For information on 17 June 2006

Legislative Council Panel on Health Services and Panel on Food Safety and Environmental Hygiene Preparedness for Avian Influenza Outbreak in Hong Kong

PURPOSE

This paper updates Members on the actions taken by Government on preparedness for avian influenza outbreaks in Hong Kong following receipt of a notification of a suspected and subsequently confirmed case of human avian influenza (H5N1) infection in Shenzhen.

BACKGROUND

- 2. An outline of Hong Kong's preparedness for influenza pandemic is set out in the paper for the Joint Panel meeting held on 5 November 2005 (LC Paper No. CB(2)294/05-06(01) at the Annex). On 13 June 2006, the Centre for Health Protection (CHP) of the Department of Health (DH) received notification from the Ministry of Health of a suspected human avian influenza case in Shenzhen. The case involved a 31 year old male patient, with symptoms which started on 3 June 2006 and was subsequently hospitalized in the early hours of 10 June 2006. Before the onset of symptoms, the patient had visited a wet a market where live poultry were sold. On 15 June 2006, following completion of further laboratory testing, the Ministry of Health notified CHP that the case was a confirmed H5N1 infection.
- 3. Notwithstanding that the suspected case had yet to be confirmed, in consideration of the proximity of Shenzhen, a team of six experts from CHP, Hospital Authority (HA) and the Agriculture and Fisheries and Conservation Department (AFCD) visited Shenzhen on 14 June 2006. The team met the Shenzhen experts who were directly involved in the case management to obtain a first hand understanding of

the clinical conditions and the epidemiology of the suspected case, as well as the respective investigation and control measures undertaken by the Shenzhen authorities.

4. In respect of live poultry, the Administration announced on 14 June 2006 that should the case be confirmed, the supply of live poultry, day-old chicks and pet birds from Guangdong province would be suspended for 21 days. The suspension was implemented on 16 June 2006, following receipt of notification of confirmation of the case. However, the supply of Mainland chilled and frozen poultry meat was not affected. The Food and Environmental Hygiene Department (FEHD) and the AFCD met the trade and briefed them on the details of the arrangement on 16 June 2006. This arrangement gives the relevant authorities time to conduct full investigation. If no new human cases are found and that no avian influenza outbreaks have occurred in the chicken farms in Guangdong and Shenzhen in the suspension period, the import of live poultry and birds will be resumed.

Avian influenza surveillance and prevention measures

5. Hong Kong is at the Alert Response Level¹, we have implemented the relevant response measures in respect of disease surveillance, investigation and control, antiviral stockpile, vaccination for seasonal influenza, port health surveillance, and risk communication. Notwithstanding that the case in question was a suspected human case not yet confirmed, given that Shenzhen is located very close to Hong Kong with very heavy daily cross-border traffic, the Health Welfare and Food Bureau found it prudent to take early steps to review and step up, where appropriate, surveillance and public education against avian influenza immediately after receipt of the notification on 13 June 2006. The Interdepartmental Action Coordinating Committee also met on 15 June 2006 to review progress and plan the work ahead. The following disease surveillance and public education measures have been or will be taken.

Surveillance Measures

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¹According to the Preparedness Plan for Influenza Pandemic, there are three response levels: Alert, Serious and Emergency.

- 6. Enhancement of the on-going surveillance measures would be effective in early identification of possible avian influenza infection. In response to the case in Shenzhen, the CHP has informed all doctors in Hong Kong of the latest situation and reminded them to report suspected avian flu infections. The CHP has also contacted public and private hospitals to enhance surveillance of suspected human avian influenza infection.
- 7. The CHP has activated an Enhanced Surveillance Programme in collaboration with the HA and the private hospitals. All public and private hospitals have to report any patients with pneumonia of unexplained etiology and had stayed in an H5N1 affected area within seven days prior to disease onset. An affected area/country refers to a place where human H5N1 infection had occurred in the past six months.
- 8. Public hospitals have also set up segregated zones in strategic clinical areas, such as Accident and Emergency Department and general out-patient clinics, to monitor and manage patients with infection symptoms.
- 9. To enhance import control, the FEHD has increased the number of imported live poultry sampled for rapid tests of H5 virus by 50%. At the retail level, FEHD will strengthen inspection and enforcement action. Live poultry retailers are reminded of the need to observe operational guidelines to prevent avian influenza.
- 10. In respect of port health measures, DH will continue to maintain temperature screening for in-bound travelers at all immigration control points. Travelers who are symptomatic and with history of possible exposure to the avian flu virus would be referred to hospitals for follow up.
- 11. The Customs and Exercise Department (C&ED) has stepped up its surveillance work at all the border control points to combat illegal import of poultry into Hong Kong. Frontline officers remain vigilant. Adopting a risk management approach, inspections of suspected cargoes and passengers' baggage have been intensified at all the border control points. Since October 2005, the Department has embarked on a special

operation with special focus on combating illegal import of poultry and birds. The Department will continue to undertake the operation. The Department will also conduct joint enforcement actions with its counterparts in the Mainland from time to time to combat poultry smuggling at the border.

12. AFCD has stepped up inspection on local poultry farms and has issued advisory letters to remind farmers to remain vigilant on their farm bio-security measures. AFCD has also issued advisory letters to fishermen to remind them not to bring any live poultry, live birds or bird carcasses into Hong Kong. The Department will step up inspection on backyard poultry farms for the next three weeks and will increase cleansing activities at the Cheung Sha Wan Poultry Wholesale Market. Moreover, AFCD will continue to monitor the H5 virus in dead wild birds.

Public education

- 13. Maintaining free and transparent information flow is an effective tool to build trust, allay anxiety and empower the public to play an active role in protecting themselves. We have taken steps to intensify the exposure of Announcements in Public Interest (APIs) regarding preventive measures on TV, radio and at the hospitals and clinics under HA to remind the public of the need to remain vigilant and to maintain good personal and environmental hygiene.
- 14. DH will continue to disseminate health advice and useful information through various channels including the mass media, and by means of their 24 hour telephone information system, posters, pamphlets, VCDs and outreach operations targeted at selected groups, etc.
- 15. DH has also stepped up the distribution of health information leaflets to travelers and broadcast health messages at immigration control points. It continues to upload updated information onto the Travel Health Service Website to enhance public awareness of the preventive measures. In respect of the recent case in Shenzhen, the Department will also enhance education to traveling public who commute between Hong Kong and Shenzhen by coaches or other modes of

transportation.

16. DH has informed the Hong Kong Travel Industry Council about the present situation and provided health advice to travel agencies accordingly.

CONCLUSION

17. We will continue to follow up with the health departments in Shenzhen and Guangdong regarding the confirmed case, and closely monitor both the local and global situation in connection with avian influenza to ensure that the necessary preparedness measures are well in place.

Health Welfare Food Bureau 16 June 2006

For discussion on 5 November 2005

Legislative Council Panel on Health Services and Panel on Food Safety and Environmental Hygiene Preparedness for Influenza Pandemic

PURPOSE

This paper updates Members on Government's preparedness for influenza pandemic.

BACKGROUND

- 2. It is important to distinguish between seasonal influenza, avian influenza and influenza pandemic.
- 3. Seasonal influenza is NOT the same as avian influenza. It is caused by subtypes of influenza virus that are already in existence among people. In Hong Kong, it is more prevalent in periods from January to March and from July to August every year. For healthy individuals, seasonal influenza is usually self-limiting with recovery in two to seven days. If one has not come into close contact with infected live poultry or birds or their droppings, there is no need to be overly alarmed of acquiring avian flu.
- 4. Avian Influenza mostly occurs in birds and the risk of avian flu in poultry and migratory birds remains high. Although there have been cases of avian flu in human, there is so far no evidence of efficient transmission. Most human cases reported were the result of contact with infected poultry or contaminated surfaces. Avian influenza in human causes a wide range of flu-like symptoms with or without diarrhoea which may progress rapidly to respiratory failure, multi-organ failure and even death.
- 5. Influenza pandemic occurs roughly every 10 to 40 years but the time of occurrence is unpredictable. It emerges as a result of influenza virus undergoing major genetic changes. Influenza pandemic is usually associated with a great number

of cases, higher severity of illness, a higher death toll and consequently greater social and economic disruption. In the light of the outbreak of avian influenza in birds and poultry population in different parts of the world, there is a concern of an avian flu induced influenza pandemic.

- 6. The World Health Organization (WHO) has advised that there is no influenza pandemic anywhere in the world at this stage, although vigilance and surveillance needs to remain high.
- 7. When a pandemic strikes, it may not be possible to totally eliminate the risk of infection, but one can reduce the risk by stepping up hygienic practices, avoiding crowded places, wearing masks if one takes care of the sick, visits a clinic or develops flu like symptoms, and paying attention to and complying with the guidelines issued by the government in respect of travelling, port health control and suspension of public events etc.

POLICY OBJECTIVES

- 8. Our policy objectives include the following
 - (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.

Current Situation in relation to Avian Influenza

H5N1 in Poultry Population

9. In the poultry population in Hong Kong, since the last outbreak in 2003, we have adopted a series of preventive measures targeting at risk reduction, including vaccination of local and imported chicken, tightened bio-security measures in local farms, segregation between poultry and waterfowls and enhanced surveillance in both wholesale and retail outlets. Since 2004, although there have been outbreaks of avian

influenza in the poultry and wild bird population in Asia, Hong Kong has remained avian flu free. The preventive measures we have taken in respect of avian influenza outbreaks among local live poultry are detailed in the Information Paper submitted to the Panel on Food on 31 October 2005 (LC Paper No CB(2) 199/05-06(01), copy at Annex A).

10. It is noted that until recently, the outbreaks were restricted to Indonesia, Vietnam, Thailand, Lao PDR, Cambodia and Mainland China. Since late July 2005, H5N1 has expanded in a north-westerly direction, and both Russia and Kazakhstan have reported outbreaks in poultry and wild birds. Mongolia also reported the death of birds in early August 2005. Confirmation of H5N1 virus in Turkey and poultry death in Romania in October 2005 indicated spread to new areas. These events raise the possibility that some migratory birds probably act as carriers for the transport of avian influenza virus over longer distances.

H5N1 in Human

11. As at 28 October 2005, the WHO has reported a total of 121 human cases of avian influenza H5N1 infection (62 deaths), including 91 cases (41 deaths) in Viet Nam, 19 cases (13 deaths) in Thailand, 4 cases (4 deaths) in Cambodia and 7 cases (4 deaths) in Indonesia since January 2004.

