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 one and week 51 of 2021 are presented in Table 1 below. Influenza A and B are co-circulating, however, the majority of cases reported from week 53, 2020 to week 51, 2021 have been Influenza B (Figure 1). Caution should be taken when interpreting these data as there are reporting delays.

Table 1: Cumulative data reported to FluNet from Western Pacific Region, week 1, 2021 to week 51, 2021

<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 (50)</td>
<td>104 834</td>
<td>8</td>
</tr>
<tr>
<td>Cambodia (42)</td>
<td>4 979</td>
<td>0</td>
</tr>
<tr>
<td>China (50)</td>
<td>606 796</td>
<td>20 962</td>
</tr>
<tr>
<td>Fiji (48)</td>
<td>734</td>
<td>-</td>
</tr>
<tr>
<td>Japan (50)</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic (50)</td>
<td>2 594</td>
<td>146</td>
</tr>
<tr>
<td>Malaysia (45)</td>
<td>2 782</td>
<td>146</td>
</tr>
<tr>
<td>Mongolia (45)</td>
<td>478</td>
<td>0</td>
</tr>
<tr>
<td>New Caledonia</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>New Zealand</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Philippines (51)</td>
<td>692</td>
<td>85</td>
</tr>
<tr>
<td>Republic of Korea (51)</td>
<td>4 496</td>
<td>0</td>
</tr>
<tr>
<td>Singapore (50)</td>
<td>2 470</td>
<td>1</td>
</tr>
<tr>
<td>Viet Nam (50)</td>
<td>711</td>
<td>39</td>
</tr>
</tbody>
</table>

Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region, week 53 2020 to week 51, 2021 (Source: WHO FLUNET)
Influenza surveillance summary

Influenza surveillance in the WHO Western Pacific Region is based on outpatient and inpatient 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, ILI and influenza activity continues to be lower than in previous seasons.

Outpatient ILI Surveillance

China (North)

During week 49 of 2021, the percentage of visits for ILI at national sentinel hospitals in Northern China was 3.3%, higher than last week (3.0%), higher than the same week of 2018 and 2020 (3.2% and 2.6%), lower than the same week of 2019 (3.8%). (Figure 2).

![Figure 2: Percentage of visits for ILI at sentinel hospitals in Northern China, 2018-2021](Source: China National Influenza Center)
Mongolia

During week 50 of 2021, the ILI activity in Mongolia decreased to 17 ILI cases per 10,000 population. This is lower than the lower tolerance limit of 28 ILI cases per 10,000 population (Figure 3).

Figure 3: Proportion of outpatient ILI visits per 10,000 people in Mongolia, 2019-2021
(Source: Mongolia National Influenza Center)
Republic of Korea
In week 50 of 2021, the overall weekly ILI rate was 2.7 ILI cases per 1,000 outpatient visits, which was an increase compared to the previous week (2.4 ILI cases per 1,000 outpatient visits). The ILI consultation rate has remained below the national epidemic threshold (5.8 ILI cases per 1,000 outpatient visits) and absence of seasonal peaks since week 10 of 2020 (Figure 4). Between 5 December and 11 December 2021 of 361 samples collected from patients with Acute Respiratory Infection at sentinel surveillance sites, 40%, 26%, and 25% tested positive for rhinovirus, respiratory syncytial virus, and parainfluenza, respectively.

Figure 4: Weekly ILI incidence rate per 1,000 outpatient consultations, Republic of Korea, 2017-2021
(Source: Korean Centre for Disease Control and Prevention)

Sentinel influenza surveillance
Japan
In week 52 of 2021, the number of cases reported weekly by sentinel hospital sites remained very low in Japan. The number of cases in 2021 has been consistently low. However, the number of cases have increase from week 50, 2021. (Figure 5).

Figure 5: Number of influenza cases reported weekly per reporting sentinel hospital site, Japan 2011-2021
(Source: Japan National Institute of Infectious Diseases)
Countries/areas in the tropical zone

ILI and influenza activity continued to be lower than previous seasons in some of the countries and areas in the tropical zone.

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

In week 51 of 2021, the average consultation rate for ILI at sentinel general outpatient clinics was 0.8 ILI cases per 1,000 consultations, which was lower than 0.9 ILI cases per 1,000 consultations recorded in the previous week (Figure 6). The average consultation rate for ILI among sentinel private medical practitioners was 27.1 ILI cases per 1,000 consultations, which was higher than 25.6 recorded in the previous week. (Figure 7).

