Trend Macrolytics, LLC
Donald Luskin, Chief Investment Officer
Thomas Demas, Managing Director
Michael Warren, Energy Strategist

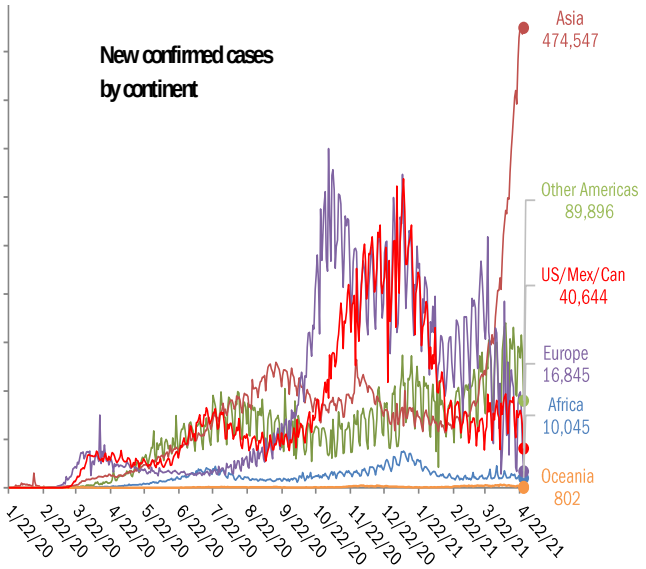
Data Insights: Covid-2019 Monitor

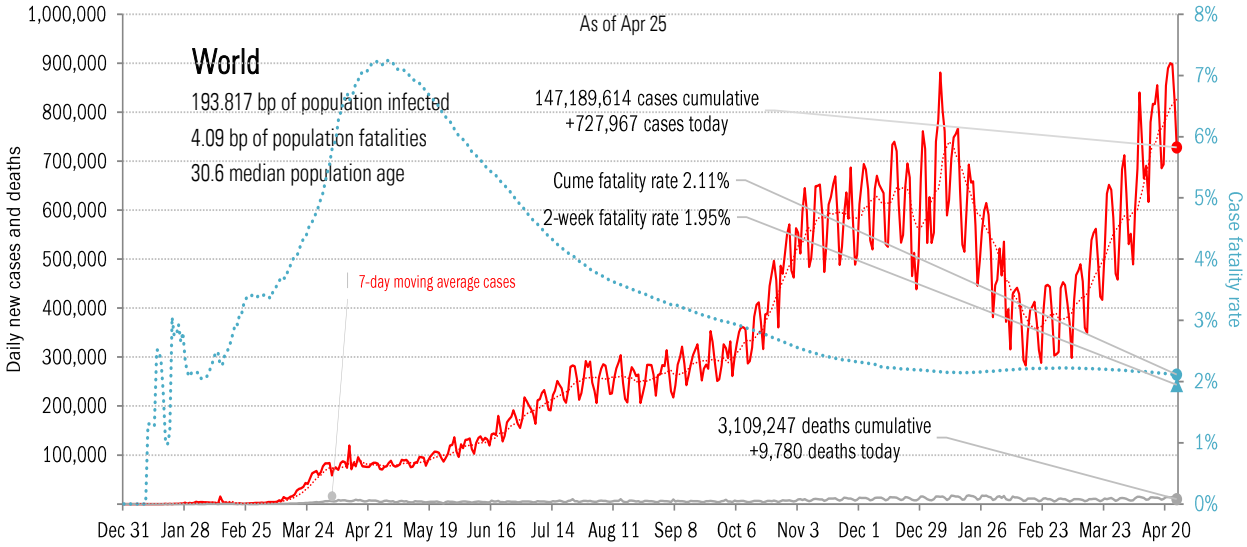
Monday, April 26, 2021

The global scorecard

The worst ten countries

New cases		New Deaths	
India	+352,991	India	+2,812
Turkey	+38,553	Brazil	+1,305
Brazil	+32,572	Colombia	+465
United States	+32,065	Iran	+454
France	+24,465	Turkey	+347
Iran	+19,165	Russia	+326
Colombia	+17,190	Peru	+284
Germany	+15,399	United States	+279
Argentina	+15,012	Ukraine	+237
Italy	+13,157	Italy	+217
	+560,569		+6,726
World	+727,967	World	+9,780
Top ten	77%	Top ten	69%





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

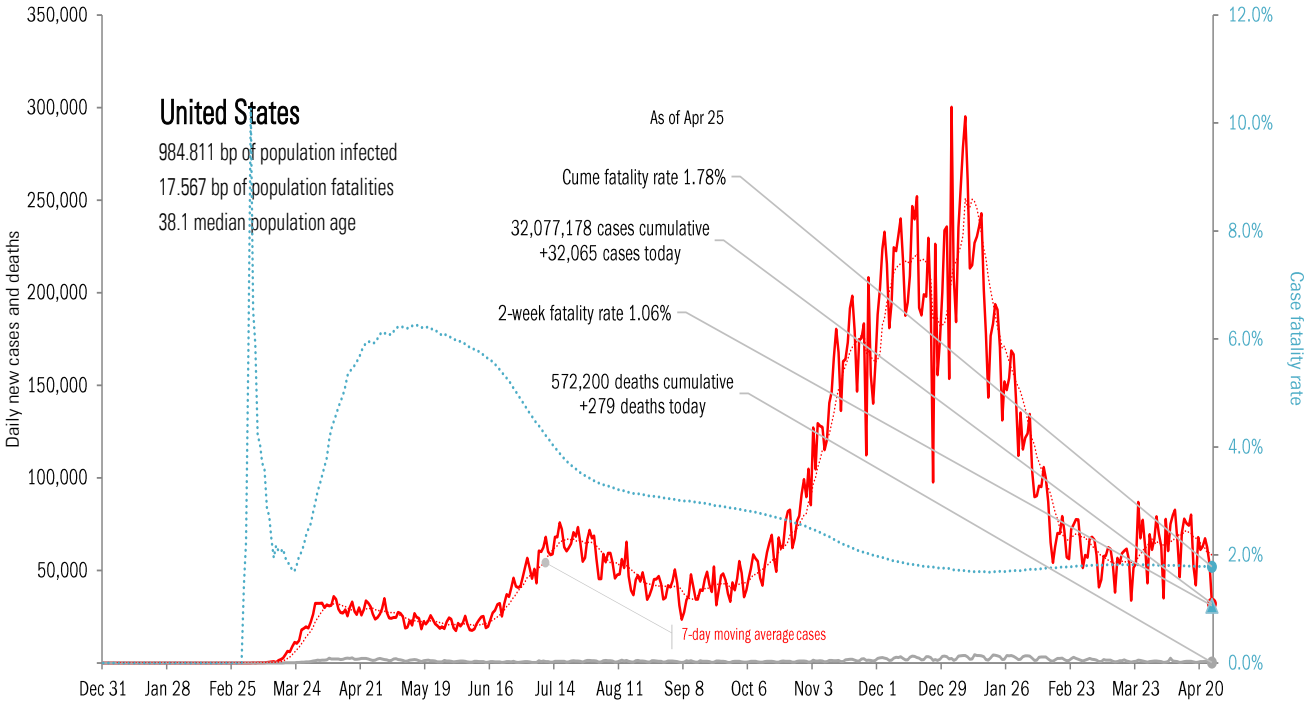
The ten worst US states

New cases		New Deaths		New in hospital		Cume cases		Cume deaths		Cume in hospital		Hospital use		ICU use	
FL	+4,671	NY	+52	AZ	+41	CA	3,731,770	CA	61,479	TX	235,417	RI	93%	MI	34%
NY	+4,064	FL	+36	CO	+29	TX	2,873,995	NY	52,003	CA	228,879	MA	84%	MD	24%
PA	+2,494	CA	+34	GA	+29	FL	2,208,584	TX	49,936	FL	164,290	CT	84%	MN	24%
IL	+2,047	IL	+25	PR	+19	NY	2,031,093	FL	34,848	NY	126,406	MD	83%	RI	19%
NJ	+1,694	SC	+16	WA	+15	IL	1,320,934	PA	25,967	GA	99,474	PA	82%	PA	18%
CO	+1,567	VA	+16	AL	+11	PA	1,134,742	NJ	25,380	PA	82,330	MI	82%	ME	18%
MN	+1,556	TX	+15	CA	+11	GA	1,093,768	IL	24,139	OH	80,384	MO	80%	DE	18%
TX	+1,239	KY	+13	ME	+11	OH	1,064,306	GA	19,975	IL	74,355	GA	80%	CO	17%
MA	+1,214	MD	+13	DE	+8	NJ	997,891	OH	19,122	KY	71,177	FL	79%	NY	16%
GA	+916	NJ	+13	ID	+8	NC	956,932	MI	18,409	MI	62,840	DC	79%	WV	14%
	+21,462		+233		+182		17,414,015		331,258		1,225,552				
All states	+32,065		+279		-594	All states	32,077,178		572,200		2,185,562	All states	70%		67%
Top ten	67%		84%		-31%	Top ten	54%		58%		56%	Median	72%		11%

Some states not reporting

Five most improved US states

Fewer daily cases		Fewer new deaths		Fewer new hospitalizations		Most pop immunity growth	
MI	-5,204	MI	-126	MI	-175	CO	+152 bp
FL	-2,740	GA	-54	NY	-140	DC	+88 bp
WA	-1,718	PA	-32	PA	-132	DE	+81 bp
CA	-1,404	TX	-29	TX	-110	CT	+80 bp
TX	-1,110	NJ	-26	IL	-97	MN	+78 bp

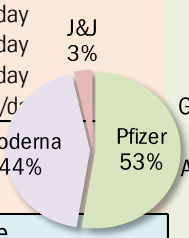


Source: Johns Hopkins, Dept. of Health and Human Services, CDC, TrendMacro calculations

Rolling out the vaccines in the US and the world

US overall	Over last day
302.27 million doses distributed	+0.01 million/day
236.69 million doses administered	+3.09 million/day
144.11 million persons partially immunized	+1.36 million/day
98.07 million persons fully immunized	+1.73 million/day
7.79 million shots long-term care residents/staff	+0.002 million/d

78.3% of distributed doses administered
43.1% of US pop partial **29.4% full immunity**
100% of LTC partial **64.1% full immunity**



At today's dosing pace,
every American >18 immune in
57 days
by Jun 20, 2021

Immunity	Full	Partial
US	28.3%	41.9%
UK	18.5%	49.6%
France	8.1%	20.6%
Spain	8.3%	22.3%
Germany	7.1%	23.3%
Italy	8.6%	20.8%
Australia	1.1%	0.6%
Israel	58.0%	62.2%
Canada	2.7%	29.2%
Japan	0.7%	1.5%
Africa	0.4%	0.9%
India	1.6%	8.5%
Brazil	5.3%	12.6%

