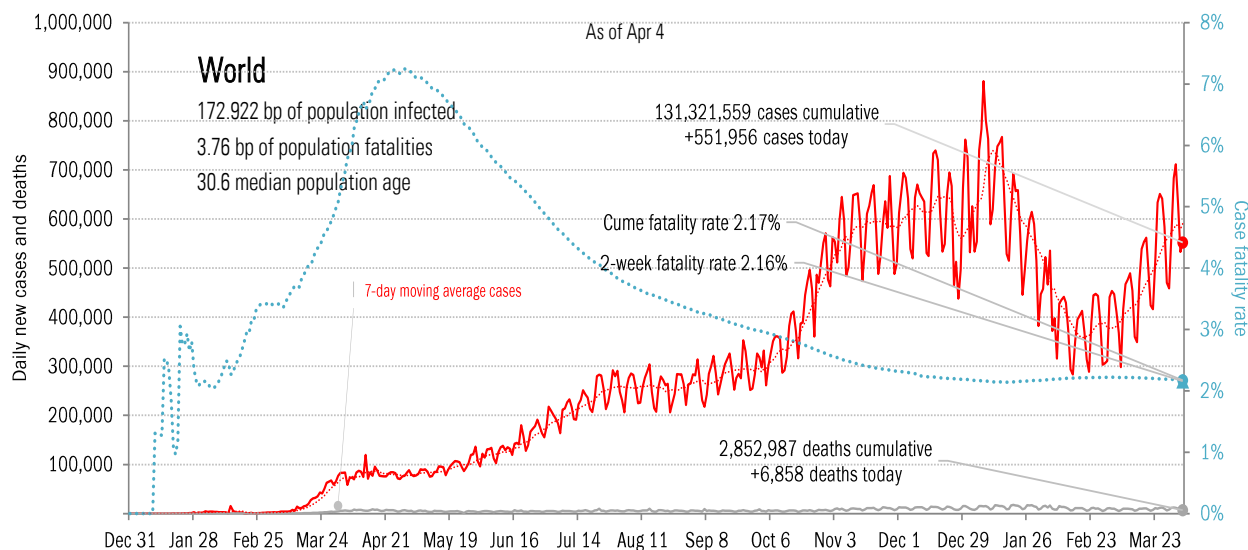
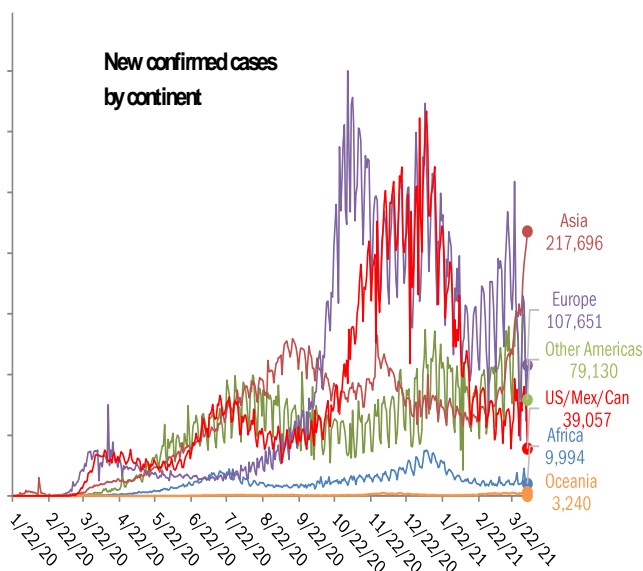


Data Insights: Covid-2019 Monitor

Monday, April 5, 2021

The global scorecard

The worst ten countries			
New cases		New Deaths	
India	+103,558	Brazil	+1,240
France	+80,629	India	+478
Turkey	+41,998	Indonesia	+427
United States	+34,282	France	+369
Brazil	+31,359	Russia	+350
Poland	+22,958	Italy	+326
Italy	+18,017	Ukraine	+265
Ukraine	+13,858	Peru	+252
Iran	+11,680	United States	+222
Philippines	+11,008	Hungary	+211
+369,347		+4,140	
World	+551,956	World	+6,858
Topten	67%	Topten	60%



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

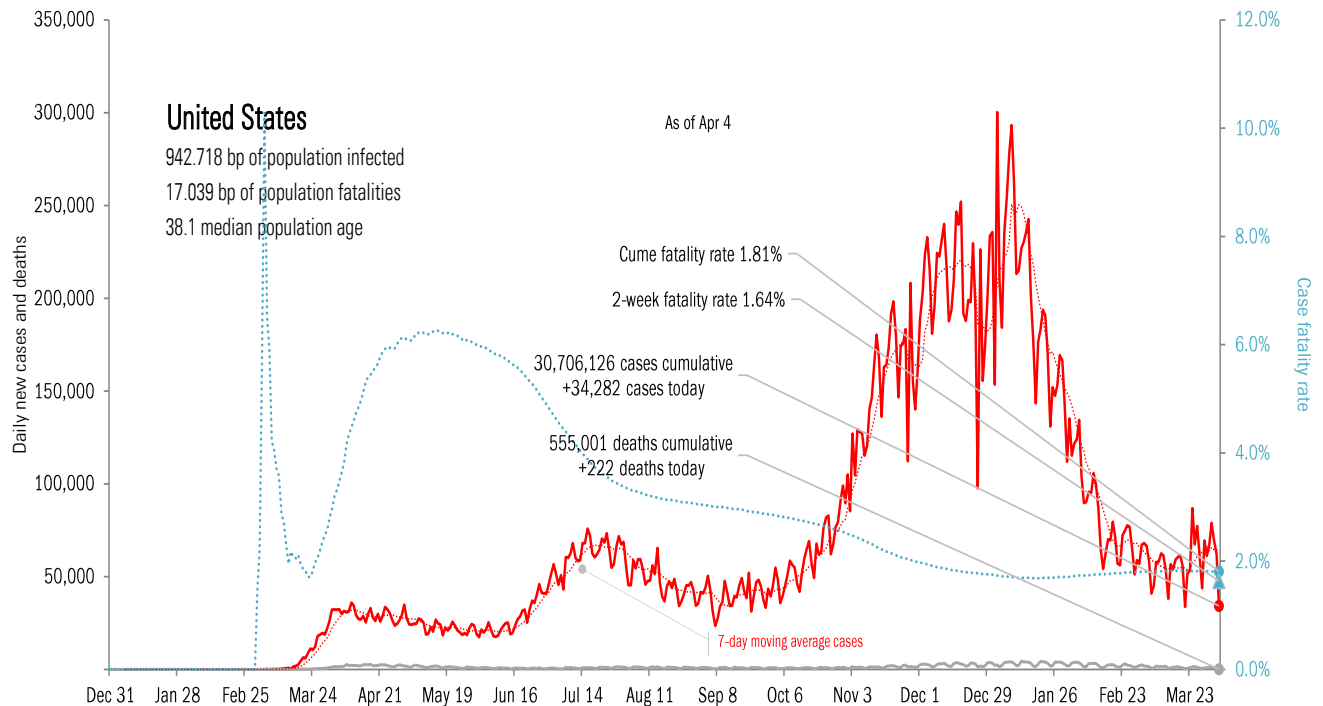
The ten worst US states

New cases			New Deaths			New in hospital			Curre cases			Curre deaths			Curre in hospital			Hospital use		ICU use	
NY	+7,636		NY	+82		FR	+199		CA	3,675,272		CA	59,614		TX	227,856		R	90%	MI	22%
FL	+4,794		VA	+42		MI	+167		TX	2,802,225		NY	50,633		CA	223,829		MD	83%	MD	21%
NJ	+3,799		FL	+22		PA	+66		FL	2,081,826		TX	48,697		FL	154,044		MA	83%	NY	19%
PA	+2,832		TX	+21		IL	+50		NY	1,905,737		FL	33,674		NY	117,289		CT	79%	PA	14%
IL	+2,442		IL	+19		IN	+29		IL	1,256,533		PA	25,173		GA	95,447		PA	79%	MN	13%
MD	+1,669		MD	+8		MN	+24		GA	1,064,554		NJ	24,637		CH	76,322		MI	78%	WV	13%
VA	+1,267		PA	+7		FL	+20		PA	1,043,524		IL	23,654		PA	75,283		MO	78%	TX	13%
CO	+1,220		NJ	+5		SC	+20		CH	1,024,011		GA	19,212		IL	69,309		FL	78%	DC	13%
TX	+1,007		FR	+5		NC	+19		NJ	927,195		CH	18,643		KY	68,680		WV	77%	ID	13%
IN	+945		AR	+2		WA	+19		NC	916,159		MA	17,281		AZ	58,624		GA	76%	NJ	13%
+27,611			+213			+613			16,697,036			321,218			1,166,683						
All states	+34,282		+222			+447			All states	30,706,126		555,001			2,077,072			All states	70%		67%
Top ten	81%		96%			137%			Top ten	54%		58%			56%			Median	70%		9%

Some states not reporting

Five most improved US states

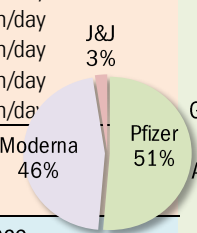
Fewer daily cases		Fewer new deaths		Fewer new hospitalizations		Most pop immunity growth	
MI	-9,292	IA	-68	NY	-162	WY	+162 bp
MA	-2,453	MI	-65	CH	-133	ME	+100 bp
PA	-2,301	TX	-56	NJ	-73	AK	+83 bp
CH	-2,293	FL	-44	VA	-53	RI	+77 bp
MN	-2,064	GA	-32	GA	-39	FL	+75 bp



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

Rolling out the vaccines in the US and the world

US overall	Over last day	Immunity	Full	Partial
217.16 million doses distributed	+0.02 million/day	US	18.4%	31.8%
171.74 million doses administered	+3.47 million/day	UK	7.9%	46.4%
109.86 million persons partially immunized	+2.05 million/day	France	4.5%	13.6%
63.97 million persons fully immunized	+1.61 million/day	Spain	6.1%	12.2%
7.74 million shots long-term care residents/staff	+0.00 million/day	Germany	5.2%	12.0%
79.1% of distributed doses administered		Italy	5.7%	12.6%
32.9% of US pop partial	19.1% full immunity	Australia	0.7%	0.6%
100% of LTC partial	63.6% full immunity	Israel	55.9%	60.9%
		Canada	1.9%	14.8%
		Japan	0.1%	0.7%
		Africa	0.3%	0.6%
		India	0.8%	5.0%
		Brazil	2.2%	7.8%



At today's dosing pace,
every American >18 immune in
80 days
by Jun 22, 2021

US achieves adult herd immunity* in
39 days
by May 12, 2021

Global data differs due to sources

AK
87.0%
35.2%
24.2%

State	
Doses distributed as % population	Best
Partial immunity as % population	Middle
Full immunity as % population	Worst

China NA
ME
68.1%
37.8%
22.9%
VT
NH
73.3%
62.0%
36.4%
40.4%
21.4%
19.7%

WA	ID	MT	ND	MN	IL	MI	NY	MA	OR	NV	WY	SD	IA	IN	OH	PA	NJ	CT	RI	CA	UT	CO	NE	MO	KY	WV	VA	MD	DE	AZ	NM	KS	AR	TN	NC	SC	DC	OK	LA	MS	AL	GA	TX	HI	FL	PR
63.5%	57.5%	67.6%	64.3%	59.7%	63.3%	61.1%	65.4%	66.8%	60.5%	57.5%	70.1%	75.5%	60.8%	54.1%	63.4%	63.9%	62.1%	72.3%	64.6%	64.1%	54.1%	61.3%	65.8%	61.4%	61.1%	69.6%	61.0%	63.0%	65.3%	62.4%	72.2%	64.7%	63.2%	60.3%	62.6%	59.3%	76.9%	71.7%	62.5%	61.9%	59.0%	58.7%	58.1%	71.5%	64.6%	65.8%
32.4%	27.9%	33.0%	34.5%	34.3%	34.0%	31.0%	34.1%	37.4%	30.8%	29.7%	29.0%	37.6%	33.5%	27.4%	31.7%	34.8%	36.4%	38.3%	35.2%	33.6%	28.1%	32.8%	32.9%	28.1%	33.2%	31.8%	34.5%	33.8%	34.1%	31.8%	40.9%	33.7%	28.4%	27.1%	30.9%	28.9%	30.4%	33.0%	27.7%	25.9%	25.3%	25.7%	33.6%	30.5%	23.9%	
20.1%	18.0%	21.4%	22.9%	21.3%	18.2%	19.1%	20.7%	21.2%	18.6%	17.8%	20.5%	24.8%	21.3%	18.3%	18.8%	18.6%	21.3%	22.9%	23.8%	17.8%	13.1%	19.3%	20.4%	17.2%	19.9%	21.2%	19.2%	19.6%	18.1%	18.8%	26.0%	19.0%	16.0%	15.4%	18.0%	16.5%	15.6%	20.3%	18.2%	16.8%	14.5%	13.1%	21.0%	17.9%	13.9%	

