Influenza Update N° 440

06 March 2023, based on data up to 19 February 2023

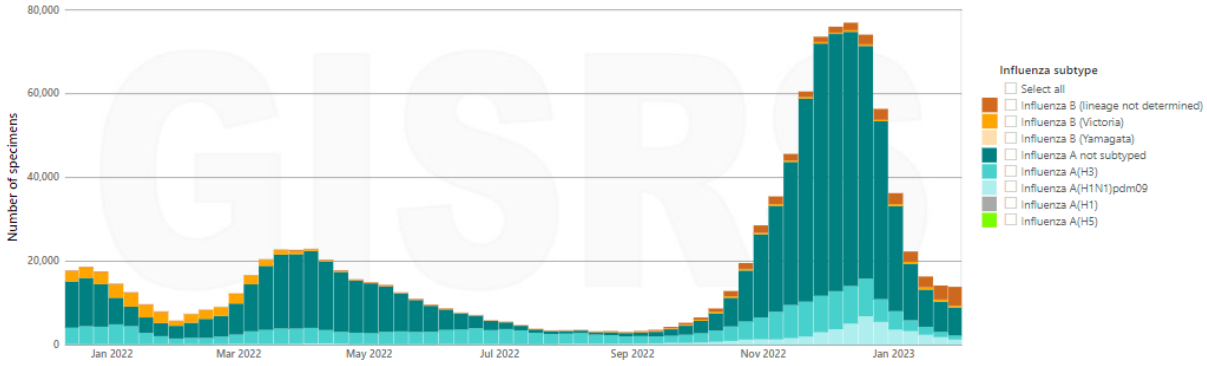
In this update, in addition to the influenza surveillance information, that of the SARS-CoV-2 surveillance by the Global Influenza Surveillance and Response System (GISRS) through its associated sentinel and non-sentinel surveillance systems and reported to FluNet is included. Information on respiratory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

Summary

- **Countries are recommended to monitor the relative co-circulation of influenza and SARS-CoV-2 viruses and report to FluNet and FLUID directly or via regional platforms. 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. Because of changes in surveillance of respiratory viruses during the COVID-19 pandemic, comparisons of current data with that from previous seasons should be interpreted with caution.**
- Globally, influenza activity continued to decrease following the peak in late 2022. Influenza A viruses predominated with a slightly larger proportion of A(H1N1)pdm09 viruses detected among the subtyped influenza A viruses. The proportion of influenza B virus detections increased during this reporting period.
- In the countries of North America, most indicators of influenza activity decreased to levels similar or below levels typically observed towards the end of the season. Influenza A viruses predominated and influenza A(H3N2) accounted for the majority of subtyped influenza A viruses in the United States of America (USA), whereas A(H1N1)pdm09 accounted for the majority of subtyped influenza A viruses in Canada.
- In Europe, overall influenza detections remained stable and influenza positivity from sentinel sites increased in the most recent week, remaining above the epidemic threshold at the regional level. Out of 39 countries, 18 reported high or moderate intensity, and over half continued to report widespread activity. Overall, influenza A and B viruses were detected at similar proportions in both sentinel and non-sentinel surveillance. The proportion of influenza B viruses increased in recent weeks. Other indicators of influenza activity remained stable or decreased in most countries while a few countries reported increases.
- In Central Asia, influenza activity decreased overall.
- In Northern Africa, activity driven by all seasonal influenza subtypes was low and continued to decrease in Morocco and Tunisia.
- In Western Asia, influenza activity continued to be reported in some countries with detections of all seasonal influenza subtypes.
- In East Asia, influenza activity of predominantly A(H1N1)pdm09 steeply increased in China but decreased in the other reporting countries.
- In the Caribbean and Central American countries, influenza activity of mainly influenza A(H3N2) and B viruses continued to decrease.
- In the tropical countries of South America, influenza remained low with all seasonal subtypes co-circulating and influenza B/Victoria predominant

