Influenza Update N° 463

22 January 2024, based on data up to 7 January 2023

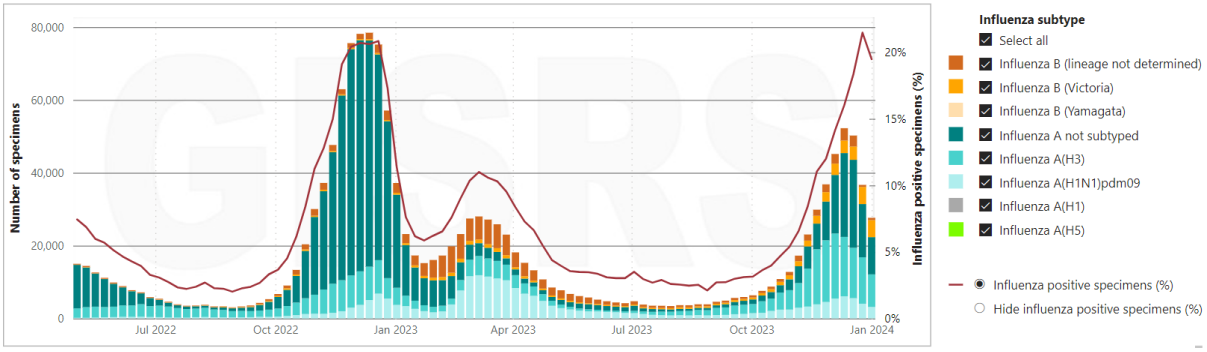
In this update, in addition to the influenza surveillance information, that of the SARS-CoV-2 surveillance by the Global Influenza Surveillance and Response System (GISRS) through its associated sentinel and non-sentinel surveillance systems and reported to the surveillance data platform FluNet hosted 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. Under-reporting due to the end of the year holidays may affect the data and conclusions below.**
- Globally, influenza detections decreased, although some countries in the Northern hemisphere continued to report increasing activity.
- In the countries of North America, influenza activity remained elevated, as expected for the time of year. Influenza A(H1N1)pdm09 viruses predominated among the detections.
- In Europe and Central Asia, influenza activity continued to increase above the 10% positivity epidemic threshold. The influenza season in the region began in week 51. Of thirty-six reporting countries, influenza activity was reported at very high intensity in one, high intensity in five, medium intensity in ten, low intensity in sixteen and below baseline in four, and geographic spread was widespread in twenty of thirty-six reporting countries. Influenza hospitalizations and intensive care unit (ICU) admissions increased sharply. Influenza A virus detections predominated among detections in primary and secondary care sentinel surveillance, with A(H1N1)pdm09 viruses predominant.
- In Northern Africa, detections of predominantly influenza A(H1N1)pdm09 continued to increase, with elevated and increasing activity reported in Algeria and Tunisia and elevated but decreasing detections of A(H1N1)pdm09 and B viruses in Egypt.
- In Eastern Asia, influenza activity remained elevated but appeared to decrease overall due to decreases in China and the Republic of Korea. Increasing activity was reported in Hong Kong SAR, China and in Mongolia.
- In Western Asia, influenza activity driven by all seasonal subtypes decreased overall. Increased detections of influenza A viruses were reported in Georgia, Lebanon and Türkiye. Decreased activity was reported in the countries of the Arabian Peninsula.
- In the Central American and Caribbean countries, influenza activity increased in the Caribbean and decreased in Central America. Influenza A(H1N1)pdm09 viruses were predominant in the Caribbean followed by influenza A(H3N2) viruses, while influenza A(H1N1)pdm09 was predominant in Central America, followed by B/Victoria.
- In tropical South America, influenza activity decreased with few detections of influenza A and B viruses reported in most countries.
- In tropical Africa, influenza detections remained low in Western and Middle Africa and decreased in Eastern Africa. Influenza A(H3N2) viruses predominated.

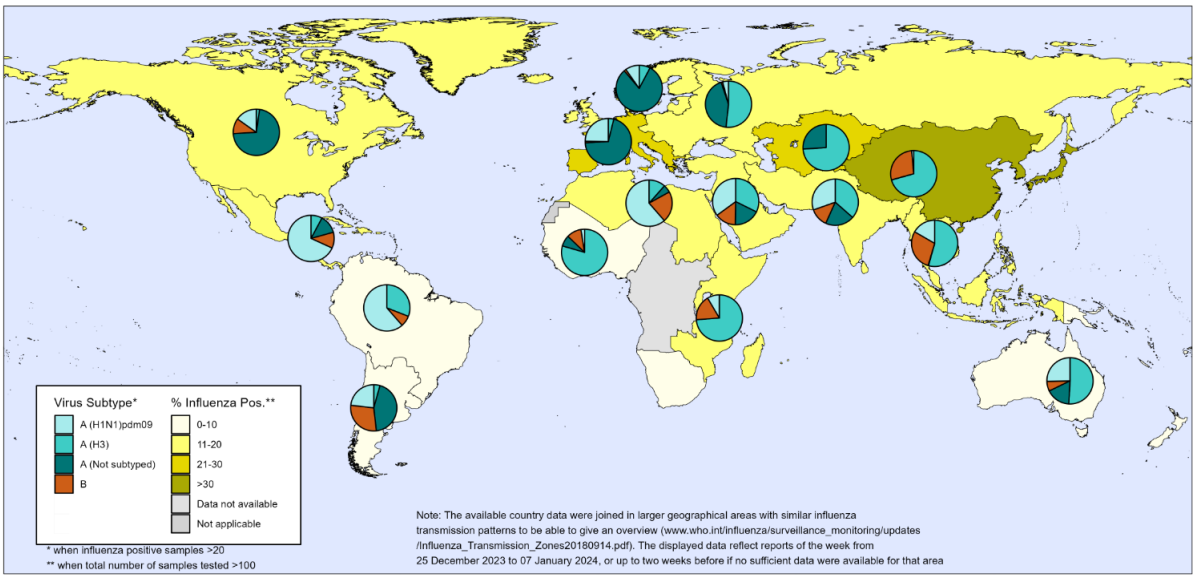
- In Southern Asia, overall influenza activity decreased but remained elevated in some countries, with increasing proportions of influenza B and A(H3N2) in recent weeks.
- In South-East Asia, influenza activity driven by all seasonal subtypes decreased but remained elevated, with influenza A(H3N2) predominant
- In the temperate zones of the southern hemisphere, indicators of influenza activity were reported at low levels or below the seasonal threshold in most reporting countries.
- National Influenza Centres (NICs) and other national influenza laboratories from 112 countries, areas or territories reported data to FluNet for the time period from 25 December 2023 to 07 January 2024 (data as of 19/01/2024 08:19:15 AM UTC). The WHO GISRS laboratories tested more than 323 975 specimens during that time period. 67 212 were positive for influenza viruses, of which 56 603 (84.2%) were typed as influenza A and 10 609 (15.8%) as influenza B. Of the sub-typed influenza A viruses, 8163 (27.0%) were influenza A(H1N1)pdm09 and 22 045 (73.0%) were influenza A(H3N2). Of the type B viruses for which lineage was determined, all (9393) 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 18/01/2024