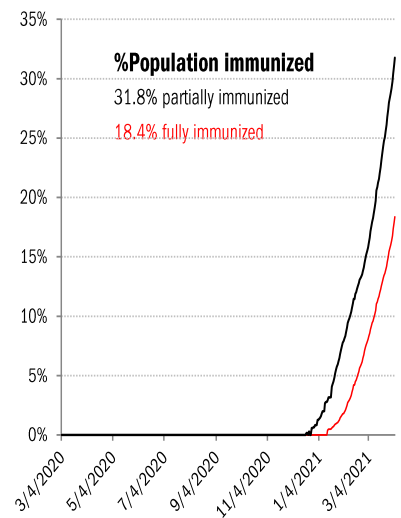
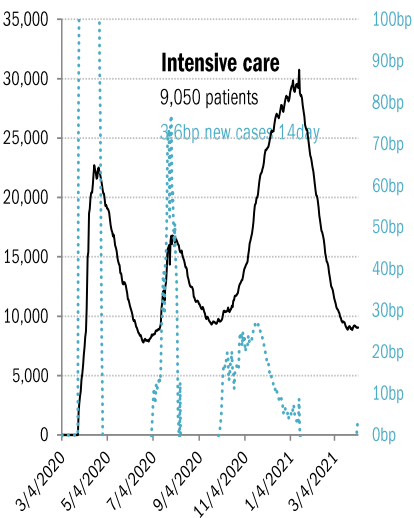
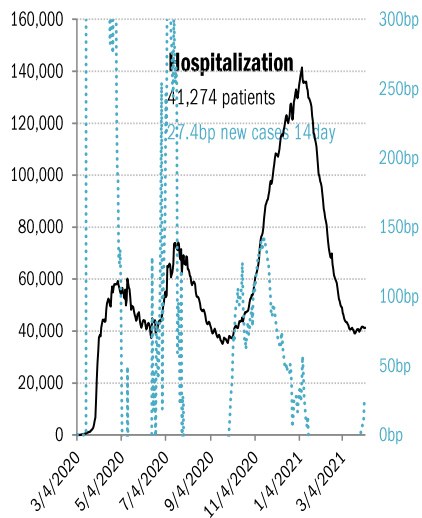
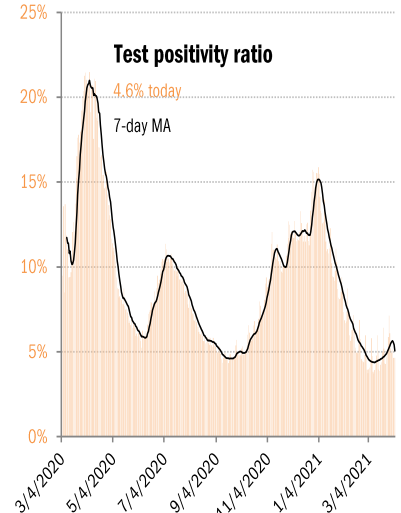
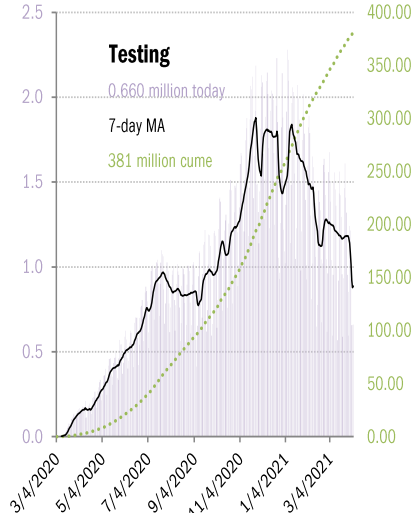
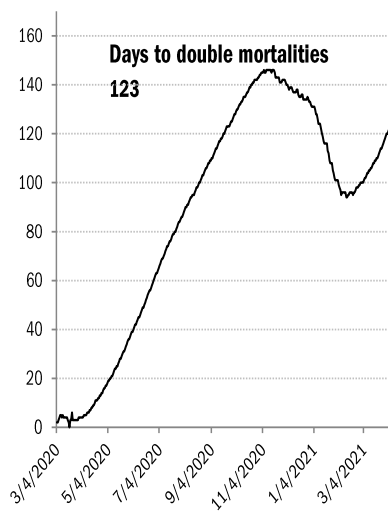
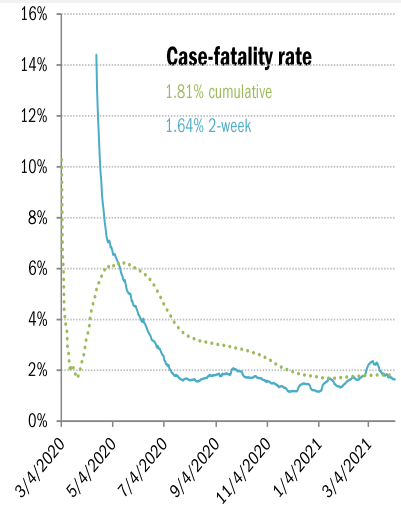
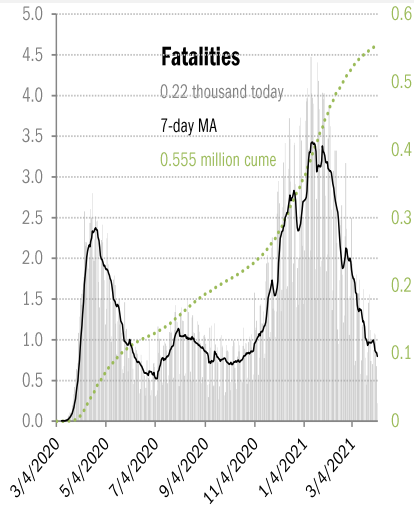
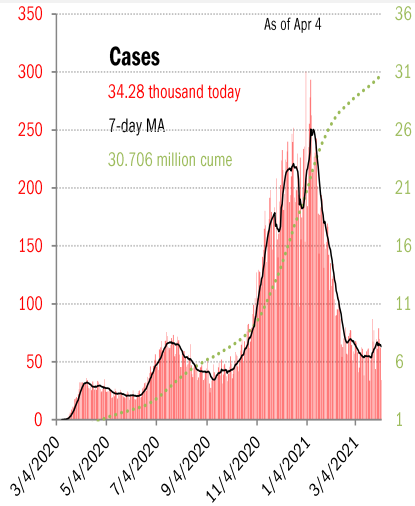
As of Apr 4

* Adult herd immunity is 60% of population over 18 years either fully vaccinated or prior tested positive, no overlap

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

US deep-dive

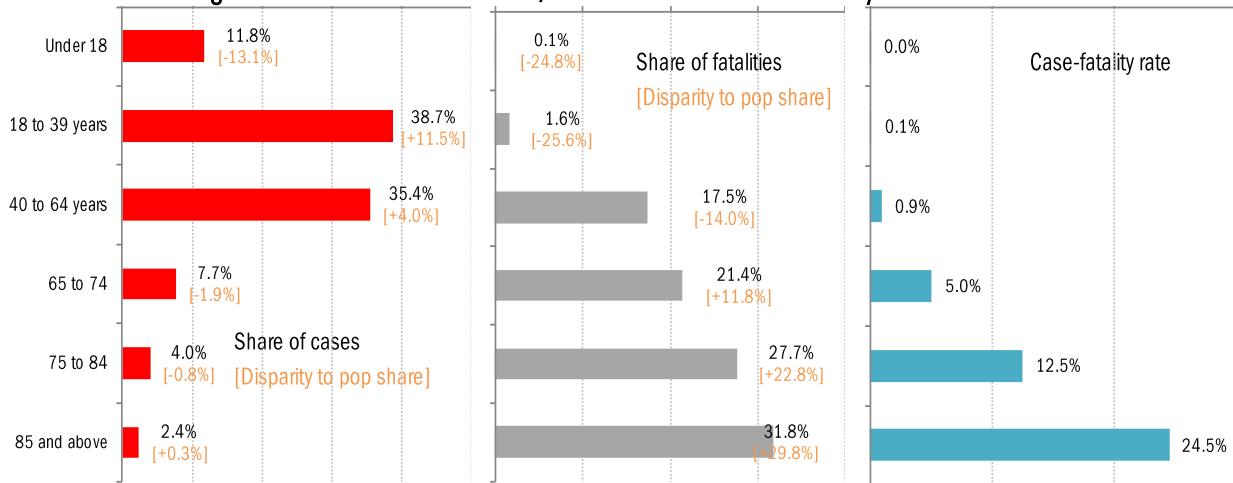
National and state-by-state data do not line up because of different sources



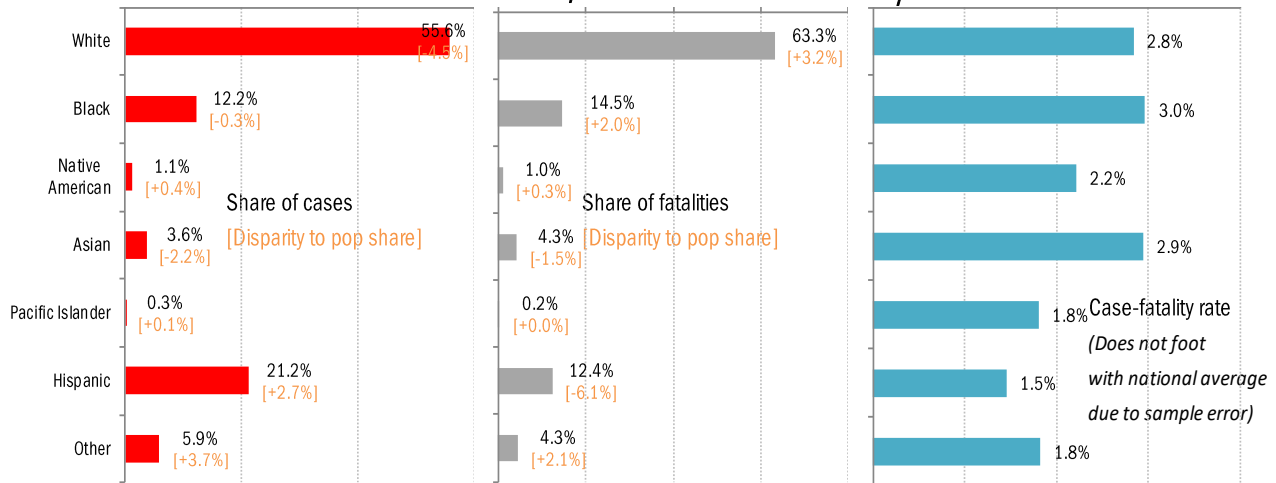
Source: [Johns Hopkins](#), [Covid Act Now](#), TrendMacro calculations

