

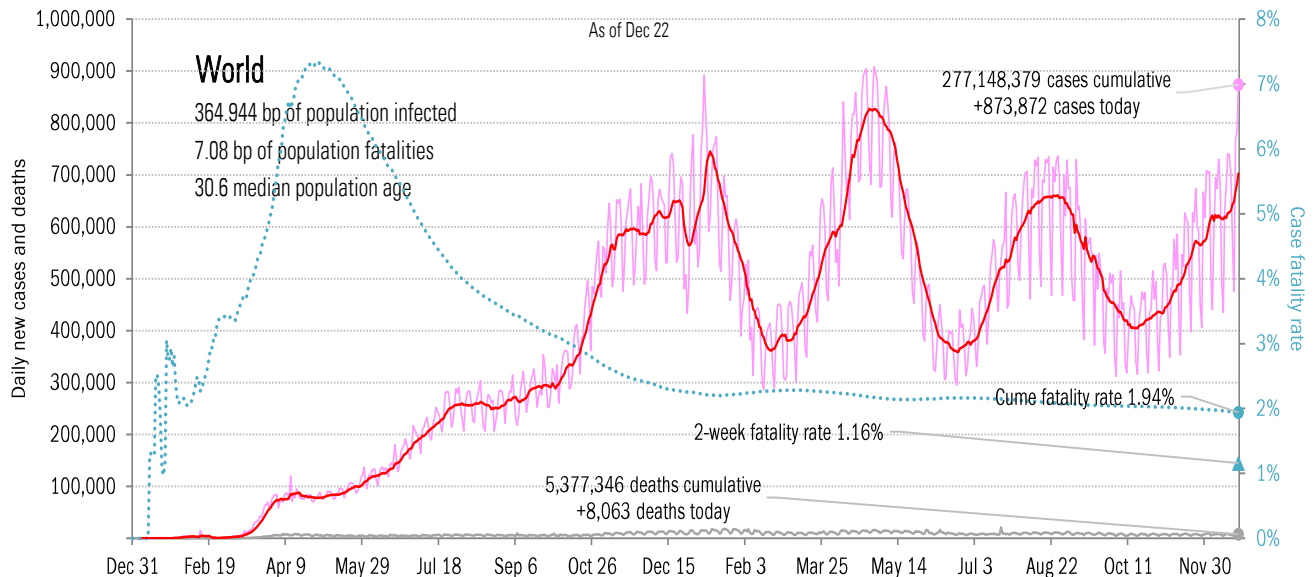
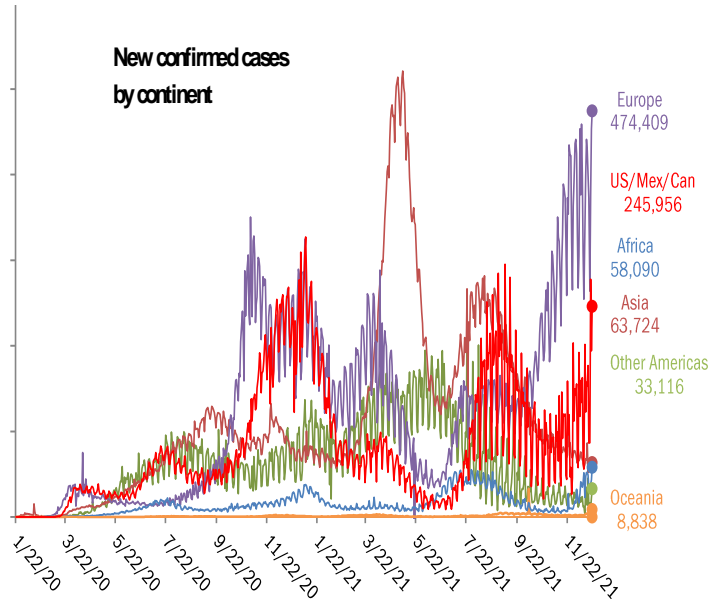
Data Insights: Covid-2019 Monitor

Thursday, December 23, 2021

The global scorecard

Cases: **7-day average** and **daily** Deaths: Daily

The worst ten countries			
New cases		New Deaths	
United States	+228,117	United States	+2,051
United Kingdom	+105,790	Russia	+993
France	+84,312	Poland	+777
Spain	+60,041	India	+434
Germany	+44,313	Germany	+425
Italy	+36,326	Ukraine	+328
Russia	+25,038	Mexico	+245
South Africa	+21,098	Vietnam	+210
Turkey	+19,095	Turkey	+179
Poland	+18,013	France	+170
+642,143		+5,812	
World	+873,872	World	+8,063
Top ten	73%	Top ten	72%



Source: [Johns Hopkins](#), TrendMacro calculations

For more information contact us:

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 Thomas Demas: 704 552 3625 tdemas@trendmacro.com

The US scorecard

Cases: 7-day average and daily Deaths: Daily

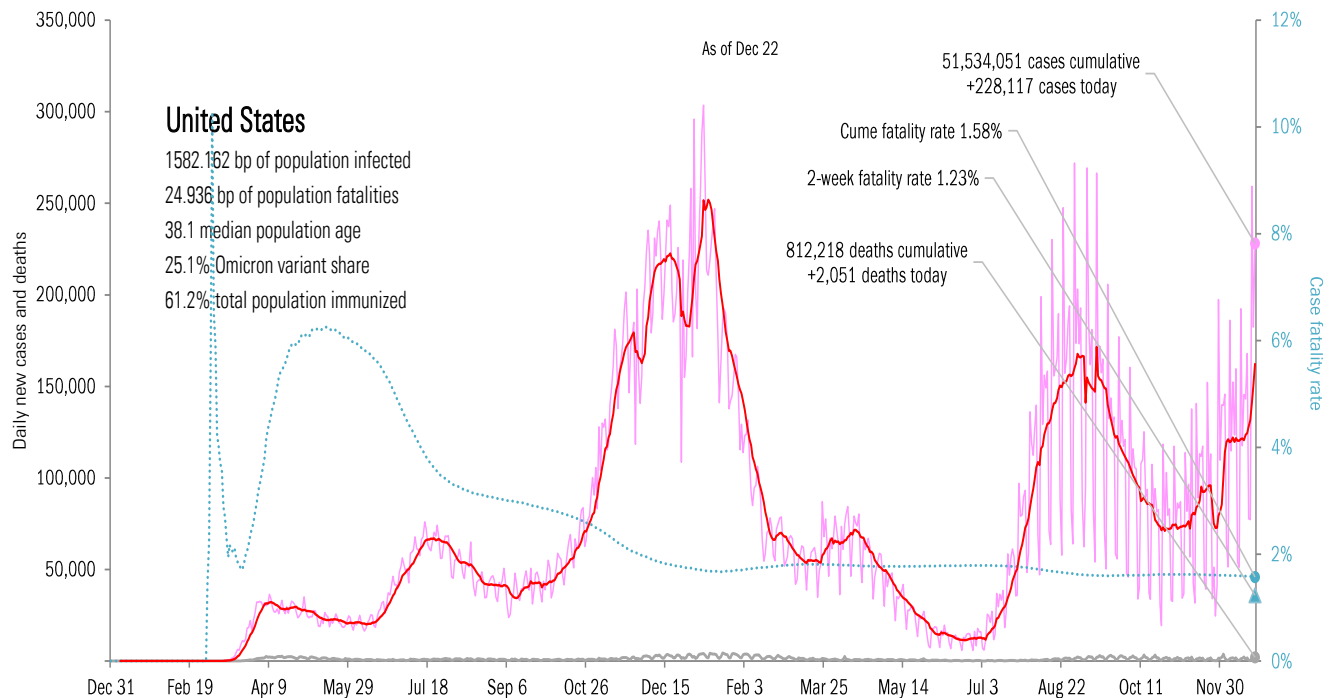
The ten worst US states

New cases			New Deaths			New in hospital			Cum cases			Cum deaths			Cum in hospital			Hospital use		ICU use	
NY	+28,243		MI	+444		FL	+174		CA	5,249,273		CA	75,958		TX	393,433		RI	88%	KY	92%
IL	+16,581		PA	+168		NY	+86		TX	4,464,706		TX	75,238		CA	328,861		PA	86%	NM	90%
MI	+16,216		IA	+119		GA	+68		FL	3,787,721		FL	62,413		FL	328,545		MA	85%	R	90%
CH	+12,864		IN	+88		IL	+58		NY	3,035,474		NY	58,796		NY	183,435		GA	84%	IN	87%
CA	+12,195		TX	+82		LA	+53		IL	2,002,360		PA	35,783		GA	166,502		WA	83%	MO	87%
NJ	+11,906		CA	+80		NJ	+41		PA	1,913,959		GA	31,124		CH	148,450		AZ	83%	NE	87%
TX	+11,190		AZ	+74		MD	+38		CH	1,880,588		IL	29,790		PA	138,213		MI	83%	AL	87%
PA	+9,838		NY	+71		MA	+34		GA	1,714,093		NJ	28,790		IL	120,229		MO	82%	MI	87%
MA	+8,602		TN	+69		NC	+33		MI	1,645,578		MI	28,345		KY	118,476		MD	82%	AR	86%
GA	+7,610		IL	+66		VA	+30		NC	1,607,378		CH	28,277		MI	113,755		CT	81%	DE	86%
+135,245			+1,261			+615			27,301,130			454,514			2,039,899						
All states +228,117			+2,051			+582			All states 51,534,051			812,218			3,685,734			All states 70%		67%	
Top ten 59%			61%			106%			Top ten 53%			56%			55%			Median 78%		80%	

Some states not reporting

Five most improved US states

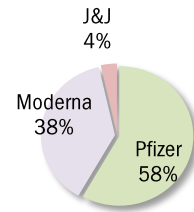
Fewer daily cases		Fewer new deaths		Fewer new hospitalizations		Most pop immunity growth	
MN	-4,579	CH	-249	AR	-54	MP	+40 bp
DC	-3,394	AZ	-149	KS	-30	DE	+30 bp
CT	-2,634	FL	-94	DE	-23	UT	+30 bp
MD	-2,146	MO	-81	CO	-17	H	+20 bp
IA	-1,210	CO	-52	SC	-17	AL	+10 bp



Source: [Johns Hopkins](#), [Dept. of Health and Human Services](#), [CDC](#), TrendMacro calculations

Rolling out the vaccines in the US and the world

Administered	Cumulative	Today	Immunity	Full	Partial
Doses	512,140,951	+1.666 million	US	61.2%	72.8%
Boosters	64,157,233	+0.981 million	UK	69.1%	75.6%
	One dose	% Pop	Immune	% pop	New immune today
Total population	247,547,001	74%	209,948,138	63%	+0.243 million
Age 12 to 17	15,036,329	63%	12,668,357	53%	+0.016 million
Age 18 to 64	167,582,518	82%	142,984,436	70%	+0.120 million
Age 65 and over	57,669,124	100%	49,698,582	91%	+0.019 million



State	Best
At least partial immunity as % population	Middle
Full immunity as % population	Worst

Every American >18 immunized in **79 days** by Mar 11, 2022
 74.5% of population >18 immunized
 18.1% previously tested positive
92.6% vs 60% adult herd immunity

France	72.5%	77.9%
Spain	80.9%	84.0%
Germany	69.9%	73.0%
Italy	73.8%	79.6%
Australia	76.2%	79.0%
Israel	63.1%	69.8%
Canada	77.1%	83.0%
Japan	78.1%	79.5%
Africa	8.6%	13.3%
India	40.1%	59.7%
Brazil	66.5%	77.5%
China	82.6%	84.8%

Global data differs due to sources, timing

AK
64.6%
56.0%

WI
67.7%
61.6%

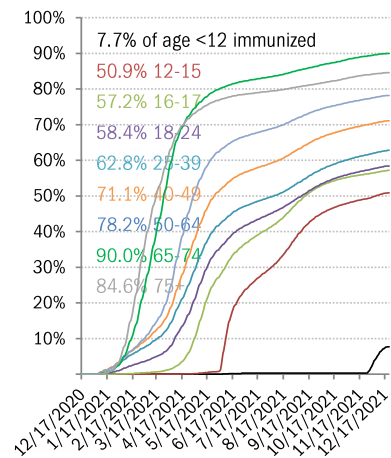
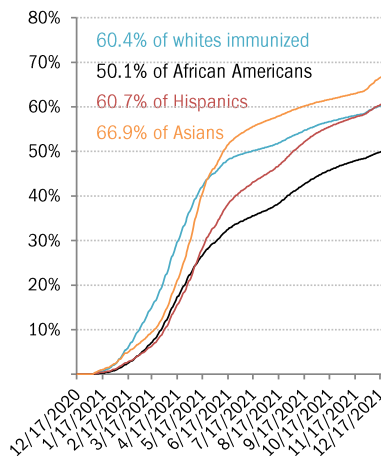
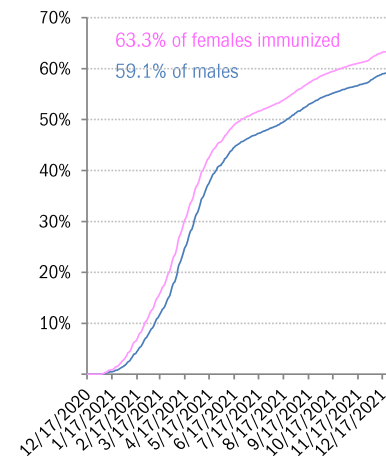
As of Dec 22

