

立法會
Legislative Council

LC Paper No. CB(2)973/10-11(04)

Ref : CB2/PL/HS

Panel on Health Services

**Background brief prepared by the Legislative Council Secretariat
for the meeting on 14 February 2011**

Prevention and control of influenza

Purpose

This paper gives an account of the past discussions by the Panel on Health Services ("the Panel") on the prevention and control of seasonal influenza and the human swine influenza ("HSI").

Background

2. Influenza is a highly infectious disease caused by different strains of influenza virus. There are three known categories of influenza, namely A, B and C. In April 2009, human cases of a new strain of swine influenza A(H1N1) virus infection were first identified in Mexico and the United States and then spread to many countries/regions worldwide and emerged to cause the pandemic in mid 2009. The World Health Organization ("WHO") announced in August 2010 that the world was moving into the post-pandemic period. Based on experience with past pandemics, this virus is expected to take on the behaviour of a seasonal influenza virus and continue to circulate in the community for some years to come.

3. Minor changes of the antigen of influenza viruses every year lead to seasonal influenza. As such, reformulation of the influenza vaccine is required every year to cope with the mutation of viral strains. In Hong Kong, influenza occurs throughout the year and often displays two seasonal peaks. The larger seasonal peak is in winter time, usually from January to March. A smaller summer peak is sometimes observed in July and August. Past records suggest that seasonal influenza accounts for about 1 000 deaths in Hong Kong every year.

4. To prevent and control communicable diseases, including seasonal influenza, the Centre for Health Protection ("CHP") of the Department of Health ("DH") has coordinated with local partners (such as the Hospital Authority ("HA") and private hospitals, general practitioners and operators of elderly homes and childcare centres), health authorities in the Mainland and overseas, as well as WHO, to organize a comprehensive communicable disease surveillance system. The main components of the system include statutory notification; outbreak reporting; sentinel surveillance; laboratory surveillance; monitoring of hospital admissions and mortality statistics; and monitoring of Mainland, overseas or unofficial disease reports.

Deliberations of the Panel

5. The subject matter of prevention and control of seasonal influenza and HSI has been discussed by the Panel at a number of meetings in the past three years. The deliberations and concerns of members are summarized below.

Influenza vaccination

6. Members noted that an annual Government Influenza Vaccination Programme ("GIVP") was in place to provide free seasonal flu vaccines to target groups (i.e. at-risk and/or under-privileged) at public hospitals or clinics so that they would be made immune or resistant to seasonal influenza. Members were advised that the Scientific Committee on Vaccine Preventable Diseases ("SCVPD") under CHP had recommended extending influenza vaccination for 2008-2009 to children aged from two to five years. In the light of this, the coverage of GIVP was extended to all children aged between six months and below six years from families receiving CSSA for 2008-2009. These children could receive free vaccination at Maternal and Child Health Centres under DH. Separately, the Influenza Vaccination Subsidy Scheme ("IVSS") was introduced for the first time in November 2008 to provide subsidy for those children aged between six months and below six years who were not under GIVP, to receive seasonal influenza vaccination in private doctors' clinics.

7. On the suggestion to cover needy children aged six to 11 years under GIVP, the Administration advised that there was no strong basis for doing so, as SCVPD had not recommended children of this age group for receiving influenza vaccination.

8. Noting that GIVP only provided free influenza vaccination to institutional elderly and elderly aged 65 years or above receiving CSSA,

there was a suggestion that GIVP should be expanded to provide free influenza vaccination to all elderly aged 65 and above.

9. Members were advised that based on the recommendations of the Scientific Committees of CHP that pneumococcal and seasonal vaccines would complement HSI vaccine in reducing deaths and hospitalizations among elderly people when the latter were infected with HSI, the coverage of GIVP (renamed as the Government Vaccination Programme ("GVP") in November 2009) would be expanded to provide pneumococcal vaccination, in addition to existing seasonal flu vaccination, free of charge for elderly aged 65 and above at public hospitals and clinics in 2009-2010. For those elderly aged 65 and above who were not on GIVP, they would receive pneumococcal and seasonal flu vaccinations in the private medical sector under a newly introduced Elderly Vaccination Subsidy Scheme ("EVSS").

