Virological Surveillance Summary

The number of specimens reported to FluNet by the Western Pacific Region countries and areas between week 1 and week 52, 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 52, 2016

<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 52)</td>
<td>42,891</td>
<td>6,676</td>
</tr>
<tr>
<td>Cambodia (week 52)</td>
<td>1,456</td>
<td>363</td>
</tr>
<tr>
<td>China (week 49)</td>
<td>59,740</td>
<td>87,454</td>
</tr>
<tr>
<td>Fiji (week 38)</td>
<td>349</td>
<td>120</td>
</tr>
<tr>
<td>Japan (week 50)</td>
<td>NA</td>
<td>7,801</td>
</tr>
<tr>
<td>Lao People's Democratic Republic (week 42)</td>
<td>4,495</td>
<td>403</td>
</tr>
<tr>
<td>Malaysia (week 30)</td>
<td>2,461</td>
<td>212</td>
</tr>
<tr>
<td>Mongolia (week 52)</td>
<td>4,198</td>
<td>453</td>
</tr>
<tr>
<td>New Caledonia (week 51)</td>
<td>1,459</td>
<td>302</td>
</tr>
<tr>
<td>New Zealand (week 39)</td>
<td>942</td>
<td>298</td>
</tr>
<tr>
<td>Papua New Guinea (week 51)</td>
<td>410</td>
<td>144</td>
</tr>
<tr>
<td>Philippines (week 52)</td>
<td>1,033</td>
<td>259</td>
</tr>
<tr>
<td>Republic of Korea (week 52)</td>
<td>10,895</td>
<td>1,752</td>
</tr>
<tr>
<td>Singapore (week 52)</td>
<td>2,270</td>
<td>1,176</td>
</tr>
<tr>
<td>Viet Nam (week 50)</td>
<td>1,562</td>
<td>379</td>
</tr>
</tbody>
</table>

Figure 1: Number of influenza positive specimens by subtype and week, Western Pacific Region, 2015-16 (accessed 9 January 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 Republic of Korea, the proportion of ILI visits per 1,000 patients increased sharply between epidemiological weeks 48 and 50. In the most of the other countries within the temperate zone of the Northern Hemisphere, ILI and influenza activity is increasing and following seasonal trends.

Outpatient ILI Surveillance

China (North)

During week 52, the percentage of visits for ILI at national sentinel hospitals in northern China was 3.9%, which was same as last week, higher than the same week of 2015 (2.8%), and lower than the same week of 2014 (4.0%) (Figure 2).

Mongolia

There has been a increase in ILI activity in Mongolia since week 30, which follows seasonal trends (Figure 3).

Republic of Korea

In week 52 2016, the proportion of ILI visits per 1,000 patients was 86.2 ILI cases per 1,000 patients, which was higher than 61.8 ILI cases per 1,000 patients recorded in the previous week. (Figure 4).
Republic of Korea

Figure 4: Weekly proportion of ILI visits per 1,000 patients 2013-2016
(Source: Korean Centre for Disease Control and Prevention)

Sentinel influenza surveillance

Japan

As of 21 December 2016, influenza activity is increasing and following seasonal trends (Figure 5).

Figure 5: Number of influenza cases reported weekly per reporting sentinel hospital site, Japan 2006-2016
(Source: Japan National Institute of Infectious Diseases)
Countries/areas in the tropical zone

In weeks 1 to 52 of 2016, ILI or ARI activity followed previous seasonal trends in countries/areas in the tropical zone.

Outpatient Surveillance

Hong Kong (China) - ILI Surveillance

In week 53, the average consultation rate for ILI among sentinel general outpatient clinics (GOPCs) was 4.6 ILI cases per 1,000 consultations, which was higher than the rate of 3.7 recorded in the previous week (Figure 6). The average consultation rate for ILI among sentinel private doctors was 35.4 ILI cases per 1,000 consultations, which was higher than the rate of 30.9 recorded in the previous week (Figure 7).

Among the respiratory specimens received in week 53, 218 (6.21%) tested positive for seasonal influenza viruses, which was higher than 4.38% recorded in the previous week. Influenza A(H3) was the predominant subtype detected comprising 94.0% of respiratory specimens. Other viruses detected were influenza B (3.2%), influenza C (1.8%), and influenza A(H1)(0.9%).

