**Influenza Update N° 460**

11 December 2023, based on data up to 26 November 2023

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 the surveillance data platform FluNet hosted by RespiMART is included. Information on respiratory syncytial virus (RSV) is included where available.

**Summary**

- **Countries are recommended to monitor the relative co-circulation of influenza and SARS-CoV-2 viruses in integrated surveillance** and report to RespiMART (FluNet and FluID) directly or via regional platforms. Clinicians should consider influenza in differential diagnosis, especially for high-risk groups for influenza, and test and treat according to national and WHO guidance.

  - Globally, influenza detections increased due to increases in parts of the temperate Northern hemisphere, including parts of Europe and Central Asia, North America, and Eastern and Western Asia.

  - In the countries of North America, influenza detections increased and activity was above the seasonal baseline and within expected levels for the time of year. Influenza A(H1N1)pdm09 viruses predominated among the detections.

  - In Europe and Central Asia, in the most recent week, influenza activity remained low overall but has been increasing over the past few weeks. Of forty reporting countries, activity was reported at medium intensity in six, low intensity in twelve and below baseline in the others, and geographic spread was widespread in four reporting countries. Among the influenza detections in primary care sentinel surveillance, influenza A viruses predominated with similar numbers of A(H1N1)pdm09 and A(H3N2) virus detections.

  - In Northern Africa, detections of predominantly influenza A(H1N1)pdm09 were elevated, mainly due to activity in Egypt.

  - In East Asia, influenza activity continued to increase mainly due to activity in China and the Republic of Korea, with influenza A(H3N2) and A(H1N1)pdm09 viruses more frequently detected, respectively.

  - In Western Asia, influenza activity remained elevated in some countries of the Arabian Peninsula and remained low in other reporting countries.

  - In the Central American and Caribbean countries, influenza activity remained moderate in the Caribbean with detections of predominantly influenza A(H1N1)pdm09 and remained low but increased in Central America with detections of predominantly B/Victoria lineage viruses.

  - In tropical south America, influenza activity remained low.

  - In tropical Africa, influenza detections decreased in Western Africa but increased in Eastern and Middle Africa. Influenza A(H3N2) viruses were predominant but all seasonal influenza subtypes were reported.

  - In Southern Asia, influenza activity driven predominantly by influenza A(H1N1)pdm09 decreased overall due to decreases in Iran (Islamic Republic of) and India.

  - In South-East Asia, influenza activity driven by all seasonal subtypes decreased overall, however influenza detections of all seasonal subtypes increased in Cambodia.
In the temperate zones of the southern hemisphere, indicators of influenza activity were reported at low levels or the below seasonal threshold in most reporting countries.

National Influenza Centres (NICs) and other national influenza laboratories from 122 countries, areas or territories reported data to FluNet for the period from 13 November 2023 to 26 November 2023 (data as of 08/12/2023 06:22:56 AM UTC). The WHO GISRS laboratories tested more than 301 639 specimens during that period. 36 530 were positive for influenza viruses, of which 32 078 (87.8%) were typed as influenza A and 4861 (12.2%) as influenza B. Of the sub-typed influenza A viruses, 4861 (18.6%) were influenza A(H1N1)pdm09 and 21 327 (81.4%) were influenza A(H3N2). Of the type B viruses for which lineage was determined, all (2892) belonged to the B/Victoria lineage.

Number of specimens positive for influenza by subtype globally

Data source: FluNet (www.who.int/toolkits/flunet), Global Influenza Surveillance and Response System (GISRS)
Data generated on 07/12/2023

Percentage of respiratory specimens testing positive for influenza, by influenza transmission zone

Map generated on 08 December 2023.

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 and RSV sentinel surveillance

- Globally, SARS-CoV-2 positivity from sentinel surveillance decreased to just above 3%. Positivity was highest in the European Region, where it was stable at around 15%. Positivity was stable around or below 5% in the other regions. SARS-CoV-2 positivity from non-sentinel surveillance was around 16% globally.

