



FluCov-Bulletin – mid-January 2024

FluCov project: combining data from around the world to better understand the impact of COVID-19 on influenza activity

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 22 countries globally (see page 3).

Results

On a global level, **influenza** activity has slightly decreased since week 50/2023. The following country patterns were observed for **influenza** in the first half of January:

- In the Northern Hemisphere, **influenza** activity appears to be decreasing in most European countries (**France, Germany, Italy, Poland**, and the **United Kingdom**) following peaks between weeks 52/2023 and 01/2024. For week 02/2024, the UK is reporting low **influenza** activity (10-20% positivity), while moderate activity (20-30% positivity) is noted in **France, Germany, Italy**, and **Netherlands**, and **Spain** is experiencing high activity (30-40% positivity) [1]. **Influenza** A(H1N1)pdm09 clades have been predominant among European countries during the month of December [1]
- The same pattern is observed in the **United States** and **Canada**, where influenza activity is decreasing [2-3]. Until now, **influenza** A(H1N1)pdm09 was predominant, when subtyping was performed. In **Mexico**, **influenza** activity decreased, as did the percentage of positive tests.
- **Influenza** activity decreased in **China** after reaching a peak in December (week 49/2023), but overall positivity rate in China remained over 30% in week 02/2024. The predominant virus was **influenza** A(H3N2). **Influenza** detections also decreased in **Japan** and **Thailand**. In **South Korea**, influenza activity stabilized in late December, with cocirculation of **influenza** A and B, and the latter has become predominant.
- Low **influenza** detections were reported in **India** and **Vietnam**.
- In **Israel**, although **influenza** activity remains low, it is on the rise, with the positivity rate exceeding 5% for the first time this season.
- In the Southern Hemisphere, **influenza** detections have been low in the countries covered by the Bulletin (**Brazil, South Africa** and **Australia**).
- No update on **influenza** activity were available for **Egypt** and the **Philippines** during the first half of January.

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 the first half of January 2024:

- **SARS-CoV-2** activity increased in **India**, the **Philippines**, and **Thailand**.
- **SARS-CoV-2** activity increased also the **United Kingdom** and **Poland** but seemed to have peaked around week 01/2024.
- In **Canada, Italy**, the **Netherlands** **SARS-CoV-2** activity decreased in the first half of January, compared to the second half of December.

- **SARS-CoV-2** activity was low or stable in the following countries: **Australia, China, Mexico** and **South Africa**.
- No update on **SARS-CoV-2** activity was available for **Brazil, Egypt, France, Germany, Japan, South Korea, Spain, United States**, and **Vietnam** in the first half of January.

Implications

Global **influenza** activity has been slightly decreasing since the second half of December 2023. **SARS-CoV-2** activity has been relatively low worldwide. In the Northern Hemisphere, **influenza** activity seems to have begun decreasing after peaking during weeks 50-52/2023 in European and North American countries [1-3], and weeks 49-50/2023 in **China**. **Influenza** activity has been low in all Southern Hemisphere countries covered by the Bulletin: **Australia, South Africa and Brazil**. In the 2023/24 Northern Hemisphere season, the prevalent **influenza** strains have been A(H1N1)pdm09 and A(H3N2), with the latter being particularly predominant in **China**. However, **influenza** B/Victoria – the dominant and only **influenza** B lineage currently circulating– has started to be detected more frequently as of January (e.g. in **China, South Korea**, and the **United States**). It is noteworthy that during the 2023/24 Northern Hemisphere **influenza** season, the proportion of **influenza** B specimens for which the lineage was determined has increased, in part contributed to a coordinated global effort to understand whether **influenza** B/Yamagata has ceased circulating [4]. **SARS-CoV-2** detections have been on the decline worldwide since December 2022 when **China** experienced its peak: as of January, detections remained relatively low. However, an increase in **SARS-CoV-2** hospital admissions has been reported in the **United States** [5]. In **Italy** and the **Netherlands**, hospital admission started to decrease, after an increase in November/early December. It's critical to acknowledge that the Bulletin's data completeness is impacted by scaled-back monitoring efforts, such as **France's** strategy of testing predominantly high-risk individuals, and instances of non-communication with WHO [6]. This results in some data not being included in the FluCov Bulletin.

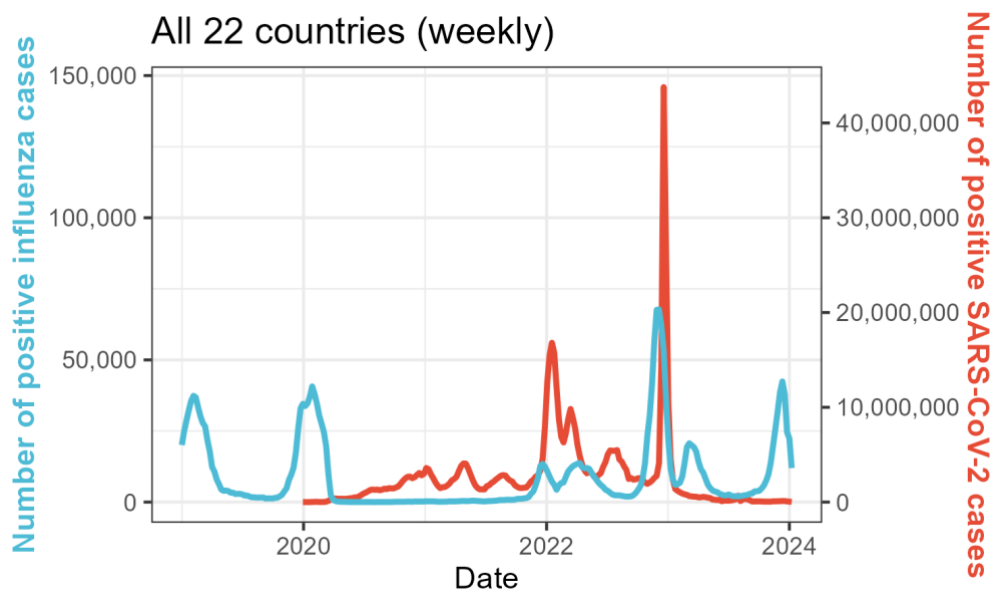


Figure 1: SARS-CoV-2 and influenza detections in the 22 countries covered by the Bulletin (period: from week 1/2019 to week 02/2024)

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, 2019 up to 14 January, 2024. 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 bar displays the Stringency Index (SI; a country-specific composite metric of the mitigation measures that are in place) over time. 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 now be accessed (real-time) at:

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

Countries (click to view plot)

North America

Canada

United States

Central America Caribbean

Mexico

Tropical South America

Brazil

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

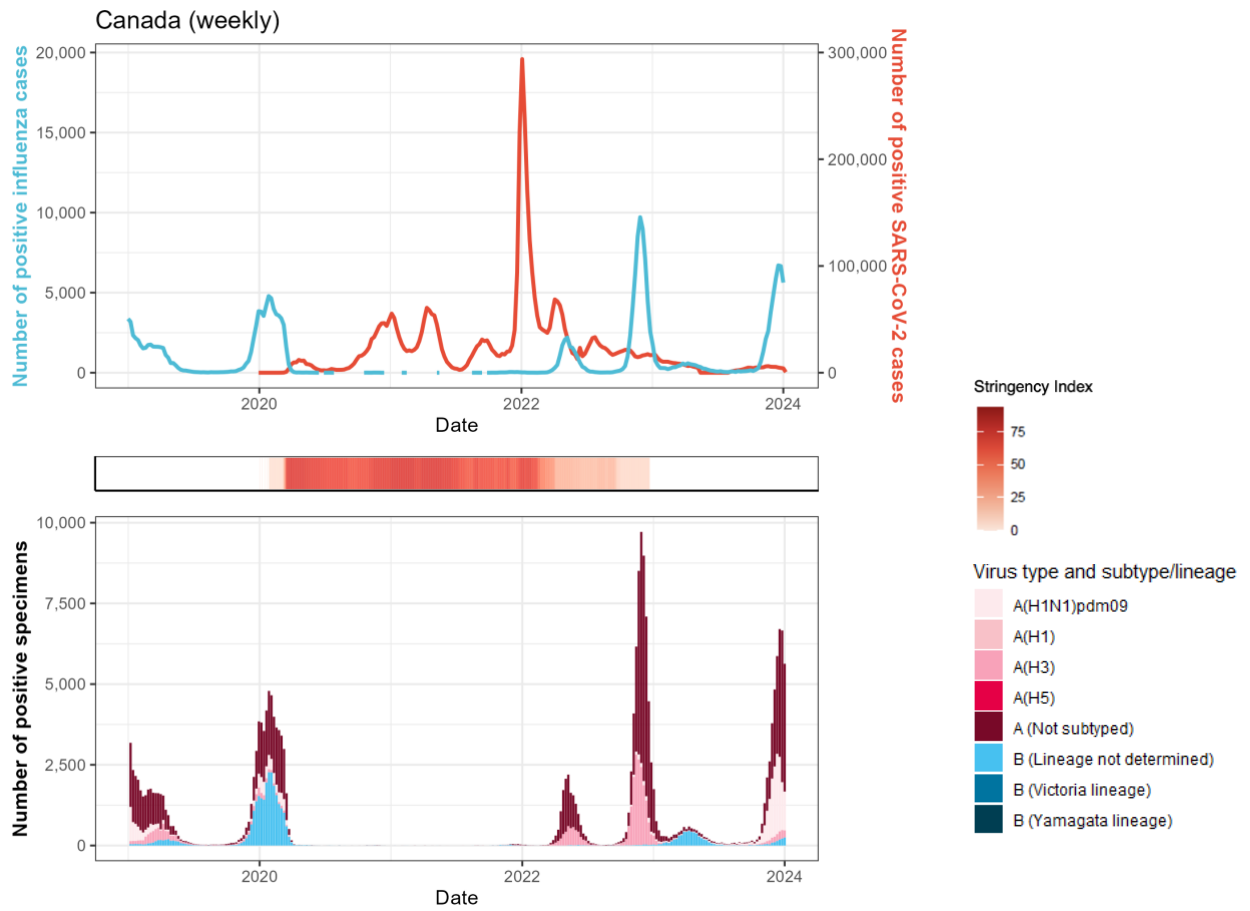
Israel

Oceania

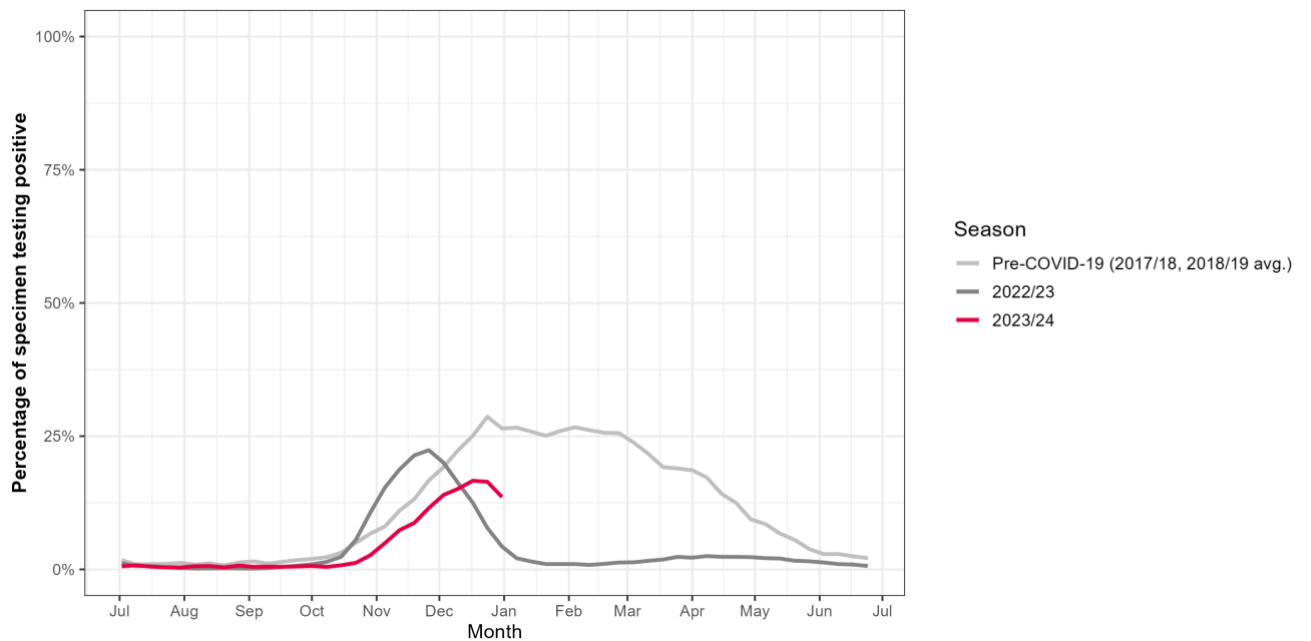
Australia

North America

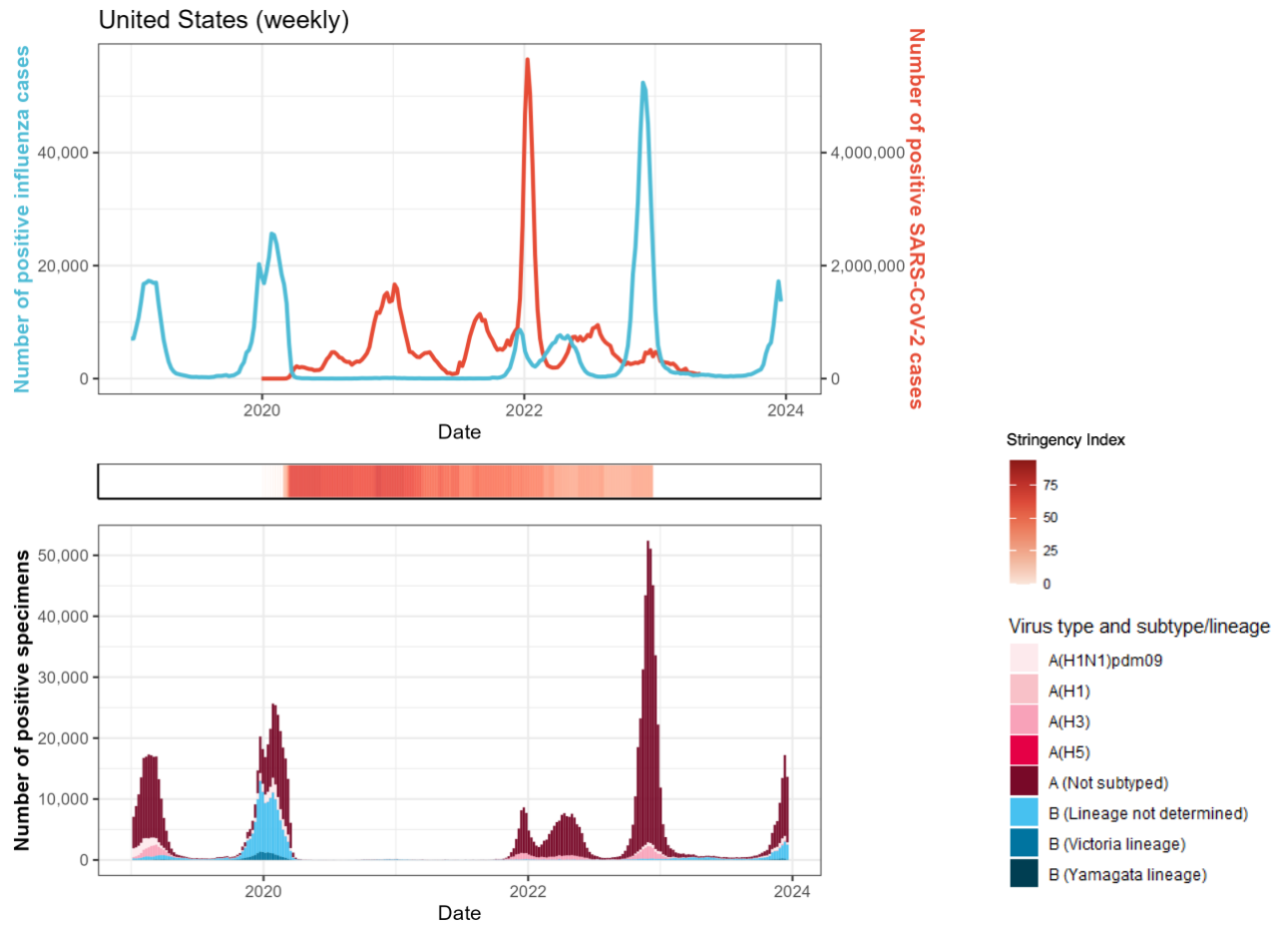
Canada



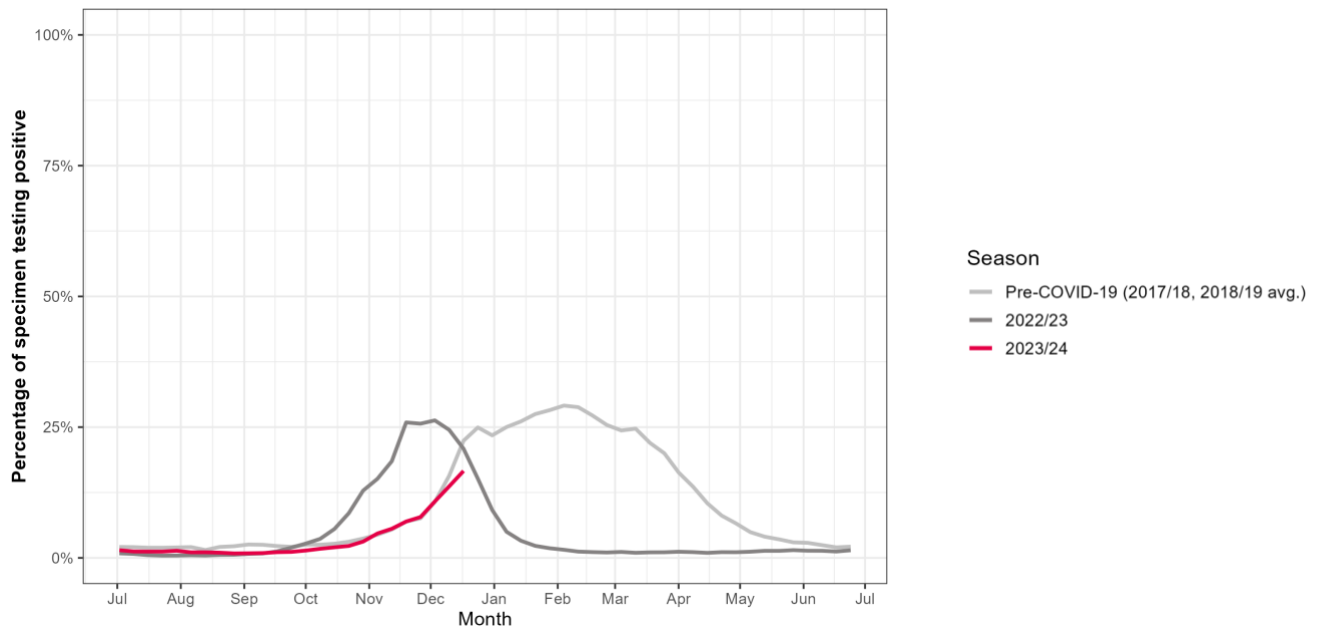
Percentage of specimens testing positive for influenza in different seasons



