

## Virological Surveillance Summary

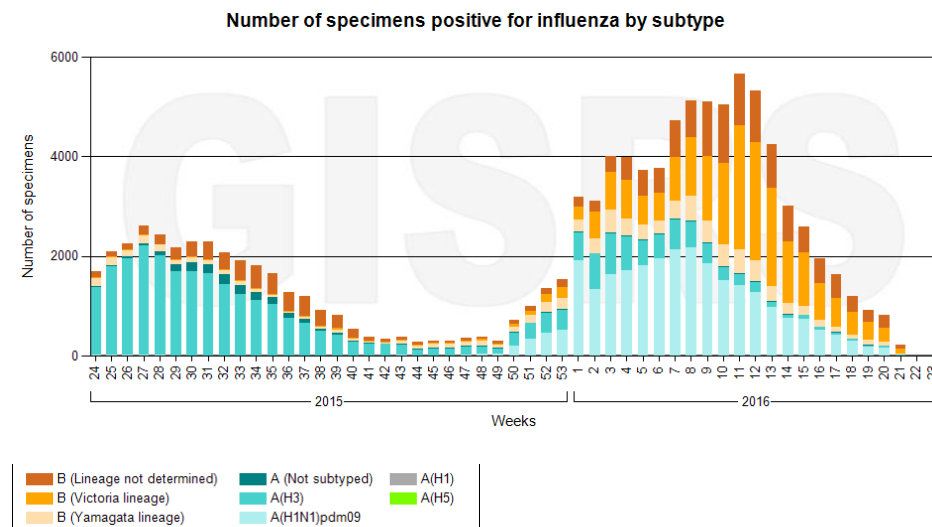
In the WHO Western Pacific Region, influenza virus B (Victoria lineage) predominated during week 21, 2016.

The number of specimens provided to FluNet by each of the Western Pacific Region countries that reported between week 1 and week 21, and proportion of all specimens contributed by each country is presented in the table below.

**Table 1: Countries providing specimens for FluNet, Western Pacific Region, weeks 1 to 21, 2016**

Country	Total (%)
Cambodia	461 (0.2)
China	289741 (96.1)
Lao People's Democratic Republic	1259 (0.4)
Mongolia	2531 (0.8)
New Caledonia	559 (0.2)
Philippines	432 (0.1)
Republic of Korea	4801 (1.6)
Singapore	956 (0.3)
Viet Nam	283 (0.1)
Papua New Guinea	285 (0.1)

**Figure 1: Number of specimens positive for influenza by subtype and week, Western Pacific Region, 2015-16 (accessed 6 June 2016)**



## 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 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 remained at low levels.

### Outpatient ILI Surveillance

#### China (North)

During week 21 2016, the percentage (%) of visits for ILI at national sentinel hospitals in north China was 2.4%, the same as last week, and lower than the same week in 2014 (2.5%), but higher than the same week in 2015 (2.3%) (Figure 2).

#### Mongolia

In week 21, 2016, ILI activity in Mongolia continued to decrease (Figure 3).

#### Republic of Korea

In week 22, 2016, the rate of ILI patient visits to sentinel physicians was 5.4 /1,000 outpatients which is below the national baseline of 11.3/ 1,000 (Figure 4).

#### China (North)

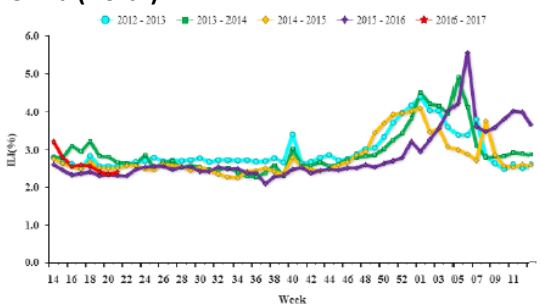


Figure 2: Percentage of visits for ILI at sentinel hospitals, 2012-2016 (Source: China National Influenza Center)

