Trend Macrolytics, LLC
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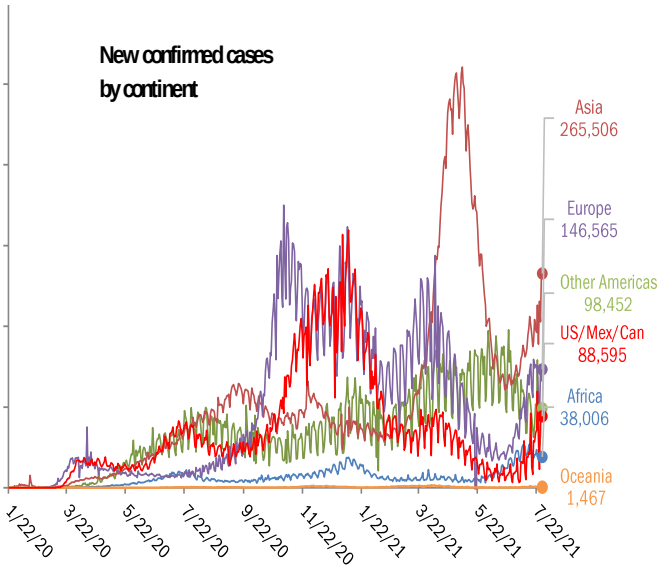
Data Insights: Covid-2019 Monitor

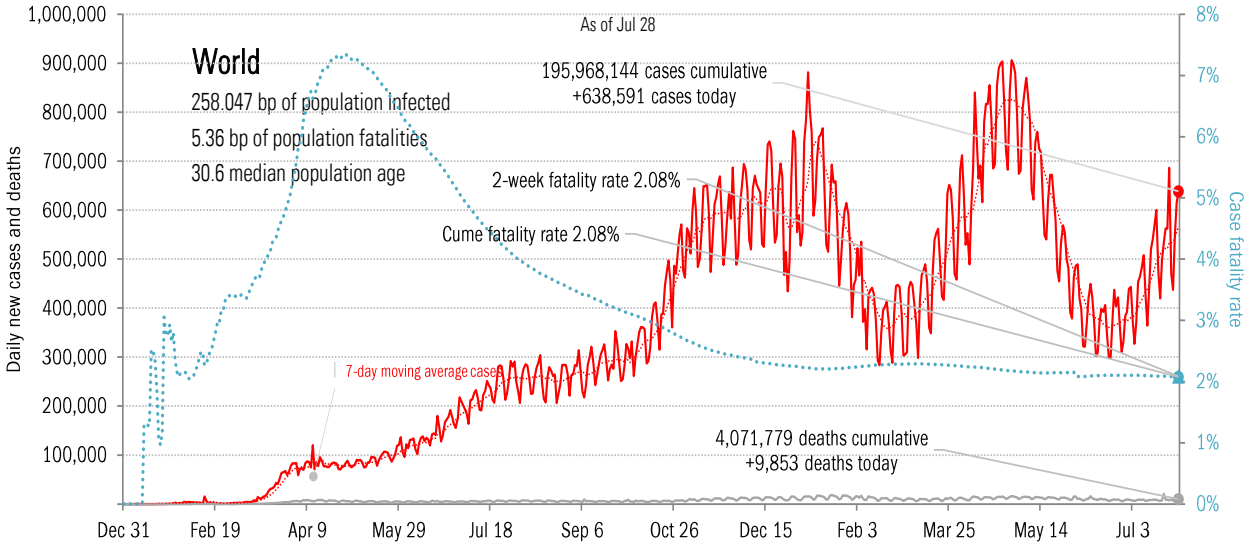
Thursday, July 29, 2021

The global scorecard

The worst ten countries

New cases		New Deaths	
United States	+68,771	Indonesia	+1,824
Brazil	+48,013	Brazil	+1,344
Indonesia	+47,791	Russia	+784
India	+43,509	India	+640
Iran	+33,817	Mexico	+537
France	+27,923	Argentina	+470
Spain	+27,149	United States	+387
United Kingdom	+25,713	Burma	+365
Turkey	+22,291	Colombia	+319
Russia	+21,870	Iran	+303
	+366,847		+6,973
World	+638,591	World	+9,853
Top ten	57%	Top ten	71%





Source: Johns Hopkins, TrendMacro calculations

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The US scorecard

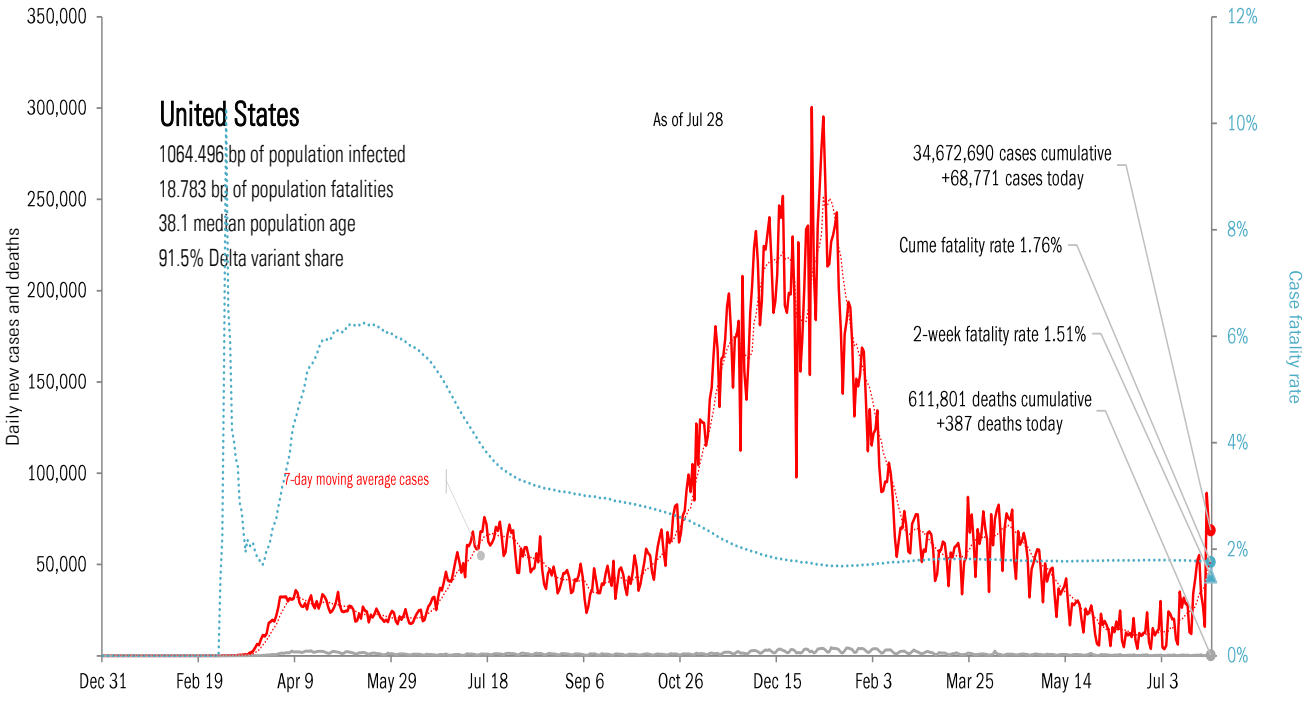
The ten worst US states

New cases		New Deaths		New in hospital		Cume cases		Cume deaths		Cume in hospital		Hospital use		ICU use	
FL	+10,452	WI	+98	FL	+433	CA	3,935,590	CA	64,341	TX	264,374	RI	94%	MO	30%
TX	+9,288	TX	+71	KY	+247	TX	3,105,208	NY	53,623	CA	247,246	MA	85%	AR	27%
CA	+7,689	CA	+49	GA	+196	FL	2,513,058	TX	53,149	FL	203,472	MO	84%	NV	24%
LA	+4,699	FL	+41	TX	+182	NY	2,142,132	FL	38,692	NY	138,130	MD	84%	FL	23%
GA	+3,828	OK	+31	CA	+125	IL	1,415,572	PA	27,838	GA	112,999	FL	83%	UT	22%
MO	+2,835	MO	+24	AL	+86	PA	1,226,720	NJ	26,589	PA	92,705	GA	82%	MS	22%
AL	+2,726	NV	+20	LA	+80	GA	1,171,233	IL	25,853	OH	89,345	PA	81%	TX	18%
NC	+2,633	AL	+18	NC	+50	OH	1,125,420	GA	21,654	IL	84,235	NV	80%	OK	18%
TN	+2,226	NC	+16	AR	+40	NC	1,041,609	MI	21,165	KY	81,212	CT	80%	AK	17%
IA	+2,158	LA	+14	MO	+37	NJ	1,035,975	OH	20,490	MI	74,003	MN	79%	WY	15%
	+48,534		+382		+1,476		18,712,517		353,394		1,387,721				
All states	+79,223		+428		+1769	All states	34,672,690		611,801		2,470,591	All states	70%		67%
Top ten	61%		89%		83%	Top ten	54%		58%		56%	Median	73%		8%

Some states not reporting

Five most improved US states

Fewer daily cases		Fewer new deaths		Fewer new hospitalizations		Most pop immunity growth	
TX	-3,264	KS	-248	NV	-55	GA	+50 bp
CA	-2,602	MO	-38	AZ	-49	NJ	+30 bp
LA	-2,119	OH	-23	KS	-36	UT	+30 bp
MI	-2,069	MI	-19	UT	-28	MP	+20 bp
MN	-410	AZ	-10	TN	-23	NH	+20 bp



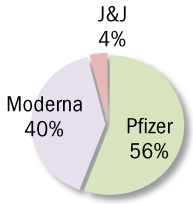
Source: Johns Hopkins, Dept. of Health and Human Services, CDC, TrendMacro calculations

Rolling out the vaccines in the US and the world

Administered	Cumulative				Today
Doses	353,231,943				+0.762 million
	One dose	% Pop	Immune	% pop	New immune today
Total population	194,249,154	58%	167,860,405	50%	+0.278 million
Age 12 to 17	10,468,788	41%	8,113,666	32%	+0.045 million
Age 18 to 64	132,923,607	65%	114,407,651	56%	+0.199 million
Age 65 and over	50,633,396	93%	45,209,424	83%	+0.035 million

Immunity	Full	Partial
US	48.9%	56.7%
UK	55.4%	68.8%
France	45.3%	59.1%
Spain	56.5%	67.0%
Germany	50.6%	60.9%
Italy	50.4%	62.6%
Australia	13.9%	31.6%
Israel	61.8%	66.7%
Canada	57.4%	71.2%
Japan	27.1%	38.2%
Africa	1.6%	3.2%
India	7.1%	25.6%
Brazil	18.6%	48.1%