United States

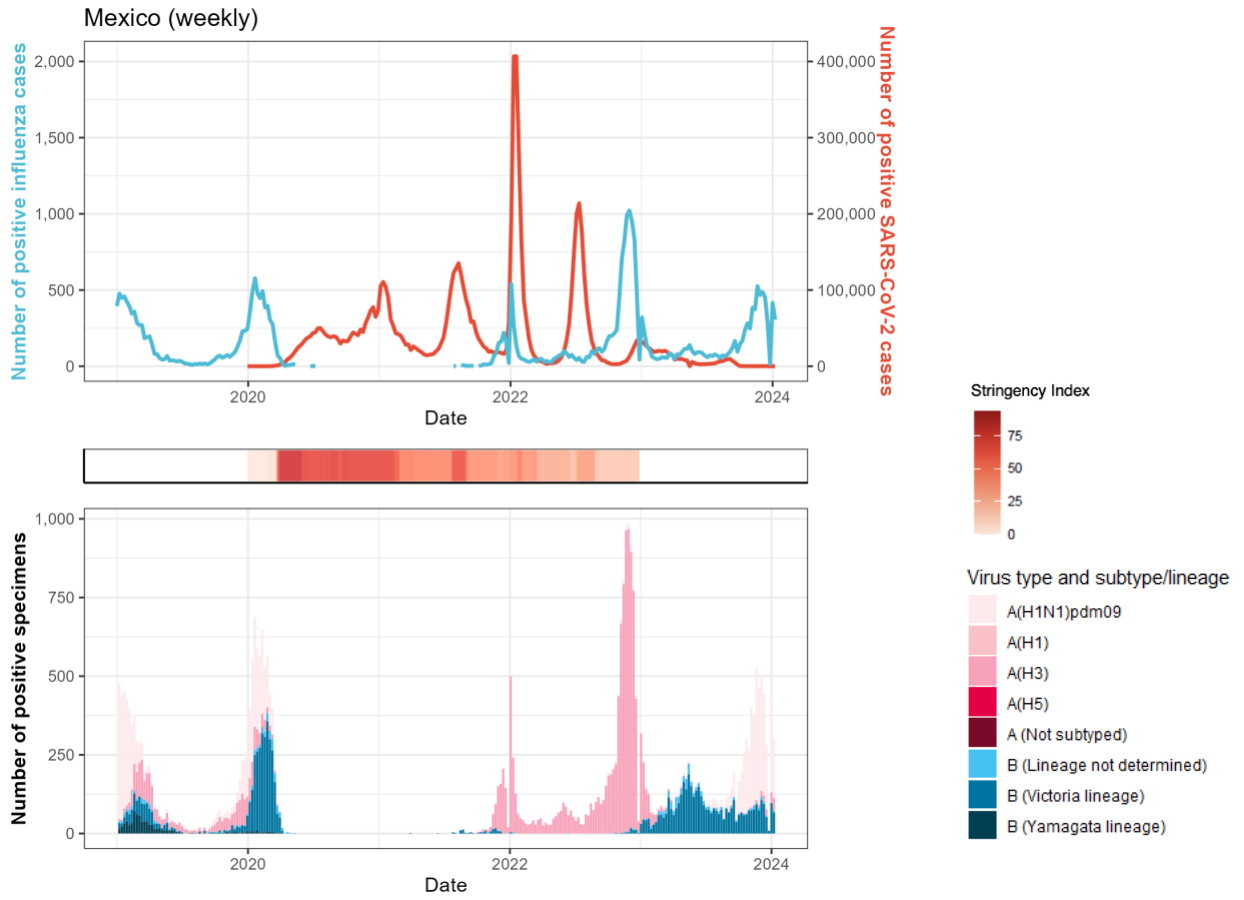


Percentage of specimens testing positive for influenza in different seasons

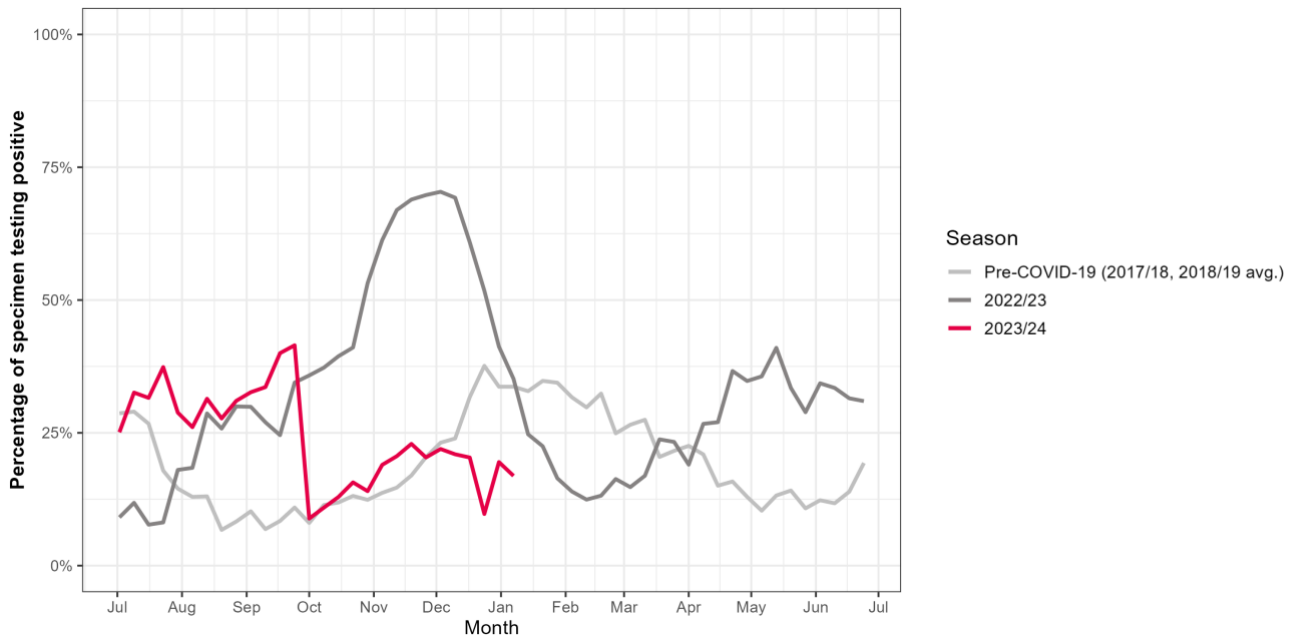


Central America Caribbean

Mexico

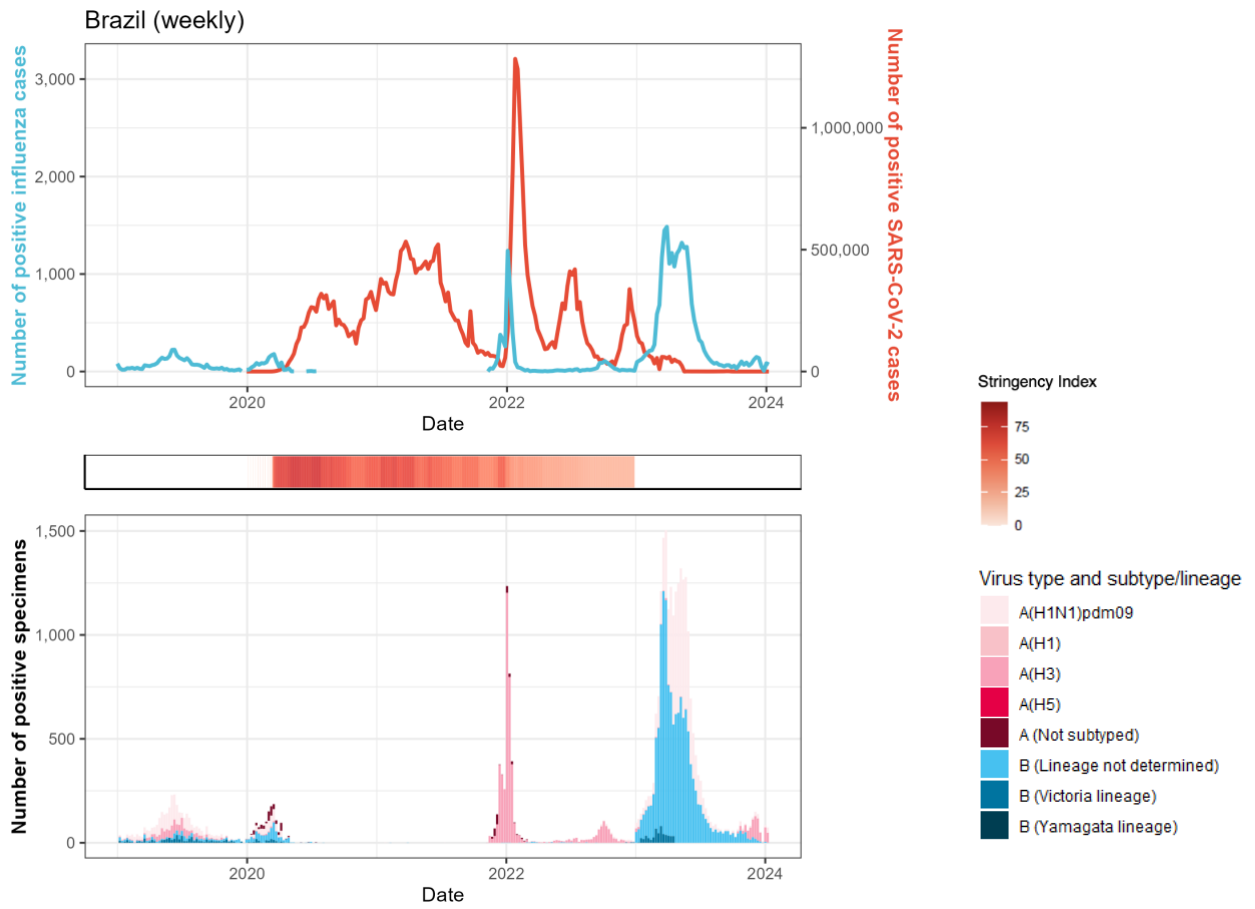


Percentage of specimens testing positive for influenza in different seasons

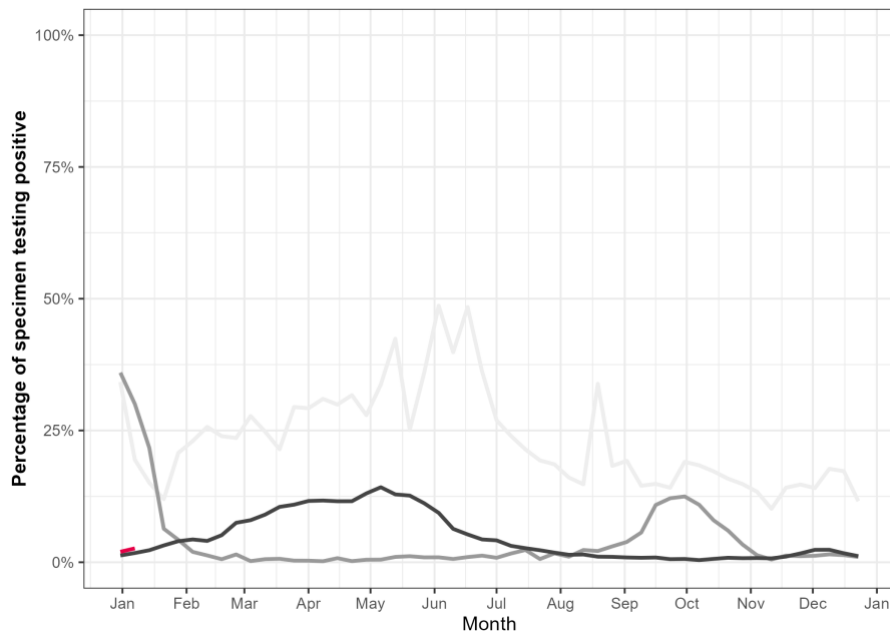


Tropical South America

Brazil

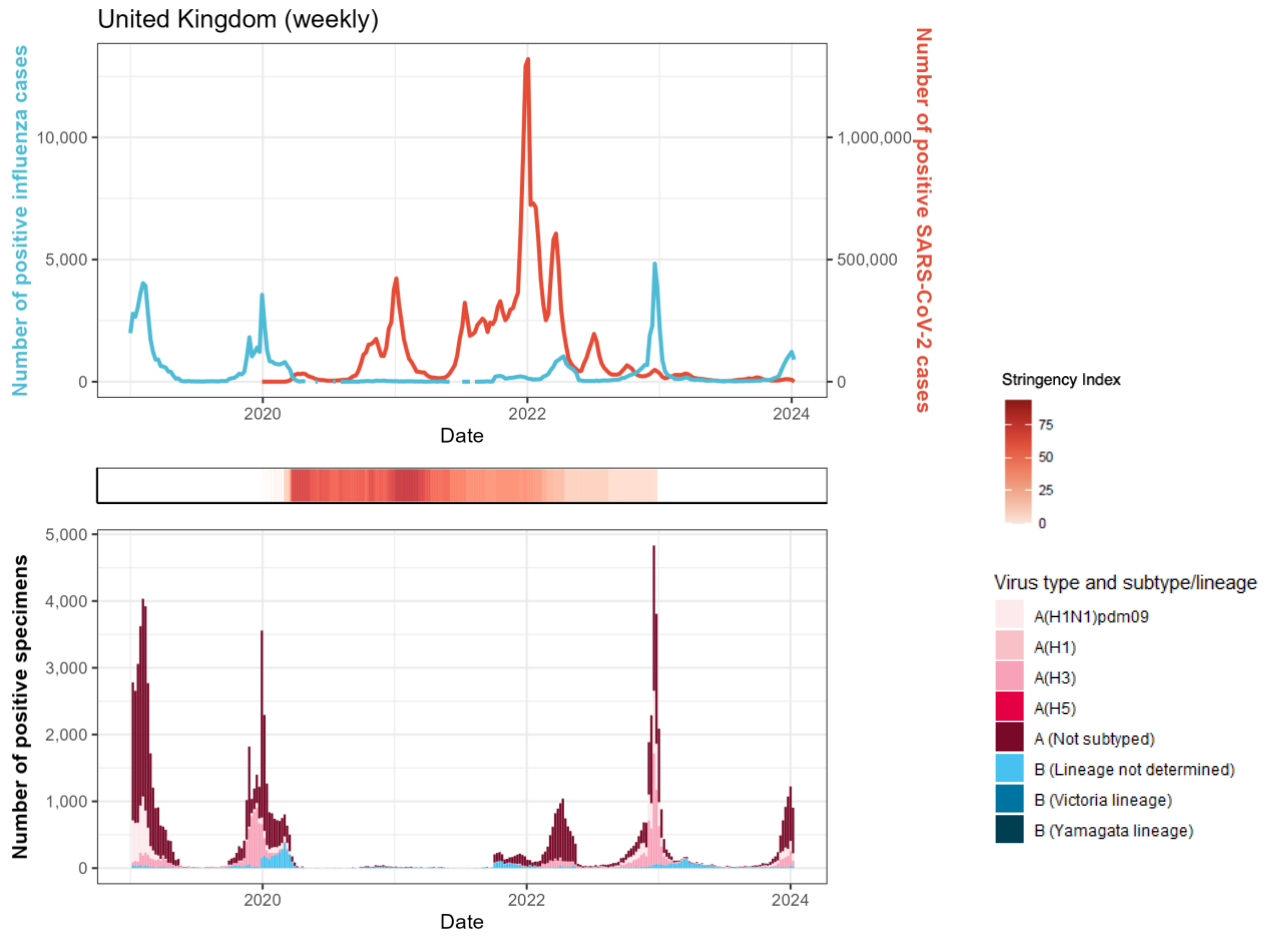


