

## FluCov-Bulletin – May 2024

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

*With 3 new countries added:  
Argentina, Chile and New Zealand*

### Commentary

#### Contents

Four years have passed since the initial report of atypical pneumonia in Wuhan, China, in January 2020, which was eventually associated with the novel **SARS-CoV-2** virus. 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 May (see Figure 1). The following country patterns were observed for **influenza**:

- In the Southern Hemisphere, **influenza** activity has been low in **Australia** and **New Zealand**, although a small increase in **influenza** detections was observed in **Australia**.
- In **South Africa** an increase in detections and the percentage of specimens that tested positive for **influenza** was observed in May, with **influenza** A(H1N1)pdm09 predominantly detected.
- The percentage of specimens testing positive for **influenza** rapidly increased in **Argentina** and **Chile**, with increased **influenza** A(not subtyped) detections in **Chile**. In **Brazil**, **influenza** detections decreased and the percentage of positive **influenza** specimens decreased to very low levels.
- In the Northern Hemisphere, **influenza** activity continued to decrease and returned to baseline activity in all European countries covered by the bulletin (**France**, **Germany**, the **Netherlands**, **Poland**, **Spain**, and the **United Kingdom**).
- **Influenza** activity also decreased to baseline levels in the **United States** and **Canada**. This decrease in **influenza** detections was also observed in **Mexico**, although the percentage of specimens testing positive for **influenza** remained over 10%, with a mix of **influenza** A(H3N2) and B/Victoria.
- **Influenza** activity continued to decrease in **China** with an overall positivity rate under 10% towards the end of May. The predominant viruses were **influenza** A(H1N1)pdm09.
- Continued low **influenza** activity was reported in **Egypt**, **India**, **Japan**, **Philippines**, **South Korea**, **Thailand**, and **Vietnam**.
- No update on **influenza** activity was available for **Israel** and **Italy** in May.

Globally, **SARS-CoV-2** detections never reached the levels observed during the late 2022 peak, mainly driven by China (see Figure 1). The following patterns were observed for **SARS-CoV-2** in May 2024:

- **SARS-CoV-2** activity was low with a decreasing trend in **Argentina**, **Australia**, **Canada**, **Chile**, **China**, **India**, **Italy**, **Netherlands**, **Poland**, **South Africa**, and the **United Kingdom**.
- **SARS-CoV-2** activity was also low in **New Zealand**, after a high peak at the beginning of April 2024.
- An increase in **SARS-CoV-2** activity was reported in **Thailand**.
- No update on **SARS-CoV-2** detections was available for **Brazil**, **Egypt**, **France**, **Germany**, **Israel**, **Japan**, **Mexico**, **Philippines**, **South Korea**, **Spain**, **United States**, and **Vietnam** in May.

## Implications

In the Southern Hemisphere, some countries in South America reported elevated **influenza** activity (**Argentina** and **Chile**) [1,2]. In **South Africa**, **influenza** activity increased in May 2024, with **influenza** A(H1N1)pdm09 as the predominant virus lineage detected [2]. Influenza detections remained low in **Australia**, **Brazil** and **New Zealand**. In the Northern Hemisphere, **influenza** activity continued to decline and is now below baseline in Europe, the **United States** and **Canada** [3-5]. In the 2022/23 Northern Hemisphere season, the peak of **influenza** epidemics was earlier compared to the pre-pandemic period (1.9 months) [6]. When looking at the 2023/24 **influenza** season in the **United States** and **Canada**, it seems that the peak timing in the percentage of **influenza**-positive cases was more comparable to the pre-pandemic average than the 2022/23 season. This observation suggests a return to pre-pandemic **influenza** patterns after the disruption caused by COVID-19. However, a comparative analysis of peak timing between seasons is necessary to be certain and caution is needed when drawing conclusions at this moment. In the 2023/24 Northern Hemisphere season, the prevalent **influenza** strains have been A(H1N1)pdm09 and A(H3N2), with the latter driving the November peak in **China**. However, **influenza** B/Victoria – the dominant and only **influenza** B lineage currently circulating – was detected more frequently later in the season and replaced **influenza** A as the dominant strain in **Canada**, **China**, **Japan** and **South Korea** in February/March 2024. This bimodal curve of **influenza** A and B is not uncommon and was already regularly seen before the COVID-19 pandemic [7]. It is of importance that the lineage of **influenza** B specimens continues to be determined, to understand whether **influenza** B/Yamagata has ceased circulating globally [8].

As of May 2024, **SARS-CoV-2** activity is low in almost all countries, after a peak in late 2023. An increase in **SARS-CoV-2** detections in May was only reported in **Thailand**. One year following the WHO's declaration of the pandemic's end [9], countries have implemented varied approaches to monitoring **SARS-CoV-2**. These strategies presently encompass the reduction of surveillance activities and instances where surveillance data is not shared with the WHO. This variation in approaches impacts the completeness of data reported in the FluCov Bulletin.

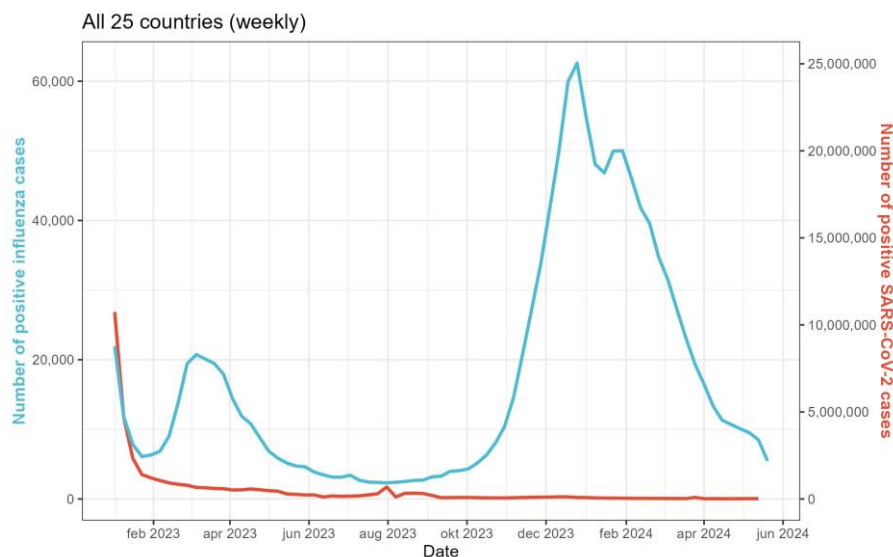


Figure 1: SARS-CoV-2 and influenza detections in the 25 countries covered by the Bulletin (period: from week 1/2023 to week 21/2024).

**Disclaimer: Comparisons between countries and seasons 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 26 May, 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, United Kingdom, France, Germany, Italy, Netherlands, Spain, Poland, South Africa, Egypt, China, Japan, South Korea, India, Philippines, Thailand, Vietnam, Israel and Australia.

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 of **SARS-CoV-2** detections per country can be found on [pages 26-28 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 season, 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/flu-cov-dashboard>

### Countries (click to view plot)

North America

Canada

United States

Central America Caribbean

Mexico

Tropical South America

Brazil

Temperate South America

Argentina

Chile

Northern Europe

United Kingdom

Eastern Europe

Poland

South West Europe

France

Germany

Italy

Netherlands

Spain

Northern Africa

Egypt

Southern Africa

South Africa

Eastern Asia

China

Japan

South Korea

Southern Asia

India

South East Asia

Philippines

Thailand

Vietnam

Western Asia

Israel

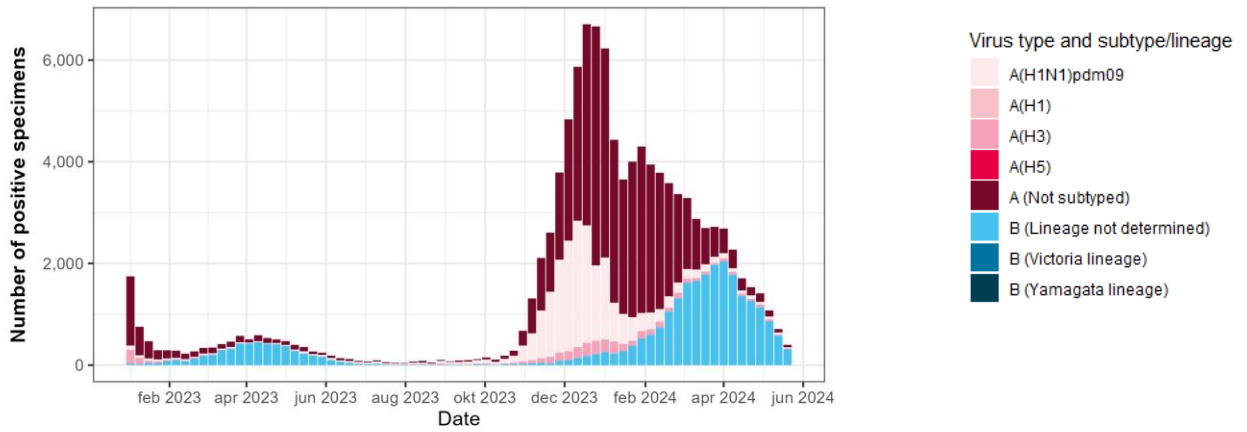
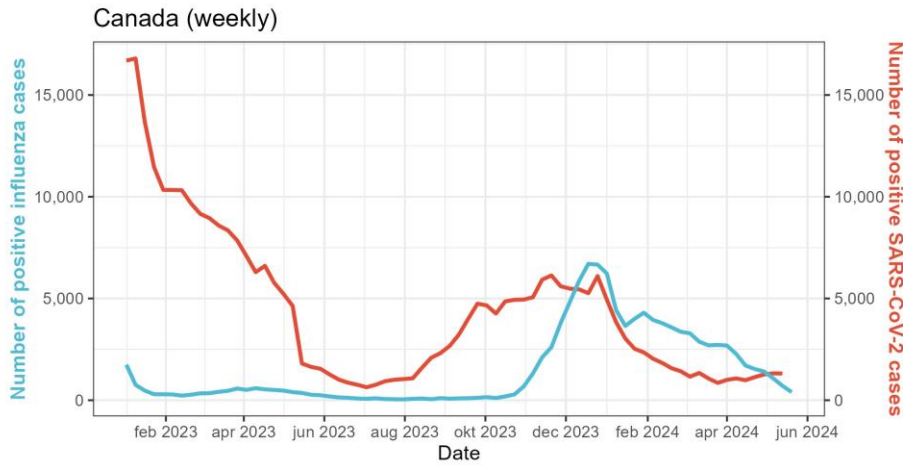
Oceania

