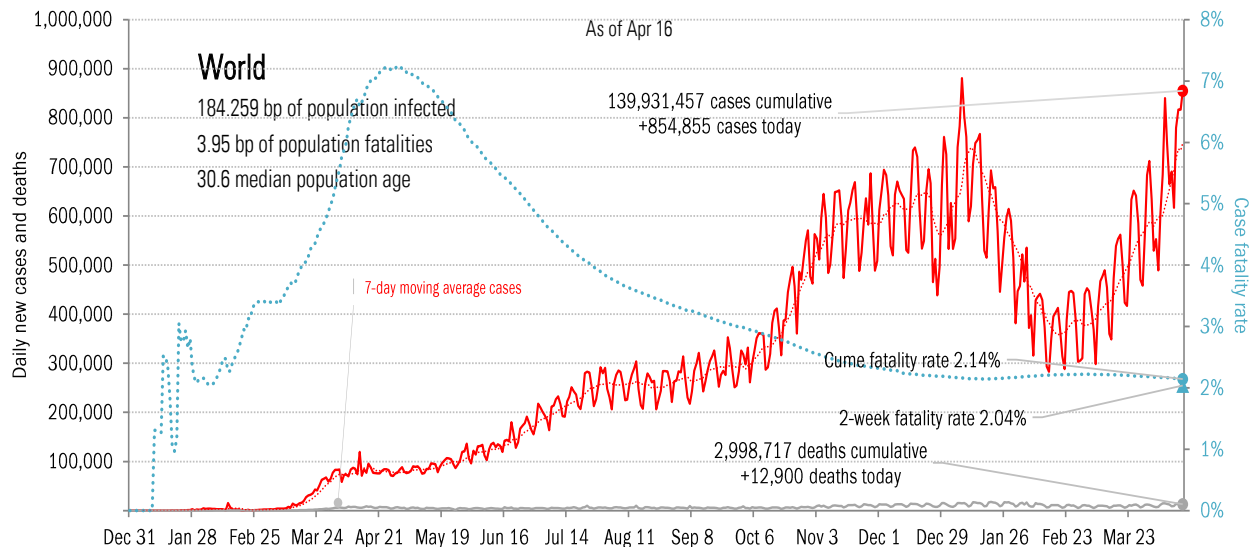
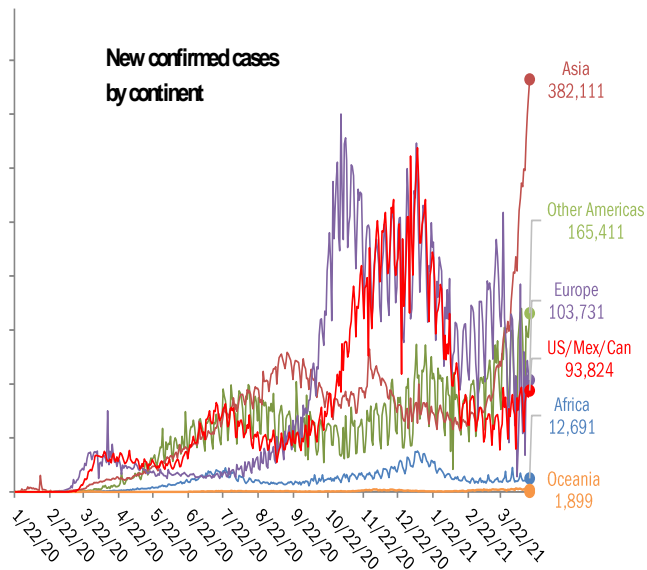


Data Insights: Covid-2019 Monitor

Saturday, April 17, 2021

The global scorecard

The worst ten countries			
New cases		New Deaths	
India	+234,692	Brazil	+3,305
Brazil	+85,774	India	+1,341
United States	+79,991	United States	+935
Turkey	+63,082	Poland	+596
France	+36,451	Mexico	+480
Argentina	+29,472	Ukraine	+443
Iran	+25,261	Italy	+429
Germany	+23,856	Russia	+392
Poland	+17,846	Colombia	+365
Ukraine	+17,602	Peru	+337
+614,027		+8,623	
World	+854,855	World	+12,900
Top ten	72%	Top ten	67%



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

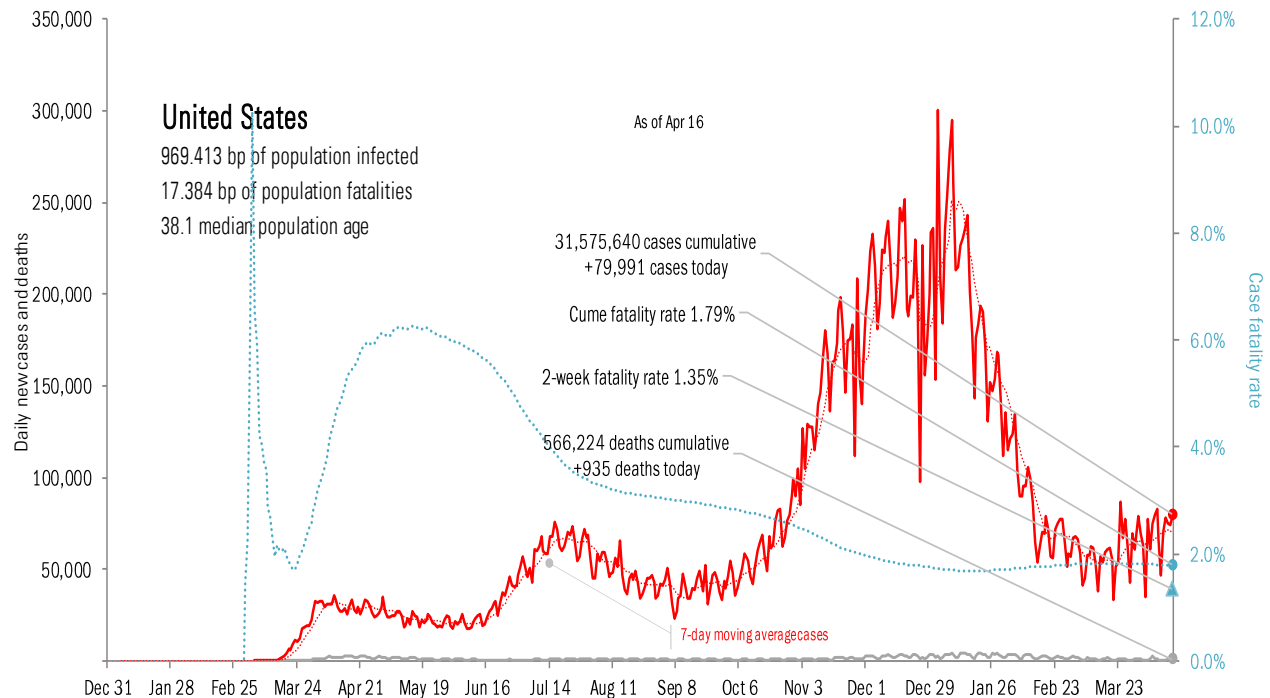
The ten worst US states

New cases			New Deaths			New in hospital			Cume cases			Cume deaths			Cume in hospital			Hospital use		ICU use	
MI	+9,850	CA	+114	PR	+205	CA	3,714,587	CA	60,922	TX	230,397	RI	90%	MI	29%						
FL	+7,296	FL	+92	MI	+124	TX	2,847,101	NY	51,470	CA	225,627	MA	84%	MD	25%						
NY	+6,344	CH	+74	GA	+108	FL	2,155,744	TX	49,510	FL	157,459	MD	83%	RI	20%						
PA	+5,536	TX	+69	IL	+54	NY	1,986,681	FL	34,330	NY	120,811	PA	81%	NY	18%						
NJ	+4,340	PA	+67	FL	+38	IL	1,296,267	PA	25,613	GA	96,993	MO	81%	DC	18%						
IL	+3,846	GA	+56	NJ	+30	PA	1,100,857	NJ	25,094	CH	77,697	MI	80%	PA	16%						
TX	+3,172	NY	+52	ND	+25	GA	1,081,629	IL	23,920	PA	77,625	CT	80%	MN	16%						
CA	+2,864	MI	+41	MN	+24	CH	1,050,112	GA	19,718	IL	70,990	MN	79%	NJ	14%						
NC	+2,475	NJ	+41	WA	+21	NJ	971,782	CH	18,991	KY	69,597	FL	78%	TX	14%						
MN	+2,287	AZ	+30	CO	+18	NC	943,693	MI	17,858	AZ	59,058	WV	78%	WV	13%						
+48,010			+636			+647			17,148,453			327,426			1,186,254						
All states +79,991			+935			+776			All states 31,575,640			566,224			2,115,580			All states 70%		67%	
Top ten 60%			68%			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	
NY	-685	MI	-82	MI	-93	NH	+85 bp
MN	-442	AK	-20	MD	-69	DC	+75 bp
LA	-324	NY	-16	KY	-68	ME	+74 bp
MS	-194	TX	-13	CT	-27	DE	+73 bp
WI	-181	WV	-11	IN	-26	MT	+70 bp



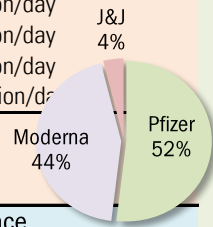
Source: [Johns Hopkins](#), [Dept. of Health and Human Services](#), [CDC](#), TrendMacro calculations

Rolling out the vaccines in the US and the world

US overall	Over last day	Immunity	Full	Partial
269.50 million doses distributed	+3.17 million/day	US	24.1%	38.2%
209.76 million doses administered	+4.04 million/day	UK	13.2%	48.0%
131.69 million persons partially immunized	+1.95 million/day	France	6.3%	17.6%
83.60 million persons fully immunized	+2.15 million/day	Spain	7.1%	19.3%
7.78 million shots long-term care residents/staff	+0.003 million/day	Germany	6.5%	19.0%
		Italy	7.2%	17.1%
		Australia	0.9%	0.6%
		Israel	57.4%	61.7%
		Canada	2.3%	22.9%
		Japan	0.5%	0.9%
		Africa	0.3%	0.7%
		India	1.1%	7.6%
		Brazil	3.8%	11.7%

77.8% of distributed doses administered
 39.4% of US pop partial
 100% of LTC partial

