Update on local epidemiology of severe human swine influenza (HSI) cases and Scientific Committees' recommendations on use of HSI vaccine

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From May 1, 2009 to January 31, 2010, a total of 35,266 laboratory confirmed human swine influenza(HSI) cases were recorded. The male to female ratio was 1:0.95. Majority (>99%) of the HSI cases were clinically mild. 63.5% of all laboratory confirmed cases were young people aged 18 years or below. Only 1.4% of all cases were elderly people aged 65 years and above. Elderly persons aged ≥65 years old and children aged ≤5 years old had much higher hospitalization rates than patients in other age groups (Table 1).

*Table 1 - Number and proportion of cases required hospitalisation (from June 27, 2009 to January 31, 2010)**

Category	Number of laboratory confirmed cases	Number of cases required hospitalisation (% of all cases)
Aged 0 - < 6 years	6,048	2,071 (34.24%)
Aged 6 - 64 years	28,129	4,157 (14.78%)
Aged ≥ 65 years	493	378 (76.67%)

**Cases confirmed before June 27, 2009 were excluded from analysis because all were admitted for isolation.*

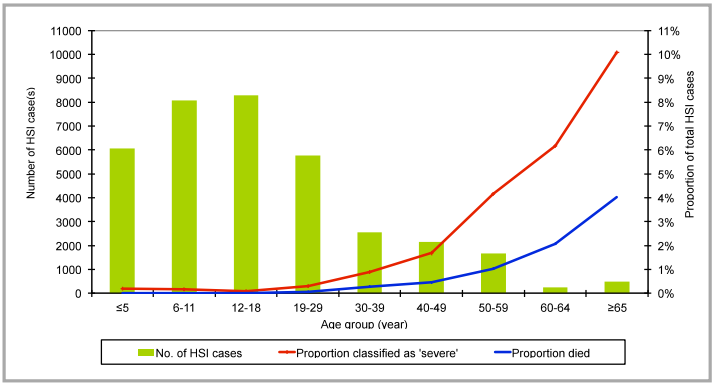

Figure 1 - Severe and fatal HSI cases from May 1, 2009 to January 31, 2010, by age.

Table 2 - Severe and fatal HSI cases from May 1, 2009 to January 31, 2010, by chronic condition status.

Category	No. of cases with chronic diseases*	No. of cases without chronic diseases
Total cases	1,803	25,222
Severe cases	166 (9.2%)	78 (0.31%)
Fatal cases	48 (2.66%)	17 (0.067%)

** Among 35,266 confirmed cases, history of chronic illnesses was available in 27,025 cases.*

So far, a total of 244 cases that had ever been classified by attending physicians as severe were recorded, constituting 0.7% of all cases. They included 149 males and 95 females with ages ranged from 10 months to 95 years (median: 51 years). Among the 244 severe cases, 169 (0.48% of all cases) required intensive care and 65 cases died. The case fatality rate was 0.18%. The deceased were 44 males and 21 females (male to female ratio = 1:0.48) with age ranging from 11 to 95 years (median: 56 years). Although the proportion of cases affecting elderly persons aged ≥65 years was small, the proportion of severe and fatal cases among the HSI cases aged ≥65 years were much higher at 10.08% and 4.03% respectively (Figure 1).

Forty-eight (73.8%) fatal cases had at least one pre-existing chronic condition (including diabetes, chronic cardiovascular and lung disease, metabolic or kidney disease, immunodeficiency, chronic neurological conditions that can compromise respiratory function, and severe obesity). The proportion of fatal cases among persons with chronic conditions is almost 40 times higher than cases without chronic diseases (Table 2).

As of January 31, we recorded 359 laboratory confirmed HSI cases in pregnant women. One (0.28%) of them required intensive care and was classified as severe infection. We recorded 1,321 cases in health care workers working in public hospitals.

The Scientific Committees of the CHP met on January 18, 2010 to review updated local epidemiology of HSI infection and local recommendations on HSI vaccination. Taking into account the latest scientific data including local disease epidemiology, international experience, World Health Organization recommendations, the Scientific Committees reaffirm their recommendations for HSI vaccination for the five existing target groups. For persons outside the target groups, the Scientific Committees consider that there are uncertainties in risk assessment and inherent lack of knowledge about the second wave of HSI at the present stage for arriving at a recommendation for mass vaccination of these persons. These individuals may choose to receive HSI vaccination based on their own consideration.