

# FLU EXPRESS

*Flu Express* is a weekly report produced by the Respiratory Disease Office of the Centre for Health Protection. It monitors and summarizes the latest local and global influenza activities.

## Local Situation of Influenza Activity (as of Feb 19, 2014)

**Reporting period: Feb 9 – 15, 2014 (Week 7)**

- The latest surveillance data showed that the local influenza activity remained at a high level.
- The Centre for Health Protection has collaborated with the Hospital Authority and private hospitals to monitor influenza associated intensive care unit (ICU) admissions or deaths (aged 18 years or above) since Jan 3, 2014. As of Feb 19, there were 147 cases of influenza associated ICU admission or death, in which 54 of them were fatal.
- Since Feb 10, 2014 (week 7), the Public Health Laboratory Services Branch (PHLSB) has adopted new genetic tests as the primary tests for various respiratory viruses, which are expected to be more sensitive than the methods used previously.
- Influenza can cause serious illnesses in high-risk individuals and even healthy persons. Except for those with contraindications, influenza vaccination is suitable for all members of the public.
- Children (aged between six months and less than 6 years, or attending a kindergarten or child care centre in Hong Kong) and elderly (aged 65 years or above), who are eligible, can be subsidised for seasonal influenza vaccination from enrolled private doctors participating in the Government's vaccination subsidy schemes starting from Oct 2, 2013.

### Influenza-like-illness surveillance among sentinel general outpatient clinics, 2012-14

In week 7, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) was 5.8 ILI cases per 1,000 consultations (Figure 1).

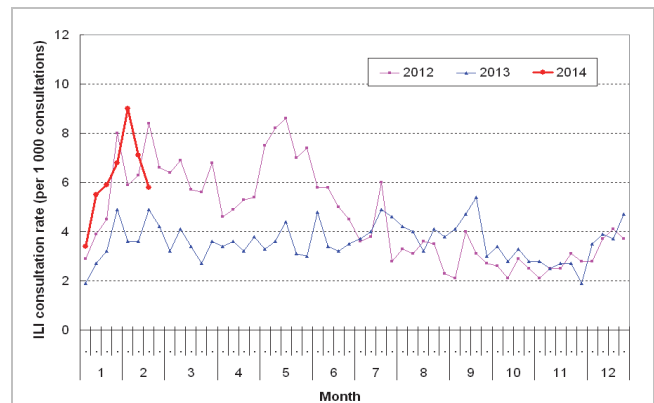


Figure 1 ILI consultation rate at sentinel GOPC, 2012-14

### Influenza-like illness surveillance among sentinel private doctors, 2012-14

In week 7, the average consultation rate for ILI among sentinel private doctors was 35.5 ILI cases per 1,000 consultations (Figure 2).

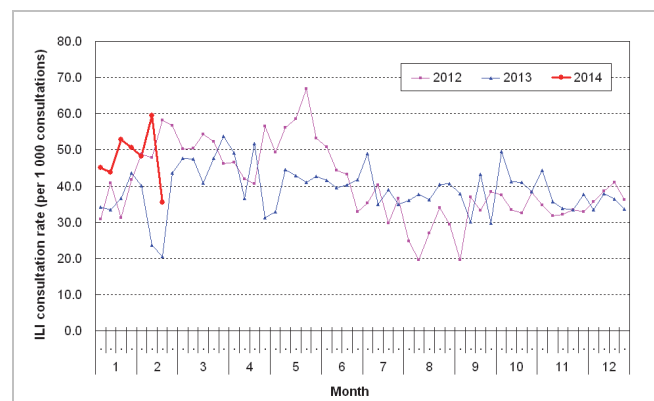


Figure 2 ILI consultation rate at sentinel GP, 2012-14

## Influenza virus detections (Laboratory surveillance), 2013-14\*

For the respiratory specimens received in week 7, 737(28.5%) were tested positive for seasonal influenza viruses, including. 394 influenza A(H1N1)pdm09 viruses, 159 influenza A(H3) viruses, 176 influenza B viruses and 8 influenza C viruses (Figure 3).

\* Since Feb 10, 2014 (week 7), PHLSB has adopted new genetic tests as the primary tests for various respiratory viruses, which are expected to be more sensitive than the methods used previously. This transition in laboratory techniques may bring about increases in detection of and percentage positive for influenza viruses.