Australia

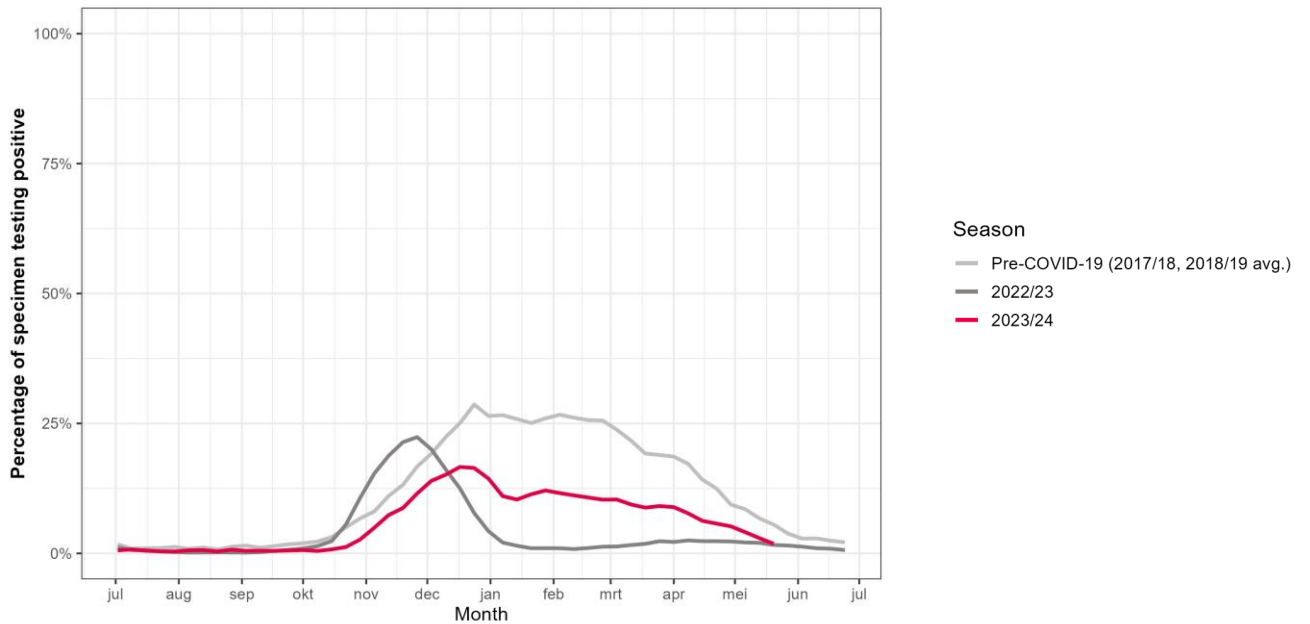
New Zealand

# North America

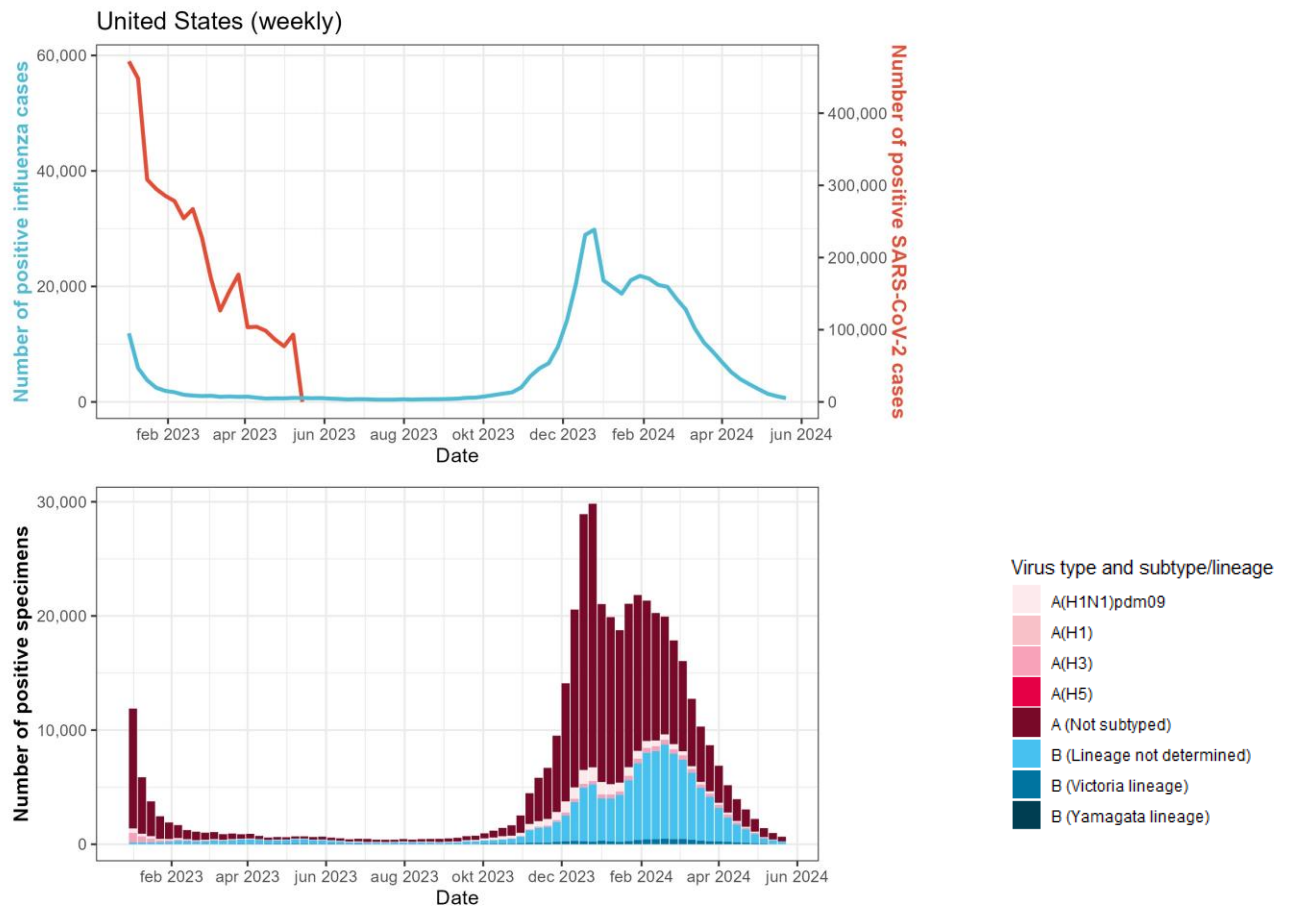
## Canada



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

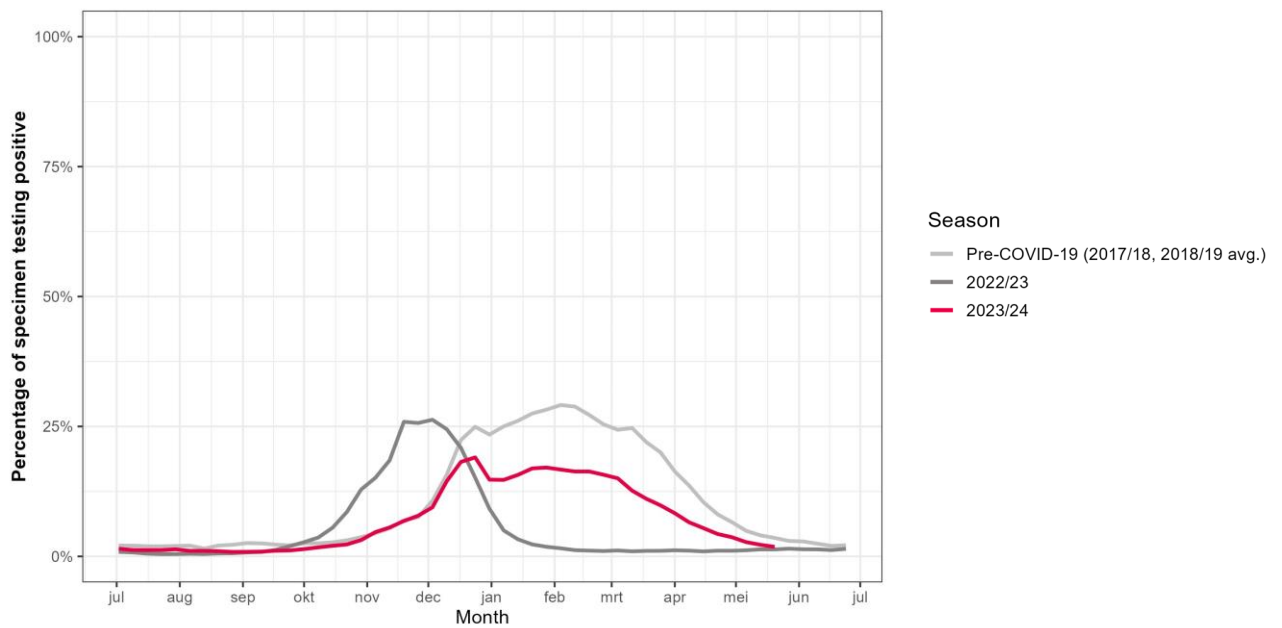


## United States



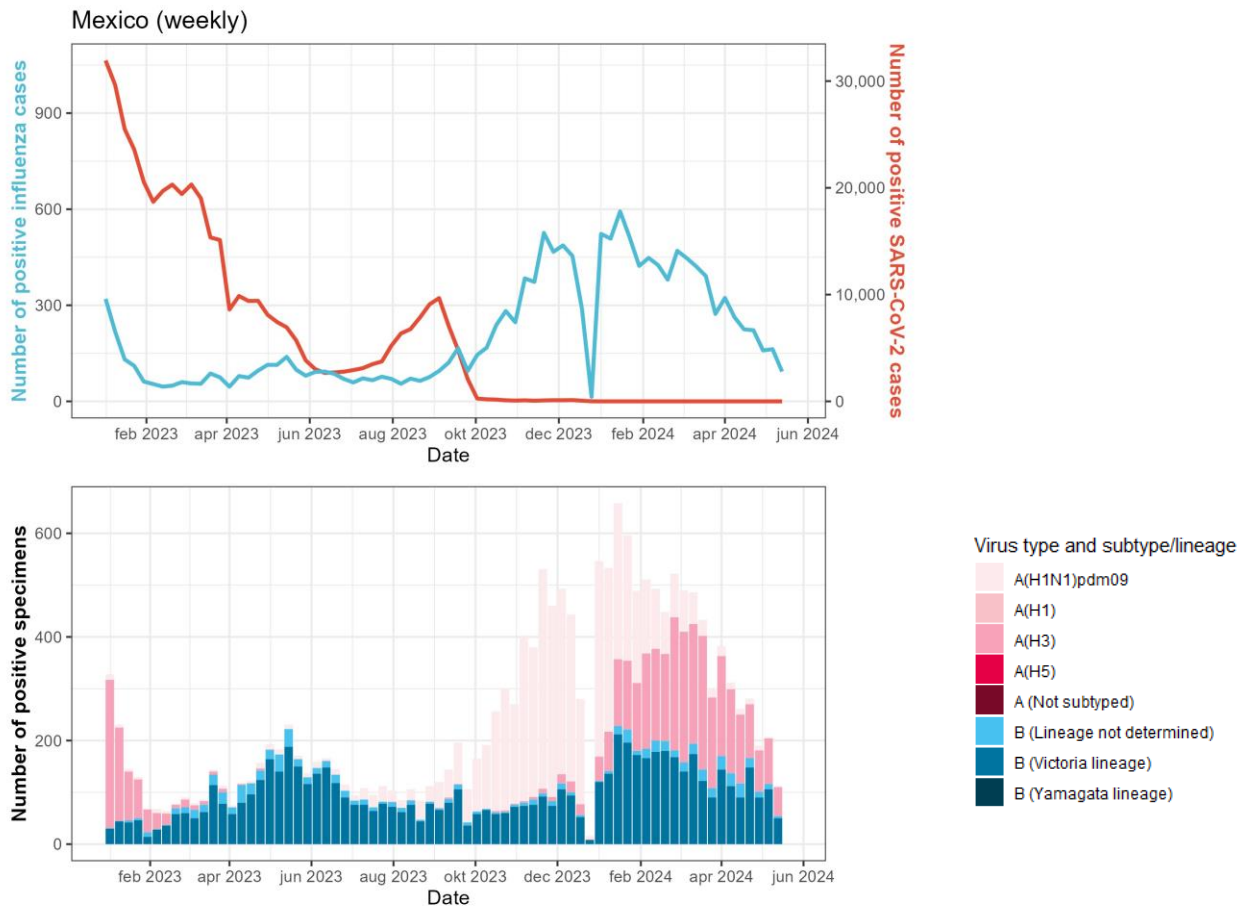
Note: The United States stopped reporting SARS-CoV-2 activity to the WHO since W20/2023

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



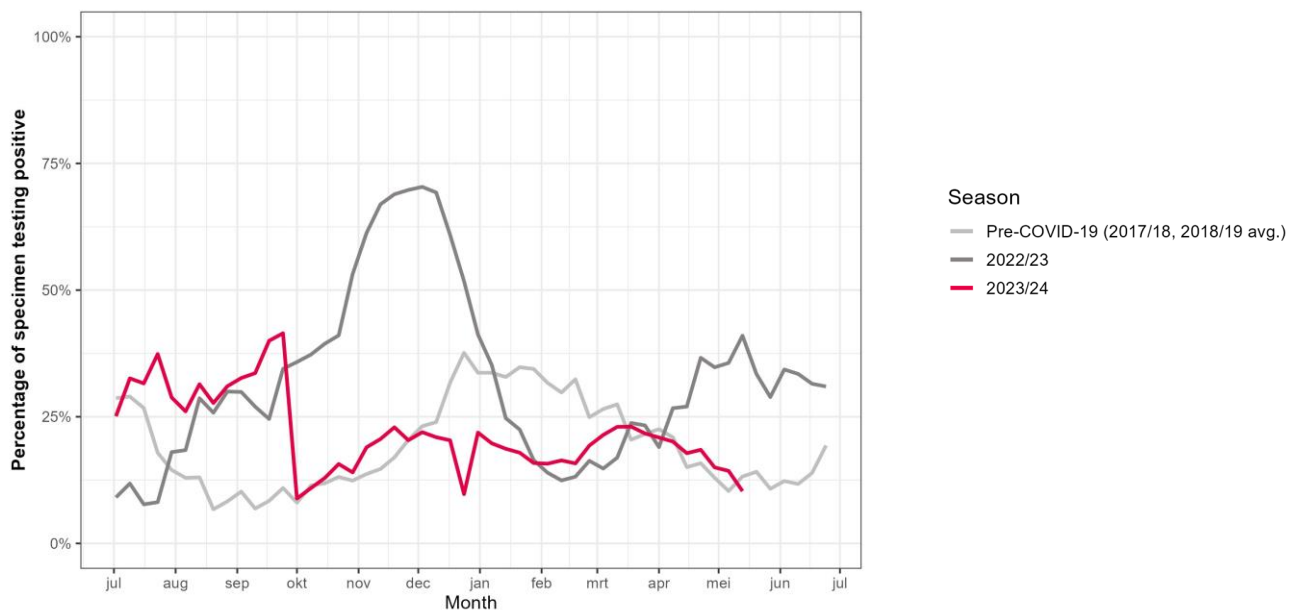
# Central America Caribbean

## Mexico



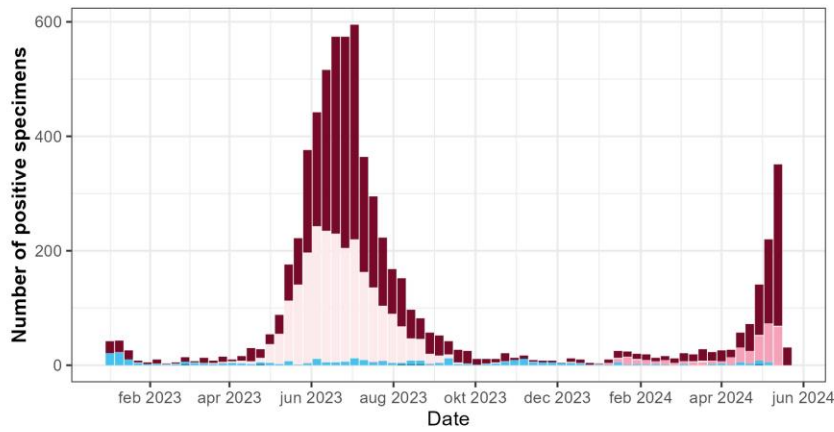
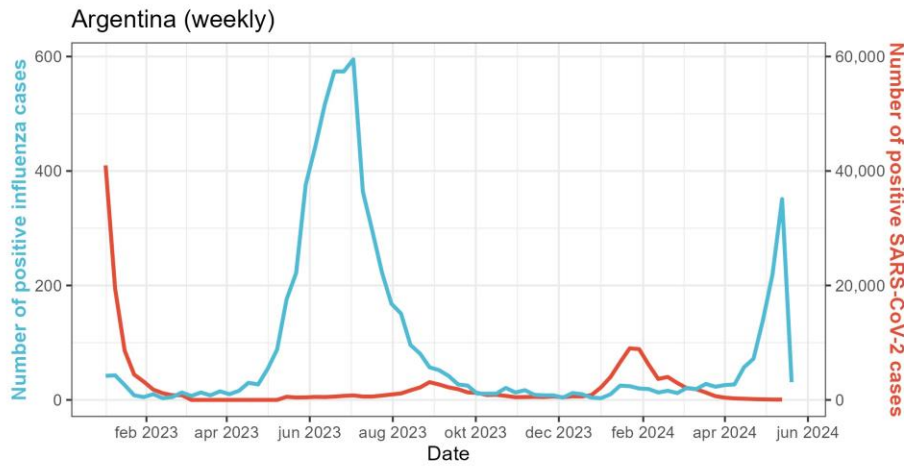
Note: Mexico has reported zero SARS-CoV-2 activity to the WHO since W2/2024

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



# Tropical South America

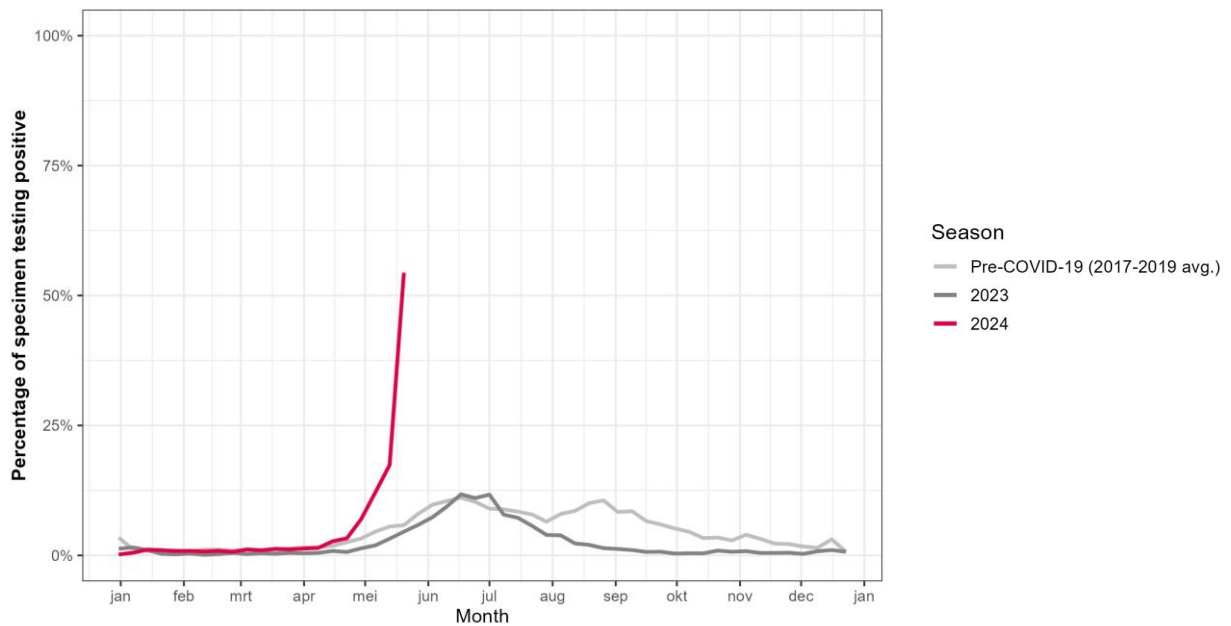
## Argentina



### Virus type and subtype/lineage

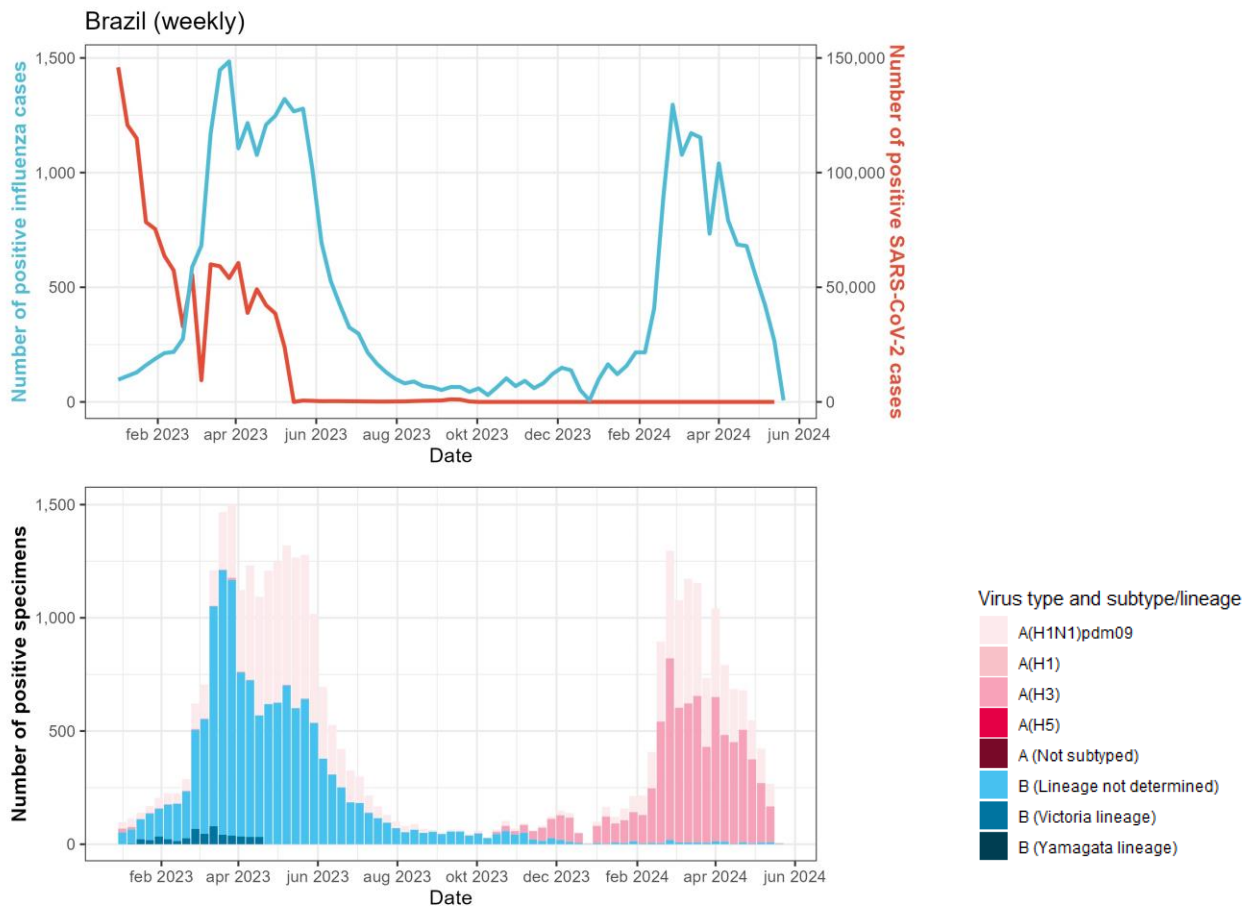
- A(H1N1)pdm09
- A(H1)
- A(H3)
- A(H5)
- A (Not subtyped)
- B (Lineage not determined)
- B (Victoria lineage)
- B (Yamagata lineage)

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



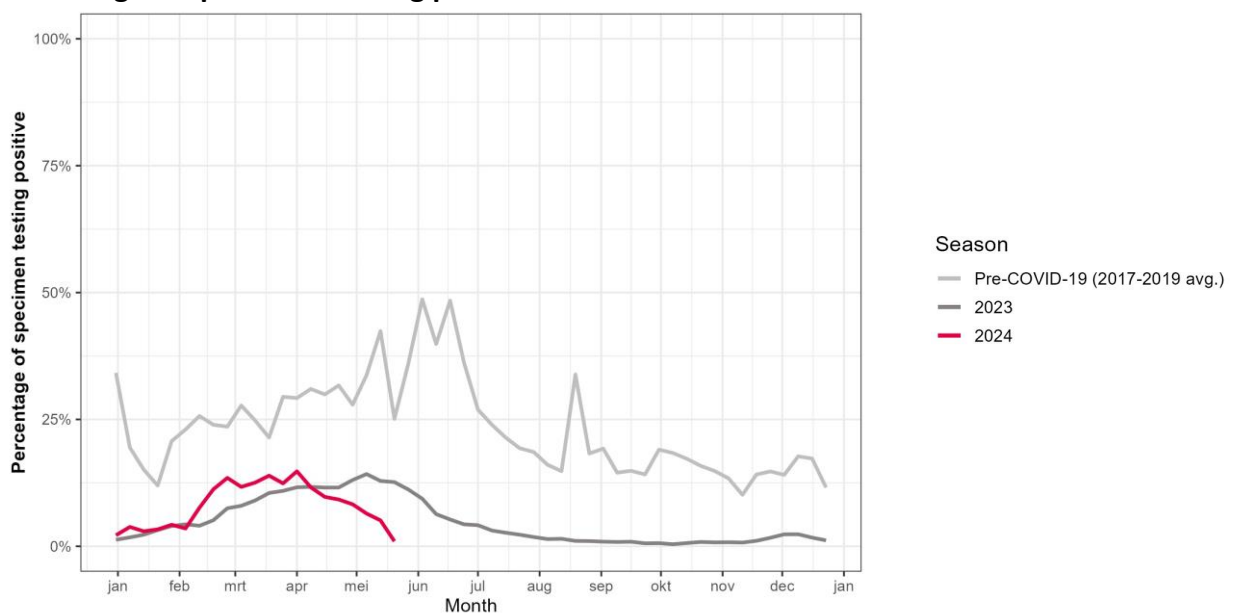


## Brazil



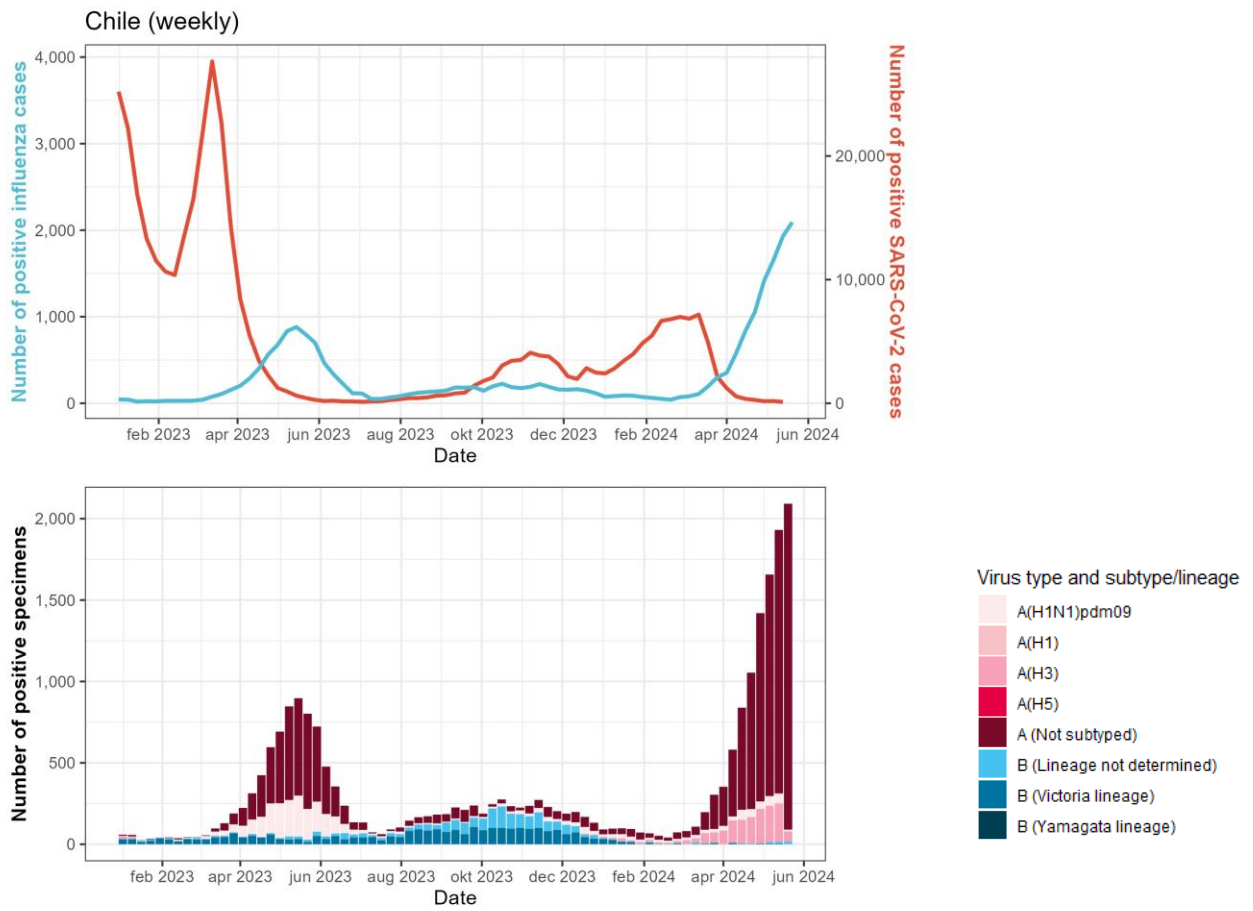
Note: Brazil has reported zero SARS-CoV-2 activity to the WHO since W2/2024

