

# FluCov-Bulletin – September 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 September, due to low activity in the Northern Hemisphere and decreasing activity in most Southern Hemisphere countries (see Figure 1). The following country patterns were observed for influenza:

- In the <u>Northern Hemisphere</u>, influenza A(H1N1)pdm09 activity in India decreased compared to August, but overall activity remained elevated. Influenza activity in the **Philippines**, primarily driven by influenza A(H3), increased at the beginning of September but decreased towards the end of the month. **Thailand** and **Vietnam** also reported a decrease in influenza activity.
- Influenza activity was stable at low levels in Canada, Mexico and most European countries covered by the bulletin (France, Germany, the Netherlands, Poland, Spain, and the United Kingdom).
- Continued low influenza activity was reported in China, Egypt, Japan, and South Korea.
- In the <u>Southern Hemisphere</u>, influenza activity decreased in Brazil, South Africa, Australia, and New Zealand compared to August.
- Influenza activity remained stable at low levels in Argentina and Chile.
- Similar to August, Influenza B (Victoria if lineage was determined) was the predominant virus type in Argentina, Brazil and Chile in September, while influenza A (not subtyped) remained dominant in Australia and New Zealand.
- No update on influenza activity was available for Israel, Italy and the United States in September.

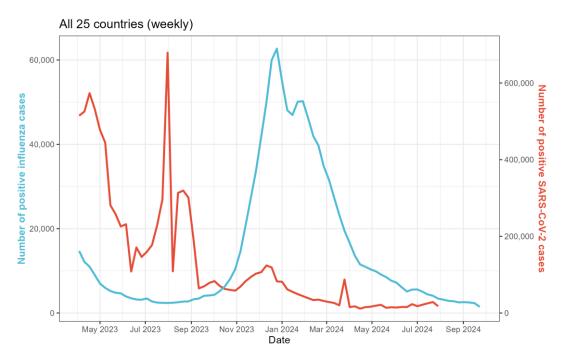
Globally, **SARS-CoV-2** detections were slightly elevated in some countries. The following country patterns were observed for **SARS-CoV-2**:

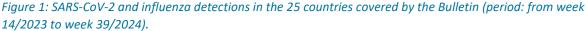
- An increase in SARS-CoV-2 activity was reported in Brazil and England in week 38 [1,2].
- In week 39, SARS-CoV-2 activity remained stable at elevated levels in Canada and most EU countries, although some EU countries showed a declining trend [3,4].
- SARS-CoV-2 activity was decreasing in Australia (week 37-38), South Africa (week 39), the United States (week 38), and China (week 36) [5-8].

#### Implications

In the Northern Hemisphere, **influenza** activity remained low at interseasonal levels. In most Southern Hemisphere countries covered by the bulletin, **influenza** activity either decreased (in **Brazil, South Africa, Australia** and **New Zealand**) or remained at low levels (in **Argentina** and **Chile**). In South America, **Influenza** B replaced **influenza** A(H3N2) as the predominant virus type in **Argentina**, **Brazil** and **Chile**. This bimodal curve of **influenza** A and B is not uncommon and was frequently observed before the COVID-19 pandemic [9]. It is important to continue determining the lineages of **influenza** B specimens to assess whether **influenza** B/Yamagata has ceased circulating globally [10]. Interim effectiveness estimates from the CDC indicate that the 2024 Southern Hemisphere seasonal **influenza** vaccine has only reduced the risk of **influenza**-associated hospitalization among high-risk groups by 35% in five South American countries (**Argentina**, **Brazil**, **Chile**, **Paraguay** and **Uruguay**). If similar A(H3N2) viruses dominate during the 2024-25 season in the Northern Hemisphere, vaccine effectiveness may be comparable [11]. The WHO 2024-2025 Northern Hemisphere vaccine composition report indicates that vaccine components are well matched to circulating A(H1N1)pdm09 and B/Victoria subclades, but are less well matched to A(H3) 2a.3a.1 clade viruses [12].

In September 2024, **SARS-CoV-2** activity was elevated in many Northern Hemisphere countries, although most reported either a decrease or stable levels of activity [13]. Since the WHO declared the end of the pandemic in May 2023 [14], 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 7 October 2024, **SARS-CoV-2** data were only updated until 4 August) impact the completeness of data reported in the FluCov Bulletin.





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.

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## 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 29 September, 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).

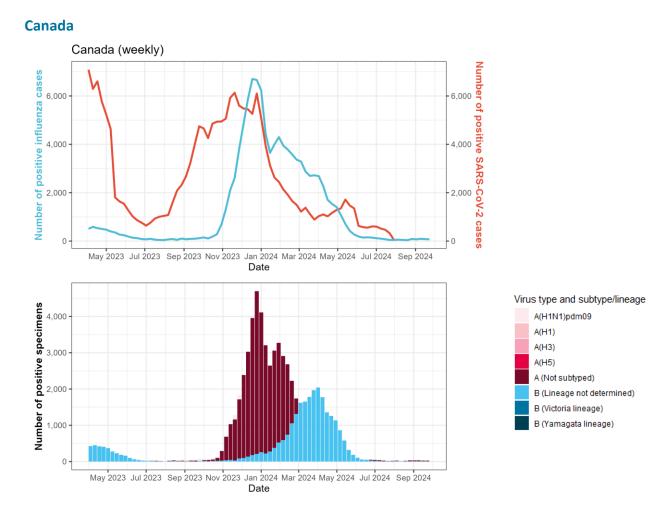
#### The FluCov Dashboard is live!

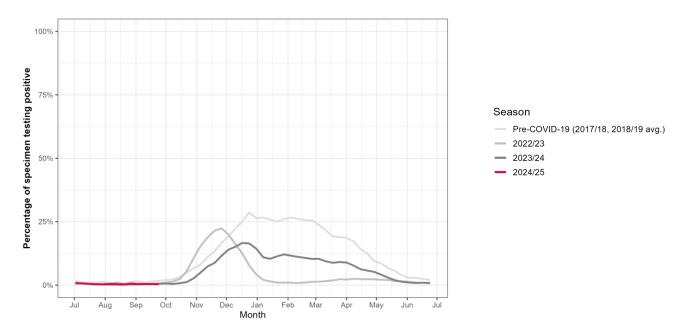
All Figures and Tables in the FluCov-Bulletin can be accessed (real-time) at: https://www.nivel.nl/en/dossier-epidemiology-respiratory-viruses/flucov-dashboard

