Virological Surveillance Summary

The number of specimens reported to FluNet by the Western Pacific Region countries and areas between week 1 and week 33, and the number of influenza positive specimens, are presented in the table below. Influenza A(H3) is currently the predominant circulating subtype (Figure 1).

Table 1: Countries and areas reporting data to FluNet, Western Pacific Region, weeks 1 to 33, 2017

<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 33)</td>
<td>25998</td>
<td>2936</td>
</tr>
<tr>
<td>Cambodia (week 31)</td>
<td>763</td>
<td>55</td>
</tr>
<tr>
<td>China (week 32)</td>
<td>389484</td>
<td>56158</td>
</tr>
<tr>
<td>Fiji (week 28)</td>
<td>288</td>
<td>92</td>
</tr>
<tr>
<td>Japan (week 32)</td>
<td>NA</td>
<td>7060</td>
</tr>
<tr>
<td>Lao People's Democratic Republic (week 31)</td>
<td>2554</td>
<td>246</td>
</tr>
<tr>
<td>Malaysia (week 17)</td>
<td>1848</td>
<td>236</td>
</tr>
<tr>
<td>Mongolia (week 26)</td>
<td>2136</td>
<td>412</td>
</tr>
<tr>
<td>New Caledonia (week 31)</td>
<td>313</td>
<td>9</td>
</tr>
<tr>
<td>New Zealand (week 18-30)</td>
<td>1316</td>
<td>660</td>
</tr>
<tr>
<td>Papua New Guinea (week 25)</td>
<td>180</td>
<td>23</td>
</tr>
<tr>
<td>Philippines (week 32)</td>
<td>776</td>
<td>172</td>
</tr>
<tr>
<td>Republic of Korea (week 33)</td>
<td>7604</td>
<td>741</td>
</tr>
<tr>
<td>Singapore (week 32)</td>
<td>1466</td>
<td>803</td>
</tr>
<tr>
<td>Viet Nam (week 31)</td>
<td>1281</td>
<td>223</td>
</tr>
</tbody>
</table>

Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region, week 35 2016 to week 33 2017 (Source: www.who.int/flunet)
Influenza surveillance summary

Influenza surveillance in the WHO Western Pacific Region is based on outpatient and inpatient sentinel surveillance systems. Case definitions, populations under surveillance and data formats differ among these countries. This influenza surveillance summary includes countries where routine surveillance is conducted and information is available.

The WHO surveillance case definition for 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 the last 10 days and requires 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 are consistent with seasonal trends but indicate an earlier start to the influenza season compared to the 2015-2016 season.

Outpatient ILI Surveillance

China (North)

During week 33, the percentage of visits for ILI at national sentinel hospitals in northern China was 2.5% of total visits, which is lower than last week (2.6%). The ILI activity was higher than during the same week of 2014-2016 (2.3% - 2.2%) (Figure 2).

Mongolia (no updates)

ILI activity remained at expected tolerance levels during week 28 of 2017 compared to the previous week and seasons. The most recent peak in ILI activity occurred in week 4 of 2017 (Figure 3). Mongolia publishes weekly reports, available here: http://www.flu.mn/eng/index.php?option=com_content&task=section&id=5&Itemid=51

China (North)

![Figure 2: Percentage of visits for ILI at sentinel hospitals in north China, 2014-2017 (Source: China National Influenza Center)](image)

Mongolia

![Figure 3: Proportion of outpatient ILI visits (per 10,000 people), 2014-2017 (Source: Mongolia National Influenza Center)](image)
Republic of Korea
In week 33, 2017, there were 3.8 ILI cases per 1,000 outpatient visits, which was lower than 4.5 per 1000 reported in the previous week. ILI activity remained stable and below the established baseline (8.9 per 1,000 outpatient visits) (Figure 4). Korea publishes a weekly report, available here: http://www.cdc.go.kr/CDC/eng/info/CdcEngInfo0101.jsp?menulds=HOME002-MNU0576-MNU0586

![Figure 4: Weekly ILI incidence rate per 1000 patients, 2013-201](Source: Korean Centre for Disease Control and Prevention)

Sentinel influenza surveillance
Japan
As of week 33 2017, influenza activity in Japan shows a similar seasonal pattern to previous years with few influenza cases reported weekly per reporting sentinel hospital (Figure 5). More information about historical trends are available here: https://www.niid.go.jp/niid/en/10/2096-weeklygraph/2572-trend-week-e.html

![Figure 5: Number of influenza cases reported weekly per reporting sentinel hospital site, Japan 2007-2017](Source: Japan National Institute of Infectious Diseases)
Countries/areas in the tropical zone

Countries/areas in the tropical zone are observing increased ILI and ARI activity in recent weeks in 2017.