US deep-dive on the demographics of age, race and health

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

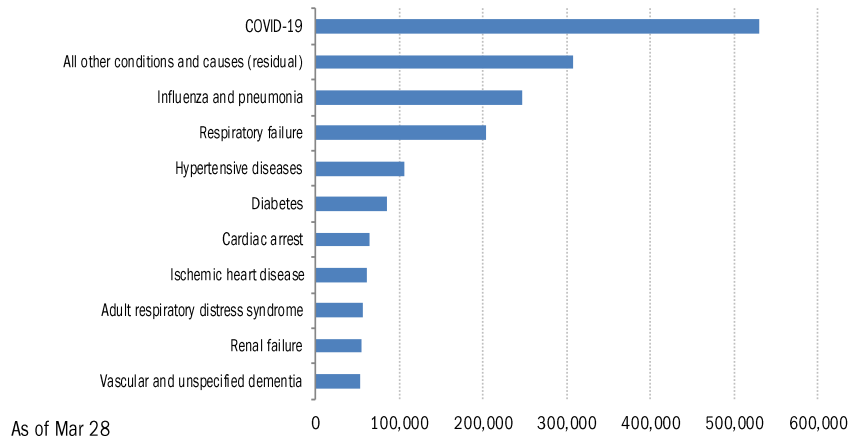


Racial distribution of US cases, fatalities and case-fatality rates



Comorbidities

Top-ten joint causes of Covid mortalities, cumulative



For 6% 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

[J&J Takes Over Contractor's Covid-19 Vaccine Manufacturing Plant](#)

Peter Loftus and Alex Leary
Wall Street Journal
April 4, 2021

[Vaccine 'Fiasco' Damages Europe's Credibility](#)

Steven Erlanger
New York Times
April 2, 2021

['Godzilla vs. Kong' Roars at Theaters, Suggests Pent-Up Demand](#)

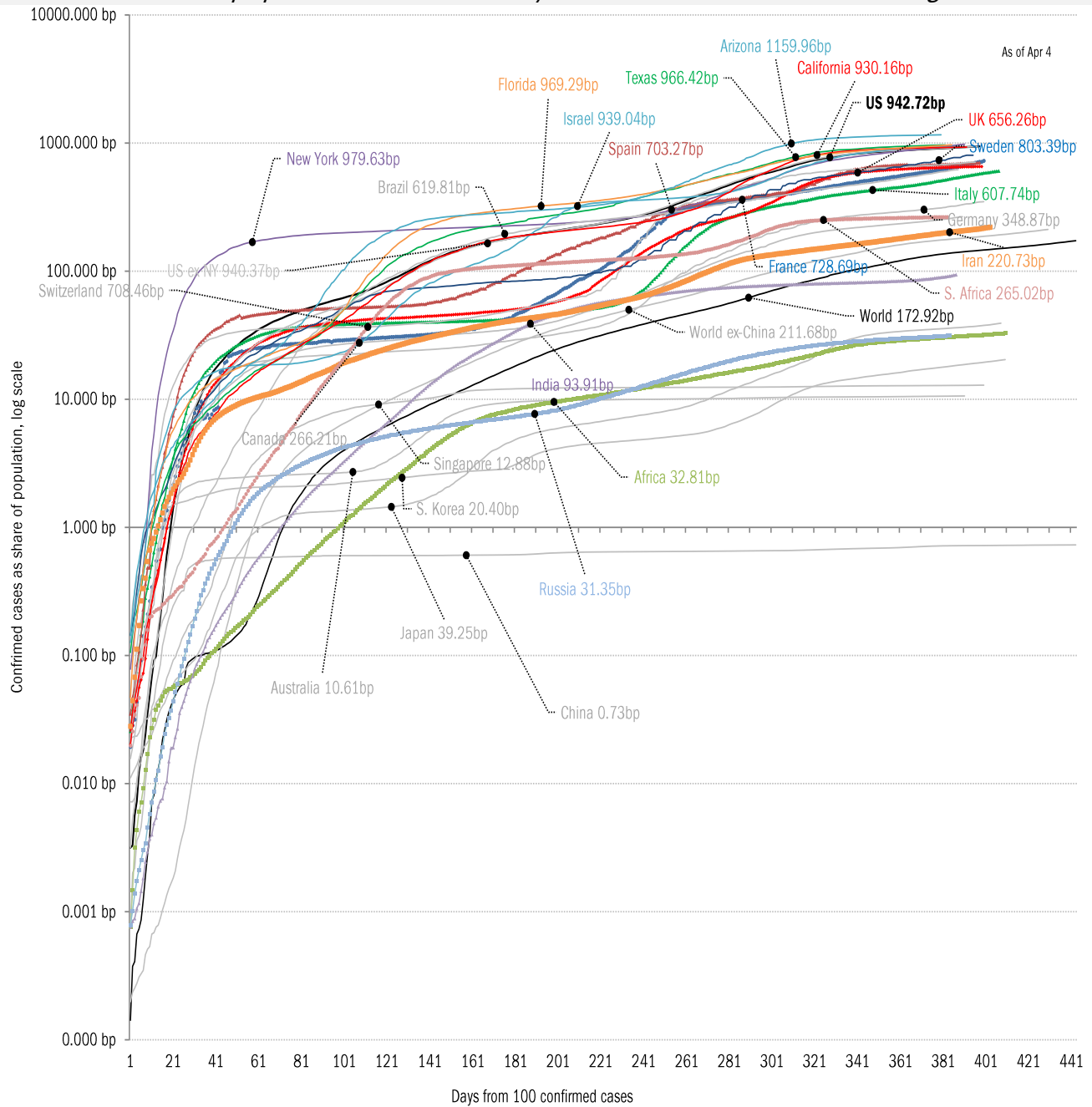
Erich Schwartzel
Wall Street Journal
April 4, 2021

Meme of day



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

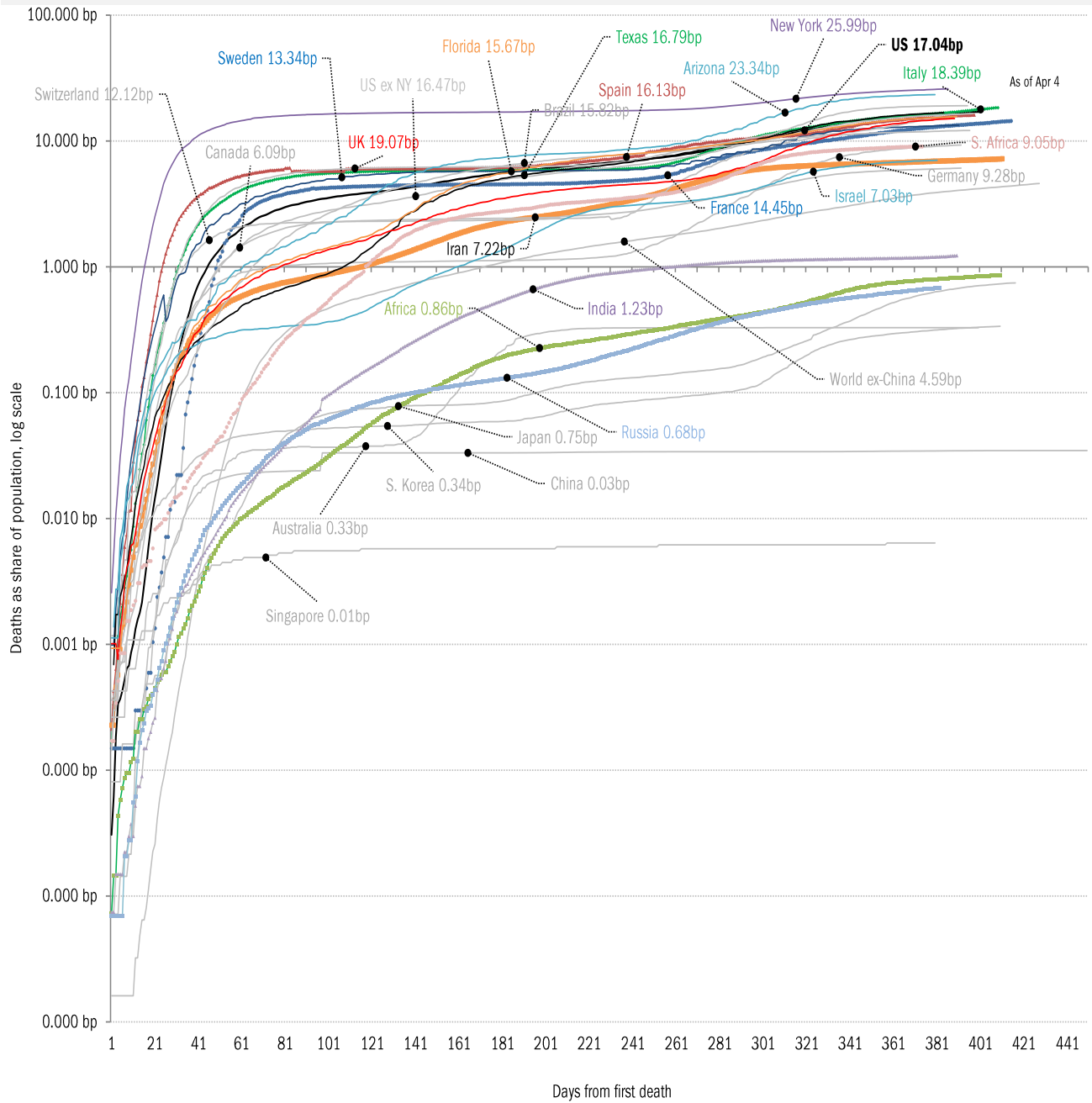
The coronavirus case accelerometer... tracking the world's infection curves
Share of infected population from first day with 100 confirmed cases, log scale