10. The Finance Committee ("FC") approved on 19 June 2009 a new commitment of \$268 million for procurement of pneumococcal and seasonal influenza vaccines and the related injection in 2009-2010.

Human swine flu vaccination programme

11. On 10 June 2009, the Administration briefed the Panel on its plan to seek the approval of FC on creating a new commitment of \$700 million to meet a one-off non-recurrent procurement of HSI vaccines and the associated injections expenditure for four target groups for 2009-2010. These target groups, which had an estimated population of around two million, included healthcare workers; persons with chronic illness and pregnant women; children between the age of six months and less than six years; and elderly persons aged 65 or above.

12. Whilst there were concerns over the uncertain evolution of the epidemic and the possible side effects as well as the eventual take-up rate of the vaccine, the Panel raised no objection in principle to the proposed vaccination programme. The new commitment was approved by FC on 19 June 2009. Vaccination in HA and DH clinics for the target groups commenced on 21 December 2009, whereas the HSI vaccination subsidy programme for the target groups at participating private clinics commenced on 28 December 2009. Pig farmers and pig-slaughtering industry personnel were also included as a target group for receiving the HSI vaccination.

13. Noting that a majority of the confirmed HSI cases in Hong Kong were under 19 years and HSI proved to be readily transmissible in school settings, there was a suggestion that primary and secondary students should be included in the vaccination programme. Some members considered that

given the low take-up rate, the vaccination programme should be extended to people outside the target groups for at least a limited time period.

14. The Administration advised that the decision recommending that five target groups should take the vaccination was made by the Scientific Committees of CHP. They comprised local experts in the field and had extensive discussions taking into account a range of scientific considerations including local disease epidemiology, international experience, WHO's recommendations, and the possible risk of medical complications, hospitalization and deaths arising from HSI. The Scientific Committees were of the opinion that more scientific evidence was required to support the statement that the protective benefits of vaccination against potential adverse effects were greater in the mass vaccination of another population group such as primary and secondary school students at this stage.

15. The Administration further advised that it was mindful that some non-target groups might wish to receive vaccination for personal protection. In this regard, 500 000 doses of vaccines were reserved for private doctors for such purposes. People who fell outside the target groups might receive vaccination from private clinics at their own cost upon the arrival of the second batch of vaccines in mid-January 2010.

16. Concerns were raised about the possible side effects involved for receiving the vaccine, including the Guillain-Barre Syndrome ("GBS") which was a rare neurological disorder causing paralysis and even respiratory difficulties. The Administration advised that while GBS had been suspected to be related with influenza vaccination, the disease could also develop following a variety of infections, including seasonal influenza. So far no clear association had been found between GBS with either seasonal or HSI vaccine. In considering whether a defined population group was recommended to receive vaccination, the Scientific Committees of CHP had assessed the protective benefits of vaccination for the defined target groups against possible side effects including rare ones like GBS. Members were advised that if the at-risk groups did not receive vaccination, they had a greater chance succumbing to HSI than experiencing the rare possible side effect of GBS associated with the vaccine.

17. The Administration advised the Panel on 11 May 2010 that as at 25 April 2010, a total of about 190 000 doses of HSI vaccines had been administered to the target groups. The stock of unused vaccines kept by the Government was about 2.7 million. Unused vaccines would be disposed of after the expiry of the injection period.

Infection risk in healthcare setting

18. Members considered that to prevent cross infections, it was important to step up infection control measures in HA hospitals.

