

Virological Surveillance Summary

The number of specimens reported to FluNet by the Western Pacific Region countries and areas between week 1 and week 17, and the number of influenza positive specimens, are presented in the table below. Influenza A(H1) is currently the predominant circulating subtype (Figure 1).

Table 1: Countries and areas reporting data to FluNet, Western Pacific Region, weeks 1 to 17, 2017

Country (most recent week)	Total number of specimens processed	Total number of influenza positive specimens
Australia (week 17)	9424	490
Cambodia (week 16)	374	8
China (week 16)	214133	28559
Fiji (week 12)	137	66
Japan (week 16)	NA	5214
Lao People's Democratic Republic (week 17)	1379	162
Malaysia (week 8)	692	99
Mongolia (week 17)	1758	403
New Caledonia (week 14)	114	3
New Zealand (week 39/2016)	942	298
Papua New Guinea (week 13)	111	21
Philippines (week 15)	285	20
Republic of Korea (week 17)	4493	655
Singapore (week 16)	528	262
Viet Nam (week 14)	496	63

Number of specimens positive for influenza by subtype

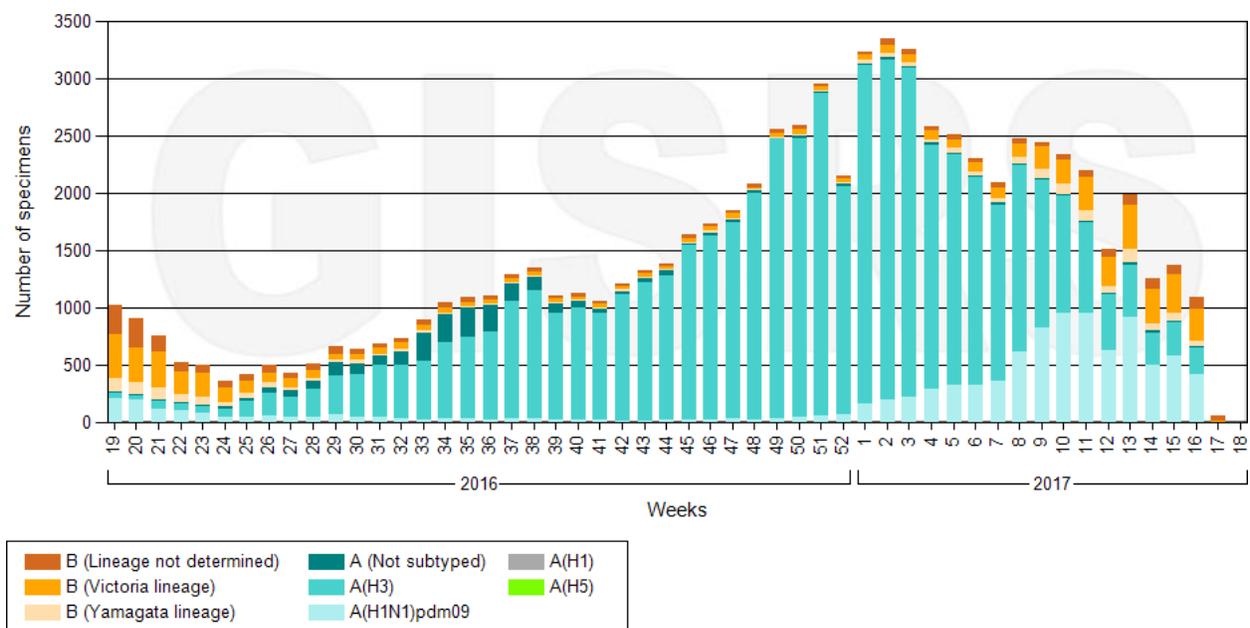


Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region, week 17 2016 to week 17 2017 (Source: www.who.int/flunet, accessed on 08 May 2017)

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 to the influenza season compared to the 2015-2016 season.

Outpatient ILI Surveillance

China (North)

During weeks 16 and 17, the percentage of visits for ILI at national sentinel hospitals in northern China was 3.1% and 3.2%. Compared to previous years, ILI activity was a little higher than the same weeks of the 2014-2016 (2.4% ~ 2.6%)(Figure 2).

