

FluCov-Bulletin – October 2024

FluCov project: combining data from around the world to better understand the co-circulation of influenza and COVID-19

Commentary

Contents

The FluCov Bulletin offers a summary starting from January 2019, detailing the count of confirmed influenza and SARS-CoV-2 detections, along with positivity rates of tested specimens, across 25 countries globally (see page 3).

Results

On a global level, **influenza** activity has further decreased in October, due to low activity in the Northern Hemisphere and decreasing or low activity in Southern Hemisphere countries (see Figure 1). The following country patterns were observed for **influenza**:

- In the <u>Northern Hemisphere</u>, a slight increase in both the number of influenza-positive cases and the percentage of specimens testing positive for influenza was observed in the **United Kingdom**.
- Influenza activity decreased in India, the Philippines, Thailand and Vietnam compared to September. In Mexico, influenza activity, primarily driven by influenza A(H3), also decreased.
- Influenza activity was stable at low levels in Canada, the United States [1] and most European countries covered by the bulletin (France, Germany, the Netherlands, Poland and Spain).
- Continued low influenza activity was reported in China, Egypt, Japan, and South Korea.
- In the <u>Southern Hemisphere</u>, influenza activity decreased in **Brazil**, Australia and New Zealand compared to September.
- Influenza activity remained stable at low levels in Argentina, Chile and South Africa.
- No update on influenza activity was available for Israel and Italy in October.

Globally, **SARS-CoV-2** detections were slightly elevated in some countries. The following country patterns were observed for **SARS-CoV-2**:

- Stable elevated SARS-CoV-2 levels were reported in Canada (week 43) [2]. SARS-CoV-2 activity was also stable in Australia (week 42) and South Africa (week 43), while stable or decreasing in England (week 43) [3-5].
- In **Brazil**, **SARS-CoV-2** activity decreased in week 42 following a slight increase observed in September [6].
- SARS-CoV-2 activity continued to decrease in China (week 41), the United States (week 43), and most European countries, with positivity rates in Europe lower than those observed at this time in 2023 [7-9].

Implications

Global influenza activity remains low, with interseasonal levels in the Northern Hemisphere and decreasing or consistently low levels in the Southern Hemisphere.

The WHO 2024-2025 Northern Hemisphere Vaccine Composition Report recommends a trivalent vaccine to protect against influenza A(H1N1)pdm09, A(H3N2), and B/Victoria lineage viruses [10]. This recommendation excludes B/Yamagata, aligning with the current understanding that this lineage has not been detected in recent global circulation. However, the Netherlands recently reported a potential detection of the influenza B/Yamagata lineage in week 42 [9], with further investigations ongoing to verify this finding and ensure it is not vaccine-derived. This finding underlines why it remains important to continue monitoring and determining the lineages of influenza B specimens to assess whether influenza B/Yamagata has truly ceased circulating [11].

In October 2024, **SARS-CoV-2** activity decreased or remained stable in most Northern Hemisphere countries, although it remained elevated in certain European countries [12]. Since the WHO declared the end of the pandemic in May 2023 [13], countries have adopted diverse monitoring strategies for **SARS-CoV-2**, leading to reduced surveillance and instances of unshared data with the WHO. This variation in approaches and a delay in data updates (as of 4 November 2024, **SARS-CoV-2** data were only updated until 4 August) impact the completeness of data reported in the FluCov Bulletin.

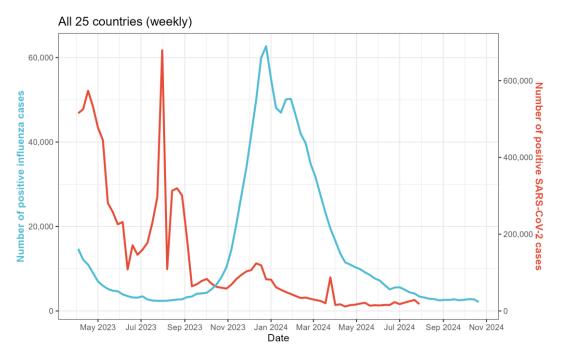


Figure 1: SARS-CoV-2 and influenza detections in the 25 countries covered by the Bulletin (period: from week 14/2023 to week 43/2024).

Disclaimer: Comparisons <u>between countries and seasons</u> of influenza and SARS-CoV-2 detections should be made with care, as national surveillance systems may differ (e.g. surveillance structures and testing intensity) and change over time.

Monthly plots by country

The plots per country show weekly data for influenza and of SARS-CoV-2 infections from 1 January, 2023 up to 27 October, 2024. For real time figures starting from 1 January 2019, please visit the FluCov Dashboard. This FluCov-Bulletin includes the countries Canada, United States, Mexico, Brazil, Argentina, Chile, United Kingdom, France, Germany, Italy, Netherlands, Spain, Poland, South Africa, Egypt, China, Japan, South Korea, India, Philippines, Thailand, Vietnam, Israel, Australia and New Zealand.

Per country, the first plot displays the number of positive influenza (in blue) and SARS-CoV-2 (in red) detections. An overview of the absolute number of influenza and SARS-CoV-2 detections per country can be found on pages 30-33 of this FluCov-Bulletin (click here). The second plot shows the influenza detections by subtypes/lineages reported to FluNet. The third plot displays the percentage of specimens testing positive for influenza during the current season (in red), the last two seasons, and the average of the two pre-COVID-19 seasons (2017-18 and 2018-19).

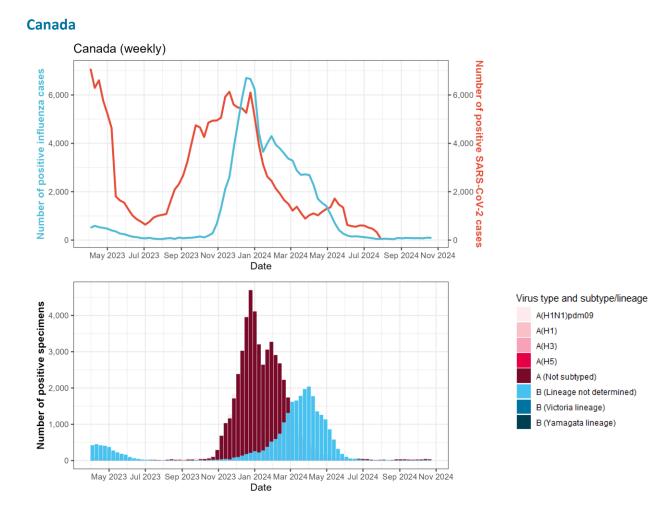
The FluCov Dashboard is live!