North America	Northern Africa
Canada	Egypt
United States	
	Southern Africa
Central America Caribbean	South Africa
Mexico	
	Eastern Asia
Tropical South America	China
Brazil	Japan
	South Korea
Temperate South America	
Argentina	Southern Asia
Chile	India
Northern Europe	South East Asia
United Kingdom	Philippines
	Thailand
Eastern Europe	Vietnam
Poland	
	Western Asia
South West Europe	Israel
France	
Germany	Oceania
Italy	Australia
Netherlands	New Zealand
Spain	
Spain	

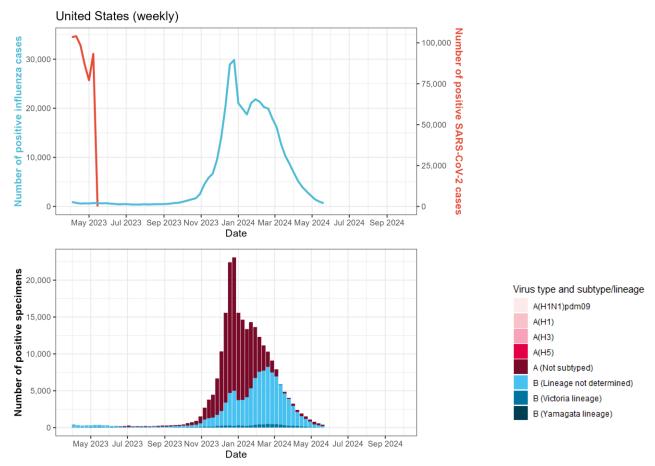
#### **Countries (click to view plot)**

### **North America**

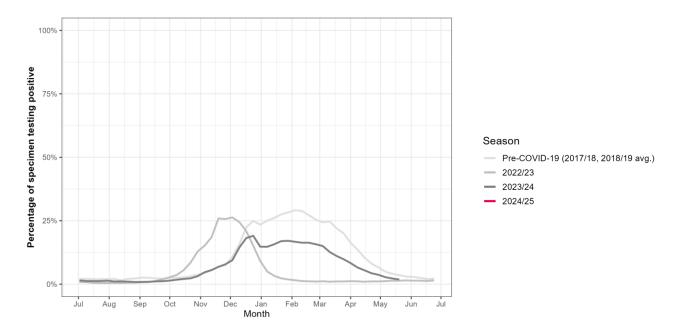


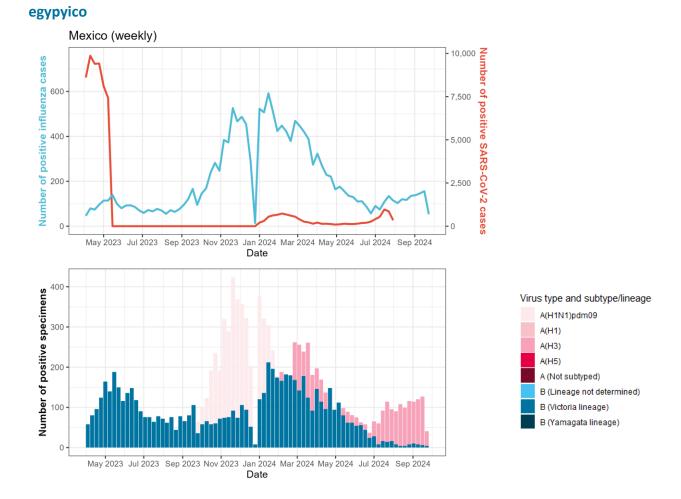


#### **United States**

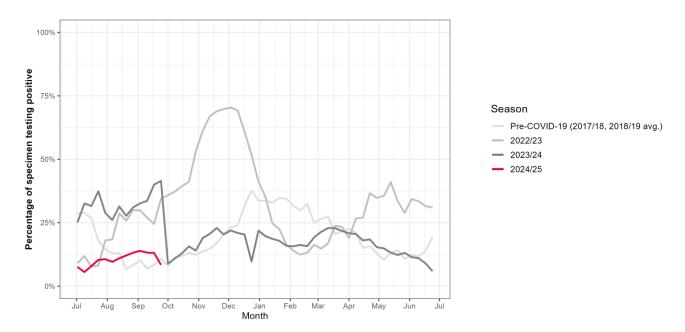


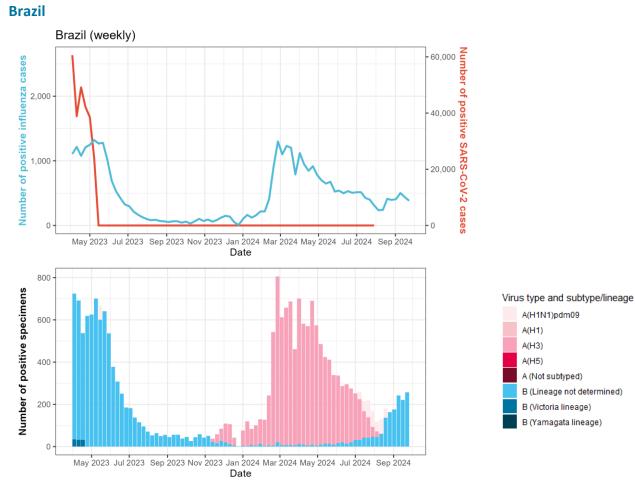
Note: The United States stopped reporting SARS-CoV-2 activity to the WHO since W20/2023