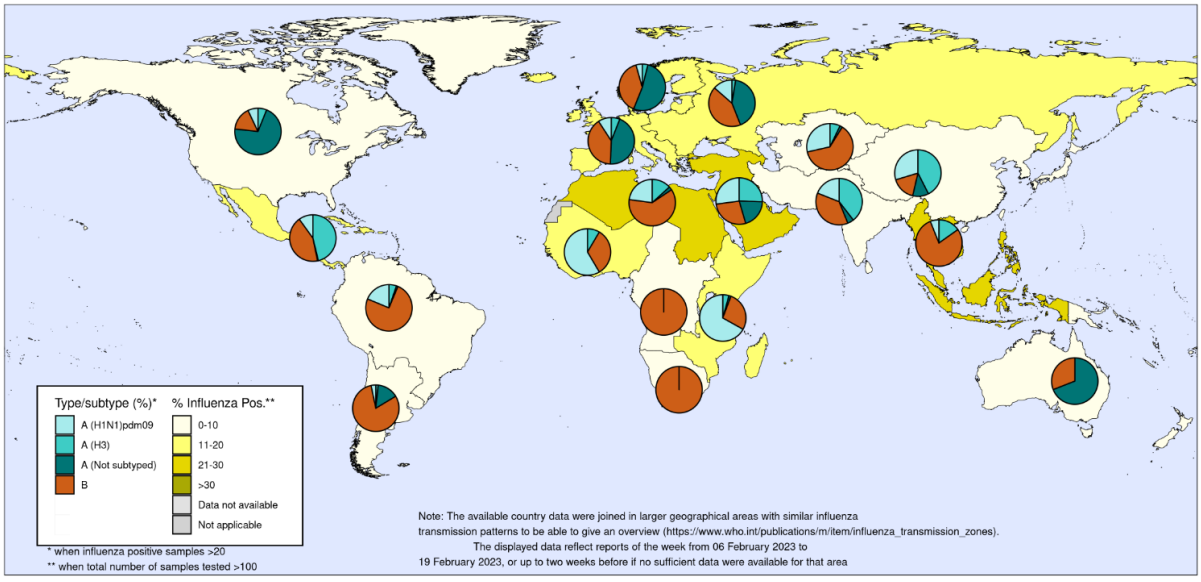
- In tropical Africa, influenza activity was highest in eastern Africa but remained low overall with detections of all seasonal influenza subtypes reported.
- In Southern Asia, influenza activity remained low with all seasonal influenza subtypes detected.
- In South-East Asia, detections of predominantly influenza B viruses remained elevated, mainly due to continued detections in Malaysia.
- In the temperate zones of the southern hemisphere, influenza activity remained at inter-seasonal levels.
- Globally, RSV activity was generally low or decreasing.

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 02/03/2023

Percentage of respiratory specimens that tested positive for influenza, by influenza transmission zone[1]. Map generated on 02 March 2023.



[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

- National Influenza Centres (NICs) and other national influenza laboratories from 112 countries, areas or territories reported data to FluNet for the time period from 06 February 2023 to 19 February 2023 (data as of 2023-03-10 10:39:46 UTC). The WHO GISRS laboratories tested more than 452 053 specimens during that time period. 31912 were positive for influenza viruses, of which 18760 (58.8%) were typed as influenza A and 13152 (41.2%) as influenza B. Of the sub-typed influenza A viruses, 4159 (66.2%) were influenza A(H1N1)pdm09 and 2144 (33.8%) were influenza A(H3N2). Of the characterized B viruses, 100% (1094) belonged to the B/Victoria lineage.

SARS-CoV-2 sentinel surveillance

- SARS-CoV-2 positivity from sentinel surveillance remained around 20% globally. Activity was around 25% in the WHO Region of the Americas, decreased to around 10% in in the Western Pacific Region and remained under 10% in the other regions. SARS-CoV-2 positivity from non-sentinel surveillance was reported around 25% globally.
- 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.
- National Influenza Centres (NICs) and other national influenza laboratories from 81 countries, areas or territories from six WHO regions (African Region: 12; Region of the Americas: 19; Eastern Mediterranean Region: 5; European Region: 36; South-East Asia Region: 3; Western Pacific Region: 6) reported to FluNet from sentinel surveillance sites for time period from 06 February 2023 to 19 February 2023 (data as of 2023-03-02 10:39:46 UTC). The WHO GISRS laboratories tested more than 42 664 sentinel specimens during that time period and 8182 (19.2%) were positive for SARS-CoV-2. Additionally, more than 118 121 non-sentinel or undefined reporting source samples were tested in the same period and 30 995 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.flunewseurope.org/
- WHO Western Pacific Region:https://www.who.int/westernpacific/emergencies/surveillance/seasonal-influenza

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Countries in the temperate zone of the northern hemisphere

- In the countries of North America, influenza activity was low with most indicators of influenza activity at levels similar or below levels typically observed towards the end of the season. In Canada, influenza-like activity (ILI) activity was below expected levels for this time of year. Influenza-associated paediatric hospitalizations remained low. In the USA, the percentage of outpatients visits for respiratory illness remained just above the

