

Scientific Committee on Emerging and Zoonotic Diseases

Suspension Period of Live Poultry Supply from the Mainland

Purpose

This paper explains the approach to determine the suspension period of live poultry supply from Guangdong following the detection of a human case of avian influenza H5 in Guangdong.

Background

- 2. In 2006 so far, there have been two human cases of avian influenza H5 occurring in Guangdong province. One occurred in Guangzhou (March) and the other in Shenzhen (June). Both cases visited live poultry markets during the incubation period, but a clear history of direct contact of live poultry could not be documented. No outbreak of H5 avian influenza among poultry was noted in the Guangdong during this period.
- 3. In both cases, the Secretary for Health, Welfare and Food declared that as a precautionary measure, import of live poultry from Guangdong was to be suspended for 21 days following confirmation of the human case, pending results of investigations on the source of infection. As subsequently there was no report of H5 avian influenza outbreaks among poultry farms in Guangdong including those farms supplying poultry to Hong Kong, live poultry import from Guangdong resumed after 21 days.

Approaches to determine the suspension period

4. The decision on timing to lift the suspension should take



衛生防護中心乃衛生署 轄下執行疾病預防 及控制的專業架構 The Centre for Health Protection is a professional arm of the Department of Health for disease prevention and control into account investigation findings of the individual human case in question. One needs to be satisfied of two pre-requisite conditions:

- (i) There is no evidence that the human case has been exposed to live poultry coming from a farm that supplies live poultry to Hong Kong; and,
- (ii) There is no evidence of highly pathogenic (or notifiable) avian influenza in Guangdong poultry farms.
- 5. The current 21-day suspension period draws reference from the OIE Terrestrial Animal Health Code in which a period of 21 days is taken as the incubation period of avian influenza among poultry for the purposes of the Terristrial Code. The approach assumes an outbreak of H5 avian influenza has occurred among poultry in Guangdong, and an investigation of a period of 21 days is required to see if there is a continuing outbreak among the poultry population.
- 6. In the situation that we faced, a human case was detected without the discovery of H5 outbreak in poultry. In other words, we are assessing the risk pertaining to the import of live poultry indirectly through our observation of epidemiology of human disease.
- 7. From the epidemiological angle of avian influenza H5 in humans, one can conjure an alternative approach in determining the suspension period. This calls for several assumptions:
 - The predominant mode of transmission of H5 infection among humans is bird-to-human.
 - Efficient human-to-human transmission has not been established.
 - Human-to-bird transmission is negligible.
 - An incubation period of 7 days for human H5 infection is used for public health practice (as per current WHO recommendation).
- 8. Consider the scenario where the human case has no discernable exposure history, and there is no documented outbreak of avian influenza in poultry farms or wet markets. Here, a conservative approach to determine the empirical suspension period is to count 14 days since the confirmation of the human case. This takes reference from conventional practice to "double the incubation period for public health practice (which corresponds to the customary upper limit of incubation period for humans)", i.e., 2 times 7 days





equals to 14 days. For example, during the SARS outbreak in 2003, the World Health Organization removed Hong Kong from the list of affected places 20 days (2 times 10 days) following the confirmation of the last human case.

- 9. Based on experience in connection with the two human cases of H5N1 in Guangdong this year, a period of 14 days was also judged to be reasonable for the initial investigations by the joint investigation team (e.g., defining probable exposures, contact tracing, medical surveillance), although some laboratory results might require a longer time.
- 10. Whilst it makes sense to stipulate an initial 14-day suspension period following the confirmation of a human case of avian influenza H5 in Guangdong, it must be emphasized again that each case has to be examined on an individual basis for epidemiological and exposure history, as well as evidence of avian influenza infection in poultry farms (re: para 4). The actual suspension period is best determined in the empirical sense and the actual date of live poultry resumption being dependent on investigation results pertaining to the particular case. If there is suspicion that avian influenza is occurring in poultry farms supplying Hong Kong, the suspension period has to be reviewed/extended depending on the actual circumstances.

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