

supplementary text

The results of reduction percentage during the restriction period

Reduction during COVID-19 restriction period

Overall, among the 116 countries analyzed, 87 showed a significant reduction in influenza cases during winter seasons, whereas 101 countries reported a decrease during Quarter 23. In winter seasons, there was a notable weighted decrease in influenza cases by 46.3% (95% CI: -70.78% to -15.79%) relative to the counterfactual predictions for the period coinciding with COVID-19 restrictions. This weighted reduction diminished to 16.63% (95% CI: -53.83% to 45.27%) by summer seasons. Notably, the largest decline during winter seasons was observed in Europe, with a decrease of 71.68% (95% CI: -89.13% to -48.41%) (**Supplementary Table 3 and Supplementary Figure 25**). Conversely, in South America, there was an increase in the number of cases during the same quarter. In summer seasons, the number of cases in South America significantly decreased, aligning with the typical influenza season in the region, which spans from April to November. This indicates that the reductions predominantly occurred during the influenza season in each country, suggesting a temporal correlation between the seasonality of influenza and the observed impacts of COVID-19 restrictions on influenza transmission.

For influenza A, the number of cases decreased in 80 of the 116 countries during the winter seasons of COVID-19 restrictions period, with a global reduction of 46.76% (95%CI: -74.56% to -9.62%). During the summer seasons of restriction period, 97 countries reported a decrease, with a global reduction of 8.80% (95%CI: -52.41% to 57.25%). In South America, the substantial decrease occurred primarily in the summer seasons, with a reduction of 92.91% (95%CI: -96.70% to -86.91%) (**Supplementary Table 4 and Supplementary Figure 26**). For influenza B, while the global reduction was not pronounced, significant decreases were observed in specific regions, including South America, North America, and Europe (**Supplementary Table 5 and Supplementary Figure 27**).

Association between stringency index and reduction during COVID-19 restriction period

The country-specific reduction in influenza cases demonstrated a positive linear relationship

with the median, mean, and maximum stringency index during winter seasons, with significance observed only for the mean value ($p = 0.0267$). In summer seasons, a positive association with both median and mean stringency indices was also noted (**Supplementary Figure 30**). Conversely, for the maximum value, a weak negative relationship was observed, though it did not reach statistical significance. Furthermore, the relationship between the reduction in influenza subtypes and both mean and median stringency indices showed a positive association in both winter seasons and summer seasons (**Supplementary Figure 31**). However, no significant association was observed between the stringency index and the reduction in specific influenza subtypes. In summer seasons, the relationship between the stringency index and overall reduction turned negative (**Supplementary Figure 32**).

Replication of association

In The Health Improvement Network (THIN) data (patient-level), we used a consistent process to calculate the reduction in daily influenza cases during the restriction period and the increase during the relaxation period. We observed a positive association between the stringency index and the reduction in daily influenza cases (**Supplementary Figure 38**).

Table 1. The number of influenza cases and the dates of restrictions and relaxations for 116 countries.

Continent	country name	influenza	influenza A	influenza B	Restriction	Relaxation
Africa	Burkina Faso	754	546	208	2020/3/1	2021/8/1
	Central African Republic	809	506	303	2020/3/1	2022/6/1
	Côte d'Ivoire	2868	1866	1002	2020/3/1	2022/4/1
	Cameroon	3353	2344	1009	2020/3/1	2022/8/1
	Democratic Republic of the Congo	1202	799	403	2020/3/1	2022/9/1
	Algeria	2059	1538	521	2020/3/1	2022/9/1
	Egypt	15445	10676	4769	2020/3/1	2022/12/1
	Ethiopia	2050	1381	669	2020/3/1	2022/10/1
	Ghana	5046	3609	1437	2020/3/1	2022/4/1
	Kenya	2306	1692	614	2020/3/1	2022/10/1
	Morocco	2484	1770	714	2020/3/1	2021/11/1
	Madagascar	4594	2545	2049	2020/3/1	2022/5/1
	Mauritius	1154	1004	150	2020/3/1	2022/4/1
	Niger	850	575	275	2020/3/1	2022/1/1
	Nigeria	884	578	306	2020/3/1	2022/4/1
	Rwanda	483	398	85	2020/3/1	2022/9/1
	Senegal	5131	3563	1568	2020/3/1	2021/3/1
	Togo	2172	1474	698	2020/3/1	2022/10/1
	Tunisia	2455	1975	480	2020/3/1	2022/2/1
	United Republic of Tanzania	2225	1578	647	2020/3/1	2022/6/1
	Uganda	2952	2163	789	2020/3/1	2022/5/1
	South Africa	9736	7211	2525	2020/3/1	2022/6/1
	Zambia	1938	1156	782	2020/3/1	2022/1/1
Asia	Bangladesh	7881	5242	2639	2020/3/1	2022/2/1
	Bahrain	1614	1261	353	2020/3/1	2022/2/1
	Bhutan	3002	2018	984	2020/3/1	2022/5/1
	China	571774	351954	219820	2020/1/1	2022/12/1
	China, Hong Kong SAR	150380	114182	36198	2020/2/1	2022/12/1
	Indonesia	8834	5531	3303	2020/4/1	2022/12/1
	India	32580	26608	5972	2020/3/1	2022/4/1

	Iran (Islamic Republic of)	21714	18965	2749	2020/3/1	2022/6/1
	Iraq	2963	2497	466	2020/2/1	2022/12/1
	Israel	12716	9494	3222	2020/3/1	2022/2/1
	Jordan	2794	2383	411	2020/3/1	2022/10/1
	Japan	70007	51485	18522	2020/2/1	2022/6/1
	Kazakhstan	6100	4643	1457	2020/3/1	2022/5/1
	Kyrgyzstan	1556	965	591	2020/3/1	2022/9/1
	Cambodia	2826	1945	881	2020/3/1	2022/12/1
	Republic of Korea	16175	9885	6290	2020/4/1	2022/4/1
	Lao People's Democratic Republic	4501	2846	1655	2020/3/1	2022/5/1
	Sri Lanka	8485	6219	2266	2020/3/1	2022/3/1
	Mongolia	5228	3852	1376	2020/1/1	2022/2/1
	Malaysia	3828	2588	1240	2020/3/1	2022/5/1
	Nepal	13220	9137	4083	2020/3/1	2022/2/1
	Oman	11039	8324	2715	2020/3/1	2022/5/1
	Pakistan	3616	3012	604	2020/3/1	2022/3/1
	Philippines	3800	2150	1650	2020/3/1	2021/11/1
	Qatar	44961	33423	11538	2020/3/1	2022/4/1
	Russian Federation	161390	125940	35450	2020/3/1	2022/11/1
	Singapore	8339	5640	2699	2020/4/1	2022/4/1
	Thailand	7818	4847	2971	2020/3/1	2022/6/1
	Türkiye	22485	17381	5104	2020/3/1	2022/3/1
	Uzbekistan	498	316	182	2020/3/1	2022/4/1
	Viet Nam	5172	3367	1805	2020/3/1	2022/4/1
Europe	Albania	2987	2368	619	2020/3/1	2022/5/1
	Austria	26166	18356	7810	2020/3/1	2022/3/1
	Azerbaijan	949	460	489	2020/3/1	2022/6/1
	Belgium	4040	2976	1064	2020/3/1	2022/3/1
	Bulgaria	3442	2562	880	2020/3/1	2022/3/1
	Belarus	5462	4735	727	2020/4/1	2022/11/1
	Switzerland	65117	47682	17435	2020/3/1	2022/2/1
	Czechia	4149	2976	1173	2020/3/1	2022/3/1
	Germany	12447	8691	3756	2020/3/1	2022/4/1
	Denmark	54838	36866	17972	2020/3/1	2022/3/1
	Spain	104776	80406	24370	2020/3/1	2022/8/1
	Estonia	10182	7515	2667	2020/3/1	2022/3/1
	Finland	1729	1388	341	2020/3/1	2022/2/1

North America	France	143491	105685	37806	2020/3/1	2022/2/1
	United Kingdom	170974	129898	41076	2020/3/1	2022/4/1
	Georgia	1524	1163	361	2020/3/1	2022/3/1
	Greece	7398	5756	1642	2020/3/1	2022/2/1
	Croatia	17067	14217	2850	2020/3/1	2022/4/1
	Hungary	5554	3987	1567	2020/3/1	2022/3/1
	Ireland	21365	15295	6070	2020/3/1	2022/5/1
	Iceland	3174	2360	814	2020/3/1	2022/2/1
	Italy	32122	23091	9031	2020/2/1	2022/2/1
	Lithuania	6796	5303	1493	2020/3/1	2022/2/1
	Luxembourg	3921	2513	1408	2020/3/1	2022/3/1
	Latvia	17320	12540	4780	2020/3/1	2022/3/1
	Republic of Moldova	2131	1622	509	2020/3/1	2022/3/1
	Malta	3640	2491	1149	2020/3/1	2022/4/1
	Netherlands (Kingdom of the)	25921	21026	4895	2020/3/1	2022/1/1
	Norway	149320	100442	48878	2020/3/1	2022/2/1
	Poland	12750	9611	3139	2020/3/1	2022/2/1
	Portugal	22722	17083	5639	2020/3/1	2022/2/1
	Romania	11058	7626	3432	2020/3/1	2022/3/1
	Serbia	6270	4948	1322	2020/3/1	2022/4/1
	Slovakia	2930	1772	1158	2020/3/1	2022/3/1
	Slovenia	24621	17820	6801	2020/3/1	2022/2/1
	Sweden	104753	77344	27409	2020/3/1	2022/2/1
	Ukraine	9718	7475	2243	2020/3/1	2022/3/1
	Canada	359135	263213	95922	2020/3/1	2022/4/1
	Costa Rica	3561	2777	784	2020/3/1	2022/1/1
	Cuba	3594	2601	993	2020/3/1	2021/11/1
	Dominican Republic	1822	1312	510	2020/3/1	2022/2/1
	Guatemala	2123	1670	453	2020/3/1	2022/7/1
	Honduras	1534	1083	451	2020/3/1	2022/1/1
	Jamaica	1193	911	282	2020/3/1	2022/3/1
	Mexico	55292	44734	10558	2020/3/1	2022/8/1
	Nicaragua	6574	4317	2257	2020/4/1	2021/6/1

	Panama	2337	1904	433	2020/3/1	2021/10/1
	El Salvador	1782	1321	461	2020/3/1	2021/5/1
	United States of America	1543247	1155659	387588	2020/3/1	2022/8/1
Oceania	Australia	51964	40778	11186	2020/3/1	2022/5/1
	Fiji	936	628	308	2020/3/1	2022/11/1
	New Zealand	15691	10568	5123	2020/3/1	2022/4/1
South America	Argentina	39734	32810	6924	2020/3/1	2022/1/1
	Bolivia (Plurinational State of)	8885	6852	2033	2020/3/1	2021/11/1
	Brazil	30981	24773	6208	2020/3/1	2022/1/1
	Chile	26658	19569	7089	2020/3/1	2021/7/1
	Colombia	7360	6190	1170	2020/3/1	2022/5/1
	Ecuador	5114	4341	773	2020/3/1	2022/10/1
	Peru	8450	7167	1283	2020/3/1	2022/10/1
	Paraguay	8681	6557	2124	2020/3/1	2022/5/1
	Uruguay	841	656	185	2020/3/1	2022/3/1
	Venezuela (Bolivarian Republic of)	521	374	147	2020/3/1	2022/5/1

Table 1. Statistical overview of the stringency index across continents

Continents	Number of countries	Mean of Stringency Index	Mean of Median Stringency Index	Mean of Maximum Stringency Index
Overall	116	55	55	84
Africa	23	44	46	81
Asia	31	58	58	85
Europe	37	53	53	82
North America	12	65	64	83
Oceania	3	46	55	88
South America	10	70	68	92

Table 2. The summary of stringency index during COVID-19 restriction period

Continents	Number of	Mean of	Mean of	Mean of Maximum
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	countries	Stringency Index	Median Stringency Index	Stringency Index	
Overall	116		55	55	84
Africa	23		44	46	81
Asia	31		58	58	85
Europe	37		53	53	82
North America	12		65	64	83
Oceania	3		46	55	88
South America	10		70	68	92

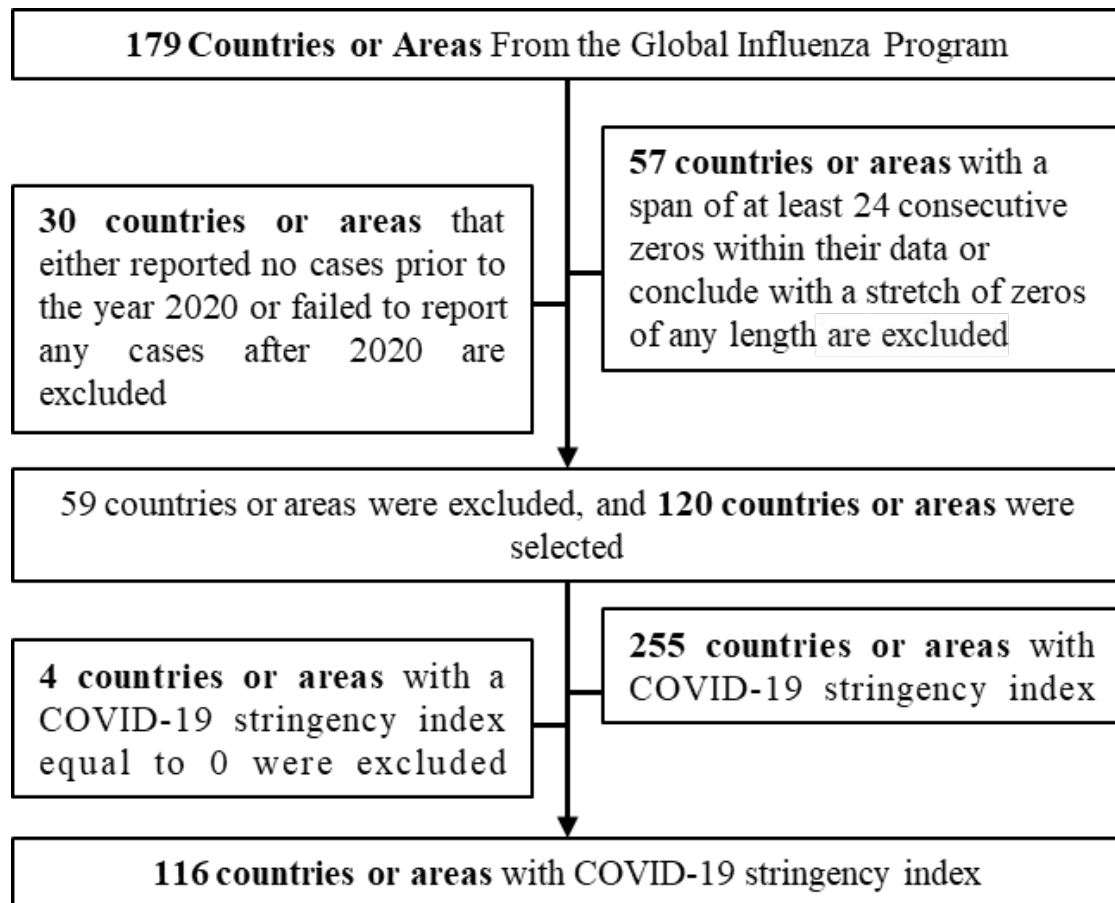


Figure 1. Flow of Country Selection

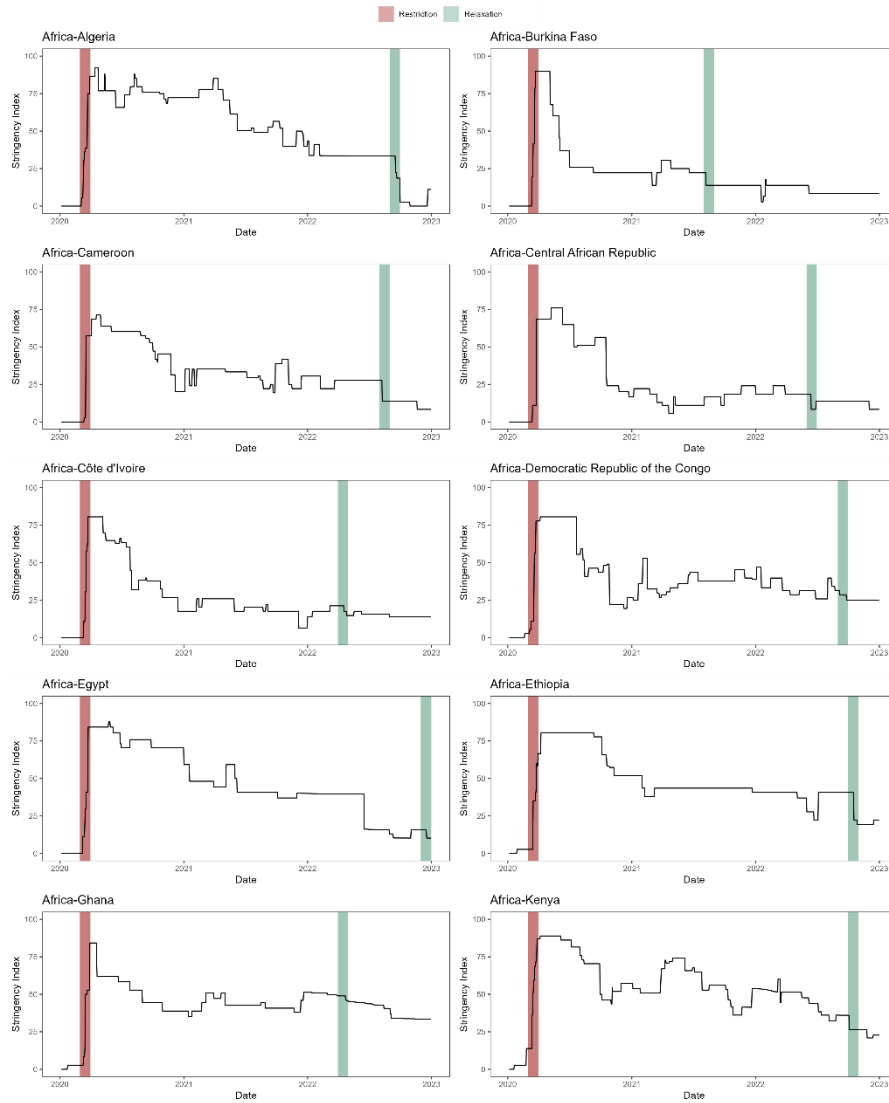


Figure 2. COVID-19 stringency index, initiation and conclusion of restrictions in Algeria, Burkina Faso, Cameroon, Central African Republic, Democratic Republic of the Congo, Egypt, Ethiopia, Ghana, and Kenya.

