# Bi-weekly Influenza Situation Update

## 13 January 2021

# **Virological Surveillance Summary**

The total number of specimens and number of positive specimens reported to FluNet by Western Pacific Region countries and areas between week 3 2020 and week 1 of 2021 are presented in the table below. Influenza A and B are co-circulating in the region, at a very low level compared to previous year (**Figure 1**). It should be noted that several countries and areas have not reported in 2020.

Table 1: Cumulative data reported to FluNet from Western Pacific Region, week 3 2020 to week 1 2021

Country (most recent week of report)	Total number of specimens processed	Total number of influenza positive specimens
Australia (1)	121,004	847
Cambodia (52)	1,069	169
China (53)	518,248	17,379
Fiji (29)	287	29
Japan (51)	-	2,070
Lao People's Democratic Republic (52)	2,379	117
Malaysia (52)	2,737	221
Mongolia (48)	4,974	859
New Caledonia (11)	126	11
New Zealand (37)	198	-
Papua New Guinea	-	-
Philippines (4)	75	8
Republic of Korea (6)	1,119	379
Singapore (53)	3,033	258
Viet Nam (50)	1,857	131

#### Number of specimens positive for influenza by subtype

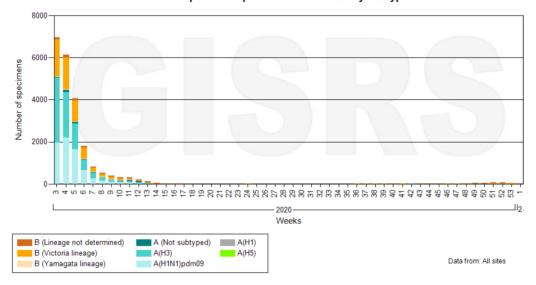


Figure 1: Number of specimens positive for influenza by subtype, Western Pacific Region, week 3 2020 to week 1 2021 (Source: WHO FLUNET)

# Influenza surveillance summary

Influenza surveillance in the WHO Western Pacific Region is based on outpatient and inpatient sentinel indicator based surveillance (IBS) systems, as well as event-based surveillance. Case definitions, population groups included and data formats differ among countries. This influenza surveillance summary includes countries and areas where routine IBS is conducted and information is available.

The WHO surveillance case definition for influenza-like illness (ILI) is an acute respiratory infection with a measured fever of ≥38°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 ≥38°C and cough, with symptom onset within 10 days that requires hospitalization. Sentinel site data should be interpreted with caution since the number of sites reporting may vary between weeks.

# Countries in the temperate zone of the Northern Hemisphere

In countries within the temperate zone of the Northern Hemisphere, ILI and influenza activity continue to decrease, lower than in previous seasons.

## **Outpatient ILI Surveillance**

## China (North)

During Week 53 of 2020, the percentage of visits for ILI at national sentinel hospitals in Northern China was 3.1%, higher than last week (2.9%), lower than the same week of 2017 to 2019 (5.5%, 4.7% and 5.7%) (Figure 2).

## Mongolia

During Week 52 of 2020, ILI activity in Mongolia has remained low and is below the lower tolerance limit (Figure 3).

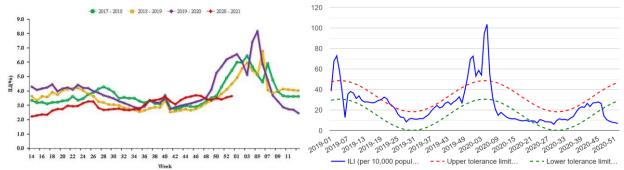


Figure 2: Percentage of visits for ILI at sentinel hospitals in Northern China, 2017-2021 (Source: China National Influenza Center)

Figure 3: Proportion of outpatient ILI visits per 10,000 people in Mongolia, 2018-2020 (Source: Mongolia National Influenza Center)

## **Republic of Korea**

In Week 1 of 2021, the overall weekly ILI rate was 2.4 ILI cases per 1,000 outpatient visits, lower than the previous week with 2.5 ILI cases per 1,000 outpatient visits and below the national epidemic threshold (5.8 ILI cases per 1,000 outpatient visits) (Figure 4).

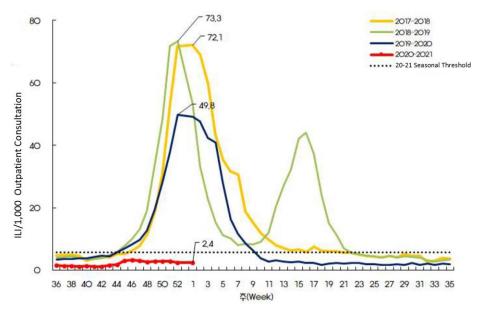


Figure 4: Weekly ILI incidence rate per 1,000 outpatient consultations, Republic of Korea, 2017-2021 (Source: Korean Centres for Disease Control and Prevention)

## Sentinel influenza surveillance

#### Japan

In Week 52 of 2020, the number of cases reported weekly by sentinel hospital sites remained low in Japan. The peak this year is lower than the previous years, but the general trend was similar to that seen in previous seasons (Figure 5).