PREPAREDNESS ACTIVITIES

- 12. In January 2005, Government issued its Preparedness Plan for Influenza Pandemic. This Plan which was developed with reference to the WHO's Global Influenza Preparedness Plan envisages a three-tiered Emergency Response Level (Alert, Serious and Emergency) with corresponding lines of command and response measures to cater for different possible outbreak scenarios. A copy of the Preparedness Plan is at Annex B. In view of the outbreaks among poultry population as well as human cases of avian influenza in places outside Hong Kong, we have activated the Alert Response Level in early 2005.
- 13. In terms of preparedness to safeguard heath of the community, we have four strategic directions-
 - (a) reduce risk of human infections;
 - (b) early detection and containment of pandemic influenza;
 - (c) enhance emergency preparedness and response for pandemic influenza; and
 - (d) foster collaboration with the Mainland and international health authorities.

(A) Reduce risk of human infections

Reduce infection risk from animals

- 14. Although Hong Kong has remained avian flu free since 2004, we need to remain vigilant and to minimise the risks of the spread of H5N1 virus among poultry and birds and the transmission of avian influenza from poultry to human. Both Agriculture, Fisheries and Conservation Department (AFCD) and the Food, Environmental and Hygiene Department (FEHD) has stepped up surveillance activities among the poultry population in farms, wholesale market and retail outlets, pet bird shops and parks in Hong Kong. Import control, including the daily import ceiling of 30,000 live chicken and anti-smuggling measures on live birds and poultry meat, will continue to be enforced vigilantly. Strict enforcement actions will be taken against the live poultry trade for breach of special conditions targeted at the prevention of avian influenza.
- 15. In this regard, Members may wish to know that owing to the decline in the local demand for live poultry in the recent weeks, there were more frequent occurrence of unsold chicken accumulated in the wholesale market. In some occasions, the total number of unsold chicken amounted to a few thousands in the wholesale market thus posing a great threat to the public health. The Administration is closely monitoring the situation and would take necessary actions to eradicate all risk factors.
- 16. The Department of Health (DH) has also organized infection control training for AFCD workers and other staff who may be involved in helping the culling actions including members of the Auxiliary Medical Services.

Publicity and public education activities

- 17. Maintaining free and transparent information flow is an effective tool in reducing public anxiety and misunderstanding and would allow the public to play an active role in protecting themselves. We adopt proactive risk communication strategies. Information on seasonal influenza, avian influenza and influenza pandemic preparedness as well as preventive and response measures, are regularly disseminated through television, radio, health education telephone hotline, outreach programmes, seminars and distribution of publicity materials. Furthermore, a dedicated influenza page on the Centre for Health Protection (CHP) and Hospital Authority websites has also been set up.
- 18. More than 10 forums have been organized by CHP since March 2005 for different target groups, including government departments, general public, healthcare professionals, non-governmental organizations, Chinese Medicine Practitioners,

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social workers and community leaders, with the aim to raise community awareness and gear up their preparedness. In the light of concerns over the development of avian flu outbreaks in neighbouring areas, DH has also organised talks and seminars to the tour group coordinators, disseminate travel health messages and updated its travel health website. Special efforts are made to reach out to ethnic minority groups including migrant workers. Focussed sector specific briefings on sectoral contingency preparedness and response will also be held in the coming months.

Preparedness in the healthcare setting

- 19. The Hospital Authority (HA) has put in place its contingency plan for avian influenza which includes enhanced surveillance and notification, laboratory and diagnostic support, hospital and bed mobilization plan, infection control strategy, stockpiles of 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 communication ambassadors, 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.
- 20. An Infectious Disease Control Training Centre, jointly developed by DH and HA, has been set up to identify and develop suitable training programmes on infection control and infectious disease. To prepare for the possibility of an upcoming pandemic, it has organised infection control training for healthcare workers in public and private sectors, selected government departments and stakeholders in the community.

Influenza vaccination

- 21. 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.
- 22. The 2005/06 Influenza Vaccination Program targets on a number of high risk groups set out in Annex C. 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 will commence on 7 November 2005. 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

23. DH's Public Health Laboratory Centre (PHLC) is one of the WHO's reference laboratories for diagnosis of Influenza A (H5) infection. To aid disease diagnosis, the PHLC provides confirmatory testing for influenza to both public and private sectors. The latest WHO guideline on laboratory diagnosis recommends the use of molecular technology by RT-PCR test for rapid and specific virological diagnosis of human influenza A (H5N1) infections. A network of six laboratories namely Public Health Laboratory Centre, Queen Mary Hospital, Prince of Wales Hospital, Tuen Mun Hospital, Princess Margaret Hospital and Queen Elizabeth Hospital would be activated to provide PCR testing for influenza A (H5N1) once the Serious Response level is declared.

(B) Early detection and containment of pandemic influenza

24. CHP has developed a sensitive influenza surveillance network to monitor local and global influenza activities. In December 2004, Influenza A(H7) and Influenza A(H9) were added to the list of infectious disease in the First Schedule to the Quarantine and Prevention of Disease Ordinance, making them statutorily notifiable diseases in Hong Kong in addition to Influenza A(H5). The CHP has issued reporting criteria to all registered medical practitioners in Hong Kong and provides laboratory support for confirmation/ exclusion of the diagnosis. Surveillance systems for febrile respiratory illness have been expanded to cover elderly homes and childcare centres. To facilitate reporting, online reporting has been launched since 1 Upon receiving notification of a suspected case, CHP will conduct March 2005. case investigation, contact tracing, health education, medical surveillance and other public health measures. Quarantine and antiviral prophylaxis may also be implemented for contacts of avian influenza patients. CHP also maintains close monitoring of the influenza situation locally through collaboration with HA and private hospitals, GPs on sentinel surveillance, laboratory surveillance, investigation of influenza-like illness outbreaks and monitoring of hospital admissions data. Results of influenza surveillance are uploaded weekly on the CHP website for public knowledge.

25. An effective surveillance system has to be supported by a strong information system. DH is developing a Communicable Disease Information System which will enhance and integrate the functional and analysis capabilities of computer systems for disease surveillance.

(C) Enhance emergency preparedness and response for pandemic influenza

Exercise and drills

26. 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 has conducted a table-top exercise on avian influenza in July 2005 and FEHD conducted an in-house culling drill in September 2005. An exercise on avian influenza/ influenza pandemic will also be held in November 2005.

Antiviral stockpiling

- 27. 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 3.5 million doses. We seek to maintain a target level of about 20.5 million doses. Arrangement has been made with the pharmaceutical companies to deliver the antiviral in batches. By early 2006, we will have an additional 4 million doses of antiviral.
- 28. Government does not recommend members of the public to buy antiviral to keep at home. It should be noted that using antiviral without doctors' professional advice greatly increases the chance of antiviral resistance emerging. We will provide antiviral to treat infected patients.

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. 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 will be provided to those volunteers.
- 30. All HA cluster hospitals have formulated their detailed staff and resource (including beds) mobilization plans according to HA overall pandemic plan. There

is a plan for staged mobilization of hospitals for admission of suspected and confirmed avian influenza patients. Princess Margaret Hospital has been designated as the first hospital to admit the initial batch of 20 patients, to be followed by seven other hospitals, one from each cluster. In the situation of overwhelming situation of pandemic with large number of hospitalized patients, additional wards in acute hospitals will be further deployed. Designated clinics in 18 districts would be set up to triage and treat patients.

Population- based cross sectoral approach

- 31. Fortifying the preparedness of the health sector alone would not be adequate, the public health preparedness cut across different Government departments and agencies. We have convened interdepartmental meetings involving more than 30 Departments and agencies to review our readiness to fight avian influenza. Some of the major initiatives/ undertakings of government departments and agencies in relation to disease prevention and control are at Annex D. We would continue to be proactive in enhancing such cross-sectoral collaboration and will shortly issue an action checklist to disseminate cross-agency efforts in preparedness.
- 32. Moreover, we arranged a briefing session for over 50 Consulates General or their representatives in Hong Kong on 31 October on Hong Kong's preparedness for influenza pandemic.

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

- 33. The Government maintains close communication with overseas health authorities, in particular the WHO, consulates general and health ministries of foreign countries. Hong Kong's public health experts have visited Thailand and Vietnam where avian influenza outbreaks have occurred to better understand the situation in these places. In recent avian influenza outbreaks in Indonesia, DH has obtained and verified disease information with WHO and the Indonesian Consulate General. 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.
- 34. We also seek to maintain effective communication and cooperation with the Mainland and other places. For example, an agreement 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.

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- 35. At present, Mainland and Macao have developed a mechanism to communicate with Hong Kong about any sudden surge of infectious diseases with public health significance on a timely basis. Building on this system, last month we have signed a "Cooperation Agreement on Response Mechanism for Public Health Emergencies" with the Mainland Ministry of Health and the Macao Special Administrative Region. 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 infections diseases outbreaks.
- 36. Besides, CHP has also established training links with their counterparts in the United Kingdom, Australia and Mainland.

Fortifying our Legislative Framework Against Avian Influenza

- 37. The above preparedness notwithstanding, at present under the Prevention of the Spread of Infectious Diseases Regulations (the Regulations), the Director of Health does not have the explicit power to prohibit or empower certain public officer to stop and detain persons suffering from or having been exposed to the risk of, or are avian influenza [Influenza A (H5), Influenza A(H7) and Influenza A(H9)] seeking to leave Hong Kong to control the spread of the disease. The Regulations also does not provide explicit authority for the Director of Health to empower persons authorised by him to conduct temperature checks or medical examination on any person arriving in or leaving Hong Kong for the purpose of ascertaining whether that person is likely to have been infected with the disease. is noted that in the case of SARS, an amendment was made to the Regulations to explicitly empower health officers and authorised officers to prohibit those suffering or have been exposed to SARS from leaving Hong Kong and to conduct temperature and medical check on persons leaving or arriving in Hong Kong in respect of SARS. To put matters beyond doubt and as a matter of legal preparedness, we will soon be proposing amendments to the Regulations to extend the powers of the Director of Health.
- 38. However, it should be noted that not all avian influenza patients have fever throughout the entire stage of their illness. Conducting temperature screening albeit it has limitations, could still assist in screening out some cases of avian influenza at the border at times when there are signs of influenza, thereby enabling appropriate medical examination and treatment be carried out. We would continue our risk assessment and closely monitor developments and activate the temperature checks at all border control points as and when required.

