

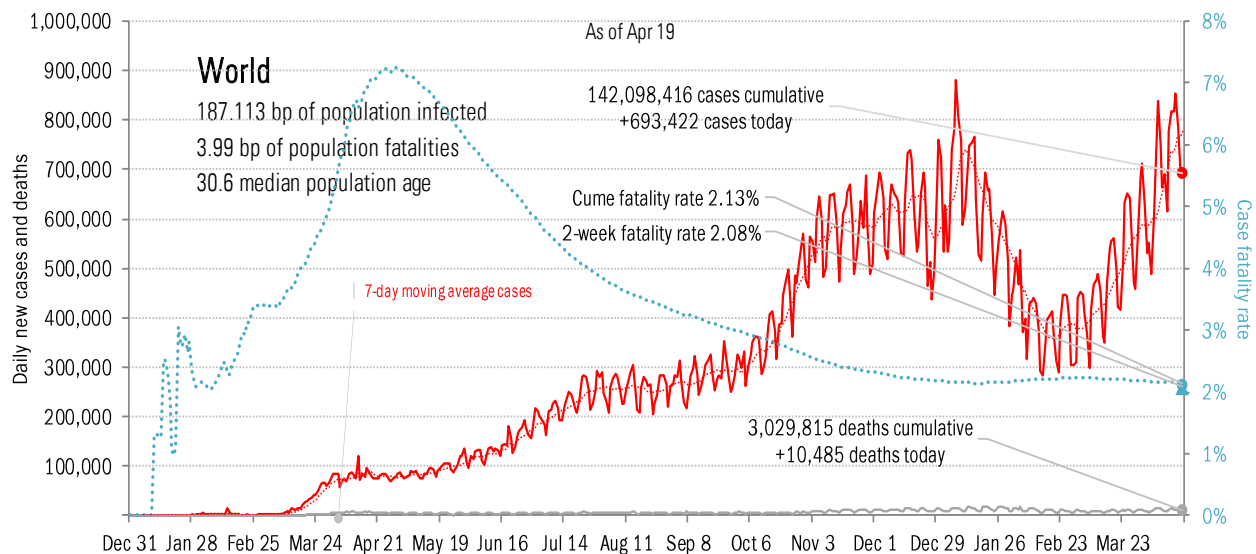
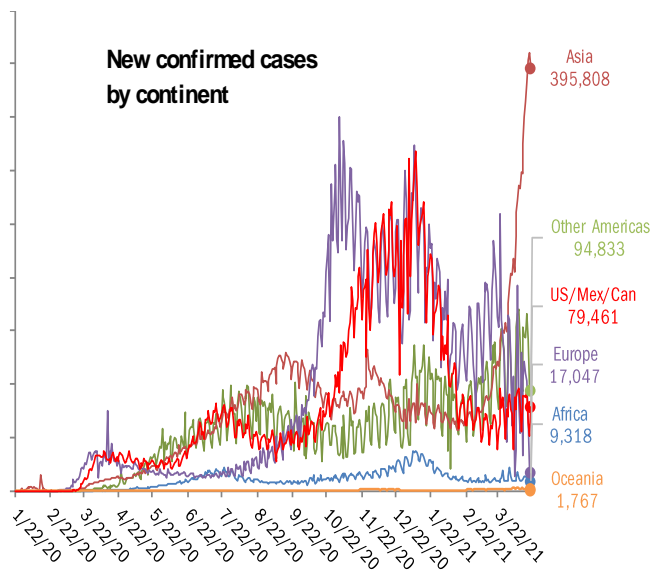
Data Insights: Covid-2019 Monitor

Tuesday, April 20, 2021

The global scorecard

The worst ten countries

New cases		New Deaths	
India	+259,167	India	+1,761
United States	+67,933	Brazil	+1,347
Turkey	+55,149	Peru	+740
Brazil	+30,624	United States	+477
Iran	+24,346	France	+447
Spain	+21,071	Colombia	+420
Argentina	+20,461	Iran	+398
Colombia	+14,189	Turkey	+341
Germany	+11,615	Russia	+339
Canada	+10,220	Italy	+316
+514,775		+6,586	
World	+693,422	World	+10,485
Top ten	74%	Top ten	63%



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

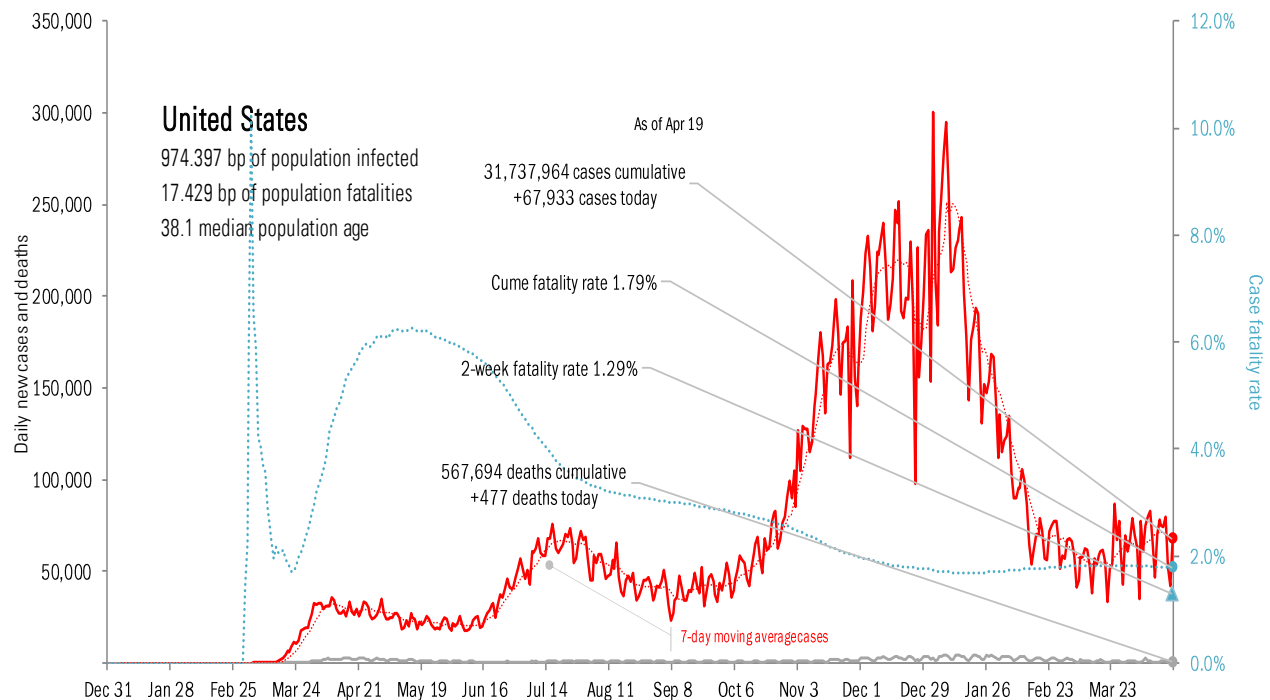
The ten worst US states

New cases			New Deaths			New in hospital			Cume cases			Cume deaths			Cume in hospital			Hospital use		ICU use	
MI	+9,171		MI	+62		PR	+215		CA	3,720,901		CA	61,045		TX	233,223		RI	92%	MI	31%
NC	+5,673		NY	+48		IL	+106		TX	2,855,052		NY	51,627		CA	227,481		MA	84%	MD	26%
TN	+5,358		FL	+32		MI	+41		FL	2,173,138		TX	49,618		FL	161,133		MD	82%	MN	20%
NY	+5,026		TN	+32		GA	+38		NY	2,003,938		FL	34,471		NY	124,095		PA	82%	RI	19%
TX	+4,477		NC	+31		TN	+36		IL	1,304,111		PA	25,673		GA	98,306		MI	82%	NY	18%
FL	+4,237		GA	+26		NY	+30		PA	1,110,675		NJ	25,161		PA	80,126		CT	81%	PA	16%
PA	+3,002		TX	+23		CH	+30		GA	1,085,161		IL	23,976		CH	79,205		MO	80%	CO	14%
CA	+2,691		IL	+21		VI	+29		CH	1,054,807		GA	19,784		IL	72,842		FL	79%	IL	14%
CT	+2,339		CT	+19		KY	+28		NJ	981,036		CH	18,991		KY	70,459		MIN	79%	DC	14%
NJ	+2,183		MA	+19		WA	+27		NC	949,366		MI	17,996		MI	59,811		SC	79%	ME	13%
	+44,157			+313			+580			17,238,185			328,342			1,206,681					
All states	+67,933			+477			+477		All states	31,737,964			567,694			2,153,974		All states	70%		67%
Top ten	65%			66%			122%		Top ten	54%			58%			56%		Median	73%		10%

Some states not reporting

Five most improved US states

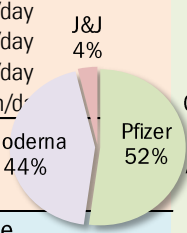
Fewer daily cases		Fewer new deaths		Fewer new hospitalizations		Most pop immunity growth	
FL	-2,597	CA	-37	NJ	-113	ME	+109 bp
NJ	-966	PA	-13	TX	-74	MT	+73 bp
IL	-682	TX	-10	CO	-56	WI	+61 bp
NY	-615	CO	-9	FL	-51	UT	+61 bp
MN	-561	MN	-9	PA	-47	WA	+56 bp



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
275.52 million doses distributed	+0.00 million/day	US	39.6%	39.6%
219.27 million doses administered	+2.22 million/day	UK	48.5%	48.5%
136.35 million persons partially immunized	+1.09 million/day	France	6.7%	18.4%
88.47 million persons fully immunized	+1.13 million/day	Spain	20.2%	20.2%
7.78 million shots long-term care residents/staff	+0.001 million/day	Germany	6.7%	20.1%
79.6% of distributed doses administered		Italy	7.5%	18.2%
40.8% of US pop partial	26.5% full immunity	Australia	1.0%	0.6%
100% of LTC partial	64.0% full immunity	Israel	57.6%	61.9%
		Canada	2.5%	24.7%
		Japan	0.6%	1.0%
		Africa	0.4%	0.8%
		India	1.3%	8.0%
		Brazil	4.2%	11.7%



At today's dosing pace,
every American >18 immune in
108 days
by Aug 5, 2021

US achieves adult herd immunity* in
16 days
by May 4, 2021

Global data differs from sources, timing

AK
54.6%
39.8%
32.2%

State
Immunities distributed as % population**
Partial immunity as % population
Full immunity as % population