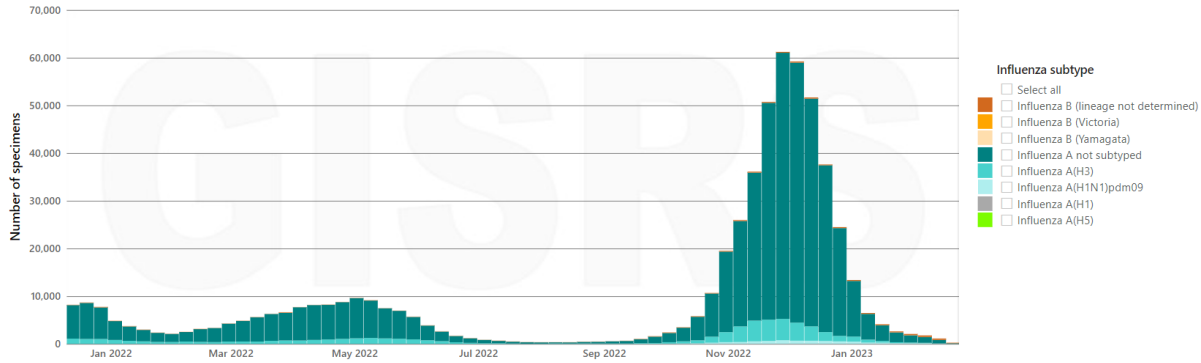
national seasonal baseline and was minimal in most regions. Weekly influenza-associated hospitalization rates decreased further. The cumulative rate of influenza-associated hospitalizations this season was greater than those of previous seasons at this time of the year but has been stable in recent weeks. The percentage of deaths attributed to pneumonia, influenza or COVID-19 in the USA decreased and remained above the epidemic threshold established from historical data, with the majority of recent mortality attributed to COVID-19 and a small proportion due to influenza in recent weeks. Influenza positivity was low in both countries, and several respiratory viruses co-circulated. Influenza A viruses predominated, and influenza A(H3N2) accounted for the majority of subtyped influenza A viruses in the United States of America whereas A(H1N1)pdm09 accounted for the majority of subtyped influenza A viruses in Canada. The proportion of influenza B viruses increased during this period in both countries. RSV activity was low in both countries.

- In Europe, overall influenza detections remained stable and influenza positivity from sentinel sites increased in the most recent week, remaining above the epidemic threshold at the regional level. Out of 39 countries, 18 reported high or moderate intensity, and over half continued to report widespread activity in the most recent week. Overall, influenza A and B viruses were detected at similar proportions in both sentinel and non-sentinel surveillance. The proportion of sentinel specimens testing positive for influenza remained greater than the proportion testing positive for SARS-CoV-2.In Eastern Europe, very high intensity was reported in the Russian Federation and high intensity was reported in Kosovo (in accordance with UN Security Council Resolution 1244 (1999)) and Slovakia. Widespread activity was still reported in most countries. Influenza positivity among sentinel samples was above 10% in Czechia, Hungary, Kosovo (in accordance with UN Security Council Resolution 1244 (1999)), Poland, Republic of Moldova, Romania, Slovakia, and Ukraine. Influenza B was predominant in Belarus, Republic of Moldova and the Russian Federation. In Northern Europe, most countries in the subregion reported low to medium intensity. Regional or widespread activity was reported in most countries. Influenza positivity among sentinel samples was above 10% in Denmark, Ireland and Norway. Influenza B virus was reported as predominant in Ireland and Lithuania and the United Kingdom. Influenza A and B co-circulated in Norway. Influenza hospitalizations increased slightly above baseline in the United Kingdom of Great Britain and Northern Ireland, but influenza ICU admissions remained stable below the baseline. In South West Europe, influenza detections remained stable overall. Most countries in the subregion reported low to medium intensity but high intensity was reported in Bosnia and Herzegovina and Croatia. Regional or widespread activity was reported in most countries. Influenza positivity among sentinel samples was above 10% in Austria, Belgium, France, Germany, Italy, Luxembourg, the Netherlands, Slovenia, Spain and Switzerland. Influenza B viruses were predominant among sentinel samples in Austria, Germany, France, Luxembourg and Spain while A and B viruses co-circulated in Slovenia and Switzerland. The proportion of ILI among all consultations increased in Denmark. ILI/ARI decreased slightly or remained stable in Belgium, France (where it remained low), Germany, Luxembourg and Switzerland. Influenza hospitalizations decreased in France to a low level. Pooled all-cause mortality estimates from the EuroMomo network showed an elevated but decreasing excess mortality in all age groups.[2]

[2] Please refer to the EuroMOMO website for a cautionary note relating to interpretation of these data.