ME
85.0%
75.3%

WA 75.1% 67.5%	ID 51.9% 46.1%	MT 61.6% 53.7%	ND 61.8% 52.2%	MN 70.9% 65.0%	IL 71.8% 64.0%	MI 63.0% 56.4%	NY 82.7% 71.2%	VT 88.4% 76.8%	NH 95.0% 66.5%	
OR 73.5% 66.1%	NV 68.7% 56.1%	WY 55.4% 47.2%	SD 70.1% 56.6%	IA 64.4% 58.6%	IN 57.5% 51.8%	OH 60.1% 54.9%	PA 77.1% 63.4%	NJ 82.6% 70.0%	MA 89.6% 74.1%	
CA 81.9% 65.6%	UT 66.8% 58.3%	CO 73.9% 65.7%	NE 65.9% 59.4%	MO 61.9% 52.8%	KY 62.0% 53.9%	WV 89.7% 71.6%	VA 78.2% 67.6%	MD 79.6% 70.0%	CT 87.6% 74.2%	RI 87.6% 75.9%
	AZ 66.6% 56.6%	NM 79.9% 65.8%	KS 68.6% 56.6%	AR 62.3% 50.9%	TN 58.3% 51.1%	NC 75.0% 56.3%	SC 62.2% 52.8%	DC 86.9% 67.0%	DE 75.9% 63.8%	
			OK 65.3% 53.1%	LA 56.9% 50.0%	MS 55.2% 48.0%	AL 58.0% 47.3%	GA 60.6% 50.6%			
			TX 66.2% 56.6%					FL 73.9% 63.0%	PR 88.2% 76.6%	

HI
85.7%
63.1%

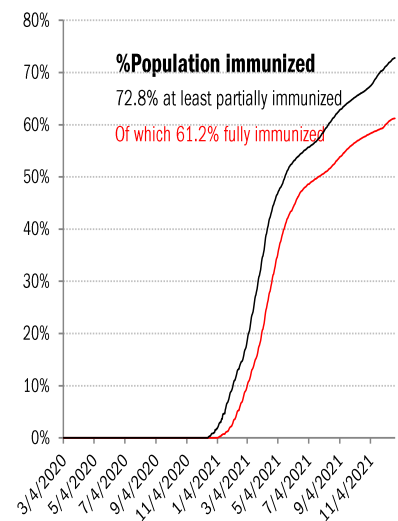
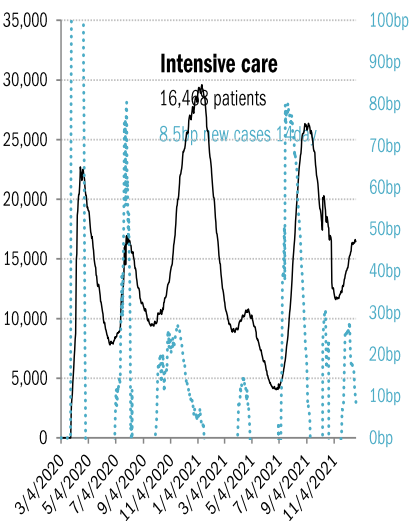
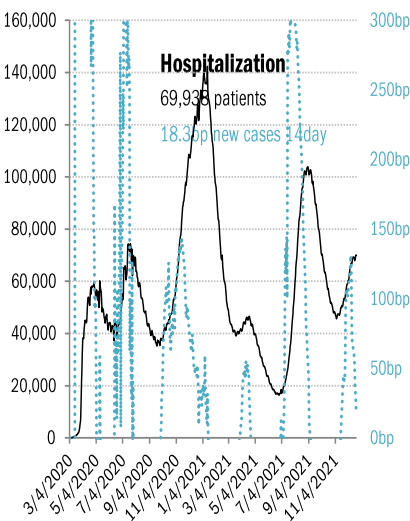
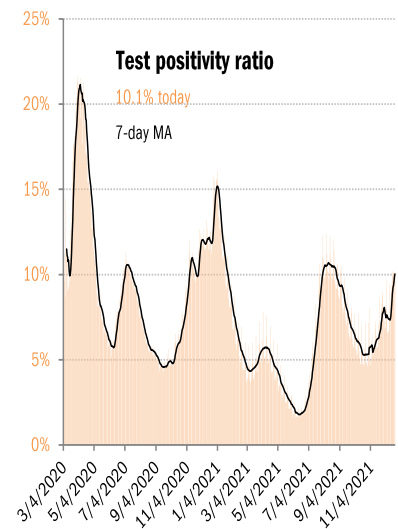
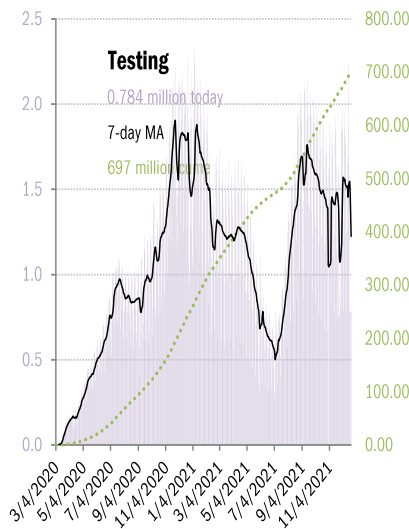
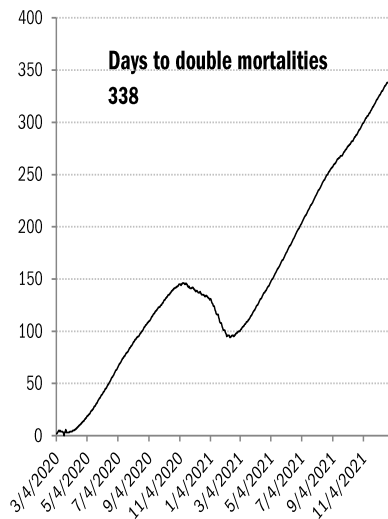
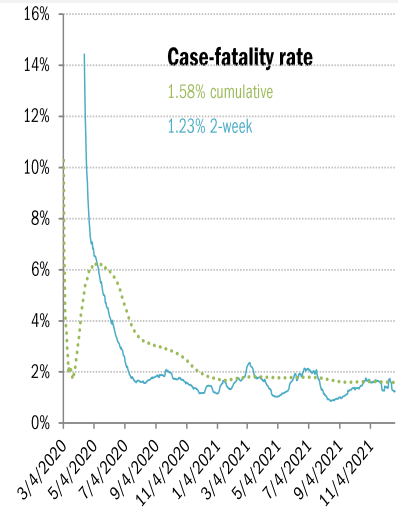
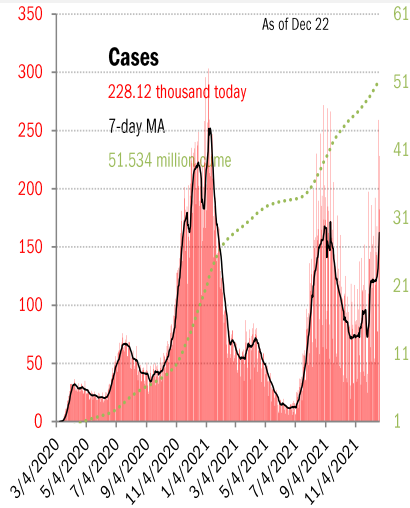
The demographics of US vaccination



Source: [CDC](#), [CDC](#), [Our World in Data](#), TrendMacro calculations

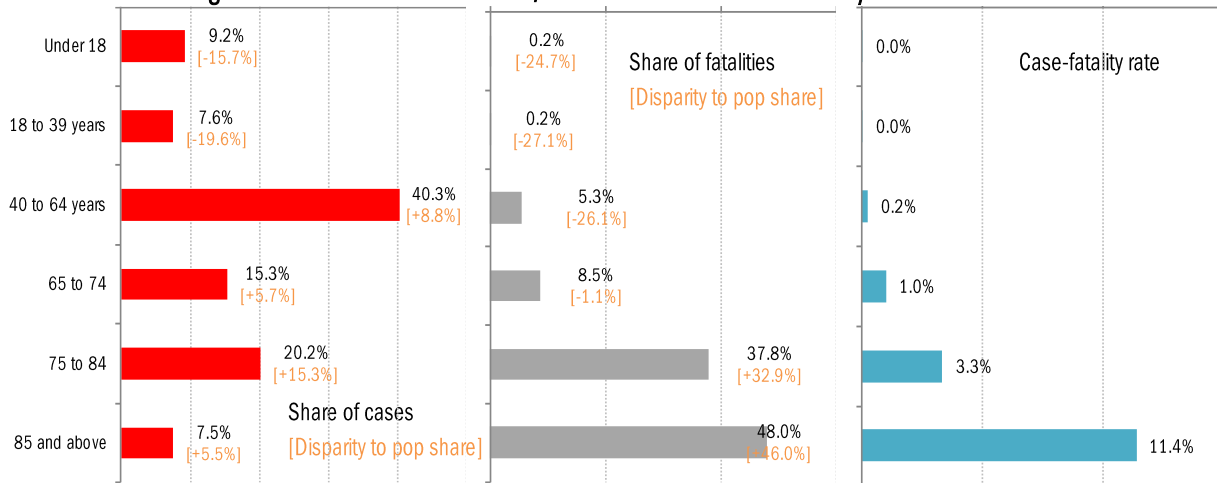
US deep-dive

National and state-by-state data do not line up because of different sources

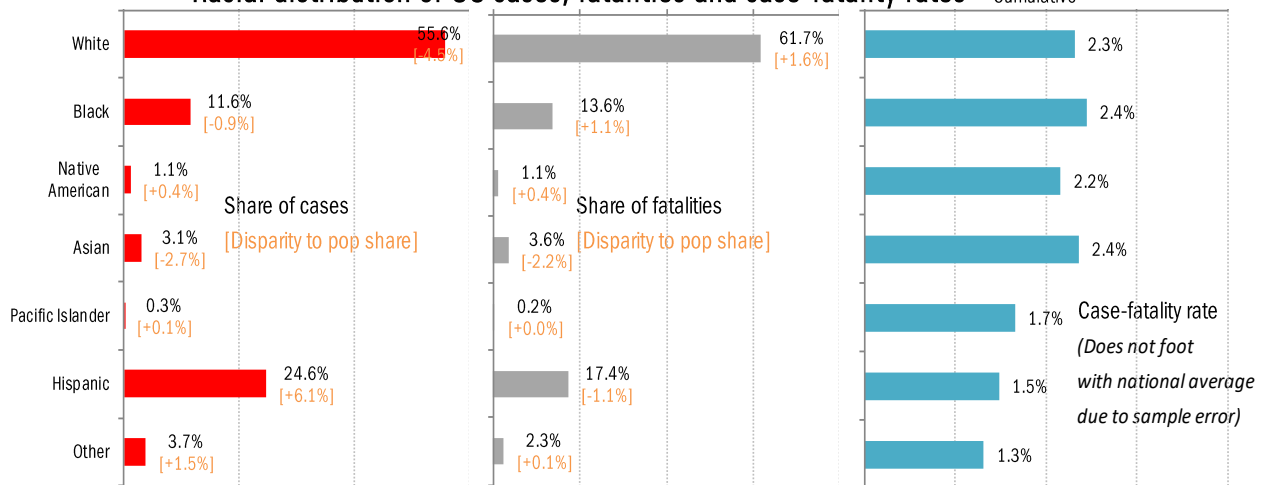


Source: [Johns Hopkins](#), [Covid Act Now](#), TrendMacro calculations

Age distribution of US cases, fatalities and case-fatality rates

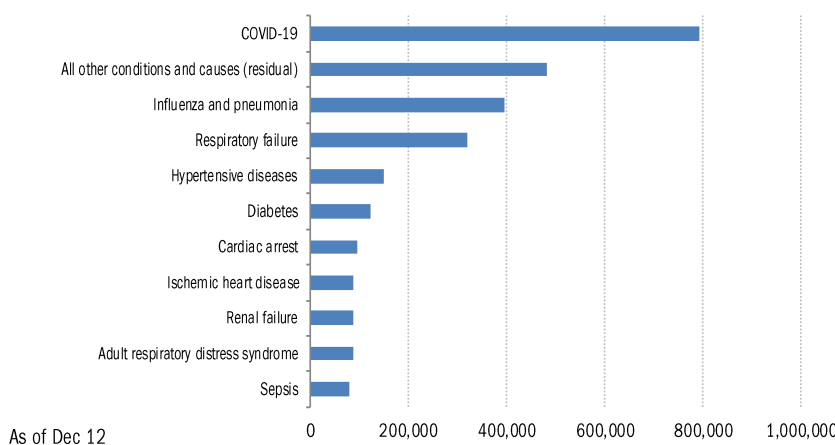


Racial distribution of US cases, fatalities and case-fatality rates



Comorbidities

Top-ten joint causes of Covid mortalities, cumulative



For over 5% of these deaths, COVID-19 was the only cause mentioned on the death certificate. For deaths with conditions or causes in addition to COVID-19, on average, there were 4.0 additional conditions or causes per death.

