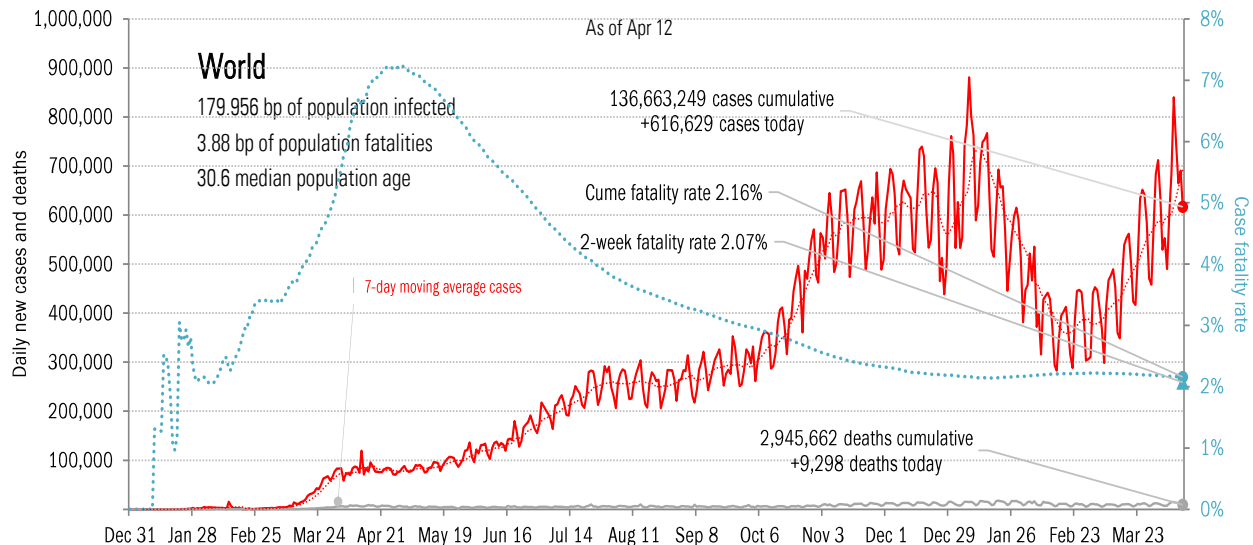
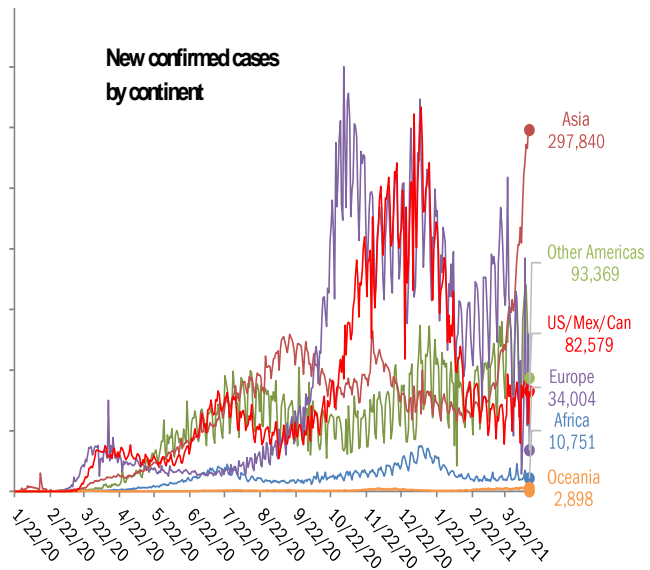


Data Insights: Covid-2019 Monitor

Tuesday, April 13, 2021

The global scorecard

The worst ten countries			
New cases		New Deaths	
India	+161,736	Brazil	+1,480
United States	+70,234	India	+879
Turkey	+54,562	United States	+467
Brazil	+35,785	France	+385
Iran	+23,311	Mexico	+364
Spain	+22,744	Italy	+358
Argentina	+19,437	Peru	+327
Colombia	+16,739	Germany	+296
Germany	+12,446	Ukraine	+294
Poland	+12,016	Hungary	+291
+429,010		+5,141	
World	+616,629	World	+9,298
Top ten	70%	Top ten	55%



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

For more information contact us:

Donald Luskin: 312 273 6766 don@trendmacro.com
 Thomas Demas: 704 552 3625 tdemas@trendmacro.com

The US scorecard

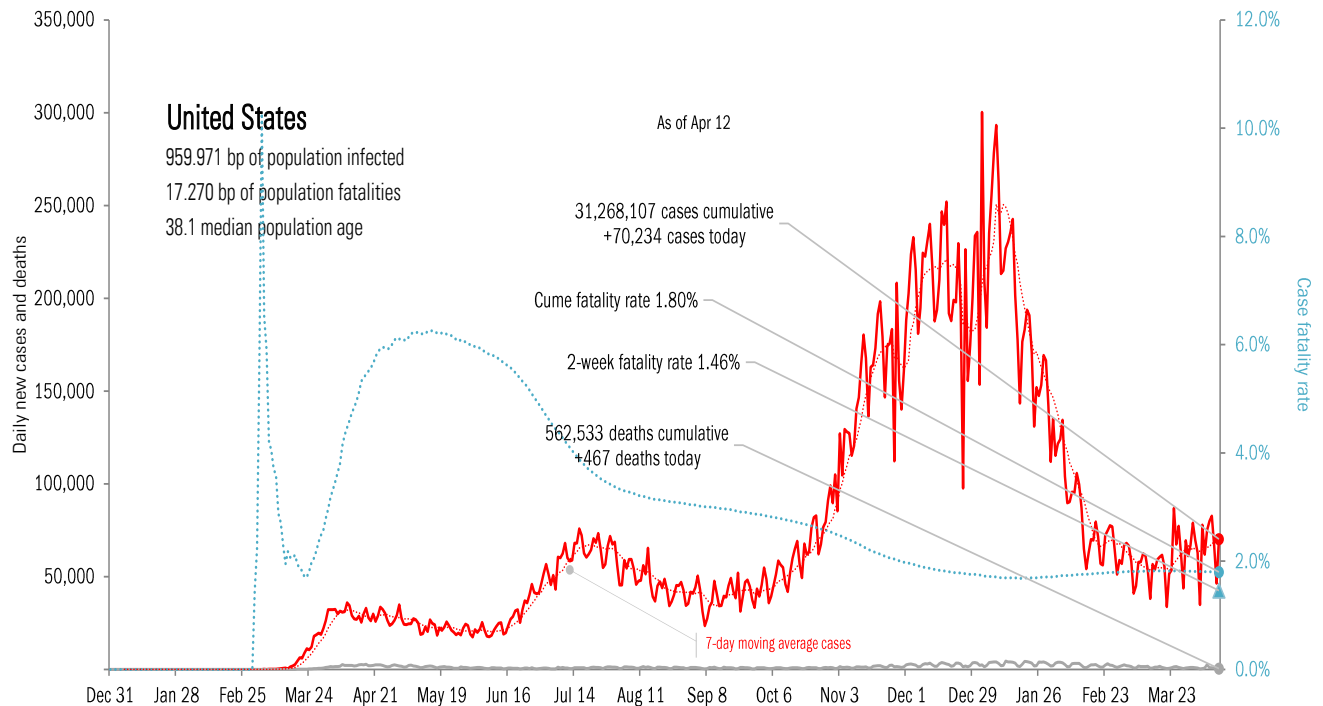
The ten worst US states

New cases			New Deaths			New in hospital			Curre cases			Curre deaths			Curre in hospital			Hospital use		ICU use	
MI	+10,553		NY	+87		FR	+205		CA	3,704,070		CA	60,495		TX	230,397		R	90%	MI	29%
NC	+5,655		CA	+43		MI	+124		TX	2,831,972		NY	51,204		CA	225,627		MA	84%	MD	25%
NY	+5,631		NC	+42		GA	+108		FL	2,125,846		TX	49,231		FL	157,459		MD	83%	RI	20%
TX	+4,995		FL	+35		IL	+54		NY	1,962,225		FL	34,056		NY	120,811		PA	81%	NY	18%
PA	+4,012		GA	+35		FL	+38		IL	1,282,114		PA	25,397		GA	96,993		MO	81%	DC	18%
CA	+3,599		NJ	+26		NJ	+30		PA	1,077,936		NJ	24,896		CH	77,697		MI	80%	PA	16%
CT	+2,985		LA	+25		ND	+25		GA	1,074,731		IL	23,809		PA	77,625		CT	80%	MN	16%
TN	+2,829		MA	+19		MN	+24		CH	1,041,389		GA	19,523		IL	70,990		MN	79%	NJ	14%
NJ	+2,468		TX	+19		WA	+21		NJ	955,958		CH	18,827		KY	69,597		FL	78%	TX	14%
IL	+2,451		IL	+16		CO	+18		NC	935,061		MI	17,576		AZ	59,058		WV	78%	WV	13%
+45,178			+347			+647			16,991,302			325,014			1,186,254						
All states	+70,234		+467			+776			All states	31,268,107		562,533			2,115,580			All states	70%	67%	
Top ten	64%		74%			83%			Top ten	54%		58%			56%			Median	71%	10%	

Some states not reporting

Five most improved US states

Fewer daily cases		Fewer new deaths		Fewer new hospitalizations		Most pop immunity growth	
FL	-3,907	CA	-25	MI	-93	CH	+132 bp
NY	-999	MN	-11	MD	-69	VT	+99 bp
NJ	-919	KS	-8	KY	-68	MN	+97 bp
MD	-498	IN	-7	CT	-27	NH	+92 bp
IL	-488	TX	-5	IN	-26	H	+80 bp

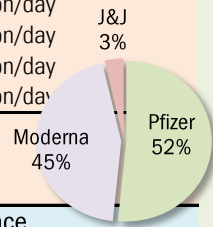


Source: [Johns Hopkins](#), [Dept. of Health and Human Services](#), [CDC](#), TrendMacro calculations

Rolling out the vaccines in the US and the world

US overall	Over last day	Immunity	Full	Partial
248.06 million doses distributed	+0.00 million/day	US	22.2%	36.1%
196.92 million doses administered	+2.70 million/day	UK	11.3%	47.4%
124.71 million persons partially immunized	+1.63 million/day	France	5.5%	15.9%
76.91 million persons fully immunized	+1.47 million/day	Spain	6.7%	16.4%
7.77 million shots long-term care residents/staff	+0.00 million/day	Germany	6.1%	16.2%
		Italy	6.6%	15.4%
		Australia	0.8%	0.6%
		Israel	57.2%	61.6%
		Canada	2.2%	19.9%
		Japan	0.4%	0.9%
		Africa	0.3%	0.7%
		India	1.0%	6.9%
		Brazil	3.0%	9.9%

79.4% of distributed doses administered
37.3% of US pop partial **23.0% full immunity**
100% of LTC partial **63.8% full immunity**



At today's dosing pace,
 every American >18 immune in
85 days
 by Jul 5, 2021
 US achieves adult herd immunity* in
26 days
 by May 8, 2021

Global data differs from sources, timing

AK
96.5%
37.2%
27.6%

State
Doses distributed as % population
Partial immunity as % population
Full immunity as % population



ME
77.1%
42.9%
27.7%

WI	VT	NH
68.7%	82.7%	73.8%
39.7%	42.5%	52.3%
25.8%	27.2%	25.0%

WA	ID	MT	ND	MN	IL	MI	NY	MA
72.4%	65.2%	77.3%	71.8%	67.0%	73.2%	70.3%	74.3%	77.4%
37.2%	31.0%	36.5%	36.8%	39.3%	38.8%	35.5%	39.2%	43.8%
24.0%	21.3%	24.9%	27.1%	26.0%	22.3%	23.1%	25.3%	25.8%

OR	NV	WY	SD	IA	IN	OH	PA	NJ	CT	RI
69.4%	65.4%	77.8%	83.7%	71.0%	63.7%	71.2%	74.5%	71.6%	83.9%	75.8%
35.5%	34.0%	31.1%	41.2%	38.1%	31.1%	35.6%	39.5%	42.1%	44.4%	40.5%
22.3%	21.5%	22.8%	28.5%	25.3%	20.9%	22.9%	22.7%	26.3%	28.1%	28.7%

CA	UT	CO	NE	MO	KY	WV	VA	MD	DE
73.5%	61.0%	71.0%	72.2%	69.2%	70.1%	77.3%	69.9%	74.0%	74.9%
38.8%	31.8%	38.1%	37.2%	31.5%	36.3%	33.6%	39.0%	38.5%	38.3%
21.4%	16.1%	22.8%	23.9%	20.6%	24.0%	24.2%	23.0%	23.8%	21.8%