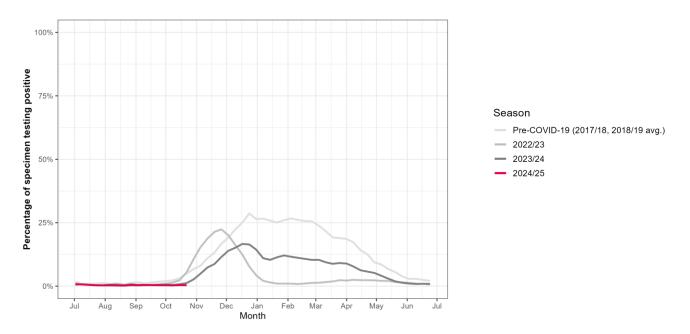
All Figures and Tables in the FluCov-Bulletin can be accessed (real-time) at: https://www.nivel.nl/en/dossier-epidemiology-respiratory-viruses/flucov-dashboard

Northern Africa
Egypt
011
Southern Africa
South Africa
Eastern Asia
China
Japan South Korea
South Korea
Southern Asia
India
South East Asia
Philippines
Thailand
Vietnam
Western Asia
Israel
Oceania
Australia
New Zealand

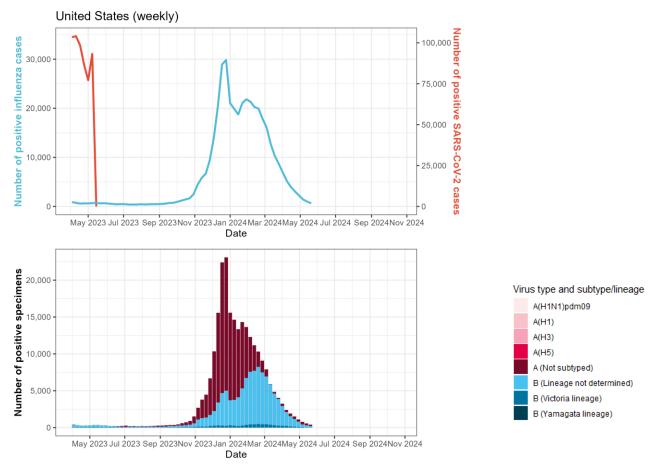
Countries (click to view plot)

North America

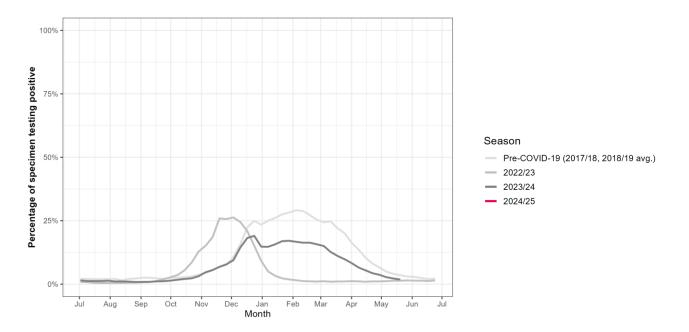


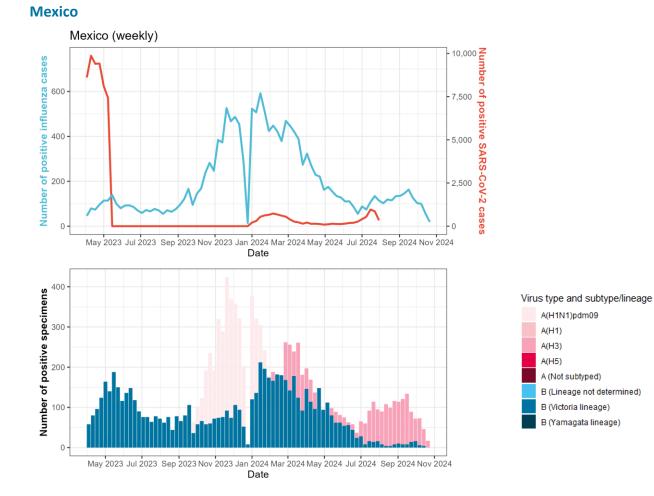


United States

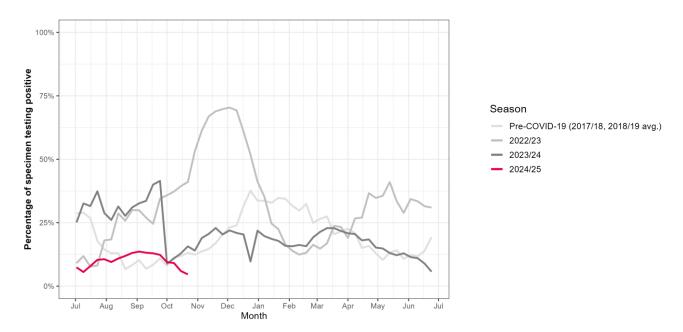


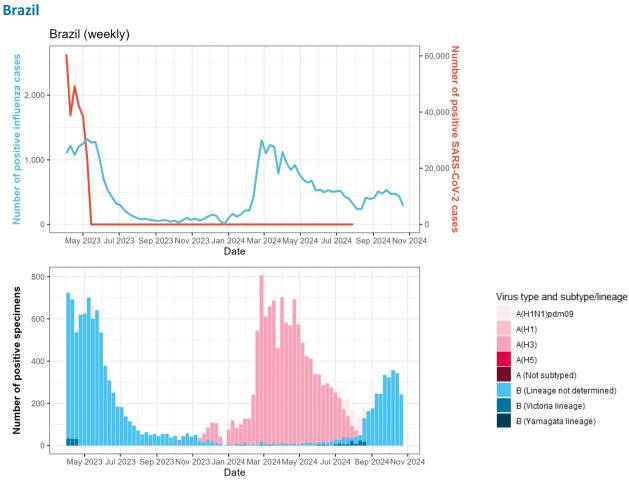
Note: The United States stopped reporting SARS-CoV-2 activity to the WHO since W20/2023