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

The coronavirus mortality accelerometer ... tracking the world's fatality curves

Share of deceased population from day of first fatality

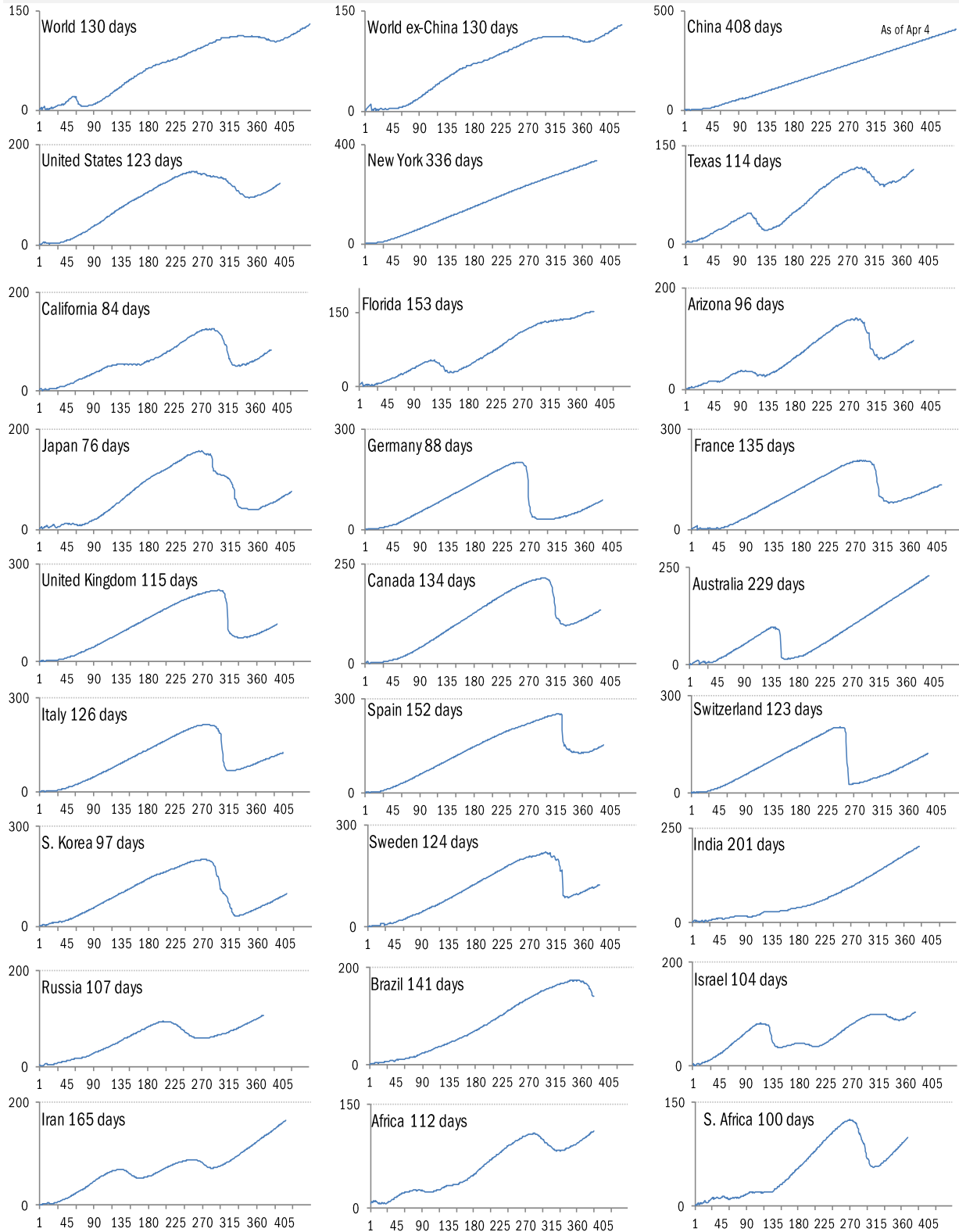


Source: [Johns Hopkins](#), TrendMacro calculations

"Exponential"? Our most reliable evidence of the rate of spread of Covid-2019

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

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

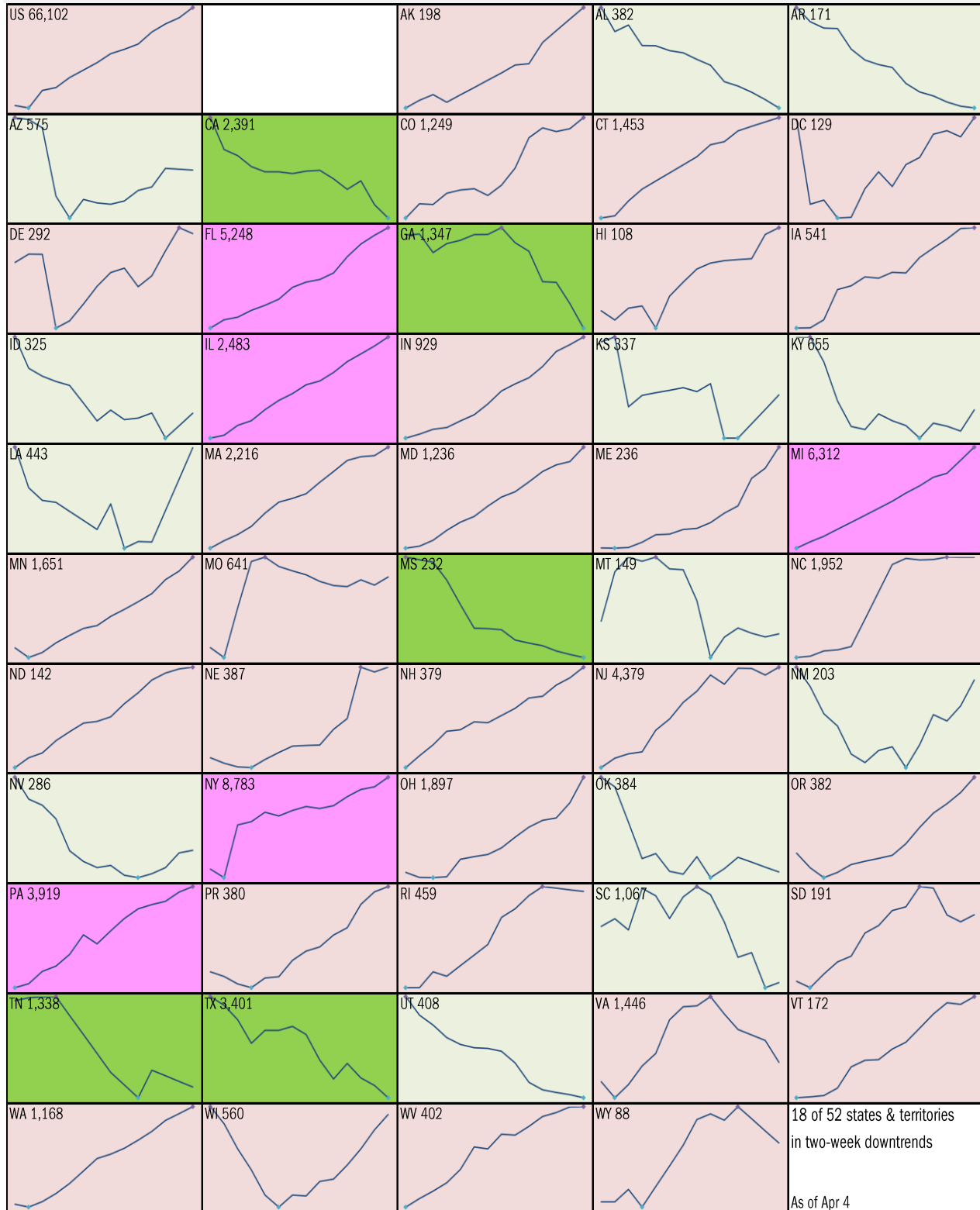


Source: [Johns Hopkins](#), TrendMacro calculations

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