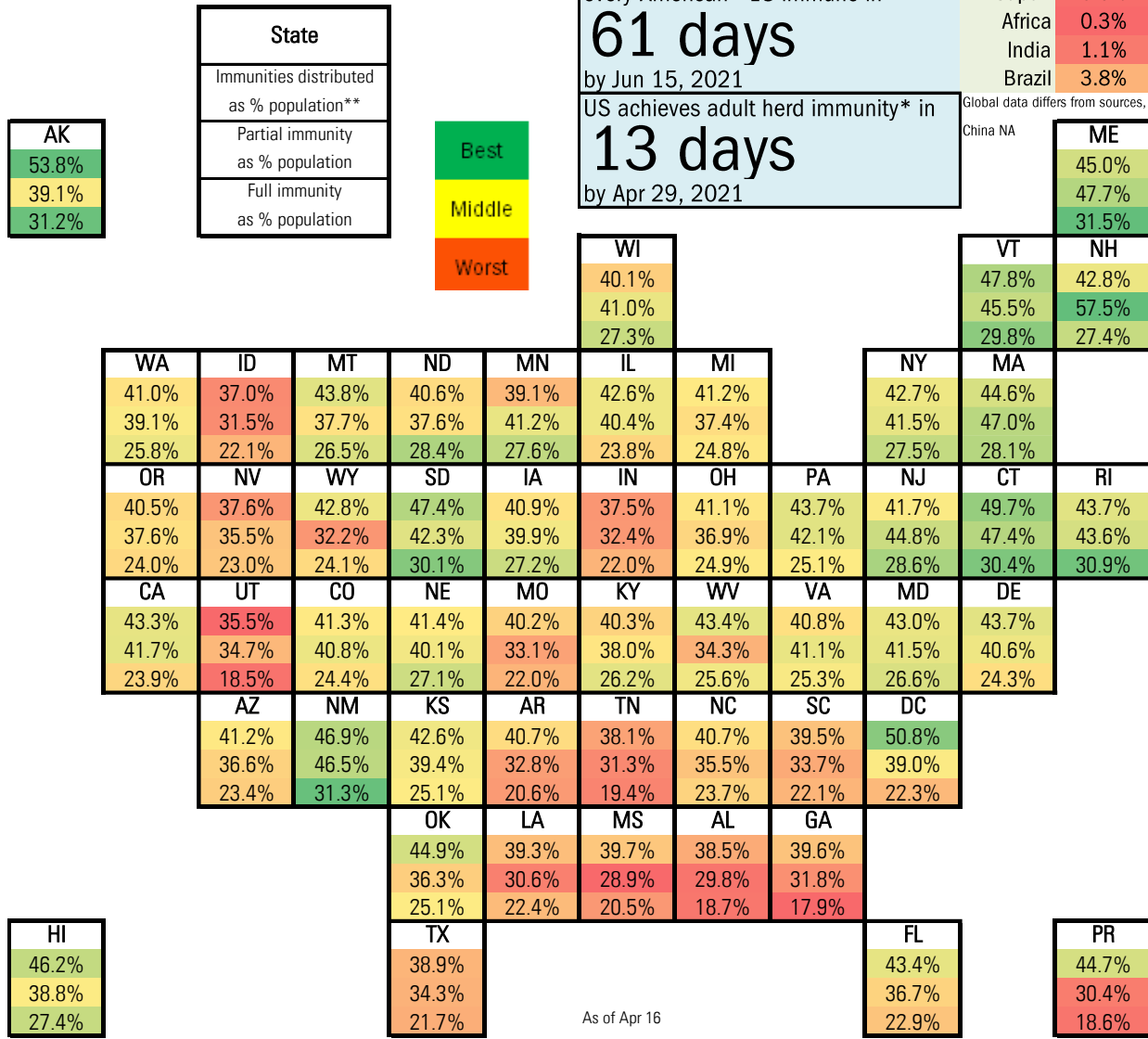
25.0% full immunity
 63.9% full immunity



At today's dosing pace,
 every American >18 immune in
61 days
 by Jun 15, 2021

US achieves adult herd immunity* in
13 days
 by Apr 29, 2021

Global data differs from sources, timing



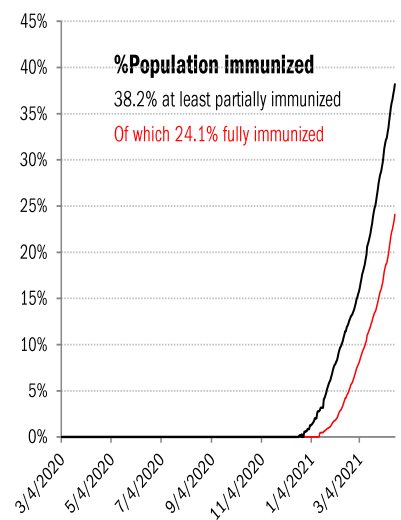
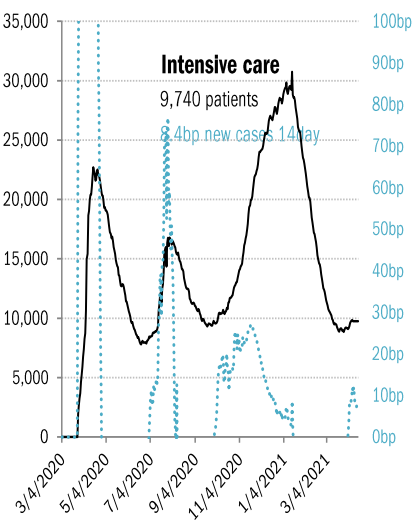
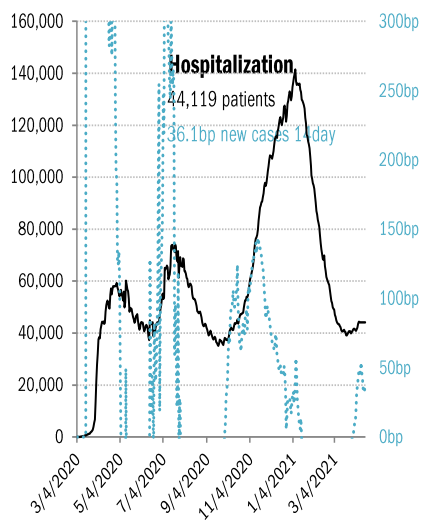
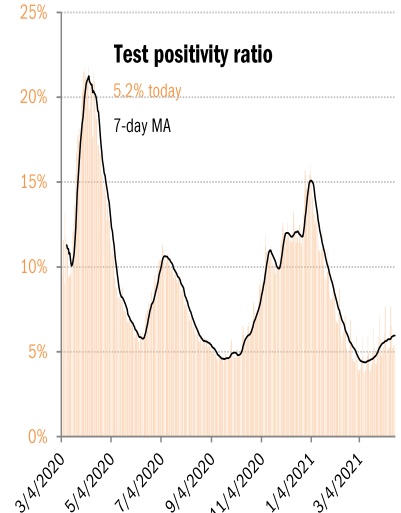
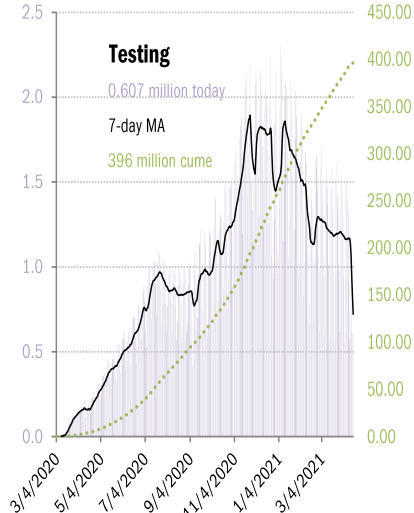
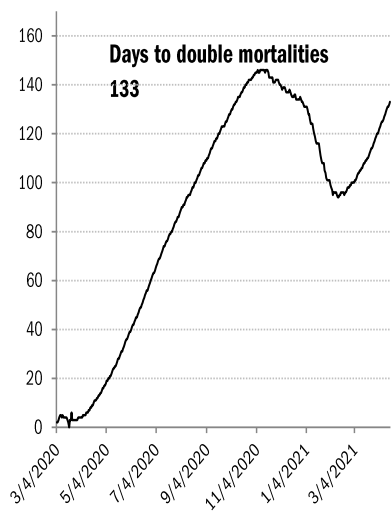
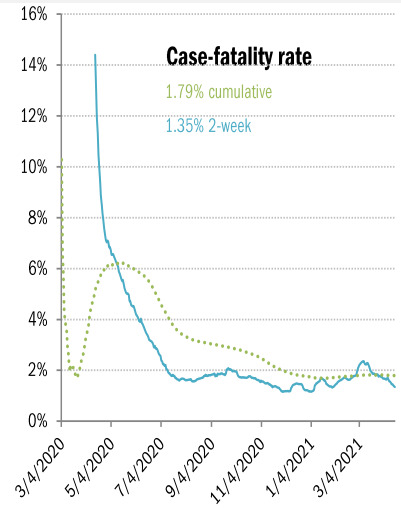
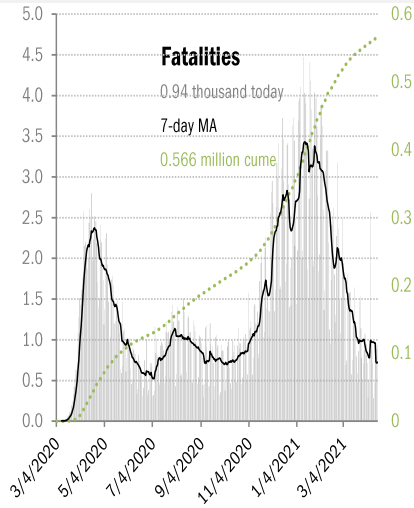
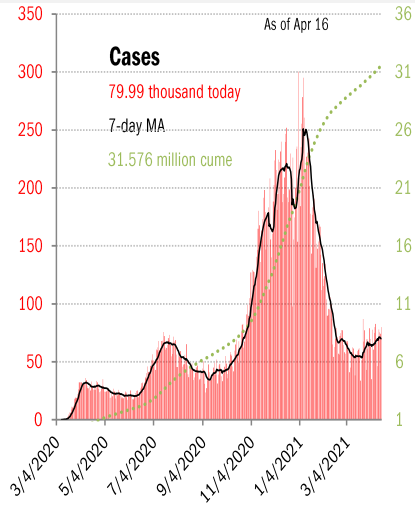
As of Apr 16

* Adult herd immunity is 60% of population over 18 years either fully vaccinated or prior tested positive, no overlap
 ** One dose of Pfizer/Moderna counts as half an immunity, one dose of J&J as a full immunity

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

US deep-dive

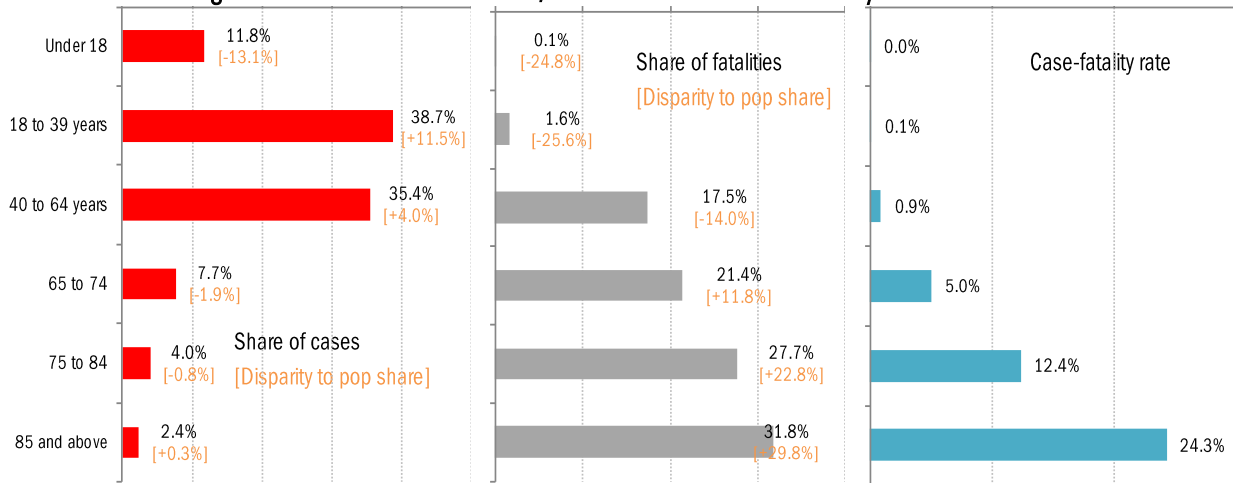
National and state-by-state data do not line up because of different sources