AZ	NM	KS	AR	TN	NC	SC	DC
70.9%	81.6%	73.5%	70.9%	67.9%	71.3%	67.9%	86.5%
35.2%	45.0%	37.7%	31.5%	30.3%	34.0%	32.7%	36.3%
22.0%	29.6%	22.9%	19.0%	18.2%	21.7%	20.6%	19.8%

OK	LA	MS	AL	GA
78.9%	70.5%	69.7%	66.9%	67.8%
35.6%	29.9%	27.9%	28.3%	28.8%
23.7%	21.1%	19.2%	16.8%	15.0%

HI	TX	FL	PR
80.5%	66.6%	73.9%	76.0%
36.7%	32.4%	34.8%	27.3%
25.2%	19.9%	21.4%	16.3%

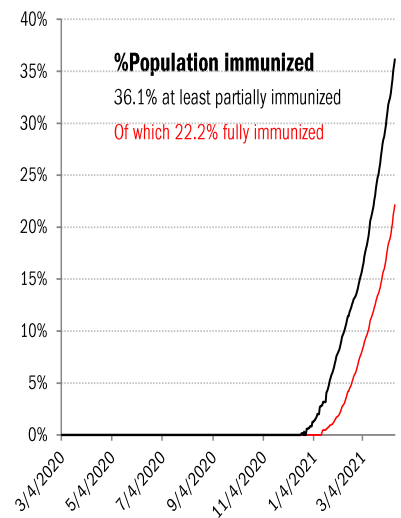
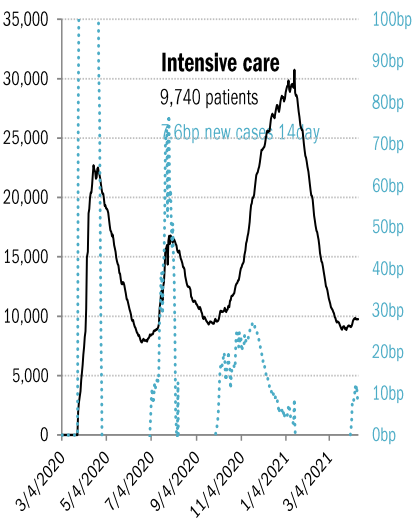
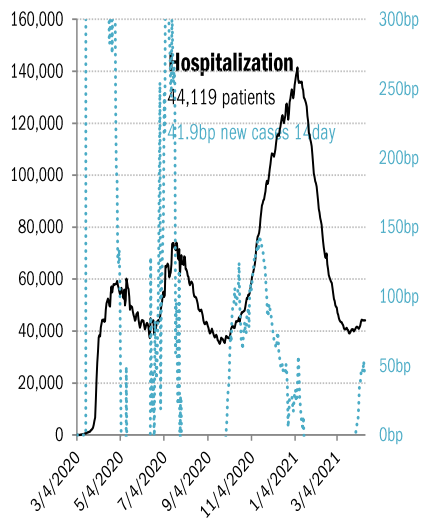
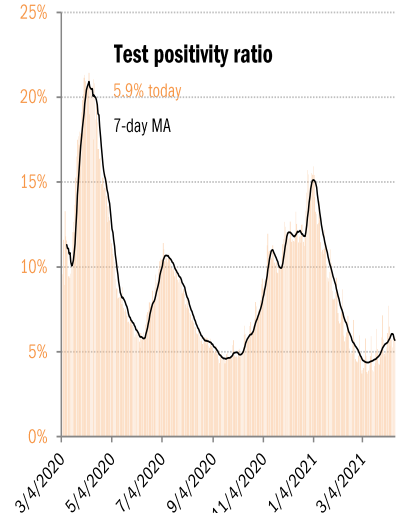
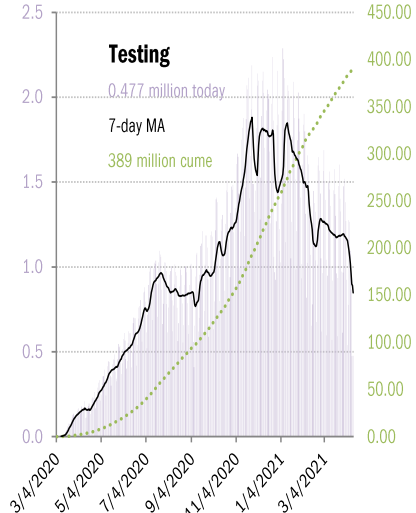
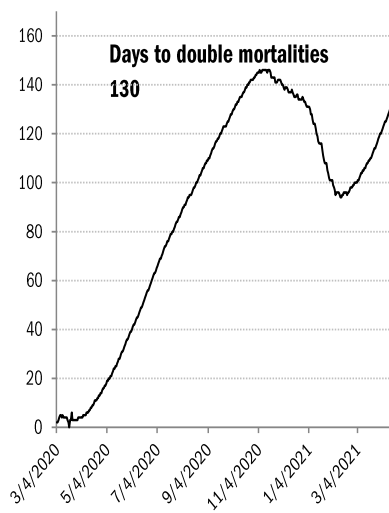
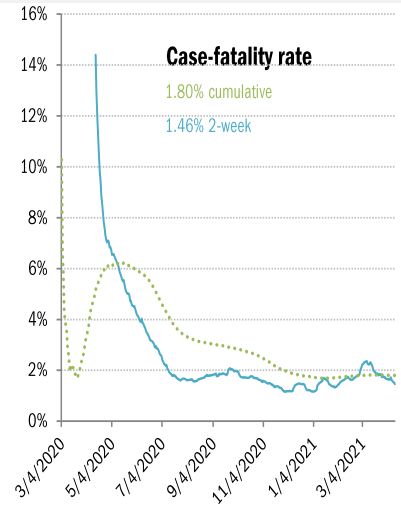
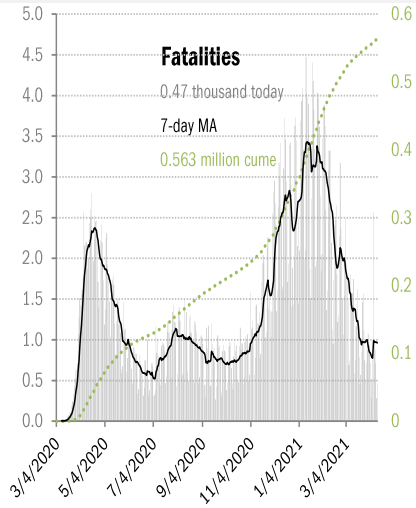
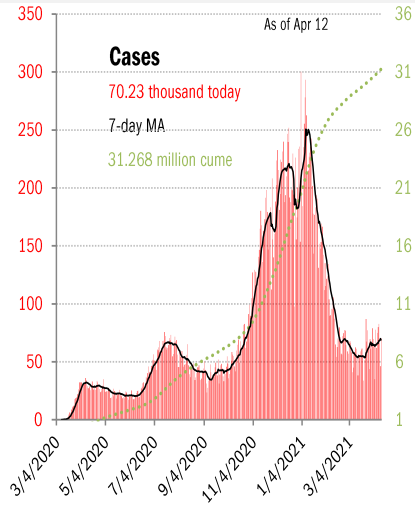
As of Apr 12

* 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

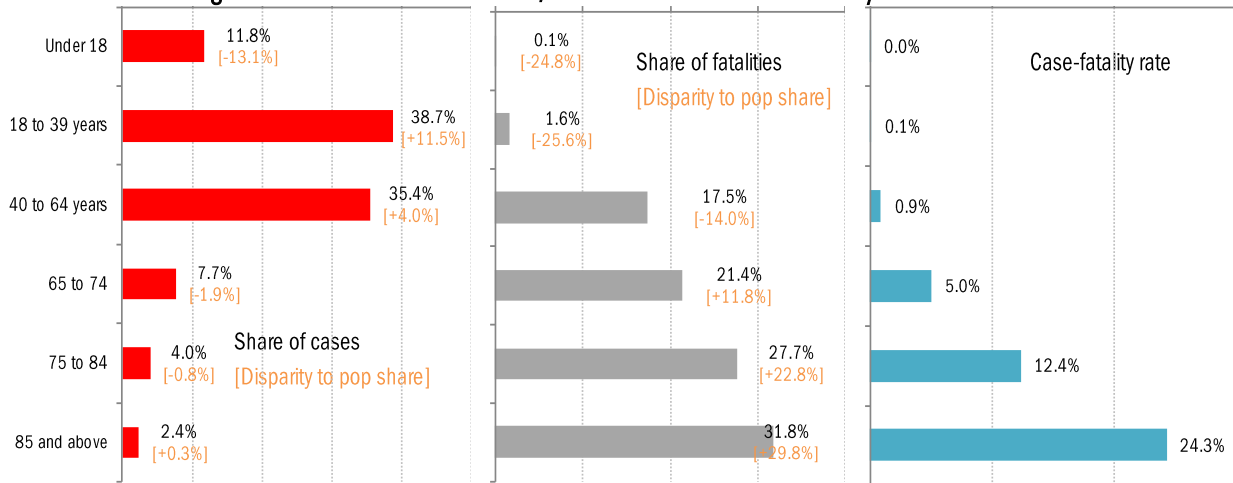
National and state-by-state data do not line up because of different sources



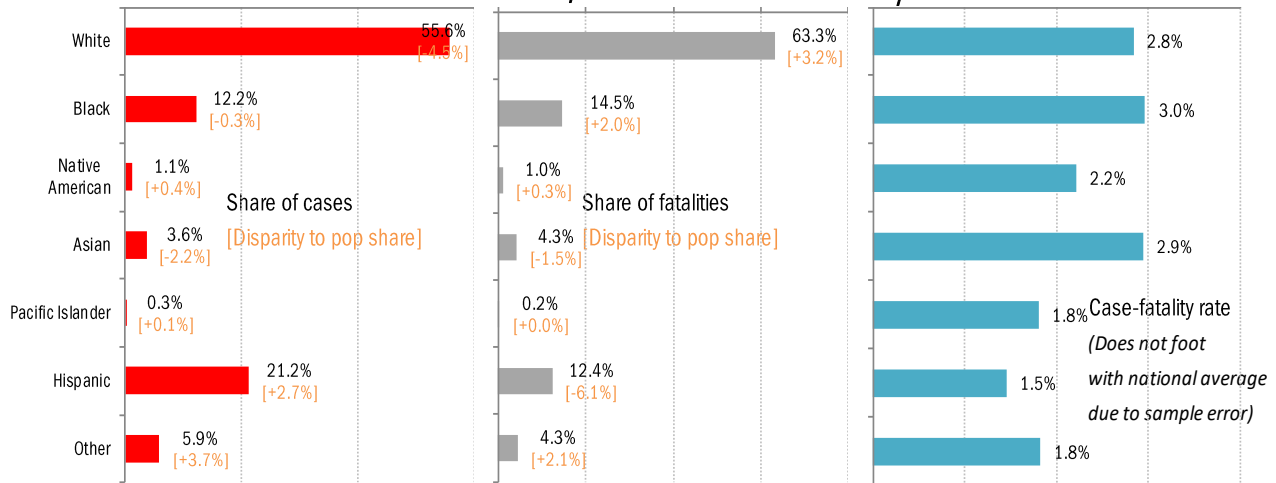
Source: [Johns Hopkins](#), [Covid Act Now](#), TrendMacro calculations

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

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

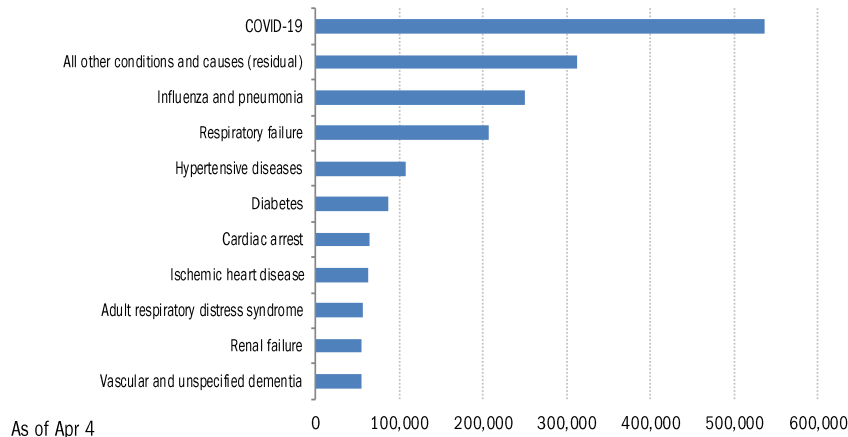


Racial distribution of US cases, fatalities and case-fatality rates



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

[Surging Virus Has Michigan's Democratic Governor at Loggerheads With Biden](#)

