

**For Discussion  
On 8 April 2008**

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

**Zonal Approach Policy on  
Control of Highly Pathogenic Avian Influenza**

**PURPOSE**

This paper briefs Members on the Administration's zonal approach policy on import suspension measures to control the import of live poultry and poultry products into Hong Kong during an outbreak of Highly Pathogenic Avian Influenza (HPAI) in Guangdong Province.

**INTRODUCTION**

2. Having regard to the introduction of various preventive measures on HPAI in recent years and the empirical evidence on the effectiveness of these measures, as well as in the light of the guidelines on the control of HPAI issued by the Food and Agriculture Organization of the United Nations (FAO) in 2006 and the World Organization for Animal Health (OIE) in 2007, the Administration has developed a zonal approach policy to control the import of live poultry and poultry products (chilled and frozen poultry, and fresh poultry eggs) in dealing with different scenarios of HPAI outbreak in Guangdong Province. We have informed our Mainland counterparts of the arrangements.

**Preventive measures on HPAI**

3. Over the past years, we have adopted a series of preventive measures with a view to reducing the risk brought by the HPAI virus. These measures include the introduction of a registered farm system for live poultry supply to Hong Kong, the adoption of a stringent import protocol and various measures implemented in local farms, wholesale markets and retail outlets in Hong Kong. The details are set out at the Annex. They are effective in reducing the risk brought by the HPAI virus. Since the establishment of the registered farm system in 1998, there has not been a single case of HPAI outbreak in the registered poultry

farms in Guangdong Province. It is also worth noting that according to the World Health Organization (WHO), most cases of human avian influenza have occurred in rural and periurban households where small flocks of poultry are kept.<sup>1</sup> In this regard, we have banned keeping of backyard poultry in Hong Kong in February 2006. Continuous action is taken to enforce this measure.

## **International Development**

4. The FAO and the OIE have issued guidelines on the control of HPAI in 2006 and 2007 respectively.

5. Under the OIE's guidelines, zoning and compartmentalization are procedures implemented by a country with a view to defining subpopulations (of poultry in this case) of distinct health status within its territory for the purpose of disease control and/or international trade. Zoning applies to an animal subpopulation defined primarily on a geographical basis (using natural, artificial or legal boundaries) whereas compartmentalization applies to an animal subpopulation defined primarily by management and husbandry practices related to biosecurity.<sup>2</sup>

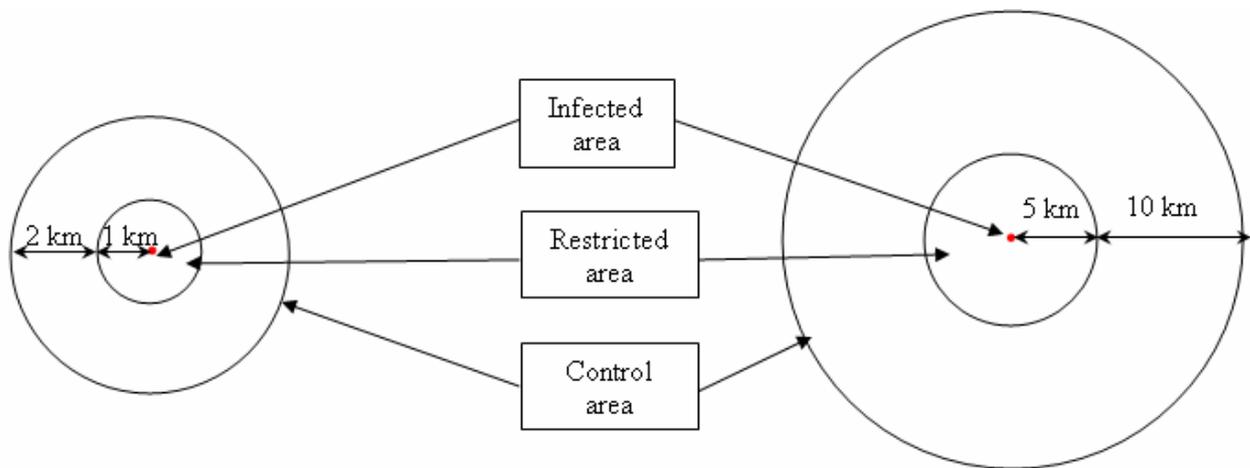
6. Whilst OIE guidelines provide for the concept of zoning and compartmentalization, FAO guidelines provide for the recommended control area in the event of a HPAI outbreak.

7. According to the FAO guidelines, a village or farm in which HPAI has been detected is known as an infected area. A restricted area will be approximately 1-5 km in radius around the infected area. The control area should be 2-10 km in radius from the boundary of the restricted area. Control and preventive measures should be adopted in the area within a radius of 3-15 km of the infected area in order to prevent the spread of the disease.