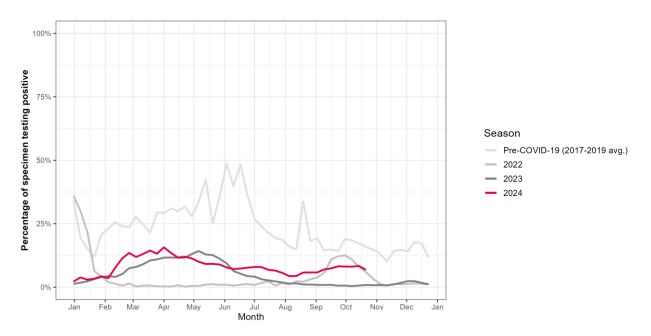
Central America Caribbean

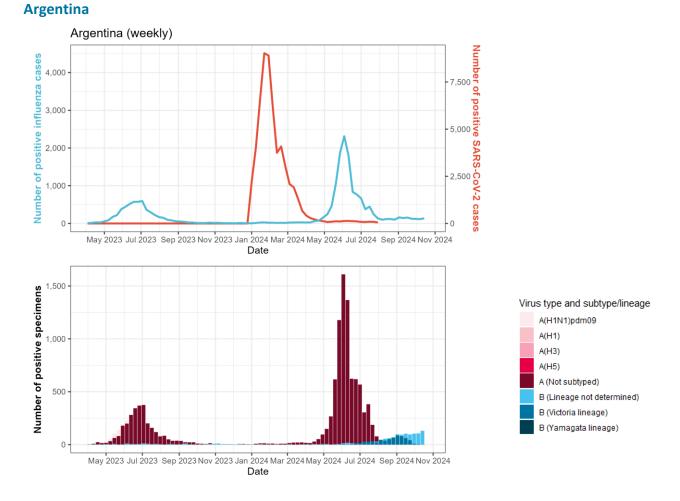




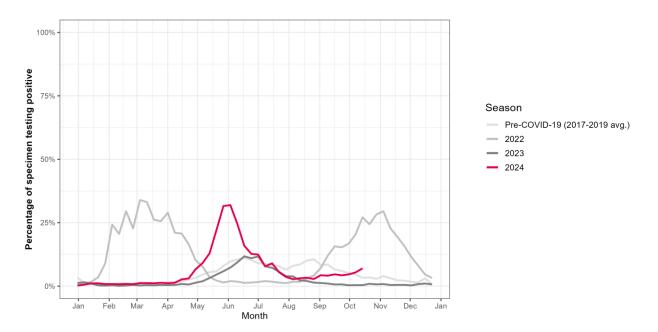
Tropical South America

Note: Brazil has reported zero SARS-CoV-2 activity to the WHO since W2/2024

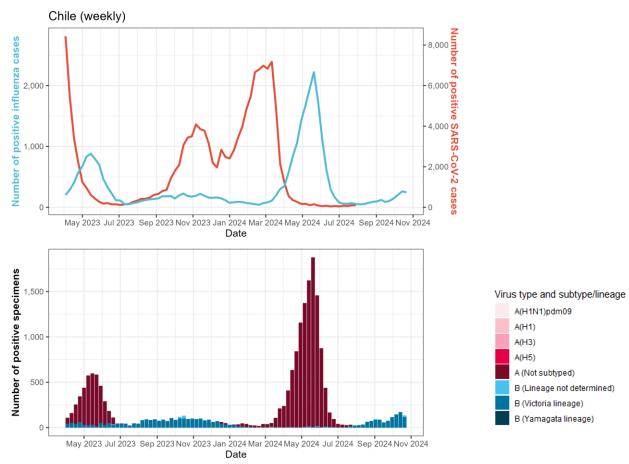


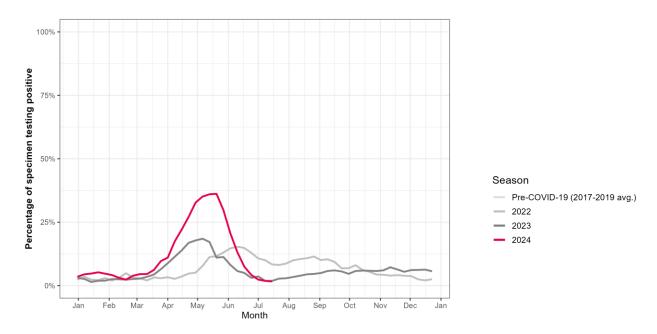


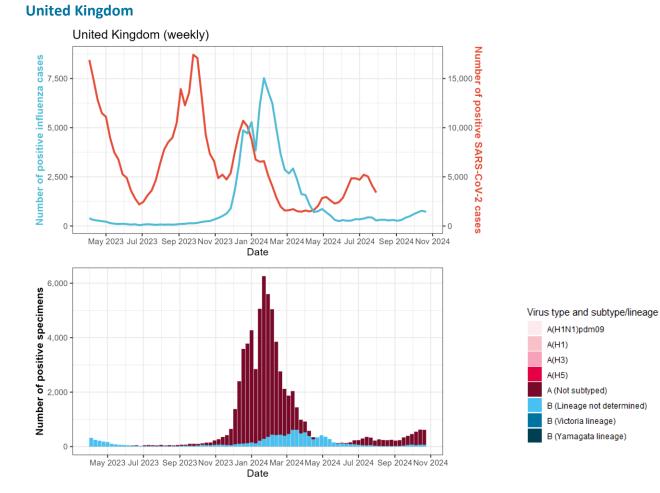
Temperate South America





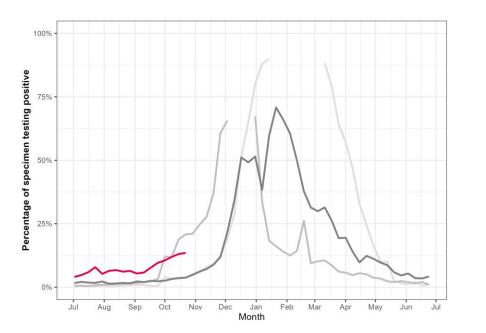






Northern Europe

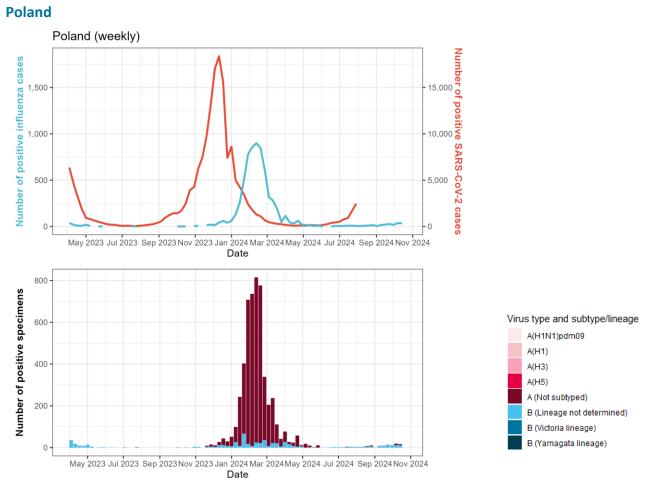
Percentage of specimens testing positive for influenza in different seasons



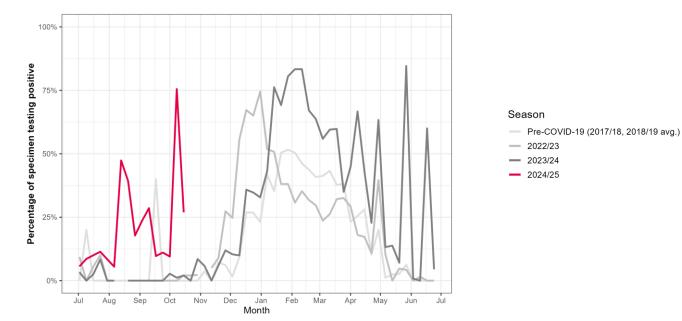
Season

- Pre-COVID-19 (2017/18, 2018/19 avg.)
- 2022/232023/24
- 2024/25

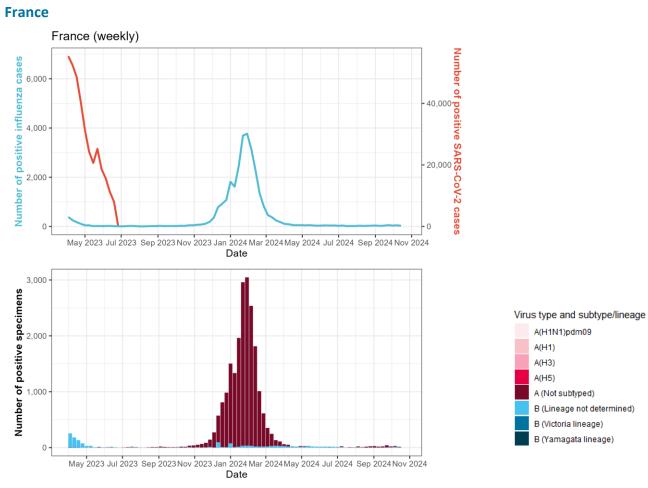
Eastern Europe



Percentage of specimens testing positive for influenza in different seasons

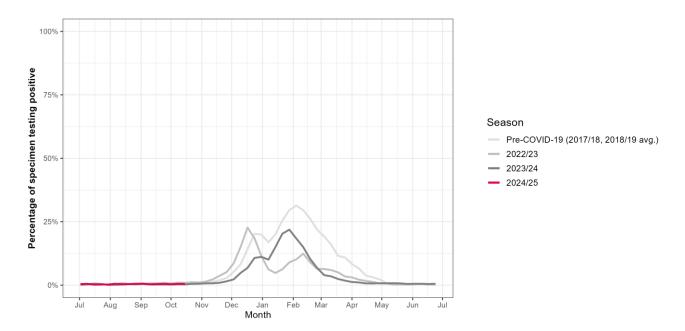


Note: the high variety in percentage positive since April 2024 is likely caused by a low number of tested specimens

