

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 Mar 2, 2016)

Reporting period: Feb 21 – 27, 2016 (Week 9)

- The latest surveillance data showed that the overall influenza activity continued to increase. It is expected that the influenza activity will remain at a high level in the coming weeks.
- The Centre for Health Protection (CHP) has collaborated with the Hospital Authority (HA) and private hospitals to reactivate the enhanced surveillance for severe seasonal influenza cases (i.e. influenza-associated admissions to intensive care unit (ICU) or deaths) among patients aged 18 or above since Jan 29, 2016. As of Mar 2, 154 adult severe cases (including 49 deaths) were recorded. Separately, 10 cases of severe paediatric influenza-associated complication/death among patients aged below 18 years (including one death) were recorded during the period.
- Influenza can cause serious illnesses in high-risk individuals and even healthy persons. Given that seasonal influenza vaccines are safe and effective, all persons aged 6 months or above except those with known contraindications are recommended to receive influenza vaccine for personal protection.
- Eligible children (aged between six months and less than 6 years, or 6 years old or above attending a kindergarten or child care centre in Hong Kong), elderly (aged 65 years or above) and eligible persons with intellectual disabilities can be subsidised for seasonal influenza vaccination from enrolled private doctors participating in the Government's vaccination subsidy schemes starting from Oct 15, 2015. Elderly aged 65 or above living in the community can also receive free vaccination from General Out-patient Clinics under the HA and designated Elderly Health Centres of the Department of Health since Nov 10, 2015. Details are available from the vaccination schemes website (http://www.chp.gov.hk/en/view_content/17980.html).

Influenza-like-illness surveillance among sentinel general outpatient clinics and sentinel private doctors, 2012-16

In week 9, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) was 9.5 ILI cases per 1,000 consultations, which was higher than 9.0 recorded in the previous week (Figure 1, left). The average consultation rate for ILI among sentinel private doctors was 67.7 ILI cases per 1,000 consultations, which was higher than 47.6 recorded in the previous week (Figure 1, right).

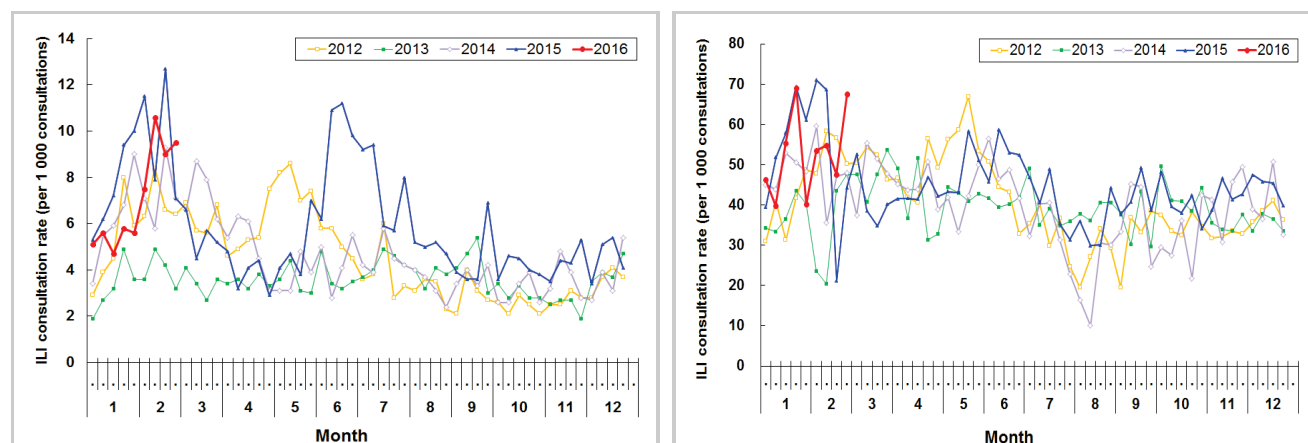


Figure 1 ILI consultation rate at sentinel GOPCs (left) and private doctors (right), 2012-16