Health, Welfare and Food Bureau November 2005

For Information on 31 October 2005

LegCo Panel on Food Safety and Environmental Hygiene

Preventive Measures Against Avian Influenza Outbreaks Among Local Live Poultry

Purpose

This paper sets out the measures taken by the Administration to prevent avian influenza outbreaks among local live poultry.

Introduction

- 2. Since 1998, Hong Kong has implemented a series of preventive and surveillance measures targeting the virus at source and its potential carriers, i.e. live poultry and wild birds, to guard against avian influenza outbreaks. These measures include:
 - (1) Valid import documentation requirement for all imported birds;
 - (2) Compulsory vaccination for all imported and local chickens;
 - (3) Regulation of local farms with stringent biosecurity measures;
 - (4) All chickens imported from the Mainland are required to come from registered farms and accompanied by health certificates;
 - (5) Compulsory segregation of waterfowl and other poultry;
 - (6) Implementing market rest days in wholesale markets and retail outlets to allow regular cleansings;
 - (7) Tightened hygiene requirements for wholesale markets and retail

outlets; and

(8) Comprehensive surveillance of human influenza and avian influenza that covers, inter alia, wild birds and pet birds sold in the market.

Recent Avian Influenza Outbreaks Outside Hong Kong

- 3. Since December 2003, a total of ten countries or places in Asia have reported avian influenza outbreaks. Recent reports also showed that avian influenza has affected parts of Europe. Under the circumstances, Hong Kong has followed the guidelines of World Organization for Animal Health (OIE) and stopped processing applications for import and re-export of poultry meat and live poultry from countries affected by avian influenza.
- 4. In view of the recent spread of avian influenza around the world, we have implemented or planned to implement the following measures to step up precautionary measures to guard against outbreaks of avian influenza amongst local live poultry:
 - (1) Reduce the current maximum licence capacity of local poultry farms from 3.7 million chickens to 2 million;
 - (2) Introduce a voluntary surrender scheme for live poultry farmers, wholesalers, retailers and transporters to encourage them to surrender their licences / tenancies and cease operation permanently; and
 - (3) Preparing for the establishment of a regional slaughtering hub in Hong Kong; and
 - (4) Other measures that strengthen our defence against avian influenza.

Contingency Measures in Case of Avian Influenza Outbreak in Hong Kong

5. As announced last year, we shall cull all chickens in Hong Kong in the event of two confirmed H5N1 cases in local poultry farms and thereafter, to

terminate the local live poultry trade on compulsory basis. We also announced our plan to cull all live poultry in Hong Kong's retail markets if there are two confirmed H5N1 cases in our retail markets.

Biosecurity Measures for Live Poultry Farms

6. According to *Public Health (Animals and Birds) Ordinance* (Cap 139), all livestock keeping and related activities in Hong Kong are regulated by the licences issued by the Agriculture, Fisheries and Conservation Department (AFCD). For live poultry rearing, the AFCD imposes additional licensing conditions that require these farms to comply with specified biosecurity requirements (see Annex), including bird proof facilities and regulation on the movement of humans, vehicles and supplies amongst farms. Since 2004, two live poultry farms have had their licences revoked for breaching the biosecurity requirements.

Security Measures for Pet Birds

7. The ACFD regularly inspects pet bird shops to ensure their compliance with licensing conditions and to prevent avian influenza. Over 220 samples of bird droppings are collected every month from these bird shops to test for the presence of high pathogenic avian influenza (HPAI). The results have all been negative.

Pet Shops

8. Licences for pet shops are issued by the AFCD. The department would step up inspections to ensure compliance with licensing conditions, a satisfactory environment of the premises, health and welfare of animals as well as to detect any clinical symptoms of infection. As part of its avian influenza monitoring programme, the AFCD would also take samples of animal droppings for tests. All 5,322 samples collected in 2005 have tested negative.

Import of Pet Birds

- 9. Most of the birds (including pet birds) imported into Hong Kong require special permits issued by the AFCD. The department would only issue permits to birds from countries that show no signs or are not suspected¹ of being infected with HPAI. Moreover, the pet birds imported into Hong Kong must comply with the following conditions:
 - (1) the birds to be imported must undergo a 14 day quarantine before export;
 - (2) the birds must be tested for H5 and H7 during the quarantine period before shipment;
 - (3) the birds must be examined and certified to be free of infectious diseases by official veterinary officials before shipment;
 - (4) on arrival in Hong Kong, birds from countries or places that had a previous history of avian influenza but have since been declared free of avian influenza by the OIE for taking a stamping out policy; or from countries adjacent to infected places are subject to hold and test at AFCD facilities. They would not be released until a negative result is confirmed; and
 - (5) pet birds from Mainland must come from two registered farms in Guangdong Province. These farms have been inspected by AFCD officers. The birds must be quarantined and tested five days before shipment and accompanied by health certificates detailing the test results. On their arrival, each and every consignment of birds will be tested by AFCD officers.
- 10. In 2004, a total of 24 consignments (50 birds in all) of birds that were imported without permits were detained and destroyed.

¹ "Suspected" covers cases where there are suspicious deaths under investigation in that country.

Surveillance Measures for Wild Birds

- 11. The surveillance measures of AFCD include continuous inspection and tests of samples of imported, local and wild birds.
- 12. Precautionary measures include surveillance of wild birds and testing samples of wild birds' droppings. Staff of AFCD have been conducting daily surveillance of wild birds in Mai Po Nature Reserve to detect any abnormalities. On discovering dead birds, they would immediately follow up and conduct tests to ascertain whether the deaths are caused by avian influenza.
- 13. In 2004, the AFCD and The University of Hong Kong have jointly tested about 14,800 samples of wild birds and birds from parks for H5 avian influenza virus. Between January and September 2005, about 7,000 bird samples were tested. All the wild birds' droppings tested negative for H5 avian influenza. In fact, the last positive test result for H5 avian influenza in wild bird dates back to the Chinese pond heron carcass collected from Lok Ma Chau in January this year
- 14. The AFCD has posted a notice at the entrance of Mai Po Nature Reserve reminding the public to maintain good personal hygiene; keep away from wild birds; avoid contact with wild birds, their nests, eggs, shed feathers and droppings. Any person who has touched birds or their droppings in the Reserve should cleanse with their own alcohol based hand sanitizers or disinfectant wet wipes.

Health, Welfare and Food Bureau October 2005

個別農場生物保安規條

Biosecurity Requirements for Individual Chicken Farms

農場編號 LKXXX YYY 先生

個別農場生物保安規條是依據該農場的生物保安計劃問卷結果而訂定。本規條是飼養牌照規定的部份內容。

Based on the biosecurity questionnaire result for the captioned farm, the following individual biosecurity requirements are enacted. The requirements form part of the licence conditions.

生產區 (Production Area(s))

本場可分為四個生產區,即如附圖中標記為黃色的區域。並參考附圖中標記為粉紅色的相對位置,以油漆劃界和懸掛告示牌的方式將生產區與非生產區明顯分別。

Four production area(s) shaded in yellow on the attached map can be designated on this farm. The demarcations between the production area(s) and the non-production area(s), marked in pink on the map, must be clearly visible to all people on farm through the use of painted lines on the ground and notice signs.

鞋履消毒盤必須設於雞隻飼養籠舍(以下簡稱雞舍)的每一出入口。其內 消毒劑須每日更新。

Footbaths, filled daily with fresh appropriate disinfectant, must be installed at every chicken shed entrance.

生產區內須設有洗手盤等清潔用具。

Proper hand-washing facilities (basin, soap, towel...etc) must be available at every shed entrance.

雞舍內不得留有任何農具、雜物和垃圾。

No farm equipment, sundries or garbage should be left inside the sheds.

雞隻不得於生產區雞舍以外的地方飼養。

Chickens must not be housed anywhere else other than inside the sheds in the production area(s).

農場人流管制 (Human Movement Control)

任何人士必須消毒鞋履後,才可進入農場。

Footwear must be properly disinfected before entering the farm.

任何人士當日進入生產區前,必須事先洗澡。在生產區內,必須穿著場內專用的乾淨特定工作服及配戴清潔無損的手套。

Everyone should have a shower, put on designated protective clothing and

wear gloves before entering the production area(s)

農友及場內工作人員曾接觸農場以外的其他禽鳥,當日不得進入生產 區。

Staff members who have been in contact with any birds outside the farm must not enter the production area(s) on the same day.

禽畜廢物收集商人員不准進入生產區。並須在指定地點收集冀料。

Workers of the livestock waste collection service contractor must not enter the production area(s). Waste must be collected at a designated area near the farm gate away from the production area(s).

訪客或運輸工人非必要時不得進入生產區。所有進入生產區的人員必須 穿著全套的保護性衣裝。

Tradespersons and visitors must not be allowed to enter the production area(s) unless it is totally necessary and they must wear full protective clothing.

必須記錄所有訪客及運輸工人的姓名、到訪目的、聯絡電話、到訪日期 及車牌號碼。

The name, telephone number and vehicle registration number of all tradespersons and visitors and their date and reason(s) of visit must be properly recorded.

車輛管制 (Vehicle Control)

進入農場的車輛必須經過消毒。

Vehicles entering the farm must have their wheels and any contaminated areas thoroughly disinfected.

飼料運抵貨倉後,飼料運輸車經過的農場範圍地面,須要消毒。

After feed delivery to the storage shed, the pathway that is adjacent to the production area(s) must be disinfected after the delivery of feed.

禽畜廢物收集商車輛不得進入農場範圍。

Vehicles of the livestock waste collection service contractor must not enter the farm premises.

進出農場的物資管制 (Control of Movement of Materials)

只可使用已經妥善清洗消毒過的運輸膠籠。

Only properly cleaned and disinfected plastic transport cages shall be used. 農場不得存留或管有任何屬於家禽批發商會的運輸膠籠(包括標有「漁農處」字樣的運輸膠籠)或用以運載雞隻至長沙灣臨時家禽批發市場的運輸籠。

No transport cages (including cages with a "漁農處" mark) owned by the poultry wholesalers associations or used for transporting chickens to the Cheung Sha Wan Temporary Wholesale Poultry Market should be kept on the farm premises.

農場只准引入來自漁農自然護理署認可孵化場的雛雞。

Chicks must be introduced only from AFCD recognised hatcheries.

所有進出農場的雞隻和蛋必須附同漁農自然護理署簽發有效的批准書。該批准書必須保留以供漁農自然護理署檢查,直至該批雞隻和蛋不再存在於農場內。在運抵農場後的24小時內,向漁農自然護理署申報運送日期、數量、雞隻日齡。

Chickens and eggs moved in or out of the farm must be accompanied by a valid permit issued by AFCD. This permit must be kept for AFCD inspection until the relevant batch of chickens and eggs are no longer present on the farm. The licensee must report the movement date, number and age of the introduced chickens to AFCD within 24 hours after their arrival.

