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

Data Insights: Covid-2019 Monitor

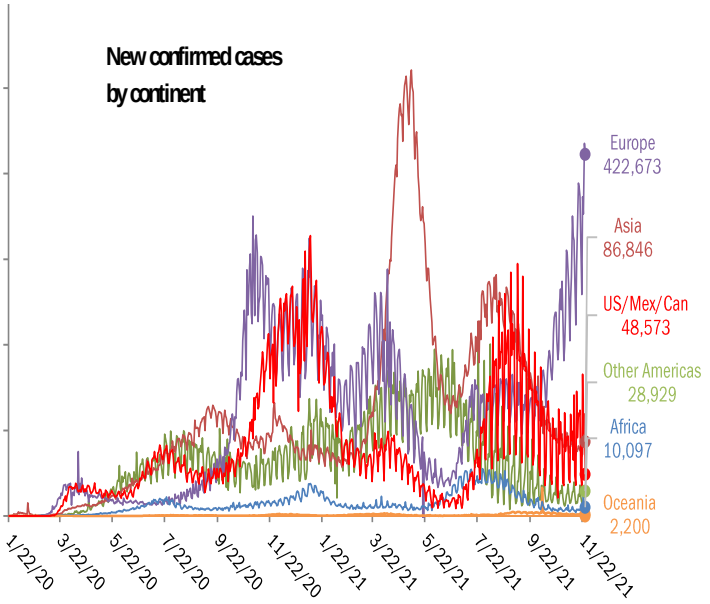
Friday, November 26, 2021

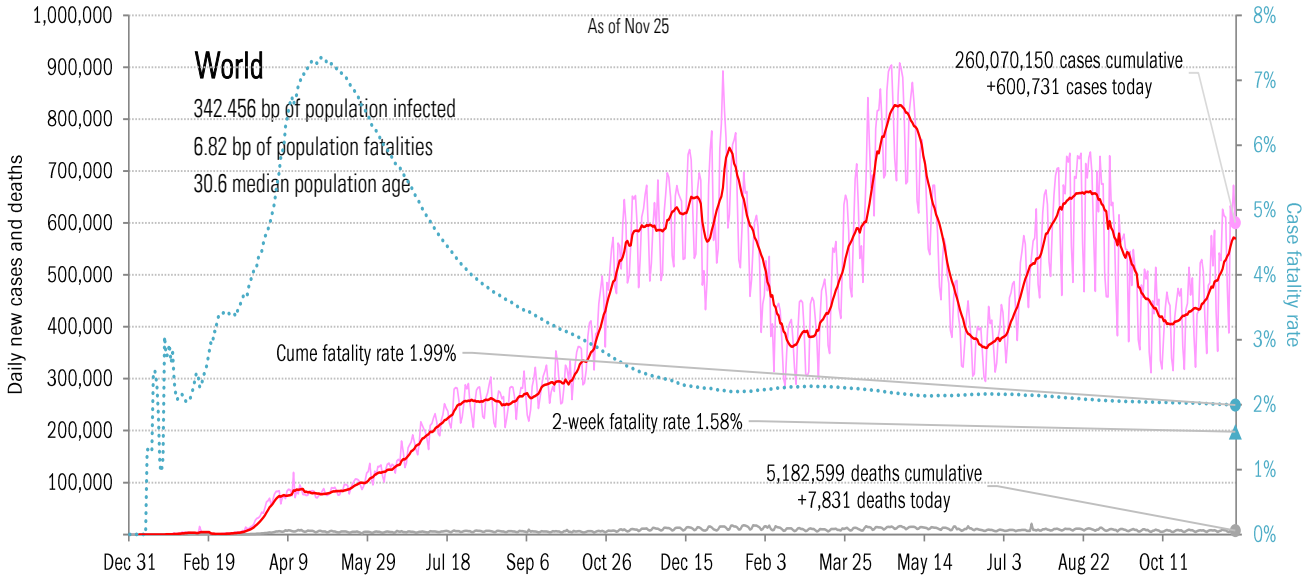
The global scorecard

Cases: 7-day average and daily Deaths: Daily

The worst ten countries

New cases		New Deaths	
Germany	+74,579	Russia	+1,201
United Kingdom	+47,287	Ukraine	+665
United States	+35,935	Mexico	+599
France	+33,510	Poland	+498
Russia	+32,866	India	+488
Poland	+28,143	United States	+437
Turkey	+24,467	Germany	+357
Netherlands	+22,239	Brazil	+303
Belgium	+20,836	Turkey	+222
Czechia	+18,046	Romania	+212
	+337,908		+4,982
World	+600,731	World	+7,831
Top ten	56%	Top ten	64%





Source: Johns Hopkins, TrendMacro calculations

For more information contact us:
Donald Luskin: 214 550 2121 don@trendmacro.com
Thomas Demas: 704 552 3625 tdemas@trendmacro.com

