Influenza Update N° 332

07 January 2019, based on data up to 23 December 2018

Information in this report is categorized by influenza transmission zones, which are geographical groups of countries, areas or territories with similar influenza transmission patterns. For more information on influenza transmission zones, see: www.who.int/influenza/surveillance_monitoring/updates/EN_GIP_Influenza_transmission_zones.pdf

Summary

- In the temperate zone of the northern hemisphere influenza activity continued to increase slowly.
  - In North America influenza activity continued to increase overall with influenza A(H1N1)pdm09 predominating.
  - In Europe, influenza activity increased, with both A viruses circulating.
  - In North Africa, increased influenza A(H3N2) detections were reported from mainly Egypt.
  - In Western Asia, some countries reached medium levels of influenza intensity. Elevated but decreasing influenza activity continued to be reported across countries of the Arabian Peninsula.
  - In East Asia, influenza season appeared to have started, with predominantly influenza A(H1N1)pdm09 detected.
In Southern Asia, influenza detections rose sharply in recent weeks mainly due to increased influenza A(H3N2) detections in Iran and continued influenza A(H1N1)pdm09 detections in India.

In the temperate zones of the southern hemisphere, influenza activity returned to inter-seasonal levels with exception of some parts in Australia. Worldwide, seasonal influenza A viruses accounted for the majority of detections.

National Influenza Centres (NICs) and other national influenza laboratories from 102 countries, areas or territories reported data to FluNet for the time period from 10 December 2018 to 23 December 2018 (data as of 2019-01-04 03:38:46 UTC). The WHO GISRS laboratories tested more than 97188 specimens during that time period. 12945 were positive for influenza viruses, of which 12148 (93.8%) were typed as influenza A and 797 (6.2%) as influenza B. Of the sub-typed influenza A viruses, 5823 (77%) were influenza A(H1N1)pdm09 and 1739 (23%) were influenza A(H3N2). Of the characterized B viruses, 40 (40.4%) belonged to the B-Yamagata lineage and 59 (59.6%) to the B-Victoria lineage.

For more detailed information, see the Influenza reports from WHO Regional Offices:

- WHO Region of the Americas (AMRO): [www.paho.org/influenzareports](http://www.paho.org/influenzareports)
- WHO European Region (EURO): [www.flunewseurope.org/](http://www.flunewseurope.org/)
- WHO Western Pacific Region (WPRO): [www.wpro.who.int/emerging_diseases/Influenza/en/](http://www.wpro.who.int/emerging_diseases/Influenza/en/)

Countries in the temperate zone of the northern hemisphere

- In the temperate zone of the northern hemisphere, influenza activity increased with influenza A(H1N1)pdm09 predominating overall.
- In North America, influenza activity continued to increase, with influenza A(H1N1)pdm09 virus predominating. In Canada, influenza activity continued to increase; pediatric hospitalizations remained stable and were close to the average number of hospitalization since the 2010-2011 season. In the United States of America, influenza activity increased, with detections of mainly influenza A(H1N1)pdm09 virus and influenza like illness (ILI) activity was reported above the national baseline. Influenza A(H1N1)pdm09 virus detections continued to be reported in Mexico.
- In Europe, influenza activity continued to increase across the continent. Influenza A(H1N1)pdm09 and A(H3N2) viruses predominated and were detected at almost equal proportions.
- In Northern Africa, there was an increase in influenza detections with mainly influenza A(H3N2) detections reported from Egypt.
- In Western Asia, respiratory illness indicators increased in Armenia, Georgia, Israel, Lebanon and Turkey. Georgia, Turkey and Ukraine reported medium intensity levels. Influenza A
viruses predominated with various proportions of A(H1N1)pdm09 and A(H3N2) in different countries. In the Arabian Peninsula, elevated influenza activity continued to be reported across countries, but in decline compared to previous reporting period. Detections of influenza A(H1N1)pdm09 remained elevated in Bahrain. Qatar and Saudi Arabia reported influenza A(H1N1)pdm09 and B detections.

- In East Asia, the influenza season appeared to have started, with predominantly influenza A(H1N1)pdm09. ILI activity increased further with mainly influenza A(H1N1)pdm09 reported in China and China, Hong Kong SAR. ILI levels sharply increased in the Republic of Korea, with mainly influenza A(H1N1)pdm09 detections. In Japan and Mongolia, influenza activity, along with ILI activity, slowly increased but were still overall low.