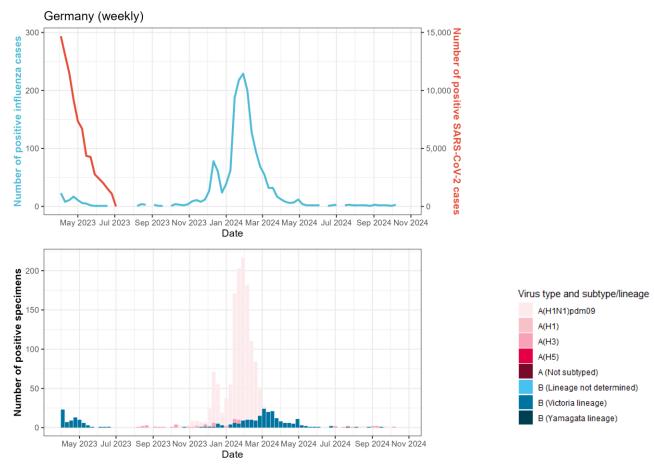


South West Europe

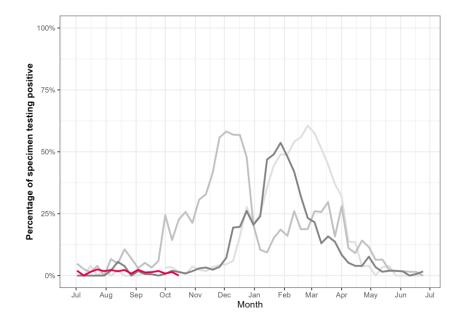
Note: France stopped reporting SARS-CoV-2 activity to the WHO since W26/2023



Germany

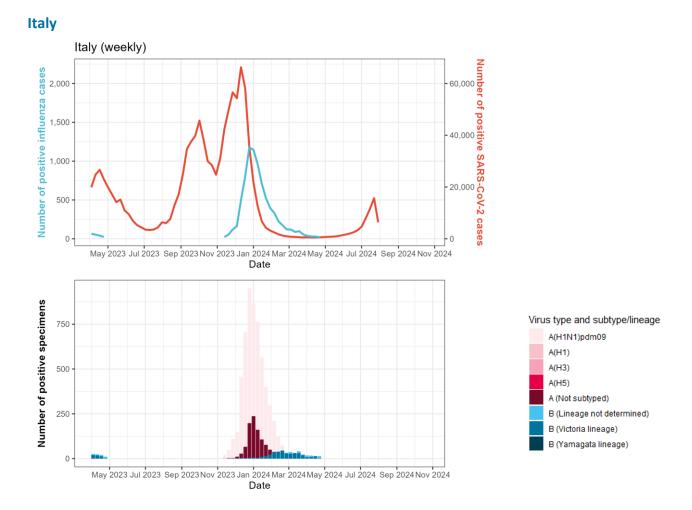


Note: Germany stopped reporting SARS-CoV-2 activity to the WHO since W27/2023



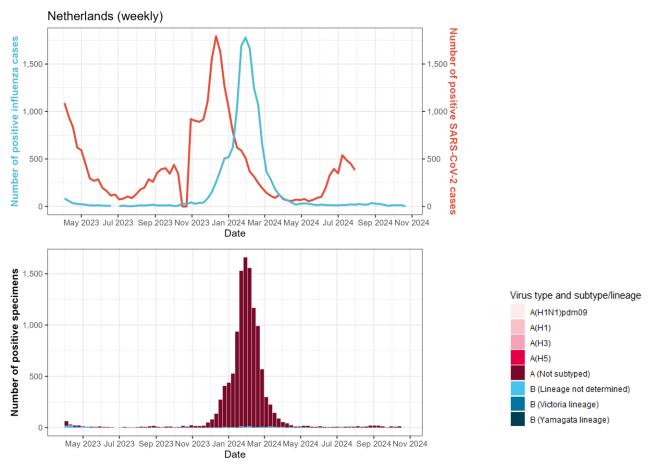


- Pre-COVID-19 (2017/18, 2018/19 avg.)
- _____ 2022/23
- 2023/24
- 2024/25



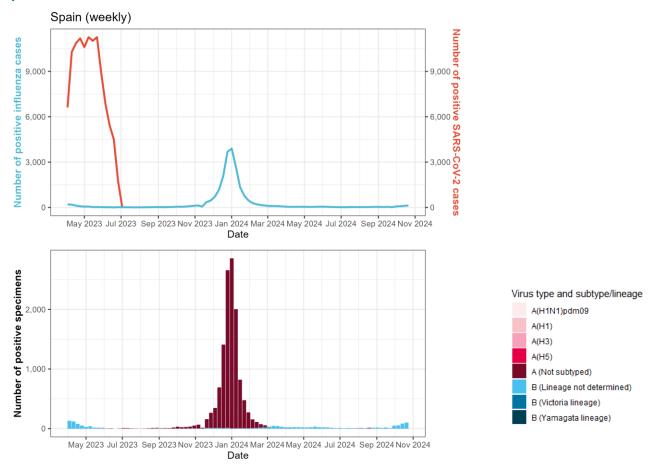
Percentage of specimens testing positive for influenza in different seasons: data not available

Netherlands

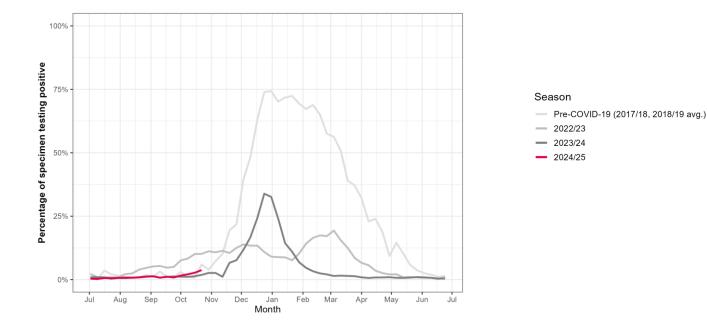


Percentage of specimens testing positive for influenza in different seasons: data not available