The US scorecard

Cases: 7-day average and daily Deaths: Daily

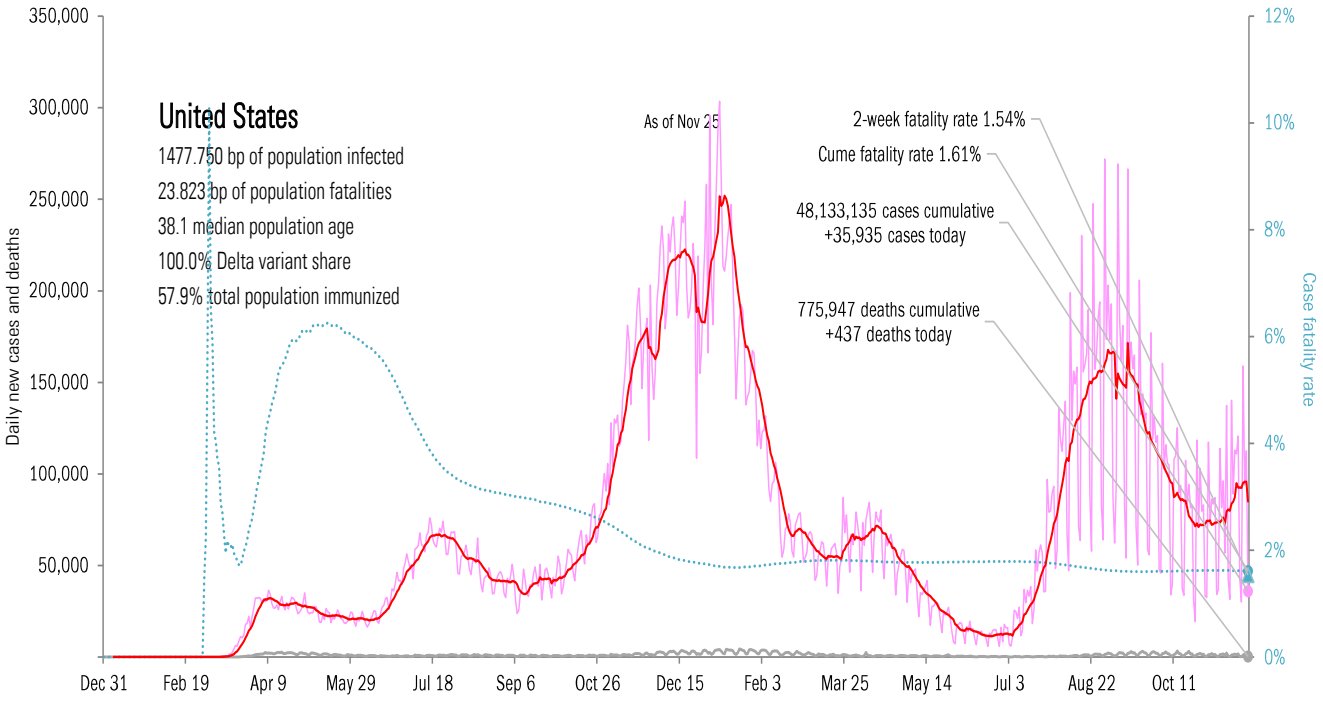
The ten worst US states

New cases		New Deaths		New in hospital		Cume cases		Cume deaths		Cume in hospital		Hospital use		ICU use	
NY	+7,091	PA	+146	AZ	+71	CA	5,057,759	CA	74,098	TX	382,488	HI	93%	NM	91%
PA	+5,950	AZ	+75	IL	+65	TX	4,321,057	TX	73,605	FL	322,882	RI	89%	RI	88%
WI	+4,309	FL	+43	GA	+62	FL	3,728,064	FL	61,297	CA	319,051	MA	87%	VT	88%
AZ	+3,349	KS	+31	PA	+49	NY	2,699,233	NY	57,322	NY	170,755	PA	85%	MI	87%
CO	+3,055	NY	+24	MN	+36	IL	1,784,900	PA	33,247	GA	162,543	MI	84%	KY	86%
NJ	+2,851	VA	+19	OH	+30	PA	1,710,478	GA	30,358	OH	132,863	WA	83%	AL	85%
KS	+2,814	WI	+18	CA	+28	OH	1,660,131	IL	28,746	PA	124,761	MN	82%	NE	85%
VA	+1,781	CO	+17	FL	+28	GA	1,659,491	NJ	28,323	KY	113,869	NH	82%	MN	85%
FL	+1,413	NJ	+16	IN	+27	NC	1,524,078	OH	26,190	IL	109,451	MO	81%	DE	84%
ND	+708	AL	+13	ME	+20	MI	1,447,230	MI	25,244	MI	101,189	NY	81%	NH	84%
	+33,321		+402		+416		25,592,421		438,430		1,939,852				
All states	+35,935		+437		+416	All states	48,133,135		775,947		3,483,868	All states	70%		67%
Top ten	93%		92%		100%	Top ten	53%		57%		56%	Median	76%		78%

Some states not reporting

Five most improved US states

Fewer daily cases		Fewer new deaths		Fewer new hospitalizations		Most pop immunity growth	
MI	-20,039	MI	-316	MI	-173	AL	+20 bp
OH	-6,751	CA	-149	OH	-79	IL	+20 bp
IL	-5,058	TX	-87	WI	-66	NC	+20 bp
TX	-4,210	IA	-86	IA	-61	SD	+20 bp
IN	-3,983	FL	-64	NY	-56	AR	+10 bp



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

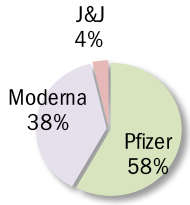
Rolling out the vaccines in the US and the world

Administered	Cumulative		Today
Doses	466,911,006		+1.234 million
Boosters	75,522,147		million
	One dose	% Pop	une today
Total population	237,181,739	71%	million
Age 12 to 17	14,578,933	61%	million
Age 18 to 64	161,412,632	79%	million
Age 65 and over	56,597,161	100%	million

Because of the Thanksgiving Day holiday, the CDC did not update its vaccine database.

