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 26 are presented in the table below. Influenza A(H1N1) has predominated in recent weeks (Figure 1).

Table 1: Countries and areas reporting data to FluNet, Western Pacific Region, weeks 1 to 26, 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 26)</td>
<td>15,819</td>
<td>832</td>
</tr>
<tr>
<td>Cambodia (week 25)</td>
<td>579</td>
<td>74</td>
</tr>
<tr>
<td>China (week 26)</td>
<td>364,111</td>
<td>65,061</td>
</tr>
<tr>
<td>Fiji (week 23)</td>
<td>184</td>
<td>73</td>
</tr>
<tr>
<td>Japan (week 25)</td>
<td>NA</td>
<td>7,088</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic (week 26)</td>
<td>1,474</td>
<td>211</td>
</tr>
<tr>
<td>Malaysia (week 18)</td>
<td>1,517</td>
<td>245</td>
</tr>
<tr>
<td>Mongolia (week 26)</td>
<td>2,232</td>
<td>291</td>
</tr>
<tr>
<td>New Caledonia (week 24)</td>
<td>963</td>
<td>247</td>
</tr>
<tr>
<td>New Zealand (week 23)</td>
<td>224</td>
<td>12</td>
</tr>
<tr>
<td>Philippines (week 25)</td>
<td>634</td>
<td>25</td>
</tr>
<tr>
<td>Republic of Korea (week 26)</td>
<td>6,486</td>
<td>1,447</td>
</tr>
<tr>
<td>Singapore (week 25)</td>
<td>1,743</td>
<td>564</td>
</tr>
<tr>
<td>Viet Nam (week 25)</td>
<td>683</td>
<td>101</td>
</tr>
</tbody>
</table>

*Data collected 9 July 2018, week 27

Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region, week 28 2017 to week 27 2018 (Source: www.who.int/flu)
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 similar to the corresponding period from previous years.

**Outpatient ILI Surveillance**

**China (North)**

During week 25, the percentage of visits for ILI at national sentinel hospitals in northern China was 2.4%, same as the previous week and lower than the same week of 2015-2017 (2.5%) (Figure 2).

**Mongolia**

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)
Republic of Korea
In week 25, there were 4.3 ILI cases per 1,000 outpatient visits, which was lower than previous week (4.6) 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?menulds=HOME002-MNU0576-MNU0583

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

Sentinel influenza surveillance

Japan
In week 24, influenza activity in Japan was similar to last week and to 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

Figure 5: Number of influenza cases reported weekly per reporting sentinel hospital site, Japan 2008-2018
(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 25, the average consultation rate for ILI among sentinel outpatient clinics was 4.0 ILI cases per 1,000, which was higher than that recorded in the previous week (3.3 per 1,000) (Figure 6). The average consultation rate for ILI among sentinel private doctors was 41.2 ILI cases per 1,000 consultations, which was higher than the rate recorded in the previous week (31.8 per 1,000) (Figure 7). Hong Kong SAR, China publishes a weekly report, available here:

China (South) - ILI Surveillance
During week 25, the percentage of outpatient or emergency visits for ILI at national sentinel hospitals in southern China was 3.8%, which is lower than the previous week and the same week of 2015-2016 (4.3%), higher than the same week in 2016-2017 (3.4%) and the same as the same week of 2017-2018 (3.8%) (Figure 8).

Singapore – Acute Respiratory Infection (ARI) Surveillance
The average daily number of patients seeking treatment in polyclinics for acute respiratory infection increased from 2,403 (over 4.5 working days) in week 24 to 2,597 (over 5.5 working days) in week 25 (Figure 9). The proportion of patients with ILI among polyclinic attendances for ARI was 1.4%. Singapore publishes a weekly report, available here:
Lao PDR
In week 25, 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 and 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 usually starting in May, and at the moment is at low inter-seasonal levels to follow seasonal trends.

Australia – Laboratory-confirmed influenza
The numbers of laboratory confirmed influenza cases and presentations of ILI to general practitioners in week 26 are similar to previous years during the same week. There were 3.6 ILI cases per 1,000 consultations at sentinel general practitioners from two surveillance systems during week 26. From 1 January 2018 to 1 July 2018, a total of 15,838 laboratory-confirmed cases of influenza were 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:
New Zealand – Influenza like Illness

During week ending 01 July 2018, there were 15.4 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 57.3 cases for every 100,000 registered patients.


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

Figure 12: Weekly General Practice ILI Rates in New Zealand
(Source: Institute of Environmental Science and Research Ltd (ESR), New Zealand)
Influenza Situation Update

In the Pacific Island Countries and Areas, in week 25, the number of ILI cases reported in Fiji, Kiribati and Tonga 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
(Source: PacNet bulletin)
Global influenza situation updates

Virological update:
http://www.who.int/influenza/gisrs_laboratory/updatessummaryreport/en/

Global update:
http://www.who.int/influenza/surveillance_monitoring/updatesslatest_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=8mo8rWJZkc
   Russian: https://www.youtube.com/watch?v=XQO6nbkKUWQ
   Spanish: https://www.youtube.com/watch?v=qXr75cXwTY