Influenza surveillance summary

This influenza surveillance summary includes countries where routine surveillance is conducted and information is available.

Countries in the temperate zone of the Northern Hemisphere

In countries within the temperate zone of the Northern Hemisphere, Influenza-Like Illness (ILI) activity is increasing following seasonal patterns.

China (North)

During week 3, 2015, proportion of ILI cases among all consultations at national sentinel hospitals in north China was 3.6%, higher than the last week and the same week of 2011 and 2012 (3.5%, 3.5%, 3.1%), lower than the same week of 2013 and 2014 (4.2%, 4.2%) (Figure 1)

Japan

In Japan number of influenza cases reported weekly per sentinel site has been increasing, following seasonal patterns. (Figure 2)
Mongolia
ILI activity in Mongolia, in week 4, 2015, has been following seasonal patterns however has surpassed the upper tolerance limit (Figure 3). Though, the proportion of patients with pneumonia among hospitalized patients still exceeds the upper tolerance limit, it is continuously decreasing in these three weeks. (Figure 4)

Figure 3 Proportion of outpatients that were ILI (per 10,000 people), Mongolia 2013-2015
(Source: National Influenza Center of Mongolia)

Figure 4: Proportion of patients with pneumonia among hospitalized, Mongolia 2013-2015
(Source: National Influenza Center of Mongolia)
**Republic of Korea**

The overall proportion of patients, who visited sentinel physicians for influenza like illness (ILI) was 18‰ for week 4. This proportion is above the national baseline of 12‰ (Figure 5).

![Figure 5 The weekly proportion of ILI visits per 1,000 patients, Republic of Korea 2011-2015](Source: Korean Center for Disease Control and Prevention)

**Countries/areas in the tropical zone**

In countries/areas in the tropical zone, the overall ILI activity was variable.

**China (South)**

During week 3 2015 the percentage of outpatient or emergency visits for ILI at national sentinel hospitals in south China was 3.0%, higher than the last week and the same week of 2012 and 2013 (2.9%, 2.7%, 2.6%), and lower than the same week of 2011 and 2014 (3.3%, 3.6%) (Figure 6).

![Figure 6: Percentage of visits due to ILI at national sentinel hospitals in south China, 2010-2015](Source: China National Influenza Center)
**Hong Kong (China)**

The overall influenza activity has continued to increase and rapidly reached a high level comparable to the peak levels in previous seasons with high activities.

The ILI consultation rates at sentinel general outpatient clinics have increased in the past five weeks. The average consultation rate for ILI among sentinel general outpatient clinics was 9.4 ILI cases per 1,000 consultations in week 4, 2015 (Figure 7).

![Figure 7: Consultation rates at sentinel general outpatient clinics, Hong Kong 2013-2015 (Source: Hong Kong Centre for Health Protection)](image)

The average consultation rate for ILI among sentinel private doctors has increased in the past four weeks. The average consultation rate was 69 ILI cases per 1,000 consultations in week 4, 2015 (Figure 8).

![Figure 8: ILI consultation rates at sentinel private doctors, Hong Kong 2013-2015 (Source: Hong Kong Centre for Health Protection)](image)
In week 4, 2015, hospital admission rates with principal diagnosis of influenza for persons aged 0-4 years, 5-64 years and 65 years or above were 2.92, 0.23 and 3.79 cases per 10,000 people in the age group, respectively. The hospital admission rate of influenza among elderly aged 65 years or above is at a high level, exceeding the highest levels recorded in the past few years (Figure 9).

![Figure 9: Influenza associated hospital admission rates and deaths, Hong Kong 2013-2015](Source: Hong Kong Centre for Health Protection)

**Singapore**

The average daily number of patients seeking treatment in the polyclinics for ARI increased from 2,921 (over 5.5 working days) in week 2, 2015 to 3,035 (over 5.5 working days) in week 3, 2015. (Figure 10)

![Figure 10: Average daily policlinic attendances for ARI, Singapore 2014-2015](Source: Singapore Ministry of Health)
Influenza Situation Update

Countries in the temperate zone of the southern hemisphere

In Australia and New Zealand, the flu season has ended. Reporting from these Member States in the Influenza Situation Update will commence during the beginning of the next flu season.

Pacific Island Countries and Areas (PICs)

In the PICs, ILI activity was variable with an increasing trend observed in a number of islands especially in Fiji, Kiribati, New Caledonia, Northern Mariana Islands, Tuvalu and Vanuatu. (Figure 11)

Figure 11: Cases of influenza-like illness, diarrhea and prolonged fever by week, Pacific Island Countries and Areas 2014-2015
Virological Surveillance Summary

Table 1: Data from WHO FluNet, MOH and Global Influenza Surveillance and Response System on virological influenza surveillance in China, Hong Kong SAR, Republic of Korea, Singapore, Viet Nam and Australia, WHO

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<th>COUNTRY</th>
<th>REPORTING PERIOD</th>
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<td>H5</td>
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<td>2</td>
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<td>0</td>
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<td>7.7%</td>
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</tbody>
</table>

Data from WHO FluNet, MOH and Global Influenza Surveillance and Response System, WHO

Countries in the temperate zone of the northern hemisphere

**China (North)**

During week 3, 2015 the percentage of specimens that were tested positive for influenza in north China was 20%, which was lower than the previous week (24%) (Figure 12). Influenza A(H3N2) was the predominant strain reported.

Figure 12: Influenza Positive Tests Reported by Northern Network Laboratories, China 2013-2015 (Data from China National Influenza Center)
Mongolia
In week 4 2015, most received specimens tested positive for influenza A(H3) viruses (Figure 13).

Figure 13: Number of detected viruses and number of tested specimen, Mongolia 2013-2015
(Source: National Influenza Center of Mongolia)

Republic of Korea
192 influenza viruses were isolated until the 4th week in 2014-2015 season. 138 viruses were identified as influenza A(H3N2), 36 viruses were identified as influenza A(H1N1)pdm09 and 18 viruses were identified as influenza B (Figure 14).

Figure 14: Number and percentage of specimens tested positive for influenza during influenza season 2014/2015, Republic of Korea (Source: Korean Center for Disease Control and Prevention)
Countries/areas in the tropical zone

China (South)
During week 3, 2015 the percentage of specimens that tested positive for influenza in south China was 21%, which was higher than the previous week (19%). Influenza A(H3N2) and Influenza B (Yamagata) were the predominant strains reported. (Figure 15)

![Figure 15: Influenza Positive Test Reported by Southern Network Laboratories, China 2013-2015](Data from China National Influenza Center)

Hong Kong (China)
Among the respiratory specimens received in week 4, 1336 (30.96%) were tested positive for seasonal influenza viruses, including 1295 influenza A(H3), 39 influenza B and 2 influenza A(H1N1)pdm09. (Figure 16)

![Figure 16: Number and percentage of specimens tested positive for influenza by week, Hong Kong 2014-2015](Source: Hong Kong Centre for Health Protection)
Singapore
The overall prevalence of influenza among ILI samples (n=104) in the community was 34% in the past 4 weeks. Of the specimens tested positive for influenza in December 2014, 92% were positive for influenza A(H3N2) while 8% were positive for influenza A(H1N1)pdm09. (Figure 17)

![Figure 17: Distribution of influenza types by Month, Singapore 2010-2015](source: Singapore Ministry of Health)

Global influenza situation updates:

Epidemiological update:
http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/

Virological update:
http://www.who.int/influenza/gisrs_laboratory/updates/summaryreport