Virological Surveillance Summary

The number of specimens reported to FluNet by the Western Pacific Region countries and areas between week 1 and week 2, 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 2, 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 2)</td>
<td>415</td>
<td>42</td>
</tr>
<tr>
<td>Cambodia (week 52)</td>
<td>1,456</td>
<td>363</td>
</tr>
<tr>
<td>China (week 1)</td>
<td>3,775</td>
<td>230</td>
</tr>
<tr>
<td>Fiji (week 38)</td>
<td>349</td>
<td>120</td>
</tr>
<tr>
<td>Japan (week 1)</td>
<td>NA</td>
<td>24</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 1)</td>
<td>101</td>
<td>48</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>1033</td>
<td>259</td>
</tr>
<tr>
<td>Republic of Korea (week 1)</td>
<td>226</td>
<td>97</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, 2016-17 (accessed 23 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 \( \geq 38^\circ \text{C} \) 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 \( \geq 38^\circ \text{C} \) 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 of the influenza season compared to 2016. In the Republic of Korea, the proportion of consultations for ILI, which showed a sharp increase earlier in the influenza season, decreased to levels comparable with previous seasons.

**Outpatient ILI Surveillance**

**China (North)**

During week 2, the percentage of visits for ILI at national sentinel hospitals in northern China was 4.0%, which is lower than last week (4.2%), and higher than the same week of 2015 and 2016 (3.5 and 3.3%) (Figure 2).

**Mongolia**

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

**Republic of Korea**

In week 2 2017, the proportion of ILI visits per 1,000 patients was 23.9 ILI cases per 1,000 patients, which was lower than 39.4 ILI cases per 1,000 patients recorded in the previous week. (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), 2014-2016 (Source: Mongolia National Influenza Center)
Republic of Korea

Figure 4: Weekly proportion of ILI visits per 1,000 patients 2013-2017
(Source: Korean Centre for Disease Control and Prevention)

Sentinel influenza surveillance

Japan

As of 11 January 2017, influenza activity is increasing and following seasonal trends (Figure 5).

Figure 5: Number of influenza cases reported weekly per reporting sentinel hospital site, Japan 2007-2017
(Source: Japan National Institute of Infectious Diseases)
Influenza Situation Update

Countries/areas in the tropical zone

In weeks 1 to 2 of 2017, ILI or ARI activity followed previous seasonal trends in countries/areas in the tropical zone.

Outpatient Surveillance

Hong Kong (China) - ILI Surveillance

In week 2, the average consultation rate for ILI among sentinel general outpatient clinics (GOPCs) was 3.7 ILI cases per 1,000 consultations, which was lower than the rate of 4.2 recorded in the previous week (Figure 6). The average consultation rate for ILI among sentinel private doctors was 33.5 ILI cases per 1,000 consultations, which was lower than the rate of 40.9 recorded in the previous week (Figure 7). Among the respiratory specimens received in week 2, 325 (8.13%) tested positive for seasonal influenza viruses, which was higher than 6.20% recorded in the previous week. Influenza A(H3) was the predominant subtype detected comprising 84.9% of respiratory specimens. Other viruses detected were influenza B (6.8%), influenza A(H1) (6.5%), and influenza C (1.8%).

China (South) - ILI Surveillance

During week 2, the percentage of outpatient or emergency visits for ILI (ILI %) at national sentinel hospitals in southern China was 3.1%, which was lower than the last week and the same week of 2016 (3.3% and 3.2%), and higher than the same week of 2014 (2.9%) (Figure 8).

Singapore – ARI Surveillance

The average daily number of patients seeking treatment in the polyclinics for ARI increased from 2,493 (over 4.5 working days) in week 52 of 2016 to 2,721 (over 4.5 working days) in week 1 of 2017 (Figure 9). The proportion of patients with ILI among polyclinic attendances for ARI remained low at 1.2%. The overall positivity rate for influenza virus among ILI samples (n=55) in the community was 38.2% in the past 4 weeks. Of influenza-positive specimens in November 2016, the majority were influenza A(H3N2) (44.4%), followed by influenza B (38.9%) and influenza A(H1N1)pdm09 (16.7%).
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)

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

In the Pacific Island Countries and Areas, in week 2, the number of ILI cases reported showed an increasing trend in Kiribati, and Cook Islands. The number of ILI cases in Federated States of Micronesia, Fiji, Solomon Islands, and Tonga showed a decreasing trend (Figure 12).

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)

Figure 12: Reported cases of influenza-like illness (red line) in Pacific Island Countries, 2017
Global influenza situation updates


Global update: http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/

Others:

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/


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