雞花盒應視為污染物資,在處理過程中,必須穿戴手套。手套用後必須清洗消毒。

Boxes used for day-old chickens shall be seen as potential sources of contamination. Protective gloves, properly cleaned and disinfected after each use, must be worn while handling these boxes.

在收集糞料後,衛龍收集箱的表面須先行清潔、消毒及抹淨後,才可送回場內重新使用。

After each waste collection, the outer surface of all faecal waste bins from Way Lung Co. shall be properly disinfected, cleaned and wiped dry before next use.

任何外來物資,進入農場前必須完全消毒。

Off-farm materials must be thoroughly disinfected before entering the farm.

動物及禽鳥防預(Control of Wild Birds and Other Animals)

犬貓不得進入雞舍。

Dogs and cats are not allowed to enter the sheds.

必須執行有效的除蟲滅鼠計劃。

Effective pest control shall be conducted routinely as part of the farm management system.

雞舍必需有防鳥設施。若使用防鳥網,其網眼不可大於高度2吋乘闊度3吋。

All the sheds must have bird-proof facilities. If bird-proof nets are used, the mesh holes shall not be more than 2 inches in height and 3 inches in width.

農場管理 (Farm Management)

農場人員只可在被委派的特定雞舍或農舍中工作。

Farm staff shall work only in their designated sheds or other work area(s). 飼養籠具和飼料糟必須為金屬或塑膠造成。

All chicken cages and feed troughs must be made of metal or plastic.

不同批次的雞隻必須清楚分隔至少六呎。每批雞隻以統進統出方式管理。

Different batches of chickens must be housed not less than 6 feet apart. The management of each batch of chickens must be on an all-in, all-out basis.

雞隻遷出後,雞舍必須消毒及空置七天,才可重新使用。

Any vacated sheds must be thoroughly disinfected and left unoccupied for at least 7 days prior to introducing new batches of chickens.

所有雞舍必須備存雞隻進出、死亡、防疫及用藥記錄。

An accurate, up-to-date record must be kept for any chicken movements, vaccinations, medications and mortalities on a shed basis.

每批出售的雞隻均需存有仔細精確的銷售記錄。該記錄須保留在農場至少12個月,並在本署人員要求時提供查閱。

A detailed, accurate sale record must be kept for at least 12 months for each batch of chickens. This record must be made available to the Department at any time on request.

在農場內自行孵化雛雞,必須精確記錄每批雛雞的孵化日期、數目、孵化率。並在24小時內通報漁農自然護理署。

If there are chicks hatched inside the farm, the licensee must keep a detailed, accurate hatching record, including the information on hatching date, number of hatched chicks and the hatching rate. The relevant information should be reported to AFCD immediately.

丢棄死雞前,必須灑上消毒粉,並包封於兩層膠袋內。

Any dead chickens must be sprinkled with disinfectant powder and completely sealed in plastic bags before disposal.

任何人士若曾進入屍體收集站,當日不准重回農場生產區。

Any persons having entered the carcass collection area must not return to the production area(s) on the same day.

當死亡率超出下述水平時,必須立刻通知本署。未經漁農自然護理署批准下,不得丟棄死雞。

在24小時內,同批超過30日齡雞隻中,有1%以上的雞隻死亡

在7天內,同批超過30日齡雞隻中,有4%以上的雞隻死亡

在7天內,同批滿30日齡或以下雞隻中,有15%以上的雞隻死亡

When mortality rates exceed the levels shown below, the licensee must notify the AFCD immediately, and the carcasses must not be disposed without the permission from the AFCD.

Within a 24 hours period, there is a mortality rate of more than 1% of chickens aged more than 30 days in any given batch.

Within a 7 days period, there is a mortality rate of more than 4% of chickens aged more than 30 days in any given batch.

Within a 7 days period, there is a mortality rate of more than 15% of chickens aged at or less than 30 days in any given batch.

按廠商的使用濃度建議,每日更新消毒劑。

The licensee must ensure the chosen disinfectants used on the farm are effectively applied according to the recommendations given by the manufacturer(s) and refreshed daily.

井口、水箱及其他儲存雞隻飲用水之器皿必須蓋好。

All water tanks, wells and containers for storing chickens' drinking water must be properly covered.

持牌人有責任確保農場內人員遵守此生物保安的各項規條。

It is the licensee's responsibility to ensure that all on-farm personnel, including workers, residents and visitors comply with all the listed individual biosecurity requirements.

塵埃及氣流管制 (Dust and Aerosol Control)

在本文件製作時,因農場大門並無面向公共行車道,亦不與其他農場鄰接,故不必設置圍牆或實質屏障。

No solid partitions at the boundaries are required as there are no shared boundaries between the captioned farm and other farms and no public driveways in front of the farm gate at the time this document was prepared.

備註:

Remarks:

Framework of Government's Preparedness Plan for Influenza Pandemic

Hong Kong Government Response Systems

The Government's plan includes a three-level response system (Alert Response Level, Serious Response Level and Emergency Response Level). These levels are based on different risk-graded epidemiological scenarios relevant to Hong Kong, and each of them prescribes a given set of public health actions required. They are designed to match with the World Health Organization (WHO)'s guideline¹ for pandemic influenza planning.

Alert Response Level

- 2. Alert Response Level depicts the scenarios of confirmation of highly pathogenic avian influenza (HPAI) outbreaks in poultry populations **outside** Hong Kong; confirmation of HPAI **in** Hong Kong in imported birds in quarantine, in wild birds, in recreational parks, in pet bird shops or in the natural environment. Upon the advice of the Director of Agriculture, Fisheries and Conservation (DAFC), the Secretary of Health, Welfare and Food (SHWF) will activate this Response Level.
- 3. Another scenario depicts confirmation of human case(s) of avian influenza **outside** Hong Kong. SHWF will activate this Response Level upon the advice of Director of Health (DoH).

Serious Response Level

- 4. Serious Response Level depicts two possible scenarios. The first scenario depicts confirmation of HPAI outbreaks in the environment of *or* among poultry population in retail markets, wholesale markets or farms **in** Hong Kong due to a strain with known human health impact. Upon the advice of DAFC or Director of Food and Environmental Hygiene, SHWF will activate this Response Level.
- 5. The second scenario depicts the confirmation of human case(s) of avian influenza **in** Hong Kong **without** evidence of efficient human-to-human transmission. Upon the advice of DoH, SHWF will activate this Response Level.

Emergency Response Level

6. Emergency Response Level depicts two possible scenarios. In the

World Health Organization, Influenza Pandemic Plan. The role of WHO and Guidelines for National and Regional Planning. Geneva, Switzerland, April 1999. WHO/CDS/CSR/EDC/99.1

first scenario, there is evidence confirming efficient human-to-human transmission of novel² influenza occurring overseas or in Hong Kong.

- 7. Efficient human-to-human transmission is defined as the ability of the virus to readily spread from person to person in the general population and cause multiple outbreaks of disease leading to epidemics.
- 8. Clear evidence of human-to-human spread³ in the general population may be inferred when secondary cases result from contact with an index case, with at least one outbreak lasting over a minimum 2-week period in one country. In confirming efficient human-to-human transmission, one must not overlook other possible explanations, such as acts of terrorism, or an unusual ecological situation with an animal vector spreading virus to humans in different locations.
- 9. The second scenario under Emergency Response Level is pandemic influenza. The declaration of pandemic comes from WHO. It means the influenza strain is beginning to cause several outbreaks in at least one country, and spread to other countries, with consistent disease patterns indicating serious morbidity and mortality is likely in at least one segment of the population.
- 10. SHWF will activate this Response Level upon the advice of DoH.

Command Structure

Alert Response Level

11. At the Alert Response Level, a simplified emergency response command structure will be put in place. The Health, Welfare & Food Bureau (HWFB), Department of Health (DH), Hospital Authority (HA), Agriculture, Fisheries and Conservation Department (AFCD) and the Food & Environmental Hygiene Department (FEHD) are the main parties assessing the nature and level of risks.

Serious Response Level

- 12. At Serious Response Level, a Steering Committee chaired by SHWF will be set up to steer Government response.
- 13. The Steering Committee will have as its core members the Permanent

Novel influenza refers to 'the emergence of an influenza A virus with different haemagglutinin sub-type than strains circulating in humans for many preceding years'.

World Health Organization, Influenza Pandemic Plan. The role of WHO and Guidelines for National and Regional Planning. Geneva, Switzerland, April 1999. WHO/CDS/CSR/EDC/99.1

Secretary for Health, Welfare & Food (PSHWF), Permanent Secretary for Education and Manpower, Permanent Secretary for Economic Development and Labour (Economic Development), Director of Agriculture, Fisheries and Conservation, Director of Food and Environmental Hygiene, Director of Health, Controller, Centre for Health Protection (Controller, CHP), Director of Home Affairs, Director of Information Services (DIS), Director of Social Welfare, Commissioner for Tourism and Chief Executive of the Hospital Authority. The committee would co-opt other senior officials and non-Government experts as circumstances warrant.

Emergency Response Level

- 14. At Emergency Response Level, the Steering Committee will be chaired by the Chief Executive.
- 15. The Steering Committee will have the Chief Secretary for Administration, the Financial Secretary, the Secretary for Justice, SHWF, the Secretary for Economic Development and Labour, the Secretary for Education and Manpower, the Secretary for Environment, Transport and Works, the Secretary for Home Affairs, the Secretary for Housing, Planning & Lands, the Secretary for Security, Director of Chief Executive's Office, DoH and DIS as its members; and will co-opt other senior officials and non-Government experts as circumstances warrant.

