Influenza Update N° 409
20 December 2021, based on data up to 5 December 2021

In this update, information on SARS-CoV-2 virus detections from sentinel and non-sentinel surveillance performed by GISRS and GISRS-associated influenza surveillance systems and reported to FluNet is included in addition to the routine influenza surveillance information.

Summary

- The current influenza surveillance data should be interpreted with caution as the ongoing COVID-19 pandemic has influenced to varying extents health seeking behaviours, staffing/routines in sentinel sites, as well as testing priorities and capacities in Member States. Various hygiene and physical distancing measures implemented by Member States to reduce SARS-CoV-2 virus transmission have likely played a role in reducing influenza virus transmission.
- Globally, influenza activity remains low but continued to increase especially in the temperate zones of the northern hemisphere.
- With the increasing detections of influenza during COVID-19 pandemic, countries are encouraged to enhance integrated surveillance to monitor influenza and SARS-CoV-2 at the same time, and step-up their influenza vaccination campaign to prevent severe disease and hospitalizations in high-risk groups of influenza.
- In the temperate zones of the northern hemisphere, influenza activity although still low starts to increase. Both influenza A and B were detected.
- In North America, influenza detections (predominately A(H3N2) among the subtyped) increased but overall remained low. RSV activity decreased in the USA and Canada.
- In Europe, influenza activity continued to increase. Influenza A(H3N2) predominated.
- In East Asia, influenza activity continued on an increasing trend, but overall, influenza illness indicators and activity remained low. Influenza B (Victoria) predominated.
- In the Caribbean and Central American countries, sporadic influenza A and B virus detections, as well as elevated RSV activity were reported in some countries.
- In tropical South America, Influenza A(H3N2) detections were reported from Brazil. Elevated RSV activity and severe acute respiratory infection (SARI) levels were reported in some countries.
- In tropical Africa, influenza activity continued on a decreasing trend after increased activity since September, with both influenza A and B detected.
- In Southern Asia, the number of influenza virus detections reported continued on a decreasing trend, with influenza A(H3N2) predominating.
- In South-East Asia, after several weeks of no detections, one detection of A(H3N2) was reported in the Philippines.
- In the temperate zones of the southern hemisphere, influenza activity remained low compared to previous seasons. Elevated RSV activity and SARI levels were reported in some countries.
- National Influenza Centres (NICs) and other national influenza laboratories from 108 countries, areas or territories reported data to FluNet for the time period from 22 November 2021 to 05 December 2021* (data as of 2021-12-17 08:17:03 UTC). The WHO GISRS laboratories tested more than 234140 specimens during that time period. 7446 were positive
for influenza viruses, of which 4327 (58.1%) were typed as influenza A and 3119 (41.9%) as influenza B. Of the sub-typed influenza A viruses, 276 (9.9%) were influenza A(H1N1)pdm09 and 2520 (90.1%) were influenza A(H3N2). Of the characterized B viruses, 0 (0%) belonged to the B-Yamagata lineage and 2738 (100%) to the B-Victoria lineage.

Percentage of respiratory specimens that tested positive for influenza by influenza transmission zone\(^1\). Map generated on 17 December 2021.

During the COVID-19 pandemic, WHO encourages countries, especially those that have received the multiplex influenza and SARS-CoV-2 reagent kits from GISRS, to continue routine influenza surveillance, test samples from influenza surveillance sites for influenza and SARS-CoV-2 viruses where resources are available and report epidemiological and laboratory information in a timely manner to established regional and global platforms (see the guidance here: https://apps.who.int/iris/rest/bitstreams/1316069/retrieve).

At the global level, SARS-CoV-2 percent positivity from sentinel surveillance continued to decrease and was under 10%. Activity remained under 10% positivity for all regions except the European Region of WHO, where an increasing trend in positivity was observed. Overall positivity from non-sentinel sites continued to decrease, remaining just under 7%. However, among the WHO South-East Asian region non-sentinel sites, positivity continued to increase to almost 35%.

\(^1\) 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: https://cdn.who.int/media/docs/default-source/influenza/influenza-updates/2020/influenza_transmission_zones20180914.pdf?sfvrsn=dba8eca5_3
National Influenza Centres (NICs) and other national influenza laboratories from 47 countries, areas or territories reported data to FluNet for the time period from six WHO regions (African Region: 1; Region of the Americas: 13; Eastern Mediterranean Region: 4; European Region: 21; South-East Asia Region: 4; Western Pacific Region: 4) reported to FluNet from sentinel surveillance sites for time period from 22 Nov 2021 to 05 Dec 2021* (data as of 2021-12-17 08:17:03 UTC). The WHO GISRS laboratories tested more than 54184 sentinel specimens during that time period and 7908 (14.6%) were positive for SARS-CoV-2. Additionally, more than 1171445 non-sentinel or undefined reporting source samples were tested in the same period and 89199 were positive for SARS-CoV-2. Further details are included at the end of this update.