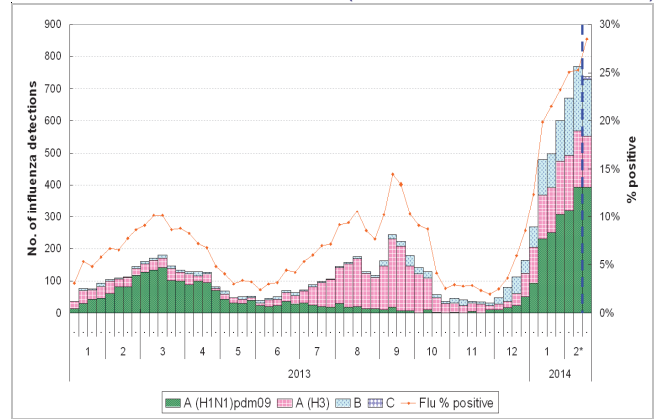


Figure 3 Influenza virus detections, 2013-14

## Percent positive for influenza viruses, 2013-14\*

Among the respiratory specimens received in week 7, 15.2% was influenza A(H1N1)pdm09, 6.2% influenza A(H3), 6.8% influenza B and 0.3% influenza C (Figure 4).

\* Since Feb 10, 2014 (week 7), PHLSB has adopted new genetic tests as the primary tests for various respiratory viruses, which are expected to be more sensitive than the methods used previously. This transition in laboratory techniques may bring about increases in detection of and percentage positive for influenza viruses.

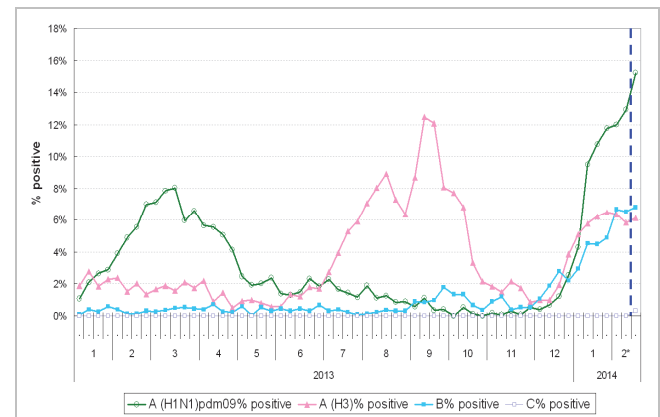


Figure 4 Percent positive for influenza viruses, 2013-14

## Influenza-like illness outbreak monitoring, 2013-14

In week 7, 5 ILI outbreaks occurring in schools/institutions were recorded. In the first 4 days of week 8 (Feb 16 to 19, 2014), 21 ILI outbreaks occurring in schools/ institutions were recorded (Figure 5).

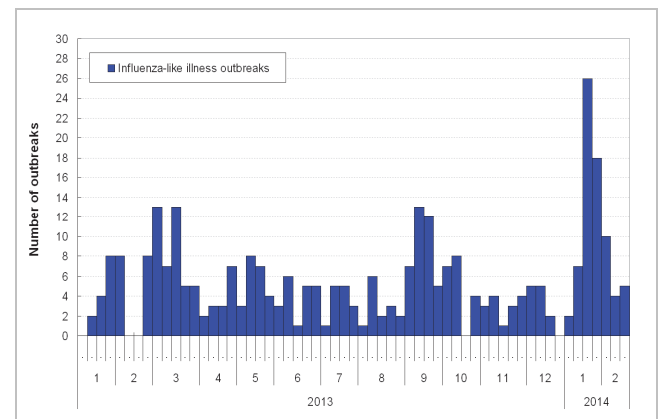


Figure 5 ILI outbreaks, 2013-14

## Rate of influenza-like illness syndrome group in accident and emergency departments, 2012-14<sup>#</sup>

In week 7, the rate of the influenza-like illness syndrome group in the accident and emergency departments (AED) was 188.1 (per 1,000 coded cases) (Figure 6).

<sup>#</sup>Note: The influenza-like illness syndrome group includes codes such as influenza, upper respiratory tract infection, fever, cough, throat pain, and pneumonia.