Laboratory surveillance, 2012-16

Among the respiratory specimens received in week 9, 1286 (25.93%) were tested positive for seasonal influenza viruses, including 840 (16.94%) influenza A(H1), 57 (1.15%) influenza A(H3), 357 (7.20%) influenza B and 32 (0.65%) influenza C. The percentage of respiratory specimens tested positive for seasonal influenza viruses last week was 25.93%, which was higher than 24.75% recorded in the previous week (Figure 2). Among the influenza viruses detected in the last week, the proportions of A(H1), B, A(H3) and C were 65.3%, 27.8%, 4.4% and 2.5% respectively.

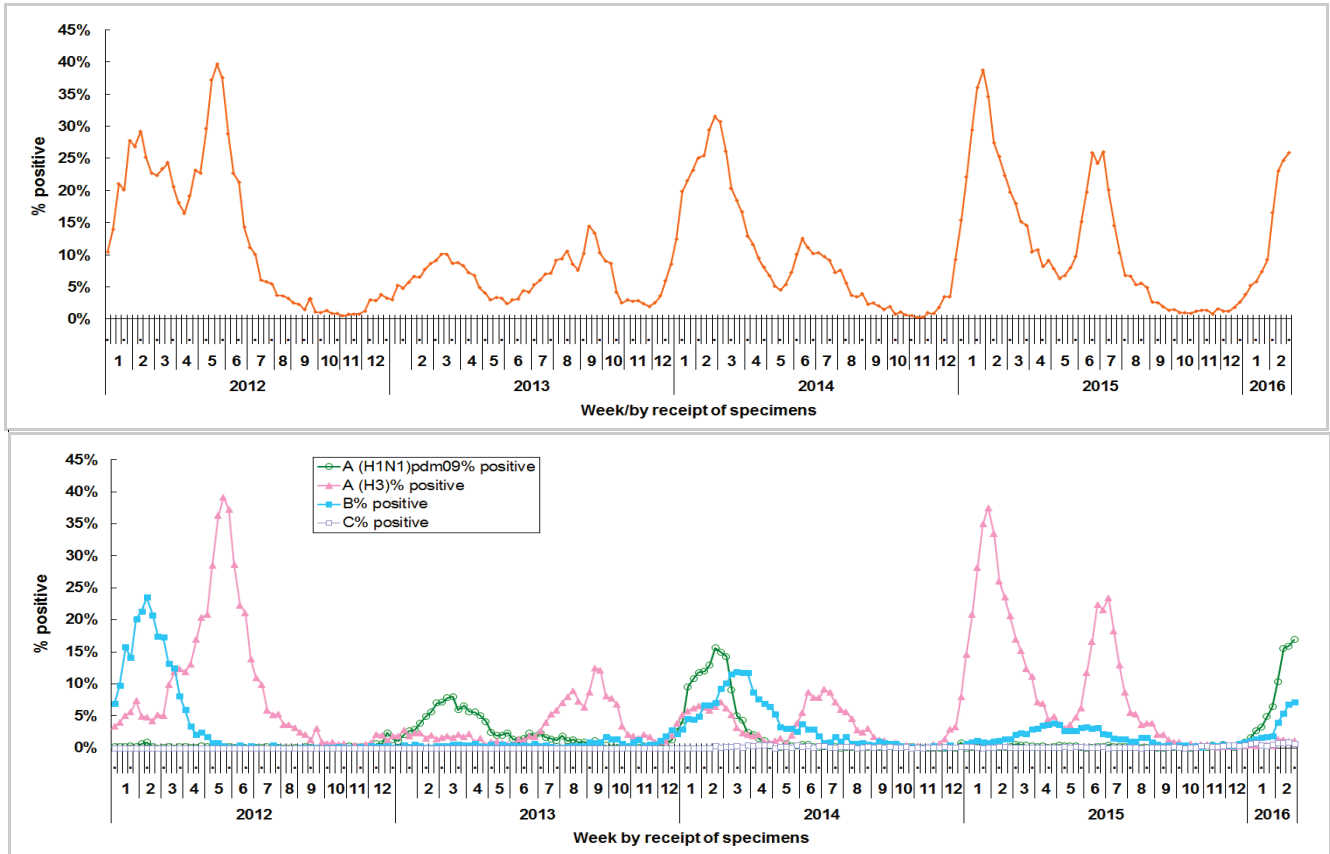


Figure 2 Percentage of respiratory specimens tested positive for influenza viruses, 2012-16 (upper: overall positive percentage, lower: positive percentage by subtypes)