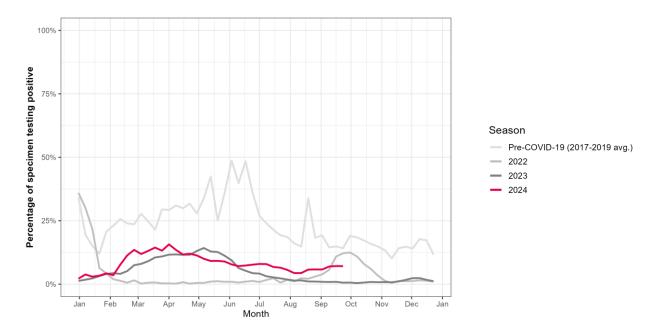
### **Central America Caribbean**

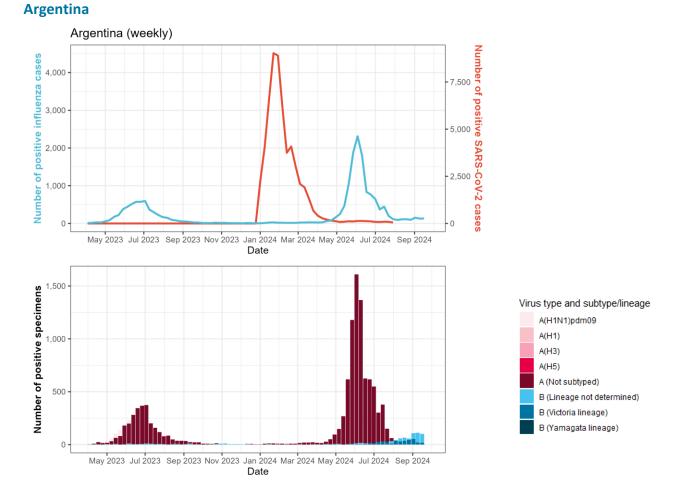




### **Tropical South America**

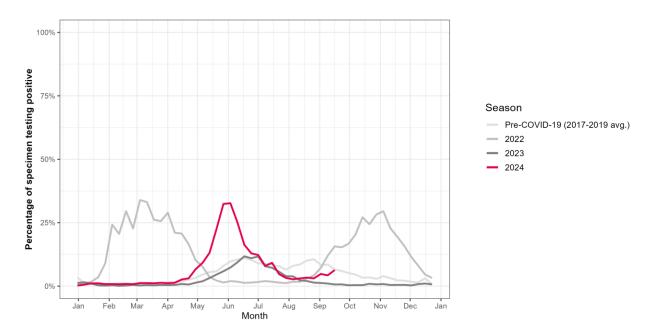
Note: Brazil has reported zero SARS-CoV-2 activity to the WHO since W2/2024





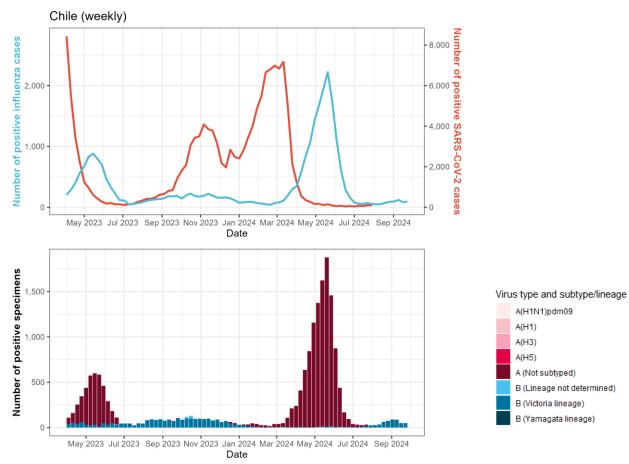
### **Temperate South America**

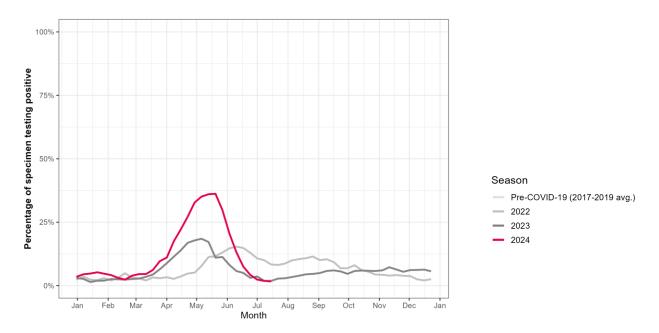
#### Percentage of specimens testing positive for influenza in different seasons

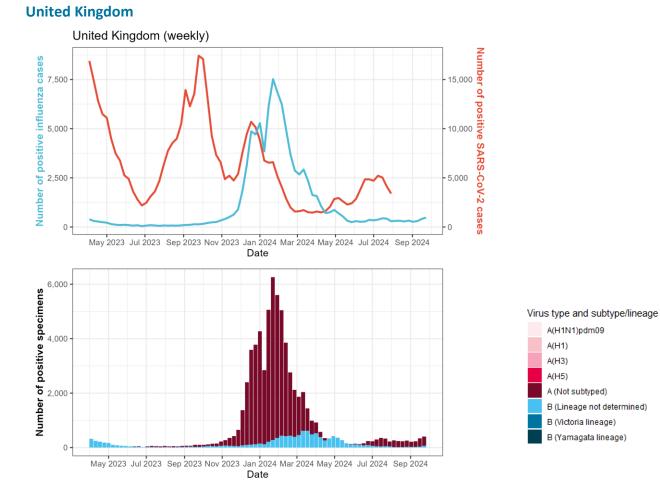


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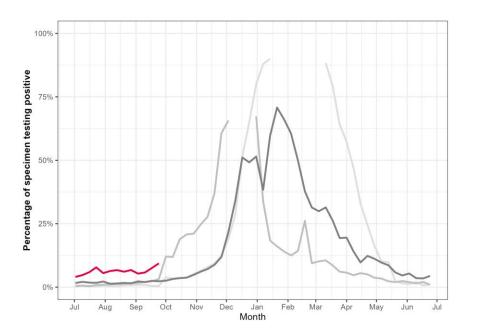






### **Northern Europe**

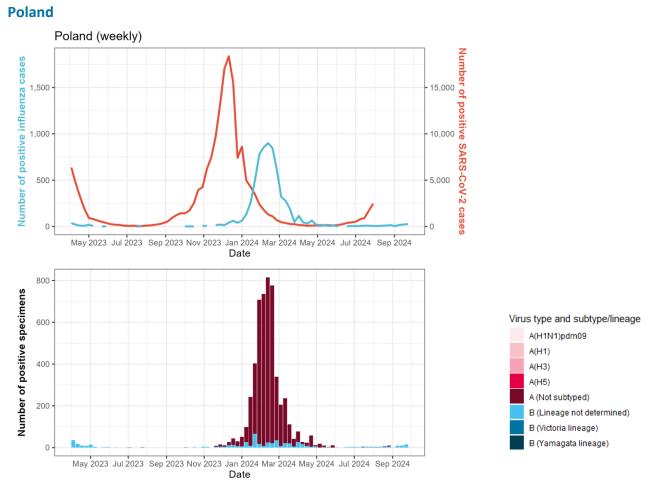
#### Percentage of specimens testing positive for influenza in different seasons