![Figure 6: ILI consultation rates at sentinel general outpatient clinics, Hong Kong SAR 2019-2021](Source: Hong Kong Centre for Health Protection)

![Figure 7: ILI consultation rates at sentinel private doctors, Hong Kong SAR 2017-2021](Source: Hong Kong Centre for Health Protection)

**China (South) - ILI Surveillance**

During week 49 of 2021, the percentage of visits for ILI at national sentinel hospitals in Southern China was 3.9%, higher than last week (3.7%), higher than the same period in 2018 and 2020 (3.3% and 3.4%, respectively) (Figure 8).

![Figure 8: Percentage of visits due to ILI at national sentinel hospitals in Southern China, 2018-2021](Source: China National Influenza Center)
Singapore – Acute Respiratory Infection (ARI) Surveillance
In week 50 of 2021, the average daily number of patients seeking treatment in polyclinics for ARI was 874 over 5.5 working days, higher than the previous season in 2020 (Figure 9). Of 179 samples tested for influenza in the past 4 weeks, the positivity rate in the community was 0%. The last specimen to test positive for influenza was collected in July 2021 and tested positive for influenza B (Figure 10).

![Figure 9: Average daily polyclinic attendances for ARI in Singapore, 2020-2021](Source: Singapore Ministry of Health)

![Figure 10: Monthly influenza surveillance for ARI in Singapore, 2020-2021](Source: Singapore Ministry of Health)

Lao PDR
From 11 December to 17 December 2021, 103 ILI cases were presented to sentinel sites, which was 69 cases higher compared to the previous week (red line). The number of ILI cases has been lower than previous years from week 18, 2021. Of 17 samples tested for influenza in week 50, 2021, zero (0) cases tested positive. (Figure 11).

![Figure 11: Weekly number of ILI cases at sentinel sites (2017 to 2021)](Source: Lao National Center for Laboratory and Epidemiology)
Cambodia

In week 50 of 2021, five out of seven sentinel sites in Cambodia reported ILI data. The recent number of ILI cases started to increase from week 26 to week 50 of 2021 (Figure 12). In week 50, 2021, there were no influenza positive specimens; in 2021, there has been one human infection with avian influenza A(H9N2) detected in week 8.

Figure 12: Number of ILI cases from seven sentinel sites and influenza positivity rate by week, 2020-2021, Cambodia
(Source: Communicable Disease Control Department, Cambodia Ministry of Health)

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 in Australia and New Zealand.

Australia – Laboratory-confirmed influenza (no update)

From 25 October to 7 November 2021, there were 14 laboratory-confirmed influenza notifications to the National Notifiable Disease Surveillance System (NNDSS). In the year to date, there have been 598 notifications of laboratory-confirmed influenza to the NNDSS. The number of confirmed cases reported has remained low since April 2020 and is lower than the five-year average (Figure 13).

Figure 13: Notifications of laboratory-confirmed influenza by month and week from 2016 to 2021 in Australia
(Source: National Notifiable Diseases Surveillance System, Australian Department of Health)
**New Zealand – Influenza like Illness (no update)**

Overall, based on multiple sources of surveillance information, influenza-like illness (ILI) activity has remained low in the week ending 1 October 2021. Community ILI activity remains very low for this time of year. The rates of Healthstat consultations for ILI are lower than the levels seen at the same time in 2020. The ILI consultation rates in most age groups in the week ending 1 October are below the historical rates (Figure 14). Public Health Units routinely investigate respiratory outbreaks, including laboratory testing of a sample of cases. There are currently five influenza cases detected through the surveillance system in 2021 (source).

![Figure 14: Weekly rates of general practice ILI consultations per 100,000 people in New Zealand in 2020-2021](Source: New Zealand Institute of Environmental Science and Research)

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

In week 50, low levels of influenza-like illness activity continue to be reported across the Pacific Island Countries and Areas. (Figure 15)
Influenza Situation Update
Caution should be taken in interpreting these data as there may be changes in the number of sentinel sites reporting to the Pacific Syndromic Surveillance System.

Figure 15: Reported cases of influenza-like illness in Pacific Island Countries, 2020-2021
(Source: Pacific Syndromic Surveillance System Weekly Bulletin)

Global influenza situation updates

Virological update

Global update

Others:
- Recommended composition of influenza virus vaccines for use in the 2021 southern hemisphere influenza season [Link]
- Recommended composition of influenza virus vaccines for use in the 2020-2021 northern hemisphere influenza season [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]