

Virological Surveillance Summary

In the Western Pacific Region, the following influenza viruses predominated:

Year	Week	Predominant viruses
2015	1-9	A (H3)
	10-16	B (Yamagata lineage), B (lineage not determined)
	17-19	B (Yamagata lineage), A (H3)
	20-37	A (H3)
	38-42	A (H3), B (lineage not determined)
	43-51	Influenza virus activity is low in all subtypes
2016	52-53	A(H3), A(H1N1)pdm09
	1-3	A(H1N1)pdm09

Countries providing specimens for FluNet reporting from the Western Pacific Region include Australia, Cambodia, China, Fiji, Lao PDR, Malaysia, Mongolia, New Zealand, Philippines, the Republic of Korea, Singapore, and Viet Nam. From week 1 to week 3, 2016 64% of influenza specimens provided to FluNet were from Korea (n=667), 19.3% from Lao PDR (n=201), 14.6% from Singapore (n=152) and 2.1% from the Republic of Korea (n=22).

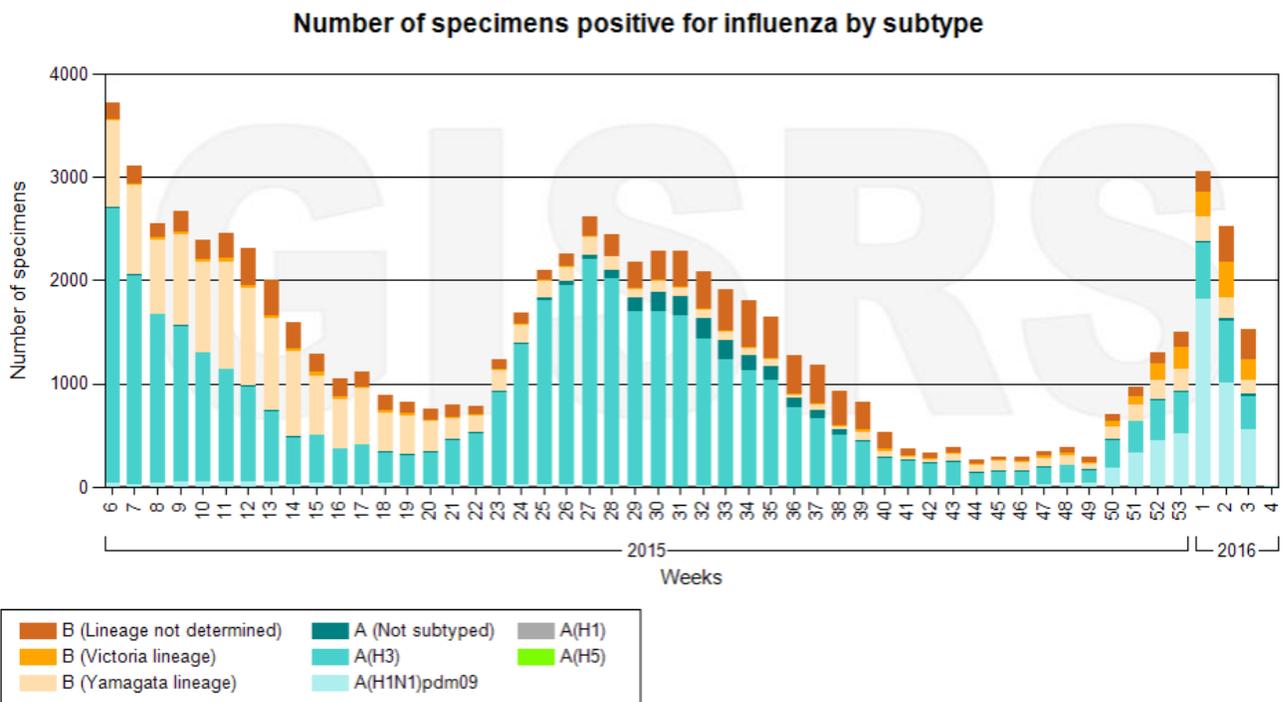


Figure 1: Number of specimens positive for influenza by subtype in Western Pacific Region
(Source: FluNet (www.who.int/fluNet), accessed 2 February 2016)

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 2, 2016, ILI activity remained lower than the general seasonal trend observed in the majority of previous years (2011–2015). ILI% at national sentinel hospitals in north China was 3.3%, higher than last week (3.0%) but lower than that seen in 2014 and 2015 (4.2% and 3.5% respectively) (Figure 2).