Influenza-like illness outbreak surveillance, 2012-16

In week 9, 58 ILI outbreaks occurring in schools/institutions (affecting 421 persons) were recorded, as compared to 6 outbreaks (affecting 67 persons) recorded in the previous week (Figure 3). In the first 4 days of week 9 (Feb 28 to Mar 2, 2016), 55 institutional ILI outbreaks (affecting 358 persons) were recorded.

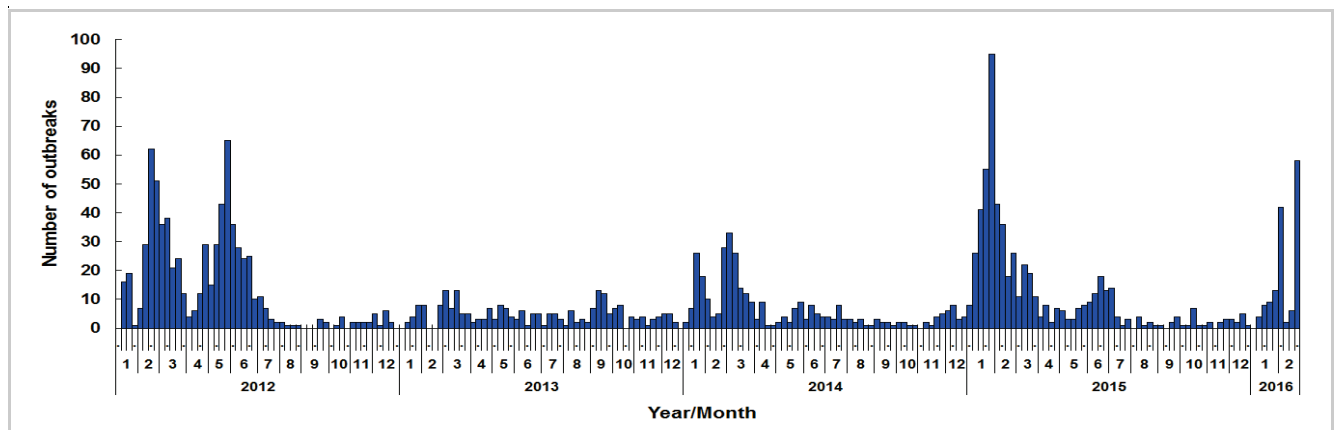


Figure 3 ILI outbreaks in schools/institutions, 2012-16

Rate of influenza-like illness syndrome group in accident and emergency departments, 2012-16[#]

In week 9, the rate of the influenza-like illness syndrome group in the accident and emergency departments (AED) was 248.4 (per 1,000 coded cases), which was higher than the rate of 244.2 in the previous week (Figure 4).