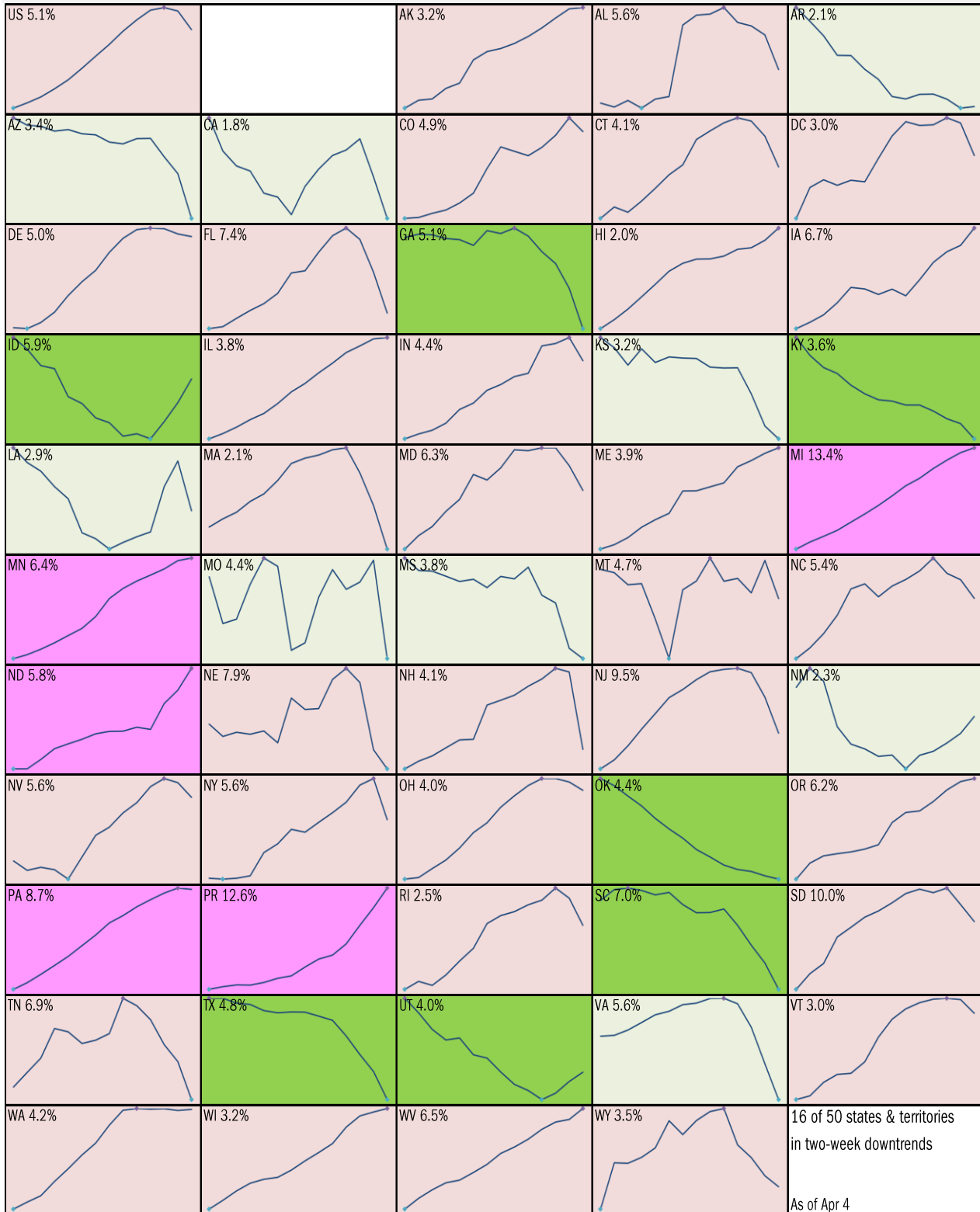


Source: [Johns Hopkins](#), TrendMacro calculations

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

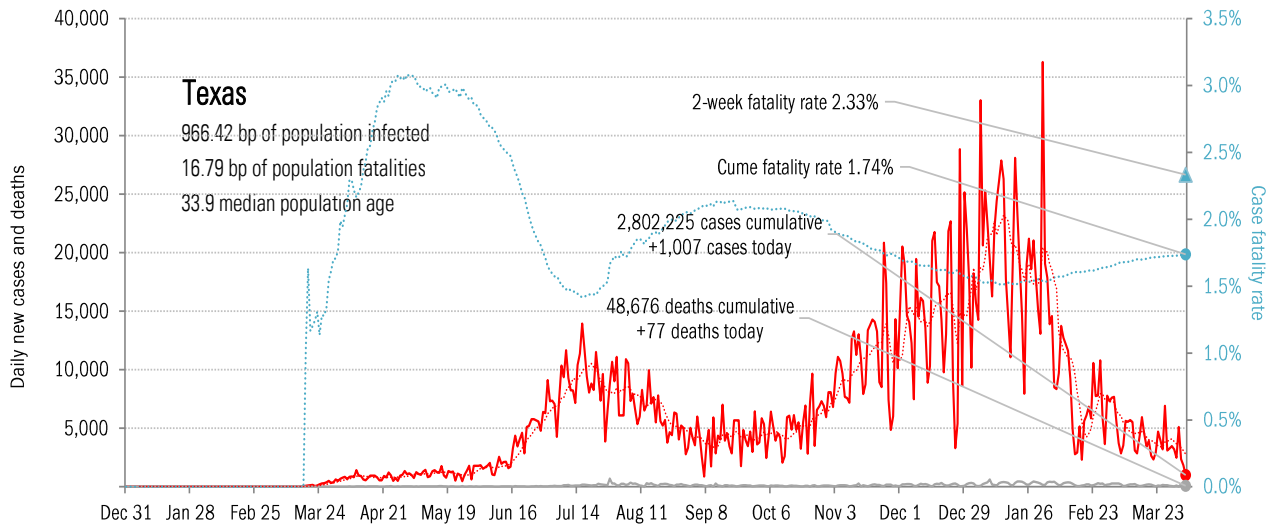
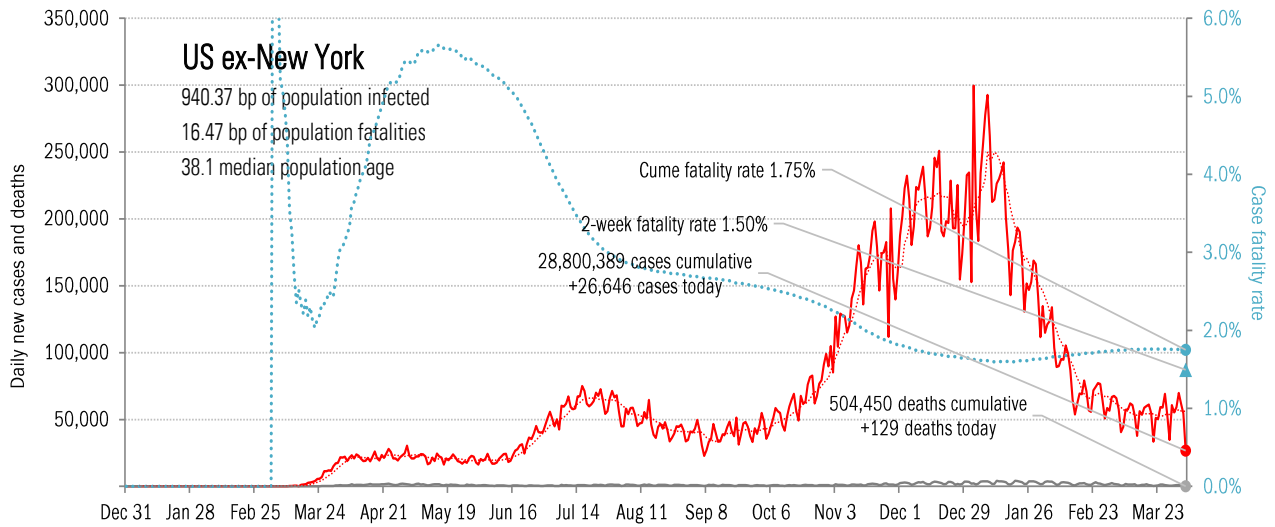
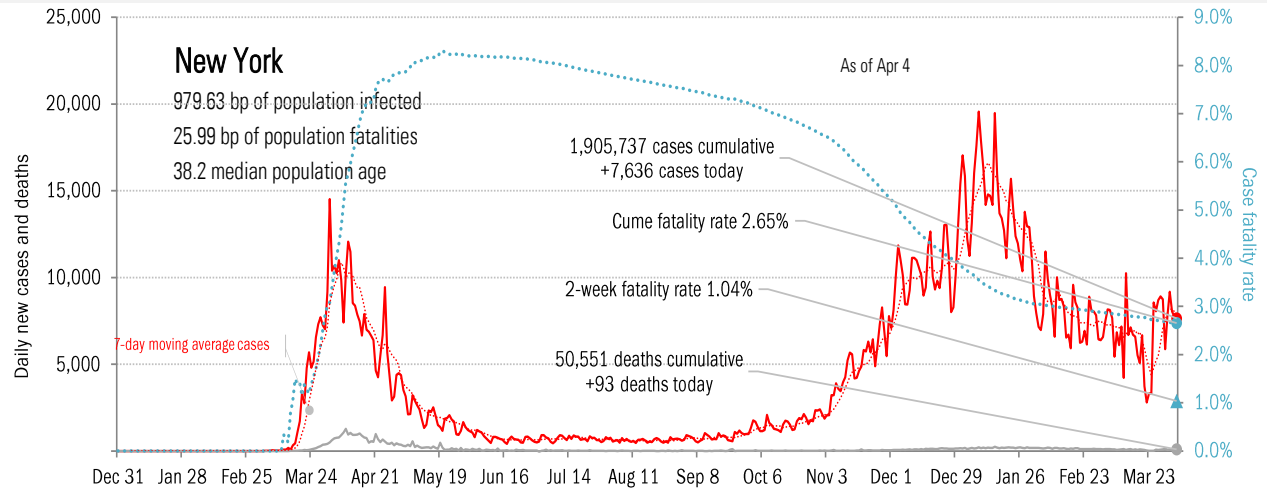
14-day moving average, last 14 days Most recent value displayed ● High ● Low

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



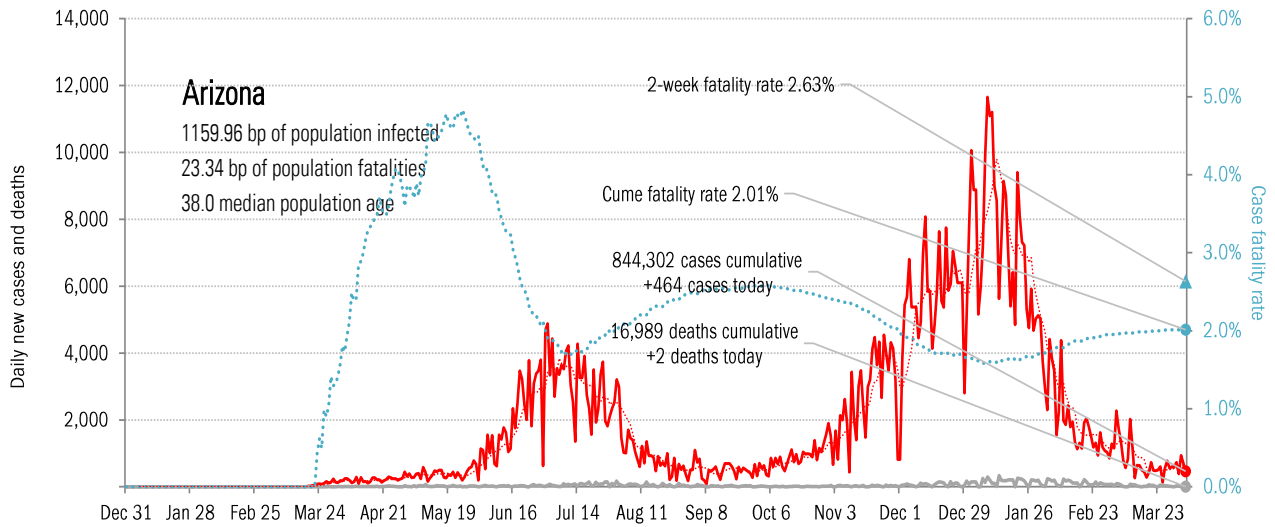
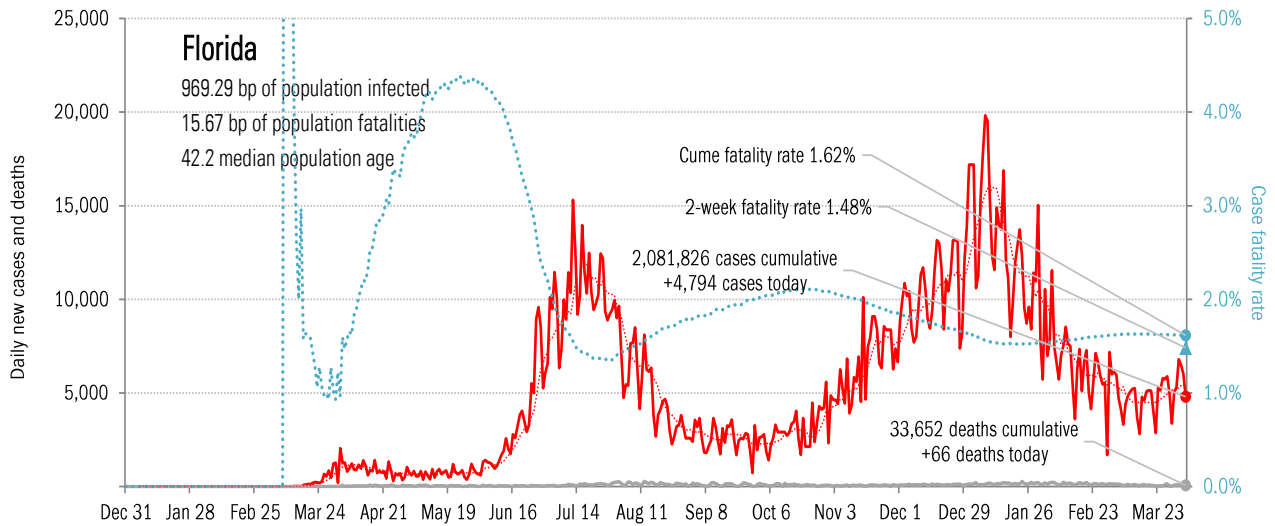
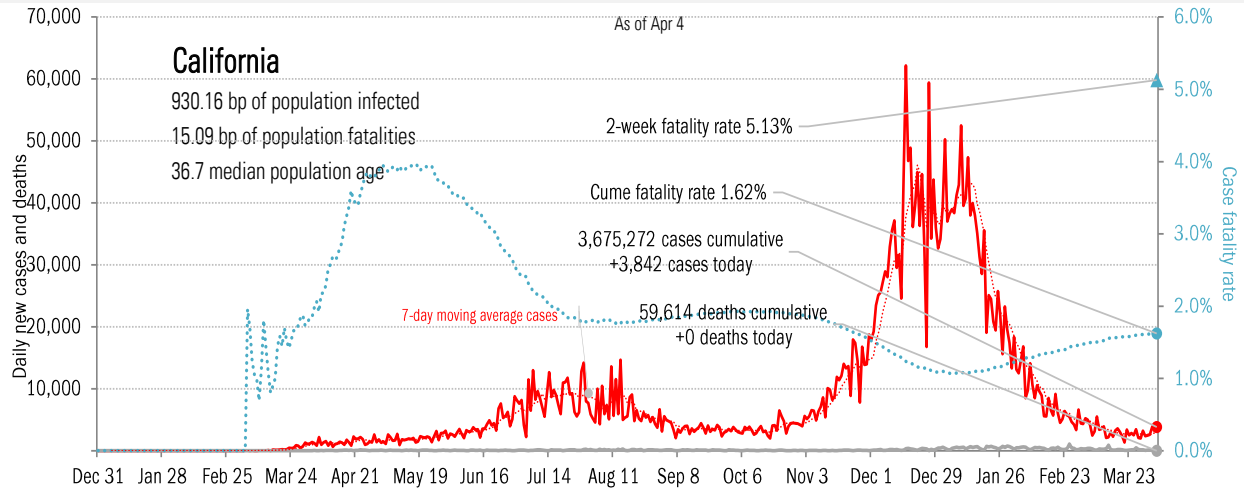
Source: [Covid Act Now](#), TrendMacro calculations