Global data differs from sources, timing

China NA

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

Best
Middle
Worst

AK											ME
55.4%						WI					50.1%
41.1%						45.4%				VT	52.0%
34.0%						44.6%				54.0%	36.2%
						33.1%				51.6%	NH
										34.8%	48.2%
	WA	ID	MT	ND	MN	IL	MI		NY	MA	59.4%
	46.4%	41.1%	47.9%	43.2%	43.5%	47.3%	46.4%		47.7%	51.8%	29.4%
	44.0%	33.3%	39.9%	38.8%	44.9%	44.8%	41.2%		45.7%	53.1%	
	30.1%	25.7%	30.4%	31.9%	32.0%	28.6%	29.7%		31.8%	33.5%	
	OR	NV	WY	SD	IA	IN	OH	PA	NJ	CT	RI
	44.9%	41.3%	43.8%	51.6%	44.8%	41.3%	45.3%	49.5%	47.3%	55.2%	52.8%
	42.2%	38.4%	33.3%	44.2%	43.0%	34.9%	39.4%	47.3%	49.6%	52.7%	49.9%
	28.3%	26.2%	26.0%	34.7%	31.7%	25.0%	30.1%	29.9%	33.5%	35.9%	34.3%
	CA	UT	CO	NE	MO	KY	WV	VA	MD	DE	
	48.5%	39.1%	45.7%	46.2%	43.8%	44.4%	48.0%	46.5%	48.4%	49.0%	
	46.8%	38.0%	45.0%	42.1%	36.3%	40.2%	35.3%	45.2%	46.3%	45.1%	
	28.4%	22.0%	30.0%	29.9%	25.8%	30.3%	29.0%	30.4%	31.7%	29.8%	
		AZ	NM	KS	AR	TN	NC	SC	DC		
		45.7%	50.6%	46.7%	45.5%	41.9%	46.7%	44.4%	58.5%		
		39.6%	49.9%	41.8%	34.8%	33.5%	38.3%	35.6%	45.3%		
		27.3%	35.5%	29.9%	24.0%	23.1%	27.4%	25.5%	27.4%		
				OK	LA	MS	AL	GA			
				49.2%	41.3%	42.5%	42.9%	43.8%			
				38.0%	31.8%	30.2%	31.5%	33.9%			
				28.5%	25.7%	22.3%	21.7%	22.0%			
HI				TX					FL		PR
50.9%				43.6%					48.7%		49.4%
49.9%				37.1%					40.2%		35.0%
33.4%				25.1%					27.2%		22.5%

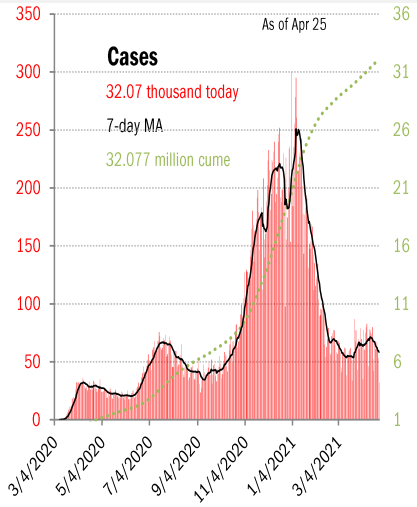
As of Apr 25

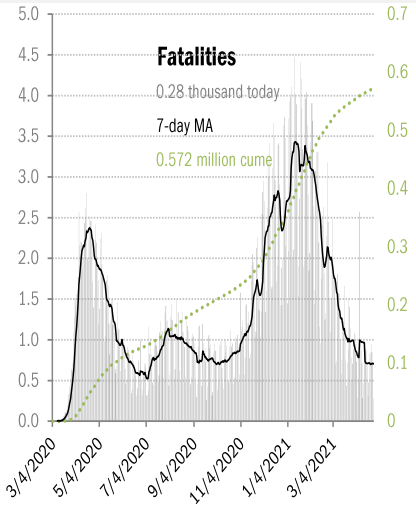
** One dose of Pfizer/Moderna counts as half an immunity, one dose of J&J as a full immunity

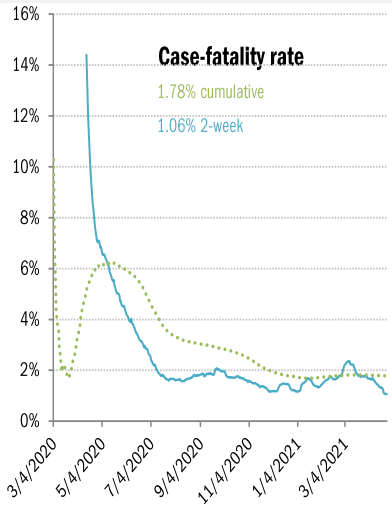
Source: CDC, CDC, Our World in Data, TrendMacro calculations

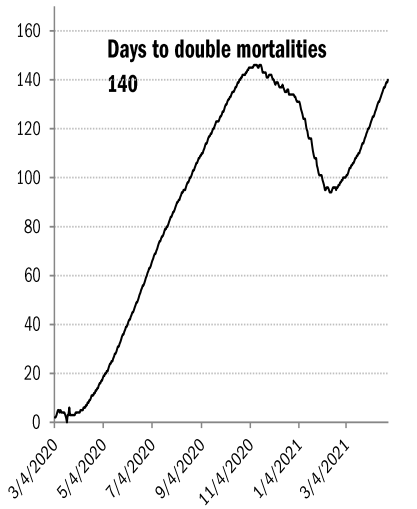
US deep-dive

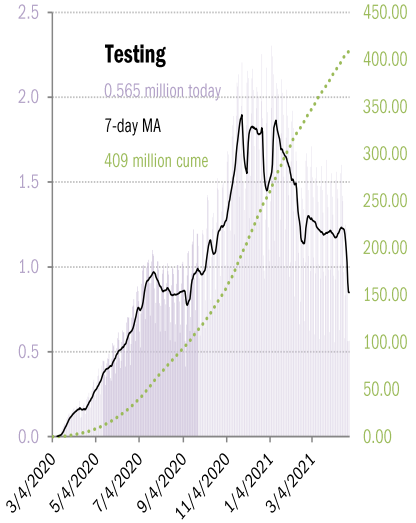
National and state-by-state data do not line up because of different sources