WI
41.4%
42.8%
29.5%

ME
45.6%
49.5%
33.3%

42.0%	38.2%	44.9%	40.8%	39.6%	43.2%	42.0%	43.8%	46.0%		
40.9%	32.2%	38.5%	38.0%	42.2%	42.2%	38.8%	43.2%	48.9%		
27.5%	23.4%	28.0%	29.8%	28.8%	25.6%	26.3%	29.0%	29.9%		
40.8%	38.1%	43.2%	48.4%	41.9%	38.0%	41.7%	44.9%	42.9%	50.7%	44.8%
39.3%	36.8%	32.2%	43.1%	41.2%	33.4%	37.9%	43.4%	46.4%	49.4%	45.6%
25.3%	24.4%	24.2%	31.4%	28.7%	23.0%	26.7%	26.5%	30.1%	32.2%	31.9%
44.1%	35.9%	41.7%	42.7%	40.7%	40.9%	45.1%	42.1%	43.7%	44.6%	
43.7%	36.3%	42.5%	40.8%	34.5%	38.9%	34.6%	42.4%	43.1%	41.9%	
25.4%	20.1%	26.2%	27.7%	23.3%	27.8%	26.6%	27.0%	28.1%	26.1%	
42.0%	47.9%	43.0%	41.9%	39.8%	42.2%	40.5%	51.6%			
37.7%	48.1%	40.3%	33.6%	32.1%	36.6%	34.6%	41.8%			
24.8%	32.6%	26.8%	21.7%	20.6%	25.0%	23.6%	24.0%			
45.2%	40.2%	40.3%	39.9%	40.2%						
37.1%	31.0%	29.4%	30.3%	32.7%						
26.5%	23.6%	21.3%	19.3%	19.5%						
39.7%	35.3%	22.6%								
47.3%	39.8%	28.7%								
44.6%	38.2%	24.3%								
45.3%	31.6%	19.8%								

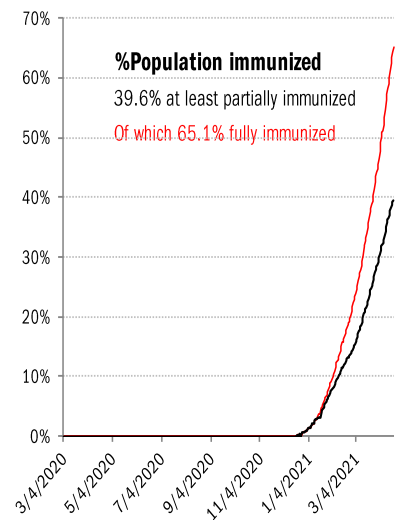
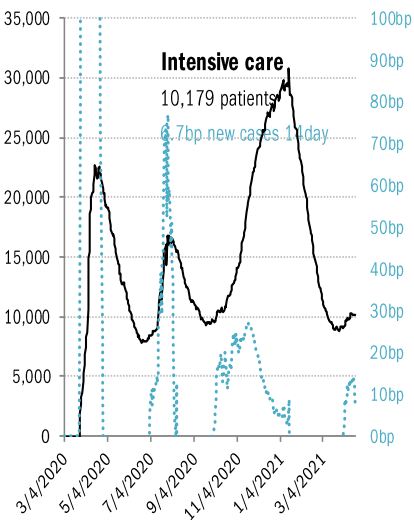
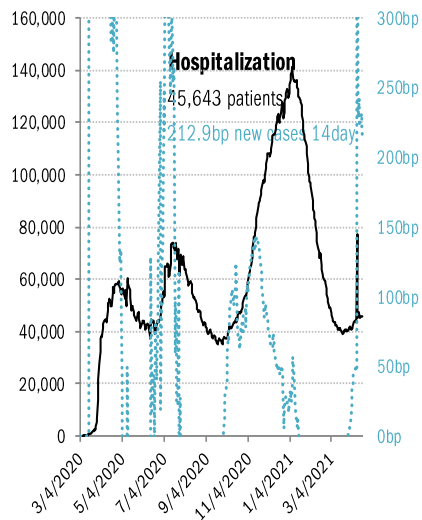
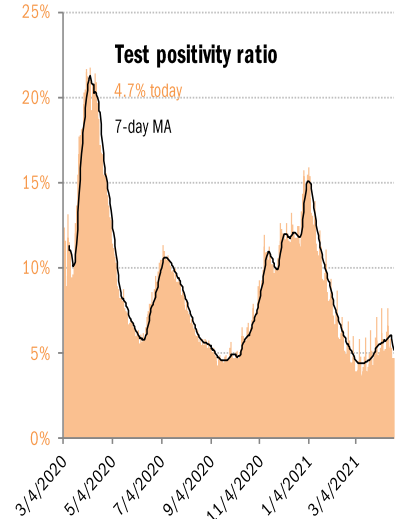
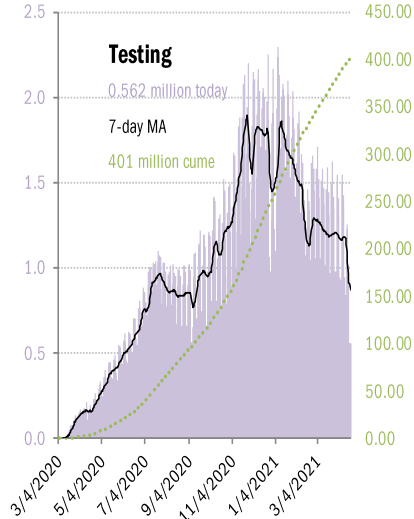
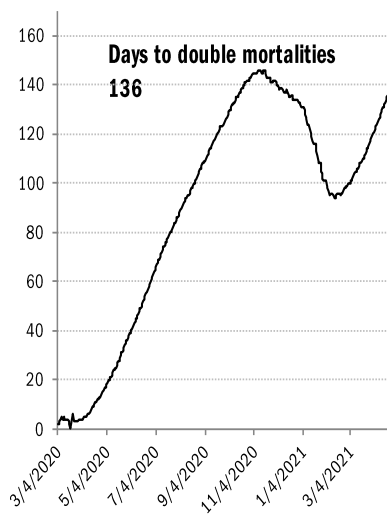
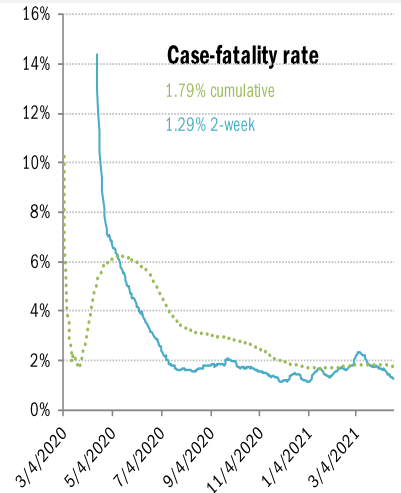
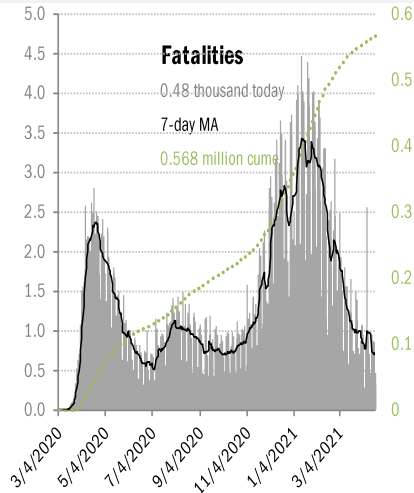
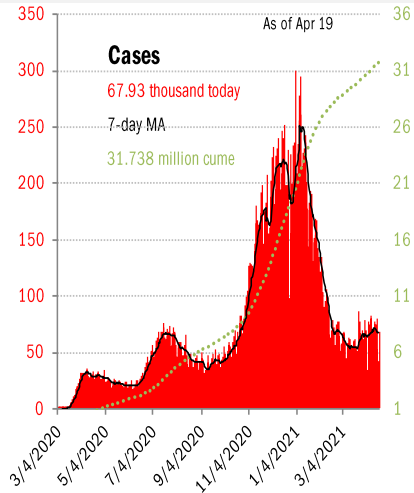
As of Apr 19

* 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

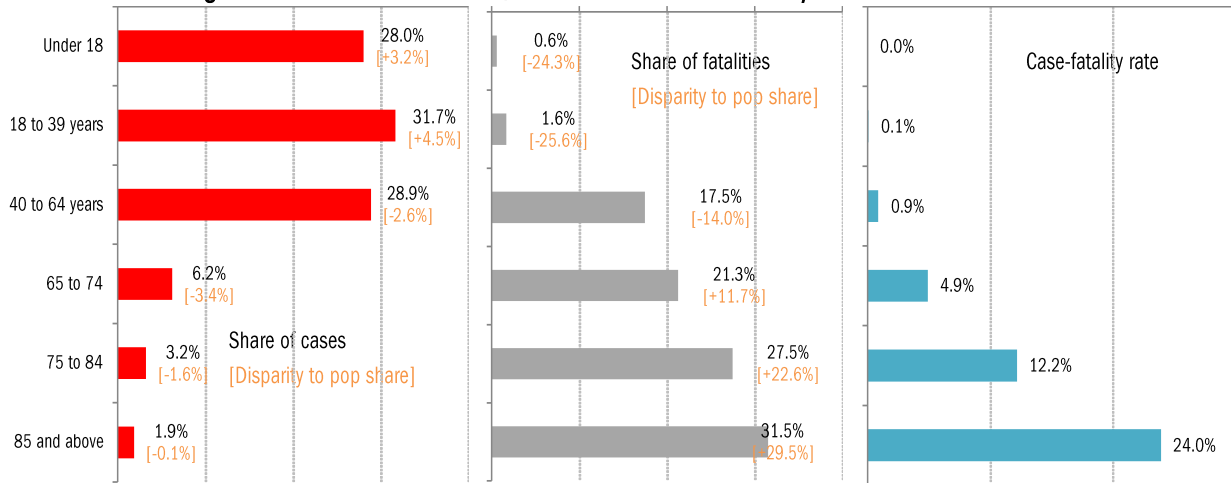
National and state-by-state data do not line up because of different sources



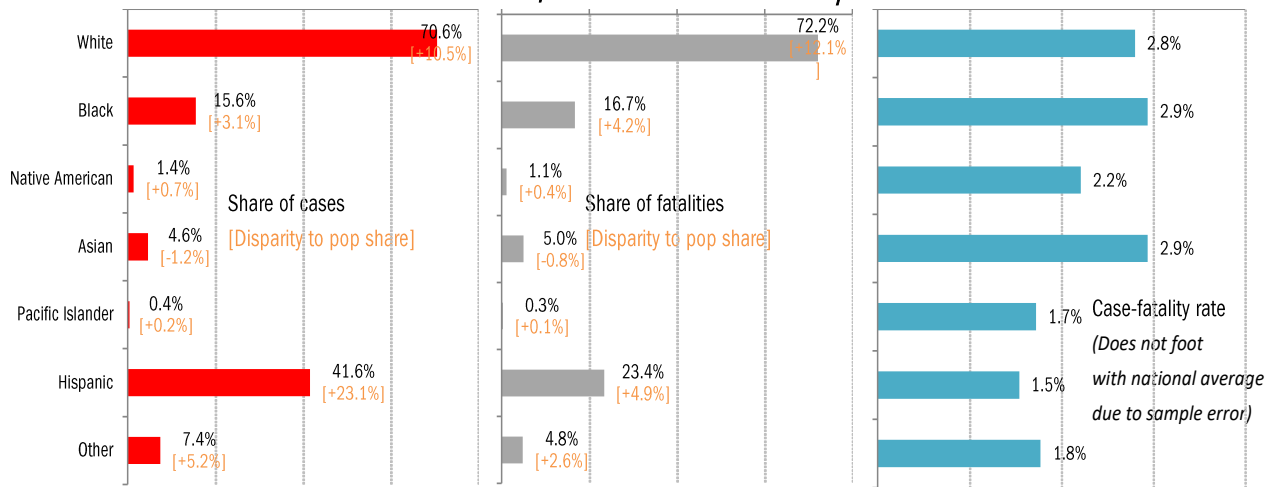
Source: [Johns Hopkins](#), [Covid Act Now](#), TrendMacro calculations