Mongolia

In week 3, 2016, ILI activity in Mongolia is decreasing and follows the seasonal trend (Figure 3).

Republic of Korea

In week 4, 2016, the proportion of patients visiting sentinel physicians with ILI (20.7/1,000 outpatients) followed the seasonal trend of previous years (2012–2015) and was above baseline (11.6/1,000 outpatients) (Figure 4).

China (North)

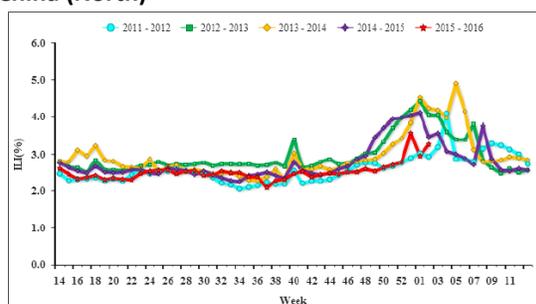


Figure 2. Percentage of Visits for ILI at Sentinel Hospitals in North China (2011-2016)

Figure 2: Percentage of visits for ILI at sentinel hospitals, 2011-2016 (Source: China National Influenza Center)

Mongolia

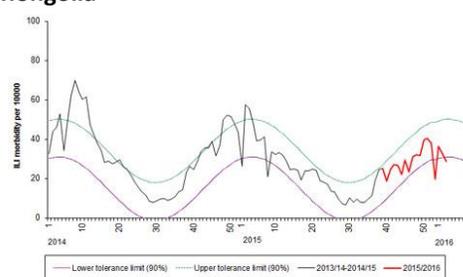


Figure 1.1.1. Countrywide

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

Republic of Korea

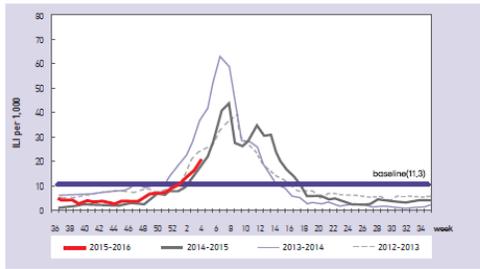


Figure 1. The weekly proportion of Influenza-Like Illness per 1,000 outpatients, 2012-2013 to 2015-2016 flu seasons

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 19 January 2016 in Japan, the number of influenza cases reported weekly per hospital sentinel site followed the known seasonal trend (2005–2014), with case numbers remaining low (Figure 5).

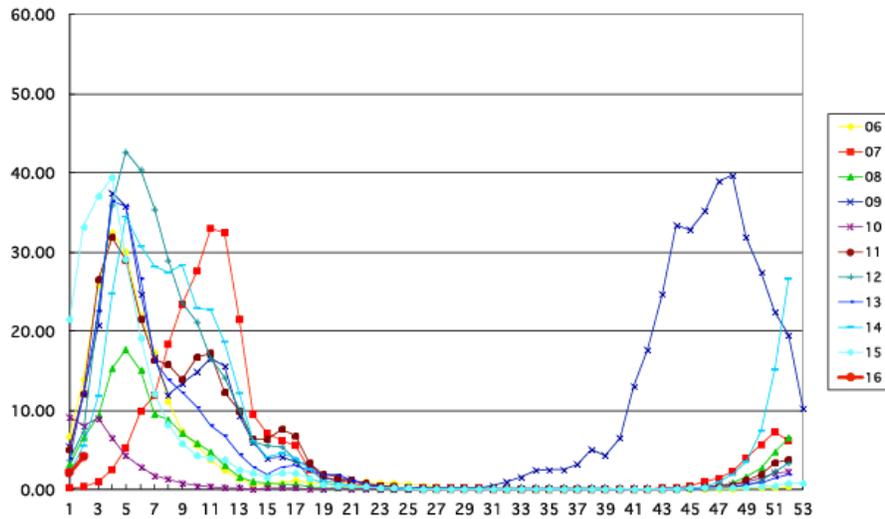


Figure 5: Number of influenza cases reported weekly per sentinel hospital site, Japan 2006-2016 (Source: Japan National Institute of Infectious Diseases)

Countries/areas in the tropical zone

In week 1-4 of 2016, ILI or Acute Respiratory Infection (ARI) activity followed previous seasonal trends in countries/areas in the tropical zone except Hong Kong which shows an increasing trend.