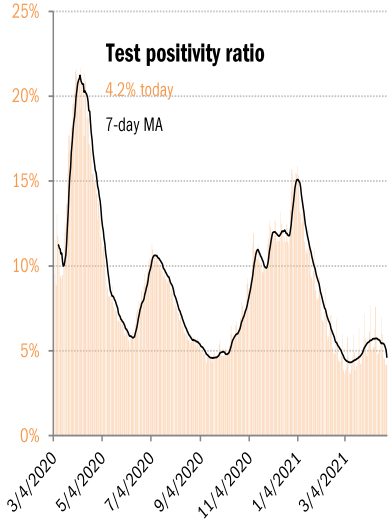


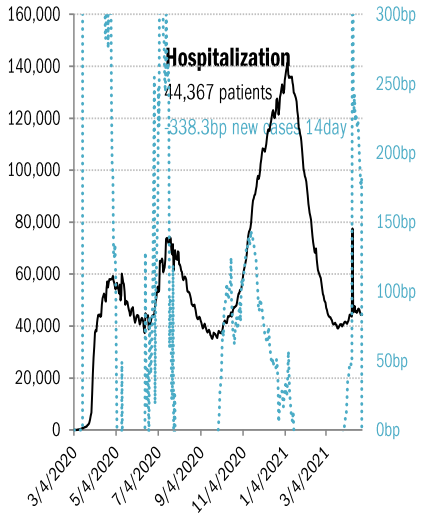


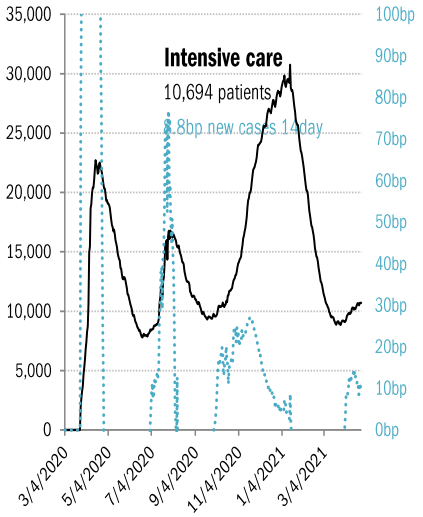


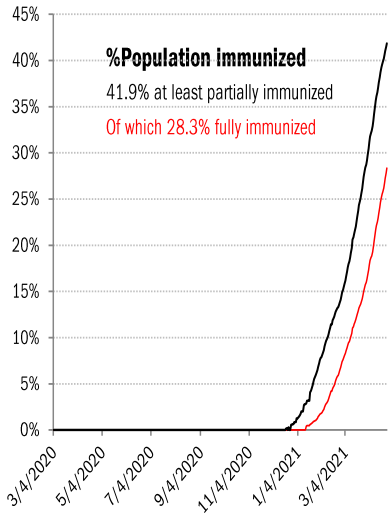






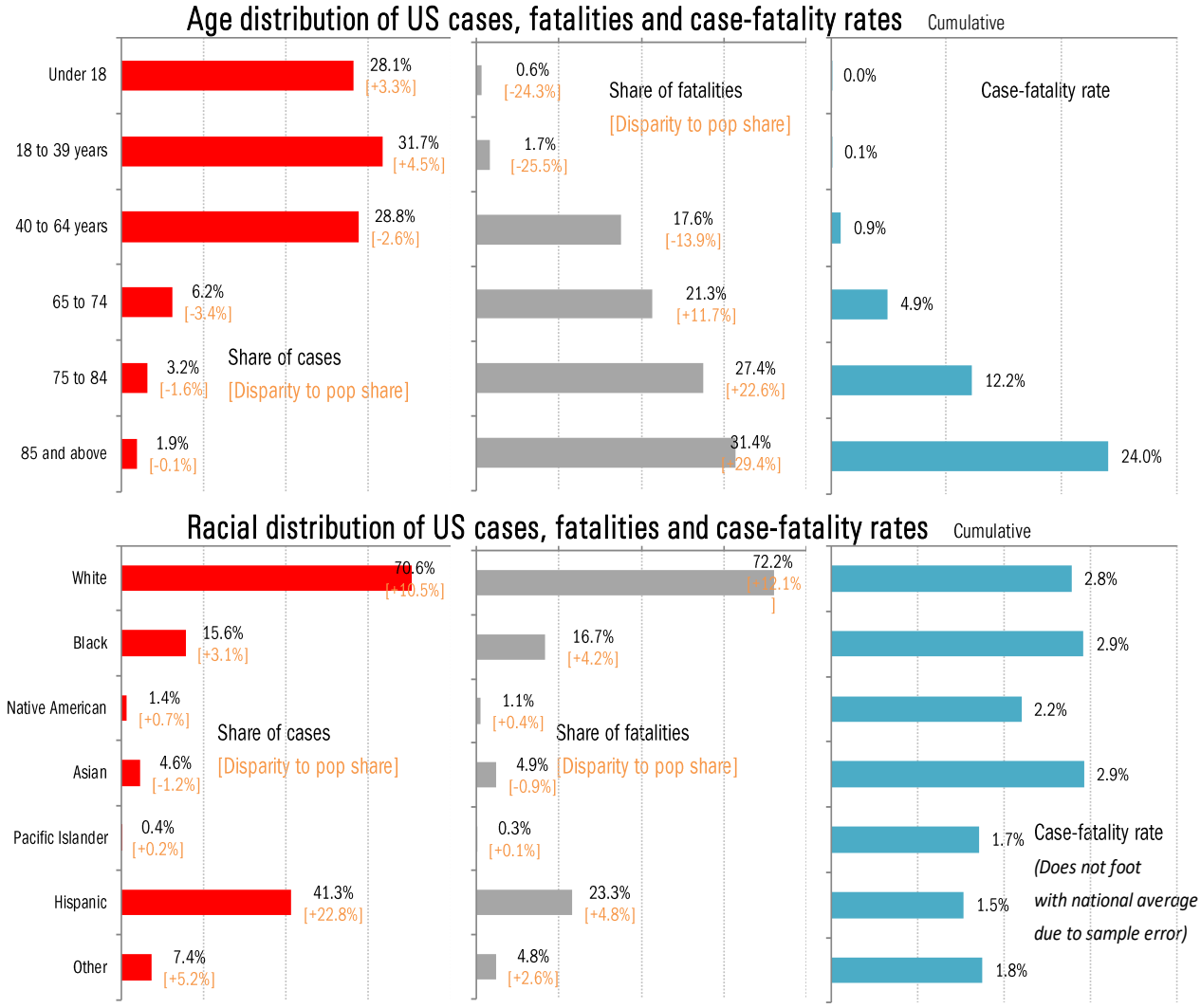




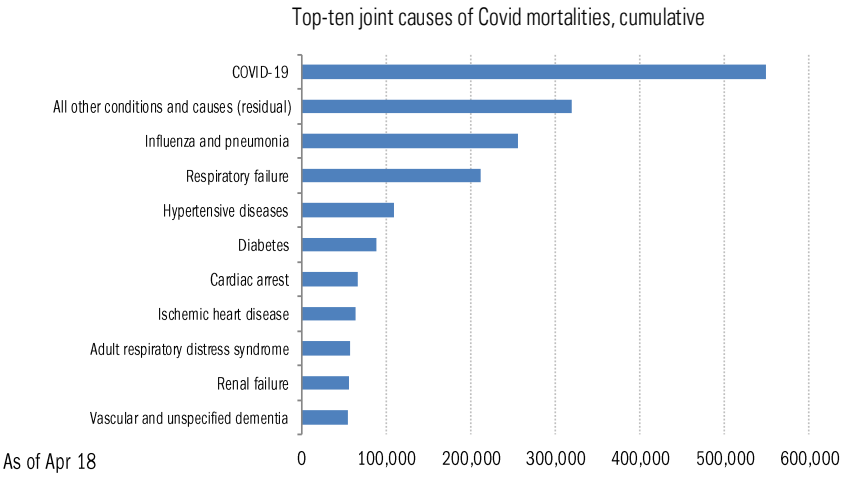


Source: Johns Hopkins, Covid Act Now, TrendMacro calculations

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



Comorbidities



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

[E.U. Set to Let Vaccinated U.S. Tourists Visit This Summer]
Matina Stevis-Gridneff
New York Times
April 25, 2021

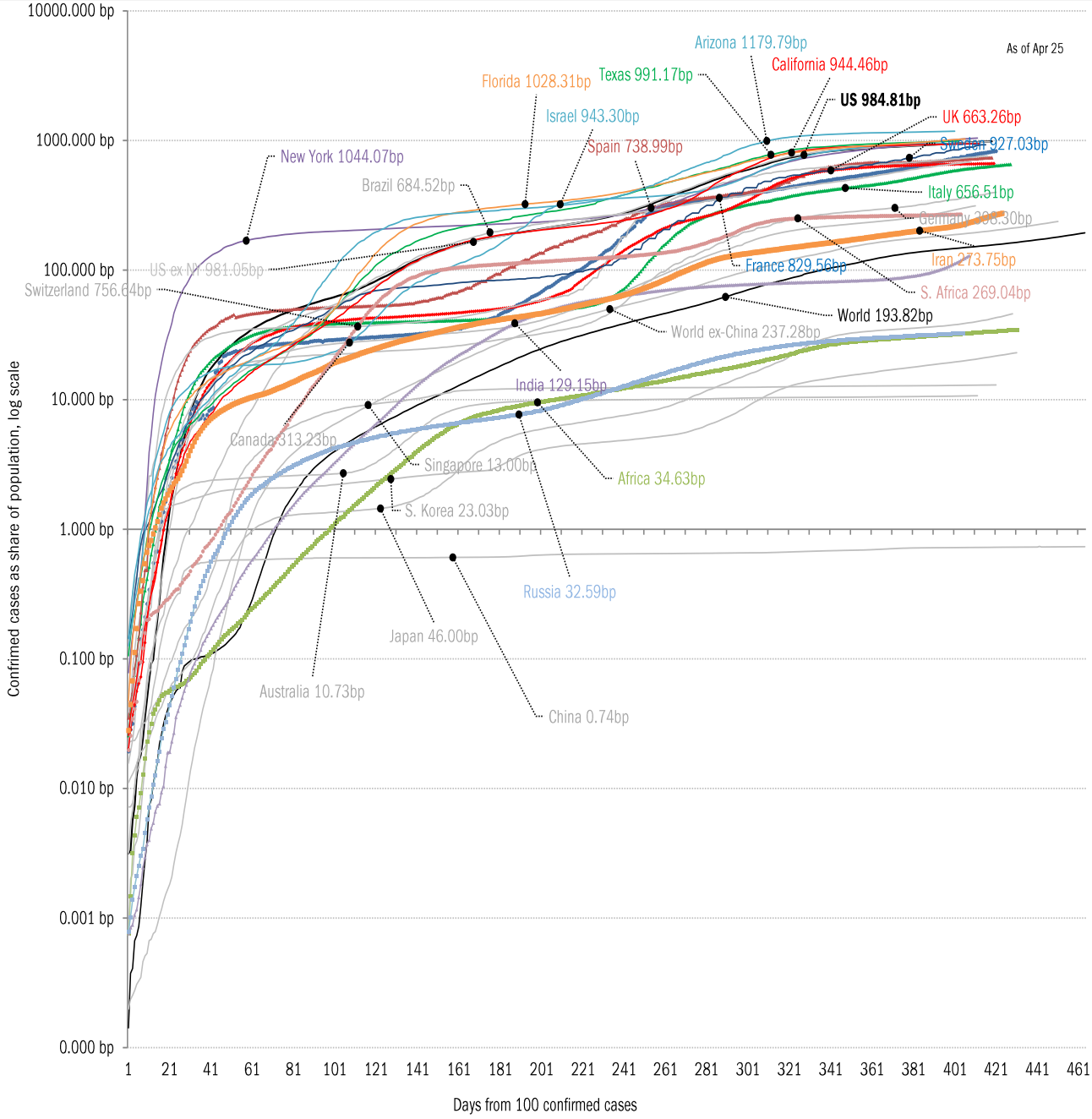
[Michigan's Covid Wards Are Filling Up With Younger Patients]
Mitch Smith and Sarah Mervosh
New York Times
April 25, 2021

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

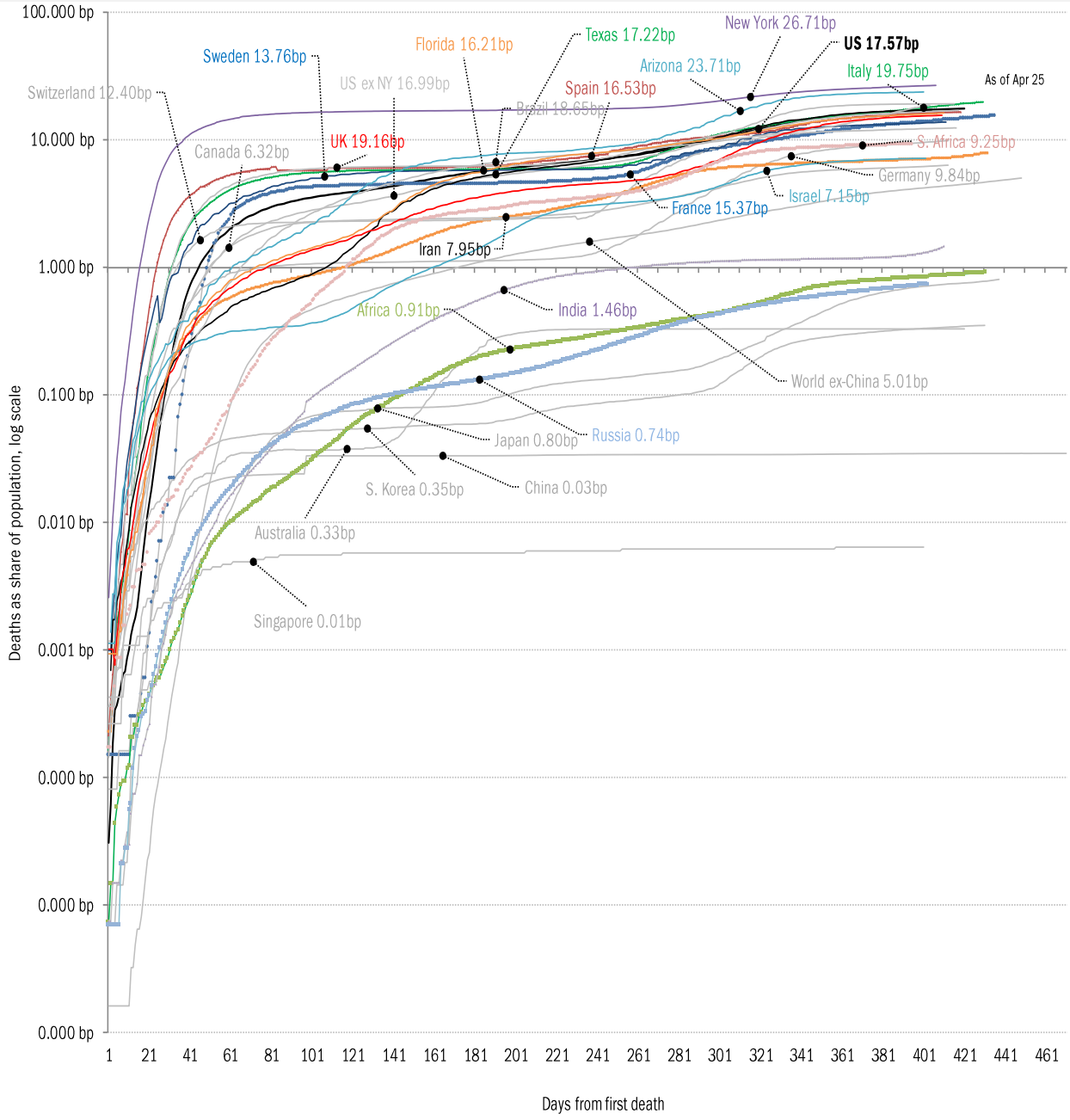
Share of infected population from first day with 100 confirmed cases, log scale