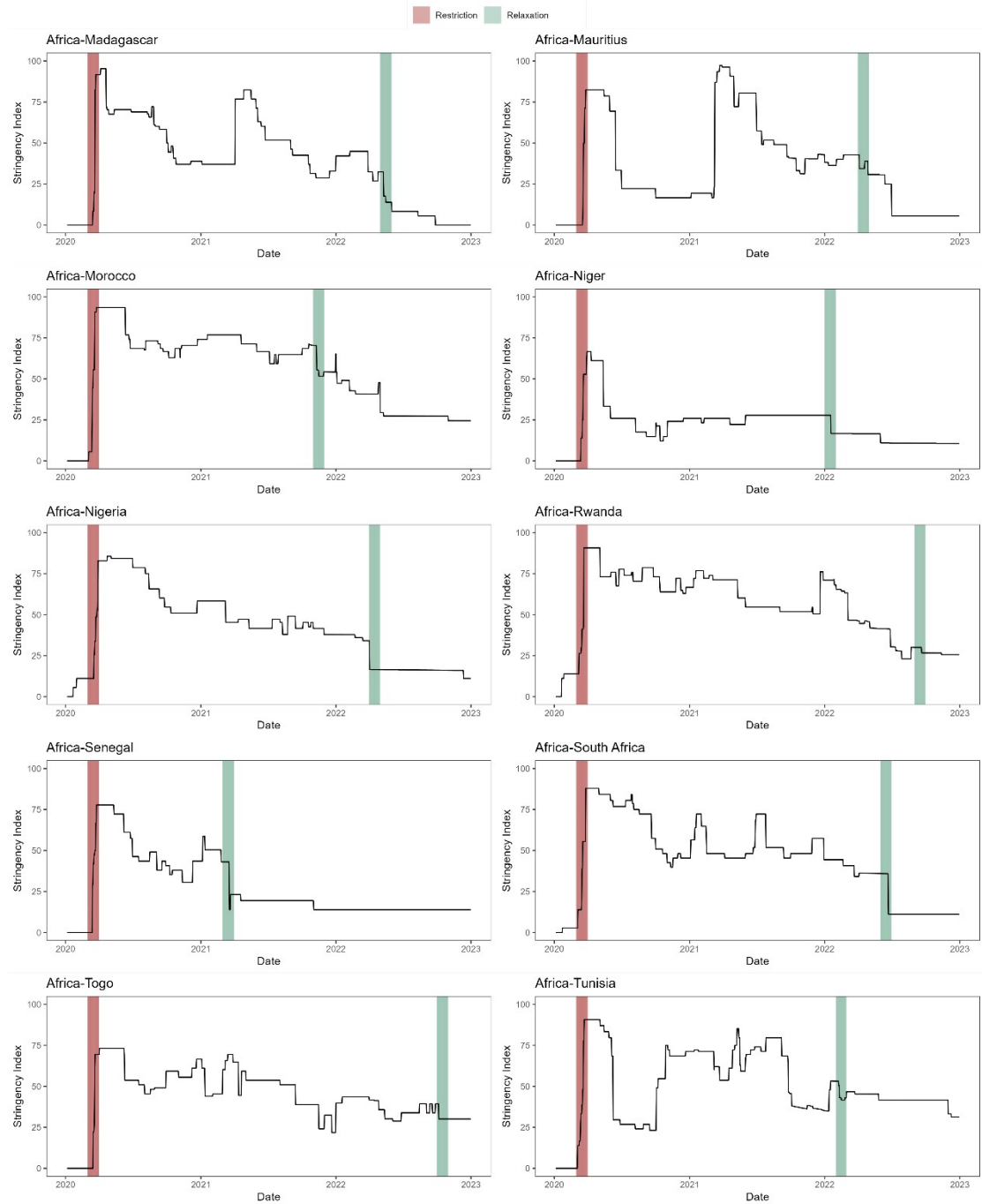


Figure 3. COVID-19 stringency index, initiation and conclusion of restrictions of Madagascar, Mauritius, Morocco ,Niger, Nigeria, Rwanda, Senegal, South Africa, Togo, and Tunisia.

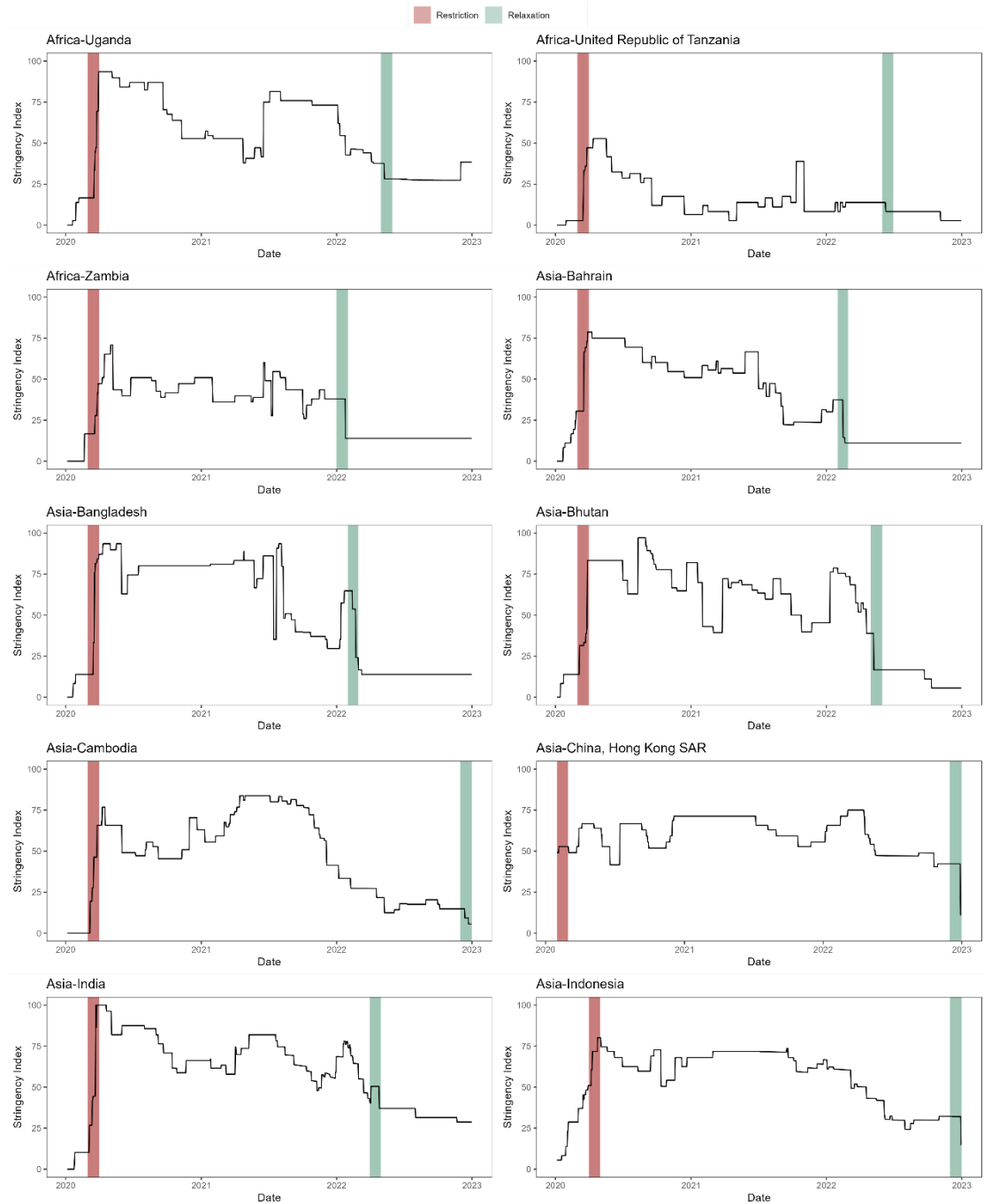


Figure 4. COVID-19 stringency index, initiation and conclusion of restrictions of Uganda, United Republic of Tanzania, Zambia, Bahrain, Bangladesh, Cambodia, China, Hong Kong SAR, India, Indonesia.

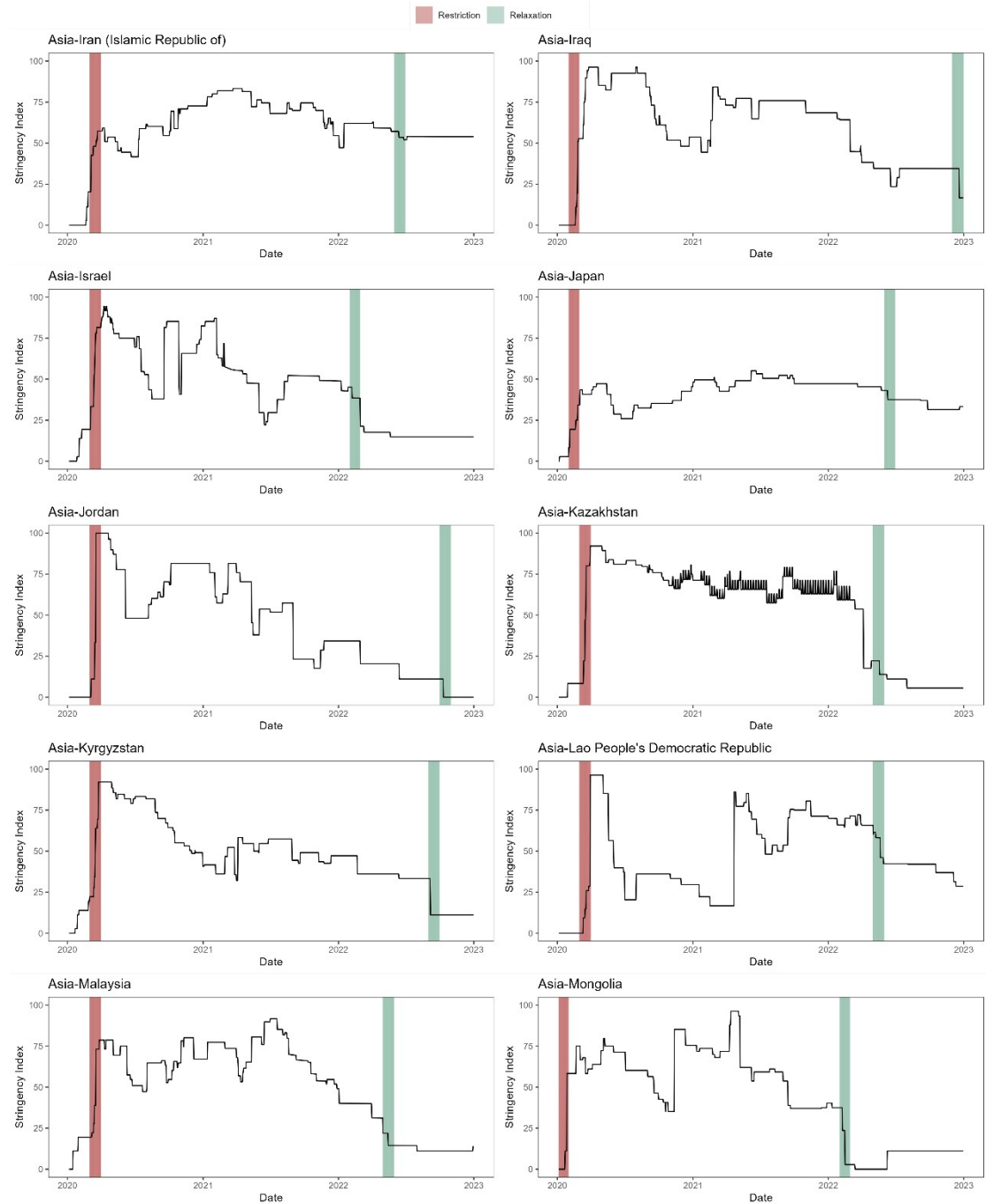


Figure 5. COVID-19 stringency index, initiation and conclusion of restrictions of Iran (Islamic Republic of), Iraq, Israel, Japan, Jordan, Kazakhstan, Kyrgyzstan, Lao People's Democratic Republic, Malaysia, and Mongolia.

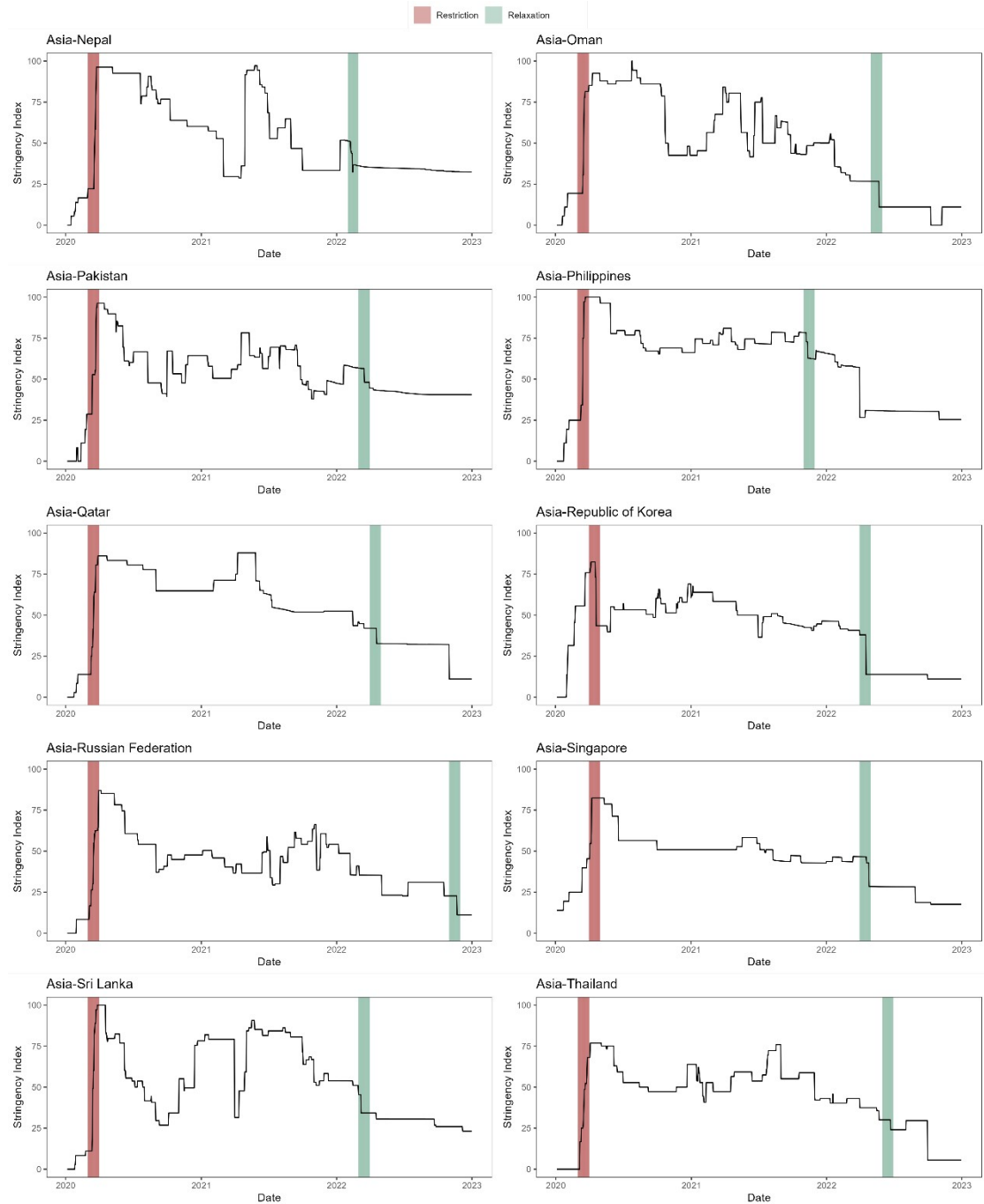


Figure 6. COVID-19 stringency index, initiation and conclusion of restrictions of Nepal, Oman, Pakistan, Philippines, Qatar, Republic of Korea, Russian Federation, Singapore, Sri Lanka, and Thailand.