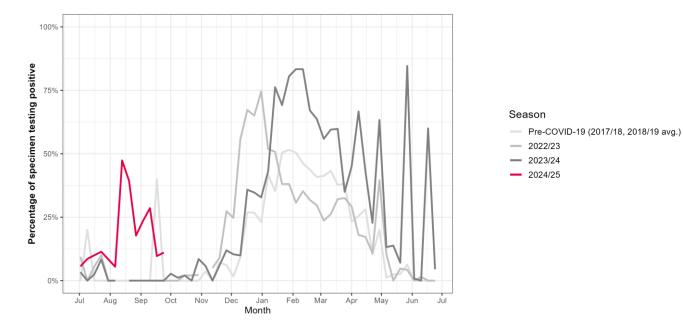
#### Season

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

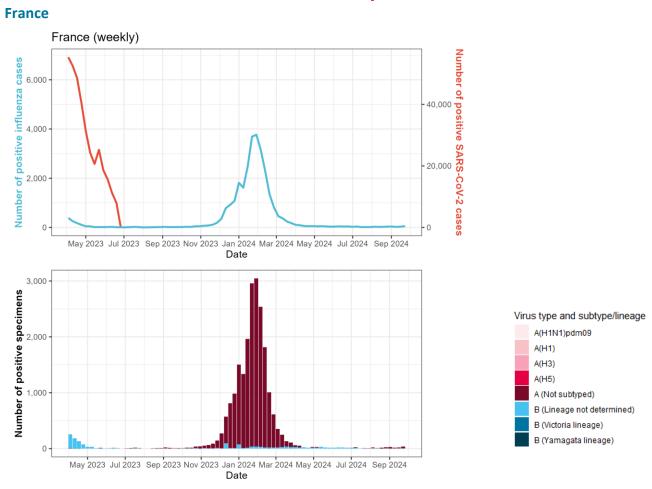
### **Eastern Europe**



#### Percentage of specimens testing positive for influenza in different seasons

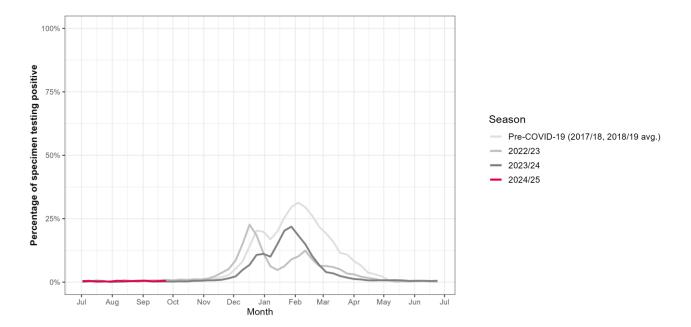


Note: the high variety in percentage positive since April 2024 is likely caused by a low number of tested specimens

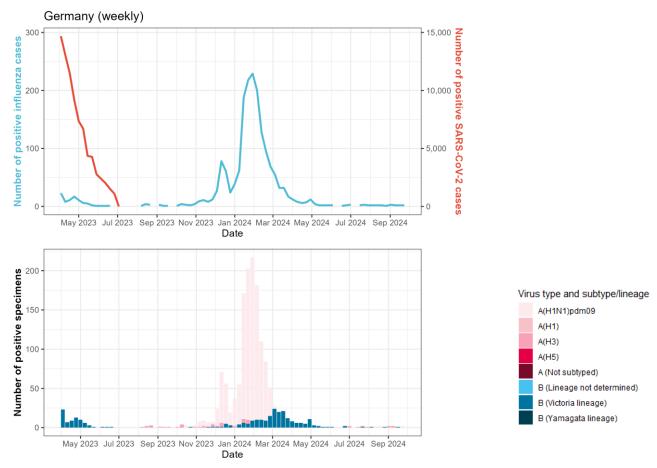


### **South West Europe**

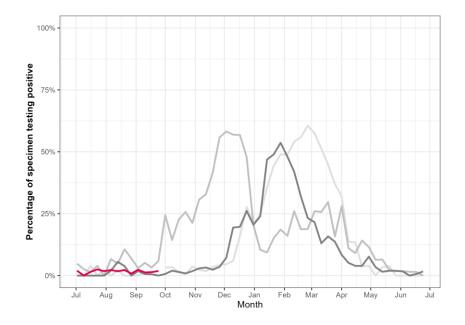
Note: France stopped reporting SARS-CoV-2 activity to the WHO since W26/2023



#### Germany

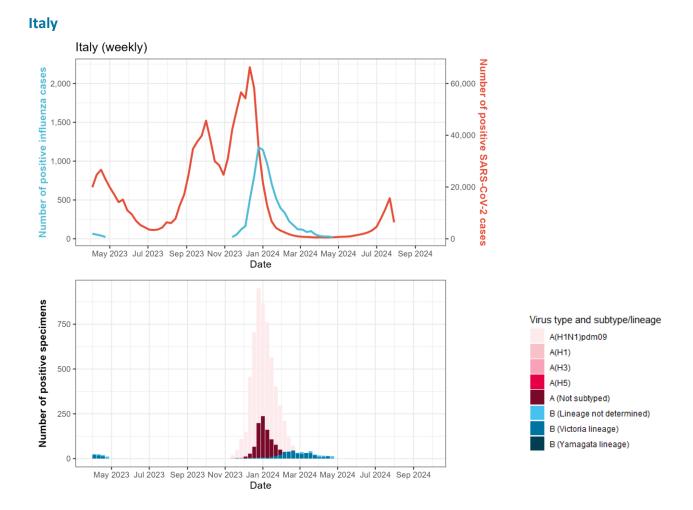


Note: Germany stopped reporting SARS-CoV-2 activity to the WHO since W27/2023



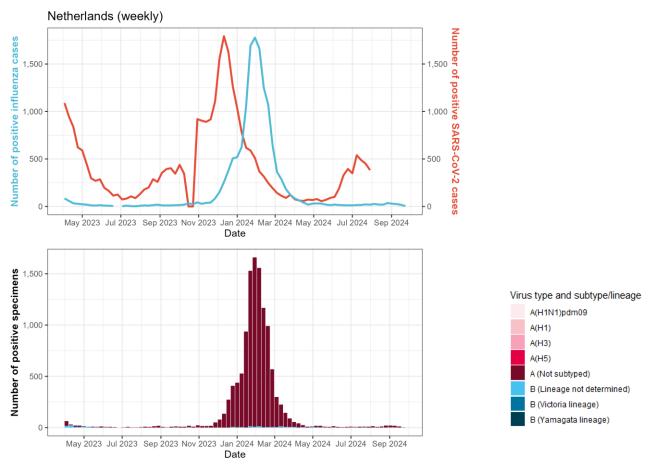


- Pre-COVID-19 (2017/18, 2018/19 avg.)
- \_\_\_\_\_ 2022/23
- 2023/24
- 2024/25



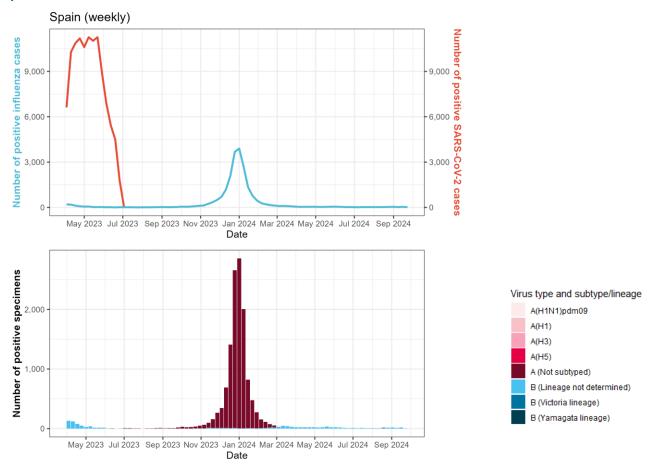
Percentage of specimens testing positive for influenza in different seasons: data not available