Noah Weiland and Mitch Smith
New York Times
April 12, 2021

[Antibodies for adherents: Saudi Arabia](#)

The Economist
April 13, 2021

[Did catching Covid-19 help these patients fight cancer? One saw his tumours vanish, another went into remission. Now doctors are asking if their immune response was key - and if it could al](#)

Pat Hagan
Daily Mail
April 12, 2021

[U.K. Rejoices and Asks: Are Lockdowns Finally Finished?](#)

Marc Santora, Megan Specia and Eric Nagourney
New York Times
April 12, 2021

[U.K. Strain Doesn't Result in More Severe Covid-19 Among Hospitalized Patients, Study Finds](#)

Brianna Abbott
Wall Street Journal
April 12, 2021

[My Family's Global Vaccine Journey](#)

Pui-Wing Tam
New York Times
April 11, 2021

[Regeneron says its Covid-19 antibody cocktail helps prevent symptomatic Covid-19](#)

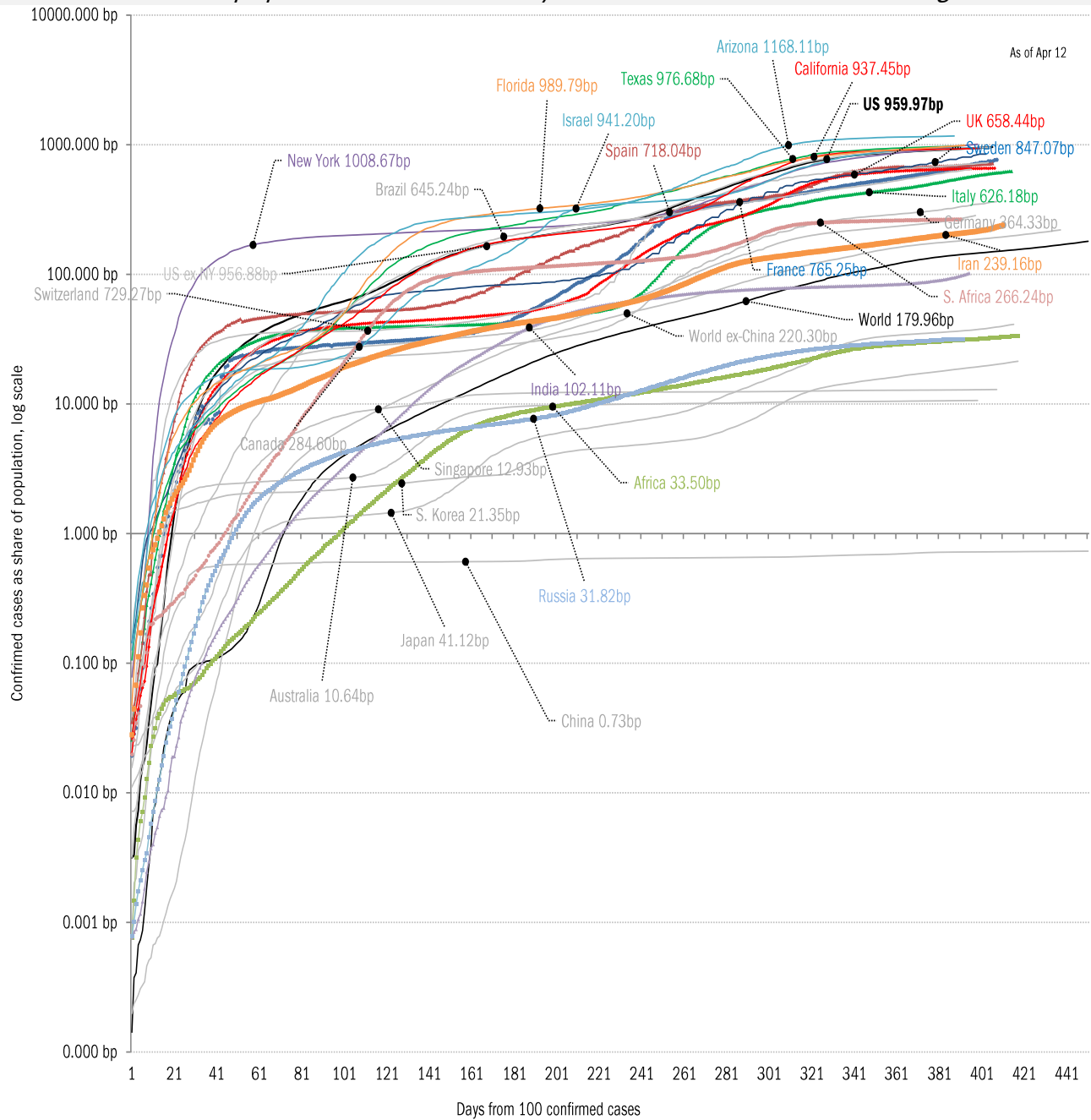
Jamie Gumbrecht
CNN
April 12, 2021

Meme of day



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

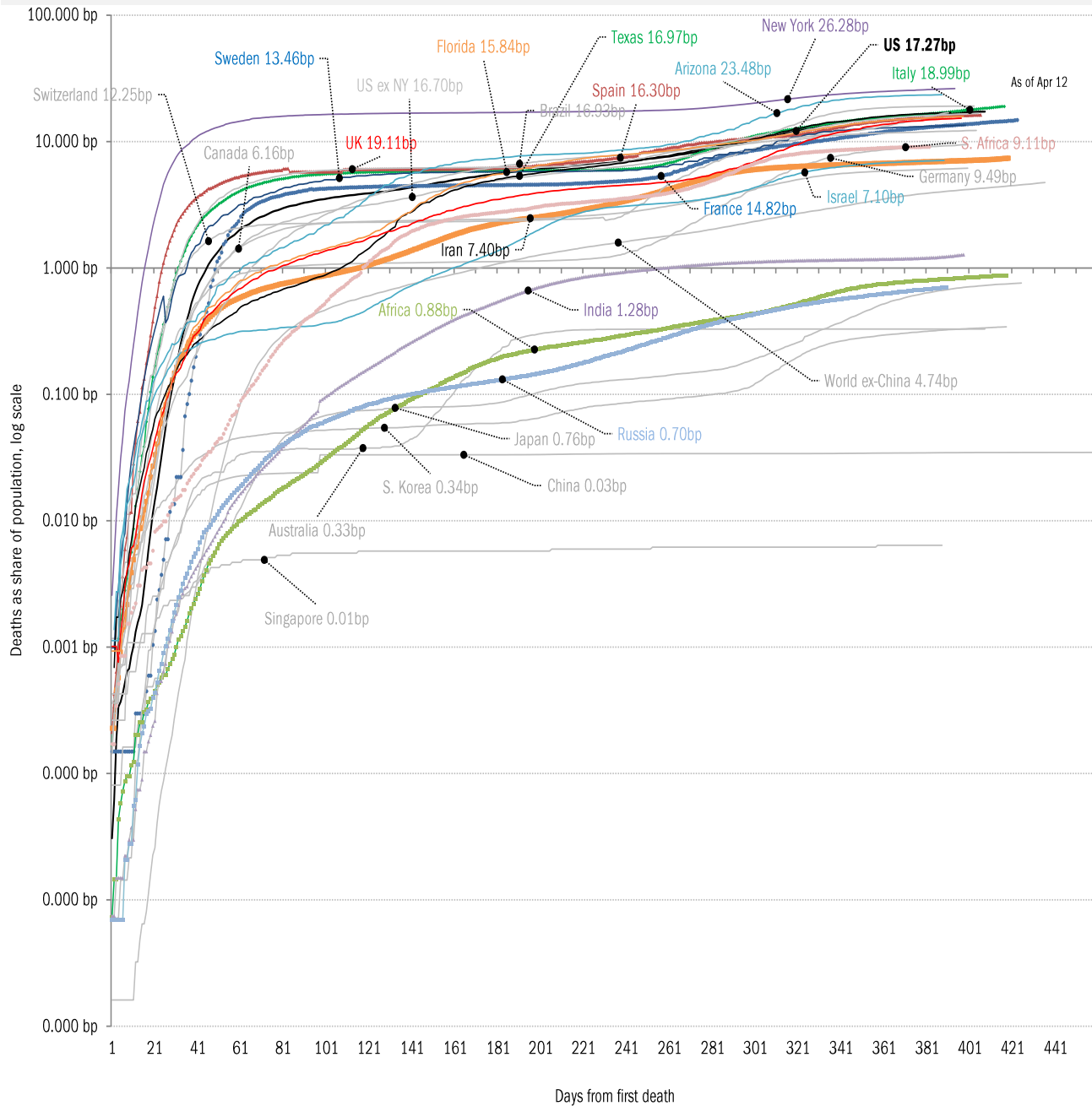
The coronavirus case accelerometer... tracking the world's infection curves
Share of infected population from first day with 100 confirmed cases, log scale