Percentage of specimens testing positive for influenza in different seasons

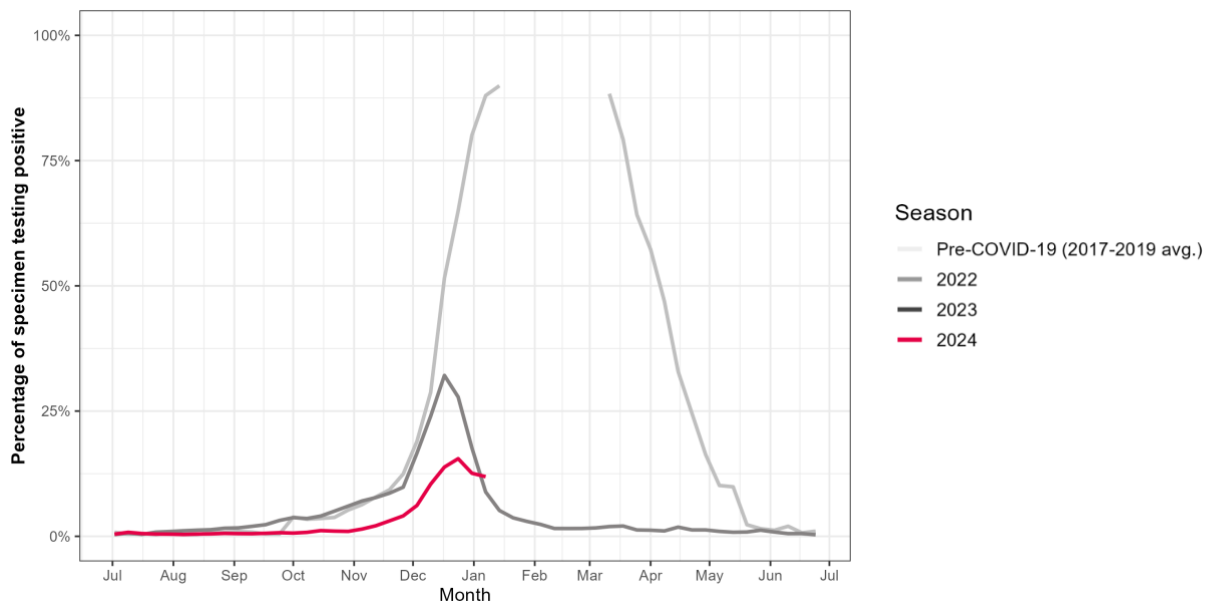


Northern Europe

United Kingdom

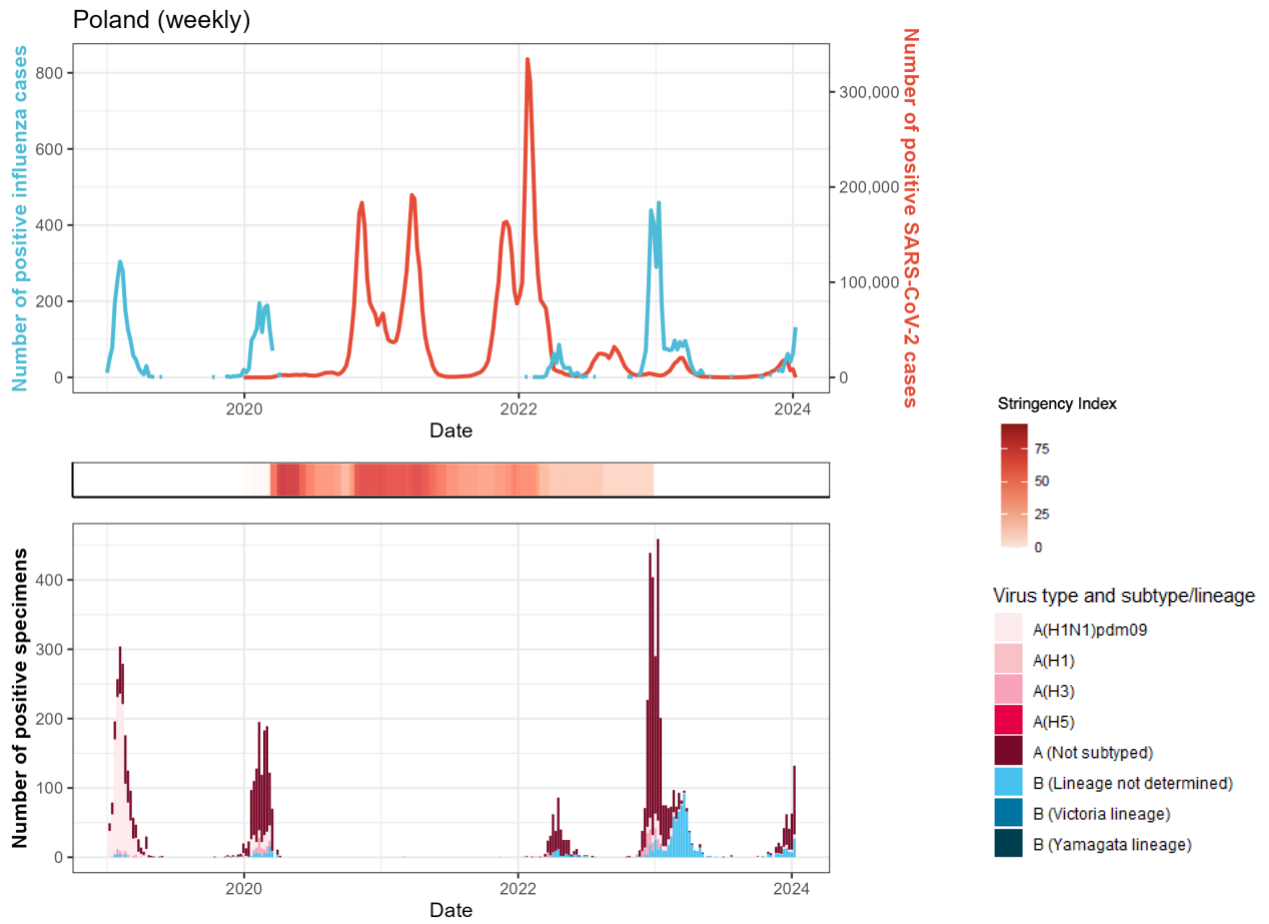


Percentage of specimens testing positive for influenza in different seasons

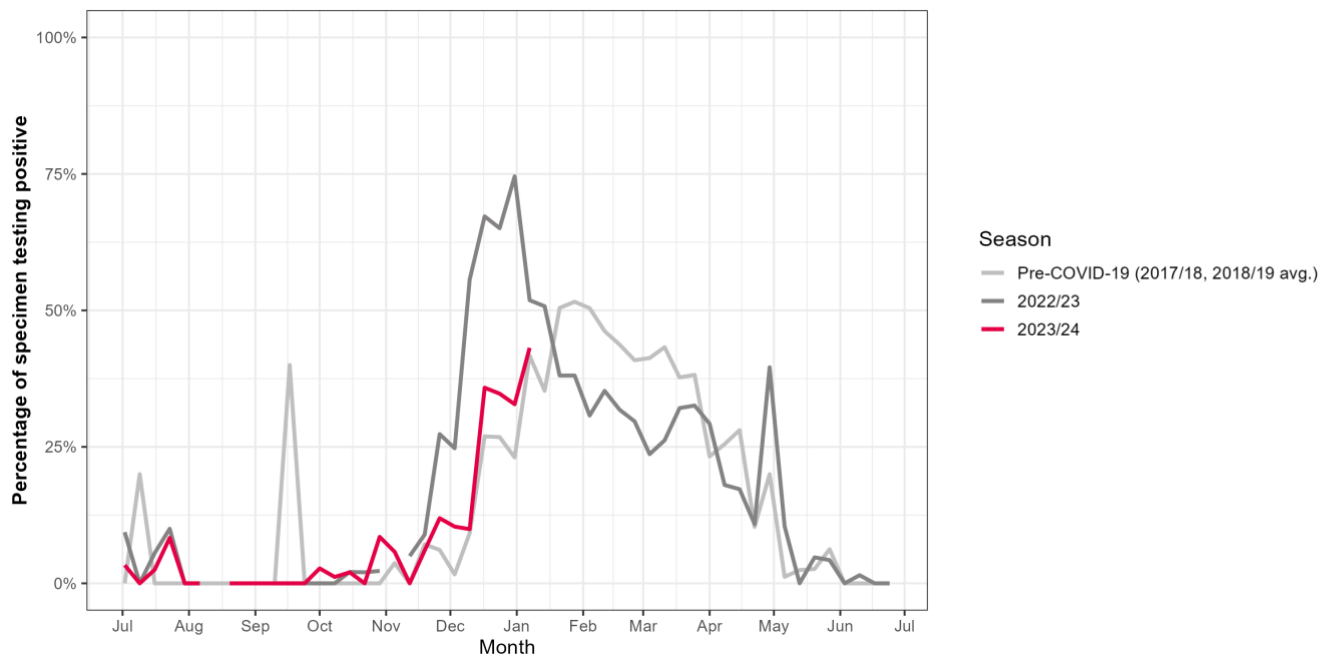


Eastern Europe

Poland

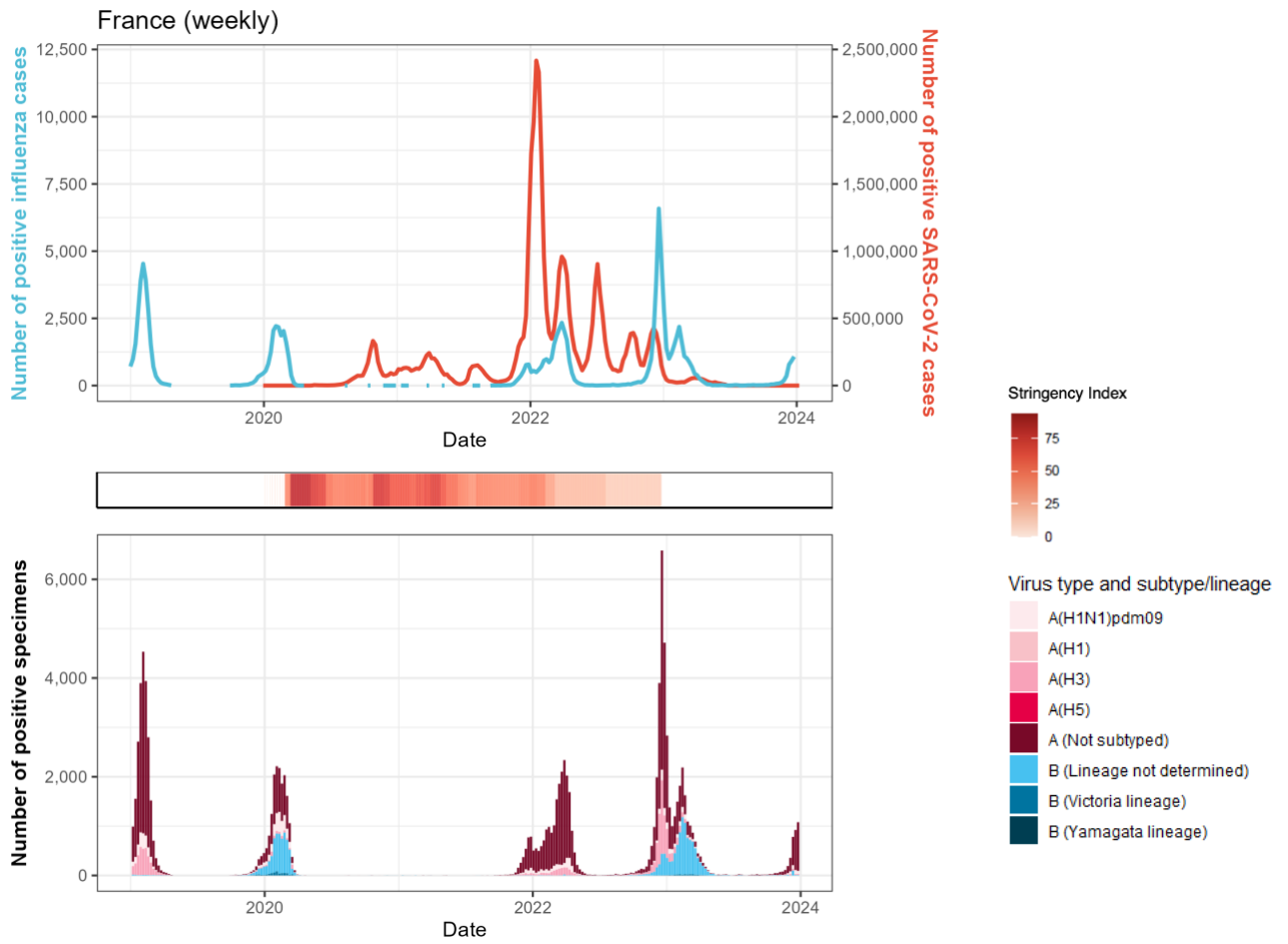


Percentage of specimens testing positive for influenza in different seasons

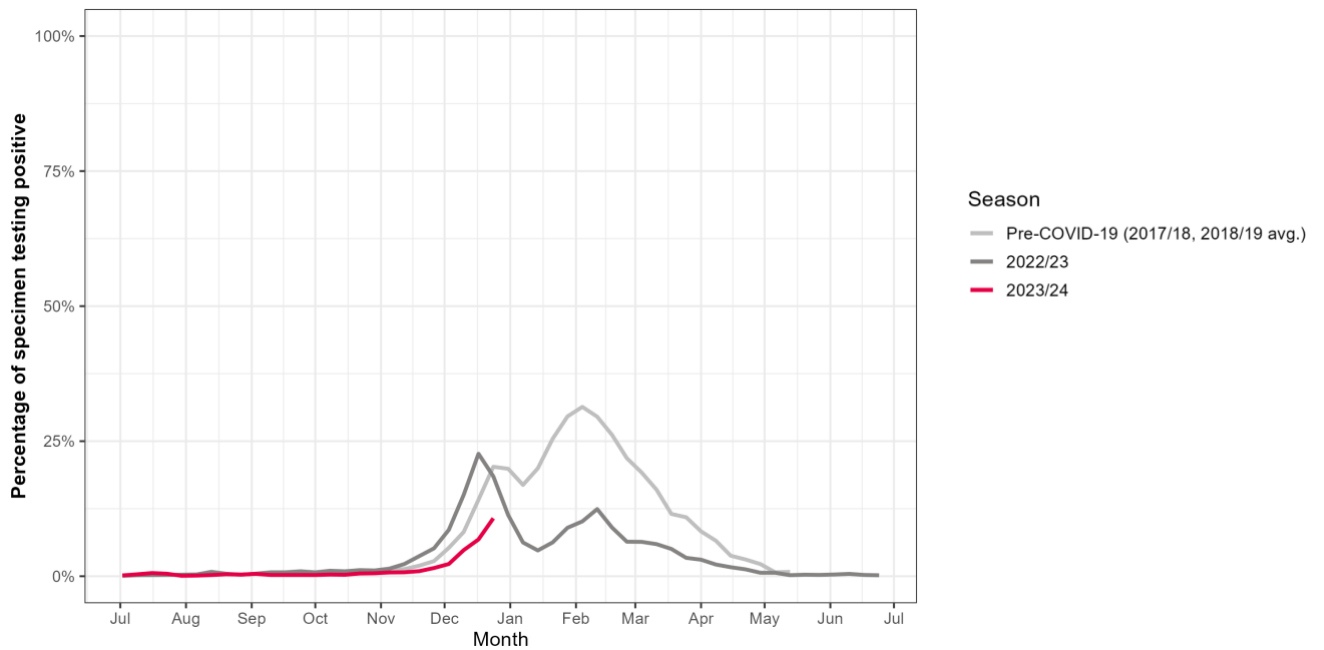


South West Europe