Percentage of respiratory specimens testing positive for influenza, by influenza transmission zone.[1] Map generated on 19 January 2024. (The displayed data reflects reports of the weeks from 25 December 2023 to 07 January 2024 or up to two weeks before if insufficient data were available for an area for that period.)



SARS-CoV-2 and RSV sentinel surveillance

- Globally, SARS-CoV-2 positivity from sentinel surveillance remained around 8%. Positivity was highest in the South-East Asia Region, where it increased sharply to around 11%. A smaller increase to around 7% was reported in the Western Pacific Region. Positivity decreased to around 10% and 9% respectively in the Eastern Mediterranean Region and the Region of the Americas in the latest week, following increases in previous weeks. Positivity was stable around 5% in the African region and decreased to around 8% in the European Region. SARS-CoV-2 positivity from non-sentinel surveillance decreased to around 15% globally.
- In countries with RSV surveillance in place, RSV activity was stable or decreased in most reporting countries in Europe and remained stable in North America. In Israel, RSV activity continued to increase in both inpatient and outpatient settings. RSV activity was elevated in Egypt. Activity was 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.

[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

- NICs and other national influenza laboratories from 78 countries, areas or territories from six WHO regions (African Region: 11; Region of the Americas: 16; Eastern Mediterranean Region: 6; European Region: 35; South-East Asia Region: 5; Western Pacific Region: 5) reported to FluNet from sentinel surveillance sites for time period from 25 December 2023 to 07 January 2024 (data as of 19/01/2024 08:19:15 AM UTC). The WHO GISRS laboratories tested more than 28 081 sentinel specimens during that period and 2199 (7.83%) were positive for SARS-CoV-2. Additionally, more than 13 400 non-sentinel or undefined reporting source samples were tested in the same period and 3036 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 Region of the Americas: https://www.paho.org/en/influenza-situation-report
- 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

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Countries in the temperate zone of the northern hemisphere

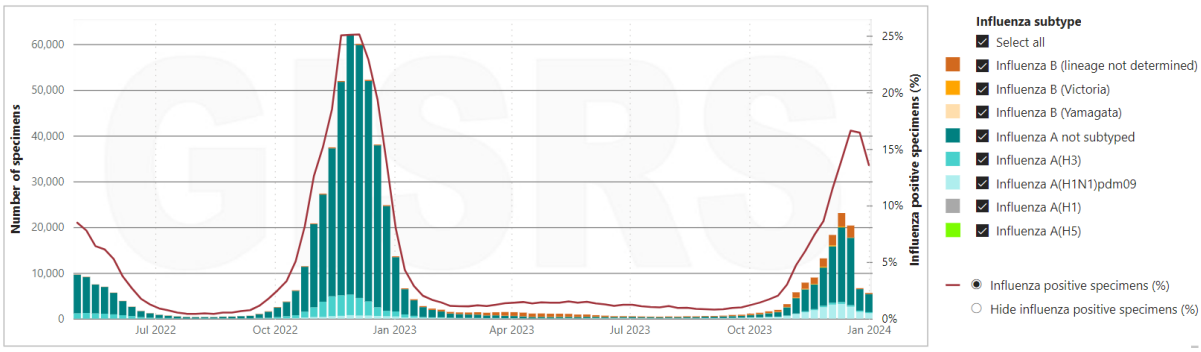
- In the countries of North America, influenza activity remained elevated as expected for the time of year. Influenza A(H1N1)pdm09 viruses predominated. In the United States of America, elevated influenza-like illness (ILI) and influenza activity continued to be observed in most parts of the country. ILI activity appeared to follow the trend of the 2019-2020 season. The number of new hospital admissions for influenza per week continued to increase. Cumulative hospital admissions for influenza were lower compared to this time last season but greater compared to this time in other previous seasons since 2015-2016. Pneumonia and influenza mortality also increased. In Canada, ILI remained stable and was within expected levels for this time of year. Influenza-associated hospitalizations continued to be reported, with the highest rate in adults aged 65 and older and children under 5 years of age. RSV activity was stable and near expected levels for this time of year in both countries.
- In Europe, influenza activity overall in the region continued to increase above the 10% positivity epidemic threshold. The influenza season was declared to have started in week 51 in the Region. In the week ending 7 January, one country reported very high influenza intensity (Russian Federation), five countries reported high intensity influenza activity (Bosnia and Herzegovina, Denmark, Greece, Italy and Malta), ten countries reported medium intensity influenza activity, sixteen reported low intensity influenza activity and four reported baseline intensity. Influenza activity was reported as widespread in twenty countries, regional in eight, and sporadic, low or no activity in the other eight reporting countries. ILI or acute respiratory infection (ARI) activity was above the seasonal baseline in 20 of 30 reporting countries in latest week. Among the influenza detections in primary care sentinel surveillance, influenza A viruses predominated with a higher proportion of A(H1N1)pdm09 virus detections compared to A(H3N2) detections. Severe acute respiratory infection (SARI) hospitalizations and intensive care unit (ICU) admissions for influenza increased sharply over the past few weeks. Among the influenza detections in SARI sentinel surveillance, influenza A