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

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

Share of deceased population from day of first fatality

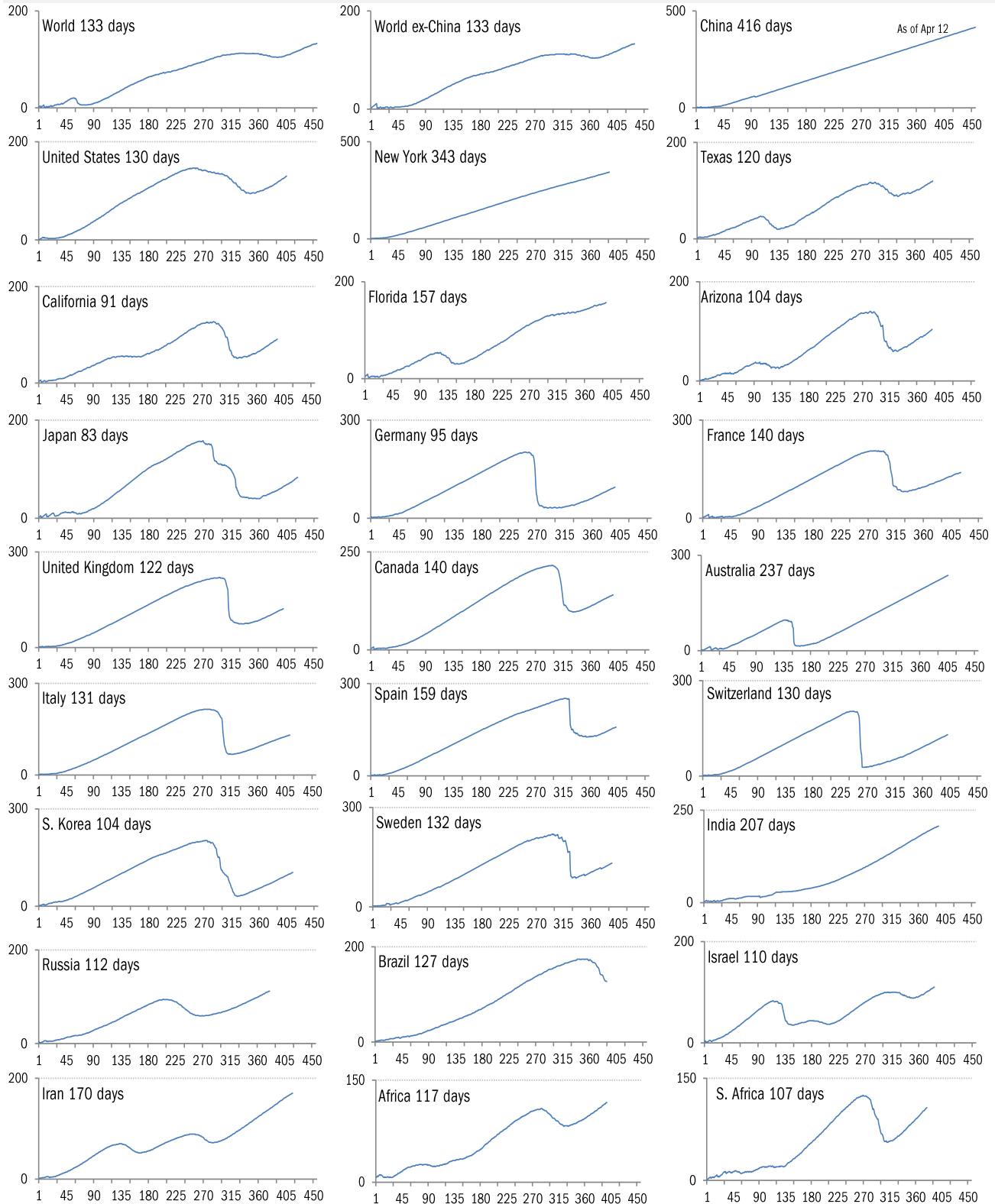


Source: [Johns Hopkins](#), TrendMacro calculations

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

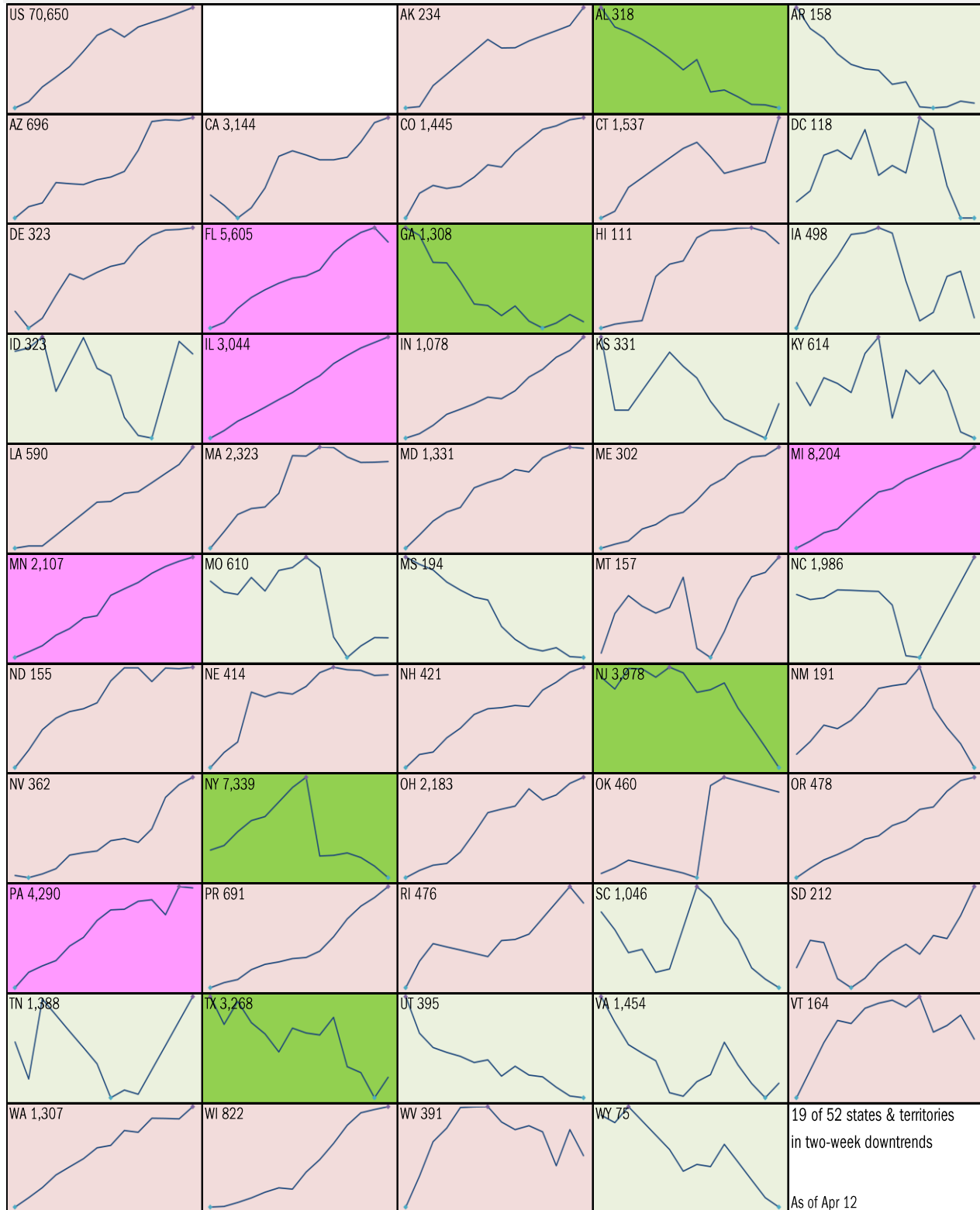
Vertical: days to double deaths Horizontal: days from first death

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

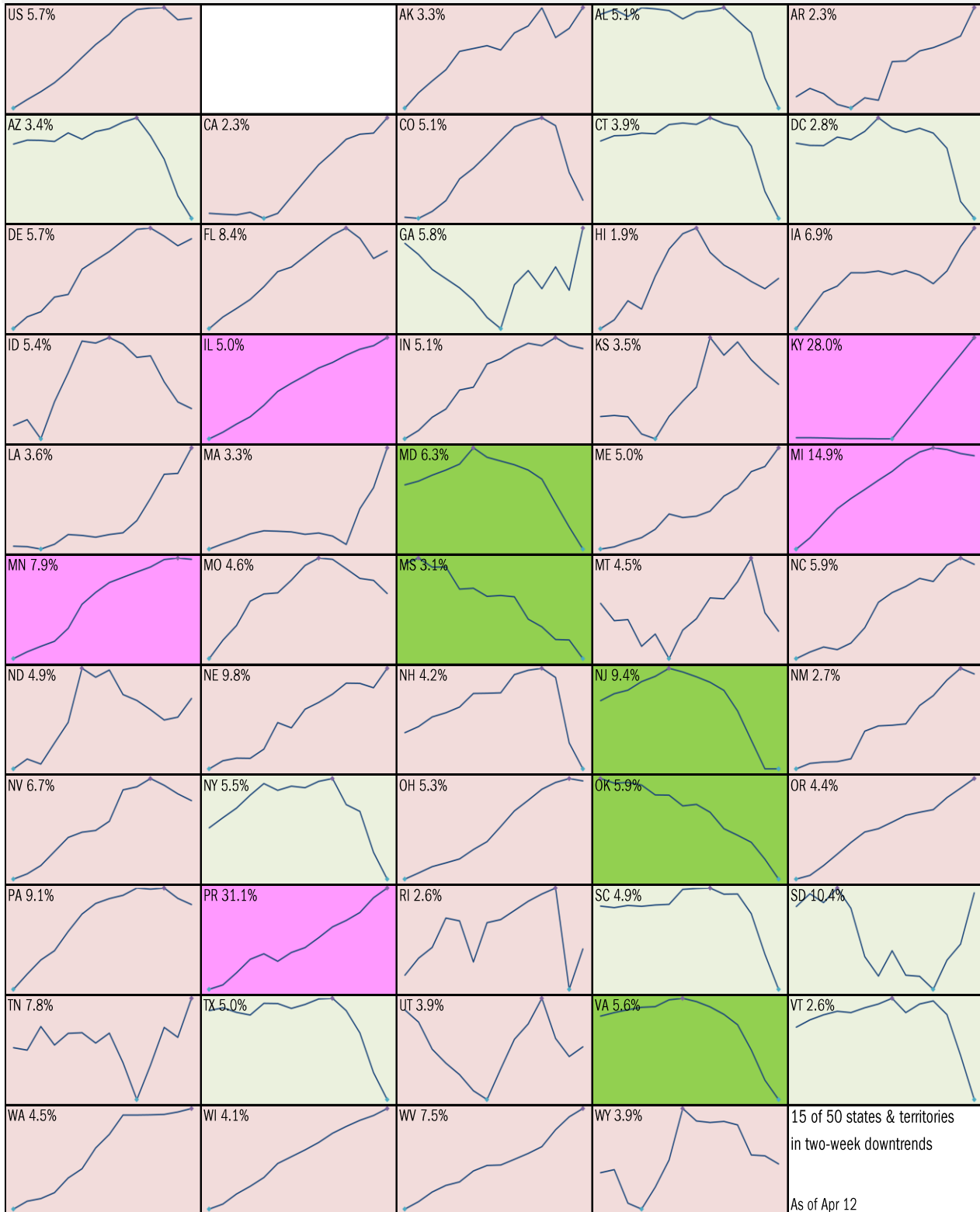


Source: [Johns Hopkins](#), TrendMacro calculations

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

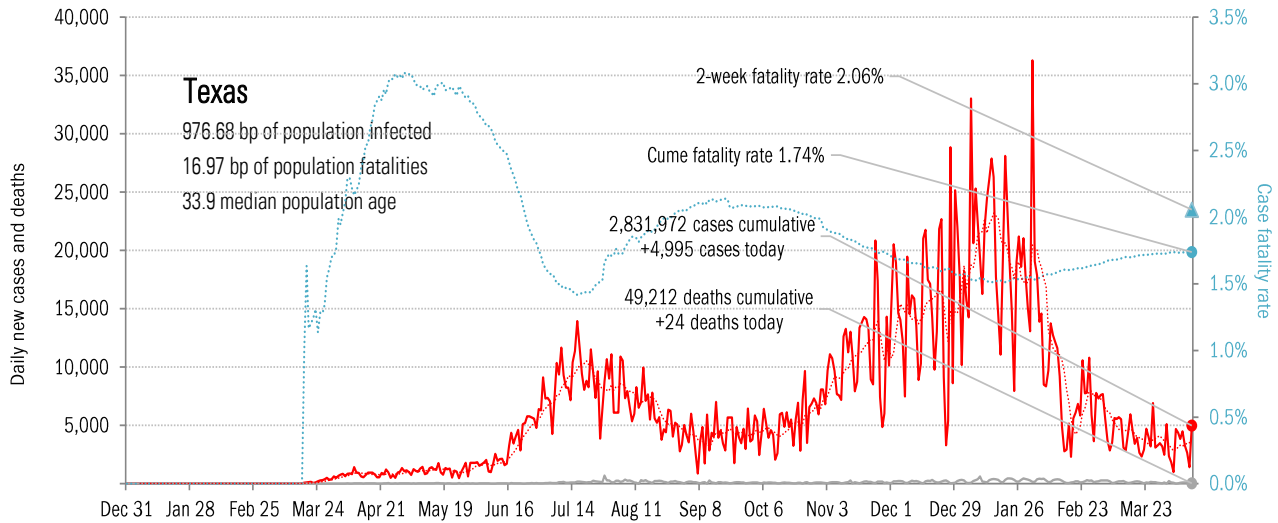
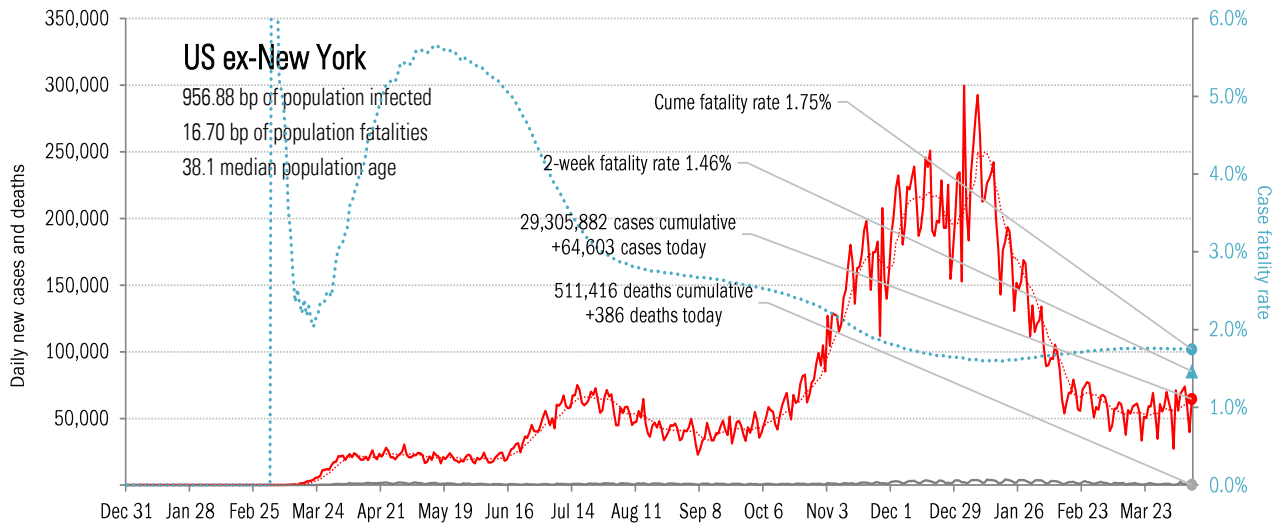
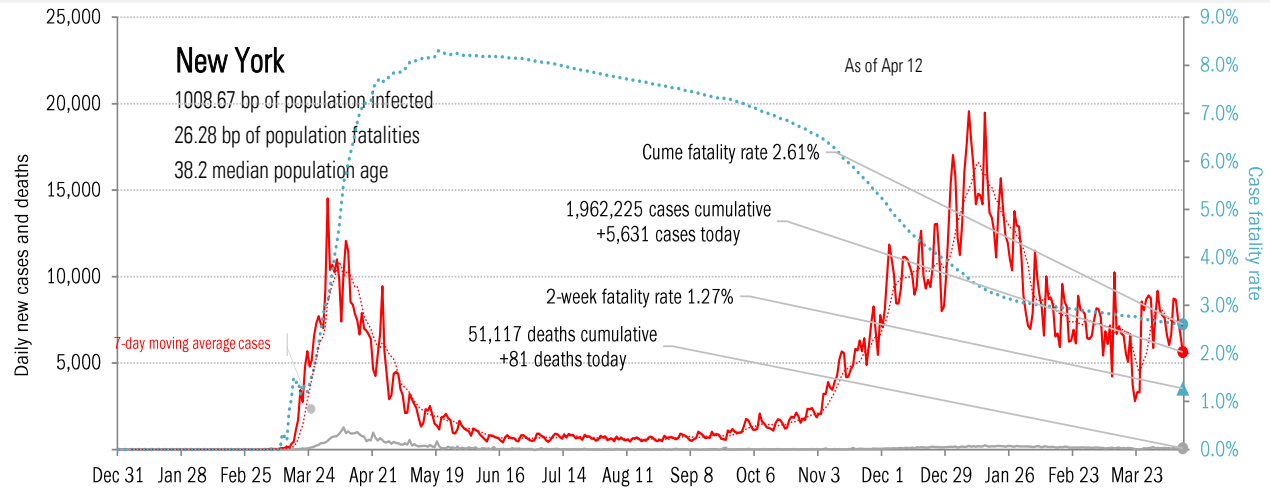
14-day moving average, last 14 days Most recent value displayed ● High ● Low