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

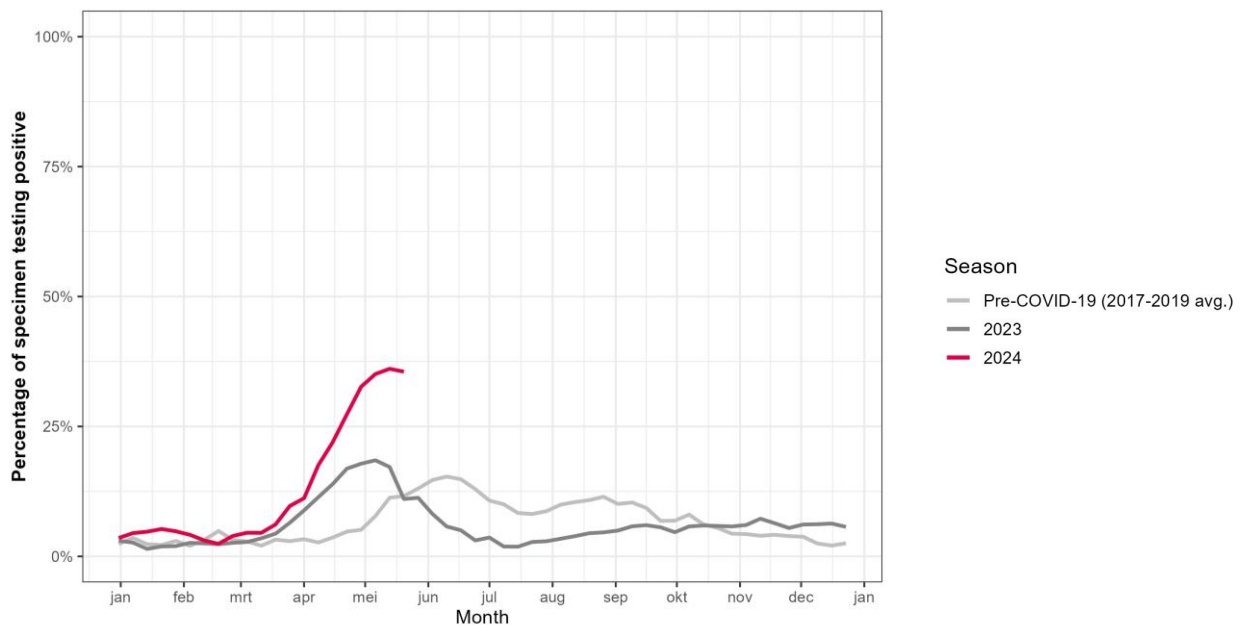




# Chile

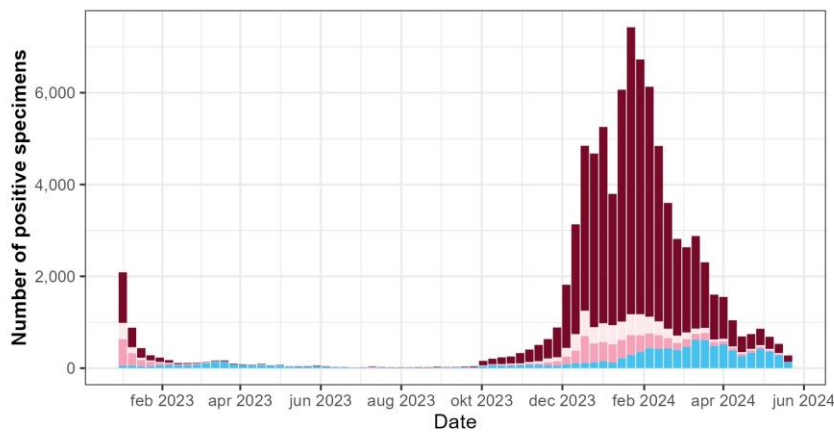
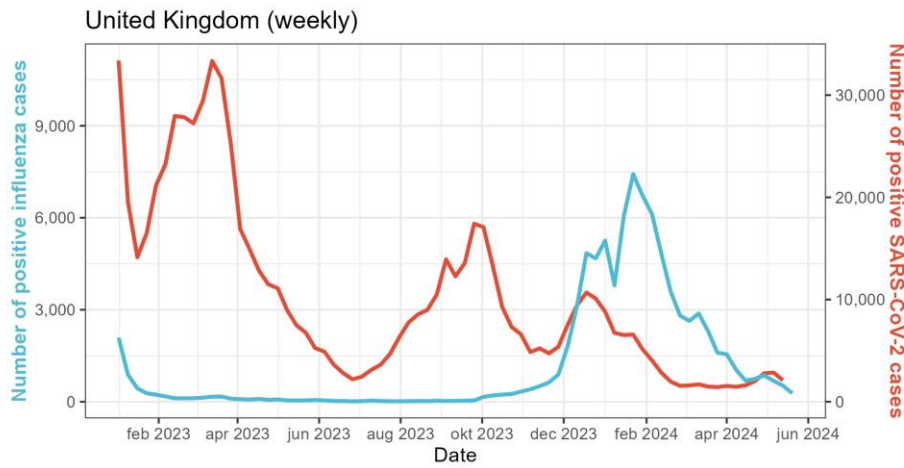


## Percentage of specimens testing positive for influenza in different seasons



# Northern Europe

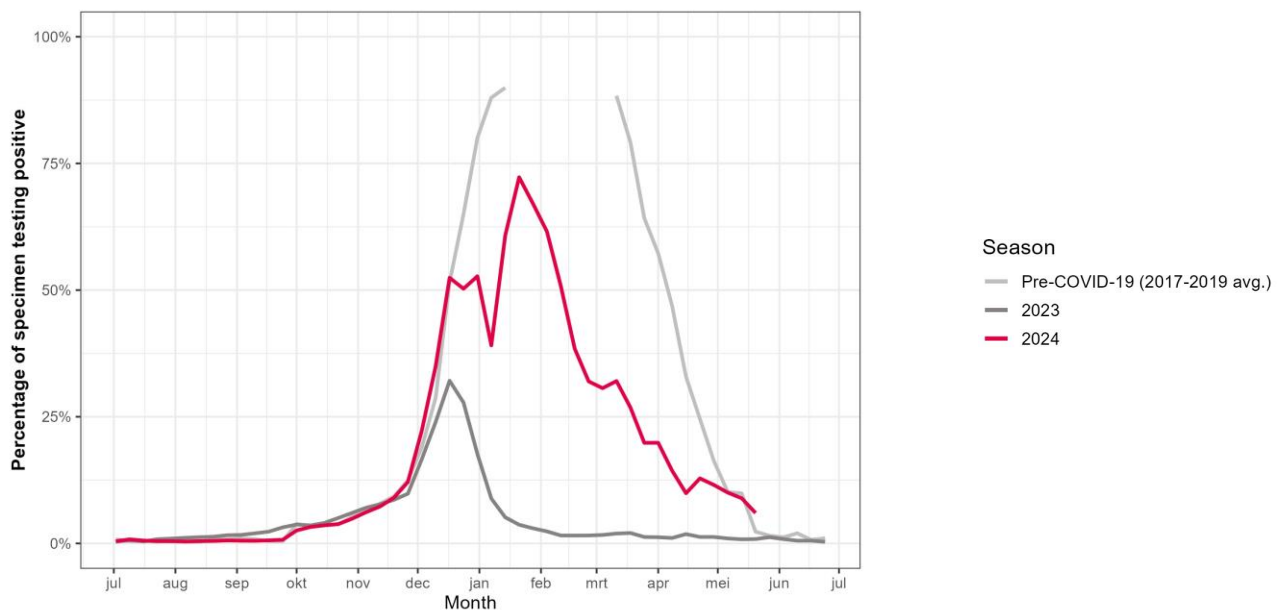
## United Kingdom



### Virus type and subtype/lineage

- A(H1N1)pdm09
- A(H1)
- A(H3)
- A(H5)
- A (Not subtyped)
- B (Lineage not determined)
- B (Victoria lineage)
- B (Yamagata lineage)

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

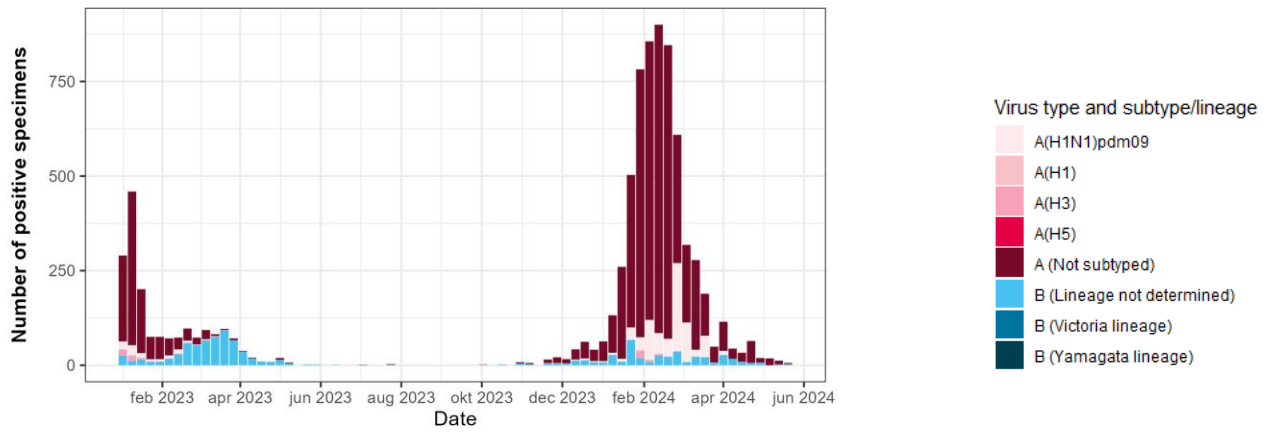
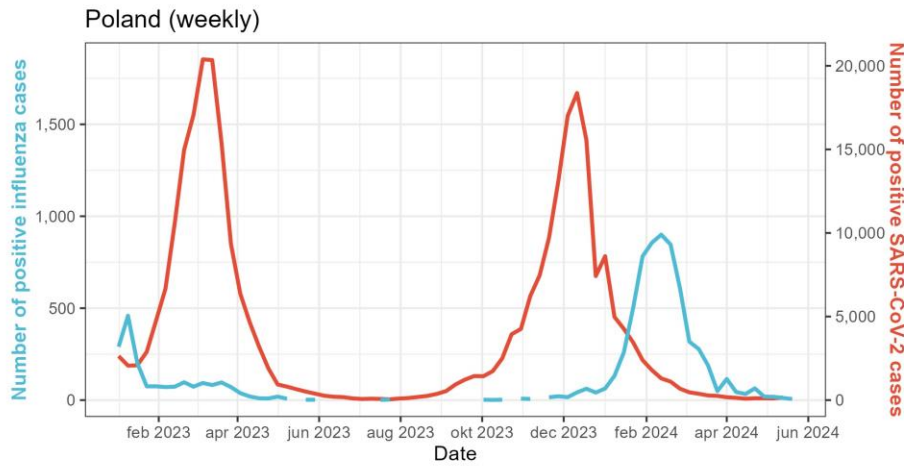


### Season

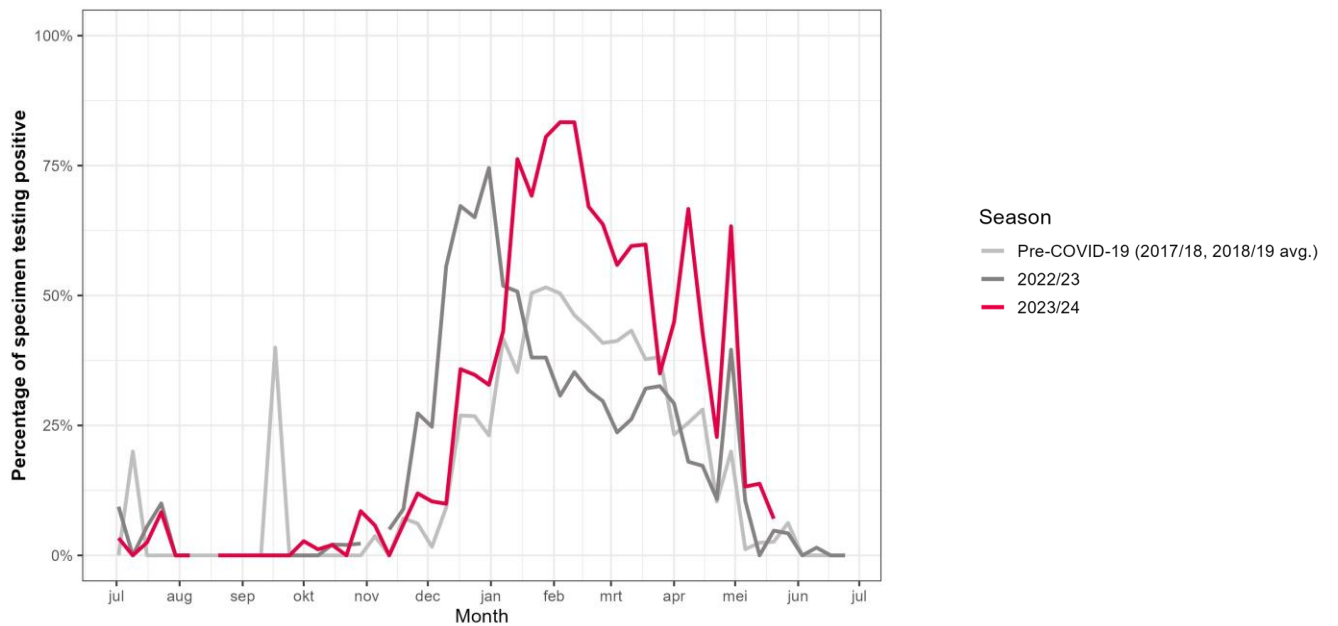
- Pre-COVID-19 (2017-2019 avg.)
- 2023
- 2024

# Eastern Europe

## Poland

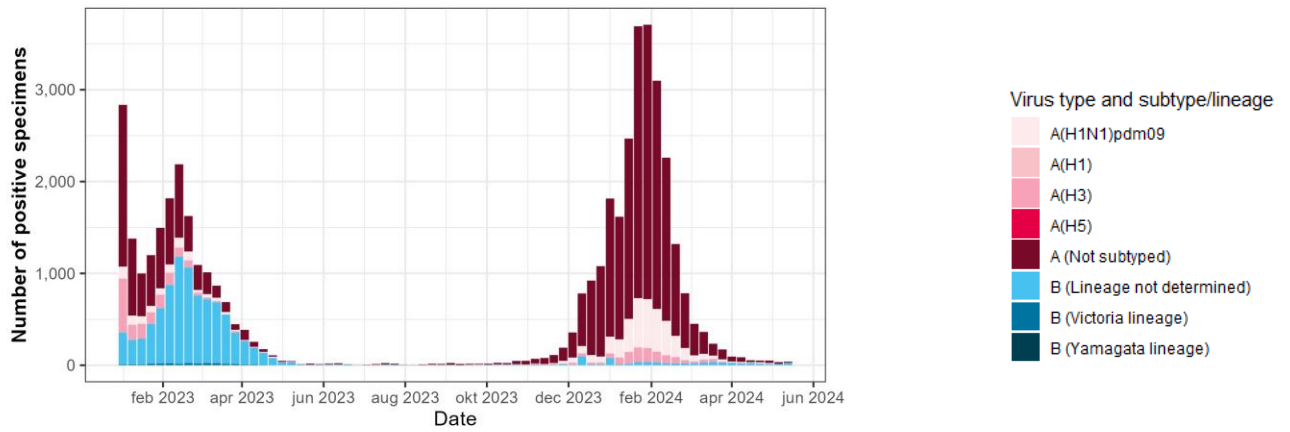
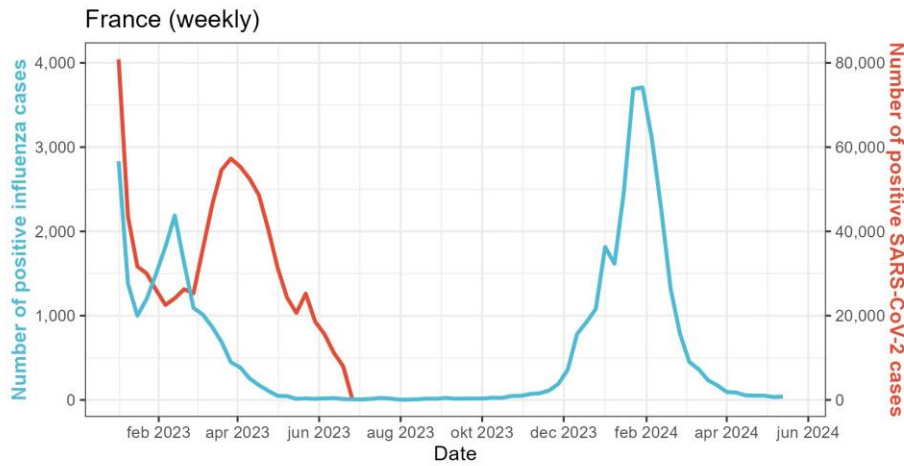