Preparedness for an influenza pandemic

- 16. According to WHO, preparedness activities for an influenza pandemic should include the following key areas:
 - Surveillance
 - Investigation and control measures
 - Laboratory support
 - Infection control measures
 - Provision of essential medical services
 - Antiviral stockpiling
 - Vaccination
 - Port health measures
 - Communication

Normal Times

17. The following describes major activities/measures in relation to influenza illness that are already in place:

Surveillance

• Influenza A (H5N1) has been a notifiable disease in Hong Kong since

- 30 January 2004 and all practitioners are required to report any suspected or confirmed cases to DH.
- Sentinel surveillance system is in place to monitor influenza-like illness (ILI). The system operates through the support of a network of 64 general outpatient clinics in the public sector and some 50 doctors in the private sector. Specimens are also collected from patients for isolation and typing of influenza virus.
- Infectious disease sentinel surveillance is set up in residential care homes for the elderly, which collects information on the number of residents with ILI on a weekly basis.
- Information on hospital discharges, admission to intensive care units and deaths due to diagnosis of influenza or pneumonia are collected from public and private hospitals on a weekly basis.
- Hospital admissions of elderly home residents with provisional diagnosis of pneumonia or chest infection are being monitored.
- Monthly figures on ILI are exchanged with Guangdong and Macao health authorities.
- Information on unusual patterns of infectious diseases is exchanged with Guangdong and Macao health authorities on an ad hoc basis.
- Ongoing surveillance programme at live poultry retail outlets and monitoring of poultry farms, pet bird traders, imported birds, recreational parks and wild birds.
- Close monitoring of the number of live poultry present in Cheung Sha
 Wan Temporary Wholesale Poultry Market and at retail outlets.

Investigation & Control measures

 Epidemiological investigation and control measures are being conducted and implemented respectively in institution outbreaks.

Laboratory support

- Confirmatory testing for influenza is being provided to both public and private sectors.
- Typing and subtyping of all influenza isolates are performed at the Public Health Laboratory Services Branch (PHLSB) of DH. Antigenically atypical isolates would be genetically characterized and forwarded to the WHO Collaborating Centres for further analysis.

Infection control measures

- Risk-based clinical management and infection control guidelines are provided to health care providers.
- Supplies of personal protective equipment (PPE) are being maintained.
- Trainings on infection control are being provided to community, government departments and healthcare workers in public and private sectors.

Antiviral

- Antiviral agents are being stockpiled.
- Strategies for administration of antiviral are developed and prioritization of target groups for antiviral administration is defined in the scenario of pandemic influenza.

Vaccination

- Annual influenza vaccination programme is being organized around November/December each year.
- Vaccination strategies for avian influenza epidemics are developed and prioritization of target groups for vaccine administration is defined, in case a vaccine is available for avian influenza.

Port Health measures

 Prepare strategies to prevent and control human cases of avian influenza at immigration control points.

Other control measures

- Agreed protocol with the Mainland on importation of live poultry.
- Control of live birds and poultry products imported into Hong Kong.

Communication

- Health education activities are organized and health advice on prevention of influenza is provided through various means to educate the public on personal and environmental hygiene.
- Working group on risk communication formed to develop risk communication strategy and action plan.
- Members of the medical profession are being informed through e-mails, fax and post.
- 18. On the occurrence of a particular event, a certain Response Level might be triggered off and the major activities/measures that will be carried out under different Response Levels by key departments/organizations are set out in the ensuring paragraphs below.

Alert Response Level

- 19. When there is confirmation of HPAI outbreaks in poultry populations **outside** Hong Kong, or when there is confirmation of HPAI in imported birds in quarantine; in wild birds; in recreational parks, in pet bird shops or in the natural environment **in** Hong Kong, AFCD and FEHD will carry out the following activities:
- ➤ (1) When there is confirmation of HPAI outbreaks in poultry populations **outside** Hong Kong and outside the Mainland:

- AFCD will continue with all normal activities related to surveillance; farm and wholesale market bio-security measures; communication with farmers, poultry wholesalers, and poultry transporters); and strategic planning in medication, PPE, training & response.
- In addition, AFCD will undertake further actions related to import control:
 - Monitoring of outbreaks of HPAI overseas.
 - Liaison with animal health authority of the affected countries, overseas authorities and international animal health authorities, e.g. World Organisation for Animal Health (OIE), to ascertain the latest surveillance and epidemiological information.
 - Suspension of imports of live birds from countries with outbreaks of HPAI in the past 6 months.
 - Increased vigilance and surveillance for imported birds depending on the geographical area of the outbreak.
- FEHD will stay vigilant in surveillance of poultry population in retail outlets and review stock of PPE.
- ➤ (2) When there is confirmation of HPAI outbreaks in poultry populations in the Mainland:
 - AFCD and FEHD will carry out the following activities:
 - Increase surveillance and monitoring of local chicken farms, particularly sentinel birds and retail outlets (AFCD & FEHD).
 - Strict enforcement of farm biosecurity measures (AFCD).
 - Issue reminder to all livestock farmers and retailers to immediately report the presence of sick and dead birds for collection and laboratory examination (AFCD & FEHD).
 - Increase monitoring of chicken numbers to ensure all birds are accounted for (AFCD).
 - Continuation of AI vaccination for local chickens (AFCD).
 - Re-issue guidelines to farmers to remind them of the importance of good biosecurity and penalties for non-compliance (AFCD).
 - Inspect and review stock of PPE for poultry culling operations (AFCD & FEHD).
 - Arrange for influenza vaccination for staff who might be potentially involved in culling operations (AFCD & FEHD).
 - Conduct appropriate culling drills and training exercises for AFCD and FEHD staff and CAS members.
 - Suspend import of live birds (including live poultry), poultry products and day old chickens from the Mainland (AFCD &

FEHD).

- (3) When there is confirmation of HPAI in imported bird in quarantine in Hong Kong
 - AFCD will carry out depopulation of all birds in the quarantine centre.
- ▶ (4) When there is confirmation of HPAI in the natural environment in Hong Kong
 - AFCD and FEHD will carry out the following activities:
 - Increase surveillance and monitoring of local chicken farms, particularly sentinel birds and retail outlets (AFCD & FEHD).
 - Strict enforcement of farm biosecurity measures (AFCD).
 - Issue reminder to all livestock farmers and retailers to immediately report the presence of sick and dead birds for collection and laboratory examination (AFCD & FEHD).
 - Increase monitoring of chicken numbers to ensure all birds are accounted for (AFCD).
 - Continuation of AI vaccination for local chickens (AFCD).
 - Re-issue guidelines to farmers to remind them of the importance of good biosecurity and penalties for non-compliance (AFCD).
 - Inspect and review stock of PPE for poultry culling operations (AFCD & FEHD).
 - Arrange for influenza vaccination for staff who might be potentially involved in culling operations (AFCD & FEHD).
 - Conduct appropriate culling drills and training exercises for AFCD and FEHD staff and CAS members.
- ➤ (5) When there is confirmation of HPAI in wild birds in Hong Kong
 - In addition to the activities carried out for local farms as in the case of confirmed HPAI in the natural environment (scenario 4 above), AFCD will undertake the following measures:
 - Increase monitoring and surveillance of wild birds
 - Consider closure of wild bird parks
 - Media message for public care to avoid wild bird faeces
- ▶ (6) When there is confirmation of HPAI in recreational parks in Hong Kong
 - In addition to the activities carried out for local farms and retail outlets as in the case of confirmed HPAI in the natural environment (scenario 4

above), AFCD will undertake the following measures:

- Increase monitoring and surveillance of birds
- Consider closure and quarantine of recreational park
- Media message for public care to avoid bird faeces
- ➤ (7) When there is confirmation of HPAI in pet bird shops in Hong Kong
 - In addition to the activities carried out for local farms and retail outlets as in the case of confirmed HPAI in the natural environment (scenario 4 above), AFCD will undertake the following measures:
 - Increase monitoring and surveillance of pet bird shops
 - Quarantine and closure of affected shop as well as any adjacent pet bird shops
 - Depopulation of affected pet bird shop(s)
 - Trace back of pet bird sources and contacts

Other measures:

When there is confirmation of HPAI in birds in Hong Kong, DH will conduct contact tracing and medical surveillance for persons who come into contact with sick or dead bird(s) confirmed to be HPAI positive. Depending on the risk assessment, antiviral chemoprophylaxis and home confinement may be considered for persons who have direct contact with the sick or dead bird(s).

Communication

- AFCD will liaise with veterinary professionals and other animal care providers (including poultry farmers, wholesalers and transporters), and liaise with NGOs involved in wild animal work, e.g. World Wide Fund for Nature (WWF), Ocean Park, etc.
- AFCD will inform local consulates, overseas authorities and international animal health authorities (e.g. the OIE) about the local situation.
- HAD will gauge community concerns with regard to the local situation.
- ➤ When there is confirmed human case(s) of avian influenza occurring outside Hong Kong:

Surveillance

- Enhance surveillance programmes. (DH & HA)
- Liaise with WHO and international health authorities to monitor the global spread and impact of the infection. (DH)
- Keep in view any new surveillance definitions issued by WHO and modify local surveillance activities accordingly. (DH)

Laboratory Support

- All specimens positive for influenza A virus from cases with clinical/epidemiological suspicion of avian influenza would be forwarded to the PHLSB for identification and characterization. (DH)
- Review laboratory diagnosis strategy and enhance capacity in laboratory diagnostic services, with stockpile of reagents for rapid antigen testing. (HA)

Antiviral

Review stockpile of antiviral. (DH)

Vaccination

 Liaise with WHO on latest development on avian influenza vaccine, with a view to examine and update vaccination strategies and prioritization for target groups, should the vaccine become available. (DH)

Infection Control measures

- Issue guidelines and health advice to residential institutions and the general public. (DH & SWD)
- Review and promulgate enhanced infection control measures where necessary. (DH & HA). Update health care workers' knowledge on infection control measures for avian influenza. (DH)
- Inspect and review stock of PPE. (DH, SWD & HA)

Port Health measures

 Liaise with tourist industry and disseminate health information to outbound travelers. (DH)

Medical Services

- Stockpile appropriate medications for public hospitals and clinics.
 (HA)
- Formulate clinical management guideline on influenza-like illness and community acquired pneumonia. (HA)
- Monitor daily bed occupancy, and review bed mobilization and compliance with admission guidelines. Assess and plan for scaling down non-emergency activities. (HA)

Communication

- Liaise with medical professionals and other health care providers. (DH, HA & SWD)
- Gauge community concerns with regard to the local situation. (HAD)
- Disseminate information and step up health advice to public through various means including press releases, pamphlets, APIs, website, and incorporate health messages in ongoing health education activities. (DH & HAD)

Promulgate health advice to clients. (HA)

Serious Response Level

- Confirmation of HPAI outbreaks in the environment of or among poultry population in Hong Kong:
- 20. When there is confirmation of HPAI outbreaks in the environment of *or* among poultry population in retail markets, wholesale markets or farms in Hong Kong due to a strain with known human health impact, in addition to the measures related to surveillance of farms and retail outlets as in the case of confirmed HPAI in the natural environment (i.e. scenario 4 under the Alert Response Level above), the following activities will be carried out:
 - AFCD will:
 - Increase monitoring and surveillance of pet bird shops.
 - Increase monitoring and surveillance of birds in recreational parks in association with LCSD and country parks and wetland parks.
 - Quarantine and monitor pets in contact with infected poultry or human cases.
 - Monitor and test local pig farms.
 - Suspend export of non-food birds from Hong Kong.
 - FEHD will suspend the import of all live poultry.