Source: Johns Hopkins, TrendMacro calculations

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

Share of deceased population from day of first fatality

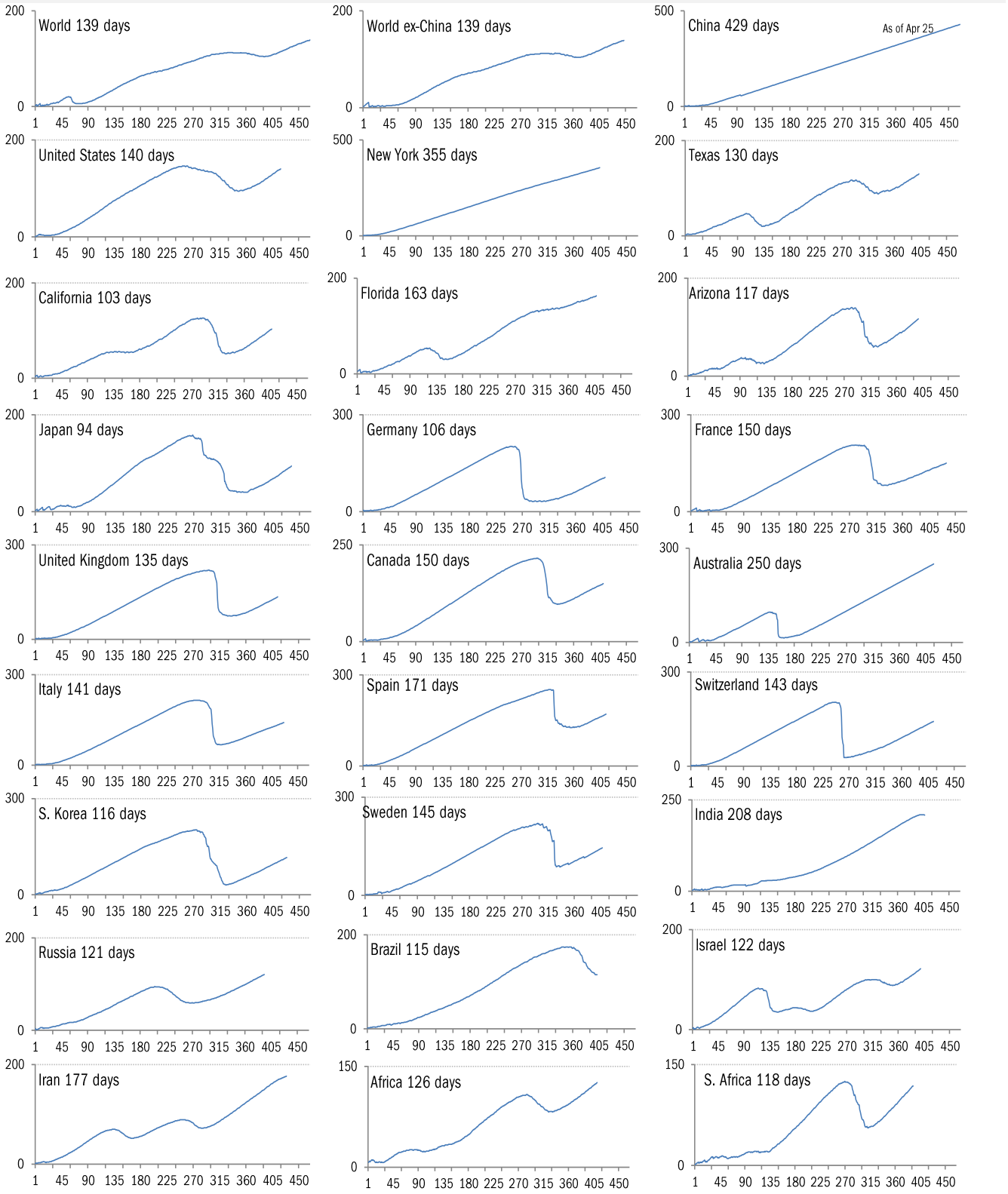


Source: Johns Hopkins, TrendMacro calculations

"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

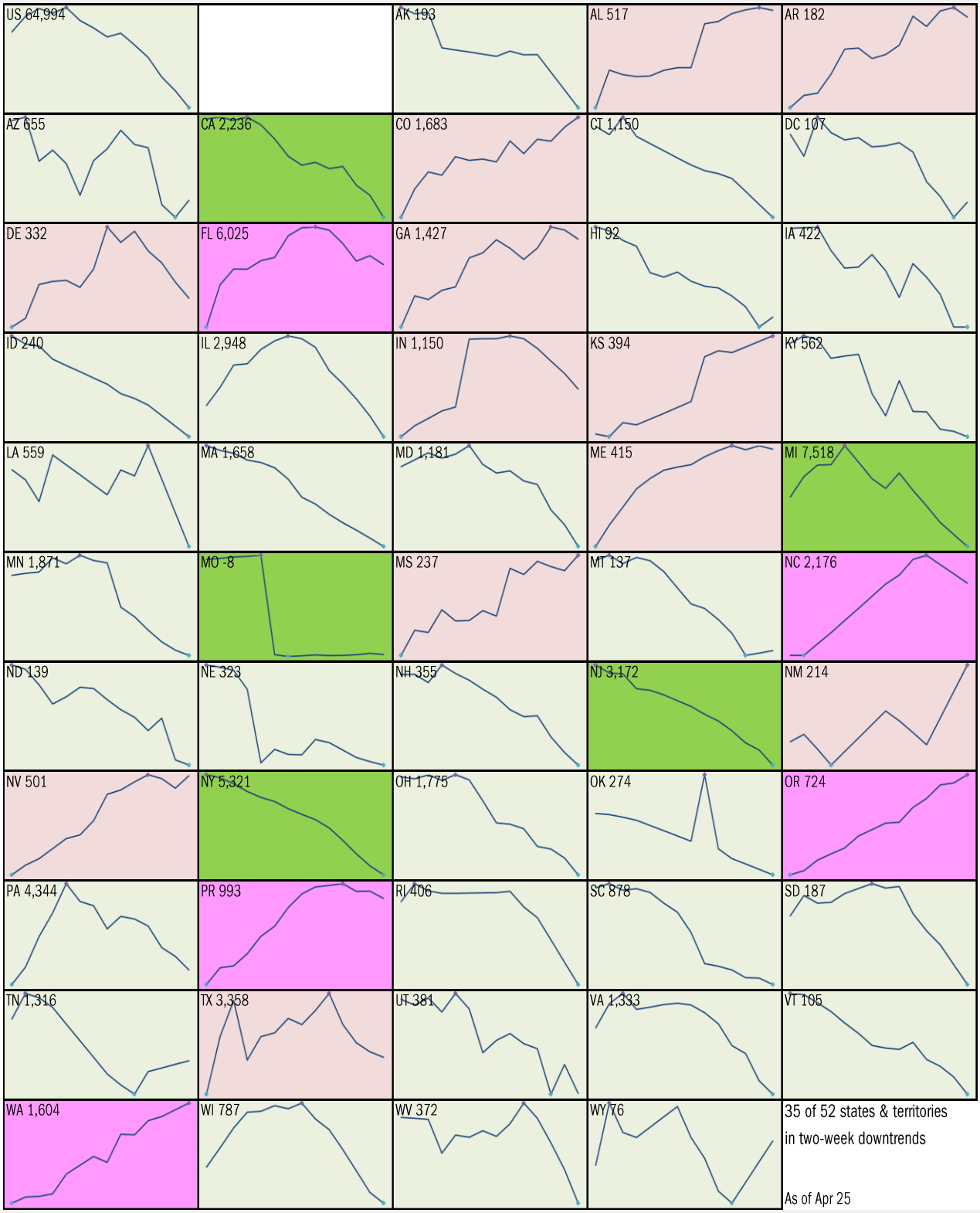


Source: Johns Hopkins, TrendMacro calculations

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