Outpatient Surveillance

Hong Kong (China) - ILI Surveillance

During week 4, the overall influenza activity has continued to increase, signaling that Hong Kong is entering the winter influenza season. The average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) was 5.8 ILI cases per 1,000 consultations, which was higher than 4.7 recorded in the previous week (Figure 6).

The average consultation rate for ILI among sentinel private doctors was 69.0 ILI cases per 1,000 consultations, which was higher than 55.3 per 1,000 recorded in the previous week (Figure 7).

The percentage of respiratory specimens in week 4 which tested positive for seasonal influenza viruses was 7.29%, which was higher than recorded in the previous week (5.85%). Of all respiratory specimens tested in week 4, 239 (7.29%) were tested positive for seasonal influenza viruses, including 160 (4.88%) influenza A(H1), 13 (0.40%) influenza A(H3), 56 (1.71%) influenza B and 10 (0.30%) influenza C.

China (South) - ILI Surveillance

During week 2, the percentage of outpatient or emergency visits for ILI at national sentinel hospitals in south China was 3.2%, same as last week (3.2%) (Figure 8). In South China, influenza A was the predominant type of influenza detected (78.3%). Of the influenza A subtypes, A(H1N1)pdm09 was the most common (91.2%).

Singapore – ARI Surveillance

The average daily number of patients seeking treatment in the polyclinics for ARI increased from 2,775 (over 5.5 working days) in week 2 to 2,946 (over 5.5 working days) in week 3 (Figure 9). The proportion of patients with influenza-like illness (ILI) among the polyclinic attendances for ARI remained low at approximately 1%. The overall prevalence of influenza among ILI samples (n=164) in the community was 62.2% in the past 4 weeks. Of the specimens tested positive for influenza in December 2015, these were positive for influenza A(H3N2) (50.0%), influenza B (33.3%), and influenza A (H1N1)pdm09 (16.7%).

Hong Kong (China) - ILI Surveillance

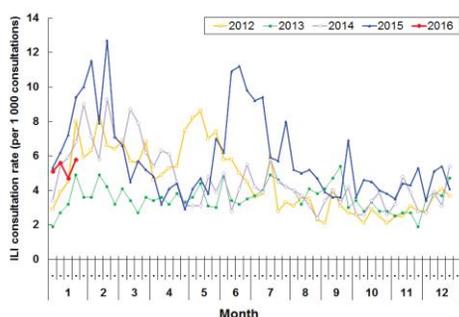


Figure 6: ILI consultation rates at sentinel general outpatient clinics, Hong Kong 2012-2016 (Source: Hong Kong Centre for Health Protection)

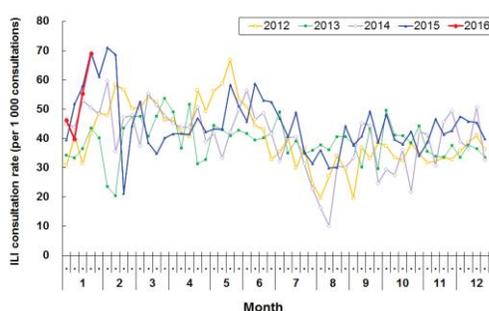


Figure 7: ILI consultation rates at sentinel private doctors, Hong Kong 2012-2016 (Source: Hong Kong Centre for Health Protection)

China (South) - ILI Surveillance

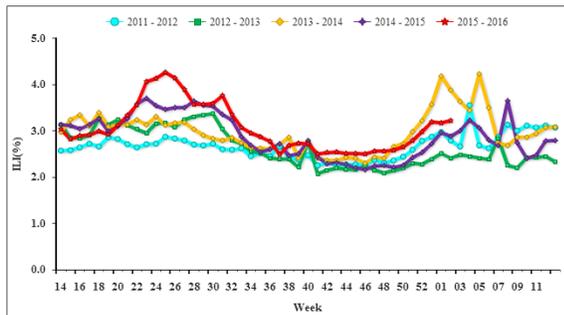


Figure 8: Percentage of visits due to ILI at national sentinel hospitals in South China, 2011-2016 (Source: China National Influenza Center)