Major culling operation (Operation Season)

• Upon activation of the operational order for the culling of live poultry in Hong Kong (Operation Season) by PSHWF, AFCD will implement the culling of live poultry in farms, wholesale markets and FEHD at retail outlets. DH, HA and EPD will also assist in the implementation of Operation Season.

Communication

- AFCD will liaise with veterinary professionals and other animal care providers (including poultry farmers, poultry traders and poultry wholesalers), and liaise with NGOs involved in wild animal work, e.g. WWF, Ocean Park, etc.
- AFCD will inform local consulates, overseas authorities and international animal health authorities (e.g. the OIE); and also brief legislators, community, the media and relevant businesses about the local situation.

DH will carry out the following activities:

Surveillance

- Monitor hospital admission due to flu-like illnesses for poultry workers. (DH, HA)
- Conduct surveillance for poultry workers of affected farms. (DH)
- Conduct sero-prevalence study on poultry workers. (DH)
- Monitor health status of cullers. (DH)

Laboratory support

 Conduct laboratory testing for rapid detection of avian influenza, virus isolation and characterization on specimens from human cases with epidemiological links to infected poultry and with clinical features consistent with AI infection. (DH)

Antiviral

 Review stockpile of antiviral agents and other medications and make initial preparations for mobilizing stockpile. (DH)

Communication

- Set up telephone hotlines to answer enquiries from poultry workers and cullers. (DH)
- Inform WHO, other health authorities outside Hong Kong and medical professionals and health care workers of the updated situation of local infection among poultry. (DH)
- > Confirmed human cases in Hong Kong (without evidence of efficient human-to-human transmission)
- 21. When there is confirmed human case(s) of avian influenza in Hong Kong without evidence of efficient human-to-human transmission, in addition to the activities conducted at Alert Level, the following activities would be carried out:

Surveillance

- Enhance surveillance activities, including zero reporting from public and private hospitals on cases due to influenza A (H5) or novel influenza virus. (DH)
- Review surveillance criteria. (DH & HA)
- Activate "e-flu" and other information systems to monitor cases and contacts in real-time. (DH & HA)
- Enhance surveillance of wild birds, recreational parks, pet bird shops and poultry. (AFCD & FEHD)

Investigation and control measures

 Conduct epidemiological investigation to determine whether the case is acquired locally or outside Hong Kong; identify the source of

- infection and ascertain the mode of transmission. (DH)
- Conduct contact tracing, medical surveillance and enforce quarantine measures on contacts of cases as appropriate to the situation. (DH, SWD & HAD)

Laboratory support

- Conduct rapid avian influenza testing on ILI and pneumonia cases.
 (DH)
- Transfer of rapid test technology to the Hospital Authority. (DH)
- Increase laboratory capacity for rapid testing to assist diagnosis. (DH & HA)
- Confirmation of all rapid test positive test cases by PHLSB. (DH)
- Perform avian influenza specific serology on close contacts. (DH)
- Perform antiviral resistance testing on avian influenza isolates. (DH)
- Coordinate with universities to perform gene sequencing on all avian influenza isolates. (DH)
- Send isolates to WHO Collaborating Centres for further analysis and comparison and to discuss on diagnostic and vaccine development. (DH)

Infection control measures

- Review stock of personal protective equipment (PPE). (DH & HA)
- Review visiting policy in HA hospitals. (HA)
- Enhance and/or review infection control measures according to the latest knowledge on the transmission route of avian influenza. (DH & HA)

Antiviral

 Review stockpile of antiviral agents and other medications and make initial preparations for mobilizing stockpile. (DH)

Port Health Measures

 Review and modify port health measures and enact legislation, where necessary, in the light of WHO latest guidelines. (DH)

Vaccination

 Liaise with WHO on the latest development and supply of the new vaccine. (DH)

Essential medical services

- Set up designated clinics and protocol for triaging patients with influenza-like illness at primary care level. (HA)
- Isolate and treat confirmed cases in designated hospitals. (HA)
- Update / revise clinical guidelines on management and related admission criteria for various specialties. Further reduce non-urgent and non-emergency services where necessary. (HA)

 Start discussion with private hospitals on patients transfer/ diversion and sharing of clinical workload. (HA)

Other measures

 Provide relief measures, counseling services and temporary residential placement for needy persons. (SWD)

Communication

- Communicate with and disseminate information to hospitals, medical professionals in the private sector and other health care workers. (DH)
- Strengthen public communication including set up telephone hotlines, conduct regular press briefings, briefings to legislators and community leader, etc. (DH & HAD)
- Educate the public on use of personal protective equipment and practices. (DH & HA)
- Monitor community response and concerns. (DH & HAD)
- Brief Consulates and relevant businesses about the local situation.
 (DH)
- Liaise with WHO and other health authorities on the local situation.
 (DH)
- Liaise with WHO on international practice regarding travel advice.
 (DH)

Culling Operation

On detection of a local human case of H5N1 infection which cannot be confirmed to be an imported case, PSHWF may activate the operational order (Operation Season). AFCD, FEHD, DH, HA and EPD will assist in the implementation of Operation Season. Depending on circumstances, pet birds may also be included in the culling operation.

Emergency Response Level

22. When there is evidence of efficient human-to-human transmission of novel influenza occurring overseas OR in Hong Kong, in addition to the measures taken at Serious Response Level, the following activities would be conducted:

Surveillance

- Monitor daily the number of novel influenza isolates from PHLSB. (DH)
- Monitor daily number of patients seen at Accident & Emergency Departments of hospitals and hospital admissions due to influenza-like-illness. (DH & HA)

Laboratory support

• Perform vaccine efficacy study if vaccine is available. (DH)

Port Health Measures

- Require inbound travelers from affected areas to declare health status and undergo temperature check, and require transit travelers to have temperature screened. (DH)
- Require outbound travelers to declare health status and undergo temperature check. (DH)

Antiviral

 Mobilize antiviral stockpile to provide treatment to patients in defined target groups with presumptive diagnosis of novel influenza and administer chemoprophylaxis for defined target groups. (DH & HA)

Vaccination

- Liaise with WHO regarding the latest development in vaccine production and supply. (DH)
- When new influenza vaccine is available, set up vaccination posts and administer vaccine according to defined priorities. (DH)
- Monitor vaccination reactions and adverse effect. (DH)

Essential medical services

- Designate additional hospitals for isolation and management of confirmed and suspected cases. (HA)
- Monitor closely the territory-wide utilization of public hospital services and further re-organize or reduce non-urgent services to meet the surge in workload due to the influenza epidemic. (HA)
- Mobilize convalescent hospitals/wards and private sector to increase capacity to treat acute cases. (HA).
- Review and promulgate updated guidelines and protocols on diagnosis, treatment and admission criteria. (HA)
- Mobilize more designated clinics and/or community centres in collaboration with the private sector and voluntary agencies where necessary. (DH, HA & HAD)
- Review and update protocols on research projects in collaboration with academia, private sectors and international organizations. (DH & HA)

Public Health Measures

- Assess the need for closure of schools, public places, stopping public gatherings & curtailing non-essential activities & services. (DH)
- Enact legislation to enable enforcement of control measures. (DH)
- Prepare for the 24-hour operation of the six crematoria. (FEHD)

Other measures

· Handle animals abandoned by households who are concerned about

animal involvement and conduct surveillance and monitoring on animal populations which have not yet been shown to be significant in disease transmission. Should novel animal populations become implicated in disease transmission, these will have to be dealt with on a case by case basis. (AFCD)

Communication

- Provide daily updates of the course of the epidemic and governmental response plans and actions. (DH)
- Step up public education on use of personal protective equipment and practices. (DH)
- Educate the public on the use of chemoprophylaxis and vaccination programmes. (DH)
- Educate the public regarding self-management of influenza like illness and when and how to seek treatment. (DH)
- Communicate closely with private health sector for sharing of expertise and workload. (HA)
- 23. When there is efficient human-to-human transmission occurring locally resulting in high attack rate among the population, actions taken at Emergency Response Level would be reviewed and the strategy revised as appropriate to ensure the most efficient use of health resources. As the situation evolves to epidemic with multiple communities in the population being affected, the following scenarios might occur: heavy burden of excessive morbidity and mortality overwhelming the health care system; shortage of medical supplies (e.g. antiviral); disruption of territory-wide infrastructures (including transportation, utilities, commerce and public The purpose of emergency response at this stage will be to slow down progression of the epidemic, minimize loss of human lives, in order to buy time for the production of an effective vaccine against the novel pandemic influenza strain. Specifically, surveillance activities would be limited to essential elements, case investigation and quarantine measures would be scaled down or abolished, and avian influenza testing would not need to be performed on all patients with influenza symptoms. Antigenic analysis would be carried out on all isolates while gene sequencing would be performed for selected isolates.

Health Welfare and Food Bureau February 2005

The Government Influenza Vaccination Program (2005/06) Target Group

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 2005/06. The SCVPD recommendations do not prescribe how influenza vaccinations are to be given by various healthcare providers. Target groups recommended for influenza vaccinations (2005/06) by the SCVPD include:

- 1. Elderly person 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 illnesses
- 5. Health care workers
- 6. Poultry workers
- 7. Children aged 6 to 23 months
- 8. Pregnant women (in 2nd or 3rd trimester)

Annex D

The following highlights some of the major initiatives/undertaking of government bureaux/departments/agencies in relation to disease prevention and control -

Health, Welfare and Food Bureau (HWFB)

- HWFB has assumed a proactive role in coordinating inter-departmental and inter-sectoral efforts to combat infectious diseases. The underlying tenet is a population-based, cross-sectoral approach vital for effective disease prevention and control.
- To enhance government and community preparedness to cope with various avian influenza emergencies, HWFB and the Department of Health (DH) have developed the Government's Preparedness Plan for Influenza Pandemic. Underpinning this Preparedness Plan is an overall Government emergency response mechanism to ensure Government's swift decision making in handling major infectious disease outbreaks. The mechanism categorizes virtually all possible scenarios into three levels, namely Alert Response Level, Serious Response Level and Emergency Response Level. They are based on different risk-graded epidemiological scenarios relevant to Hong Kong, and each of them prescribes a given set of public health measures required.
- The Preparedness Plan provides a clear command structure for strategic decision-making, sets out distinct roles and responsibilities for different parties and establishes line of command for launching various types of operations. In particular, when the Emergency Response Level is activated, the Chief Executive of the Hong Kong Special Administrative Region will chair an interdepartmental Steering Committee to facilitate formulation of territory-wide strategies in combating the outbreak and oversee their implementation.
- The Secretary for Health, Welfare and Food briefed over 50 Consulate Generals or their representatives in Hong Kong on 31 October about Hong Kong's preparedness for influenza pandemic. HWFB and CHP will issue an action checklist shortly to disseminate cross-agency efforts in preparedness.
- The Permanent Secretary for Health, Welfare and Food (PSHWF) has

been convening interdepartmental meetings since end October this year to review the readiness of Hong Kong to fight against avian influenza amid fears that migratory birds might spread the virus with the approach of winter. Representatives from over 30 government bureaux, departments and agencies were involved.