## Percentage of specimens testing positive for influenza in different seasons



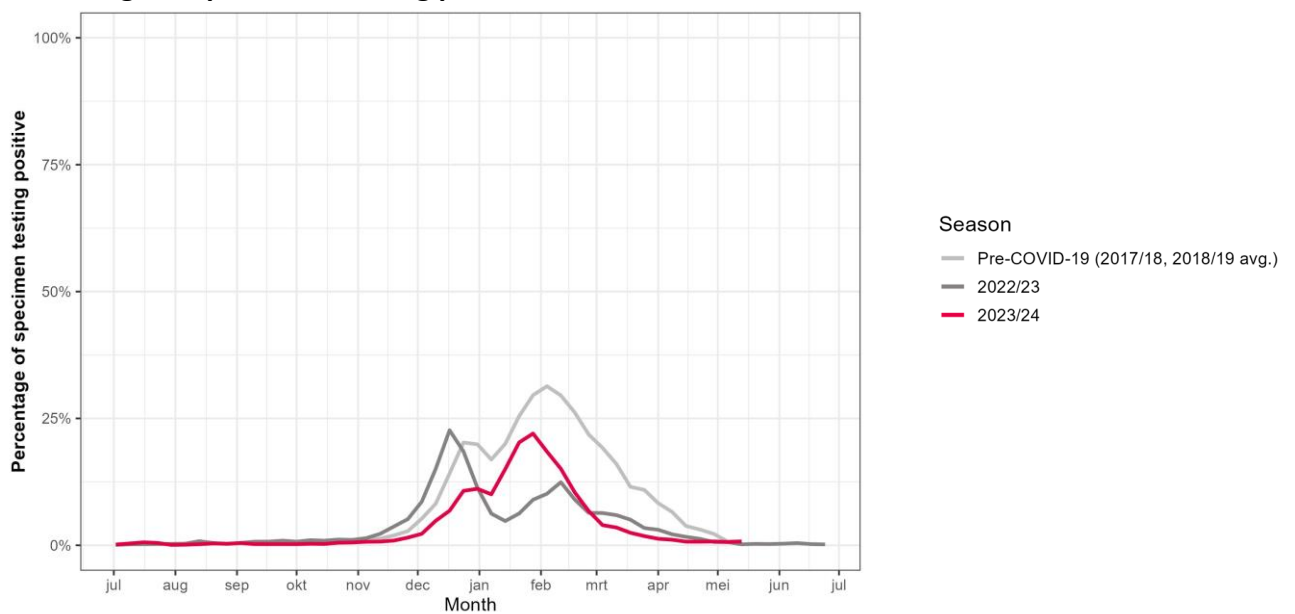
# South West Europe

## France

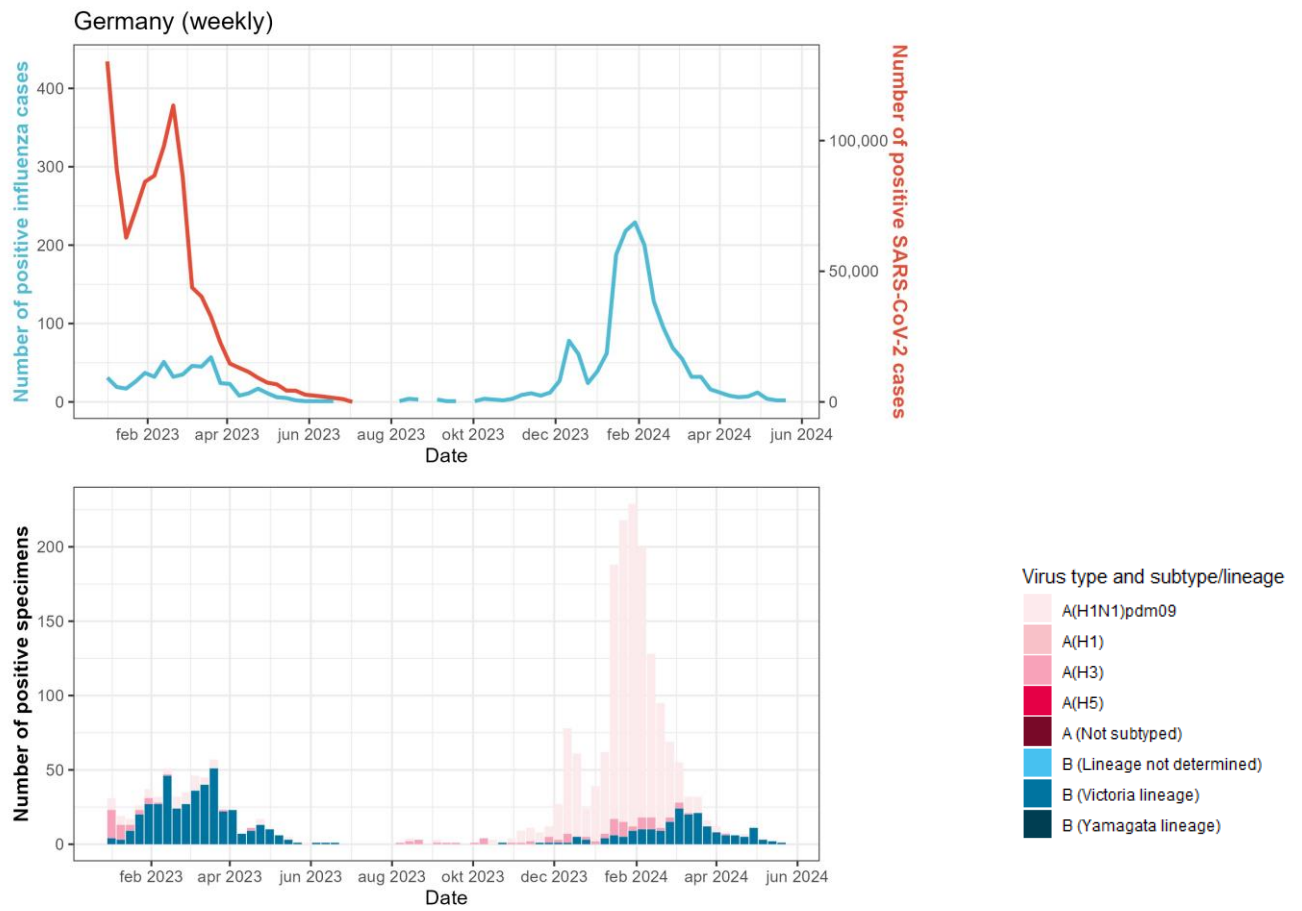


Note: France stopped reporting SARS-CoV-2 activity to the WHO since W26/2023

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

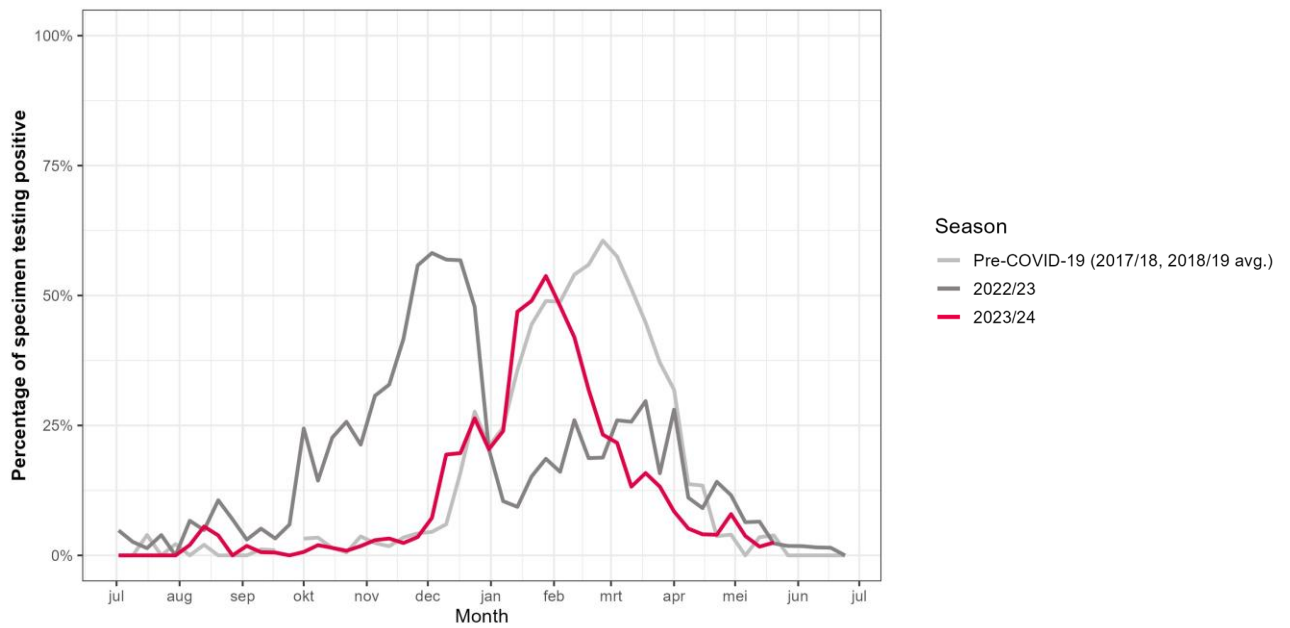


## Germany

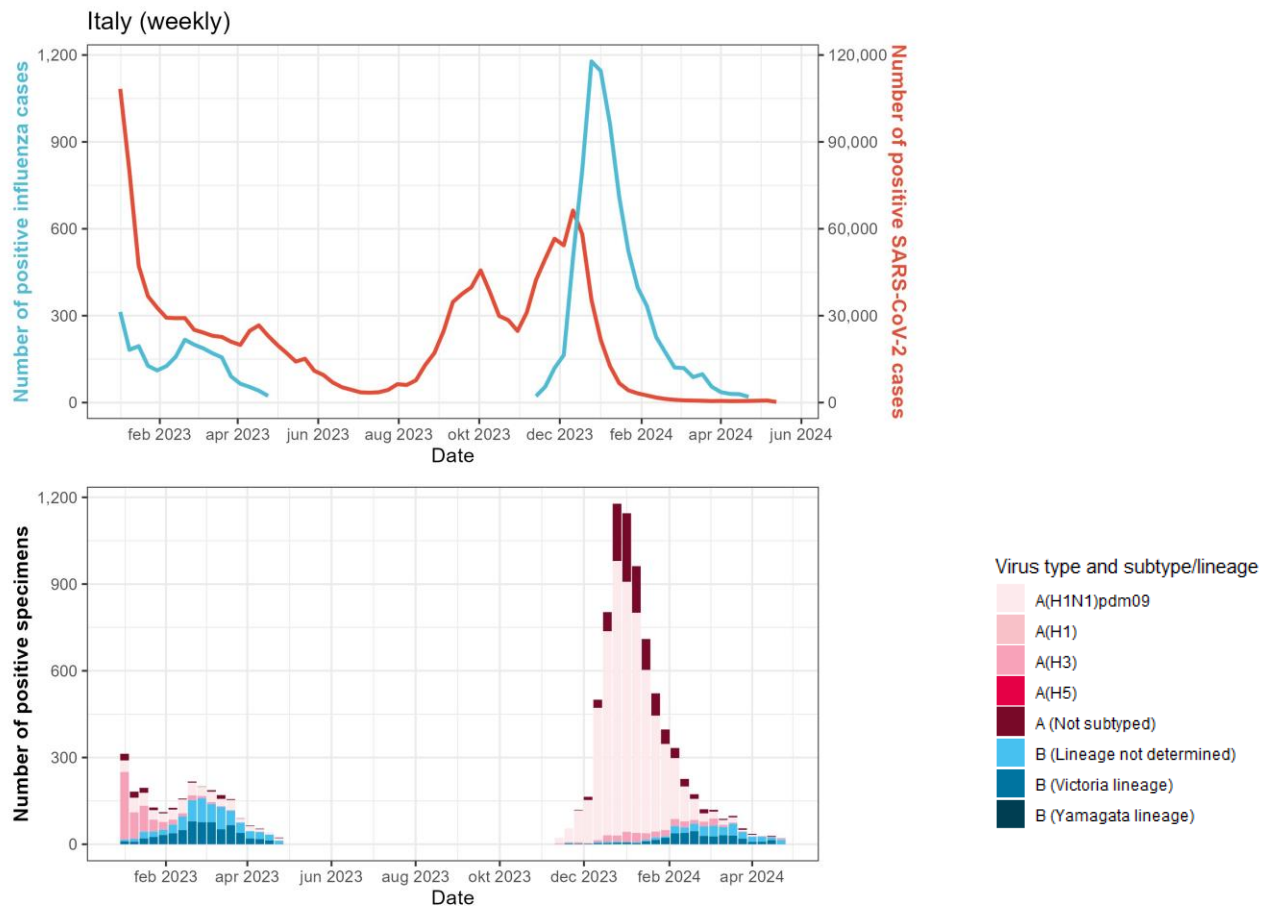


Note: Germany stopped reporting SARS-CoV-2 activity to the WHO since W27/2023

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

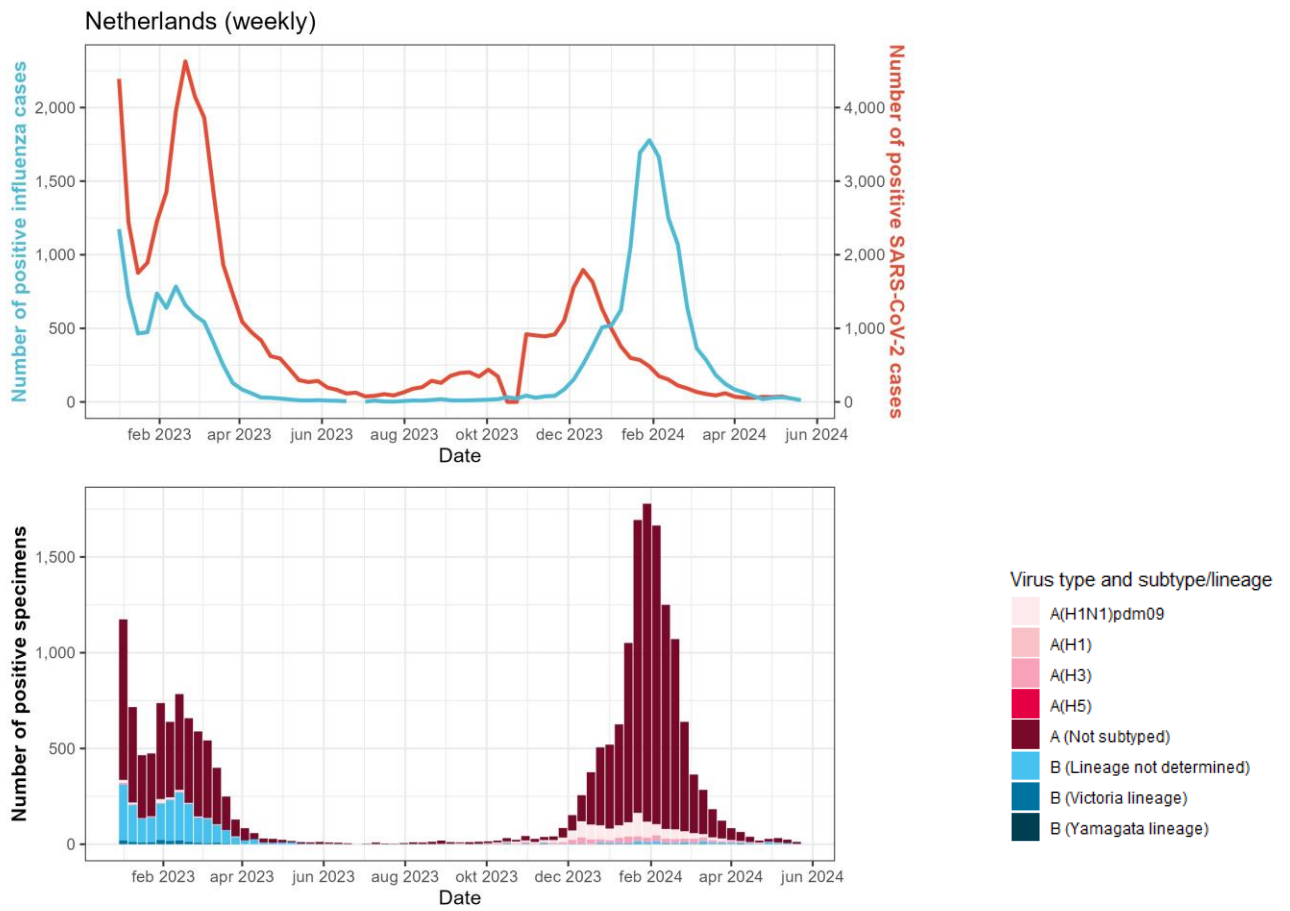


## Italy



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

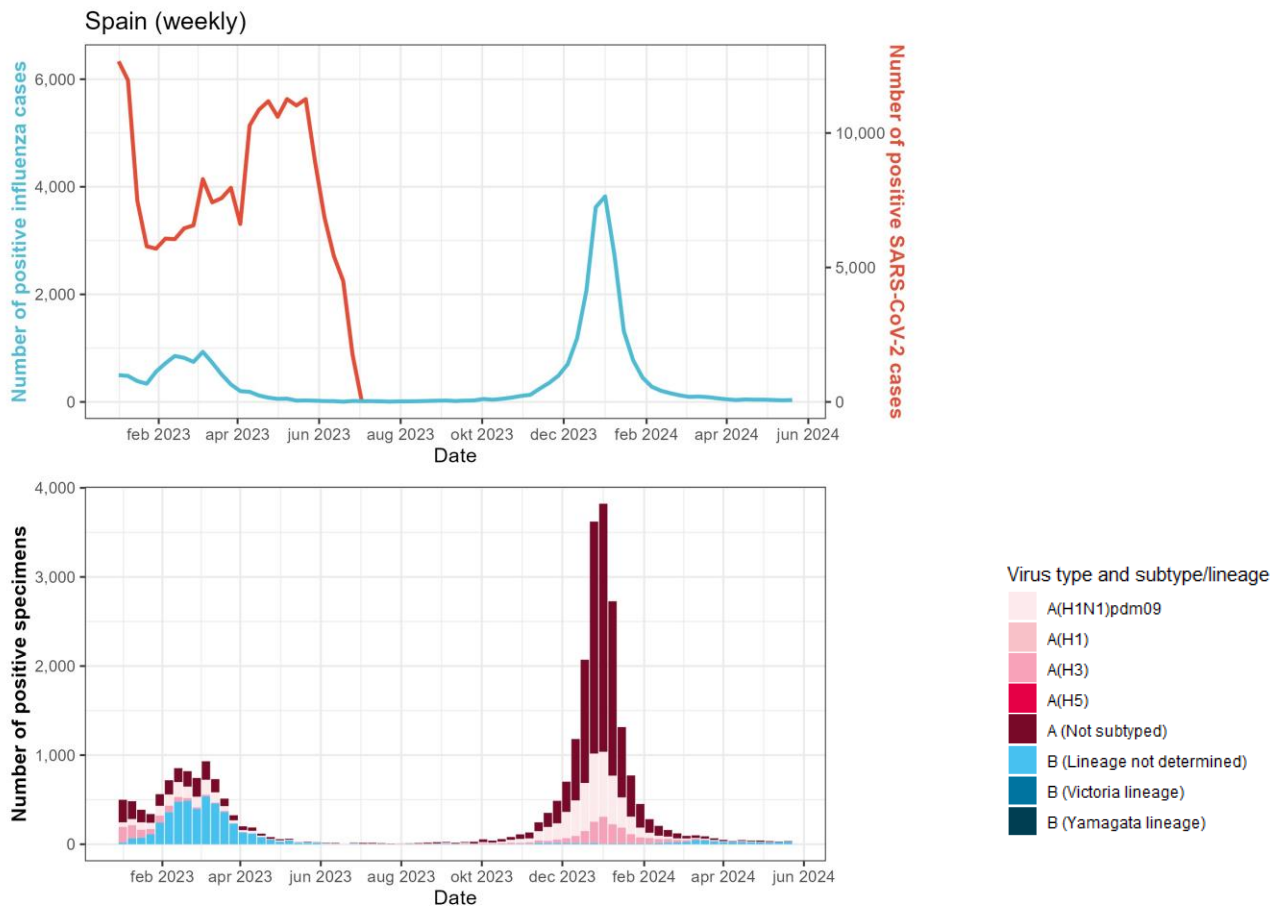
## Netherlands



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

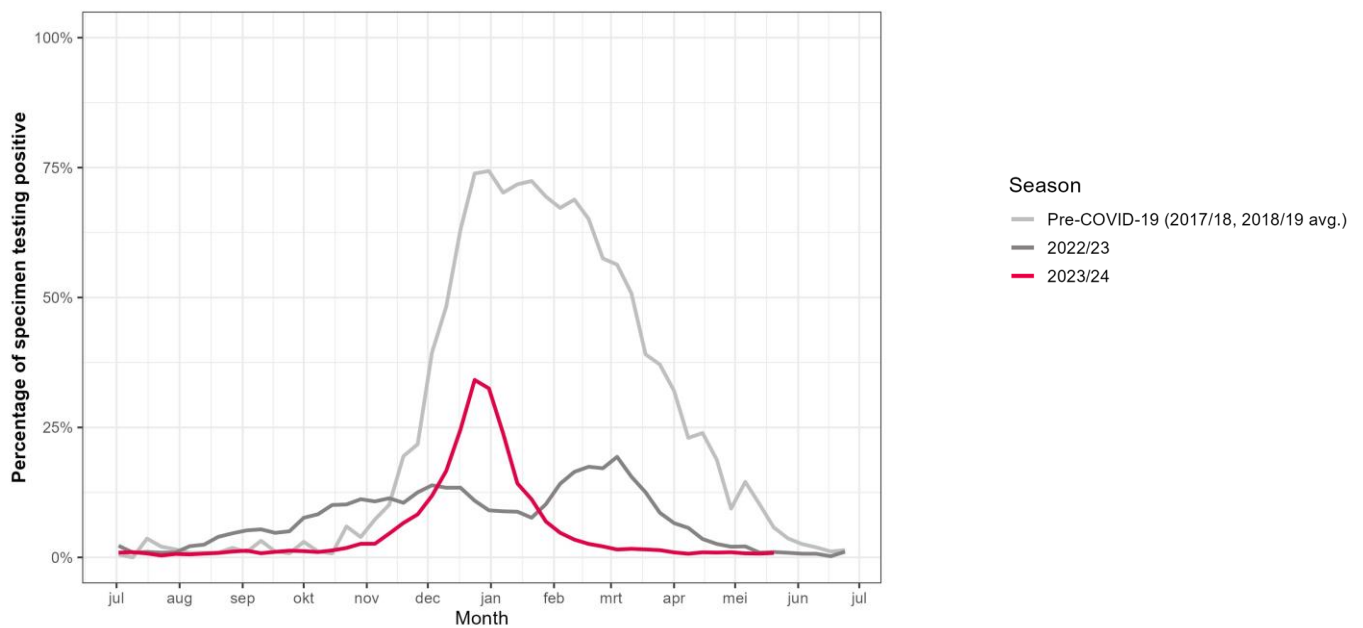