Source: Distributions [CDC](#), Comorbidities [CDC](#), TrendMacro calculations

Recommended reading

[Omicron Has 80% Lower Risk of Hospitalization in South Africa](#)

Janice Kew
Bloomberg
December 22, 2021

[Omicron Hospitalization Risk Is Far Below Delta's in Two Studies](#)

Naomi Kresge
Bloomberg
December 22, 2021

[Series of preclinical studies supports the Army's pan-coronavirus vaccine development strategy](#)

US Army
December 16, 2021

[US Army Creates Single Vaccine Against All COVID & SARS Variants, Researchers Say](#)

Tara Kopp
Defense One
December 21, 2021

[Mixed Messaging from U.S. Government on China's Biological Weapons Program](#)

Clare M. Lopez
American Greatness
December 21, 2021

[Tuskegee Tony](#)

Lloyd Billingsley
American Greatness
December 21, 2021

[Remarks by President Biden on the Fight Against COVID-19](#)

The White House
December 21, 2021

[Early assessment of the clinical severity of the SARS-CoV-2 Omicron variant in South Africa](#)

Nicole Wolter
medRxiv
December 21, 2021

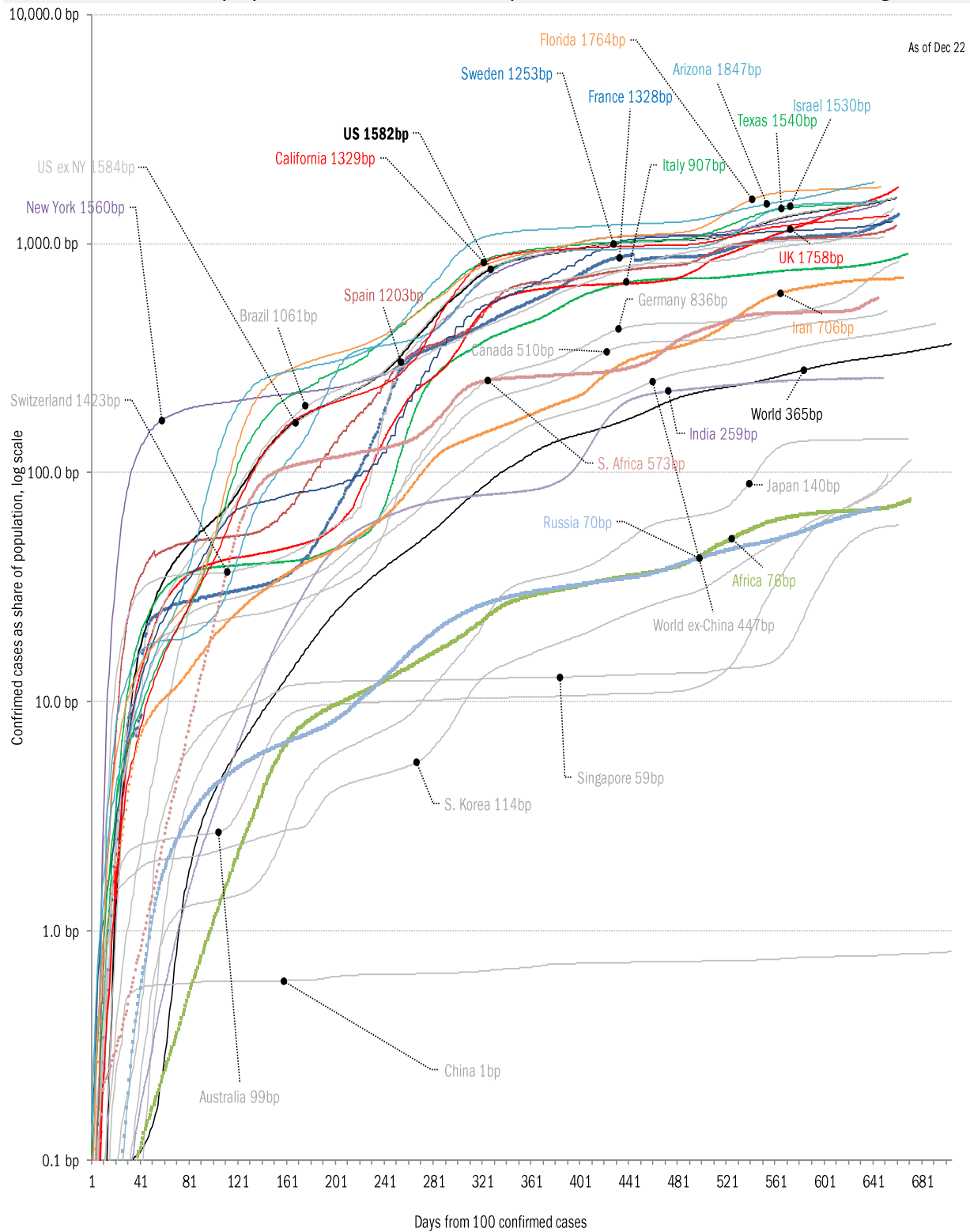
Meme of the day



Santa To Replace 'Naughty Or Nice' List With 'Vaxxed Or Unvaxxed' List

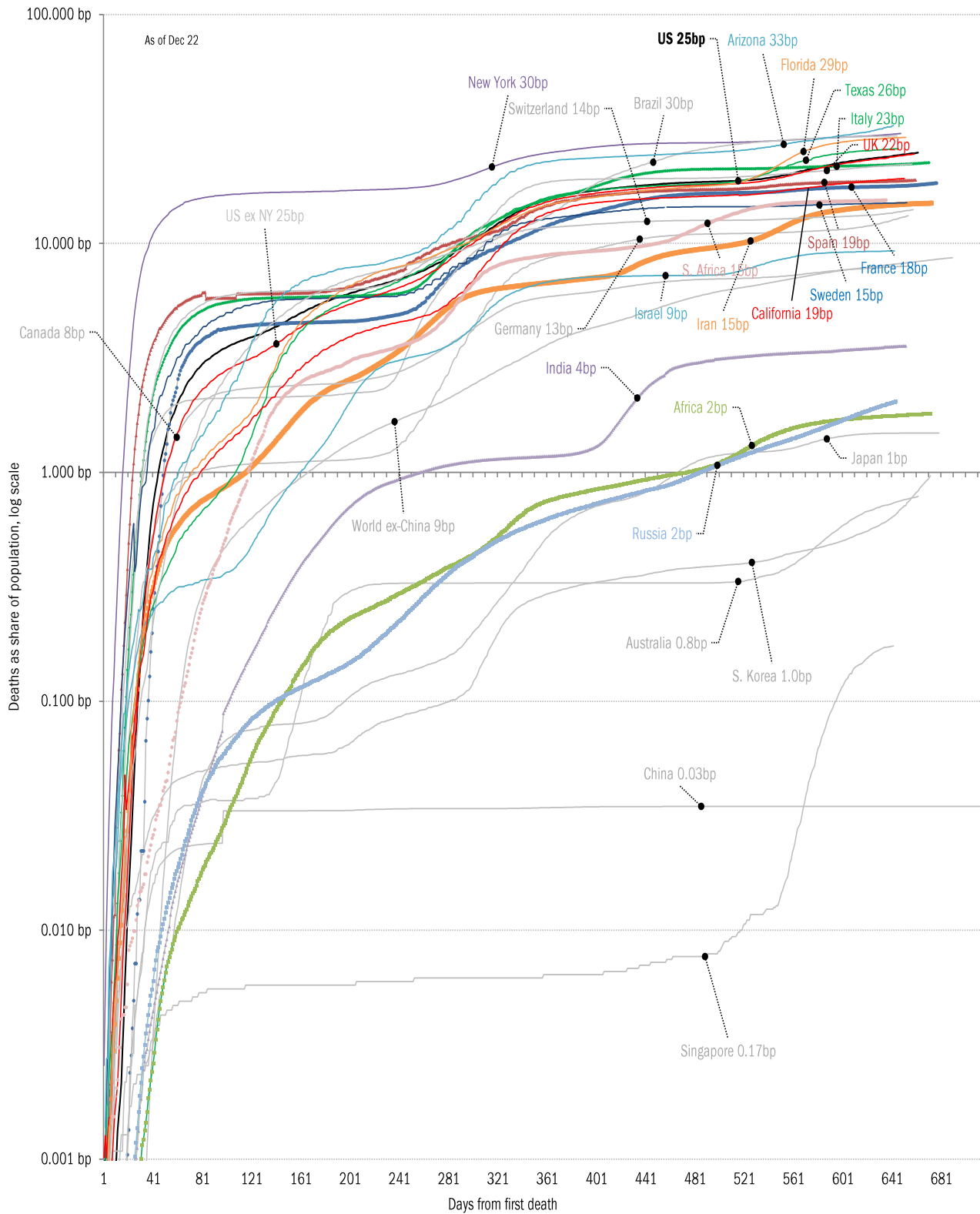
Source: Our beloved clients, [Power Line blog "The Week in Pictures"](#) and [CTUP](#)

The coronavirus case accelerometer... tracking the world's infection curves
Share of infected population from first day with 100 confirmed cases, log scale



Source: [Johns Hopkins](#), TrendMacro calculations

The coronavirus mortality accelerometer ... tracking the world's fatality curves
Share of deceased population from day of first fatality, log scale

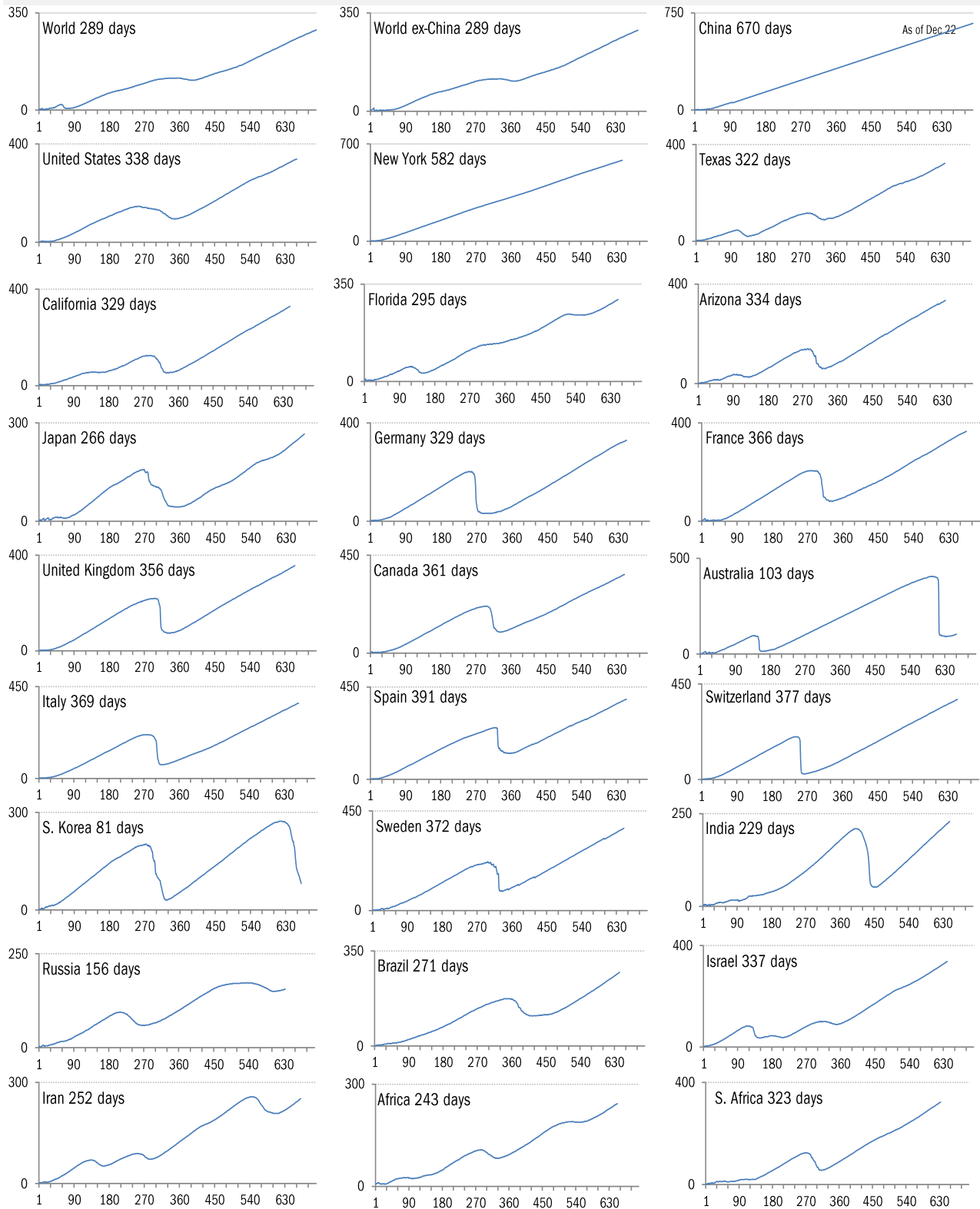


Source: [Johns Hopkins](#), TrendMacro calculations

"Exponential"? Our most reliable evidence of the rate of spread of Covid-19

Vertical: days to double deaths Horizontal: days from first death

Flat indicates exponential spread Declining indicates supra-exponential spread Rising indicates sub-exponential spread