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1 WHO Fact Sheet on Avian Influenza ([http://www.who.int/mediacentre/factsheets/avian\\_influenza/en/](http://www.who.int/mediacentre/factsheets/avian_influenza/en/))

2 OIE Terrestrial Animal Health Code, 2007



**Diagram 1**  
 Scenario with the smallest restricted area and control area

**Diagram 2**  
 Scenario with the largest restricted area and control area

8. The infected area will be subject to quarantine and all susceptible animals will be destroyed within this area. The restricted area is subject to intense surveillance and movement controls. Movement of poultry out of the restricted area will in general be prohibited, whilst movement into the area would only be allowed through regulatory approval. The purpose of the control area is to reduce the risk of disease spread, and in general surveillance and movement controls will be less intense and animals and products may be permitted to move under veterinary control.

9. Against the above, the Administration has discussed the zonal approach policy to control the import of live poultry and poultry products in dealing with different scenarios of HPAI outbreak in Guangdong Province among in-house experts and exchanged views with local academia. We have now come to a view that it would be appropriate to adopt the zonal approach. The zonal approach puts public health first, while being able to avoid unnecessary restrictions on a steady food supply to Hong Kong.

**ZONAL APPROACH**

10. The registered farm system practised in the Mainland for supply of live poultry to Hong Kong is in line with the concept of compartmentalization as stated in the OIE guidelines. Whilst only registered farms with stringent biosecurity measures (compartments) in the Mainland would be allowed to export live poultry to Hong Kong, we consider it prudent to adopt a zonal approach to

control the import of live poultry and poultry products under different scenarios of HPAI outbreak. The arrangement would be able to stop the import of live poultry and poultry products from registered farms located within a certain zone surrounding the index farm (under the zoning concept) where an HPAI outbreak has occurred (or the likely location of infection for a human case) in order to prevent the spread of HPAI to Hong Kong. The safeguards provided by the aforementioned registered farm system and control measures are factors to be considered in determining the size of the zone.

11. Based on control measures adopted in Guangdong Province, we have decided to adopt an ‘import control zone’ arrangement consisting of ‘infected area’, ‘restricted area’ and ‘control area’. This ‘import control zone’ would have a radius of 13 km from the infected area. This is in line with the concept of the FAO guidelines and the OIE’s Terrestrial Animal Health Code.

12. Based on the ‘import control zone’ concept, the detailed measures to be adopted under different scenarios of HPAI outbreak are outlined in the following paragraphs.

### **Outbreak in Registered Poultry Farms**

13. Given that stringent preventive measures have been implemented in all registered poultry farms in Guangdong Province, a confirmed outbreak of HPAI in any single registered farm would indicate a breach or lapse in these preventive measures (such as problems relating to application and storage of vaccine or a major fault in the biosecurity measures implemented in the farm). Taking a precautionary approach, we would suspend the import of live poultry and poultry products (including chilled and frozen poultry and poultry eggs) from the whole Guangdong Province for a period of up to 21 days. The actual length of suspension period would depend on the outbreak information provided by the Mainland authorities.

14. Furthermore, we consider that in addition to measures outlined in paragraph 13 above, we should impose a suspension period of 90 days for live poultry and poultry products from the ‘restricted area’ (i.e. the area within a radius of 3 km from the ‘infected area’) and a suspension period of 21 days for the ‘control area’ (i.e. the area within a radius of 10 km from the ‘restricted area’). The incubation period of HPAI is three to five days in general. However, for the purpose of disease control in the OIE’s Terrestrial Animal Health Code, the incubation period of HPAI in poultry is set at 21 days.

## **Outbreak in Non-registered Poultry Farms**

15. Since non-registered poultry farms are not permitted to export live poultry to Hong Kong, a HPAI outbreak in non-registered farms or backyard poultry would pose a relatively lower risk to Hong Kong. We are of the view that an outbreak in a limited number of non-registered farms would not render it necessary to suspend the import of live poultry and poultry products from the whole Guangdong Province to Hong Kong. However, as a precautionary measure, we would suspend the import of live poultry and poultry products from the 'restricted area' (i.e. the area within a radius of 3 km from the 'infected area') for a period of 90 days and the 'control area' (i.e. the area within a radius of 10 km from the 'restricted area') for 21 days.

16. In case more than one 'import control zone' has emerged, we would consider the circumstances of the case to see whether there are signs of spreading of the virus. We would suspend the import of live poultry and poultry products as necessary from the whole Guangdong Province for a period up to 21 days. Furthermore, we will suspend the import of live poultry and poultry products from the 'restricted area' (i.e. the area within a radius of 3 km from the 'infected area') for 90 days and the 'control area' (i.e. the area within a radius of 10 km from the 'restricted area') for 21 days.

## **Suspected Outbreak in Poultry Farms**

17. We will suspend the import of live poultry and poultry products from the 'import control zone' (i.e. the area within a radius of 13 km from the index farm with the suspected HPAI outbreak).