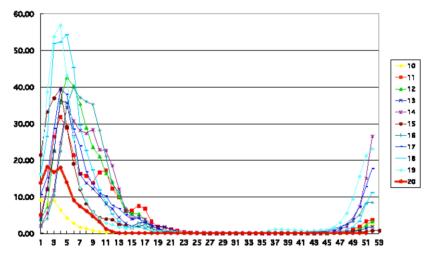


Figure 5: Number of influenza cases reported weekly per reporting sentinel hospital site, Japan 2010-2020 (Source: Japan National Institute of Infectious Diseases)

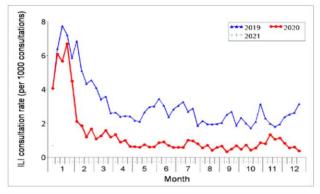
# Countries/areas in the tropical zone

ILI and influenza activity continued to decrease in most of the countries and areas.

#### Surveillance

## Hong Kong SAR (China) – ILI and hospital Surveillance

In Week 1 of 2021, the average consultation rate for ILI among sentinel general outpatient clinics was 0.7 ILI cases per 1,000 consultations, which was higher than 0.4 ILI cases per 1,000 consultations recorded in the previous week (Figure 6). The average consultation rate for ILI among sentinel private medical practitioners was 19.8 ILI cases per 1,000 consultations, which was lower than 20.3 recorded in the previous week (Figure 7).



ILI consultation rate (per 1000 consultations) 2018 2019 2020 2021 70 60 50 20 10

Figure 6: ILI consultation rates at sentinel general outpatient clinics, Hong Kong SAR 2019-2021

(Source: Hong Kong Centre for Health Protection)

Figure 7: ILI consultation rates at sentinel private doctors, Hong Kong SAR 2017-2021

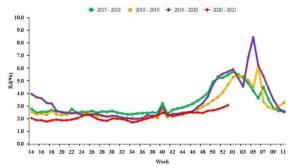
(Source: Hong Kong Centre for Health Protection)

#### China (South) - ILI Surveillance

During Week 53 of 2020, the percentage of visits for ILI at national sentinel hospitals in Southern China was 3.1%, higher than the previous week (2.9%), and lower than the same week of 2017 to 2019 (5.5%, 4.7%, and 5.7%) (Figure 8).

## Singapore – Acute Respiratory Infection (ARI) Surveillance

In Week 53 of 2020, the average daily number of patients seeking treatment in polyclinics for ARI was 849 over 4 working days, which is significantly lower than the same time period in 2019 (Figure 9).



Polyclinic Attendances for Acute Respiratory Infection, 2019-2020 3500 2500

Figure 8: Percentage of visits due to ILI at national sentinel hospitals in Southern China, 2017-2021

(Source: China National Influenza Center)

Figure 9: Average daily polyclinic attendances for ARI in Singapore, 2019-2020

(Source: Singapore Ministry of Health)

## **Lao PDR**

In Week 52 of 2020, the number of ILI cases presenting to sentinel sites was lower compared to the previous week and the same week of the previous year (Figure 10).

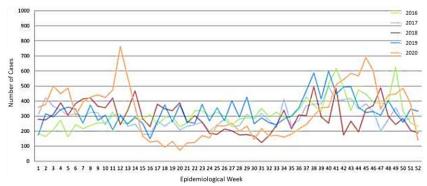


Figure 10: Weekly number of ILI presentations at sentinel sites, 2016-2020, Lao PDR (Source: Lao National Center for Laboratory and Epidemiology)

#### **Cambodia**

In week 53, 2020, the number of ILI cases reported weekly by seven sentinel outpatient sites remained low in Cambodia. The number of cases has remained relatively stable and low since week 11, with a second peak between weeks 39-40 (Figure 11). The positivity rate peaked in week 40 (65.2%) and has remained at 0% for the last nine weeks. In the second half of the year all positive specimens were influenza A(H3N2) (Figure 12).