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

- WHO Region of the Americas: www.paho.org/influenzareports
- WHO European Region: www.flunewseurope.org/
- WHO Western Pacific Region: https://www.who.int/westernpacific/emergencies/surveillance/seasonal-influenza

Countries in the temperate zone of the northern hemisphere

- In the temperate zones of the northern hemisphere, influenza activity remained low although increasing.
- In the countries of North America, influenza activity indicators and detections were at low levels with detections of influenza A and B viruses. In Canada, influenza-like illness (ILI) activity remained below expected levels. In the United States of America (USA), ILI activity increased slightly and reached the national baseline but was similar to levels seen in previous pre-COVID 19 years at this time of year. Influenza detections increased but remained low, with influenza A(H3N2) predominating, but other respiratory viruses are contributing to respiratory illness RSV activity continued to be reported in some parts of Canada, though a decrease was observed. In the USA, RSV activity also decreased, but remained at moderate levels compared to previous seasons. Human coronavirus and human metapneumovirus activity appeared to increase in Canada and USA in recent weeks. The percentage of deaths attributed to pneumonia, influenza or COVID-19 in the USA remained above the epidemic threshold established from historical data.

- In Europe, influenza activity started to increase throughout the European Region with 5% of all sentinel primary care specimens from patients presenting with ILI or ARI symptoms testing positive for influenza. A sharp increase of influenza activity (number of detections and % flu positivity) was reported in the Russian Federation and in Sweden with influenza A(H3N2) predominately detected. Pooled all-cause mortality estimates from the EuroMOMO network showed a slight increase overall; high excess mortality that was observed in Ukraine in recent weeks appeared to decrease. RSV activity continued to decrease in England (United Kingdom), Germany and Ireland. Increased RSV activity was observed in the Russian Federation.
In Central Asia, increasing influenza activity mainly due to influenza A(H3N2) was reported in Kazakhstan, Kyrgyzstan and Uzbekistan and influenza A (not subtyped) in Tajikistan.

In Northern Africa, no influenza detections were reported.

In Western Asia, there were influenza detections throughout the subregion. In Western Asia, the overall number of influenza detections has increased in recent weeks. The vast majority of detections were for influenza A, with similar proportions of A(H3N2) and (H1N1)pdm09 viruses and only a few influenza B detections (Victoria lineage where determined). Oman reported a large and increasing number of detections, of which approximately half were influenza A (H1N1)pdm09, half were influenza A(H3N2) and a few were influenza B (Victoria lineage), contributing significantly to the overall pattern for detections in the region.

In East Asia, influenza activity continued on an increasing trend, but overall, influenza illness indicators and activity remained low. Influenza B (Victoria lineage) detections continued to increase in China in both northern and southern provinces. The number of detections remains low compared to previous seasons. Hong Kong SAR reported low ILI activity and very few detections of influenza A(H3N2), influenza A (H1N1)pdm09 and influenza B. Chinese Taipei reported low influenza activity and few influenza A and influenza B detections. In Mongolia, the proportion of hospitalizations and deaths due to pneumonia decreased relative to previous weeks. These deaths and hospitalizations are largely attributed to COVID-19.

Number of specimens positive for influenza by subtype in the European Region of WHO

Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS) Data generated on 17/12/2021
Countries in the tropical zone

Tropical countries of Central America, the Caribbean and South America

- In the Caribbean and Central American countries, sporadic influenza virus detections were reported in Mexico and Haiti (influenza A(H3N2) and B). A few RSV detections were reported in some countries across the subregion, though RSV was reported at elevated levels in Mexico. The number of SARI cases was elevated above the epidemic threshold in El Salvador, Jamaica and moderate in Mexico and High in Jamaica.
- In the tropical countries of South America, influenza A(H3N2) was detected in Brazil. Elevated RSV activity continued to be reported as elevated in Brazil and SARI rate increased from moderate to high levels in the Plurinational State of Bolivia.

