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 10 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 10)</td>
<td>5760</td>
<td>389</td>
</tr>
<tr>
<td>Cambodia (week 9)</td>
<td>211</td>
<td>15</td>
</tr>
<tr>
<td>China (week 9)</td>
<td>162,445</td>
<td>53,402</td>
</tr>
<tr>
<td>Japan (week 9)</td>
<td>NA</td>
<td>2,633</td>
</tr>
<tr>
<td>Lao People's Democratic Republic (week 9)</td>
<td>488</td>
<td>71</td>
</tr>
<tr>
<td>Mongolia (week 9)</td>
<td>1209</td>
<td>187</td>
</tr>
<tr>
<td>New Caledonia (week 6)</td>
<td>101</td>
<td>16</td>
</tr>
<tr>
<td>Philippines (week 8)</td>
<td>230</td>
<td>16</td>
</tr>
<tr>
<td>Republic of Korea (week 10)</td>
<td>2803</td>
<td>1,302</td>
</tr>
<tr>
<td>Singapore (week 8)</td>
<td>630</td>
<td>277</td>
</tr>
<tr>
<td>Viet Nam (week 8)</td>
<td>168</td>
<td>19</td>
</tr>
</tbody>
</table>

Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region, week 11 2017 to week 10 2018 (Source: www.who.int/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, populations 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 $\geq 38^\circ C$ 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 $\geq 38^\circ C$ 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 9, the percentage of visits for ILI at national sentinel hospitals in northern China was 2.9%, which is lower than the previous week (3.6%), but the same as the same week of 2015, 2016 and 2017 (2.9%, 3.2% and 2.7%) (Figure 2).

**Mongolia**

ILI activity in Mongolia decreased since week 51 of 2017, but increased slightly 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](http://www.flu.mn/eng/index.php?option=com_content&task=section&id=5&Itemid=51)

**Republic of Korea**

In week 9, there were 15.1 ILI cases per 1,000 outpatient visits, which was lower than the previous week (18.8) (Figure 4). Korea publishes a weekly report, available here: [http://www.cdc.go.kr/CDC/info/CdcKrInfo0301.jsp?menulds=HOME001-MNU1154-MNU0005-MNU0037-MNU1380](http://www.cdc.go.kr/CDC/info/CdcKrInfo0301.jsp?menulds=HOME001-MNU1154-MNU0005-MNU0037-MNU1380)
**Sentinel influenza surveillance**

**Japan**

In week 8, influenza activity in Japan decreased to corresponding levels in 2016 and 2017. (Figure 5). More information about historical trends are available here:


**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 9, the average consultation rate for ILI among outpatient clinics was 7.6 ILI cases per 1,000 consultations, which was lower than that recorded in the previous week (8.1 per 1,000) (Figure 6). The average consultation rate for ILI among private doctors was 47.9 ILI cases per 1,000 consultations, which was lower than the rate recorded in the previous week (57.4 per 1,000) (Figure 7). Hong Kong SAR, China publishes a weekly report, available here:

Hong Kong (China) - ILI Surveillance

Figure 6: ILI consultation rates at sentinel general outpatient clinics, Hong Kong 2014-2018
(Source: Hong Kong Centre for Health Protection)

Figure 7: ILI consultation rates at sentinel private doctors, Hong Kong 2014-2018
(Source: Hong Kong Centre for Health Protection)

China (South) - ILI Surveillance

During week 9, the percentage of outpatient or emergency visits for ILI at national sentinel hospitals in southern China was 4.0%. This is lower than the previous week (4.8%) and higher than the same week of 2015 to 2017 (2.7%, 3.4% 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 3,513 over 5.5 working day in week 8, to 3,174 over 5.5 working day in week 9 (Figure 9). The proportion of patients with ILI among polyclinic attendances for ARI remained at 2.1%. Singapore publishes a weekly report, available here: http://www.moh.gov.sg/content/moh_web/home/statistics/infectiousDiseasesStatistics/weekly_infectiousdiseasesbulletin.html

Figure 8: Percentage of visits due to ILI at national sentinel hospitals in South China, 2014-2018
(Source: China National Influenza Center)

Figure 9: Average daily polyclinic attendances for ARI in Singapore, 2017-2018
(Source: Singapore Ministry of Health)
Lao PDR
In week 9, 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: http://www.health.gov.au/internet/main/publishing.nsf/content/cda-surveillance-ozflu-flucurr.htm#current

Figure 10: Weekly number of ILI presentations at sentinel sites, 2013 to week 7 2018, 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)
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

Pacific Island Countries and Areas (PICs) - ILI Surveillance
In the Pacific Island Countries and Areas, in week 9, the number of ILI cases reported in Kiribati and the 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 2017-2018 northern hemisphere influenza season
http://www.who.int/influenza/vaccines/virus/recommendations/201703_recommendation.pdf?ua=1

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=yhhJfT86Bgg
French: https://www.youtube.com/watch?v=8mo8rWJZkc
Russian: https://www.youtube.com/watch?v=XQO6nbkKUWQ
Spanish: https://www.youtube.com/watch?v=qKr75cKxwTY