#### Netherlands

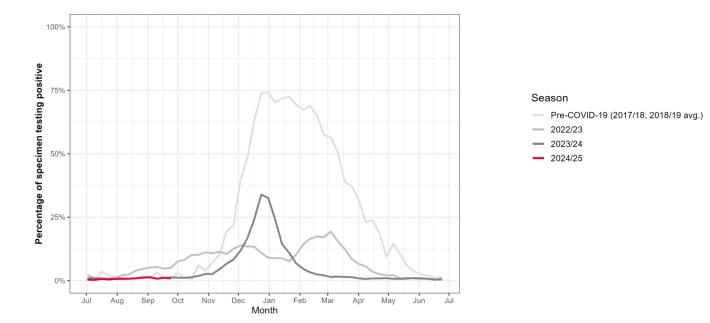


Percentage of specimens testing positive for influenza in different seasons: data not available

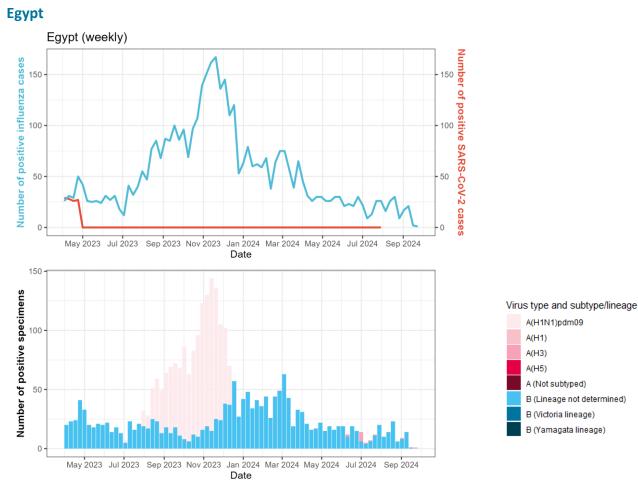
#### Spain



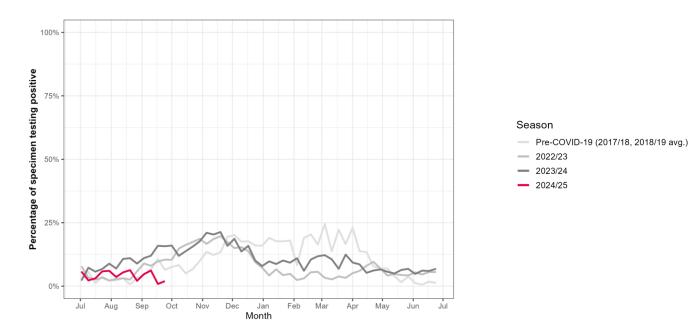
Note: Spain stopped reporting SARS-CoV-2 activity to the WHO since W27/2023