Global data differs from sources, timing



State
At least partial immunity as % population
Full immunity as % population

Best
Middle
Worst

Every American >18 immune in
171 days
by Jan 15, 2022

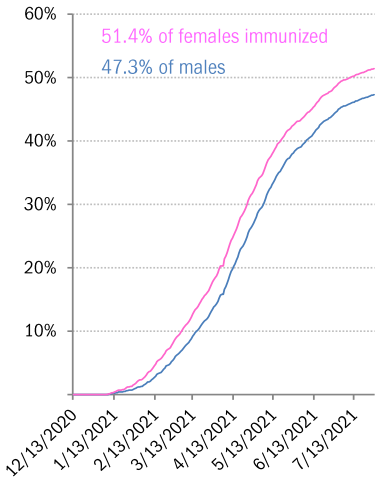
61.8% of population >18 immunized
11.8% previously tested positive
73.6% vs 60% adult herd immunity*

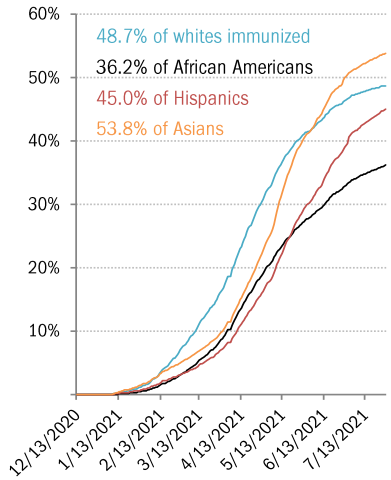
As of Jul 28

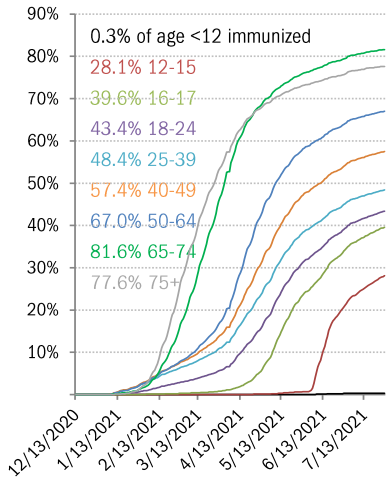
China NA

AK					WI					ME
51.2%					55.3%					68.1%
45.4%					51.6%					63.3%
WA	ID	MT	ND	MN	IL	MI		NY	VT	NH
63.6%	40.9%	49.1%	45.2%	58.5%	61.8%	52.9%		62.7%	75.3%	64.5%
57.4%	37.2%	44.1%	40.0%	53.6%	48.2%	48.7%		56.8%	67.4%	58.2%
OR	NV	WY	SD	IA	IN	OH	PA	NJ	MA	
60.4%	53.1%	41.4%	52.4%	53.0%	46.9%	49.6%	65.2%	65.6%	72.4%	
55.8%	44.1%	36.5%	46.8%	49.5%	44.0%	46.3%	52.0%	58.1%	63.7%	
CA	UT	CO	NE	MO	KY	WV	VA	MD	CT	RI
64.3%	51.9%	59.9%	53.5%	48.2%	51.6%	45.9%	61.3%	64.4%	69.5%	66.8%
52.5%	44.7%	54.2%	49.3%	41.0%	45.3%	39.0%	54.3%	58.6%	63.0%	61.2%
	AZ	NM	KS	AR	TN	NC	SC	DC	DE	
	52.7%	65.0%	52.9%	46.0%	44.3%	50.8%	46.3%	63.6%	60.3%	
	45.1%	56.8%	45.0%	36.1%	38.9%	43.6%	40.4%	54.5%	52.5%	
			OK	LA	MS	AL	GA			
			47.4%	41.5%	39.3%	42.7%	45.9%			
			40.0%	36.7%	34.4%	34.2%	38.5%			
HI			TX					FL		PR
71.2%			51.1%					57.0%		68.6%
53.4%			43.6%					48.6%		59.6%

The demographics of US vaccination



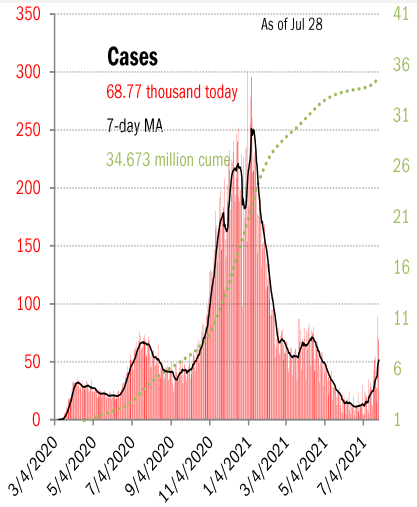


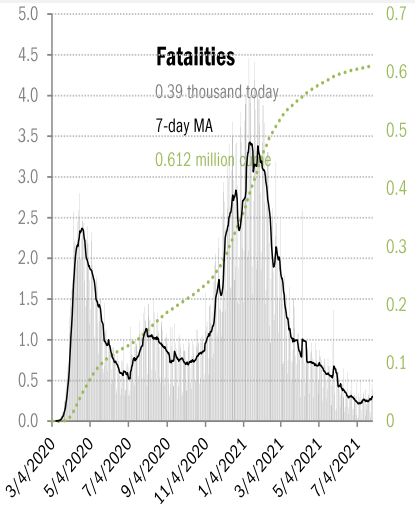


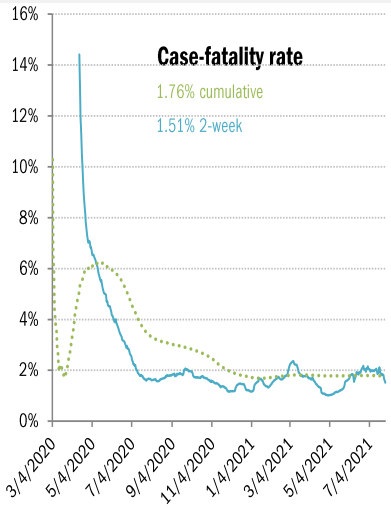
Source: CDC, CDC, Our World in Data, TrendMacro calculations

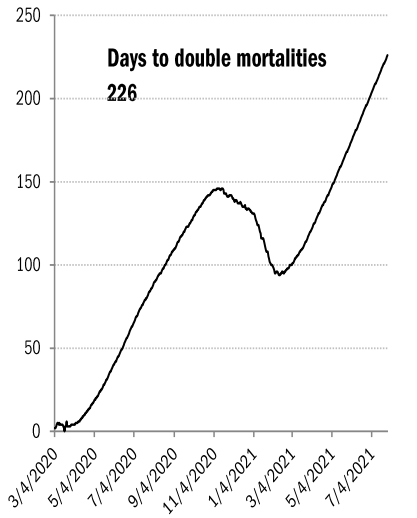
US deep-dive

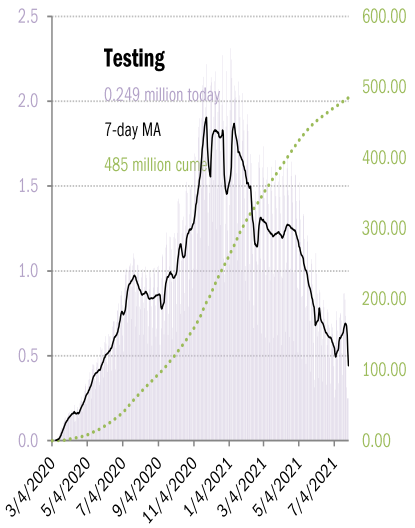
National and state-by-state data do not line up because of different sources