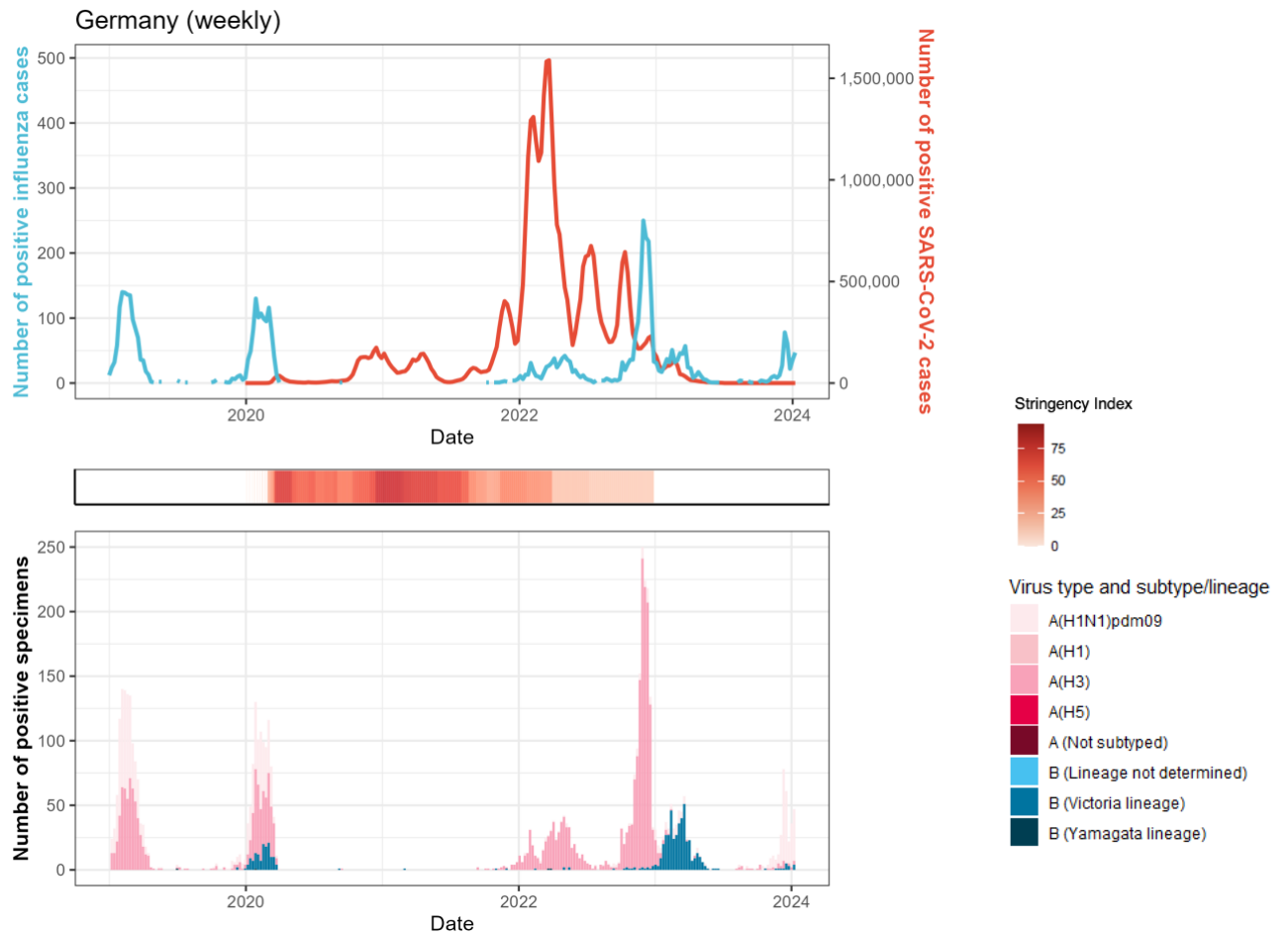
France



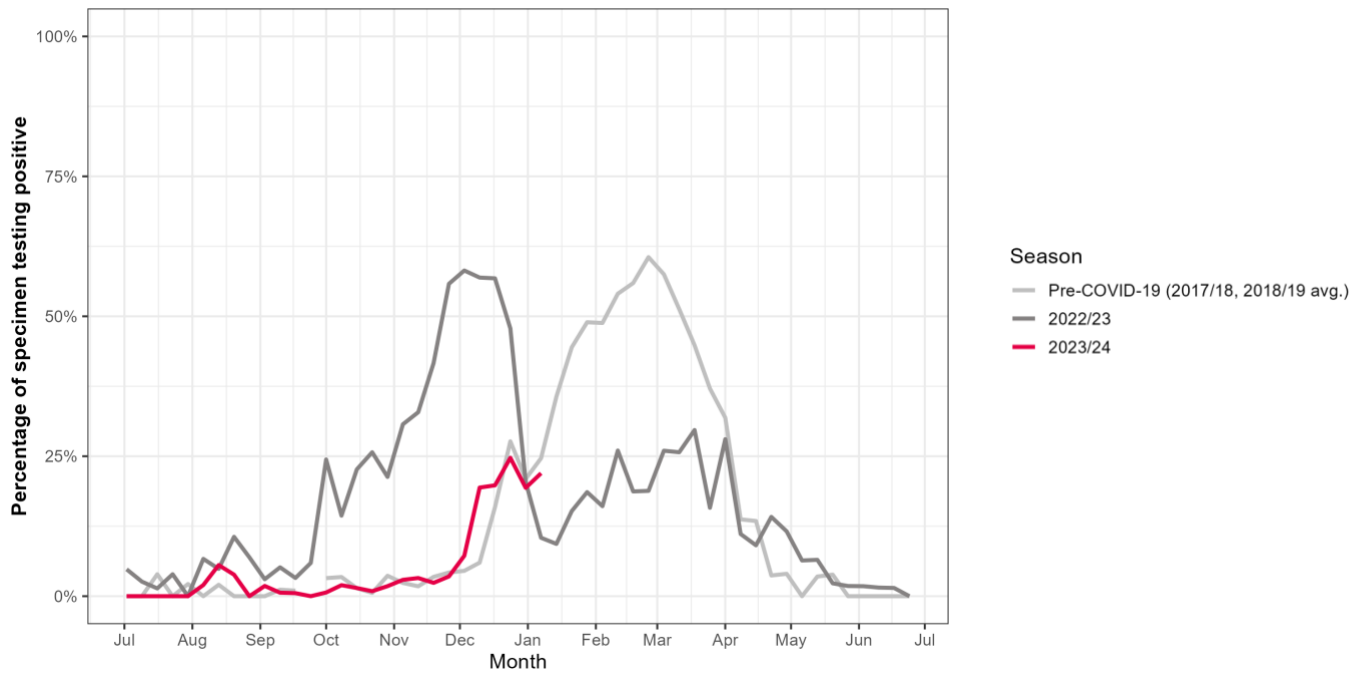
Percentage of specimens testing positive for influenza in different seasons



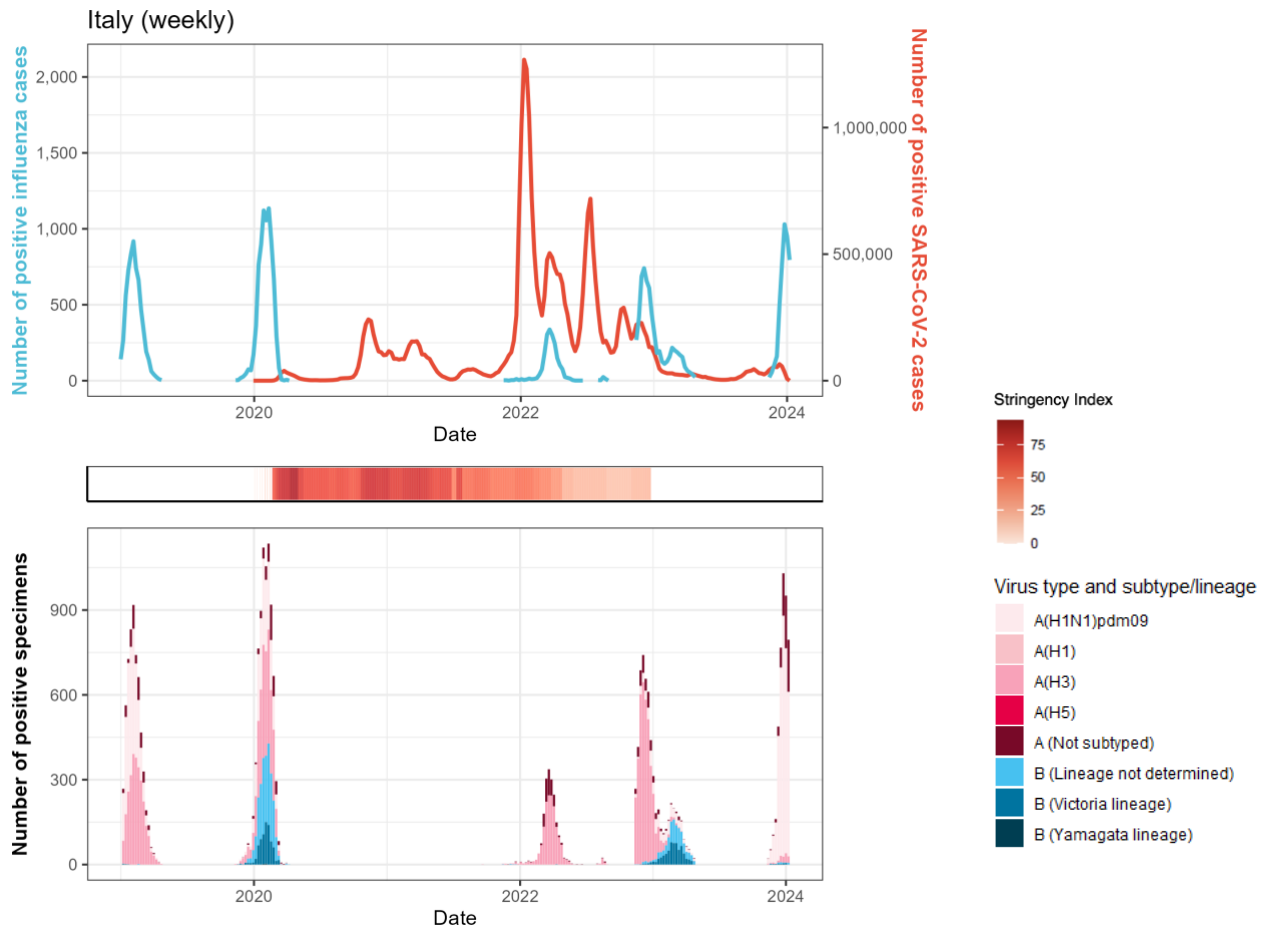
Germany



Percentage of specimens testing positive for influenza in different seasons

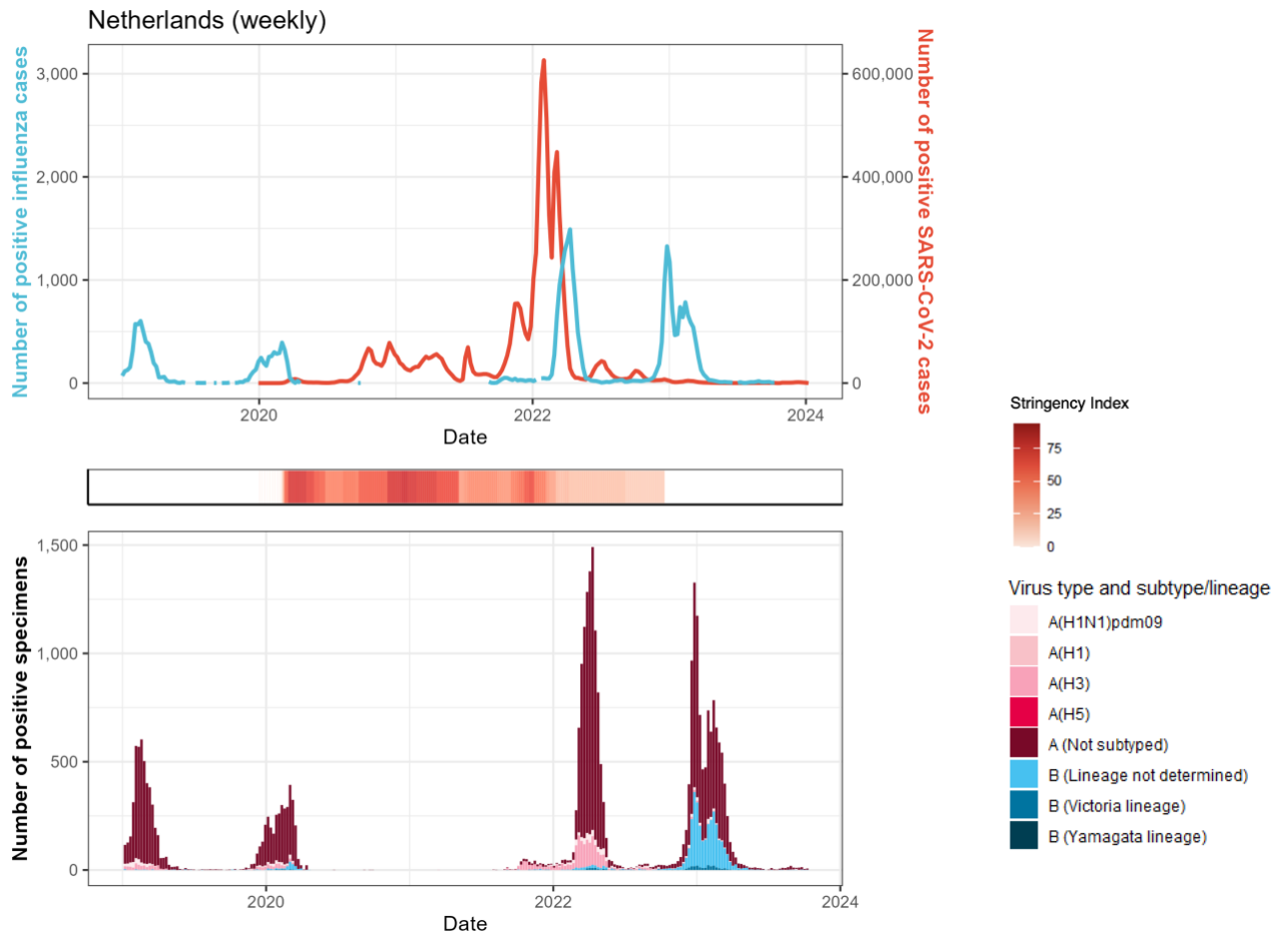


Italy



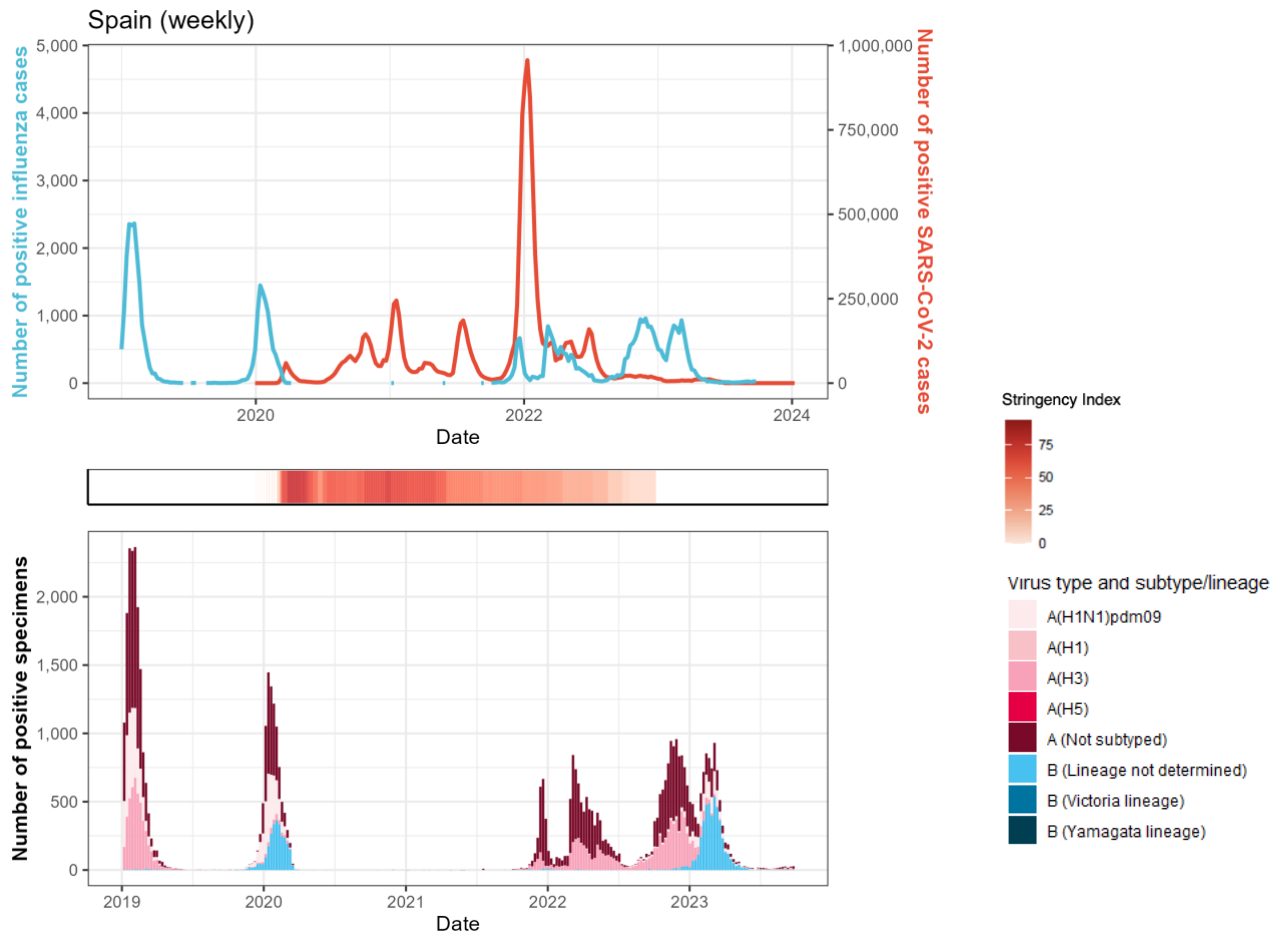
Percentage of specimens testing positive for influenza in different seasons: data not available