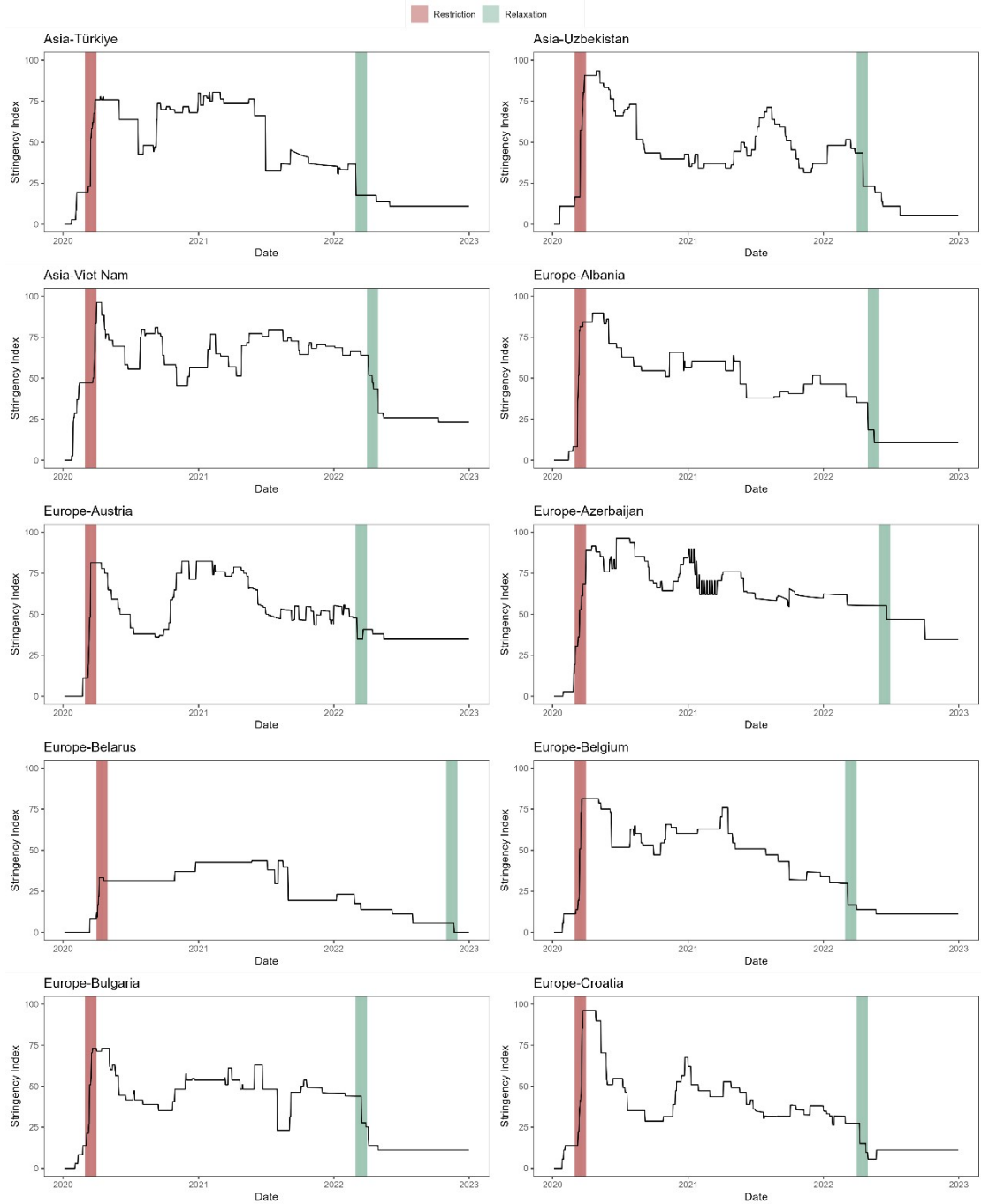


Figure 7. COVID-19 stringency index, initiation and conclusion of restrictions of Türkiye, Uzbekistan, Viet Nam, Albania, Austria, Azerbaijan, Belarus, Belgium, Bulgaria, and Croatia.

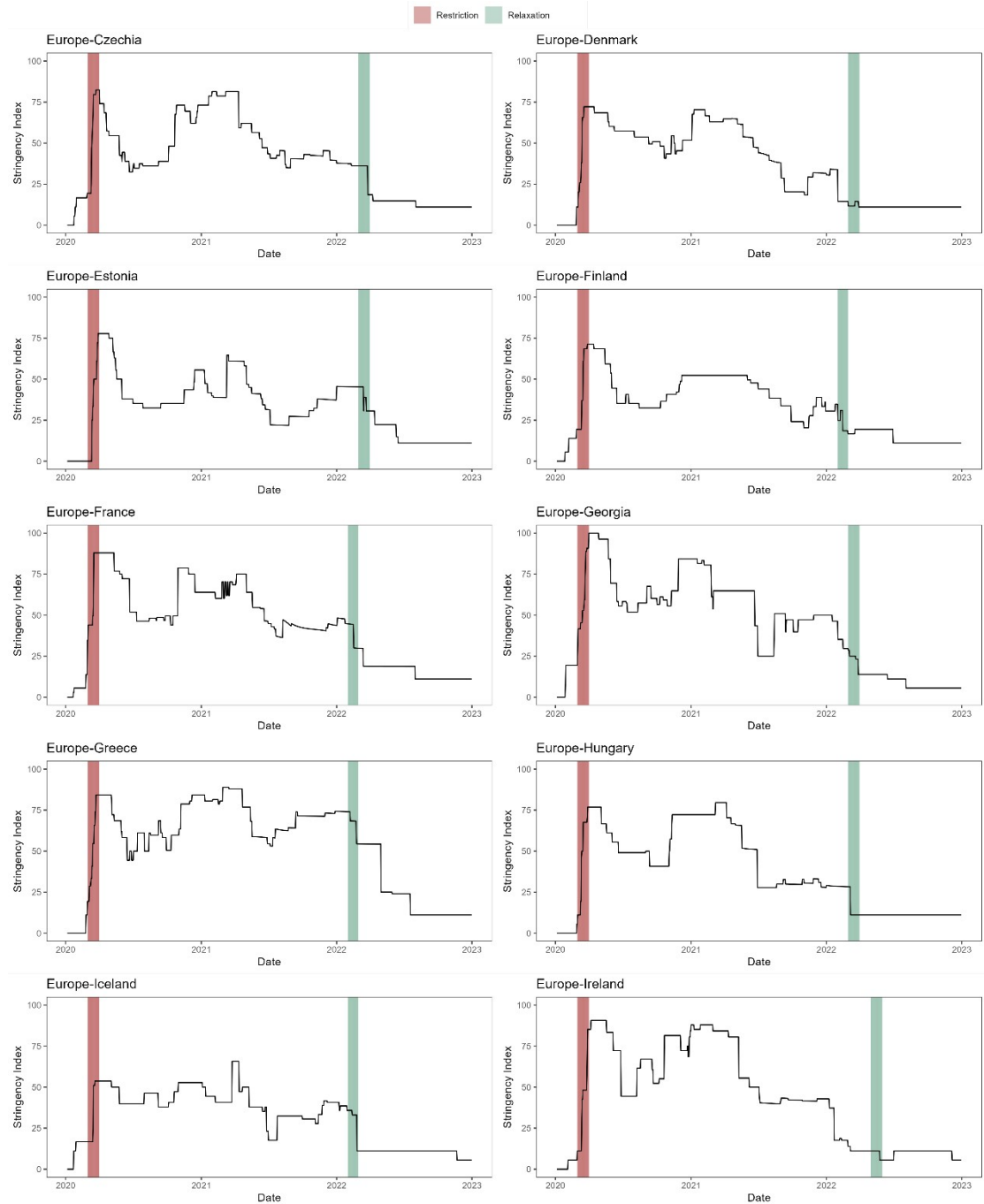


Figure 8. COVID-19 stringency index, initiation and conclusion of restrictions of Czechia, Denmark, Estonia, Finland, France, Georgia, Greece, Hungary, Iceland, and Ireland.

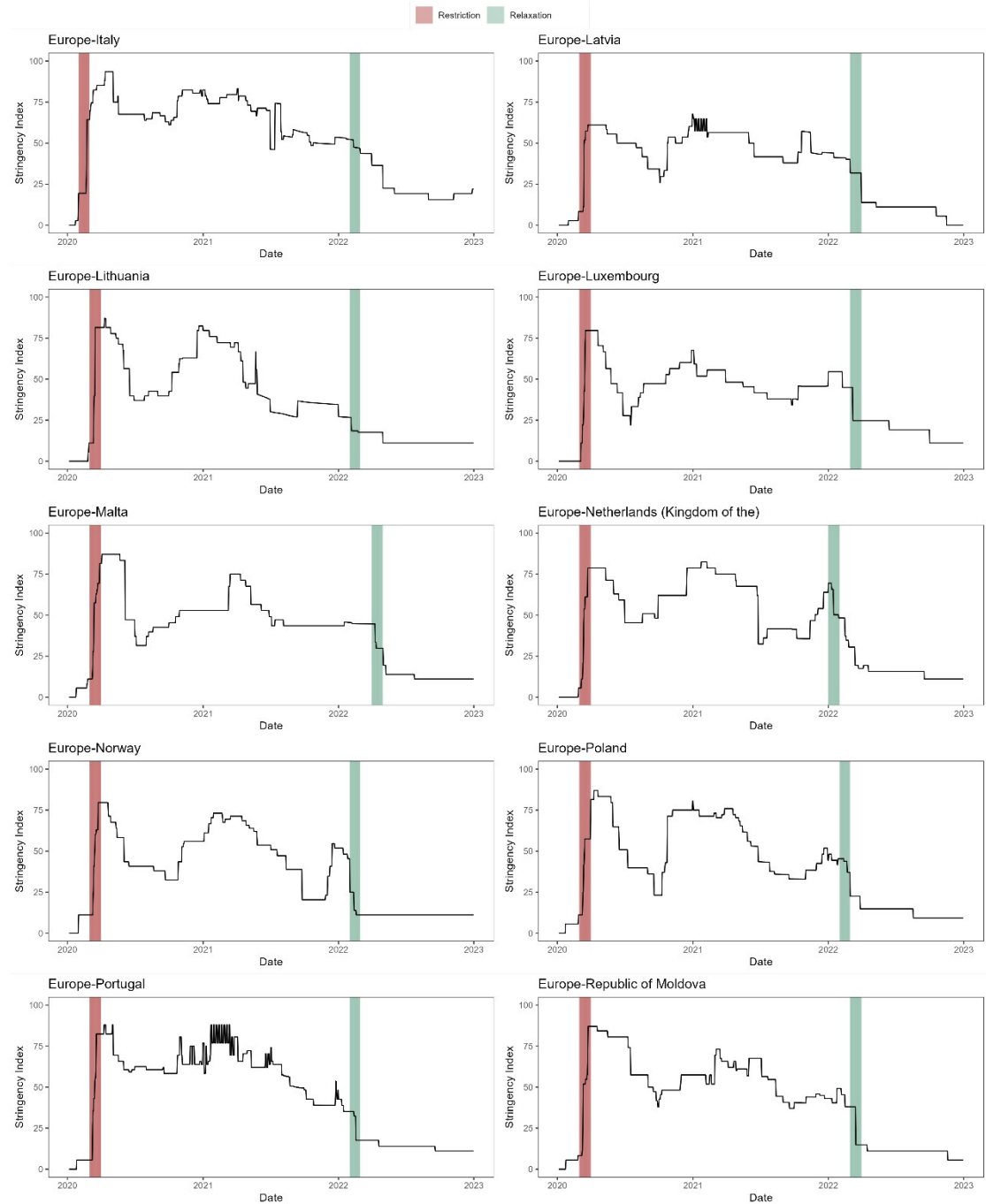


Figure 9. COVID-19 stringency index, initiation and conclusion of restrictions of Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, and Republic of Moldova.

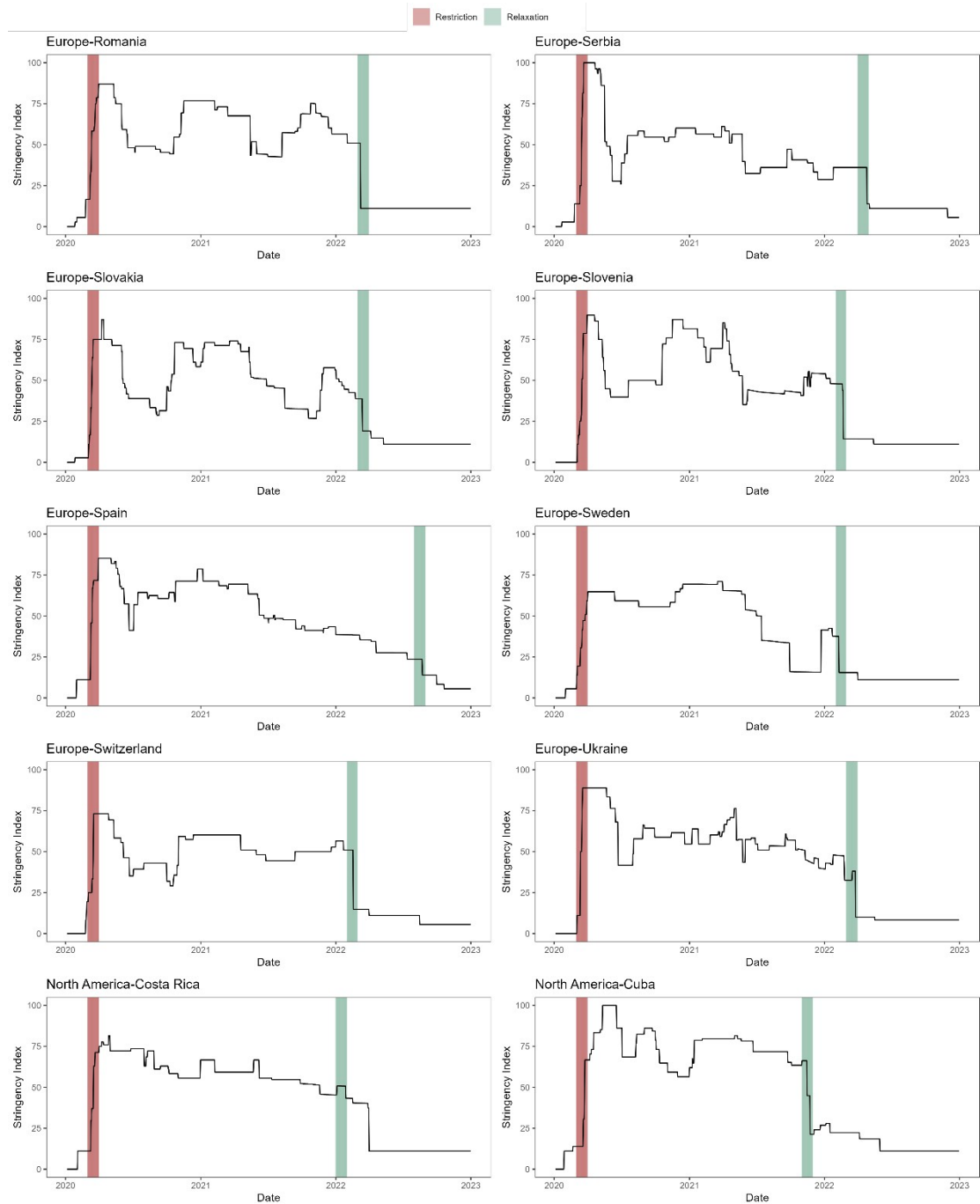


Figure 10. COVID-19 stringency index, initiation and conclusion of restrictions of Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, Costa Rica, and Cuba.

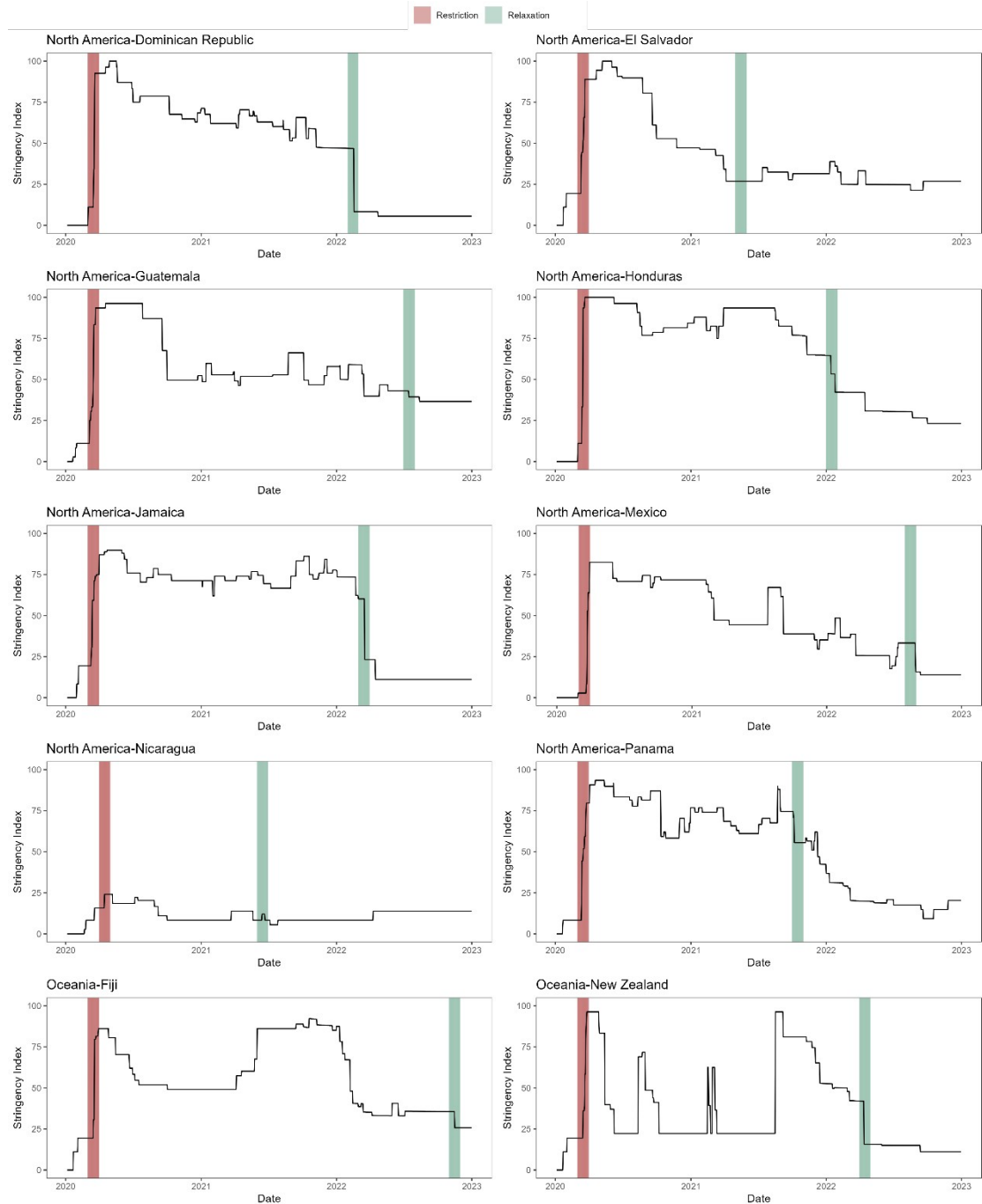


Figure 11. COVID-19 stringency index, initiation and conclusion of restrictions of Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Fiji, and New Zealand.

