Virological Surveillance Summary

The total number of specimens and number of positive specimens reported to FluNet by Western Pacific Region countries and areas between weeks 1 and 32 are presented in the table below. Influenza A and B have co-circulated throughout the year and A(H1N1) has predominated in recent weeks (Figure 1).

Table 1: Countries and areas reporting data to FluNet, Western Pacific Region, weeks 1 to 32, 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 32)</td>
<td>24,849</td>
<td>1,277</td>
</tr>
<tr>
<td>Cambodia (week 31)</td>
<td>742</td>
<td>129</td>
</tr>
<tr>
<td>China (week 31)</td>
<td>415,004</td>
<td>65,806</td>
</tr>
<tr>
<td>Fiji (week 23)</td>
<td>184</td>
<td>73</td>
</tr>
<tr>
<td>Japan (week 31)</td>
<td>0</td>
<td>7,243</td>
</tr>
<tr>
<td>Lao People's Democratic Republic (week 30)</td>
<td>1,726</td>
<td>222</td>
</tr>
<tr>
<td>Malaysia (week 22)</td>
<td>1,850</td>
<td>270</td>
</tr>
<tr>
<td>Mongolia (week 30)</td>
<td>2,248</td>
<td>291</td>
</tr>
<tr>
<td>New Caledonia (week 29)</td>
<td>1,108</td>
<td>276</td>
</tr>
<tr>
<td>New Zealand (week 31)</td>
<td>745</td>
<td>159</td>
</tr>
<tr>
<td>Philippines (week 30)</td>
<td>780</td>
<td>76</td>
</tr>
<tr>
<td>Republic of Korea (week 32)</td>
<td>7,458</td>
<td>1,452</td>
</tr>
<tr>
<td>Singapore (week 29)</td>
<td>1,965</td>
<td>639</td>
</tr>
<tr>
<td>Viet Nam (week 30)</td>
<td>776</td>
<td>104</td>
</tr>
</tbody>
</table>

Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region week 33 2017 to week 32 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 similar to the corresponding period from previous years.

**Outpatient ILI Surveillance**

**China (North)**

During week 30, the percentage of visits for ILI at national sentinel hospitals in northern China was 2.2%, which is the same as the last week (2.2%) and lower than the same week of 2015-2017. (Figure 2)

**Mongolia (no updates)**

During week 23, ILI activity in Mongolia increased 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](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 31, overall weekly influenza like illness (ILI) rate was 4.5 ILI cases per 1,000 outpatient visits which was identical to the previous week and similar to previous years for the same week (Figure 4). Korea publishes weekly reports, available here: [http://www.cdc.go.kr/CDC/eng/info/CdcEngInfo0101.jsp?menulds=HOME002-MNU0576-MNU0583](http://www.cdc.go.kr/CDC/eng/info/CdcEngInfo0101.jsp?menulds=HOME002-MNU0576-MNU0583)

Figure 4: Weekly ILI incidence rate per 1,000 consultations, 2013-2018, Republic of Korea
(Source: Korean Centres for Disease Control and Prevention)

**Sentinel influenza surveillance**

**Japan**

In week 30, influenza activity in Japan remained low, consistent with the same period between 2008 and 2017 (Figure 5). More information about historical trends is 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
(Source: Japan National Institute of Infectious Diseases)
Influenza Situation Update

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 31, the average consultation rate for ILI among sentinel outpatient clinics was 1.4 ILI cases per 1 000 consultations, which was lower than that recorded in the previous week (2.6 per 1,000) (Figure 6). The average consultation rate for ILI among sentinel private doctors was 17.3 ILI cases per 1 000 consultations, which was lower than the rate recorded in the previous week (25.5 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

**China (South) - ILI Surveillance**

During week 30, the percentage of outpatient or emergency visits for ILI at national sentinel hospitals in southern China was 3.0%, same as last week (3.0%) and lower than the same week of 2015-2017. (Figure 8).

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

The average daily number of patients seeking treatment in the polyclinics for ARI decreased from 3 202 (over 5.5 working days) in week 29 to 3 033 (over 5.5 working days) in week 30. The proportion of patients with influenza-like illness (ILI) among the polyclinic attendances for ARI is 1.9%. Singapore publishes a weekly report, available here: http://www.moh.gov.sg/content/moh_web/home/statistics/infectiousDiseasesStatistics/weekly_infectiousdiseasesbulletin.html
China (South) - ILI Surveillance

Singapore – ARI Surveillance

**Figure 8:** Percentage of visits due to ILI at national sentinel hospitals in South China, 2015-2018 (Source: China National Influenza Center)

**Figure 9:** Average daily polyclinic attendances for ARI in Singapore, 2017-2018 (Source: Singapore Ministry of Health)

**Lao PDR**

In week 31, ILI activity decreased compared to the previous week and is lower compared to the number of cases reported in the same week in previous years. (see Figure 10).

**Figure 10:** Weekly number of ILI presentations at sentinel sites, 2013-2018, Lao PDR
(Source: Lao National Center for Laboratory and Epidemiology)
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 usually starting in May. Influenza activity in the temperate zone tends to remain at low inter-seasonal levels.

**Australia – Laboratory-confirmed influenza**

The numbers of laboratory confirmed influenza cases and presentations of ILI to general practitioners in week 29 are low and within historical range. There were 5.6 ILI cases per 1 000 consultations at sentinel general practitioners and there have been 19 216 laboratory confirmed cases of influenza reported to the National Notifiable Diseases Surveillance System (Figure 11). Australia publishes influenza surveillance reports on a fortnightly basis during the influenza season, typically between May and October. For more information:


![Figure 11: Australian notifications of laboratory confirmed influenza](Source: National Notifiable Diseases Surveillance System, Australian Department of Health)

**New Zealand – Influenza like Illness**

During the week ending 5 August 2018, there were 20.3 general practice visits for influenza-like illness for every 100 000 registered patients. The historical average seasonal rate for the week ending 5 August is 73.0 per 100 000 registered patients. Historical average is based on 2000-2017 seasons (excluding pandemic seasons: 2009). New Zealand publishes a weekly report, available here:


![Weekly General Practice ILI Rates in New Zealand](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 31 the number of ILI cases reported in Samoa, Solomon Islands, Tonga and Vanuatu increased compared to the previous week (Figure 13). The PICs submit a report on a weekly basis, found here:


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**Figure 13: Reported cases of influenza-like illness in Pacific Island Countries**
(Source: PacNet bulletin)
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=8mo8rWtIZkc
  Russian: https://www.youtube.com/watch?v=XQO6nbkKUWQ
  Spanish: https://www.youtube.com/watch?v=qXr75cKtwTY