Influenza Update N°433
28 November 2022, based on data up to 13 November 2022

In this update, in addition to the influenza surveillance information, that of the SARS-CoV-2 surveillance by the Global Influenza Surveillance and Response System (GISRS) through its associated sentinel and non-sentinel surveillance systems and reported to FluNet is included. Information on respiratory syncytial virus (RSV) is included where available.

Summary

- Countries are recommended to monitor the co-circulation of influenza and SARS-CoV-2 viruses. They are encouraged to enhance integrated surveillance, and in northern hemisphere countries step-up their influenza vaccination campaign to prevent severe disease and hospitalizations associated with influenza. Clinicians should consider influenza in differential diagnosis, especially for high-risk groups for influenza, and test and treat according to national guidance.
- Globally, influenza activity increased and where subtyped, influenza A(H3N2) viruses predominated.
- In the countries of North America, influenza positivity and influenza-like-illness (ILI) activity increased steeply in recent weeks, indicating an earlier start of the influenza season in comparison with pre-COVID-19-pandemic seasons. Influenza A(H3N2) was the predominant virus detected.
- In Europe, overall influenza activity continued to increase with influenza positivity reported above epidemic threshold in some countries. Influenza A viruses predominated among the reported detections in general, with A(H3N2) viruses accounting for the majority of subtyped influenza A viruses.
- In central Asia, Kazakhstan reported high influenza activity with B/Victoria-lineage viruses predominating.
- In East Asia, influenza activity of predominantly influenza A(H3N2) remained stable at intermediate levels overall.
- In Western Asia influenza activity remained elevated, especially in some countries of the Arabian Peninsula.
- In the Caribbean and Central American countries, influenza activity of predominately influenza A(H3N2) increased in Mexico but remained low in most other reporting countries.
- In the tropical countries of South America, influenza detections were low and A(H3N2) detections predominated.
- In tropical Africa, influenza activity remained low with detections of influenza A(H1N1)pdm09, A(H3N2) and B/Victoria reported.
- In Southern Asia, influenza activity increased steeply mainly due to elevated activity reported in Iran (Islamic Republic of). Influenza A(H3N2) was the most frequently detected subtype in the subregion.
- In South East Asia, detections of predominantly influenza A(H3N2) and influenza B continued to decrease.
- In the temperate zones of the southern hemisphere, influenza activity continued to decrease in most reporting countries, except in temperate South America where activity increased in Argentina and Chile.
Number of specimens positive for influenza by subtype globally


Percentage of respiratory specimens that tested positive for influenza, by influenza transmission zone\(^1\). Map generated on 25 November 2022.

- National Influenza Centres (NICs) and other national influenza laboratories from 125 countries, areas or territories reported data to FluNet for the time period from 31 October 2022 to 13 November 2022 (data as of 2022-11-29 05:35:56 UTC). The WHO GISRS laboratories tested more than 465 365 specimens during that time period. 56 551 were positive for influenza viruses, of which 53 829 (95.2%) were typed as influenza A and 2 722 (4.8%) as influenza B. Of the sub-typed influenza A viruses, 2 024 (16.3%) were influenza A(H1N1)pdm09 and 10 356 (83.7%) were influenza A(H3N2). Of the characterized B viruses (550), 100% belonged to the B-Victoria lineage.

\(^1\)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://www.who.int/publications/m/item/influenza_transmission_zones
SARS-CoV-2 sentinel surveillance

- COVID-19 positivity from sentinel surveillance slightly increased but remained under 10%, after a long-term downturn beginning in mid-2022. Activity appeared to increase in the African Region, Eastern Mediterranean Region and Region of the Americas, with percent positivity remaining below 10%. In the European and South-East Asia Region, positivity was stable slightly above 10%. In the Western Pacific Region, positivity declined below 10%. Globally, COVID-19 positivity from non-sentinel surveillance increased in recent weeks and was around 10%.

- 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 conduct integrated surveillance of influenza and SARS-CoV-2 and report epidemiological and laboratory information in a timely manner to established regional and global platforms. The guidance can be found here: https://www.who.int/publications/i/item/WHO-2019-nCoV-integrated_sentinel_surveillance-2022.1.

