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 37 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 37 of 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 of 2022 to week 37 of 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 (36 of 2022)</td>
<td>211,584</td>
<td>11,311</td>
</tr>
<tr>
<td>Cambodia (33 of 2022)</td>
<td>3,950</td>
<td>22</td>
</tr>
<tr>
<td>China (36 of 2022)</td>
<td>348,876</td>
<td>49,260</td>
</tr>
<tr>
<td>Fiji (33 of 2022)</td>
<td>1,343</td>
<td>210</td>
</tr>
<tr>
<td>Japan (35 of 2022)</td>
<td>-</td>
<td>21</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic (36 of 2022)</td>
<td>3,040</td>
<td>224</td>
</tr>
<tr>
<td>Malaysia (34 of 2022)</td>
<td>21,869</td>
<td>3,082</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 (34 of 2022)</td>
<td>1,785</td>
<td>74</td>
</tr>
<tr>
<td>Republic of Korea (35 of 2022)</td>
<td>4,168</td>
<td>38</td>
</tr>
<tr>
<td>Singapore (35 of 2022)</td>
<td>4,338</td>
<td>331</td>
</tr>
<tr>
<td>Viet Nam (37 of 2022)</td>
<td>36</td>
<td>1</td>
</tr>
</tbody>
</table>

Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region, week 35 of 2021 to week 37 of 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 ≥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 similar to the corresponding period from previous years.

**Outpatient ILI Surveillance**

**China (North)**

During week 36 of 2022, the percentage for ILI at national sentinel hospitals in northern provinces of China was 2.6%, higher the last week (2.5%), higher than the same week of 2019-2021 (2.0%, 1.9% and 1.8%) *(Figure 2).*

![Figure 2: Percentage of visits for ILI at sentinel hospitals in Northern China, 2019-2022](Source: China National Influenza Center)
**Mongolia**

During week 35 of 2022, the ILI activity in Mongolia increased to 29 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 37 of 2022, the overall weekly ILI rate was 5.1 ILI cases per 1,000 outpatient visits, which was slightly higher than previous week (4.7). 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 35 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 37 of 2022, the average consultation rate for ILI at sentinel general outpatient clinics (GOPC) was 0.6 ILI cases per 1,000 consultations, which was the same as 0.6 reported in the previous week (Figure 6). The average consultation rate for ILI among sentinel private medical practitioner (PMP) clinics was 20.1 ILI cases per 1,000 consultations, which was higher than 15.0 recorded in the previous week (Figure 7).
China (South) - ILI Surveillance
During week 36 of 2022, the percentage of visits for ILI at national sentinel hospitals in southern provinces was 3.5%, higher than the last week (2.9%), higher than the same week of 2019-2021 (2.9%, 3.0% and 3.1%) (Figure 8).

Singapore – Acute Respiratory Infection (ARI) Surveillance
In week 36 of 2022, the average daily number of patients seeking treatment in polyclinics for ARI was 2,054 in week 36, which is higher than the previous reported in the same period in 2021 (Figure 9). The proportion of patients with influenza-like illness (ILI) among the polyclinic attendances for ARI is 0.5. Of 705 samples tested for influenza in the past 4 weeks, the positivity rate in the community was 18.7%. Of the 162 specimens tested positive for influenza in August 2022, 155 were positive for Influenza A(H3N2) (95.7%),
five samples positive for Influenza A(pH1N1) (3.1%) and two were positive for Influenza B (1.2%) (Figure 10).

Figure 9: Average daily polyclinic attendances for ARI in Singapore, 2020-2022
(Source: Singapore Ministry of Health)

Figure 10: Monthly influenza surveillance for ARI in Singapore, 2020-2022
(Source: Singapore Ministry of Health)

Lao PDR
During week 36 of 2022, the influenza activity has similar presented to sentinel sites compared to the previous week. There were 156 samples tested for influenza in week 36 of 2022. Of these, 48 samples tested positive for influenza, including 16 cases for Influenza B Victoria and 32 cases for Flu A/H3 (Figure 11).

Figure 11: Weekly number of ILI cases at sentinel sites (2018 to 2022)
(Source: Lao National Center for Laboratory and Epidemiology)

Cambodia
In week 36 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 36 of 2022 (109 cases) compared to week 35 of 2022 (103 cases). However, the influenza positivity rate increased significantly in this week 36 of 2022 (35%) compared to last week 35 of 2022 (21%) (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 223,678 notifications reported to the National Notifiable Diseases Surveillance System (NNDSS) in Australia, of which 1,351 notifications had a diagnosis date this fortnight. Between mid-April 2022 to week 29 of 2022, 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**).
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)

New Zealand – Influenza like Illness
Overall, based on multiple sources of surveillance information, community ILI activity has increased slightly following a decline since mid-August (Figure 14). Activity is lower than historical rates for this time of the year and has declined over the past few weeks to 1 September 2022.

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 36 of 2022, 14 out of 18 PICs reported the data. Low levels of influenza-like illness activity continue to be reported across the Pacific Island Countries and Areas except for CNMI, Tonga, 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*
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