Tropical Africa

- In Western Africa, a few influenza A viruses were reported from Côte d’Ivoire, Ghana and Nigeria of which the majority were (H1N1)pdm09 viruses.
- In Middle Africa, Cameroon continued to report decreasing detections of influenza A (H1N1)pdm09 and influenza A(H3N2) viruses.
- In Eastern Africa, Kenya reported a slight increase in influenza A(H3N2) detections following a steady decrease over previous weeks. Mozambique reported a few detections of influenza B (Victoria lineage where determined) and influenza A virus. An A(H3N2) epidemic is ongoing in Mayotte, and the number of detections and some activity indicators have increased slightly. In Réunion, A(H3N2) influenza detections and activity indicators remained in pre-epidemic phase. The United Republic of Tanzania reported a large number of influenza B detections, as well as a few influenza A(H3N2) and (H1N1)pdm09 detections for this reporting period (and retrospectively for previous weeks).
**Tropical Asia**

- In Southern Asia influenza detections have declined in Bangladesh, India, Maldives and Nepal but detections (predominantly influenza A(H3N2)) seem to start to increase in Afghanistan and Iran.
- In South East Asia, after several weeks of no detections, the Philippines reported one positive detection of influenza A(H3N2).

**Number of specimens positive for influenza by subtype in Southern Asia**

![Graph showing number of specimens positive for influenza by subtype in Southern Asia.](image)

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

Data generated on 17/12/2021

**Countries in the temperate zone of the southern hemisphere**

- Overall, influenza activity remained low in Oceania and temperate South America.
- In Oceania, influenza is being detected at very low levels, even below the already low detection rate in 2020, despite ongoing testing.
- In South Africa, sustained detections of influenza virus continue in all surveillance systems. Influenza A(H1N1)pdm09 and A(H3N2) predominated, with a few influenza B detections. COVID-19 detections are increasing in both ILI and pneumonia surveillance systems. Variant identification for these detections is pending. RSV is being detected below seasonal levels.
- In temperate South America, influenza A(H3N2) was detected in Paraguay and Chile. However, overall influenza activity remain lower than previous seasons. RSV activity continued to be reported at moderate but decreasing levels in Chile. SARI hospitalization rates were above epidemic thresholds in Chile and Uruguay.
Number of specimens positive for influenza by subtype in southern hemisphere

SARS-CoV-2 sentinel surveillance data reported to FluNet

- SARS-CoV-2 data are included from those countries reporting testing one or more sentinel specimens for SARS-CoV-2 per week. Influenza data are included from those countries reporting testing one or more sentinel specimens for influenza per week regardless of their reporting of SARS-CoV-2 testing data. Currently, there are a limited number of countries reporting such data to FluNet in a timely and consistent way. The charts below show the data globally and by WHO region from the data reported to date to WHO from a limited number of countries and thus the trends in percent positivity do not reflect the situation as a whole in the region.
Influenza and SARS-CoV-2 virus detections from sentinel surveillance reported to FluNet globally

Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS)
Data generated on 17/12/2021

Influenza and SARS-CoV-2 virus detections from sentinel surveillance reported to FluNet from countries, areas and territories in the WHO African Region

Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS)
Data generated on 17/12/2021
Influenza and SARS-CoV-2 virus detections from sentinel surveillance reported to FluNet from countries, areas and territories in the WHO Region of the Americas

Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS)
Data generated on 17/12/2021

Influenza and SARS-CoV-2 virus detections from sentinel surveillance reported to FluNet from countries, areas and territories in the WHO South-East Asia Region

Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS)
Data generated on 17/12/2021
Influenza and SARS-CoV-2 virus detections from sentinel surveillance reported to FluNet from countries, areas and territories in the WHO European Region

Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS) Data generated on 17/12/2021

Influenza and SARS-CoV-2 virus detections from sentinel surveillance reported to FluNet from countries, areas and territories in the WHO Eastern Mediterranean Region

Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS) Data generated on 17/12/2021
Influenza and SARS-CoV-2 virus detections from sentinel surveillance reported to FluNet from countries, areas and territories in the WHO Western Pacific Region

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

Data generated on 17/12/2021

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. During the COVID-19 pandemic, FluNet has also been receiving updates on testing of samples obtained from routine influenza surveillance systems for SARS-CoV-2. Completeness can vary among updates due to availability and quality of data available at the time when the update is developed.

Virological surveillance updates: https://www.who.int/tools/flunet/flunet-summary
Influenza – COVID-19 Interface, including surveillance outputs: https://www.who.int/teams/global-influenza-programme/influenza-covid19

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