- NICs and other national influenza laboratories from 63 countries, areas or territories from six WHO regions (African Region: 9; Region of the Americas: 17; Eastern Mediterranean Region: 4; European Region: 24; South-East Asia Region: 4; Western Pacific Region: 5) reported to FluNet from sentinel surveillance sites for the time period from 31 October 2022 to 13 November 2022 (data as of 2022-11-25 08:22:37 UTC). The WHO GISRS laboratories tested more than 41,704 sentinel specimens during that time period and 2,970 (7.1%) were positive for SARS-CoV-2. Additionally, more than 156,762 non-sentinel or undefined reporting source samples were tested in the same period and 13,620 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 Eastern Mediterranean Region: https://www.emro.who.int/health-topics/influenza/updates.html
- WHO European Region: www.flunewsurope.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 countries of North America, influenza positivity and ILI activity increased steeply in recent weeks, indicating an earlier start of the influenza season in comparison with pre-COVID-19-pandemic seasons. In Canada, ILI activity increased well above the pre-pandemic seasonal average for this time of year. Influenza percent positivity was above the seasonal threshold for several weeks, indicating the start of the seasonal epidemic, and was also well above the pre-pandemic seasonal average for this time of year. Influenza-associated hospitalizations increased sharply, and paediatric hospitalizations were at levels typical of the peak of epidemic activity. In the United States of America (USA), ILI continued to increase well above levels observed for this time of the year during the past five seasons, with increases observed in all age-groups and across the country.
hospitalizations to date were greater compared to the same data for past seasons since 2010-11. The percentage of deaths attributed to pneumonia, influenza or COVID-19 in the USA remained above the epidemic threshold established from historical data, with the majority of recent mortality attributed to COVID-19. In both countries, several respiratory viruses were co-circulating. Influenza A viruses predominated and A(H3N2) viruses accounted for the majority of subtyped influenza A viruses, but with a slightly increased proportion of influenza A(H1N1)pdm09 viruses detected in the USA. RSV activity increased further in both countries and remained above average levels for this time of year in Canada.

- In Europe, overall influenza activity continued on an increasing trend, with influenza positivity from all sentinel sites reported above epidemic threshold. Influenza A(H3N2) predominated among the subtyped influenza A viruses, with some detections of A(H1N1)pdm09 and B viruses. Activity was reported above the epidemic threshold in Georgia, Germany, Portugal and the United Kingdom of Great Britain and Northern Ireland (Scotland). Germany and Portugal reported widespread activity. Malta continued to report high-intensity activity with local spread. Rising cases of RSV infections were reported from several countries in the region. Pooled all-cause mortality estimates from the EuroMomo network continued to show increased excess mortality across some age-groups.

- In Central Asia, influenza activity was high in Kazakhstan, with detections of largely B viruses (Victoria where lineage determined); ILI and severe acute respiratory infections (SARI) activity were also elevated.

- In Northern Africa, sporadic detections of influenza B were reported in Morocco and Tunisia and sporadic detections of influenza A(H3N2) were reported in Morocco.

- In Western Asia, detections of influenza continued to increase in some countries of the Arabian Peninsula, with all seasonal influenza subtypes co-circulating in the United Arab Emirates, influenza A(H1N1)pdm09 and B viruses predominating in Qatar and Saudi Arabia. Detections of all seasonal influenza subtypes appeared to decrease in Bahrain and Oman. Increased detections of influenza A(H3N2) and A(H1N1)pdm09 were reported in Georgia and Iraq, respectively. ILI and SARI activity increased in Georgia, Saudi Arabia and Türkiye in recent weeks.

- In East Asia, influenza activity decreased slightly in China, with influenza A(H3N2) viruses predominant. The Republic of Korea reported increased detections of influenza A(H3N2) viruses and one influenza B/Yamagata lineage virus detection in week 43/2022; ILI activity continued to increase with higher rates among children and young adults; RSV activity remained elevated in children under one year of age. In Mongolia, the ILI rate and the proportion of hospitalizations due to pneumonia remained above expected levels; detections of respiratory viruses other than influenza increased slightly in recent weeks with human metapneumovirus and rhinovirus most frequently detected.
Number of specimens positive for influenza by subtype in North America

Number of specimens positive for influenza by subtype in Western Asia

Countries in the tropical zone

Tropical countries of Central America, the Caribbean and South America

- In the Caribbean and Central American countries, influenza activity of predominately influenza A(H3N2) increased in recent weeks, mainly due to increased circulation in Mexico. RSV activity remained low overall. In Puerto Rico, detections of predominantly influenza A increased and were above the average for the time of year and above the seasonal threshold. In Guatemala, influenza activity and ILI rate continued to increase and were at moderate levels, with detections of mainly influenza A(H3N2) followed by influenza B/Victoria lineage viruses. Nicaragua continued to report detections of influenza B, with percent positivity at low levels but increased above the average for the time of year. In Panama, influenza detections of A(H3N2) and B viruses increased slightly in recent weeks; RSV detections continued to be reported. In Jamaica, pneumonia activity was at a moderate level and increasing. In Costa Rica, SARI cases decreased slightly but remained at moderate levels. In El Salvador, the SARI rate continued to increase to a moderate level and above the expected level for this time of year.