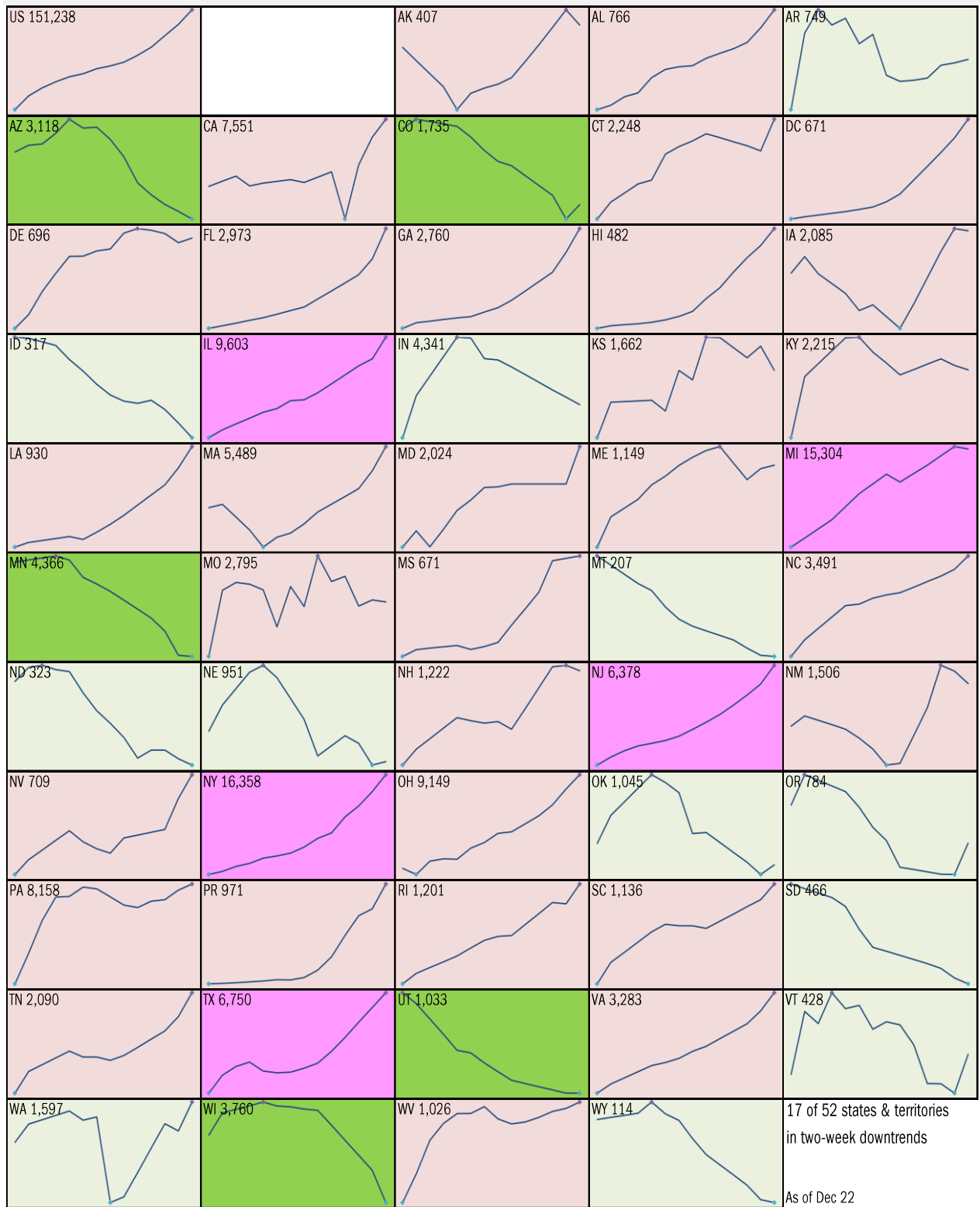


Source: [Johns Hopkins](#), TrendMacro calculations

Requirement to [Open Up America Again](#): 14-day "downward trajectory" in new cases

14-day moving average, last 14 days *Most recent value displayed* ● High ● Low

■ Downward trajectory ■ Five best ■ Upward trajectory ■ Five worst

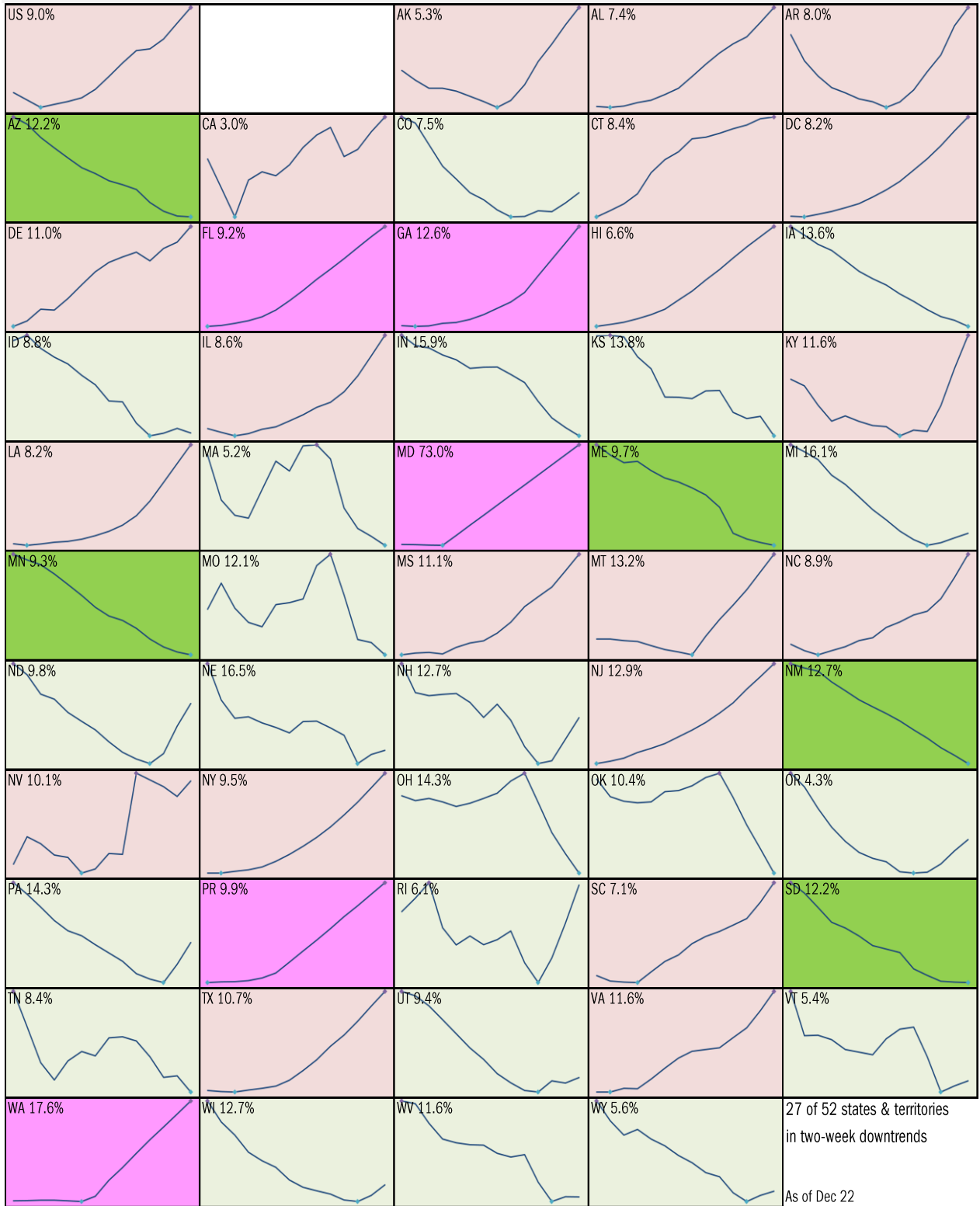


Source: [Johns Hopkins](#), TrendMacro calculations

Alt requirement to [Open Up America Again](#): 14-day “downward trajectory” in pos tests

14-day moving average, last 14 days Most recent value displayed ● High ● Low

■ Downward trajectory ■ Five best ■ Upward trajectory ■ Five worst

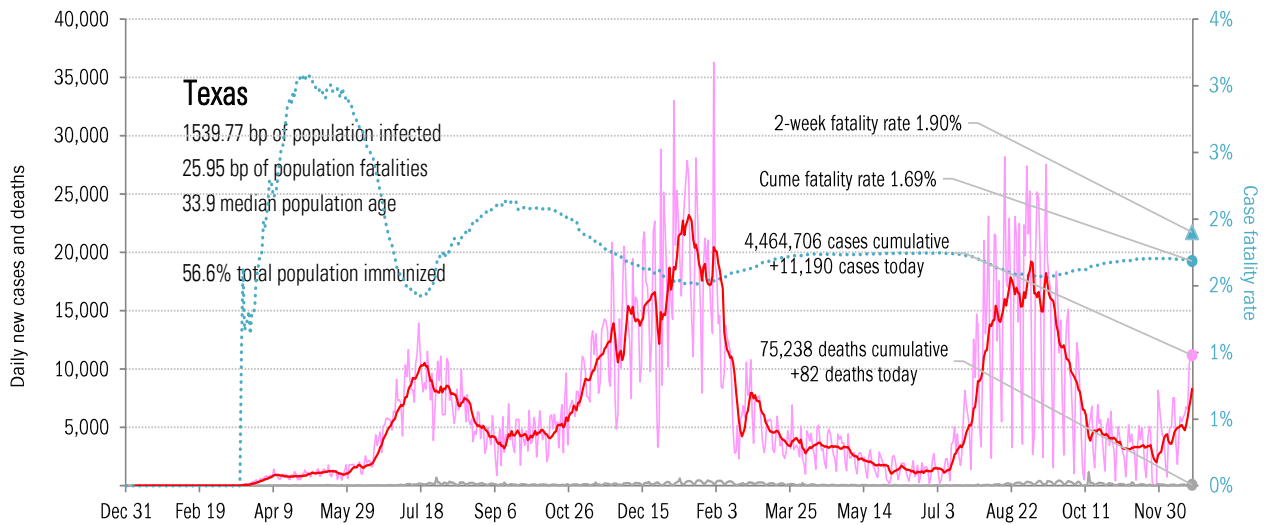
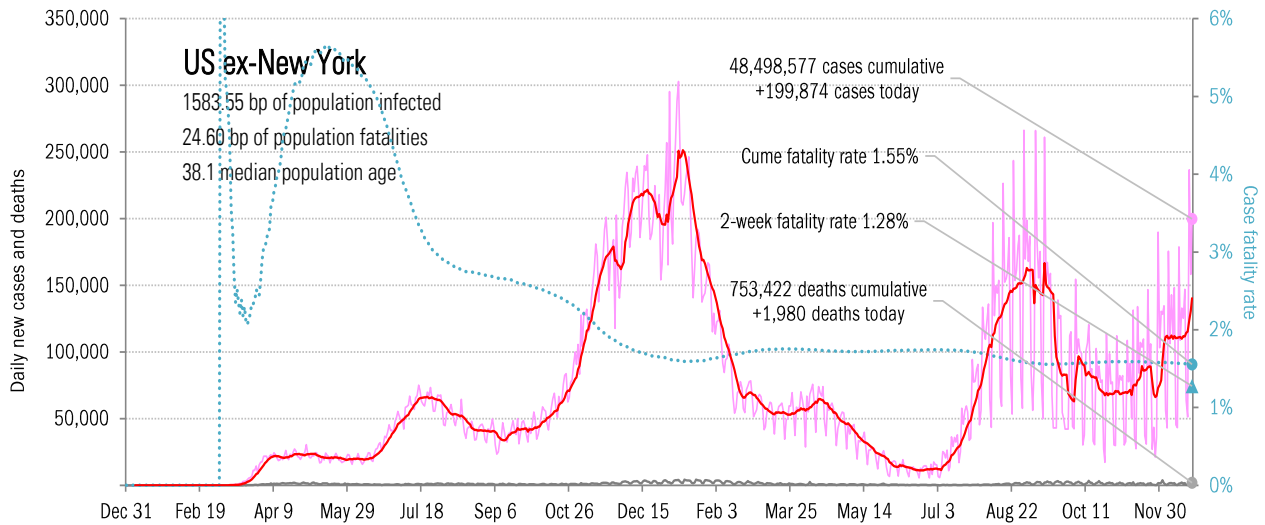
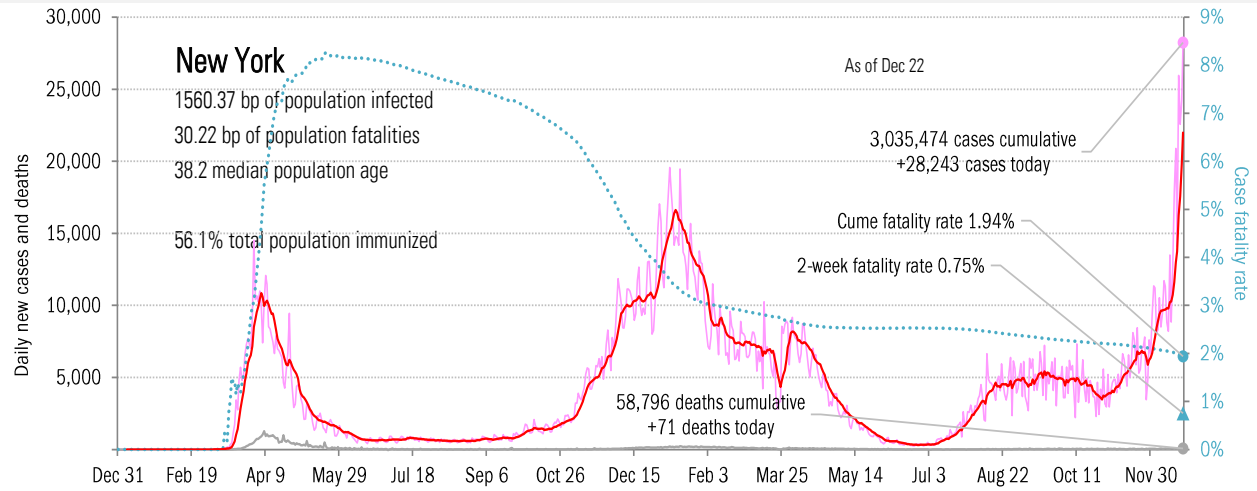