**Surveillance**

**Hong Kong SAR (China) – ILI and hospital Surveillance**
Outpatient surveillance data showed that the local influenza activity has decreased significantly from its peak that occurred several weeks ago but some indicators still remain elevated from inter-seasonal levels. In week 33, the average consultation rates for ILI among sentinel general outpatient clinics and sentinel private doctors were 4.7 and 53.6 ILI cases per 1,000 consultations, which were lower than 6.6 and 57.0 in the previous week. Hong Kong SAR, China publishes a weekly report, available here: [http://www.chp.gov.hk/en/guideline1_year/29/134/441/304.html](http://www.chp.gov.hk/en/guideline1_year/29/134/441/304.html)

**China (South) - ILI Surveillance**
During week 33, the percentage of outpatient or emergency visits for ILI at national sentinel hospitals in southern China was 3.6%, same as the last week and higher than the same week of 2014-2016 (2.9%, 3.1%, 2.8%) (Figure 6).

**Singapore – Acute Respiratory Infection Surveillance**
The average daily number of patients seeking treatment in polyclinics for acute respiratory infection decreased from an average of 618 per working day in week 32, to an average of 526 per working day in week 33 (Figure 9). The proportion of patients with ILI among polyclinic attendances for ARI remained low at 1.9%. Singapore publishes a weekly report, available here: [http://www.moh.gov.sg/content/moh_web/home/statistics/infectiousDiseasesStatistics/weekly_infectiousdiseasesbulletin.html](http://www.moh.gov.sg/content/moh_web/home/statistics/infectiousDiseasesStatistics/weekly_infectiousdiseasesbulletin.html)

**Hong Kong (China) - ILI Surveillance**

![Figure 6: ILI consultation rates at sentinel general outpatient clinics, Hong Kong 2013-2017 (Source: Hong Kong Centre for Health Protection)](image1)

![Figure 7: ILI consultation rates at sentinel private doctors, Hong Kong 2013-2017 (Source: Hong Kong Centre for Health Protection)](image2)
Influenza Situation Update

China (South) - ILI Surveillance

Figure 8: Percentage of visits due to ILI at national sentinel hospitals in South China, 2014-2017 (Source: China National Influenza Center)

Lao PDR

In week 33, influenza activity has decreased compared to last week but the number of ILI presentations remains similar to previous years (see Figure 10). The number of severe acute respiratory infections increased this year and remains higher than numbers reported during week 33 in the past 5 years. However, the number of cases has decreased over the past two weeks.

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

As of 18 August 2017, a total of 93,711 notifications of laboratory confirmed influenza were reported to the National Notifiable Diseases Surveillance System (Figure 11). Many surveillance indicators are comparable to or exceeding the seasonal peak in 2016. Seventy-one percent of notifications were influenza A (65% A(unsubtyped), 5% influenza A(H3N2) and 1% influenza A(H1N1)pdm09, 28% were influenza B and less than 1% were influenza C, influenza A and 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
During week 33, 182 patients with influenza-like illness consulted sentinel general practices in 20 district health boards (DHBs). The weekly ILI incidence was 44.3 per 100,000 patient population. Of the 136 laboratory tested ILI cases, 37 were positive for influenza viruses. This gives an ILI related influenza incidence (adjusted) of 12.0 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 33, the number of ILI cases reported in Fiji, Samoa, Solomon Islands, Tonga and Tuvalu increased compared to previous weeks (Figure 13). The Solomon Islands continues to show greater increase in ILI activity. The PICs submit a report on a weekly basis, for more information:
Figure 13: Reported cases of influenza-like illness in Pacific Island Countries, 2017
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

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=xW9gDKEPitQ
    English: https://www.youtube.com/watch?v=yhhjFT86Bgg
    French: https://www.youtube.com/watch?v=8mo8rWWJZkc
    Russian: https://www.youtube.com/watch?v=XQO6nbkKUWQ
    Spanish: https://www.youtube.com/watch?v=qXr75cKxwTY

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