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



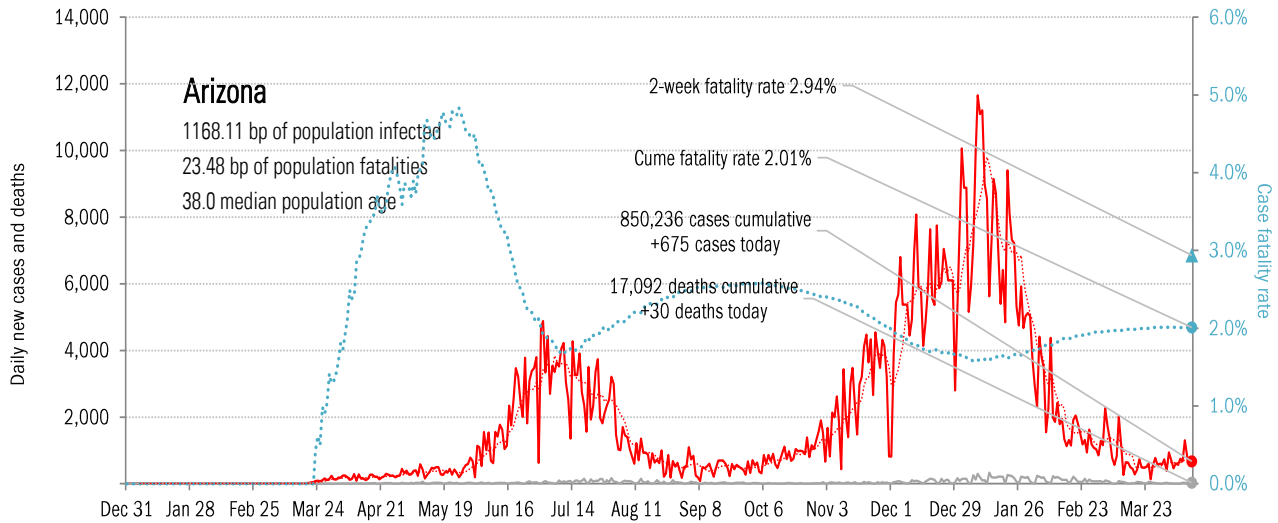
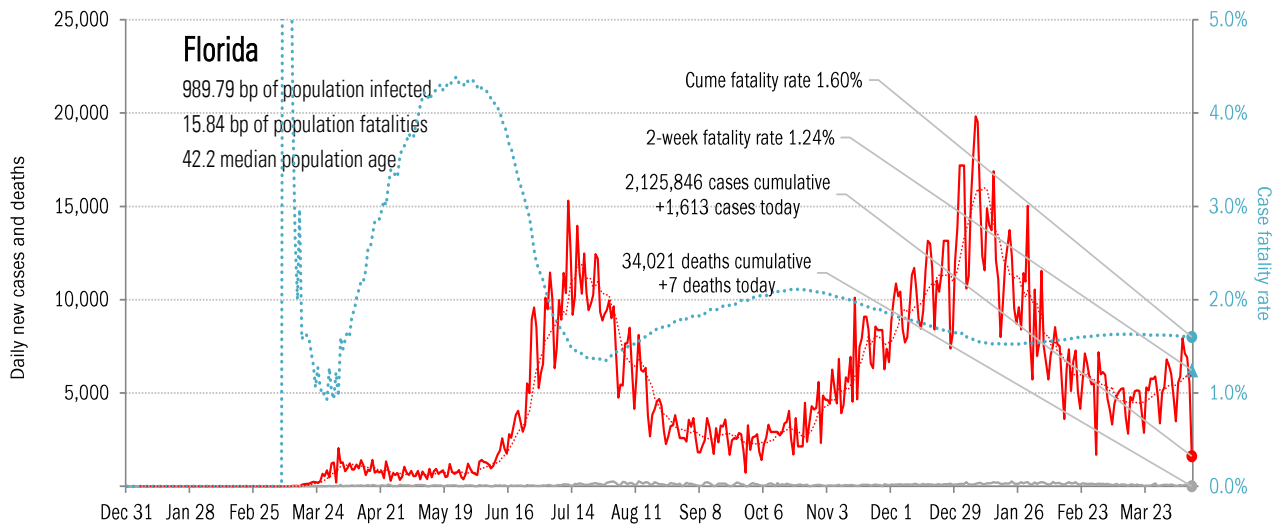
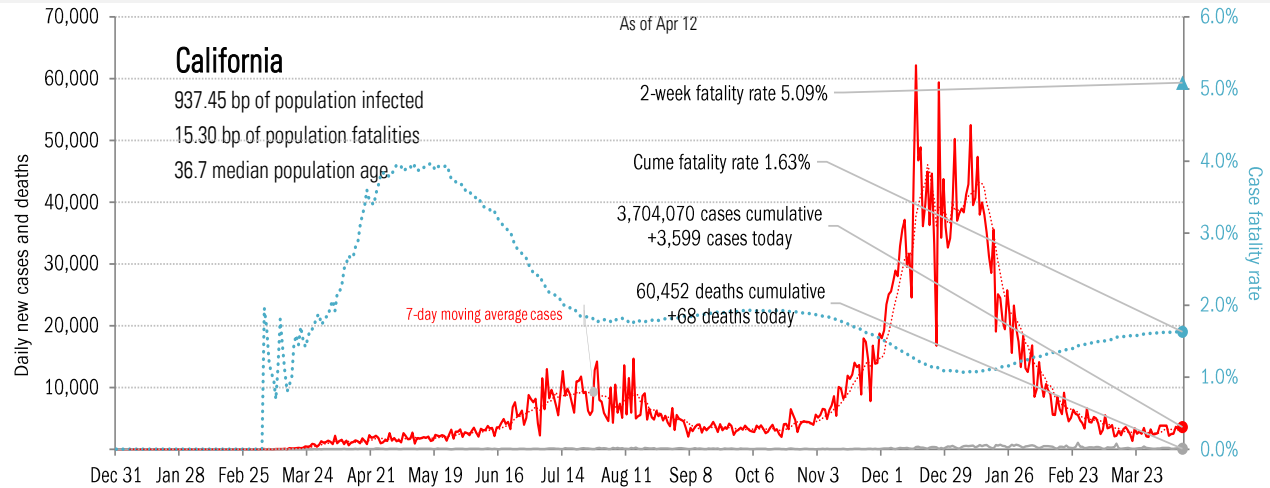
Source: [Covid Act Now](#), TrendMacro calculations

From Ground Zero to the Rio Grande



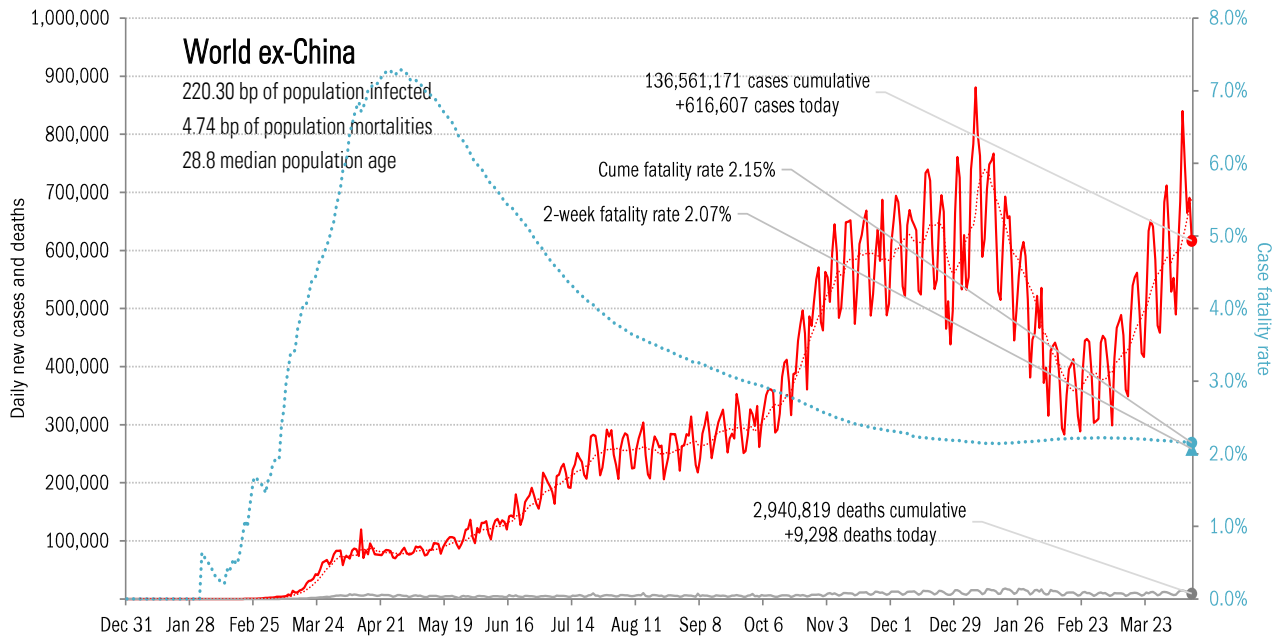
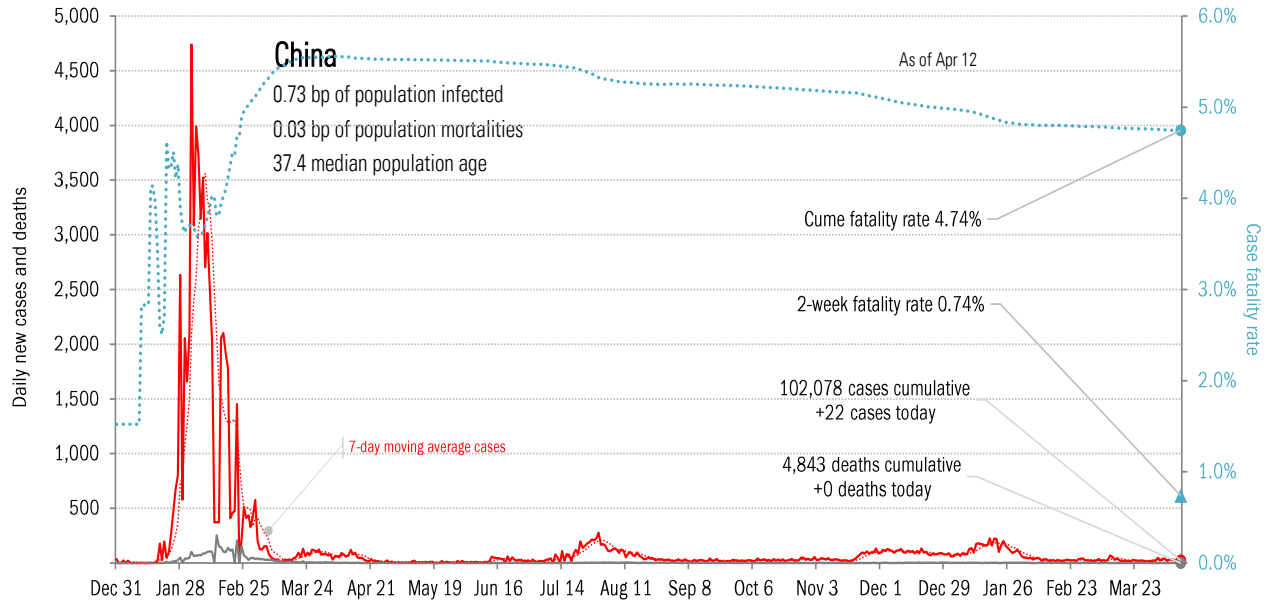
Source: [Johns Hopkins](#), TrendMacro calculations