Immunity	Full	Partial
US	57.9%	68.8%
UK	67.8%	74.5%
France	69.2%	76.6%
Spain	80.4%	81.9%
Germany	67.6%	70.2%
Italy	72.8%	77.9%
Australia	71.9%	77.1%
Israel	62.1%	67.6%
Canada	76.0%	79.3%
Japan	76.8%	79.0%
Africa	7.1%	10.6%
India	30.1%	55.6%
Brazil	60.0%	75.9%
China	74.5%	84.8%

Global data differs due to sources, timing



Every American >18 immunized in
168 days
by May 10, 2022

72.7% of population >18 immunized
14.3% previously tested positive
87.0% vs 60% adult herd immunity

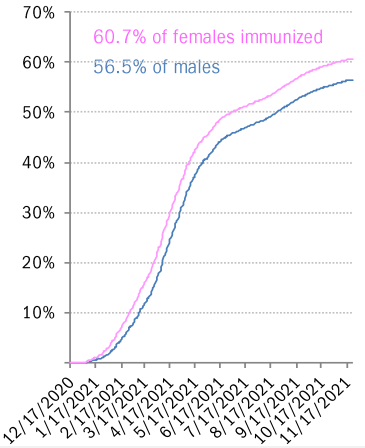
State
At least partial immunity as % population
Full immunity as % population

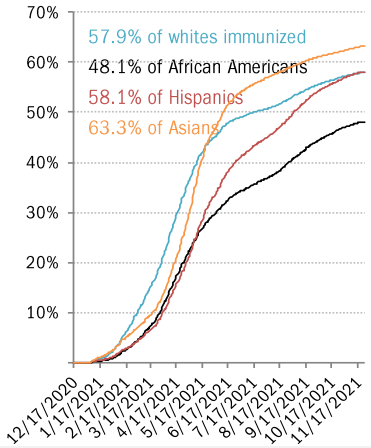
Best
Middle
Worst

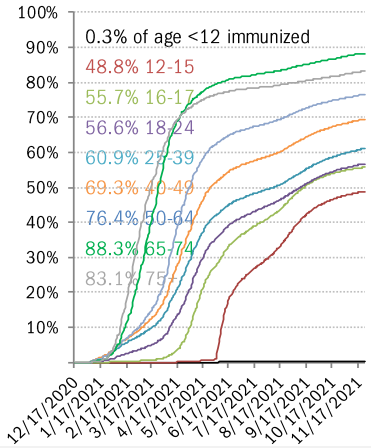
As of Nov 24

					WI					ME
					65.4%					81.4%
AK					59.3%					72.1%
62.3%										
54.0%										
WA	ID	MT	ND	MN	IL	MI		NY	VT	NH
72.3%	50.5%	59.4%	57.6%	68.5%	68.7%	60.8%		77.5%	84.6%	86.3%
64.8%	45.1%	51.7%	48.6%	62.2%	61.4%	54.4%		68.2%	72.7%	64.6%
OR	NV	WY	SD	IA	IN	OH	PA	NJ	MA	
71.0%	65.9%	53.2%	66.3%	62.2%	55.5%	58.0%	80.8%	78.4%	85.0%	
63.8%	54.2%	45.3%	54.3%	56.5%	50.5%	52.8%	58.0%	67.5%	70.8%	
CA	UT	CO	NE	MO	KY	WV	VA	MD	CT	RI
78.2%	63.7%	70.9%	63.7%	59.4%	59.9%	53.8%	74.9%	76.4%	83.3%	82.4%
62.8%	55.2%	62.9%	57.2%	50.8%	51.9%	41.5%	64.6%	67.2%	71.7%	72.2%
	AZ	NM	KS	AR	TN	NC	SC	DC	DE	
	63.8%	76.0%	65.7%	60.0%	56.5%	69.4%	59.8%	80.6%	71.4%	
	54.4%	63.3%	54.4%	49.1%	49.4%	54.0%	51.2%	64.1%	60.9%	
			OK	LA	MS	AL	GA			
			62.3%	55.3%	53.7%	56.2%	58.6%			
HI			51.3%	48.7%	46.9%	46.0%	49.4%			
81.7%			TX					FL		PR
60.7%			63.7%					71.3%		84.2%
			54.5%					61.0%		73.9%