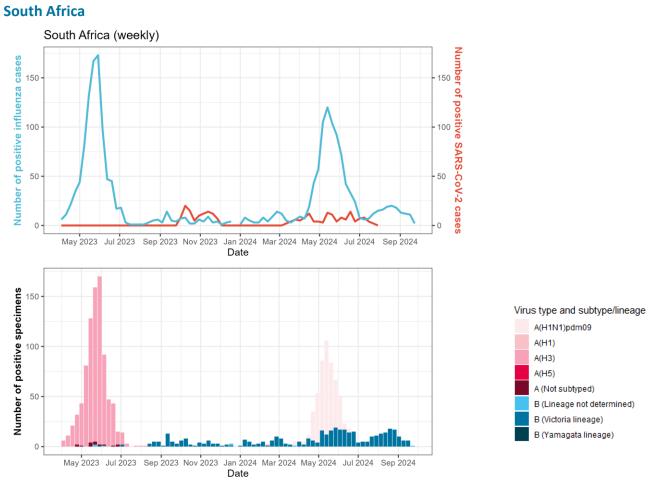


**Northern Africa** 

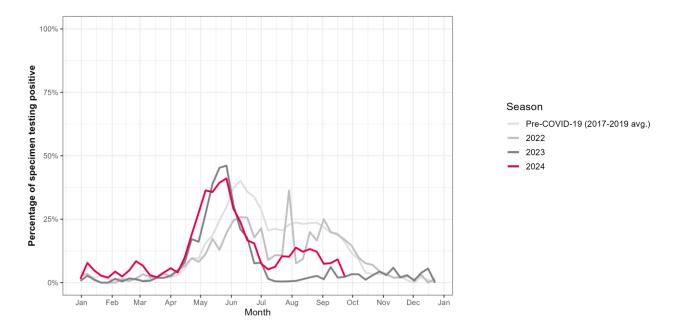


Note: Egypt has reported zero SARS-CoV-2 activity to the WHO since W18/2023

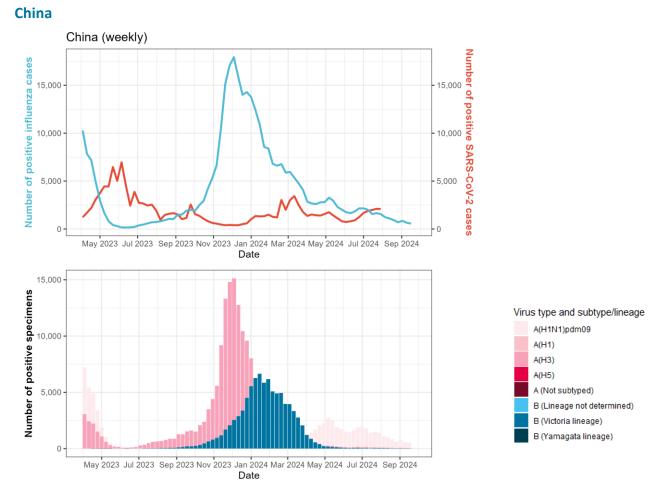


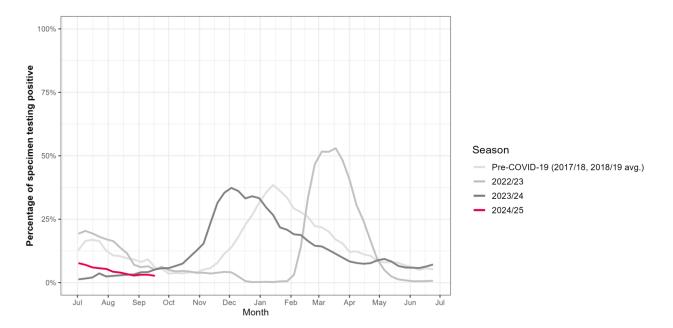


### **Southern Africa**

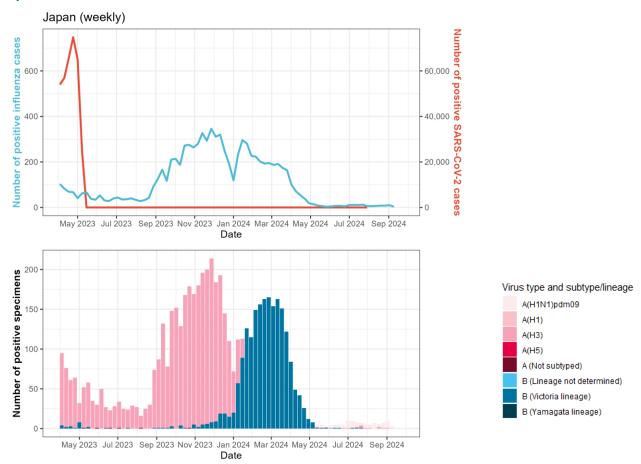


**Eastern Asia** 





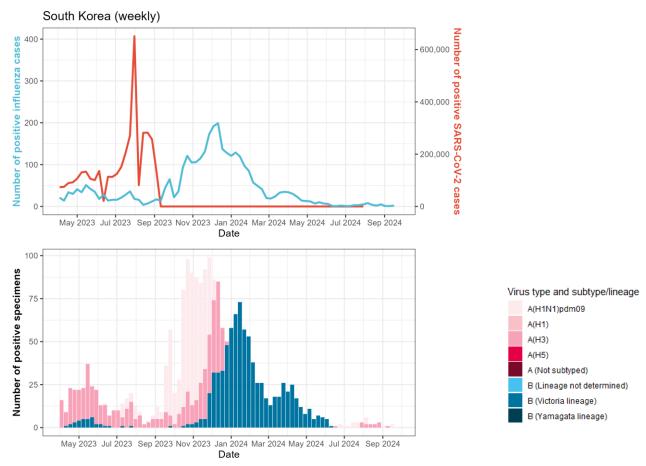
#### Japan



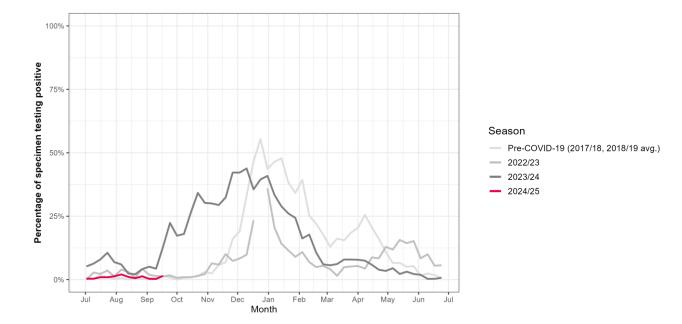
Note: Japan has reported zero SARS-CoV-2 activity to the WHO since W21/2023

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

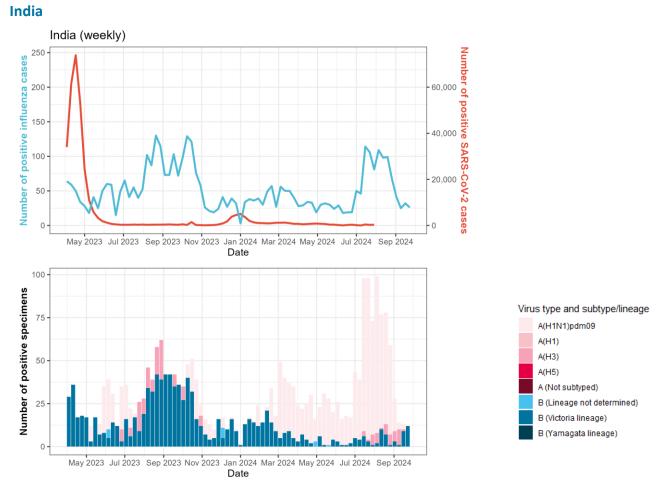
#### **South Korea**

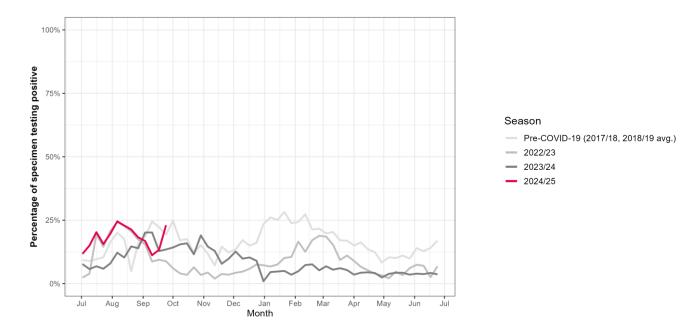


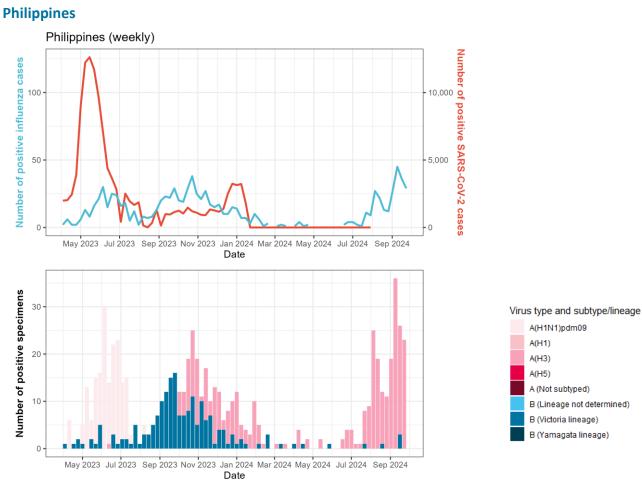
Note: South Korea has reported zero SARS-CoV-2 activity to the WHO since W37/2023





