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 5 2019 and week 3 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 5 2019 to week 3 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 (3)</td>
<td>93,294</td>
<td>13,746</td>
</tr>
<tr>
<td>Cambodia (2)</td>
<td>1,153</td>
<td>304</td>
</tr>
<tr>
<td>China (2)</td>
<td>673,263</td>
<td>105,503</td>
</tr>
<tr>
<td>Fiji (50, 2019)</td>
<td>496</td>
<td>185</td>
</tr>
<tr>
<td>Japan (2)</td>
<td>-</td>
<td>6,066</td>
</tr>
<tr>
<td>Lao People's Democratic Republic (3)</td>
<td>3,819</td>
<td>575</td>
</tr>
<tr>
<td>Malaysia (2)</td>
<td>4,569</td>
<td>1,098</td>
</tr>
<tr>
<td>Mongolia (3)</td>
<td>3,565</td>
<td>616</td>
</tr>
<tr>
<td>New Caledonia (52, 2019)</td>
<td>2,185</td>
<td>537</td>
</tr>
<tr>
<td>New Zealand (33, 2019)</td>
<td>1,963</td>
<td>957</td>
</tr>
<tr>
<td>Papua New Guinea (45, 2019)</td>
<td>122</td>
<td>15</td>
</tr>
<tr>
<td>Philippines (51, 2019)</td>
<td>1,347</td>
<td>291</td>
</tr>
<tr>
<td>Republic of Korea (2)</td>
<td>11,373</td>
<td>1,491</td>
</tr>
<tr>
<td>Singapore (52, 2019)</td>
<td>3,305</td>
<td>1,047</td>
</tr>
<tr>
<td>Viet Nam (51, 2019)</td>
<td>1,551</td>
<td>348</td>
</tr>
</tbody>
</table>

Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region, week 5 2019 to week 3 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 increased slightly earlier than in previous seasons in China and Japan.

Outpatient ILI Surveillance

China (North)

During week 3 2020, the percentage of visits for ILI at national sentinel hospitals in Northern China was 4.5%, lower than the last week (5.2%), and higher than the same week of 2016-2017 (3.4%), and lower than the same week of 2018-2019 (5.2% and 5.4%) (Figure 2).

Mongolia

During week 4 2020, ILI activity in Mongolia was higher than the previous week and was above the upper tolerance limits (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, 2017-2020
(Source: Mongolia National Influenza Center)
Republic of Korea
In week 3 2020, the overall weekly ILI rate was 42.4 ILI cases per 1,000 outpatient visits, slightly lower than the previous week with 47.8 ILI cases per 1,000 outpatient visits. The peak this year is lower than 2016-2019, but the general trend was similar to that seen in previous seasons (Figure 4).

Sentinel influenza surveillance

Japan
In week 2 of 2020, influenza sentinel hospital activity is increasing in Japan and within seasonally expected levels. (Figure 5).
Countries/areas in the tropical zone

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

Surveillance

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

In week 3 2020, the average consultation rate for ILI among sentinel general outpatient clinics was 5.7 ILI cases per 1,000 consultations, which was lower than 6.1 ILI cases per 1,000 consultations recorded in the previous week and lower than the same week of previous year (Figure 6). The average consultation rate for ILI among sentinel private medical practitioners was 34.8 ILI cases per 1,000 consultations, which was lower than 39.0 recorded in the previous week and lower than previous years, 2016 - 2019 (Figure 7).

**China (South) - ILI Surveillance**

During week 3 2020, the percentage of visits for ILI at national sentinel hospitals in Southern China was 5.1%, lower than the previous week (6.0%), higher than the same week of 2017 (2.8%), and lower than the same week of 2018 and 2019 (6.5% and 6.0% respectively). ILI activity increased slightly earlier compared with previous seasons (Figure 8).

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

In week 2 2020, the average daily number of patients seeking treatment in polyclinics for ARI was 3,585 over 5.5 working days, which is slightly lower than the previous week but higher than the same time period in 2019 (Figure 9).
Lao PDR
In week 2 2020, the number of ILI cases presenting to sentinel sites was slightly increased compared to the previous week and slightly higher than the same period of previous year (Figure 10).

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

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.

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 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 32020, the number of ILI cases reported increased in several PICs, including in Cook Islands, French Polynesia, Pitcairn Islands, Solomon Islands, Tonga, and Vanustu (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]