The demographics of US vaccination



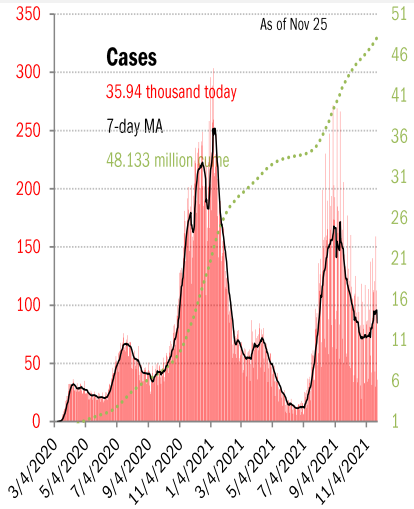


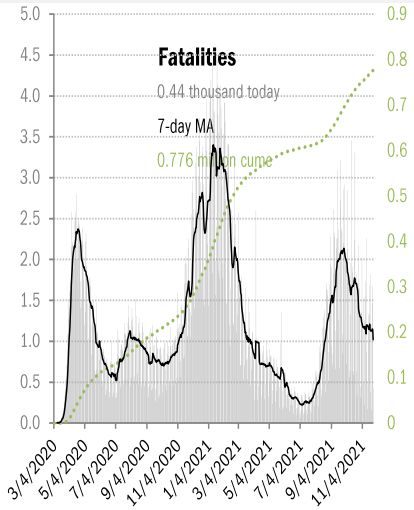


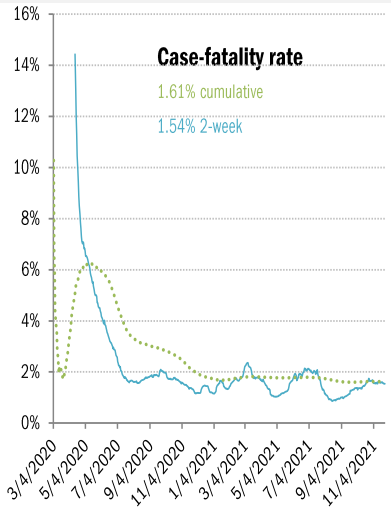
Source: CDC, CDC, Our World in Data, TrendMacro calculations

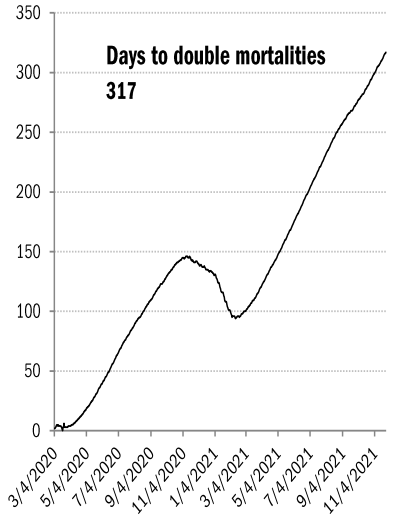
US deep-dive

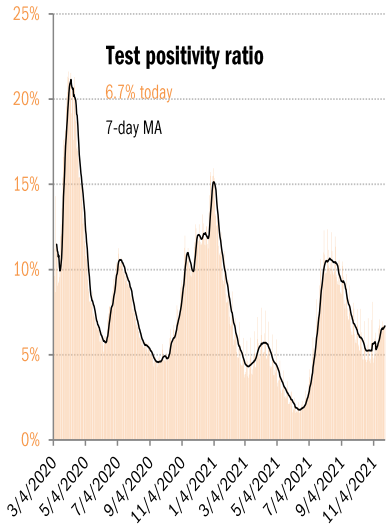
National and state-by-state data do not line up because of different sources