Mongolia

ILI activity remained low during week 17 of 2017 compared to the previous week and seasons. The most recent peak in ILI activity occurred in week four of 2017 (Figure 3).

Republic of Korea

In week 17 2017, there were 13.3 ILI cases per 1000, which was lower than 14.5 per 1000 in the previous week. ILI activity was on a downward trend. (Figure 4).

China (North)

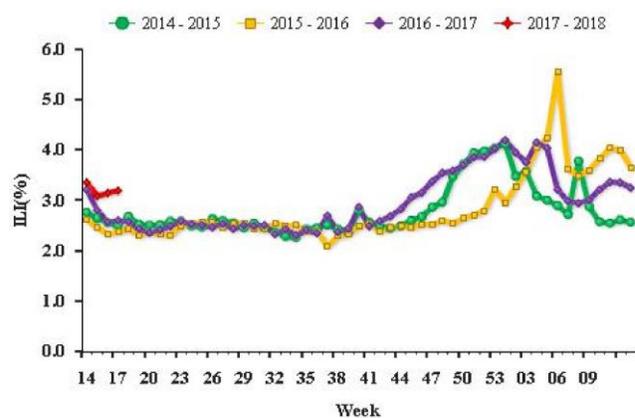


Figure 2: Percentage of visits for ILI at sentinel hospitals in north China, 2012-2017 (Source: China National Influenza Center)

Mongolia

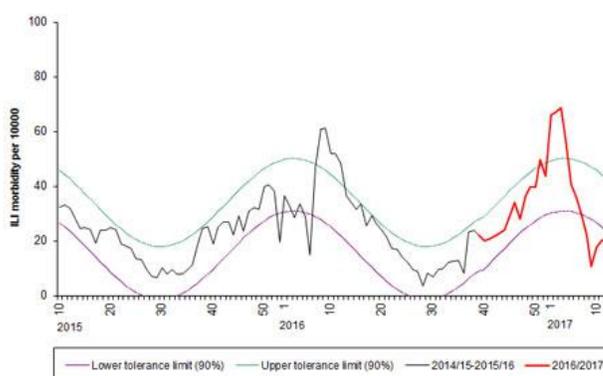


Figure 3: Proportion of outpatient ILI visits (per 10,000 people), 2014-2017 (Source: Mongolia National Influenza Center)

Republic of Korea

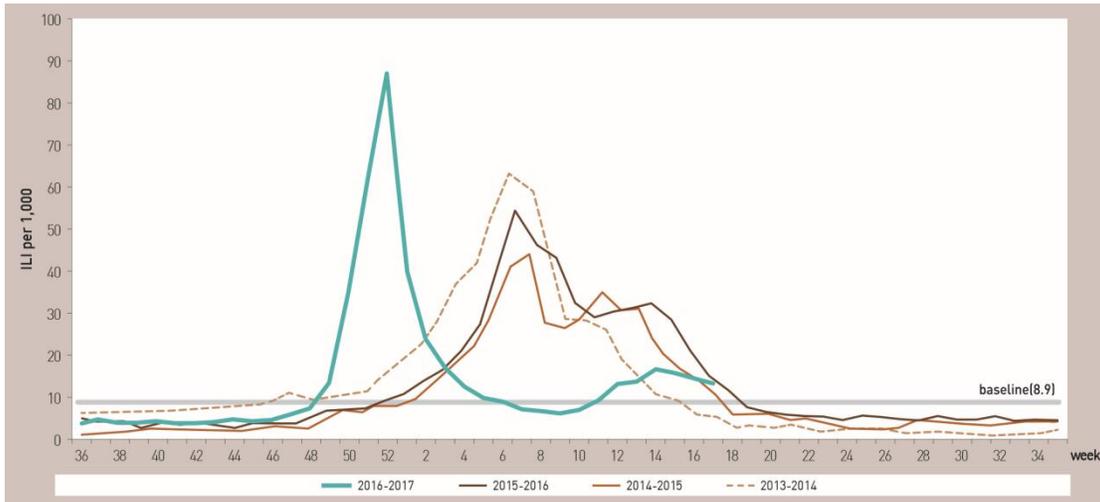


Figure 4: Weekly ILI incidence rate per 1000 patients, 2013-2017
(Source: Korean Centre for Disease Control and Prevention)

Sentinel influenza surveillance

Japan

As of week 15 2017, influenza activity in Japan is following a similar seasonal pattern to the previous years. (Figure 5).