**Number of specimens positive for influenza by subtype in North America**

![Graph showing influenza activity in North America](image)

*Data source: FluNet (www.who.int/flunet). Global Influenza Surveillance and Response System (GISRS) Data generated on 03/01/2018*

**Number of specimens positive for influenza by subtype in the Western Asia**

![Graph showing influenza activity in the Western Asia](image)

*Data source: FluNet (www.who.int/flunet). Global Influenza Surveillance and Response System (GISRS) Data generated on 03/01/2018*
Countries in the tropical zone

**Tropical countries of Central America, the Caribbean and South America**

- In the Caribbean, while influenza activity remained overall low, increased detections of influenza A(H1N1)pdm09 and B (Victoria-lineage) viruses were reported in Cuba. Respiratory syncytial virus (RSV) activity remained elevated across the sub-region.

- In Central American countries, influenza activity was reported in Costa Rica (influenza A viruses) and Nicaragua (influenza A(H1N1)pdm09 and B viruses). Although decreased compared to previous reporting period, RSV activity remained elevated across the sub-region.

- In the tropical countries of South America, influenza and RSV activity were low in general except for Ecuador where elevated RSV activity was reported.

**Tropical Africa**

- In Western Africa, influenza detections (mainly influenza A(H3N2) and B Victoria-lineage viruses) were reported. Influenza activity appeared to be declining in Ghana where both influenza A(H3N2) and influenza B viruses were reported. A small number of cases of influenza A(H3N2) were detected in Guinea and Mauritania with low levels of ILI and SARI. Niger reported low numbers of influenza B virus.

- In Middle Africa, Cameroon reported fewer influenza detections with including influenza types A and B viruses.

- In Eastern Africa, low levels of influenza B viruses were detected in Madagascar and Mozambique. Kenya reported decreasing levels of influenza A(H3N2) virus detections.

**Tropical Asia**

- In Southern Asia, influenza detections rose sharply in recent weeks mainly due to increased influenza A(H3N2) virus detections in Iran and continued influenza A(H1N1)pdm09 virus detections in India. Levels of ILI and SARI activity in Afghanistan continued to increase during this reporting period with mainly influenza A(H1N1)pdm09 virus detections. Detections of influenza A viruses were low in Nepal and in the Maldives.

- In South East Asia, Lao PDR continued to report influenza activity with ILI levels consistent with previous years. Influenza A(H1N1)pdm09 were the most frequently detected viruses. Although decreased, influenza virus detections continued to be reported in Thailand with influenza A (both subtypes) and influenza B.
Number of specimens positive for influenza by subtype in Central America and Caribbean

![Graph showing influenza by subtype in Central America and Caribbean]

**Data source**: FluNet ([www.who.int/flunet](http://www.who.int/flunet)). Global Influenza Surveillance and Response System (GISRS)
Data generated on 03/01/2018

Number of specimens positive for influenza by subtype in Southern Asia

![Graph showing influenza by subtype in Southern Asia]

**Data source**: FluNet ([www.who.int/flunet](http://www.who.int/flunet)). Global Influenza Surveillance and Response System (GISRS)
Data generated on 03/01/2018
Countries in the temperate zone of the southern hemisphere

- In the temperate zone of the southern hemisphere, influenza activity returned to inter-seasonal levels. Although influenza activity continued at low level in many parts of southern Australia, higher activity was reported in the northern tropical regions.

Number of specimens positive for influenza by subtype in southern hemisphere

![Graph showing influenza activity by subtype in southern hemisphere](Image)

**Data source:** FluNet (www.who.int/flunet). Global Influenza Surveillance and Response System (GISRS)

Data generated on 03/01/2018

**Sources of data**
The Global Influenza Programme monitors influenza activity worldwide and publishes an update every two weeks. The updates are based on available epidemiological and virological data sources, including FluNet (reported by the WHO Global Influenza Surveillance and Response System) FluID (epidemiological data reported by national focal points) and influenza reports from WHO Regional Offices and Member States. Completeness can vary among updates due to availability and quality of data available at the time when the update is developed.

**Seasonal influenza reviews:**
A review of the 2017–2018 influenza season in the northern hemisphere, was published in August 2018 and can be found here: [http://apps.who.int/iris/bitstream/handle/10665/274263/WER9334.pdf?ua=1&ua=1](http://apps.who.int/iris/bitstream/handle/10665/274263/WER9334.pdf?ua=1&ua=1)

**Epidemiological Influenza updates:**

**Epidemiological Influenza updates archives 2015:**

**Virological surveillance updates:**
[http://www.who.int/influenza/gisrs_laboratory/updates/summaryreport](http://www.who.int/influenza/gisrs_laboratory/updates/summaryreport)

**Virological surveillance updates archives:**

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