- In countries with RSV surveillance in place, RSV activity increased in North America and Europe, with activity above the seasonal threshold in most reporting countries in Europe. Activity remained elevated in Central America and the Caribbean and was generally low or decreasing elsewhere.

- 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 80 countries, areas or territories from six WHO regions (African Region: 12; Region of the Americas: 18; Eastern Mediterranean Region: 6; European Region: 31; South-East Asia Region: 7; Western Pacific Region: 6) reported to FluNet from sentinel surveillance sites for time period from 12 November 2023 to 26 November 2023 (data as of 08/12/2023 06:22:56 AM UTC). The WHO GISRS laboratories tested more than 27 132 sentinel specimens during that period and 1199 (4.4%) were positive for SARS-CoV-2. Additionally, more than 26 830 non-sentinel or undefined reporting source samples were tested in the same period and 4684 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 African Region: https://www.afro.who.int/health-topics/influenza
- WHO Eastern Mediterranean Region: www.emro.who.int/health-topics/influenza/updates.html
- WHO European Region: https://erviss.org/
- WHO Western Pacific Region: ww.who.int/westernpacific/emergencies/surveillance/seasonal-influenza

Countries in the temperate zone of the northern hemisphere

- In the countries of North America, influenza activity increased and was above the seasonal baseline as expected for the time of year. Influenza A(H1N1)pdm09 was predominant. In the United States of America, increasing influenza activity was observed in most parts of the country. Influenza-like illness increased, remaining above the baseline nationally, and was typically higher in southern states. The number of new hospital admissions for influenza per week continued to increase. In Canada, detections of predominantly influenza A(H1N1)pdm09 increased, and activity crossed the seasonal threshold. Positivity for influenza varied by region. Influenza-like illness (ILI) increased but remained within expected levels for this time of year. In both countries, SARS-CoV-2 detections increased and were elevated overall, with activity varying regionally. RSV activity increased in both countries.
In Europe, influenza activity overall in the region remained low but was increasing. In the most recent week, six countries (Bulgaria, Denmark, Lithuania, Malta, Russian Federation and Slovakia) reported medium intensity influenza activity, twelve reported low intensity activity and twenty-two reported baseline intensity. Influenza activity was reported as widespread in four countries (Denmark, Norway, Spain and the United Kingdom of Great Britain and Northern Ireland (Scotland)), regional in five, and sporadic, low or no activity in the other reporting countries. Influenza-like illness or acute respiratory infection activity were above the seasonal baseline in twelve out of thirty-five reporting countries in the most recent week. Among the influenza detections in primary care sentinel surveillance, influenza A viruses predominated with similar numbers of A(H1N1)pdm09 and A(H3N2) virus detections. SARS-CoV-2 detections in primary care sentinel surveillance remained stable overall but increased trends were reported in thirteen countries and remained stable overall in sentinel SARI surveillance. RSV positivity from primary care sentinel surveillance was stable overall but increased in eight reporting countries in the region. Severe acute respiratory infection (SARI) hospitalizations for influenza were low but increased for RSV, predominantly in children. Non-sentinel hospitalizations for RSV decreased in all three reporting countries. Pooled all-cause mortality estimates from the EuroMOMO network showed elevated excess mortality in adults aged 65 years and older, similar to patterns observed during this period in previous years.2

- In Northern Africa, influenza A(H1N1)pdm09 predominated, followed by influenza B viruses. Algeria reported detections of all seasonal subtypes. Tunisia reported sporadic influenza A(H1N1)pdm09 and A(H3N2) activity. Egypt reported elevated detections of predominantly influenza A(H1N1)pdm09 virus detections.

