Virological Surveillance Summary

The total number of specimens and number of positive specimens reported to FluNet by Western Pacific Region countries and areas between week 1 and week 15 are presented in the table below. Influenza A, specifically A(H1N1)pdm09, predominated throughout the 2018–2019 influenza season but in recent weeks the proportion of influenza B(Victoria lineage) and A(H3) has increased (Figure 1).

Table 1: Cumulative data reported to FluNet from Western Pacific Region, weeks 1 to 15, 2019

<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 15)</td>
<td>13283</td>
<td>1485</td>
</tr>
<tr>
<td>Cambodia (week 14)</td>
<td>317</td>
<td>46</td>
</tr>
<tr>
<td>China (week 14)</td>
<td>250555</td>
<td>71030</td>
</tr>
<tr>
<td>Japan (week 14)</td>
<td>-</td>
<td>4470</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic (week 15)</td>
<td>1049</td>
<td>143</td>
</tr>
<tr>
<td>Malaysia (week 10)</td>
<td>780</td>
<td>120</td>
</tr>
<tr>
<td>Mongolia (week 13)</td>
<td>2400</td>
<td>710</td>
</tr>
<tr>
<td>New Caledonia (week 13)</td>
<td>437</td>
<td>140</td>
</tr>
<tr>
<td>Philippines (week 13)</td>
<td>367</td>
<td>114</td>
</tr>
<tr>
<td>Republic of Korea (week 15)</td>
<td>3614</td>
<td>886</td>
</tr>
<tr>
<td>Singapore (week 13)</td>
<td>797</td>
<td>192</td>
</tr>
<tr>
<td>Viet Nam (week 13)</td>
<td>145</td>
<td>6</td>
</tr>
</tbody>
</table>

Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region weeks 1 to 15 2019 (Source: WHO 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. Sentinel site data should be interpreted with caution since the number of sites reporting may vary between weeks.

**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 low and similar to the corresponding period from previous years.

**Outpatient ILI Surveillance**

**China (North)**

During week 15, the percentage of visits for ILI at national sentinel hospitals in Northern China was 3.7%, which is lower than the last week (4.0%) and higher than week in 2016–2018 (2.6%, 2.5% and 2.4%) (Figure 2).

**Mongolia**

During week 15, ILI activity in Mongolia decreased from the previous week, and was below the upper tolerance limits (Figure 3).

**Republic of Korea**

In week 15, overall weekly ILI rate was 42.1 ILI cases per 1,000 outpatient visits, higher than last week, 32.2 %, and was higher than the same period in 2014-2015, 2015-2016 and 2016-2017.
Sentinel influenza surveillance

**Japan**

In week 14 of 2019, influenza activity in Japan continues to decrease from 1.73 cases per sentinel hospital in week 13 to 1.46 in week 14, and it is lower than the same period in 2017 and 2018.

![Figure 5: Number of influenza cases reported weekly per reporting sentinel hospital site, Japan 2008-2019](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 15, the average consultation rate for ILI among sentinel general outpatient clinics was 4.5 ILI cases per 1,000 consultations, which was a decrease compared to the rate recorded in the previous week and showing a trend similar trend to 2018 (Figure 6). The average consultation rate for ILI among sentinel private medical practitioners was 30.1 ILI cases per 1,000 consultations, which was lower than 33.5 recorded in the previous week. (Figure 7).

![Hong Kong SAR (China) ILI Surveillance](Source: Hong Kong Centre for Health Protection)

**Figure 6: ILI consultation rates at sentinel general outpatient clinics, Hong Kong SAR 2014-2019**

**Figure 7: ILI consultation rates at sentinel private doctors, Hong Kong SAR 2014-2019**

(Source: Hong Kong Centre for Health Protection)
Influenza Situation Update

China (South) - ILI Surveillance
During week 15, the percentage of visits for ILI at national sentinel hospitals in Southern China was 4.0%, lower than last week (4.3%) but higher than the same weeks of 2016-2018 (3.7%, 3.2% and 3.3%) (Figure 8).

Singapore – Acute Respiratory Infection (ARI) Surveillance
In week 15, the average daily number of patients seeking treatment in the polyclinics for ARI was 2,870, an increase compared to the previous week of 2,834. The proportion of patients with ILI among the polyclinic attendances for ARI was 2.4% (Figure 9).

Lao PDR
In week 15, ILI activity increased compared to the previous week and remains lower than previous years (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. Influenza activity in the temperate zone tends to remain at low inter-seasonal levels.
**Australia – Laboratory-confirmed influenza and ILI (last update 16 Nov 2018)**

The numbers of laboratory confirmed influenza cases and presentations of ILI to general practitioners in week 43 are low and within historical range. There were 5.9 ILI cases per 1,000 consultations at sentinel general practitioners which was lower than the five year average for the same period (11.8 per 1000 consultations) and year to date there have been 48,276 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 Nacional Notifiable Diseases Surveillance System, Australian Department of Health)

**New Zealand – Influenza like Illness (last update February 2019)**

As expected for this time of year, across all district Health Boards, rates of GP visits for ILI have remained low over the months as expected. The historical average is based on 2000-2017 seasons (excluding pandemic seasons: 2009).

![Figure 12: 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 15, the number of ILI cases reported increased in French Polynesia, Kiribati, Northern Mariana Islands, New Caledonia, Tonga and Vanuatu (Figure 13).

![Figure 13: Reported cases of influenza-like illness in Pacific Island Countries (Source: PacNet bulletin)](image)

**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 2019-2020 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](#)