#### Mongolia

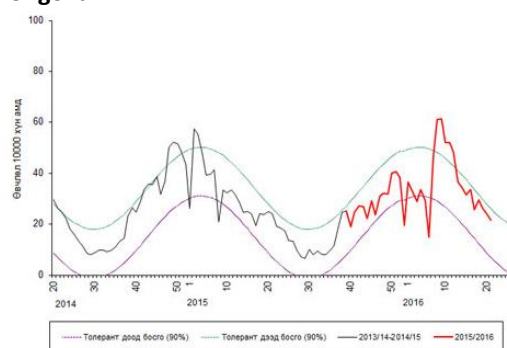


Figure 3: Proportion of outpatients that were ILI (per 10,000 people), 2013-2016 (Source: Mongolia National Influenza Center)

## Republic of Korea

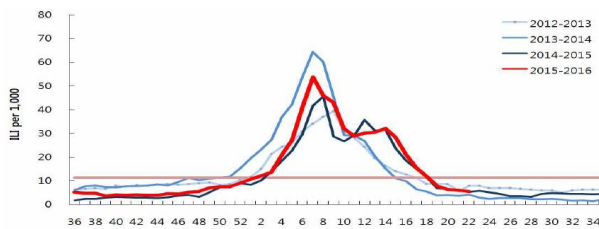


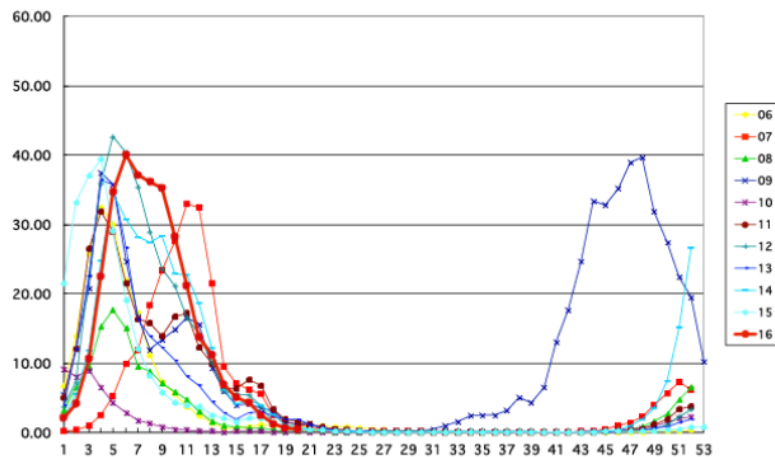
Figure 4: Weekly proportion of ILI visits per 1,000 patients 2012-2016 (Source: Korean Centre for Disease Control and Prevention)

## Sentinel influenza surveillance

### Japan

As of 29 May 2016, the number of influenza cases reported weekly, 0.29 per sentinel hospital site, continued to decrease in line with the seasonal pattern (Figure 5).

Figure 5: Number of influenza cases reported weekly per sentinel hospital site, Japan 2006-2016 (Source: Japan National Institute of Infectious Diseases)



## Countries/areas in the tropical zone

In weeks 1 to 21 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 22, 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 6.1 ILI cases per 1,000 consultations, which was lower than 6.8 recorded in the previous week (Figure 6).

The average consultation rate for ILI among sentinel private doctors was 40.7 ILI cases per 1,000 consultations, which was lower than 42.7 recorded in the previous week (Figure 7).

The percentage of respiratory specimens in week 22 which tested positive for seasonal influenza viruses was 6.26%, lower than that recorded in the previous week (8.50%). Of all respiratory specimens tested in week 22, 237 (6.26%) tested positive for seasonal influenza viruses, including 35 (0.90%) influenza A (H1), 22 (0.58%) influenza A (H3), 157 (4.15%) influenza B and 23 (0.61%) influenza C.