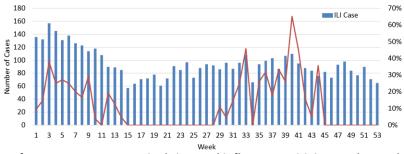


Figure 11: Number of ILI cases at seven sentinel sites and influenza positivity rate by week, 2020, Cambodia (Source: Communicable Disease Control Department, Cambodia Ministry of Health)

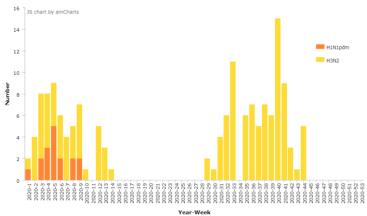


Figure 12: Number of influenza positive samples by subtype, 2020, Cambodia (Source: Communicable Disease Control Department, Cambodia Ministry of Health)

# Countries in the temperate zone of the southern hemisphere

In the temperate zone of the southern hemisphere, influenza activity is reported during the influenza season usually starting May in Australia and New Zealand.

## Australia – Laboratory-confirmed influenza and ILI (No update)

From 1 January to 29 November 2020, there have been 21,266 notifications of laboratory-confirmed influenza to the National Notifiable Diseases Surveillance System. The number of cases was lower than the five-year average and did not show a seasonal peak between July and October, as seen in past years (Figure 13).

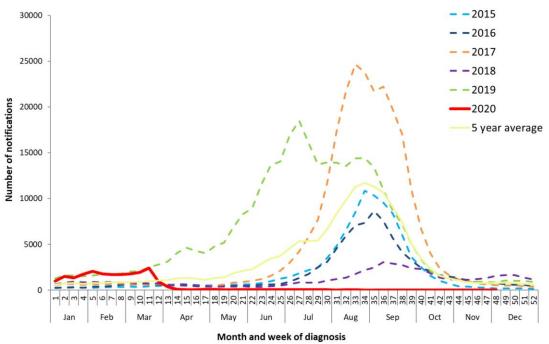


Figure 13: Australian notifications of laboratory confirmed influenza

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

#### New Zealand – Influenza like Illness (No update)

General Practice-based ILI surveillance methods have changed in 2020 due to the COVID-19 response, limiting interpretability for influenza ILI surveillance. Collection of specimens commenced on 2nd June 2020 and stopped on 27 September 2020. In this period, there were 230 specimens collected from patients presenting to general practices with ILI symptoms, 0 (0%) of which were influenza positive. For the same period last year, 1,617 specimens were tested, 919 (56.8%) of which were influenza positive. (Source)

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

In the Pacific Island Countries and Areas, in week 53 of 2020, there was an increase in ILI cases in Niue, Samoa, and Tokelau (Figure 14).

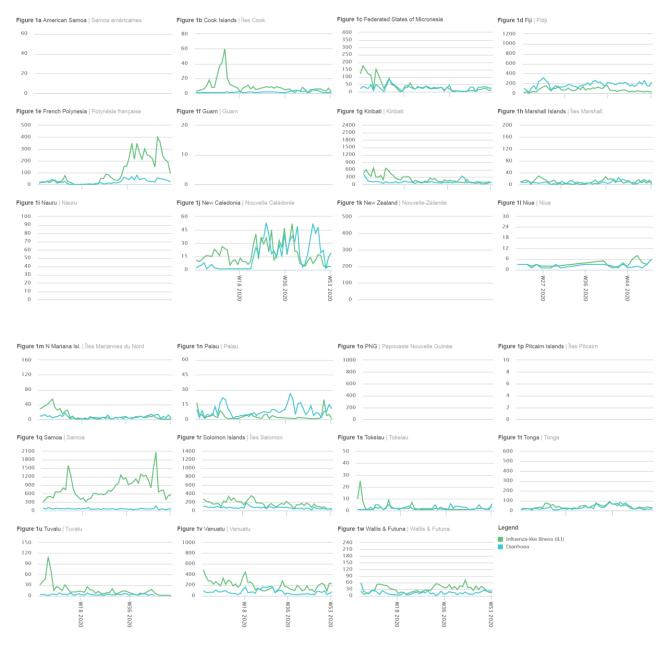


Figure 14: Reported cases of influenza-like illness in Pacific Island Countries (Source: PacNet Bulletin)

# Global influenza situation updates

## Virological update

#### **Global update**

## Others:

- Recommended composition of influenza virus vaccines for use in the 2021 southern hemisphere influenza season Link
- Recommended composition of influenza virus vaccines for use in the 2020-2021 northern hemisphere influenza season Link
- WHO Consultation and Information Meeting on the Composition of Influenza Virus Vaccines for Use in the 2021 Southern Hemisphere Influenza Season Link
- Antigenic and genetic characteristics of zoonotic influenza viruses and candidate vaccine viruses developed for potential use in human vaccines Link
- 4th WHO Informal Consultation on Improving Influenza Vaccine Virus Selection Link

WHO's YouTube Channel: film exploring a number of key aspects of the constant evolution of influenza viruses and associated impacts on public health. Arabic, Chinese, English, French, Russian, Spanish