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

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

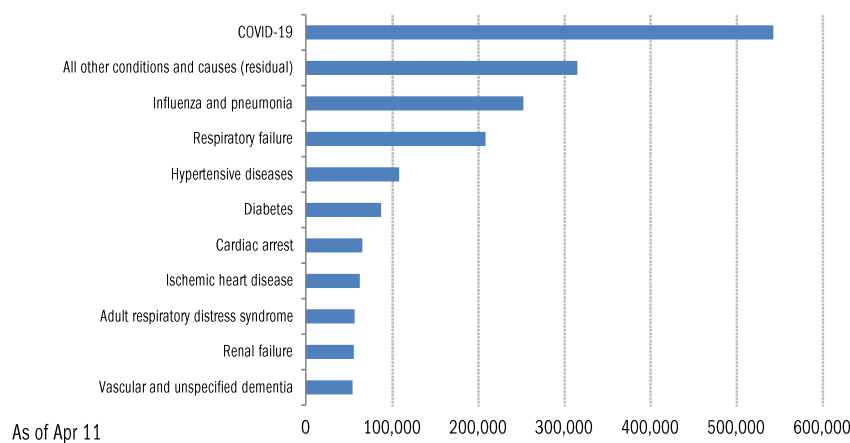


Racial distribution of US cases, fatalities and case-fatality rates



Comorbidities

Top-ten joint causes of Covid mortalities, cumulative



For 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

[Women more affected by Zoom fatigue](#)

Geraldine Fauville
University of Gothenberg
April 14, 2021

[An American Epidemic of 'Covid Mania'](#)

Joseph A. Ladapo
Wall Street Journal
April 19, 2021

[Israel, a world leader in vaccinations, lifts its outdoor mask mandate.](#)

Isabel Kershner
New York Times
April 18, 2021

[Pandemic pushes California into new age of telehealth and telecommuting](#)

Ron Mackovich
USC News
April 19, 2021

[Covid-Vaccinations Study Highlights How Shots Are Curbing Spread](#)

John Lauerman
Bloomberg
April 19, 2021

[Canadian police refuse provincial order to make random stops amid COVID-19 surge](#)

Steve Scherer
Reuters
April 17, 2021

[Michigan Moving To Make 'Emergency' COVID-19 Mandates Permanent](#)

Jarret Skorup
Reason
April 16, 2021

[Gavin Newsom can't guarantee California schools will be open in the fall. Why not?](#)

Eric Ting
SFGate
April 16, 2021

[How Safe Are You From Covid When You Fly?](#)

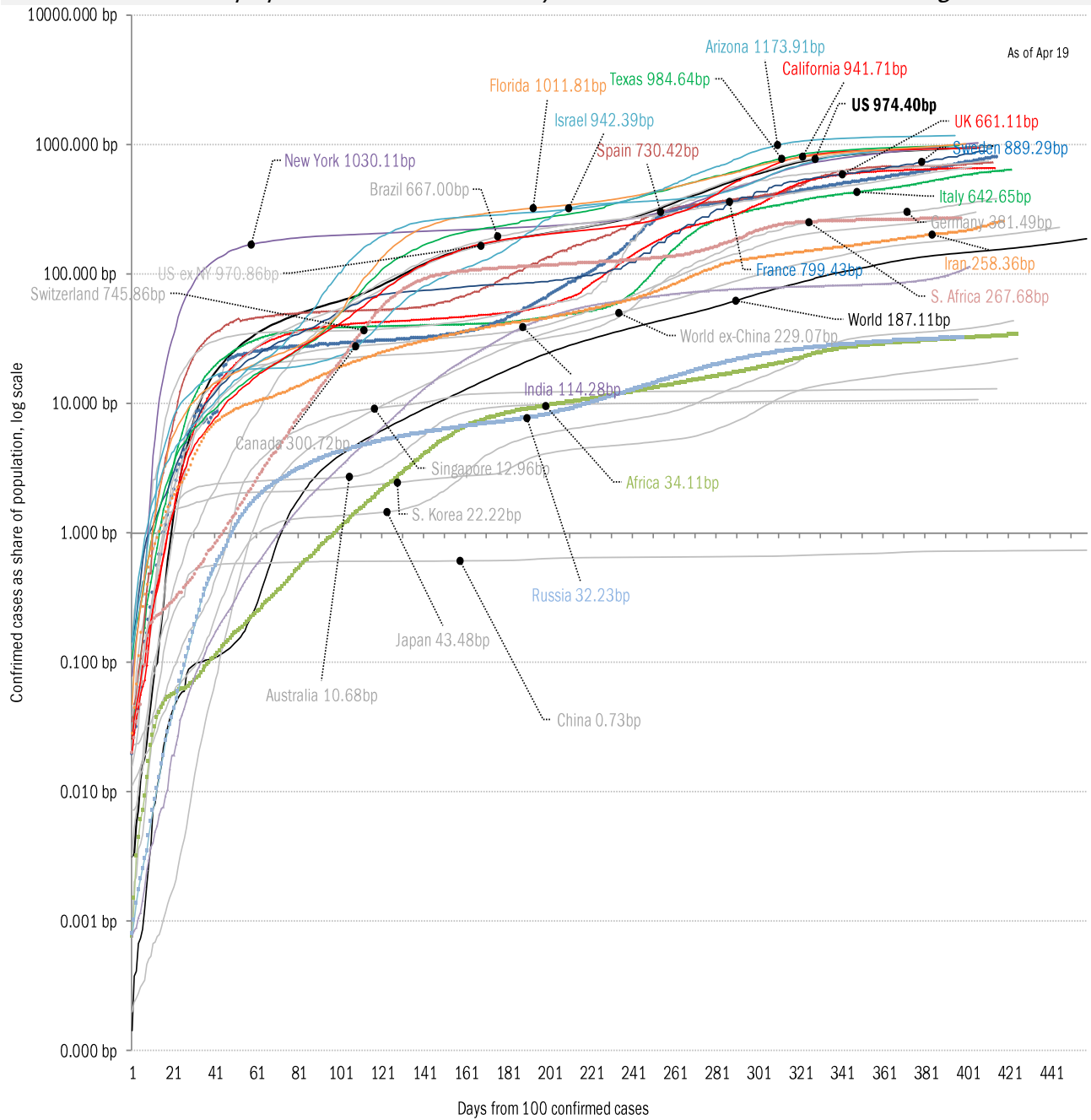
Mika Gröndahl, Tariro Mzezewa, Or Fleisher and Jeremy White
New York Times
April 17, 2021

Meme of the day



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

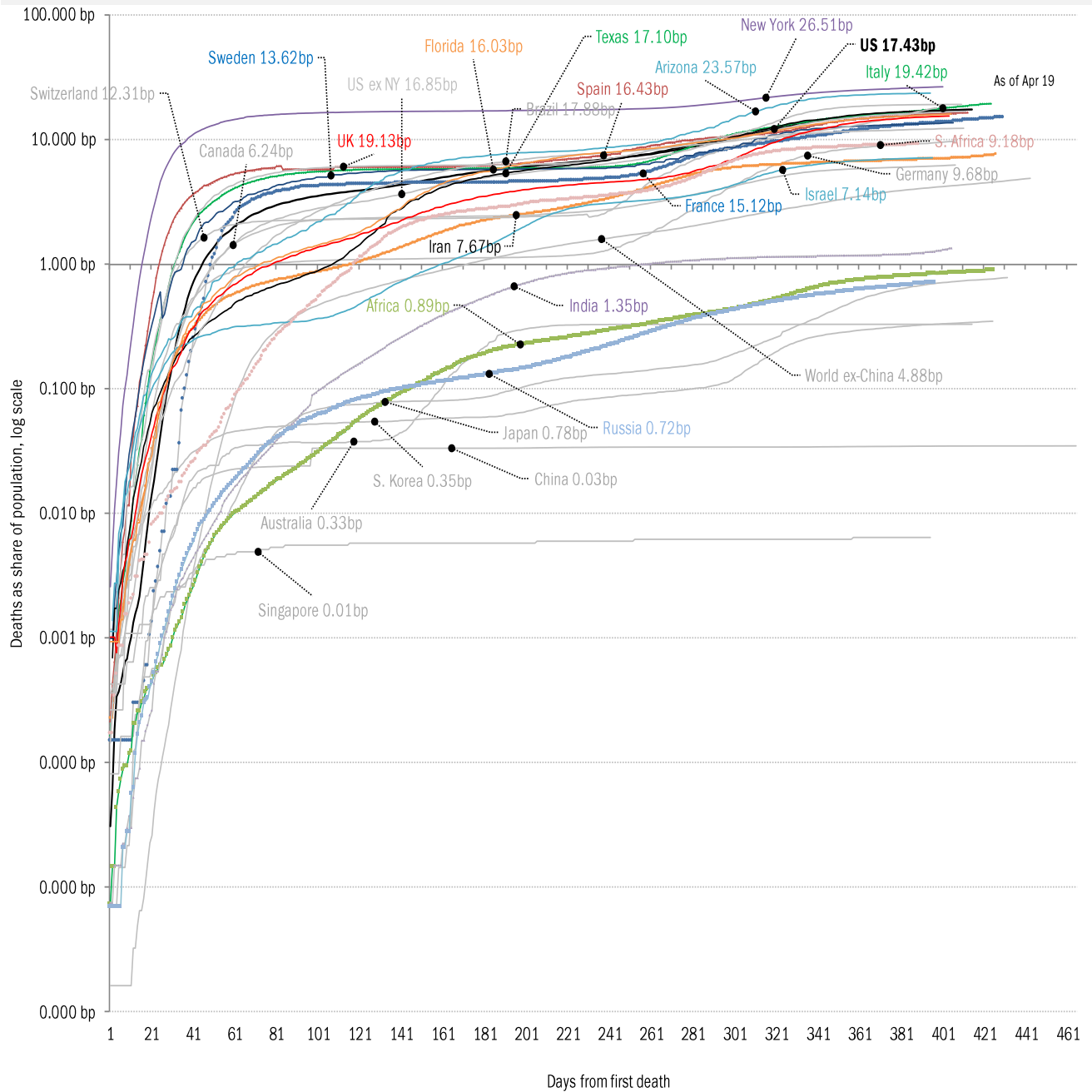
The coronavirus case accelerometer... tracking the world's infection curves
Share of infected population from first day with 100 confirmed cases, log scale



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-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