viruses predominated with a higher proportion of A(H1N1)pdm09 virus detections compared to A(H3N2) detections. Non-sentinel hospitalizations for influenza increased in two countries (Ireland and Malta). SARS-CoV-2 positivity in primary care and secondary care sentinel surveillance decreased overall, however increases in SARS-CoV-2 positivity in primary care surveillance were reported in six countries in the latest week. RSV positivity from primary and secondary care sentinel surveillance was stable overall, with increases in some countries and decreases in others. Pooled all-cause mortality estimates from the EuroMOMO network showed elevated excess mortality overall and in age groups over 45 years.[2]

- In Northern Africa, influenza detections were elevated and continued to increase, mainly due to elevated and increasing activity in Algeria. Detections of predominantly influenza A(H1N1)pdm09 continued to be reported in Algeria, Tunisia and Morocco. Detections of predominantly A(H1N1)pdm09 and influenza B viruses decreased in Egypt. Detections were low in the other reporting countries. SARS-CoV-2 detections in integrated surveillance increased in Morocco and decreased in Tunisia.
- In Eastern Asia, influenza activity remained elevated and appeared to decrease with activity mainly reported in China and the Republic of Korea. In China, influenza activity started to decrease in both northern and southern provinces with detections of predominantly influenza A(H3N2) followed by a smaller but increasing proportion of B/Victoria lineage viruses; ILI activity remained elevated. In Hong Kong SAR, ILI, influenza detections and influenza-associated hospitalizations increased and were reported at levels above the seasonal threshold; influenza A(H3N2) viruses were predominantly detected. SARS-CoV-2 activity in sentinel surveillance remained low. In Japan, detections of influenza A(H1N1)pdm09 and A(H3N2) viruses were reported in recent weeks and influenza detections at sentinel sites slightly decreased. Increased detections of influenza A(H3N2) viruses were reported in Mongolia in recent weeks. In the Republic of Korea, influenza detections decreased with A(H1N1)pdm09, A(H3N2) and B/Victoria lineage viruses co-circulating. SARS-CoV-2 positivity in sentinel surveillance samples remained stable.
- In Western Asia, influenza activity driven by all seasonal subtypes continued to be reported in some countries reporting this period. Increased detections of influenza A viruses were reported in Georgia and Türkiye. In Lebanon, influenza activity remained elevated with A(H1N1)pdm09 viruses predominantly detected followed by A(H3N2) viruses. Decreased activity was reported in the countries of the Arabian Peninsula. Elevated ILI activity continued to be reported in Türkiye. SARS-CoV-2 positivity in sentinel surveillance samples increased or remained elevate in Israel, Oman, Türkiye and the United Arab Emirates.

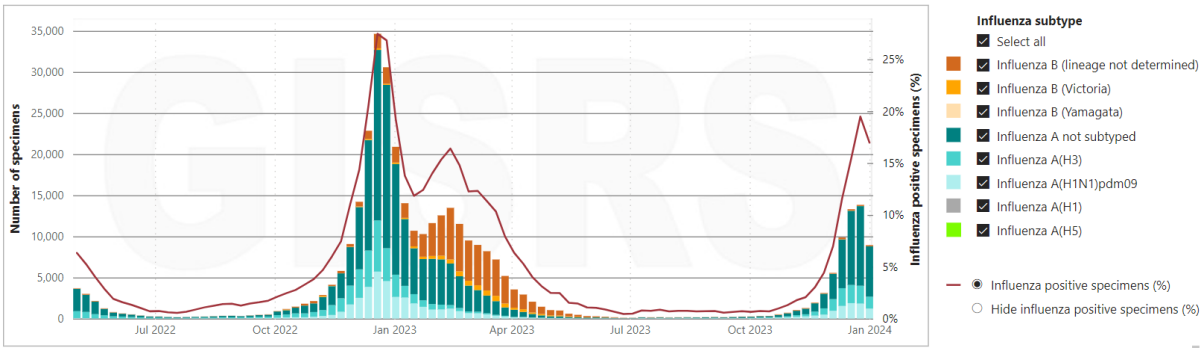
[2] Please refer to the EuroMOMO website for a cautionary note relating to interpretation of these data.

