For information on 13 July 2009

Legislative Council Panel on Health Services

Update on the Prevention and Control of Human Swine Influenza Infection in Hong Kong

Purpose

This paper provides an update on the latest situation of human swine influenza (HSI) epidemic, and the Administration's strategy and measures to prevent and control the spread of the disease.

Latest Situation of HSI

Global situation

2. Since the outbreak of HSI infection in Mexico and the United States in April 2009, newly confirmed cases of HSI have continued to emerge in more countries/areas. The World Health Organization (WHO) had raised the level of influenza pandemic alert to the highest phase 6 on 11 June 2009. As at 1430 hours on 3 July 2009, 121 countries/areas (including Hong Kong) in total have reported over 77,000 confirmed cases, including 332 fatal cases.

Local situation

3. In Hong Kong, since the confirmation of the first cluster of indigenous cases¹ on 11 June 2009, the number of confirmed HSI cases has been increasing rapidly from 63 on 11 June 2009 to 901 as at 1430 hours on 3 July 2009. Figures 1 and 2 below show the daily and cumulative numbers of confirmed cases of HSI in Hong Kong respectively.

¹ An indigenous case means a case without any identifiable link to an imported index patient or a place affected by HSI outside Hong Kong.

Figure 1: Daily number of confirmed cases of HSI in Hong Kong (as at 1430 hours, 3 July 2009)

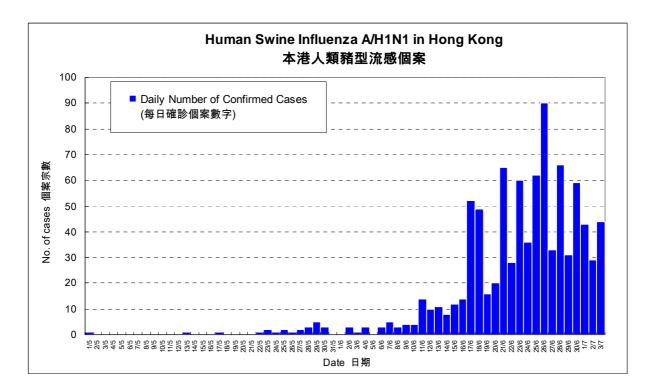
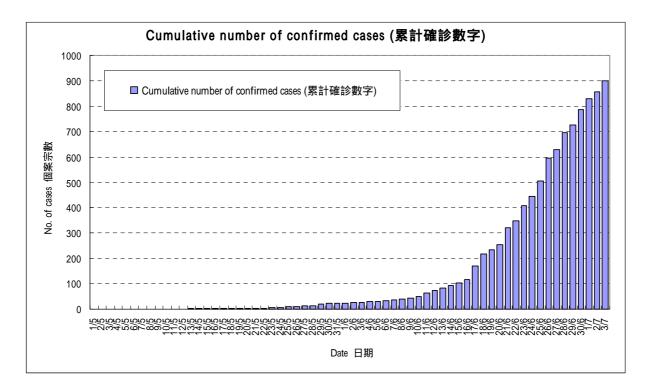
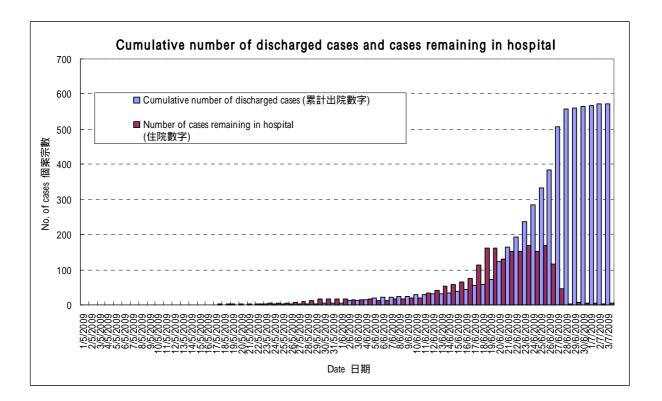


Figure 2: Cumulative number of confirmed cases of HSI in Hong Kong (as at 1430 hours, 3 July 2009)



4. Of the 901 confirmed cases in Hong Kong, there were 484 males and 417 females (male to female ratio = 1.2:1), age ranged from 5 months to 81 years (median age was 16 years old). Over 80% were aged 30 years old or younger. So far, all confirmed cases had relatively mild flu-like symptoms. There had been no fatal cases or cases requiring treatment in intensive care unit. As at 1430 hours on 3 July 2009, 577 patients had been hospitalised and all except 4 had already been discharged. The 4 are in stable condition. Figure 3 below shows the daily number of confirmed cases remaining hospitalized and the number of cases discharged from hospital.