- PSHWF will brief Heads of Departments on 7 November to promote their awareness of the possible influenza pandemic and encouraging departments to enhance their contingency plans.
- HWFB also signed a "Cooperation Agreement on Response Mechanism for Public Health Emergencies" with the Mainland Ministry of Health and the Macao Special Administrative Region in October this year. Under the Agreement, in case of serious public health emergencies in the Mainland, Macao or Hong Kong, not only a notification system for timely exchange of information but also a mutual coordination and support mechanism in terms of manpower, techniques and resources would be in place. The three places could also send experts to take part in dealing with such crisis upon mutual agreement. If cross-boundary public health emergencies occur among the three places or between any two, the concerned places would immediately notify the other parties, activate the emergency mechanism, form a joint public health emergency response team to handle the crisis.
- HWFB and DH will conduct an exercise for avian influenza/influenza pandemic on 24 November this year.

Department of Health (DH)

- DH's major measures already in place in relation to influenza illness include
 - (i) Surveillance (local and global) network;
 - (ii) Investigation and control measures;
 - (iii) Laboratory support;
 - (iv) Infection control measures;
 - (v) Anti-viral stockpiling;
 - (vi) Influenza Vaccination;
 - (vii) Port Health measures; and
 - (viii) Risk Communication and public health education.

- When there are human case(s) of avian influenza in Hong Kong without evidence of efficient human-to-human transmission, DH will enhance the surveillance of novel influenza virus, review surveillance criteria, and activate "e-flu" and other information systems to monitor cases and contacts in real-time. Necessary epidemiological investigation will be conducted to determine whether the case is acquired locally or outside Hong Kong. Contact tracing, medical surveillance and quarantine measures will be conducted as appropriate to the situation. DH would also increase laboratory capacity for rapid testing to assist diagnosis and would also coordinate with universities to perform gene sequencing on all avian influenza isolates. Isolates would be sent to World Health Organization Collaborating Centres for further analysis and comparison and to discuss on diagnostic and vaccine development.
- DH has been conducting forums and producing leaflets and handbooks in respect of avian influenza and influenza pandemic for the public and specific sectors in the community.

Hospital Authority (HA)

- HA has formulated a comprehensive Contingency Plan for Avian Influenza/Influenza Pandemic to ensure early detection and timely isolation and treatment of patients.
- Public hospitals have always been on high vigilance since early this year following the activation of the Yellow Alert (under the three-tier alert system: Green, Yellow, Red Alert) by HA.
- In close collaboration with the CHP, HA will activate the following key measures which are covered in the Contingency Plan during the pandemic:
 - (i) Central command and coordination
 - (ii) Strengthened infection control measures
 - (iii) Close surveillance and reporting of symptomatic cases
 - (iv) Enhanced laboratory support for rapid test
 - (v) Clinical management guidelines & stockpile of antivirals
 - (vi) Management of Personal Protective Equipment and medical facilities
 - (vii) Collaboration with private sectors and the community
 - (viii) Deployment and training for staff
 - (ix) Provision of essential services

- (x) Internal and external communication
- HA will conduct drills to test inter-cluster cooperation effectiveness on 8 November this year.

Education and Manpower Bureau (EMB)

- A circular memorandum on "Stepping up precautionary measures to prevent the spread of influenza in schools" was issued on 25 October 2005. It aims at reminding schools to adopt the preventive measures as advised by Department of Health (DH).
- All advice and guidelines issued to schools by DH and its Centre for Health Protection (CHP) regarding communicable diseases has been uploaded to EMB's home page for reference by schools and parents.
- EMB has linked the relevant information on prevention of communicable diseases on the websites of DH and CHP to the guidelines and circulars issued by EMB to schools for their easy reference. It has also emailed schools drawing their attention to CHP's website for fact sheets of avian indfluenza.
- EMB is updating school contact lists to facilitate EMB and CHP to implement control measures, if required, over weekends and during holidays

Agriculture, Fisheries and Conservation Department (AFCD)

- AFCD to publicize taking overall in-charge of disposal of dead pet birds
- Increased surveillance and monitoring of local chicken farms.
- Strict enforcement of farm biosecurity measures.
- Reminder to all livestock farmers to immediately report the presence of sick and dead birds for collection and laboratory examination.
- Increased monitoring of chicken numbers to ensure all birds areas are accounted for.

- Continuation of avian influenza vaccination for local chickens.
- Re-issue guidelines to farmers to remind them of the importance of good biosecurity and penalties for non-compliance.
- Inspect and review stock of personal protective equipment (PPE) for poultry culling operations.
- Arrange for influenza vaccination for staff who might be potentially involved in culling operations.
- Conduct culling drills and training exercises for AFCD staff and CAS staff.
- Take a proactive role to provide free vaccination service against avian flu to these backyard chickens.

Auxiliary Medical Service (AMS)

- An Action Team with AMS members trained for handling communicable diseases has been formed since 2003. The existing strength of this Team is 1,229 including 924 completed Communicable Diseases Management Training conducted by AMS and 305 completed CHP Health Protection Training. The Team could be mobilized within 30-45 minutes.
- A set of guidelines on prevention and control of communicable diseases has been prepared.
- An AMS Contingency Plan for Communicable Diseases has been drawn up. The key roles of AMS are: (i) manning health posts at border control points for screening of body temperature and arrange conveyance of suspected patients to hospitals; (ii) setting up posts at lobby of buildings for temperature screening and dispatching of patients; (iii) manning health post at isolation centres; and (iv) assisting in contact tracing of suspected patients and answering hotlines.
- Stockpile PPEs for emergency operational use.

Buildings Department (BD)

- BD stands ready to deal with any problems relating to the fabric of buildings in collaboration with other government departments.
- BD will effect actions on emergency inspections and investigation of private buildings upon request by DH to give advice on the building conditions, and to take any actions as may be necessary under the Buildings Ordinance.
- BD has stepped up publicity to increase public awareness on the importance of proper installation and maintenance of U-traps and drainage pipes to guard against the spread of infectious diseases. It has dispatched a leaflet on the subject matter to 1.3 million households living in private buildings.

Civil Aviation Department (CAD)

- CAD has taken necessary steps to prepare for influenza pandemic and to ensure that disruption to airport operation would be minimized during a bird flu outbreak.
- Being a service provider in air traffic management, CAD has:
 - (i) developed a Departmental Contingency Plan to deal with Communicable Disease Outbreaks. The Plan contains the followings:
 - guidelines and procedures to follow when a staff member, a member of his household or any person with whom the staff has frequent and close contact contracted a communicable disease;
 - operational specific contingency plans according to specific functions and duties of each of its divisions;
 - arrangement for internal administration of the Department, communication and reporting hierarchy in the event of an outbreak, cleaning and disinfection services to be provided to the various offices of the Department including the Air Traffic Control Tower.
 - (ii) issued internal circular to raise awareness of staff of the bird flu virus and the importance of ensuring personal hygiene;

and

- (iii) ensured that sufficient stock of personal protective items, e.g. masks and alcohol wipes, are available for staff.
- As a regulatory authority of civil aviation, CAD has been in close liaison with the Airport Authority Hong Kong and local airlines to ensure that adequate preventive measures and contingency plans are in place to respond to a potential bird flu outbreak. Actions to be taken at the airport will include:
 - (i) monitoring body temperature of airport staff;
 - (ii) stepping up cleaning and disinfection of public installation;
 - (iii) providing adequate facilities and cleaning material for hand washing;
 - (iv) stepping up maintenance on indoor ventilation system;
 - (v) ensuring adequate equipment for protection for frontline staff;
 - (vi) restricting access control to critical operation control centres;
 - (vii) reporting cases and maintaining close contact with DH; and
 - (viii) ensuring procedures are set out in airline operational manuals for handling suspected passengers, cleaning of infected aircraft, and notification.

Civil Aid Service (CAS)

- The CAS has a Standing Operations Procedure on Outbreak of Communicable Disease
- The CAS is ready to provide the following services:
 - (i) crowd management at hospitals, clinics, temporary shelters etc.
 - (ii) establishment and subsequent management of isolation centres
 - (iii) evacuation of residents affected by the disease

- In addition to the above, the CAS is ready to provide the following services:
 - (i) assist AFCD in the culling operation
 - (ii) removal of residents/workers from poultry farms affected by the disease

Customs and Excise Department

The Department has stepped up enforcement against smuggling of pet birds and poultry.

Electrical and Mechanical Services Department (EMSD)

- EMSD would strengthen their engineering services provided to other government departments & public bodies (e.g. to increase the air exchange rate of air-conditioning & ventilation systems as deemed necessary).
- EMSD would also provide professional engineering support to assist other government departments & public bodies in any necessary alteration and improvement of engineering systems (e.g. ventilation systems) so as to prepare for flu outbreak.

Food and Environmental Hygiene Department (FEHD)

- Stepped up monitoring of live poultry at import and retail levels.
- Reminder letters issued to the retail trade on close observance of hygiene requirements and conditions and prompt report of dead/sick poultry.
- Culling drill completed in September and adequate stock of PPE for poultry culling operations available.
- Poultry trade and staff who have or are liable to have contact with poultry and those may be deployed on massive culling operations have

been arranged to receive free influenza vaccination in November/December.

• Import of live poultry and/or poultry products from affected countries/area suspended.

Fire Services Department (FSD)

- All ambulance personnel will be arranged to have flu vaccination on a voluntary basis;
- FSD will keep in close contact with DH and HA for the most updated situations about flu outbreak and to implement necessary operational contingency reaction.
- PPE (surgical masks, N95 masks and disposable gowns) for ambulance personnel have been checked to have about six months' stocks.

