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 20 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 20, 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 20)</td>
<td>20,061</td>
<td>2,350</td>
</tr>
<tr>
<td>Cambodia (week 16)</td>
<td>361</td>
<td>57</td>
</tr>
<tr>
<td>China (week 19)</td>
<td>306,888</td>
<td>80,888</td>
</tr>
<tr>
<td>Japan (week 19)</td>
<td>-</td>
<td>5,127</td>
</tr>
<tr>
<td>Lao People's Democratic Republic (week 19)</td>
<td>1,260</td>
<td>164</td>
</tr>
<tr>
<td>Malaysia (week 18)</td>
<td>1,475</td>
<td>226</td>
</tr>
<tr>
<td>Mongolia (week 16)</td>
<td>2,632</td>
<td>718</td>
</tr>
<tr>
<td>New Caledonia (week 13)</td>
<td>437</td>
<td>140</td>
</tr>
<tr>
<td>Philippines (week 17)</td>
<td>451</td>
<td>115</td>
</tr>
<tr>
<td>Republic of Korea (week 19)</td>
<td>4,717</td>
<td>1,148</td>
</tr>
<tr>
<td>Singapore (week 17)</td>
<td>1,001</td>
<td>223</td>
</tr>
<tr>
<td>Viet Nam (week 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 20 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, ILI and influenza activity is variable, with higher than normal activity in Northern China and the Republic of Korea compared to the corresponding period from previous years but normal seasonal trends being observed in Mongolia and Japan.

Outpatient ILI Surveillance

China (North)
During week 19, the percentage of visits for ILI at national sentinel hospitals in Northern China was 2.6%, which is lower than the last week (3.2%), similar to the previous three years (Figure 2).

Mongolia
During week 19, ILI activity in Mongolia was similar to the previous week, and remains below the upper tolerance limits (Figure 3).

Republic of Korea
In week 19, overall weekly ILI rate was 15.1 ILI cases per 1,000 outpatient visits, lower than last week with 23.9 ILI per 1,000 outpatient visits, but higher than the same period in the previous seasons.

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, 2017-2019
(Source: Mongolia National Influenza Center)

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

Japan

In week 19 of 2019, influenza activity in Japan decreased from 1.02 cases per sentinel hospital in week 18 to 0.74 in week 19, and it is lower than the same period in recent years.

![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 observing influenza activity that is consistent with previous seasons with the exception of Southern China, where trends are higher than the past three seasons.

Surveillance

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

In week 19, the average consultation rate for ILI among sentinel general outpatient clinics was 3.9 ILI cases per 1,000 consultations, which was slightly higher compared to the rate recorded in the previous week but showing a trend similar trend to 2018 (Figure 6). The average consultation rate for ILI among sentinel private medical practitioners was 19.0 ILI cases per 1,000 consultations, which was lower than 28.0 recorded in the previous week. (Figure 7).

![Hong Kong SAR (China) ILI Surveillance](https://example.com/ILI_surveillance.png)

*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 19, the percentage of visits for ILI at national sentinel hospitals in Southern China was 4.0%, lower than the last week (4.5%), but higher than the same weeks of 2016-2018 (3.6%, 3.2% and 3.7%) (Figure 8).

Singapore – Acute Respiratory Infection (ARI) Surveillance

In week 19, the average daily number of patients seeking treatment in the polyclinics for ARI was 3,184 over 5.5 working days, a decrease compared to the previous week of 3,224 over 4.5 working days. The proportion of patients with ILI among the polyclinic attendances for ARI was 2.3 % (Figure 9).

Lao PDR

In week 19, ILI activity decreased compared to the previous week but remains within the range of 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 is unusually high in Australia for this time of year.
**Australia – Laboratory-confirmed influenza and ILI**

In week 18, there were 8.2 ILI per 1,000 consultations at sentinel general practitioners, increasing from 7.6 per 1,000 consultations in week 17 and almost twice the five year average for this time of year. The numbers of laboratory confirmed influenza cases in week 18 was substantially higher than the five year average for the same period and year to date there have been 44,160 laboratory confirmed cases of influenza reported to the National Notifiable Diseases Surveillance System (Figure 11).

![Figure 11: Australian notifications of laboratory confirmed influenza](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 past few months. 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 19, the number of ILI cases reported increased in Samoa, Solomon Islands, Tokelau, Tonga and Vanuatu, but remains within the range of previous weeks. (Figure 13).
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]