## Spain



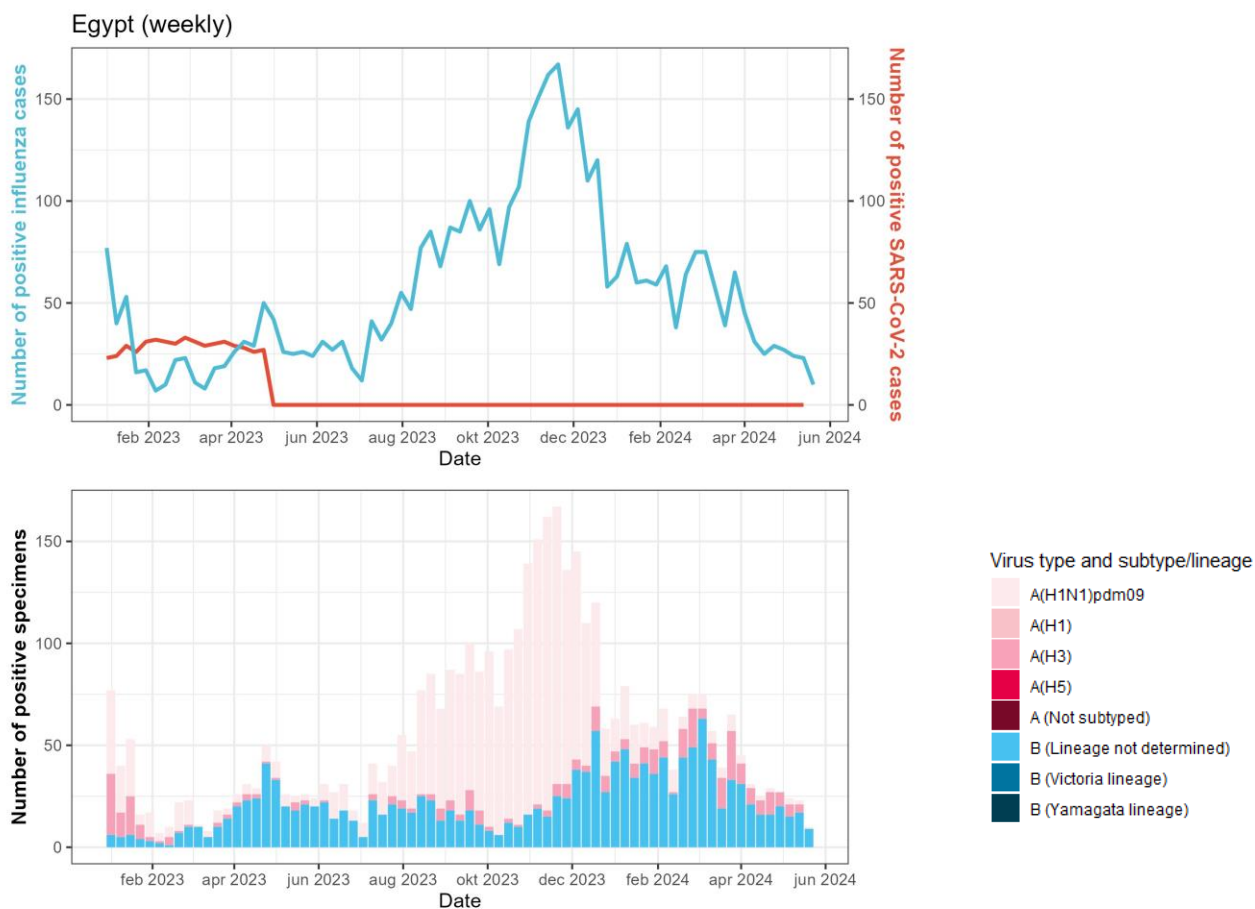
Note: Spain stopped reporting SARS-CoV-2 activity to the WHO since W27/2023

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



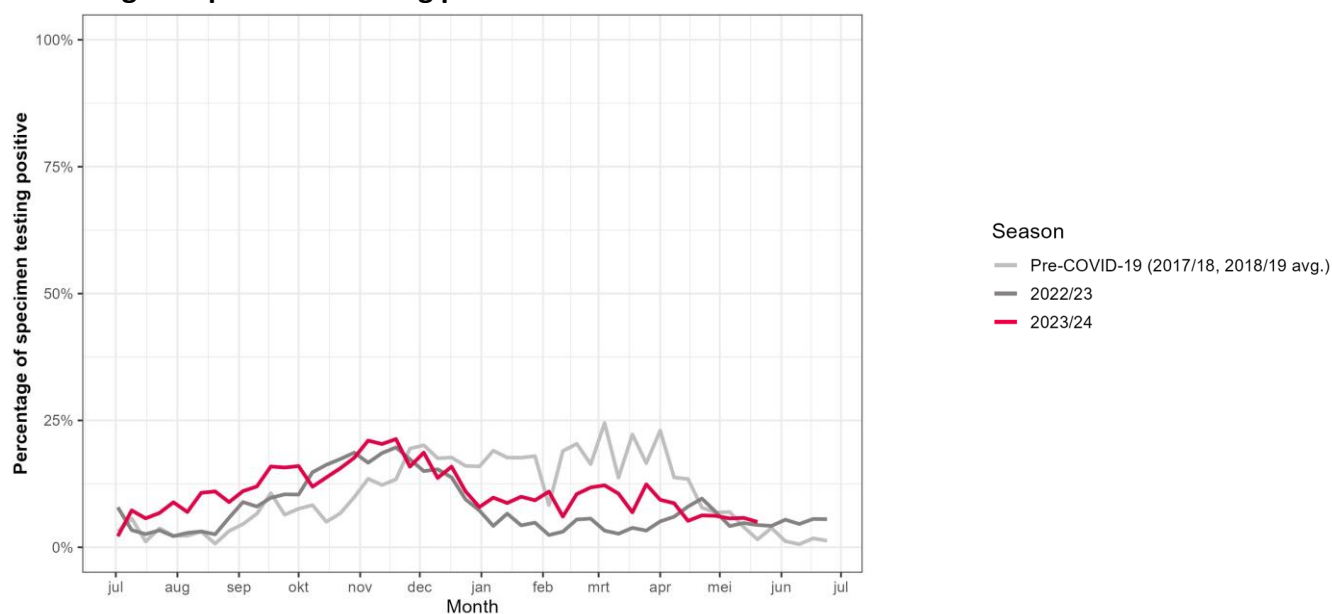
## Northern Africa

### Egypt



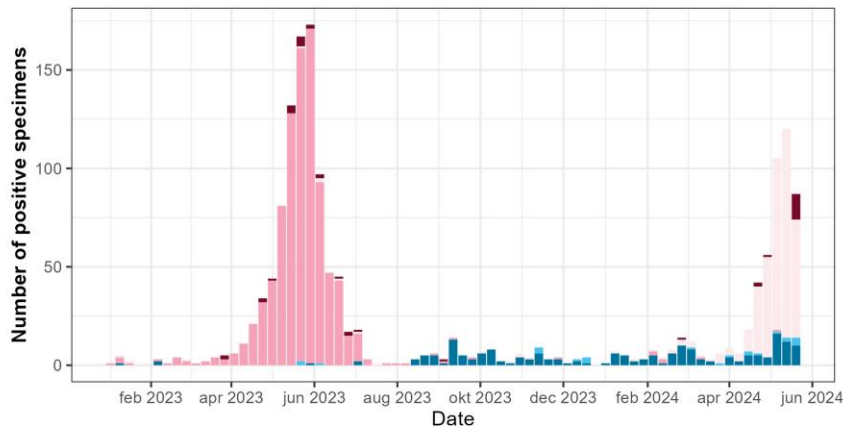
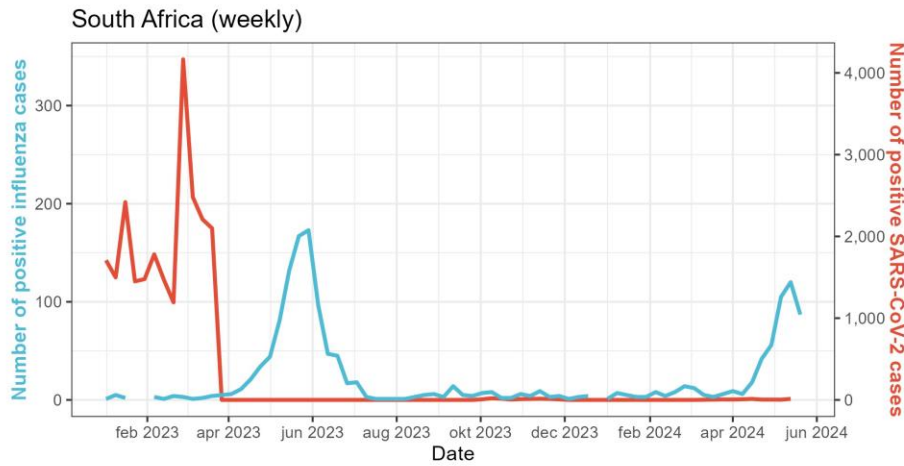
Note: Egypt has reported zero SARS-CoV-2 activity to the WHO since W18/2023

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



# Southern Africa

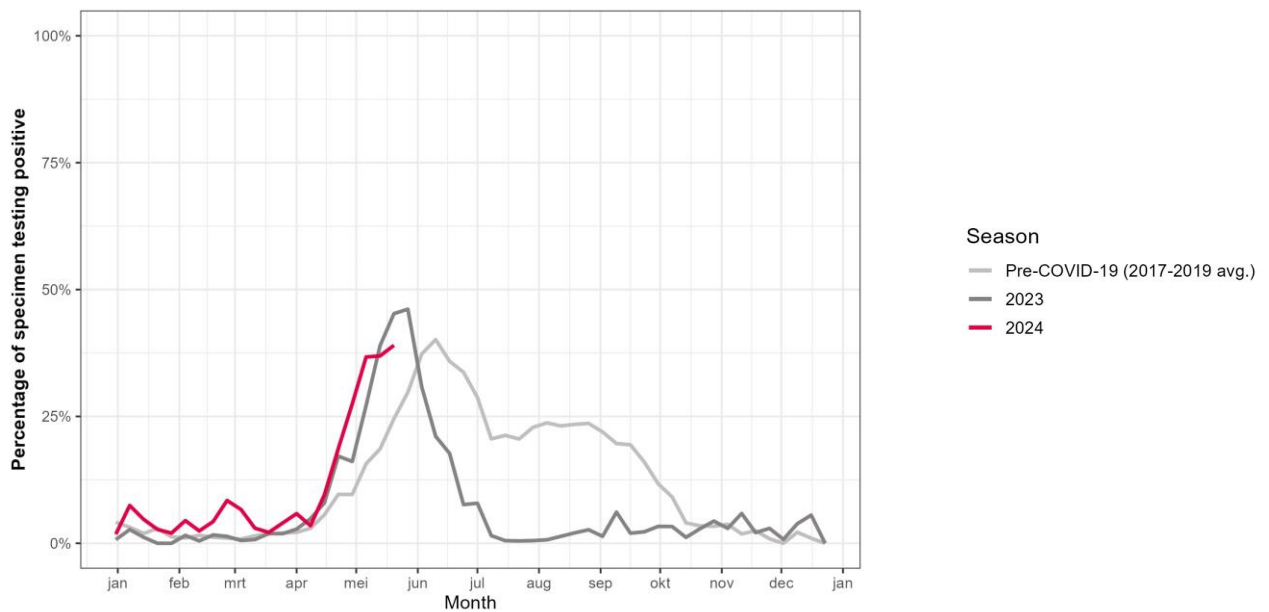
## South Africa



### Virus type and subtype/lineage

- A(H1N1)pdm09
- A(H1)
- A(H3)
- A(H5)
- A (Not subtyped)
- B (Lineage not determined)
- B (Victoria lineage)
- B (Yamagata lineage)

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

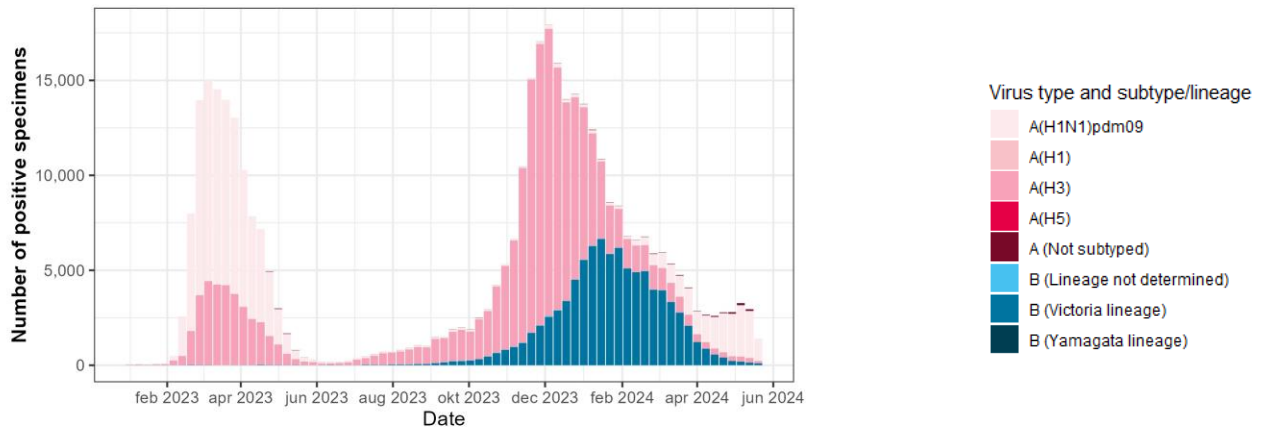
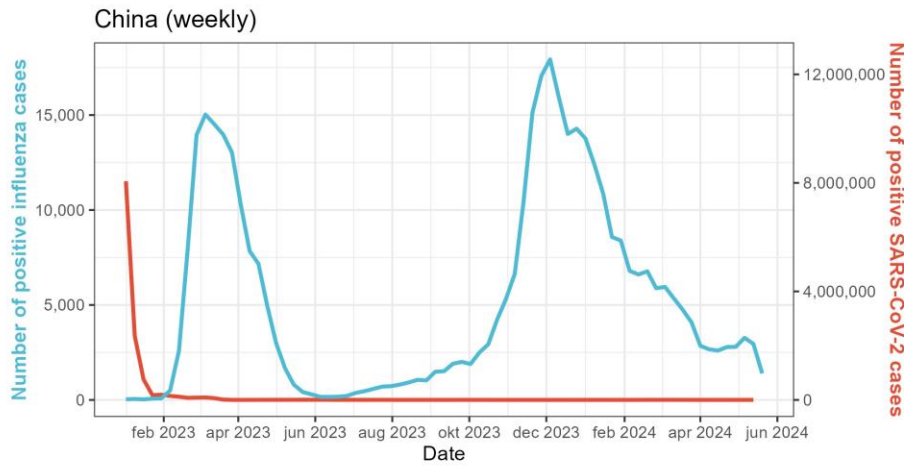


