Virological Surveillance Summary

The number of specimens reported to FluNet by the Western Pacific Region countries and areas between week 1 and week 21, 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 21, 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 21)</td>
<td>12 471</td>
<td>600</td>
</tr>
<tr>
<td>Cambodia (week 20)</td>
<td>486</td>
<td>10</td>
</tr>
<tr>
<td>China (week 21)</td>
<td>265 061</td>
<td>33 357</td>
</tr>
<tr>
<td>Fiji (week 17)</td>
<td>179</td>
<td>78</td>
</tr>
<tr>
<td>Japan (week 20)</td>
<td>NA</td>
<td>5 992</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic (week 21)</td>
<td>1 718</td>
<td>189</td>
</tr>
<tr>
<td>Malaysia (week 8)</td>
<td>692</td>
<td>99</td>
</tr>
<tr>
<td>Mongolia (week 17)</td>
<td>1 758</td>
<td>4 03</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 21)</td>
<td>416</td>
<td>21</td>
</tr>
<tr>
<td>Republic of Korea (week 21)</td>
<td>5 365</td>
<td>707</td>
</tr>
<tr>
<td>Singapore (week 21)</td>
<td>917</td>
<td>500</td>
</tr>
<tr>
<td>Viet Nam (week 14)</td>
<td>496</td>
<td>63</td>
</tr>
</tbody>
</table>

Number of specimens positive for influenza by subtype
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 20 and 21, the percentage of visits for ILI at national sentinel hospitals in northern China was 3.5% and 3.0%. Compared to previous years, ILI activity was slightly higher than the same weeks of the 2014-2016 (2.4% ~ 2.6%)(Figure 2).
**Mongolia**
ILI activity remained at the normal level during week 20 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 21 2017, there were 6.7 ILI cases per 1000, which was lower than 7.6 per 1000 in the previous week. ILI activity was on a downward trend. (Figure 4).
**Sentinel influenza surveillance**

**Japan**
As of week 20 2017, influenza activity in Japan is following a similar seasonal pattern to previous years. (Figure 5).

**Countries/areas in the tropical zone**
In weeks 1 to 21 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. In weeks 20 and 21 of 2017, the consultation rate for ILI among sentinel general outpatient clinics was 5.8 and 5.3 ILI cases per 1,000 consultations respectively. The average consultation rate for ILI among sentinel private doctors was 55.7 and 50.8 ILI cases per 1000 consultations in week 20 and 21 (Figure 6 & Figure 7).

**China (South) - ILI Surveillance**
During weeks 20 and 21, the percentage of outpatient or emergency visits for ILI at national sentinel hospitals in southern China was 3.3% 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 3,500 (over 5.5 working days) in week 20 to 3,440 (over 5.5 working days) in week 21. (Figure 9). The proportion of patients with ILI among polyclinic attendances for ARI remained low at 3.7%.
Hong Kong (China) - ILI Surveillance

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

Figure 7: ILI consultation rates at sentinel private doctors, Hong Kong 2012-2017 (Source: Hong Kong Centre for Health Protection)

China (South) - ILI Surveillance

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

Singapore - ARI Surveillance

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

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 (no update)

As of 28 October 2016, a total of 83,092 notifications of laboratory confirmed influenza were reported to the National Notifiable Diseases Surveillance System (Figure 10). Ninety percent of notifications were influenza A (73% A (unsubtyped), 6% influenza A(H1N1)pdm09 and 11% influenza A(H3N2), 10% were influenza B and less than 1% were influenza C, 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. (Source: [http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-surveil-ozflu-flucurr.htm/$File/Australian-Influenza-Surveillance-Report.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-surveil-ozflu-flucurr.htm/$File/Australian-Influenza-Surveillance-Report.pdf))
New Zealand – Influenza like Illness
In week 21, influenza activity was low among consultation-seeking patients nationwide, but increased slightly as per normal seasonal trends; 58 patients with ILI consulted sentinel general practices in 20 District Health Boards. The weekly ILI incidence was 14.1 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 15, the number of ILI cases reported in American Samoa 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=PxW6Pq1Anwl
  Chinese: https://www.youtube.com/watch?v=xW9gDKEpitQ
  English: https://www.youtube.com/watch?v=yhhjft86bqg
  French: https://www.youtube.com/watch?v=8mo8riWwjkc
  Russian: https://www.youtube.com/watch?v=XQO6nkkKUWQ
  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