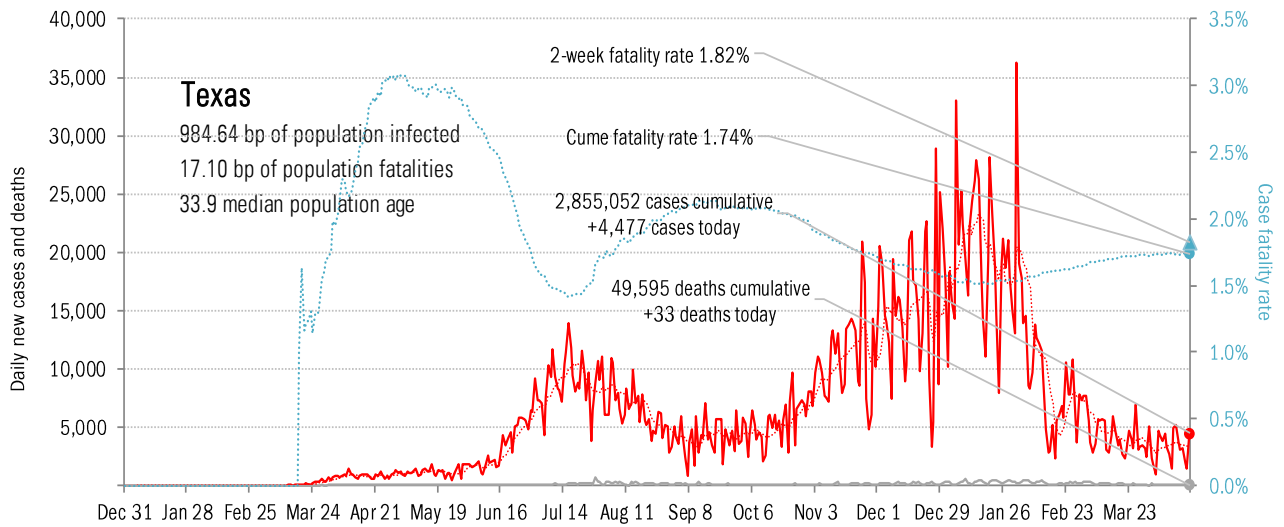
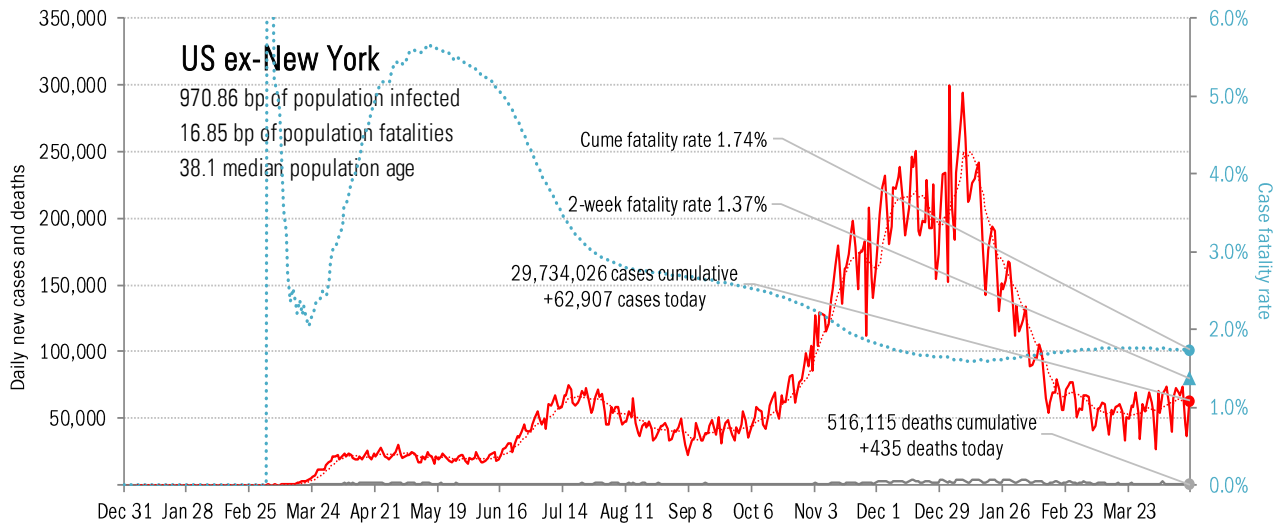
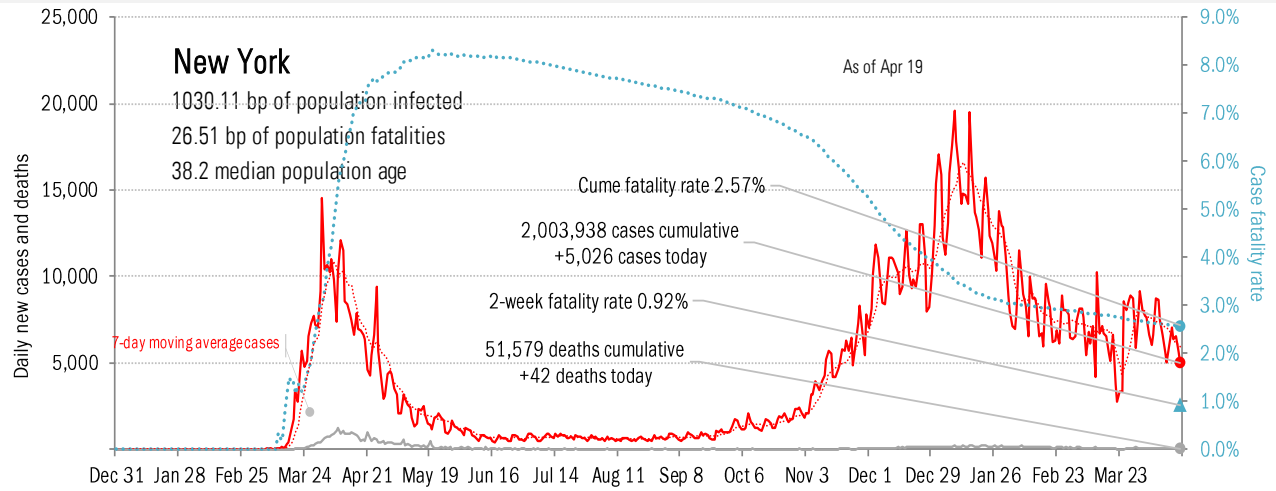
14-day moving average, last 14 days Most recent value displayed ● High ● Low

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



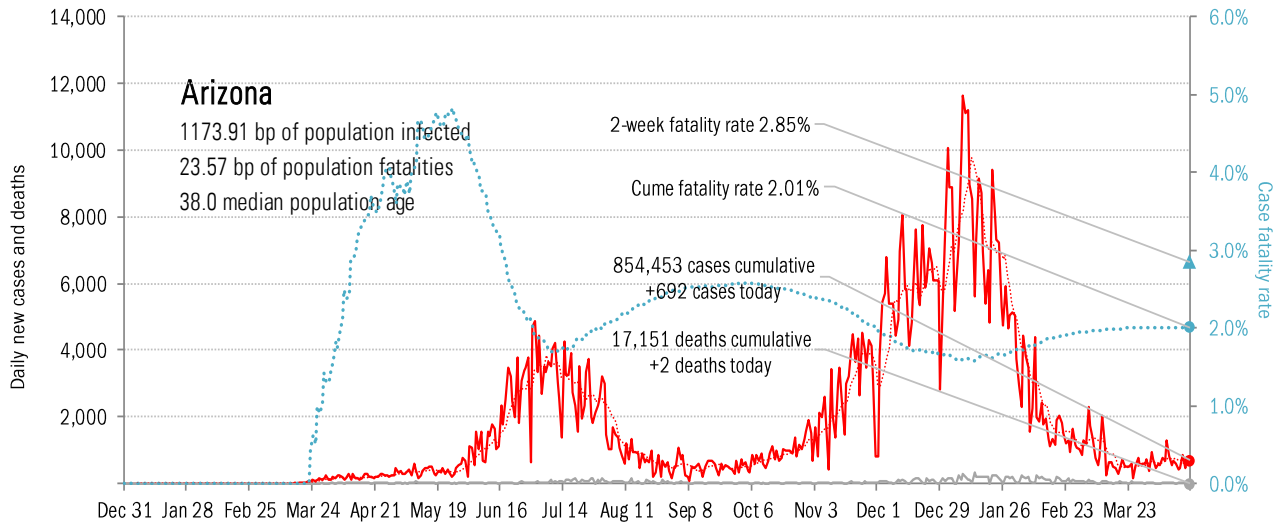
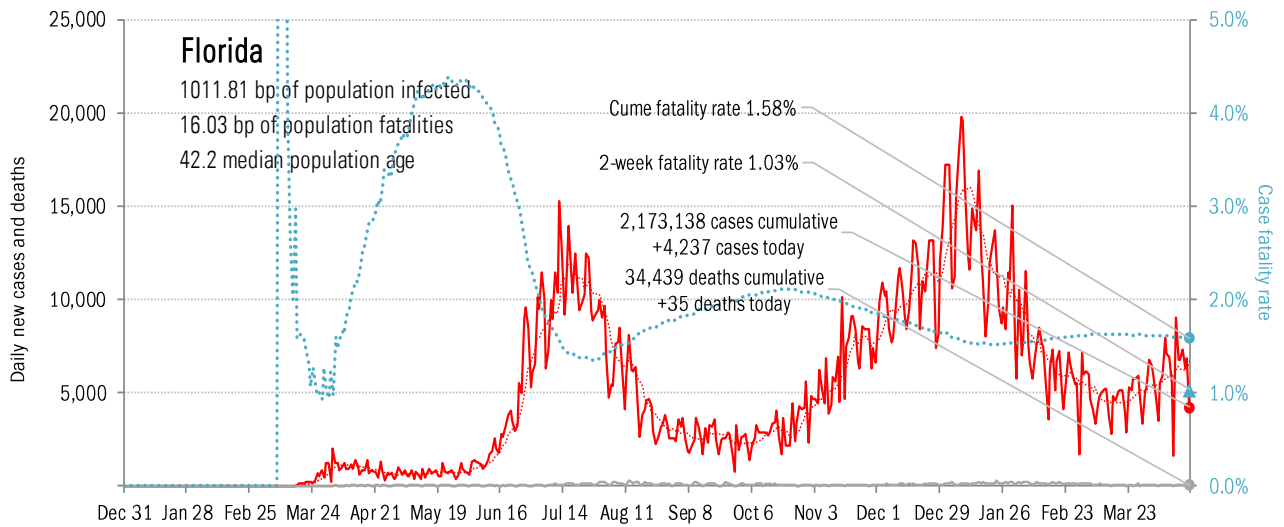
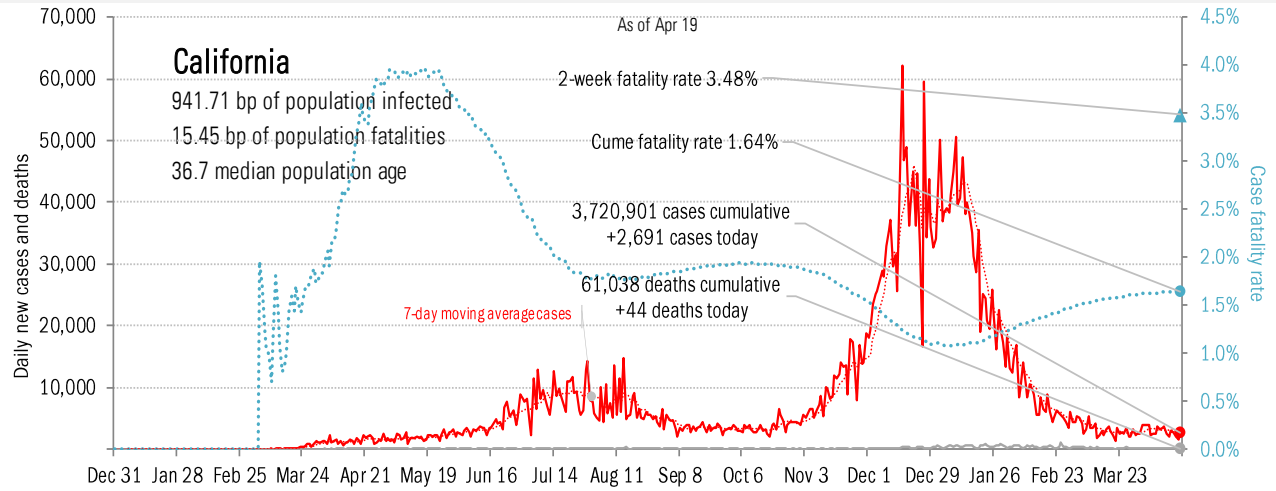
Source: [Covid Act Now](#), TrendMacro calculations