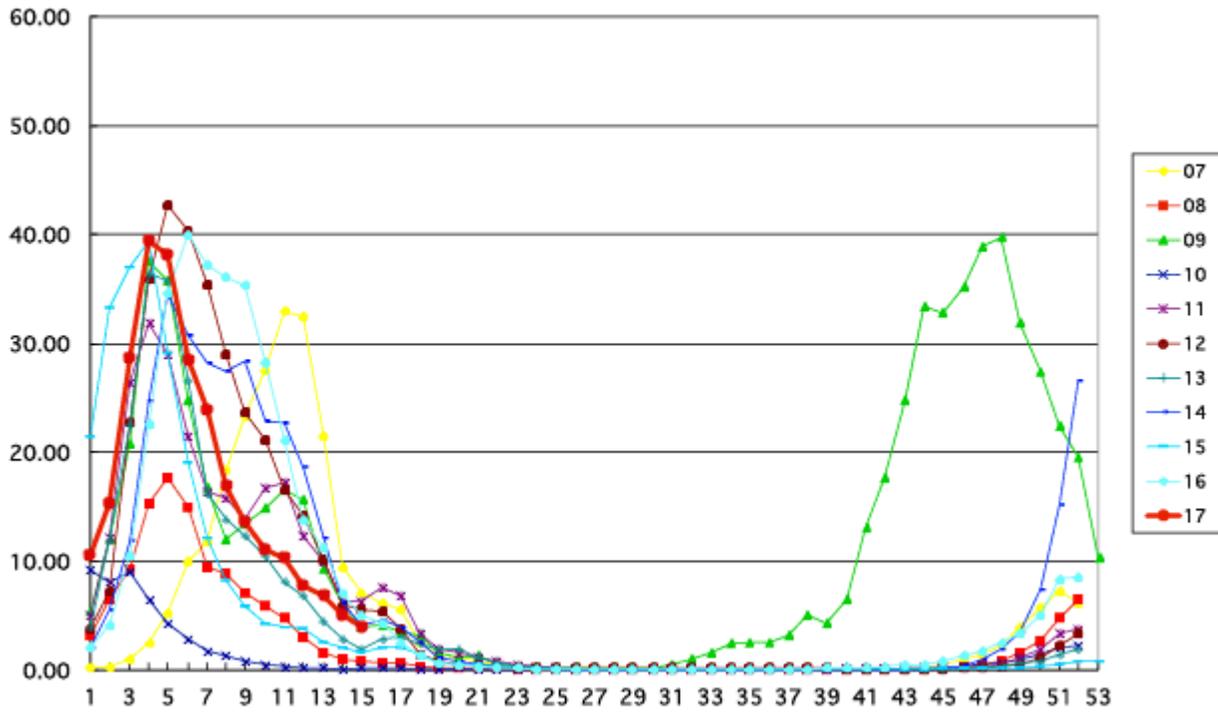


Figure 5: Number of influenza cases reported weekly per reporting sentinel hospital site, Japan 2007-2017
(Source: Japan National Institute of Infectious Diseases)

Countries/areas in the tropical zone

In weeks 1 to 17 of 2017, ILI and ARI activity followed previous seasonal trends in countries/areas in the tropical zone.

Outpatient Surveillance

Hong Kong (China) - ILI Surveillance

Surveillance data indicate an increase in local influenza activity in recent weeks. In weeks 16 and 17 of 2017, the consultation rate for ILI among sentinel general outpatient clinics was 3.6 and 4.0 ILI cases per 1,000 consultations respectively. The average consultation rate for ILI among sentinel private doctors was 31.6 ILI cases per 1000 consultations in week 16 and 49.9 per 1000 consultations in week 17 (Figure 6 & Figure 7).

China (South) - ILI Surveillance

During weeks 16 and 17, the percentage of outpatient or emergency visits for ILI at national sentinel hospitals in southern China was 3.2% and 3.1% respectively, which was similar to previous seasons (Figure 8).