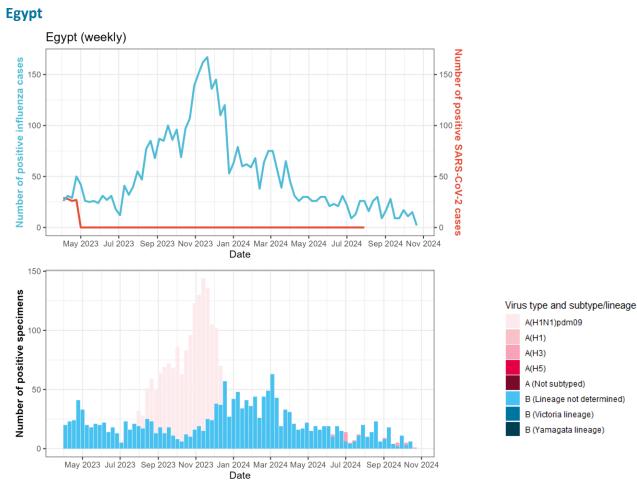
Spain



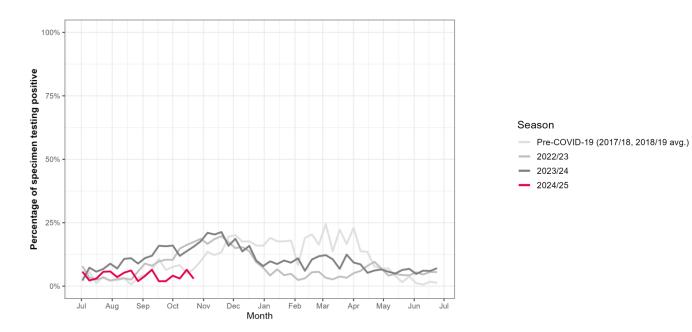
Note: Spain stopped reporting SARS-CoV-2 activity to the WHO since W27/2023

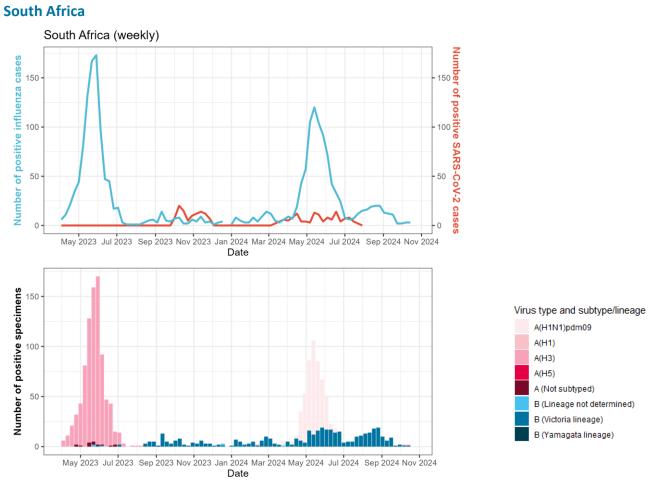


Northern Africa



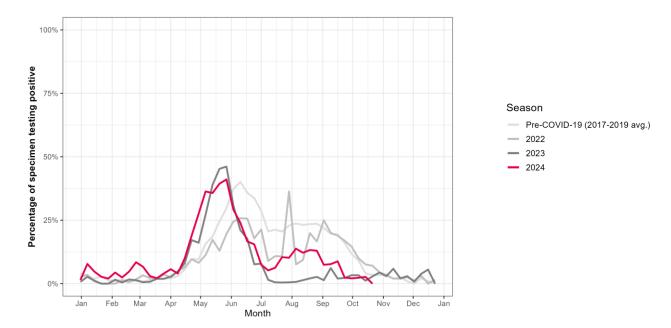
Note: Egypt has reported zero SARS-CoV-2 activity to the WHO since W18/2023





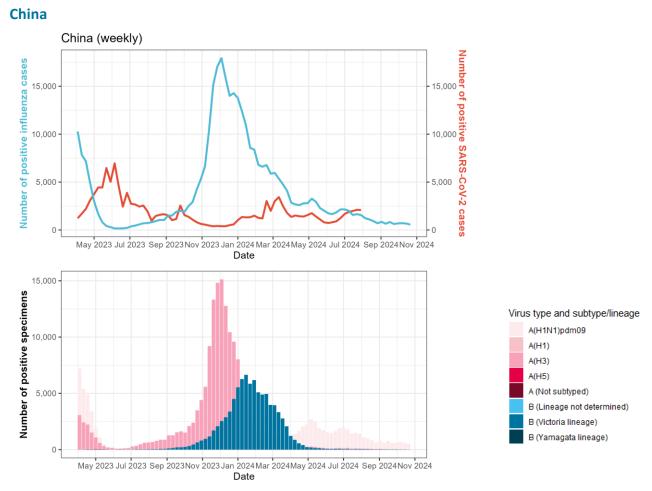
Southern Africa

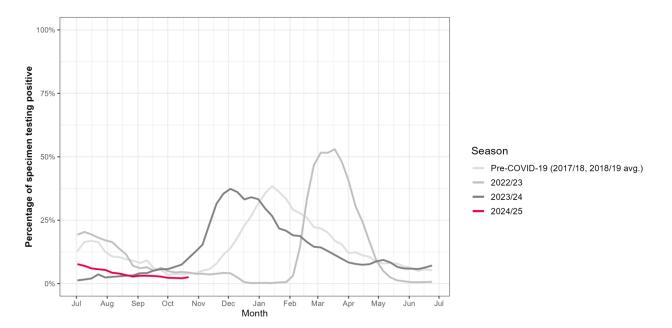
Percentage of specimens testing positive for influenza in different seasons



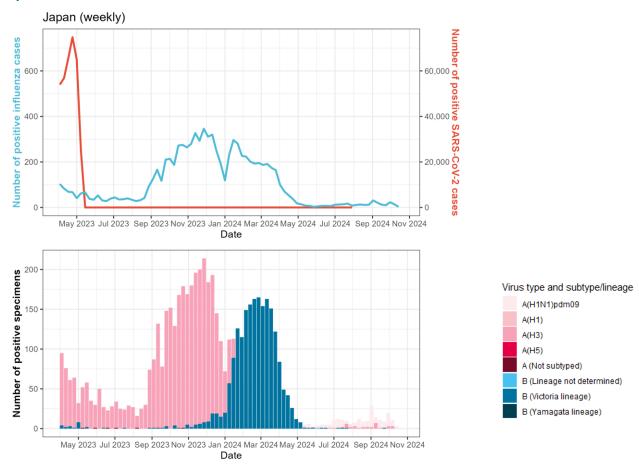
Nivel

Eastern Asia





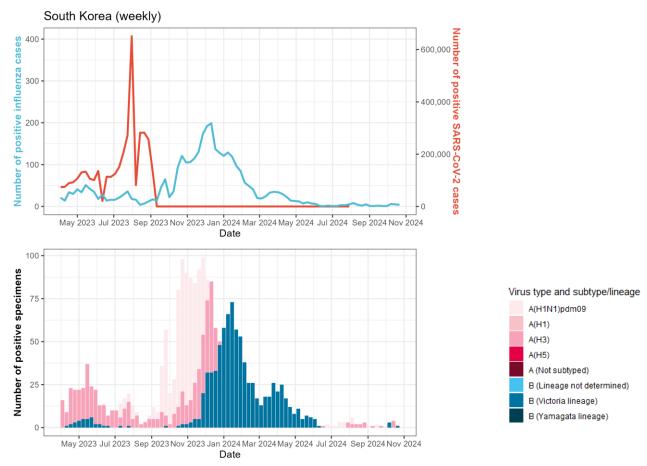
Japan



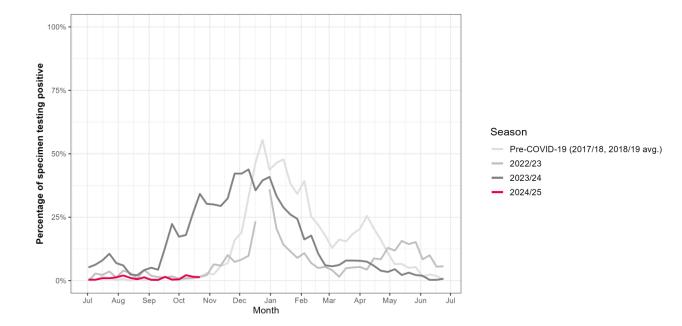
Note: Japan has reported zero SARS-CoV-2 activity to the WHO since W21/2023