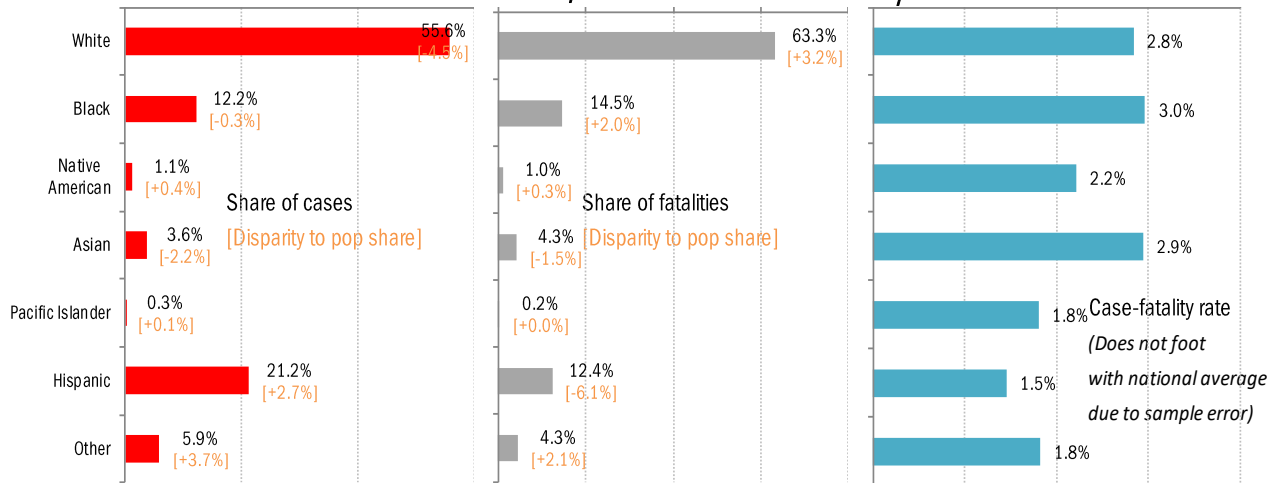
Source: [Johns Hopkins](#), [Covid Act Now](#), TrendMacro calculations

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

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

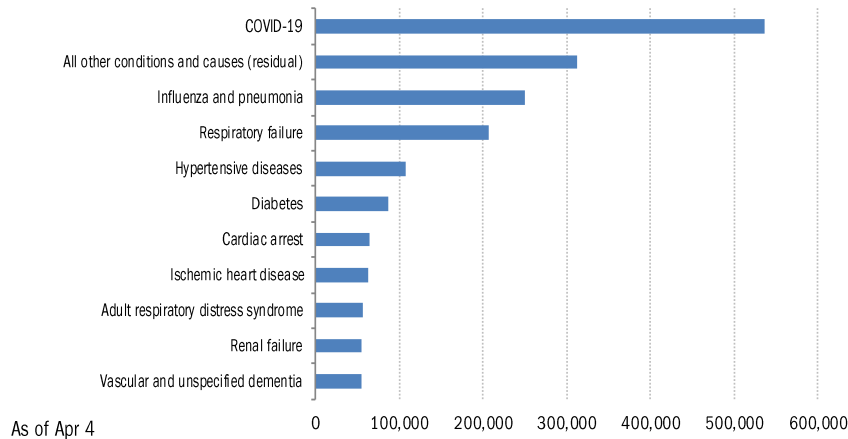


Racial distribution of US cases, fatalities and case-fatality rates



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

[Expat Americans Fly Home for Covid-19 Vaccination Shots](#)

Stu Woo

Wall Street Journal

April 17, 2021

[Covid Survivors May Require Just One Shot of a Two-Dose Vaccine](#)

Carey Goldberg

Bloomberg

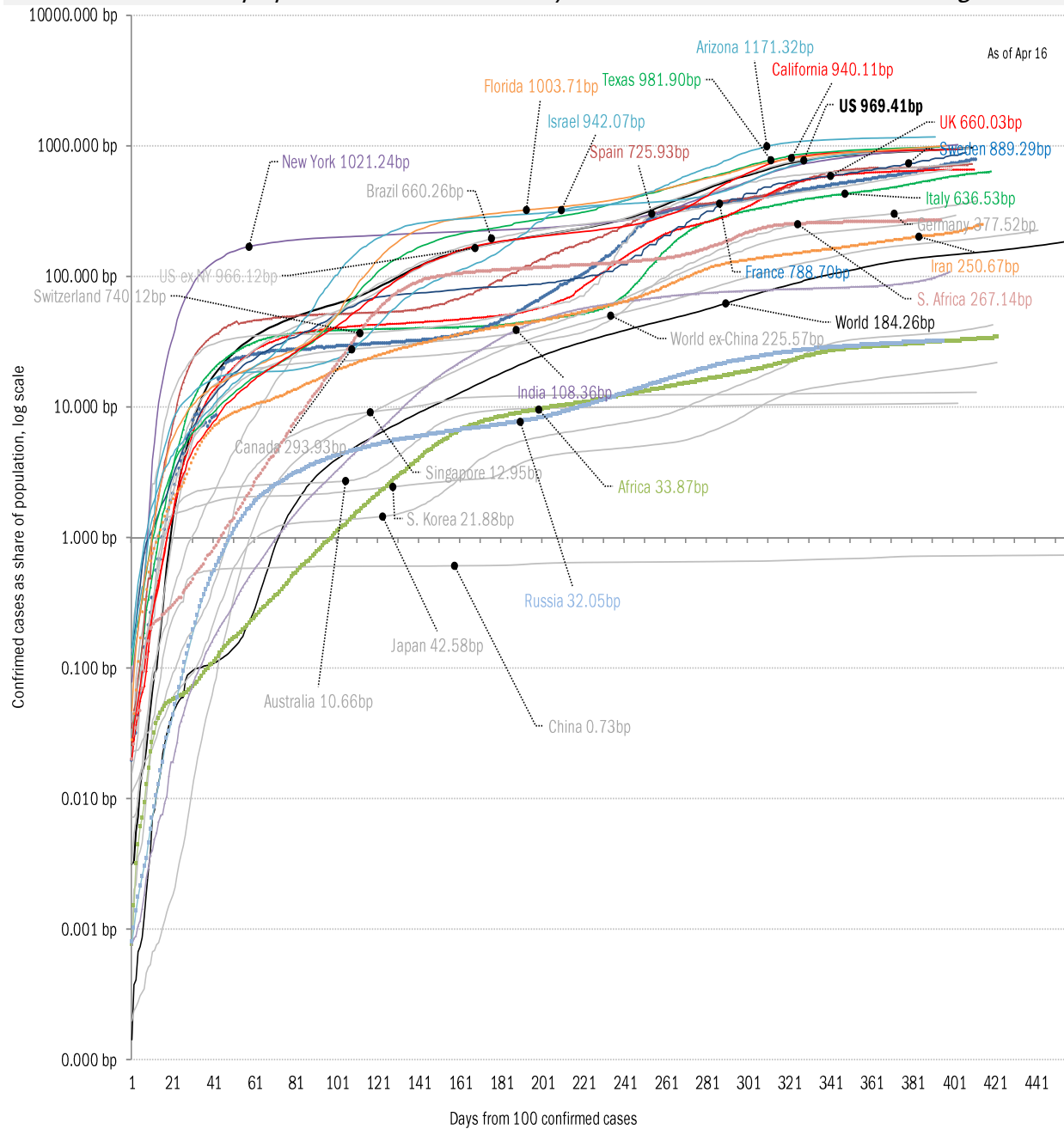
April 17, 2021

Meme of the day



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

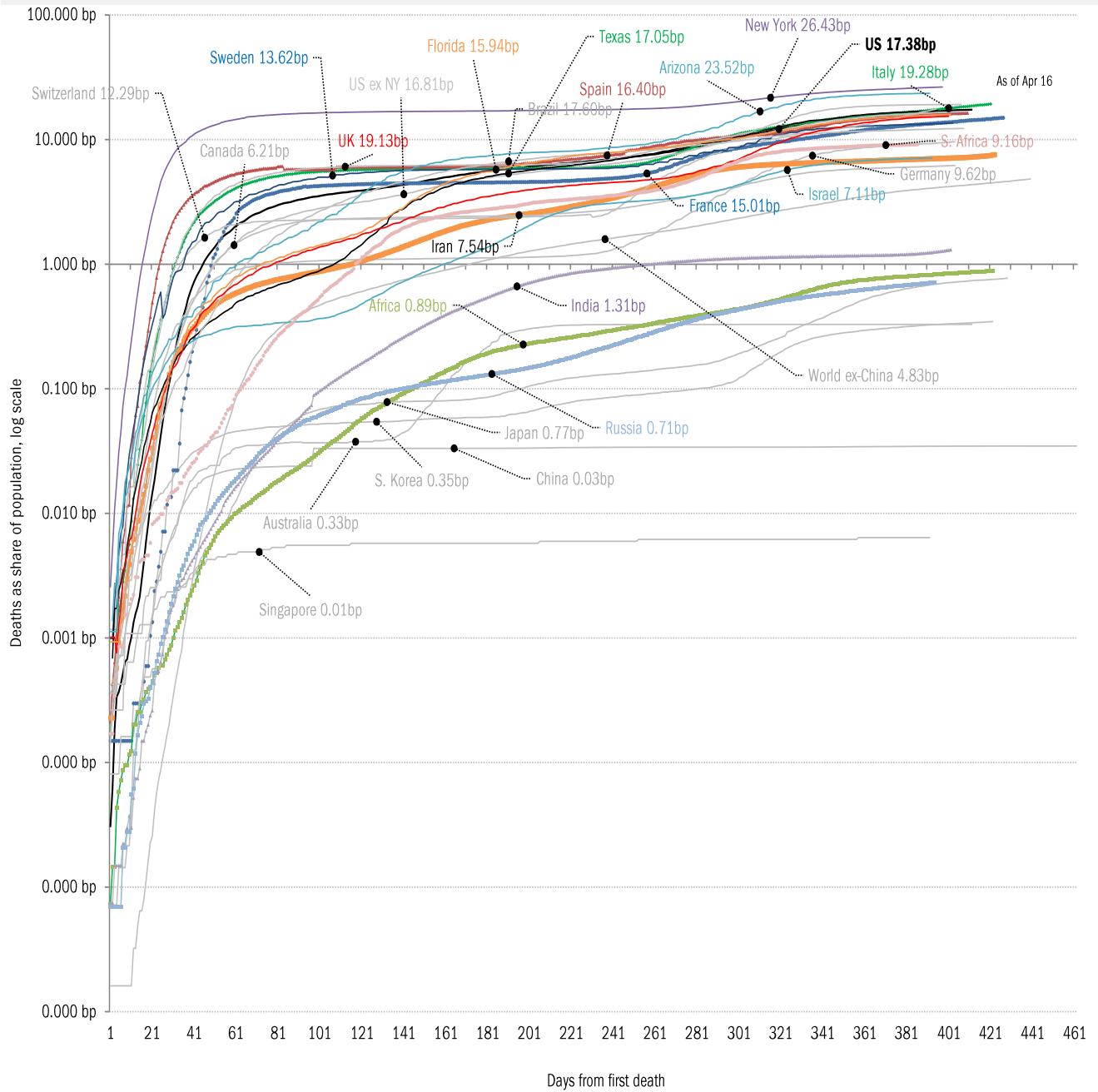
The coronavirus case accelerometer... tracking the world's infection curves
Share of infected population from first day with 100 confirmed cases, log scale