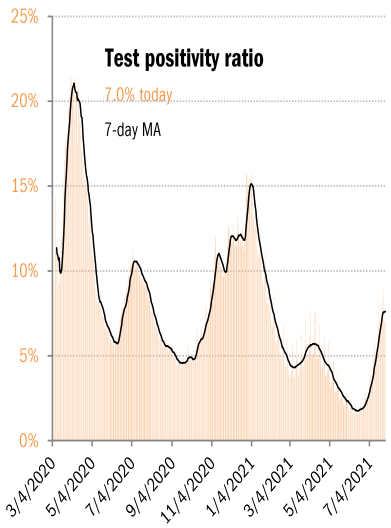


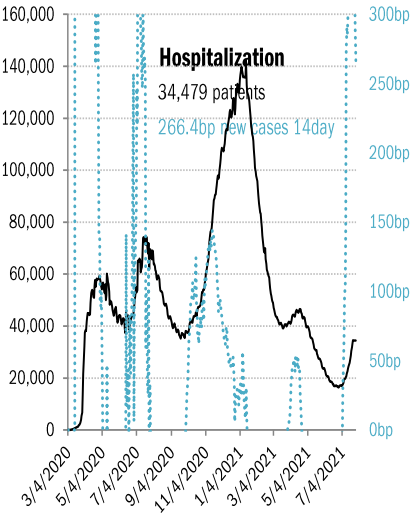


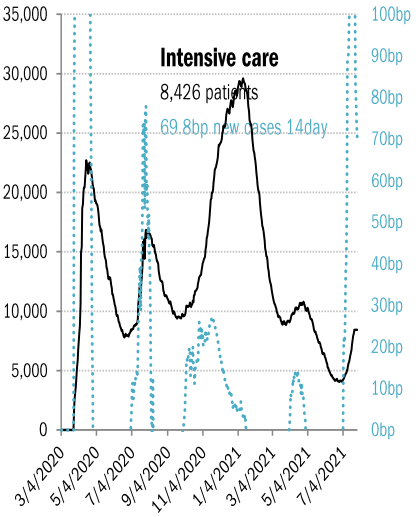


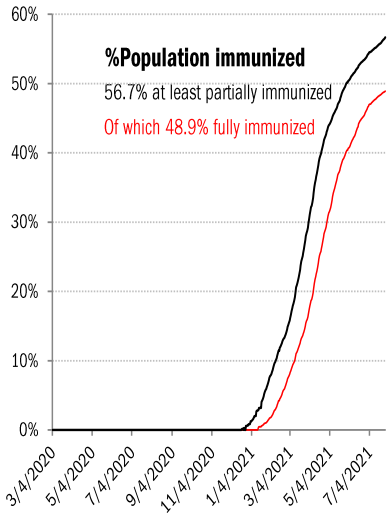










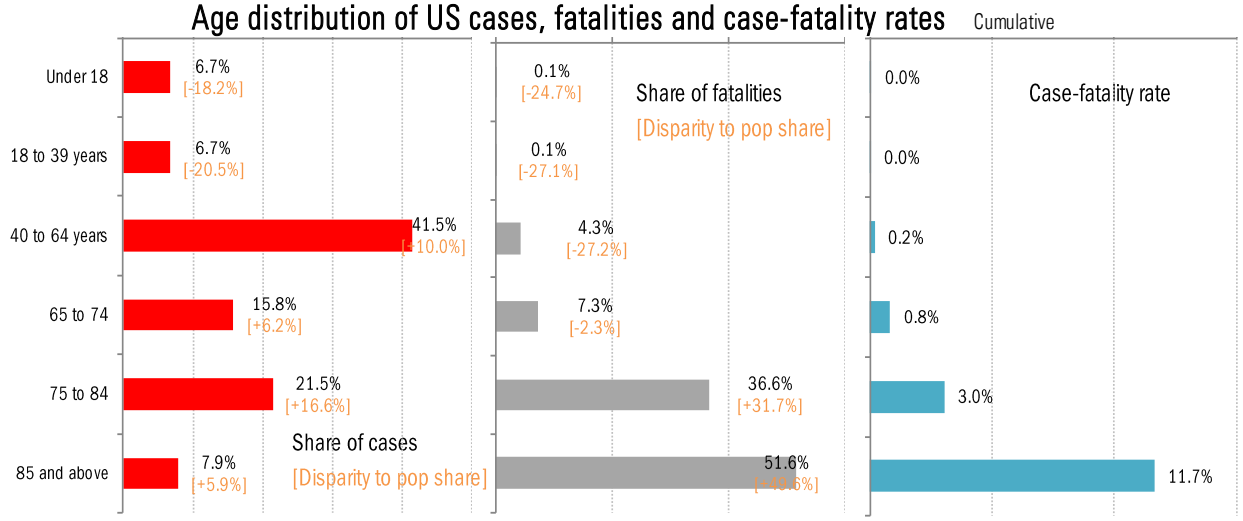


Source: Johns Hopkins, Covid Act Now, TrendMacro calculations

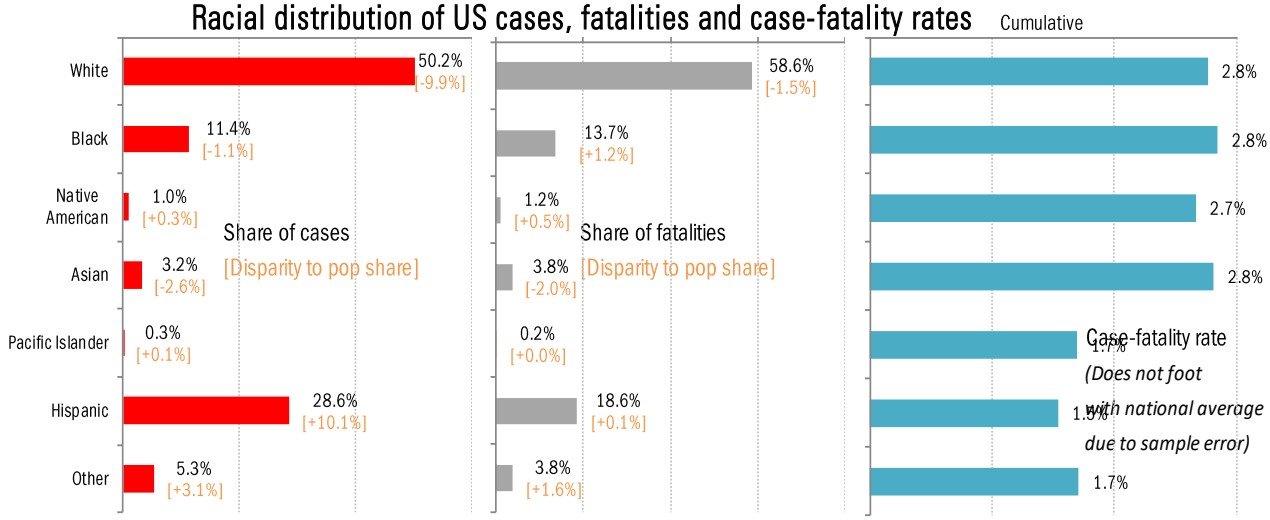
US deep-dive on the demographics of age, race and health

Updates weekly on Sundays

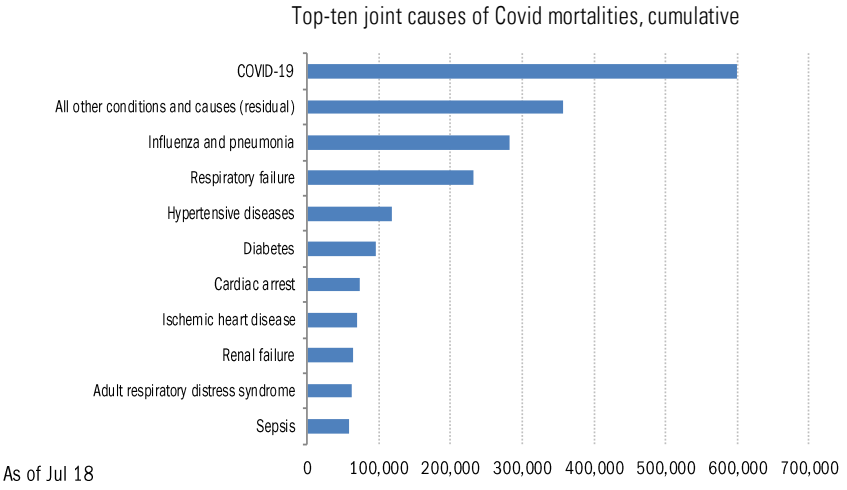
Age distribution of US cases, fatalities and case-fatality rates



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



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

COVID-19 and education: The lingering effects of unfinished learning
ma Dorn, Bryan Hancock, Jimmy Sarakatsannis, and Ellen Viruleg
McKinsey & Company
July 27, 2021

The Cost of the School Shutdowns
Wall Street Journal
July 28, 2021

Covid Will Increase Life Expectancy
David Colander
Wall Street Journal
July 28, 2021

Longitudinal analysis shows durable and broad immune memory after SARS-CoV-2 infection with persisting antibody responses and memory B and T cells
Kristen W. Cohen et al.
Outbreak News Today
July 14, 2021

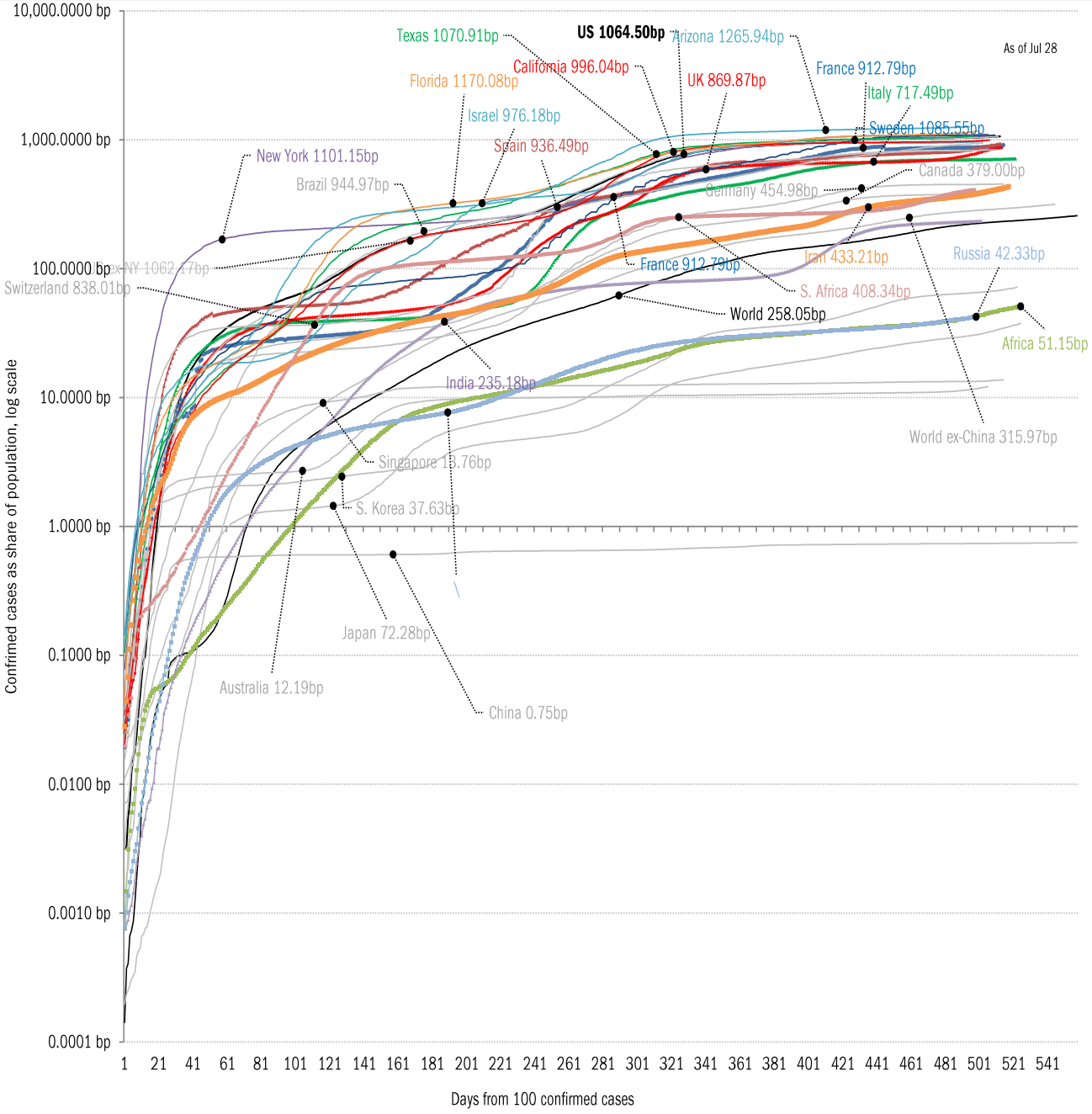
Eight reasons why the UK's coronavirus cases appear to be falling
Graham Lawton
NewScientist
July 27, 2021

