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 3 are presented in the table below. Influenza A and B co-circulated throughout 2018 but in recent weeks influenza A(H1N1)pdm09 was predominant (Figure 1).

Table 1: Cumulative data reported to FluNet from Western Pacific Region, weeks 1 to 3, 2019

<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 (week 3)</td>
<td>702</td>
<td>189</td>
</tr>
<tr>
<td>Cambodia (week 2)</td>
<td>42</td>
<td>6</td>
</tr>
<tr>
<td>China (week 3)</td>
<td>48767</td>
<td>15958</td>
</tr>
<tr>
<td>Japan (week 2)</td>
<td>-</td>
<td>77</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic (week 3)</td>
<td>209</td>
<td>47</td>
</tr>
<tr>
<td>Mongolia (week 3)</td>
<td>907</td>
<td>440</td>
</tr>
<tr>
<td>Philippines (week 3)</td>
<td>69</td>
<td>38</td>
</tr>
<tr>
<td>Republic of Korea (week 3)</td>
<td>811</td>
<td>286</td>
</tr>
<tr>
<td>Singapore (week 3)</td>
<td>174</td>
<td>72</td>
</tr>
</tbody>
</table>

Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region weeks 1 to 3 2019 (Source: www.who.int/flunets)
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 most countries within the temperate zone of the Northern Hemisphere, ILI and influenza activity is low and similar to the corresponding period from previous years.

Outpatient ILI Surveillance

China (North)

During week 3, the percentage of visits for ILI at national sentinel hospitals in Northern China was 5.4%, the same as the previous week, but higher than the same week from 2016 to 2018 (3.5%, 3.4%, and 5.2%) (Figure 2).

Mongolia

During week 4, ILI activity in Mongolia was above seasonal threshold and higher than the same time period in 2018 but following a similar trend to 2017 (Figure 3).

![Figure 2: Percentage of visits for ILI at sentinel hospitals in Northern China, 2015-2019](Source: China National Influenza Center)

![Figure 3: Number of positive specimens by type in Mongolia from 2015-2019](Source: Mongolia National Influenza Centre)
**Republic of Korea**

In week 3, overall weekly influenza like illness (ILI) rate was 23.0 ILI cases per 1,000 outpatient visits, lower than the same period in the previous year but similar to the trend in 2017 (Figure 4).

![Figure 4: Weekly ILI incidence rate per 1,000 consultations, 2014-2019, Republic of Korea](source: Korean Centres for Disease Control and Prevention)

**Sentinel influenza surveillance**

**Japan**

In week 2 of 2019, influenza activity in Japan has increased and is above the same period between 2008 and 2017 (Figure 5).

![Figure 5: Number of influenza cases reported weekly per reporting sentinel hospital site, Japan 2008-2018](source: Japan National Institute of Infectious Diseases)
Countries/areas in the tropical zone

Countries and areas in the tropical zone are observing influenza activity that is consistent with previous seasons. However, the number of SARI cases reported in Lao PDR is higher than previous years but has been decreasing over the past few weeks.

Surveillance

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

In week 3, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) was 11.4 ILI cases per 1,000 consultations, which was the same recorded in the previous week (Figure 6). The average consultation rate for ILI among sentinel private doctors was 54.6 ILI cases per 1,000 consultations, which was higher than 47.9 recorded in the previous week (Figure 7).

![Hong Kong SAR (China) - ILI Surveillance](image)

**China (South) - ILI Surveillance**

During week 3, the percentage of visits for ILI at national sentinel hospitals in Southern China was 5.9%, higher than the last week (5.5%) and higher than the same week in 2016 and 2017 (3.3% and 2.8%) (Figure 8).

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

In week 3, the average daily number of patients seeking treatment in the polyclinics for ARI was 3,391. The proportion of patients with influenza-like illness (ILI) among the polyclinic attendances for ARI was 2.7% (Figure 9).
Lao PDR

In week 3, ILI activity decreased slightly compared to the previous week and is trending similar to previous years (Figure 10).

![Weekly number of ILI presentations at sentinel sites, 2015-2019, 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. Influenza activity in the temperate zone tends to remain at low interseasonal levels.

Australia – Laboratory-confirmed influenza and ILI (no update)

The numbers of laboratory confirmed influenza cases and presentations of ILI to general practitioners in week 42 are low and within historical range. There were 5.1 ILI cases per 1,000 consultations at sentinel general practitioners and year to date there have been 44,694 laboratory confirmed cases of influenza reported to the National Notifiable Diseases Surveillance System (Figure 11). Australia publishes influenza surveillance reports on a fortnightly basis during the influenza season, typically between May and October.

![Australian notifications of laboratory confirmed influenza](Source: National Notifiable Diseases Surveillance System, Australian Department of Health)
New Zealand – Influenza like Illness (no update)
During the week ending 28 October 2018, there were 4.2 general practice visits for influenza-like illness for every 100,000 registered patients. The historical average seasonal rate for the week ending 28 October is 15.6 per 100,000 registered patients. Historical average is based on 2000-2017 seasons (excluding pandemic seasons: 2009).

![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 3 the number of ILI cases reported increased in Federated States of Micronesia, Samoa, Solomon Islands and Vanuatu (Figure 13).
Global influenza situation updates

Virological update

Global update

Others:

- Recommended composition of influenza virus vaccines for use in the 2018 southern hemisphere influenza season Link
- Recommended composition of influenza virus vaccines for use in the 2018-2019 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