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

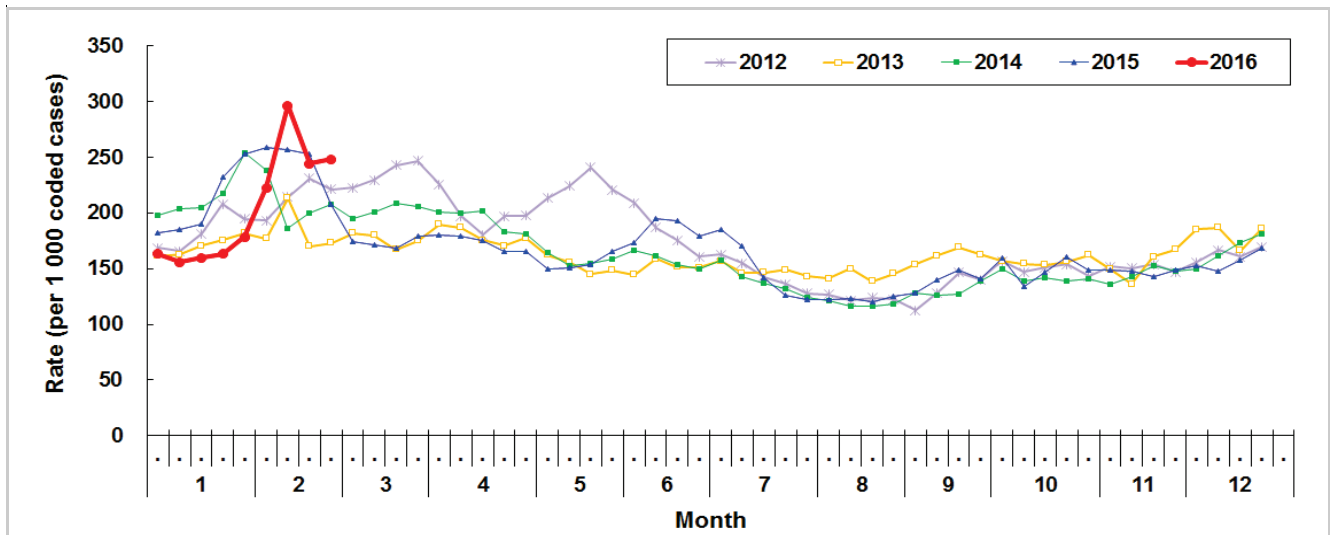


Figure 4 Rate of ILI syndrome group in AED, 2012-16

Influenza associated hospital admission rates and deaths in public hospitals based on discharge coding, 2012-16

In week 9, the admission rates in public hospitals with principal diagnosis of influenza for persons aged 0-4 years, 5-64 years and 65 years or above were 5.84, 0.28 and 0.68 cases (per 10,000 people in the age group) respectively, as compared to 5.09, 0.27 and 1.00 cases in the previous week (Figure 5). Weekly number of deaths with any diagnosis of influenza is also shown in Figure 5.