From Ground Zero to the Rio Grande



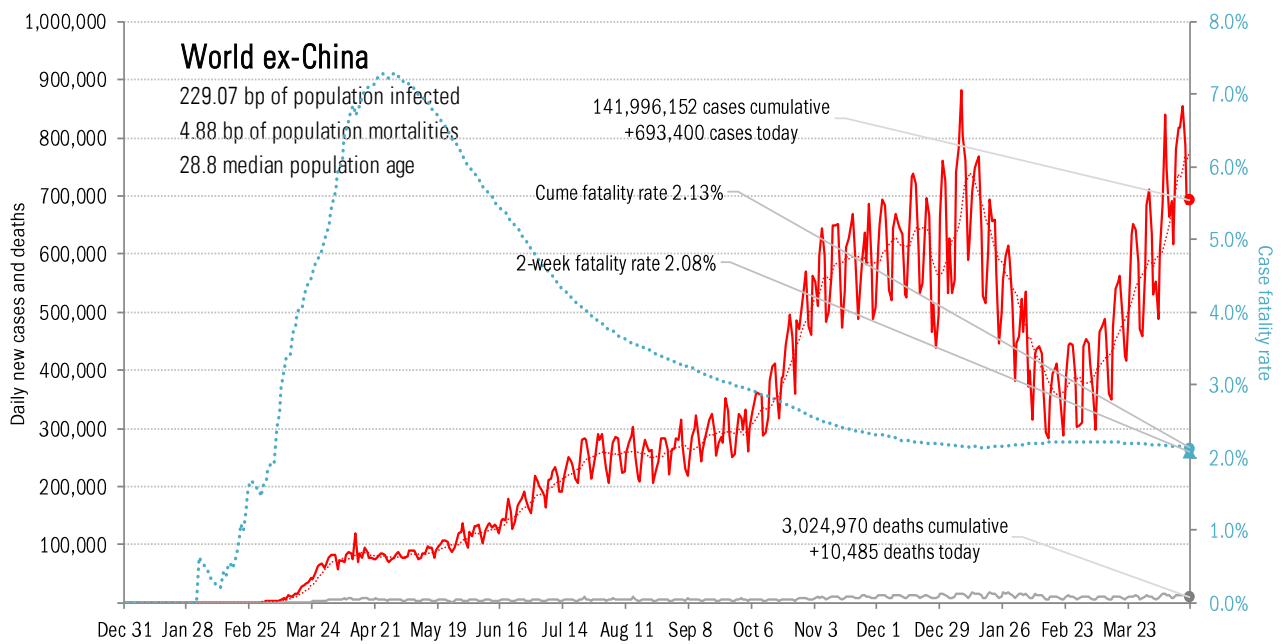
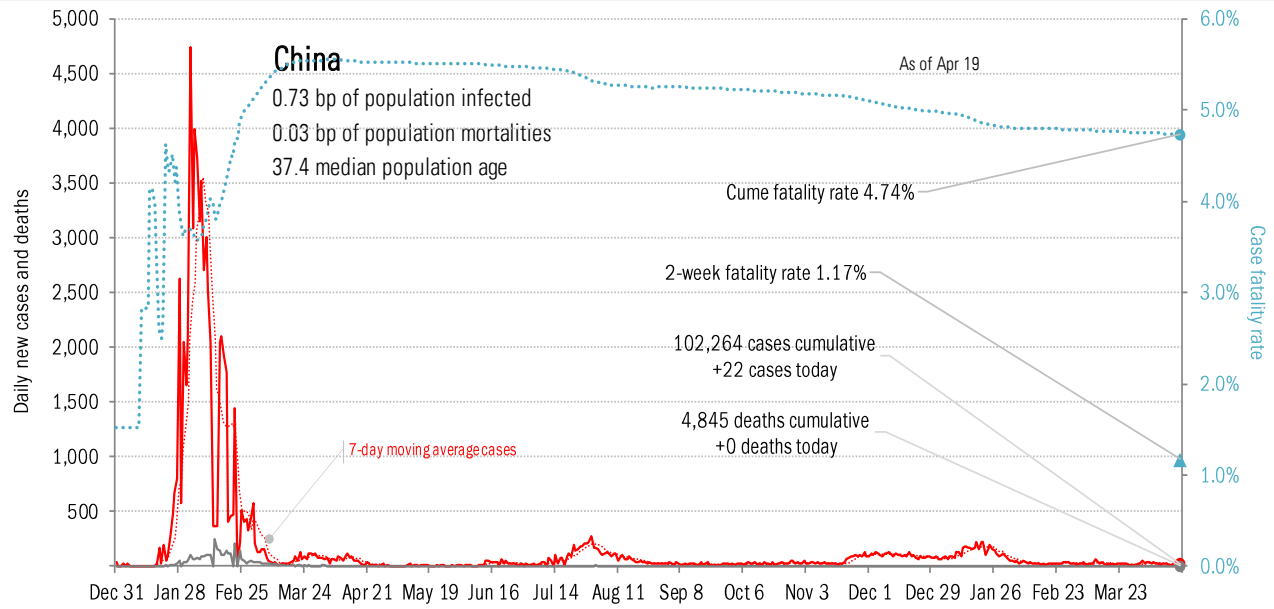
Source: [Johns Hopkins](https://www.jhu.edu/), TrendMacro calculations

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



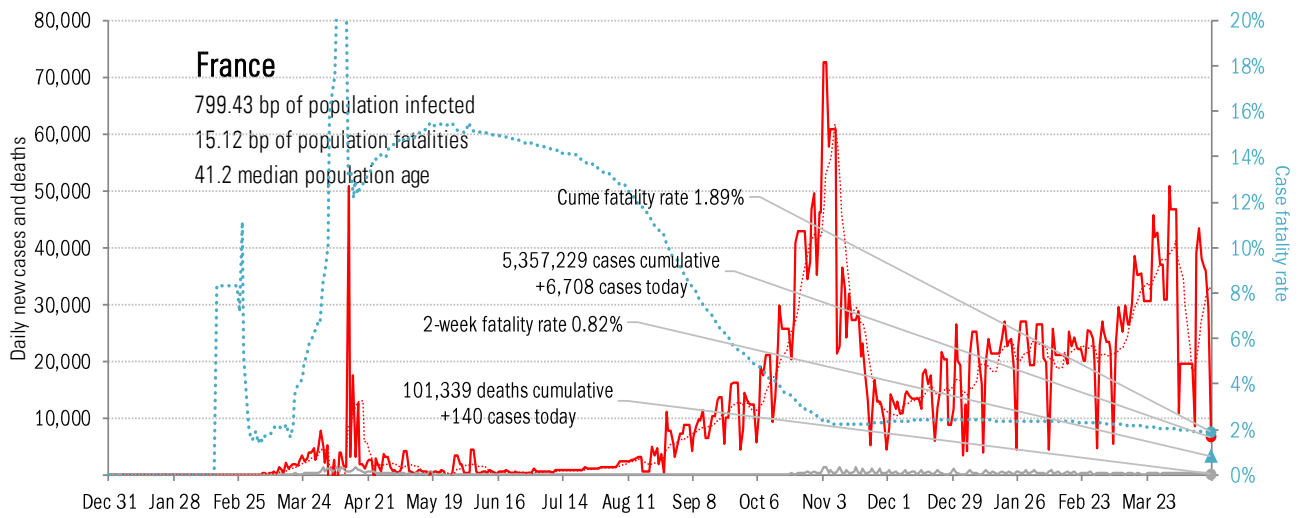
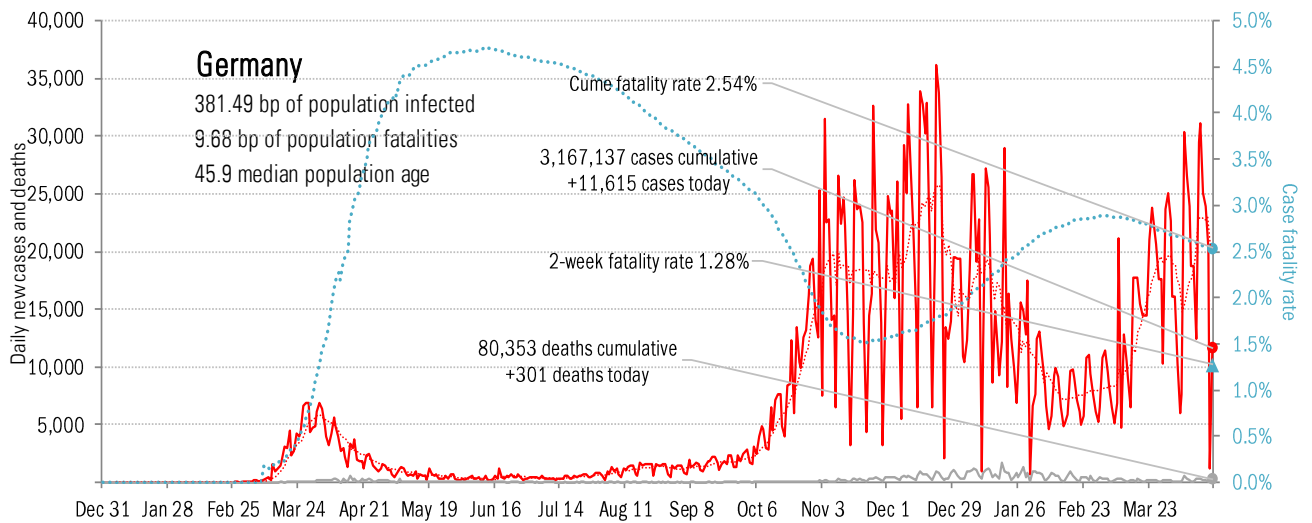
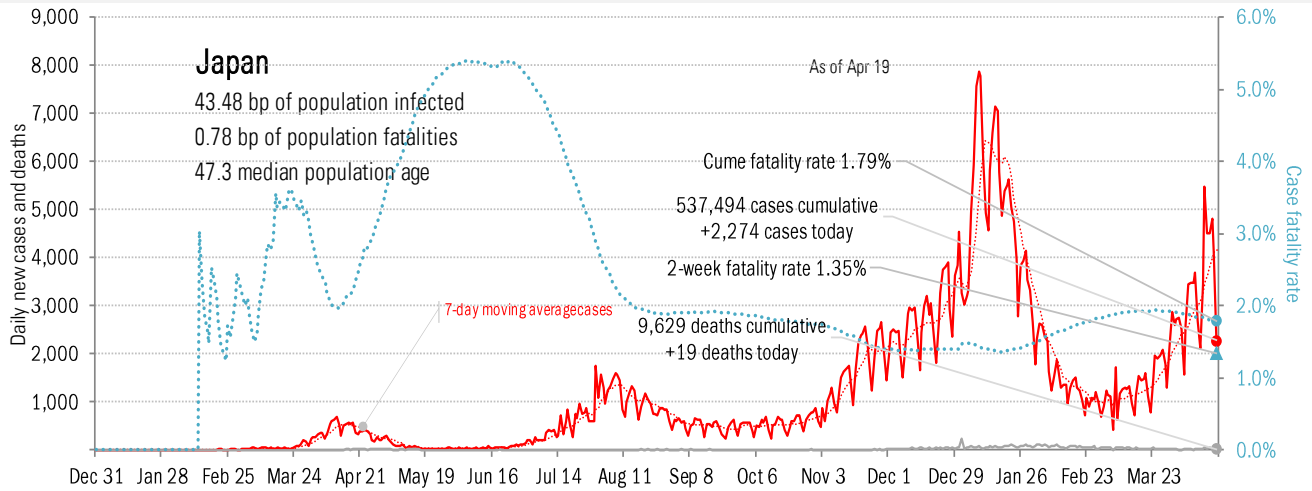
Source: [Johns Hopkins](#), TrendMacro calculations