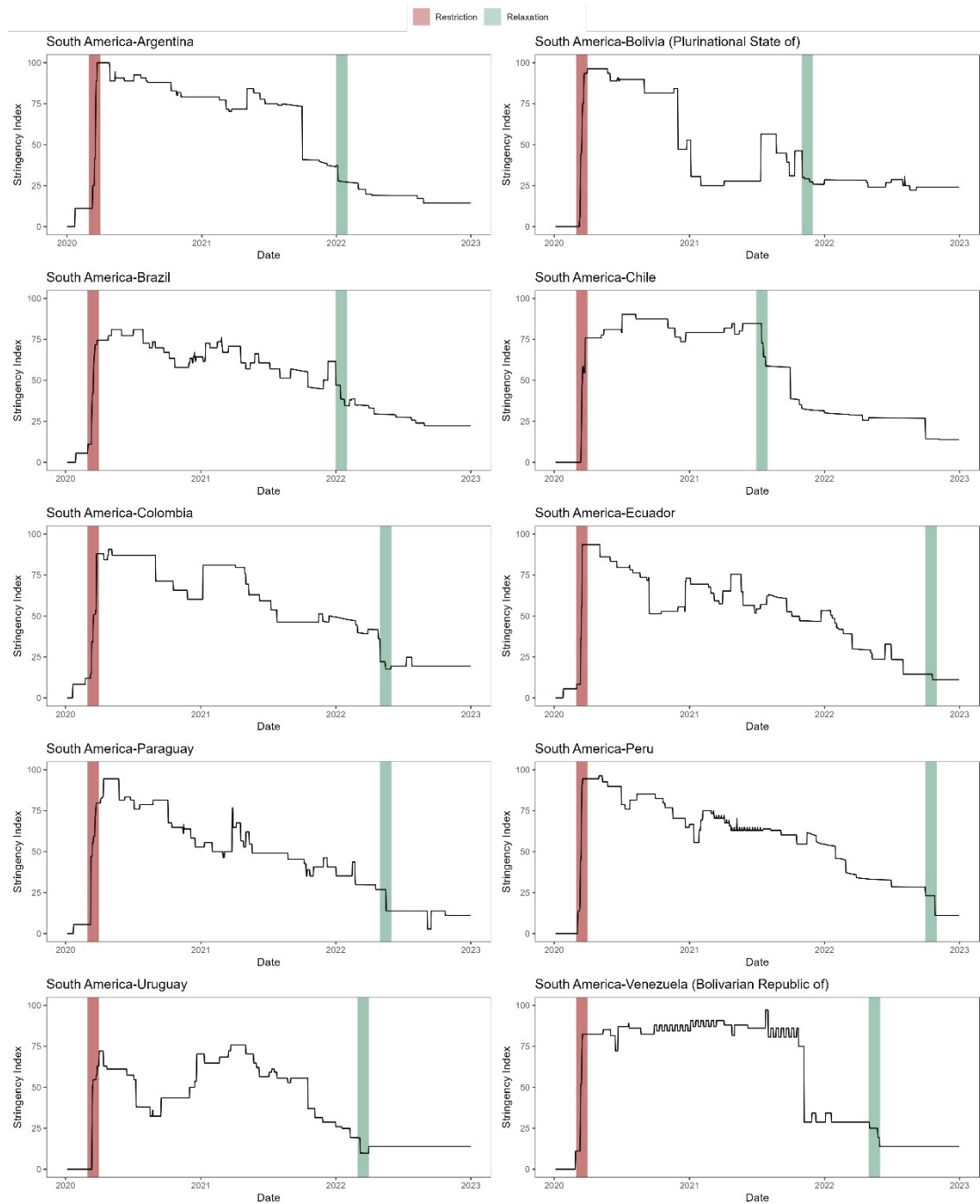
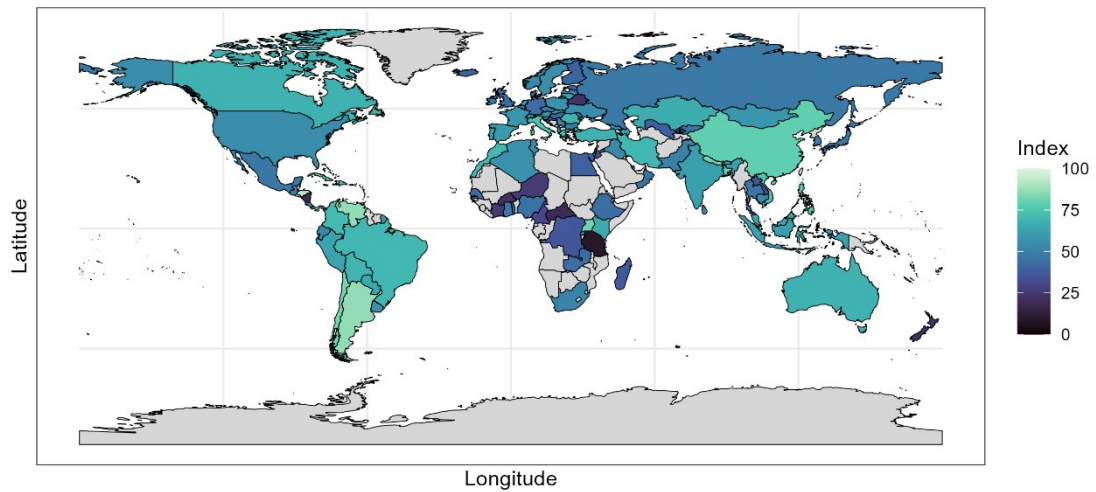
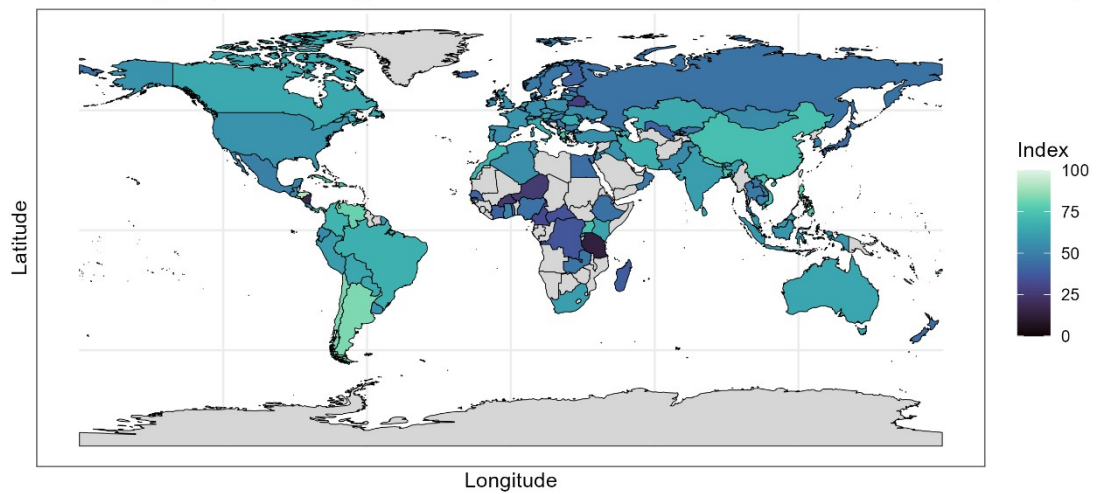


Figure 12. COVID-19 stringency index, initiation and conclusion of restrictions of Argentina, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Paraguay, Peru, Uruguay, and Venezuela (Bolivarian Republic of).

A Median stringency index during seasonal influenza season in the COVID-19 restriction period (%)



B Mean stringency index during seasonal influenza season in the COVID-19 restriction period (%)



C Maximum stringency index during seasonal influenza season in the COVID-19 restriction period

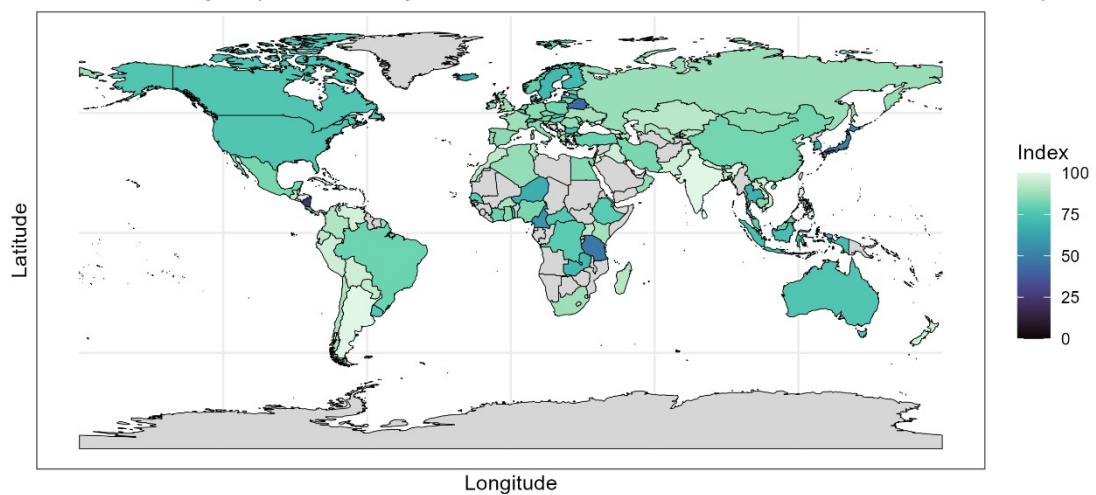


Figure 13. Median, mean, and maximum stringency index by countries.



Figure 14. total influenza cases of Algeria, Burkina Faso, Cameroon, Central African Republic, Côte d'Ivoire, Democratic Republic of the Congo, Ethiopia, Ghana, and Kenya.



Figure 15. total influenza cases of Madagascar, Mauritius, Nigeria, Rwanda, Senegal, South Africa, Togo, and Tunisia.



Figure 16. total influenza cases of restrictions of Uganda, United Rep Tanzania, Zambia, Bahrain, Bangladesh, Bhutan, Cambodia, China, Hong SAR ,India, Indonesia.



Figure 17. total influenza cases of Iran (Islamic Republic of), Iraq, Israel, Japan, Jordan, Kazakhstan, Kyrgyzstan, Lao People's Democratic Republic, Malaysia, and Mongolia.



Figure 18. total influenza cases of Nepal, Oman, Pakistan, Philippines, Republic of Korea, Russian Federation, Singapore, Sri Lanka, and Thailand.



Figure 19. total influenza cases of Türkiye, Uzbekistan, Viet Nam, Austria, Azerbaijan, Belarus, Belgium, Bulgaria, and Croatia.



Figure 20. total influenza cases of Czechia, Denmark, Estonia, Finland, France, Georgia, Greece, Hungary, Iceland, and Ireland.



Figure 21. total influenza cases of Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands (Kingdom of the), Norway, Poland, Portugal, Republic of Moldova.



Figure 22. total influenza cases of Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, Costa Rica, and Cuba.



Figure 23. total influenza cases of Dominican Republic, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Fiji, and New Zealand.



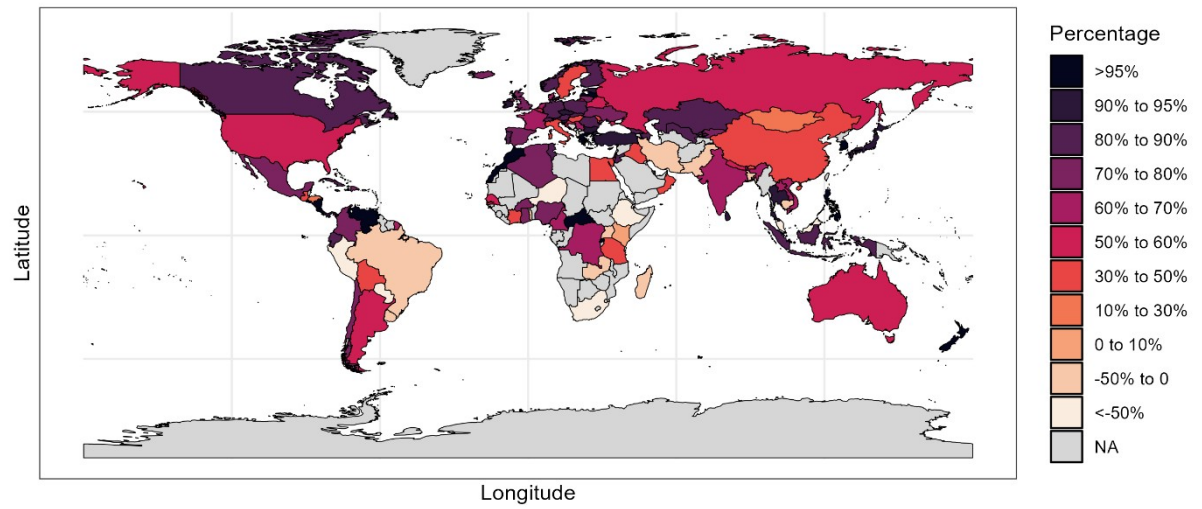
Figure 24. total influenza cases of Argentina, Bolivia (Plurinational Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, U (Bolivarian Republic of).

Table 3. Reduction in total influenza activity levels during restriction period across continents and top 5 countries of each continent.

Q14			Q23		
Continents or Top 5 countries	Reduction	95%CI	Continents or Top 5 countries	Reduction	95%CI
Overall	-46.30	-70.78 to -15.79	Overall	-16.63	-53.83 to 45.27
Africa			Africa		
	-25.95	-56.61 to 11.01		-25.43	-53.21 to 12.54
Rwanda	-	-100.00 to 100.00	Algeria	-	-100.00 to 100.00
Central African Republic	-	-100.00 to 100.00	Morocco	-	-100.00 to 100.00
Morocco	-98.40	-100.00 to 93.40	Rwanda	-	-100.00 to 100.00
Tunisia	-84.60	-96.71 to 67.24	Tunisia	-	-100.00 to 100.00
Nigeria	-79.67	-90.78 to 66.71	Central African Republic	-	-100.00 to 100.00
Asia			Asia		
	-52.13	-72.36 to 26.79		-4.89	-47.99 to 68.30
Republic of Korea	-	-100.00 to 100.00	Israel	-	-100.00 to 100.00
Singapore	-98.67	-99.80 to 96.90	Republic of Korea	-	-100.00 to 100.00
Bahrain	-98.30	-100.00 to 95.22	Mongolia	-	-100.00 to 100.00
Philippines	-97.70	-100.00 to 92.95	Türkiye	-	-100.00 to 100.00
China, Hong Kong SAR	-97.60	-99.15 to 94.96	Bahrain	-	-100.00 to 100.00
Europe			Europe		
	-71.68	-89.13 to 48.41		-53.75	-77.78 to 5.25
Malta	-	-100.00 to 100.00	Austria	-	-100.00 to 100.00
Greece	-97.57	-99.95 to 92.48	Estonia	-	-100.00 to 100.00
Latvia	-96.97	-99.06 to 94.41	Greece	-	-100.00 to 100.00
Bulgaria	-94.25	-98.06 to 89.07	Republic of Moldova	-	-100.00 to 100.00

Slovenia	-91.77	-97.76 to - 82.46	Hungary	- 100.00	-100.00 to - 100.00
North America	-65.30	-80.08 to - 45.72	North America	8.30	-41.19 to 86.52
El Salvador	-98.72	-100.00 to - 95.92	Jamaica	- 100.00	-100.00 to - 100.00
Nicaragua	-98.52	-100.00 to - 96.33	El Salvador	- 100.00	-100.00 to - 100.00
Costa Rica	-95.46	-100.00 to - 89.44	Costa Rica	- 100.00	-100.00 to - 100.00
Panama	-93.88	-100.00 to - 79.11	Cuba	- 100.00	-100.00 to - 100.00
Jamaica	-90.59	-99.17 to - 77.20	Dominican Republic	-100.00 to - -99.61	-100.00 to - 98.61
Oceania	-55.40	-77.62 to - 25.63	Oceania	-93.47	-99.62 to - 86.27
New Zealand	- 100.00	-100.00 to - 100.00	New Zealand	- 100.00	-100.00 to - 100.00
Australia	-55.76	-76.23 to - 29.69	Fiji	-98.17	-100.00 to - 95.49
Fiji	200.26	6.86 to 498.04	Australia	-92.01	-99.53 to - 83.23
South America	23.60	-52.15 to 116.30	South America	-93.00	-96.83 to - 87.48
Venezuela (Bolivarian Republic of)	- 100.00	-100.00 to - 100.00	Uruguay	- 100.00	-100.00 to - 100.00
Ecuador	-88.51	-94.49 to - 81.35	Venezuela (Bolivarian Republic of)	- 100.00	-100.00 to - 100.00
Colombia	-72.99	-89.40 to - 50.54	Bolivia (Plurinational State of)	-100.00 to - -99.83	-100.00 to - 99.55
Chile	-71.97	-95.58 to - 39.82	Chile	-99.72	-99.93 to - 99.38
Argentina	-54.61	-89.22 to - 6.80	Argentina	-99.17	-99.64 to - 98.39

