Virological Surveillance Summary

The total number of specimens and number of positive specimens reported to FluNet by the Western Pacific Region countries and areas between weeks 1 and 21 are presented in the table below. During this period, both influenza A and B are circulating, with A(H1N1) predominating in recent weeks (Figure 1).

Table 1: Countries and areas reporting data to FluNet, Western Pacific Region, weeks 1 to 21, 2018

<table>
<thead>
<tr>
<th>Country (most recent week of report)</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>12,975</td>
<td>671</td>
</tr>
<tr>
<td>Cambodia (week 21)</td>
<td>482</td>
<td>53</td>
</tr>
<tr>
<td>China (week 21)</td>
<td>314,621</td>
<td>64,409</td>
</tr>
<tr>
<td>Japan (week 20)</td>
<td>NA</td>
<td>6,533</td>
</tr>
<tr>
<td>Lao People's Democratic Republic (week 20)</td>
<td>1,211</td>
<td>179</td>
</tr>
<tr>
<td>Mongolia (week 21)</td>
<td>2,127</td>
<td>288</td>
</tr>
<tr>
<td>New Caledonia (week 17)</td>
<td>658</td>
<td>170</td>
</tr>
<tr>
<td>Philippines (week 20)</td>
<td>509</td>
<td>18</td>
</tr>
<tr>
<td>Republic of Korea (week 21)</td>
<td>5,492</td>
<td>1,431</td>
</tr>
<tr>
<td>Singapore (week 20)</td>
<td>1,504</td>
<td>503</td>
</tr>
<tr>
<td>Viet Nam (week 17)</td>
<td>380</td>
<td>44</td>
</tr>
</tbody>
</table>

Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region, week 21 2017 to week 22 2018 (Source: www.who.int/flunet)
Influenza surveillance summary

Influenza surveillance in the WHO Western Pacific Region is based on outpatient and inpatient sentinel indicator based surveillance (IBS) systems, as well as event-based surveillance. Case definitions, population groups included, and data formats differ among countries. This influenza surveillance summary includes countries and areas where routine IBS is conducted and information is available.

The WHO surveillance case definition for influenza-like illness (ILI) is an acute respiratory infection with a measured fever of $\geq 38^\circ C$ 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 $\geq 38^\circ C$ and cough, with symptom onset within 10 days that 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 is lower than the corresponding period from previous years.

Outpatient ILI Surveillance

China (North)

During week 21, the percentage of visits for ILI at national sentinel hospitals in northern China was 2.3%, same as the previous week and same week of 2015-2016 and 2016-2017 (2.3%) and lower than the same week of 2017 and 2018 (both 2.4%) (Figure 2).

Mongolia (no update)

During week 18, ILI activity in Mongolia decreased from the previous week and is below the upper tolerance limits (Figure 3). Mongolia publishes weekly reports, available here: http://www.flu.mn/eng/index.php?option=com_content&task=section&id=5&Itemid=51

Figure 2: Percentage of visits for ILI at sentinel hospitals in north China, 2015-2018  
(Source: China National Influenza Center)

Figure 3: Proportion of outpatient ILI visits (per 10,000 people), 2016-2018  
(Source: Mongolia National Influenza Center)
Republic of Korea
In week 21, there were 5.6 ILI cases per 1,000 outpatient visits, which was lower than previous week (6.0) and comparable to previous years for the same week (Figure 4). Korea publishes a weekly report, available here: http://www.cdc.go.kr/CDC/eng/info/CdcEngInfo0101.jsp?menuIds=HOME002-MNU0576-MNU0583

Sentinel influenza surveillance
Japan
In week 20, influenza activity in Japan decreased compared to last week and is similar to the same period in 2016 and 2017 (Figure 5). More information about historical trends are available here: https://www.niid.go.jp/niid/en/10/2096-weeklygraph/1644-01flu.html
Countries/areas in the tropical zone

Countries and areas in the tropical zone are observing influenza activity that is consistent with previous seasons.