Meme of the day

Source: Our beloved clients, Power Line blog "The Week in Pictures" and CTUP

The coronavirus case accelerometer… tracking the world's infection curves

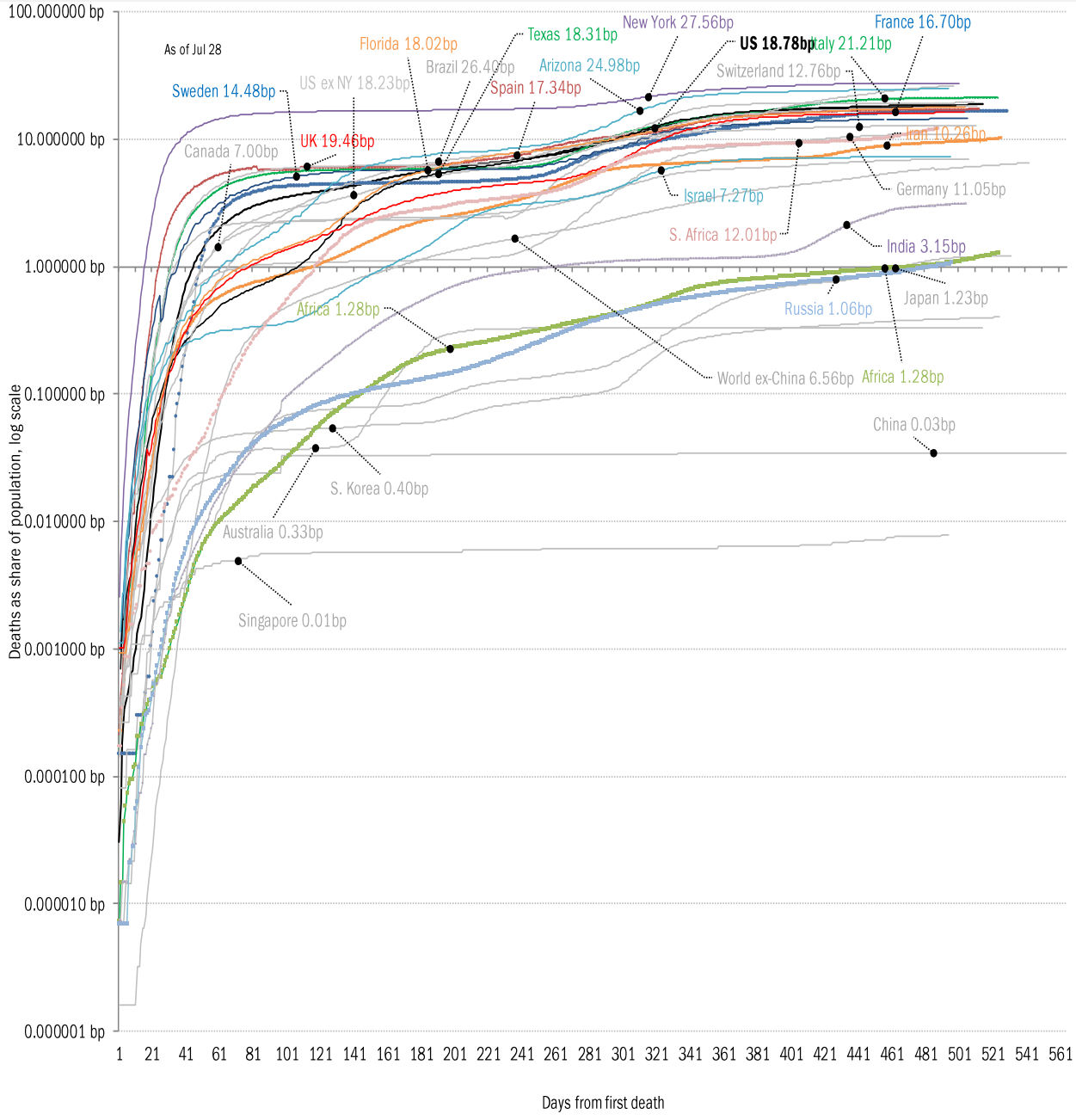
Share of infected population from first day with 100 confirmed cases, log scale