Singapore – Acute Respiratory Infection Surveillance

The average daily number of patients seeking treatment in the polyclinics for acute respiratory infection decreased from 3,202 (over 5.5 working days) in week 16 to 3,189 (over 5.5 working days) in week 17. (Figure 9). The proportion of patients with ILI among polyclinic attendances for ARI remained low at 2.8%.

Hong Kong (China) - ILI Surveillance

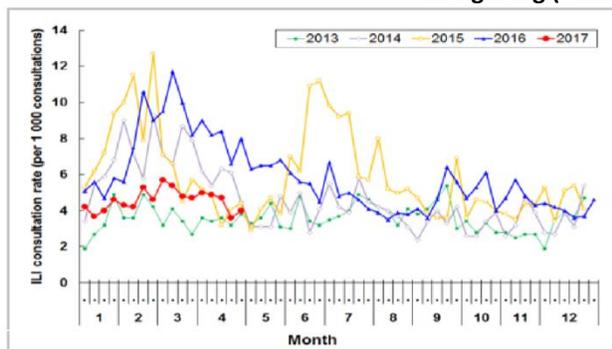


Figure 6: ILI consultation rates at sentinel general outpatient clinics, Hong Kong 2012-2017 (Source: Hong Kong Centre for Health Protection)

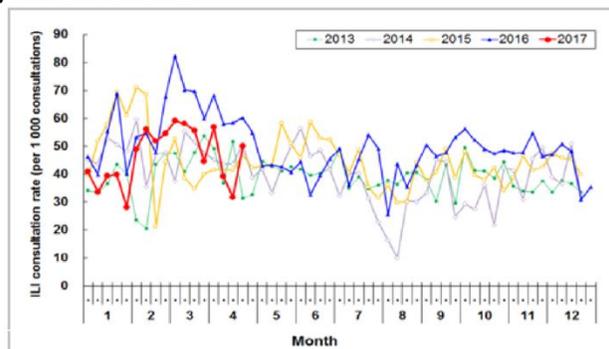


Figure 7: ILI consultation rates at sentinel private doctors, Hong Kong 2012-2017 (Source: Hong Kong Centre for Health Protection)

China (South) - ILI Surveillance

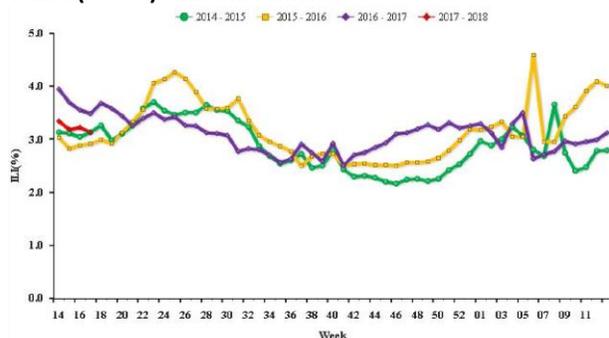


Figure 8: Percentage of visits due to ILI at national sentinel hospitals in South China, 2012-2017 (Source: China National Influenza Center)

Singapore - ARI Surveillance

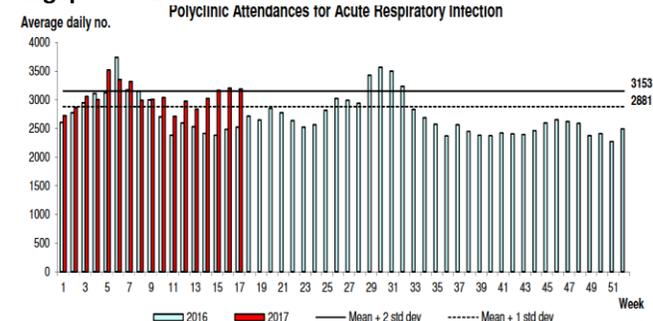


Figure 9: Average daily polyclinic attendances for ARI in Singapore, 2016-2017 (Source: Singapore Ministry of Health)

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. Australia publishes influenza surveillance reports on a fortnightly basis during the influenza season, typically between May and October. (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))

