Virological Surveillance Summary

The total number of specimens and number of positive specimens reported to FluNet by the Western Pacific Region countries and areas between weeks 1 and 11 are presented in the table below. In this period, both influenza A and B are circulating, with an equal predominance of A(H1N1)pdm09 and Influenza B - Yamagata (Figure 1).

Table 1: Countries and areas reporting data to FluNet, Western Pacific Region, weeks 1 to 10, 2018

<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 11)</td>
<td>6336</td>
<td>410</td>
</tr>
<tr>
<td>Cambodia (week 11)</td>
<td>252</td>
<td>19</td>
</tr>
<tr>
<td>China (week 10)</td>
<td>179,519</td>
<td>55,890</td>
</tr>
<tr>
<td>Japan (week 10)</td>
<td>NA</td>
<td>3,597</td>
</tr>
<tr>
<td>Lao People's Democratic Republic (week 10)</td>
<td>519</td>
<td>73</td>
</tr>
<tr>
<td>Mongolia (week 11)</td>
<td>1,508</td>
<td>206</td>
</tr>
<tr>
<td>New Caledonia (week 6)</td>
<td>101</td>
<td>16</td>
</tr>
<tr>
<td>Philippines (week 10)</td>
<td>273</td>
<td>17</td>
</tr>
<tr>
<td>Republic of Korea (week 11)</td>
<td>3,052</td>
<td>1,331</td>
</tr>
<tr>
<td>Singapore (week 10)</td>
<td>816</td>
<td>338</td>
</tr>
<tr>
<td>Viet Nam (week 8)</td>
<td>168</td>
<td>19</td>
</tr>
</tbody>
</table>

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 require hospitalization.

**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 higher than the corresponding period from previous years.

**Outpatient ILI Surveillance**

**China (North)**

During week 11, the percentage of visits for ILI at national sentinel hospitals in northern China was 2.6%, which is the same as the previous week (2.6%), higher than the same week of 2015 (2.5%), but lower than the same week of 2016 and 2017 (3.6% and 2.8%) (Figure 2).

**Mongolia**

ILI activity in Mongolia decreased since week 51 of 2017, but increased compared to the previous week (Figure 3). Mongolia publishes weekly reports, available here: http://www.flu.mn/eng/index.php?option=com_content&task=section&id=5&Itemid=51

**Republic of Korea**

In week 11, there were 9.8 ILI cases per 1,000 outpatient visits, which was lower than the previous week (11.7) (Figure 4). Korea publishes a weekly report, available here: http://www.cdc.go.kr/CDC/Info/CdcKrInfo0301.jsp?menuIds=HOME001-MNU1154-MNU0005-MNU0037-MNU1380
**Republic of Korea**

![Figure 4: Weekly ILI incidence rate per 1,000 patients, 2013-2018, Republic of Korea](source: Korean Centre for Disease Control and Prevention)

**Sentinel influenza surveillance**

**Japan**

In week 10, influenza activity in Japan decreased to corresponding levels in 2016 and 2017 (Figure 5). More information about historical trends are available here: https://www.niid.go.jp/niid/en/10/2096-weeklygraph/1644-01flu.html

![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.

Surveillance

Hong Kong SAR (China) – ILI and hospital Surveillance

In week 11, the average consultation rate for ILI among outpatient clinics was 4.6 ILI cases per 1,000 consultations, which was lower than that recorded in the previous week (6.8 per 1,000) (Figure 6). The average consultation rate for ILI among private doctors was 45.3 ILI cases per 1,000 consultations, which was higher than the rate recorded in the previous week (40.2 per 1,000) (Figure 7). Hong Kong SAR, China publishes a weekly report, available here:


China (South) – ILI Surveillance

During week 11, the percentage of outpatient or emergency visits for ILI at national sentinel hospitals in southern China was 3.6%. This is lower than the previous week (3.7%) and the same week of 2016 (3.9%), higher than the same week of 2015 and 2017 (2.5% and 3.0%) (Figure 8).

Singapore – Acute Respiratory Infection (ARI) Surveillance

The average daily number of patients seeking treatment in polyclinics for acute respiratory infection decreased from 3,012 over 5.5 working day in week 10, to 2,694 over 5.5 working day in week 11 (Figure 9). The proportion of patients with ILI among polyclinic attendances for ARI remained at 2.2%. Singapore publishes a weekly report, available here:

China (South) - ILI Surveillance

Lao PDR

In week 11, ILI activity decreased compared to the previous week, but is higher than that reported in the corresponding weeks between 2013 and 2017. (see Figure 10).

Countries in the temperate zone of the southern hemisphere

In the temperate zone of the southern hemisphere, influenza activity followed seasonal trends.

Australia – Laboratory-confirmed influenza (no update)

The number of laboratory confirmed influenza cases has decreased from a peak reached in week 33. As of 27 October 2017 (week 42), a total of 229,579 laboratory-confirmed cases of influenza were reported to the National Notifiable Diseases Surveillance System (Figure 11). Sixty-three percent of notifications were influenza A (57% A(unsubtyped), 4% influenza A(H3N2) and 1% influenza A(H1N1pdm09)), 37% were influenza B and less than 1% were influenza A&B co-infections or untyped. Australia publishes influenza surveillance reports on a fortnightly basis during the influenza season, typically between May and October. For more information:

New Zealand – Influenza like Illness (no update)
During week 39, 80 patients with influenza-like illness consulted sentinel general practices in 20 district health boards (DHBs). The weekly ILI incidence was 19.5 per 100,000. Of the 36 laboratory tested ILI cases, eight were positive for influenza viruses. This gives an ILI related influenza incidence of 4.3 per 100,000 patient population. New Zealand publishes a weekly report, available here: https://surv.esr.cri.nz/virology/influenza_weekly_update.php
In the Pacific Island Countries and Areas, in week 11, the number of ILI cases reported in Kiribati, Fiji, and Solomon islands increased compared to previous weeks (Figure 13). The PICs submit a report on a weekly basis, found here: http://www.wpro.who.int/southpacific/programmes/communicable_diseases/disease_surveillance_response/page/en/index2.html
Global influenza situation updates

Epidemiological update

Virological update:

Global update:
http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/

Others:
Recommended composition of influenza virus vaccines for use in the 2017 southern hemisphere influenza season

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

Antigenic and genetic characteristics of zoonotic influenza viruses and candidate vaccine viruses developed for potential use in human vaccines
http://www.who.int/influenza/vaccines/virus/characteristics_virus_vaccines/en/

4th WHO Informal Consultation on Improving Influenza Vaccine Virus Selection

Video on influenza on WHO's YouTube Channel
Arabic: https://www.youtube.com/watch?v=PxW6Pg1Anwl
Chinese: https://www.youtube.com/watch?v=xW9qDKEPitQ
English: https://www.youtube.com/watch?v=yhhJFT86Bqg
French: https://www.youtube.com/watch?v=8mo8rWWJZkc
Russian: https://www.youtube.com/watch?v=XQO6nbkKUWQ
Spanish: https://www.youtube.com/watch?v=qXr75cKxwTY