### China (South) - ILI Surveillance

During week 21, the percentage of outpatient or emergency visits for ILI at national sentinel hospitals in south China was 3.3% which was lower than the last week (3.4%) but the same as in 2014 and 2015 (3.3%) (Figure 8). In South China, influenza B was the predominant type of influenza detected (78.3%). Of the influenza B subtypes, Victoria lineage was predominant (72.9%).

### Singapore – ARI Surveillance

The average daily number of patients seeking treatment in polyclinics for ARI decreased from 2,853 (over 5.0 working days) in week 20 to 2,775 (over 5.5 working days) in week 21 (Figure 9). The proportion of patients with ILI among the polyclinic attendances for ARI remained low at 1.1 %. The overall prevalence of influenza among ILI samples (n=134) in the community was 34.3% in the past 4 weeks. Of specimens that tested positive for influenza in April 2016, 60.5% were positive for influenza B, 26.3% for influenza A(H1N1) pdm09, and 13.2% for influenza A(H3N2).

### Hong Kong (China) - ILI Surveillance

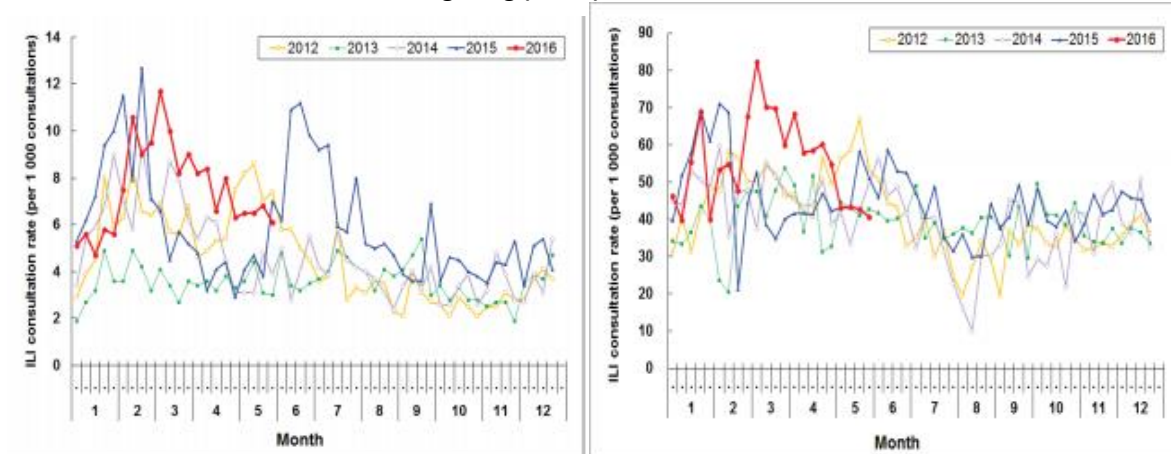


Figure 6: ILI consultation rates at sentinel general outpatient clinics, Hong Kong 2012-2016 (Source: Hong Kong Centre for Health Protection)

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

### China (South) - ILI Surveillance

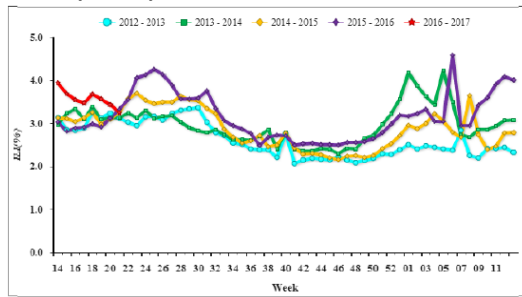


Figure 8: Percentage of visits due to ILI at national sentinel hospitals in South China, 2012-2016 (Source: China National Influenza Center)