Source: Johns Hopkins, TrendMacro calculations

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

Share of deceased population from day of first fatality, log scale

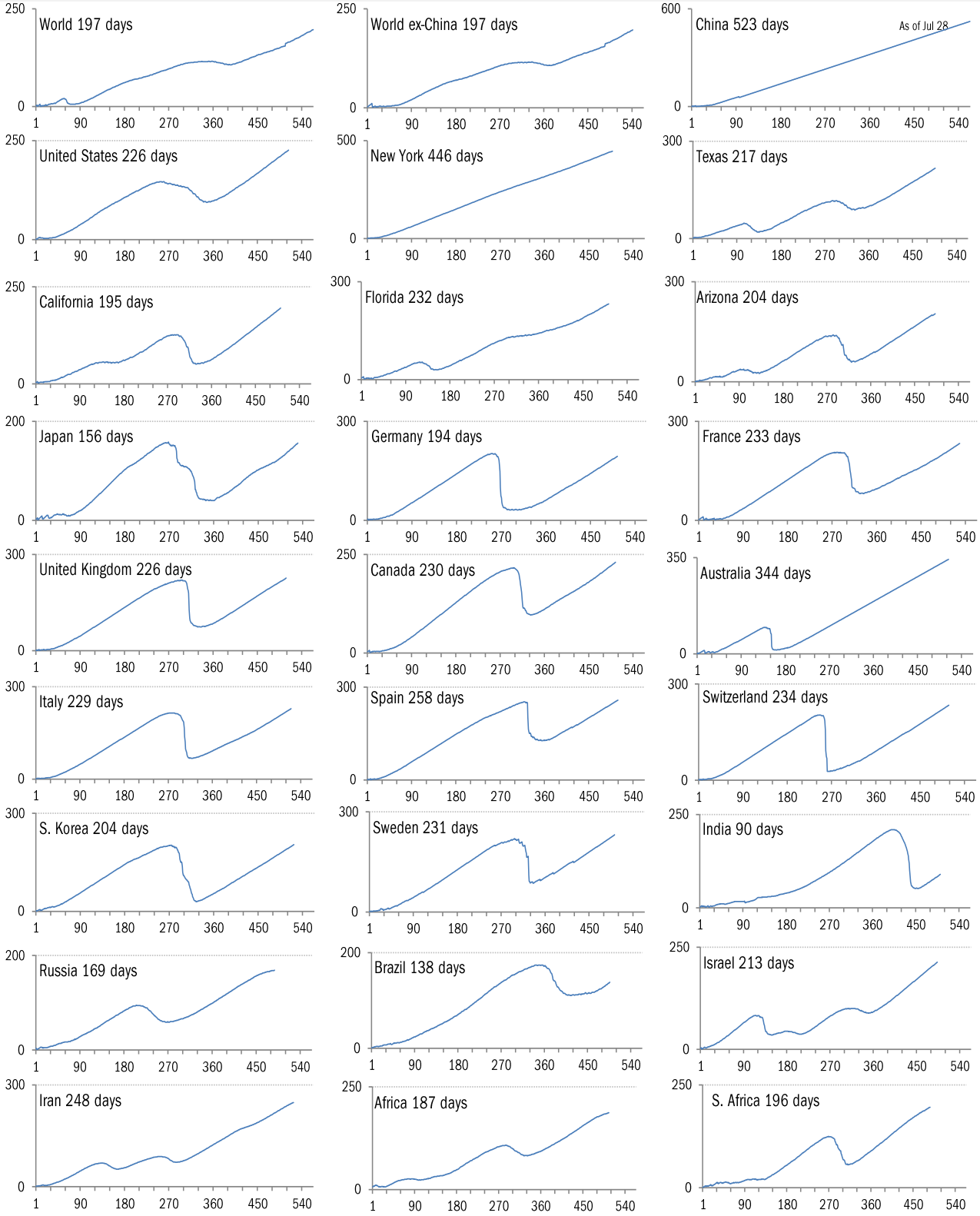


Source: Johns Hopkins, TrendMacro calculations

"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

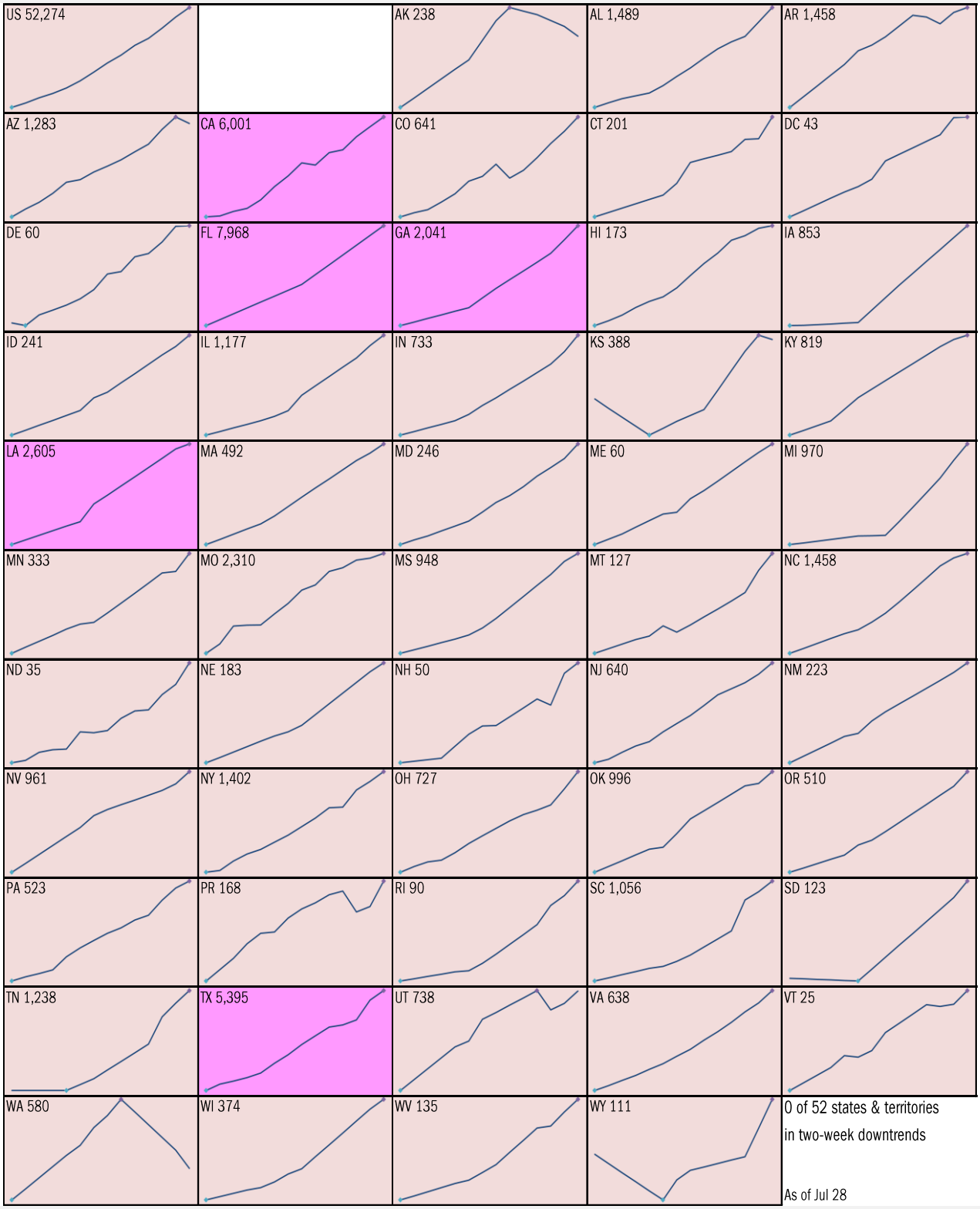


Source: Johns Hopkins, TrendMacro calculations

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

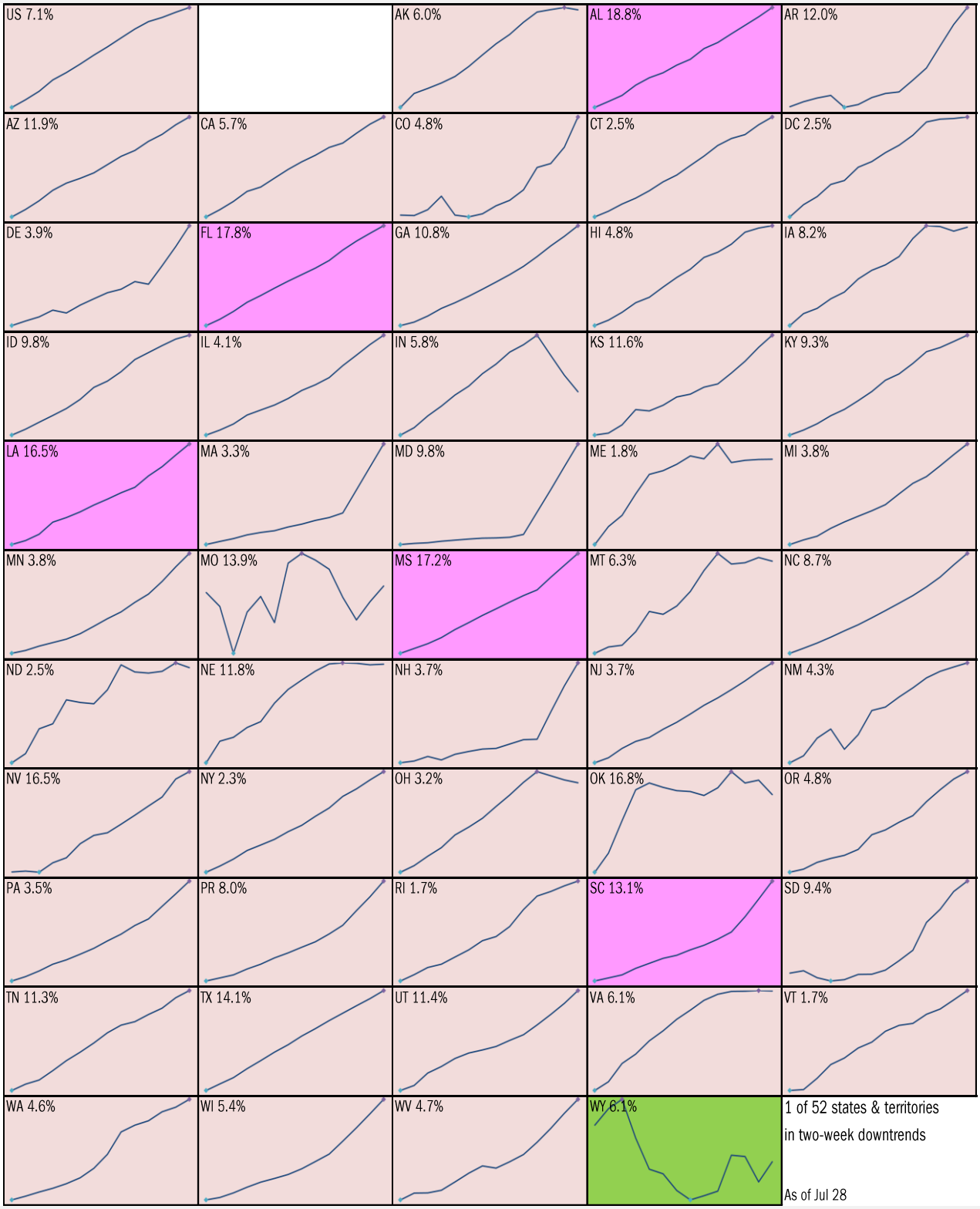


Source: Johns Hopkins, TrendMacro calculations

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

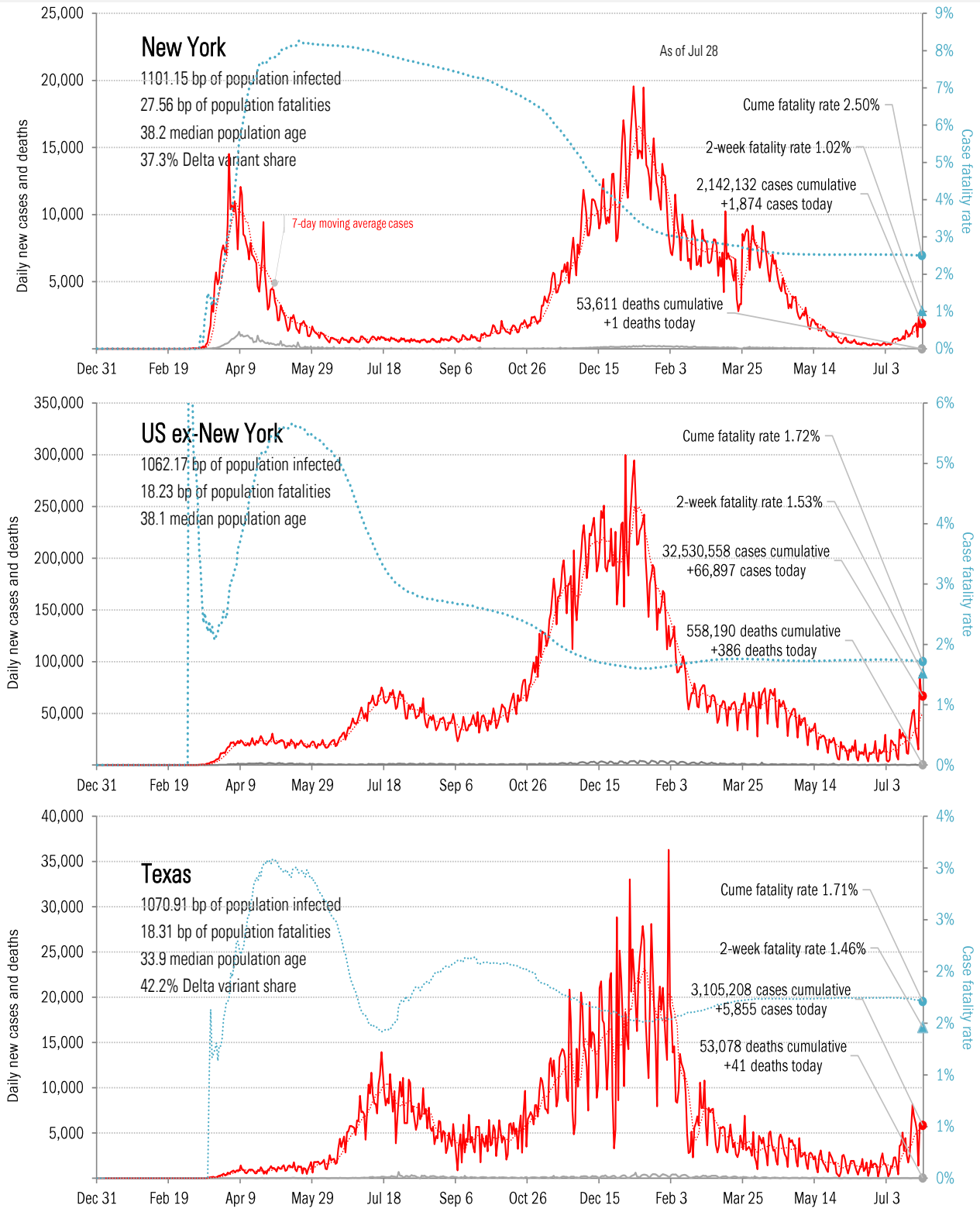
14-day moving average, last 14 days *Most recent value displayed* • High • Low