Percentage of specimens testing positive for influenza in different seasons: data not available

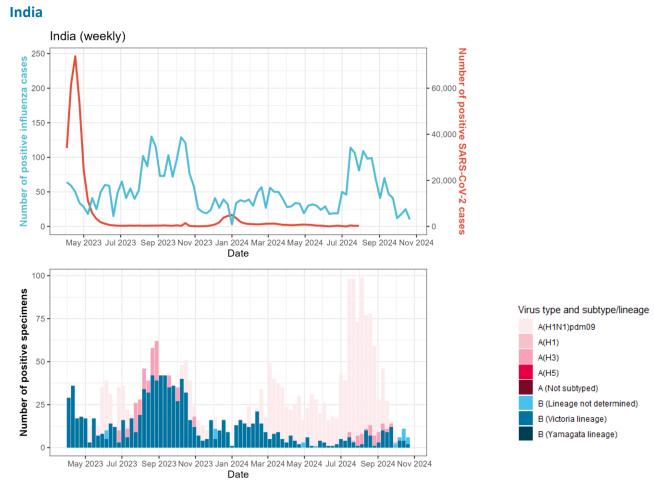
South Korea

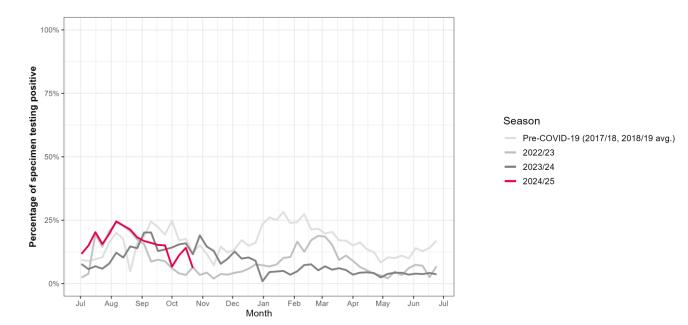


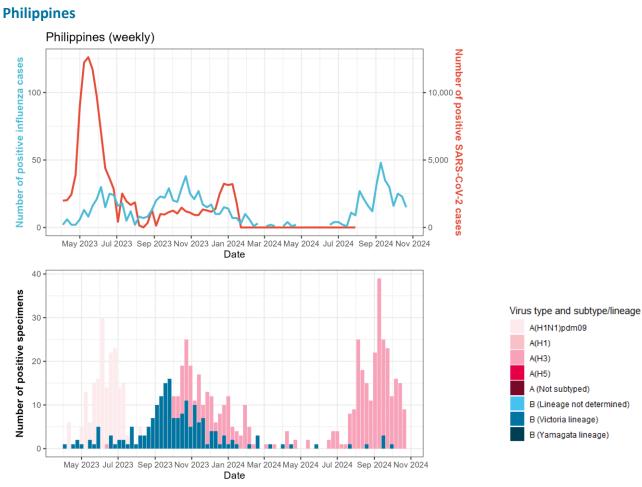
Note: South Korea has reported zero SARS-CoV-2 activity to the WHO since W37/2023



Southern Asia

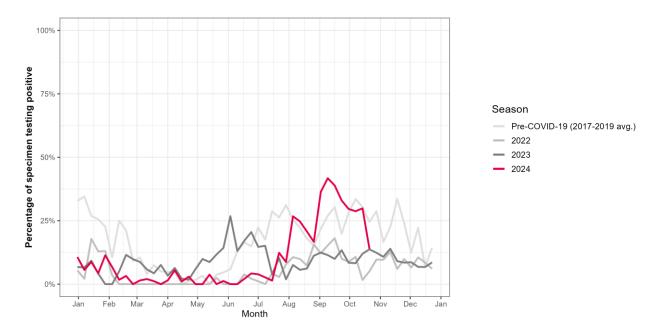




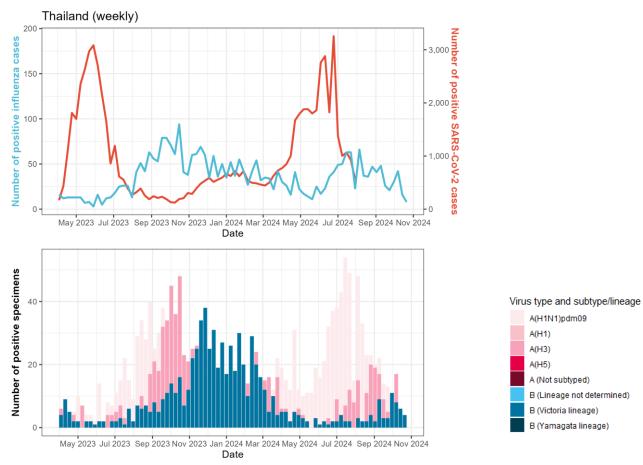


South-East Asia

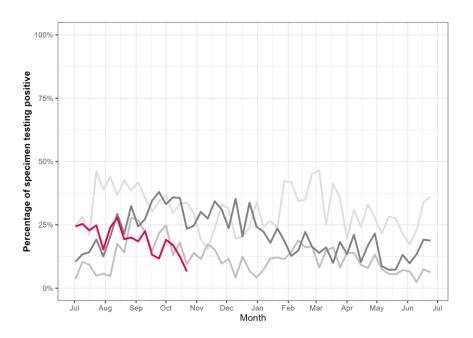
Note: the Philippines has reported zero SARS-CoV-2 activity to the WHO since W04/2024



Thailand



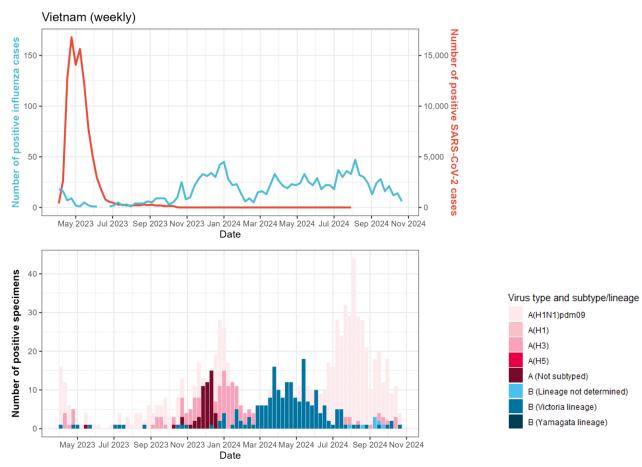
Percentage of specimens testing positive for influenza in different seasons



