Virological Surveillance Summary

The number of specimens reported to FluNet by the Western Pacific Region countries and areas between week 1 and week 23, and the number of influenza positive specimens, are presented in the table below. Influenza A(H1) and B are currently the predominant circulating subtypes (Figure 1).

Table 1: Countries and areas reporting data to FluNet, Western Pacific Region, weeks 1 to 23, 2017

<table>
<thead>
<tr>
<th>Country (most recent week)</th>
<th>Total number of specimens processed</th>
<th>Total number of influenza positive specimens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia (week 23)</td>
<td>14177</td>
<td>657</td>
</tr>
<tr>
<td>Cambodia (week 22)</td>
<td>530</td>
<td>15</td>
</tr>
<tr>
<td>China (week 23)</td>
<td>280612</td>
<td>34546</td>
</tr>
<tr>
<td>Fiji (week 22)</td>
<td>220</td>
<td>83</td>
</tr>
<tr>
<td>Japan (week 22)</td>
<td>NA</td>
<td>5999</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic (week 23)</td>
<td>1950</td>
<td>202</td>
</tr>
<tr>
<td>Malaysia (week 13)</td>
<td>1062</td>
<td>170</td>
</tr>
<tr>
<td>Mongolia (week 22)</td>
<td>2020</td>
<td>410</td>
</tr>
<tr>
<td>New Caledonia (week 20)</td>
<td>161</td>
<td>3</td>
</tr>
<tr>
<td>New Zealand (week 18-21)</td>
<td>117</td>
<td>29</td>
</tr>
<tr>
<td>Papua New Guinea (week 13)</td>
<td>111</td>
<td>21</td>
</tr>
<tr>
<td>Philippines (week 23)</td>
<td>478</td>
<td>27</td>
</tr>
<tr>
<td>Republic of Korea (week 23)</td>
<td>5793</td>
<td>715</td>
</tr>
<tr>
<td>Singapore (week 23)</td>
<td>1038</td>
<td>585</td>
</tr>
<tr>
<td>Viet Nam (week 22)</td>
<td>834</td>
<td>145</td>
</tr>
</tbody>
</table>

Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region, week 25 2016 to week 23 2017 (Source: www.who.int/flunet, accessed on 20 June 2017)
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.

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 (ARI) 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 are consistent with seasonal trends but indicate an earlier start to the influenza season compared to the 2015-2016 season.

Outpatient ILI Surveillance

China (North)

During weeks 22 and 23, the percentage of visits for ILI at national sentinel hospitals in northern China was 2.8% and 2.5%. Compared to previous years, ILI activity was slightly higher than the same weeks of the 2014-2016 (2.3% ~ 2.6%)(Figure 2).

Mongolia

ILI activity remained at expected tolerance levels during week 23 of 2017 compared to the previous week and seasons. The most recent peak in ILI activity occurred in week four of 2017 (Figure 3).

Republic of Korea

In week 23 2017, there were 5.1 ILI cases per 1,000, which was higher than 4.9 per 1000 in the previous week. ILI activity was on a downward trend. (Figure 4).

Figure 2: Percentage of visits for ILI at sentinel hospitals in north China, 2012-2017 (Source: China National Influenza Center)

Figure 3: Proportion of outpatient ILI visits (per 10,000 people), 2014-2017 (Source: Mongolia National Influenza Center)
Republic of Korea

Figure 4: Weekly ILI incidence rate per 1000 patients, 2013-2017
(Source: Korean Centre for Disease Control and Prevention)

Sentinel influenza surveillance

Japan
As of week 22 2017, influenza activity in Japan is following a similar seasonal pattern to previous years. (Figure 5).

Figure 5: Number of influenza cases reported weekly per reporting sentinel hospital site, Japan 2007-2017
(Source: Japan National Institute of Infectious Diseases)
**Countries/areas in the tropical zone**

In weeks 1 to 23 of 2017, ILI and ARI activity followed previous seasonal trends in countries/areas in the tropical zone.

**Outpatient Surveillance**

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

Surveillance data indicate an increase in local influenza activity in recent weeks, consistent with the summer influenza season. In weeks 22 and 23 of 2017, the consultation rate for ILI among sentinel general outpatient clinics was 7.6 and 5.7 ILI cases per 1,000 consultations respectively. The average consultation rate for ILI among sentinel private doctors was 55.8 and 44.3 ILI cases per 100 consultations in week 22 and 23 (Figure 6 & Figure 7).

**China (South) - ILI Surveillance**

During weeks 22 and 23, the percentage of outpatient or emergency visits for ILI at national sentinel hospitals in southern China was 3.6% and 3.4% respectively, which was similar to previous seasons (Figure 8).

**Singapore – Acute Respiratory Infection Surveillance**

The average daily number of patients seeking treatment in the polyclinics for acute respiratory infection increased from 3,440 (over 5.5 working days) in week 21 to 3,241 (over 5.5 working days) in week 22. (Figure 9). The proportion of patients with ILI among polyclinic attendances for ARI remained low at 3.8%.

![Figure 6: ILI consultation rates at sentinel general outpatient clinics, Hong Kong 2012-2017 (Source: Hong Kong Centre for Health Protection)](image1)

![Figure 7: ILI consultation rates at sentinel private doctors, Hong Kong 2012-2017 (Source: Hong Kong Centre for Health Protection)](image2)
Countries in the temperate zone of the southern hemisphere

In the temperate zone of the southern hemisphere, influenza activity followed seasonal trends.

**Australia – Laboratory-confirmed influenza**

As of 26 May 2017, a total of 12,772 notifications of laboratory confirmed influenza were reported to the National Notifiable Diseases Surveillance System (Figure 10). Eighty two percent of notifications were influenza A (70% A (unsubtyped), 10% influenza A(H3N2) and 2% influenza A(H1N1)pdm09), 18% were influenza B and less than 1% were influenza A&B co-infections or untyped. Australia publishes influenza surveillance reports on a fortnightly basis during the influenza season, typically between May and October. For more information:


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Figure 8: Percentage of visits due to ILI at national sentinel hospitals in South China, 2012-2017 (Source: China National Influenza Center)

Figure 9: Average daily polyclinic attendances for ARI in Singapore, 2016-2017 (Source: Singapore Ministry of Health)

Figure 10: Australian notifications of laboratory confirmed influenza (Source: National Notifiable Diseases Surveillance System, Australian Department of Health)
**New Zealand – Influenza like Illness**

In week 23, influenza activity was low among consultation-seeking patients nationwide, but increased slightly as per normal seasonal trends; 70 patients with ILI consulted sentinel general practices in 20 District Health Boards. The weekly ILI incidence was 17.0 ILI cases per 100,000 patients (Figure 11).

**Pacific Island Countries and Areas (PICs) - ILI Surveillance (no update)**

In the Pacific Island Countries and Areas, in week 23, the number of ILI cases reported in Kiribati increased compared to previous weeks (Figure 12).
Global influenza situation updates

Epidemiological update

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 2017 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=yhhJfT868ag
French: https://www.youtube.com/watch?v=8mo8rtW/iJZkC
Russian: https://www.youtube.com/watch?v=XQ6ObkkpUWQ
Spanish: https://www.youtube.com/watch?v=qXr75cKxwTY

Recommended composition of influenza virus vaccines for use in the 2017-2018 northern hemisphere influenza season
http://www.who.int/influenza/vaccines/virus/recommendations/201703_recommendation.pdf?ua=1