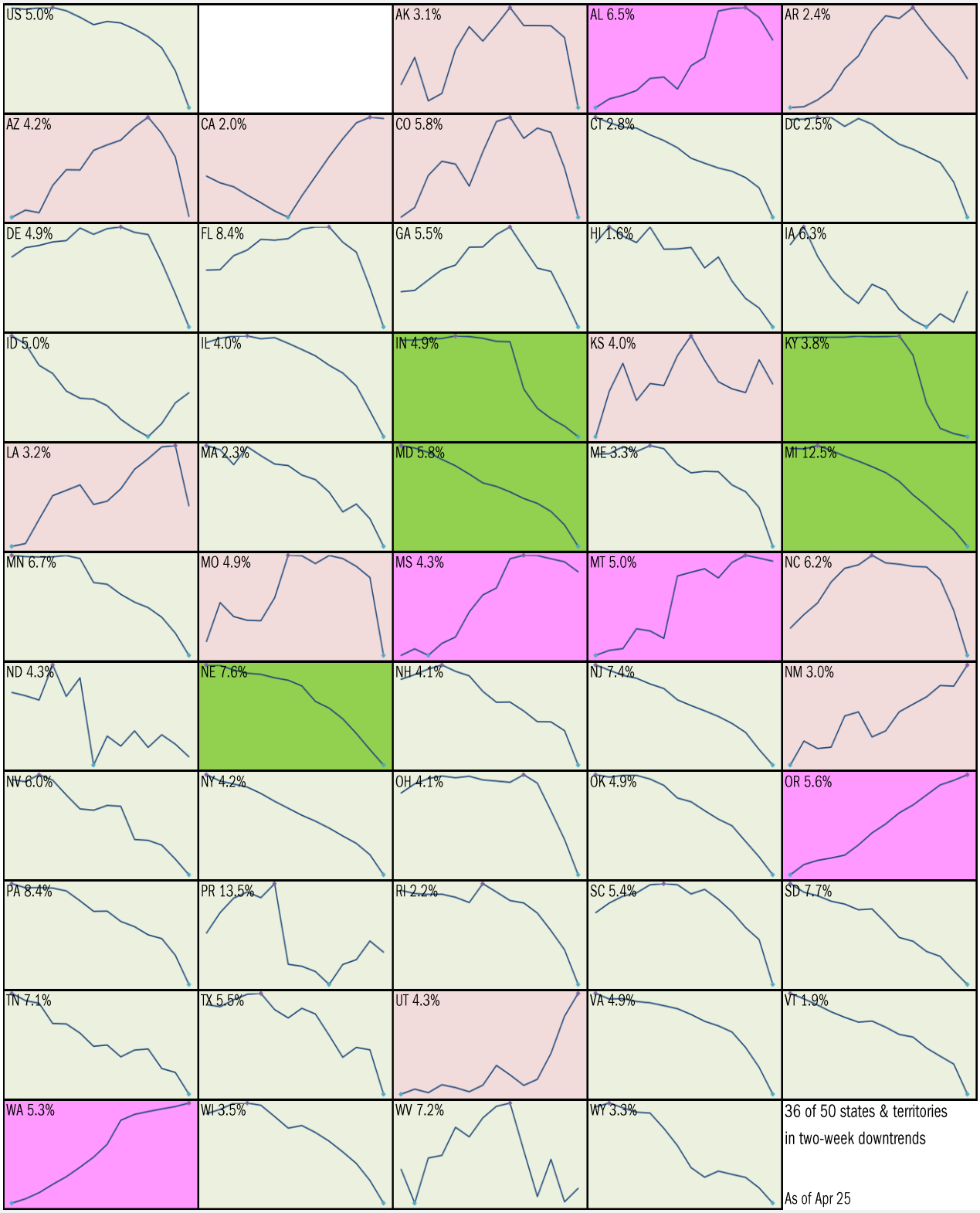


Source: Johns Hopkins, TrendMacro calculations

Alt requirement to Open Up America Again: 14-day "downward trajectory" in pos tests

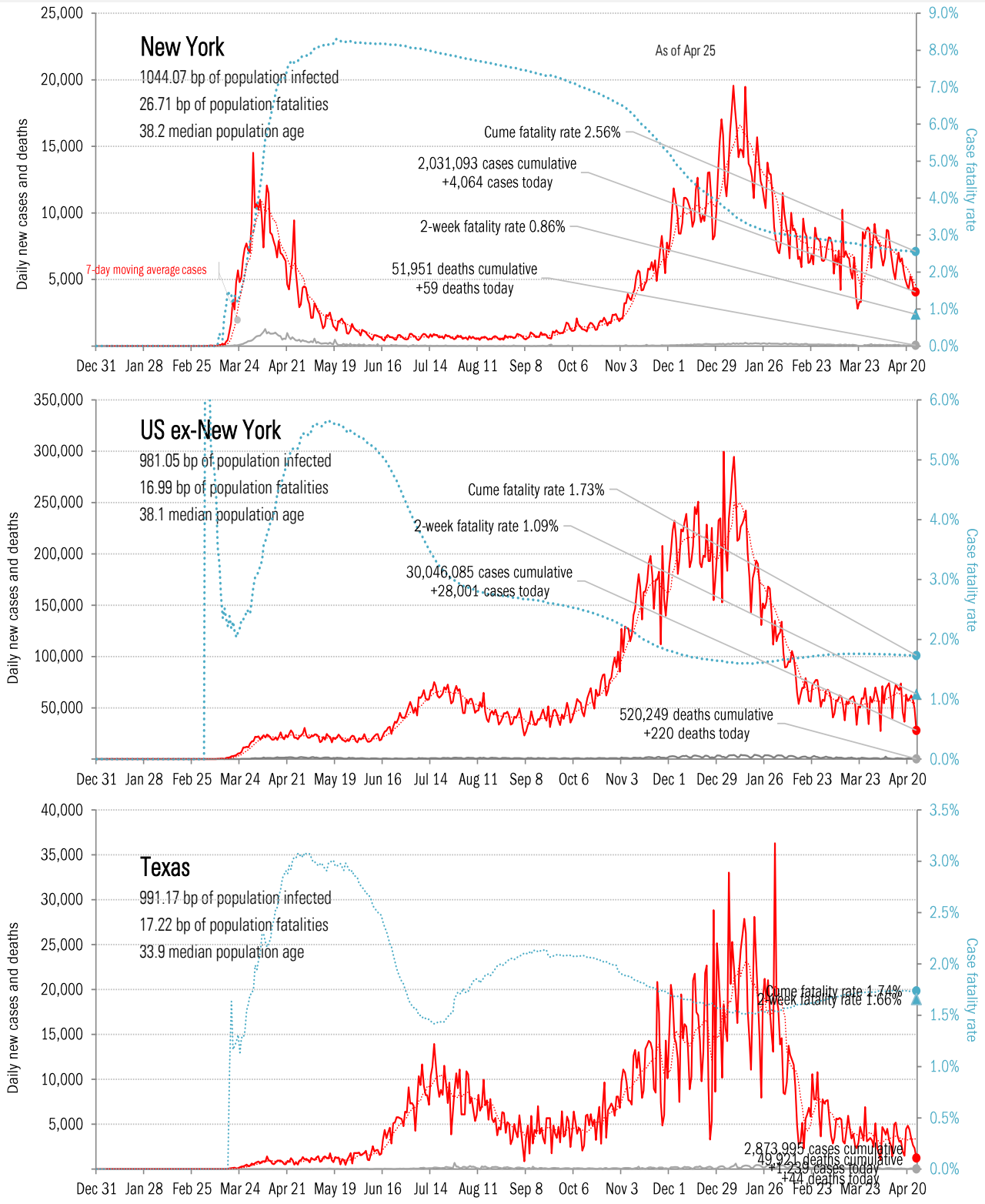
14-day moving average, last 14 days *Most recent value displayed* High Low

Downward trajectory Five best Upward trajectory Five worst



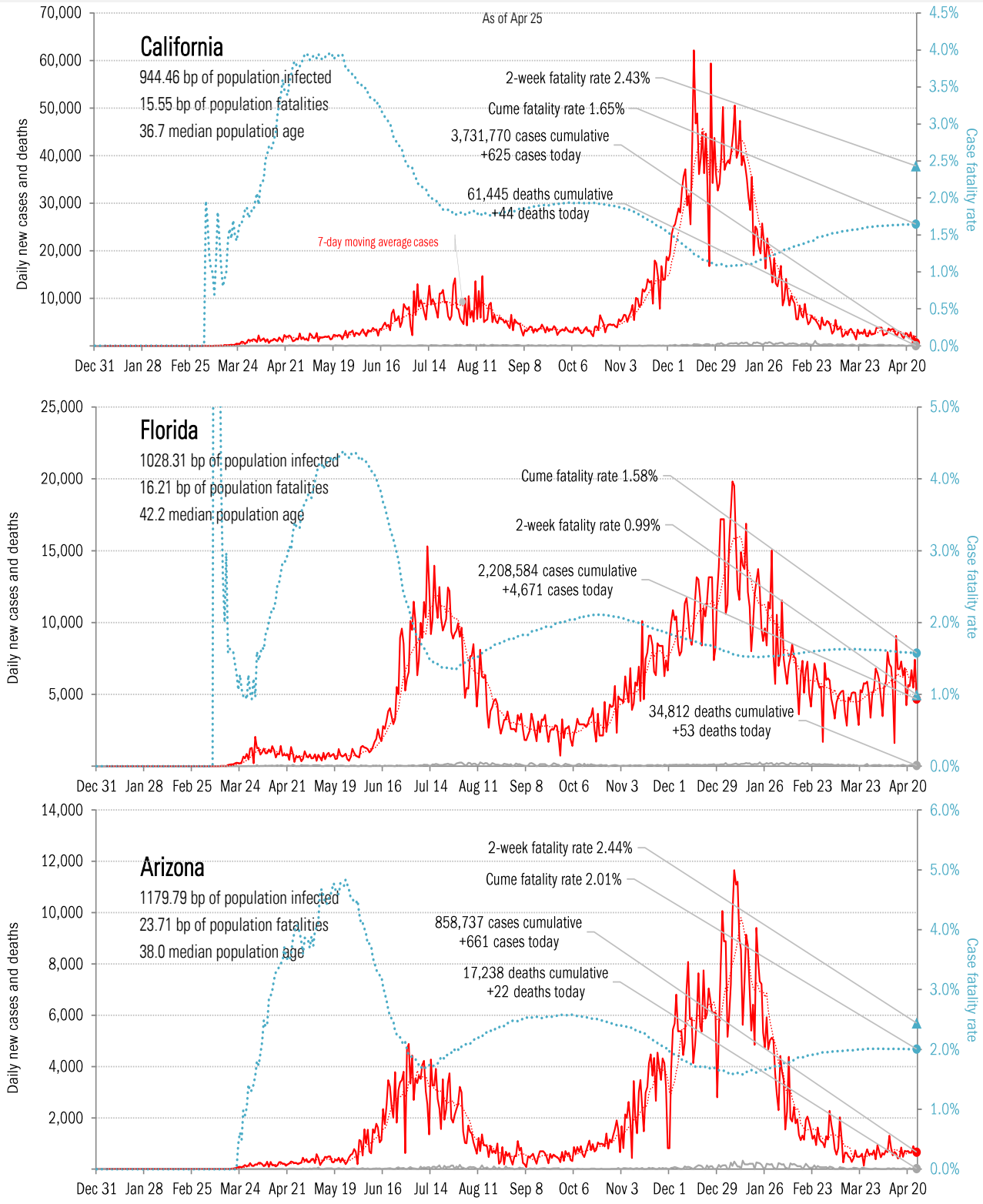
Source: Covid Act Now, TrendMacro calculations