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

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

Share of deceased population from day of first fatality

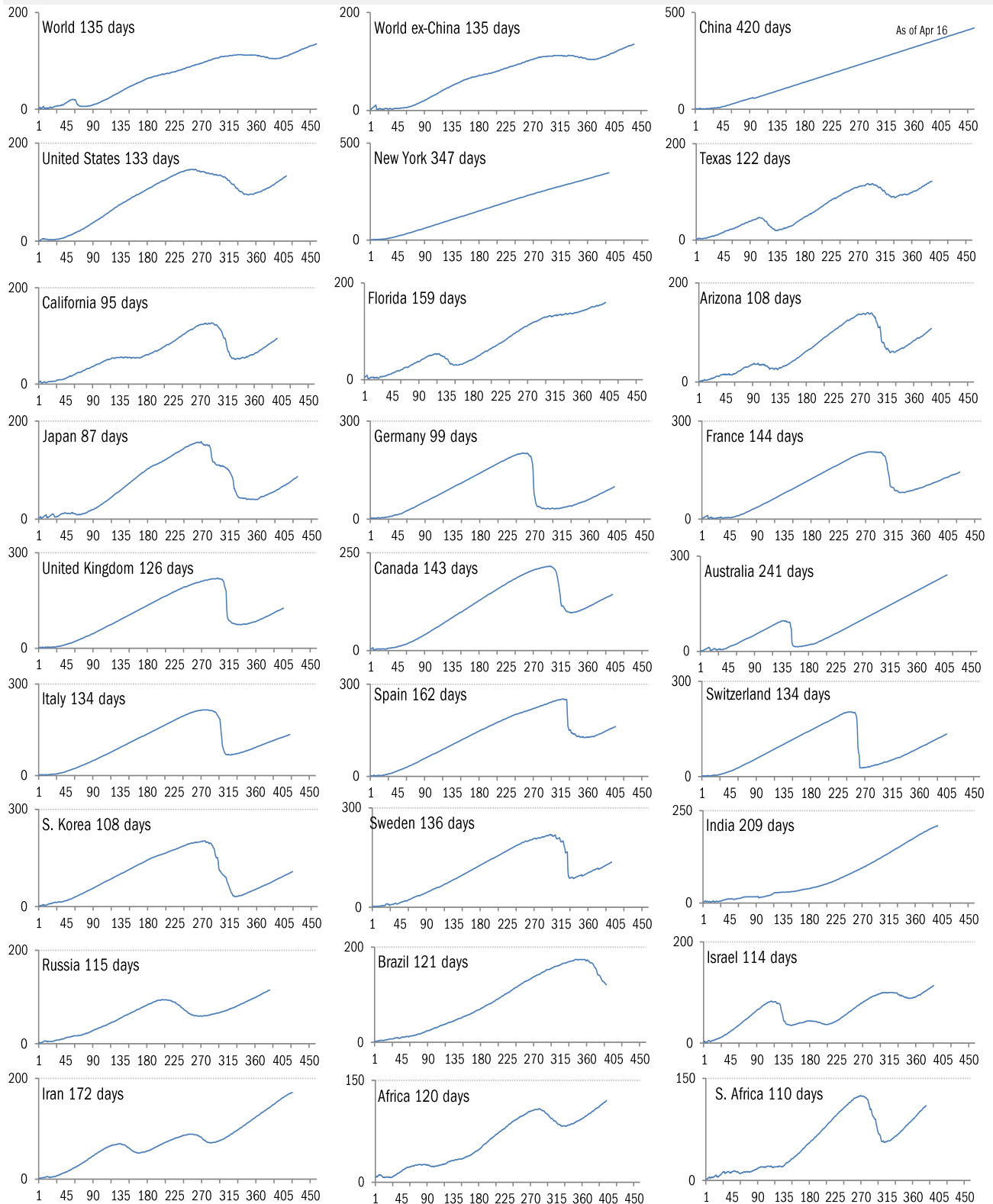


Source: [Johns Hopkins](#), TrendMacro calculations

"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

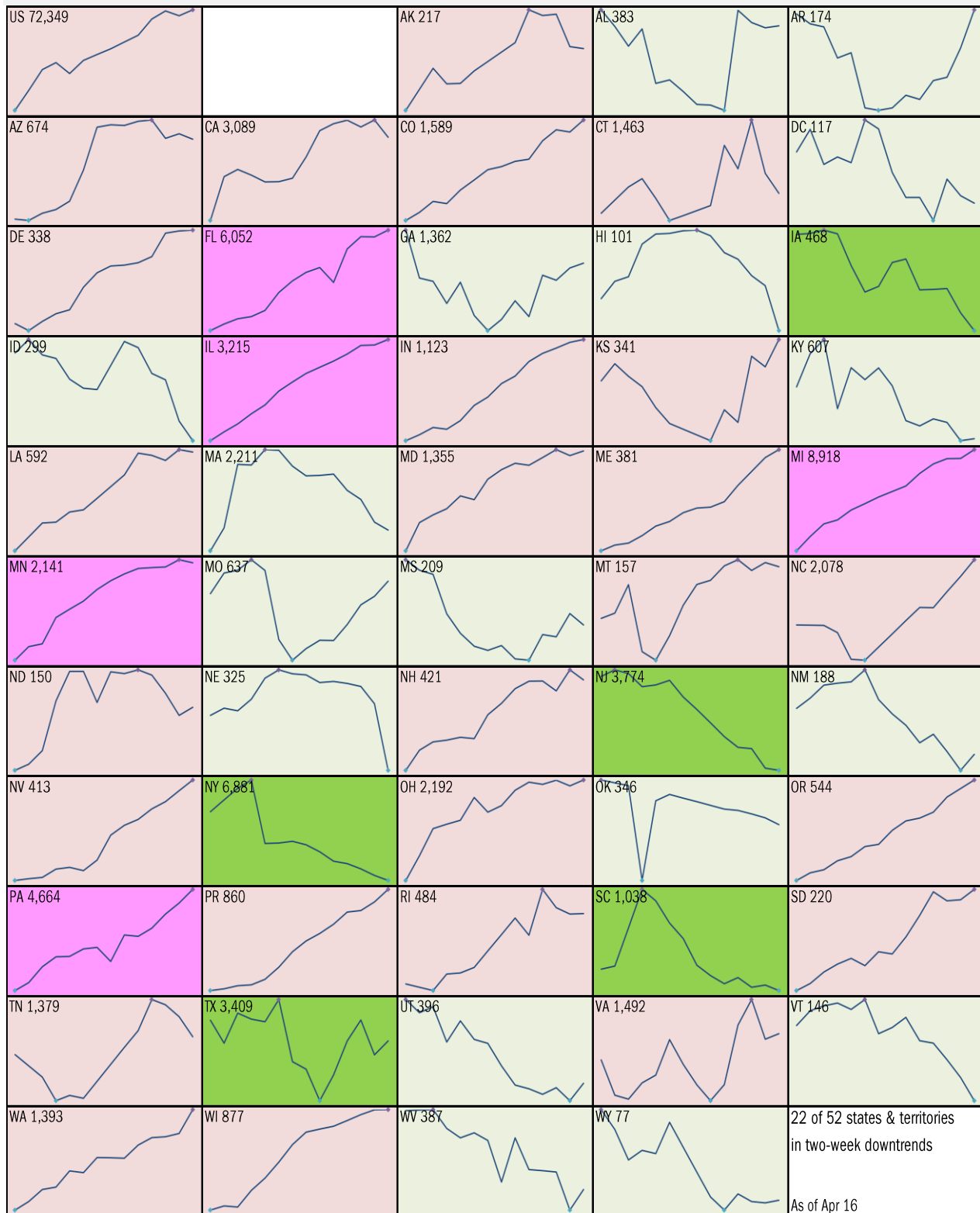


Source: [Johns Hopkins](#), TrendMacro calculations

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

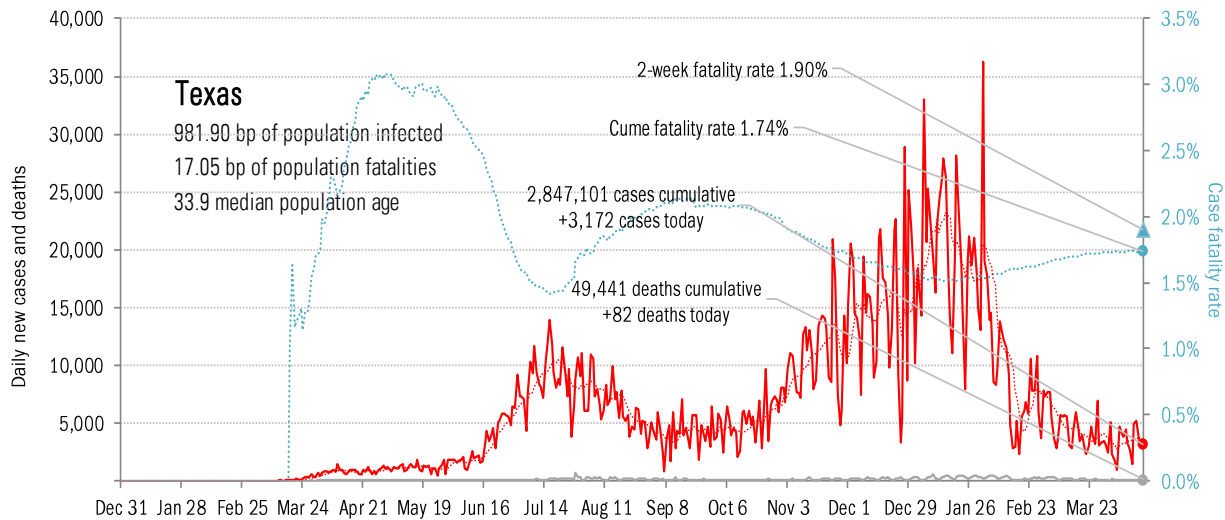
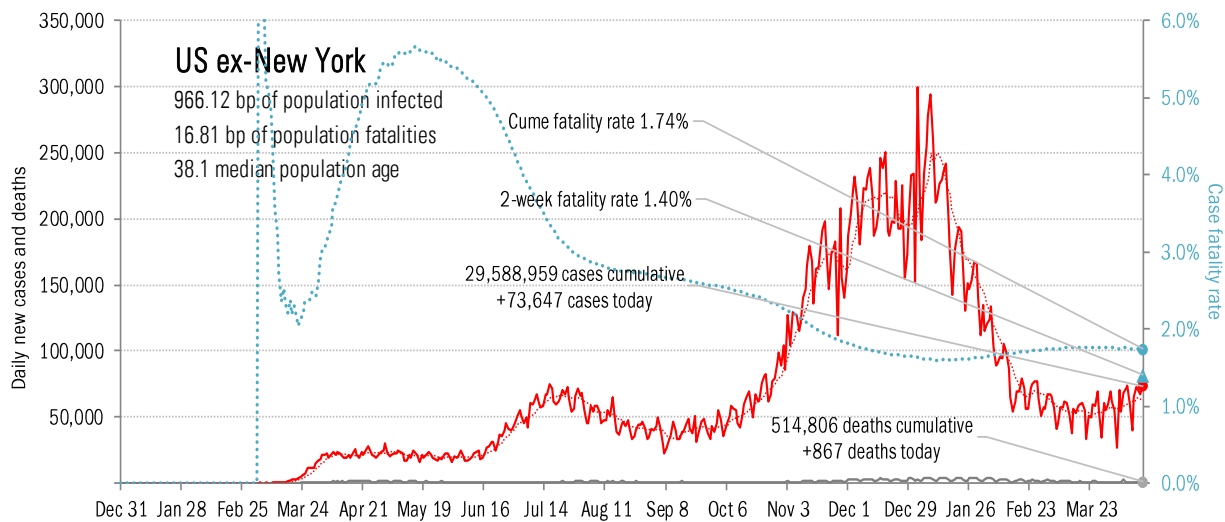
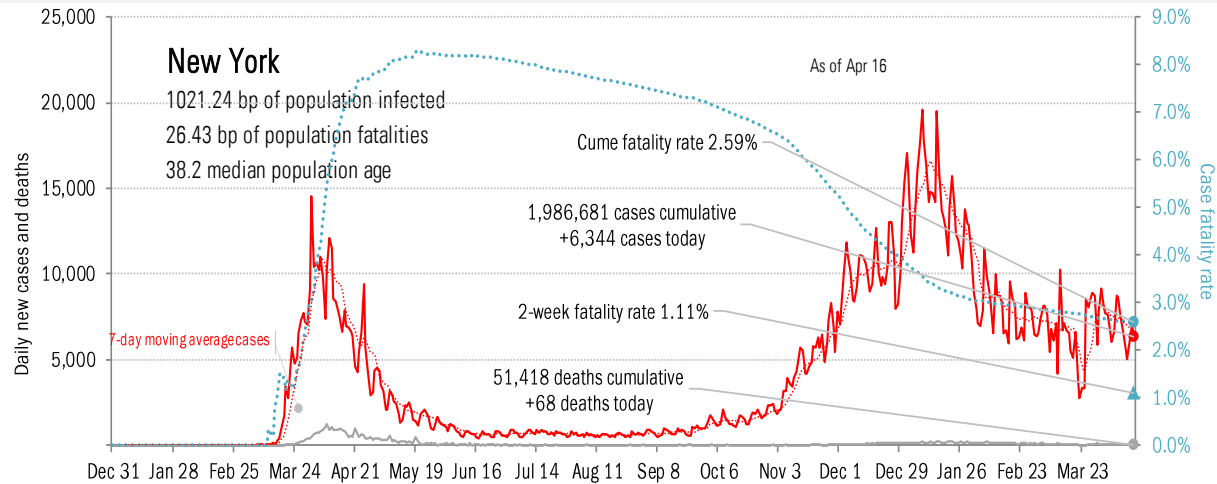
14-day moving average, last 14 days *Most recent value displayed* ● High ● Low