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



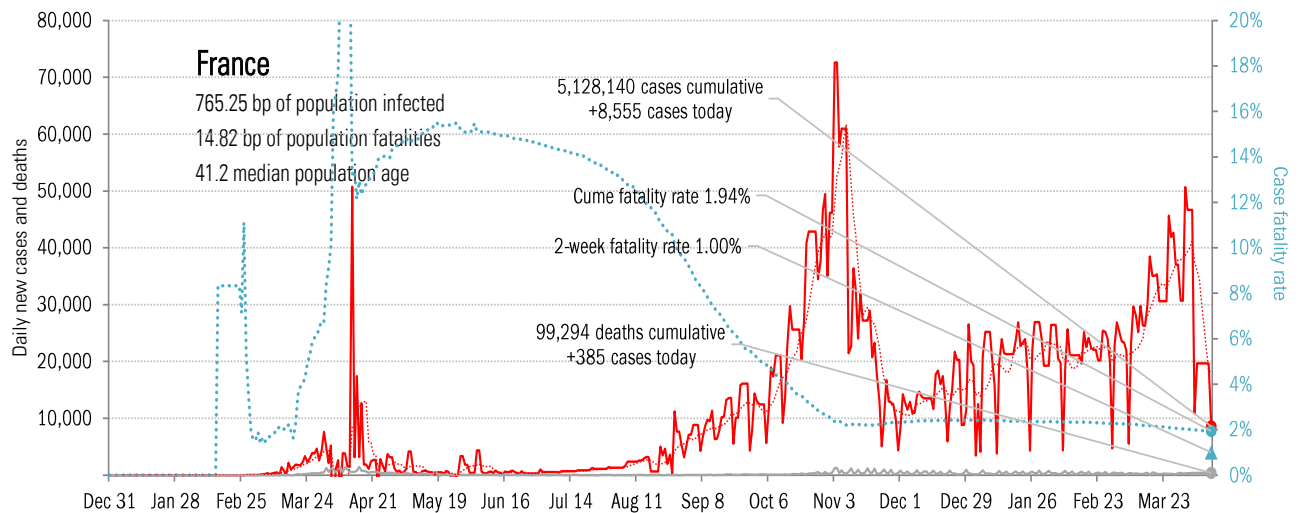
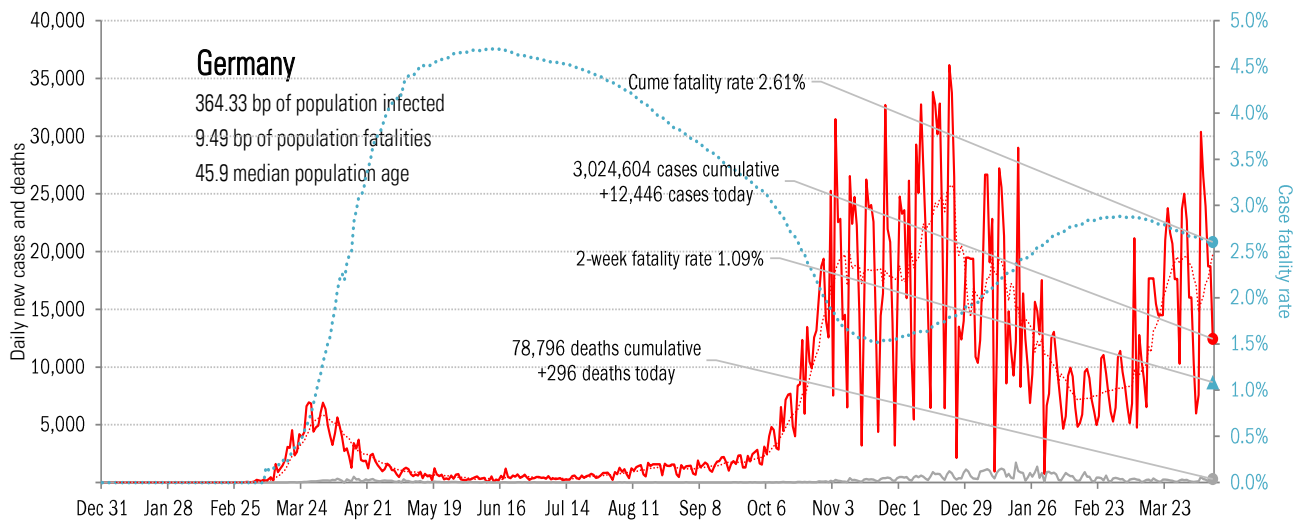
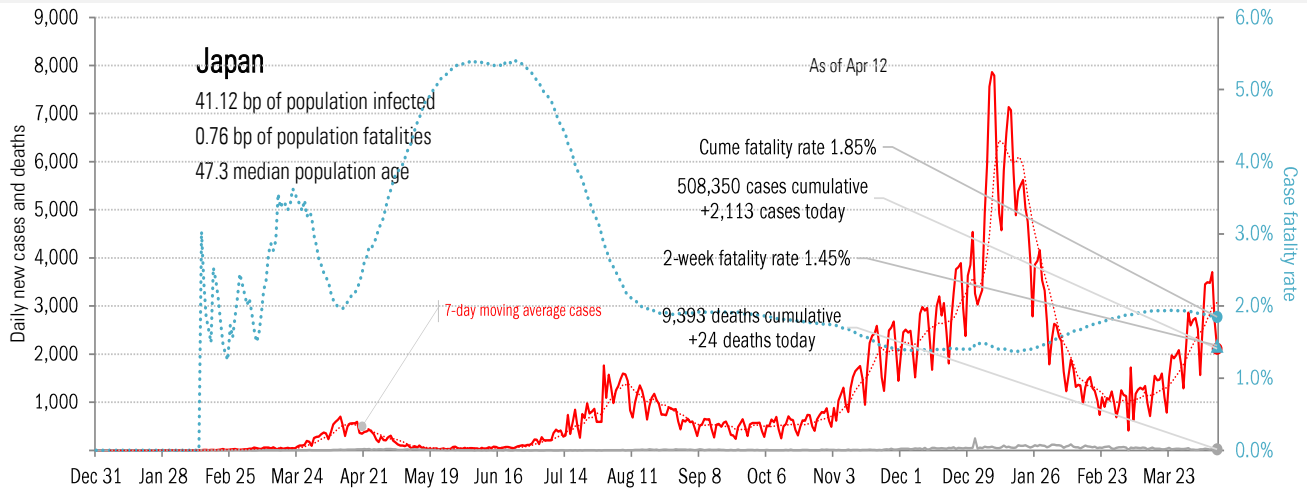
Source: [Johns Hopkins](#), TrendMacro calculations

Patient zero... and then everyone else



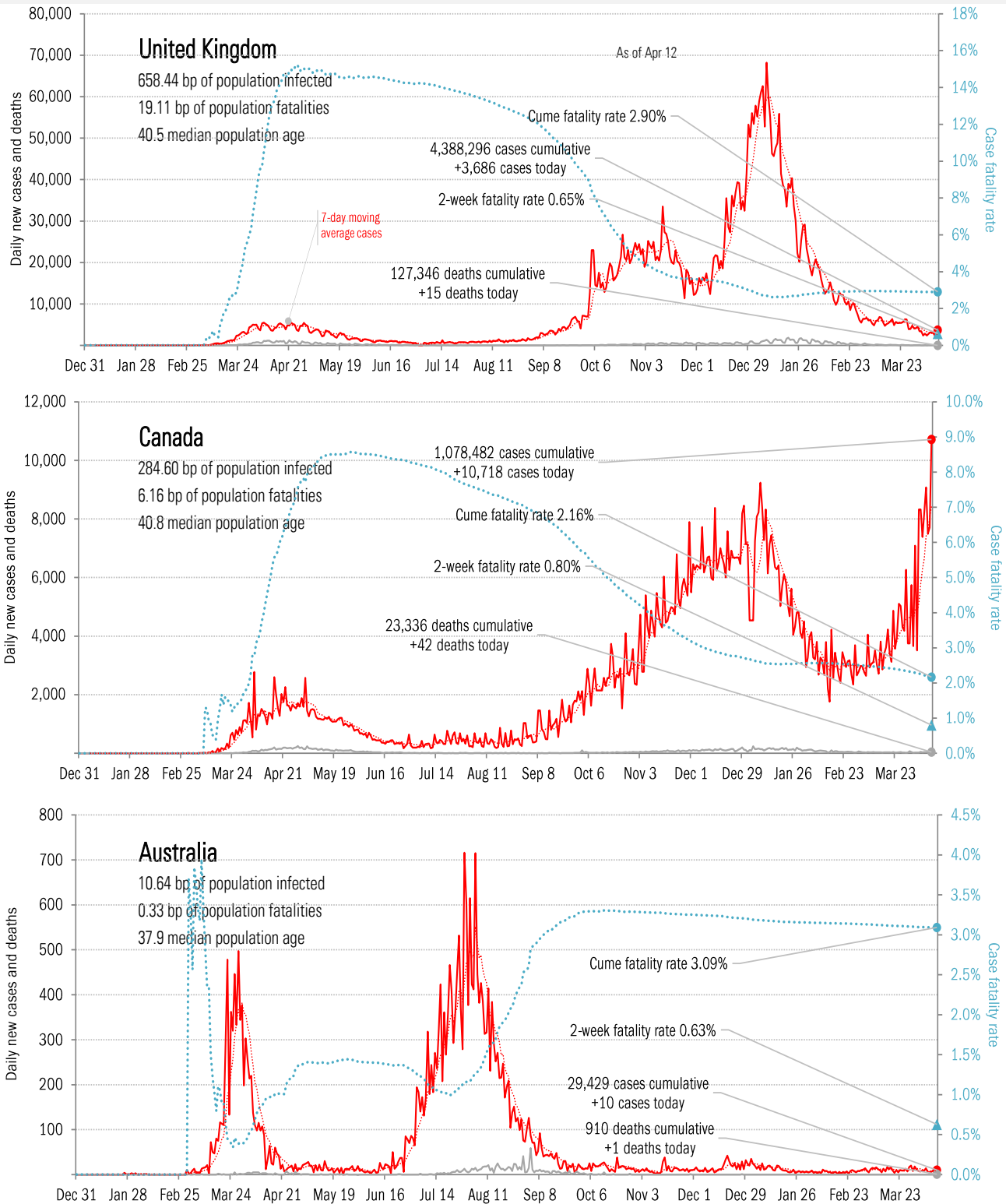
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in the largest economies