Number of specimens positive for influenza by subtype in North America



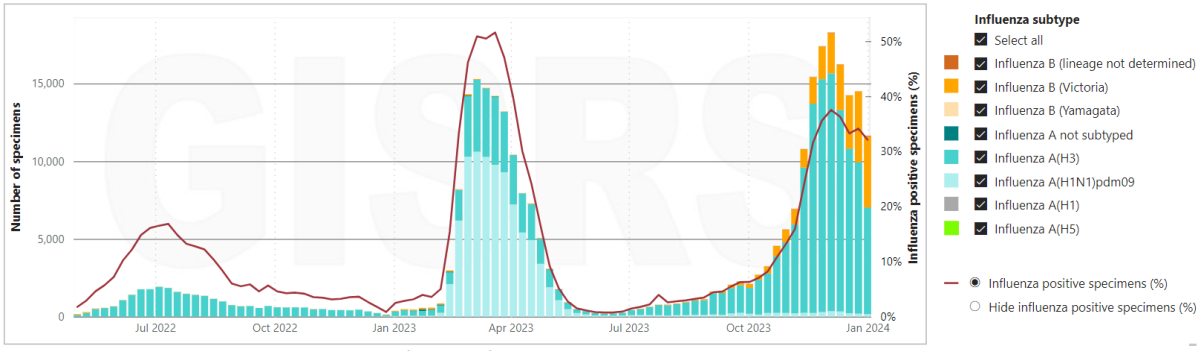
Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS)
Data generated on 18/01/2024

Number of specimens positive for influenza by subtype in Europe



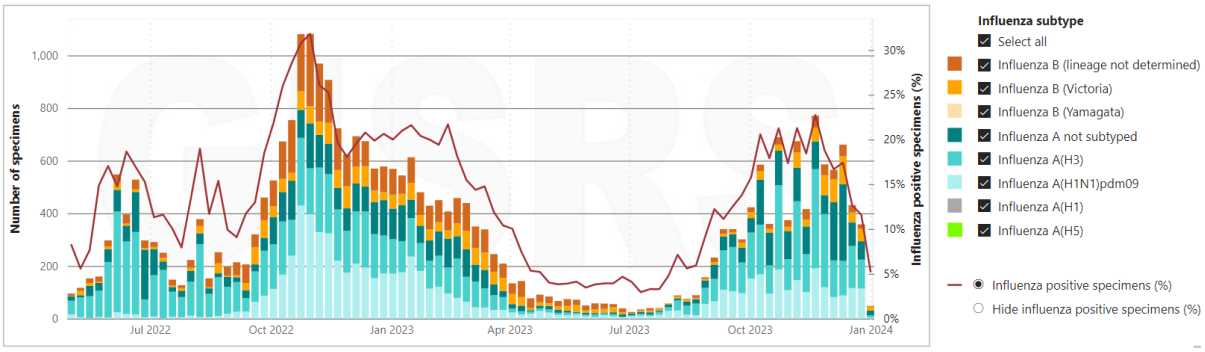
Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS)
Data generated on 18/01/2024

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 18/01/2024

Number of specimens positive for influenza by subtype in Western Asia



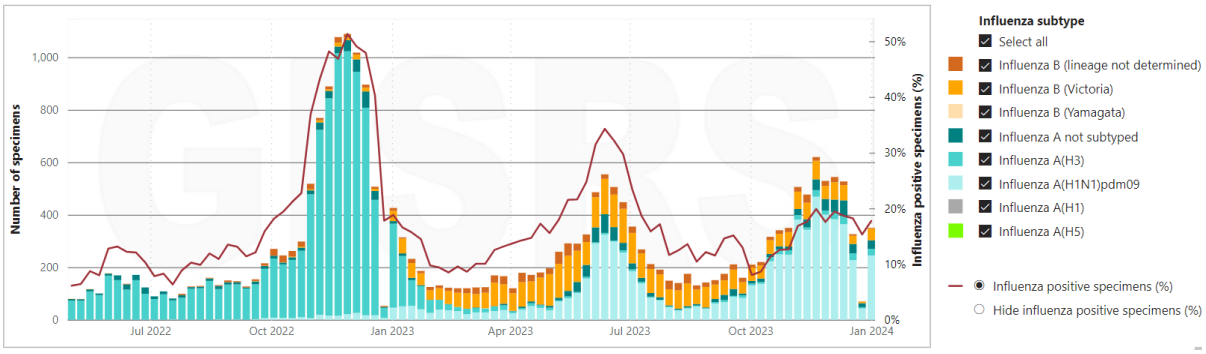
Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS)
Data generated on 18/01/2024

Countries in the tropical zone

Tropical countries of Central America, the Caribbean and South America

- In the Central American and Caribbean countries, influenza activity increased in the Caribbean and decreased in Central America. Influenza A(H1N1)pdm09 viruses were predominant in the Caribbean followed by influenza A(H3N2) viruses. Influenza A(H1N1)pdm09 was predominant in Central America, followed by B/Victoria. Influenza detections were particularly elevated in the Cayman Islands and St Vincent and the Grenadines. Influenza detections decreased but remained elevated in Mexico. ILI and SARI in the Caribbean decreased and were mainly attributable to influenza. ILI increased in Central America, with the majority of cases associated with SARS-CoV-2. SARS-CoV-2 activity increased and was at moderate levels in the Caribbean and low levels in Central America, with activity increasing in Barbados and Panama. RSV activity declined to low levels in both the Caribbean and Central America.
- In tropical South America, influenza activity decreased with few detections of influenza A and B viruses reported overall. However, influenza detections in Colombia and French Guiana were elevated and increasing, with influenza A(H1N1)pdm09 and influenza A(H3N2) predominant, respectively. Detections in Ecuador decreased but remained elevated. ILI and SARI activity remained at low levels except in Ecuador where SARI and pneumonia case levels were moderate, driven by influenza and SARS-CoV-2 activity. SARS-CoV-2 activity increased across the subregion and was at high levels, mainly due to increases in Bolivia (Plurinational State of) and Colombia. RSV activity remained low overall.