Downward trajectory Five best Upward trajectory Five worst



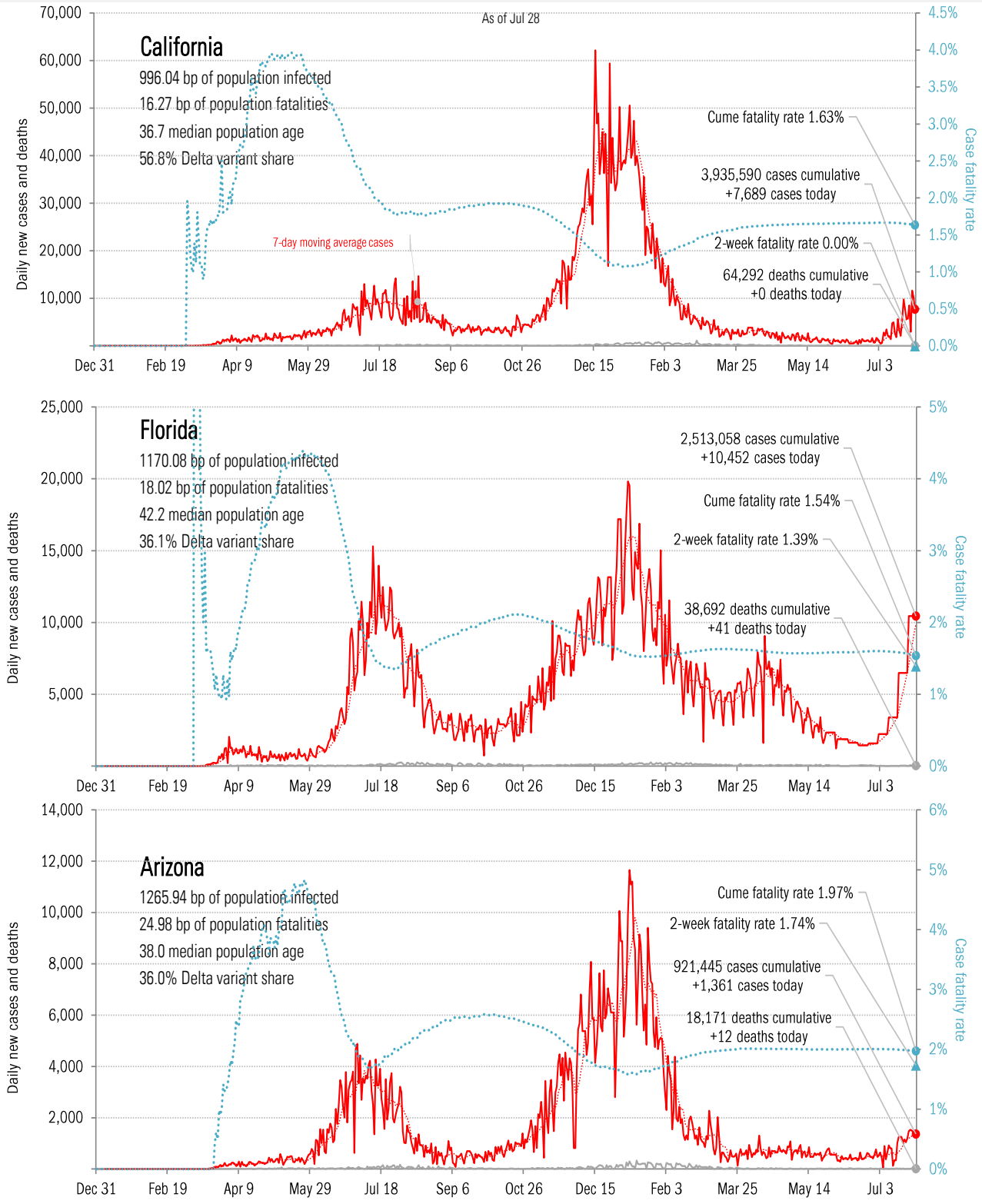
Source: Covid Act Now, TrendMacro calculations

From Ground Zero to the Rio Grande



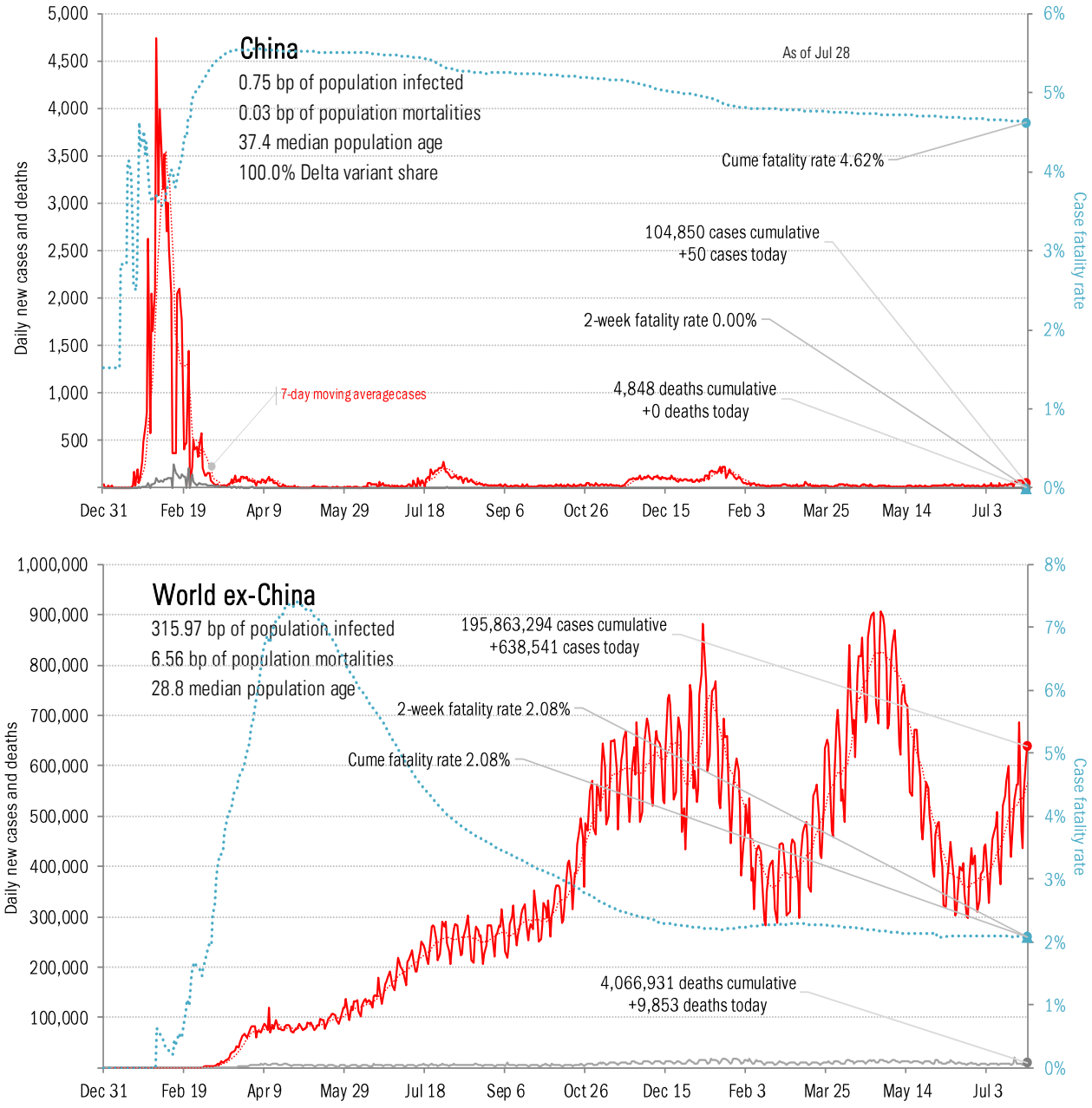
Source: Johns Hopkins, TrendMacro calculations

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



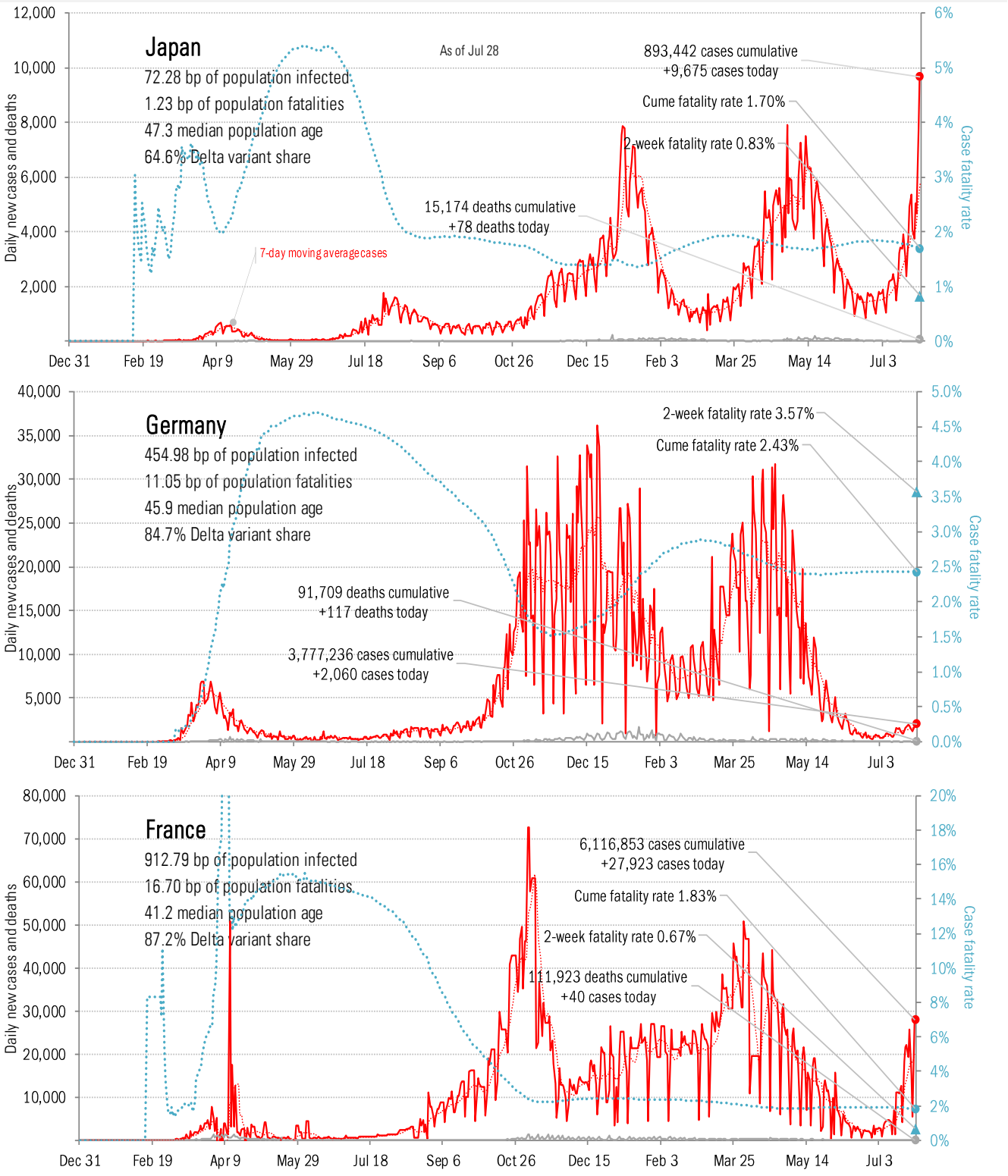
Source: Johns Hopkins, TrendMacro calculations