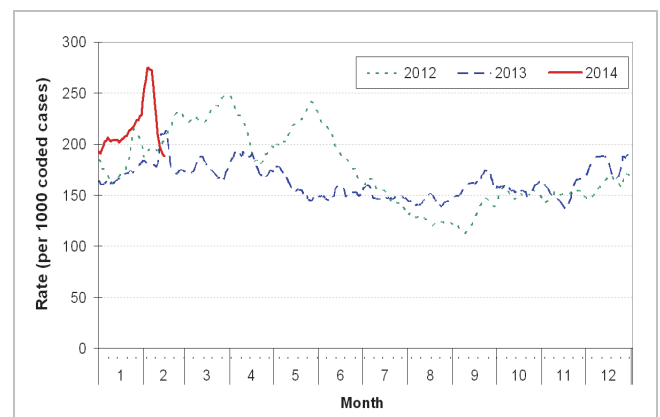


Figure 6 Rate of ILI syndrome group in AED, 2012-14

## Influenza associated hospital admission rates and deaths based on discharge coding, 2012-14

In week 7, hospital admission rates with principal diagnosis of influenza for persons aged 0-4 years, 5-64 years and 65 years or above were 2.78, 0.14 and 0.74 cases respectively (per 10,000 people in the age group) (Figure 7). Weekly number of deaths with any diagnosis of influenza in public hospitals is also shown in the figure on the right hand side.

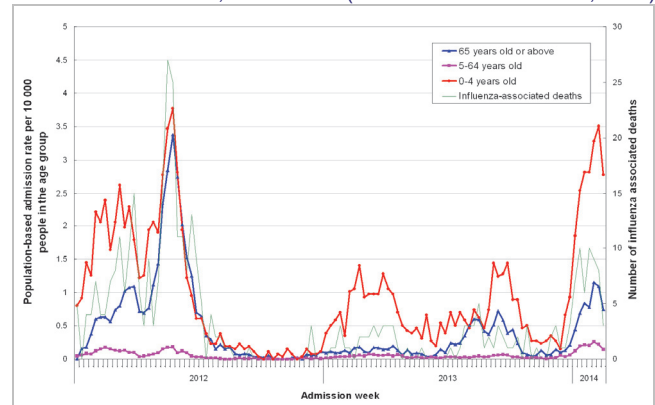


Figure 7 Influenza associated hospital admission rates and deaths, 2012-14

## Fever surveillance at sentinel child care centres/ kindergartens, 2012-14

In week 7, 0.71% of children in the sentinel child care centres/ kindergartens (CCC/ KG) had fever (Figure 8).

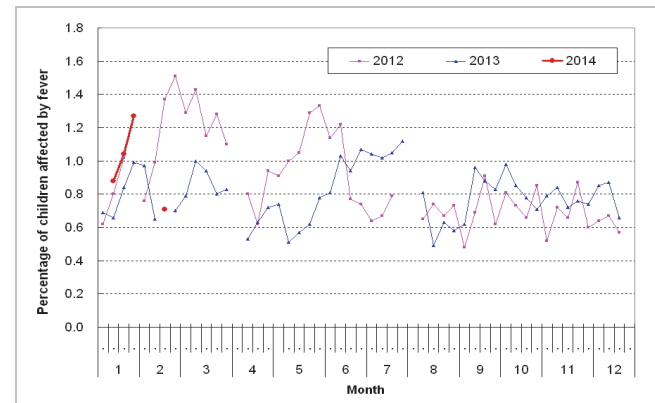


Figure 8 Percentage of children with fever at sentinel CCC/ KG, 2012-14

## Fever surveillance at sentinel residential care homes for the elderly, 2012-14

In week 7, 0.06% of residents in the sentinel residential care homes for the elderly (RCHEs) had fever (Figure 9).