### Season

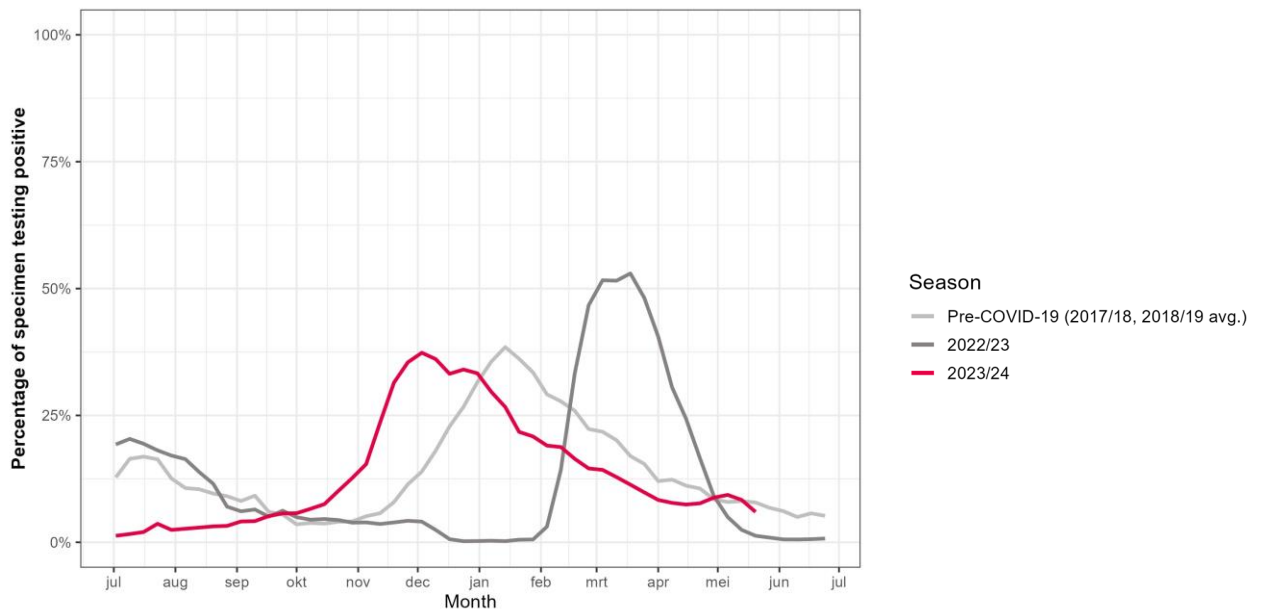
- Pre-COVID-19 (2017-2019 avg.)
- 2023
- 2024

# Eastern Asia

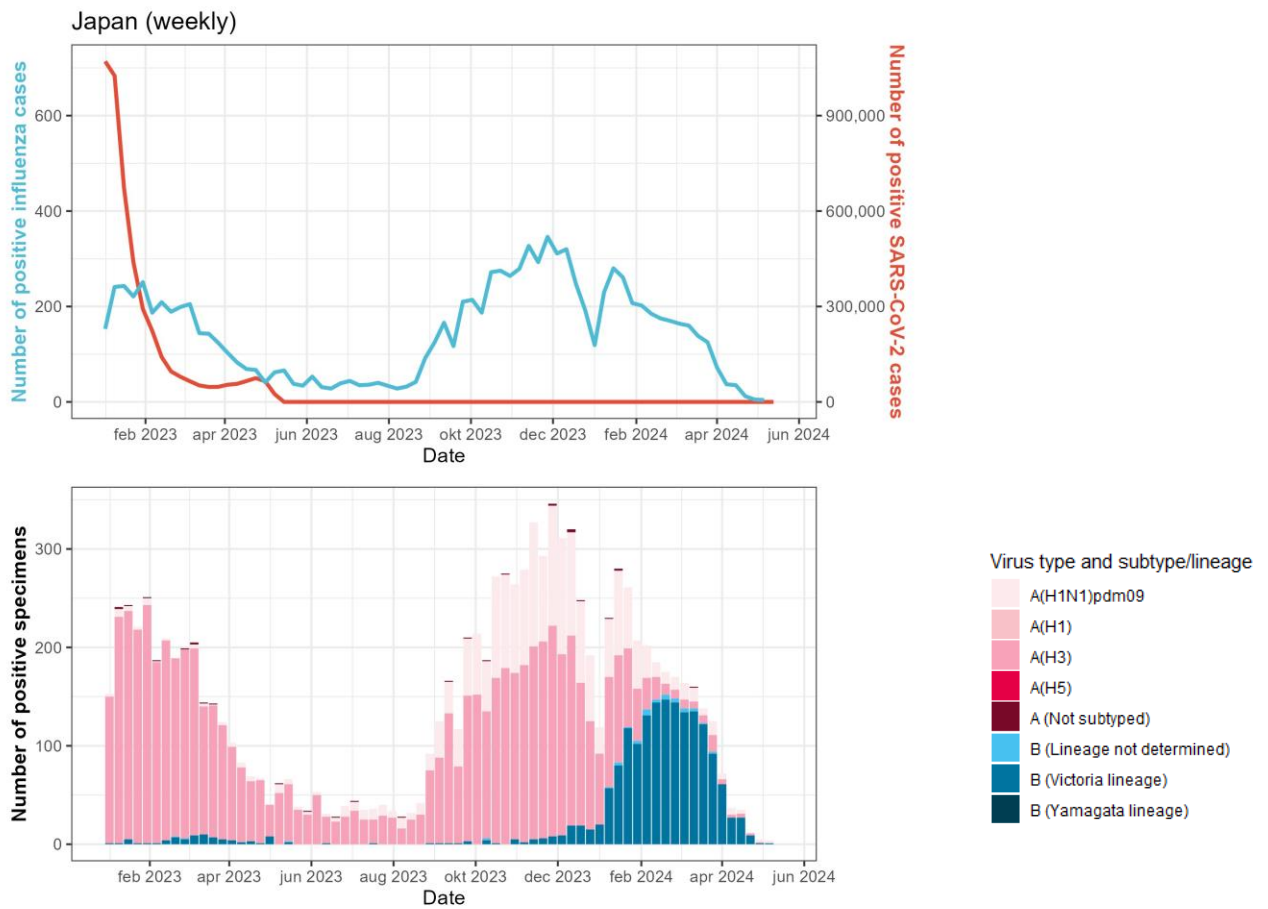
## China



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



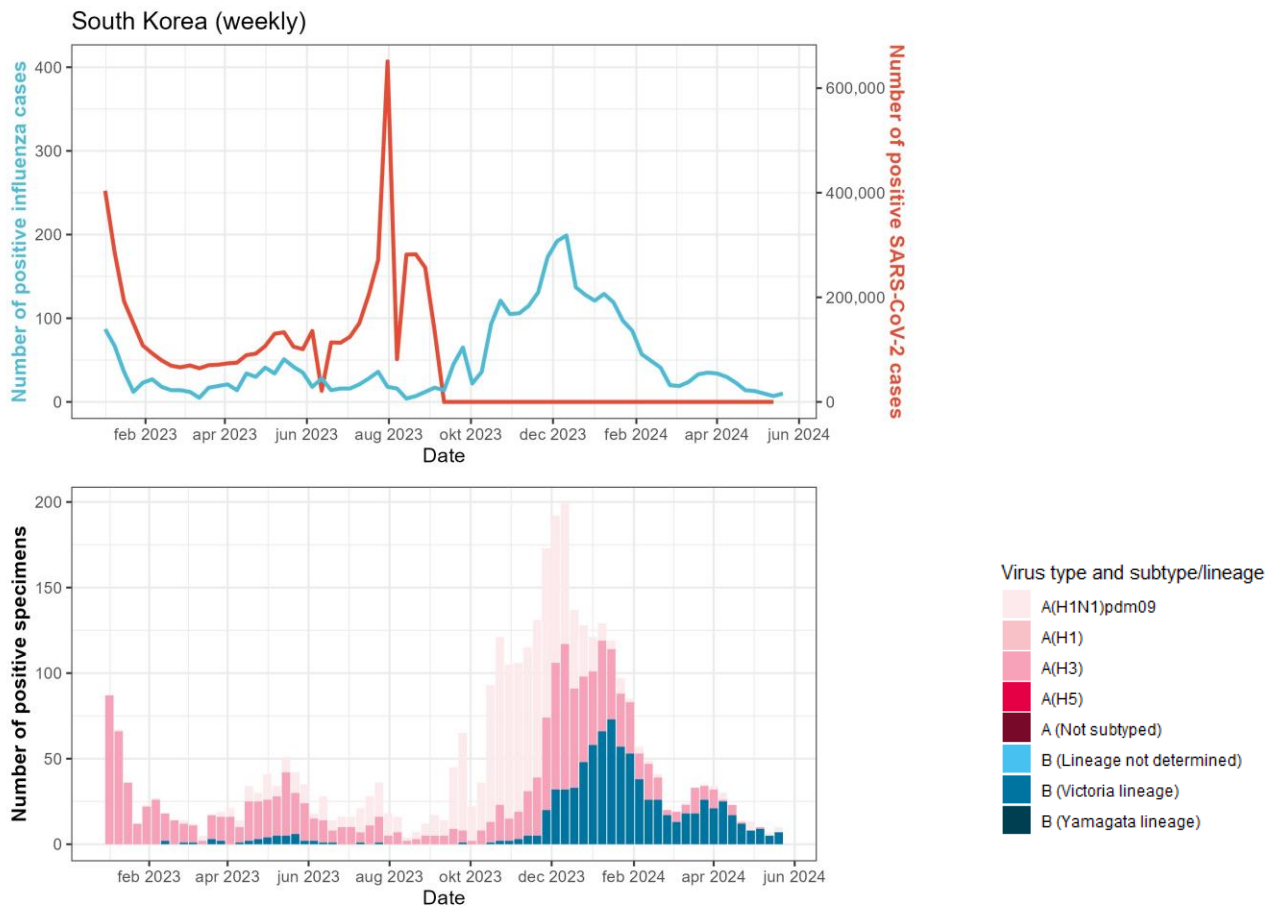
## Japan



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

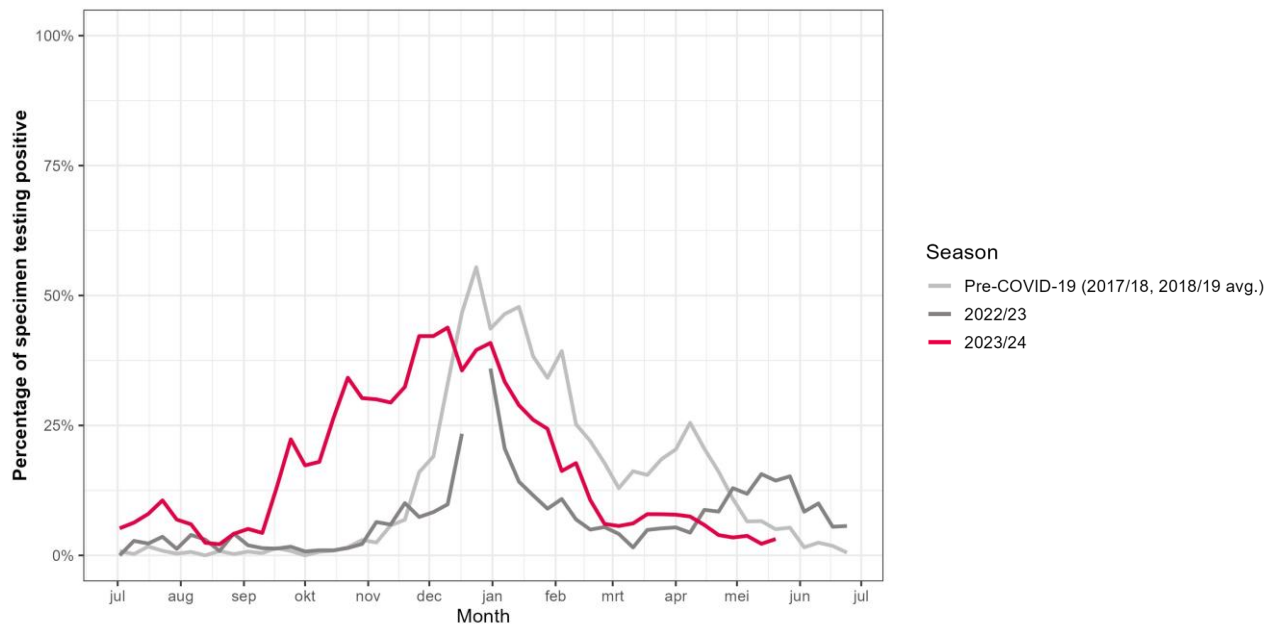
**Percentage of specimens testing positive for influenza in different seasons: data not available**

## South Korea



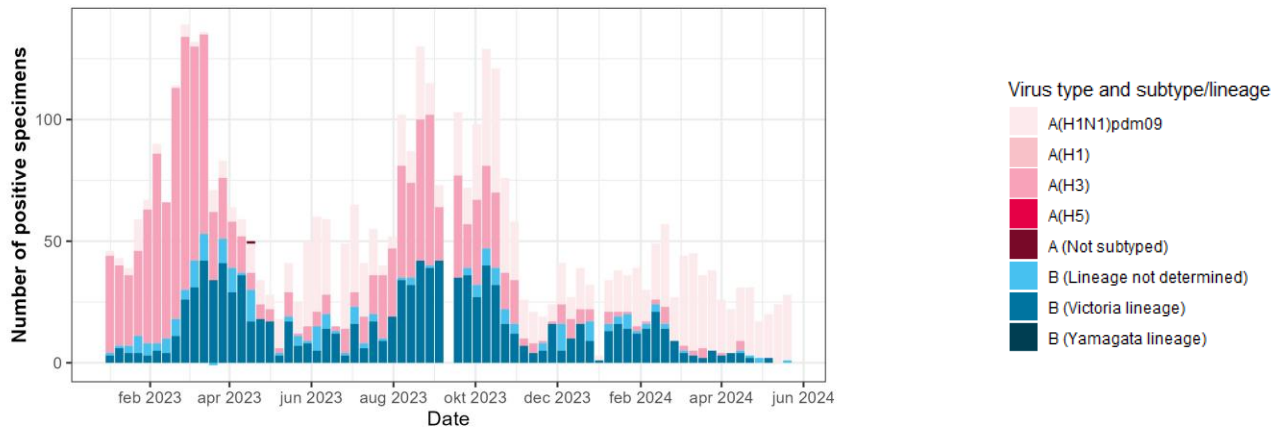
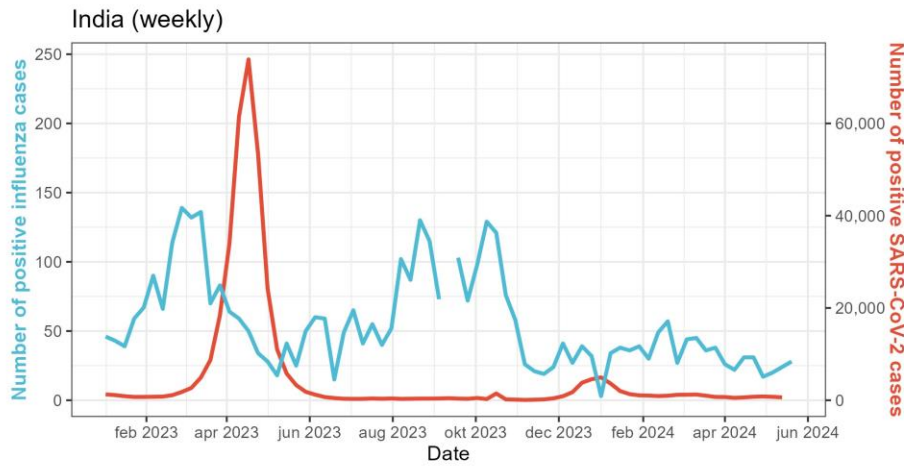
Note: South Korea has reported zero SARS-CoV-2 activity to the WHO since W37/2023

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

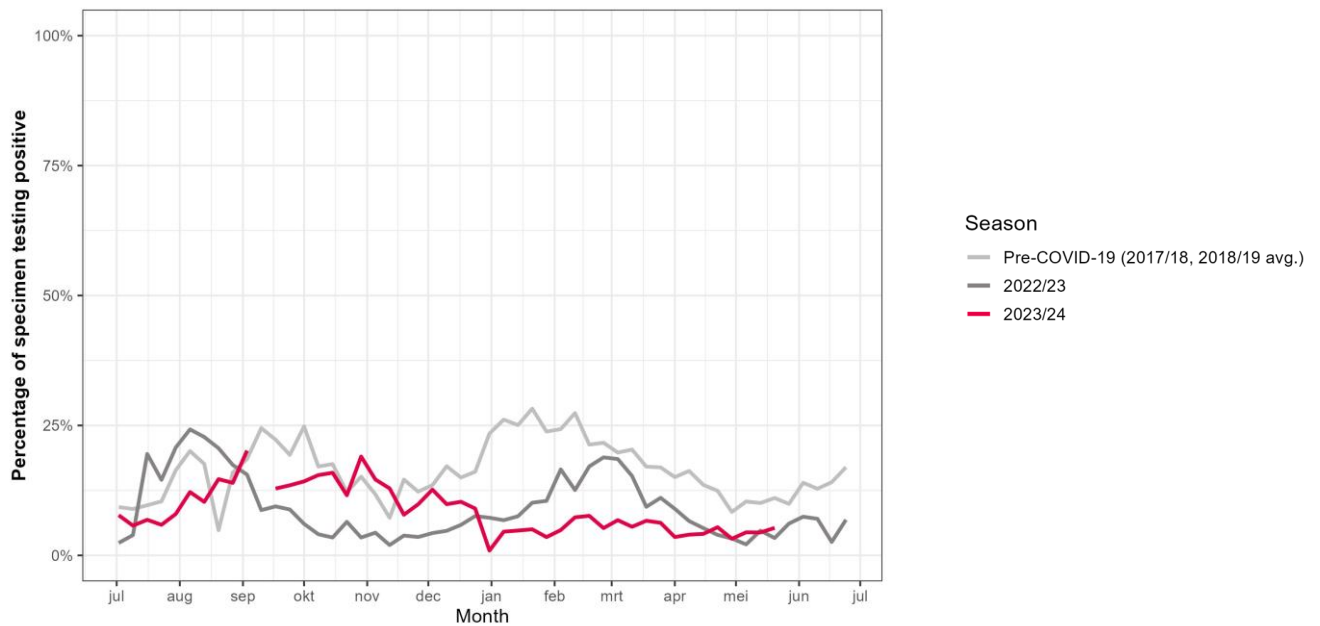


# Southern Asia

## India



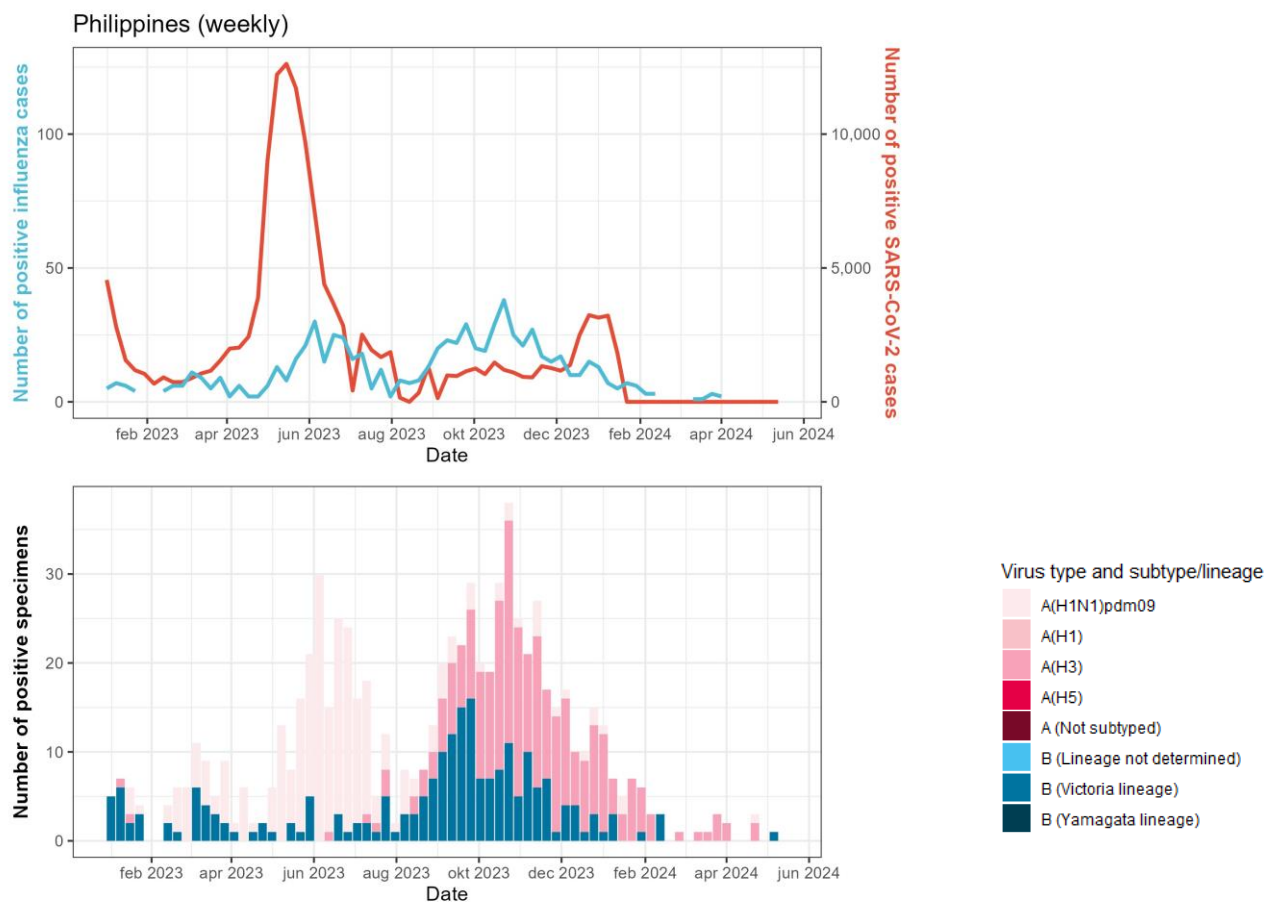
## Percentage of specimens testing positive for influenza in different seasons