Number of specimens positive for influenza by subtype in Central America and Caribbean



Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS)
Data generated on 18/01/2024

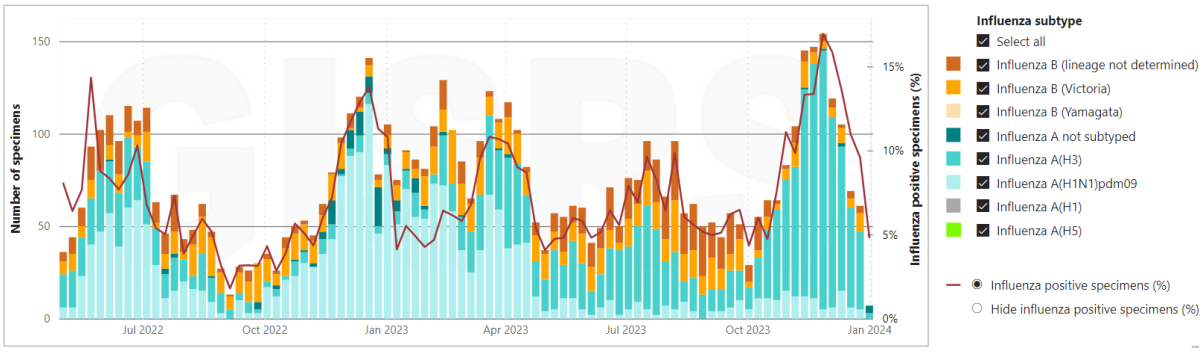
Tropical Africa

- In Western Africa, detections of mainly influenza A(H3N2) remained low overall among reporting countries. ILI cases continued to decrease in Senegal. SARS-CoV-2 activity remained low across reporting countries.
- In Middle Africa, no influenza detections were reported this period. SARI activity decreased in Cameroon.
- In Eastern Africa, detections of predominately influenza A(H3N2) decreased overall, mainly due to decreases in Ethiopia and Madagascar. Influenza activity decreased and was no longer at epidemic levels in Mayotte. ILI activity was stable in Madagascar and decreased in Mozambique. SARI activity was stable in Mozambique. SARS-CoV-2 detections in samples from integrated surveillance remained increased in the United Republic of Tanzania and were low and decreasing in other reporting countries.

Tropical Asia

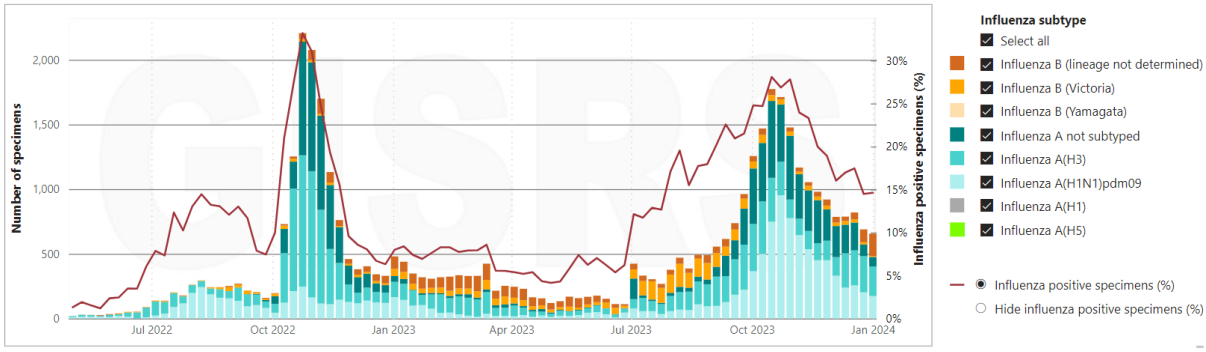
- In Southern Asia, overall influenza activity decreased with increasing proportions of influenza B and A(H3N2) in recent weeks. In Afghanistan, elevated ILI and SARI rates and high numbers of influenza detections were reported, with mainly influenza A(H3N2) detected. Iran and Pakistan also reported elevated but decreasing influenza detections with increasing proportions of influenza A(H3N2) and B in Iran and A(H3N2) in Pakistan. In other reporting countries, influenza activity decreased further or remained low. SARS-CoV-2 detections and percent positivity were increasing in Bangladesh and Bhutan.
- In South-East Asia, influenza activity driven by all seasonal subtypes decreased but remained elevated, with influenza A(H3N2) predominant. Singapore reported increasing detections, while Lao People's Democratic Republic, Malaysia, the Philippines and Thailand reported stable or decreasing detections. SARS-CoV-2 activity increased in Cambodia and Thailand, and increased sharply to high levels in Indonesia. Elevated and increasing SARI activity was reported in Indonesia and Thailand.