From Ground Zero to the Rio Grande



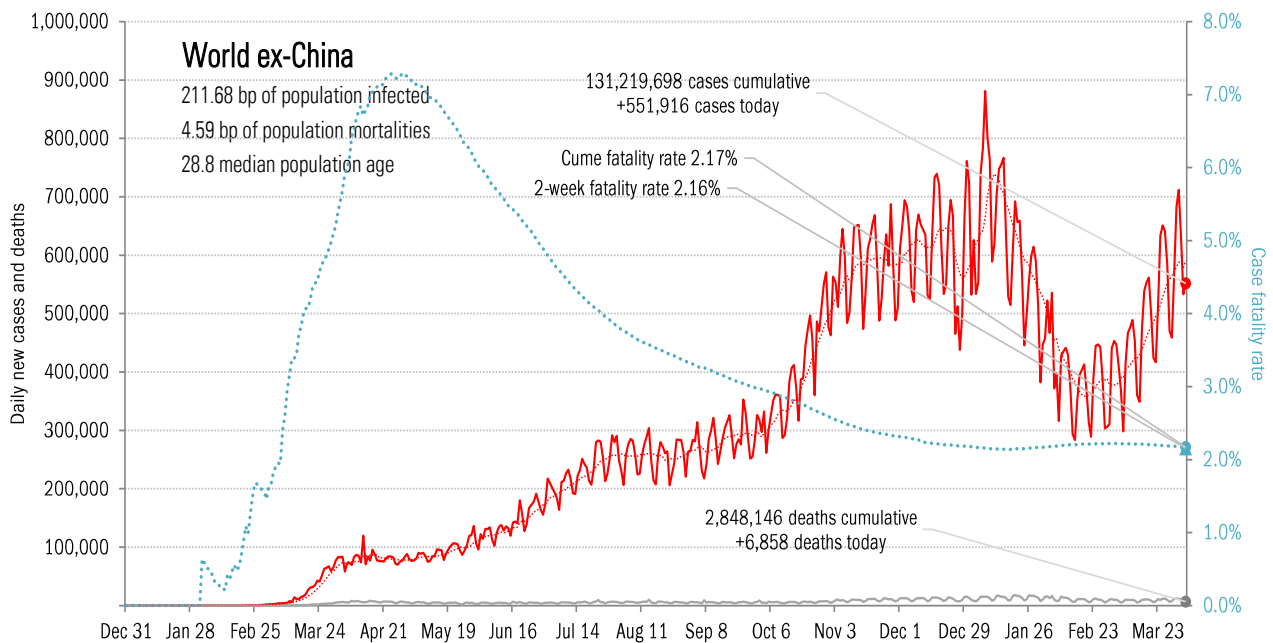
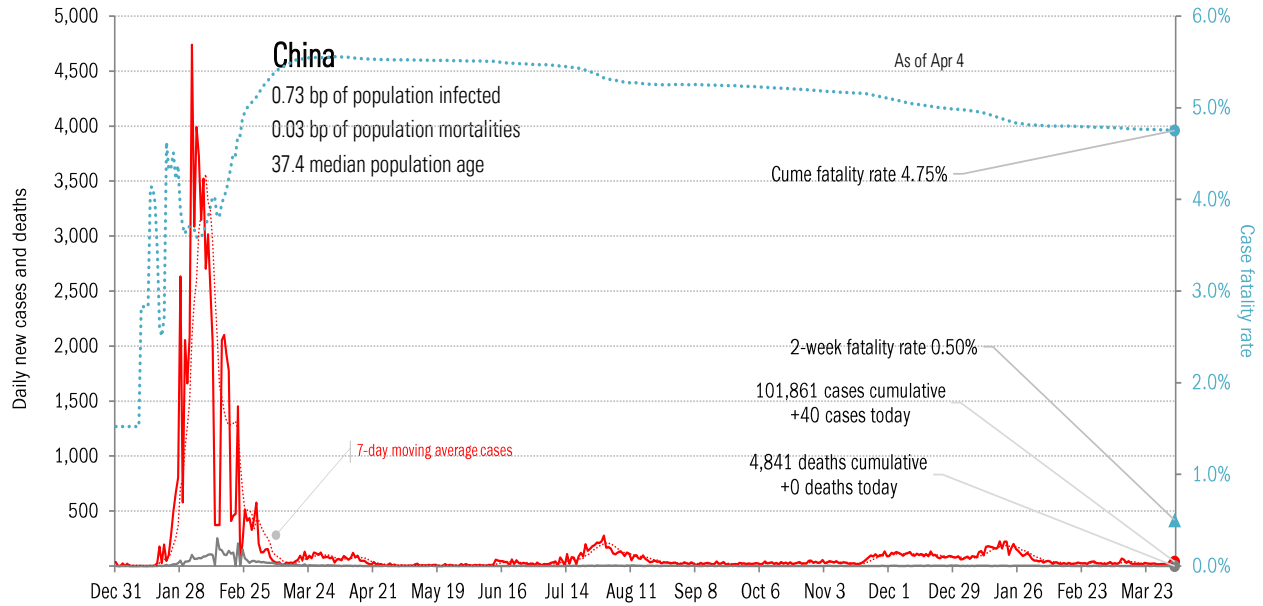
Source: [Johns Hopkins](#), TrendMacro calculations

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



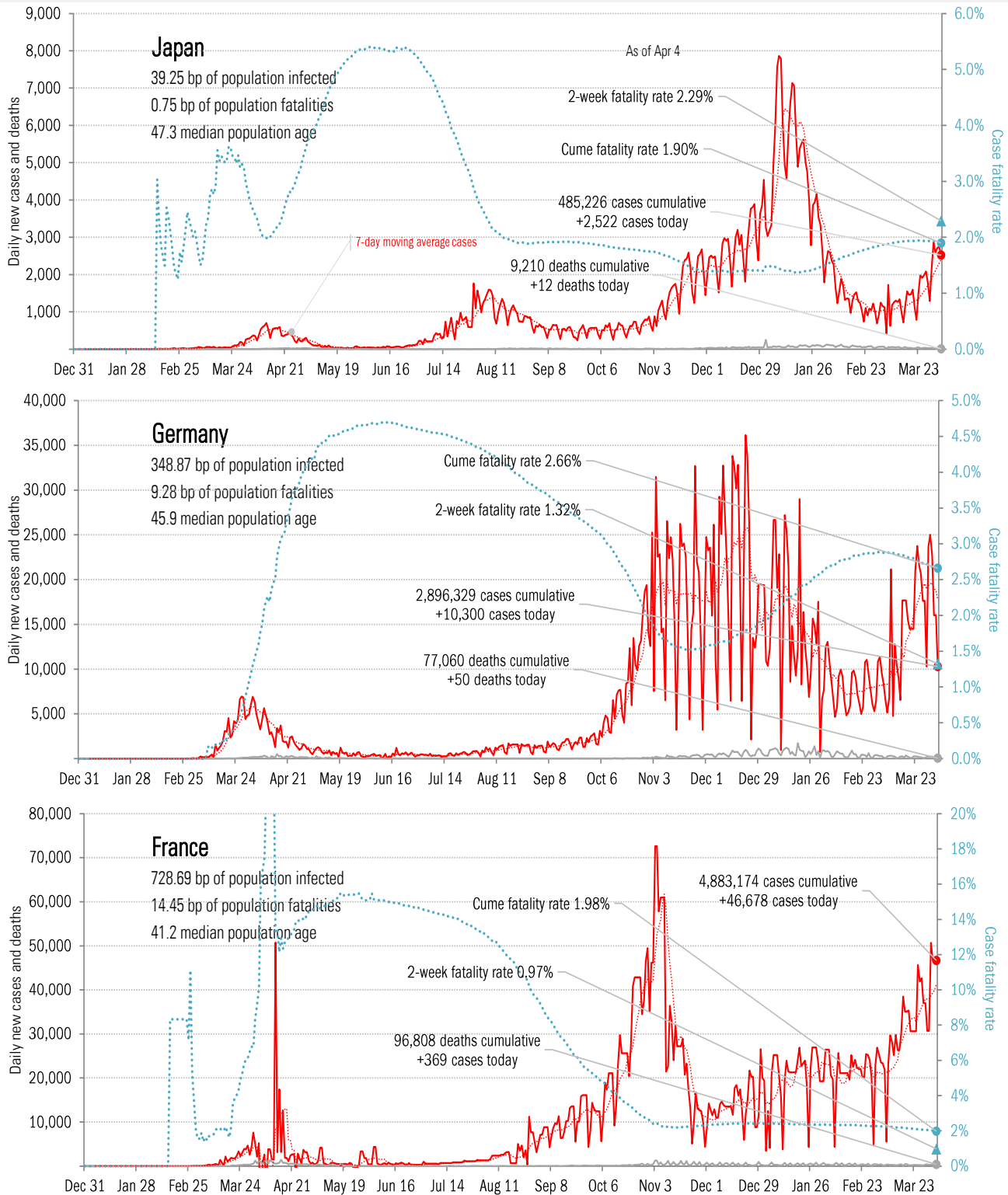
Source: [Johns Hopkins](#), TrendMacro calculations

Patient zero... and then everyone else



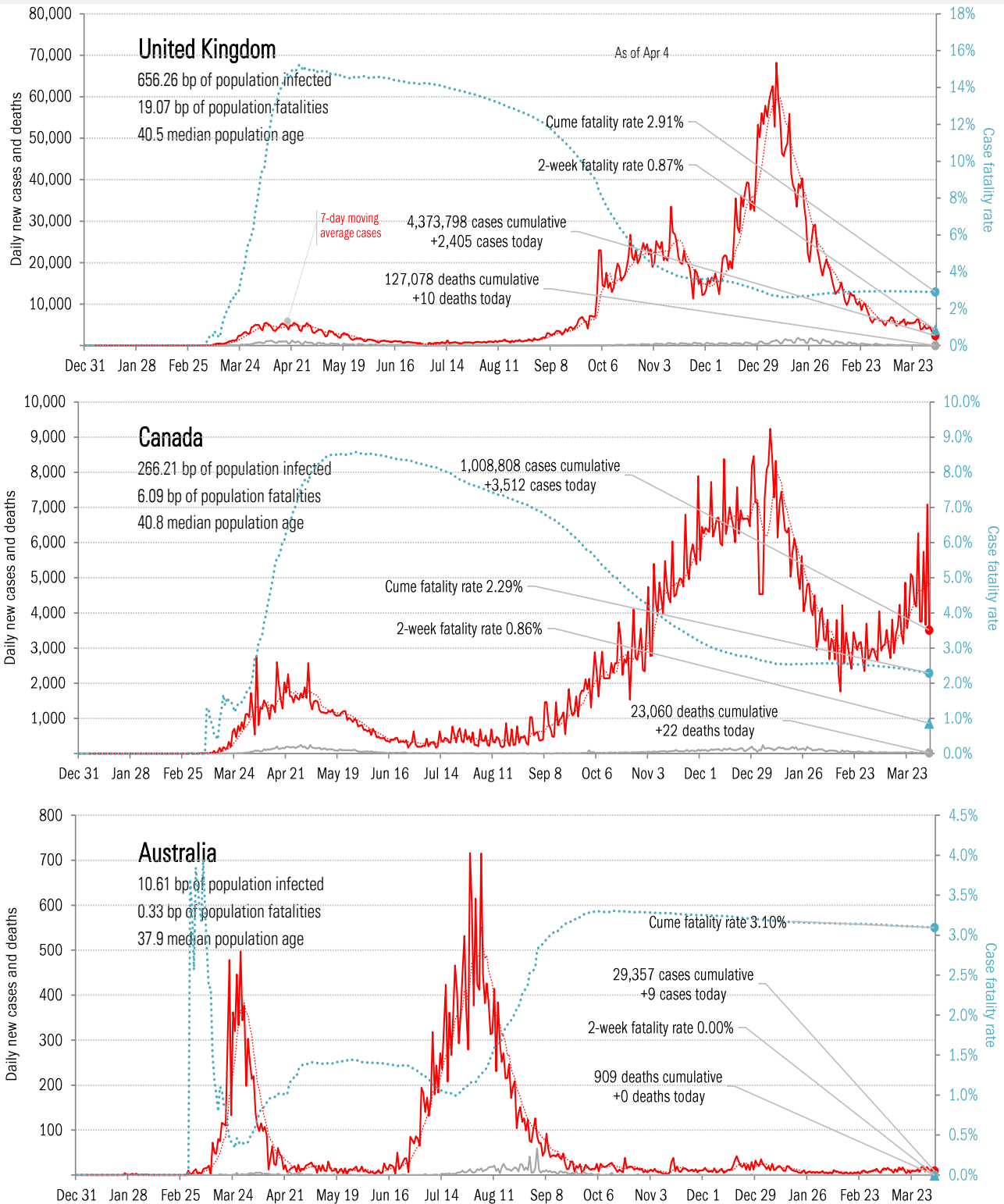
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in the largest economies