- In Eastern Asia, influenza activity continued to increase, mainly due to activity in China and the Republic of Korea. In China, ILI was above usual levels for this time of year and continued to increase in the northern provinces, remaining below the peak in 2022-2023. Detections were predominantly influenza A(H3N2) followed by B/Victoria lineage viruses. In October, in sentinel surveillance, the positivity for influenza was greater than that for SARS-CoV-2. In Hong Kong SAR, ILI, influenza detections and influenza-associated hospitalizations decreased, and activity was reported at low levels. SARS-CoV-2 activity in sentinel surveillance was also low. In Japan, detections of influenza A(H1N1)pdm09 and A(H3N2) viruses were reported in recent weeks and influenza detections at sentinel sites remained elevated. In Mongolia, ILI rates and the proportion of pneumonia among hospitalized patients remained at the upper tolerance limits. In the Republic of Korea, influenza-like illness remained elevated above usual levels for this time of year, and increased especially in 7 to 18-year-olds, with A(H1N1)pdm09 viruses predominant, followed by A(H3N2) viruses. Influenza and rhinovirus were the most detected respiratory viruses in outpatient and inpatient surveillance. SARS-CoV-2 positivity in sentinel surveillance remained stable around 10%.

- In Western Asia, influenza activity driven by all seasonal subtypes, continued to be reported in some countries of the Arabian Peninsula, with elevated detections reported from Bahrain, Oman, Qatar and the United Arab Emirates (UAE). Detections increased in Qatar and decreased or remained stable elsewhere. Influenza activity remained low in other reporting

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2 Please refer to the EuroMOMO website for a cautionary note relating to interpretation of these data.
countries. ILI activity remained elevated in Türkiye, with SARS-CoV-2 positivity in sentinel surveillance samples above 25%. SARI activity decreased slightly in Qatar.

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

Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS) Data generated on 11/12/2023

**Number of specimens positive for influenza by subtype in Europe**

Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS) Data generated on 11/12/2023

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

Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS) Data generated on 07/12/2023
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 Central American and Caribbean countries, influenza activity remained moderate in the Caribbean and increased but remained low in Central America. Influenza A(H1N1)pdm09 and A(H3N2) were predominant in the Caribbean, and influenza B/Victoria was predominant in Central America. Influenza detections remained elevated in Barbados, with influenza A(H1N1)pdm09 and A(H3N2) predominant. Influenza and SARI activity decreased to below baseline levels in Haiti. In Jamaica, pneumonia remained at moderate levels. In St Lucia, SARI activity was elevated. Influenza detections remained low in Central America but increased in Mexico where activity driven predominantly by influenza A(H1N1)pdm09 was above the seasonal baseline at low levels. ILI and SARI activity were low or below baseline in most reporting countries, except Mexico where activity was moderate due to influenza, RSV and SARS-CoV-2. SARS-CoV-2 activity was low overall but elevated in a few countries. RSV activity declined in the Caribbean and remained at moderate levels in Central America. In the Dominican Republic, El Salvador and Guatemala RSV activity declined but remained elevated. RSV activity also declined in St Lucia and Honduras. RSV activity remained elevated in Nicaragua and Panama.

- In tropical South America, influenza A and B detections were few overall. Detections of primarily influenza A(H1N1)pdm09 followed by influenza B and percent positivity continued to increase in Colombia and Ecuador, reaching low epidemic levels in Ecuador and remaining below baseline in Colombia. Detections of influenza B/Victoria declined in Venezuela. Pneumonia was moderate in Ecuador. SARS-CoV-2 activity continued to be detected across the subregion and was moderate in Ecuador. RSV activity remained low overall but increased in Colombia.
Number of specimens positive for influenza by subtype in Central America and Caribbean

![Graph showing influenza detections over time](image)

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

Data generated on 07/12/2023

### Tropical Africa

- **In Western Africa,** detections of mainly influenza A(H3N2) decreased in all reporting countries. ILI and SARI activity also decreased in all reporting countries and SARS-CoV-2 activity remained low. In Middle Africa, influenza A(H3N2) detections increased, and were elevated and increasing in the Democratic Republic of the Congo and sporadic in the Central African Republic. Cameroon reported increased detections of all seasonal subtypes but influenza B/Victoria lineage viruses predominated. ILI and SARI increased in Cameroon.

