Bi-weekly Influenza Situation Update
24 May 2016

Virological Surveillance Summary

In the WHO Western Pacific Region, influenza virus B (Victoria lineage) was predominated during week 19, 2016.

The number of specimens provided to FluNet by each of the Western Pacific Region countries that reported between week 1 and week 19, and proportion of all specimens contributed by each country is presented in the table below.

Table 1: Countries providing specimens for FluNet, Western Pacific Region, weeks 1 to 19, 2016

<table>
<thead>
<tr>
<th>Country</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>483 (0.17)</td>
</tr>
<tr>
<td>China</td>
<td>267445 (95.95)</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic</td>
<td>1332 (0.48)</td>
</tr>
<tr>
<td>Mongolia</td>
<td>2479 (0.89)</td>
</tr>
<tr>
<td>New Caledonia</td>
<td>492 (0.18)</td>
</tr>
<tr>
<td>Philippines</td>
<td>442 (0.16)</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>4615 (1.66)</td>
</tr>
<tr>
<td>Singapore</td>
<td>877 (0.31)</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>291 (0.10)</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>285 (0.10)</td>
</tr>
</tbody>
</table>

Figure 1: Number of specimens positive for influenza by subtype and week, Western Pacific Region, 2015-16 (accessed 23 May 2016)

Influenza surveillance summary

Influenza surveillance in the WHO Western Pacific Region is based on outpatient and inpatient sentinel surveillance systems. Case definitions, populations under surveillance and data formats differ among these countries. This influenza surveillance summary includes countries where routine surveillance is conducted and information is available from syndromic surveillance systems for Influenza-like-illness (ILI) and Severe Acute Respiratory Infections (SARI).
The WHO surveillance case definition for ILI is an acute respiratory infection with a measured fever of ≥38°C and cough, with symptom onset within the last 10 days. For SARI, it is an acute respiratory infection with a history of fever or measured fever of ≥38°C and cough, with symptom onset within the last 10 days and requires hospitalization.

**Countries in the temperate zone of the Northern Hemisphere**

In most countries within the temperate zone of the Northern Hemisphere, ILI and influenza activity remained at low levels.

**Outpatient ILI Surveillance**

**China (North)**

During week 19 2016, percentage (%) of visits for ILI at national sentinel hospitals in north China was 2.4%, lower than last week and the same week of 2014 (2.6% and 2.5%), but higher than the same week in 2015 (2.3%) (Figure 2).

**Mongolia**

In week 19, 2016, ILI activity in Mongolia continued to decrease (Figure 3).

**Republic of Korea**

In week 20, 2016, the rate of ILI patient visits to sentinel physicians decreased (6.3 /1,000 outpatients) below the national baseline of 11.3/ 1,000 (Figure 4).

![Figure 2: Percentage of visits for ILI at sentinel hospitals, 2012-2016 (Source: China National Influenza Center)](image)

![Figure 3: Proportion of outpatients that were ILI (per 10,000 people), 2013-2016 (Source: Mongolia National Influenza Center)](image)

![Figure 4: Weekly proportion of ILI visits per 1,000 patients 2012-2016 (Source: Korean Centre for Disease Control and Prevention)](image)
**Sentinel influenza surveillance**

**Japan**
As of 17 May 2016, the number of influenza cases reported weekly, 1.24 per sentinel hospital site, continued to decrease in line with the seasonal pattern (Figure 5).

*Figure 5: Number of influenza cases reported weekly per sentinel hospital site, Japan 2006-2016 (Source: Japan National Institute of Infectious Diseases)*

**Countries/areas in the tropical zone**
In weeks 1 to 19 of 2016, ILI or Acute Respiratory Infection (ARI) activity followed previous seasonal trends in countries/areas in the tropical zone.

**Outpatient Surveillance**

**Hong Kong (China) - ILI Surveillance**
During week 20, the latest surveillance data showed that local influenza activity has almost returned to baseline level. The average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics was 6.5 ILI cases per 1,000 consultations, which was same as that in the previous week (Figure 6).

The average consultation rate for ILI among sentinel private doctors was 43.4 ILI cases per 1,000 consultations, similar to 43.1 per 1,000 recorded in the previous week (Figure 7).

