Virological Surveillance Summary

The number of specimens provided to FluNet by each of the Western Pacific Region countries and areas that reported between week 1 and week 33, and the number of Influenza positive specimens are presented in the table below.

Table 1: Countries and areas reporting data to FluNet, Western Pacific Region, weeks 1 to 33, 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>China (week 33)</td>
<td>375,771</td>
<td>64,177</td>
</tr>
<tr>
<td>Republic of Korea (week 33)</td>
<td>6,969</td>
<td>1,285</td>
</tr>
<tr>
<td>Mongolia (week 30)</td>
<td>2,688</td>
<td>335</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic (week 33)</td>
<td>3,285</td>
<td>169</td>
</tr>
<tr>
<td>Malaysia (week 26)</td>
<td>2,237</td>
<td>179</td>
</tr>
<tr>
<td>Singapore (week 29)</td>
<td>1,438</td>
<td>836</td>
</tr>
<tr>
<td>Australia (week 33)</td>
<td>13,913</td>
<td>2,026</td>
</tr>
<tr>
<td>New Caledonia (week 28)</td>
<td>810</td>
<td>173</td>
</tr>
<tr>
<td>Philippines (week 32)</td>
<td>662</td>
<td>170</td>
</tr>
<tr>
<td>Viet Nam (week 32)</td>
<td>771</td>
<td>274</td>
</tr>
<tr>
<td>Papua New Guinea (week 32)</td>
<td>377</td>
<td>143</td>
</tr>
<tr>
<td>Fiji (week 30)</td>
<td>310</td>
<td>117</td>
</tr>
<tr>
<td>Cambodia (week 31)</td>
<td>853</td>
<td>194</td>
</tr>
<tr>
<td>Japan (week 25)</td>
<td>N/A</td>
<td>6,526</td>
</tr>
<tr>
<td>New Zealand (week 31)</td>
<td>540</td>
<td>123</td>
</tr>
</tbody>
</table>
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 \( \geq 38^\circ C \) and cough, with symptom onset within the last 10 days. For SARI, it is an acute respiratory infection with a history of fever or measured fever of \( \geq 38^\circ C \) 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 remained at low levels.

Outpatient ILI Surveillance

China (North)
During week 33, 2016, the percentage (%) of ILI visits at national sentinel hospitals in Northern China was 2.4%. This is higher than last week (week 32) and the same as week 33 of 2014 (both 2.3%), but lower than the same week of 2015 (2.5%) (Figure 2).

Mongolia
Since week 30, 2016, there has been a steady increase in ILI activity in Mongolia (Figure 3).
Republic of Korea
In week 33, 2016, the rate of ILI patient visits to sentinel physicians was 4.5 /1,000 outpatients which is below the national baseline of 11.3/1,000 outpatients (Figure 4).

China (North)
Figure 2: Percentage of visits for ILI at sentinel hospitals, 2012-2016 (Source: China National Influenza Center)

Mongolia
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 2012-2016 (Source: Korean Centre for Disease Control and Prevention)
Sentinel influenza surveillance

**Japan**
As of 24 August 2016, the number of influenza cases reported weekly was 0.02 per sentinel hospital sites. The seasonal pattern remains similar to that seen in the majority of previous years (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)](image)

**Countries/areas in the tropical zone**
In weeks 1 to 33 of 2016, ILI or Acute Respiratory Infection (ARI) activity followed previous seasonal trends in countries/areas in the tropical zone.

**Outpatient Surveillance**

**Hong Kong (China) - ILI Surveillance**
During week 33, the latest surveillance data showed that local influenza activity remained at a low level. The average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics was 3.8 ILI cases per 1,000 consultations, which was lower than 3.9 ILI cases per 1,000 consultations 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 lower than 43.7 ILI cases per 1,000 consultations recorded in the previous week (Figure 7).

The percentage of respiratory specimens in week 33 which tested positive for seasonal influenza viruses was 4.11%. This is higher than 3.99% recorded in the previous week. Of all respiratory specimens tested in week 31, 127 (4.11%) tested positive for seasonal influenza viruses, including 5 (0.16%) influenza A (H1), 102 (3.30%) influenza A (H3), 15 (0.49%) influenza B and 5 (0.16%) influenza C.

**China (South) - ILI Surveillance**
During week 33, the percentage of outpatient or emergency visits for ILI (ILI%) at national sentinel hospitals in southern China was 2.8%. This is similar to last week (week 32), but lower than the same week of 2014 and 2015 (2.9% and 3.1% respectively) (Figure 8).
**Singapore – ARI Surveillance**

The average daily number of patients seeking treatment in polyclinics for ARI decreased from 3,233 (over 4.5 working days) in week 32 to 2,834 (over 5.5 working days) in week 33 (Figure 9). The proportion of patients with ILI among the polyclinic attendance for ARI remained low at 1.3%. The overall prevalence of positive influenza cases among ILI samples (n=421) in the community was 46.8% in the past 4 weeks. Of the specimens that tested positive for influenza in July 2016, 8.1% were positive for influenza B, 3.2% for influenza A(H1N1)pdm09, and 88.7% for influenza A(H3N2).


**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)

**China (South) - ILI Surveillance**

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

**Singapore - ARI Surveillance**

Figure 9: Average daily polyclinic attendances for Acute Respiratory Infection, Singapore 2015-2016 (Source: Singapore Ministry of Health)
Countries in the temperate zone of the southern hemisphere

Influenza activity remained at inter-seasonal levels in the reporting countries of the southern hemisphere.

**Australia – Laboratory-confirmed influenza**

As of 05 August 2016, a total of 25,335 notifications of laboratory confirmed influenza were reported to the National Notifiable Diseases Surveillance System (Figure 10). In the most recent fortnight, 92% of notifications were influenza A (63% A(unsubtyped), 8% influenza A(H1N1)pdm09 and 21% influenza A (H3N2)), 8% were influenza B and less than 1% were influenza A and 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 10: Australian notifications of laboratory confirmed influenza](image)

(Source: National Notifiable Diseases Surveillance System, Australian Department of Health)

**New Zealand – Influenza like Illness**

In week 33, 117 patients were reported with ILI through sentinel surveillance in 20 District Health Boards, with a weekly ILI incidence rate of 22.2 ILI cases per 100,000 residents (Figure 11). Of the 48 tested ILI cases, 22 were positive for influenza virus, giving an ILI associated influenza incidence (adjusted) of 10.2 per 100,000 patient population.

![Figure 11: Weekly resident ILI and influenza incidence since (Week 18) 2 May 2016 in New Zealand](image)

(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 33, the number of ILI cases reported was higher than the previous week in American Samoa and Fiji. The number of ILI cases in Guam, Tonga, Vanuatu and Palau decreased from the previous week (Figure 12).

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**Global influenza situation updates**


Others:

Recommended composition of influenza virus vaccines for use in the 2016 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/


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=8mo8rWVjZkc
- Russian: https://www.youtube.com/watch?v=XQO6nbkKUWQ
- Spanish: https://www.youtube.com/watch?v=qXr75cKxwTY