19. HA advised that it had implemented a series of measures to cope with the influenza season and the associated surge in patient attendance and bed occupancy in public hospitals and clinics. This included promoting hand hygiene in all HA hospitals and clinics; enhancing support to residential care homes for the elderly by Community Geriatric Assessment Service, Community Nursing Service and Visiting Medical Officer programmes; creating additional observation areas and temporary areas to solve the capacity limitation of Emergency Medical Wards and reduce unnecessary admission to medical wards; opening additional wards and/or additional beds to accommodate the extra demand by paediatric, medical and geriatric patients; more frequent ward rounds in paediatric, medical and geriatric wards to ensure early discharge of patients; and restricting visiting hours to acute wards to two hours per day to prevent cross infections.

20. On reducing the risk of healthcare-associated infections, members were advised that at present, each major public hospital had an infection control team to oversee infection control policies and practices. Hospital front-line staff also worked closely with infection control officers to ensure early identification of infectious cases and implementation of appropriate actions to prevent the spread of diseases. On the other hand, CHP and HA provided infection control training programmes to healthcare and healthcare-related workers in the public and private sectors. Guidelines on infection control were issued for different institutional settings and professional groups. In addition, an infectious disease block in the Princess Margaret Hospital with 108 isolation beds was completed in 2007. There were a total of 1 144 isolation beds in the acute hospitals of HA to cater for isolation of infectious cases as of February 2009.

Surge capacity

21. During the discussion on the strategy and management of HSI in 2009, concern was raised about whether HA had the surge capacity to handle patients who required hospitalization.

22. HA advised that it had drawn up guidelines for triage and management of HSI to ensure that patients most in need of hospitalization would not be denied of proper treatment, including the setting up of designated HSI clinics for patients with influenza symptoms to triage and provide treatment including antiviral medication.

Antiviral stockpiling and use of Tamiflu

23. Members noted that on the advice of its Scientific Committee on Emerging and Zoonotic Diseases, CHP had stockpiled about 20 million doses of antiviral drugs to prepare for emergency situations. The stockpile included both oseltamivir (Tamiflu) and zanamivir (Relenza). Members were also advised that DH would review the antiviral stockpiling strategies from time to time, taking into account the recommendations of the Scientific Committee and WHO.

24. On the use of Tamiflu in the management of HSI, the Administration advised that during the mitigation phase, Tamiflu would only be prescribed to patients infected with HSI, as it was no longer feasible nor appropriate to treat close and social contacts where their risk of infection approximated that of the general public.

Suspension of classes

25. During the discussion on the management of HSI in 2009, concern was raised over the transmission of the disease in school settings which might cause sizable outbreaks. The Administration advised that where necessary, classes of all primary schools, kindergartens, nurseries and other pre-schools would be suspended for up to 14 days in the first instance and to be reviewed as appropriate. During the suspension period, schools, if required, would remain open to serve those children whose parents had difficulties in arranging alternative child care, while making necessary arrangements to avoid dense congregation of children to minimize the risk of disease transmission.

26. As regards the grounds for not imposing the same requirement for secondary schools, the Administration advised that children aged 12 and below were usually less capable of adhering to good personal hygiene and keeping a distance from their classmates. Therefore, special consideration should be given to primary schools, kindergartens, nurseries and other pre-schools. The Administration, however, would not rule out suspending the classes of all secondary schools if transmission of HSI became sustained and significant.

27. The Administration further advised that it would issue advisory guidelines on school functions and extra-curricular activities for children and youth, with a view to enabling operators as well as parents and their children to make informed decisions in organizing and participating in these activities.

Communication

28. Members were of the view that the Administration should step up its efforts in keeping the public posted of the latest influenza situation.

29. The Administration advised that before the influenza season arrived, CHP would issue alerts to doctors, homes for the elderly, hostels for people with disabilities, schools, kindergartens and child care centres from time to time, so that appropriate prevention action could be taken. A weekly surveillance report, the Flu Express, would be issued during the flu season to inform the public of the latest situation. In addition, daily update of the influenza situation was posted on CHP's dedicated influenza webpage in its website to enhance timeliness in circulating information to the public.