Government Property Agency (GPA)

- Stepping up cleaning service to the common areas in the government joint-user office buildings (JUBs) and quarters under the Agency's management by the outsourced Property Management Agents (PMAs).
- Coordinating with EMSD to step up cleaning of air-filters in the air-conditioning system and increase fresh air intake in the JUBs, when and where necessary.
- Coordinating with ArchSD to inspect all the drainage systems and sanitary fitments in the JUBs and government quarters, when and where necessary, and institute suitable remedial/improvement actions.

Home Affairs Department (HAD)

HAD will take the following actions during the outbreak situations -

• to assist in the publicity drive by distributing leaflets, guidelines and health advice to members of public through District Offices;

- to organise a Team Clean Day to mobilise members of the public to clean up hygiene black spots in their districts; and
- to mobilize the community to support the relevant campaigns launched by the Administration.

Housing Department (HD)

- Action has been strengthened to preserve environmental hygiene and cleanliness in markets.
- Intensified cleansing of public housing estates by the way of "Operation Tai Ping Tei".
- Messages for the purpose of reminding estate residents to upkeep personal hygiene will be promulgated.
- Enforcement action against misdeeds, such as littering and spitting, that may be conducive to the spread of infectious diseases, has been stepped up. Estate residents are liable to fixed penalty fine of \$1,500 and/or points be deducted under the Marking Scheme of Tenancy Enforcement, if they dirty the public areas while feeding feral birds/pigeons.
- Local management will be requested to identify hygiene black spots and areas with high density of feral birds/pigeons. Action will be taken to intensify cleansing operations to black spots so identified.
- Estate staff have been deployed to frighten away feral birds.
- Rolling text with message to remind estate residents not to feed feral birds/pigeons has been broadcasted on the Housing Channel.
- Cleansing contractors have been requested to clean/disinfect the press buttons of lifts in public residential housing blocks three times a day.
- In addition to setting up teams to inspect the drainage system, HD has asked tenants to take parallel action to report defective drains and to refill U-trap with water regularly.
- Leaflets on proper maintenance of drain pipes will be distributed to all

public housing tenants.

• Tenants have been urged to upkeep environmental hygiene and not to feed wild birds through various channels in public housing estates.

Labour Department (LD)

- Avian influenza arising out of and in the course of farming and handling poultry and poultry products has been made a notifiable occupational disease since February 2005.
- For each and every occupational avian influenza case notified to LD, detailed investigation will be conducted and control measures will be undertaken. As in all occupational infections, LD would liaise with the CHP to speed up all the necessary control measures.
- In case of an outbreak of avian influenza, LD would enhance our inspection to high-risk workplaces. If the avian influenza outbreak is found to be confined only to poultry, LD's inspections would be targeted mainly at poultry farms, markets, restaurants, etc. If there is evidence of human-to-human transmission, inspection would be extended to cover other high-risk workplaces such as hospitals, clinics and elderly homes. Inspections would be conducted to determine the adequacy of respiratory protection, indoor ventilation, cleansing as well as infection control measures.
- In the case of widespread human-to-human transmission of avian influenza, the doctors and nurses of LD are prepared to be re-deployed to the CHP to strengthen the medical team there in the control of this disease in Hong Kong.

Information Services Department

- To step up publicity efforts to advise the public on precautionary measures. New announcements in the public interest (APIs) will be broadcast on TV and radio over the next few weeks.
- More leaflets, posters and other publicity materials in different languages are being produced and distributed.

- Distributed leaflets on "What you should learn about avian influenza" (Tangalog, Thai and Indonesian) to domestic helpers.
- A dedicated webpage providing up-to-date information on prevention of avian flu can be viewed via the Centre for Health Protection website www.chp.gov.hk or the Government website www.info.gov.hk.

Leisure and Cultural Services Department (LCSD)

- LCSD has prepared a Departmental Action Plan on Influenza Pandemic, setting out the actions to be required of LCSD in different response levels.
- LCSD maintains a collection of about 1 500 birds in four major parks, namely Hong Kong Zoological & Botanical Gardens, Hong Kong Park, Kowloon Park and Yuen Long Park. Extra vigilance on the presence of bird disease has been maintained within our collection. LCSD's Senior Veterinary Officer monitors the health of our bird collections closely.
- Bird-keeping staff have been reminded to follow strictly the departmental guidelines on contact with birds during the course of their work and to enhance their personal hygiene. All the cleansing staff and contractors have also been reminded to wear proper protective clothing/gear when clearing the bird droppings left on the ground.
- Precautionary measures have been stepped up to ensure health condition of our bird collections. These include increasing the frequency of faecal testing of birds and cleansing of bird cages; and suspending acquisition and transfer of birds.
- Any dead wild birds found in our venues will be safely handled by LCSD staff and sent to AFCD for avian flu checking.
- The public have been advised not to feed the wild birds in LCSD venues and LCSD staff has stepped up prosecution accordingly.
- Warning signs to advise the public against contact with birds or their dropping have been put up in the areas where there are bird collections or where wild birds aggregate.

- To closely liaise with HWFB, AFCD and DH on the possible closure of the aviaries at Hong Kong Zoological & Botanical Gardens, Hong Kong Park, Kowloon Park and Yuen Long Park; and to liaise with the Penfold Park, Ocean Park and Kadoorie Farm so that they will also take corresponding precautionary actions.
- Drill programmes on closing the aviaries are conducted regularly to enhance our preparedness for the possible outbreak of bird flu.
- Arrangement has been made with DH for LCSD's field staff including staff of the contractors working at four aviaries and Yuen Po Street Birds Garden to receive influenza vaccine commencing 21 November.
- To make ready holiday villages for use as isolation centres and the provision of domestic support to the centres.

Marine Department (MD)

Maintaining Port Safety

• During an outbreak, MD will accord priority to managing port safety and maintaining port operations. The first priority will be to adequately manned the Vessel Traffic Centre (VTC) the primary function of which is to regulate and maintain traffic safety. In the next week or so, the Department will draw up a list of qualified and trained staff for manning the VTC. Should VTC staff be affected by an outbreak, trained staff from other offices will be deployed to the VTC such that services with a lower priority will be affected initially.

Inbound Traffic

• The Pre-Arrival Notification (PAN) from ocean-going vessels will serve as an information collection tool for visiting ships. MD will follow the advice from DH as to what symptoms and information should be declared by such vessels. The requirements will be promulgated by a Marine Department Notice for ships to follow. Subject to advice by DH on how to manage/control vessels with reported/suspected cases of Avian Flu, MD can set aside anchorages for quarantine/segregating vessels for inspection by DH.

• Rivertrade vessels are also covered by PAN and can be accordingly treated.

Outgoing Traffic

• MD will act in accordance with advice from DH as to whether any declaration is required by a ship or the need for an inspection by DH etc.

MD Managed Cross-boundary Ferry Terminals

• If a quarantine area is needed according to DH advice, MD will endeavour to designate an area within the terminals. MD will gear up to facilitate DH in implementing any measures that are considered necessary. The situations at the terminals will be closely monitored and cleansing services will be enhanced as necessary.

Hong Kong Police Force (HKPF)

- HKPF has developed a comprehensive set of guidelines for its response to all types of infectious disease, including influenza.
- HKPF has shared its knowledge and expertise with the CHP, and since 2003, has seconded a Superintendent and Chief Inspector to the CHP to help facilitate Government planning for any future infectious disease outbreak

Contact Tracing

- Police will deploy the Major Incident Investigation and Disaster Support System (MIIDSS), for contact tracing and the identification of potential disease hot spots.
- Police Regional Missing Persons Units and if necessary Crime Formations, will be used to trace contacts, and locate individuals classified as defaulters.

Major and Widespread Outbreaks

 Where the infectious disease leads to large scale deaths, police will be primarily concerned with the maintenance of public order, and ensuring that multi-disciplinary response teams and medical personnel are able to safely go about their business.

Internal Measures to Safeguard Police Personnel

 To ensure that police officers are available to discharge their duties during an infectious disease outbreak, HKPF has initiated a number of measures in respect of an alert system, staff, buildings, equipment, transport, prisoners, handling dead bodies and handling property and exhibits.

Hong Kong Post (HKP)

• HKP has issued an Action Plan for Highly Pathogenic Avian Influenza and Pandemic Influenza covering risk communications, PPE stockpiling, office disinfection, disease prevention and hygiene guidelines and special delivery arrangement, etc.

Social Welfare Department (SWD)

- SWD had in place the Contingency Plan for Influenza Outbreaks since January 2005. It is a three-tier action plan corresponding to the three-level response system of the Hong Kong. In Serious Response Level, District Social Welfare Officers will activate a 24-hour staff roster to provide welfare services to those citizens in home confinement.
- With the assistance of DH, SWD had compiled and issued guidelines in April 2005 to all residential services, day services and other general welfare service units to advise on prevention, precautionary measures, alert and emergency measures to be taken in Avian Influenza. These service units are also told to draw up their own contingency measures. Ongoing advices received from DH are also disseminated to the welfare service units
- An enhanced information exchange mechanism is in place among DH, HA and SWD to enable early detection and timely notification in residential care home for the elderly and people with disabilities to combat any infectious disease outbreaks.
- In collaboration with DH, briefing to SWD staff and NGO sector on Influenza Pandemic and the Government Preparedness Plan had been

conducted in July 2005. Besides, for staff of residential homes, training classes have been organized for them on infection control measures in mid-2005.

• Influenza vaccination for elderly and people with disabilities living in institutions and their home staff are being arranged in November 2005.

Tourism Commission

- The Tourism Commission also maintains close liaison with the travel trade to keep them updated of the latest news and development of potential infectious diseases in Hong Kong; and to remind them of the need to adopt relevant preventive measures.
- The tourism sector, including the airlines, hotels, restaurants, travel agents, tourist guides and tour coach operators have observed the guidelines and advice issued by the DH and have put in place measures to protect the health of their staff and visitors.
- Both the Tourism Commission and the Hong Kong Tourism Board are also in touch with Mainland international and regional tourism organizations to exchange the most up-to-date information on destinations and health-related matters in the region, and to collaborate on the appropriate plans and responses.

Transport Department

• Letters are being sent to public transport operators providing rail, franchised bus, non-franchised bus, public light bus, taxi or ferry services appealing for their support to upkeep their cleaning standards and preparedness to prevent avian flu.