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



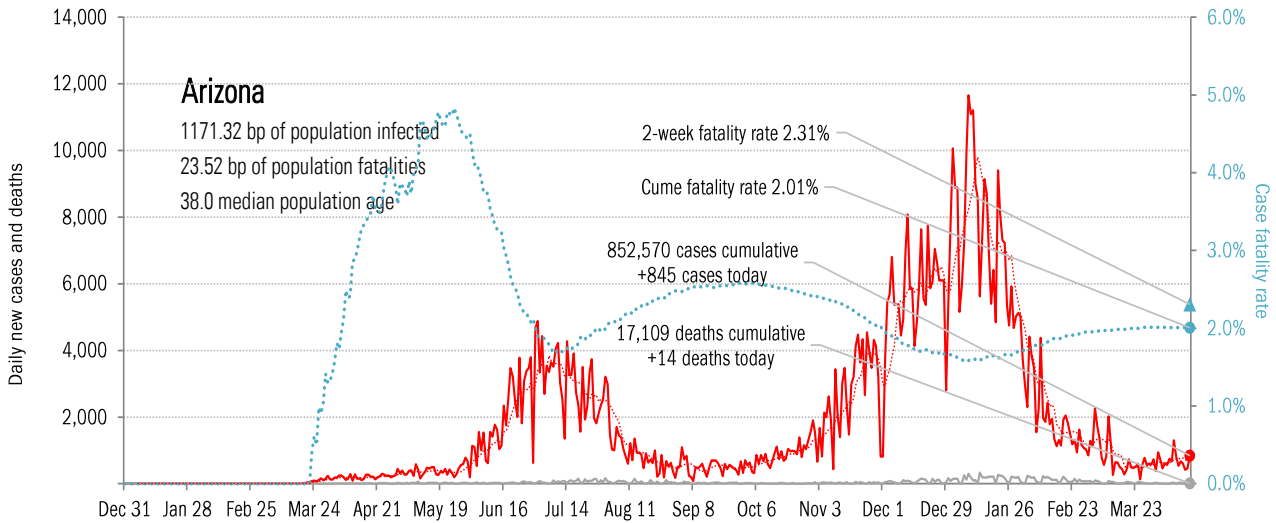
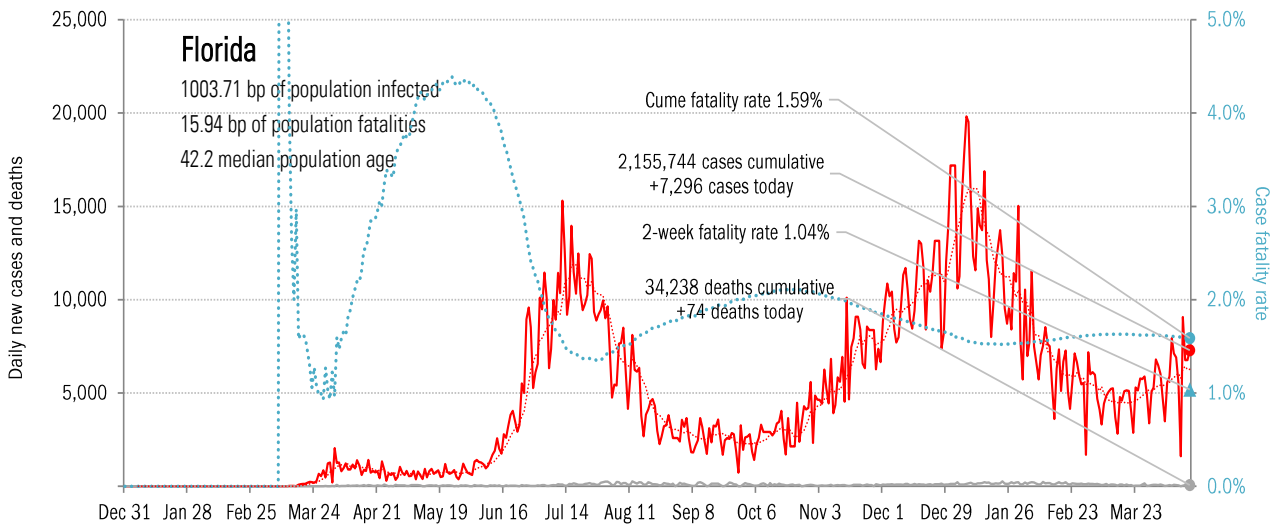
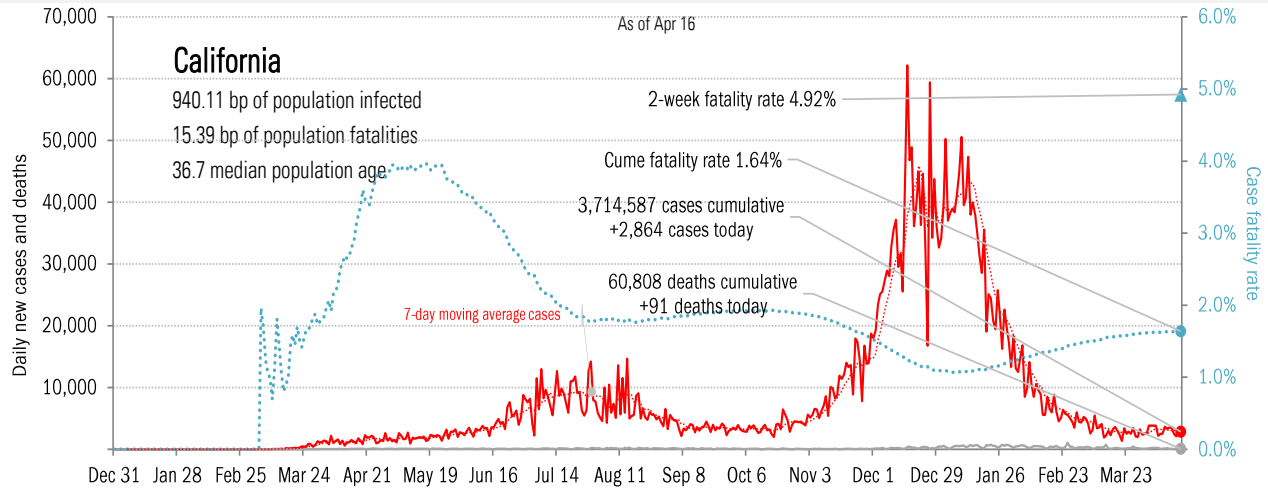
Source: [Covid Act Now](#), TrendMacro calculations

From Ground Zero to the Rio Grande



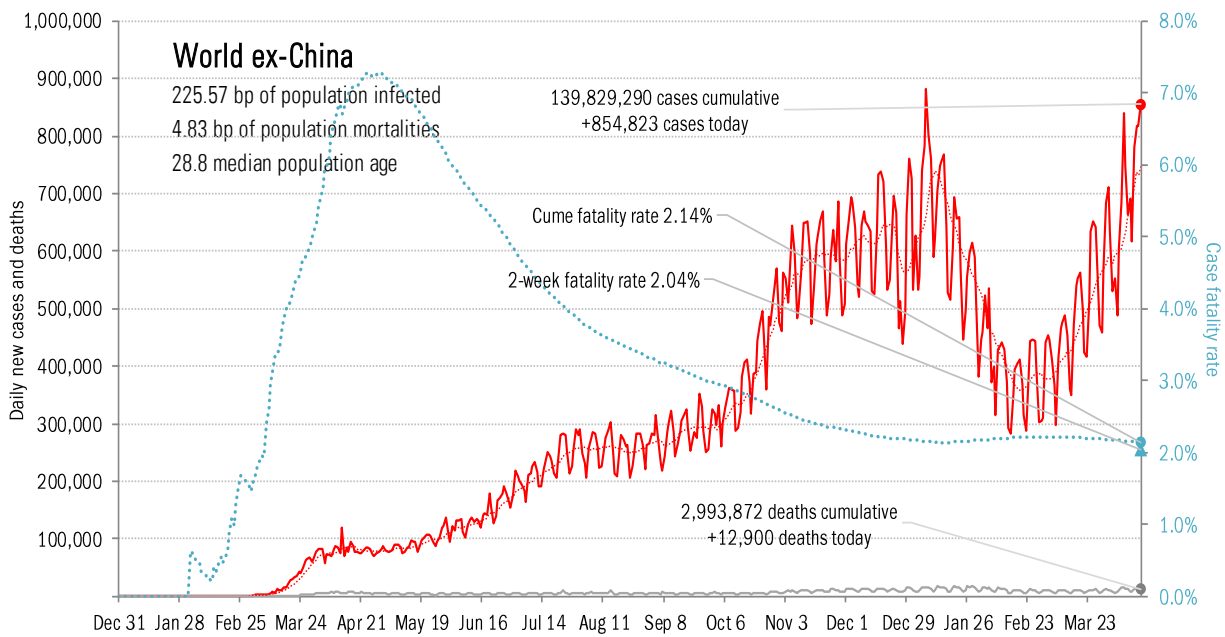
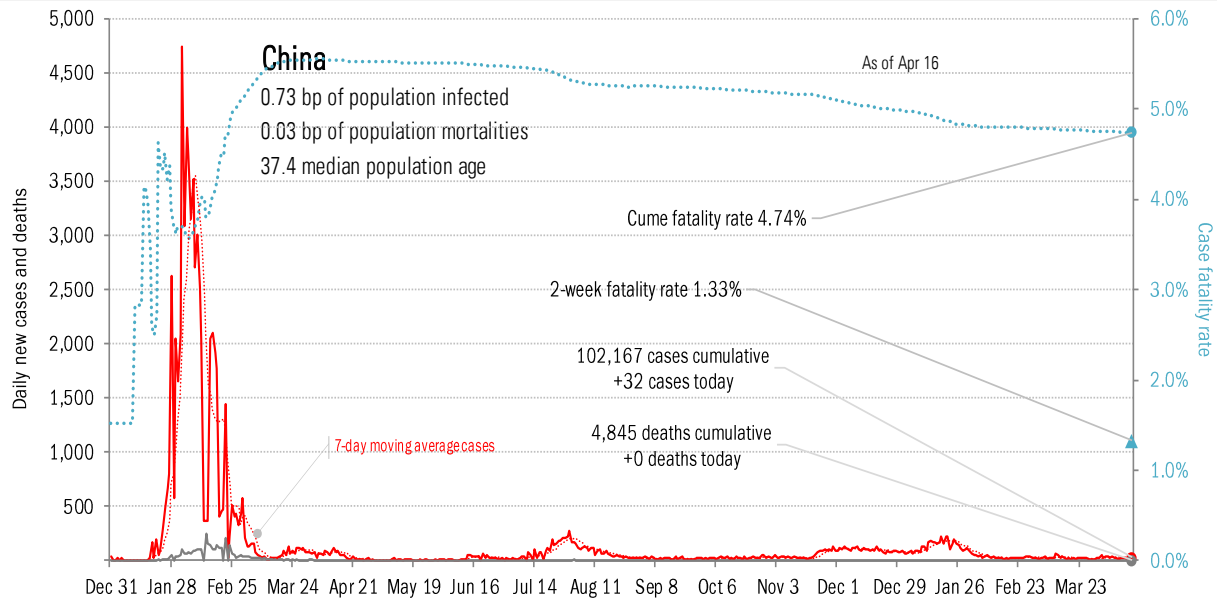
Source: [Johns Hopkins](#), TrendMacro calculations