Season

- Pre-COVID-19 (2017/18, 2018/19 avg.)
- 2022/23
- 2023/24
- 2024/25

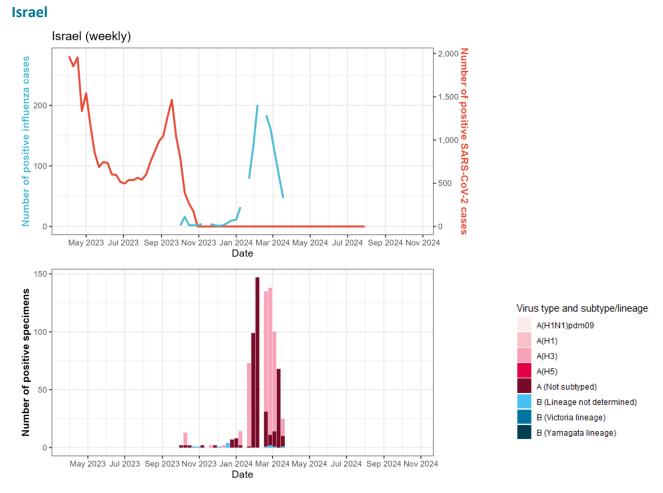
Vietnam



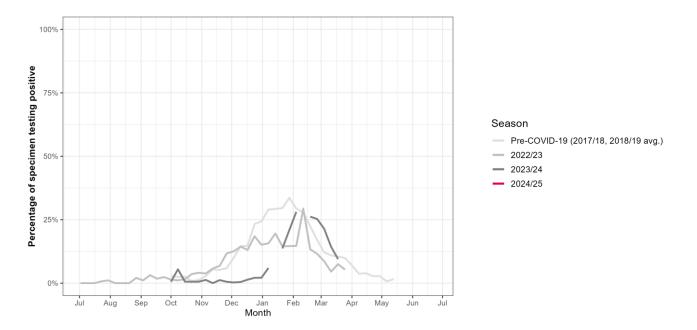
Note: Vietnam has reported zero SARS-CoV-2 activity to the WHO since W44/2023

Percentage of specimens testing positive for influenza in different seasons: data not available

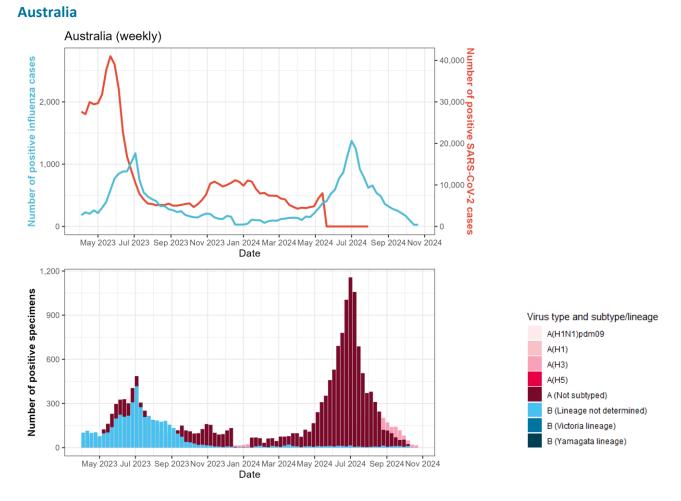
Western Asia

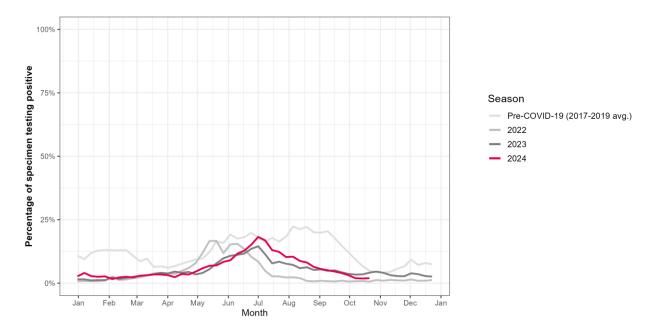


Note: Israel has reported zero SARS-CoV-2 activity to the WHO since W44/2023

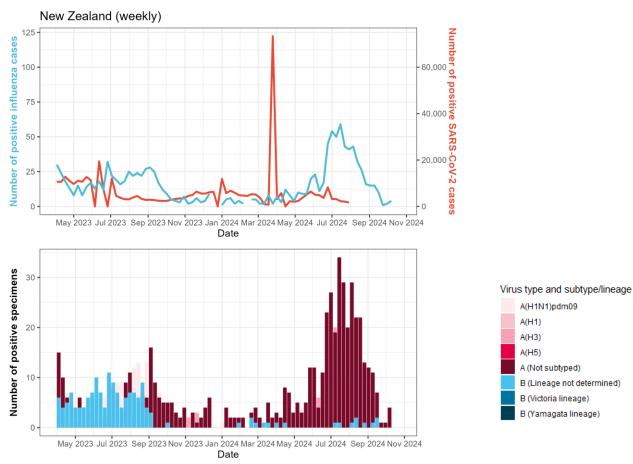


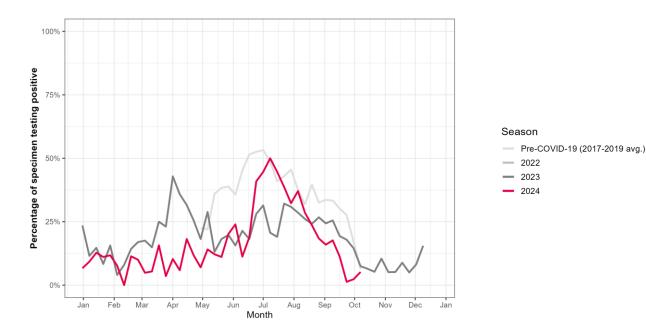
Oceania





New Zealand





Absolute numbers per country

Country	Year	Cases ^{a,b} of	+/- since	Cases ^a of	+/- since	Week of last
		SARS-CoV-2 [*]	last month ^c	influenza	last month ^c	influenza update
Argentina	2019			6,477		
Argentina	2020	1,629,908		465		
Argentina	2021	3,930,008		29		
Argentina	2022	4,331,223		26,585		
Argentina	2023	153,818		5,618		
Argentina	2024	56,261	54	13,232	373	2024-43
Australia	2019			14,002		
Australia	2020	28,296		949		
Australia	2021	338,311		8		
Australia	2022	10,327,434		14,654		
Australia	2023	1,027,494		15,427		
Australia	2024	139,626	0	15,334	324	2024-43
Brazil	2019			3,459		
Brazil	2020	7,448,560		1,391		
Brazil	2021	14,782,177		1,240		
Brazil	2022	13,893,600		3,648		
Brazil	2023	1,387,584		21,939		
Brazil	2024	0	0	24,199	1,678	2024-43
Canada	2019			43,196		
Canada	2020	539,241		44,956		
Canada	2021	1,422,482		337		
Canada	2022	2,514,662		71,314		
Canada	2023	297,851		47,166		
Canada	2024	44,819	38	62,880	347	2024-43
Chile	2019			6,539		
Chile	2020	598,394		272		
Chile	2021	1,200,731		77		
Chile	2022	3,207,034		13,139		
Chile	2023	326,818		10,926		
Chile	2024	68,149	100	17,163	861	2024-43
China	2019			122,757		
China	2020	96,324		31,237		
China	2021	34,534		26,151		
China	2022	62,314,792		56,455		
China	2023	36,877,077		260,766		
China	2024	50,492	2,087	150,316	2,638	2024-43
Egypt	2019			1,999		
Egypt	2020	131,315		659		
Egypt	2021	249,205		233		
Egypt	2022	134,994		2,709		
Egypt	2023	509		3,074		
Egypt	2024	0	0	1,459	45	2024-43