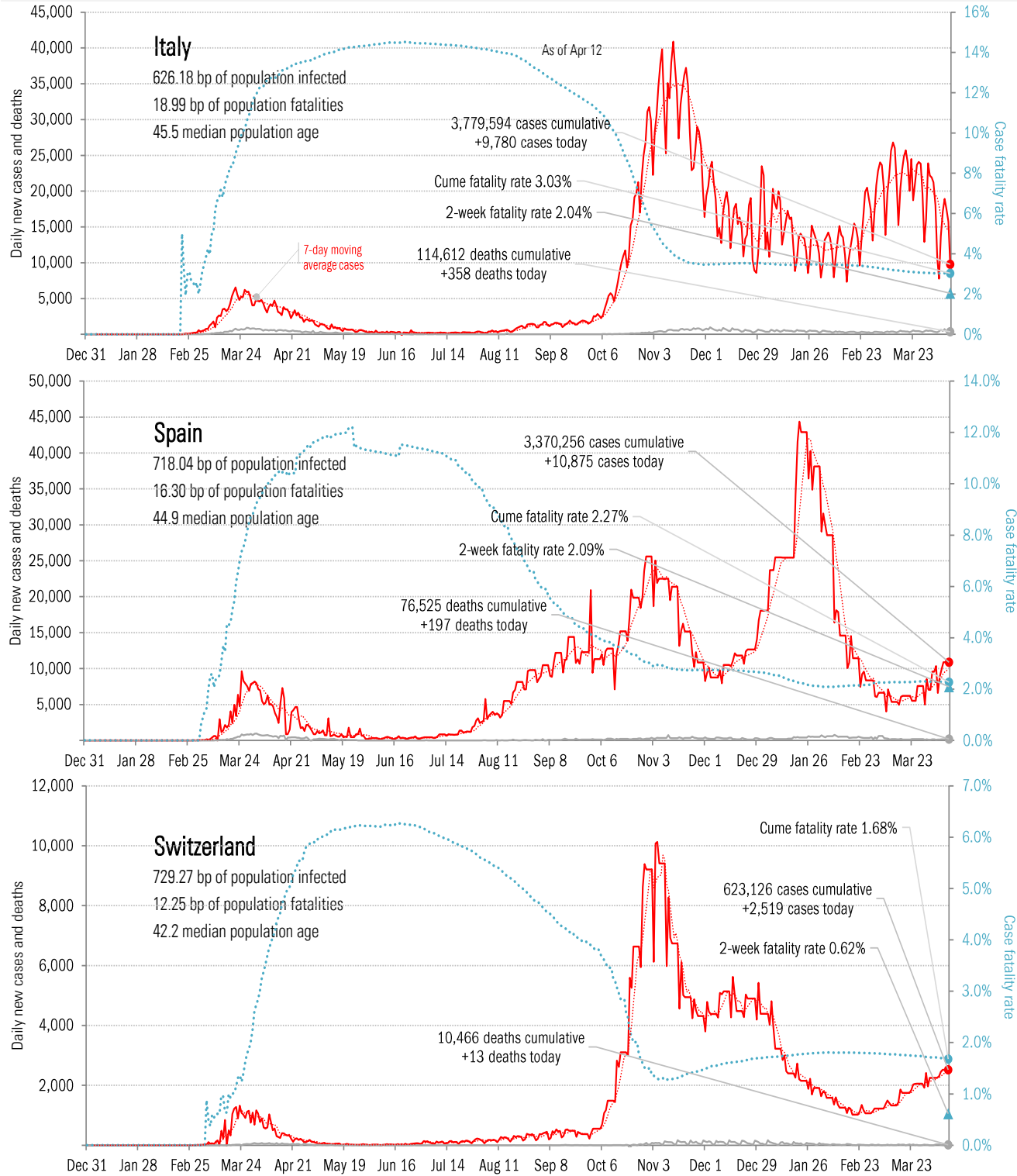
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in The Anglosphere



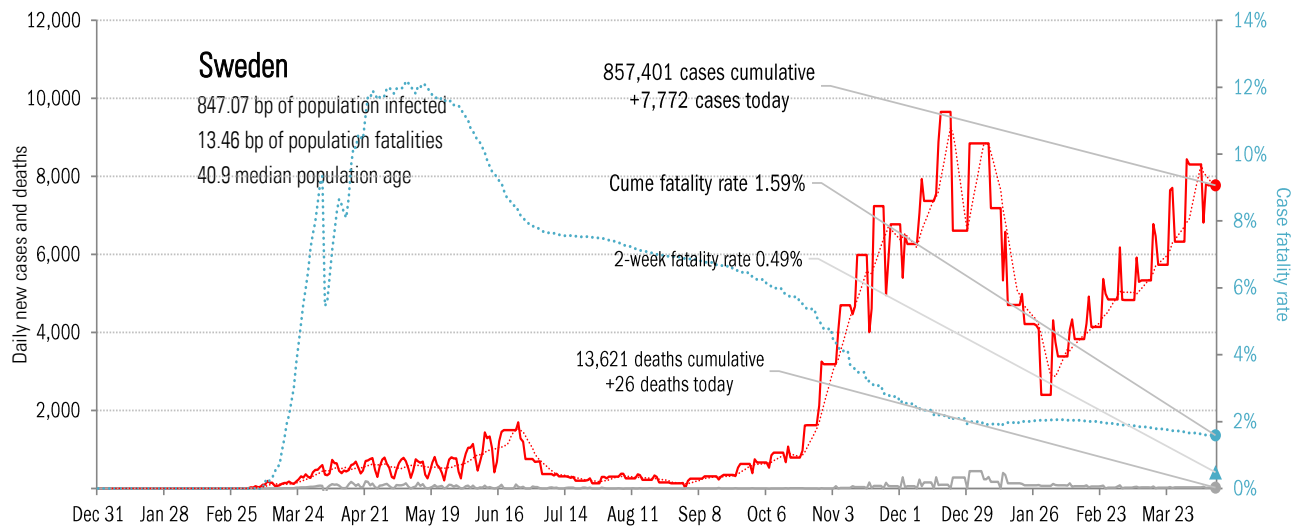
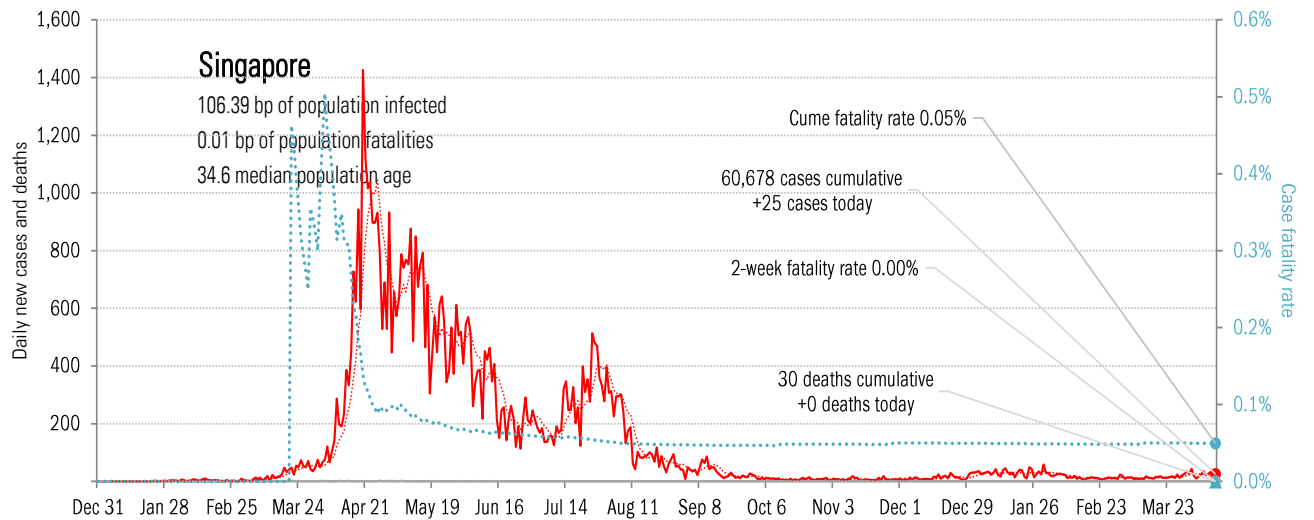
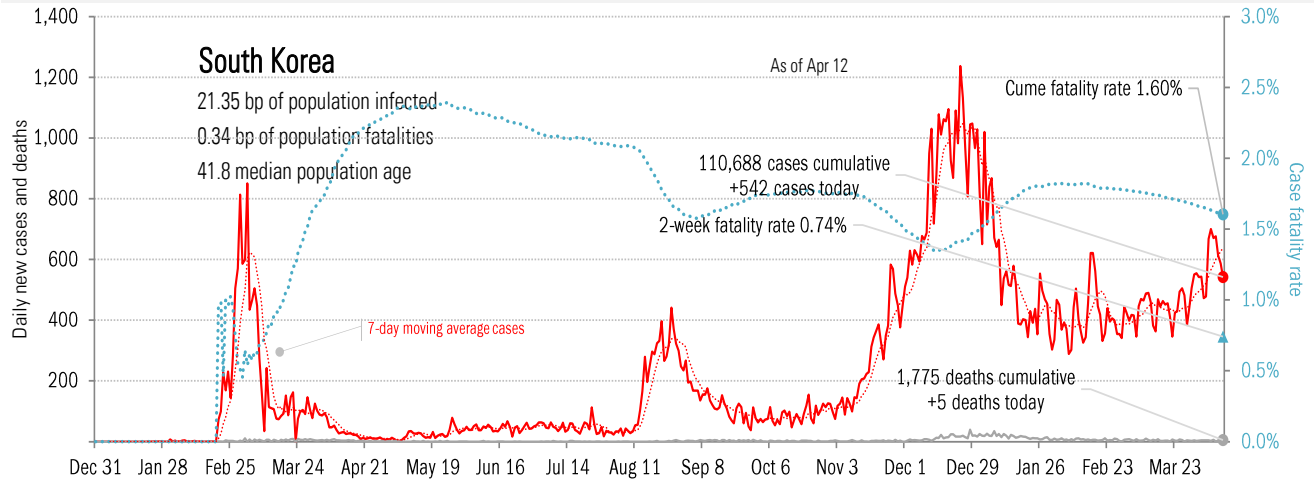
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in continental Europe



