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 35 of 2022 are presented in Table 1 below. Influenza A and B are co-circulating, however, the majority of cases reported from week 1 to week 35 2022 have been Influenza A (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, 2022 to week 35, 2022

<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 (34 of 2022)</td>
<td>198,779</td>
<td>11,200</td>
</tr>
<tr>
<td>Cambodia (31 of 2022)</td>
<td>3,749</td>
<td>15</td>
</tr>
<tr>
<td>China (34 of 2022)</td>
<td>333,760</td>
<td>47,850</td>
</tr>
<tr>
<td>Fiji (31 of 2022)</td>
<td>1,282</td>
<td>210</td>
</tr>
<tr>
<td>Japan (33 of 2022)</td>
<td>-</td>
<td>20</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic (35 of 2022)</td>
<td>2,780</td>
<td>123</td>
</tr>
<tr>
<td>Malaysia (32 of 2022)</td>
<td>19,443</td>
<td>2,675</td>
</tr>
<tr>
<td>Mongolia (25 of 2022)</td>
<td>3,438</td>
<td>272</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 (32 of 2022)</td>
<td>1,329</td>
<td>40</td>
</tr>
<tr>
<td>Republic of Korea (35 of 2022)</td>
<td>4,168</td>
<td>38</td>
</tr>
<tr>
<td>Singapore (33 of 2022)</td>
<td>3,846</td>
<td>232</td>
</tr>
<tr>
<td>Viet Nam (34 of 2022)</td>
<td>33</td>
<td>0</td>
</tr>
</tbody>
</table>

Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region, week 33, 2021 to week 35, 2022 (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 is similar to the corresponding period from previous years.

Outpatient ILI Surveillance

China (North)

During week 34 of 2022, the percentage for ILI at national sentinel hospitals in northern provinces of China was 2.5%, the same as the last week (2.5%), higher than the same week of 2019-2021 (2.0%, 1.7% and 1.7%) (Figure 2).

![Figure 2: Percentage of visits for ILI at sentinel hospitals in Northern China, 2019-2023](Source: China National Influenza Center)
Mongolia

During week 33 of 2022, the ILI activity in Mongolia decreased to 23 ILI cases per 10,000 population. This is higher than the upper tolerance limit of 20 ILI cases per 10,000 population (Figure 3).

![Figure 3: Proportion of outpatient ILI visits per 10,000 people in Mongolia, 2020-2022](Source: Mongolia National Influenza Center)

Republic of Korea

In week 35 of 2022, the overall weekly ILI rate was 4.3 ILI cases per 1,000 outpatient visits, which was slightly higher than previous week (4.2). 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).

![Figure 4: Weekly ILI incidence rate per 1,000 outpatient consultations, Republic of Korea, 2017-2022](Source: Korean Centres for Disease Control and Prevention)
**Sentinel influenza surveillance**

**Japan**

In week 33 of 2022, the number of cases reported weekly by sentinel hospital sites remained very low in Japan. The number of cases in 2022 has been consistently low (Figure 5).

![Figure 5: Number of influenza cases reported weekly per reporting sentinel hospital site, Japan 2012-2022](Source: Japan National Institute of Infectious Diseases)

**Countries/areas in the tropical zone**

ILI and influenza activity is similar to the corresponding period from previous years in some of the countries and areas in the tropical zone.

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

In week 35 of 2022, the average consultation rate for ILI at sentinel general outpatient clinics (GOPC) was 0.4 ILI cases per 1,000 consultations, which was lower than 0.5 reported in the previous week (Figure 6). The average consultation rate for ILI among sentinel private medical practitioner (PMP) clinics was 11.4 ILI cases per 1,000 consultations, which was higher than 10.3 recorded in the previous week (Figure 7).
China (South) - ILI Surveillance
During week 34 of 2022, the percentage of visits for ILI at national sentinel hospitals in Southern China was 3.0%, lower than the last week (3.3%), higher than the same week of 2019-2021 (2.9%, 2.7% and 2.6%) (Figure 8).

Singapore – Acute Respiratory Infection (ARI) Surveillance
In week 34 of 2022, the average daily number of patients seeking treatment in polyclinics for ARI was 2,121 higher than the previous season in 2021 (Figure 9). The proportion of patients with influenza-like illness (ILI) among the polyclinic attendances for ARI is 0.9. Of 737 samples tested for influenza in the past 4 weeks, the positivity rate in the community was 18.9%. Of the 77 specimens tested positive for influenza in July 2022, 75 were positive for Influenza A(H3N2) (97.0%) and two samples positive for Influenza A(pH1N1) (3.0%) (Figure 10).
Lao PDR
During week 34 of 2022, the influenza activity has similar presented to sentinel sites compared to the previous week. Ninety samples tested for influenza in week 34, 2022. Of these 33 samples tested positive for influenza, including 15 cases for Influenza B Victoria and 18 cases for Flu A/H3 (Figure 11).

Cambodia
In week 34 of 2022, Ministry of Health received data from all seven-sentinel sites in Cambodia. The trend in 2022 showed an increase from week 8 that peaked in week 16 of 2022. The number of ILI cases in Cambodia slightly increased in week 34 of 2022 (102 cases) compared to week 33 of 2022 (95 cases). However, the influenza positivity rate increased significantly in this week 34 of 2022 (11.76%) compared to last week (week 33 of 2022) (10.53%) (Figure 12).
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

In the year to date, there have been 217,898 notifications reported to the National Notifiable Diseases Surveillance System (NNDSS) in Australia, of which 1,796 notifications had a diagnosis date this fortnight. Between mid-April 2022 to epidemiology week 29, the weekly number of notifications of laboratory-confirmed influenza reported in Australia has exceeded the 5 year average. This previous fortnight is lower than the weekly 5 year average for this time of year (Figure 13).
New Zealand – Influenza like Illness

Overall, based on multiple sources of surveillance information, community ILI activity remains plateaued in the week ending 26 August (Figure 14). Activity is lower than historical rates for this time of the year and has declined over the past few weeks to 29 July, with 2 ILI/ARI outbreaks were reported which has seen an increase in the rates.

Figure 13: Notifications of laboratory-confirmed influenza by month and week from 2017 to 2022 in Australia
(Source: National Notifiable Diseases Surveillance System, Australian Department of Health)

Figure 14: Weekly rates of general practice ILI consultations per 100,000 people in New Zealand in 2020-2022
(Source: New Zealand Institute of Environmental Science and Research)
Pacific Island Countries and Areas (PICs) - ILI Surveillance

In week 34, 2022, only 12 out of 18 PICs reported the data and showed low levels of influenza-like illness activity continue to be reported across the Pacific Island Countries and Areas except for Samoa, Vanuatu and Solomon Islands (Figure 15).
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.

** FSM: Federated States of Micronesia, CMNI: Commonwealth of Northern Mariana Islands

*Figure 15: Reported cases of influenza-like illness in Pacific Island Countries, 2019-2022
(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 2022 southern hemisphere influenza season [Link]
- Recommended composition of influenza virus vaccines for use in the 2022-2023 northern hemisphere influenza season [Link]
- WHO Consultation on the Composition of Influenza Virus Vaccines for Use in the 2023 Southern Hemisphere Influenza Season 19-22 September 2022 [Link]
- WHO issues updated influenza vaccines position paper [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]