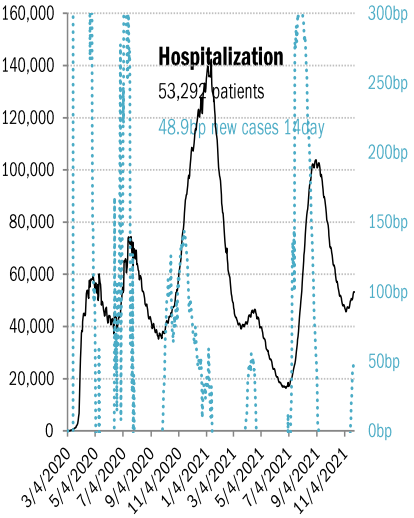


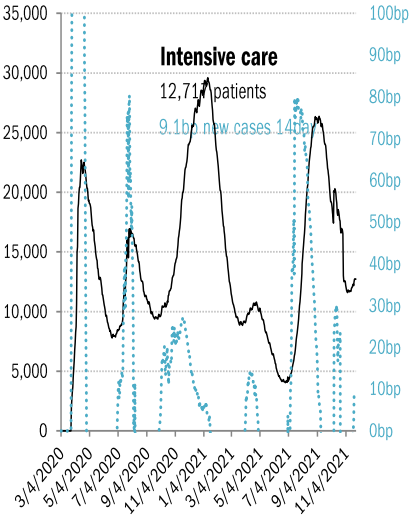


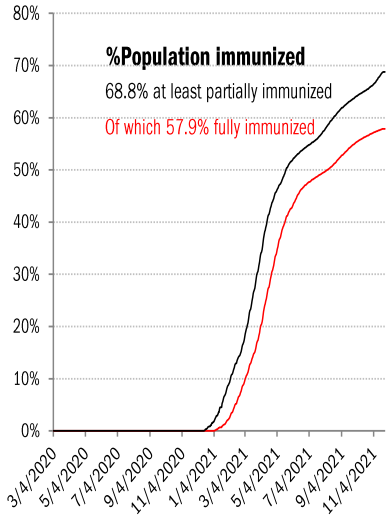












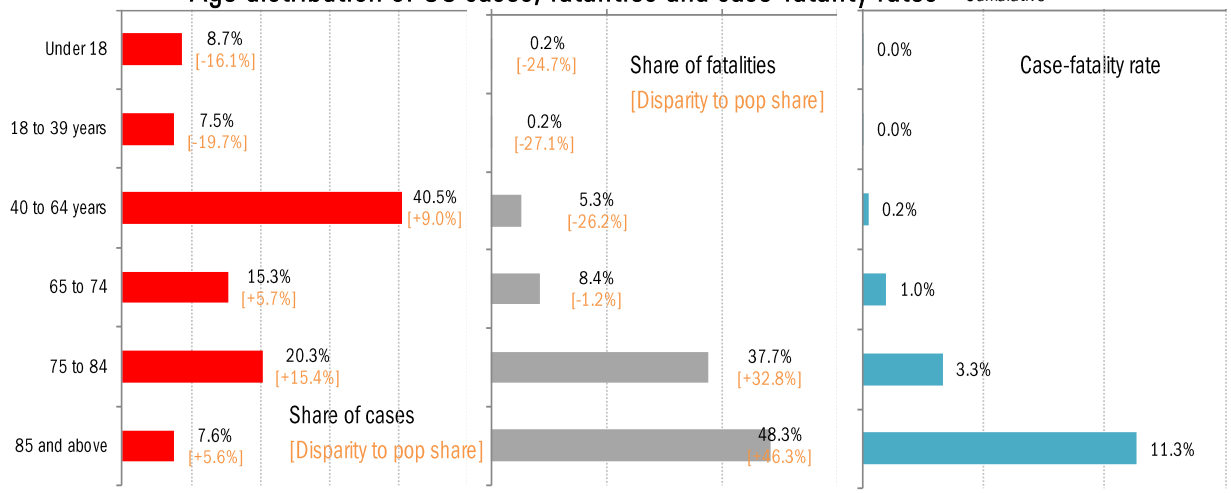
Source: Johns Hopkins, Covid Act Now, TrendMacro calculations

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

Updates weekly on Sundays

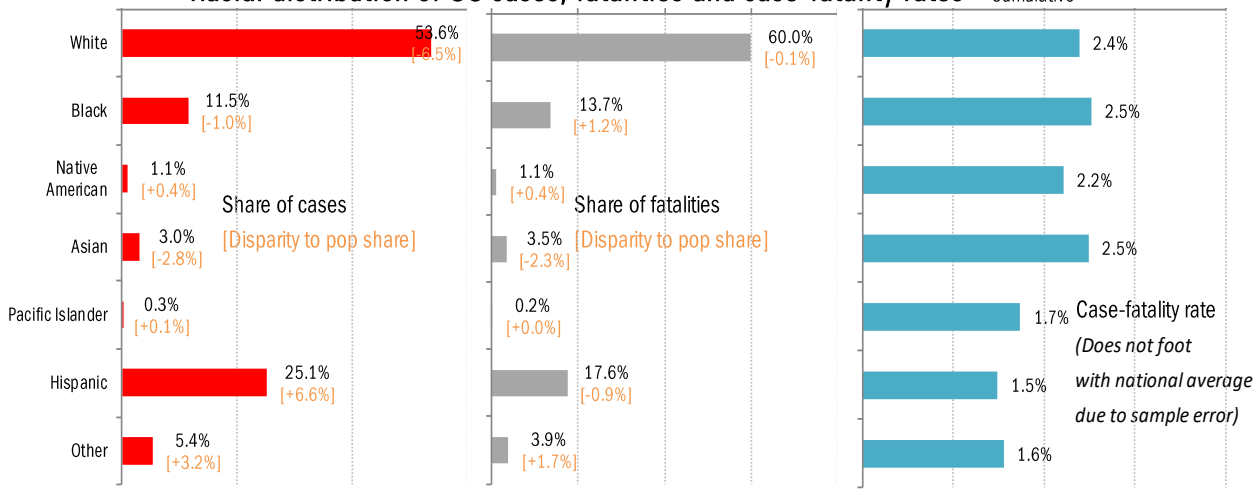
Age distribution of US cases, fatalities and case-fatality rates

Cumulative



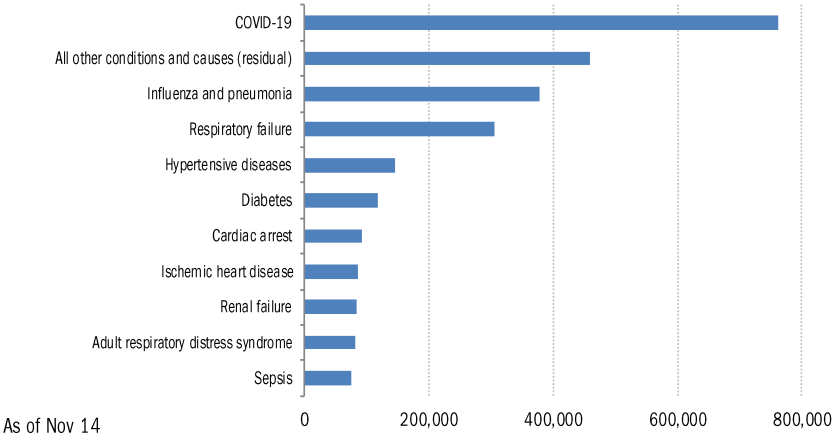
Racial distribution of US cases, fatalities and case-fatality rates

Cumulative



Comorbidities

Top-ten joint causes of Covid mortalities, cumulative



As of Nov 14

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

WHO Lauds South Africa's Speed in Reporting New Virus Variant
Thomas Mulier
Bloomberg
Novemeber 26, 2021