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



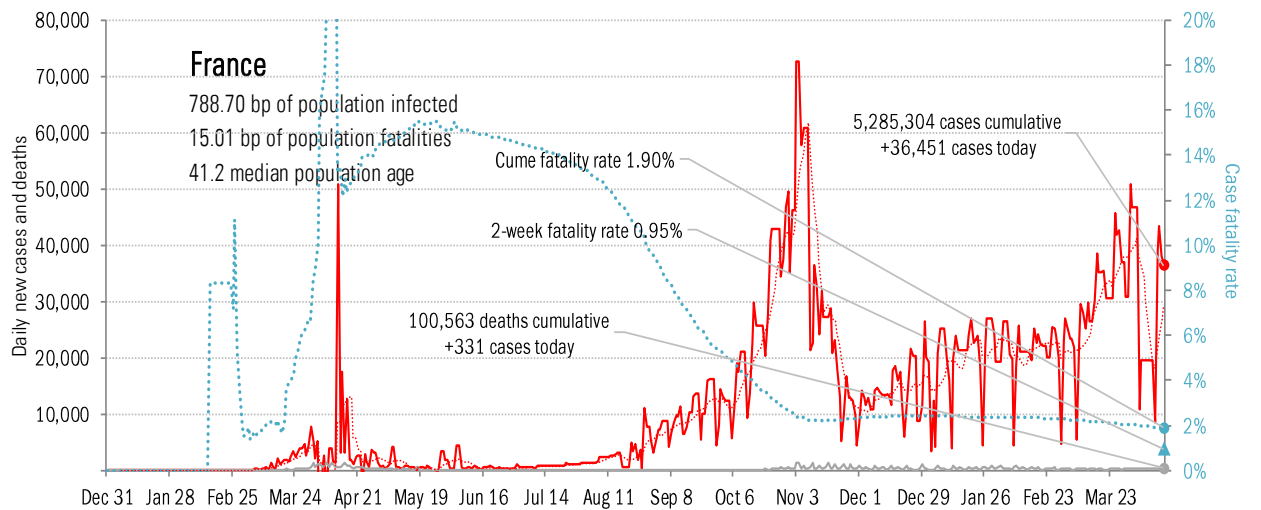
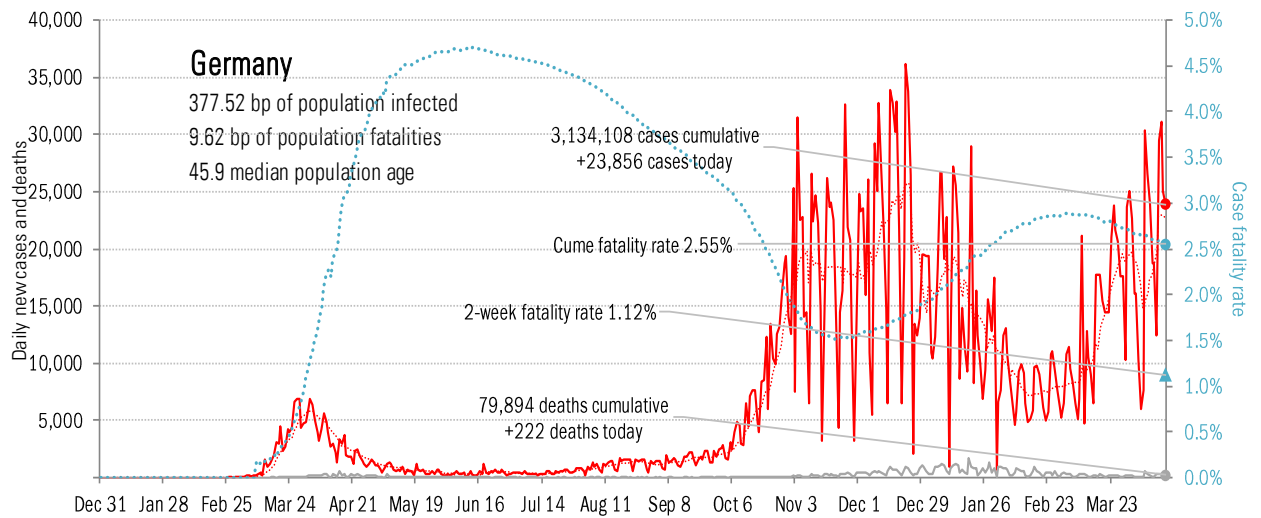
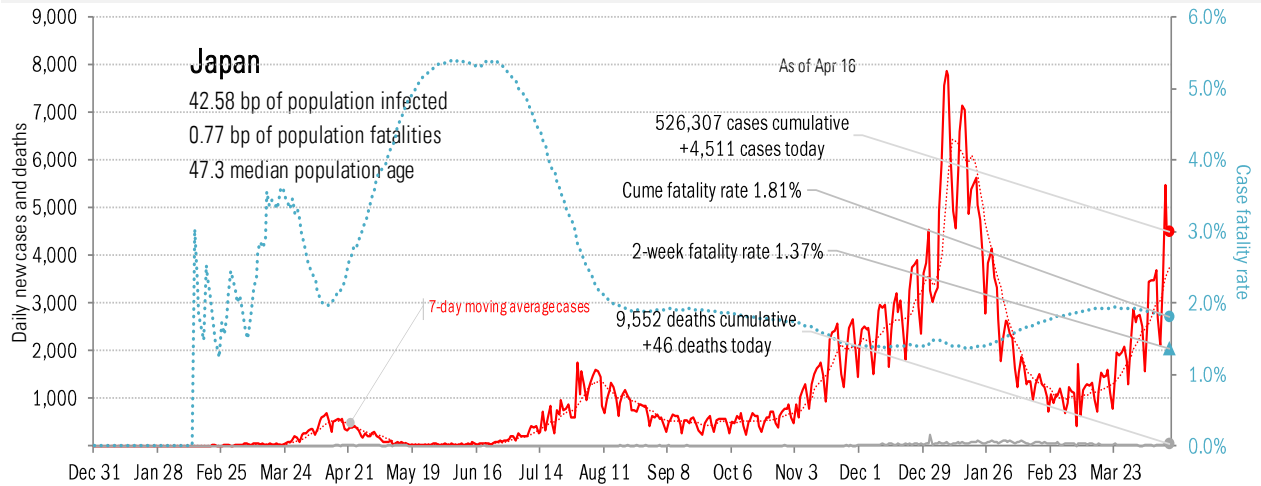
Source: [Johns Hopkins](#), TrendMacro calculations

Patient zero... and then everyone else



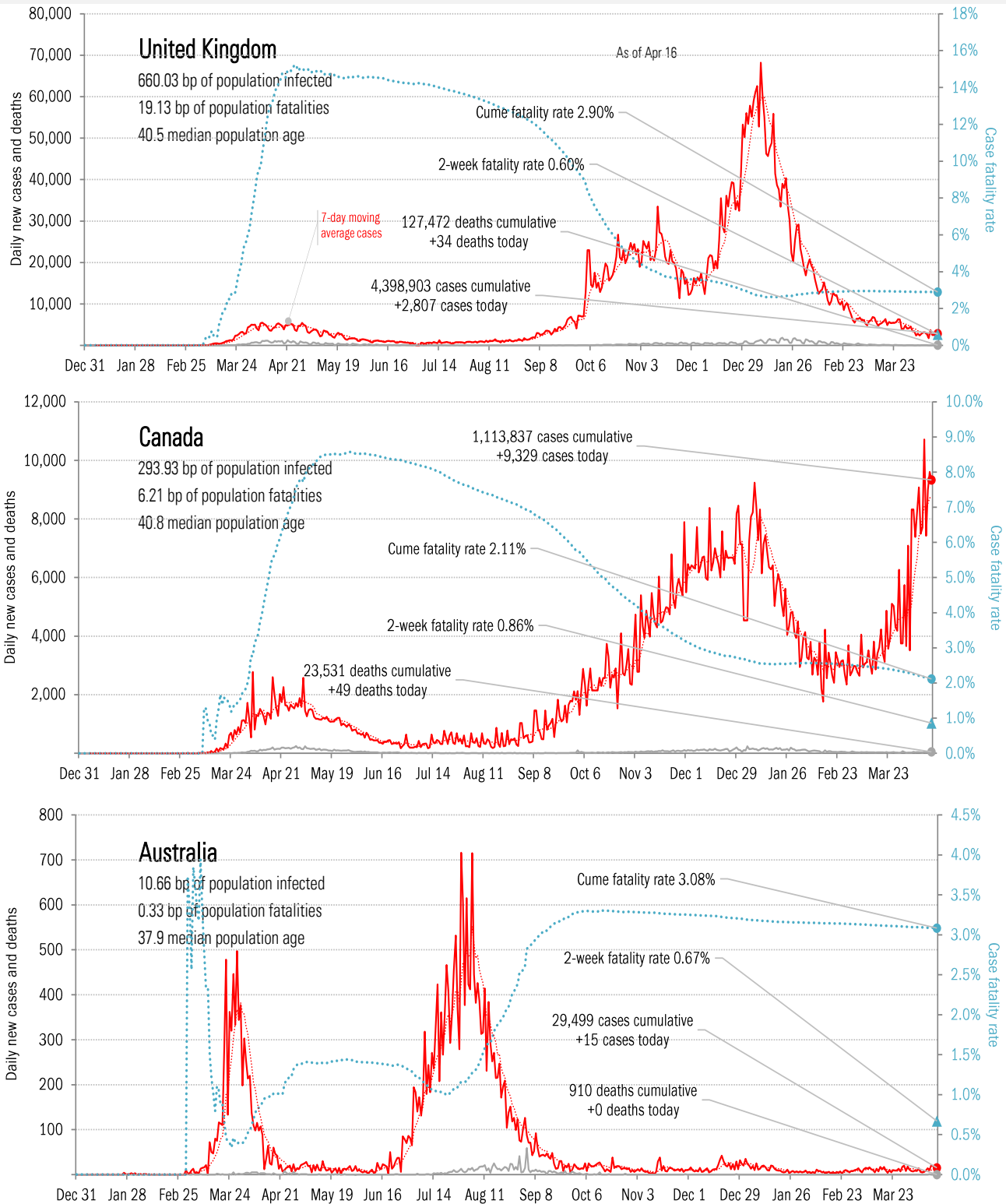
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in the largest economies