Patient zero… and then everyone else



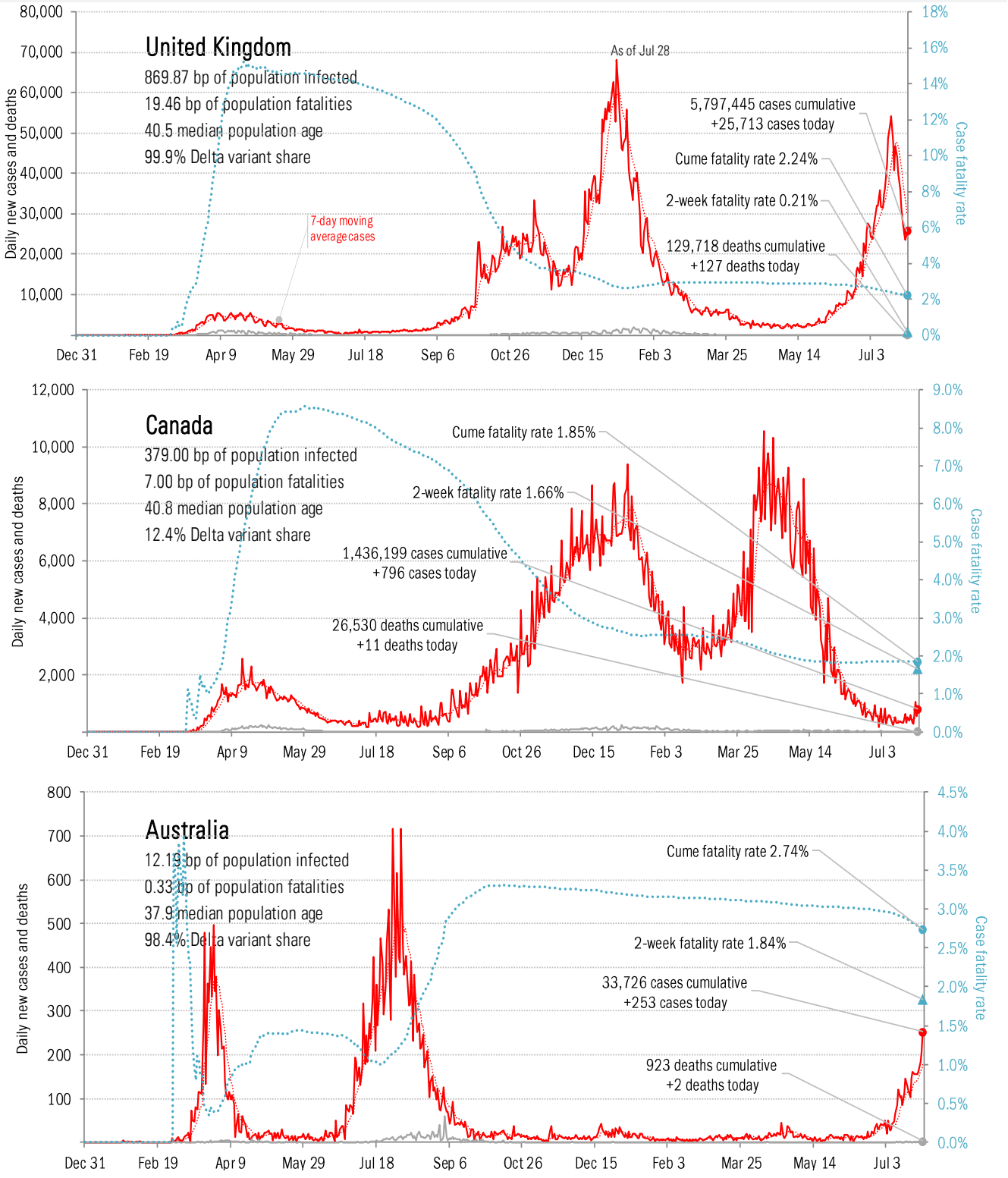
Source: Johns Hopkins, TrendMacro calculations

Impact in the largest economies



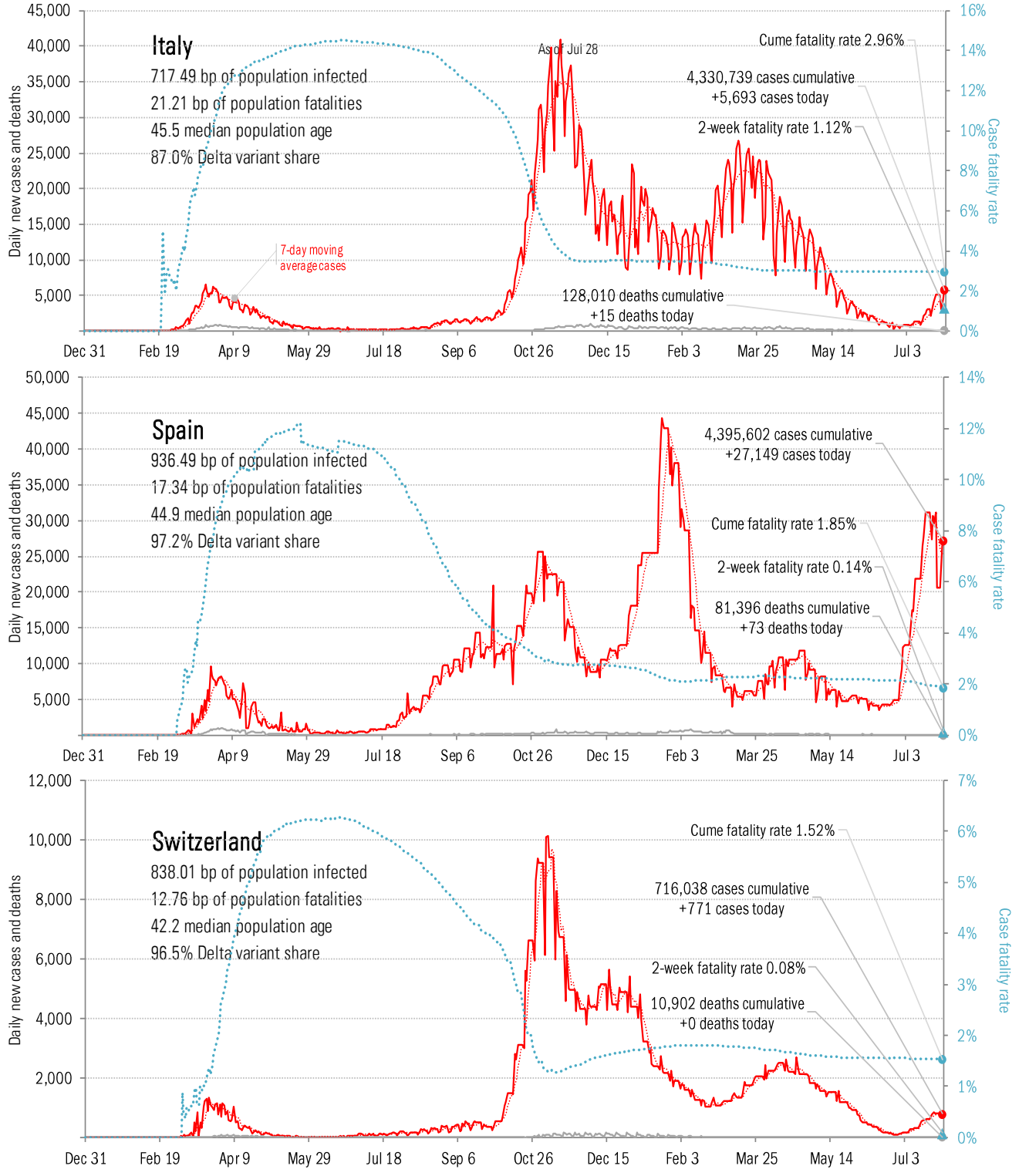
Source: Johns Hopkins, TrendMacro calculations

Impact in The Anglosphere



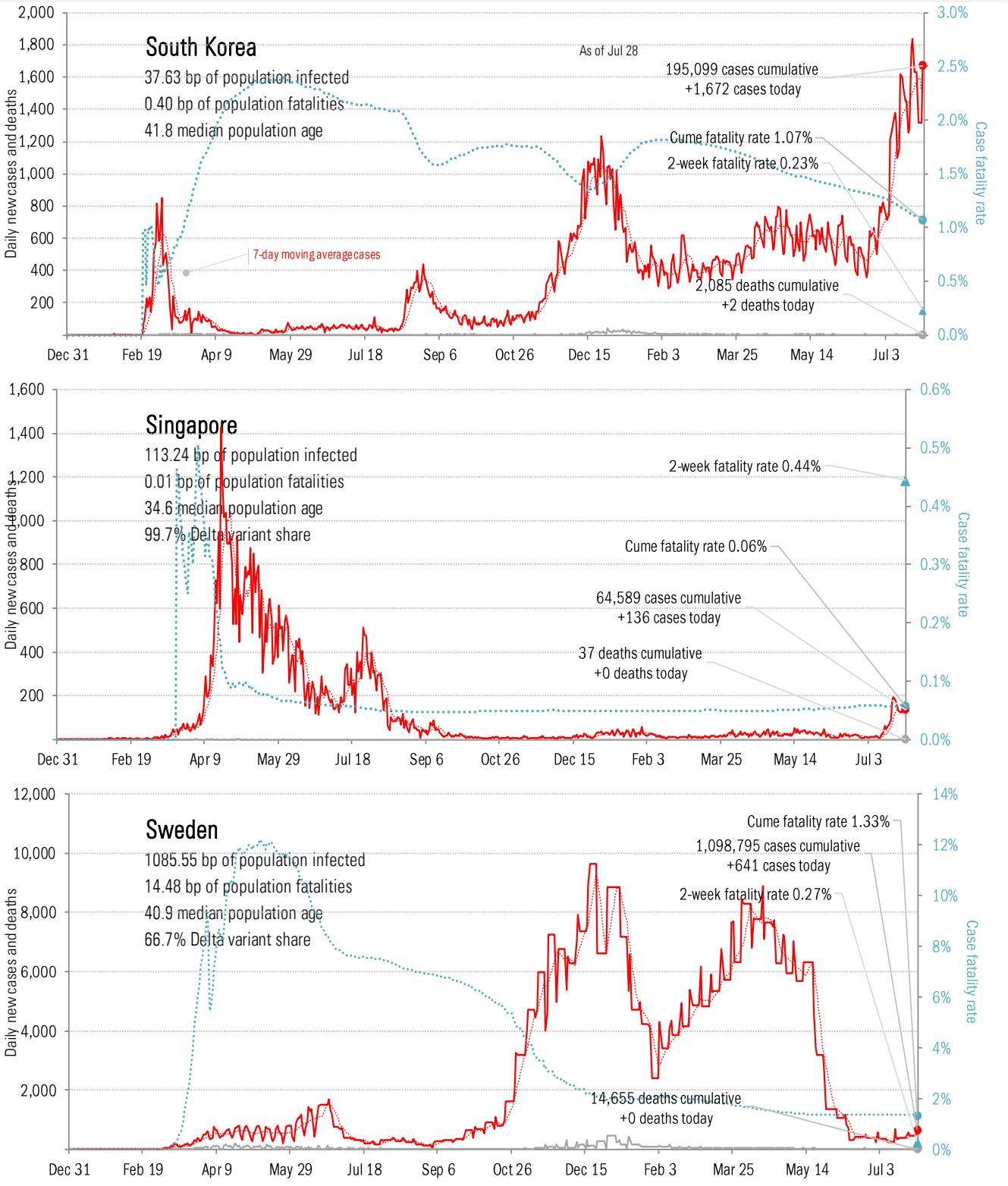
Source: Johns Hopkins, TrendMacro calculations