Promotion of personal and environmental hygiene

30. There was a suggestion that personal hygiene should be included in the curriculum of kindergartens and primary schools.

31. The Administration advised that efforts had been and would continuously be made by the Education Bureau to encourage schools to ensure the observance of personal hygiene measures so as to guard against the spread of influenza and other communicable diseases.

Pandemic preparedness

32. Members noted that the Government had promulgated its Preparedness Plan for Influenza Pandemic in January 2005. The Plan included a three-level response system, i.e. Alert Response Level, Serious Response Level and Emergency Response Level. These levels were based on different risk-graded epidemiological scenarios relevant to Hong Kong, and each of them prescribed a given set of public health actions required. They were designed to match with the guideline promulgated by WHO for pandemic influenza planning.

33. Question was raised as to whether public hospitals and clinics had adequate supply of personal protective equipment ("PPE") to deal with a pandemic. HA advised that its PPE stock level was equivalent to three times the peak monthly consumption during the last Severe Acute Respiratory Syndrome outbreak for the PPE supplies. Arrangements had also been made with PPE suppliers to stock two-month supply of the equipment in Hong Kong in case there was an upsurge of demand for the equipment. To ensure effective delivery of PPE supplies to the frontline workers, a computerized logistics system had been put in place.

34. As regards whether all levels of Governmental staff were familiarized with their roles and duties on the preparedness and response plans for influenza pandemic, the Administration advised that relevant Government departments had developed their own contingency plans and detailed operating manuals on infectious disease prevention and control, and had been conducting regular drills to ensure that parties concerned were familiar with the plans. HA advised that it would step up actions to see that all frontline staff were familiar with their roles and duties in the prevention of and during an outbreak of influenza in the hospitals.

35. Noting that the existing Preparedness Plan for Pandemic Influenza was developed to face the challenge of avian influenza, there was a suggestion that in the long term, the Administration should formulate preparedness plans for different types of pandemic influenza.

Latest developments

36. On 17 January 2011, CHP indicated that the latest surveillance data showed that Hong Kong has entered the winter influenza peak season. At present, the Alert Response Level under the Government's Preparedness Plan for Influenza Pandemic is activated. As at 2 February 2011, CHP recorded 29 severe cases newly admitted to the intensive care unit. Among them, five were fatal cases. According to CHP, Influenza A(H1N1)2009 (i.e. HSI) constitutes about 90% of the currently circulating influenza viruses. The remaining ones are influenza A(H3N2) and influenza B. They are antigenically similar to this year's vaccine viruses, i.e. the vaccine will be able to provide protection against influenza infection.

37. As at 6 February 2011, more than 362 000 doses of seasonal influenza vaccines have been administered to specified target groups under GVP and the Vaccination Subsidy Schemes (i.e. CIVSS and EVSS).

Relevant papers

38. A list of relevant papers and documents is in the **Appendix** for members' reference. The papers and documents are available on the Legislative Council website at <http://www.legco.gov.hk>.