A Reduction of epidemic levels during quarter14 the COVID-19 restriction period (%)



B Reduction of epidemic levels during quarter23 the COVID-19 restriction period (%)

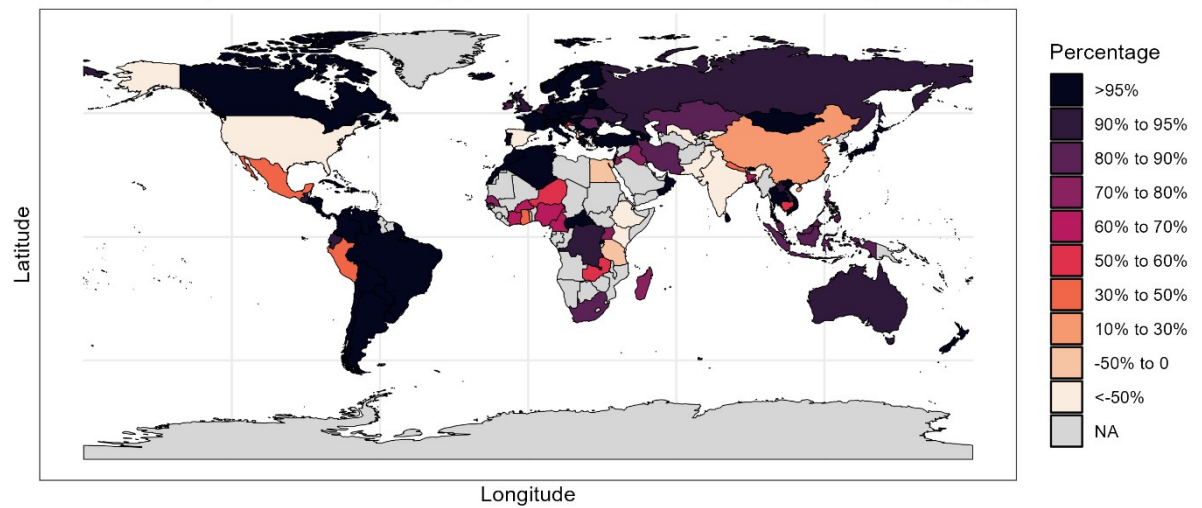


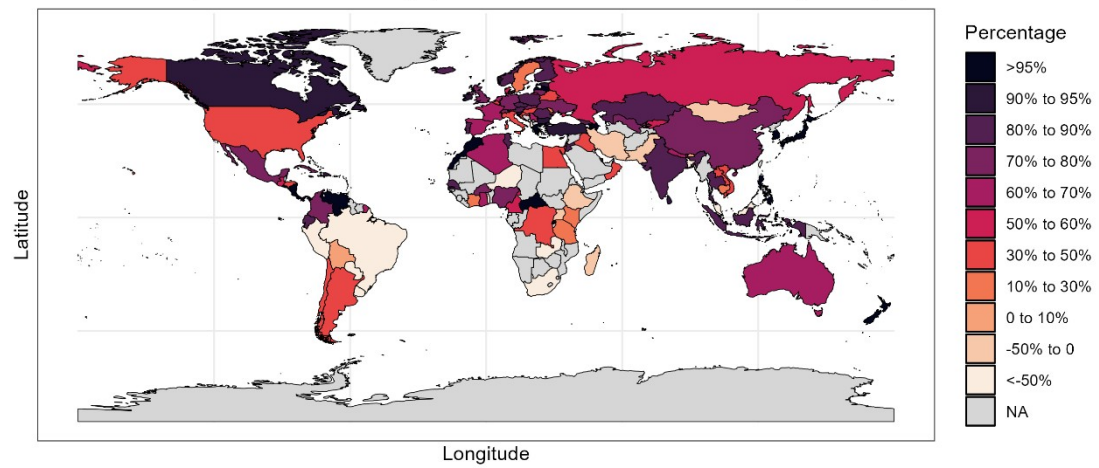
Figure 25. Reduction of epidemic levels during the COVID-19 restriction period.

Table 4. The reduction in influenza A activity levels during COVID-19 restriction period across continents and top 5 countries of each continent.

Q14			Q23		
Continents or Top 5 countries	Reduction	95%CI	Continents or Top 5 countries	Reduction	95%CI
Overall	-46.76	-74.56 to -9.62	Overall	-8.80	-52.41 to 57.25
Africa	-3.77	-47.73 to 53.96	Africa	-26.76	-56.38 to 14.94
Rwanda	-100.00	-100.00 to -100.00	Algeria	-100.00	-100.00 to -100.00
Central African Republic	-100.00	-100.00 to -100.00	Rwanda	-100.00	-100.00 to -100.00
Morocco	-98.09	-100.00 to -91.94	Morocco	-100.00	-100.00 to -100.00
Tunisia	-82.29	-95.80 to -62.56	Tunisia	-100.00	-100.00 to -100.00
Senegal	-80.46	-95.95 to -42.52	Central African Republic	-100.00	-100.00 to -100.00
Asia	-63.34	-82.27 to -37.88	Asia	-8.88	-53.65 to 55.22
Republic of Korea	-100.00	-100.00 to -100.00	Israel	-100.00	-100.00 to -100.00
Bahrain	-98.32	-100.00 to -95.20	Republic of Korea	-100.00	-100.00 to -100.00
Singapore	-97.97	-99.70 to -95.26	Kazakhstan	-100.00	-100.00 to -100.00
China, Hong Kong SAR	-97.35	-99.34 to -93.87	Mongolia	-100.00	-100.00 to -100.00
Japan	-95.90	-99.21 to -91.77	Türkiye	-100.00	-100.00 to -100.00
Europe	-68.97	-87.81 to -43.50	Europe	-19.42	-61.69 to 65.47
Malta	-100.00	-100.00 to -100.00	Iceland	-100.00	-100.00 to -100.00
Greece	-98.71	-100.00 to -95.82	Austria	-100.00	-100.00 to -100.00
Latvia	-96.45	-98.78 to -93.64	Luxembourg	-100.00	-100.00 to -100.00
Azerbaijan	-96.41	-100.00 to -90.64	Estonia	-100.00	-100.00 to -100.00
Bulgaria	-94.68	-98.26 to -89.56	Malta	-100.00	-100.00 to -100.00
North America	-61.24	-77.77 to -39.28	North America	105.90	10.76 to 263.40
El Salvador	-100.00	-100.00 to -100.00	Jamaica	-100.00	-100.00 to -100.00
Nicaragua	-100.00	-100.00 to -100.00	El Salvador	-100.00	-100.00 to -100.00

		100.00			100.00
Costa Rica	-96.55	-100.00 to -90.16	Costa Rica	-100.00	-100.00 to -100.00
Panama	-96.27	-100.00 to -87.12	Panama	-100.00	-100.00 to -100.00
Dominican Republic	-93.90	-99.41 to -86.31	Honduras	-100.00	-100.00 to -100.00
Oceania	-60.69	-81.42 to -33.09	Oceania	-94.63	-99.73 to -88.58
		-100.00 to -100.00			-100.00 to -100.00
New Zealand	-100.00	100.00	New Zealand	-100.00	100.00
Australia	-65.89	-81.83 to -46.68	Fiji	-95.96	-100.00 to -89.59
Fiji	301.56	32.40 to 715.93	Australia	-93.53	-99.66 to -86.30
South America	68.10	-39.25 to 211.70	South America	-92.91	-96.70 to -86.91
Venezuela (Bolivarian Republic of)	-100.00	-100.00 to -100.00	Uruguay	-100.00	-100.00 to -100.00
			Venezuela (Bolivarian Republic of)	-100.00	-100.00 to -100.00
Ecuador	-87.30	-94.20 to -79.01	Chile	-99.82	-99.97 to -99.59
Colombia	-71.49	-91.66 to -43.62	Bolivia (Plurinational State of)	-99.78	-100.00 to -99.41
Argentina	-40.48	-85.39 to 24.04	Argentina	-99.31	-99.76 to -98.51
Chile	-39.94	-90.72 to 33.20			

A Reduction of epidemic levels during quarter14 the COVID-19 restriction period (%)



B Reduction of epidemic levels during quarter23 the COVID-19 restriction period (%)

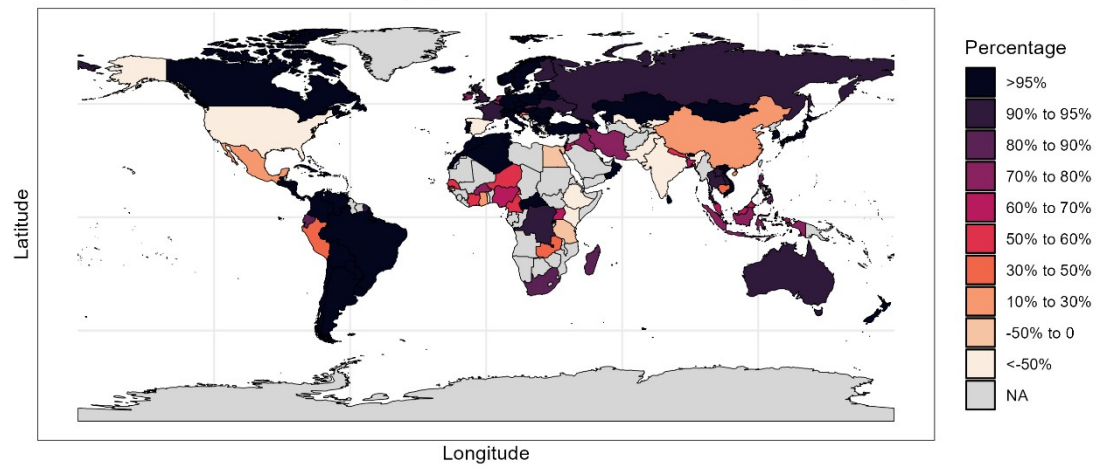


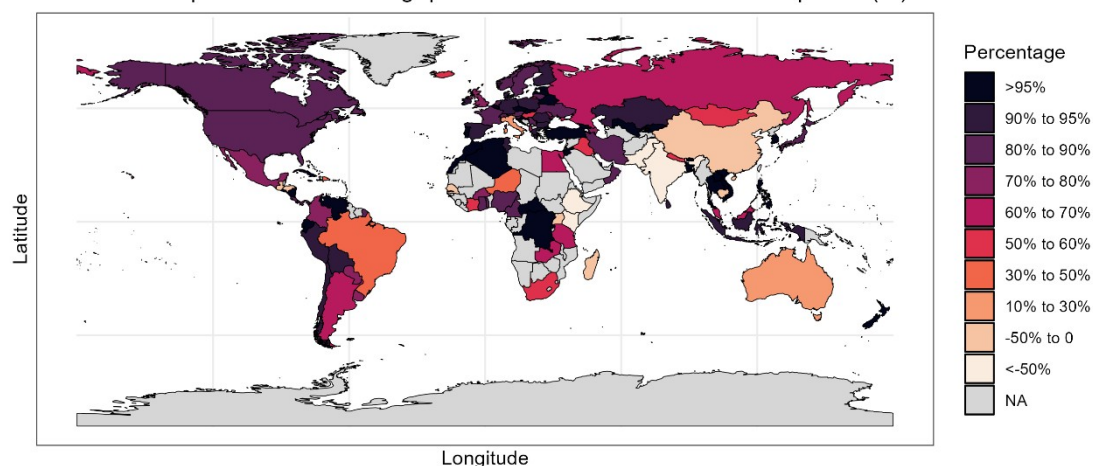
Figure 26. Reduction of influenza A epidemic levels during restriction period.

Table 5. The reduction in influenza B activity levels during COVID-19 restriction period across continents and top 5 countries of each continent.

Q14			Q23		
Continents or Top 5 countries	Reduction	95%CI	Continents or Top 5 countries	Reduction	95%CI
Overall	0.53	-52.57 to 69.15	Overall	-28.06	-70.79 to 38.83
Africa	-43.76	-72.16 to -4.15	Africa	-21.49	-61.71 to 47.87
Central African Republic	-100.00	-100.00 to -100.00	Algeria	-100.00	-100.00 to -100.00
Rwanda	-100.00	-100.00 to -100.00	Morocco	-100.00	-100.00 to -100.00
Morocco	-99.20	-100.00 to -96.68	Tunisia	-100.00	-100.00 to -100.00
Algeria	-97.72	-100.00 to -93.82	Central African Republic	-100.00	-100.00 to -100.00
Democratic Republic of the Congo	-95.50	-100.00 to -88.32	Rwanda	-100.00	-100.00 to -100.00
Asia	37.94	-32.99 to 128.49	Asia	-5.86	-63.32 to 82.20
Republic of Korea	-100.00	-100.00 to -100.00	Republic of Korea	-100.00	-100.00 to -100.00
Jordan	-100.00	-100.00 to -100.00	Türkiye	-100.00	-100.00 to -100.00
Singapore	-100.00	-100.00 to -100.00	Israel	-100.00	-100.00 to -100.00
Uzbekistan	-100.00	-100.00 to -100.00	Iraq	-100.00	-100.00 to -100.00
Viet Nam	-100.00	-100.00 to -100.00	Bahrain	-100.00	-100.00 to -100.00
Europe	-80.07	-95.70 to -55.72	Europe	-96.82	-99.28 to -90.02
Croatia	-100.00	-100.00 to -100.00	Latvia	-100.00	-100.00 to -100.00
Malta	-100.00	-100.00 to -100.00	Republic of Moldova	-100.00	-100.00 to -100.00
Latvia	-98.53	-100.00 to -96.11	Czechia	-100.00	-100.00 to -100.00
Belarus	-97.74	-100.00 to -94.22	Belarus	-100.00	-100.00 to -100.00
Georgia	-97.14	-100.00 to -91.72	Hungary	-100.00	-100.00 to -100.00
North America	-76.37	-93.68 to -53.10	North America	-93.50	-95.88 to -89.17
Cuba	-98.77	-100.00 to -95.16	El Salvador	-100.00	-100.00 to -100.00
El Salvador	-96.34	-100.00 to -88.07	Costa Rica	-100.00	-100.00 to -100.00

					100.00
					-100.00 to -
Nicaragua	-95.12	-100.00 to -87.87	Cuba	-100.00	100.00
					-100.00 to -
Costa Rica	-87.76	-100.00 to -66.29	Jamaica	-100.00	100.00
United States of America	-85.94	-96.18 to -70.84	Dominican Republic	-98.41	-100.00 to -93.19
Oceania	-27.35	-70.06 to 32.72	Oceania	-89.03	-99.10 to -76.61
					-100.00 to -
New Zealand	-100.00	-100.00 to -100.00	New Zealand	-100.00	100.00
					-100.00 to -
Fiji	-94.82	-100.00 to -78.74	Fiji	-100.00	100.00
Australia	-10.62	-63.09 to 62.85	Australia	-86.48	-98.89 to -71.17
South America	-63.12	-92.34 to -28.55	South America	-91.05	-97.49 to -82.30
Venezuela (Bolivarian Republic of)	-100.00	-100.00 to -100.00	Venezuela (Bolivarian Republic of)	-100.00	-100.00 to -
					100.00
					-100.00 to -
Ecuador	-97.57	-100.00 to -91.78	Uruguay	-100.00	100.00
Bolivia (Plurinational State of)	-94.62	-100.00 to -82.71	Bolivia (Plurinational State of)	-100.00	-100.00 to -
					100.00
					-100.00 to -
Peru	-93.78	-100.00 to -82.81	Ecuador	-100.00	100.00
Chile	-93.41	-99.23 to -85.13	Chile	-99.35	-99.90 to -98.45

A Reduction of epidemic levels during quarter14 the COVID-19 restriction period (%)



B Reduction of epidemic levels during quarter23 the COVID-19 restriction period (%)

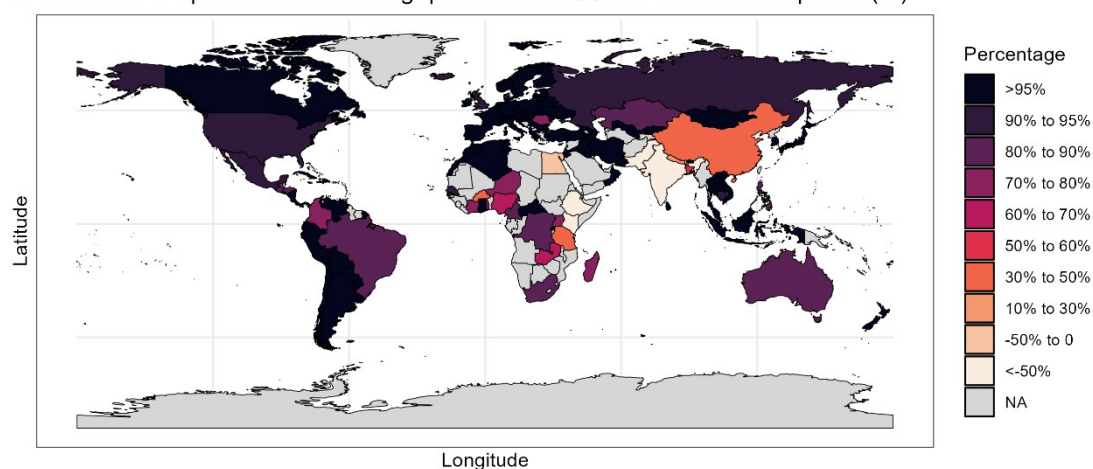


Figure 27. Reduction of influenza B epidemic levels during restriction period.