Patient zero... and then everyone else



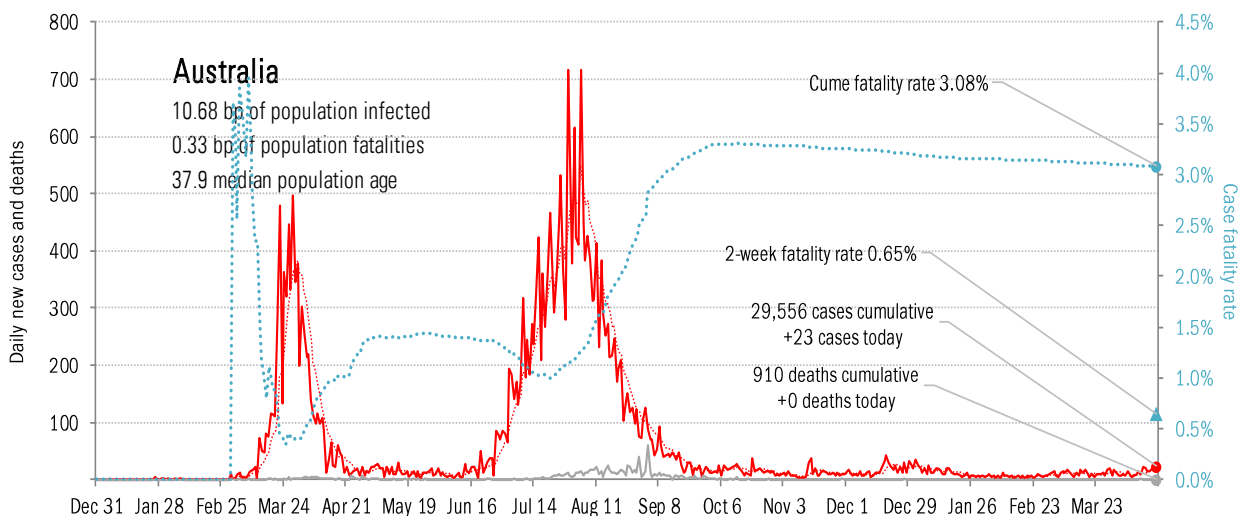
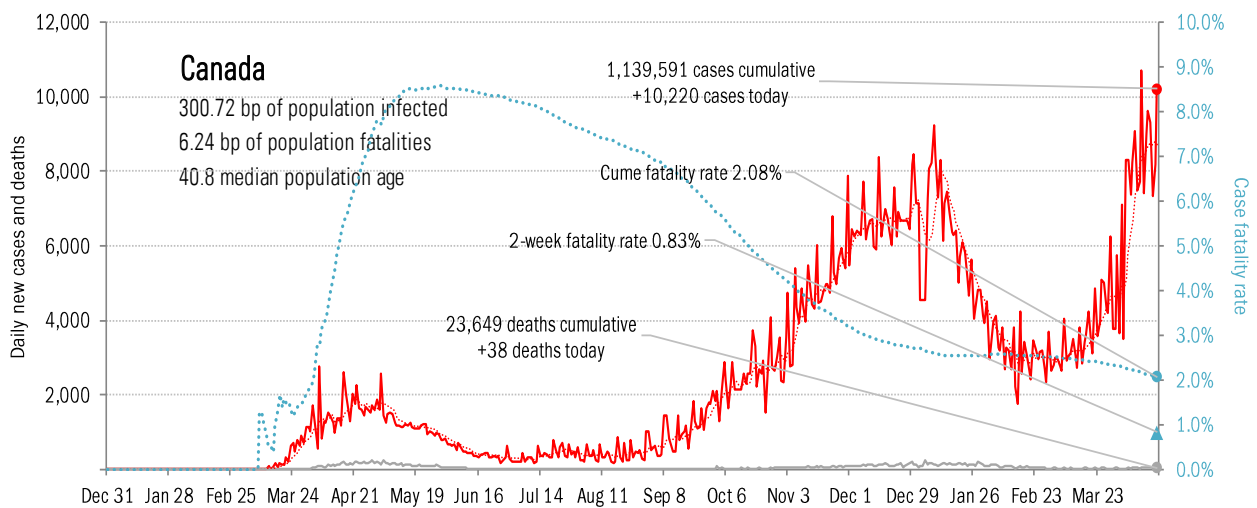
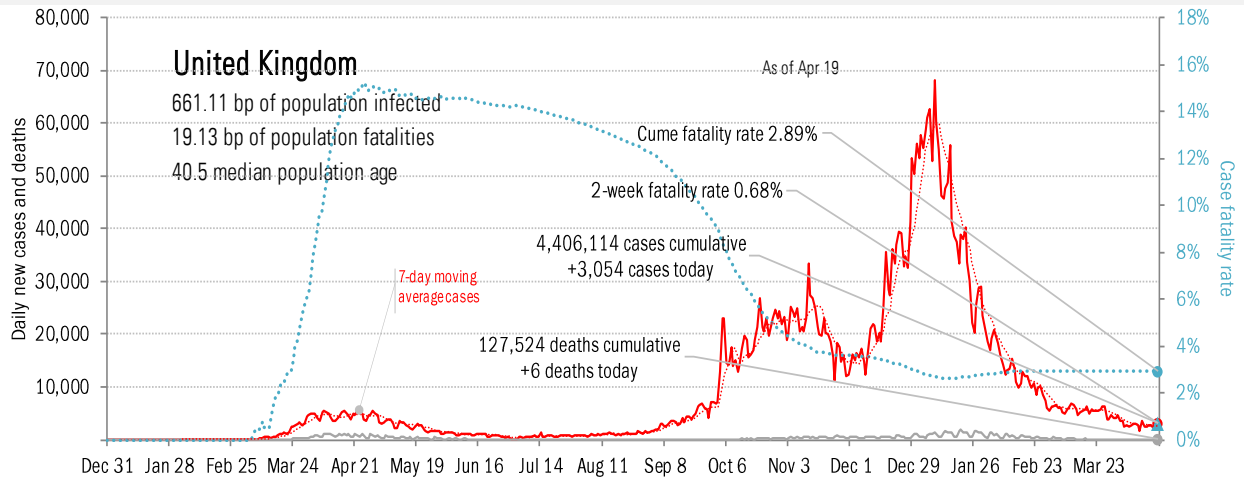
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in the largest economies