New Covid-19 Variant Sets Off Fears of Restrictions, Arrives in Europe
Gabriele Steinhauser
Wall Street Journal
November 26, 2021

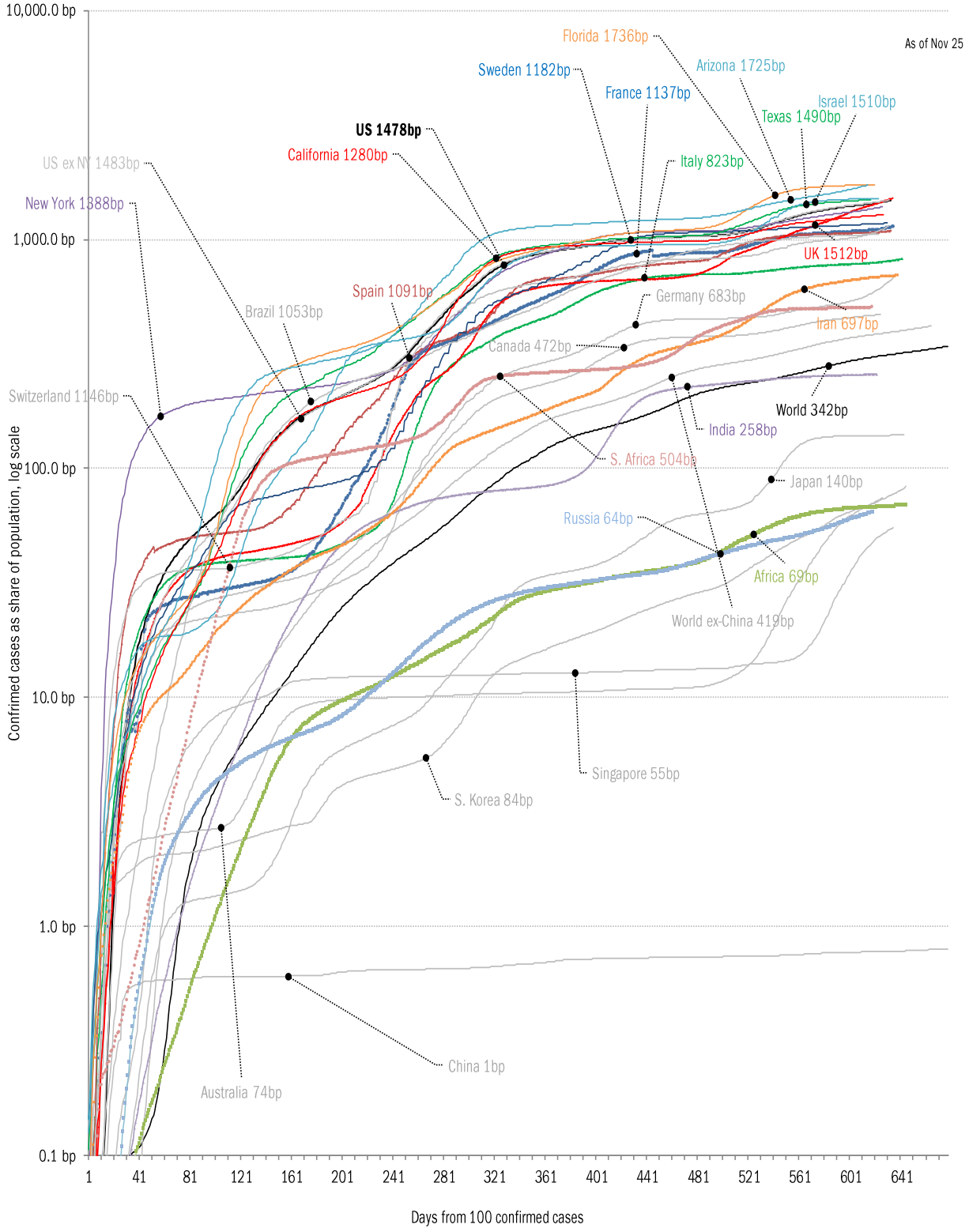
South Africa Raises Alarm Over New Coronavirus Variant
Gabriele Steinhauser
Wall Street Journal
November 25, 2021