As of Dec 22

Source: [Covid Act Now](#), TrendMacro calculations

From Ground Zero to the Rio Grande

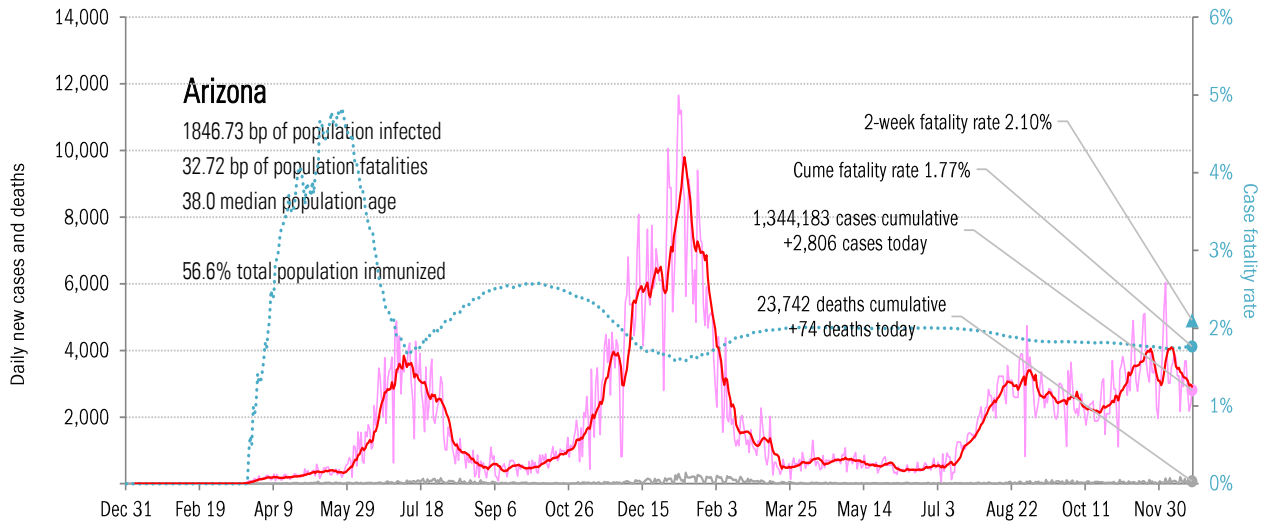
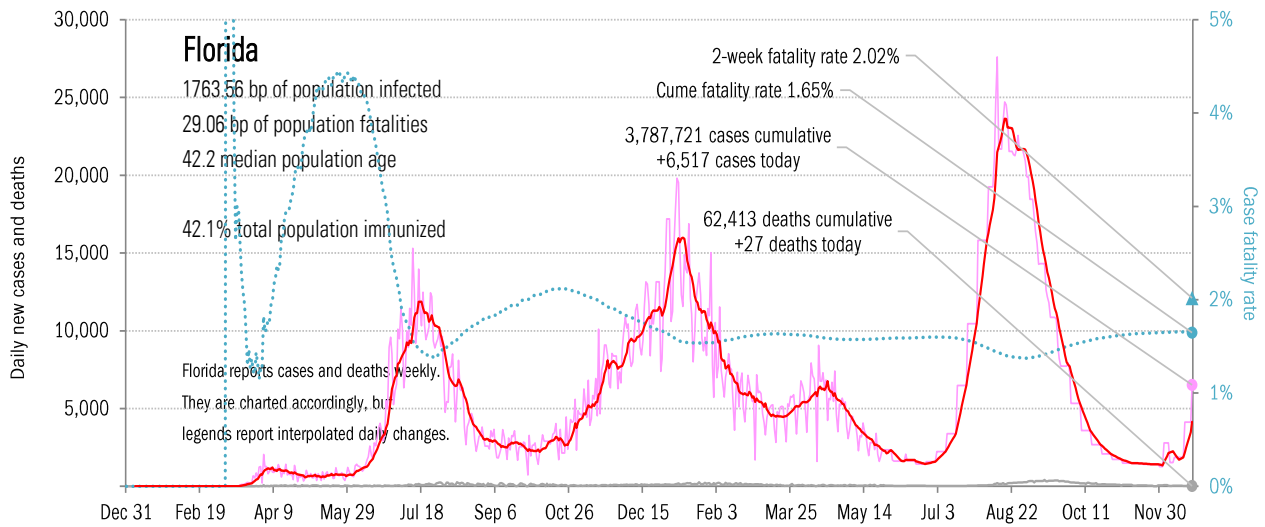
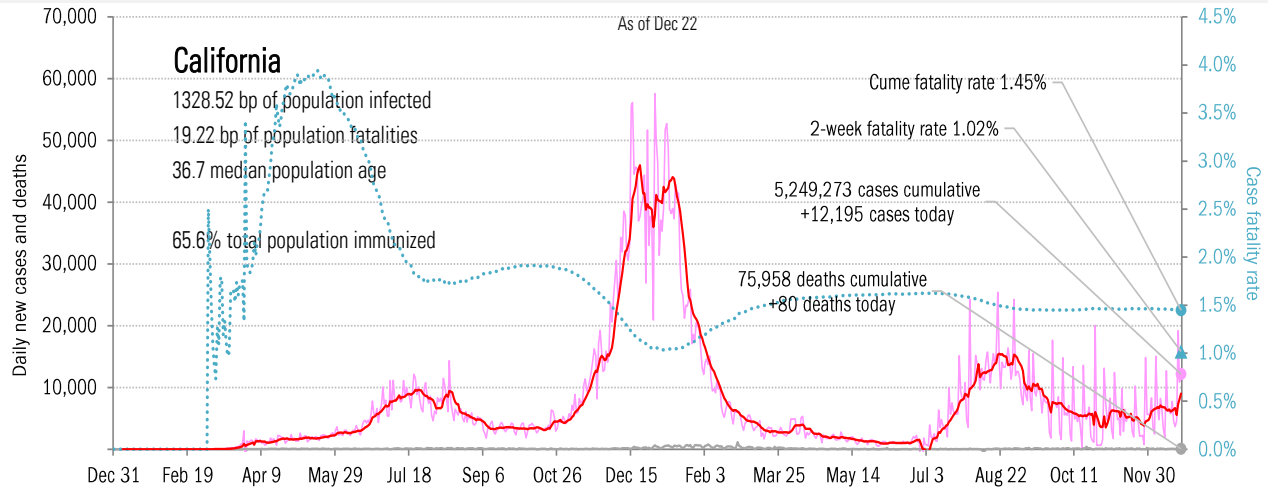
Cases: 7-day average and daily Deaths: Daily



Source: [Johns Hopkins](#), TrendMacro calculations

The sun-belt hot-spot states (other than Texas)

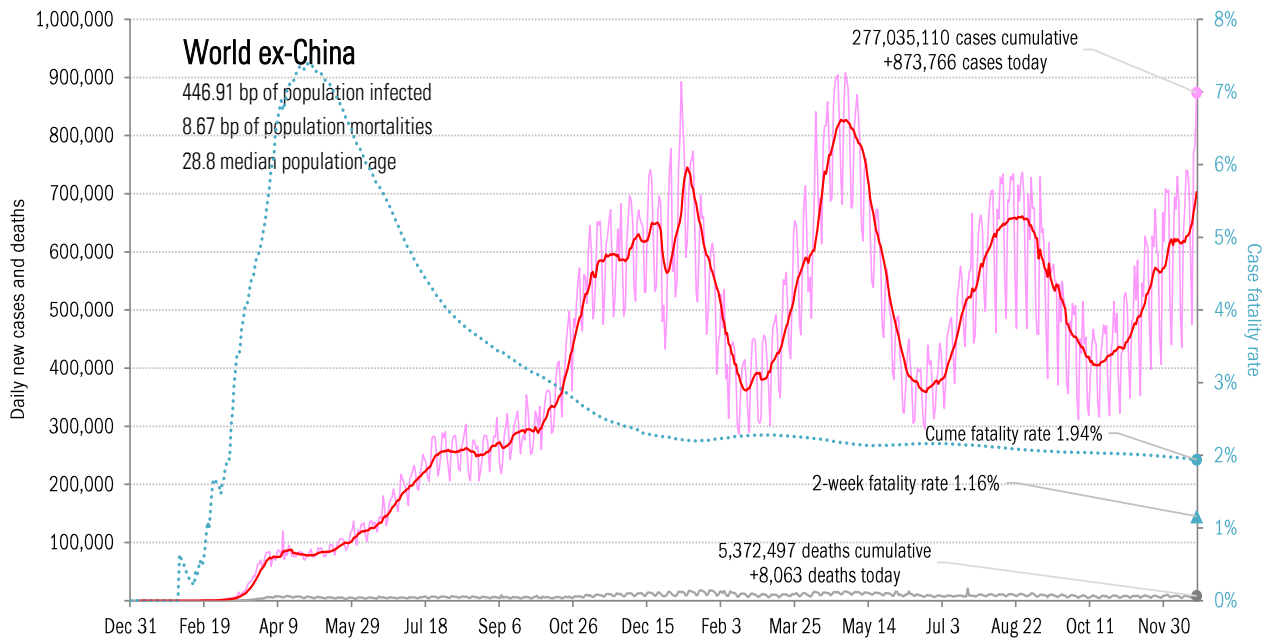
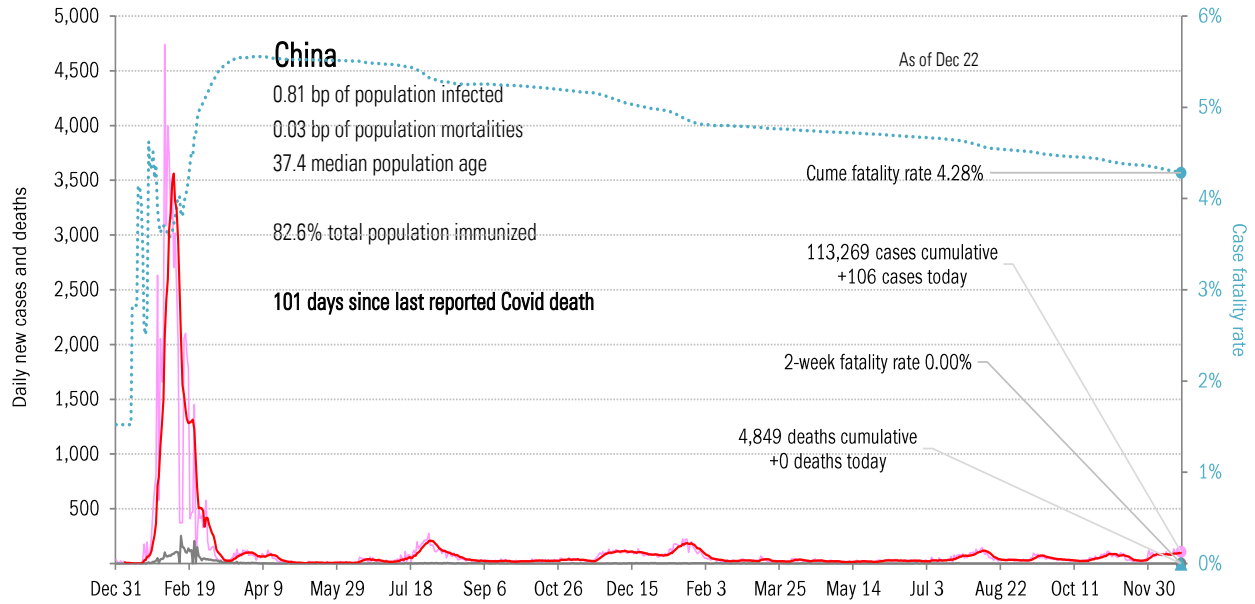
Cases: 7-day average and daily Deaths: Daily