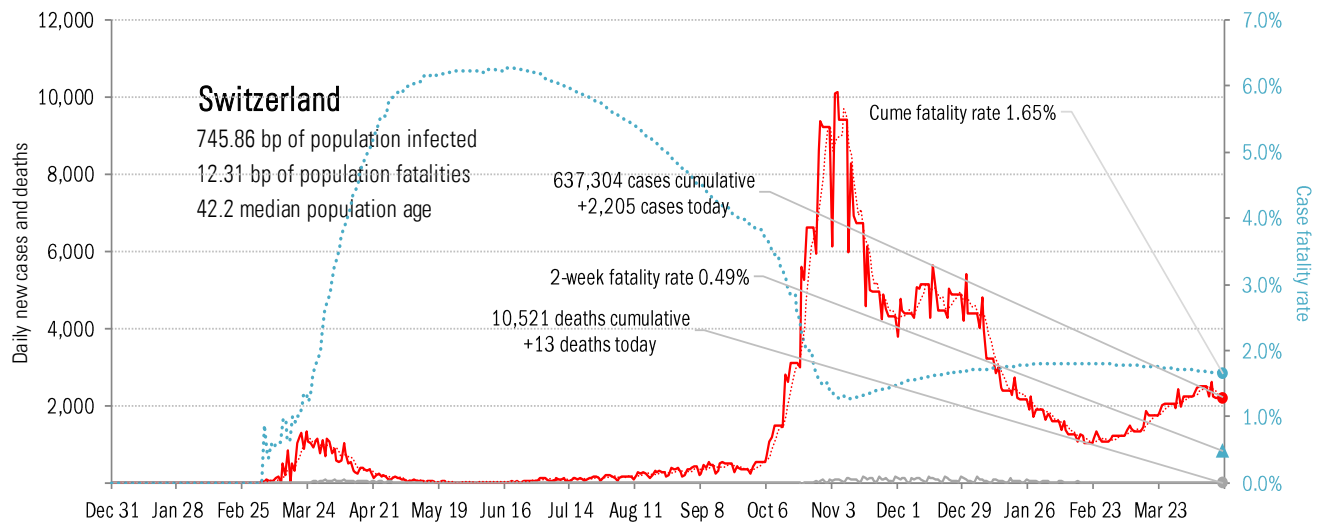
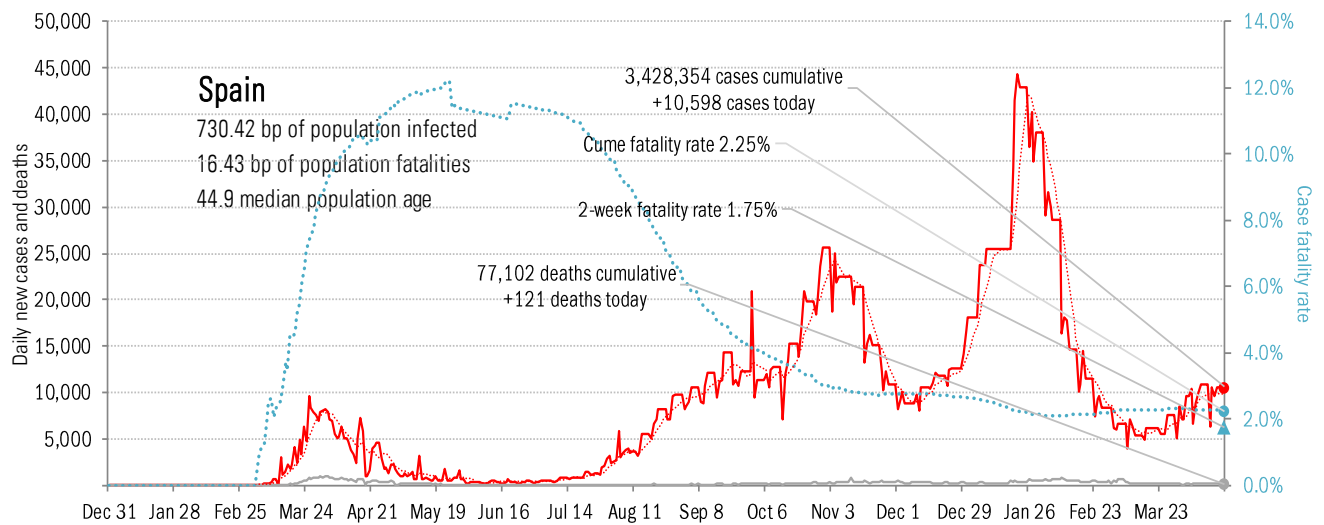
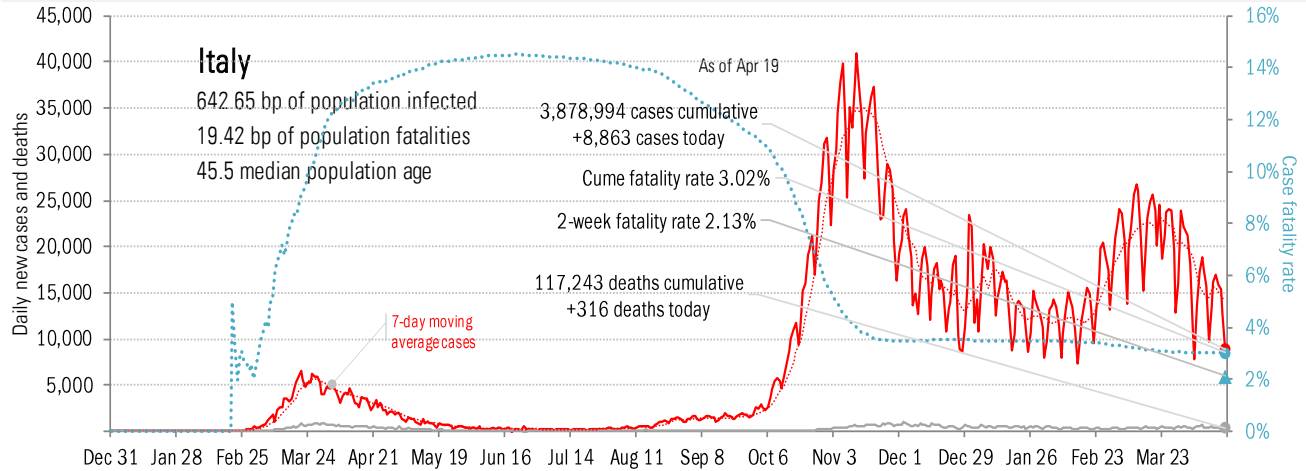
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in The Anglosphere



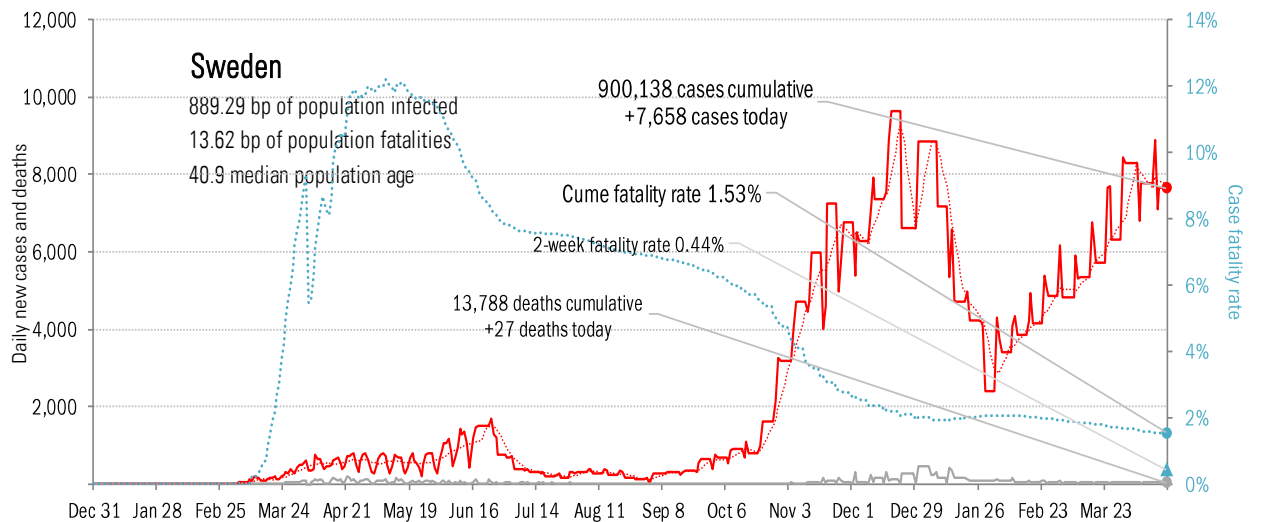
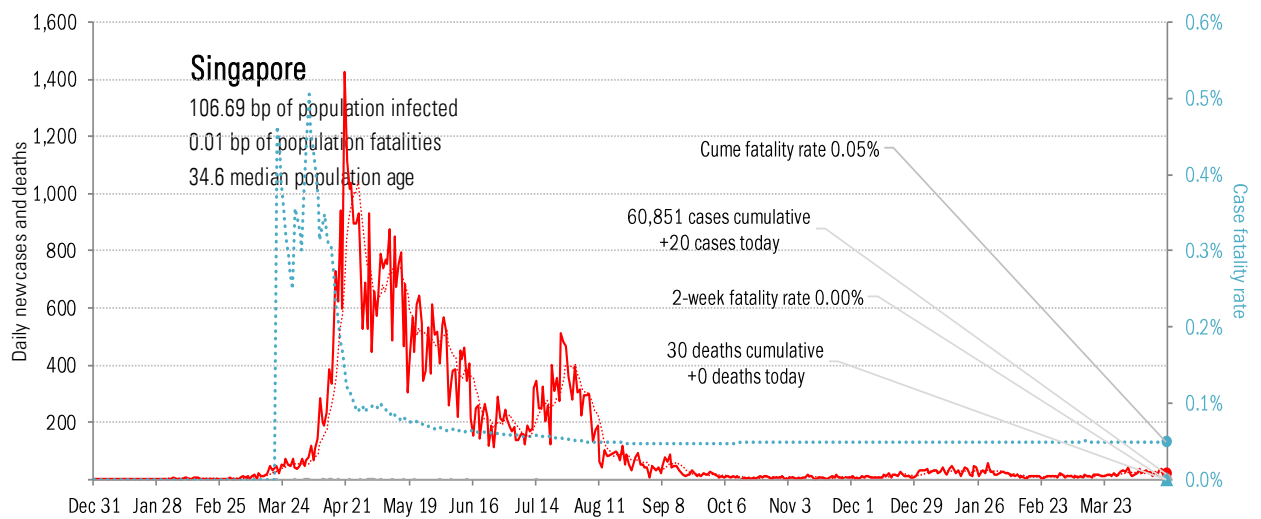
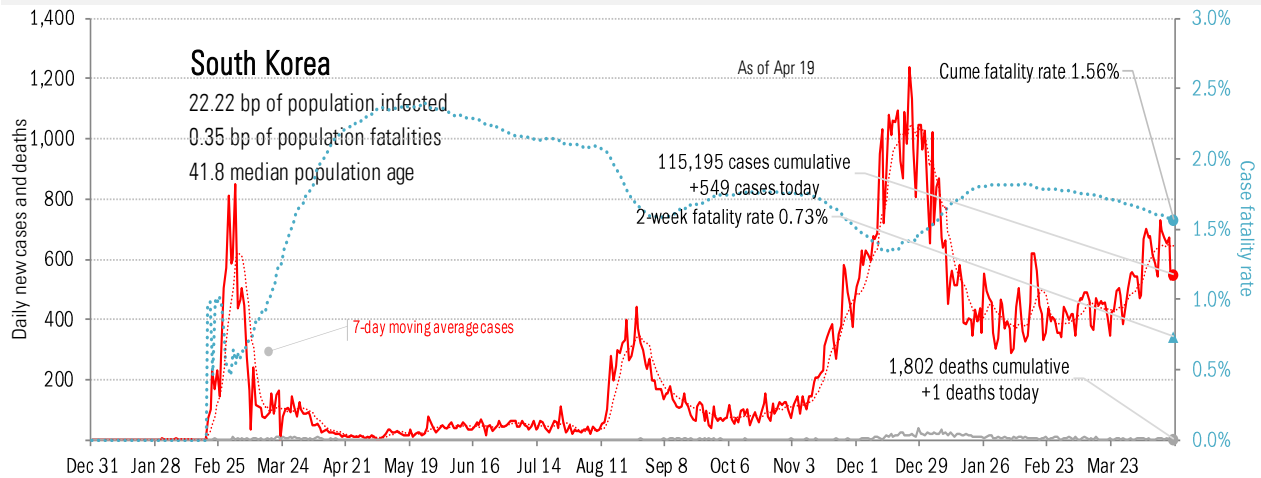
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in continental Europe