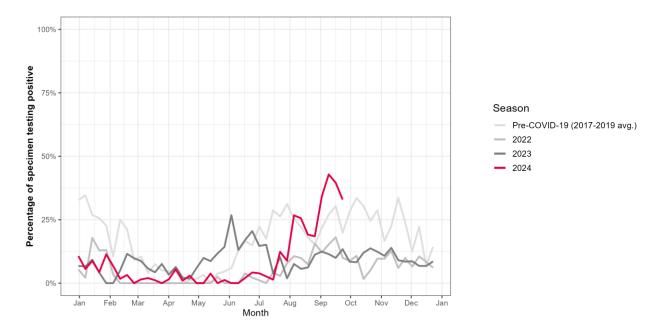




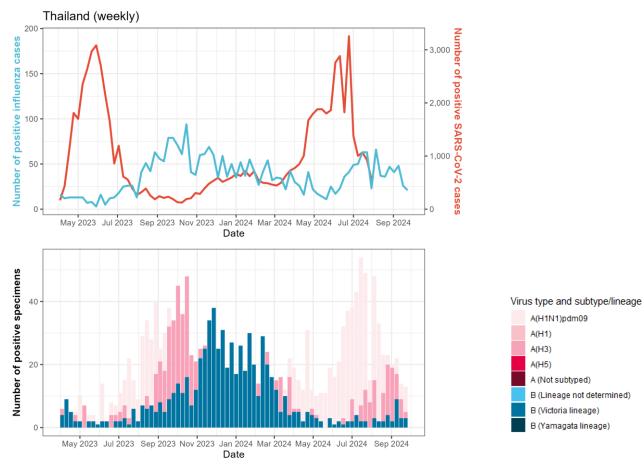


### South-East Asia

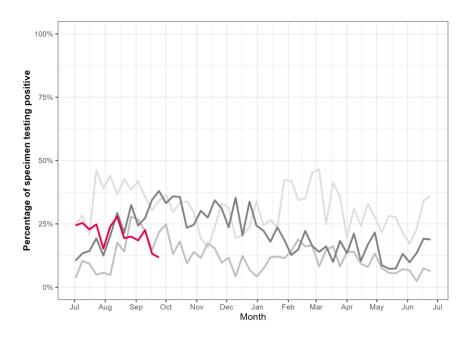
Note: the Philippines has reported zero SARS-CoV-2 activity to the WHO since W04/2024



#### Thailand



### Percentage of specimens testing positive for influenza in different seasons

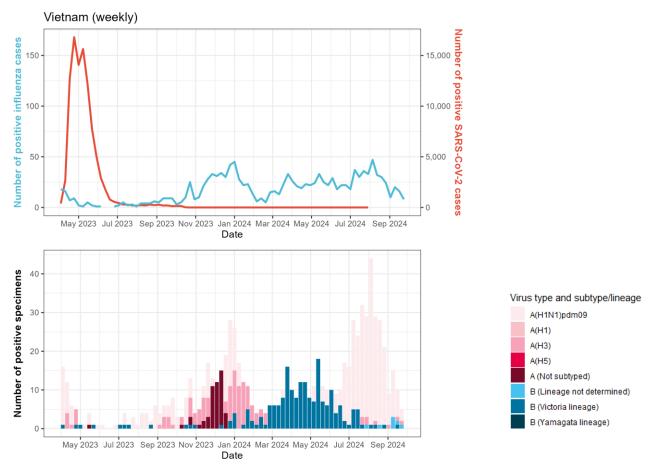


#### Season

- Pre-COVID-19 (2017/18, 2018/19 avg.)
- 2022/23
- 2023/242024/25

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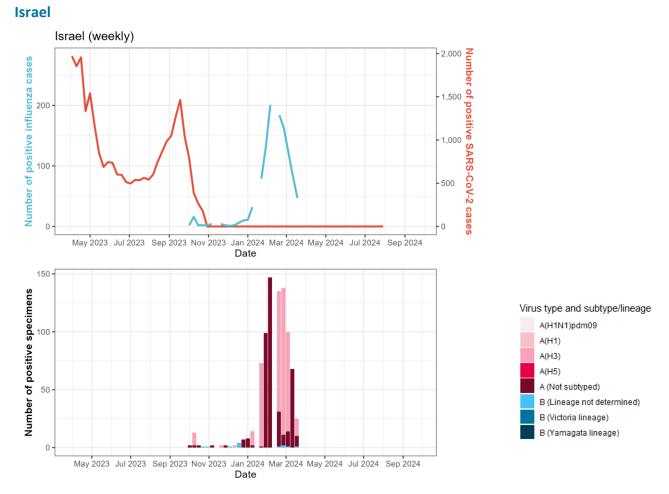
#### Vietnam



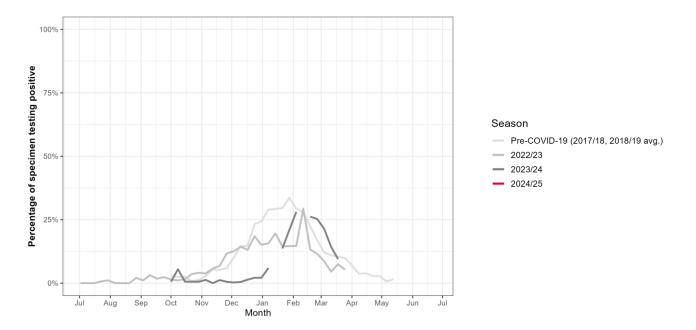
Note: Vietnam has reported zero SARS-CoV-2 activity to the WHO since W44/2023