Source: [Johns Hopkins](#), TrendMacro calculations

Patient zero... and then everyone else

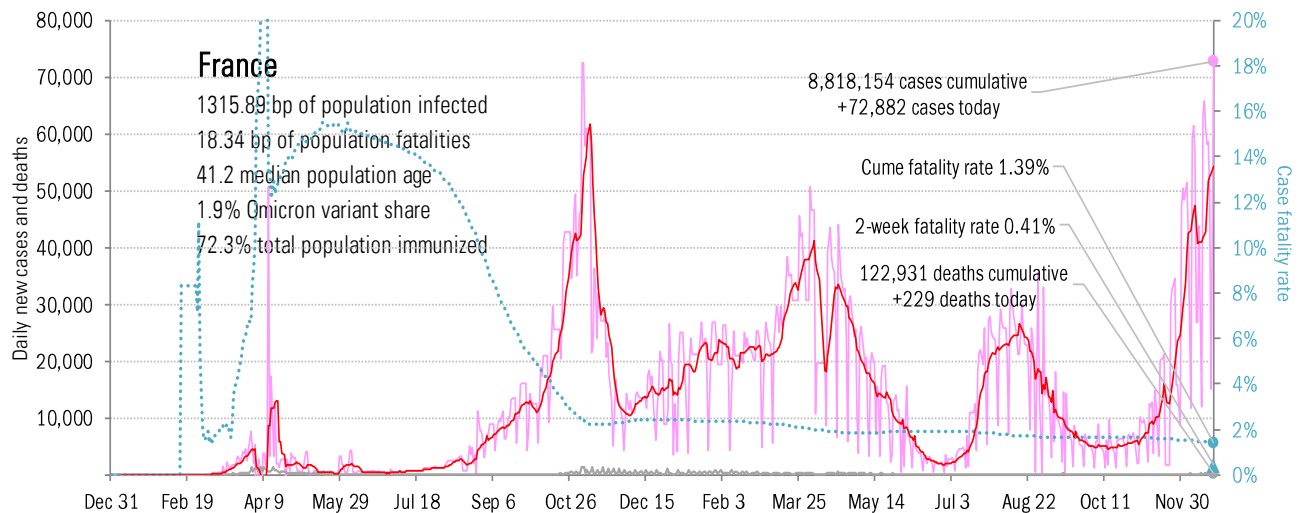
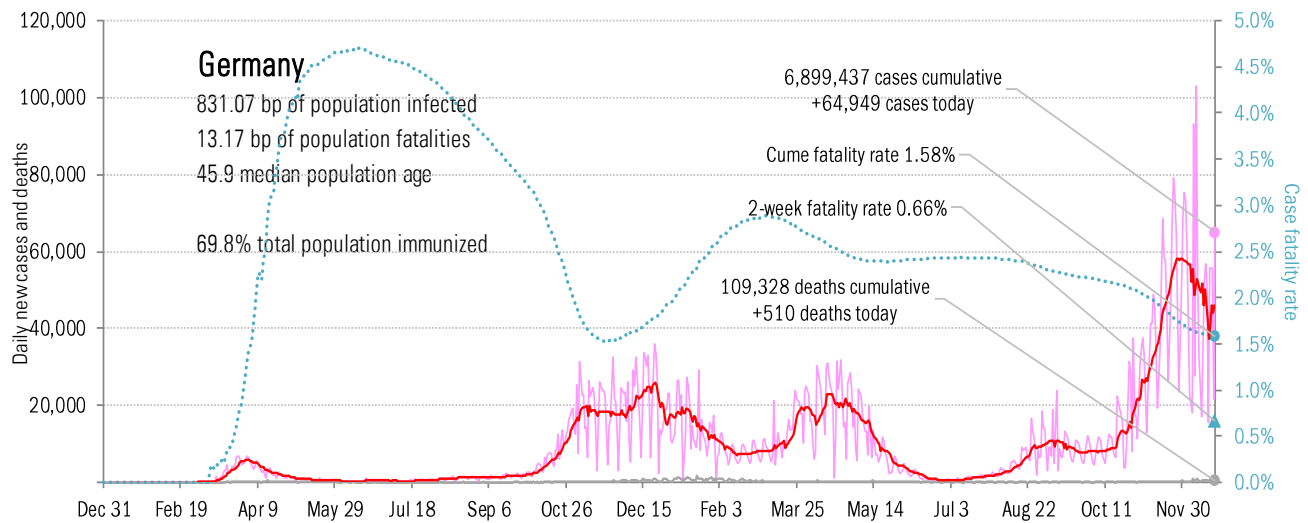
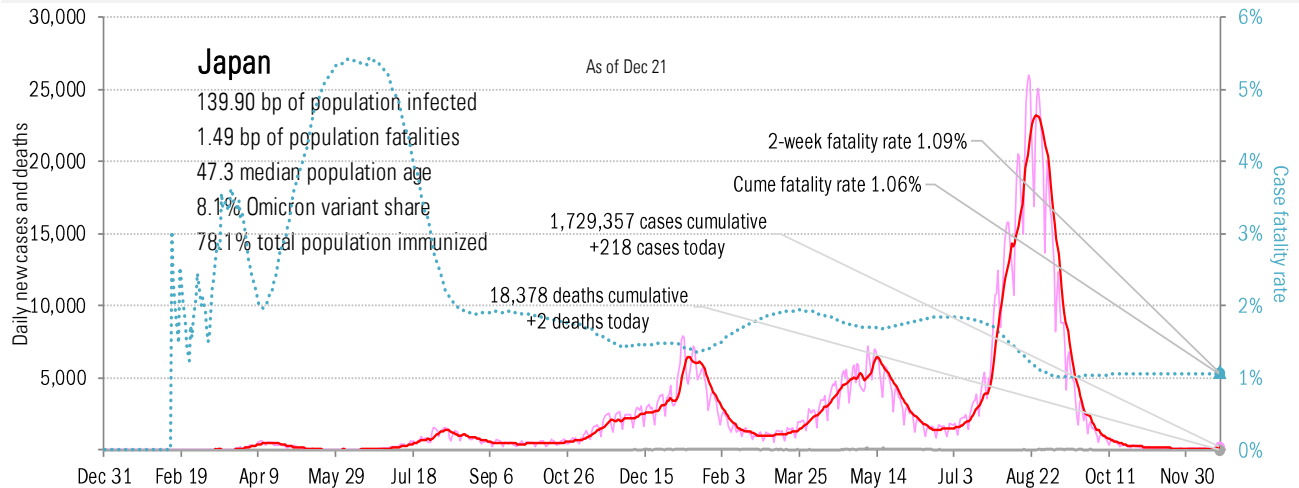
Cases: 7-day average and daily Deaths: Daily



Source: [Johns Hopkins](#), TrendMacro calculations

Impact in the largest economies

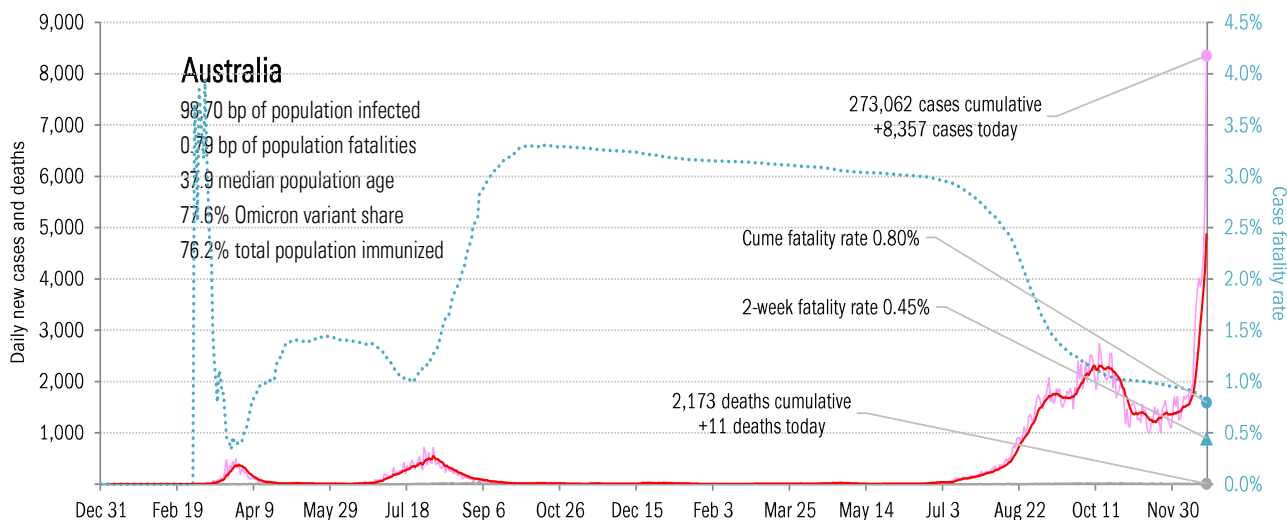
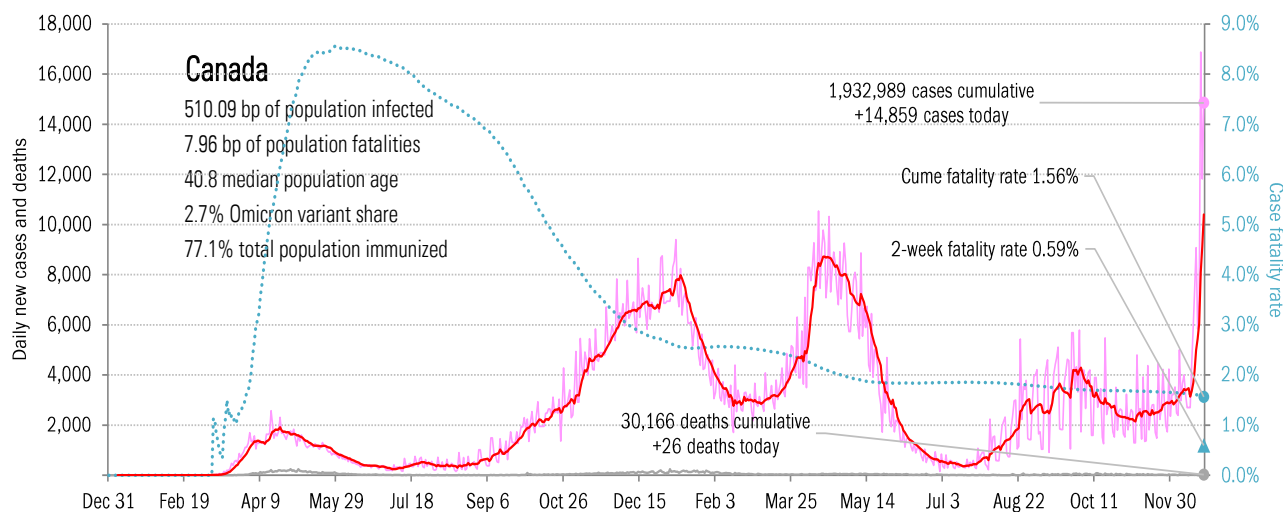
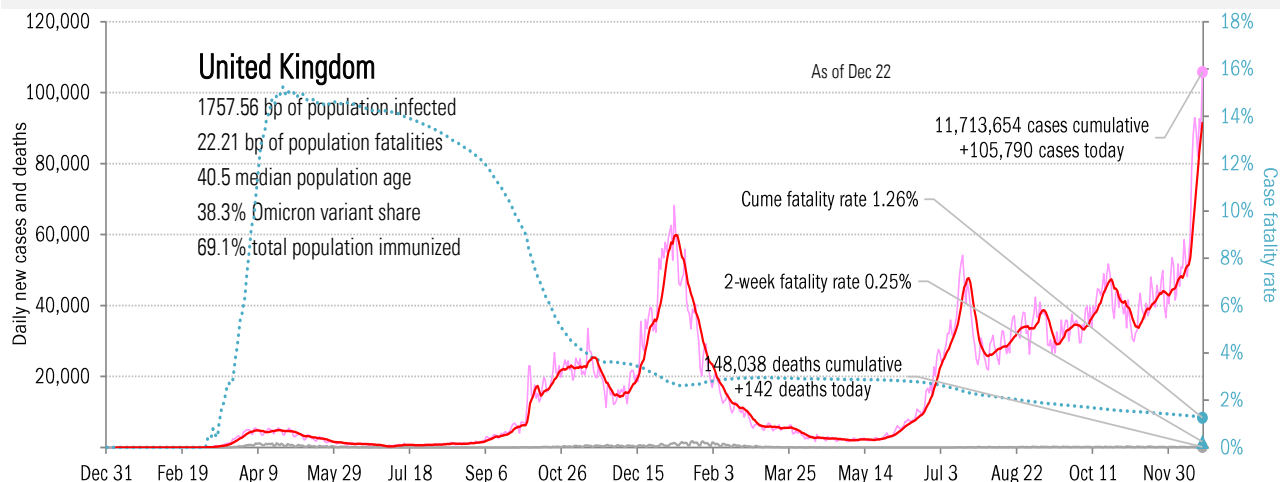
Cases: 7-day average and daily Deaths: Daily