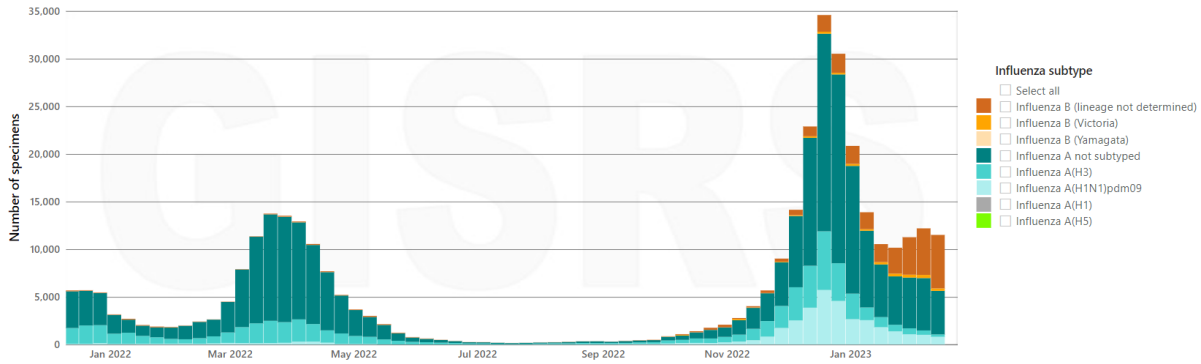
- In Central Asia, influenza detections decreased overall. Influenza B viruses predominated in Kyrgyzstan and Tajikistan.
- In Northern Africa, influenza detections were few and decreasing in all reporting countries, with Tunisia reporting mostly influenza B/Victoria viruses and fewer influenza A(H1N1)pdm09 and A(H3N2) viruses, and Morocco reporting detections of influenza A(H3N2) and B/Victoria.
- In Western Asia, influenza activity decreased slightly in Armenia and Israel with influenza A(H1N1)pdm09 predominant, followed by a smaller proportion of influenza B viruses. Jordan retrospectively reported activity driven by mainly influenza A(H1N1)pdm09 viruses in previous months. Detections continued to be reported at low levels across other reporting countries. ILI activity was elevated in Azerbaijan, though influenza detections were sporadic. In East Asia, influenza activity increased steeply in both northern and southern provinces in China, with A(H1N1)pdm09 viruses predominant followed by A(H3N2). Detections of influenza A(H3N2) viruses continued to decrease in Japan and in the Republic of Korea. ILI activity continued to decline in the Republic of Korea but remained above the seasonal threshold. In Mongolia, detections of predominately A(H3N2) and B/Victoria viruses decreased slightly compared to the previous reporting period and hospitalizations for pneumonia remained above expected levels.

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 02/03/2023

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



Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS)
Data generated on 02/03/2023

Countries in the tropical zone

Tropical countries of Central America, the Caribbean and South America

- In the Caribbean and Central American countries, influenza activity driven by mainly influenza A(H3N2) and B viruses continued to decrease . In Mexico, influenza activity, ILI and SARI were at low levels and below the expected levels for this time of year. Jamaica reported moderate pneumonia activity. In the French Territories of Guadeloupe, Martinique and St Martin, ILI consultations declined but remained high. In Central American countries, moderate influenza activity was driven by influenza B/Victoria viruses. Influenza activity was at low levels in Guatemala and moderate levels in Honduras. ILI was also above baseline levels in Guatemala. SARS-CoV-2 activity was low or decreasing except in Mexico, Costa Rica and Panama. RSV activity was low except in Mexico, Jamaica and Guatemala.
- In the tropical countries of South America, influenza detections remained low with all seasonal subtypes co-circulating in the subregion and influenza B/Victoria predominant. In Bolivia, influenza activity was elevated and SARI activity also increased to moderate levels. In Ecuador, influenza activity remained low, while pneumonia cases remained at moderate levels and SARI decreased slightly to low levels. In Peru, SARI remained low but increased to higher levels than usually seen for the time of year. SARS-CoV-2 activity was elevated in Brazil, Ecuador and Peru. RSV activity remained low overall but was elevated in Brazil.

Tropical Africa

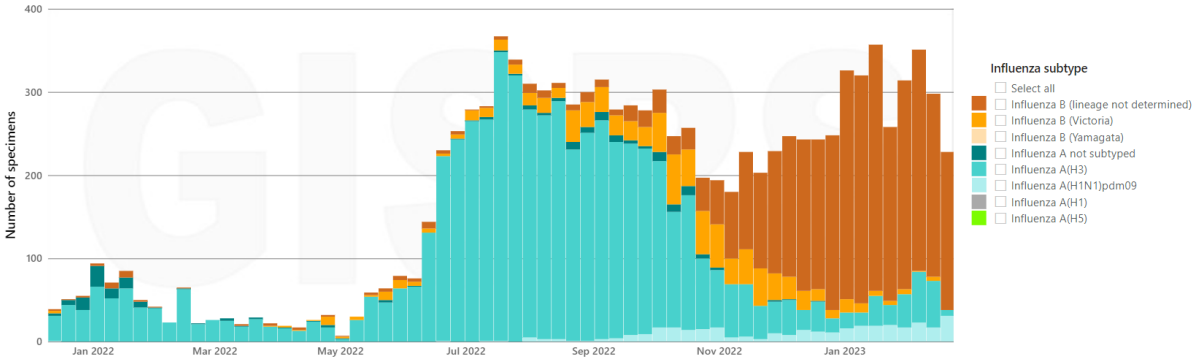
- In Western Africa, few influenza detections were reported. Influenza A(H1N1)pdm09 detections were predominant in Burkina Faso, Côte D'Ivoire and Ghana. Niger reported elevated and increasing detections of mainly A(H1N1)pdm09 as well as influenza B/Victoria and influenza A(H3N2) detections. Nigeria reported sporadic detections of influenza B/Victoria .
- In Middle Africa, activity remained low, with Cameroon reporting influenza B/Victoria detections.
- In Eastern Africa, detections of mainly influenza A(H1N1)pdm09 followed by influenza B and influenza A(H3N2) decreased but remained elevated. Ethiopia reported mainly influenza A(H1N1)pdm09 viruses and fewer influenza B detections. Kenya reported a few detections of mainly influenza B/Victoria. Madagascar reported decreasing detections of influenza A(H1N1)pdm09 and B/Victoria, and Mozambique reported a few influenza A(H1N1)pdm09 detections.