- In the tropical countries of South America, influenza detections generally remained low and A(H3N2) viruses predominated. In Bolivia (Plurinational State of) influenza detections were
few but increased and percent positivity rose to a moderate level. SARI activity increased above the moderate threshold. In Colombia, influenza detections were at a baseline level but pneumonia and ARI were both at low levels, just below the moderate threshold and higher than the average for the time of year. In Brazil, RSV activity continued at elevated levels but with a decreasing trend. Elsewhere, RSV activity remained at baseline levels.

Tropical Africa

- In Western Africa, the overall number of reported influenza detections decreased, with mainly influenza B and some influenza A(H3N2) detections reported. Côte d’Ivoire reported sporadic influenza A(H3N2) detections. Ghana reported detections of mainly influenza B/Victoria and fewer influenza A(H3N2) viruses. Guinea reported sporadic influenza A(H1N1)pdm09 and A(H3N2) detections.
- In Middle Africa, Gabon reported sporadic detections of influenza A(H3N2) viruses.
- In Eastern Africa, influenza A and B detections decreased. Ethiopia reported few detections of influenza A(H1N1)pdm09, influenza A(H3N2) and influenza B viruses. Madagascar reported few detections of influenza A and B viruses. Mozambique reported increasing influenza A(H1N1)pdm09 detections. An influenza epidemic driven primarily by influenza A(H1N1)pdm09 with co-circulation of influenza A(H3N2) and influenza B continued in the French territory of Réunion, with increased influenza detections among hospitalized patients. Zambia continued to report elevated detections of mainly influenza B viruses and fewer influenza A(H1N1)pdm09 viruses.

Tropical Asia

- In Southern Asia, influenza activity increased steeply mainly due to increased detections in Iran (Islamic Republic of), where predominantly influenza A(H3N2) followed by influenza A(H1N1)pdm09 and few influenza B detections were reported. Influenza detections increased in Sri Lanka, with all seasonal subtypes co-circulating. Influenza activity decreased in Bhutan, with influenza A(H3N2) viruses most frequently detected. In Pakistan, influenza detections of mainly B/Victoria lineage continued to be reported at a moderate level. In India, Maldives and Nepal, influenza detections remained low.
- In South-East Asia, influenza activity decreased in all countries reporting this period except in Malaysia and Thailand where increased detections of influenza A(H3N2) and B were reported.
Countries in the temperate zone of the southern hemisphere

- In Oceania, influenza activity remained low overall with a few detections of influenza A viruses reported in Australia. Influenza activity remained very low in New Zealand and the hospitalization rate for SARI in children under five years and those over 80 years of age decreased significantly in recent weeks. In the Pacific Islands, ILI activity overall was low or decreased except in Fiji and Tuvalu.

- In South Africa, detections of influenza A(H3N2) and influenza B/Victoria continued to decrease and influenza detection rates in ILI and pneumonia surveillance returned to inter-seasonal levels. There were few SARS-CoV-2 or RSV detections and the detection rate for RSV in children under five years of age remained below the epidemic threshold.

- In temperate South America, influenza detections remained elevated in Argentina and Chile. In Argentina, influenza B was predominant followed by influenza A(H1N1)pdm09 and positivity remained elevated at a moderate level while ILI was low. In Chile, influenza A(H3N2) predominated and percent positivity and ILI rates reached extraordinary levels, while the SARI rate remained low. In Uruguay, influenza detections of B/Victoria lineage were low. RSV remained low in the subregion.
Number of specimens positive for influenza by subtype in Oceania

Data source: FluNet (www.who.int/toolkits/flunet), Global Influenza Surveillance and Response System (GISRS) Data generated on 25/11/2022

Number of specimens positive for influenza by subtype in Southern Africa

Data source: FluNet (www.who.int/toolkits/flunet), Global Influenza Surveillance and Response System (GISRS) Data generated on 25/11/2022

Number of specimens positive for influenza by subtype in Temperate South America

Data source: FluNet (www.who.int/toolkits/flunet), Global Influenza Surveillance and Response System (GISRS) Data generated on 25/11/2022
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. Additional information on data reported from countries can be found on the Integrated influenza and other respiratory viruses surveillance outputs dashboard here.

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 25/11/2022
Influenza and SARS-CoV-2 virus detections from sentinel surveillance reported to FluNet from countries, areas and territories in the WHO African Region


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

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


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

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


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


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 and other respiratory virus 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](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](https://www.who.int/teams/global-influenza-programme/influenza-covid19)

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