Singapore - ARI Surveillance

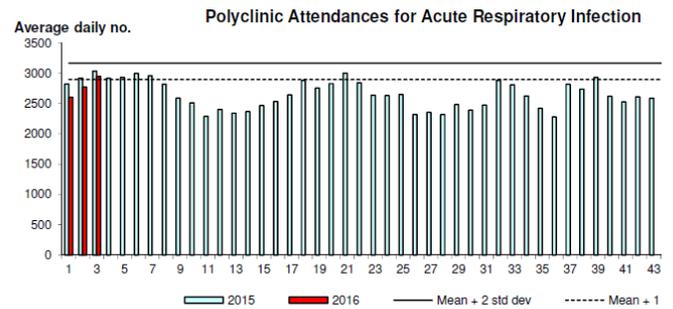


Figure 9: Average daily polyclinic attendances for Acute Respiratory Infection, Singapore 2015-2016 (Source: Singapore Ministry of Health)

Countries in the temperate zone of the southern hemisphere

Influenza surveillance data from Australia and New Zealand is reported during their influenza season and will not be updated in this report unless unusual activity is apparent.

Pacific Island Countries and Areas (PICs)- ILI Surveillance

In the Pacific Island Countries and Areas, as of week 2, the number of ILI cases reported are higher than the previous weeks in Cook Island, Northern Mariana Islands and Samoa (Figure 10).

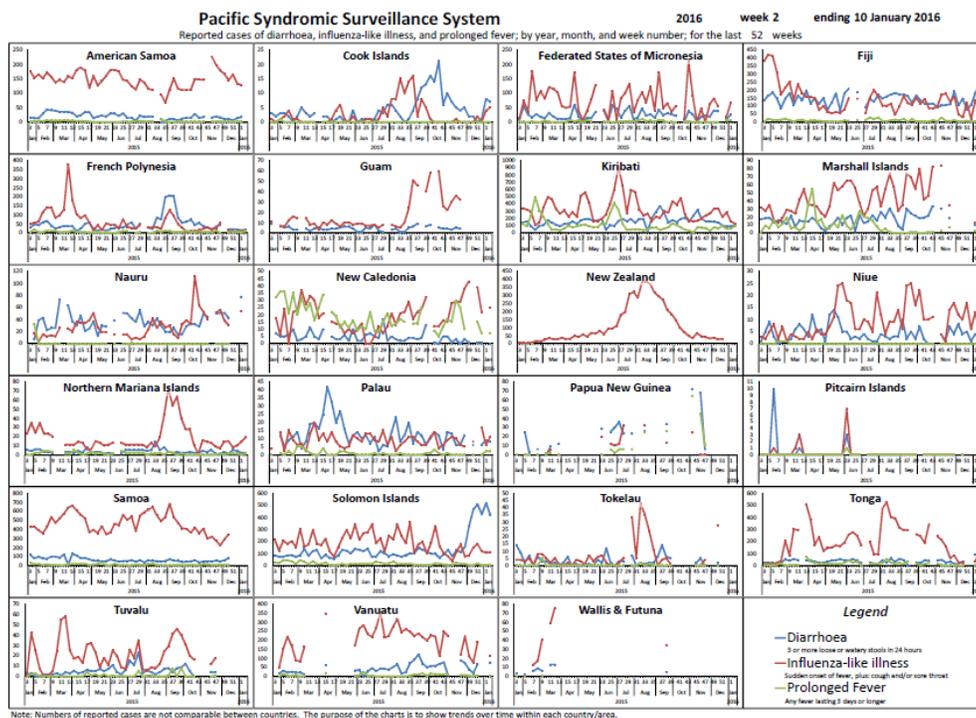


Figure 10: Reported cases of influenza-like illness (ILI) in PICs (red line), 2015–2016

Global influenza situation updates

Epidemiological update:

http://www.who.int/influenza/surveillance_monitoring/updates/2016_01_17_surveillance_update_255.pdf?ua=1

Virological update:

http://www.who.int/influenza/qisrs_laboratory/updates/summaryreport/en/

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 2016 southern hemisphere influenza season

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/

4th WHO Informal Consultation on Improving Influenza Vaccine Virus Selection

http://www.who.int/influenza/qisrs_laboratory/updates/summaryreport

Video on influenza on WHO's YouTube Channel

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

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>