Tropical Asia

- In Southern Asia, influenza activity remained low with all seasonal influenza subtypes detected. Detections decreased or remained stable in all countries, except in Sri Lanka, where a slight increase in influenza A detections was reported and Bhutan where an increase in mainly influenza B/Victoria detections was reported.
- In South-East Asia, influenza detections remained elevated due to continued detections in in Malaysia and increasing detections in Singapore and Thailand. Influenza detections remained low in other reporting countries. Malaysia, Thailand and Singapore reported detections of all

seasonal influenza subtypes, with influenza B predominating in Malaysia and A(H3N2) predominating in Thailand and Singapore.

Number of specimens positive for influenza by subtype in South-East Asia



Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS)
Data generated on 02/03/2023

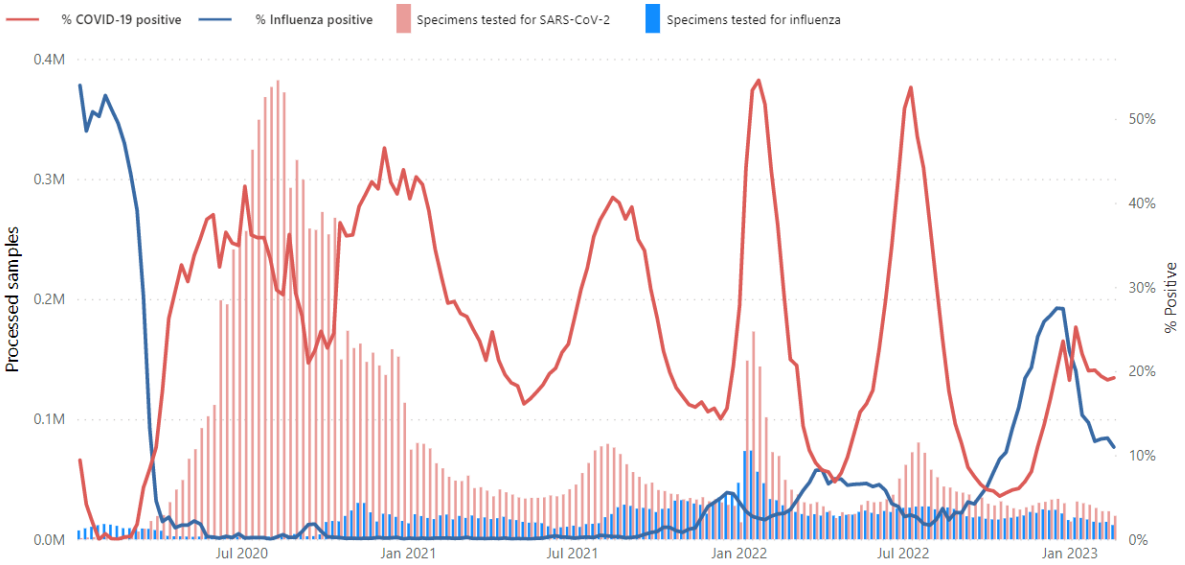
Countries in the temperate zone of the southern hemisphere

- In Oceania, influenza detections and activity remained at inter-seasonal levels overall, with both influenza A and B viruses reported. In the Pacific Islands, the Federated States of Micronesia reported elevated but decreasing ILI activity. The influenza outbreak in French Polynesia continued and the number of new cases and hospitalizations increased. Influenza A viruses predominated, with a higher proportion of A(H3N2) than influenza A(H1N1)pdm09 viruses detected.In South Africa, influenza detections remained at an inter-seasonal level, with both influenza A and influenza B viruses reported.
- In temperate South America, detections of influenza A and B and respiratory illness indicators were low. Influenza activity was above baseline levels in Paraguay