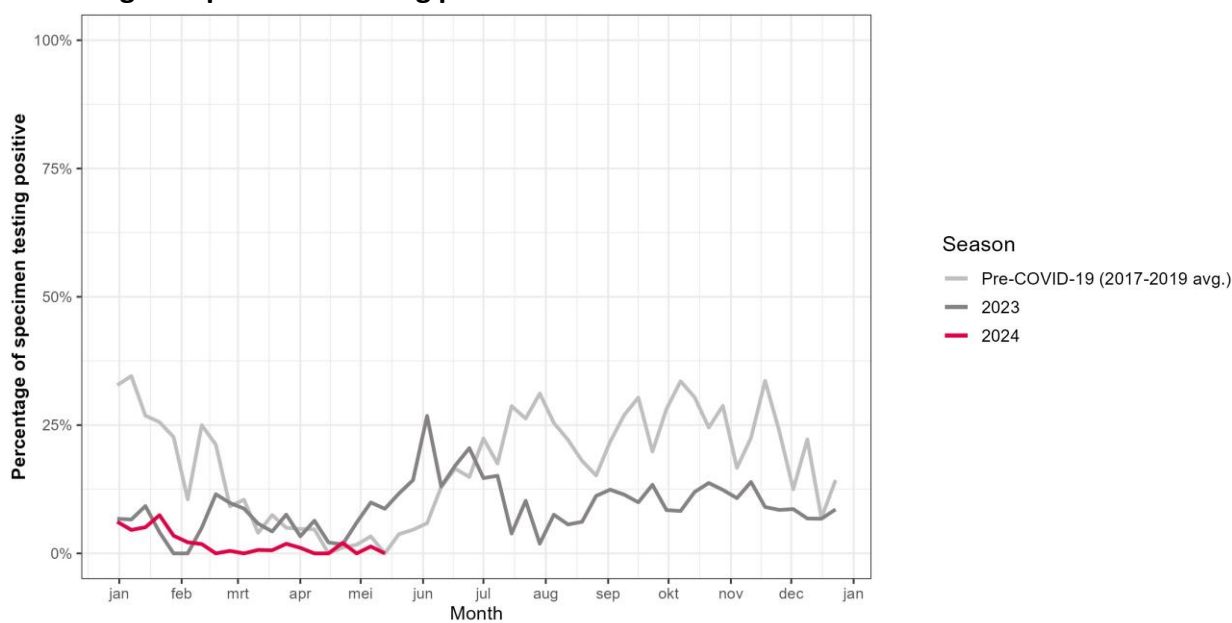
## South-East Asia

### Philippines

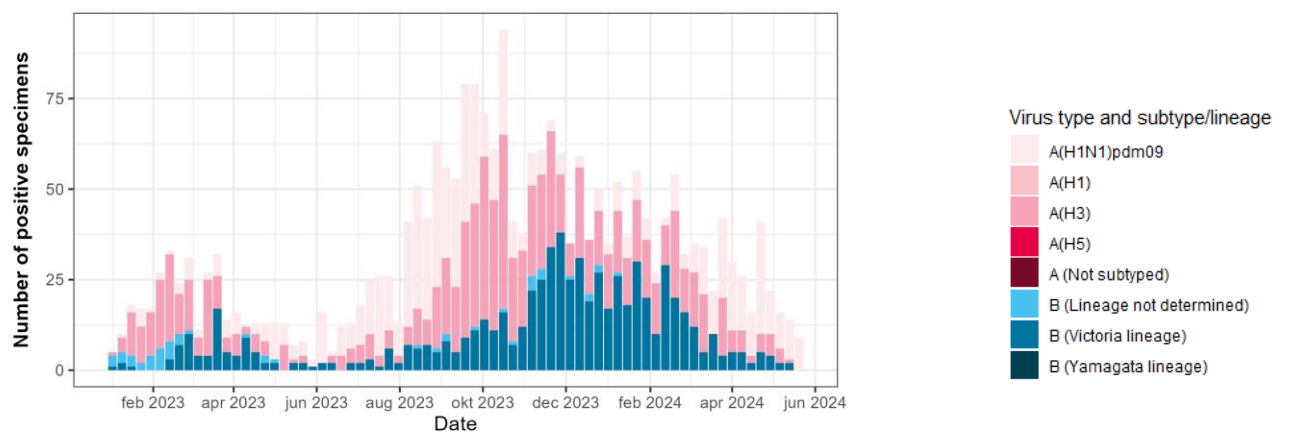
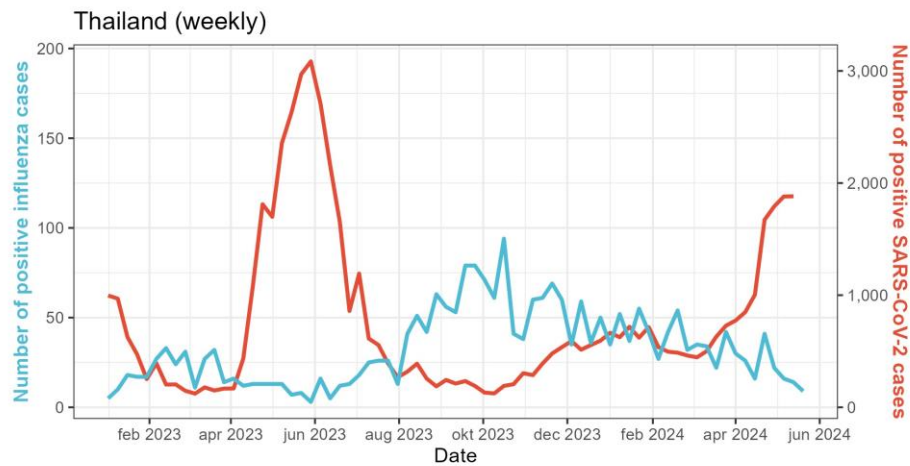


Note: the Philippines has reported zero SARS-CoV-2 activity to the WHO since W04/2024

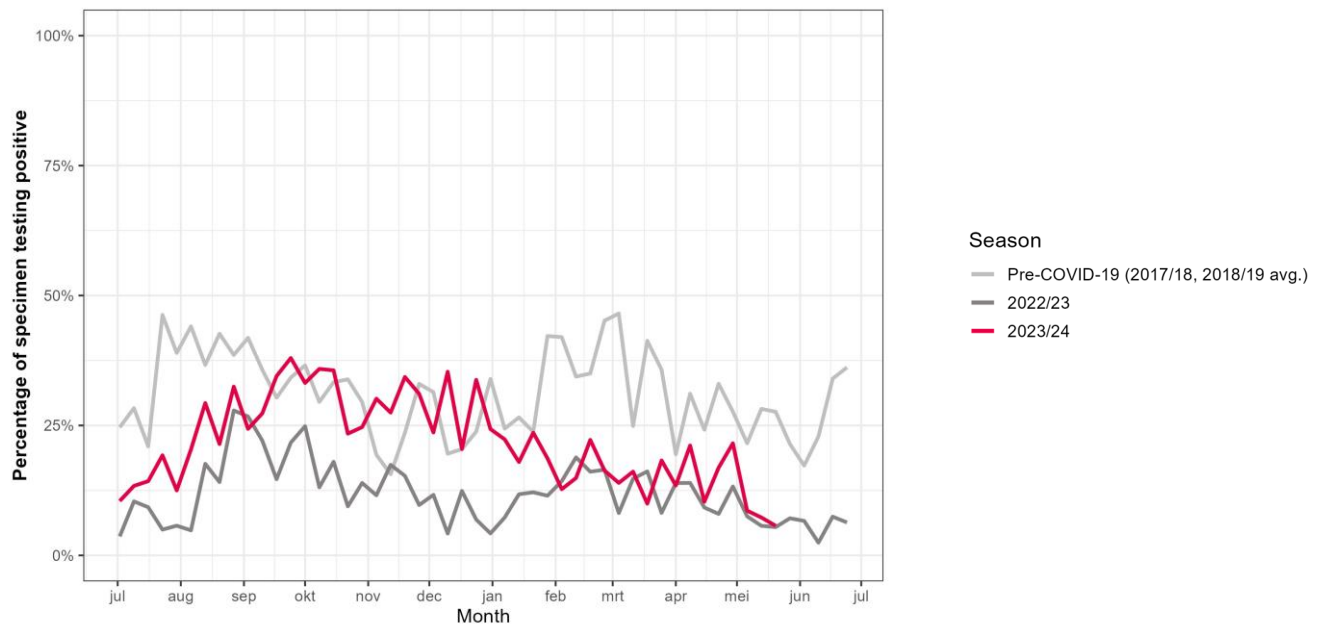
### Percentage of specimens testing positive for influenza in different seasons



