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 24 are presented in the table below. Influenza A and B are cocirculating in the region, with influenza B (Victoria lineage) predominant in recent weeks (Figure 1).

Table 1: Cumulative data reported to FluNet from Western Pacific Region, weeks 1 to 24, 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 (24)</td>
<td>30,568</td>
<td>4,863</td>
</tr>
<tr>
<td>Cambodia (21)</td>
<td>487</td>
<td>112</td>
</tr>
<tr>
<td>China (23)</td>
<td>357,680</td>
<td>87,193</td>
</tr>
<tr>
<td>Japan (21)</td>
<td>-</td>
<td>5,539</td>
</tr>
<tr>
<td>Lao People's Democratic Republic (22)</td>
<td>1,502</td>
<td>171</td>
</tr>
<tr>
<td>Malaysia (19)</td>
<td>1,579</td>
<td>248</td>
</tr>
<tr>
<td>Mongolia (16)</td>
<td>2,632</td>
<td>718</td>
</tr>
<tr>
<td>New Caledonia (20)</td>
<td>881</td>
<td>268</td>
</tr>
<tr>
<td>New Zealand (20)</td>
<td>193</td>
<td>80</td>
</tr>
<tr>
<td>Philippines (23)</td>
<td>583</td>
<td>127</td>
</tr>
<tr>
<td>Republic of Korea (23)</td>
<td>5,692</td>
<td>1,214</td>
</tr>
<tr>
<td>Singapore (21)</td>
<td>1,206</td>
<td>269</td>
</tr>
<tr>
<td>Viet Nam (14)</td>
<td>274</td>
<td>41</td>
</tr>
</tbody>
</table>

Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region, weeks 1 to 24, 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 countries within the temperate zone of the Northern Hemisphere, influenza activity is within normal seasonal trends observed during the corresponding period from previous years in Northern China, Mongolia, Republic of Korea and Japan.

Outpatient ILI Surveillance

**China (North)**

During week 23, the percentage of visits for ILI at national sentinel hospitals in Northern China was 2.6%, which is higher than the last week (2.4%), and higher than the same week of 2016-2018 (2.5% 2.5%, 2.4%) (Figure 2).

**Mongolia**

During week 23, ILI activity in Mongolia decreased compared to the previous week, and within the tolerance limits (Figure 3).

![Figure 2: Percentage of visits for ILI at sentinel hospitals in Northern China, 2016-2020](Source: China National Influenza Center)

![Figure 3: Proportion of outpatient ILI visits per 10,000 people in Mongolia, 2017-2019](Source: Mongolia National Influenza Center)
Republic of Korea

In week 23, overall weekly ILI rate was 5.1 ILI cases per 1,000 outpatient visits, lower than last week with 5.5 ILI cases per 1,000 outpatient visits, bringing the activity lower than 2018-2019 seasonal epidemic threshold and within trends of previous years (Figure 4).

![Figure 4: Weekly ILI incidence rate per 1,000 consultations, Republic of Korea, 2014-2019](Source: Korean Centres for Disease Control and Prevention)

Sentinel influenza surveillance

Japan

In week 22 of 2019, influenza sentinel hospital activity in Japan was low and similar to the same period in recent years (Figure 5).

![Figure 5: Number of influenza cases reported weekly per reporting sentinel hospital site, Japan 2009-2019](Source: Japan National Institute of Infectious Diseases)
Countries/areas in the tropical zone

Countries and areas in the tropical zone are generally observing influenza activity that is consistent with previous seasons. However, influenza activity is slightly higher than previous seasons in Southern China and Lao PDR.

Surveillance

**Hong Kong SAR (China) – ILI and hospital Surveillance**

In week 23, the average consultation rate for ILI among sentinel general outpatient clinics was 4.1 ILI cases per 1,000 consultations, which was lower than 4.9 recorded in the previous week and within expected seasonal levels compared to previous years (Figure 6). The average consultation rate for ILI among sentinel private medical practitioners was 24.4 ILI cases per 1,000 consultations, which was lower than 34.6 recorded in the previous week (Figure 7).

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

**China (South) - ILI Surveillance**

During week 23, the percentage of visits for ILI at national sentinel hospitals in Southern China was 4.6%, higher than the last week (4.1%) and higher than the same weeks of 2016-2018 (3.5%, 3.4% and 4.2%) (Figure 8).

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

In week 23, the average daily number of patients seeking treatment in the polyclinics for ARI was 2,824 over 4.5 working days, an decrease compared to the previous week of 3,017 over 5.5 working days. The proportion of patients with ILI among the polyclinic attendances for ARI was 2.3% (Figure 9).
Lao PDR
In week 23, number of ILI cases presenting to sentinel sites increased compared to the previous week and is slightly higher than previous years (Figure 10).

Figure 8: Percentage of visits due to ILI at national sentinel hospitals in Southern China, 2016-2020 (Source: China National Influenza Center)

Figure 9: Average daily polyclinic attendances for ARI in Singapore, 2018-2019 (Source: Singapore Ministry of Health)

Figure 10: Weekly number of ILI presentations at sentinel sites, 2015-2019, Lao PDR (Source: Lao National Center for Laboratory and Epidemiology)
Influenza Situation Update

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 remains unusually high in Australia for this time of year.

Australia – Laboratory-confirmed influenza and ILI

In week 22, there were 9.9 ILI per 1,000 consultations at sentinel general practitioners, decreasing from 11.9 per 1,000 consultations in week 21 and almost twice the five year average for this time of year. The numbers of laboratory confirmed influenza cases in week 22 was substantially higher than the five year average for the same period and year to date there have been 70,341 laboratory confirmed cases of influenza reported to the National Notifiable Diseases Surveillance System (Figure 11).

New Zealand – Influenza like Illness

General Practice (GP) visits for influenza like illness (ILI) is still above the baseline level this week but showing a slight decrease than last week. The historical average is based on 2000-2017 seasons (excluding pandemic seasons: 2009) (Figure 12).

Pacific Island Countries and Areas (PICs) - ILI Surveillance
In the Pacific Island Countries and Areas, in week 23, the number of ILI cases reported increased in Tonga, Tuvalu and Wallis & Futuna compared to last week (Figure 13).

**Figure 13: Reported cases of influenza-like illness in Pacific Island Countries**

*Source: PacNet bulletin*
Global influenza situation updates

Virological update

Global update

Others:

- Recommended composition of influenza virus vaccines for use in the 2019 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]