## **Human Infection**

18. In the event of a confirmed human case of HPAI infection within Guangdong Province, we will suspend the import of live poultry and poultry products from the 'import control zone' (i.e. the area of 13 km radius from the possible place of infection) for 21 days. If there is evidence that the patient has a history of contact with poultry within 14 days of disease onset, then the 'import control zone' covers the implicated/related poultry farms, markets and places where patient contact has occurred. If a positive contact history is not apparent, the 'import control zone' is worked out by reference to the usual residence of the patient within 14 days of disease onset.

19. The zonal approach would serve as a general guideline on the import suspension measures to be adopted by the Administration during the outbreak of HPAI in Guangdong Province. In handling each individual case of outbreak, we would at the same time take into account all factors concerned including for example the severity in the spread of the virus and the number of farms involved and poultry infected when determining the suspension measure.

## **ARRANGEMENTS FOR OTHER PROVINCE / COUNTRIES**

20. There are provinces outside Guangdong Province where there is no export of live poultry to Hong Kong. In the event of a confirmed HPAI poultry infection, we will suspend the import of poultry products from that province for at least 21 days.

21. In the event of a confirmed HPAI poultry infection in an overseas country, we will suspend the import of poultry products from the administrative unit in which the farm is located for at least 21 days. For countries with a small geographic area (e.g. Poland), the administrative region refers to the entire country. For countries with a large geographic area (e.g. USA and Canada), this administrative unit can be in the form of a province, state or county of that affected country.

22. The zonal approach policy is adopted in Guangdong Province taking into account the accessibility and close communication between Hong Kong and the relevant Mainland authorities. In the event of an HPAI outbreak in Guangdong Province, we can secure first hand information of the situation by site inspection. Regarding overseas countries and provinces outside Guangdong Province, we can mostly rely on paper audits, and hence we would adopt a more prudent approach.

## **CONCLUSION**

23. Since 2008, the Administration has adopted the zonal approach policy in dealing with the confirmed human HPAI case in Haifeng, Shanwei in Guangdong Province in February 26 and poultry HPAI case in Guangzhou on March 16. The above arrangements under the zonal approach policy for different scenarios of HPAI outbreak in Guangdong Province would protect the health of the

public against infection, whilst avoiding unnecessary disruption to a stable supply of live poultry and poultry products to Hong Kong.

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Agriculture, Fisheries and Conservation Department  
Department of Health  
Food and Environmental Hygiene Department**

**April 2008**

## **Preventive measures on Highly Pathogenic Avian Influenza**

Details of the preventive measures on Highly Pathogenic Avian Influenza (HPAI) adopted by the Administration are set out below.

### **Registered Farm System**

2. A registered farm system has been adopted since 1998 whereby live poultry supplied to Hong Kong from the Mainland would only come from registered farms, mainly in Guangdong Province. In these farms, strict biosecurity measures, traceability arrangements and drug residue monitoring are imposed. A vaccination programme for poultry against H5 avian influenza has also been introduced since 2003. The supply of chilled and frozen chicken and fresh poultry eggs to Hong Kong followed a similar registered farm system since 2002 and 2007 respectively.

3. The Centre for Food Safety (CFS) of the Food and Environmental Hygiene Department sends inspection teams to registered poultry farms on a regular basis. So far, the registered farms have a good track record of compliance.

### **Import Protocol**

4. All live poultry exported from the Mainland to Hong Kong are subject to stringent import protocol. The poultry destined for export are put under quarantine for five days and are required to pass blood tests prior to leaving the farms. All live poultry destined for Hong Kong must be accompanied by an official animal health certificate confirming an adequate immune status against H5 avian influenza virus and that the poultry are free of clinical signs of diseases and have been inspected by official veterinarians prior to export.

5. The live chickens imported from the Mainland are subject to clinical inspection at Man Kam To Livestock Inspection Station, including the taking of blood and faecal samples for tests and verification of official animal health certificates. After inspection, the truck carrying the live chicken is sealed and an “inspection certificate” will be issued to the driver for further verification at the Cheung Sha Wan Temporary Poultry Wholesale Market (CSWTPWM).

6. When the truck arrives at CSWTPWM, the seal will be broken and the “inspection certificate” will be collected. Labels bearing the truck registration number will be put on cages to help make sure that there is no mixing of different consignments during the waiting period. The chickens will be inspected again. Only chicken with negative results for the H5 avian influenza antigen testing will be released for sale in retail outlets.

### **Measures adopted in Hong Kong**

7. Enhanced biosecurity measures have been adopted by local farms since early 2002. A comprehensive vaccination programme for poultry against H5 avian influenza virus was also put in place in 2003. At the retail level, we introduced a monthly ‘rest day’ arrangement for all poultry stalls in public markets and fresh provision shops selling live poultry in July 2001. All live poultry would be slaughtered before the rest day and the premises would be thoroughly cleansed. Since March 2003, we have enhanced the arrangement to two ‘rest days’ per month. The rest days in retail outlets synchronized with the rest days in the CSWTPWM during which would also be thoroughly cleansed. Besides, the Administration banned keeping of backyard poultry in February 2006. Continuous enforcement action is taken in this regard.