Netherlands

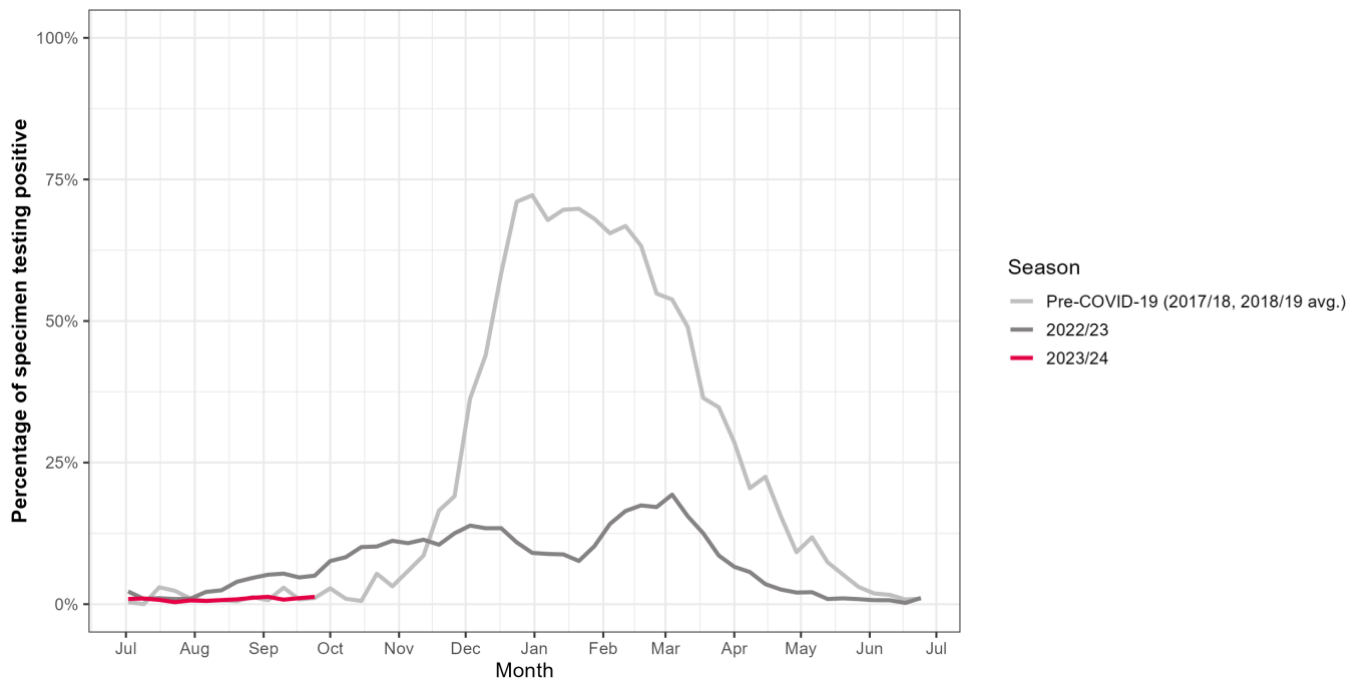


Percentage of specimens testing positive for influenza in different seasons: data not available