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 18/01/2024

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 18/01/2024

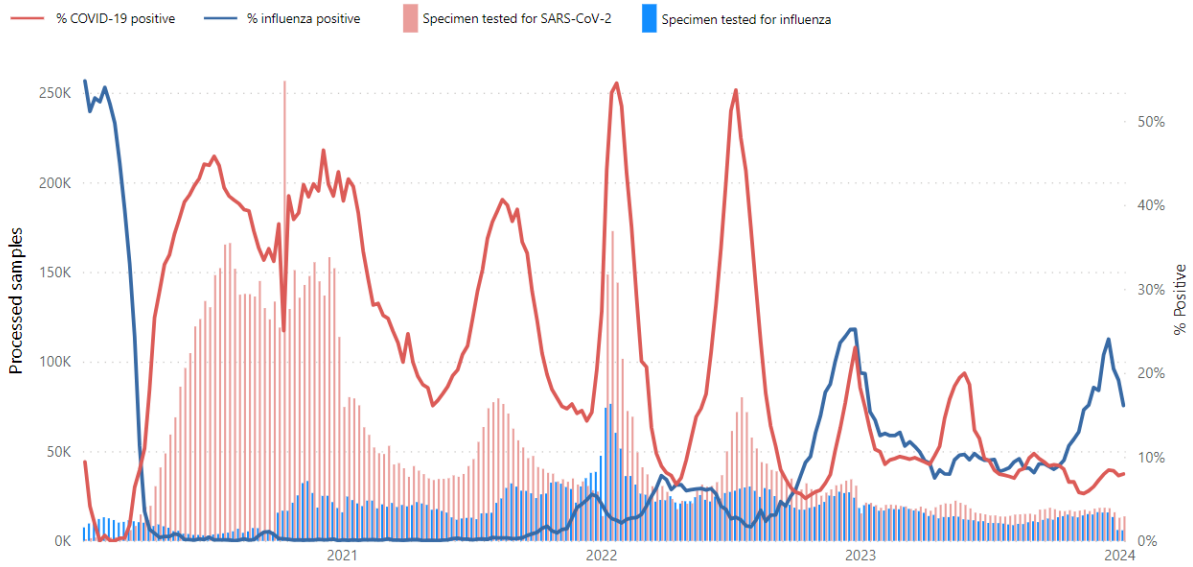
Countries in the temperate zone of the southern hemisphere

- In Oceania, influenza activity remained low. In Australia, influenza detections were low overall, with influenza A predominant. SARS-CoV-2 activity was high or increasing in several states. In New Zealand, low levels of respiratory illness activity were reported. In the Pacific Islands, influenza A and B continued to circulate in the Northern Mariana Islands. In French Polynesia, influenza activity driven mainly by influenza A remained above the epidemic threshold, while SARS-CoV-2 detections, positivity and hospitalizations decreased.
- In Southern Africa, influenza activity remained low with few influenza B/Victoria virus detections reported in recent weeks. SARI and SARS-CoV-2 activity were also low.
- In temperate South America, influenza detections were few and positivity remained below baseline, except in Chile where detections of predominantly influenza A viruses continued to be elevated and positivity was above the seasonal threshold at low levels. ILI and SARI activity remained low overall. SARS-CoV-2 positivity in sentinel surveillance remained elevated overall, was very high in Chile and increased in Argentina and Paraguay. RSV activity was low in all reporting countries.

SARS-CoV-2 sentinel surveillance data reported to FluNet

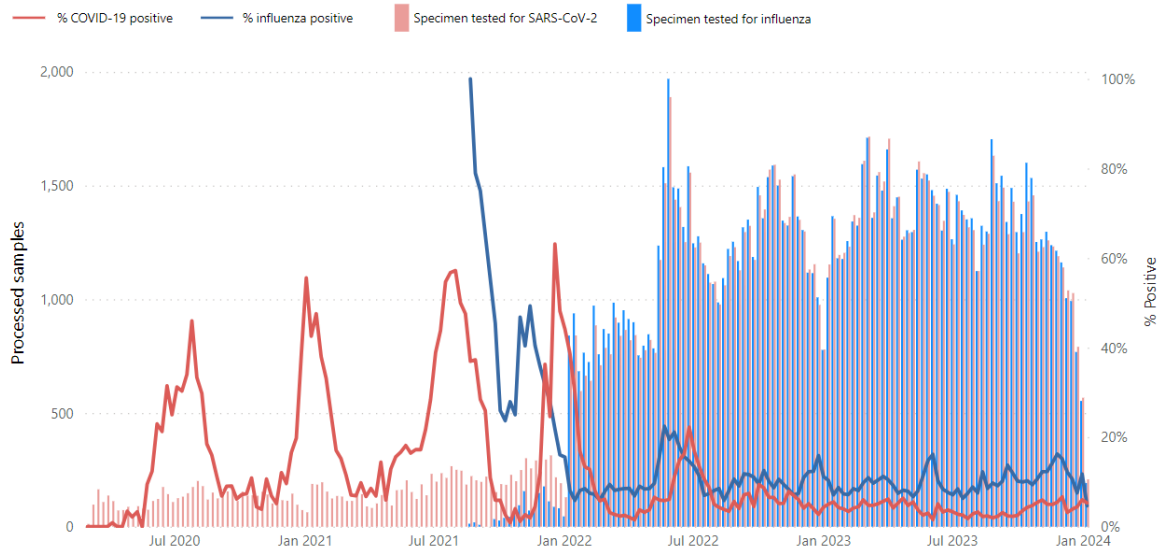
SARS-CoV-2 data are included from those countries reporting testing one or more sentinel specimens for SARS-CoV-2 per week. Influenza data are included from those countries reporting testing one or more sentinel specimens for influenza per week regardless of their reporting of SARS-CoV-2 testing data.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



