**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 13 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 13, 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 13)</td>
<td>11774</td>
<td>1336</td>
</tr>
<tr>
<td>Cambodia (week 11)</td>
<td>244</td>
<td>31</td>
</tr>
<tr>
<td>China (week 13)</td>
<td>230579</td>
<td>67624</td>
</tr>
<tr>
<td>Japan (week 12)</td>
<td>-</td>
<td>3897</td>
</tr>
<tr>
<td>Lao People's Democratic Republic (week 13)</td>
<td>908</td>
<td>138</td>
</tr>
<tr>
<td>Mongolia (week 13)</td>
<td>2400</td>
<td>710</td>
</tr>
<tr>
<td>Philippines (week 11)</td>
<td>314</td>
<td>113</td>
</tr>
<tr>
<td>Republic of Korea (week 13)</td>
<td>3002</td>
<td>645</td>
</tr>
<tr>
<td>Singapore (week 11)</td>
<td>692</td>
<td>174</td>
</tr>
</tbody>
</table>

Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region weeks 1 to 13 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 ≥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. 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 13, the percentage of visits for ILI at national sentinel hospitals in Northern China was 3.6%, which is higher than the last week (3.5%) and the same week in 2017 and 2018 (3.2%, 2.7% and 2.6%) (Figure 2).

Mongolia
During week 13, ILI activity in Mongolia decreased from the previous week, and was below the upper tolerance limits (Figure 3).

Figure 2: Percentage of visits for ILI at sentinel hospitals in Northern China, 2015-2019
(Source: China National Influenza Center)

Figure 3: Proportion of outpatient ILI visits per 10,000 people, 2016-2019
(Source: Mongolia National Influenza Center)
**Republic of Korea**

In week 13, overall weekly ILI rate was 27.2 ILI cases per 1000 outpatient visits, higher than last week, 20.3%, and was higher than the same period in 2016-2017 but similar levels to 2014-2015 and 2015-2016.

![Image of weekly ILI incidence rate](source)

**Sentinel influenza surveillance**

**Japan**

In week 12 of 2019, influenza activity in Japan continues to decrease from 2.92 cases per sentinel hospital in week 11 to 2.49 in week 12, and it is lower than the same period in 2017 and 2018.

![Image of number of influenza cases reported weekly per reporting sentinel hospital site](source)
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 13, the average consultation rate for ILI among sentinel general outpatient clinics was 3.9 ILI cases per 1000 consultations, which was a decrease compared to the rate recorded in the previous week and showing a similar trend to 2018 (Figure 6). The average consultation rate for ILI among sentinel private medical practitioners was 36.5 ILI cases per 1000 consultations, which was lower than 40.4 recorded in the previous week. (Figure 7).

![Figure 6: ILI consultation rates at sentinel general outpatient clinics, Hong Kong SAR 2014-2019](Source: Hong Kong Centre for Health Protection)

![Figure 7: ILI consultation rates at sentinel private doctors, Hong Kong SAR 2014-2019](Source: Hong Kong Centre for Health Protection)

**China (South) - ILI Surveillance**

During week 13, the percentage of visits for ILI at national sentinel hospitals in Southern China was 4.0%, lower than last week (4.1%) but higher than the same week of 2016 and 2018 (3.1%, 3.6%). (Figure 8)

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

In week 13, the average daily number of patients seeking treatment in the polyclinics for ARI was 2,687, an increase compare to the previous week of 2,591. The proportion of patients with ILI among the polyclinic attendances for ARI was 1.7% (Figure 9).

![Figure 8: Percentage of visits due to ILI at national sentinel hospitals in Southern China, 2015-2019](Source: China National Influenza Center)

![Figure 9: Average daily polyclinic attendances for ARI in Singapore, 2017-2019](Source: Singapore Ministry of Health)
**Lao PDR**
In week 13, ILI activity decreased compared to the previous week and remains lower than previous years (Figure 10).

![Figure 10: Weekly number of ILI presentations at sentinel sites, 2015-2019, Lao PDR](image)
(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 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 1000 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](image)
(Source: National 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).

Pacific Island Countries and Areas (PICs) - ILI Surveillance

In the Pacific Island Countries and Areas, in week 13, the number of ILI cases reported increased in Solomon Islands, French Polynesia, Federated States of Micronesia, and Vanuatu (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 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]