Spain

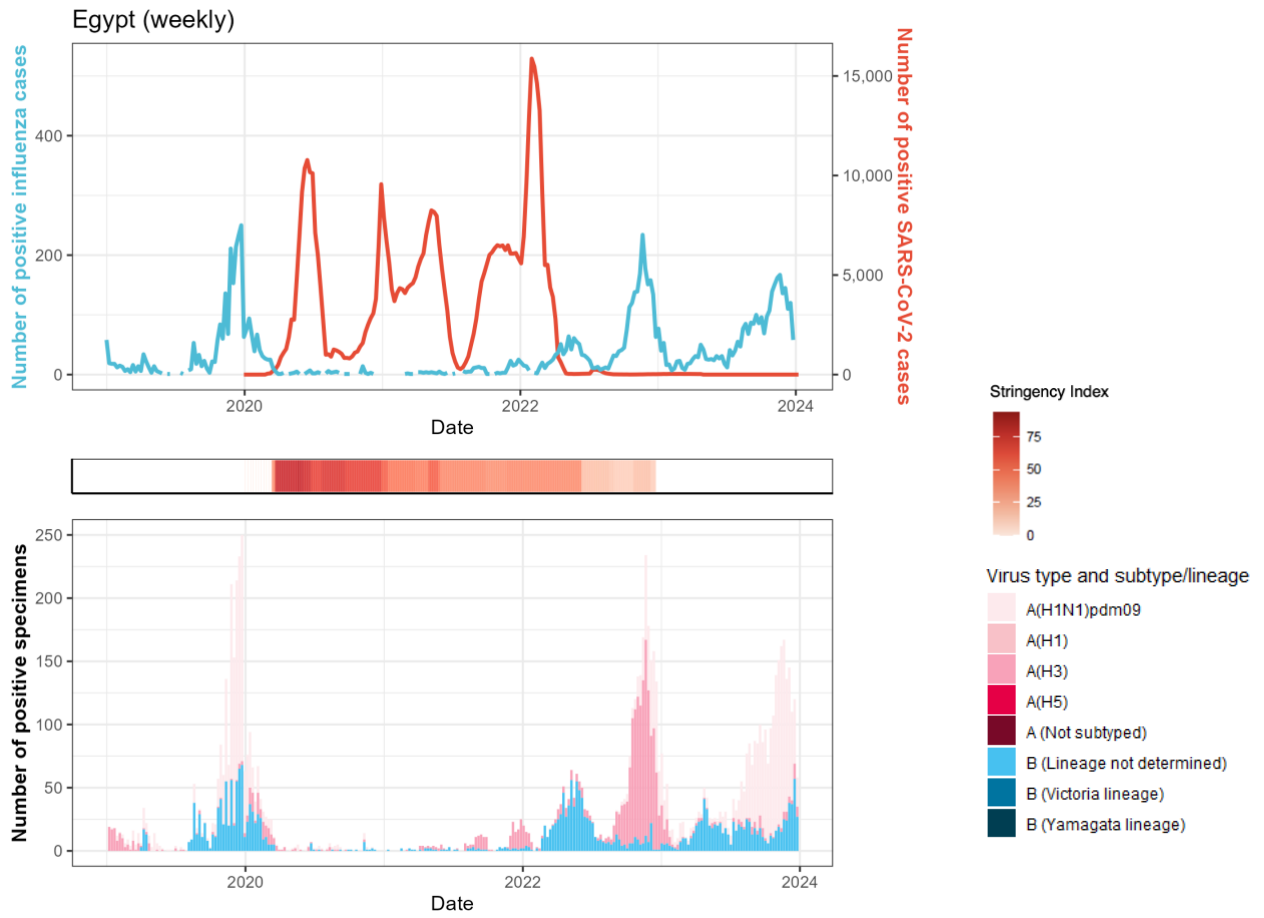


Percentage of specimens testing positive for influenza in different seasons

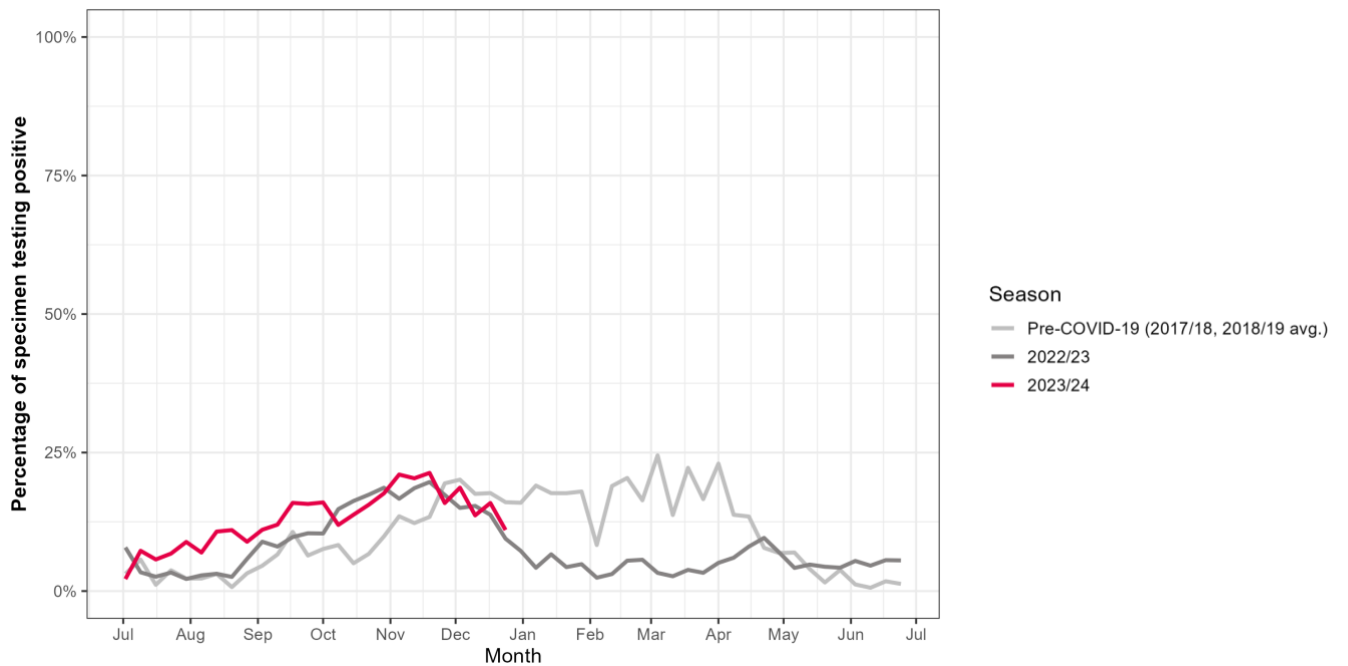


Northern Africa

Egypt

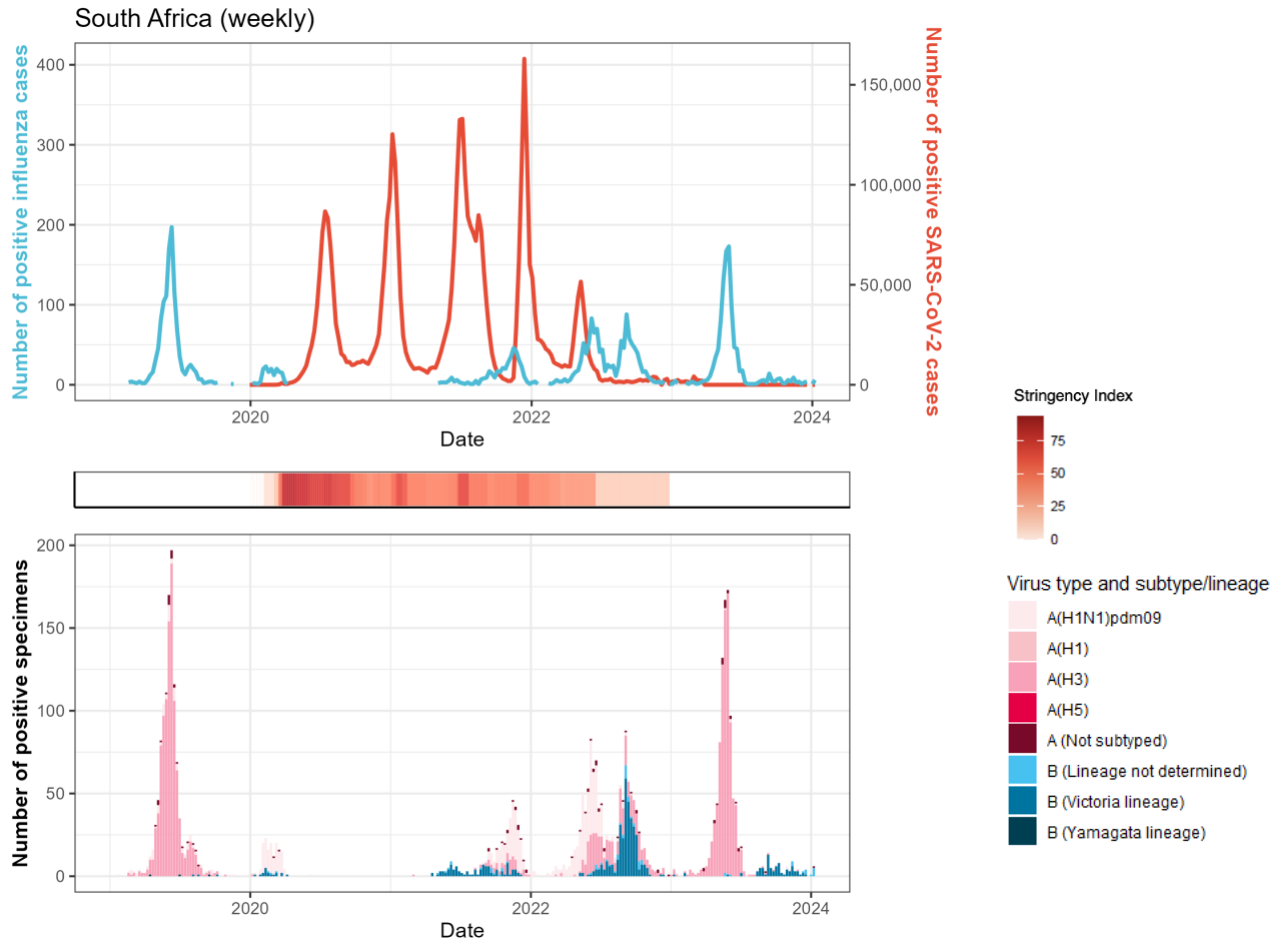


Percentage of specimens testing positive for influenza in different seasons

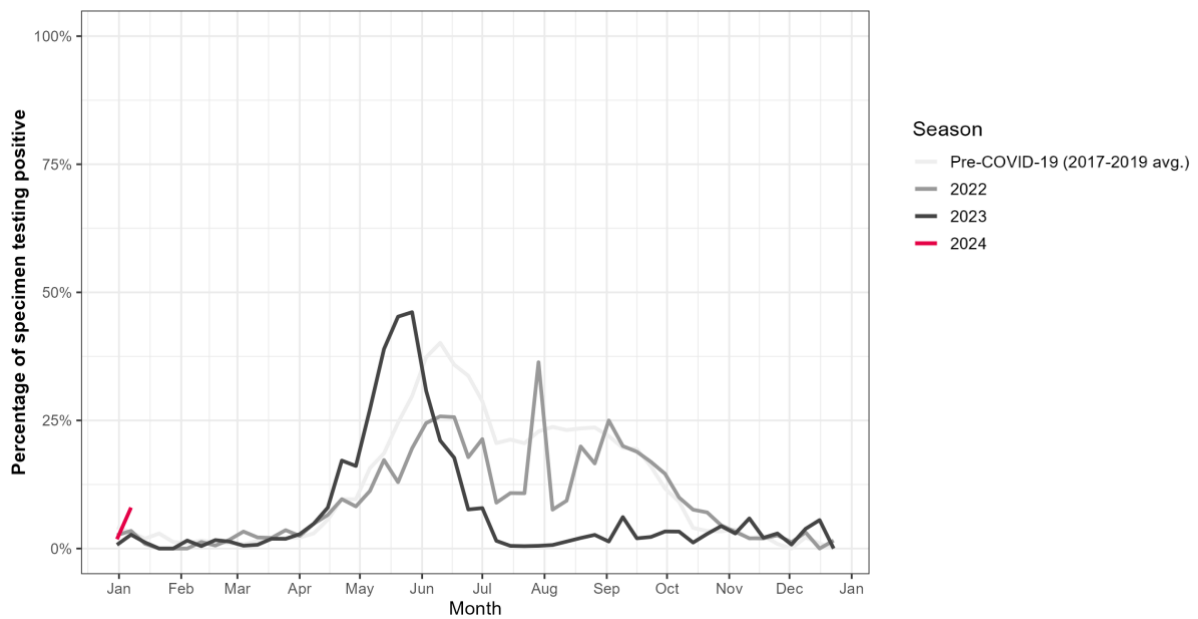


Southern Africa

South Africa

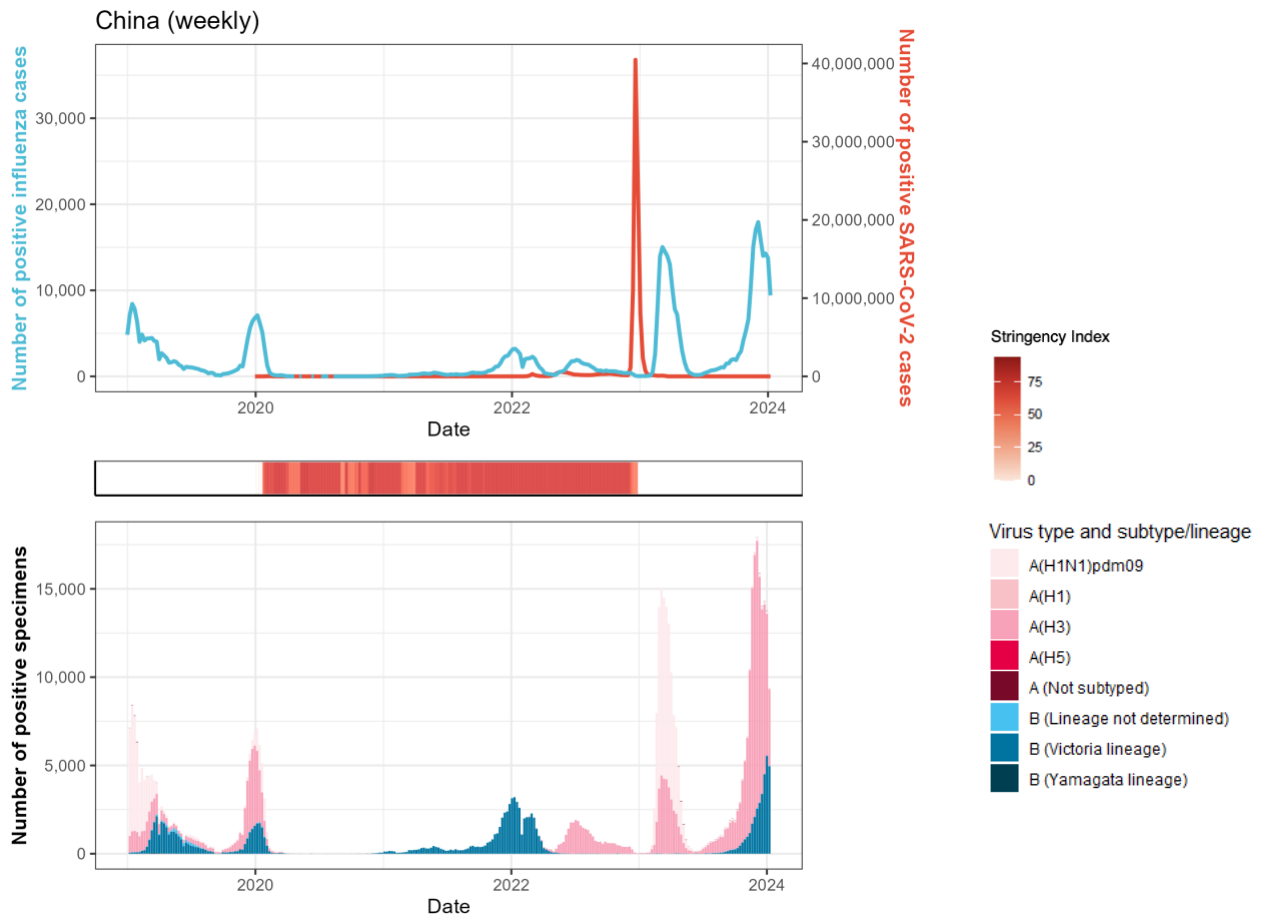


Percentage of specimens testing positive for influenza in different seasons

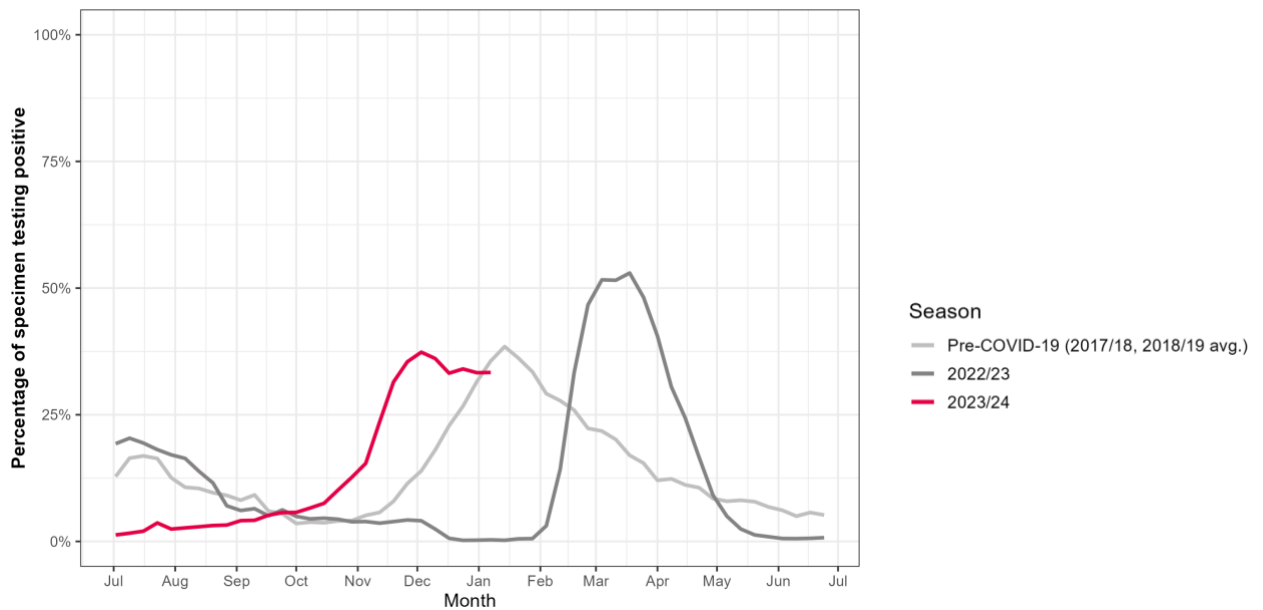


Eastern Asia

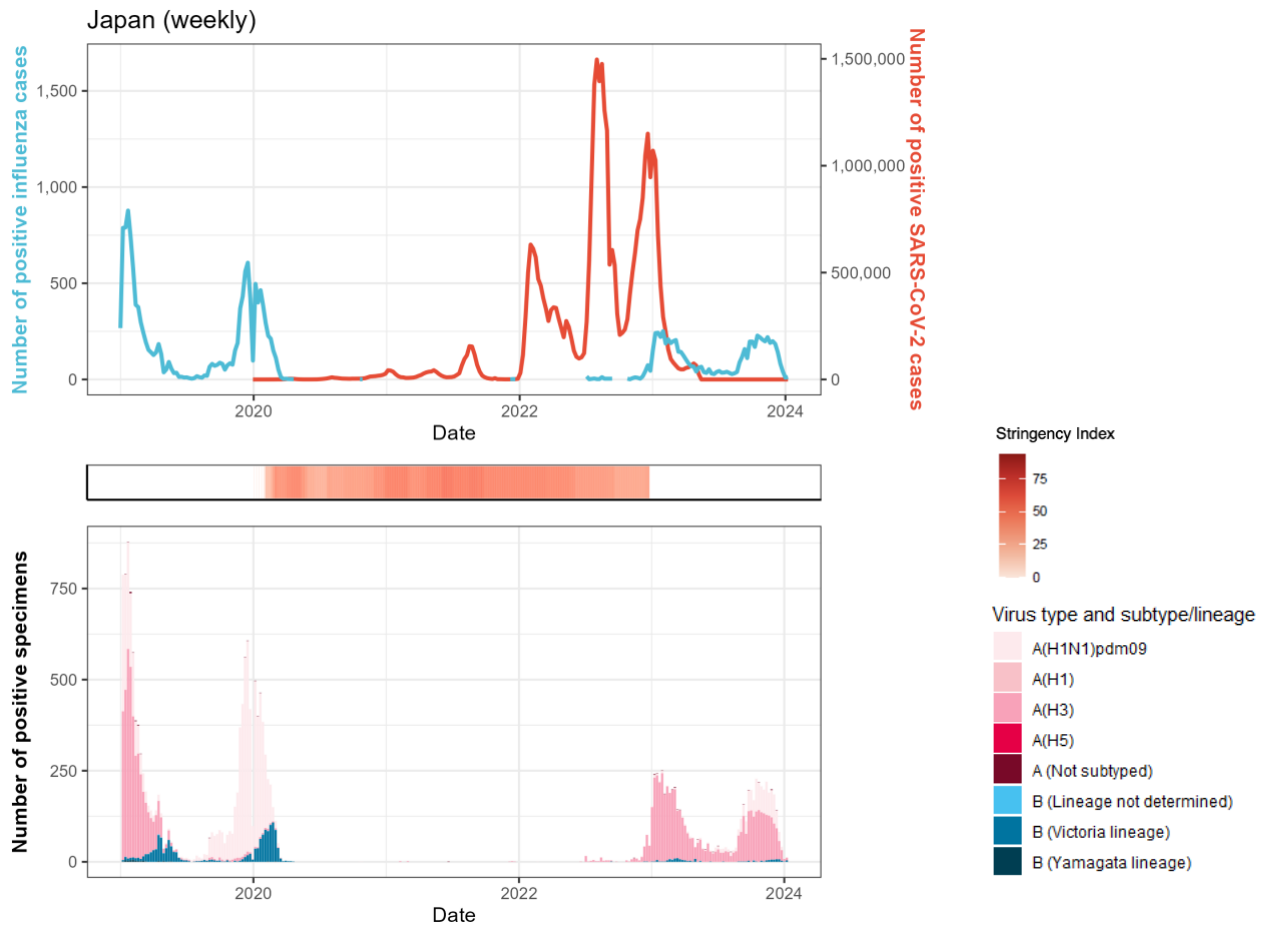
China



Percentage of specimens testing positive for influenza in different seasons

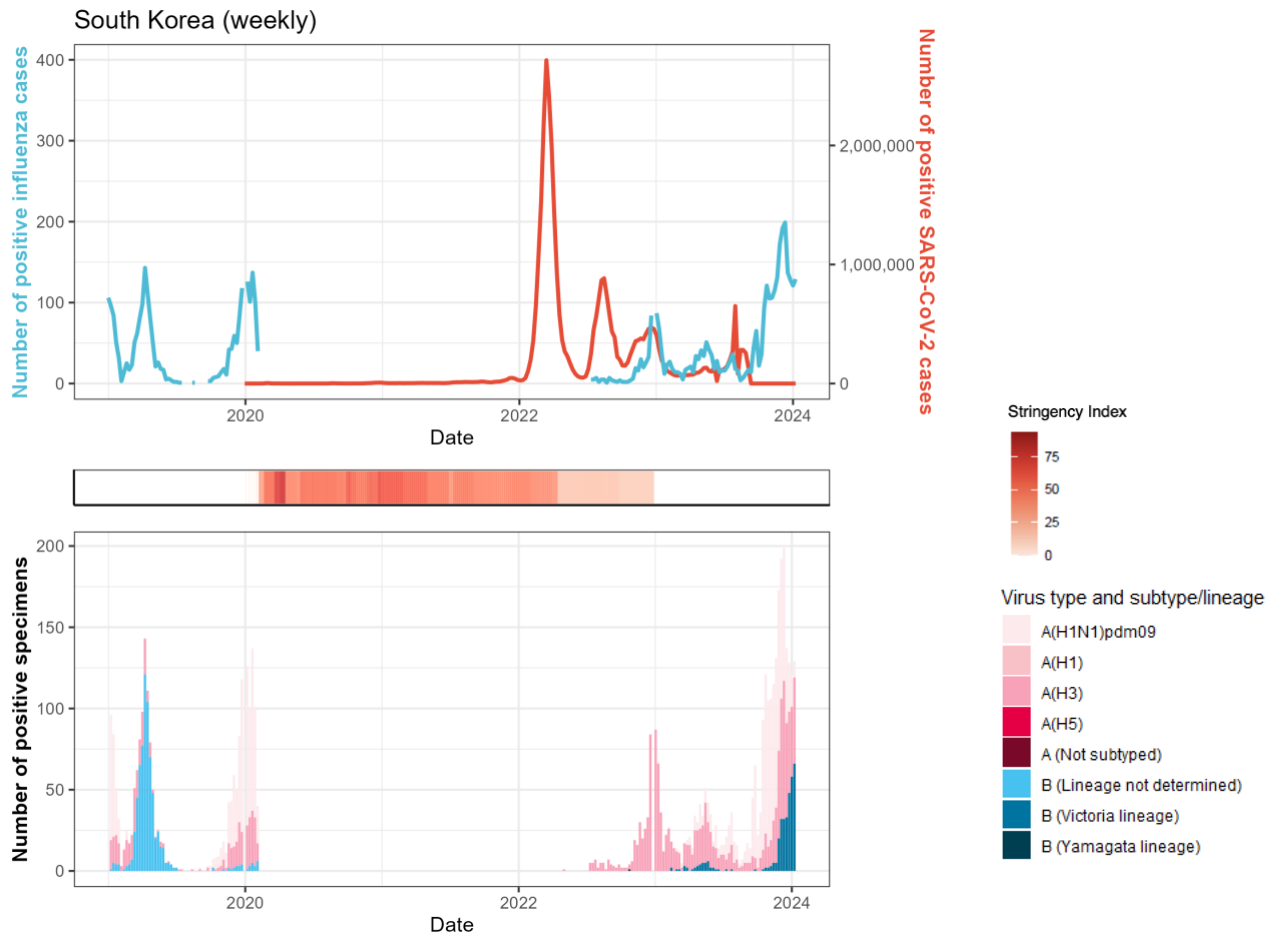


Japan

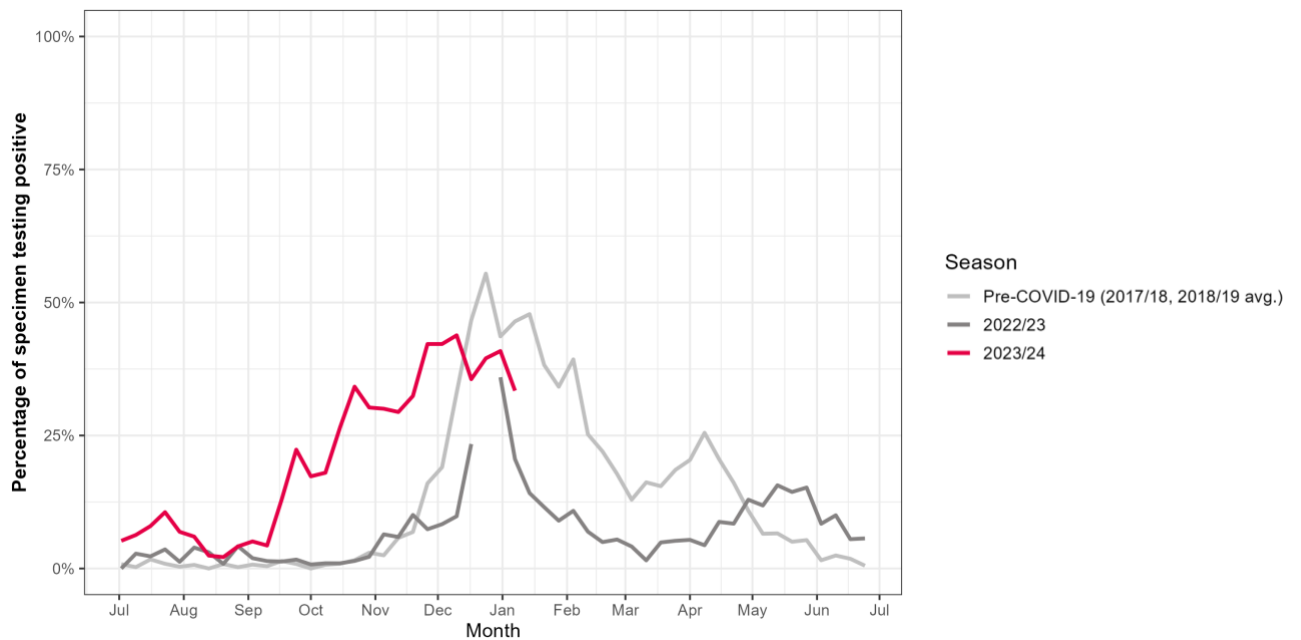


Percentage of specimens testing positive for influenza in different seasons: data not available