SARS-CoV-2 sentinel surveillance data reported to FluNet

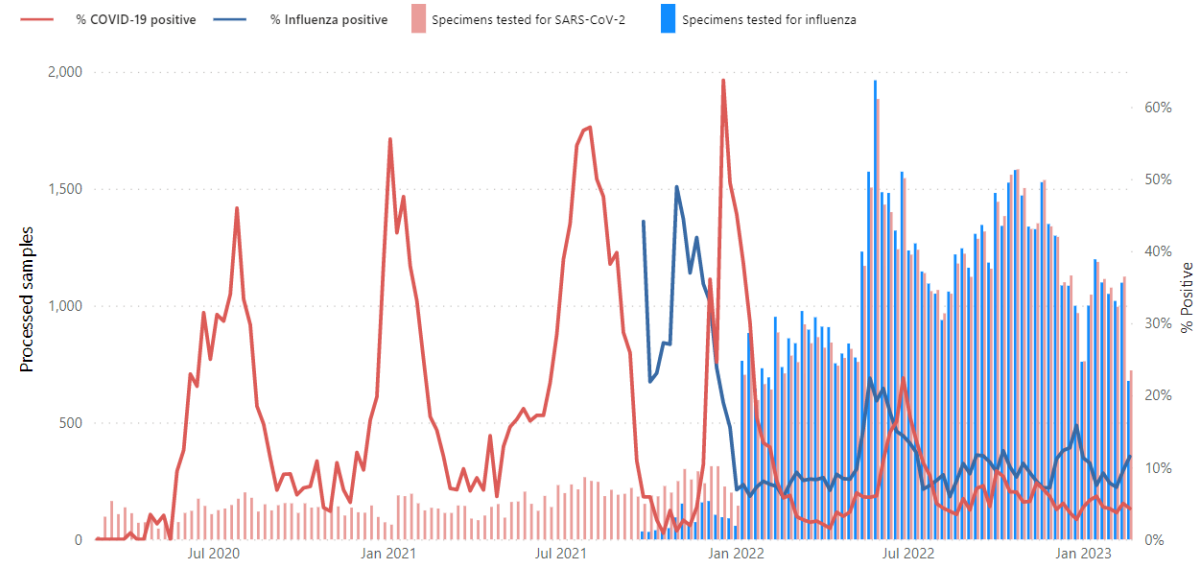
SARS-CoV-2 data are included from those countries reporting testing one or more sentinel specimens for SARS-CoV-2 per week. Influenza data are included from those countries reporting testing one or more sentinel specimens for influenza per week regardless of their reporting of SARS-CoV-2 testing data. 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



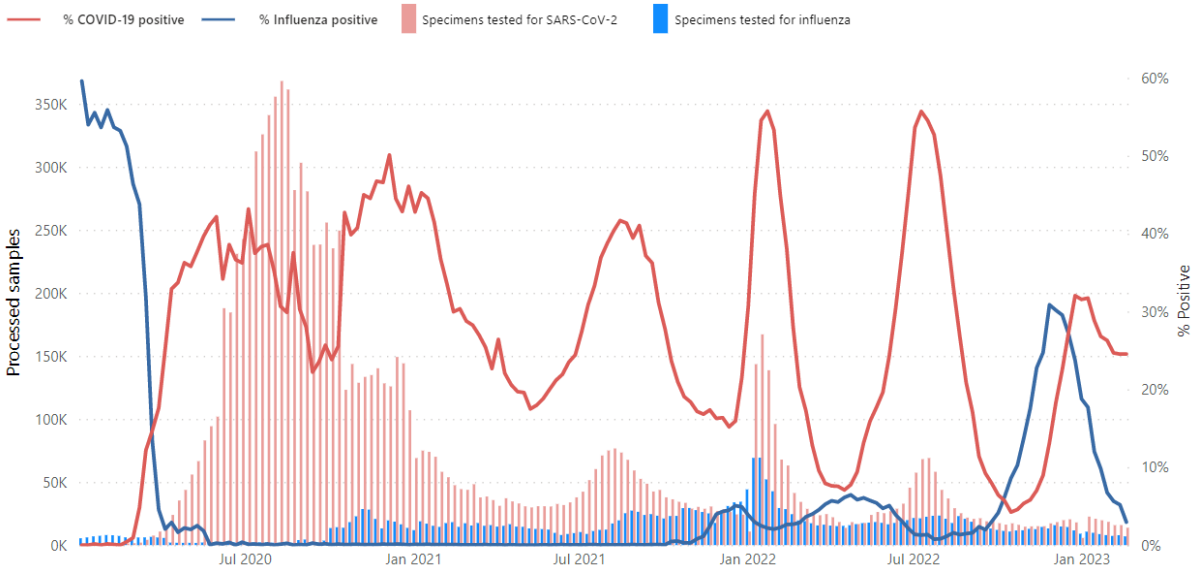
Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS)
Data generated on 02/03/2023

