Virological Surveillance Summary

The number of specimens reported to FluNet by the Western Pacific Region countries and areas between week 1 and week 19, and the number of influenza positive specimens, are presented in the table below. Influenza A(H1) and B are currently the predominant circulating subtype (Figure 1).

Table 1: Countries and areas reporting data to FluNet, Western Pacific Region, weeks 1 to 19, 2017

<table>
<thead>
<tr>
<th>Country (most recent week)</th>
<th>Total number of specimens processed</th>
<th>Total number of influenza positive specimens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia (week 19)</td>
<td>9950</td>
<td>521</td>
</tr>
<tr>
<td>Cambodia (week 18)</td>
<td>441</td>
<td>9</td>
</tr>
<tr>
<td>China (week 19)</td>
<td>241,176</td>
<td>31,215</td>
</tr>
<tr>
<td>Fiji (week 17)</td>
<td>179</td>
<td>78</td>
</tr>
<tr>
<td>Japan (week 19)</td>
<td>NA</td>
<td>5,603</td>
</tr>
<tr>
<td>Lao People's Democratic Republic (week 19)</td>
<td>15,728</td>
<td>177</td>
</tr>
<tr>
<td>Malaysia (week 8)</td>
<td>692</td>
<td>99</td>
</tr>
<tr>
<td>Mongolia (week 17)</td>
<td>17,58</td>
<td>403</td>
</tr>
<tr>
<td>New Caledonia (week 14)</td>
<td>114</td>
<td>3</td>
</tr>
<tr>
<td>New Zealand (week 2)</td>
<td>53</td>
<td>14</td>
</tr>
<tr>
<td>Papua New Guinea (week 13)</td>
<td>111</td>
<td>21</td>
</tr>
<tr>
<td>Philippines (week 19)</td>
<td>372</td>
<td>21</td>
</tr>
<tr>
<td>Republic of Korea (week 19)</td>
<td>48,61</td>
<td>689</td>
</tr>
<tr>
<td>Singapore (week 19)</td>
<td>719</td>
<td>369</td>
</tr>
<tr>
<td>Viet Nam (week 14)</td>
<td>496</td>
<td>63</td>
</tr>
</tbody>
</table>

Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region, week 21 2016 to week 17 2017 (Source: www.who.int/flunet, accessed on 22 May 2017)
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 from syndromic surveillance systems for influenza-like-illness (ILI) and Severe Acute Respiratory Infections (SARI).

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 weeks 18 and 19, the percentage of visits for ILI at national sentinel hospitals in northern China was 3.4% and 3.0%. Compared to previous years, ILI activity was slightly higher than the same weeks of the 2014-2016 (2.4% ~ 2.6%)(Figure 2).

Mongolia

ILI activity remained at the normal level during week 18 of 2017 compared to the previous week and seasons. The most recent peak in ILI activity occurred in week four of 2017 (Figure 3).

Republic of Korea

In week 18 2017, there were 9.5 ILI cases per 1000, which was lower than 13.3 per 1000 in the previous week. ILI activity was on a downward trend. (Figure 4).

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**Figure 2:** Percentage of visits for ILI at sentinel hospitals in north China, 2012-2017 (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

![Weekly ILI incidence rate](image)

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

**Sentinel influenza surveillance**

**Japan**

As of week 18 2017, influenza activity in Japan is following a similar seasonal pattern to previous years. (Figure 5).

![Number of influenza cases reported weekly per reporting sentinel hospital site](image)

**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

In weeks 1 to 19 of 2017, ILI and ARI activity followed previous seasonal trends in countries/areas in the tropical zone.

**Outpatient Surveillance**

**Hong Kong (China) - ILI Surveillance**
Surveillance data indicate an increase in local influenza activity in recent weeks. In weeks 18 and 19 of 2017, the consultation rate for ILI among sentinel general outpatient clinics was 4.1 and 5.5 ILI cases per 1,000 consultations respectively. The average consultation rate for ILI among sentinel private doctors was 54.2 and 50.7 ILI cases per 1000 consultations in week 18 and 19 (Figure 6 & Figure 7).

**China (South) - ILI Surveillance**
During weeks 18 and 19, the percentage of outpatient or emergency visits for ILI at national sentinel hospitals in southern China was 3.6% and 3.3% respectively, which was similar to previous seasons (Figure 8).

**Singapore – Acute Respiratory Infection Surveillance**
The average daily number of patients seeking treatment in the polyclinics for acute respiratory infection increased from 3,452 (over 4.5 working days) in week 18 to 3,645 (over 4.5 working days) in week 19. (Figure 9). The proportion of patients with ILI among polyclinic attendances for ARI remained low at 3.0%.

![Figure 6: ILI consultation rates at sentinel general outpatient clinics, Hong Kong 2012-2017 (Source: Hong Kong Centre for Health Protection)](image)

![Figure 7: ILI consultation rates at sentinel private doctors, Hong Kong 2012-2017 (Source: Hong Kong Centre for Health Protection)](image)

![Figure 8: Percentage of visits due to ILI at national sentinel hospitals in South China, 2012-2017 (Source: China National Influenza Center)](image)

![Figure 9: Average daily polyclinic attendances for ARI in Singapore, 2016-2017 (Source: Singapore Ministry of Health)](image)
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)*

As of 28 October 2016, a total of 83,092 notifications of laboratory confirmed influenza were reported to the National Notifiable Diseases Surveillance System (Figure 10). Ninety percent of notifications were influenza A (73% A (unsubtyped), 6% influenza A(H1N1)pdm09 and 11% influenza A(H3N2), 10% were influenza B and less than 1% were influenza C, 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. *(Source: http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-surveil-ozflu-flucurr.htm/$File/Australian-Influenza-Surveillance-Report.pdf)*

![Figure 10: Australian notifications of laboratory confirmed influenza](Source: National Notifiable Diseases Surveillance System, Australian Department of Health)

**New Zealand – Influenza like Illness**

In week 19, influenza activity was low among consultation-seeking patients nationwide, but increased slightly as per normal seasonal trends; 44 patients with ILI consulted sentinel general practices in 20 District Health Boards. The weekly ILI incidence was 2.6 ILI cases per 100 000 patients (Figure 11).

![Figure 11: Weekly resident ILI and influenza incidence since Week 1 of 2017 in New Zealand](Source: Institute of Environmental Science and Research Ltd (ESR), New Zealand)
In the Pacific Island Countries and Areas, in week 15, the number of ILI cases reported was at a relatively high level in Kinbati (Figure 12).

Figure 12: Reported cases of influenza-like illness (red line) 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=XQO6nbKUWQ
  Spanish: https://www.youtube.com/watch?v=qXr75cXwTY

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