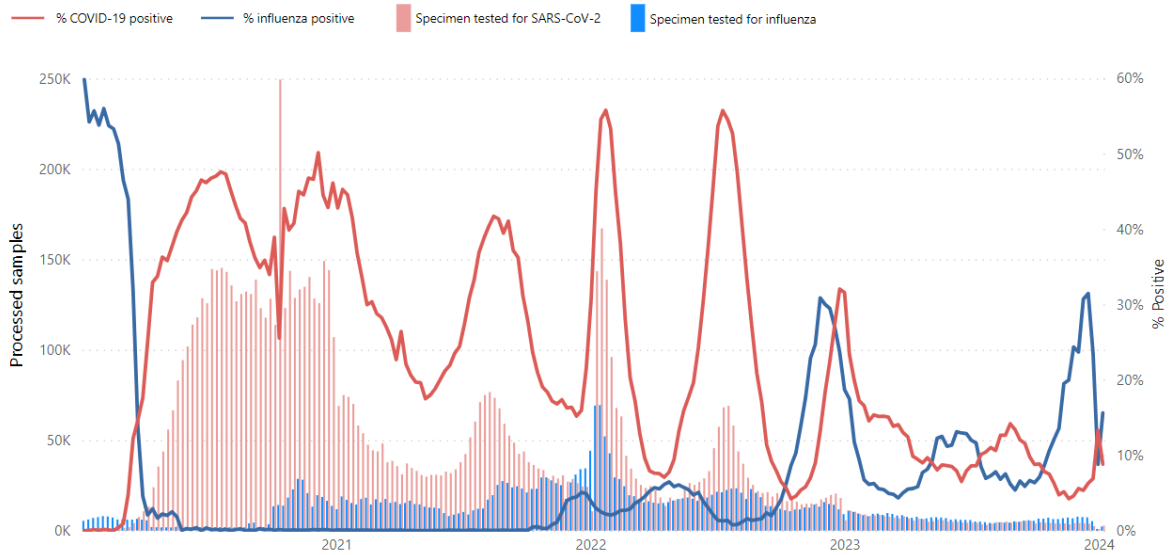
Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS)
Data generated on 18/01/2024

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



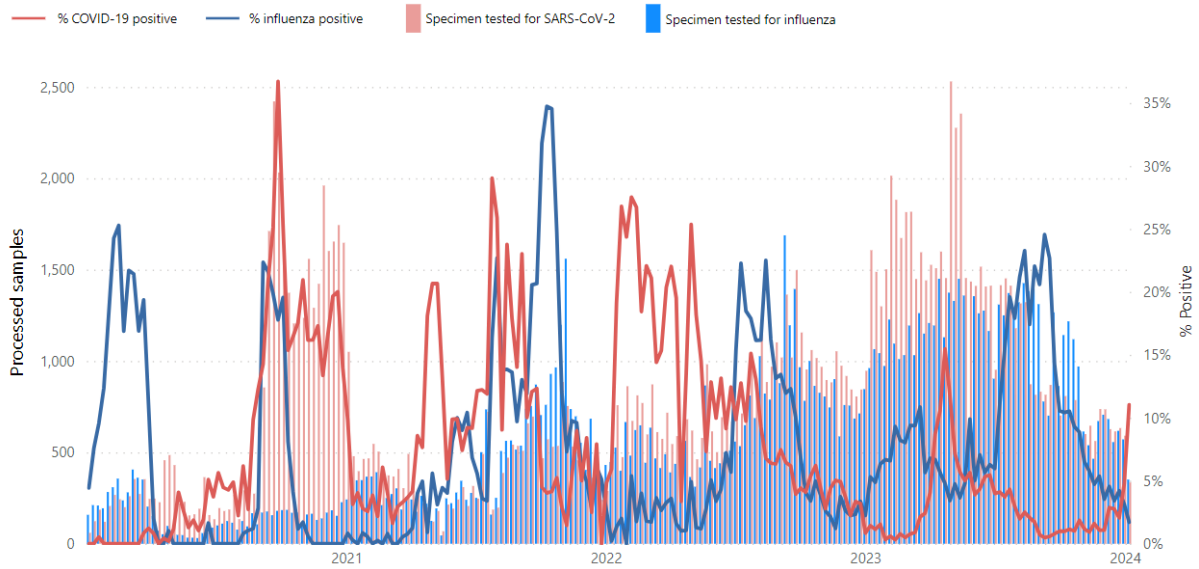
Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS)
Data generated on 18/01/2024

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



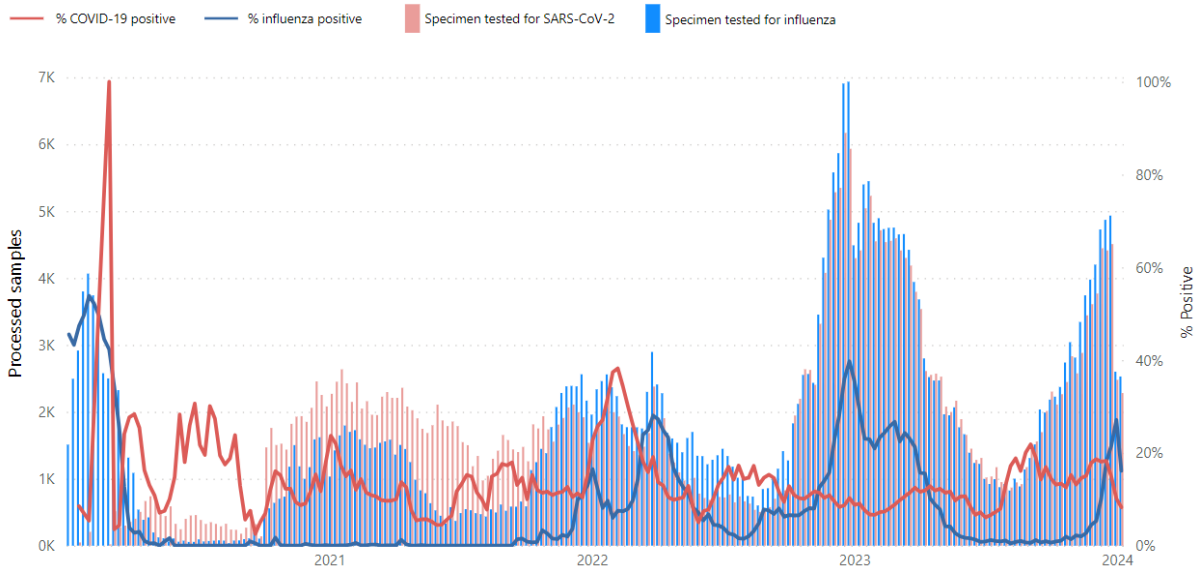
Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS)
Data generated on 18/01/2024