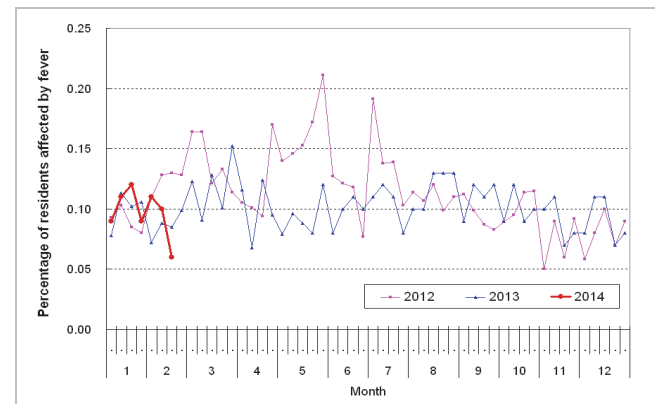


Figure 9 Percentage of residents with fever at sentinel RCHE, 2012-14

## Influenza-like illness surveillance among sentinel Chinese medicine practitioners, 2012-14

In week 7, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 3.39 ILI cases per 1,000 consultations (Figure 10).

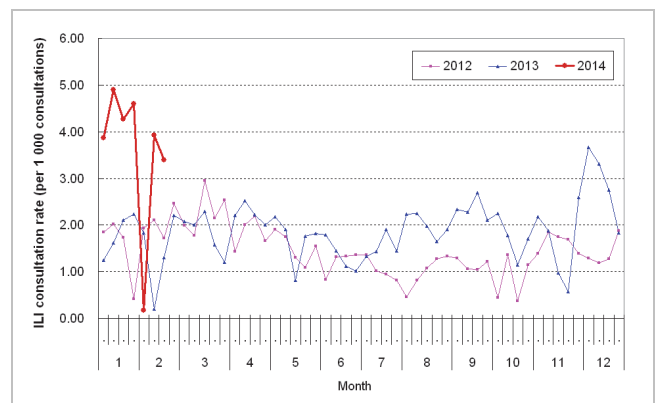


Figure 10 ILI consultation rate at sentinel CMP, 2012-14

### **Enhanced Surveillance for Severe Seasonal Influenza (Aged 18 years or above)**

- From Feb 12, 2014, 12:00 noon, to Feb 19, 2014, 12:00 noon, 31 cases of influenza associated ICU admission/death were recorded, in which 6 of them were fatal. In addition, 3 previously reported cases who required ICU admission passed away during this reporting period.

Note: The data reported are provisional figures and subject to further revision.

### **Surveillance of severe paediatric influenza-associated complication/death (Aged above one month and below 18 years)**

- In week 7, two cases of severe paediatric influenza-associated complication involving two 2-year-old boys were reported. The first case had developed pneumonia and status epilepticus, and the second case had developed pneumonia. They had been discharged. The first case had his nasopharyngeal aspirate tested positive for influenza A(H3), whereas the second case's nasopharyngeal aspirate was tested positive for influenza A(H1). In the first 4 days of week 8 (Feb 16 to 19, 2014), one new report of severe paediatric influenza-associated complication involving a one-year-old boy who had developed pneumonia and status epilepticus was reported. He is now in stable condition. His nasopharyngeal aspirate was tested positive for influenza B.

Note: The data reported are provisional figures and subject to further revision.

### **Surveillance of Tamiflu resistant influenza A(H1N1)pdm09 virus infection**

- In week 7 and the first 4 days of week 8 (Feb 16 to 19, 2014), there were no new reports of oseltamivir (Tamiflu) resistant influenza A(H1N1)pdm09 virus infection. There are totally 45 reports of Tamiflu resistant influenza A(H1N1)pdm09 virus detected in Hong Kong since 2009.

## **Global Situation of Influenza Activity**

- In the United States (week ending Feb 8, 2014), influenza activity decreased, but still remained at a high level with influenza A(H1N1)pdm09 the predominating virus.
- In Canada (week ending Feb 8, 2014), overall influenza activity continued to decrease, with the exception of ongoing activity in the more eastern provinces which experienced a later start of the influenza season. Influenza A(H1N1)pdm09 virus remains the most common virus circulating this season.
- In the United Kingdom (week ending Feb 9, 2014), the weekly influenza consultations remained low in England, Wales, Scotland and Northern Ireland.
- In Europe (week ending Feb 9, 2014), ILI consultation rates were increasing in most countries in the Region.
- In Singapore (week ending Feb 8, 2014), the number of consultations for acute respiratory infections continued to decrease.

#### **Sources:**

Information have been extracted from the following sources when updates are available: [United States Centers for Disease Control and Prevention](#), [Public Health Agency of Canada](#), [United Kingdom Health Protection Agency](#), [World Health Organization/Europe Euroflu](#) and [Singapore Ministry of Health](#).