Impact in continental Europe



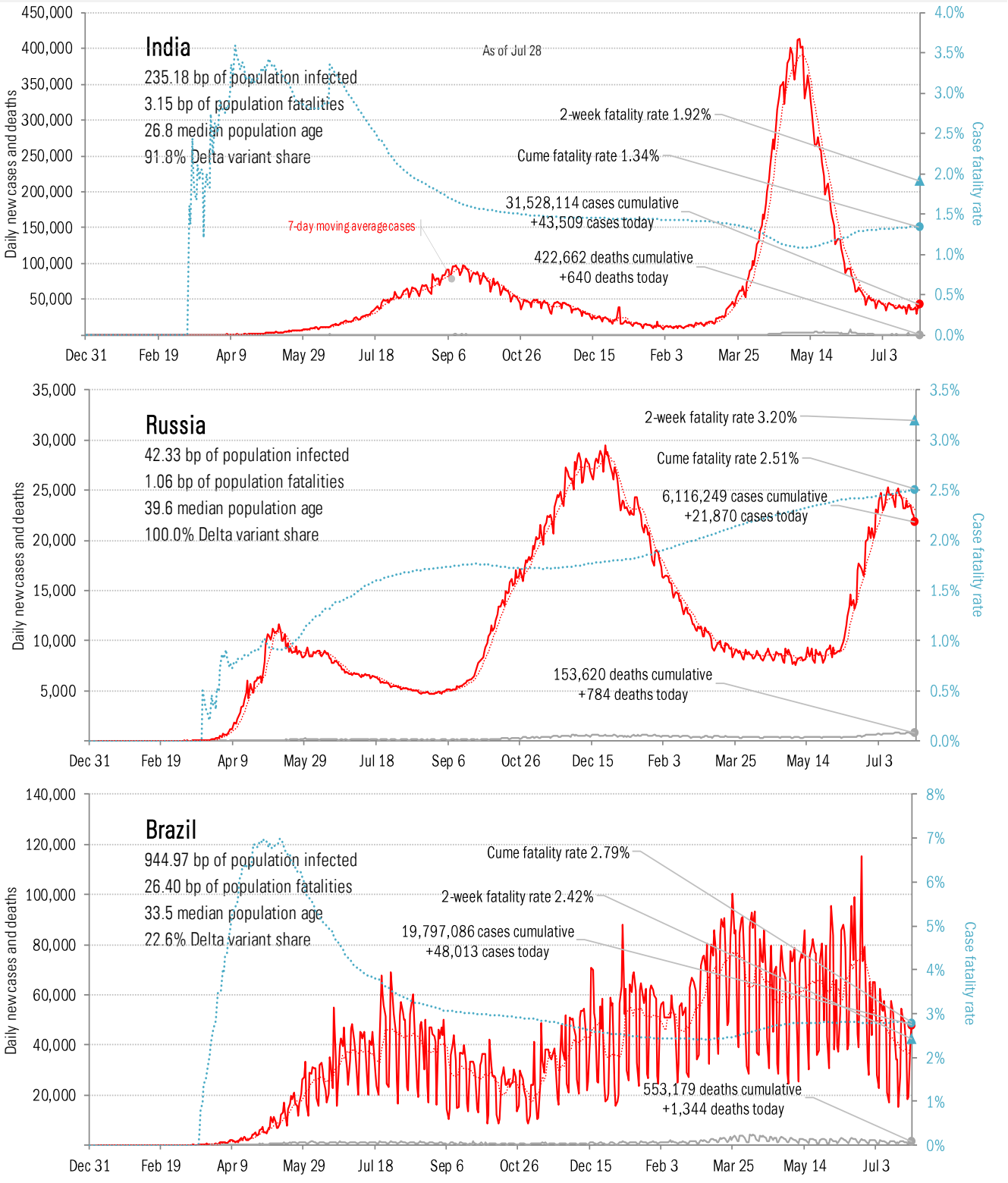
Source: Johns Hopkins, TrendMacro calculations

Impact in other hot-spots



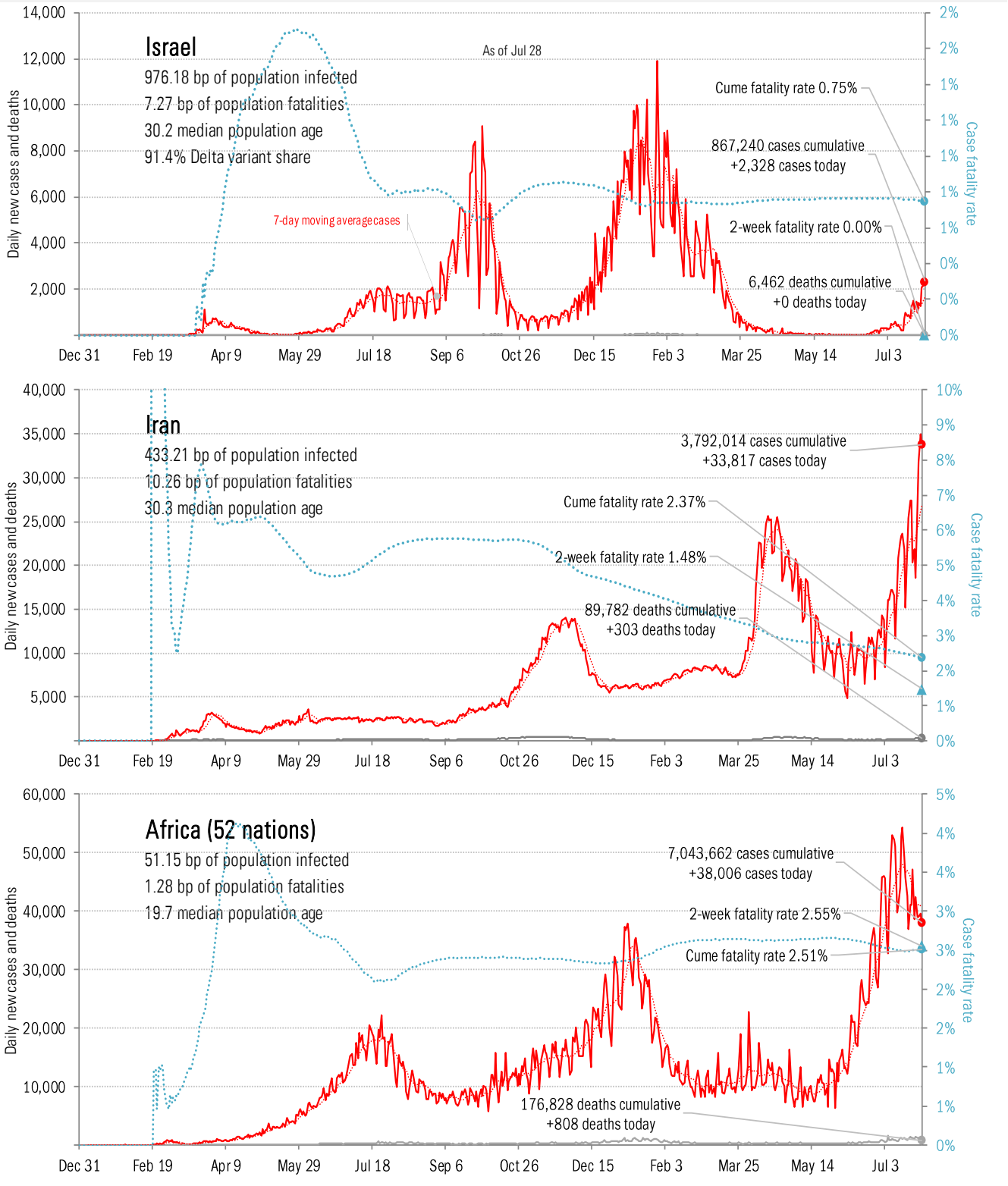
Source: Johns Hopkins, TrendMacro calculations

Impact in the BRICs ex-China



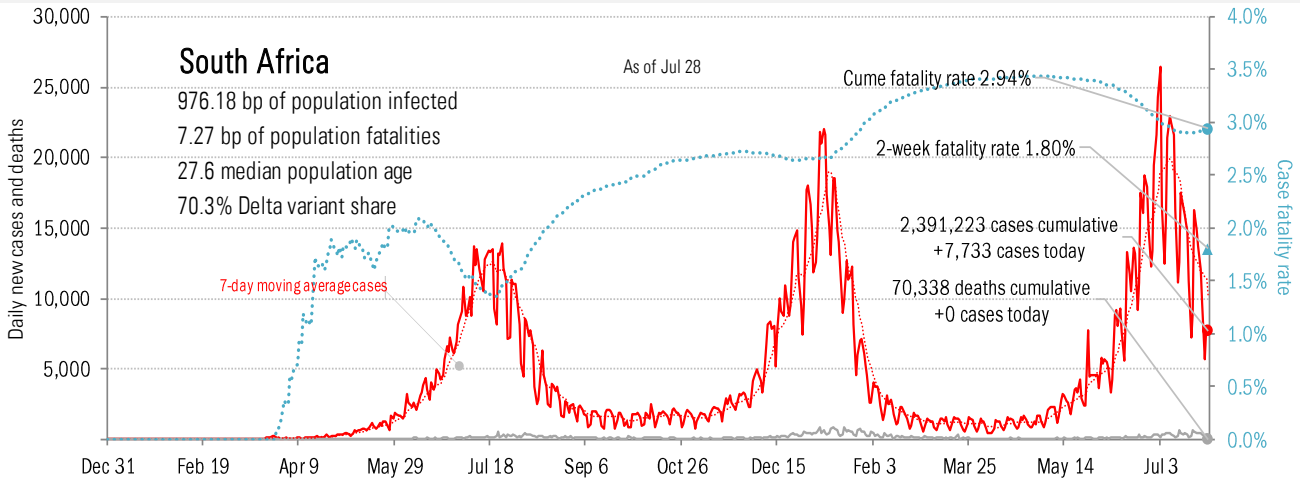
Source: Johns Hopkins, TrendMacro calculations

Impact in the Middle East and Africa



Source: Johns Hopkins, TrendMacro calculations

Impact in Africa, continued



Source: Johns Hopkins, TrendMacro calculations