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 2020 and week 14 2020 are presented in the table below. Influenza A and B are cocirculating in the region, with influenza A (H3) predominating (Figure 1). It should be noted that several countries and areas have not reported in 2020.

Table 1: Cumulative data reported to FluNet from Western Pacific Region, week 1 2020 to week 14 2020

<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 (14)</td>
<td>28309</td>
<td>926</td>
</tr>
<tr>
<td>Cambodia (14)</td>
<td>306</td>
<td>67</td>
</tr>
<tr>
<td>China (14)</td>
<td>178901</td>
<td>30759</td>
</tr>
<tr>
<td>Fiji (14)</td>
<td>79</td>
<td>9</td>
</tr>
<tr>
<td>Japan (14)</td>
<td>-</td>
<td>1908</td>
</tr>
<tr>
<td>Lao People's Democratic Republic (14)</td>
<td>934</td>
<td>206</td>
</tr>
<tr>
<td>Malaysia (14)</td>
<td>1064</td>
<td>281</td>
</tr>
<tr>
<td>Mongolia (14)</td>
<td>3008</td>
<td>972</td>
</tr>
<tr>
<td>New Caledonia (14)</td>
<td>75</td>
<td>15</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 (14)</td>
<td>92</td>
<td>8</td>
</tr>
<tr>
<td>Republic of Korea (14)</td>
<td>1409</td>
<td>505</td>
</tr>
<tr>
<td>Singapore (14)</td>
<td>1250</td>
<td>363</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region, week 15 2019 to week 14 2020 (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 continue to decrease, lower than in previous seasons.

Outpatient ILI Surveillance

**China (North)**

During week 13 2020, the percentage of visits for ILI at national sentinel hospitals in Northern China was 2.3%, lower than the last week (2.4%), and lower than the same week of 2017-2019 (2.7%, 2.6% and 3.6%) (Figure 2). ILI activity continues to disease after a peak in week 5.

**Mongolia**

During week 13 2020, ILI activity in Mongolia has a decrease trend and below the lower tolerance limit (Figure 3).

![Figure 2: Percentage of visits for ILI at sentinel hospitals in Northern China, 2016-2020](Source: China National Influenza Center)

![Figure 3: Proportion of outpatient ILI visits per 10,000 people in Mongolia, 2018-2020](Source: Mongolia National Influenza Center)
Republic of Korea
In week 13 of 2020, the overall weekly ILI rate was 2.8 ILI cases per 1,000 outpatient visits, lower than the previous week with 3.2 ILI cases per 1,000 outpatient visits and below the national epidemic threshold (5.9 ILI cases per 1,000 outpatient visits) (Figure 4).

Figure 4: Weekly ILI incidence rate per 1,000 consultations, Republic of Korea, 2015-2020
(Source: Korean Centres for Disease Control and Prevention)

Sentinel influenza surveillance
Japan
In week 12 of 2020, influenza sentinel hospital activity in Japan has a decrease trend. The peak this year is lower than the previous years, but the general trend was similar to that seen in previous seasons (Figure 5).

Figure 5: Number of influenza cases reported weekly per reporting sentinel hospital site, Japan 2010-2020
(Source: Japan National Institute of Infectious Diseases)
Countries/areas in the tropical zone

ILI and influenza activity continued to decrease in most of the countries and areas.

Surveillance

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

In week 13 of 2020, the average consultation rate for ILI among sentinel general outpatient clinics was 1.2 ILI cases per 1,000 consultations, which was lower than 1.6 ILI cases per 1,000 consultations recorded in the previous week but significantly lower than the same week of the previous year (Figure 6). The average consultation rate for ILI among sentinel private medical practitioners was 19.3 ILI cases per 1,000 consultations, which was lower than 20.5 recorded in the previous week (Figure 7).

**China (South) - ILI Surveillance**

During week 13 2020, the percentage of visits for ILI at national sentinel hospitals in Southern China was 2.4%, lower than the previous week (2.7%), lower than the same week of 2017-2019 (3.1%, 3.6% and 4.0%). ILI activity continues to decrease after a peak in week 5 (Figure 8).

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

In week 14 of 2020, the average daily number of patients seeking treatment in polyclinics for ARI was 2,065 over 5.5 working days, which is lower than the previous weeks and the same time period in 2019 (Figure 9).
Lao PDR
In week 13 of 2020, the number of ILI cases presenting to sentinel sites was decreased compared to the previous week but higher than the same period of previous year (Figure 10).

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 and ILI (No update)
In week 40, there were 3.9 ILI per 1,000 consultations at sentinel general practitioners, decreasing from the seasonal high of 13.3 per 1,000 consultations in week 28 and lower than the 5 year average for this time of year. There have been 298,120 laboratory-confirmed cases of influenza reported to the National Notifiable Diseases Surveillance System. While number of cases was slightly lower than the five year average, there has been a marked decrease in notifications per week following a peak in week 27 and now showing a weekly trend similar to that seen in past years (Figure 11).

Figure 10: Weekly number of ILI presentations at sentinel sites, 2016-2020, Lao PDR
(Source: Lao National Center for Laboratory and Epidemiology)

Figure 11: Australian notifications of laboratory confirmed influenza
(Source: National Notifiable Diseases Surveillance System, Australian Department of Health)
New Zealand – Influenza like Illness (No update)
There were 4 general practice visits for Influenza-like Illness per every 100,000 registered patients followed in New Zealand during the week ending 29 September. General Practice visits for influenza-like illness are well below the baseline level in the week ending 29 September, with a decrease compared to the previous week (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 13 of 2020, the number of ILI cases reported increased in several PICs, including in Samoa and Tokelau (Figure 13).
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]