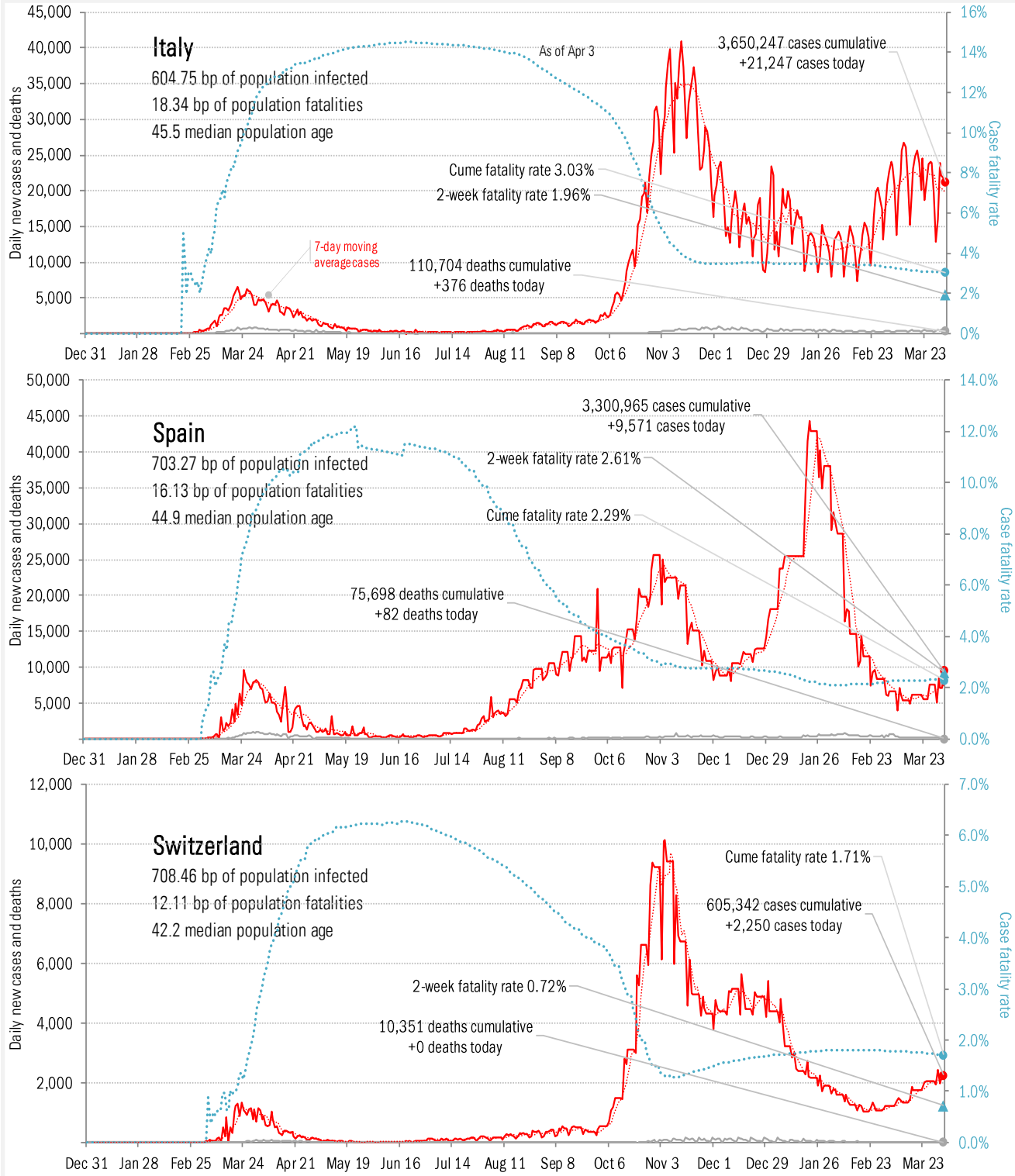
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in The Anglosphere



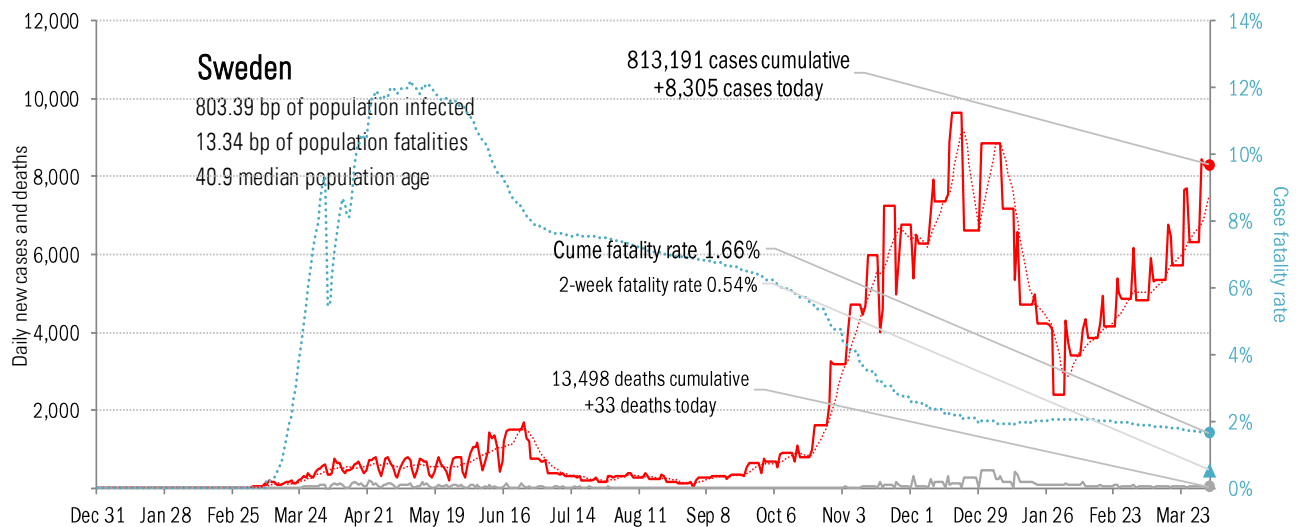
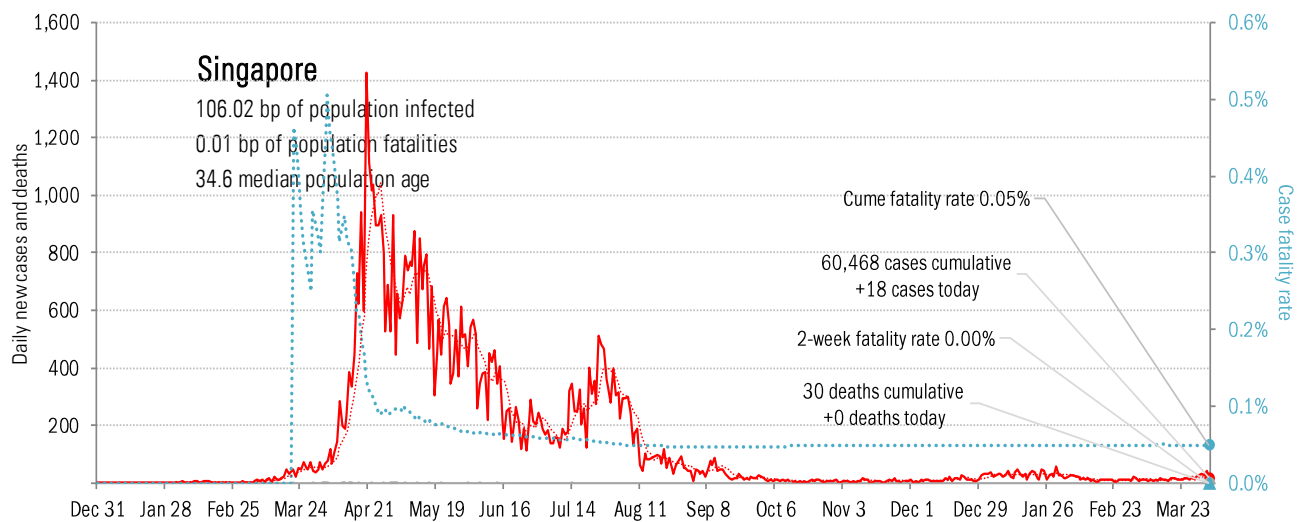
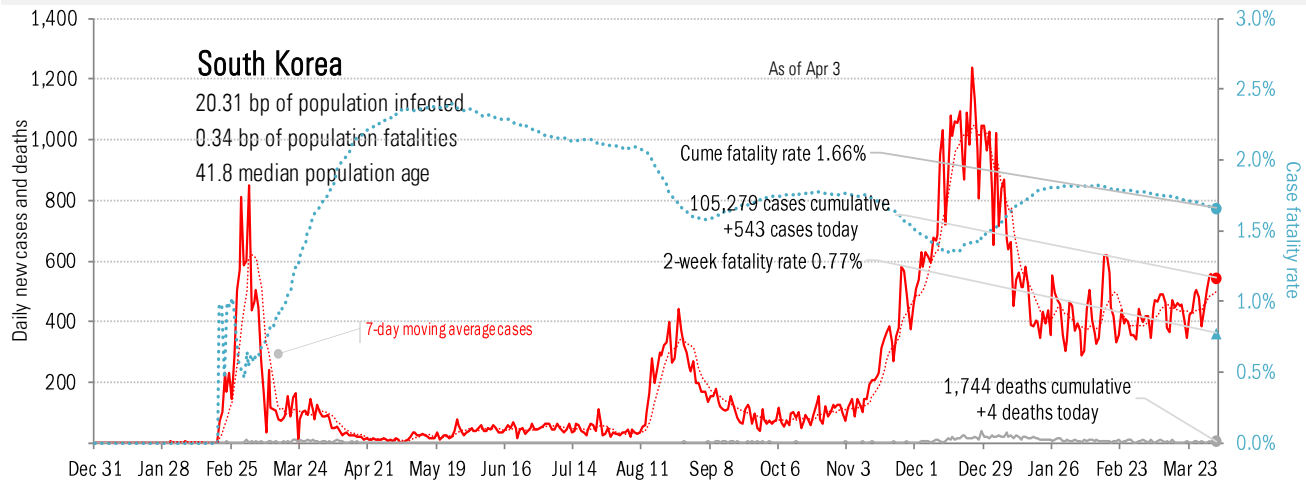
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in continental Eur