The percentage of respiratory specimens in week 20 which tested positive for seasonal influenza viruses was 9.46%, lower than that recorded in the previous week (11.45%). Of all respiratory specimens tested in week 20, 325 (9.46%) tested positive for seasonal influenza viruses, including 96 (2.8%) influenza A (H1), 21 (0.6%) influenza A (H3), 195 (5.75%) influenza B and 13 (0.4%) influenza C.

**China (South) - ILI Surveillance**
During week 19, the percentage of outpatient or emergency visits for ILI at national sentinel hospitals in south China was 3.5%, lower than the last week 3.7% but higher than the corresponding weeks in 2014 and 2015 (3.0% and 2.9%) (Figure 8). In South China, influenza B was the predominant type of influenza detected (78.3%). Of the influenza B subtypes, B Victoria was the most common (72.9%).
**Singapore – ARI Surveillance**

The average daily number of patients seeking treatment in polyclinics for ARI decreased from 2,715 (over 4.5 working days) in week 18 to 2,648 (over 5.5 working days) in week 19 (Figure 9). The proportion of patients with ILI among the polyclinic attendances for ARI remained low at approximately 1%. The overall prevalence of influenza among ILI samples (n=110) in the community was 34.5% in the past 4 weeks. Of specimens that tested positive for influenza in April 2016, 60.5% were positive for influenza B, 26.3% for influenza A (H1N1) pdm, and 13.2% for influenza A (H3N2).

**Hong Kong (China) - ILI Surveillance**

![Figure 6: ILI consultation rates at sentinel general outpatient clinics, Hong Kong 2012-2016 (Source: Hong Kong Centre for Health Protection)](image)

![Figure 7: ILI consultation rates at sentinel private doctors, Hong Kong 2012-2016 (Source: Hong Kong Centre for Health Protection)](image)

**China (South) - ILI Surveillance**

![Figure 8: Percentage of visits due to ILI at national sentinel hospitals in South China, 2012-2016 (Source: China National Influenza Center)](image)

**Singapore - ARI Surveillance**

![Figure 9: Average daily polyclinic attendances for Acute Respiratory Infection, Singapore 2015-2016 (Source: Singapore Ministry of Health)](image)
Countries in the temperate zone of the southern hemisphere

Influenza surveillance data from Australia and New Zealand is reported during their influenza season and will not be updated in this report unless unusual activity is apparent.

Pacific Island Countries and Areas (PICs) - ILI Surveillance

In the Pacific Island Countries and Areas, in week 19 the number of ILI cases reported is higher than the previous weeks in the Marshall Islands. The number of ILI cases in American Samoa, Fiji and Federated States of Micronesia are decreasing compared to the high numbers reported in previous weeks. (Fig. 10)

Figure 10: Reported cases of influenza-like illness (red line) in Pacific Island Countries, 2015–2016

![Figure 10: Reported cases of influenza-like illness (red line) in Pacific Island Countries, 2015–2016](image_url)
Global influenza situation updates

Epidemiological update:
http://www.who.int/influenza/surveillance_monitoring/updates/2016_05_16_surveillance_update_263.pdf

Virological update:

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

Others:
Recommended composition of influenza virus vaccines for use in the 2016 southern hemisphere influenza season

Antigenic and genetic characteristics of zoonotic influenza viruses and candidate vaccine viruses developed for potential use in human vaccines
http://www.who.int/influenza/vaccines/virus/characteristics_virus_vaccines/en/

4th WHO Informal Consultation on Improving Influenza Vaccine Virus Selection

Video on influenza on WHO's YouTube Channel
  Arabic: https://www.youtube.com/watch?v=PxW6Pg1Anwl
  Chinese: https://www.youtube.com/watch?v=xW9gDKEPitQ
  English: https://www.youtube.com/watch?v=yhhJfT86Bgg
  French: https://www.youtube.com/watch?v=8mo8rWWJZkc
  Russian: https://www.youtube.com/watch?v=XQO6nbkKUWQ
  Spanish: https://www.youtube.com/watch?v=qXr75cKxwTY