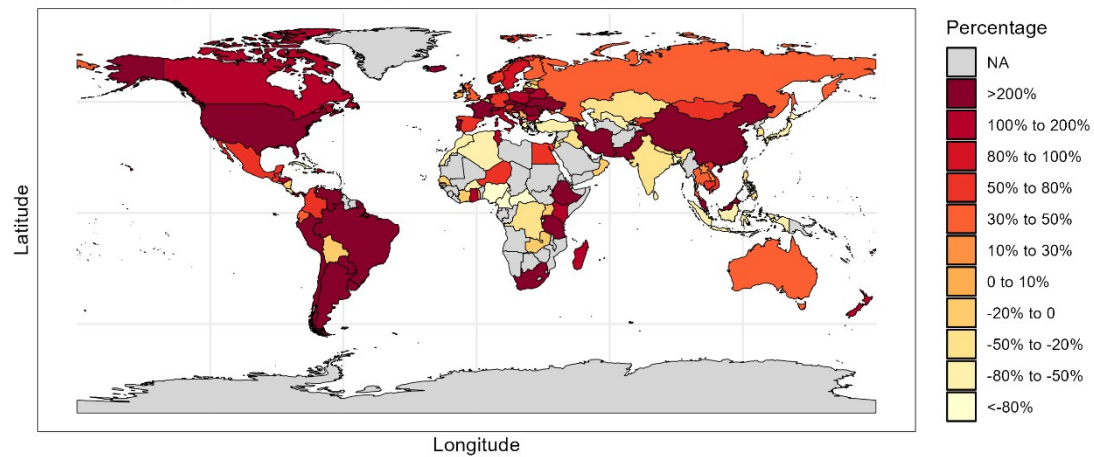
Table 5. The increase in influenza A activity levels during COVID-19 restriction period across continents and top 5 countries of each continent.

Q14			Q23		
Continents or Top 5 countries	Immunity debt Percent age	95%CI	Continents or Top 5 countries	Immunity debt Percent age	95%CI
Overall	168.71	43.84 to 336.52	Overall	245.91	55.88 to 577.39
Africa	64.34	-4.44 to 207.54 to 157.02	Africa	57.70	-16.03 to 179.37
Ethiopia	379.55	593.68	Ghana	480.74	942.75
South Africa	257.14	106.34 to 483.23	Egypt	452.50	242.73 to 750.11

United Republic of Tanzania	210.68	78.65 to 387.59			75.79 to 529.21
Madagascar	167.34	33.08 to 321.11	Mauritius	248.63	75.93 to 356.98
Kenya	125.67	40.52 to 226.68	Togo	187.04	67.28 to 351.31
			United Republic of Tanzania	181.72	
Asia	120.09	24.33 to 239.21	Asia	191.04	46.36 to 395.37
Bahrain	592.01	211.22 to 1154.33	Bahrain	11053.4	7132.15 to 16178.93
Iran (Islamic Republic of)	526.93	186.08 to 1077.40	Malaysia	9	2957.09 to 6010.34
Pakistan	374.69	174.73 to 641.62	Mongolia	3780.70	240.20 to 2239.51
China	361.38	157.15 to 597.32	Pakistan	973.42	322.33 to 1197.51
Malaysia	360.63	241.94 to 519.39	Iran (Islamic Republic of)	668.93	256.10 to 1200.12
Europe	196.18	58.93 to 377.58	Europe	638.26	380.61 to 3454.03
Ukraine	1143.61	566.60 to 1862.65		11978.4	5075.98 to 28484.40
Czechia	931.84	400.87 to 1631.94	Portugal	8	1454.06 to 9599.81
Portugal	490.07	275.66 to 724.50	Netherland s (Kingdom of the)	4558.37	1231.67 to 8540.96
Denmark	386.14	174.03 to 681.78	Czechia	3952.63	440.12 to 10468.69
Switzerland	338.10	158.10 to 607.24	Switzerland	3373.12	654.64 to 7233.48
North America	171.30	41.38 to 333.28	Luxembour g	2640.00	14.57 to 190.09
United States of America	241.62	79.52 to 437.64	North America	82.79	
Panama	230.72	-19.45 to 626.59	Canada	566.79	250.88 to 1093.09
Honduras	180.04	-68.38 to	Mexico	123.62	34.03 to 238.98
			Guatemala	88.78	36.36 to

		669.30			155.52
		-1.36 to			
Canada	109.49	238.24	Panama	84.86	-1.85 to 232.69
Dominican		25.11 to			
Republic	105.94	212.74	Costa Rica	63.74	-0.34 to 161.15
		21.00 to			39.59 to
Oceania	81.62	324.51	Oceania	107.44	260.28
		128.02 to			71.36 to
Fiji	621.39	1547.88	Australia	153.85	340.21
		-0.72 to			
New Zealand	166.99	1365.90	Fiji	-47.47	-79.64 to 10.38
			New		-100.00 to -
Australia	45.50	21.46 to 75.58	Zealand	-100.00	100.00
South		354.68 to	South		
America	907.56	1758.81	America	-15.88	-54.37 to 47.00
			Venezuela		
			(Bolivarian		
		2747.88 to	Republic		18.70 to
Argentina	5108.46	8472.62	of)	202.68	557.27
Venezuela					
(Bolivarian		518.05 to			43.27 to
Republic of)	1508.44	2899.69	Argentina	125.72	239.56
		91.13 to			17.22 to
Uruguay	559.72	1463.37	Uruguay	91.53	191.36
		31.35 to			-47.79 to
Brazil	433.82	1148.03	Peru	39.98	179.32
		129.66 to			
Paraguay	333.09	625.88	Chile	24.74	-37.54 to 99.13

A Increase of epidemic levels during the winter season (%)



B Increase of epidemic levels during the summer season (%)

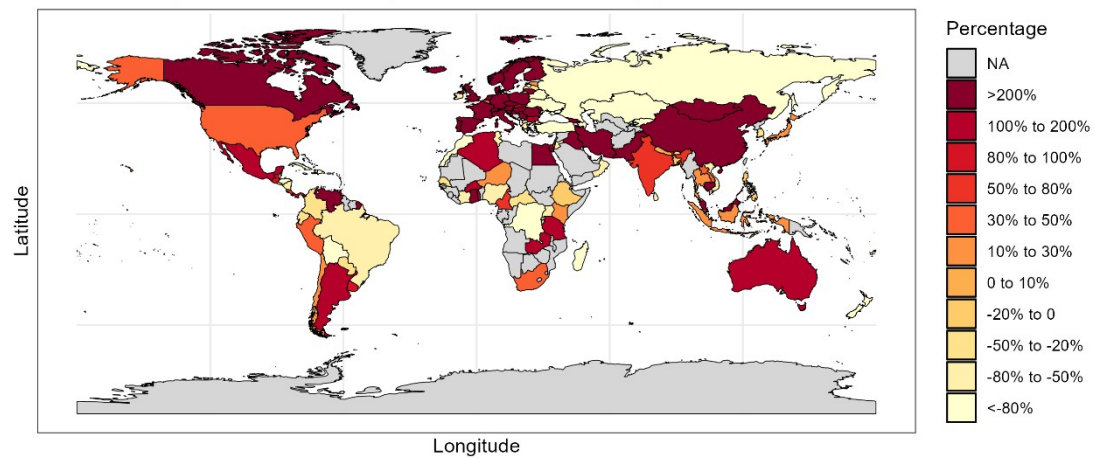


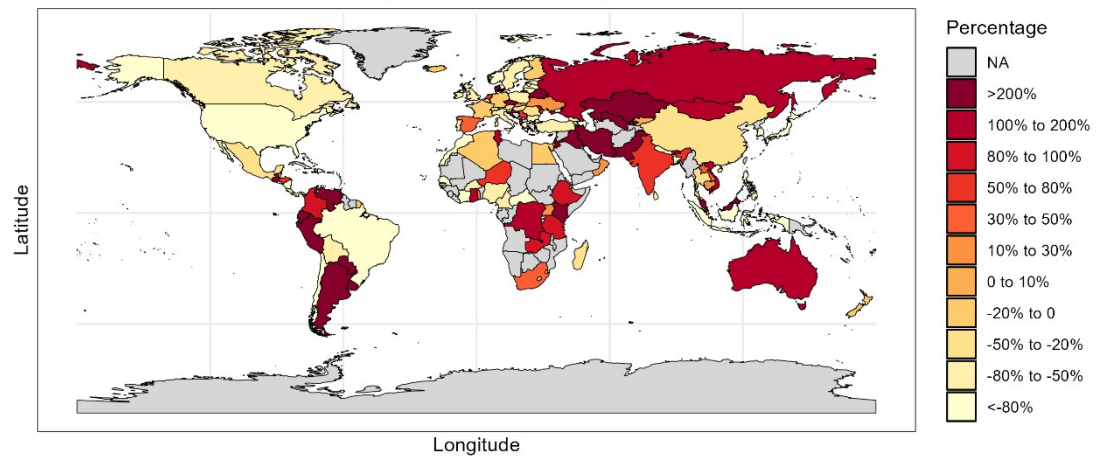
Figure 28. Increases of influenza A epidemic levels during the relaxation period.

Table 5. The increase in influenza B activity levels during COVID-19 restriction period across continents and top 5 countries of each continent.

Q14			Q23		
Continents or Top 5 countries	Immunity debt	95%CI	Continents or Top 5 countries	Immunity debt	95%CI
	Percentage			Percentage	
Overall	85.58	3.93 to 196.05	Overall	34.51	-35.90 to 164.62
Africa	31.83	-35.45 to 131.12	Africa	2.08	-42.59 to 81.00
Kenya	278.79	103.14 to 515.94	United Republic of Tanzania	196.99	85.19 to 369.11
Tunisia	167.65	5.15 to 419.60	Egypt	149.20	104.45 to 218.90
Democratic Republic of the	163.16	29.28 to 353.77	Ethiopia	110.22	0.00 to 312.81

Congo					
Ghana	161.35	19.96 to 344.75	Niger	77.78	-39.93 to 438.40
Ethiopia	97.56	32.67 to 209.01	Ghana	52.53	-40.98 to 184.10
Asia	95.59	17.47 to 197.37	Asia	44.98	-30.93 to 175.92
					1723.62 to
Malaysia	5733.33	4222.16 to 7530.67	Bahrain	2806.12	4344.24
Bahrain	900.66	488.46 to 1360.47	Pakistan	1972.73	923.78 to 3859.13
			Iran (Islamic		
Pakistan	743.22	458.74 to 1150.20	Republic of)	774.07	295.35 to 1459.87
Kazakhstan	533.73	199.54 to 1006.25	Malaysia	143.79	56.85 to 347.90
			Lao People's		
Iran (Islamic			Democratic		
Republic of)	518.18	355.63 to 760.81	Republic	79.92	0.18 to 229.76
Europe	14.36	-46.23 to 102.64	Europe	58.20	-72.23 to 403.62
Belarus	1934.45	1018.12 to 3285.18	Albania	18414.29	0.00 to 70774.67
Czechia	368.24	89.83 to 751.49	Luxembourg	336.36	25.77 to 1268.88
Denmark	336.43	110.42 to 725.55	Spain	304.60	49.16 to 861.56
			Netherlands		
			(Kingdom of		
Croatia	199.72	45.35 to 423.87	the)	161.73	35.02 to 379.11
Republic of					
Moldova	116.28	5.07 to 277.13	Serbia	128.57	-31.48 to 647.16
North America	-64.06	-77.64 to -47.37	North America	68.65	16.10 to 143.08
Guatemala	274.29	144.29 to 433.33	Mexico	441.11	275.22 to 674.33
Honduras	51.96	-33.13 to 162.55	Guatemala	120.90	29.71 to 247.24
			United States of		
Jamaica	10.06	-79.59 to 169.91	America	-28.31	-50.17 to 3.14
Mexico	-49.26	-70.93 to -24.85	Honduras	-85.78	-100.00 to -57.30
Canada	-75.10	-87.26 to -59.31	Canada	-95.05	-96.65 to -92.55
Oceania	219.55	41.36 to 584.41	Oceania	8.82	-15.49 to 78.92
Fiji	2786.47	785.33 to 7609.16	Fiji	199.16	-72.18 to 911.69
Australia	173.38	38.85 to 349.11	Australia	23.45	3.19 to 84.40
New Zealand	-11.86	-80.89 to 503.98	New Zealand	-100.00	-100.00 to -100.00
South America	403.62	136.65 to 769.00	South America	-68.29	-90.98 to -35.62
Argentina	3383.82	1518.93 to 5742.10	Argentina	10.57	-74.74 to 119.99
Uruguay	828.57	252.03 to 1967.33	Colombia	-29.06	-93.10 to 62.51
Peru	430.10	255.09 to 686.35	Peru	-31.71	-59.47 to 15.40
Ecuador	423.13	186.03 to 719.52	Ecuador	-61.23	-87.32 to -24.18
Venezuela			Venezuela		
(Bolivarian			(Bolivarian		
Republic of)	357.41	70.96 to 957.62	Republic of)	-62.93	-88.47 to -11.95

A Increase of epidemic levels during the winter season (%)



B Increase of epidemic levels during the summer season (%)

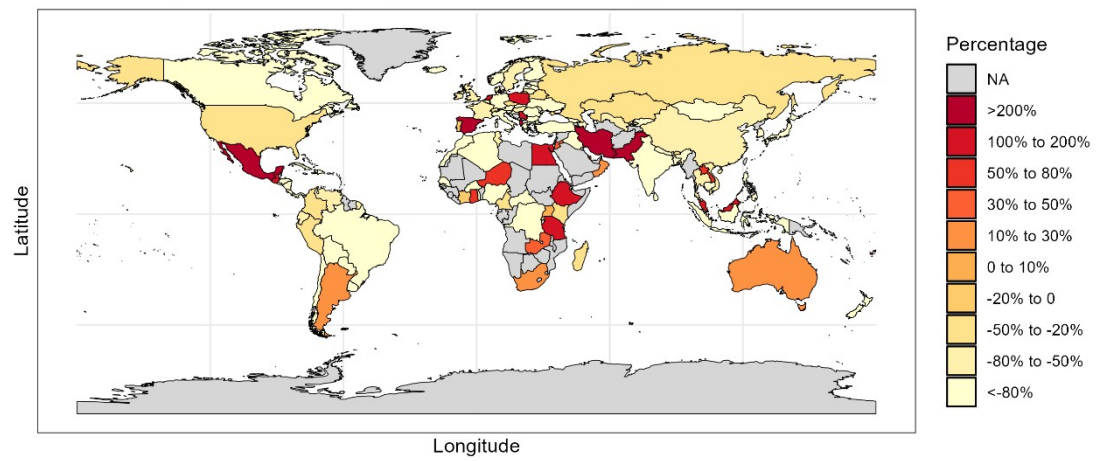


Figure 29. Increases of influenza B epidemic levels during the relaxation period.

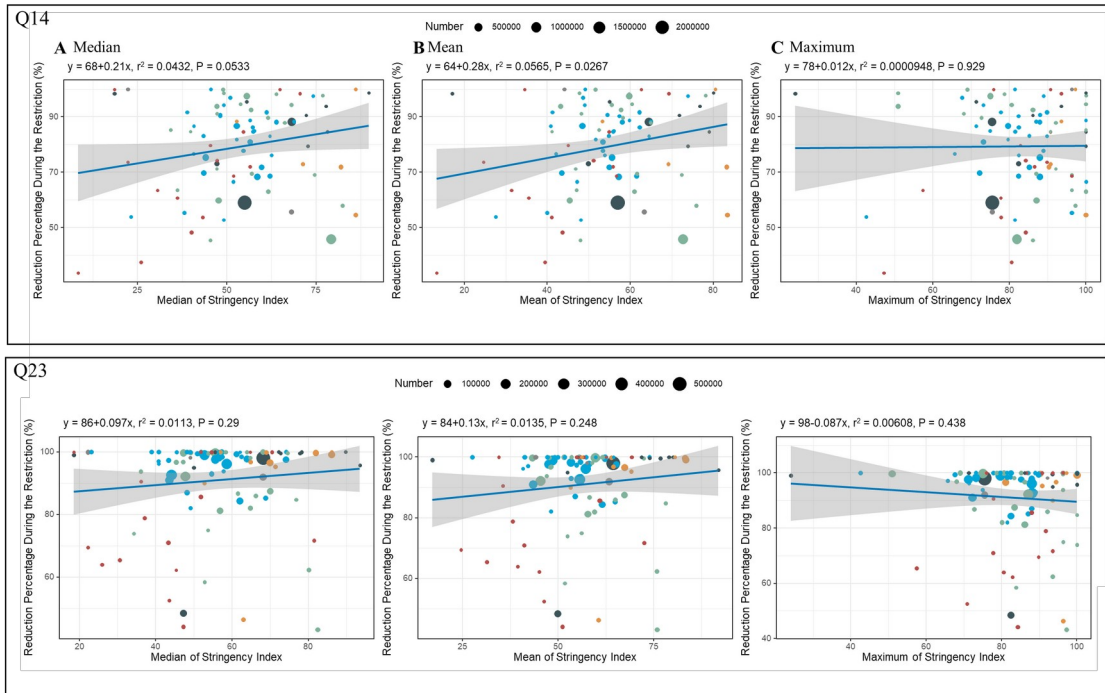


Figure 30. Relationship between country-specific reduction in number of influenza cases and median, mean, and maximum stringency index during COVID-19 restriction period.