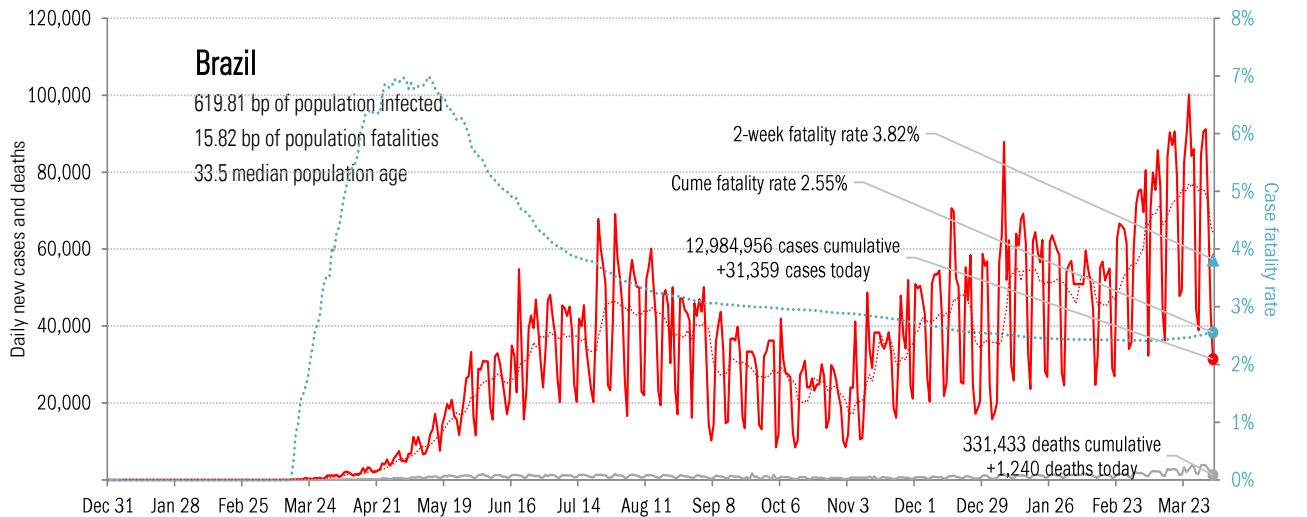
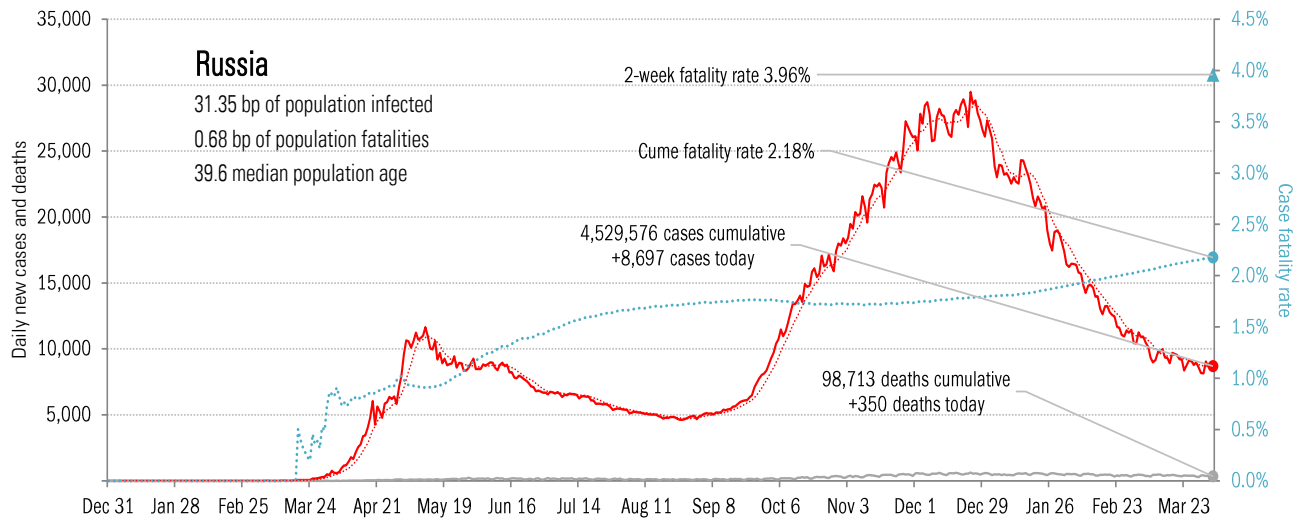
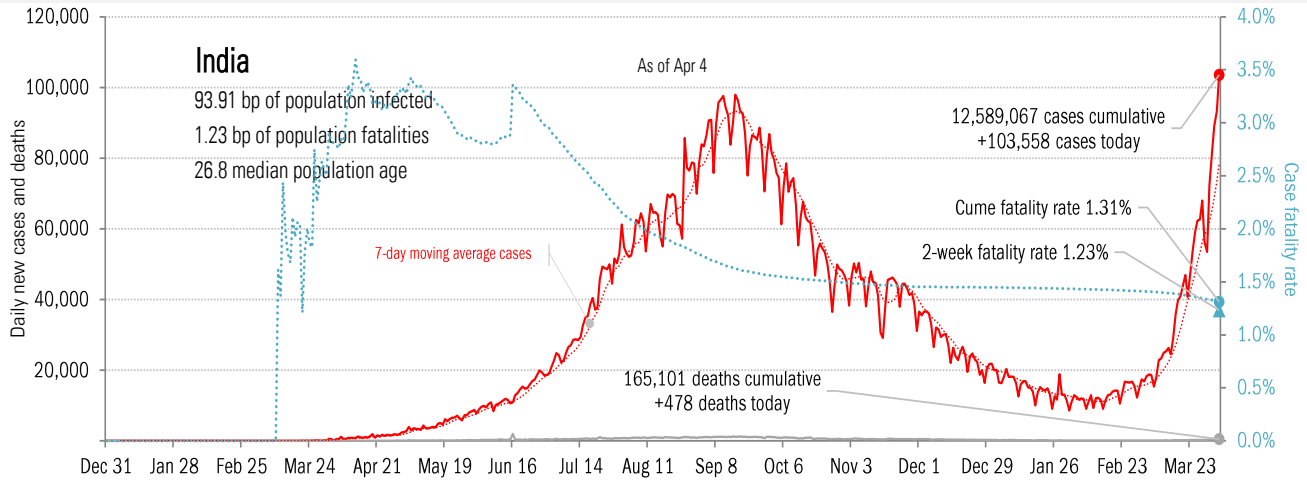
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in other hot-spots



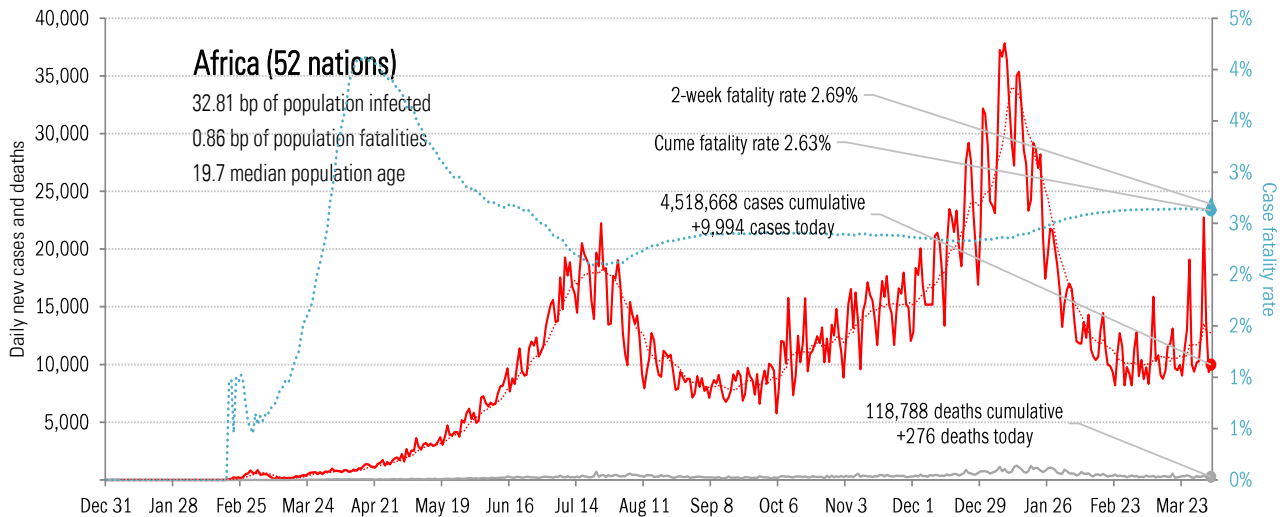
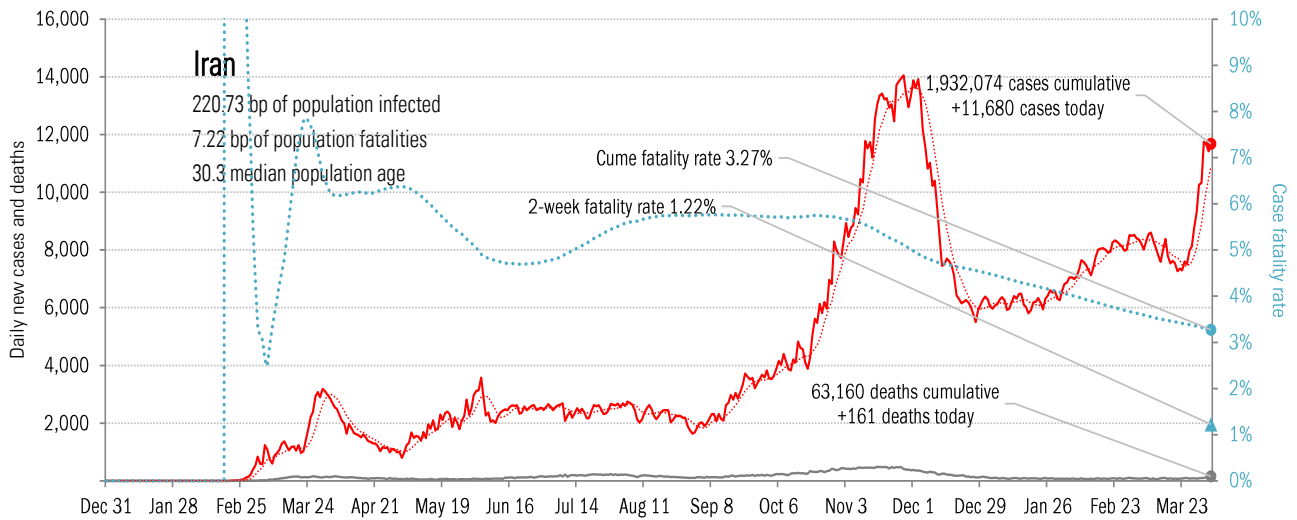
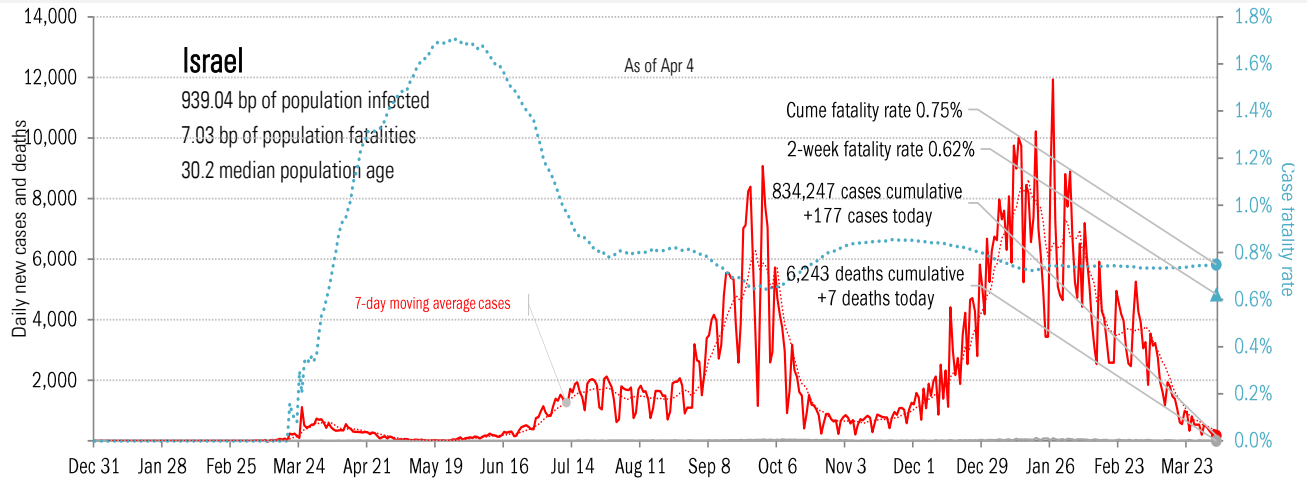
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in the BRICs ex-China



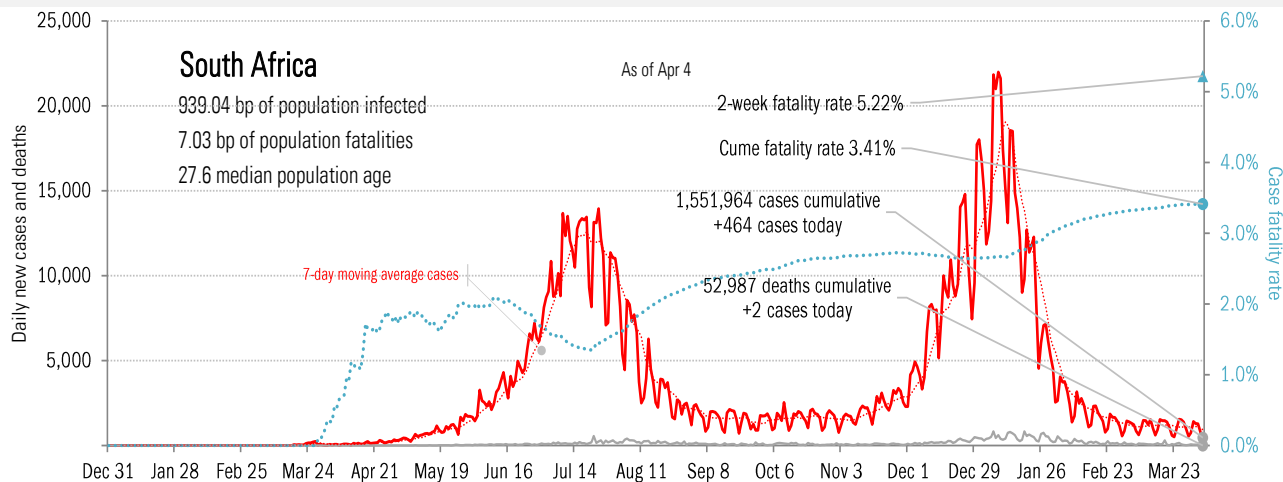
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in the Middle East and Africa



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

Impact in Africa, continued



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