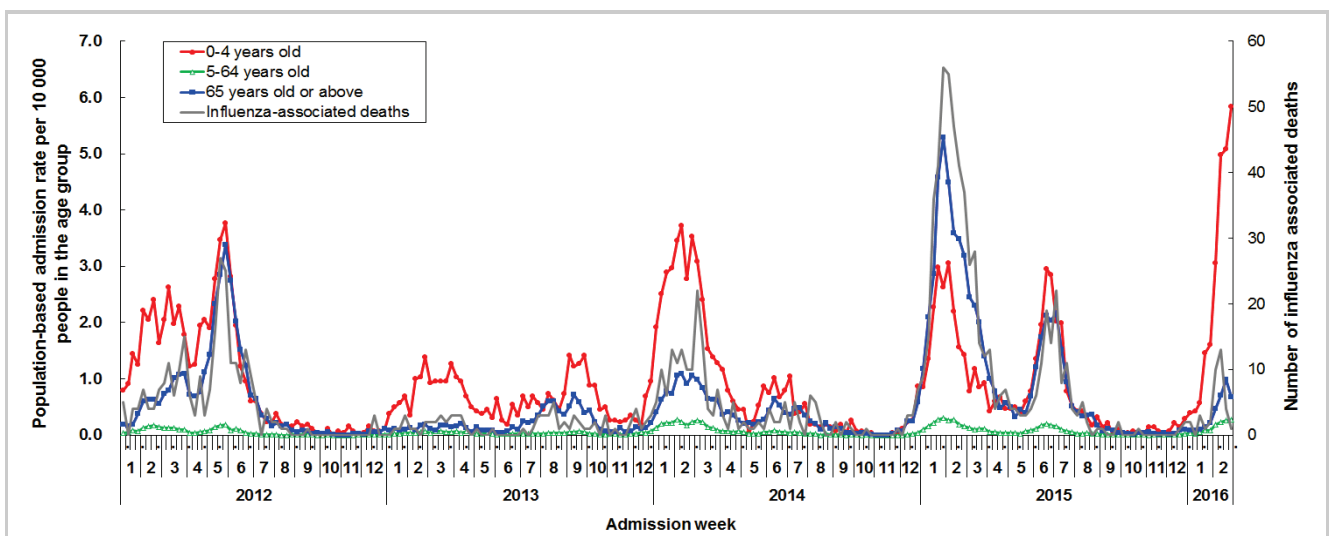


Figure 5 Influenza associated hospital admission rates and deaths, 2012-16

Fever surveillance at sentinel child care centres/ kindergartens, 2012-16

In week 9, 1.11% of children in the sentinel child care centres/ kindergartens (CCC/ KG) had fever (38°C or above) as compared to 0.98% in the previous week (Figure 6).

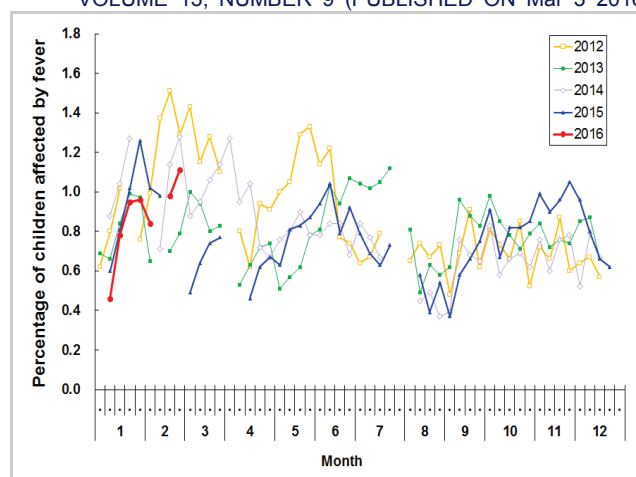


Figure 6 Percentage of children with fever at sentinel CCC/ KG, 2012-16

Fever surveillance at sentinel residential care homes for the elderly, 2012-16

In week 9, 0.11% of residents in the sentinel residential care homes for the elderly (RCHes) had fever (38°C or above) as compared to 0.12% in the previous week (Figure 7).

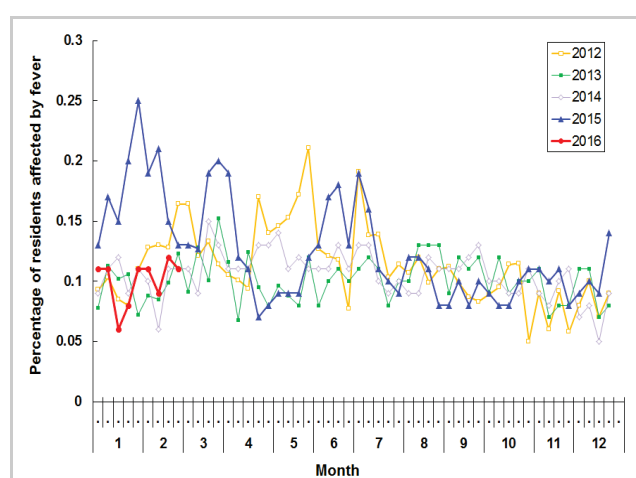


Figure 7 Percentage of residents with fever at sentinel RCHE, 2012-16

Influenza-like illness surveillance among sentinel Chinese medicine practitioners, 2012-16

In week 9, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 4.23 ILI cases per 1,000 consultations as compared to 3.53 in the previous week (Figure 8).