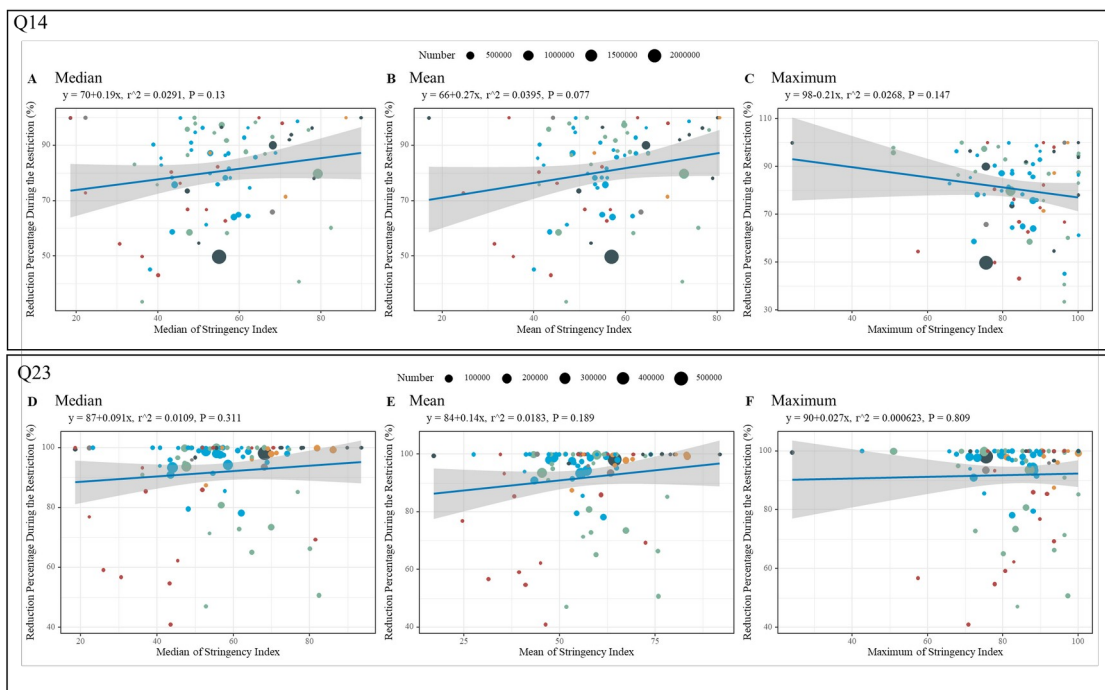


Figure 31. Relationship between country-specific reduction in number of influenza A cases and median, mean, and maximum stringency index during COVID-19 restriction period.

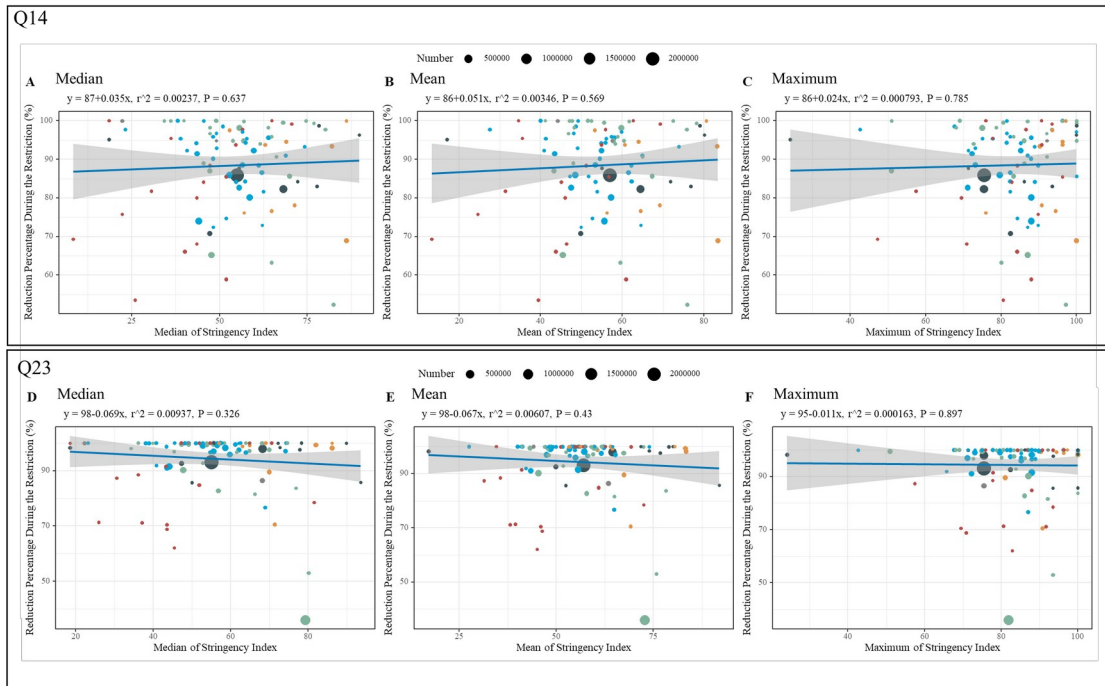


Figure 32. Relationship between country-specific reduction in number of influenza B cases and median, mean, and maximum stringency index during C restriction period.

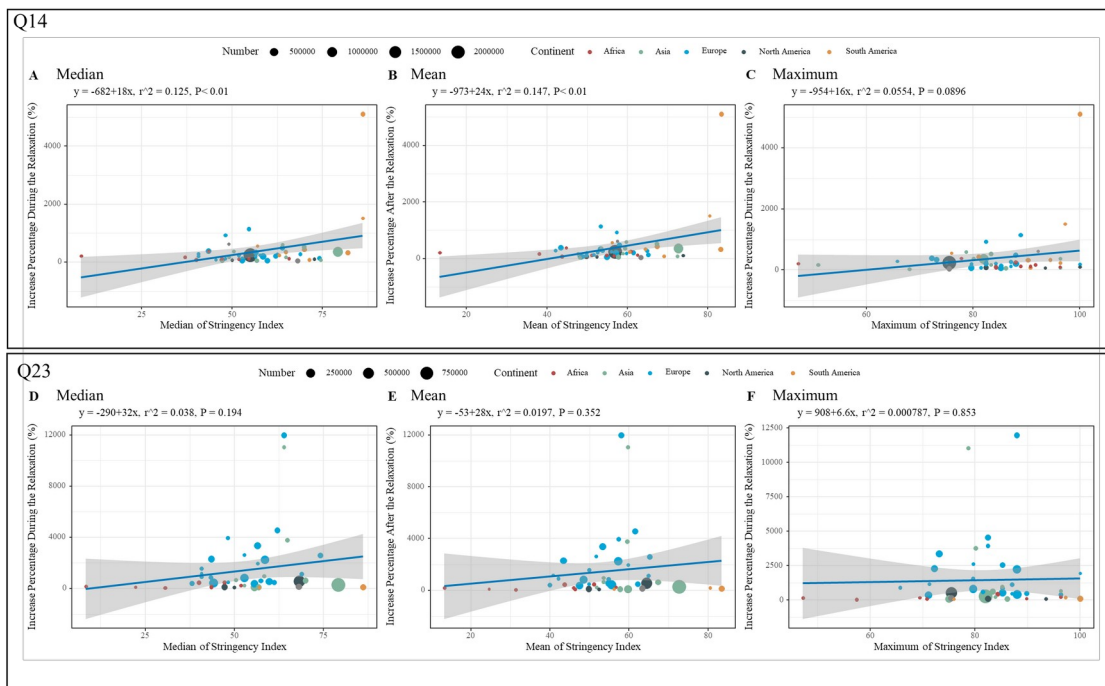


Figure 33. Relationship between country-specific increase in number of influenza A cases and median, mean, and maximum stringency index during relaxation period.

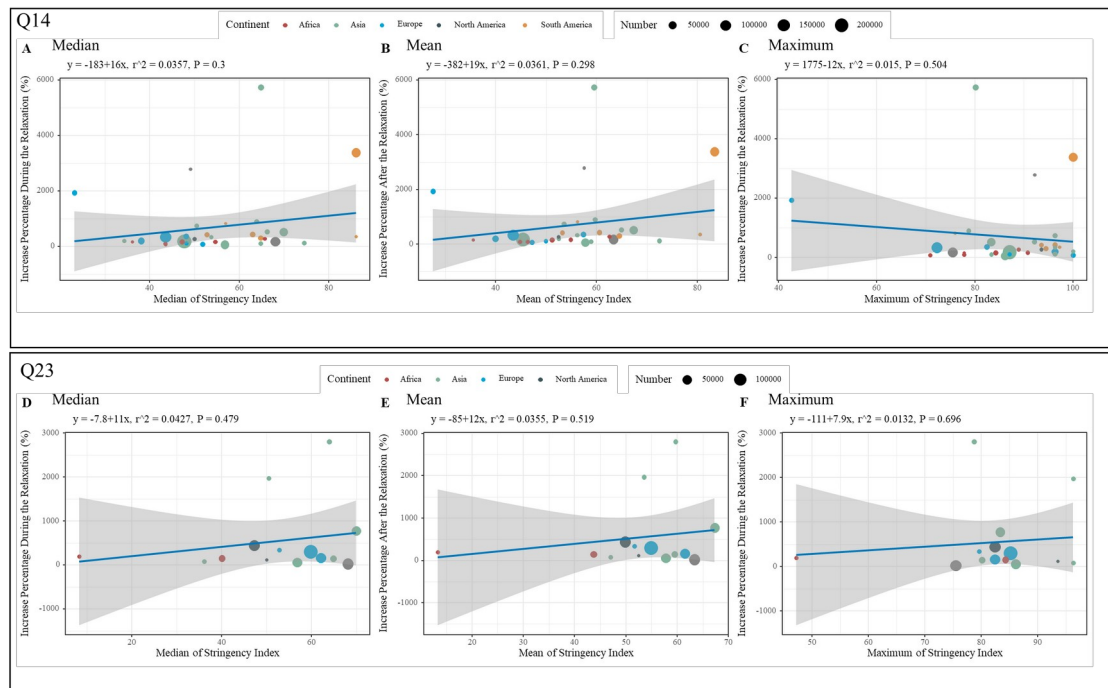


Figure 34. Relationship between country-specific increase in number of influenza B cases and median, mean, and maximum stringency index during relaxation period.

Table 6. The reduction during the restriction period in the Pa CPRDGLD data

Country	Outcome	period	season	observe d	predicti on	reductio n
United Kingdom (CPRDGLD)	influenza	Restriction	Winter season	98.50	312.98	-68.53
United Kingdom (CPRDGLD)	influenza	Restriction	Summer season	20.54	42.54	-51.72
United Kingdom	influenza	Restriction	Winter season	100.13	337.97	-70.37
United Kingdom	influenza	Restriction	Summer season	36.88	58.42	-36.87
Belgium	influenza	Restriction	Winter season	397.20	955.21	-58.42
Belgium	influenza	Restriction	Summer season	74.27	96.27	-22.85
Spain	influenza	Restriction	Winter season	441.84	2055.66	-78.51
Spain	influenza	Restriction	Summer season	119.04	96.75	23.04
France	influenza	Restriction	Winter season	3109.37	7400.72	-57.99
France	influenza	Restriction	Summer season	262.19	405.02	-35.27

		ion	season			
Italy	influenza	Restriction	Winter season	150.43	265.00	-43.23
Italy	influenza	Restriction	Summer season	6.02	16.00	-62.37
Romania	influenza	Restriction	Winter season	28.89	110.90	-73.95
Romania	influenza	Restriction	Summer season	0.40	1.96	-79.79
United Kingdom (CPRDGOLD)	copd	Restriction	Winter season	473.77	820.80	-42.28
United Kingdom (CPRDGOLD)	copd	Restriction	Summer season	143.85	348.96	-58.78
United Kingdom	copd	Restriction	Winter season	433.41	871.36	-50.26
United Kingdom	copd	Restriction	Summer season	157.48	359.33	-56.17
Belgium	copd	Restriction	Winter season	286.39	436.62	-34.41
Belgium	copd	Restriction	Summer season	101.00	125.08	-19.25
Spain	copd	Restriction	Winter season	230.70	295.71	-21.99
Spain	copd	Restriction	Summer season	74.53	112.22	-33.59
France	copd	Restriction	Winter season	473.23	589.01	-19.66
France	copd	Restriction	Summer season	158.67	200.08	-20.70
Italy	copd	Restriction	Winter season	310.32	78.67	294.45
Italy	copd	Restriction	Summer season	57.25	28.88	98.27
Romania	copd	Restriction	Winter season	286.32	363.79	-21.29
Romania	copd	Restriction	Summer season	88.94	139.38	-36.19
United Kingdom (CPRDGOLD)	hypertension	Restriction	Winter season	1956.14	2272.85	-13.93
United Kingdom (CPRDGOLD)	hypertension	Restriction	Summer season	572.58	900.67	-36.43
United Kingdom	hypertension	Restriction	Winter season	2013.04	2845.04	-29.24
United Kingdom	hypertension	Restriction	Summer	710.65	1160.15	-38.74

Belgium	ion hypertens ion	ion Restrict ion	season Winter season	588.43	643.77	-8.60
Belgium	hypertens ion	Restrict ion	Summer season	252.46	221.58	13.93
Spain	hypertens ion	Restrict ion	Winter season	1310.89	1259.19	4.11
Spain	hypertens ion	Restrict ion	Summer season	405.56	477.93	-15.14
France	hypertens ion	Restrict ion	Winter season	3933.96	4205.22	-6.45
France	hypertens ion	Restrict ion	Summer season	1352.25	1433.42	-5.66
Italy	hypertens ion	Restrict ion	Winter season	4141.50	1029.63	302.23
Italy	hypertens ion	Restrict ion	Summer season	1228.75	338.71	262.78
Romania	hypertens ion	Restrict ion	Winter season	1091.57	1157.01	-5.66
Romania	hypertens ion	Restrict ion	Summer season	355.67	410.08	-13.27
United Kingdom (CPRDGOLD)	pneumoni a	Restrict ion	Winter season	653.25	858.65	-23.92
United Kingdom (CPRDGOLD)	pneumoni a	Restrict ion	Summer season	217.88	291.44	-25.24
United Kingdom	pneumoni a	Restrict ion	Winter season	525.96	898.05	-41.43
United Kingdom	pneumoni a	Restrict ion	Summer season	213.38	321.96	-33.72
Belgium	pneumoni a	Restrict ion	Winter season	130.57	229.48	-43.10
Belgium	pneumoni a	Restrict ion	Summer season	36.00	53.13	-32.24
Spain	pneumoni a	Restrict ion	Winter season	389.07	535.21	-27.31
Spain	pneumoni a	Restrict ion	Summer season	120.50	179.06	-32.70
France	pneumoni a	Restrict ion	Winter season	653.96	1167.31	-43.98
France	pneumoni a	Restrict ion	Summer season	141.38	315.71	-55.22
Italy	pneumoni a	Restrict ion	Winter season	98.82	80.41	22.90

Italy	pneumonia	Restriction	Summer season	25.42	23.65	7.49
Romania	pneumonia	Restriction	Winter season	841.82	1141.70	-26.27
Romania	pneumonia	Restriction	Summer season	167.21	306.21	-45.39

Table 7. The increases during the relaxation period in the Pa CPRDGOLD data

Country	Outcome	period	season	observed	prediction	increases
United Kingdom (CPRDGOLD)	influenza	Relaxation	Winter season	170.86	312.98	-45.41
United Kingdom (CPRDGOLD)	influenza	Relaxation	Summer season	29.08	39.79	-26.91
United Kingdom	influenza	Relaxation	Winter season	114.54	337.97	-66.11
United Kingdom	influenza	Relaxation	Summer season	26.13	54.67	-52.21
Belgium	influenza	Relaxation	Winter season	190.82	955.21	-80.02
Belgium	influenza	Relaxation	Summer season	108.29	96.27	12.49
Spain	influenza	Relaxation	Winter season	242.61	2055.66	-88.20
Spain	influenza	Relaxation	Summer season	63.83	131.00	-51.27
France	influenza	Relaxation	Winter season	3520.46	7095.28	-50.38
France	influenza	Relaxation	Summer season	1024.63	405.02	152.98
Italy	influenza	Relaxation	Winter season	205.11	265.00	-22.60
Italy	influenza	Relaxation	Summer season	33.71	16.00	110.68
Romania	influenza	Relaxation	Winter season	58.50	110.90	-47.25
Romania	influenza	Relaxation	Summer season	16.17	1.96	725.53
United Kingdom (CPRDGOLD)	copd	Relaxation	Winter season	400.86	820.80	-51.16
United Kingdom (CPRDGOLD)	copd	Relaxation	Summer season	206.08	346.58	-40.54
United Kingdom	copd	Relaxation	Winter	129.36	871.36	-85.15

		n	season			
United Kingdom	copd	Relaxatio	Summer	150.08	357.96	-58.07
		n	season			
Belgium	copd	Relaxatio	Winter	81.71	436.62	-81.28
		n	season			
Belgium	copd	Relaxatio	Summer	90.08	125.08	-27.98
		n	season			
Spain	copd	Relaxatio	Winter	50.21	295.71	-83.02
		n	season			
Spain	copd	Relaxatio	Summer	31.67	123.75	-74.41
		n	season			
France	copd	Relaxatio	Winter	174.86	563.73	-68.98
		n	season			
France	copd	Relaxatio	Summer	160.42	200.08	-19.83
		n	season			
Italy	copd	Relaxatio	Winter	89.79	78.67	14.13
		n	season			
Italy	copd	Relaxatio	Summer	116.75	28.88	304.33
		n	season			
Romania	copd	Relaxatio	Winter	76.50	363.79	-78.97
		n	season			
Romania	copd	Relaxatio	Summer	109.33	139.38	-21.55
		n	season			
United Kingdom (CPRDGOLD)	hypertensi	Relaxatio	Winter	1516.00	2272.85	-33.30
	on	n	season			
United Kingdom (CPRDGOLD)	hypertensi	Relaxatio	Summer	791.92	889.75	-11.00
	on	n	season			
United Kingdom	hypertensi	Relaxatio	Winter	520.64	2845.04	-81.70
	on	n	season			
United Kingdom	hypertensi	Relaxatio	Summer	678.92	1149.79	-40.95
	on	n	season			
Belgium	hypertensi	Relaxatio	Winter	143.21	643.77	-77.75
	on	n	season			
Belgium	hypertensi	Relaxatio	Summer	209.25	221.58	-5.57
	on	n	season			
Spain	hypertensi	Relaxatio	Winter	222.43	1259.19	-82.34
	on	n	season			
Spain	hypertensi	Relaxatio	Summer	146.33	513.42	-71.50
	on	n	season			
France	hypertensi	Relaxatio	Winter	1205.43	4022.49	-70.03
	on	n	season			
France	hypertensi	Relaxatio	Summer	1186.50	1433.42	-17.23
	on	n	season			
Italy	hypertensi	Relaxatio	Winter	789.79	1029.63	-23.29