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



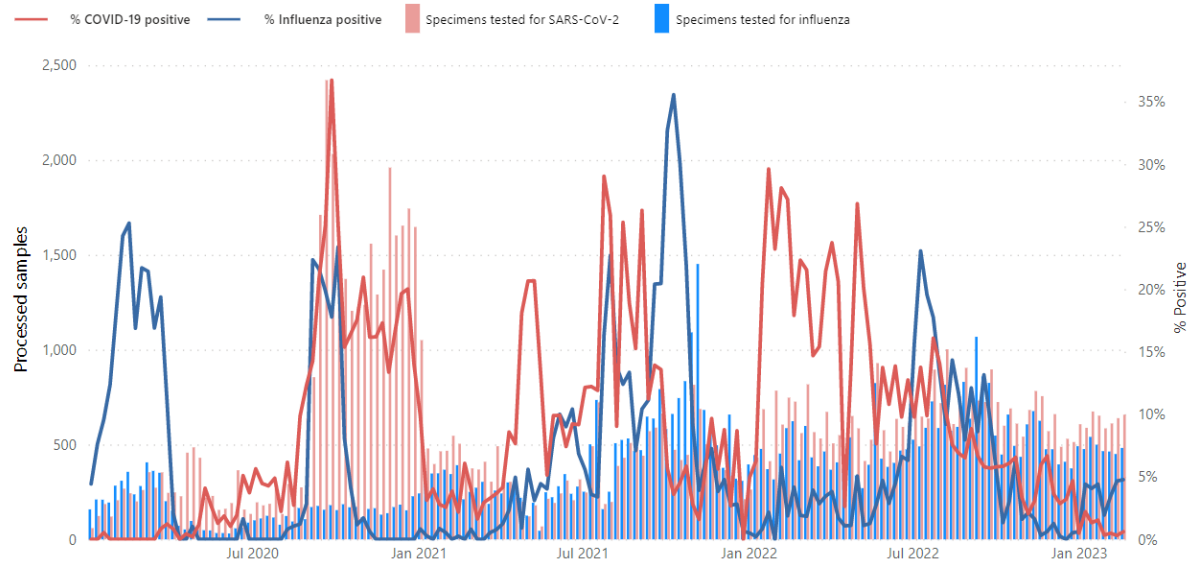
Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS)
Data generated on 02/03/2023

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



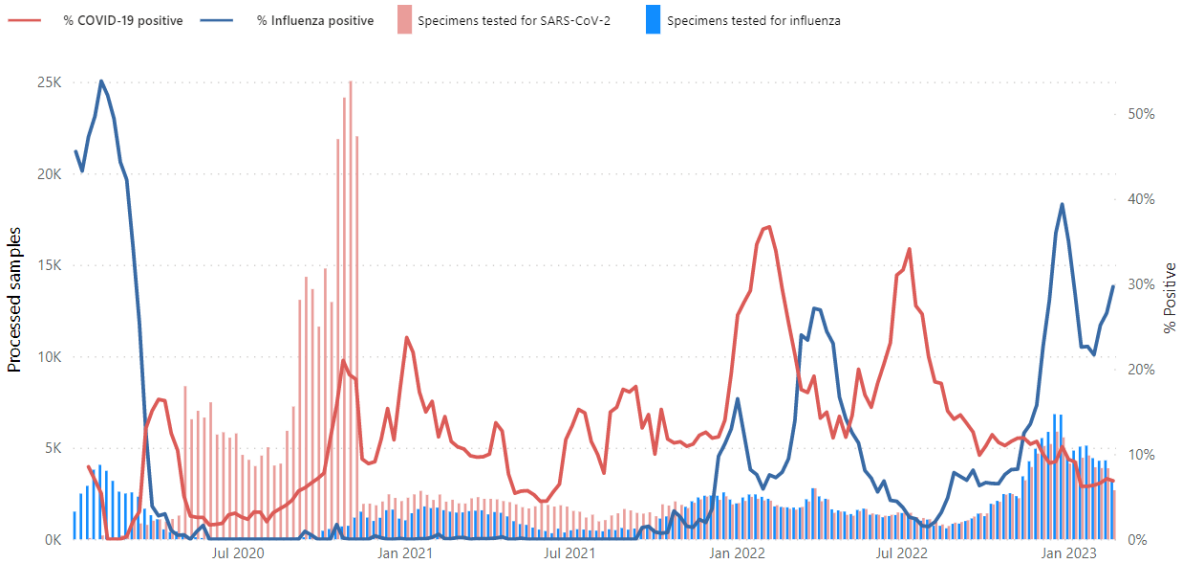
Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS)
Data generated on 02/03/2023

