nearby Asian countries are in general more restrictive than that of Hong Kong. Some jurisdictions have banned the keeping of pigeons altogether, and others forbid pigeon from flying outside their lofts. Most American cities do not allow pigeons to be kept within a certain distance from residential premises.

HONG KONG'S REGULATORY SYSTEM

15. Having considered the relatively low risk of an outbreak of Avian Influenza in pigeons in Hong Kong, the Administration has decided to allow the keeping of pigeons in an enclosed area, provided bio-security measures to prevent contact with wild birds are implemented.

Premises for keeping pigeons will also be inspected regularly to test for any presence of the avian influenza virus. Pigeons are also allowed to fly outside for exercise and competition purposes provided they do not cause any nuisance to their human neighbours. We believe that our prevailing regulatory regime can strike a balance between the need to protect public health and environmental hygiene, as well as to accommodate the need of pigeon racing activities in Hong Kong as far as possible.

Agriculture, Fisheries & Conservation Department
December 2006

The Government Influenza Vaccination Programme (2006/07)

Target Groups

The Scientific Committee on Vaccine Preventable Diseases (SCVPD) under the CHP has formulated a set of recommendations for certain target groups to receive influenza vaccination for the influenza season of 2006/07. The SCVPD recommendations do not prescribe how influenza vaccinations are to be given by various healthcare providers. Target groups recommended for influenza vaccinations (2006/07) by the SCVPD include:

1. Elderly persons living in residential care homes
2. Long-stay residents of institutions for the disabled
3. Elderly persons aged 65 years or above
4. Persons with chronic illness
5. Health care workers
6. Poultry workers
7. Children aged 6 to 23 months
8. Pregnant women