Italy	on hypertension	n Relaxation	season Summer season	1334.58	338.71	294.02
Romania	on hypertension	n Relaxation	Winter season	270.21	1157.01	-76.65
Romania	on hypertension	n Relaxation	Summer season	391.33	410.08	-4.57
United Kingdom (CPRDGOLD)	pneumonia	n Relaxation	Winter season	416.93	858.65	-51.44
United Kingdom (CPRDGOLD)	pneumonia	n Relaxation	Summer season	218.58	286.83	-23.79
United Kingdom	pneumonia	n Relaxation	Winter season	163.29	898.05	-81.82
United Kingdom	pneumonia	n Relaxation	Summer season	162.67	315.75	-48.48
Belgium	pneumonia	n Relaxation	Winter season	54.00	229.48	-76.47
Belgium	pneumonia	n Relaxation	Summer season	39.92	53.13	-24.86
Spain	pneumonia	n Relaxation	Winter season	105.86	535.21	-80.22
Spain	pneumonia	n Relaxation	Summer season	48.83	203.17	-75.96
France	pneumonia	n Relaxation	Winter season	377.07	1121.49	-66.38
France	pneumonia	n Relaxation	Summer season	212.50	315.71	-32.69
Italy	pneumonia	n Relaxation	Winter season	47.64	80.41	-40.75
Italy	pneumonia	n Relaxation	Summer season	30.04	23.65	27.05
Romania	pneumonia	n Relaxation	Winter season	267.86	1141.70	-76.54
Romania	pneumonia	n Relaxation	Summer season	234.33	306.21	-23.47

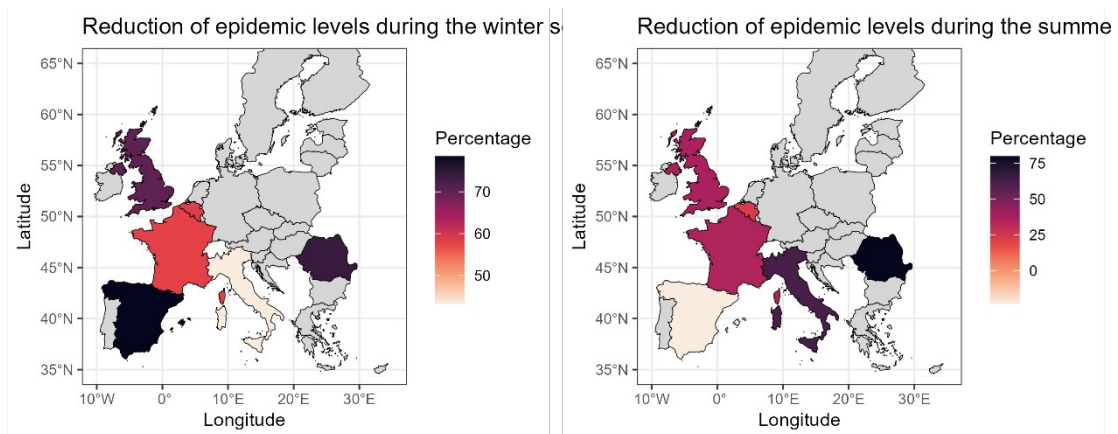


Figure 35: the reduction and increases in Influenza in the Patient-level

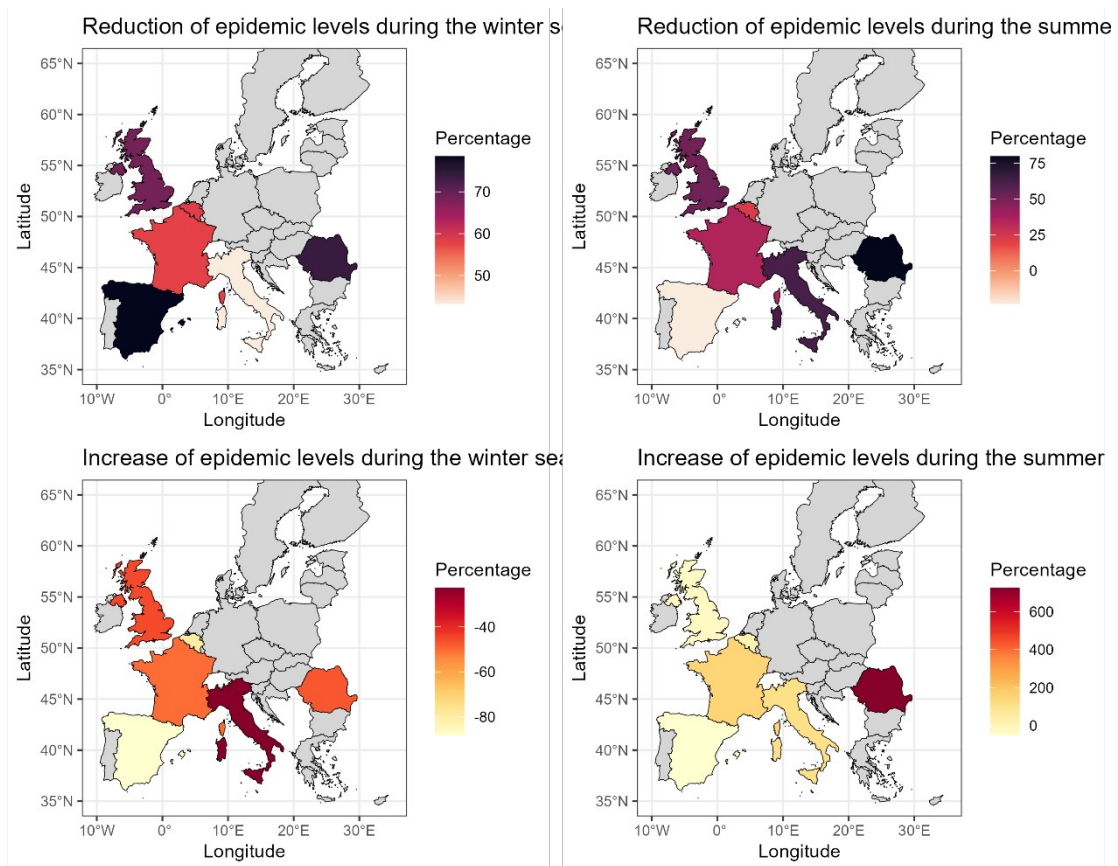


Figure 36: the reduction and increases in Influenza in the Patient-level.

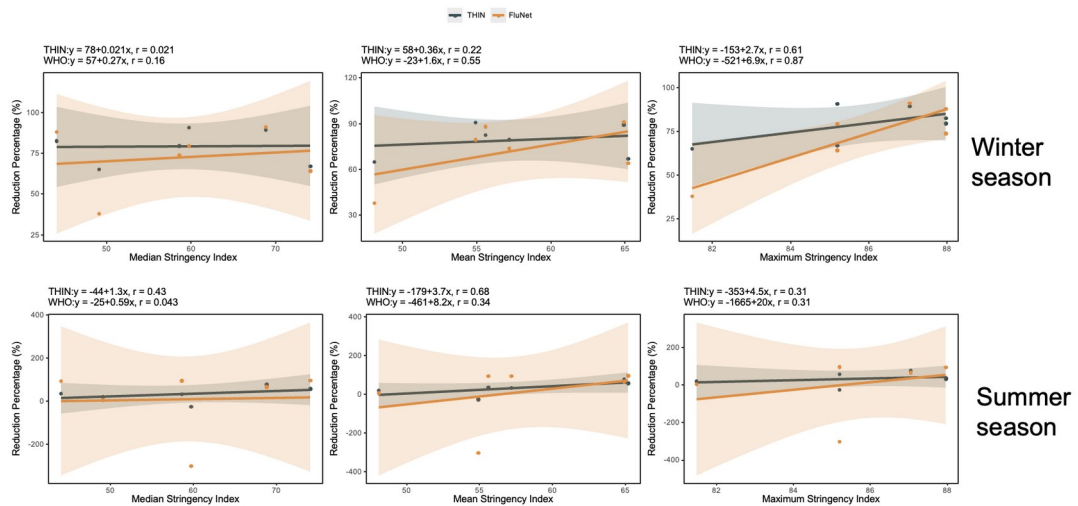


Figure 37: Relationship between Country-Specific reduction in Influenza Cases and Median, Mean, and Maximum Stringency Index During Relaxation Period in the patient-level and FluNet Data

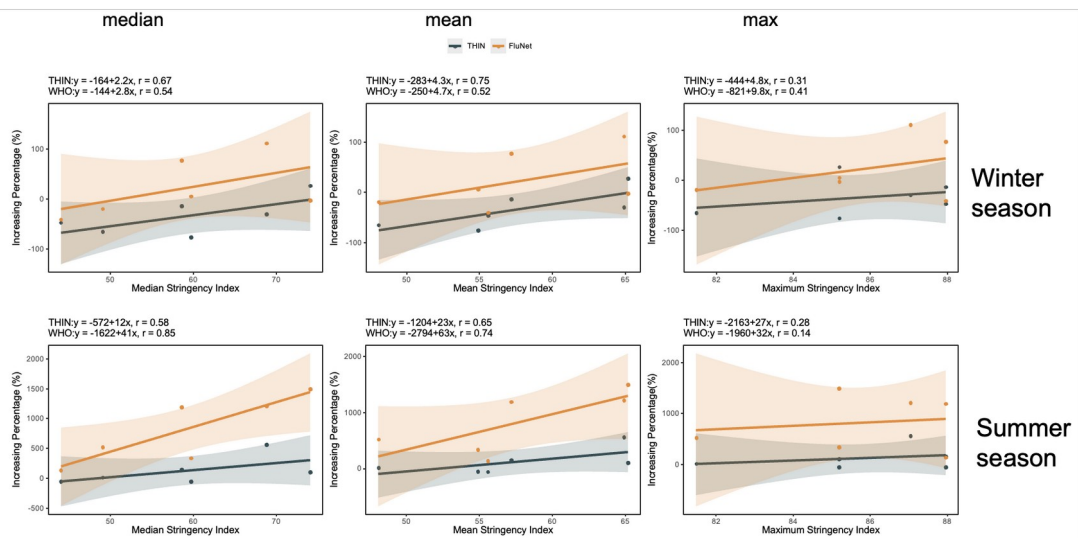


Figure 38: Relationship between Country-Specific Increase in Influenza Cases and Median, Mean, and Maximum Stringency Index During Relaxation Period in the patient-level and FluNet Data

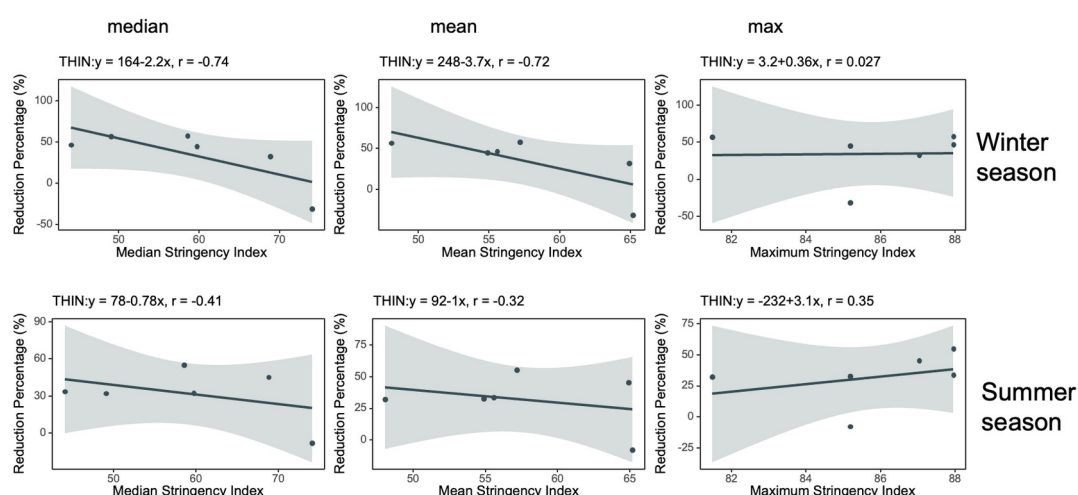


Figure 39: Relationship between Country-Specific reduction in pneumonia Cases and Median, Mean, and Maximum Stringency Index During Relaxation Period in the Patient-level

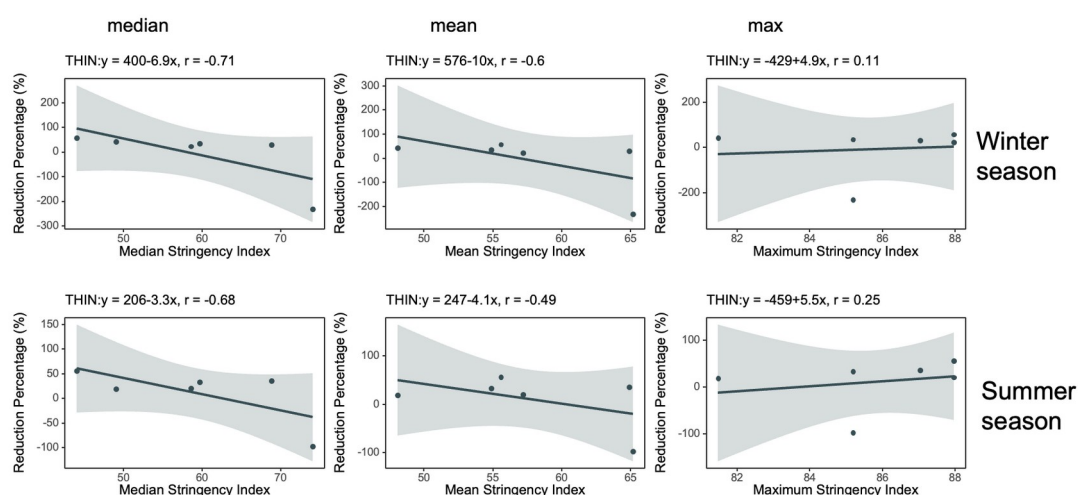


Figure 40: Relationship between Country-Specific reduction in chronic obstructive pulmonary disease (COPD) Cases and Median, Mean, and Maximum Stringency Index During Relaxation Period in the Patient-level.

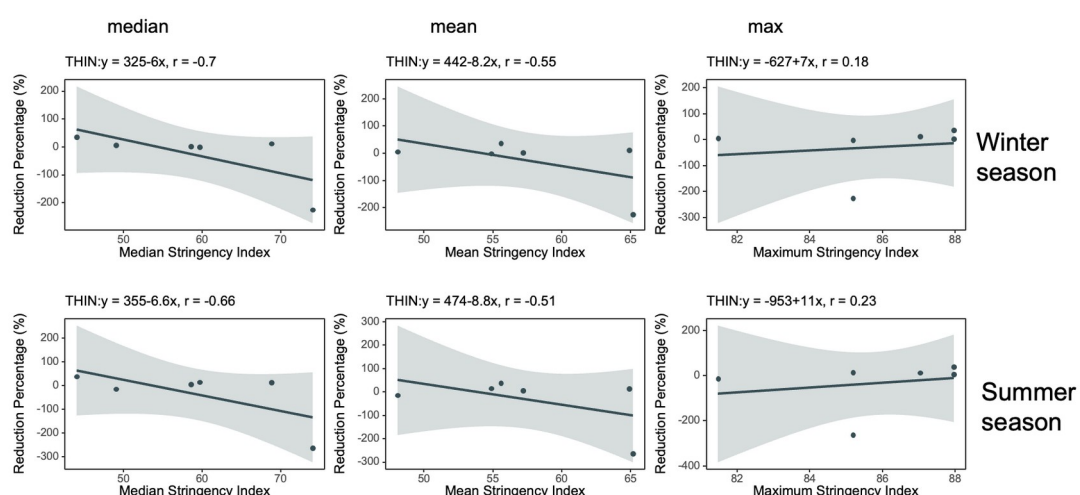


Figure 41: Relationship between Country-Specific reduction in hypertension Cases and Median, Mean, and Maximum Stringency Index During Relaxation Period in the Patient-level.