### Singapore - ARI Surveillance

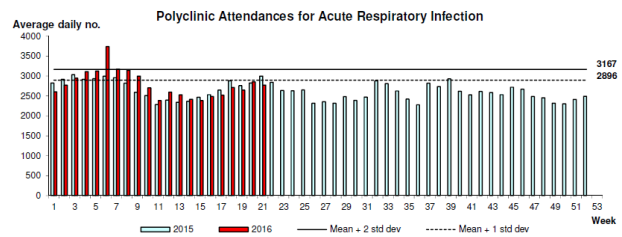


Figure 9: Average daily polyclinic attendances for Acute Respiratory Infection, Singapore 2015-2016 (Source: Singapore Ministry of Health)

## Countries in the temperate zone of the southern hemisphere

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

### New Zealand – Influenza like Illness

In week 21, 52 patients were reported with ILI through sentinel surveillance in 20 District Health Boards, with a weekly ILI incidence rate of 10.7 per 100,000 (Figure 10). This is below the seasonal threshold of ILI consultations (Figure 11). Three out of 16 ILI cases tested were positive for influenza virus, giving an ILI related influenza incidence (adjusted) of 2.0 per 100, 000 patient population.

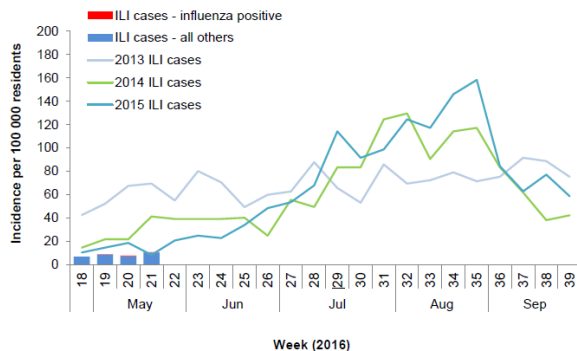


Figure 10. Weekly resident ILI and influenza incidence since 2 May 2016 in New Zealand (Source: Institute of Environmental Science and Research Ltd (ESR), New Zealand)

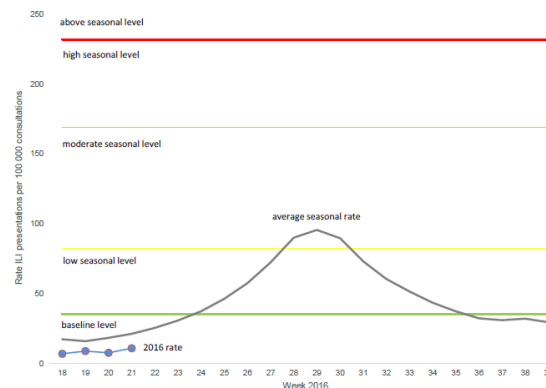
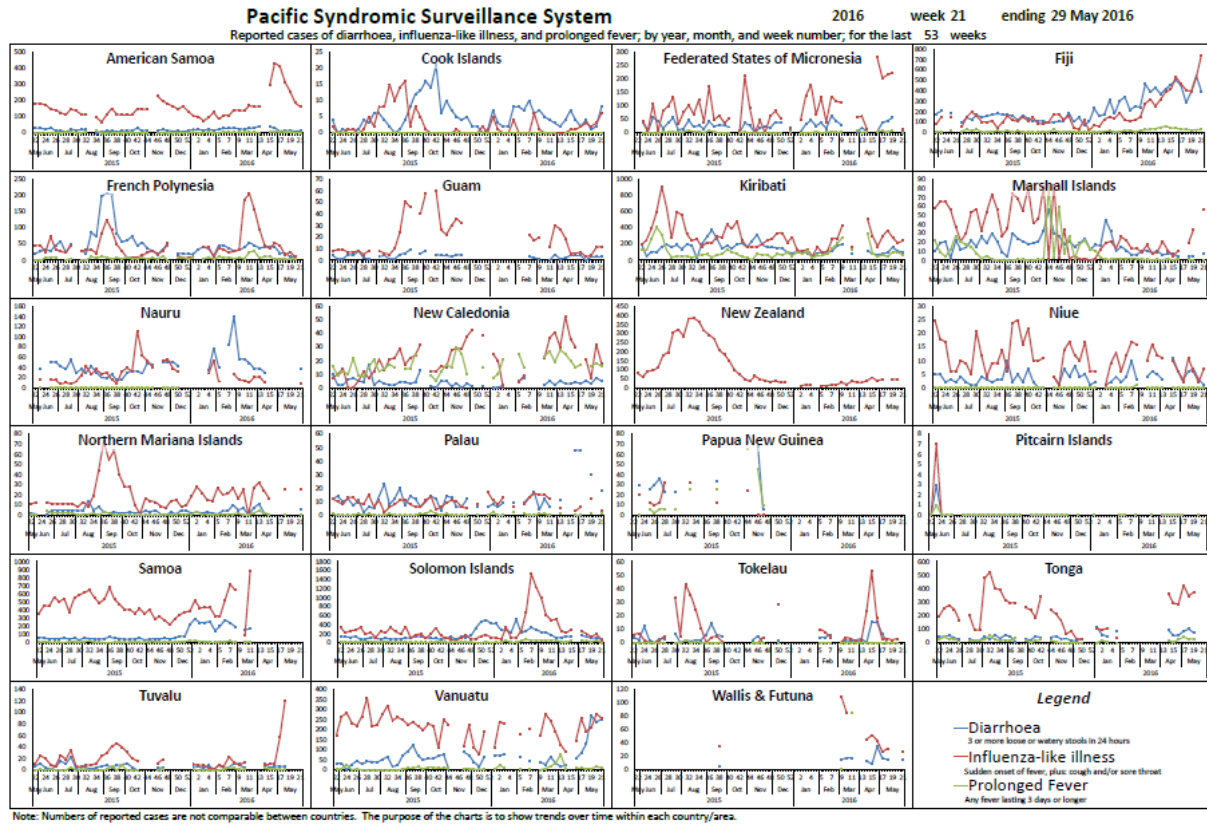


