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 51 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 51 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, 2022 to week 51, 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 (51 of 2022)</td>
<td>277,307</td>
<td>11,868</td>
</tr>
<tr>
<td>Cambodia (49 of 2022)</td>
<td>5,680</td>
<td>401</td>
</tr>
<tr>
<td>China (50 of 2022)</td>
<td>511,907</td>
<td>56,356</td>
</tr>
<tr>
<td>Fiji (47 of 2022)</td>
<td>1,545</td>
<td>210</td>
</tr>
<tr>
<td>Japan (50 of 2022)</td>
<td>-</td>
<td>72</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic (51 of 2022)</td>
<td>4,932</td>
<td>629</td>
</tr>
<tr>
<td>Malaysia (51 of 2022)</td>
<td>35,472</td>
<td>4,867</td>
</tr>
<tr>
<td>Mongolia (46 of 2022)</td>
<td>5,105</td>
<td>273</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 of 2022)</td>
<td>3,126</td>
<td>201</td>
</tr>
<tr>
<td>Republic of Korea (51 of 2022)</td>
<td>8,350</td>
<td>295</td>
</tr>
<tr>
<td>Singapore (51 of 2022)</td>
<td>7,659</td>
<td>890</td>
</tr>
<tr>
<td>Viet Nam (41 of 2022)</td>
<td>165</td>
<td>43</td>
</tr>
</tbody>
</table>

Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region, week 51, 2021 to week 51, 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 51 of 2022, sentinel hospitals in the northern provinces reported an ILI% of 8.3%, an increase from the previous week's level of 6.2% and higher than the same weeks in 2019 to 2021 (5.3%, 2.8% and 3.9%) (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 51 of 2022, the ILI activity in Mongolia decreased to 74 ILI cases per 10,000 population. This is higher than the upper tolerance limit (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 51 of 2022, the overall weekly ILI rate was 41.9 ILI cases per 1,000 outpatient visits, which is higher than the previous week (30.3 per 1,000 outpatients) (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 49 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**
The latest surveillance data showed that the overall seasonal influenza activity in Hong Kong remained low. In week 51, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPC) was 0.3 ILI cases per 1,000 consultations, which was lower than 0.6 recorded in the previous week (Figure 6). The average consultation rate for ILI among sentinel private medical practitioner (PMP) clinics was 30.4 ILI cases per 1,000 consultations, which was higher than 29.1 recorded in the previous week (Figure 7).

![Figure 6: ILI consultation rates at sentinel general outpatient clinics, Hong Kong SAR 2020-2022](Source: Hong Kong Centre for Health Protection)

![Figure 7: ILI consultation rates at sentinel private doctors, Hong Kong SAR 2018-2022](Source: Hong Kong Centre for Health Protection)
**China (South) - ILI Surveillance**

During week 51 of 2022, the percentage of visits for ILI at national sentinel hospitals in Southern China was 13.0%, higher than the last week (9.3%) and higher than the same week of 2019-2021 (5.7%, 3.4% and 4.0%) (Figure 8).

![Figure 8: Percentage of visits due to ILI at national sentinel hospitals in Southern China, 2019-2022](source: China National Influenza Center)

**Singapore – Acute Respiratory Infection (ARI) Surveillance**

In week 51 of 2022, the average daily number of patients seeking treatment in the polyclinics for ARI is 2,168 (over 5.5 working days) (Figure 9). The proportion of patients with influenza-like illness (ILI) among the polyclinic attendances for ARI is 0.4%. Of 693 samples tested for influenza in the past four weeks, the positivity rate in the community was 11.7%. Of the 78 specimens tested positive for influenza in November 2022, 57 were positive for Influenza A(H3N2) (73.0%), 7 were positive for Influenza A(pH1N1) (8.9%) and 14 were positive for Influenza B (18%) (Figure 10).

![Figure 9: Average daily polyclinic attendances for ARI in Singapore, 2021-2022](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 51 of 2022, the National Center for Laboratory and Epidemiology received data from all seven sentinel sites in Lao PDR. The number of ILI cases presenting at sentinel sites was 69 cases lower than the previous week. There were 48 samples tested for influenza in week 51, 2022. All samples tested positive for influenza, including 5 cases for Influenza B Victoria (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 51 of 2022, Ministry of Health received data from all seven-sentinel sites in Cambodia. The number of ILI cases in Cambodia slightly increased in week 51 of 2022 (130 cases) compared to week 50 of 2022 (127 cases). The influenza positivity rate decreased in week 51 of 2022 (0%) compared to the influenza positivity rate in week 50 (66.7%) (Figure 12).

![Figure 12: Number of ILI cases from seven sentinel sites and influenza positivity rate by week, 2020-2022, 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**

In the year to 13 November 2022, there have been 227,359 notifications reported to the National Notifiable Diseases Surveillance System in Australia. Of these, 824 notifications had a diagnosis date in the latest reported fortnight (31 October 2022 - 13 November 2022). This is higher than the number of notifications with a diagnosis date in the previous fortnight (778). The weekly number of notifications of laboratory-confirmed influenza in 2022 has decreased to below the weekly 5 year average since mid-July (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**

In the four weeks to 25 November 2022, the influenza like illness (ILI) general practitioner consultation rate declined (Figure 14). GP consultation rates remain lower than the historical rate for this time of year. Rates were highest in Counties Manukau, which were higher than observed historically, though showed a decrease throughout the month.

![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 50 of 2022, 14 out of 18 PICs reported ILI surveillance data. No reports are available for American Samoa, Guam and Nauru. The following countries reported increased influenza-like illness activity, compared with 2019–2021 trends: Fiji, French Polynesia, Federated States of Micronesia, Samoa, Vanuatu and Wallis and Futuna (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:

- New recommended composition of influenza virus vaccines for use in the 2023 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]