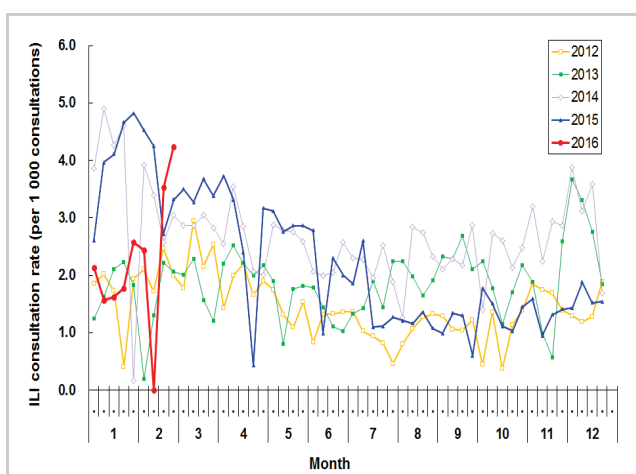


Figure 8 ILI consultation rate at sentinel CMP, 2012-16

Surveillance of severe influenza cases

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

- Since activation of the enhanced surveillance for severe influenza infection on Jan 29, 2016, a total of 154 adult severe cases (including 49 deaths) and 10 paediatric severe cases (including one death) were recorded (as of Mar 2)(Figure 9). Among them, 128 patients had infection with influenza A(H1N1)pdm09, 19 patients with influenza B, 9 patients with influenza A(H3N2), 7 patients with influenza A pending subtype and one patient with both influenza A(H3N2) and B. In the last winter season in early 2015, 647 adult cases (including 501 deaths) and 18 paediatric cases (including 1 death) were filed.

Enhanced surveillance for severe seasonal influenza (Aged 18 years or above)

- In week 9, 37 cases of influenza associated ICU admission/death were recorded, in which 11 of them were fatal. In the first 4 days of week 10 (Feb 28 to Mar 2), 15 cases of influenza associated ICU admission/death were recorded, in which 7 of them were fatal.

Surveillance of severe paediatric influenza-associated complication/death (Aged below 18 years)

- One case and two cases of severe paediatric influenza-associated complication/death were reported in week 9 and in the first 4 days of week 10 (Feb 28 to Mar 2) respectively. The case affecting a 6-year-old boy reported in week 10 was a fatal case. The details are as follow:

Reporting week	Age	Sex	Complication	Influenza subtype
9	9 months	Female	Pneumonia	Influenza A(H1N1)pdm09
10	14 years	Male	Pneumonia	Influenza A(H1N1)pdm09
10	6 years	Male	Myocarditis	Influenza B