Figure 11: Weekly incidence rates for influenza-like illness in New Zealand in 2016 (Source: Institute of Environmental Science and Research Ltd (ESR), New Zealand)

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

In the Pacific Island Countries and Areas, in week 21 the number of ILI cases reported is higher than the previous weeks in Fiji and Cook Islands. The number of ILI cases in French Polynesia and New Caledonia are decreasing compared to the previous week (Figure 12).

Figure 12: Reported cases of influenza-like illness (red line) in Pacific Island Countries, 2015–2016



## Global influenza situation updates

Epidemiological update:

[http://http://www.who.int/influenza/surveillance\\_monitoring/updates/2016\\_05\\_30\\_surveillance\\_update\\_264.pdf](http://http://www.who.int/influenza/surveillance_monitoring/updates/2016_05_30_surveillance_update_264.pdf)

Virological update:

[http://www.who.int/influenza/girs\\_laboratory/updates/summaryreport/en/](http://www.who.int/influenza/girs_laboratory/updates/summaryreport/en/)

Global update:

[http://www.who.int/influenza/surveillance\\_monitoring/updates/latest\\_update\\_GIP\\_surveillance/](http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/)

Others:

Recommended composition of influenza virus vaccines for use in the 2016 southern hemisphere influenza season

[http://www.who.int/influenza/vaccines/virus/recommendations/2016\\_south/en/](http://www.who.int/influenza/vaccines/virus/recommendations/2016_south/en/)

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/](http://www.who.int/influenza/vaccines/virus/characteristics_virus_vaccines/en/)

4th WHO Informal Consultation on Improving Influenza Vaccine Virus Selection

[http://www.who.int/influenza/vaccines/virus/4thmtg\\_improve\\_vaccine\\_virus\\_selection/en/](http://www.who.int/influenza/vaccines/virus/4thmtg_improve_vaccine_virus_selection/en/)

Video on influenza on WHO's YouTube Channel

Arabic: <https://www.youtube.com/watch?v=PxW6Pq1AnwI>

Chinese: <https://www.youtube.com/watch?v=xW9qDKEpitQ>

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>