Virological Surveillance Summary

The number of specimens reported to FluNet by the Western Pacific Region countries and areas between week 1 and week 36, 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 36, 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 36)</td>
<td>31426</td>
<td>5516</td>
</tr>
<tr>
<td>Cambodia (week 33)</td>
<td>825</td>
<td>74</td>
</tr>
<tr>
<td>China (week 35)</td>
<td>431514</td>
<td>64361</td>
</tr>
<tr>
<td>Fiji (week 35)</td>
<td>331</td>
<td>95</td>
</tr>
<tr>
<td>Japan (week 35)</td>
<td>NA</td>
<td>7200</td>
</tr>
<tr>
<td>Lao People's Democratic Republic (week 35)</td>
<td>3187</td>
<td>402</td>
</tr>
<tr>
<td>Malaysia (week 22)</td>
<td>2277</td>
<td>298</td>
</tr>
<tr>
<td>Mongolia (week 36)</td>
<td>2249</td>
<td>414</td>
</tr>
<tr>
<td>New Caledonia (week 36)</td>
<td>473</td>
<td>41</td>
</tr>
<tr>
<td>New Zealand (week 18-36)</td>
<td>2069</td>
<td>895</td>
</tr>
<tr>
<td>Papua New Guinea (week 33)</td>
<td>222</td>
<td>24</td>
</tr>
<tr>
<td>Philippines (week 33)</td>
<td>823</td>
<td>151</td>
</tr>
<tr>
<td>Republic of Korea (week 35)</td>
<td>8002</td>
<td>744</td>
</tr>
<tr>
<td>Singapore (week 34)</td>
<td>1538</td>
<td>835</td>
</tr>
<tr>
<td>Viet Nam (week 31)</td>
<td>1281</td>
<td>300</td>
</tr>
</tbody>
</table>

Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region, week 37 2016 to week 36 2017 (Source: www.who.int/flu.net)
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

**Outpatient ILI Surveillance**

**China (North)**

During week 35, the percentage of visits for ILI at national sentinel hospitals in northern China was 2.4%, which is the same as the previous week and the same week in 2014 and 2015 (2.4%) but higher than the same week of 2016 (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](http://www.flu.mn/eng/index.php?option=com_content&task=section&id=5&Itemid=51)

---

Figure 2: Percentage of visits for ILI at sentinel hospitals in northern China, 2014-2017
(Source: China National Influenza Center)

Figure 3: Proportion of outpatient ILI visits (per 10,000 people), 2014-2017
(Source: Mongolia National Influenza Center)
Republic of Korea
In week 35, 2017, there were 4.8 ILI cases per 1,000 outpatient visits, which was lower than 5.2 per 1,000 in the previous week. ILI activity remained stable and below the established baseline (8.9 per1,000 outpatient visits) (Figure 4). Korea publishes a weekly report, available here: http://www.cdc.go.kr/CDC/info/CdcKrInfo0301.jsp?menulds=HOME001-MNU1154-MNU0005-MNU0037-MNU1380

Sentinel influenza surveillance
Japan
As of week 34 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
Countries/areas in the tropical zone

Countries/areas in the tropical zone are observing decreasing influenza activity.

**Surveillance**

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

In week 35, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) was 2.9 ILI cases per 1,000 consultations, which was lower than 3.8 recorded in the previous week (Figure 6). The average consultation rate for ILI among sentinel private doctors was 38.1 ILI cases per 1,000 consultations, which was lower than 52.3 recorded in the previous week (Figure 7). 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 3.4% which is lower than the last week (3.5%) but higher than the same week of 2014-2016 (2.5%, 2.9%, 2.6%) (Figure 6).

**Singapore – Acute Respiratory Infection Surveillance**

The average daily number of patients seeking treatment in polyclinics for acute respiratory infection increased from 2,771 per working day in week 34, to 2,502 per working day in week 35 (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](image1)

(Source: Hong Kong Centre for Health Protection)

![Figure 7: ILI consultation rates at sentinel private doctors, Hong Kong 2013-2017](image2)

(Source: Hong Kong Centre for Health Protection)
Influenza activity has decreased compared to last week. The number of severe acute respiratory infections was generally higher this year compared to previous years and remains higher than numbers reported during week 35 in the past 5 years.
In the temperate zone of the southern hemisphere, influenza activity followed seasonal trends.

**Australia – Laboratory-confirmed influenza (no updates)**
The number of laboratory confirmed influenza cases has decreased from previous weeks but number of notifications remains higher than numbers seen in 2013-2016. As of 1 September 2017, a total of 137,566 notifications of laboratory confirmed influenza were reported to the National Notifiable Diseases Surveillance System (Figure 11). Sixty nine percent of notifications were influenza A (62% A(unsutyped), 5% influenza A(H3N2) and 1% influenza A(H1N1pdm09)), 31% 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-surveil-ozflu-flucurr.htm#current](http://www.health.gov.au/internet/main/publishing.nsf/content/cda-surveil-ozflu-flucurr.htm#current)

**New Zealand – Influenza like Illness**
During week 35, 130 patients with influenza-like illness consulted sentinel general practices in 20 district health boards (DHBs). The weekly ILI incidence was 31.6 per 100 000 patient population. Of the 72 laboratory tested ILI cases, 20 were positive for influenza viruses. This gives an ILI related influenza incidence (adjusted) of 8.8 per 100 000 patient population. New Zealand publishes a weekly report, available here: [https://surv.esr.cri.nz/virology/influenza_weekly_update.php](https://surv.esr.cri.nz/virology/influenza_weekly_update.php)
Influenza Situation Update

Pacific Island Countries and Areas (PICs) - ILI Surveillance

In the Pacific Island Countries and Areas, in week 35, the number of ILI cases reported in Federated States of Micronesia, Fiji, Samoa and Solomon Islands increased compared to previous weeks (Figure 13). The PICs submit a report on a weekly basis, for more information: [http://www.wpro.who.int/southpacific/programmes/communicable_diseases/disease_surveillance_response/page/en/index2.html](http://www.wpro.who.int/southpacific/programmes/communicable_diseases/disease_surveillance_response/page/en/index2.html)

**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=PxW6Pa1Anwl
  Chinese: https://www.youtube.com/watch?v=xW9gDKEPi7Q
  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=qXr75cKwTY

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