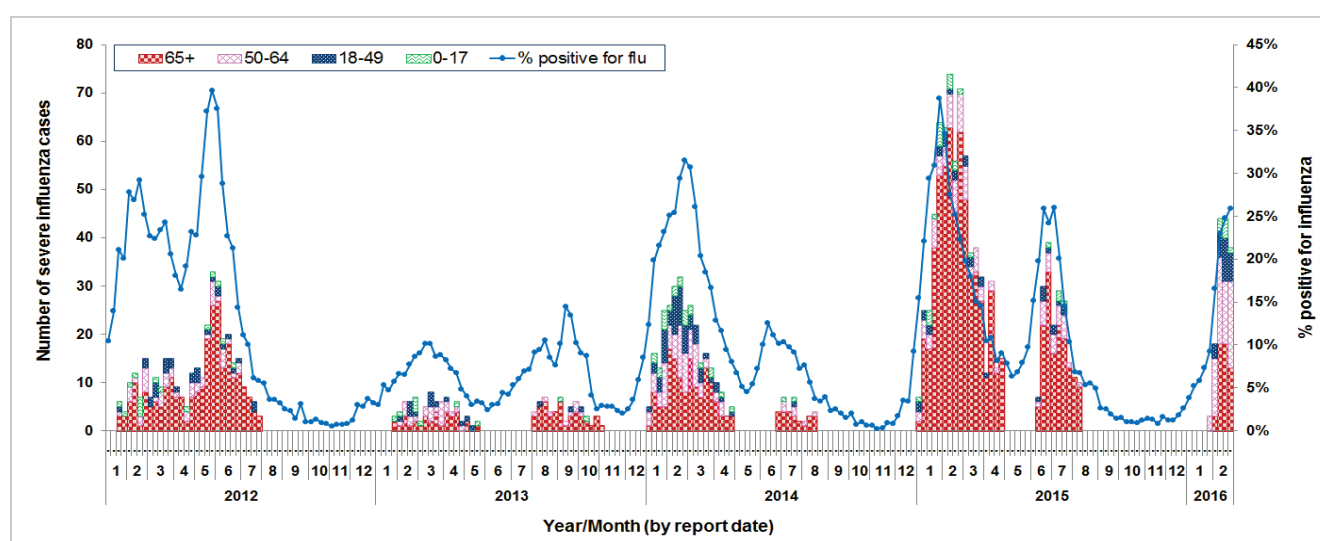


Figure 9 Weekly number of severe influenza cases recorded during influenza seasons, 2012-2016

Remark: The surveillance system for severe influenza cases aged 18 years or above was only activated intermittently during influenza seasons.

Surveillance of oseltamivir resistant influenza A(H1N1)pdm09 virus infection

- In week 9 and the first 4 days of week 10 (Feb 28 to Mar 2, 2016), there were no new reports of oseltamivir (Tamiflu) resistant influenza A(H1N1)pdm09 virus infection. There are totally 47 reports of oseltamivir resistant influenza A(H1N1)pdm09 virus detected in Hong Kong since 2009.

Global Situation of Influenza Activity

- In the United States (week ending Feb 20, 2016), influenza activity increased. The proportion of outpatient visits for ILI was 3.2%, which was above the national baseline of 2.1%.
- In Canada (week ending Feb 20, 2016), the influenza activity continued to increase. Laboratory detections and outbreaks of influenza in the past week continued to increase with the majority due to influenza A. Influenza A(H1N1)pdm09 is the most common circulating virus subtype.
- In the United Kingdom (week ending Feb 21, 2016), the influenza indicators stabilised. The weekly ILI consultation rate has decreased but remained above the baseline threshold in England. The ILI rates have increased in Scotland and Wales while a slight decrease was noted in Northern Ireland. The percentage of positive influenza detection was 22.6% as compared to 20.7% in the previous week. It was above the threshold for 2015/16 season of 7.4%.
- In Europe (week ending Feb 21, 2016), influenza activity continued to increase. Influenza A(H1N1)pdm09 predominated, accounting for 86% of subtyped influenza A viruses detected through sentinel surveillance.
- In Mainland China (week ending Feb 21, 2016), influenza activities in both southern and northern China were at seasonal epidemic levels. Influenza A(H1N1), influenza A(H3N2) and influenza B co-circulated in Mainland China.
- In Taiwan (week ending Feb 27, 2016), influenza activity gradually decreased after reaching the peak level during Chinese New Year. The activity stabilized this week as compared with previous week. Recently the predominating virus was influenza A(H1N1), which was similar to the vaccine viruses.
- In Japan (week ending Feb 21, 2016), the influenza season has started since early January. The average number of reported ILI cases per sentinel site was 37.16 in the week ending February 21, much higher than the baseline level of 1.00.

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](#), [Public Health England](#), [Joint European Centre for Disease Control and Prevention-World Health Organization/Flu News Europe](#), [Chinese National influenza Center](#), [Taiwan Centers for Disease Control](#) and [Japan Ministry of Health](#).