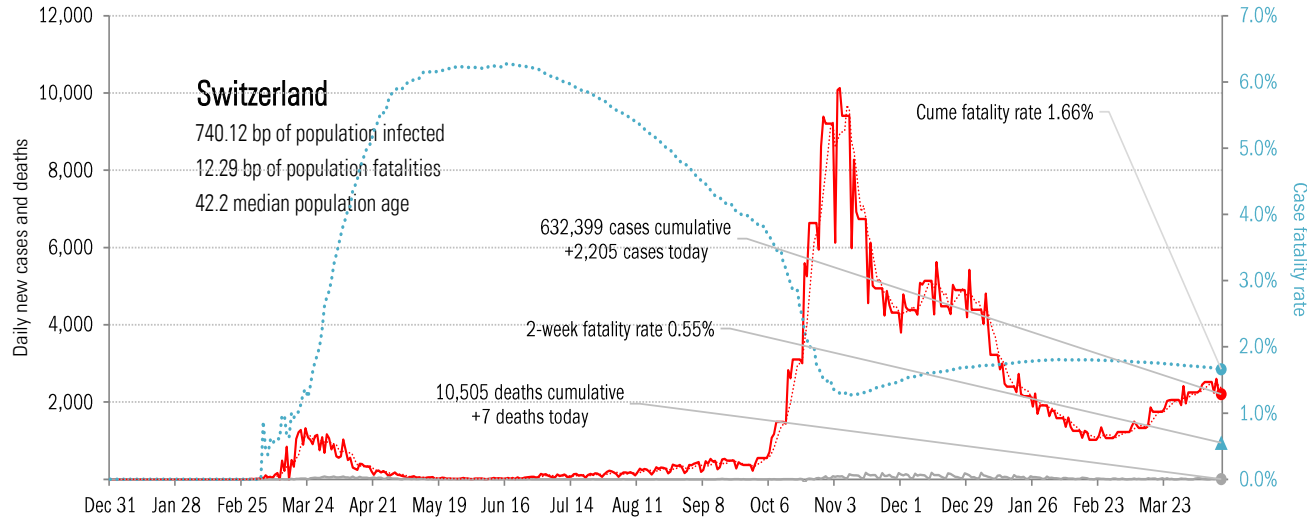
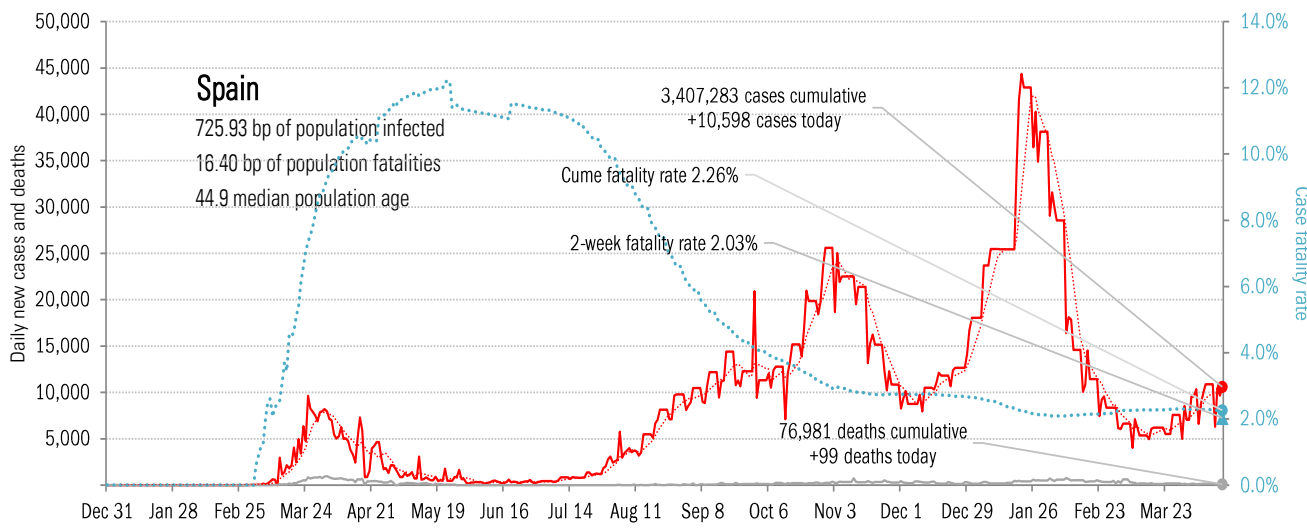
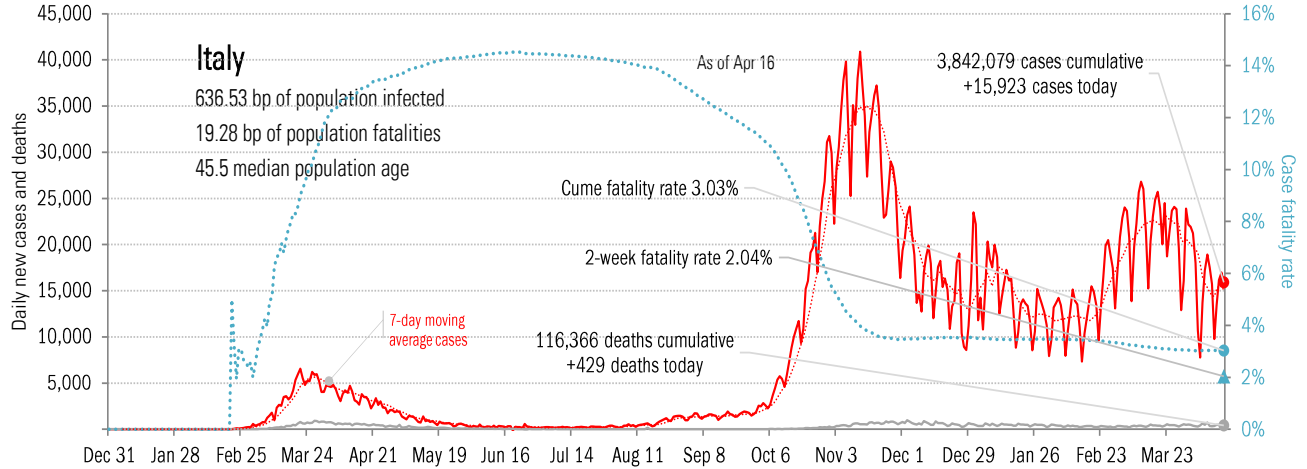
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in The Anglosphere



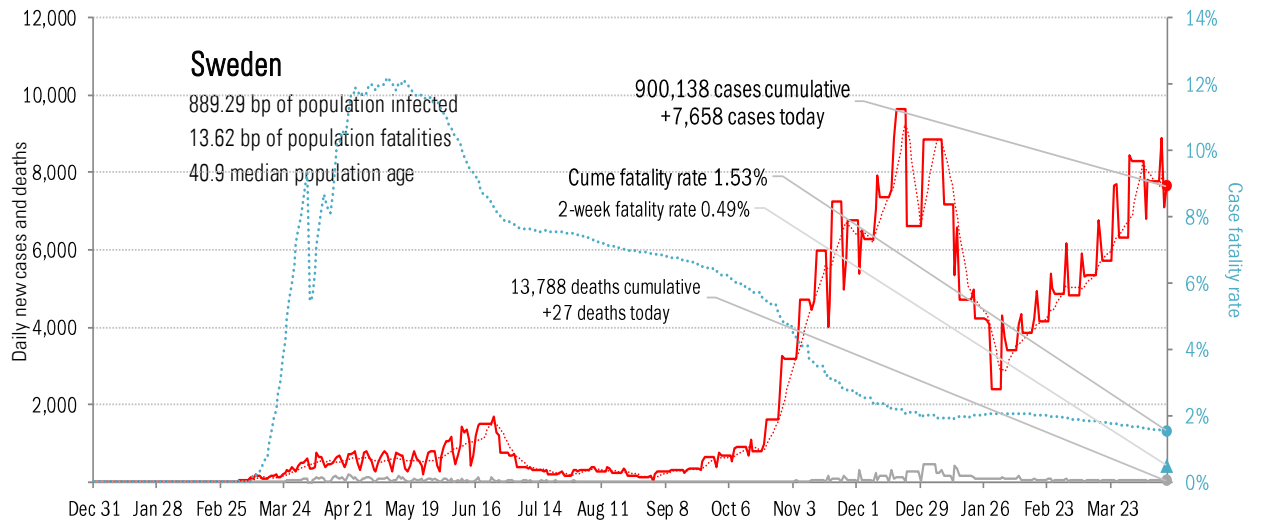
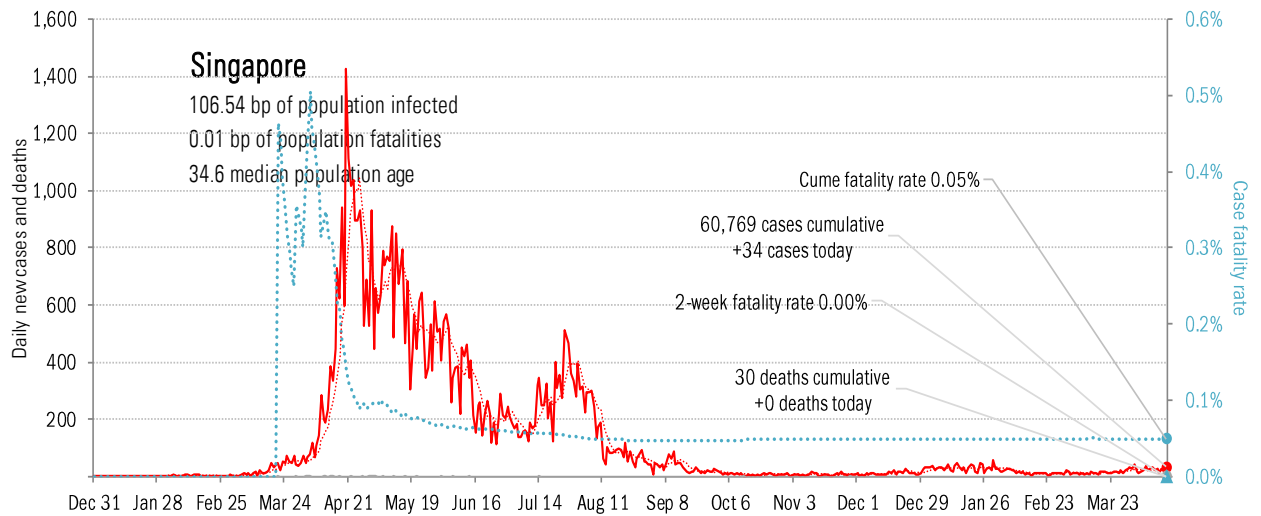
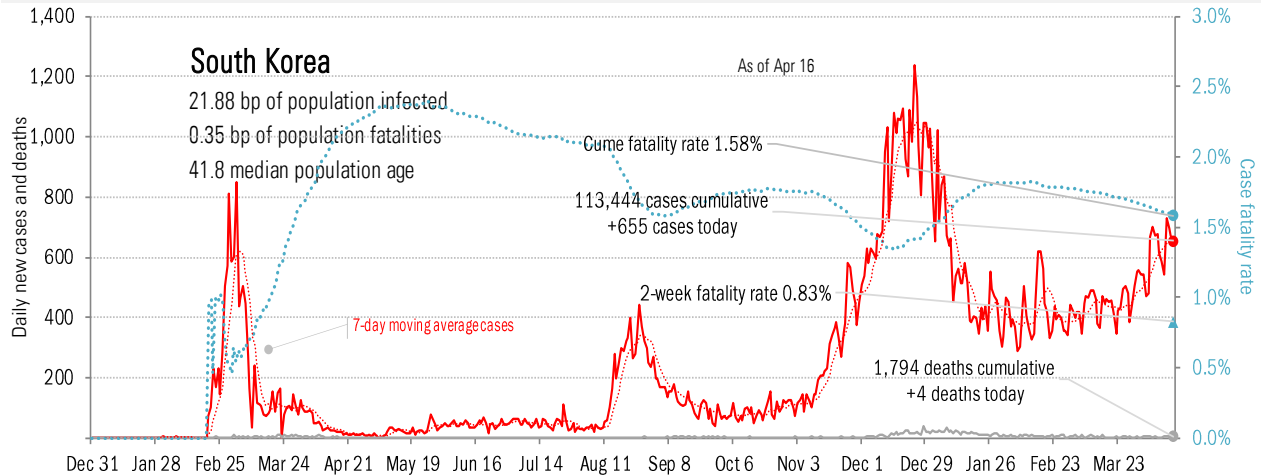
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in continental Europe



