Bi-weekly Influenza Situation Update

26 September 2017

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 week 1 and week 37 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 37, 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 37)</td>
<td>38332</td>
<td>7696</td>
</tr>
<tr>
<td>Cambodia (week 33)</td>
<td>825</td>
<td>74</td>
</tr>
<tr>
<td>China (week 37)</td>
<td>453562</td>
<td>67714</td>
</tr>
<tr>
<td>Fiji (week 35)</td>
<td>331</td>
<td>95</td>
</tr>
<tr>
<td>Japan (week 36)</td>
<td>NA</td>
<td>7212</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic (week 37)</td>
<td>3466</td>
<td>511</td>
</tr>
<tr>
<td>Malaysia (week 22)</td>
<td>2277</td>
<td>298</td>
</tr>
<tr>
<td>Mongolia (week 37)</td>
<td>2273</td>
<td>414</td>
</tr>
<tr>
<td>New Caledonia (week 37)</td>
<td>508</td>
<td>54</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>228</td>
<td>24</td>
</tr>
<tr>
<td>Philippines (week 36)</td>
<td>899</td>
<td>171</td>
</tr>
<tr>
<td>Republic of Korea (week 37)</td>
<td>8429</td>
<td>747</td>
</tr>
<tr>
<td>Singapore (week 36)</td>
<td>1577</td>
<td>842</td>
</tr>
<tr>
<td>Viet Nam (week 37)</td>
<td>1535</td>
<td>389</td>
</tr>
</tbody>
</table>

Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region, week 37 2016 to week 37 2017 (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 under surveillance and data formats differ among countries. This influenza surveillance summary includes countries/areas where routine IBS 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 37, the percentage of visits for ILI at national sentinel hospitals in northern China was 2.4%, lower than the last week and the same week of 2014 and 2016 (all 2.5%), higher than the same week of 2015 (2.1%). (Figure 2).

Mongolia

ILI activity remained at expected levels during week 37 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)

Mongolia

Figure 2: Percentage of visits for ILI at sentinel hospitals in north 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 37, 2017, there were 5.1 ILI cases per 1,000 outpatient visits, which was higher than 4.9 per 1,000 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/info/CdcKrInfo0301.jsp?menuIds=HOME001-MNU1154-MNU0005-MNU0037-MNU1380](http://www.cdc.go.kr/CDC/info/CdcKrInfo0301.jsp?menuIds=HOME001-MNU1154-MNU0005-MNU0037-MNU1380)

![Figure 4: Weekly ILI incidence rate per 1000 patients, 2013-2017 (Source: Korean Centre for Disease Control and Prevention)](image)

**Sentinel influenza surveillance**

**Japan**

As of week 36 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](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)](image)
Countries/areas in the tropical zone

Countries/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 37, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) was 5.3 ILI cases per 1,000 consultations, which was higher than 3.3 recorded in the previous week (Figure 6). The average consultation rate for ILI among sentinel private doctors was 48.7 ILI cases per 1,000 consultations, which was higher than rates recorded in the previous week (42.8 ILI cases per 1,000 consultations) (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 37, the percentage of outpatient or emergency visits for ILI at national sentinel hospitals in southern China was 3.3% which is the same as last week (3.3%) but higher than the same week of 2014-2016 (2.7%, 2.5%, 2.9%) (Figure 6).

**Singapore – Acute Respiratory Infection Surveillance**

The average daily number of patients seeking treatment in polyclinics for acute respiratory infection increased from 2,378 per working day in week 36, to 2,489 per working day in week 37 (Figure 9). The proportion of patients with ILI among polyclinic attendances for ARI remained low at 1.6%. 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)

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

![Figure 6: ILI consultation rates at sentinel general outpatient clinics, Hong Kong 2013-2017](image)

(Source: Hong Kong Centre for Health Protection)

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

(Source: Hong Kong Centre for Health Protection)
Lao PDR

In week 36, influenza activity has increased compared to last week but the number of cases remains similar to previous years (see Figure 10). The number of severe acute respiratory infections was slightly higher than numbers reported during week 36 in the past 5 years.
Countries 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 a peak reached in week 33. As of 15 September 2017, a total of 172,247 notifications of laboratory confirmed influenza were reported to the National Notifiable Diseases Surveillance System (Figure 11). Sixty seven percent of notifications were influenza A (60% A(unsubtyped), 5% influenza A(H3N2) and 1% influenza A(H1N1pdm09)), 33% 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 37, 106 patients with influenza-like illness consulted sentinel general practices in 20 district health boards (DHBs). The weekly ILI incidence was 25.8 per 100,000 patient population. Of the 58 laboratory tested ILI cases, 12 were positive for influenza viruses. This gives an ILI related influenza incidence (adjusted) of 5.3 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)
In the Pacific Island Countries and Areas, in week 37, the number of ILI cases reported compared to previous weeks increased in several PICs, including Fiji, Samoa and Solomon Islands (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

Figure 3: 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