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



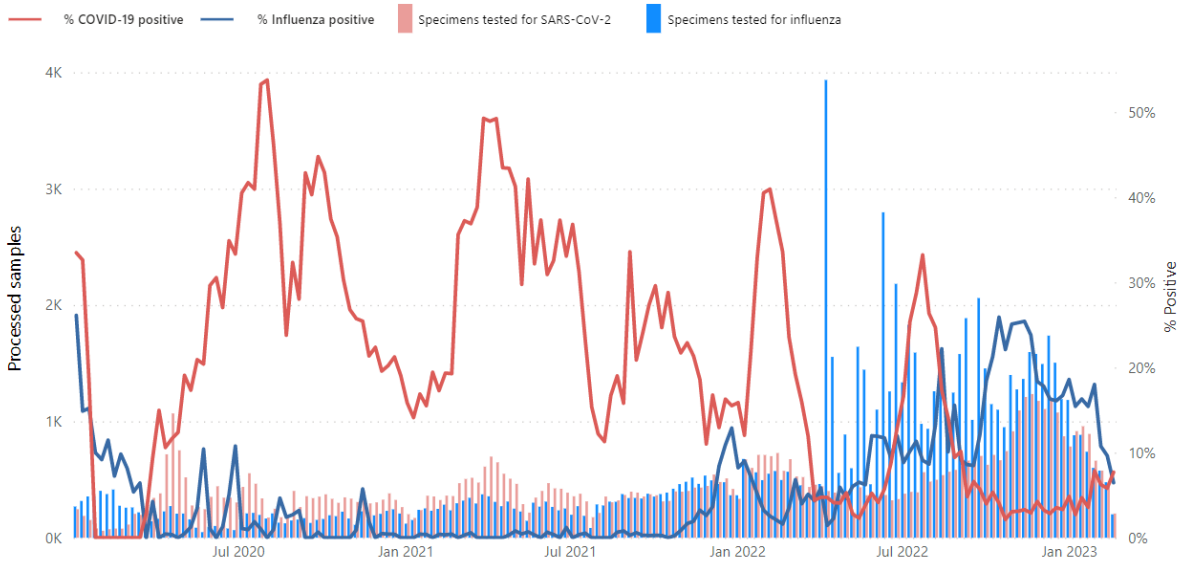
Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS)
Data generated on 02/03/2023

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



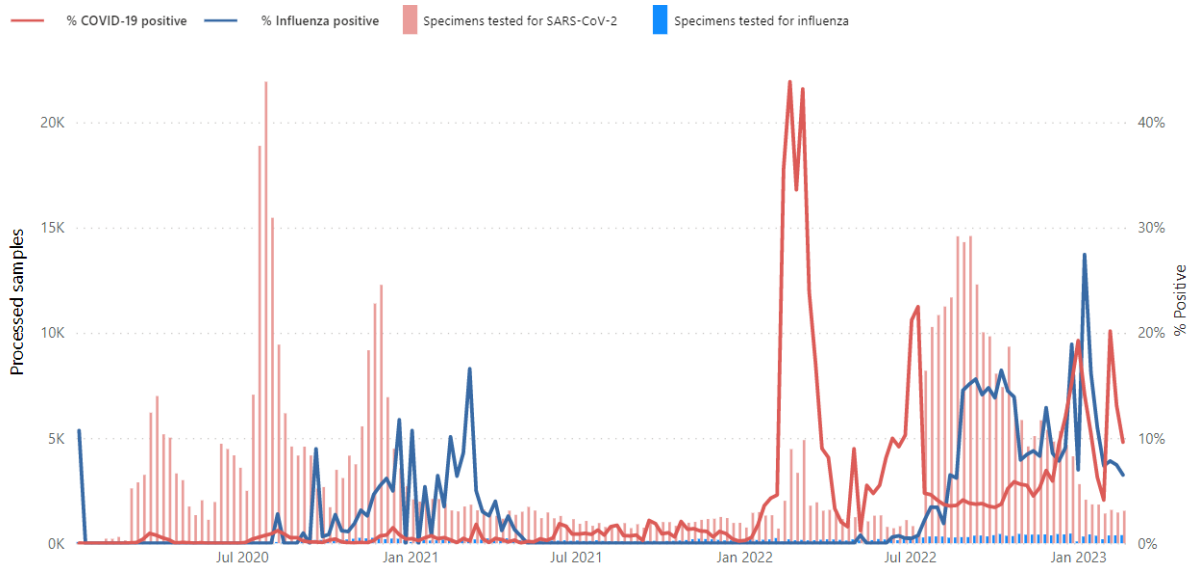
Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS)
Data generated on 02/03/2023

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 02/03/2023

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 02/03/2023

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) 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.

Seasonal influenza reviews: Review of global influenza circulation, late 2019 to 2020, and the impact of the COVID-19 pandemic on influenza circulation
Epidemiological Influenza updates: https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-updates
Virological surveillance updates: https://www.who.int/tools/flunet/flunet-summary
Influenza surveillance outputs: https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-surveillance-outputs
Influenza – COVID-19 Interface, including surveillance outputs: https://www.who.int/teams/global-influenza-programme/influenza-covid19

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