**Surveillance**

**Hong Kong SAR (China) – ILI and hospital Surveillance**

In week 21, the average consultation rate for ILI among outpatient clinics was 3.9 ILI cases per 1,000, which was lower than that recorded in the previous week (4.1 per 1,000) (Figure 6). The average consultation rate for ILI among private doctors was 38.9 ILI cases per 1,000 consultations, which was lower than the rate recorded in the previous week (41.6 per 1,000) (Figure 7). Hong Kong SAR, China publishes a weekly report, available here: [http://www.chp.gov.hk/en/guideline1_year/29/134/441/304.html](http://www.chp.gov.hk/en/guideline1_year/29/134/441/304.html)

![Hong Kong (China) - ILI Surveillance](image)

**China (South) - ILI Surveillance**

During week 21, the percentage of outpatient or emergency visits for ILI at national sentinel hospitals in southern China was 4.1%, which is higher than the previous week (4.0%) and same weeks in 2015-2017 (2.9%, 3.6% and 3.2% respectively) (Figure 8).

**Singapore – Acute Respiratory Infection (ARI) Surveillance**

The average daily number of patients seeking treatment in polyclinics for acute respiratory infection increased from 3,075 (over 5.5 working days) in week 20 to 3,089 (over 5.5 working days) in week 21 (Figure 9). The proportion of patients with ILI among polyclinic attendances for ARI was 2.0%. Singapore publishes a weekly report, available here: [http://www.moh.gov.sg/content/moh_web/home/statistics/infectiousDiseasesStatistics/weekly_infectiousdiseasesbulletin.html](http://www.moh.gov.sg/content/moh_web/home/statistics/infectiousDiseasesStatistics/weekly_infectiousdiseasesbulletin.html)
In China (South), the ILI activity is monitored at national sentinel hospitals. Figure 8 shows the percentage of visits due to ILI in South China from 2015 to 2018, highlighting a decline compared to the previous week. The number of ILI presentations at sentinel sites was higher than in the corresponding week in 2016 and 2017 (see Figure 10).

In Lao PDR, ILI activity decreased in week 20 compared to the previous week. The number of ILI presentations at sentinel sites was higher than in the corresponding week in 2016 and 2017. (see Figure 10).

Countries in the temperate zone of the southern hemisphere

In Australia, laboratory-confirmed influenza cases have decreased from a peak reached in week 33. From 1 January 2017 to 27 October 2017, a total of 229,579 laboratory-confirmed cases of influenza were reported to the National Notifiable Diseases Surveillance System (Figure 11). Sixty-three percent of notifications were influenza A (57% A(unsubtyped), 4% influenza A(H3N2) and 1% influenza A(H1N1pdm09)), 37% 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: [http://www.health.gov.au/internet/main/publishing.nsf/content/cda-surveil-ozflu-flucurr.htm#current](http://www.health.gov.au/internet/main/publishing.nsf/content/cda-surveil-ozflu-flucurr.htm#current)
New Zealand – Influenza like Illness
During week ending 27 May 2018, there were 11.6 general practice visits for ILI for every 100,000 registered patients. This is below the historical seasonal rate based on data from 2000-2017 (excluding data from 2009) of 21.1 cases for every 100,000 registered patients.

Pacific Island Countries and Areas (PICs) - ILI Surveillance
In the Pacific Island Countries and Areas, in week 21, the number of ILI cases reported in Kiribati, Solomon Islands and Vanuatu increased compared to previous weeks (Figure 13). The PICs submit a report on a weekly basis, found here: http://www.wpro.who.int/southpacific/programmes/communicable_diseases/disease_surveillance_response/page/en/index2.html
Figure 13: Reported cases of influenza-like illness in Pacific Island Countries, week 21, 21 May and 27 May, 2018
Global influenza situation updates

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 2018 southern hemisphere influenza season

Recommended composition of influenza virus vaccines for use in the 2018-2019 northern 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=yhhJFT86Bqg
   French: https://www.youtube.com/watch?v=8mo8rWWJZkc
   Russian: https://www.youtube.com/watch?v=XQO6nbbKUWQ
   Spanish: https://www.youtube.com/watch?v=qXr75cKxwTY