South Korea

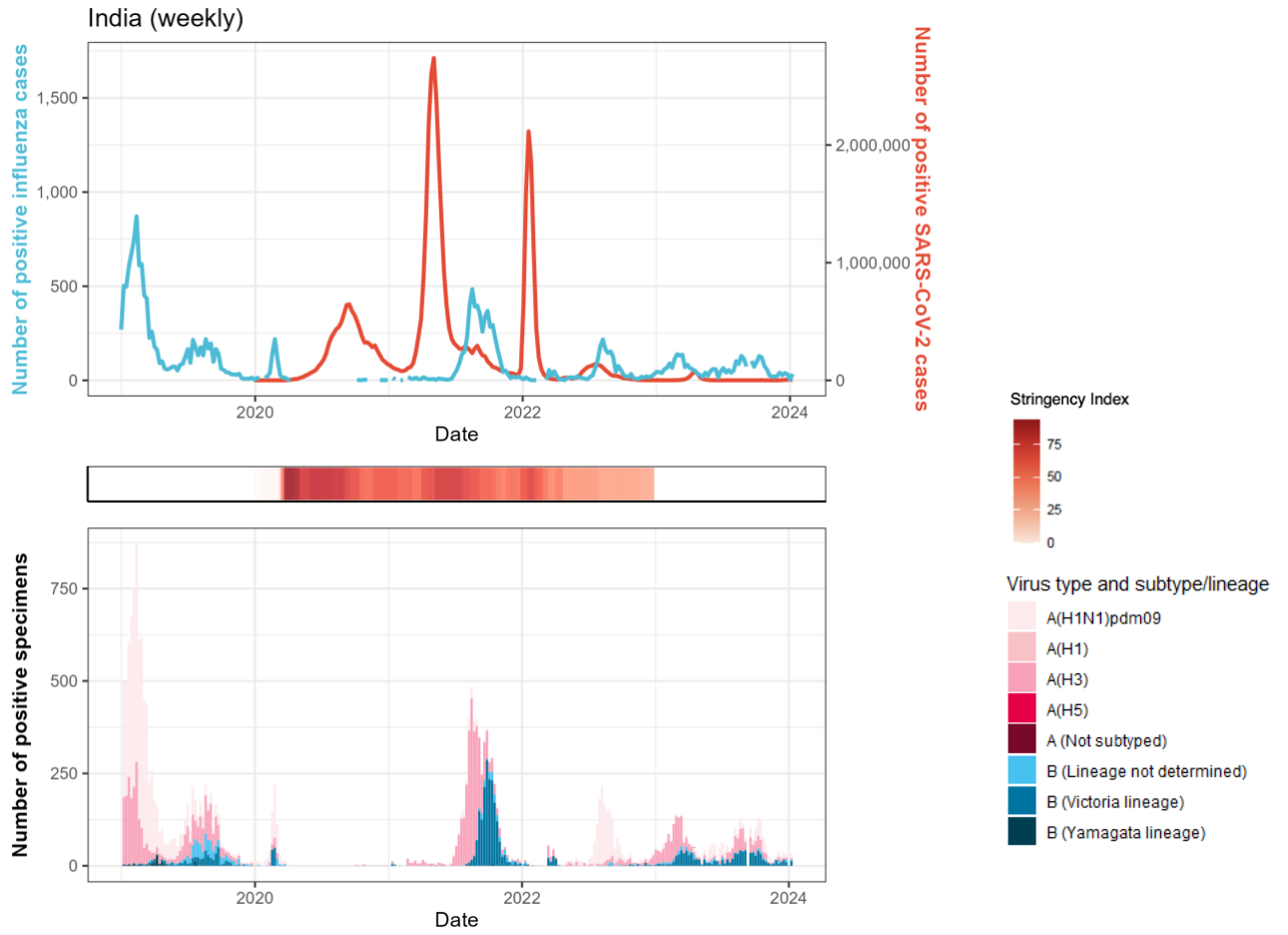


Percentage of specimens testing positive for influenza in different seasons

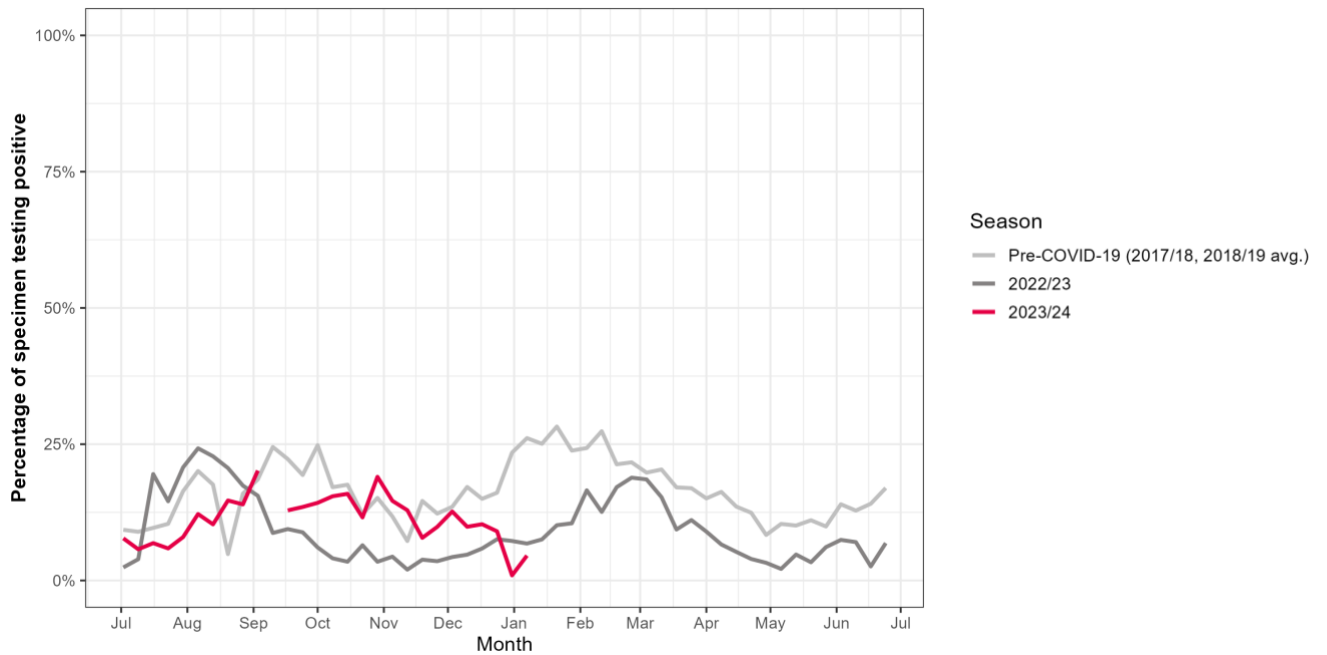


Southern Asia

India

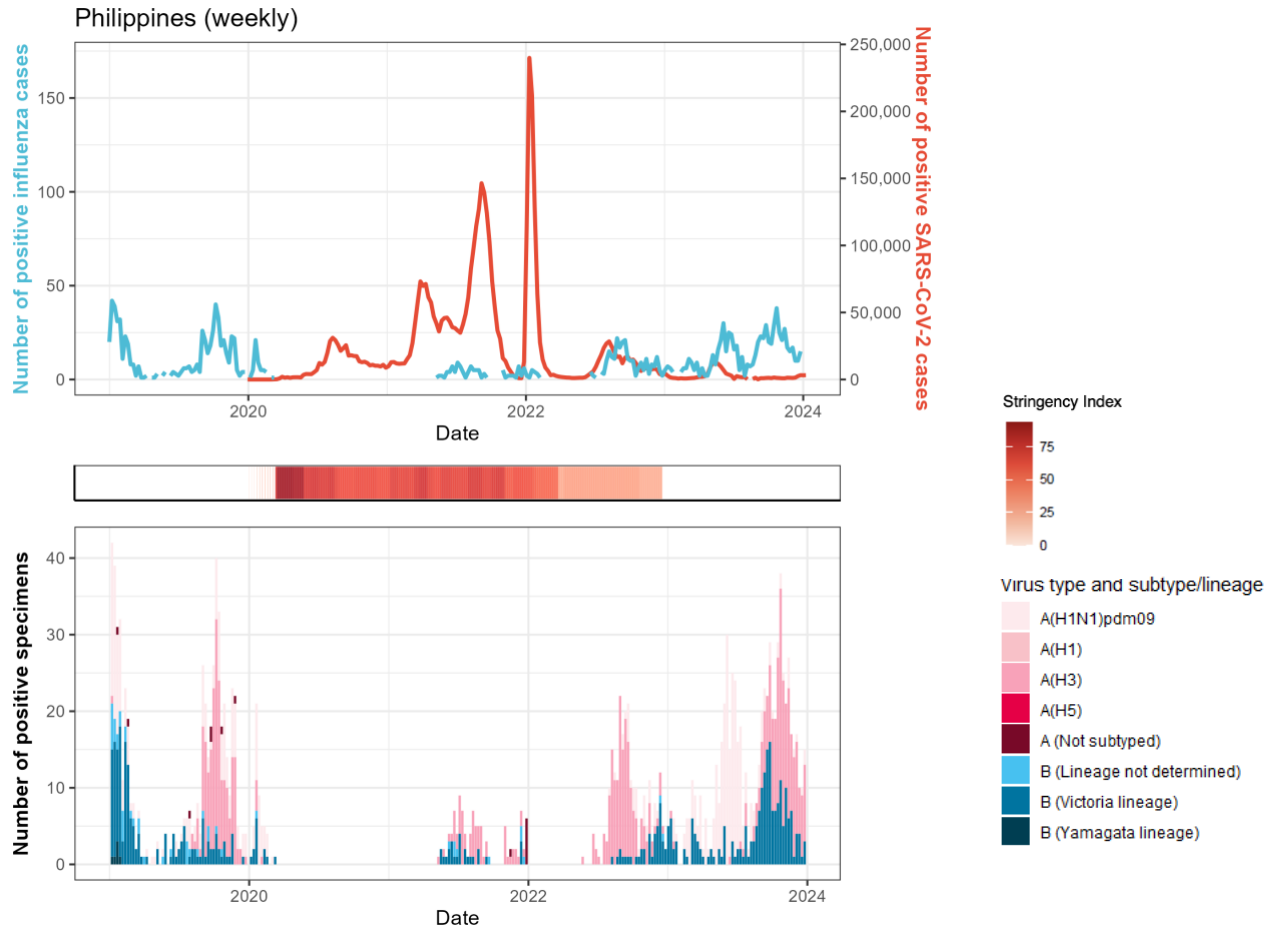


Percentage of specimens testing positive for influenza in different seasons

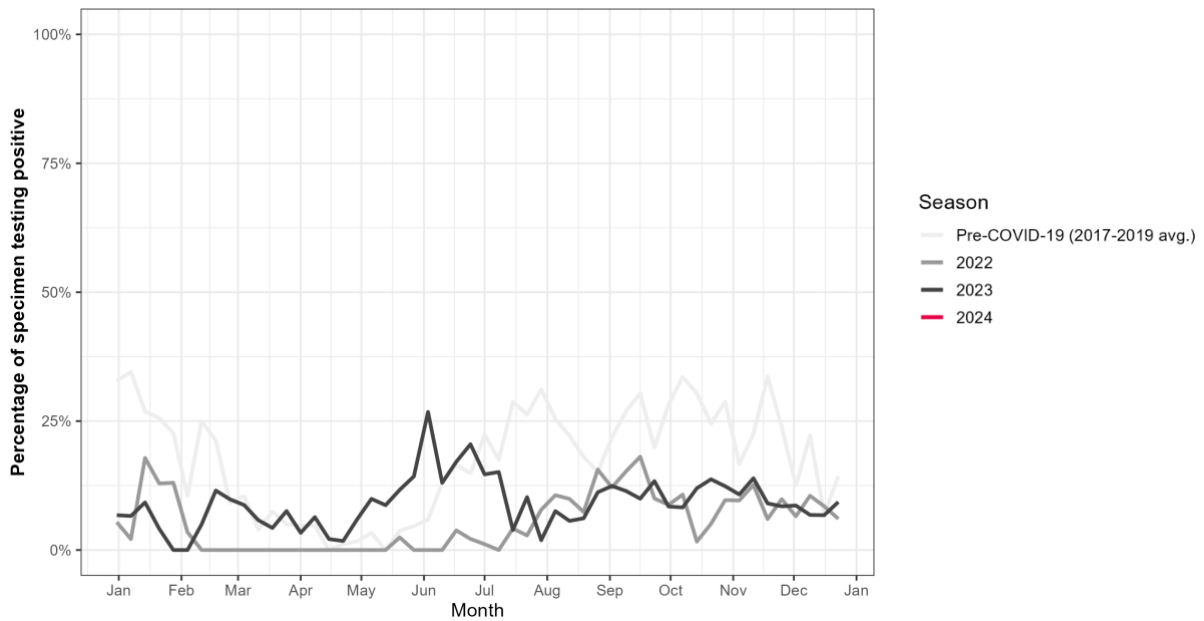


South-East Asia

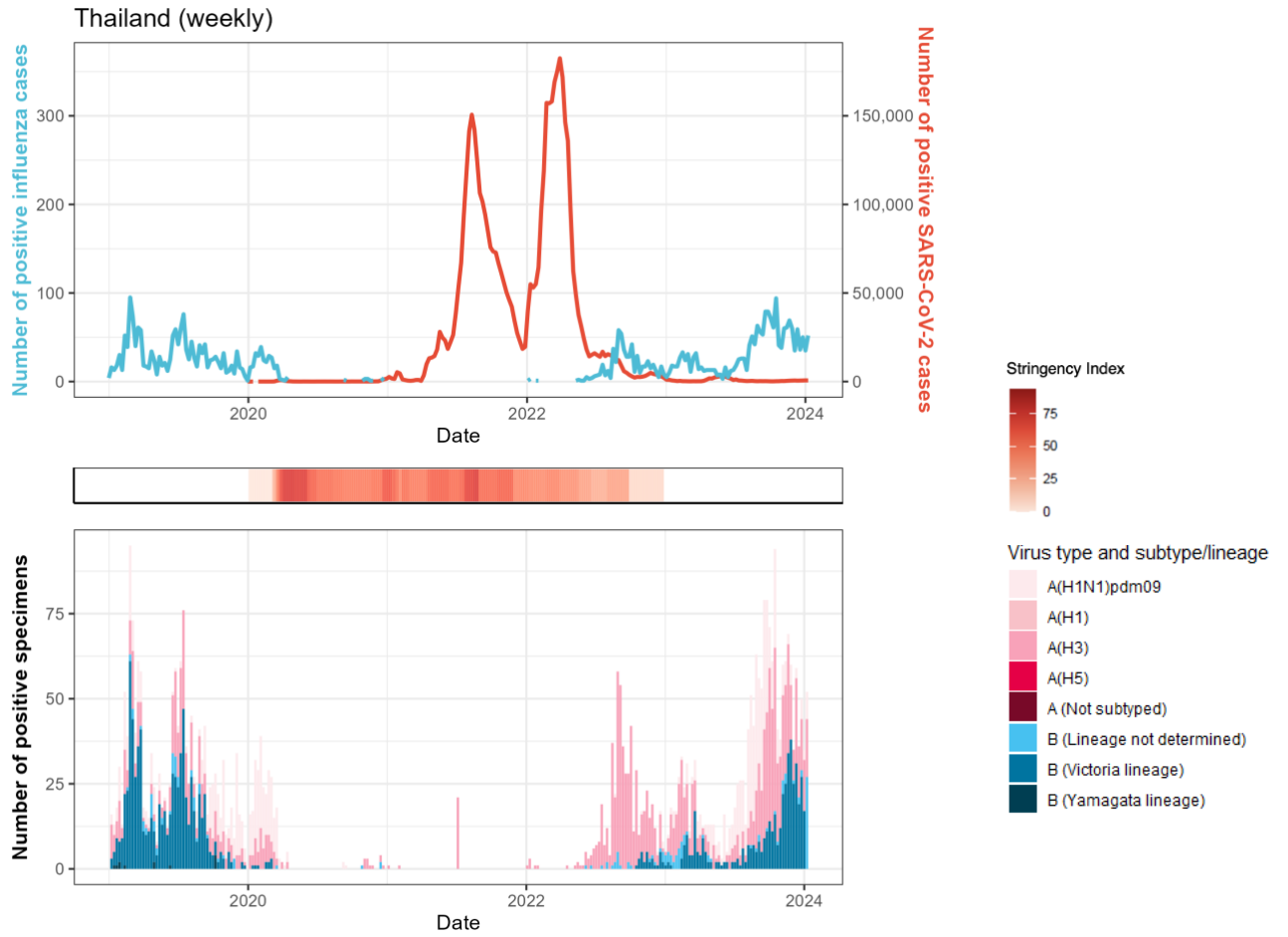
Philippines



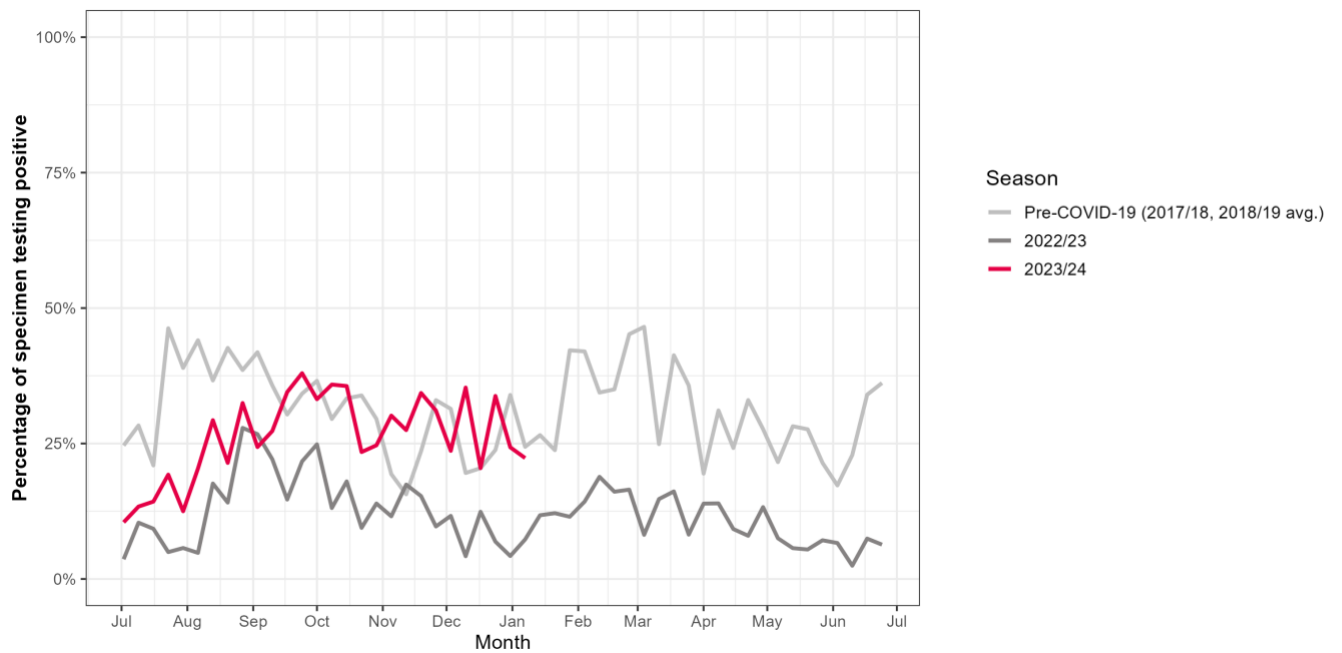
Percentage of specimens testing positive for influenza in different seasons



