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 26 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 26, 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 (26)</td>
<td>34,994</td>
<td>6,269</td>
</tr>
<tr>
<td>Cambodia (23)</td>
<td>535</td>
<td>132</td>
</tr>
<tr>
<td>China (24)</td>
<td>372,331</td>
<td>88,366</td>
</tr>
<tr>
<td>Japan (25)</td>
<td>-</td>
<td>6,033</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic (24)</td>
<td>1,637</td>
<td>178</td>
</tr>
<tr>
<td>Malaysia (19)</td>
<td>1,579</td>
<td>248</td>
</tr>
<tr>
<td>Mongolia (24)</td>
<td>2,821</td>
<td>723</td>
</tr>
<tr>
<td>New Caledonia (24)</td>
<td>1,140</td>
<td>329</td>
</tr>
<tr>
<td>New Zealand (20)</td>
<td>193</td>
<td>80</td>
</tr>
<tr>
<td>Philippines (24)</td>
<td>603</td>
<td>128</td>
</tr>
<tr>
<td>Republic of Korea (25)</td>
<td>6,085</td>
<td>1,224</td>
</tr>
<tr>
<td>Singapore (23)</td>
<td>1,329</td>
<td>309</td>
</tr>
<tr>
<td>Viet Nam (21)</td>
<td>401</td>
<td>76</td>
</tr>
</tbody>
</table>

Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region, weeks 1 to 26, 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 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 25, the percentage of visits for ILI at national sentinel hospitals in Northern China was 2.3%, which is same the last week (2.3%), and lower than the same week of 2016-2018 (2.4%, 2.5%, 2.4%) (Figure 2).

**Mongolia**

During week 25, ILI activity in Mongolia decreased compared to the previous week, and within the tolerance limits (Figure 3).
**Republic of Korea**

In week 25, overall weekly ILI rate was 4.4 ILI cases per 1,000 outpatient visits, lower than last week with 4.7 ILI cases per 1,000 outpatient visits, following trends shown in 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)](image)

**Sentinel influenza surveillance**

**Japan**

In week 24 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)](image)
Countries/areas in the tropical zone

Countries and areas in the tropical zone are generally 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 general outpatient clinics was 5.1 ILI cases per 1,000 consultations, which was higher than 4.3 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 33.2 ILI cases per 1,000 consultations, which was lower than 36.8 recorded in the previous week (Figure 7).

![Figure 6: ILI consultation rates at sentinel general outpatient clinics, Hong Kong SAR 2015-2019](Source: Hong Kong Centre for Health Protection)

![Figure 7: ILI consultation rates at sentinel private doctors, Hong Kong SAR 2015-2019](Source: Hong Kong Centre for Health Protection)

**China (South) - ILI Surveillance**

During week 25, the percentage of visits for ILI at national sentinel hospitals in Southern China was 4.0%, lower than the last week (4.2%) and higher than the same weeks of 2016-2018 (3.4%, 3.8% and 3.8%) (Figure 8).

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

In week 25 the average daily number of patients seeking treatment in the polyclinics for ARI was 2,824 over 5.5 working days, higher compared to the previous week of 2,797 over 5.5 working days. The proportion of patients with ILI among the polyclinic attendances for ARI was 2.7% (Figure 9).
Lao PDR
In week 25, number of ILI cases presenting to sentinel sites increased compared to the previous week, while case for week 25 remain within normal range cases for week 25. (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 remains unusually high in Australia for this time of year.

Australia – Laboratory-confirmed influenza and ILI
In week 24, there were 11.8 ILI per 1,000 consultations at sentinel general practitioners, decreasing from 13.0 per 1,000 consultations in week 23 and almost twice the five year average for this time of year. The numbers of laboratory confirmed influenza cases in week 24 was substantially higher than the five year average for the same period and year to date there have been 93,090 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 similar trend of the average seasonal rate of 2000-2017 seasons (excluding pandemic seasons: 2009) (Figure 12).

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

In the Pacific Island Countries and Areas, in week 25, the number of ILI cases reported increased in French Polynesia and Samoa 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]