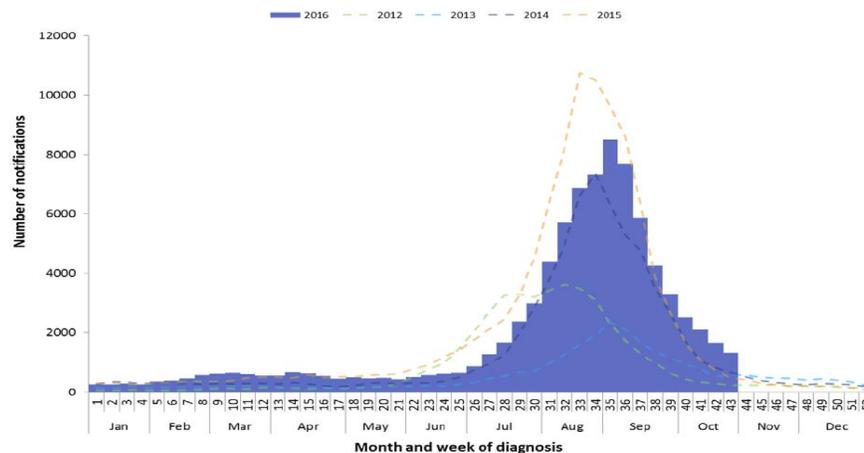


Figure 10: Australian notifications of laboratory confirmed influenza (Source: National Notifiable Diseases Surveillance System, Australian Department of Health)

New Zealand – Influenza like Illness

In week 17, influenza activity was very low among consultation-seeking patients nationwide; 15 patients with ILI consulted sentinel general practices in 20 District Health Boards. The weekly ILI incidence was 3.1 ILI cases per 100 000 patients (Figure 11).

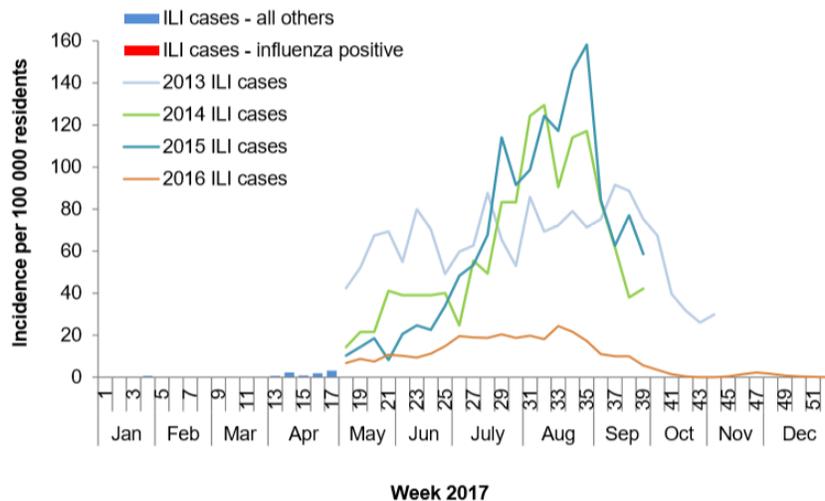


Figure 11: Weekly resident ILI and influenza incidence since Week 1 of 2017 in New Zealand (Source: Institute of Environmental Science and Research Ltd (ESR), New Zealand)

Pacific Island Countries and Areas (PICs) - ILI Surveillance

In the Pacific Island Countries and Areas, in week 15, the number of ILI cases reported was at a relatively high level in Kinbati (Figure 12).

