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 21 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 21, 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 (21)</td>
<td>21,506</td>
<td>2,891</td>
</tr>
<tr>
<td>Cambodia (20)</td>
<td>469</td>
<td>105</td>
</tr>
<tr>
<td>China (20)</td>
<td>324,612</td>
<td>82,857</td>
</tr>
<tr>
<td>Japan (20)</td>
<td>-</td>
<td>5,358</td>
</tr>
<tr>
<td>Lao People's Democratic Republic (21)</td>
<td>1,400</td>
<td>168</td>
</tr>
<tr>
<td>Malaysia (18)</td>
<td>1,475</td>
<td>226</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 (21)</td>
<td>544</td>
<td>118</td>
</tr>
<tr>
<td>Republic of Korea (21)</td>
<td>5,208</td>
<td>1,192</td>
</tr>
<tr>
<td>Singapore (19)</td>
<td>1,109</td>
<td>246</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 21 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 Mongolia compared to the corresponding period from previous years but normal seasonal trends being observed in Northern China, Republic of Korea, and Japan.

Outpatient ILI Surveillance

China (North)

During week 21, the percentage of visits for ILI at national sentinel hospitals in Northern China was 2.5%, which is lower than the last week (2.6%), and similar to the previous three years (Figure 2).

Mongolia

During week 21, ILI activity in Mongolia decreased compared to the previous week, and higher the upper tolerance limits (Figure 3).

Republic of Korea

In week 21, overall weekly ILI rate was 7.0 ILI cases per 1,000 outpatient visits, lower than last week with 11.3 ILI cases per 1,000 outpatient visits, but higher than the same period in the previous seasons. (Figure 4)
**Sentinel influenza surveillance**

**Japan**
In week 20 of 2019, influenza sentinel hospital activity in Japan was similar to the same period in recent years. (Figure 5)

**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 21, the average consultation rate for ILI among sentinel general outpatient clinics was 3.2 ILI cases per 1,000 consultations, which was lower 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 38.0 ILI cases per 1,000 consultations, which was higher than the rate recorded in the previous week. (Figure 7).
Hong Kong SAR (China) ILI Surveillance

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 21, the percentage of visits for ILI at national sentinel hospitals in Southern China was 4.2%, higher than the last week (4.2%) and 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 21, the average daily number of patients seeking treatment in the polyclinics for ARI was 3,210 over 4.5 working days, an increase compared to the previous week of 3,052 over 5.5 working days. The proportion of patients with ILI among the polyclinic attendances for ARI was 2.2% (Figure 9).

Lao PDR
In week 21, ILI activity decreased compared to the previous week and remains within the range of 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)
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 and New Zealand for this time of year.

**Australia – Laboratory-confirmed influenza and ILI**

In week 20, there were 7.6 ILI per 1,000 consultations at sentinel general practitioners, increasing from 8.7 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 20 was substantially higher than the five year average for the same period and year to date there have been 55,240 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**

The rate of GP visits for ILI is higher than expected for this time of year aftern initially be lower than usual in April and May.. The historical average is based on 2000-2017 seasons (excluding pandemic seasons: 2009) (Figure 12).

![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 21, the number of ILI cases reported slightly increased in Samoa, Solomon Islands and Vanuatu 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