China (South) - ILI Surveillance

During week 52, the percentage of outpatient or emergency visits for ILI (ILI %) at national sentinel hospitals in southern China was 3.3%, which was the same as the previous week, and higher than the same week of 2014 and 2015 (2.5% and 2.8%) (Figure 8).

Singapore – ARI Surveillance

The average daily number of patients seeking treatment in the polyclinics for ARI decreased from 2,410 (over 5.5 working days) in week 50 to 2,275 (over 5.5 working days) in week 51 (Figure 9). The proportion of patients with ILI among polyclinic attendances for ARI remained low at 0.9%. The overall positivity rate for influenza virus among ILI samples (n=45) in the community was 33.3% in the past 4 weeks. Of influenza-positive specimens in November 2016, the majority were influenza A(H3N2) (64.3%), followed by influenza B (32.1%) and influenza A(H1N1)pdm09 (3.6%).

Hong Kong (China) - ILI Surveillance

Figure 6: ILI consultation rates at sentinel general outpatient clinics, Hong Kong 2012-2016 (Source: Hong Kong Centre for Health Protection)

Figure 7: ILI consultation rates at sentinel private doctors, Hong Kong 2012-2016 (Source: Hong Kong Centre for Health Protection)
Influenza Situation Update

China (South) - ILI Surveillance

Singapore - ARI Surveillance

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. Source: [http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-surveil-ozflu-flucurr.htm/$File/Australian-Influenza-Surveillance-Report.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-surveil-ozflu-flucurr.htm/$File/Australian-Influenza-Surveillance-Report.pdf)

**Figure 8:** Percentage of visits due to ILI at national sentinel hospitals in South China, 2012-2016 (Source: China National Influenza Center)

**Figure 9:** Average daily polyclinic attendances for ARI, Singapore 2015-2016 (Source: Singapore Ministry of Health)

**Figure 10:** Australian notifications of laboratory confirmed influenza (Source: National Notifiable Diseases Surveillance System, Australian Department of Health)
**New Zealand – Influenza like Illness** (no update)

In week 39, ending 2 October 2016, 24 patients with ILI consulted sentinel general practices in 20 District Health Boards. The weekly ILI incidence was 4.4 ILI cases per 100 000 patients. Of the 14 tested ILI cases, 4 were positive for influenza viruses, yielding an influenza-associated ILI incidence rate of 1.3 ILI cases per 100 000 patients (adjusted).

![Figure 11: Weekly resident ILI and influenza incidence since (Week 18) 2 May 2016 in New Zealand](Source: Institute of Environmental Science and Research Ltd (ESR), New Zealand)

**Pacific Island Countries and Areas (PICs)- ILI Surveillance**

In the Pacific Island Countries and Areas, in week 52, the number of ILI cases reported showed an increasing trend in American Samoa, Kiribati, and Northern Marian Islands. The number of ILI cases in Federated States of Micronesia, Fiji, Samoa, Solomon Islands, and Tonga showed a decreasing trend (Figure 12).

![Figure 12: Reported cases of influenza-like illness (red line) in Pacific Island Countries, 2016](Note: Numbers of reported cases are not comparable between countries. The purpose of the chart is to show trends over time rather than absolute numbers.)
Global influenza situation updates


Others:


Video on influenza on WHO’s YouTube Channel

- Arabic: [https://www.youtube.com/watch?v=PxW6Pg1AnwI](https://www.youtube.com/watch?v=PxW6Pg1AnwI)
- Chinese: [https://www.youtube.com/watch?v=xW9gDKEPitQ](https://www.youtube.com/watch?v=xW9gDKEPitQ)
- English: [https://www.youtube.com/watch?v=yhhjFT86Bgg](https://www.youtube.com/watch?v=yhhjFT86Bgg)
- French: [https://www.youtube.com/watch?v=8mo8rWVJZkc](https://www.youtube.com/watch?v=8mo8rWVJZkc)
- Russian: [https://www.youtube.com/watch?v=XQO6nbkKUWQ](https://www.youtube.com/watch?v=XQO6nbkKUWQ)
- Spanish: [https://www.youtube.com/watch?v=qXr75cKxwTY](https://www.youtube.com/watch?v=qXr75cKxwTY)