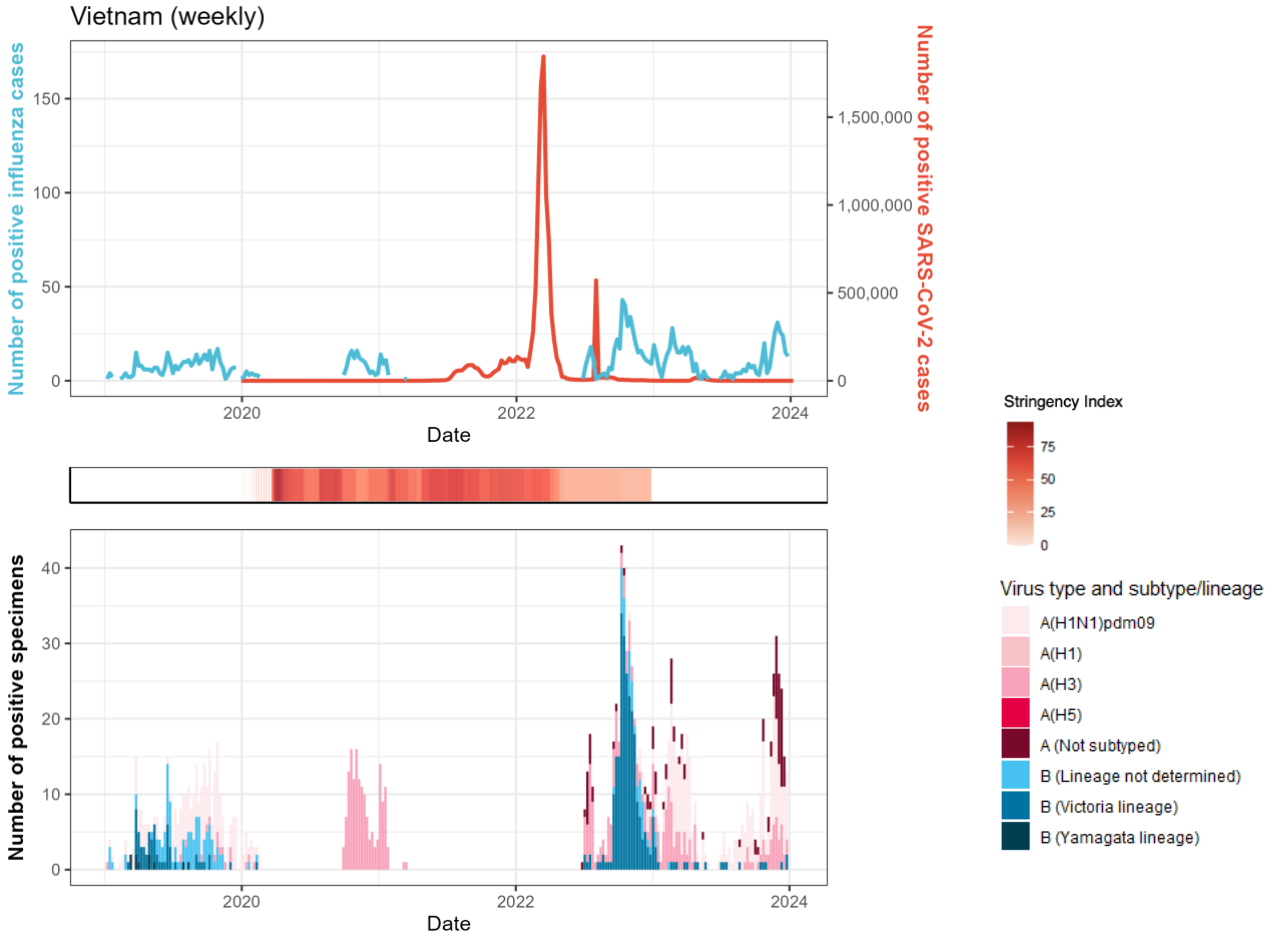
Thailand



Percentage of specimens testing positive for influenza in different seasons



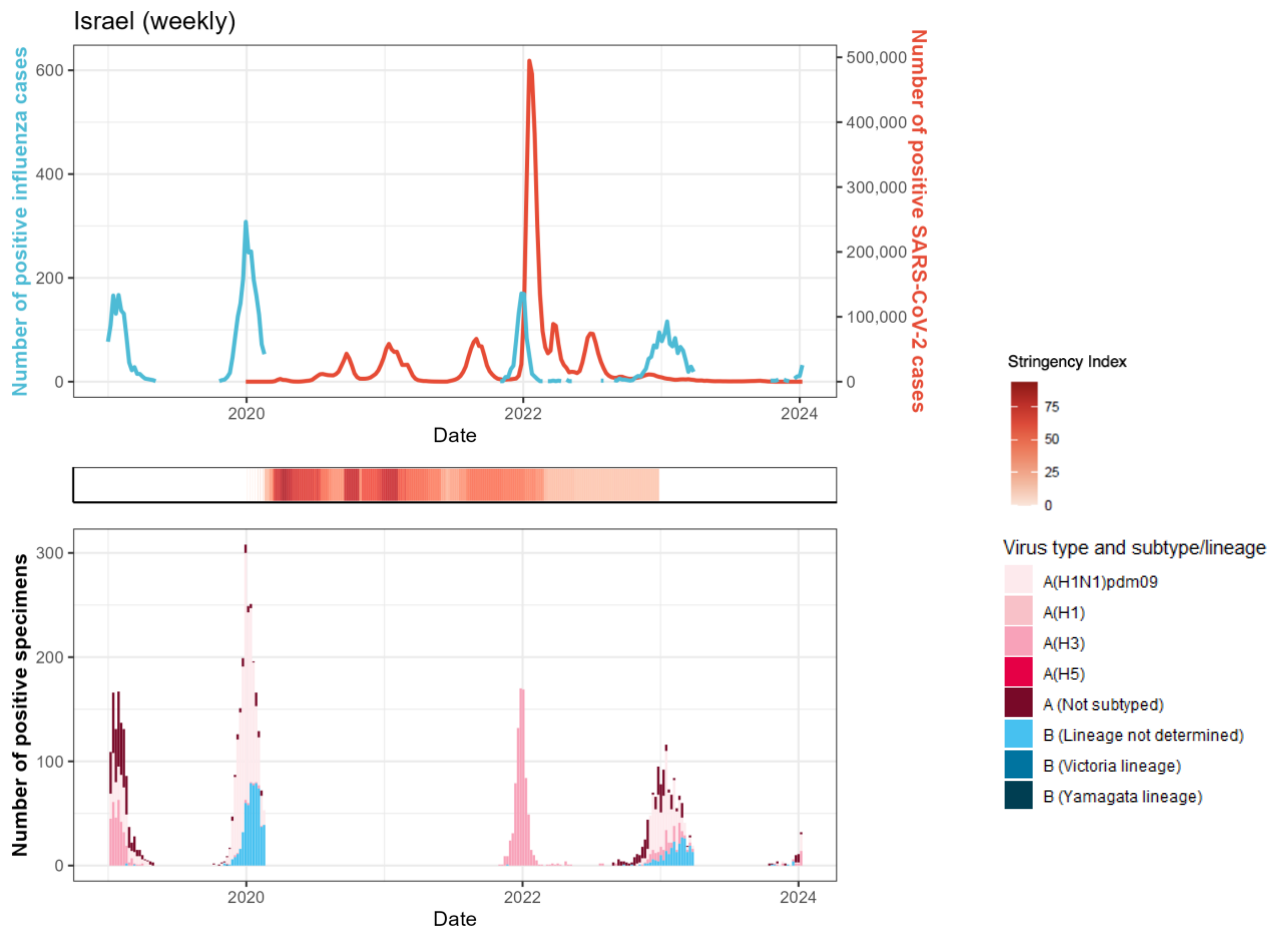
Vietnam



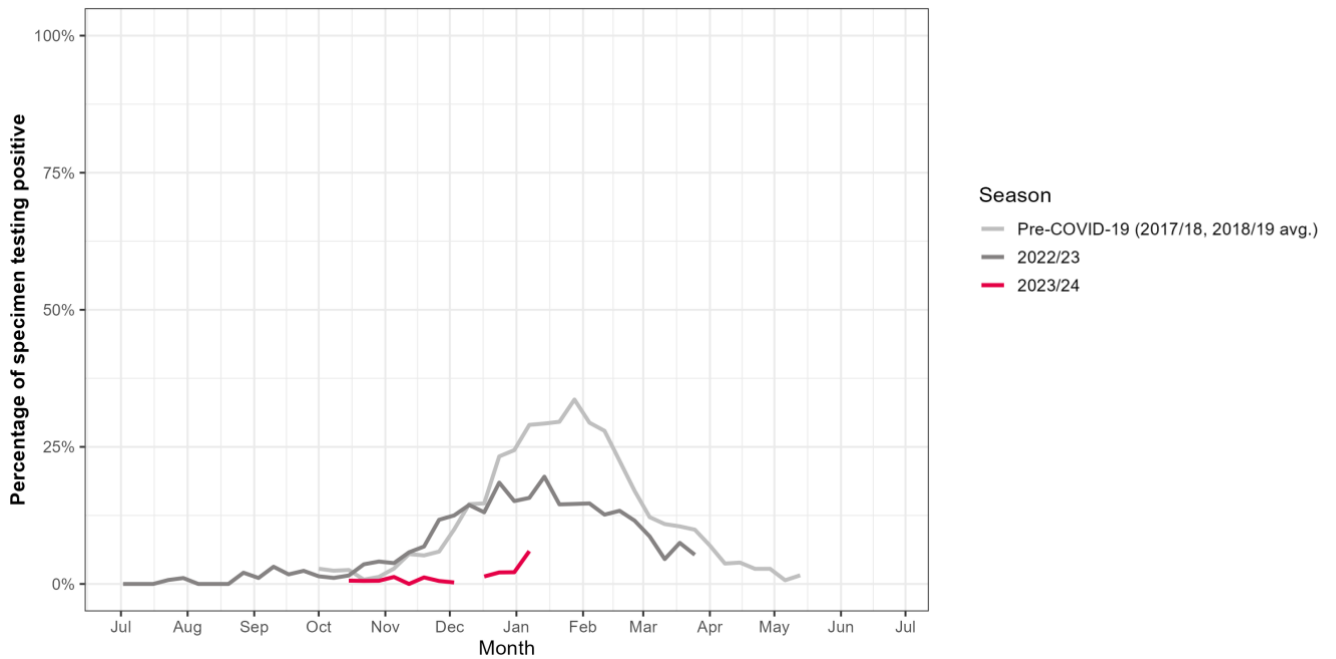
Percentage of specimens testing positive for influenza in different seasons: data not available

Western Asia

Israel

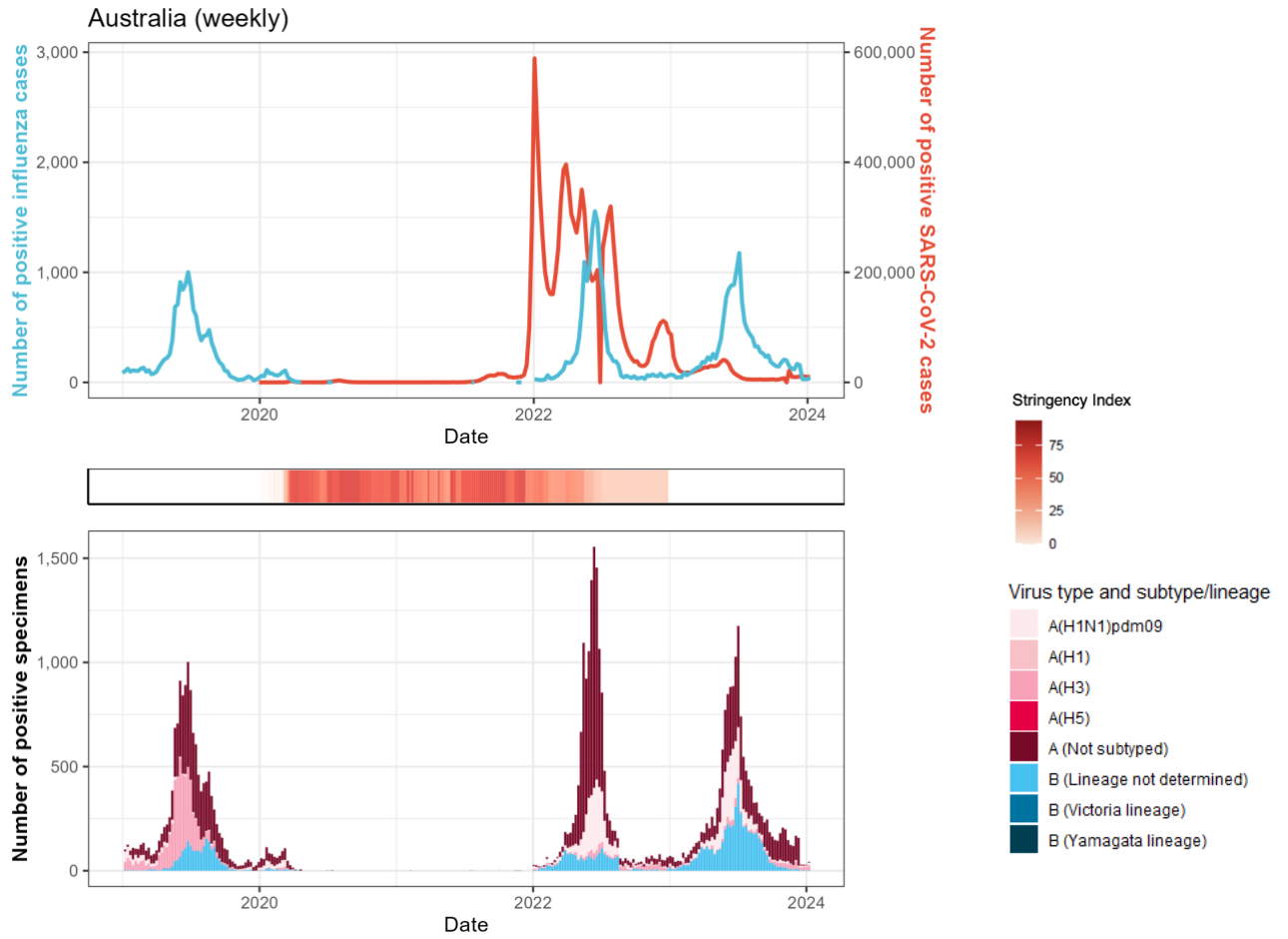


Percentage of specimens testing positive for influenza in different seasons

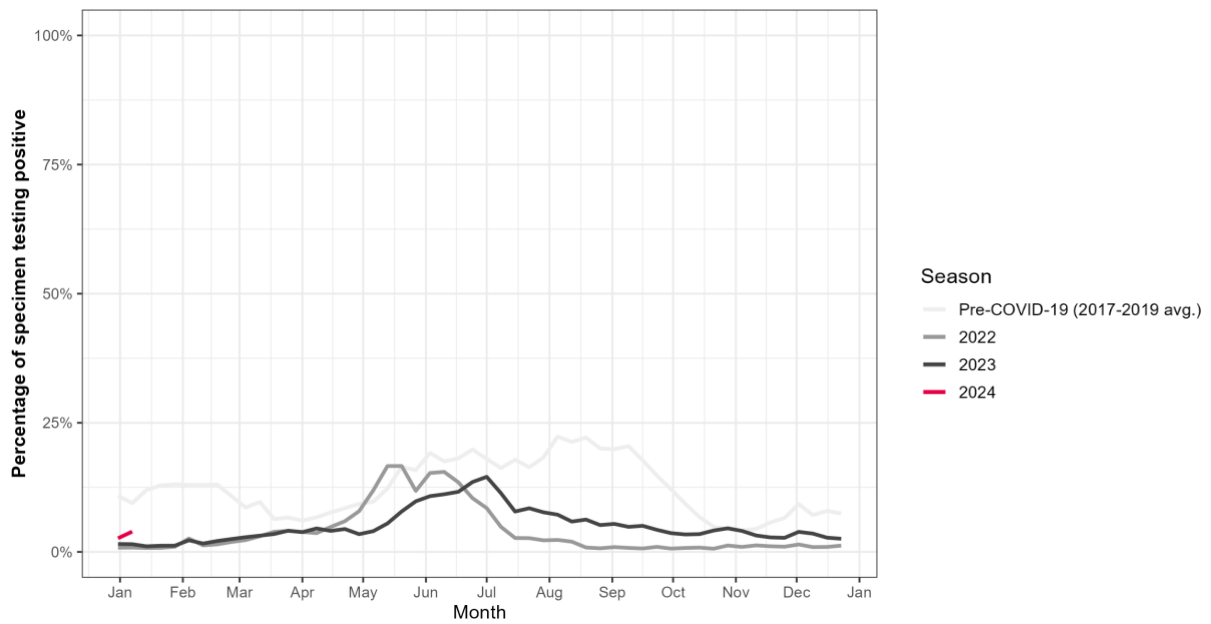


Oceania

Australia



Percentage of specimens testing positive for influenza in different seasons



Absolute numbers per country*

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
Australia	2019			14,002		
Australia	2020	28,296		949		
Australia	2021	338,311		8		
Australia	2022	10,327,434		14,654		
Australia	2023	1,027,364	51,848	15,422	385	2024-02
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	0	21,939	346	2024-02
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	282,745	25,972	47,166	24,067	2024-01
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	2,302	260,766	62,122	2024-02
Egypt	2019			1,999		
Egypt	2020	131,315		659		
Egypt	2021	249,205		233		
Egypt	2022	134,994		2,709		
Egypt	2023	509	0	3,079	433	2023-52
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	0	22,690	3,140	2023-52
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	0	794	188	2024-02
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	11,408	3,282	139	2024-02
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	0	834	17	2024-02

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
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	1,594,808	265,289	5,043	2,446	2024-02
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	0	6,461	450	2024-02
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	457,219	397	7,666	1,243	2024-02
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	64,796	7,181	7,980	0	2023-41
Philippines	2019			612		
Philippines	2020	469,003		52		
Philippines	2021	2,369,471		105		
Philippines	2022	1,220,895		260		
Philippines	2023	137,910	9,542	688	52	2023-52
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	71,465	2,085	161	2024-02
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	-89	1,024	8	2024-02
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	0	2,586	656	2024-02
Spain	2019			17,228		
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	0	8,960	0	2023-39
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	2,789	1,717	180	2024-02

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
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	705,589	42,616	10,143	3,193	2024-02
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	0	127,244	44,332	2023-51
Vietnam	2019			355		
Vietnam	2020	1,440		146		
Vietnam	2021	1,650,233		39		
Vietnam	2022	9,872,529		399		
Vietnam	2023	99,798	0	508	78	2024-02

^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.

*** It is noteworthy that, due to technical reasons, this bulletin's table with the absolute numbers by country is not reporting 2024 data.**

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 [7]. The emergence of this new virus has had a major impact on the global circulation of respiratory viruses, including influenza and RSV [8]. 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 are compared to the prevention and control measures applied in each country using the Stringency Index from the Oxford COVID-19 Government Response Tracker (OxCGRT) [9].

Data sources

- **Influenza:** FluNet [10] 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 [11]. 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 [12].
- **Government response tracker:** The Oxford COVID-19 Government Response Tracker (OxCGRT) [9] 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 22 January 2024 and cover the period 1 January 2019 to 14 January 2024.

It is noteworthy that, due to technical reasons, this bulletin's table with the absolute numbers by country is not reporting 2024 data. 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.

References

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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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