Figure 3: Daily number of confirmed cases remain hospitalized and <u>number of confirmed cases discharged in Hong Kong</u> (as at 1430 hrs, 3 July 2009)



5. Further rise in the number of confirmed cases locally is expected with the approaching summer influenza season in Hong Kong, normally in July/August. It is important to note that the number of confirmed cases represents probably a small fraction of infections that have occurred, as many infections remain undetected due to the mild or asymptomatic nature of the illness.

6. On the other hand, HSI has also become a major strain of influenza

in Hong Kong, surpassing previous circulating strains of seasonal influenza H1N1 (Brisbane) viruses. Most recent data show that HSI makes up over two-third of all influenza viruses. Furthermore, about one in five patients seen at the Hospital Authority (HA)'s Designated Flu Clinics (DFCs) are tested positive for HSI, signifying that HSI is widely circulating in the community.

7. HSI has now taken root in the community. It proves to be readily transmissible in school settings and has caused sizeable outbreaks in some secondary schools, possibly because of the lack of population immunity to this new virus especially among younger age groups. Therefore, we have reasons to believe that the spread of the infection would have been much more extensive had we not suspended the classes of primary schools, special schools, kindergartens and child care centres since 12 June 2009.

8. At the same time, it is also clear that HSI in Hong Kong has so far manifested itself in a relatively mild manner, like in most other countries. Nonetheless, given the widespread transmission of HSI in the community involving large numbers of people, it would be a matter of time before we observe the emergence of serious or fatal cases, especially among the at-risk population groups, for example, persons with chronic illnesses, young children and the elderly.

Adjustment of mitigation strategy

9. Taking into account the latest situation of and knowledge gained about this new virus in Hong Kong, especially the evidence so far that HSI causes relatively mild disease albeit transmitting easily through the population, we have adjusted our mitigation strategy as follows -

- (a) Advance summer holidays for primary schools, special schools, kindergartens and child care centres, since the mitigation objective is to prevent large explosive outbreaks of HSI, and that the HSI epidemic is predicted to continue and intensify during the summer months.
- (b) Advise secondary schools to make arrangements for an early summer break after end-of-term examinations.
- (c) Issue advisory guidelines on school functions and extra-curricular

activities for children and youth during summer holidays, with a view to allowing operators as well as parents and their children to make informed decisions in organizing and participating in these activities.

- (d) Reissue advisory guidelines for organizers and participants of public functions with a view to maintaining normal societal functions and activities to proceed with practicable precautions to reduce the risk of large outbreaks.
- (e) Widely promulgate health advice for at-risk populations, i.e. children below 6, elderly at or above 65, and persons with chronic illnesses, for their personal protection with a view to reducing their chance of infection and in turn likelihood of serious or fatal complications.

10. The above strategy during the mitigation phase aims at reducing disease transmission especially large explosive outbreaks and in turn the final cumulative number of infected cases and the associated morbidity and mortality. It also serves to reduce the peak daily incidence of cases so as to minimize disruption to health services and other sectors of the society.

11. On the other hand, since HSI is now widely circulating in the community, measures such as patient isolation and tracing/quarantine of contacts are no longer efficient in reducing transmission. Priority is now accorded to disease surveillance, and management of clinically more severe cases and patients who are at risk of complications if infected by HSI. In this regard, clinical specimens have continued to be collected at DFCs and public hospitals to monitor the activity of HSI in the community on a daily basis. The Centre for Health Protection (CHP) is providing laboratory support to the private medical sector for patients with severe illnesses suspected to be due to HSI. Temperature screening, health declarations and broadcast of health messages at border control points remain unchanged at this stage.

12. On the service of DFCs, it will continue to attend to patients with fever and influenza-like-illness (ILI). However, priority would be given to pregnant women, those aged two or below, and high risk groups which include those suffering from chronic diseases or having immuno-compromised states. Confirmed patients with mild symptoms are not required for admission

and would be provided with symptomatic treatment. Tamiflu would only be given to ILI patients with chronic diseases or in immuno-compromised states. Patients with severe conditions will be referred to hospital for admission and they will be discharged from hospitals based on their clinical conditions.

WAY FORWARD

13. As the influenza pandemic progresses and more knowledge is gained about the properties of the disease, further measures and refinements of our strategy and management of the HSI may be adopted. The Administration will continue to monitor the situation closely and to implement appropriate measures to safeguard public health.

ADVICE SOUGHT

14. Members are invited to note the content of the paper.

Food and Health Bureau Department of Health Hospital Authority July 2009