From Ground Zero to the Rio Grande



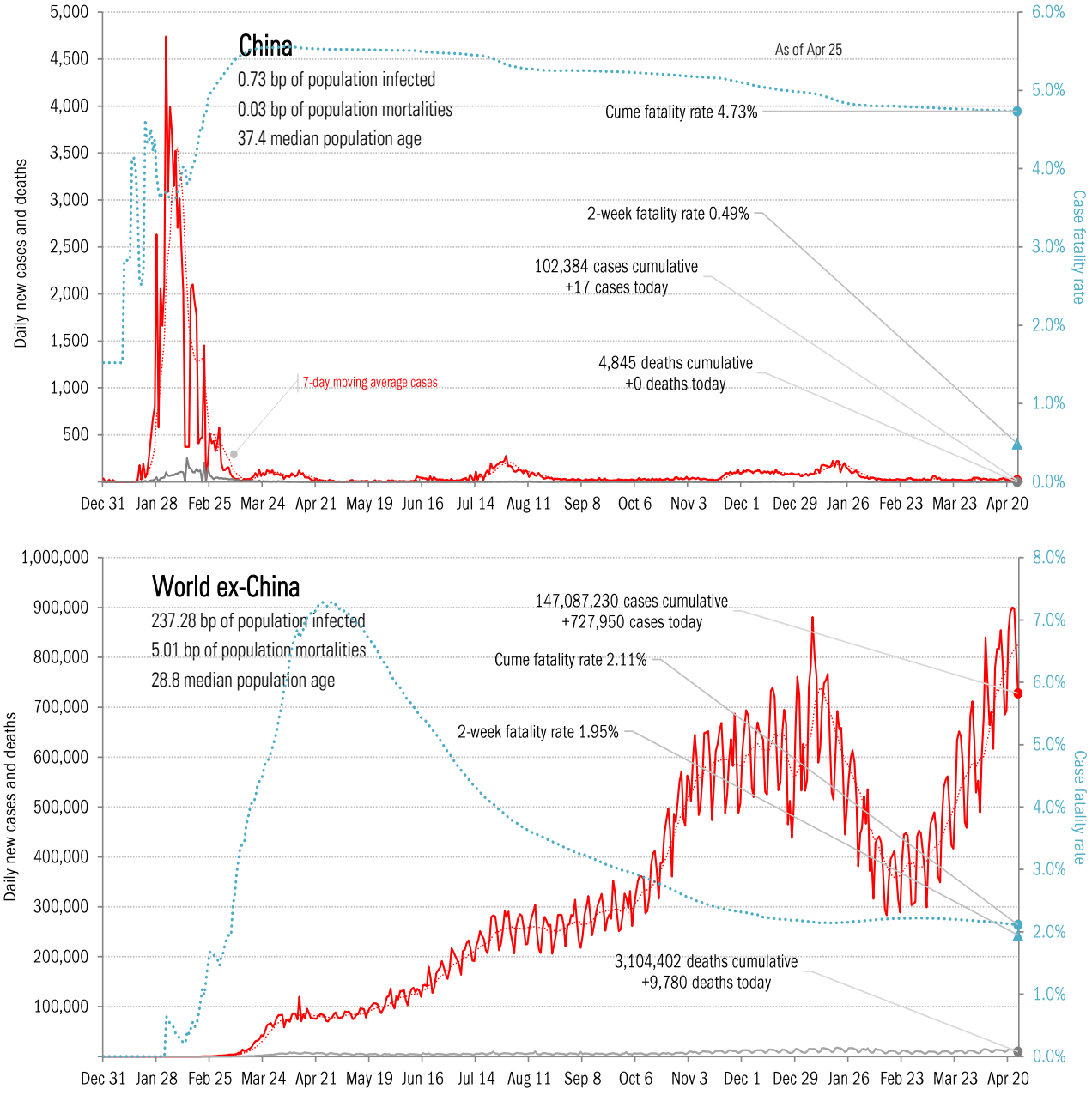
Source: Johns Hopkins, TrendMacro calculations

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



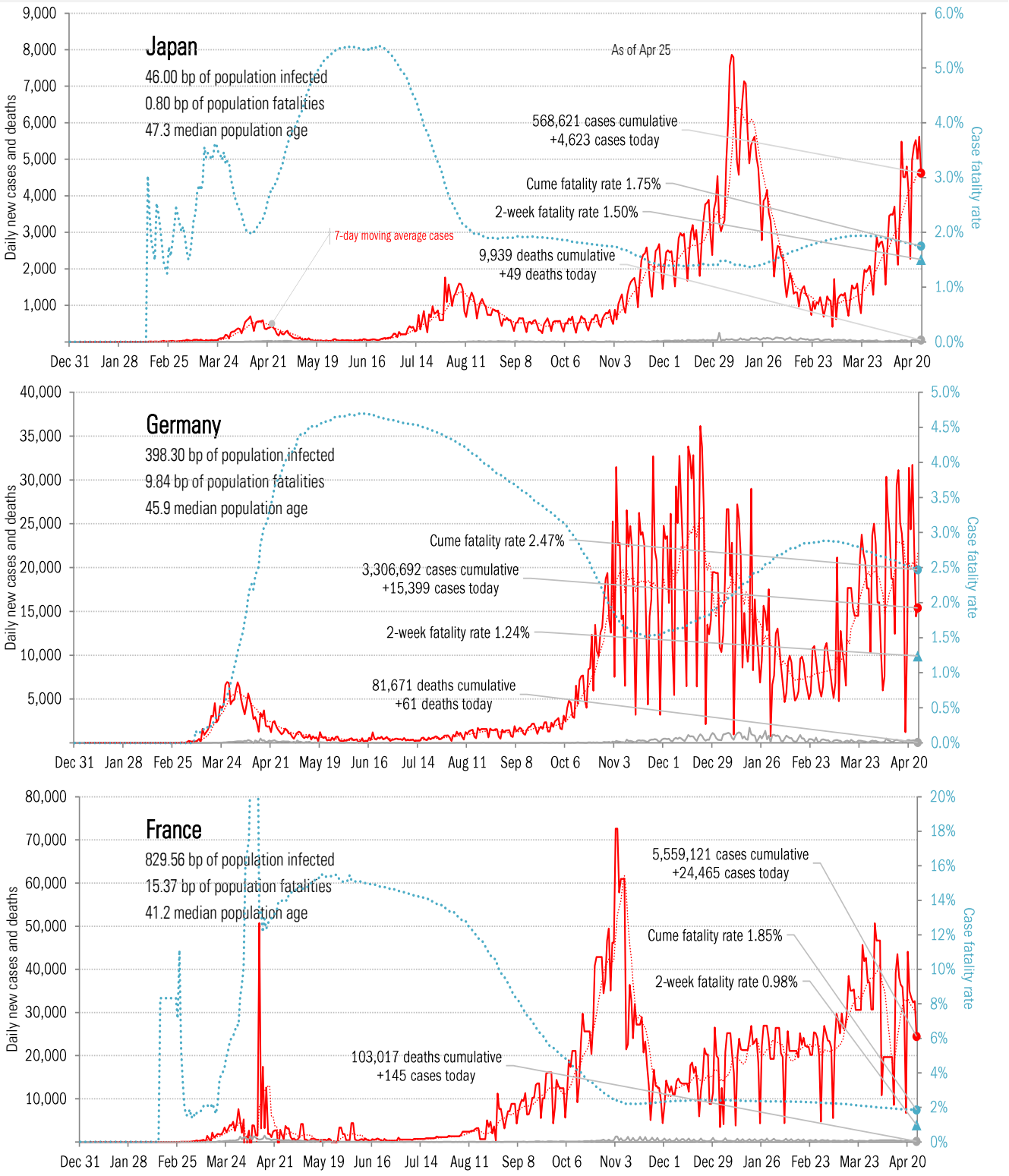
Source: Johns Hopkins, TrendMacro calculations

Patient zero… and then everyone else



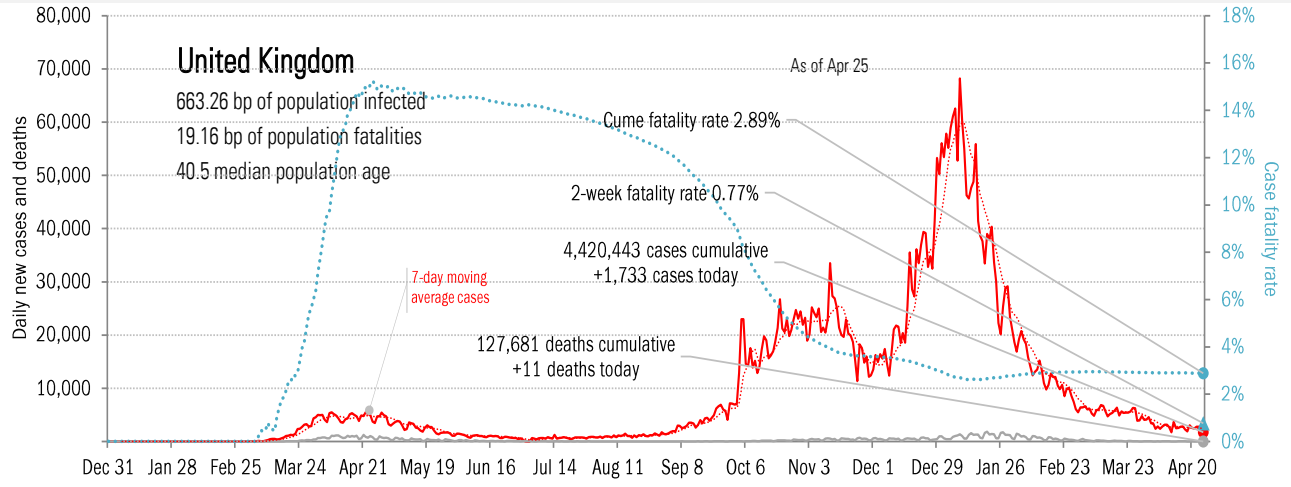
Source: Johns Hopkins, TrendMacro calculations

