**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 40 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 40, 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 40)</td>
<td>36324</td>
<td>2505</td>
</tr>
<tr>
<td>Cambodia (week 38)</td>
<td>921</td>
<td>177</td>
</tr>
<tr>
<td>China (week 38)</td>
<td>499188</td>
<td>67284</td>
</tr>
<tr>
<td>Fiji (week 23)</td>
<td>184</td>
<td>73</td>
</tr>
<tr>
<td>Japan (week 38)</td>
<td>0</td>
<td>7351</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic (week 39)</td>
<td>2626</td>
<td>338</td>
</tr>
<tr>
<td>Malaysia (week 31)</td>
<td>2575</td>
<td>303</td>
</tr>
<tr>
<td>Mongolia (week 40)</td>
<td>2357</td>
<td>291</td>
</tr>
<tr>
<td>New Caledonia (week 29)</td>
<td>1108</td>
<td>276</td>
</tr>
<tr>
<td>New Zealand (week 38)</td>
<td>1399</td>
<td>446</td>
</tr>
<tr>
<td>Philippines (week 38)</td>
<td>1123</td>
<td>157</td>
</tr>
<tr>
<td>Republic of Korea (week 37)</td>
<td>8367</td>
<td>1455</td>
</tr>
<tr>
<td>Singapore (week 36)</td>
<td>2235</td>
<td>683</td>
</tr>
<tr>
<td>Viet Nam (week 37)</td>
<td>1085</td>
<td>154</td>
</tr>
</tbody>
</table>

**Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region week 41 2017 to week 40 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 38, the percentage of visits for ILI at national sentinel hospitals in northern China was 2.1%, which is the same as the last week (2.1%) and lower than the same week of 2016-2017 (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).

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 38, overall weekly influenza like illness (ILI) rate was 4.4 ILI cases per 1,000 outpatient visits (Figure 4).

Figure 4: Weekly ILI incidence rate per 1,000 consultations, 2014-2018, Republic of Korea
(Source: Korean Centres for Disease Control and Prevention)

Sentinel influenza surveillance
Japan
In week 38 influenza activity in Japan remained low, consistent with trends during the same period between 2008 and 2017 (Figure 5).

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 39, the average consultation rate for ILI among sentinel outpatient clinics was 3.7 ILI cases per 1,000 consultations, which was slightly 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 18.6 ILI cases per 1,000 consultations, which was similar to the rate recorded in the previous week (18.5 per 1,000) (Figure 7).

**China (South) – ILI Surveillance**

During week 38, the percentage of outpatient or emergency visits for ILI at national sentinel hospitals in southern China was 2.9%, which is similar to last week (2.8%) and to the same week of 2016-2017. (Figure 8).

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

The average daily number of patients seeking treatment in the polyclinics for ARI decreased from 2,845 (over 5.5 working days) in week 38 to 2,767 (over 5.5 working days) in week 39. The proportion of patients with influenza-like illness (ILI) among the polyclinic attendances for ARI is 1.7%.
Influenza Situation Update

Lao PDR
In week 39, ILI activity decreased compared to the previous week and is below trends seen in previous years, however, this should be interpreted with caution as it is based on data from 5 out of 7 sentinel sites (see Figure 10). On the other hand, Severe Acute Respiratory Infection (SARI) cases remain higher than the previous 5 years (data not shown).

![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 38 are low and within historical range. There were 5.6 ILI cases per 1,000 consultations at sentinel general practitioners and there have been 36,305 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.

![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 30 September 2018, there were 17.2 general practice visits for influenza-like illness for every 100,000 registered patients. The historical average seasonal rate for the week ending 30 September is 29.3 per 100,000 registered patients. Historical average is based on 2000-2017 seasons (excluding pandemic seasons: 2009).

![Weekly General Practice ILI Rates in New Zealand](source)

**Pacific Island Countries and Areas (PICs) - ILI Surveillance**

In the Pacific Island Countries and Areas, in week 39 the number of ILI cases reported in Tonga and Kiribati increased compared to week 38. ILI in Samoa appears to be decreasing (Figure 13).
Global influenza situation updates

Virological update

Global update

Others:

- Recommended composition of influenza virus vaccines for use in the 2018 southern hemisphere influenza season [Link]
- Recommended composition of influenza virus vaccines for use in the 2018-2019 northern hemisphere influenza season [Link]
- Antigenic and genetic characteristics of zoonotic influenza viruses and candidate vaccine viruses developed for potential use in human vaccines [Link]
- 4th WHO Informal Consultation on Improving Influenza Vaccine Virus Selection [Link]

WHO's YouTube Channel: film exploring a number of key aspects of the constant evolution of influenza viruses and associated impacts on public health. [Arabic, Chinese, English, French, Russian, Spanish]