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



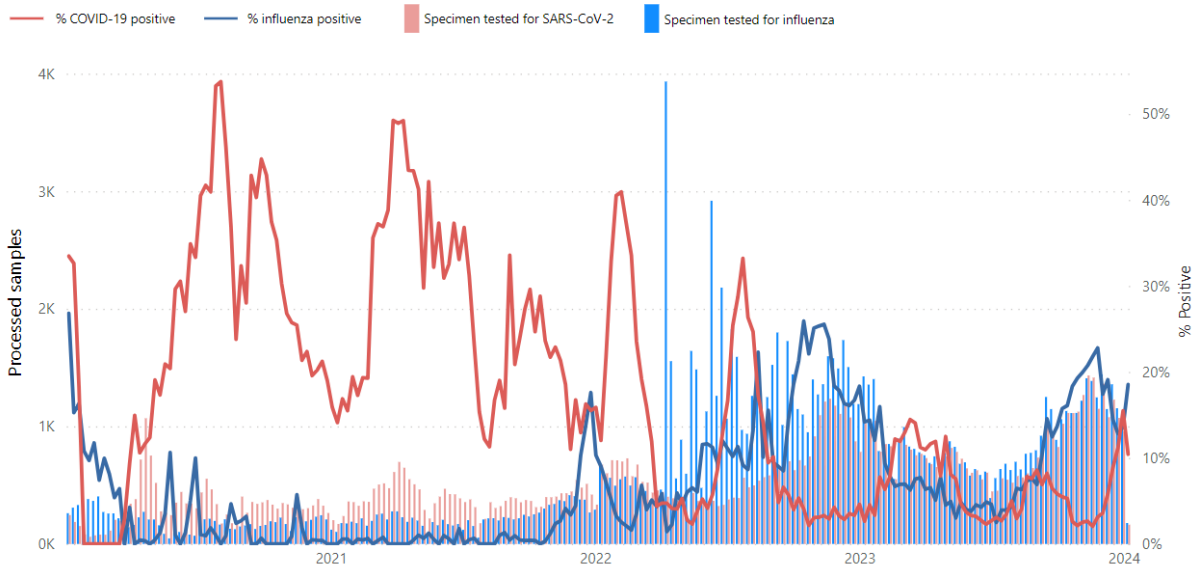
Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS)
Data generated on 18/01/2024

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



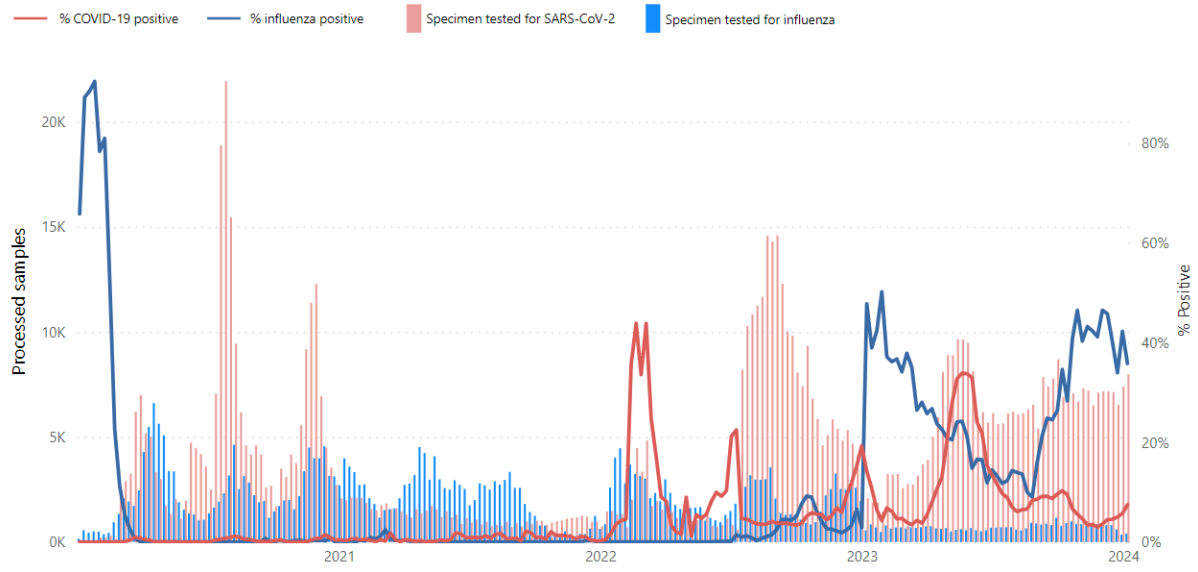
Data source: FluNet (www.who.int/toolkits/flunet). Global Influenza Surveillance and Response System (GISRS)
Data generated on 18/01/2024

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 18/01/2024

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 18/01/2024

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.

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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