Source: [Johns Hopkins](#), TrendMacro calculations

Impact in The Anglosphere

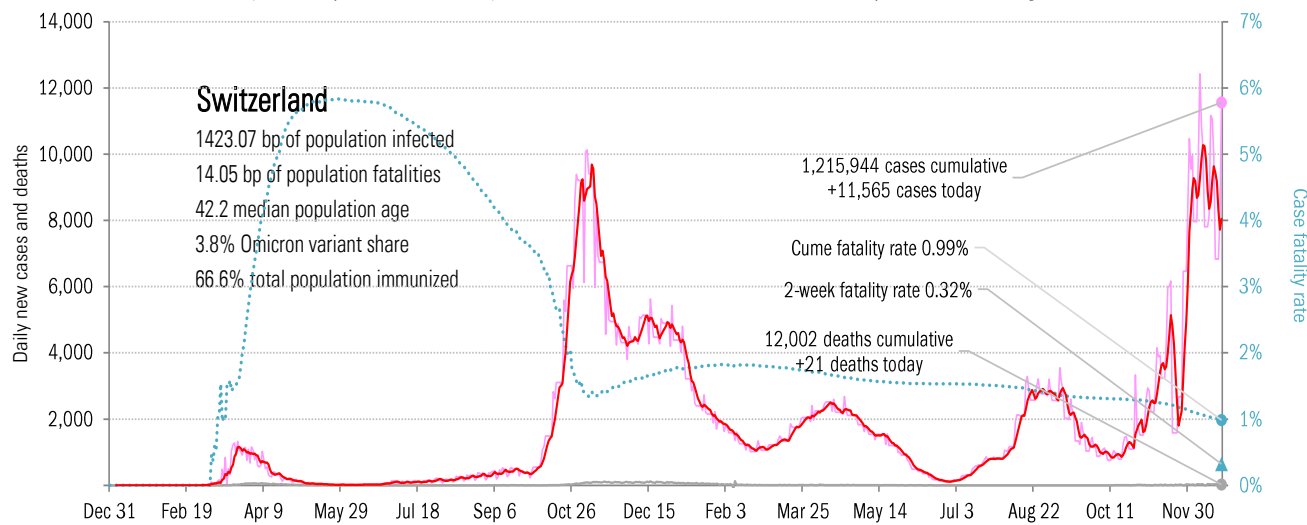
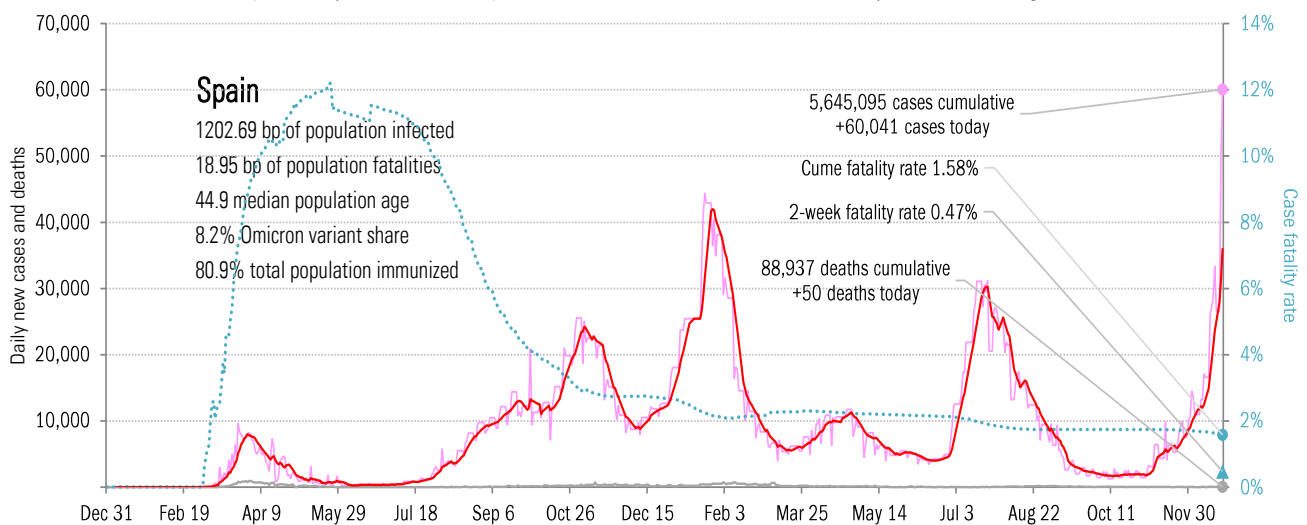
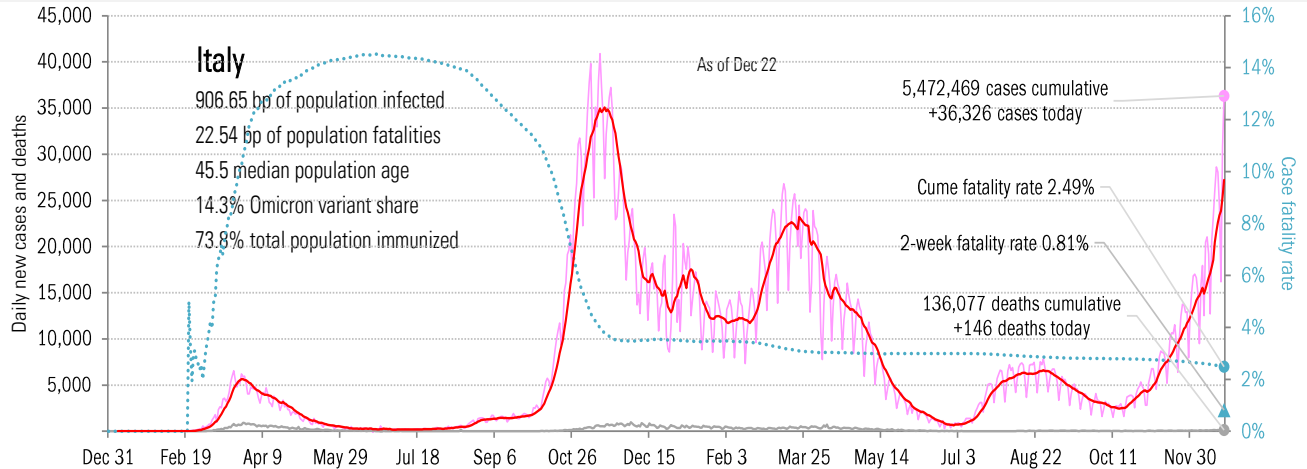
Cases: 7-day average and daily Deaths: Daily



Source: [Johns Hopkins](#), TrendMacro calculations

Impact in continental Europe

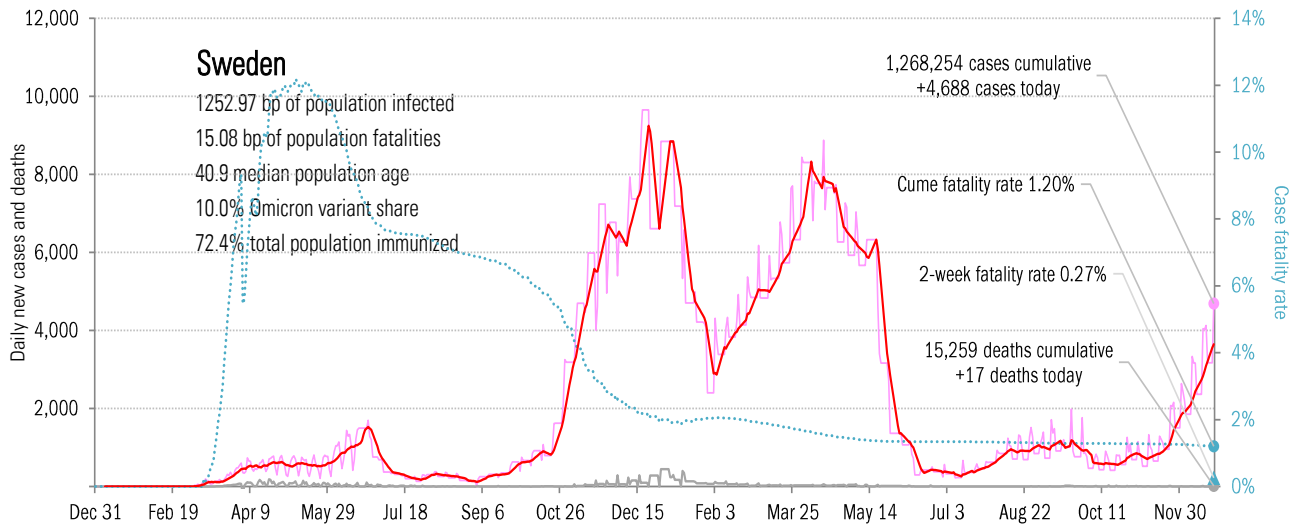
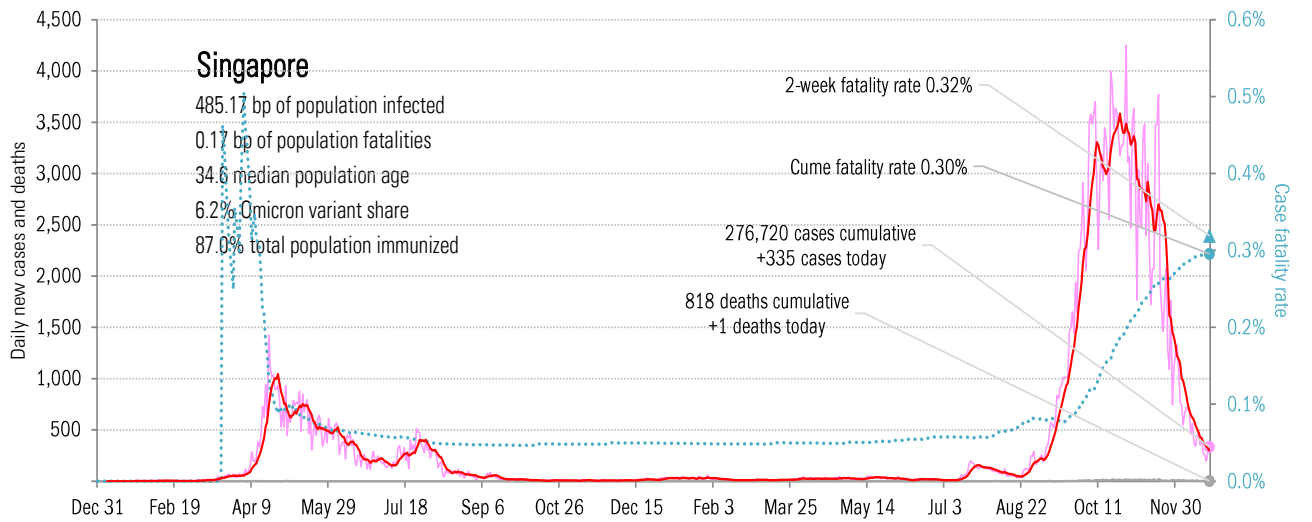
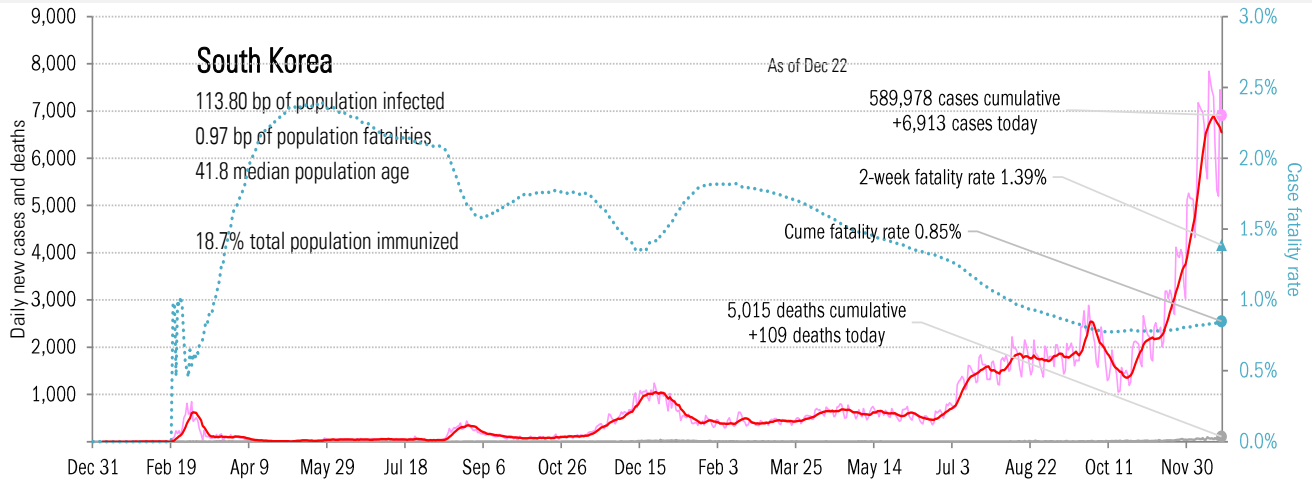
Cases: 7-day average and daily Deaths: Daily