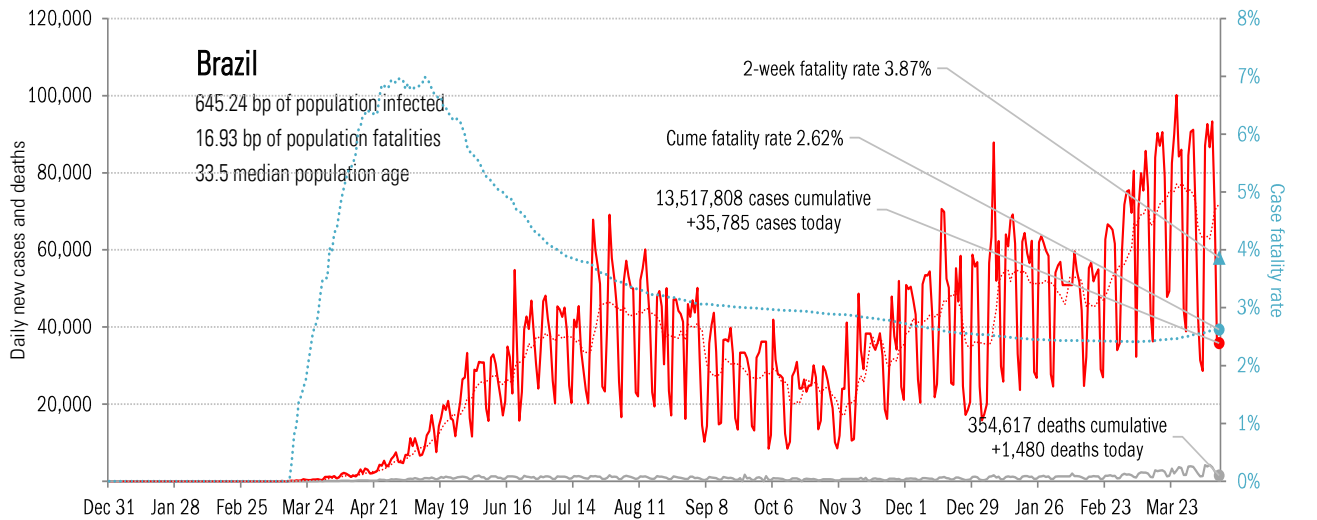
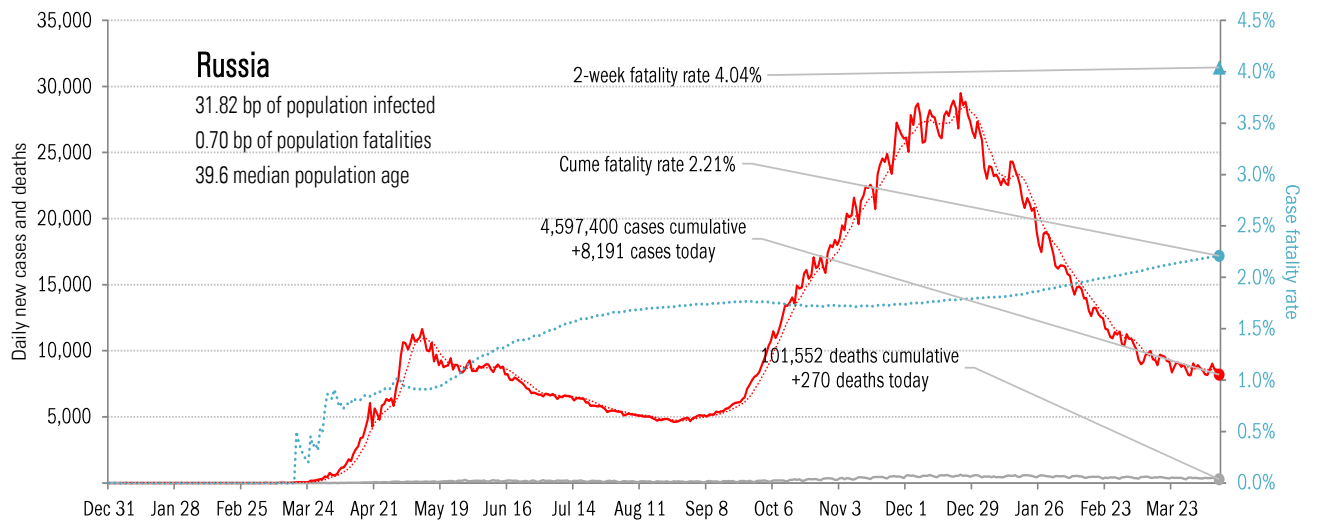
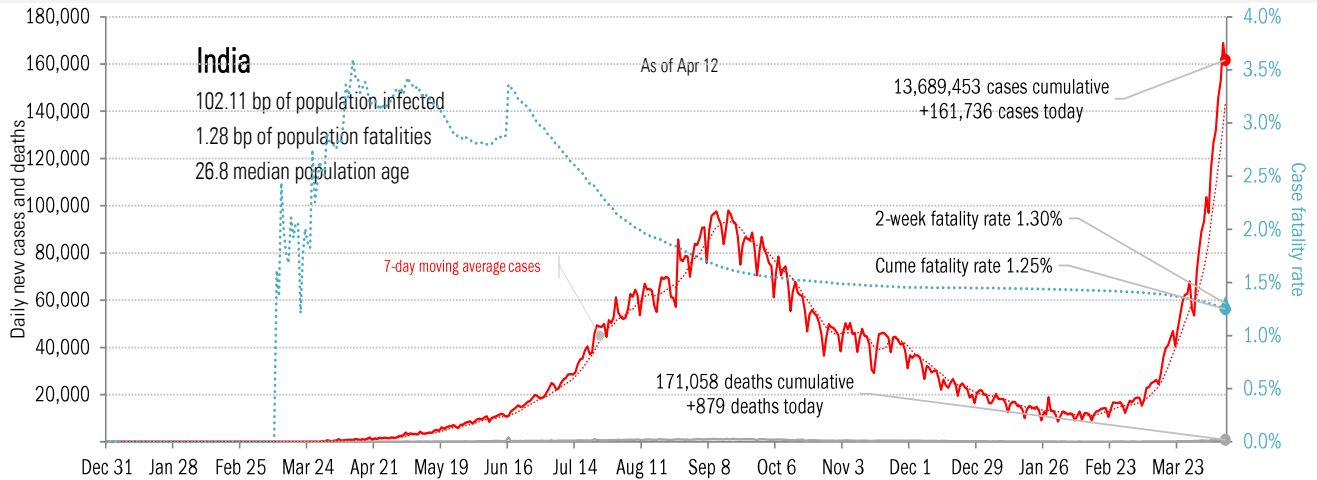
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in other hot-spots



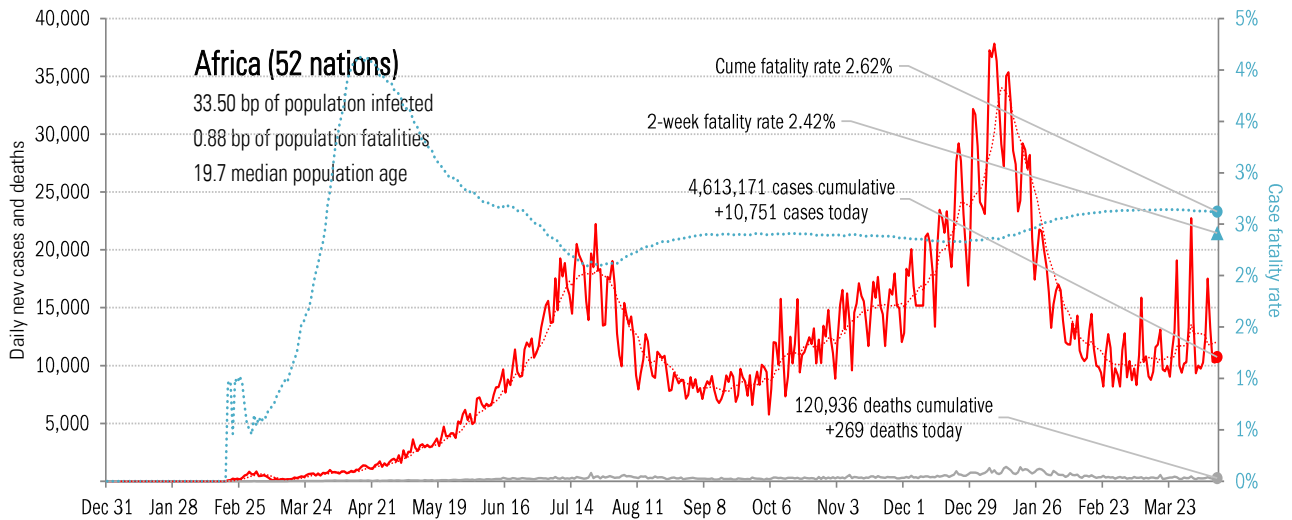
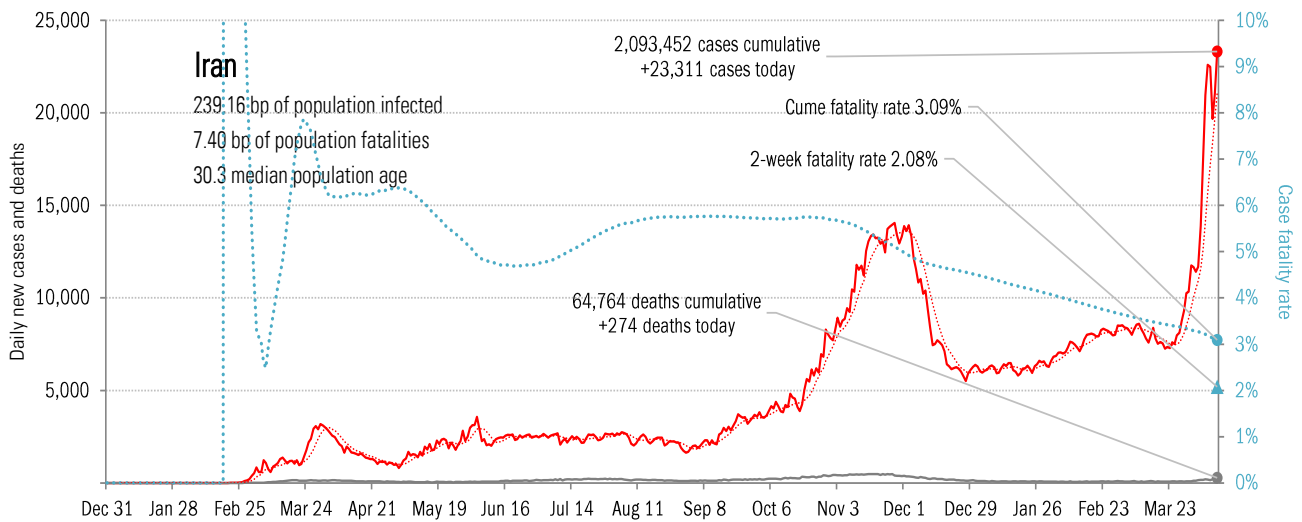
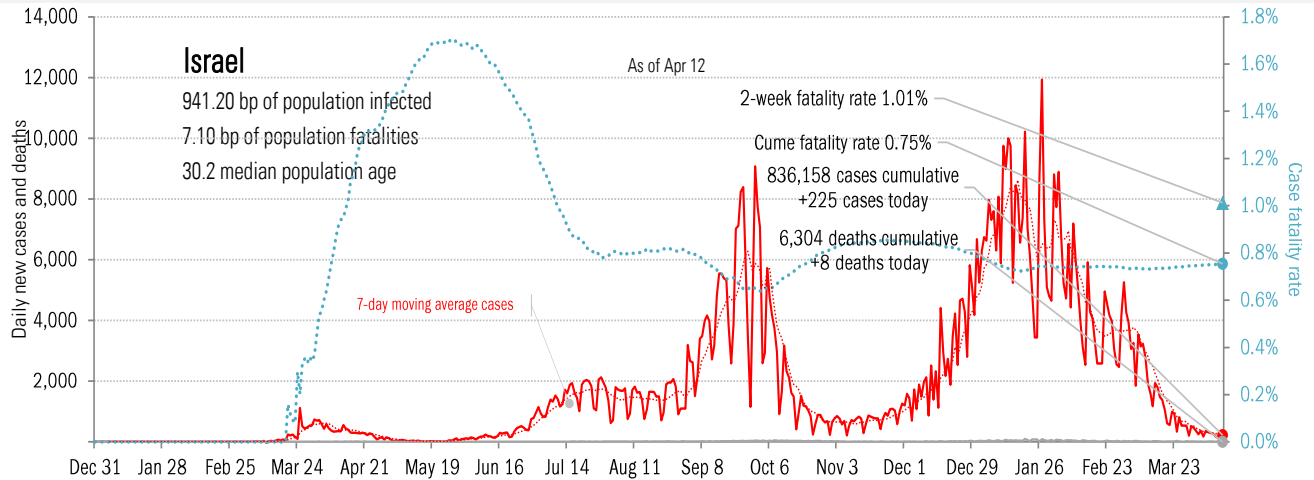
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in the BRICs ex-China



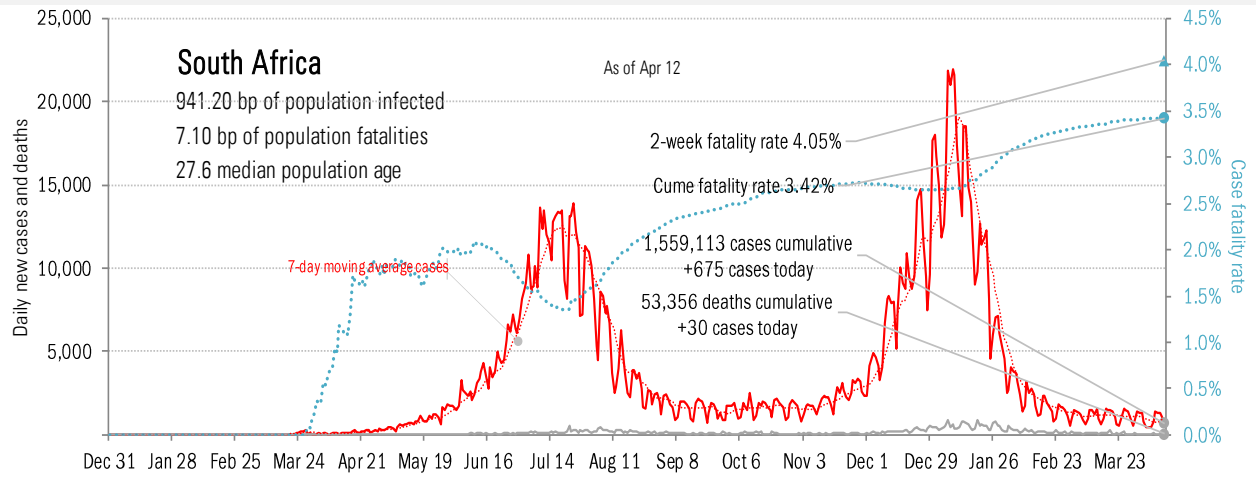
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in the Middle East and Africa



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

Impact in Africa, continued



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