Country	Year	Cases ^{a,b} of SARS-CoV-2 [*]	+/- since last month ^c	Cases ^a of influenza	+/- since last month ^c	Week of last influenza update
France	2019	JARS-CUV-Z	last month	25,405	last month	innuenza upuate
France	2015	2,338,258		16,589		
France	2021	6,371,668		3,071		
France	2021	29,279,621		40,148		
France	2022	1,007,943		22,690		
France	2023	0	0	23,399	113	2024-42
Germany	2019	0	0	1,215	110	202112
Germany	2015	1,660,178		958		
Germany	2020	5,353,865		29		
Germany	2021	30,227,893		1,923		
Germany	2022	1,195,820		796		
Germany	2023	0	0	1,454	4	2024-42
India	2019	0	0	10,428	-	2024 42
India	2019	10,187,850		10,428 655		
India	2020	24,598,952		5,128		
India	2021	24,398,932 9,890,304		1,948		
India	2022	336,066		3,355		
India	2023	28,576	313	3,333 1,887	65	2024-43
		28,370	515		05	2024-43
Israel	2019	200 105		1,796		
Israel	2020	399,105		1,424		
Israel	2021	965,663		456		
Israel	2022	3,391,936		774		
Israel	2023	84,854	0	1,013	0	2024 12
Israel	2024	0	0	1,053	0	2024-12
Italy	2019	2 0 2 2 4 0 2		6,361		
Italy	2020	2,039,182		7,485		
Italy	2021	3,583,249		31		
Italy	2022	19,438,072		5,817		
Italy	2023	1,601,116	6 350	5,256	0	2024 47
Italy	2024	119,459	6,350	5,064	0	2024-17
Japan	2019			10,343		
Japan	2020	217,312		2,915		
Japan	2021	1,514,477		9		
Japan	2022	26,534,616		273		
Japan	2023	5,537,167		7,752		
Japan	2024	0	0	3,246	40	2024-42
Mexico	2019			6,963		
Mexico	2020	1,453,414		4,799		
Mexico	2021	2,548,565		960		
Mexico	2022	3,243,611		10,314		
Mexico	2023	362,826		7,666		
Mexico	2024	11,042	340	9,796	276	2024-43

Netherlands20195,166Netherlands2020773,1983,235Netherlands20212,312,304471Netherlands20225,480,56514,864Netherlands202364,96310,910Netherlands20248,9783831,942422024-43New Zealand20201,7890New Zealand20222,014,4520New Zealand20222,014,4520New Zealand20222,014,4520New Zealand20222,014,4520New Zealand2023412,394631New Zealand20211,73063362024198,6731,7306336Philippines20122,369,471105Philippines20212,369,471105Philippines20221,220,895260Philippines20211,259,9231,282Poland20191,786Poland20222,314,5501,604Poland20222,314,5501,604Poland20222,314,5501,604Poland20222,40,2951,171South Africa202094,911157South Africa20212,41,3026413South Africa202224,43026413South Africa20222,54,8120South Africa20235,912,8182,586South Korea	Country	Year	Cases ^{a,b} of SARS-CoV-2 [*]	+/- since last month ^c	Cases ^a of influenza	+/- since last month ^c	Week of last influenza update
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	Spain	2024	0	0	11,521	385	2024-43

Country	Year	Cases ^{a,b} of	+/- since	Cases ^a of	+/- since	Week of last
	204.0	SARS-CoV-2 [*]	last month ^c	influenza	last month ^c	influenza update
Thailand	2019			1,568		
Thailand	2020	6,142		297		
Thailand	2021	2,203,829		23		
Thailand	2022	2,511,838		575		
Thailand	2023	40,567		1,717		
Thailand	2024	36,805	560	1,494	96	2024-43
United Kingdom	2019			42,447		
United Kingdom	2020	2,344,433		14,373		
United Kingdom	2021	10,230,346		2,755		
United Kingdom	2022	11,584,258		79,679		
United Kingdom	2023	706,222		44,148		
United Kingdom	2024	109,370	3,400	72,200	2,790	2024-43
United States	2019			268,524		
United States	2020	18,890,446		229,766		
United States	2021	32,988,414		39,507		
United States	2022	47,140,633		469,968		
United States	2023	4,417,336		176,909		
United States	2024	0	0	254,069	0	2024-21
Vietnam	2019			355		
Vietnam	2020	1,440		146		
Vietnam	2021	1,650,233		39		
Vietnam	2022	9,872,529		399		
Vietnam	2023	99,798		596		
Vietnam	2024	0	0	979	53	2024-43

*Note: SARS-CoV-2 data are only updated until 4 August 2024.

^a Laboratory-confirmed cases.

^b As of the 24th bulletin, the data source, used by Our World In Data, for SARS-CoV-2 cases has been changed retrospectively. As a result, yearly totals displayed in this table may differ from those in previous bulletins. ^c Influenza cases are reported by FluNet on a weekly basis. To convert these data to months, weekly data are assigned to the month most days in that week belong to. SARS-CoV-2 cases are reported per day and assigned to each month by date. +/- since last month includes all cases over the last full calendar month.

Methodology

Background

After assessment of alarming levels of spread and severity of SARS-CoV-2 virus, on March 11, 2020, WHO declared COVID-19 a pandemic [14]. The emergence of this new virus has had a major impact on the global circulation of respiratory viruses, including influenza and RSV [15]. The FluCov project aims to understand and communicate the impact of COVID-19 on: i) influenza activity and ii) prevention and control measures (e.g. vaccination) in the coming years.

Scope

The countries included in this FluCov-Bulletin are distributed over the Americas (North, Central and Tropical South), Europe (Northern, South West and Eastern), Africa (Northern and Southern), Asia (Eastern, Southern, South East and Western) and Oceania. These data were compared to the prevention and control measures applied in each country using the Stringency Index from the Oxford COVID-19 Government Response Tracker (OxCGRT), when this indicator was available (until 31 December 2022) [16].

Data sources

- Influenza: FluNet [17] is a global web-based tool for influenza virological surveillance first launched in 1997. The virological data entered into FluNet, e.g. number of influenza viruses detected by subtype, are critical for tracking the movement of viruses globally and interpreting the epidemiological data. The data are provided remotely by National Influenza Centres (NICs) of the Global Influenza Surveillance and Response System (GISRS) and other national influenza reference laboratories collaborating actively with GISRS or are uploaded from WHO regional databases.
- SARS-CoV-2: Our World in Data systematically collects COVID-19 data which is presented in their online tool [18]. We used this platform to extract data on the number of cases, as well as tests performed per country. As of 8 March 2023, Our World in Data changed their primary data source from the John Hopkins repository on daily confirmed COVID-19 cases to the WHO [19].
- Government response tracker: The Oxford COVID-19 Government Response Tracker (OxCGRT) [16] systematically collects information on several different common policy responses that governments have taken to respond to the pandemic on 20 indicators such as school closures and travel restrictions. It now has data from more than 180 countries. OxCGRT data is downloaded directly from the Our World in Data platform.

Extraction details

Data were extracted on 4 November 2024 and cover the period 1 January 2019 to 27 October 2024 (influenza) and 4 August 2024 (SARS-CoV-2). Data from both platforms are regularly updated and **sometimes retrospectively corrected**. This might explain any discrepancies between our reported figures and the data published online, even when referring to the exact same period. In case of any unclear details or perceived irregularities, feel free to contact us at <u>flucov@nivel.nl</u>.

References

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Websites

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Funding

The FluCov Project is funded by Sanofi, France.