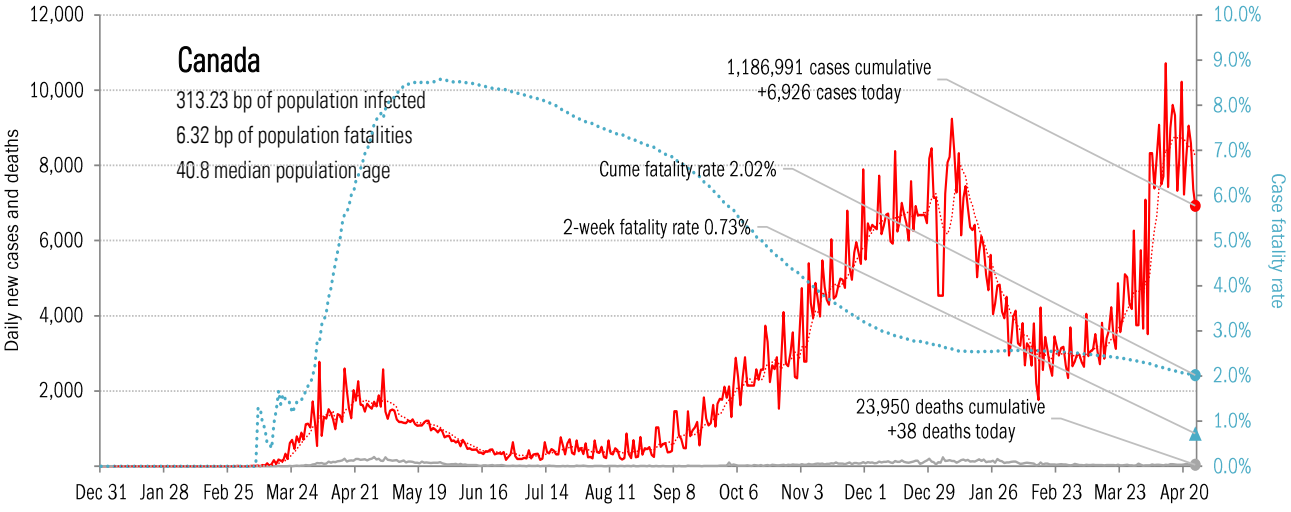
Impact in the largest economies

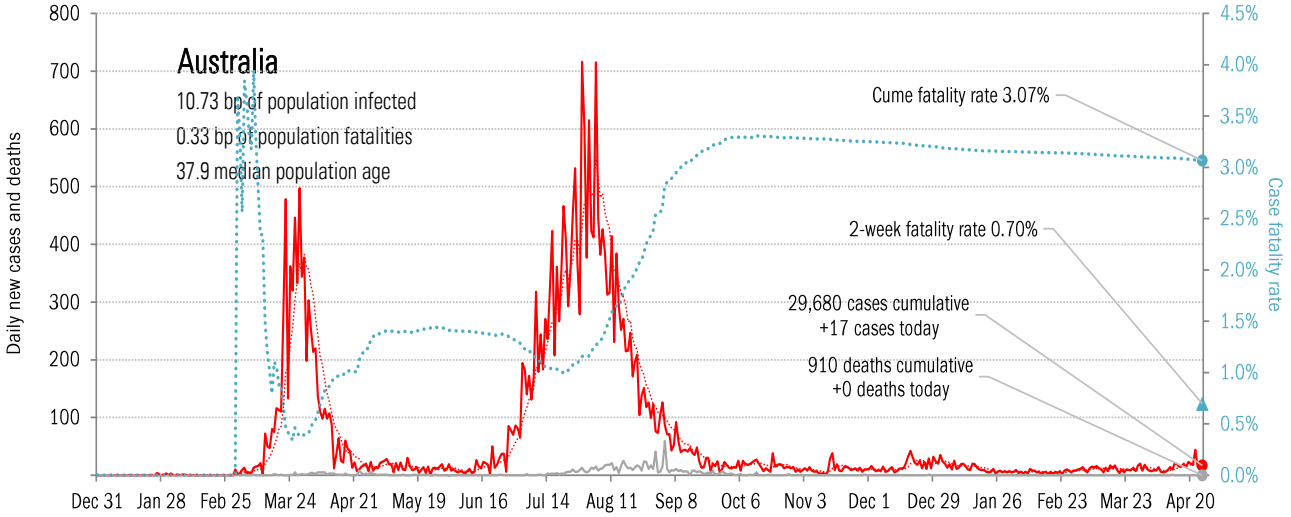


Source: Johns Hopkins, TrendMacro calculations

Impact in The Anglosphere

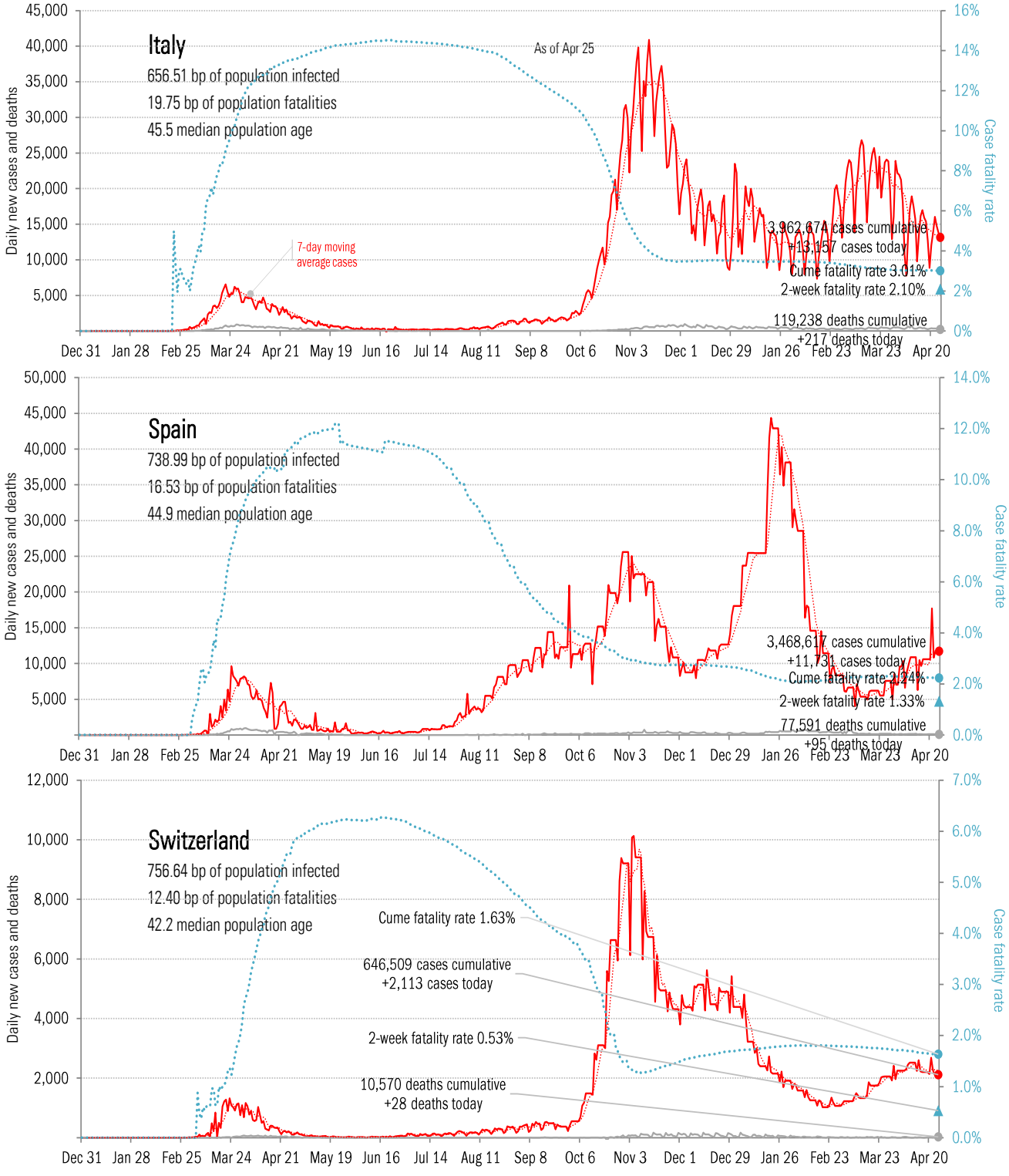






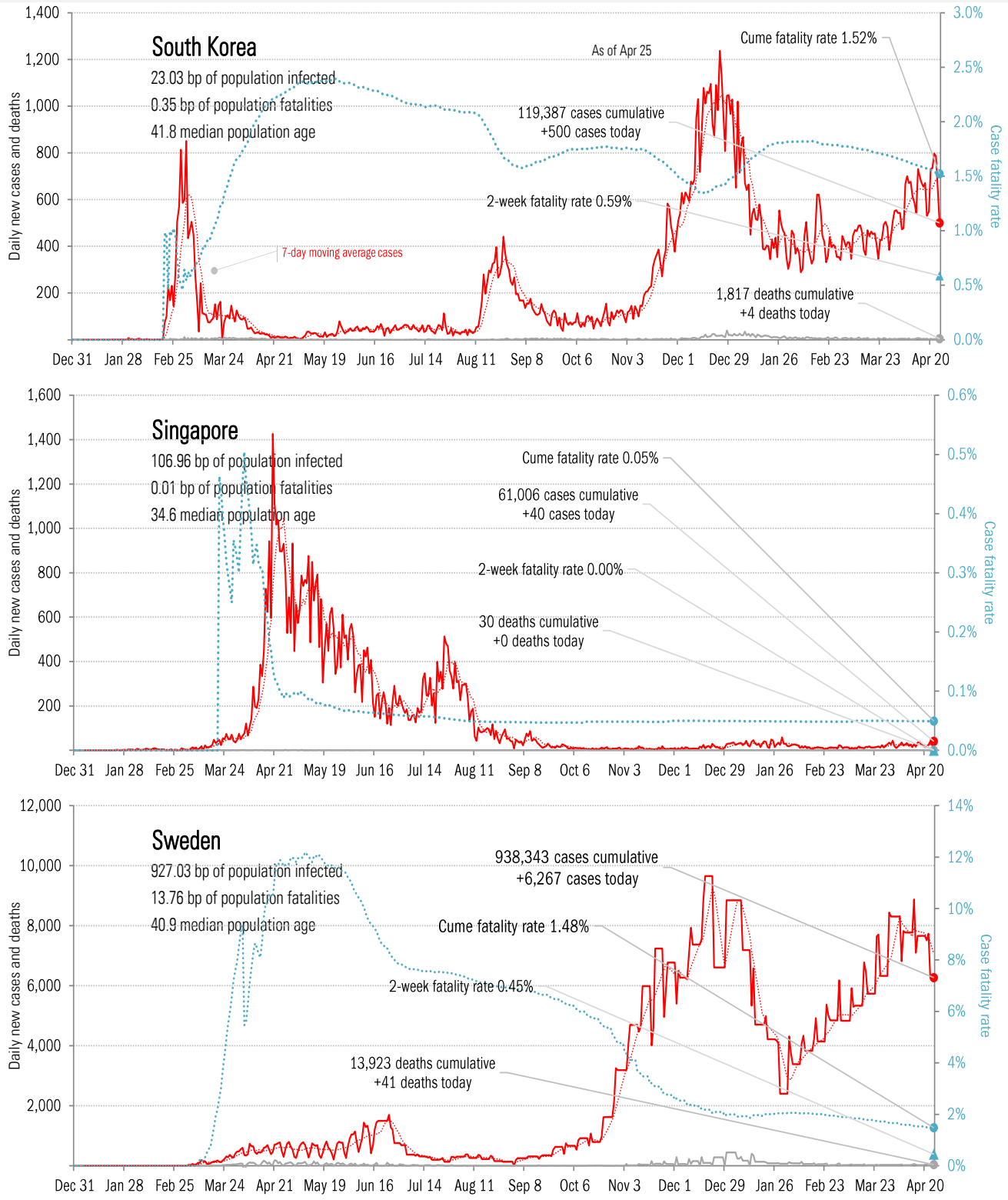
Source: Johns Hopkins, TrendMacro calculations