- **In Eastern Africa,** detections of predominantly influenza A(H3N2) increased. Detections of predominantly influenza A(H3N2) were elevated in Ethiopia and increased in Madagascar. Mozambique reported increasing influenza B detections. Mauritius and the United Republic of Tanzania reported stable and decreasing influenza detections, respectively. Influenza continued to circulate at epidemic levels in Mayotte, while activity in Réunion was at post-epidemic levels. SARI and ILI activity increased in Madagascar. ILI activity increased in Ethiopia. SARS-CoV-2 activity increased in Mauritius and in the United Republic of Tanzania.

### Tropical Asia

- **In Southern Asia,** influenza activity continued to decrease, primarily due to decreased detections in Iran (Islamic Republic of) and India. Influenza detections of predominantly influenza A(H1N1)pdm09 viruses remained elevated in Iran. Detections of predominantly influenza A(H3N2) increased from low levels in Afghanistan, Pakistan and Sri Lanka. ILI and SARI also increased in Afghanistan. Detections of all seasonal subtypes continued in Bhutan. Influenza A and B detections continued to be detected in the Maldives. Bangladesh and Nepal reported few detections of influenza A and B viruses. SARS-CoV-2 detections in integrated sentinel surveillance were low in the region.

- **In South-East Asia,** influenza detections decreased overall, with all seasonal subtypes reported. Detections of all seasonal subtypes increased in Cambodia, and SARI and SARS-CoV-2 activity also increased slightly. Influenza detections continued to decrease in Singapore and the Philippines. Detections were stable in Lao People’s Democratic Republic and Thailand. SARS-CoV-2 activity remained low in reporting countries.
Number of specimens positive for influenza by subtype in Eastern Africa

Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS) Data generated on 07/12/2023

Number of specimens positive for influenza by subtype in Southern Asia

Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS) Data generated on 07/12/2023
Countries in the temperate zone of the southern hemisphere

- In Oceania, influenza activity remained low, with influenza A predominant. In Australia, influenza detections were low overall but remained elevated in some states. Influenza A predominated. SARS-CoV-2 activity increased in some states but remained low overall. RSV activity was low in reporting states. In New Zealand, influenza activity remained low. SARI activity was low, with rhinovirus being the most detected virus in SARI surveillance. Influenza-confirmed SARI was below baseline levels. In the Pacific Islands, influenza A, influenza B and RSV continued to circulate in the Northern Mariana Islands. In French Polynesia, influenza activity increased but remained moderate, and COVID-19 cases increased. COVID-19 cases increased slightly in Tonga. ILI increased in Samoa and Wallis & Futuna.

- In Southern Africa, South Africa reported influenza activity indicators and RSV activity below seasonal thresholds. Low numbers of influenza B detections were reported in recent weeks. SARS-CoV-2 detections in sentinel surveillance programmes remained stable.

- In temperate South America, influenza detections were few and positivity remained below baseline, except in Chile where detections of predominantly influenza B/Victoria remained elevated and positivity was above the seasonal threshold at low levels. In Chile, ILI and SARI were stable at moderate and just below baseline levels respectively, with influenza and SARS-CoV-2 accounting for most activity. In Paraguay, SARI remained above the seasonal baseline at low levels, with SARS-CoV-2 accounting for most activity. SARS-CoV-2 activity in sentinel surveillance was elevated in Chile, low in other reporting countries and decreased in Paraguay and Uruguay. RSV activity was low in all reporting countries.

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 positivity 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 07/12/2023

Influenza and SARS-CoV-2 virus positivity 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 07/12/2023
Influenza and SARS-CoV-2 virus positivity 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 07/12/2023

Influenza and SARS-CoV-2 virus positivity 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 07/12/2023
Influenza and SARS-CoV-2 virus positivity 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 07/12/2023

Influenza and SARS-CoV-2 virus positivity 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 07/12/2023
Influenza and SARS-CoV-2 virus positivity 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 07/12/2023

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) hosted by WHO RespiMART platform 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
Influenza – COVID-19 Interface, including surveillance outputs: https://www.who.int/teams/global-influenza-programme/influenza-covid19

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