Source: [Johns Hopkins](#), TrendMacro calculations

Impact in other hot-spots

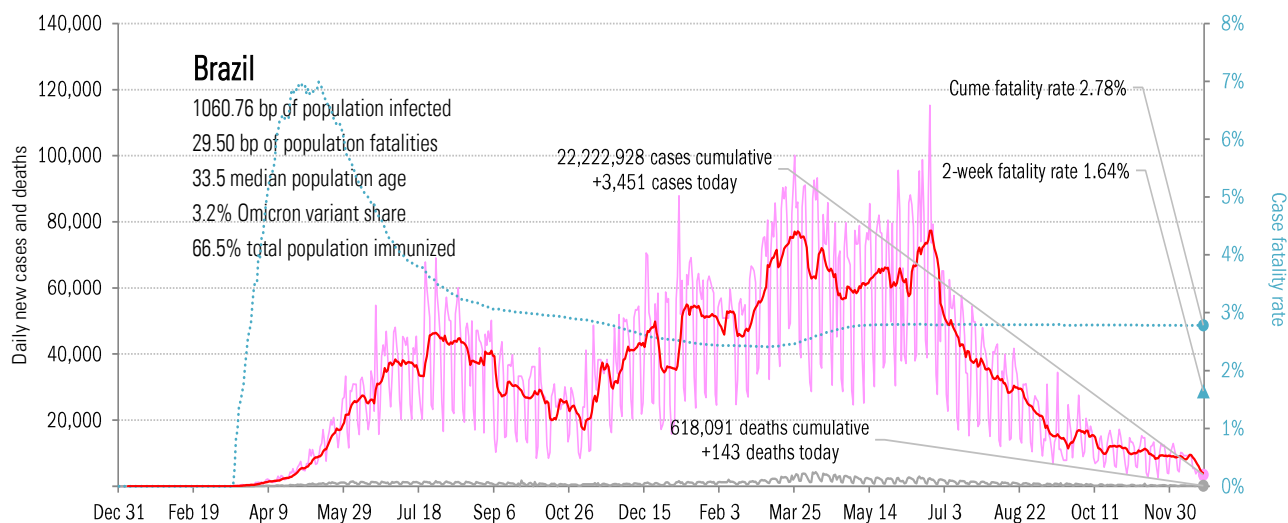
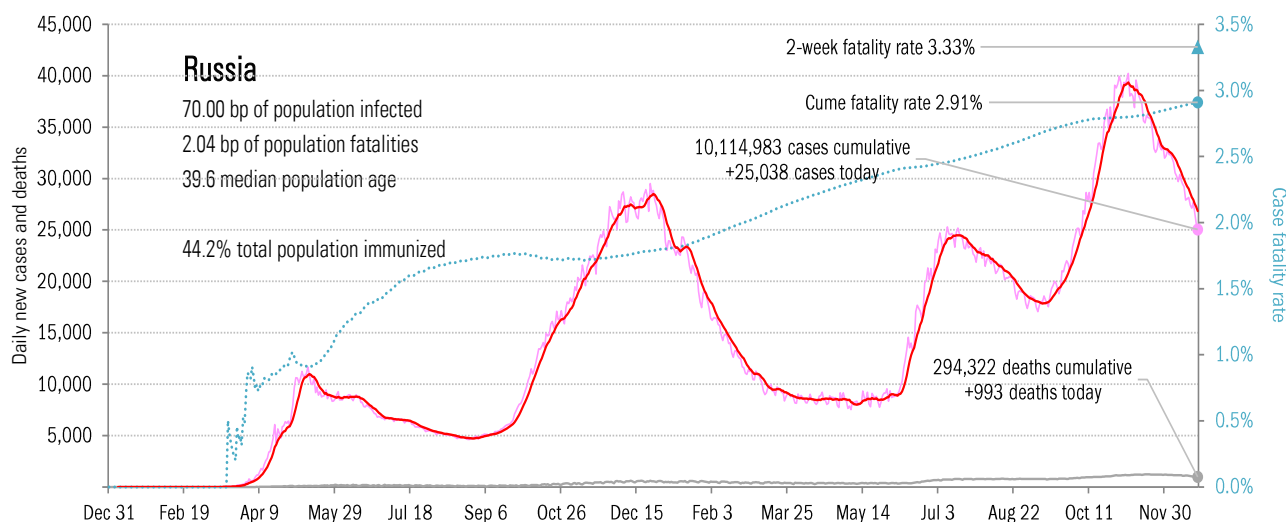
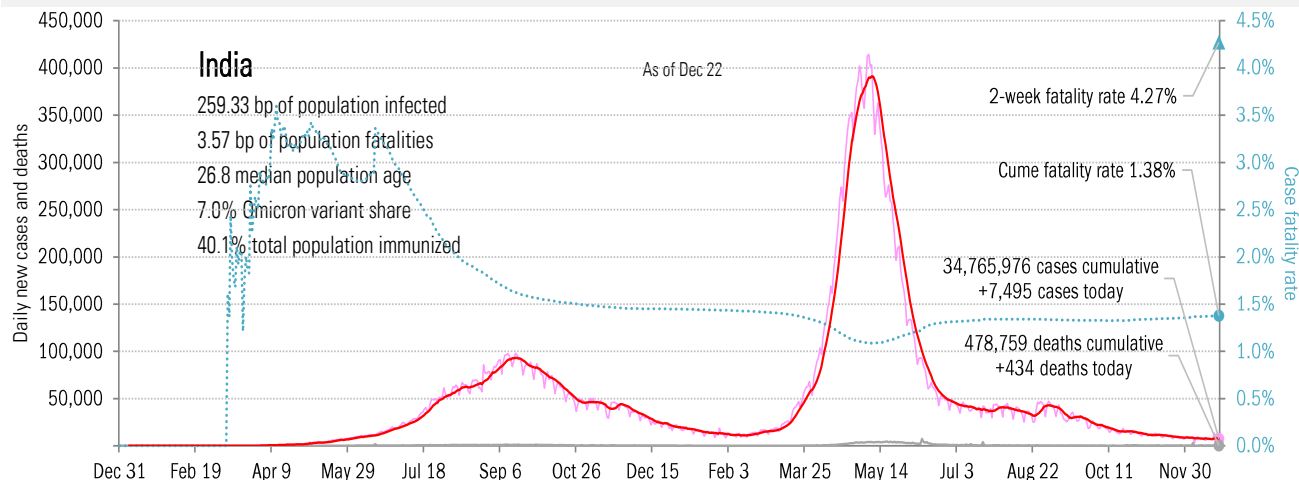
Cases: 7-day average and daily Deaths: Daily



Source: [Johns Hopkins](#), TrendMacro calculations

Impact in the BRICs ex-China

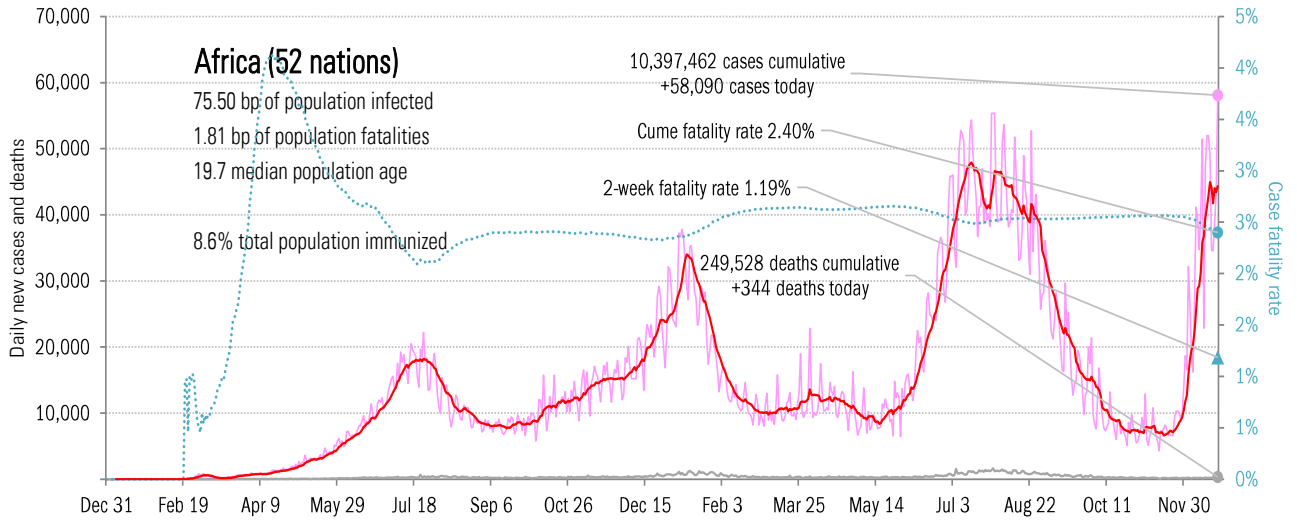
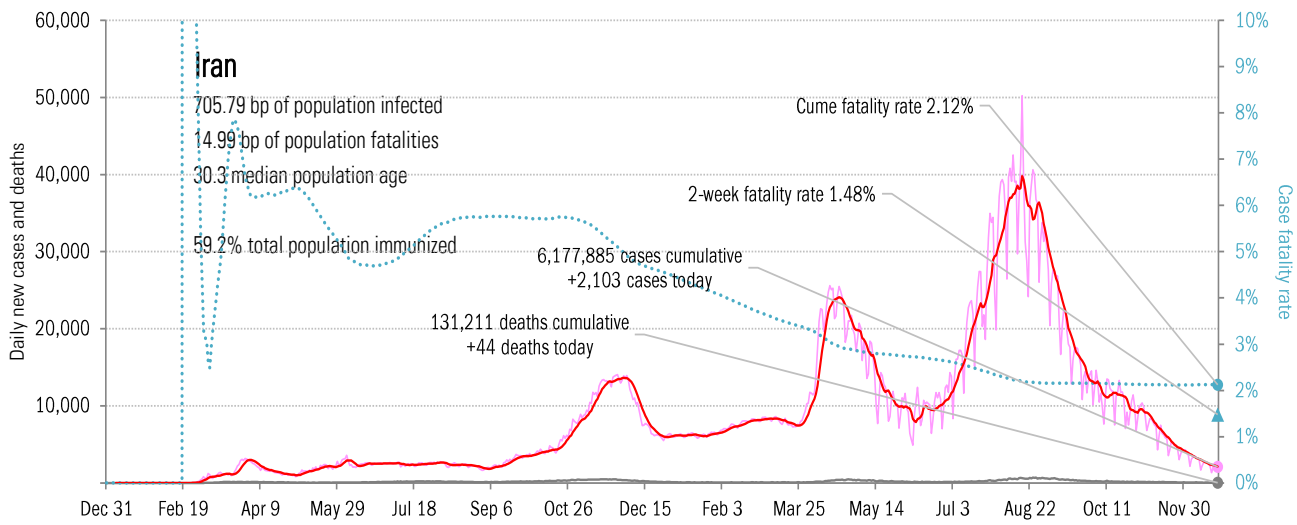
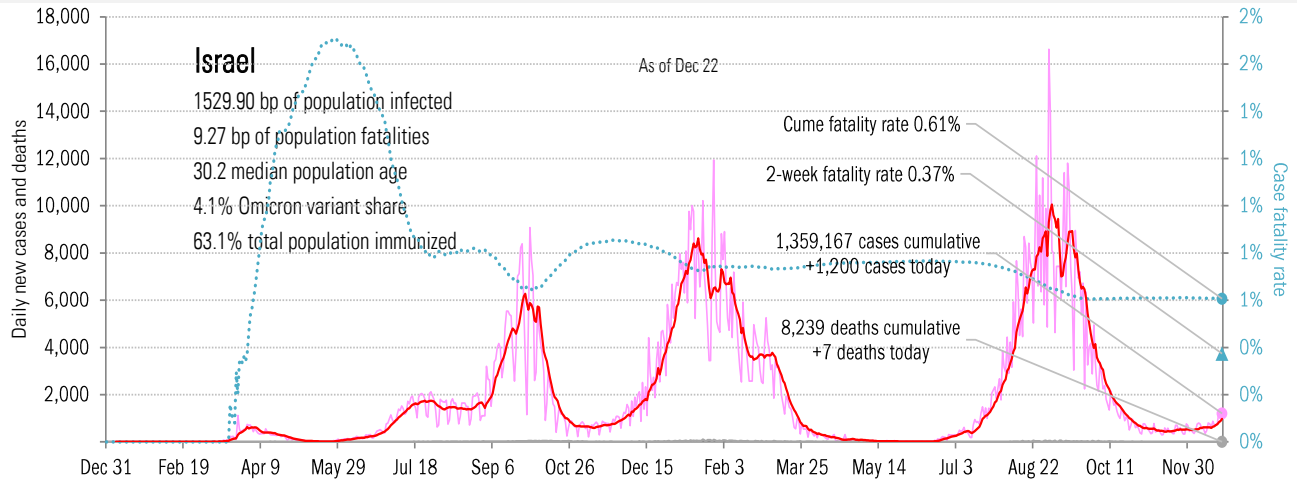
Cases: 7-day average and daily Deaths: Daily



Source: [Johns Hopkins](#), TrendMacro calculations

Impact in the Middle East and Africa

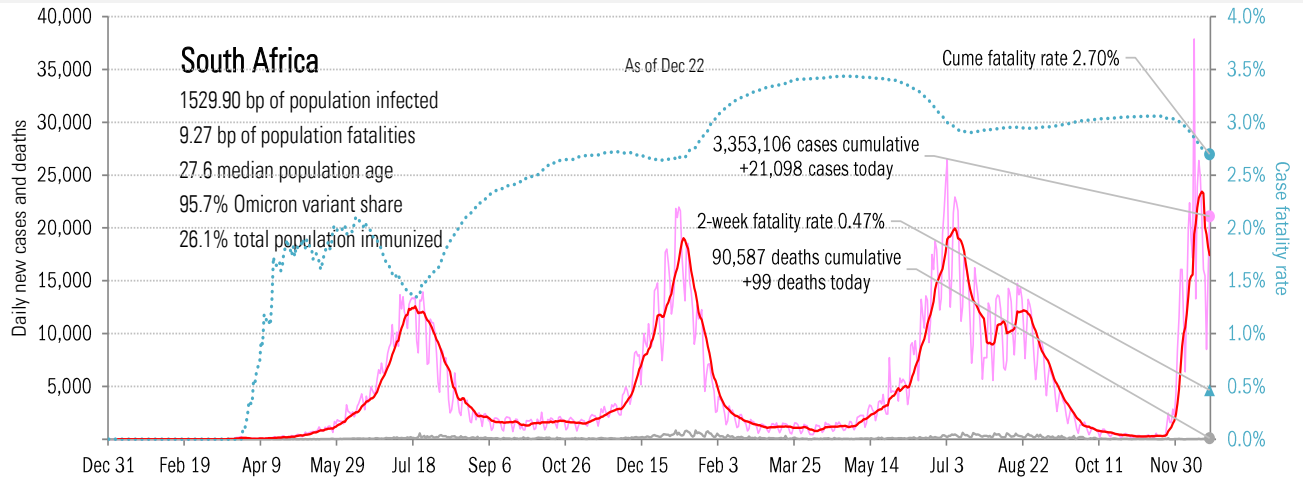
Cases: 7-day average and daily Deaths: Daily



Source: [Johns Hopkins](#), TrendMacro calculations

Impact in Africa, continued

Cases: 7-day average and daily Deaths: Daily



Source: [Johns Hopkins](#), TrendMacro calculations