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 19 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 17, 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 19)</td>
<td>10,601</td>
<td>602</td>
</tr>
<tr>
<td>Cambodia (week 16)</td>
<td>362</td>
<td>27</td>
</tr>
<tr>
<td>China (week 19)</td>
<td>290,648</td>
<td>64,015</td>
</tr>
<tr>
<td>Japan (week 18)</td>
<td>NA</td>
<td>5,991</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic (week 19)</td>
<td>1,012</td>
<td>142</td>
</tr>
<tr>
<td>Mongolia (week 19)</td>
<td>2,062</td>
<td>282</td>
</tr>
<tr>
<td>New Caledonia (week 17)</td>
<td>658</td>
<td>170</td>
</tr>
<tr>
<td>Philippines (week 18)</td>
<td>477</td>
<td>18</td>
</tr>
<tr>
<td>Republic of Korea (week 19)</td>
<td>5,046</td>
<td>1,420</td>
</tr>
<tr>
<td>Singapore (week 18)</td>
<td>1,370</td>
<td>465</td>
</tr>
<tr>
<td>Viet Nam (week 17)</td>
<td>371</td>
<td>42</td>
</tr>
</tbody>
</table>

Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region, week 21 2017 to week 20 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 ≥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 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 19, the percentage of visits for ILI at national sentinel hospitals in northern China was 2.3%, which is lower than the previous week and same week of 2017 (both 2.6%) (Figure 2).

**Mongolia**

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](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](image)

*Source: China National Influenza Center*

![Figure 3: Proportion of outpatient ILI visits (per 10,000 people), 2016-2018](image)

*Source: Mongolia National Influenza Center*

**Republic of Korea**

In week 19, there were 6.1 ILI cases per 1,000 outpatient visits, which is similar to the previous week (6.2) 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](http://www.cdc.go.kr/CDC/eng/info/CdcEngInfo0101.jsp?menuIds=HOME002-MNU0576-MNU0583)

![Figure 4: Weekly ILI incidence rate per 1,000 patients, 2013-2018, Republic of Korea](image)

(Source: Korean Centre for Disease Control and Prevention)
**Sentinel influenza surveillance**

**Japan**

In week 18, influenza activity in Japan decreased compared to last week and is lower than 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](https://www.niid.go.jp/niid/en/10/2096-weeklygraph/1644-01flu.html)

![Figure 5: Number of influenza cases reported weekly per reporting sentinel hospital site, Japan 2008-2018](https://www.niid.go.jp/niid/en/10/2096-weeklygraph/1644-01flu.html)

(Source: Japan National Institute of Infectious Diseases)

**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 19, the average consultation rate for ILI among outpatient clinics was 3.4 ILI cases per 1,000, which was lower than that recorded in the previous week (4.2 per 1,000) (Figure 6). The average consultation rate for ILI among private doctors was 42.9 ILI cases per 1,000 consultations, which was lower than the rate recorded in the previous week (46.9 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)

![Figure 6: ILI consultation rates at sentinel general outpatient clinics, Hong Kong 2014-2018](https://www.chp.gov.hk/en/guideline1_year/29/134/441/304.html)

(Source: Hong Kong Centre for Health Protection)

![Figure 7: ILI consultation rates at sentinel private doctors, Hong Kong 2014-2018](https://www.chp.gov.hk/en/guideline1_year/29/134/441/304.html)

(Source: Hong Kong Centre for Health Protection)
China (South) - ILI Surveillance
During week 19, the percentage of outpatient or emergency visits for ILI at national sentinel hospitals in southern China was 3.7%, which is lower than the previous week (3.9%) and higher than the 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 3,249 (over 4.5 working days) in week 18 to 3,131 (over 5.5 working days) in week 19 (Figure 9). The proportion of patients with ILI among polyclinic attendances for ARI was 2.1%. Singapore publishes a weekly report, available here:

Lao PDR
In week 19, ILI activity decreased compared to the previous week. The number of ILI presentations at sentinel sites was lower than that reported in the corresponding week in 2016 but higher than 2017. (see Figure 10).
Countries in the temperate zone of the southern hemisphere

In the temperate zone of the southern hemisphere, influenza activity is reported during the influenza season, from May to follow seasonal trends.

**Australia – Laboratory-confirmed influenza (no update)**

The number of laboratory confirmed influenza cases has 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)

![Figure 11: Australian notifications of laboratory confirmed influenza](image)

(Source: National Notifiable Diseases Surveillance System, Australian Department of Health)

**New Zealand – Influenza like Illness**

During week ending 20 May 2018, there were 12 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 18.2 cases for every 100,000 registered patients. New Zealand publishes a weekly report, available here: [https://surv.esr.cri.nz/virology/influenza_weekly_update.php](https://surv.esr.cri.nz/virology/influenza_weekly_update.php)

![Figure 12: Weekly General Practice ILI Rates To 6 May of 2018 in New Zealand](image)

(Source: Institute of Environmental Science and Research Ltd (ESR), New Zealand)
Pacific Island Countries and Areas (PICs) - ILI Surveillance

In the Pacific Island Countries and Areas, in week 19, the number of ILI cases reported in Fiji, Kiribati, Tonga 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 19, 7 May and 13 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=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