Relevant Papers/Documents

<u>Meeting</u>	<u>Meeting Date</u>	<u>Papers</u>
Finance Committee	19 June 2009	<p>Administration's paper FCR(2009-10)29 http://www.legco.gov.hk/yr08-09/english/fc/fc/papers/f09-29e.pdf</p> <p>Minutes of meeting LC Paper No. FC14/09-10 http://www.legco.gov.hk/yr08-09/english/fc/fc/minutes/fc20090619.pdf</p> <p>LC Paper No. FC19/09-10 http://www.legco.gov.hk/yr08-09/english/fc/fc/minutes/fc20090619a.pdf</p>
Panel on Health Services	5 November 2005 #	<p>Administration's paper LC Paper No. CB(2)294/05-06(01) http://www.legco.gov.hk/yr05-06/english/panels/hs/papers/fehs1105cb2-294-1e.pdf</p> <p>Minutes of meeting LC Paper No. CB(2)1627/05-06 http://www.legco.gov.hk/yr05-06/english/panels/hs/minutes/fshs1105.pdf</p>
	10 March 2008	<p>Administration's paper LC Paper No. CB(2)1266/07-08(05) http://www.legco.gov.hk/yr07-08/english/panels/hs/papers/hs0310cb2-1266-5-e.pdf</p> <p>Administration's supplementary information paper LC Paper No. CB(2)2028/07-08(01) http://www.legco.gov.hk/yr07-08/english/panels/hs/papers/hs0310cb2-2028-1-e.pdf</p> <p>Minutes of meeting LC Paper No. CB(2)1525/07-08 http://www.legco.gov.hk/yr07-08/english/panels/hs/minutes/hs080310.pdf</p>

<u>Meeting</u>	<u>Meeting Date</u>	<u>Papers</u>
	16 June 2008	<p>Administration's paper LC Paper No. CB(2)2211/07-08(01) http://www.legco.gov.hk/yr07-08/english/panels/hs/papers/hs0616cb2-2211-1-e.pdf</p> <p>Minutes of meeting LC Paper No. CB(2)2729/07-08 http://www.legco.gov.hk/yr07-08/english/panels/hs/minutes/hs080616.pdf</p>
	3 March 2009 *	<p>Administration's paper LC Paper No. CB(2)1007/08-09(02) http://www.legco.gov.hk/yr08-09/english/panels/hs/papers/hscb2-1007-2-e.pdf</p>
	2 May 2009 #	<p>Minutes of meeting LC Paper No. CB(2)1591/08-09 http://www.legco.gov.hk/yr08-09/english/panels/hs/minutes/hsfe20090502.pdf</p>
	11 May 2009	<p>Administration's paper LC Paper No. CB(2)1505/08-09(01) http://www.legco.gov.hk/yr08-09/english/panels/hs/papers/hs0511cb2-1505-1-e.pdf</p> <p>Minutes of meeting LC Paper No. CB(2)2384/08-09 http://www.legco.gov.hk/yr08-09/english/panels/hs/minutes/hs20090511.pdf</p>
	13 May 2009	<p>Administration's paper LC Paper No. CB(2)1542/08-09(01) http://www.legco.gov.hk/yr08-09/english/panels/hs/papers/hs0513cb2-1542-1-e.pdf</p> <p>Administration's supplementary information paper LC Paper No. CB(2)1933/08-09(01) http://www.legco.gov.hk/yr08-09/english/panels/hs/papers/hs0513cb2-1933-1-e.pdf</p>

<u>Meeting</u>	<u>Meeting Date</u>	<u>Papers</u>
		<p>Minutes of meeting LC Paper No. CB(2)2134/08-09 http://www.legco.gov.hk/yr08-09/english/panels/hs/minutes/hs20090513.pdf</p>
	<p>27 May 2009</p>	<p>Administration's paper LC Paper No. CB(2)1634/08-09(01) http://www.legco.gov.hk/yr08-09/english/panels/hs/papers/hscb2-1634-1-e.pdf</p> <p>Minutes of meeting LC Paper No. CB(2)2196/08-09 http://www.legco.gov.hk/yr08-09/english/panels/hs/minutes/hs20090527.pdf</p>
	<p>10 June 2009</p>	<p>Legislative Council Brief File Ref : FH CR 8/2/3821/09 http://www.legco.gov.hk/yr08-09/english/panels/hs/papers/hs0610-fhcr82382109-e.pdf</p> <p>Administration's supplementary information paper LC Paper No. CB(2)1924/08-09(01) http://www.legco.gov.hk/yr08-09/english/panels/hs/papers/hs0610cb2-1924-1-e.pdf</p> <p>Minutes of meeting LC Paper No. CB(2)2020/08-09 http://www.legco.gov.hk/yr08-09/english/panels/hs/minutes/hs20090610.pdf</p>
	<p>13 July 2009</p>	<p>Administration's paper LC Paper No. CB(2)2170/08-09(01) http://www.legco.gov.hk/yr08-09/english/panels/hs/papers/hs0713cb2-2170-1-e.pdf</p> <p>Administration's paper LC Paper No. CB(2)2133/08-09(02) http://www.legco.gov.hk/yr08-09/english/panels/hs/papers/hs0713cb2-2133-2-e.pdf</p>