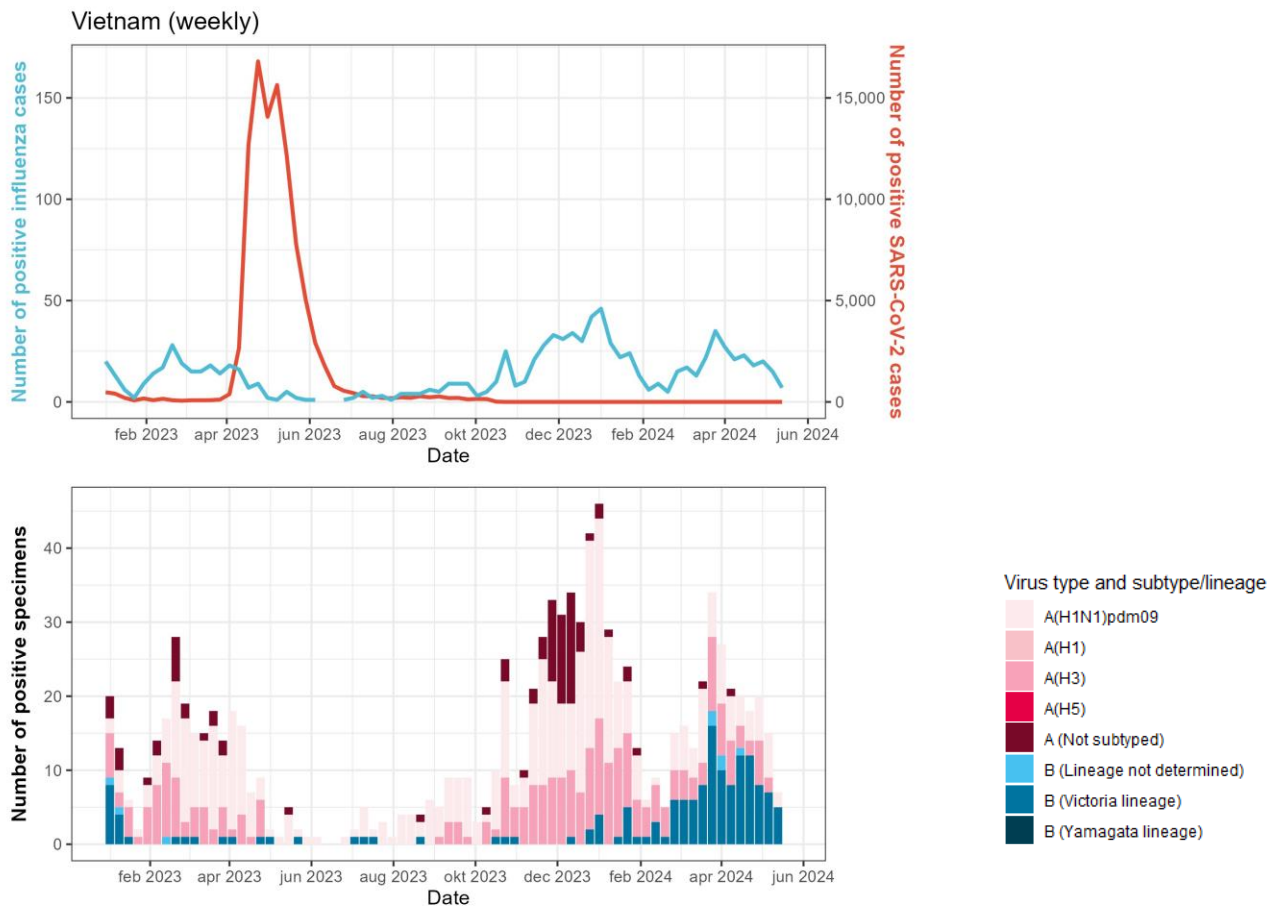
## Thailand



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



## Vietnam

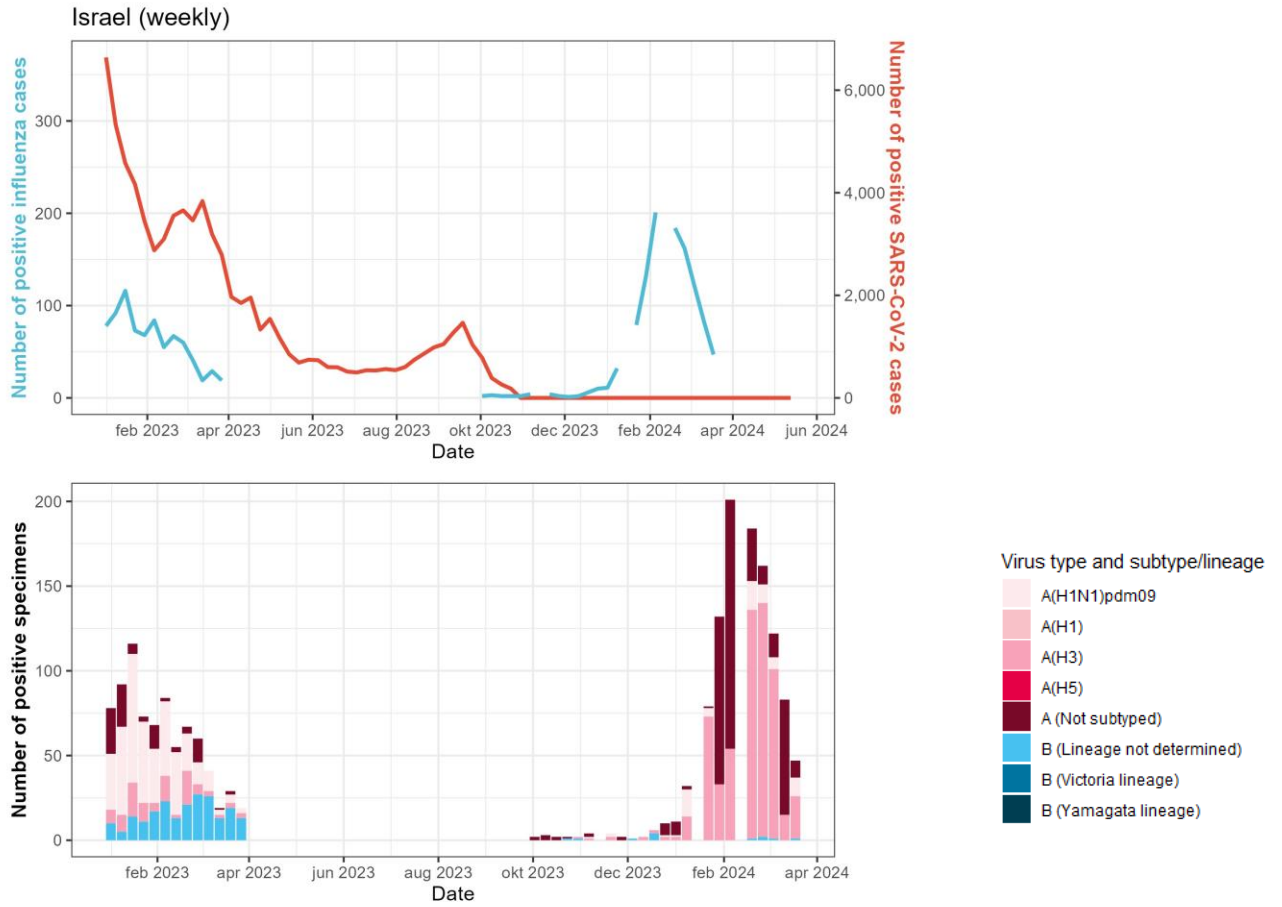


Note: Vietnam has reported zero SARS-CoV-2 activity to the WHO since W44/2023

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

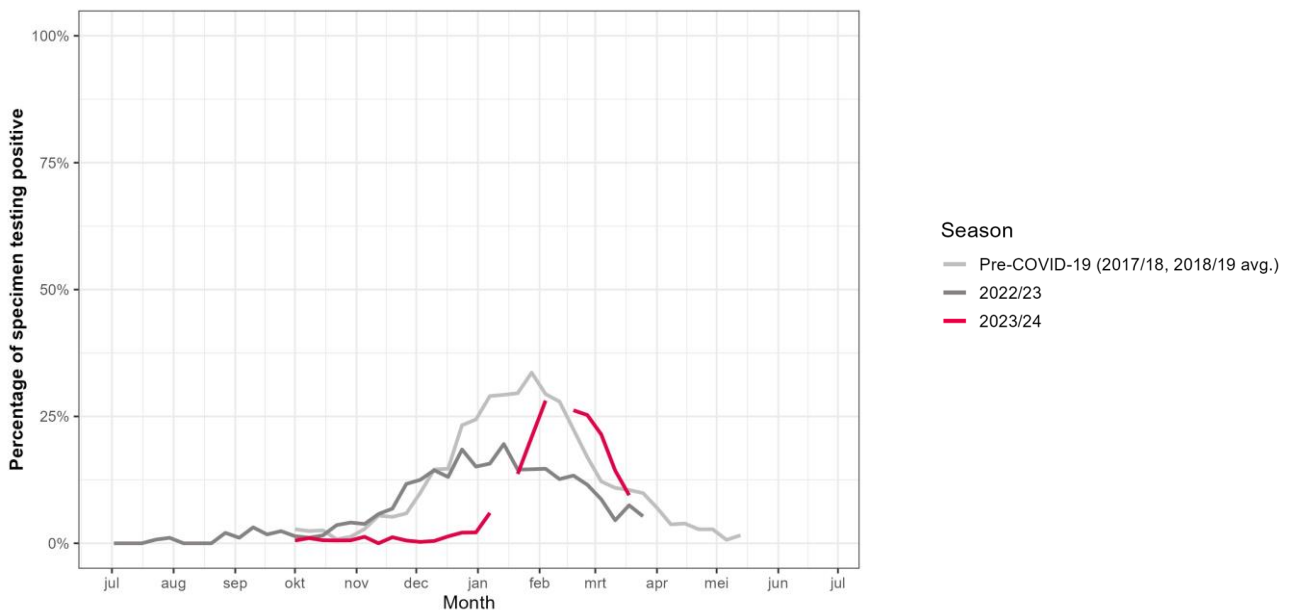
## Western Asia

### Israel



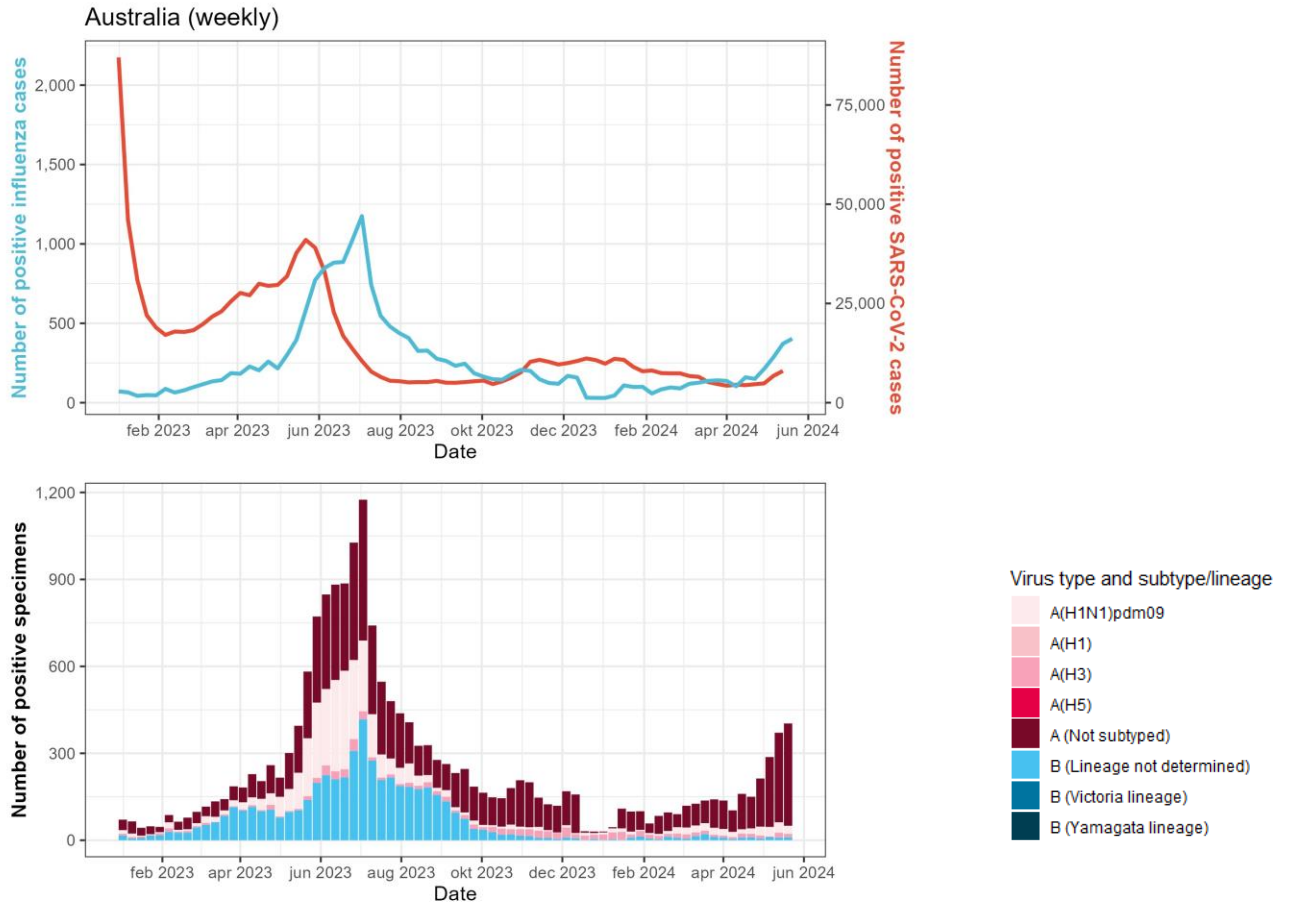
Note: Israel has reported zero SARS-CoV-2 activity to the WHO since W44/2023

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

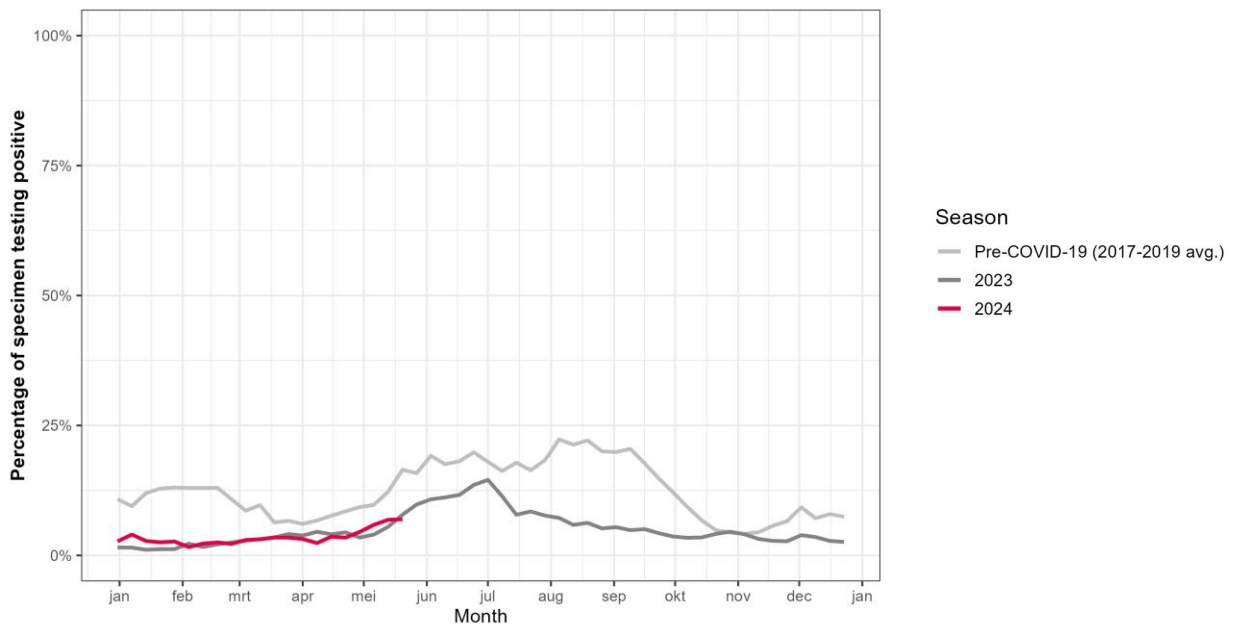


# Oceania

## Australia

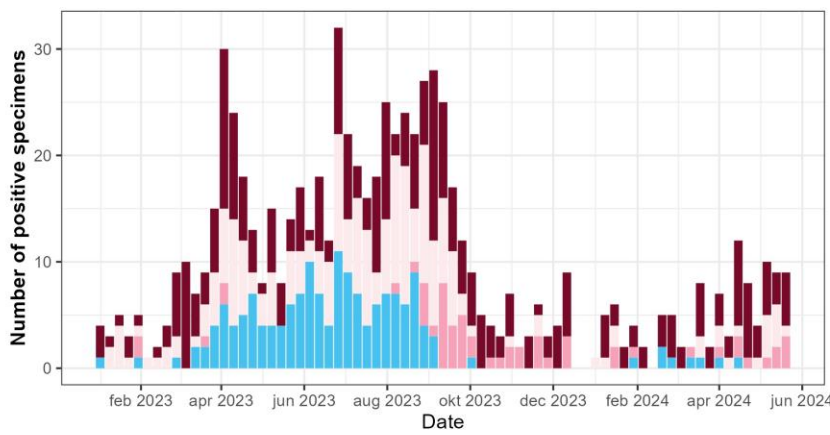
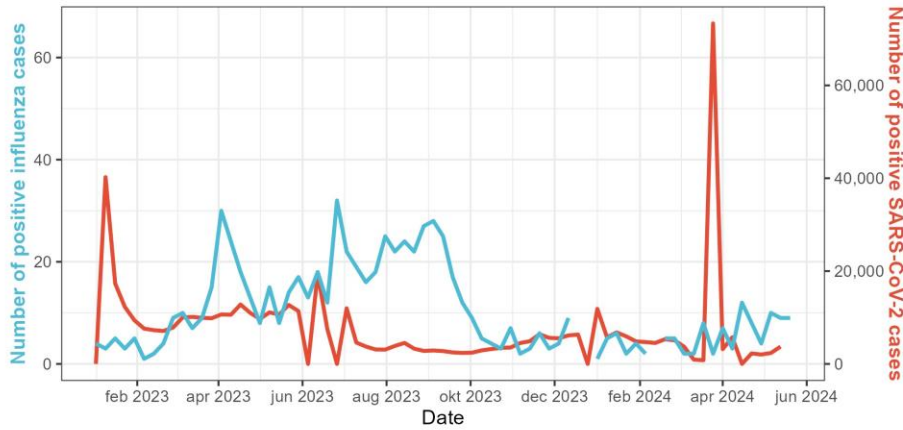


## Percentage of specimens testing positive for influenza in different seasons



## New Zealand

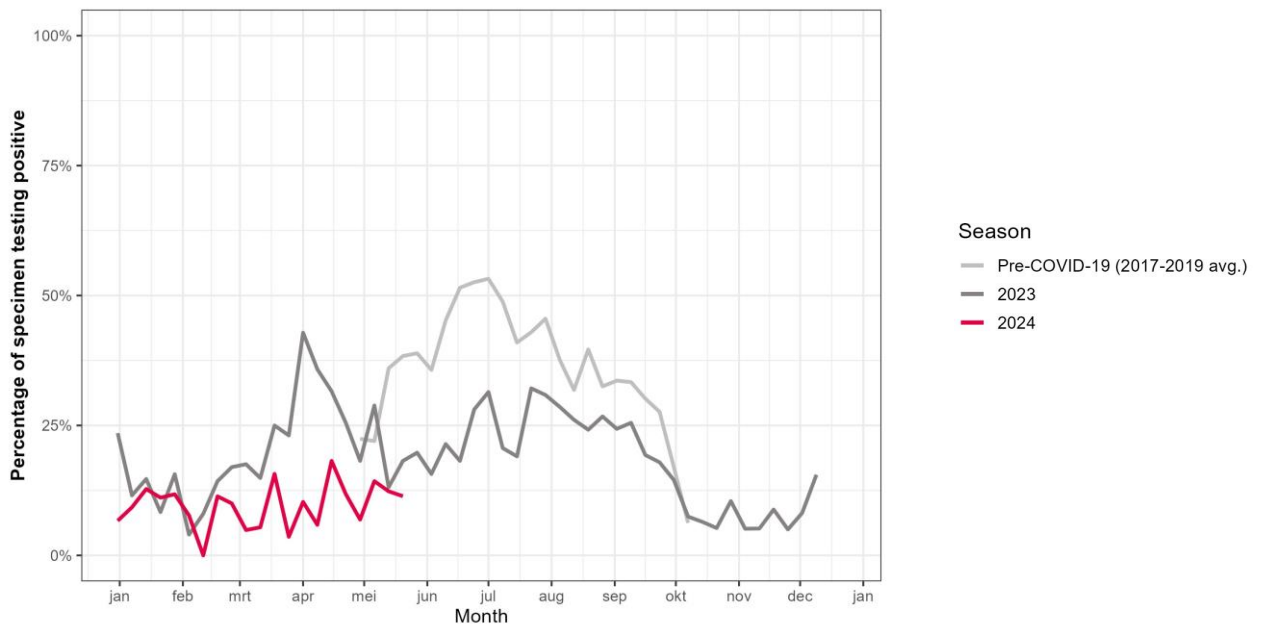
New Zealand (weekly)



Virus type and subtype/lineage

- A(H1N1)pdm09
- A(H1)
- A(H3)
- A(H5)
- A (Not subtyped)
- B (Lineage not determined)
- B (Victoria lineage)
- B (Yamagata lineage)

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



Season

- Pre-COVID-19 (2017-2019 avg.)
- 2023
- 2024

## Absolute numbers per country

Country	Year	Cases <sup>a,b</sup> of SARS-CoV-2	+/- since last month <sup>c</sup>	Cases <sup>a</sup> of influenza	+/- since last month <sup>c</sup>	Week of last 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	186,267		5,618		
Argentina	2024	54,619	178	1,157	742	2024-21
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	11,635	3,058	1,274	2024-21
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	1,395,623		21,939		
Brazil	2024	0	0	12,150	1,243	2024-21
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	36,067	2,584	60,663	3,598	2024-21
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	67,297	339	11,229	7,094	2024-21
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	35,168	3,320	121,510	10,412	2024-21
Egypt	2019			1,999		
Egypt	2020	131,315		659		
Egypt	2021	249,205		233		
Egypt	2022	134,994		2,709		
Egypt	2023	509		3,079		
Egypt	2024	0	0	1,017	84	2024-21



Country	Year	Cases <sup>a,b</sup> of SARS-CoV-2	+/- since last month <sup>c</sup>	Cases <sup>a</sup> of influenza	+/- since last month <sup>c</sup>	Week of last influenza update
France	2019			25,405		
France	2020	2,338,258		16,589		
France	2021	6,371,668		3,071		
France	2022	29,279,621		40,148		
France	2023	1,007,943		22,690		
France	2024	0	0	22,391	124	2024-20
Germany	2019			1,215		
Germany	2020	1,660,178		958		
Germany	2021	5,353,865		29		
Germany	2022	30,227,893		1,923		
Germany	2023	1,195,820		796		
Germany	2024	0	0	1,416	20	2024-21
India	2019			10,428		
India	2020	10,187,850		655		
India	2021	24,598,952		5,128		
India	2022	9,890,304		1,948		
India	2023	336,066		3,282		
India	2024	25,968	1,565	675	89	2024-21
Israel	2019			1,796		
Israel	2020	399,105		1,424		
Israel	2021	965,663		456		
Israel	2022	3,391,936		774		
Israel	2023	84,854		841		
Israel	2024	0	0	1,053	0	2024-12
Italy	2019			6,361		
Italy	2020	2,039,182		7,485		
Italy	2021	3,583,249		31		
Italy	2022	19,438,072		5,817		
Italy	2023	1,601,108		5,256		
Italy	2024	61,119	1,349	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	2,581	9	2024-19
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	464,157		7,666		
Mexico	2024	0	0	7,262	415	2024-21

Country	Year	Cases <sup>a,b</sup> of SARS-CoV-2	+/- since last month <sup>c</sup>	Cases <sup>a</sup> of influenza	+/- since last month <sup>c</sup>	Week of last influenza update
Netherlands	2019			5,166		
Netherlands	2020	773,198		3,235		
Netherlands	2021	2,312,304		471		
Netherlands	2022	5,480,565		14,019		
Netherlands	2023	64,963		9,582		
Netherlands	2024	5,344	140	11,548	96	2024-21
New Zealand	2019			1,011		
New Zealand	2020	1,789		-		
New Zealand	2021	11,740		-		
New Zealand	2022	2,014,452		-		
New Zealand	2023	412,394		631		
New Zealand	2024	152,894	4,379	106	32	2024-21
Philippines	2019			612		
Philippines	2020	469,003		52		
Philippines	2021	2,369,471		105		
Philippines	2022	1,220,895		260		
Philippines	2023	137,910		688		
Philippines	2024	8,183	0	56	1	2024-20
Poland	2019			1,786		
Poland	2020	1,259,923		1,282		
Poland	2021	2,790,909		2		
Poland	2022	2,314,550		1,604		
Poland	2023	266,683		2,085		
Poland	2024	30,823	211	6,096	55	2024-21
South Africa	2019			1,164		
South Africa	2020	994,911		157		
South Africa	2021	2,413,026		413		
South Africa	2022	640,295		1,171		
South Africa	2023	24,404		1,024		
South Africa	2024	61	7	522	368	2024-21
South Korea	2019			1,702		
South Korea	2020	56,855		505		
South Korea	2021	554,812		0		
South Korea	2022	28,047,388		295		
South Korea	2023	5,912,818		2,586		
South Korea	2024	0	0	970	40	2024-21
Spain	2019			16,358		
Spain	2020	1,919,549		8,827		
Spain	2021	4,180,589		2,206		
Spain	2022	7,654,824		18,089		
Spain	2023	225,378		18,098		
Spain	2024	0	0	10,522	142	2024-21

Country	Year	Cases <sup>a,b</sup> of SARS-CoV-2	+/- since last month <sup>c</sup>	Cases <sup>a</sup> of influenza	+/- since last month <sup>c</sup>	Week of last 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	17,483	3,672	683	61	2024-21
United Kingdom	2019			42,447		
United Kingdom	2020	2,344,433		14,377		
United Kingdom	2021	10,230,346		2,755		
United Kingdom	2022	11,584,258		26,896		
United Kingdom	2023	706,119		24,078		
United Kingdom	2024	64,836	5,635	62,442	2,347	2024-21
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	5,270	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	387	42	2024-21

<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 [10]. The emergence of this new virus has had a major impact on the global circulation of respiratory viruses, including influenza and RSV [11]. 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) [12].

## Data sources

- **Influenza:** FluNet [2] 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 [13]. 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 [14].
- **Government response tracker:** The Oxford COVID-19 Government Response Tracker (OxCGRT) [12] 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 3 June 2024 and cover the period 1 January 2019 to 26 May 2024 (influenza) and 13 May 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 [flu cov@nivel.nl](mailto:flu cov@nivel.nl).

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### Websites

Project Website: <https://www.nivel.nl/en/fluov>

FluCoV Dashboard: <https://www.nivel.nl/en/dossier-epidemiology-respiratory-viruses/fluov-dashboard>

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