Impact in continental Europe



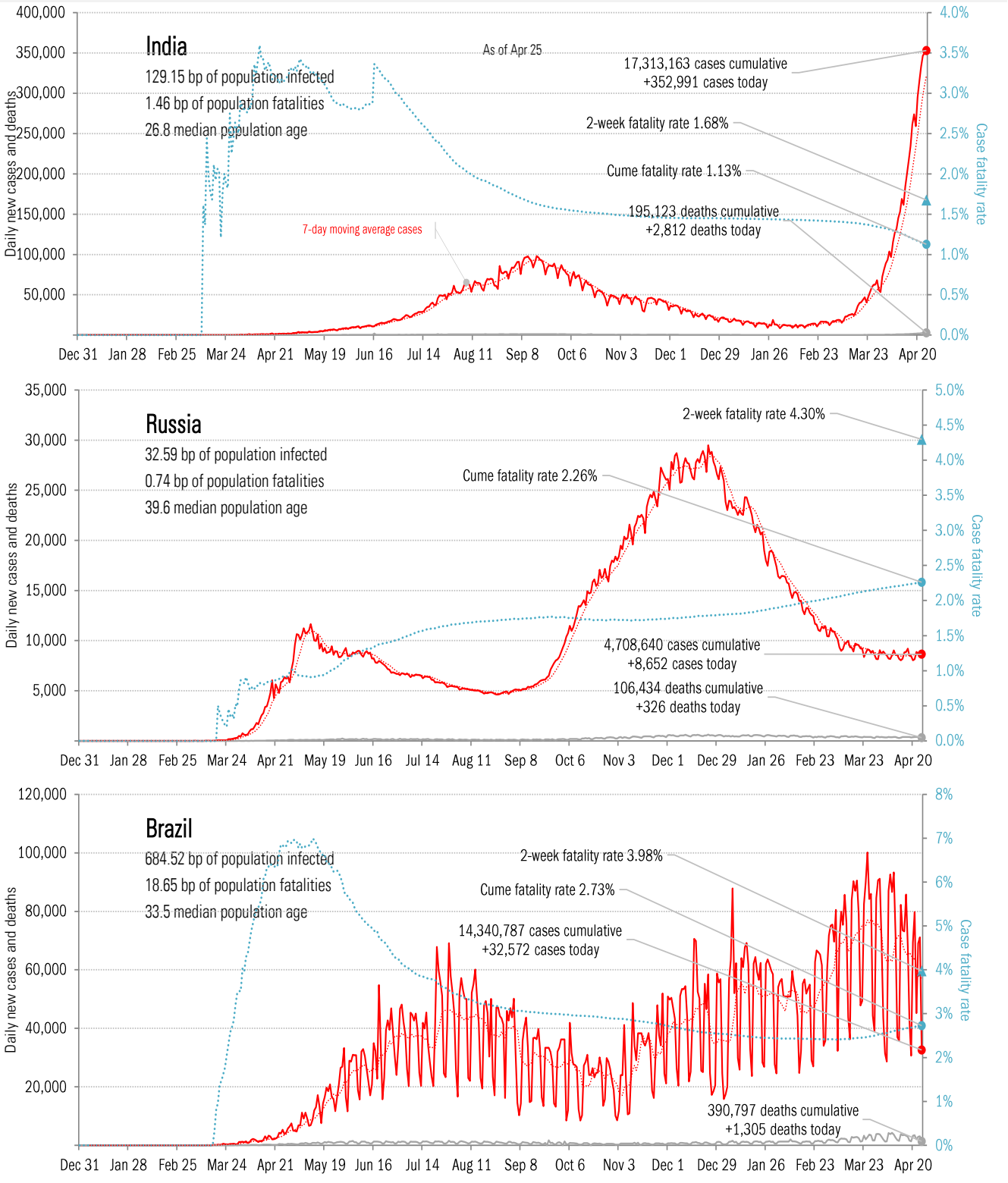
Source: Johns Hopkins, TrendMacro calculations

Impact in other hot-spots



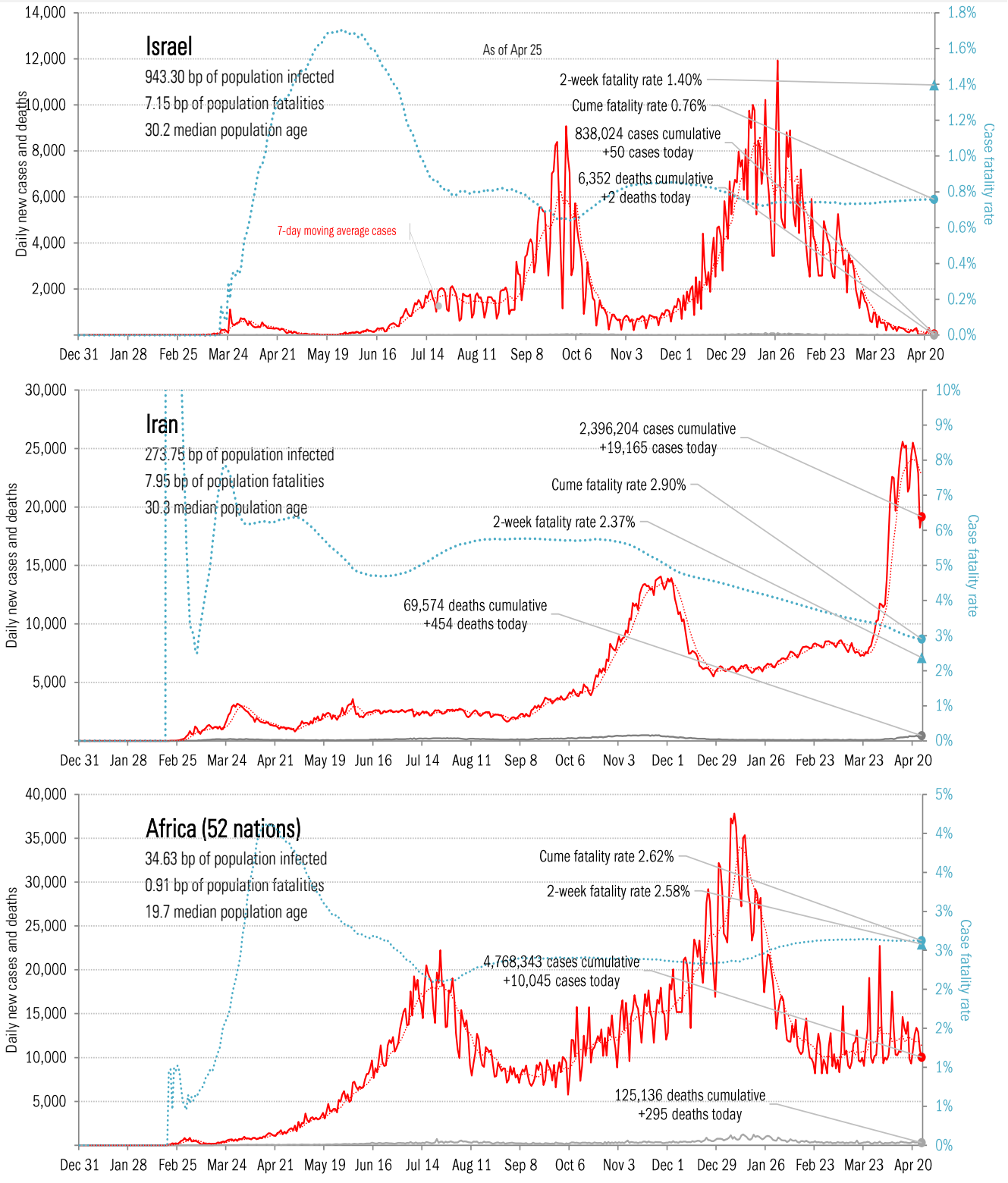
Source: Johns Hopkins, TrendMacro calculations

Impact in the BRICs ex-China



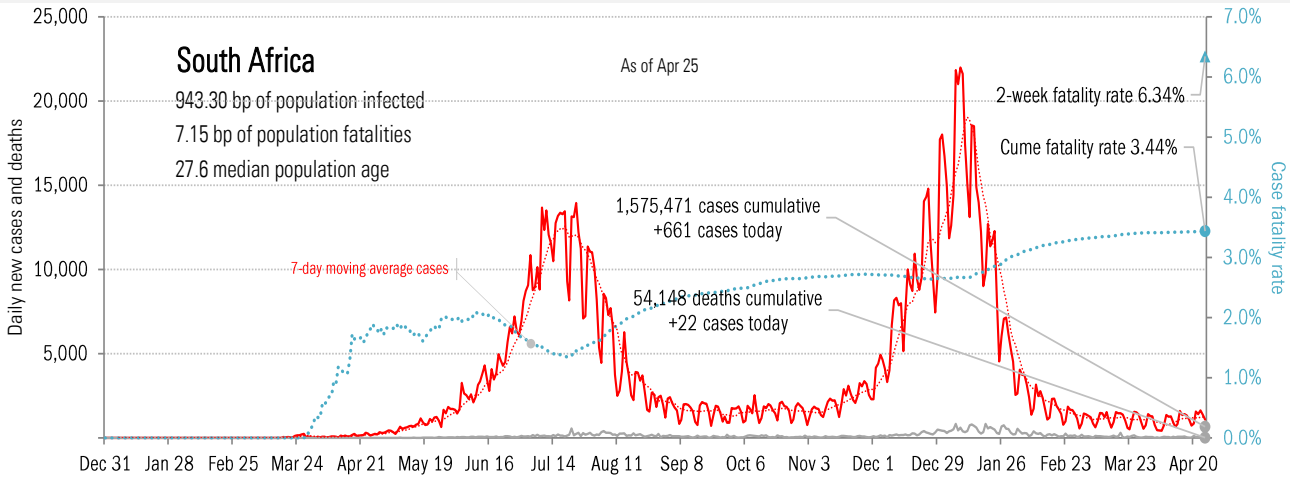
Source: Johns Hopkins, TrendMacro calculations

Impact in the Middle East and Africa



Source: Johns Hopkins, TrendMacro calculations

Impact in Africa, continued



Source: Johns Hopkins, TrendMacro calculations