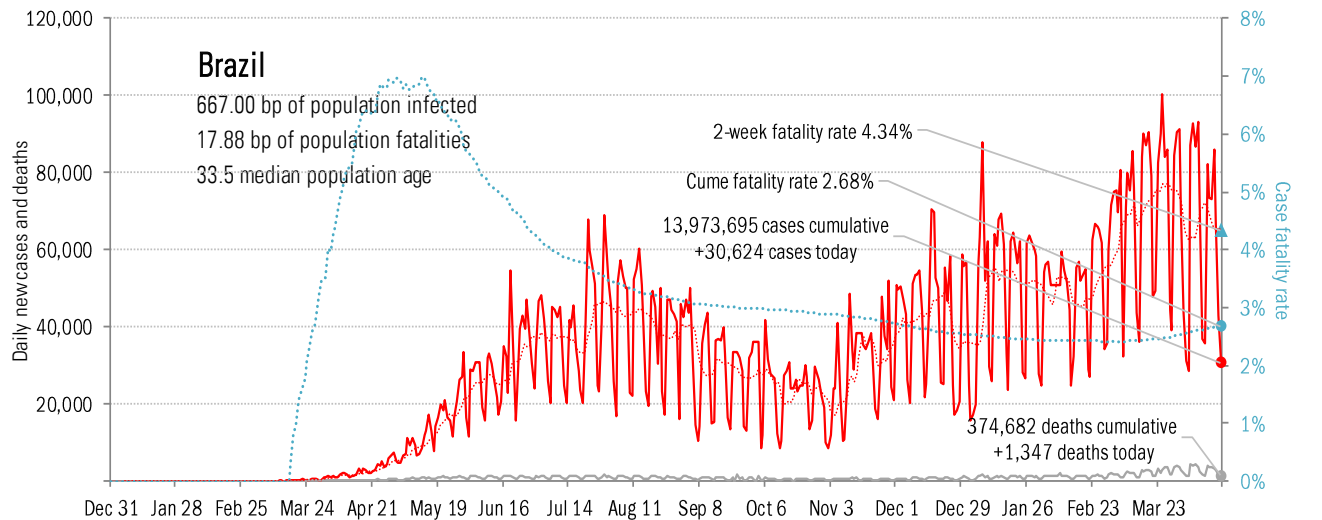
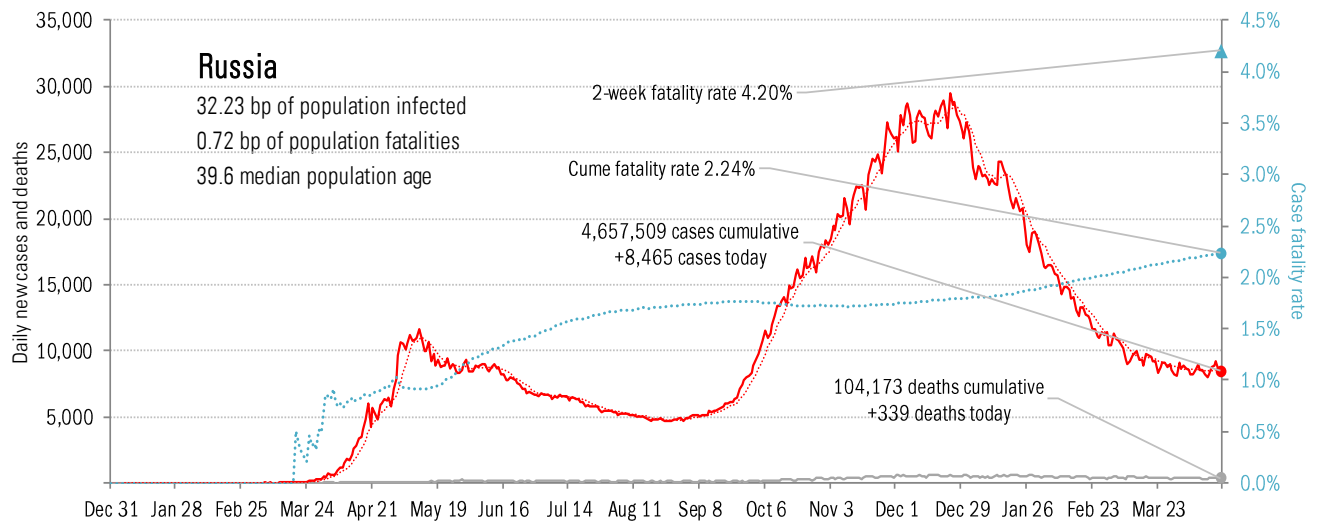
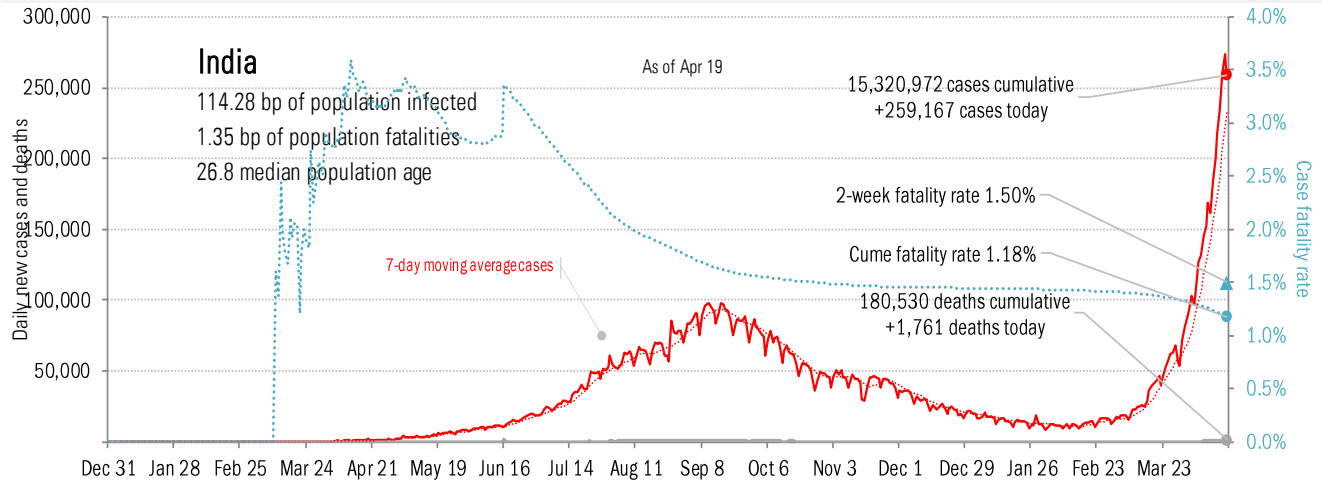
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in other hot-spots



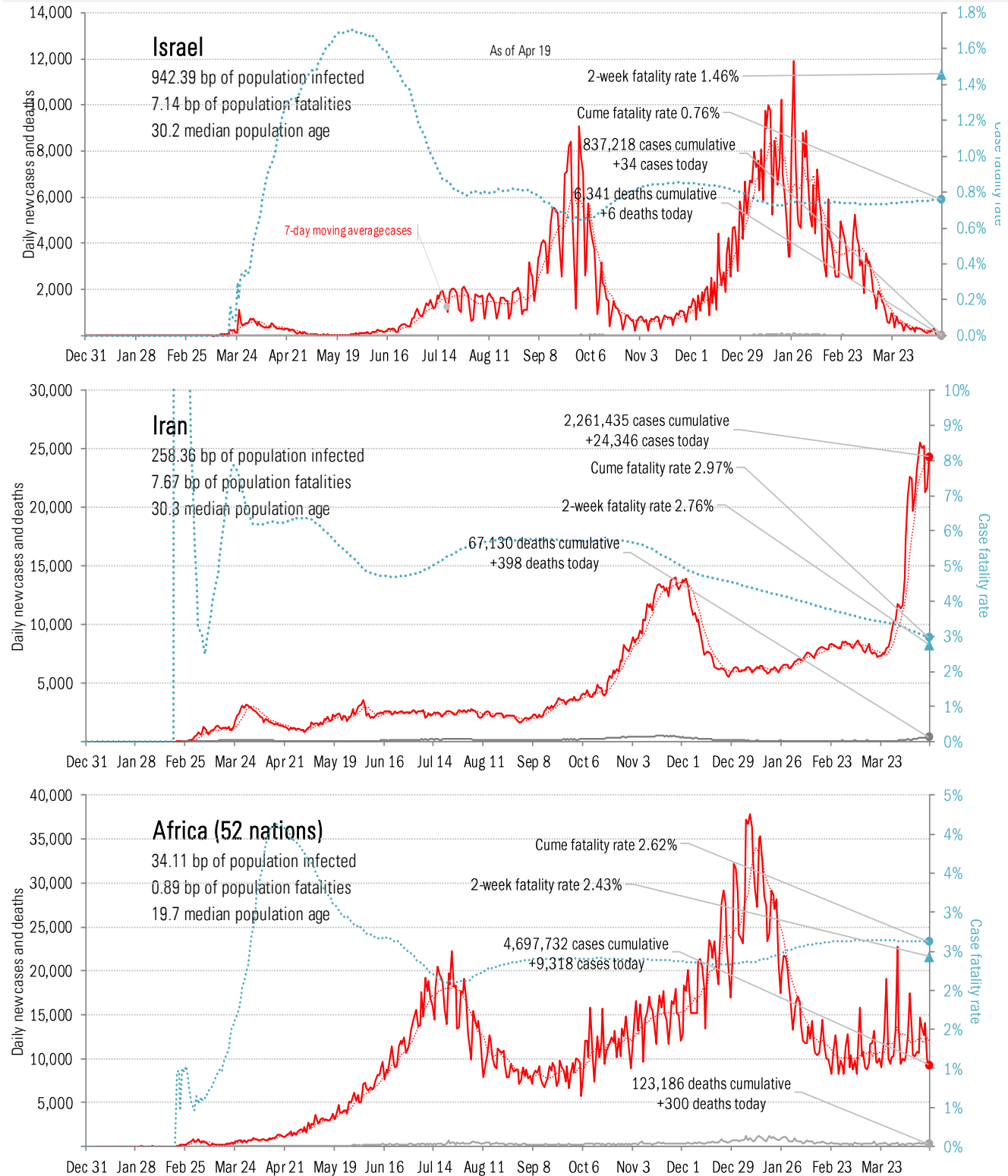
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in the BRICs ex-China



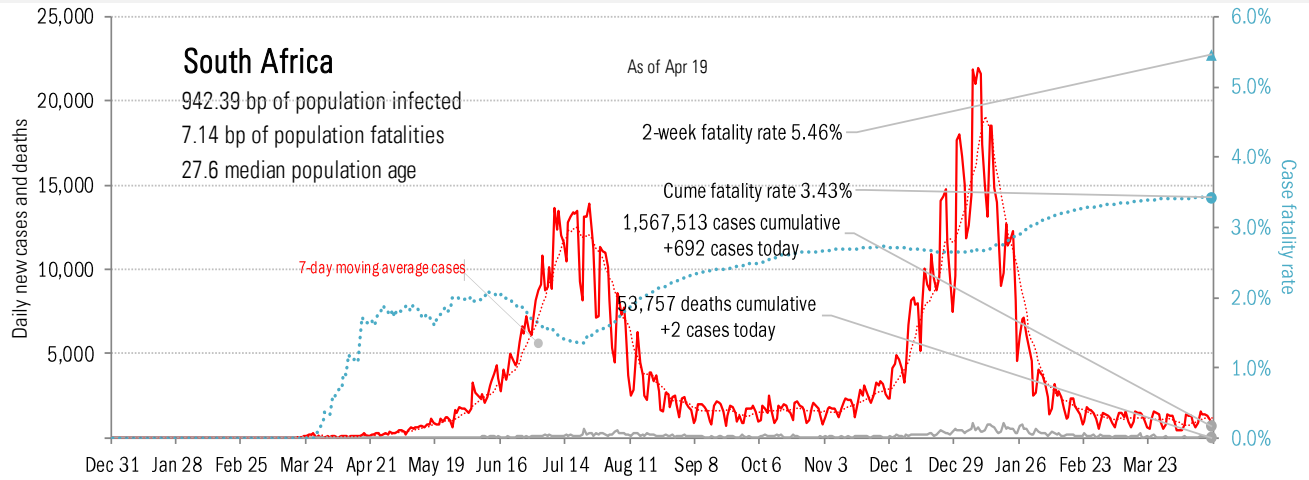
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in the Middle East and Africa



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

Impact in Africa, continued



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