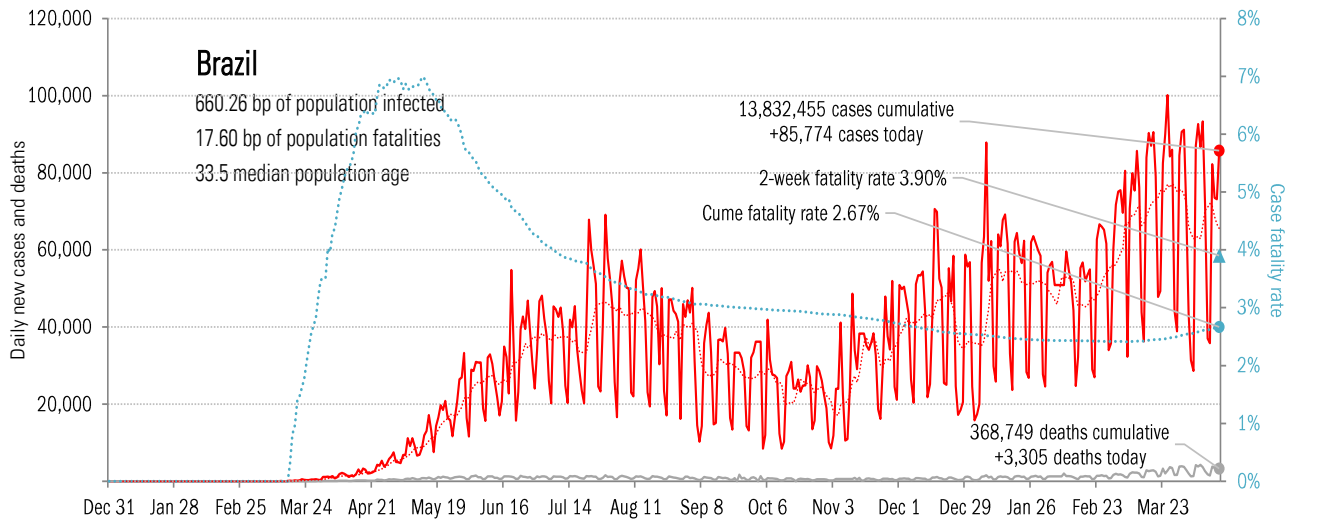
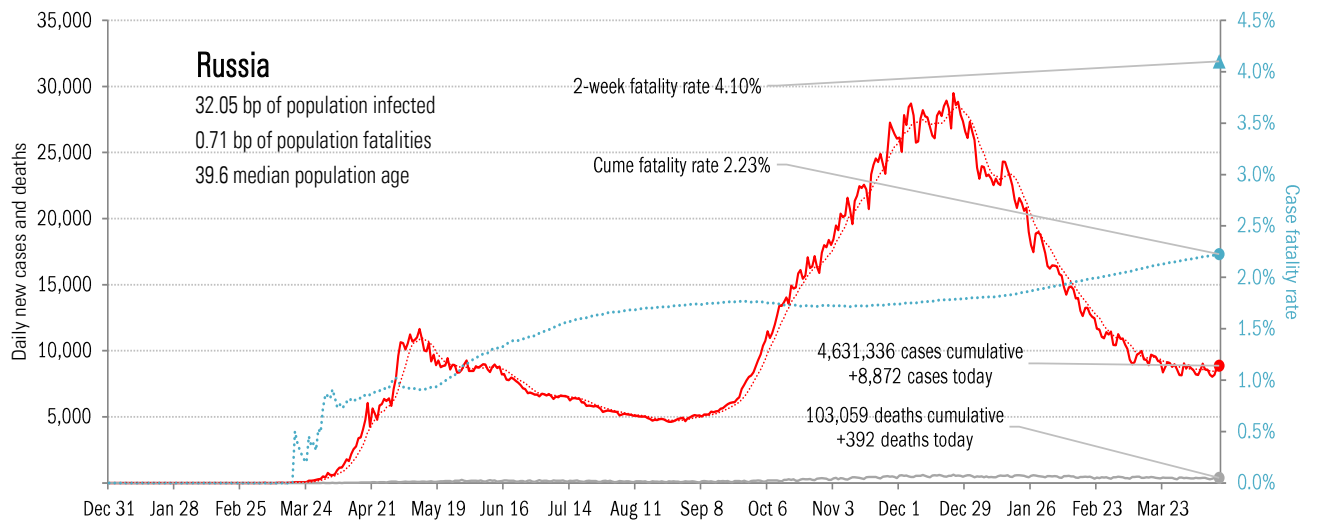
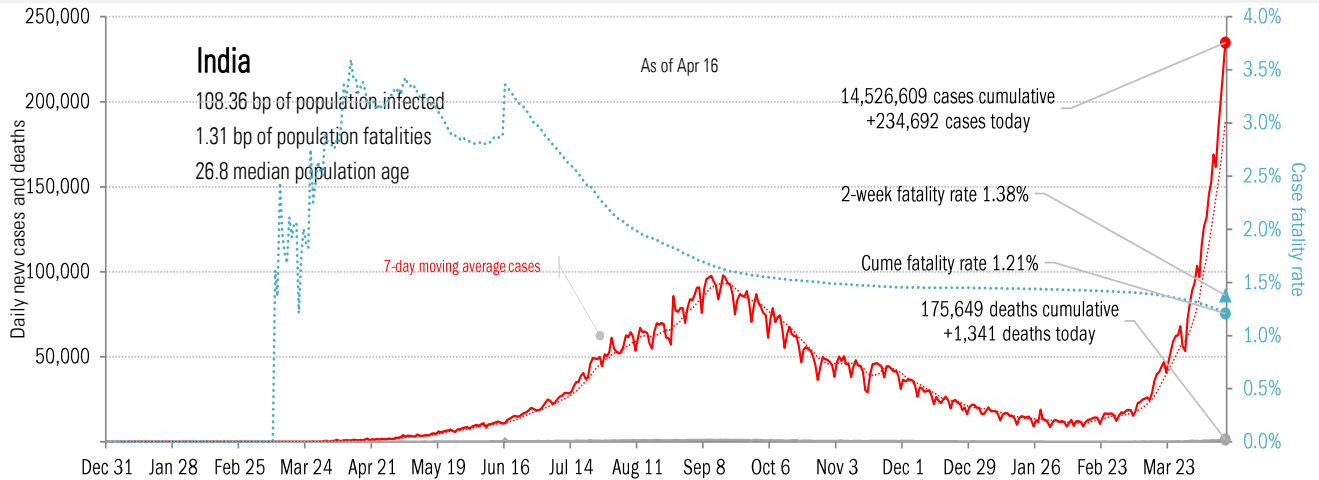
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in other hot-spots



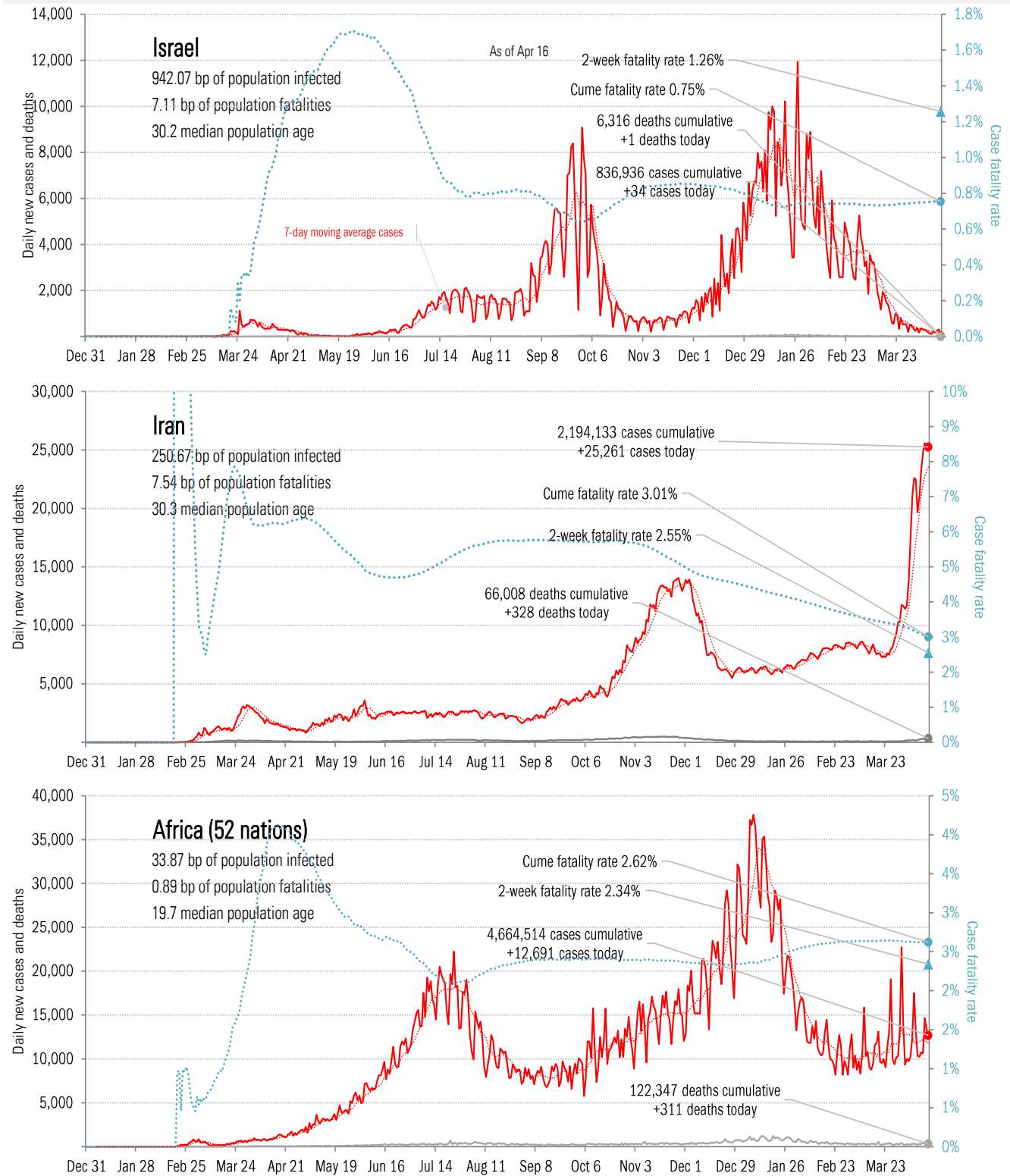
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in the BRICs ex-China



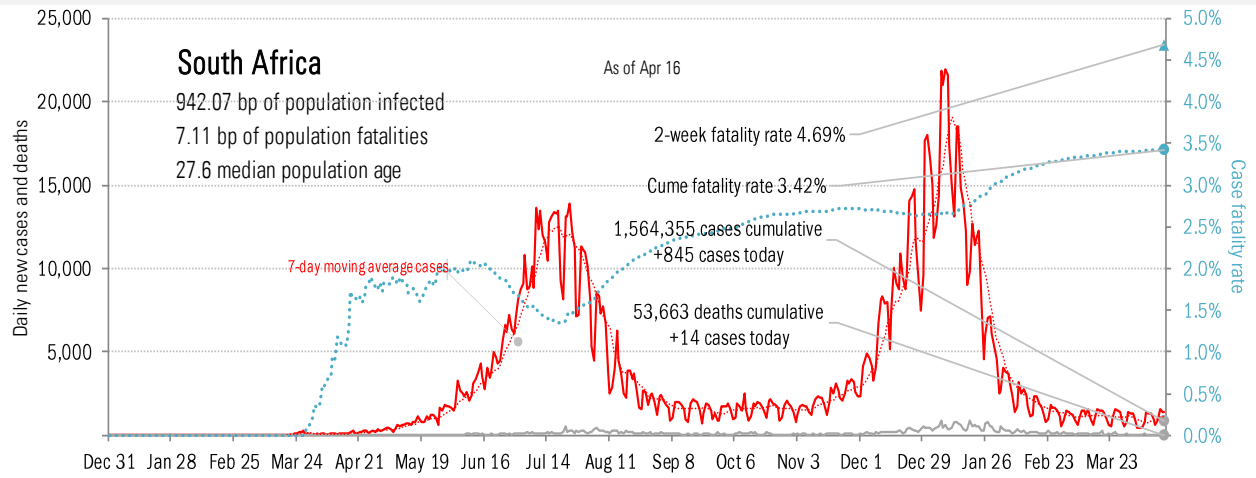
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in the Middle East and Africa



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

Impact in Africa, continued



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