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

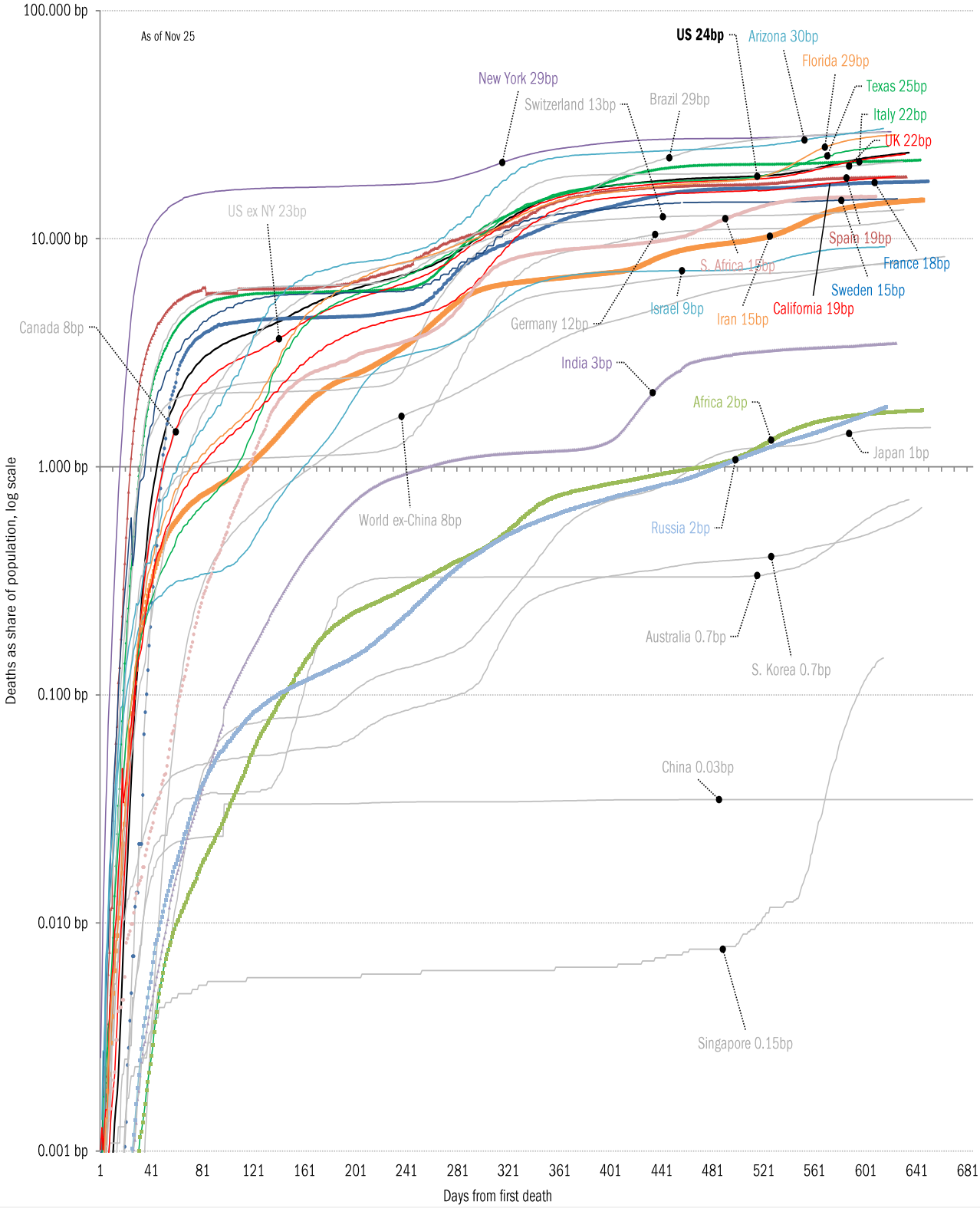
Share of infected population from first day with 100 confirmed cases, log scale