<u>Meeting</u>	<u>Meeting Date</u>	<u>Papers</u>
		<p>Minutes of meeting LC Paper No. CB(2)2439/08-09 http://www.legco.gov.hk/yr08-09/english/panels/hs/minutes/hs20090713.pdf</p>
	<p>9 November 2009</p>	<p>Administration's paper LC Paper No. CB(2)182/09-10(05) http://www.legco.gov.hk/yr09-10/english/panels/hs/papers/hs1109cb2-182-5-e.pdf</p> <p>Administration's supplementary information paper LC Paper No. CB(2)624/09-10(01) http://www.legco.gov.hk/yr09-10/english/panels/hs/papers/hs1109cb2-624-1-e.pdf</p> <p>Minutes of meeting LC Paper No. CB(2)643/09-10 http://www.legco.gov.hk/yr09-10/english/panels/hs/minutes/hs20091109.pdf</p>
	<p>14 December 2009</p>	<p>Administration's paper LC Paper No. CB(2)416/09-10(01) http://www.legco.gov.hk/yr09-10/english/panels/hs/papers/hscb2-416-1-e.pdf</p> <p>Administration's paper LC Paper No. CB(2)494/09-10(05) http://www.legco.gov.hk/yr09-10/english/panels/hs/papers/hs1214cb2-494-5-e.pdf</p> <p>Administration's supplementary information paper LC Paper No. CB(2)1042/09-10(01) http://www.legco.gov.hk/yr09-10/english/panels/hs/papers/hs1214cb2-1042-1-e.pdf</p> <p>Minutes of meeting LC Paper No. CB(2)679/09-10 http://www.legco.gov.hk/yr09-10/english/panels/hs/minutes/hs20091214.pdf</p>

<u>Meeting</u>	<u>Meeting Date</u>	<u>Papers</u>
	11 January 2010	<p>Administration's paper LC Paper No. CB(2)705/09-10(01) http://www.legco.gov.hk/yr09-10/english/panels/hs/papers/hs0111cb2-705-1-e.pdf</p> <p>Administration's supplementary information paper LC Paper No. CB(2)1042/09-10(01) http://www.legco.gov.hk/yr09-10/english/panels/hs/papers/hs1214cb2-1042-1-e.pdf</p> <p>Minutes of meeting LC Paper No. CB(2)864/09-10 http://www.legco.gov.hk/yr09-10/english/panels/hs/minutes/hs20100111.pdf</p>
	8 February 2010	<p>Administration's supplementary information paper LC Paper No. CB(2)1172/09-10(01) http://www.legco.gov.hk/yr09-10/english/panels/hs/papers/hs0208cb2-1172-1-e.pdf</p> <p>Minutes of meeting LC Paper No. CB(2)1014/09-10 http://www.legco.gov.hk/yr09-10/english/panels/hs/minutes/hs20100208.pdf</p>
	11 May 2010	<p>Administration's paper LC Paper No. CB(2)1533/09-10(03) http://www.legco.gov.hk/yr09-10/english/panels/hs/papers/hs0511cb2-1533-3-e.pdf</p> <p>Minutes of meeting LC Paper No. CB(2)1755/09-10 http://www.legco.gov.hk/yr09-10/english/panels/hs/minutes/hs20100511.pdf</p>

Joint meeting with Panel on Food Safety and Environmental Hygiene

* Issue date