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

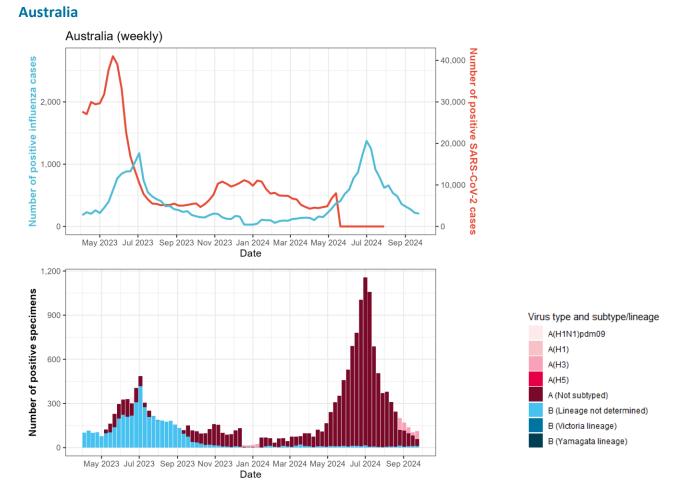
### Western Asia

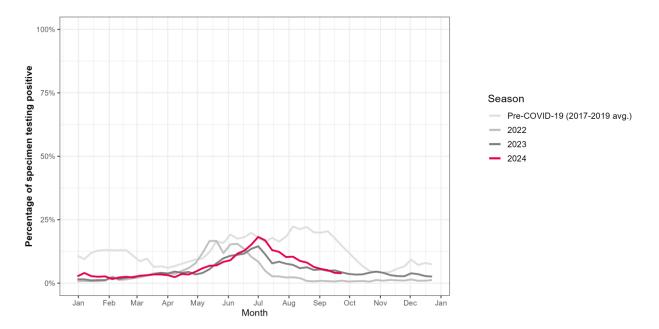


Note: Israel has reported zero SARS-CoV-2 activity to the WHO since W44/2023

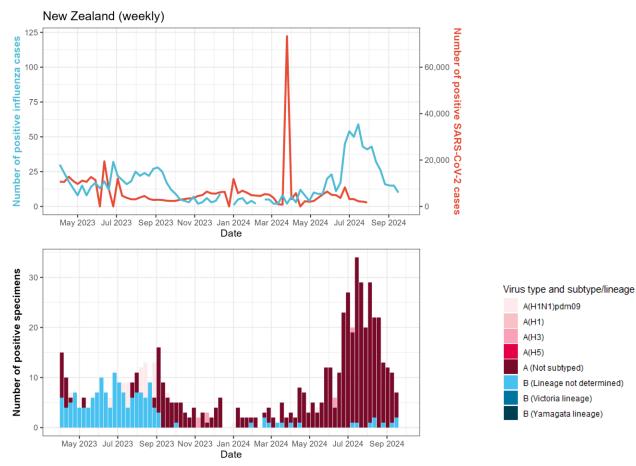


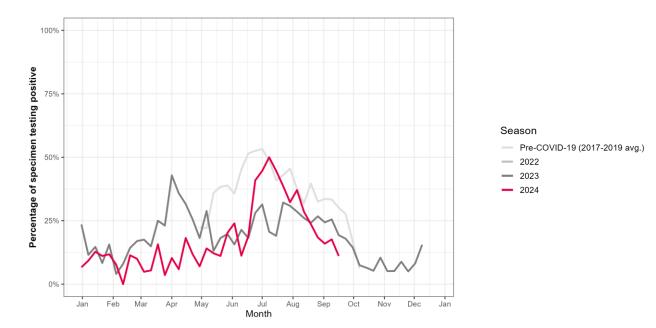
### Oceania





#### **New Zealand**





# Absolute numbers per country

Country	Year	Cases <sup>a,b</sup> of	+/- since	Cases <sup>a</sup> of	+/- since	Week of last
		SARS-CoV-2 <sup>*</sup>	last month <sup>c</sup>	influenza	last month <sup>c</sup>	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	12,579	510	2024-39
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	14,965	1,378	2024-39
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	22,314	2,125	2024-39
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	2023	44,819	38	62,528	408	2024-39
Chile	2019	11,010	50	6,539	100	202133
Chile	2019	598,394		272		
Chile	2020	1,200,731		77		
Chile	2021	3,207,034		13,139		
Chile	2022	3,207,034 326,818		10,926		
Chile	2025	520,818 68,149	100	16,286	485	2024-39
		00,149	100		465	2024-39
China	2019	06 224		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	2 007	260,766	2 760	2024.20
China	2024	50,492	2,087	146,782	2,768	2024-38
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	1,391	50	2024-39

France     2019     33,258     16,589     10011     Internal Data       France     2020     2,338,258     16,589     5       France     2021     6,371,668     3,071     5       France     2022     29,279,621     40,148     5       France     2024     0     0     23,281     179     2024-39       Germany     2019     1,215     5     5     5     5     5       Germany     2022     30,227,893     1,923     5	Country	Year	Cases <sup>a,b</sup> of SARS-CoV-2 <sup>*</sup>	+/- since last month <sup>c</sup>	Cases <sup>a</sup> of influenza	+/- since last month <sup>c</sup>	Week of last influenza update
France20202,338,25816,589France20216,371,6683,071France202229,279,62140,148France20231,007,94322,690France20240023,281179Cermany20191,215Germany20201,660,178958Germany20215,353,86529Germany202230,227,8931,923Germany20233,227,8931,923Germany2024001,45010Germany2024001,45010Germany20240,187,8506551India20200,187,8506551India20212,4598,9525,1281India20229,890,3041,9481India20229,890,3041,9481India202428,5763131,747191Israel2020399,1051,4241Israel2021965,6634561Israel20223,391,9367741Israel202384,8541,0131Israel2024001,0530Italy202419,488,0725,86171Italy202419,488,0725,86171Italy20231,531,1675,2561Italy202411,514,47791 <t< td=""><td>France</td><td>2019</td><td>JARJ-CUV-2</td><td></td><td></td><td></td><td>innuenza upuate</td></t<>	France	2019	JARJ-CUV-2				innuenza upuate
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France20240023,2811792024-39Germany2019					•		
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Country	Year	Cases <sup>a,b</sup> of	+/- since	Cases <sup>a</sup> of	+/- since	Week of last
		SARS-CoV-2*	last month <sup>c</sup>	influenza	last month <sup>c</sup>	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	1,398	183	2024-39
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	69,429	1,777	2024-39
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	899	78	2024-39

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

<sup>a</sup> Laboratory-confirmed cases.

<sup>b</sup> As of the 24<sup>th</sup> 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. <sup>c</sup> 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 [15]. The emergence of this new virus has had a major impact on the global circulation of respiratory viruses, including influenza and RSV [16]. 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) [17].

#### Data sources

- Influenza: FluNet [18] 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 [19]. 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 [20].
- **Government response tracker**: The Oxford COVID-19 Government Response Tracker (OxCGRT) [17] 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 7 October 2024 and cover the period 1 January 2019 to 29 September 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>.

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#### Websites

Project Website: <u>https://www.nivel.nl/en/flucov</u> FluCoV Dashboard: <u>https://www.nivel.nl/en/dossier-epidemiology-respiratory-viruses/flucov-dashboard</u>

#### Funding

The FluCov Project is funded by Sanofi, France.