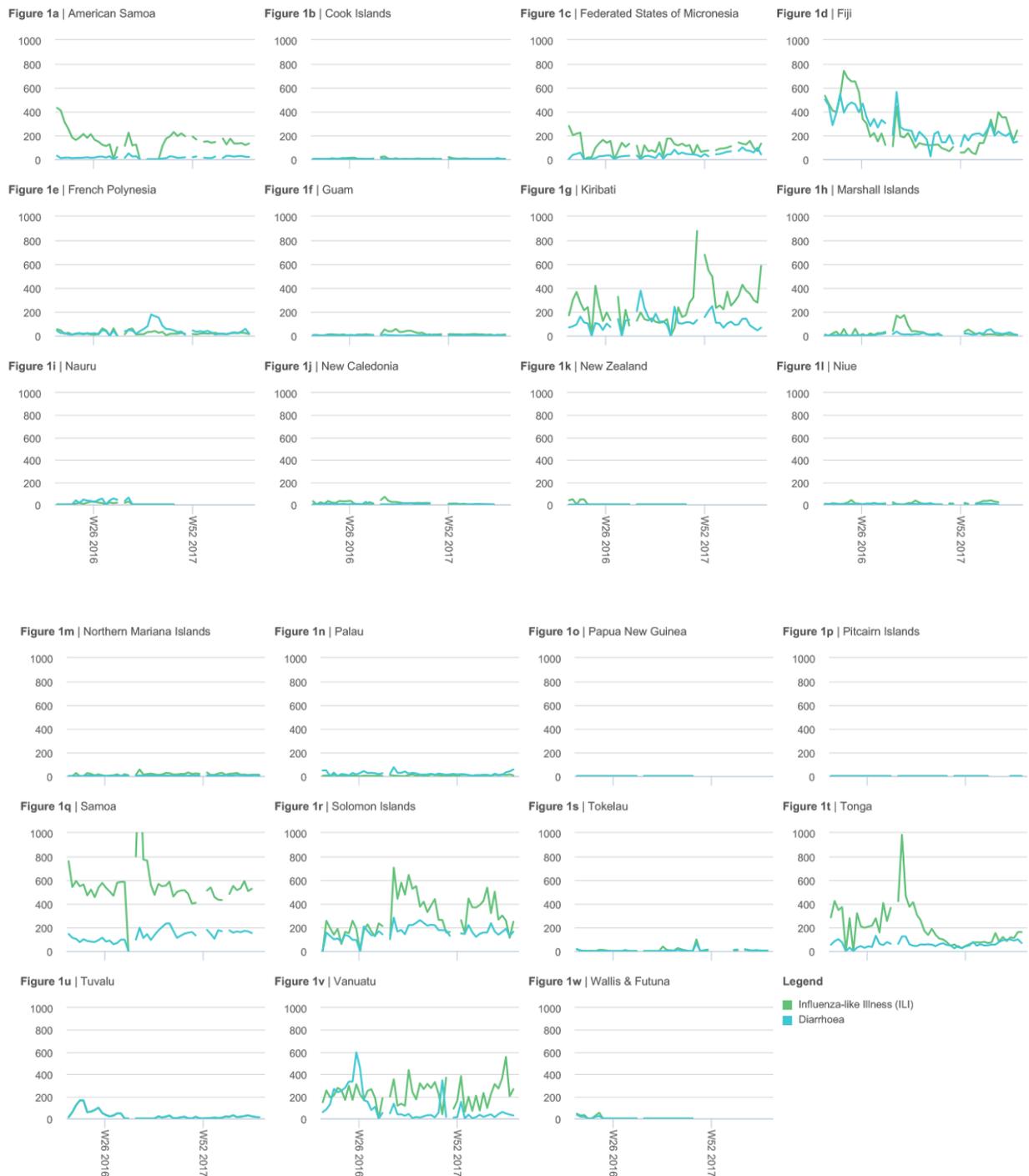


Figure 12: Reported cases of influenza-like illness (red line) in Pacific Island Countries, 2017

Global influenza situation updates

Epidemiological update

http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/

Virological update:

http://www.who.int/influenza/gisrs_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 2017 southern hemisphere influenza season

http://www.who.int/influenza/vaccines/virus/recommendations/2017_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/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=xW9gDKEpitQ>

English: <https://www.youtube.com/watch?v=yhhJfT86Bqg>

French: <https://www.youtube.com/watch?v=8mo8rWWJZkc>

Russian: <https://www.youtube.com/watch?v=XQO6nbkKUWQ>

Spanish: <https://www.youtube.com/watch?v=qXr75cKxwTY>

Recommended composition of influenza virus vaccines for use in the 2017-2018 northern hemisphere influenza season

http://www.who.int/influenza/vaccines/virus/recommendations/201703_recommendation.pdf?ua=1