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

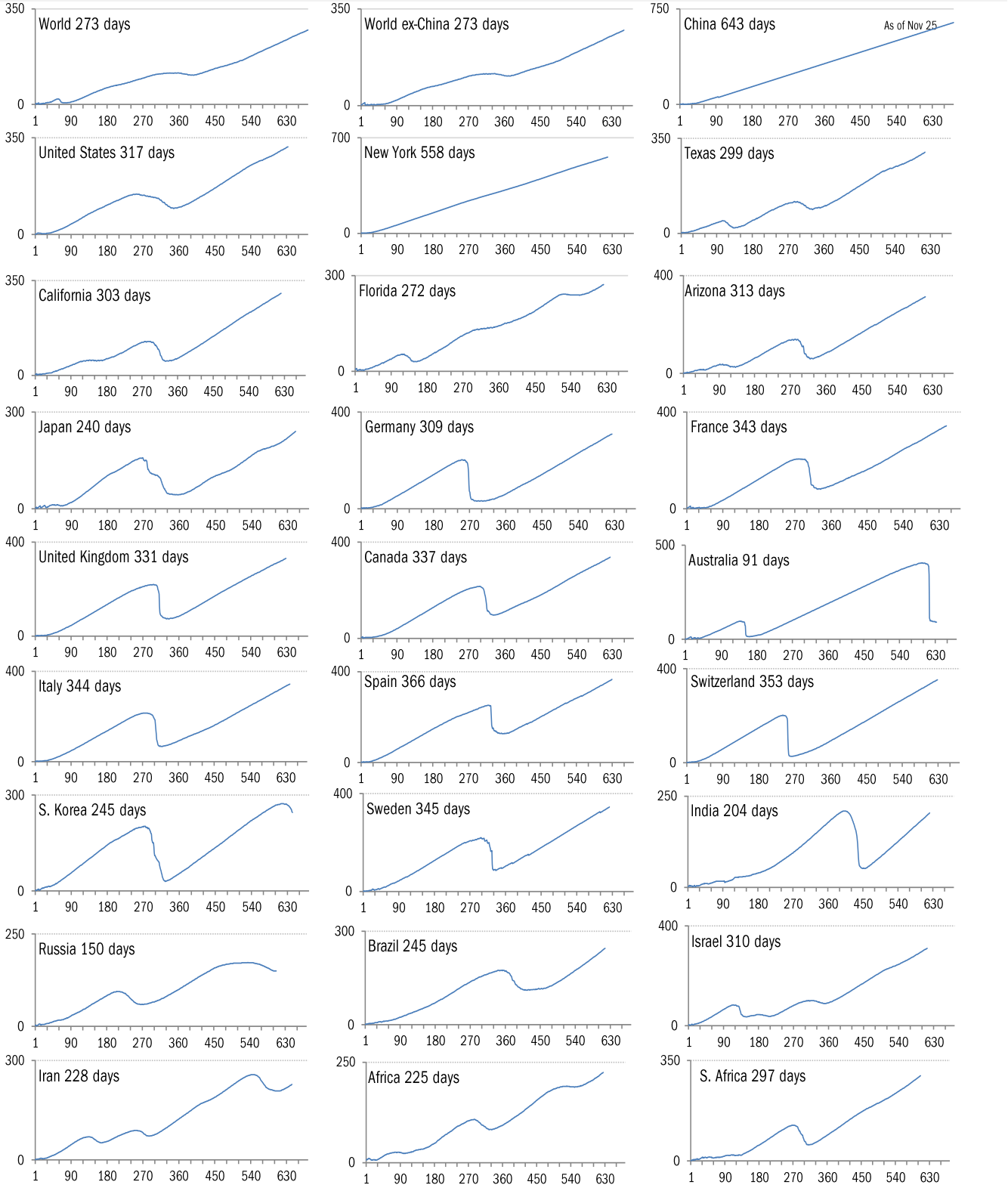


Source: Johns Hopkins, TrendMacro calculations

"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

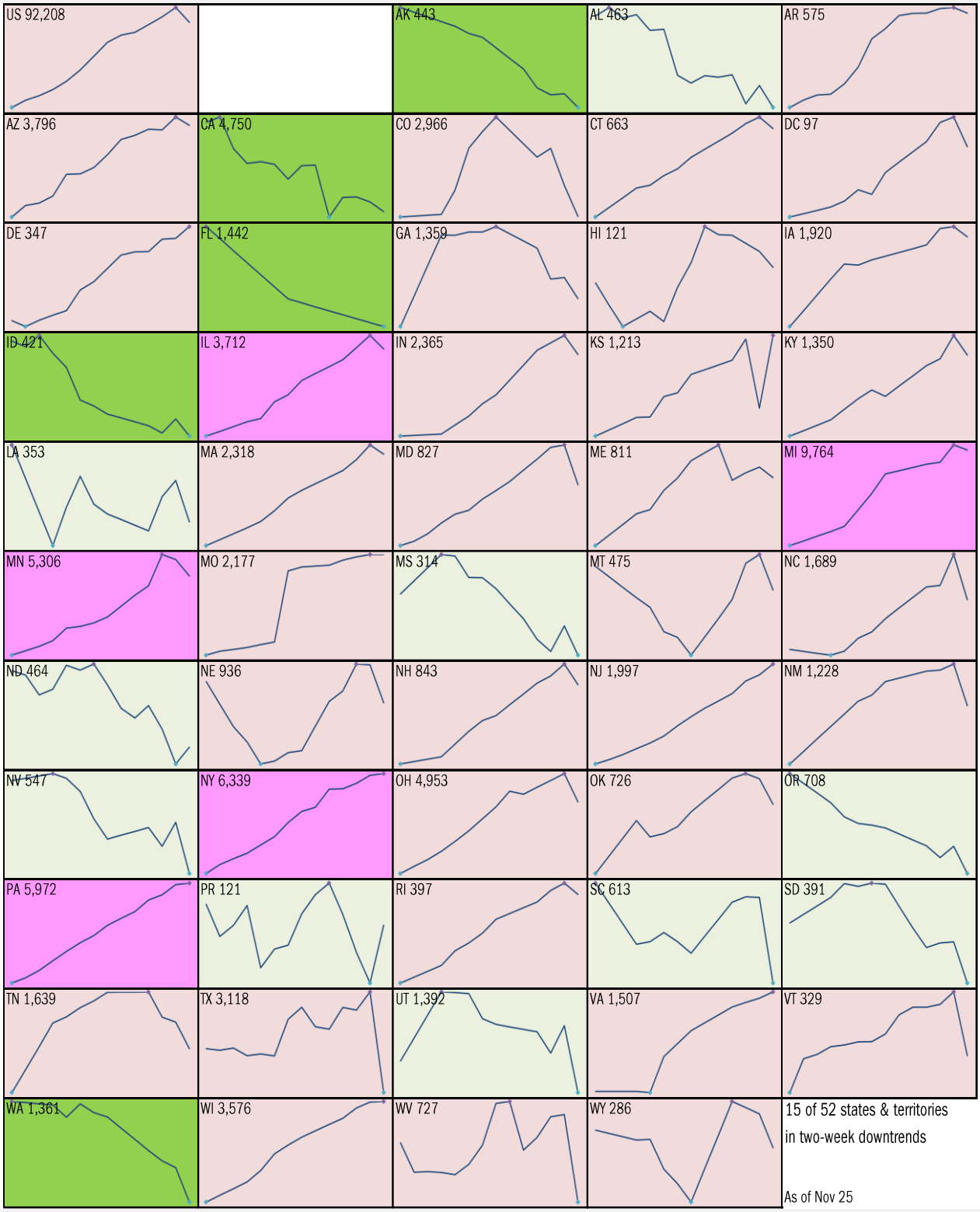


Source: Johns Hopkins, TrendMacro calculations

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

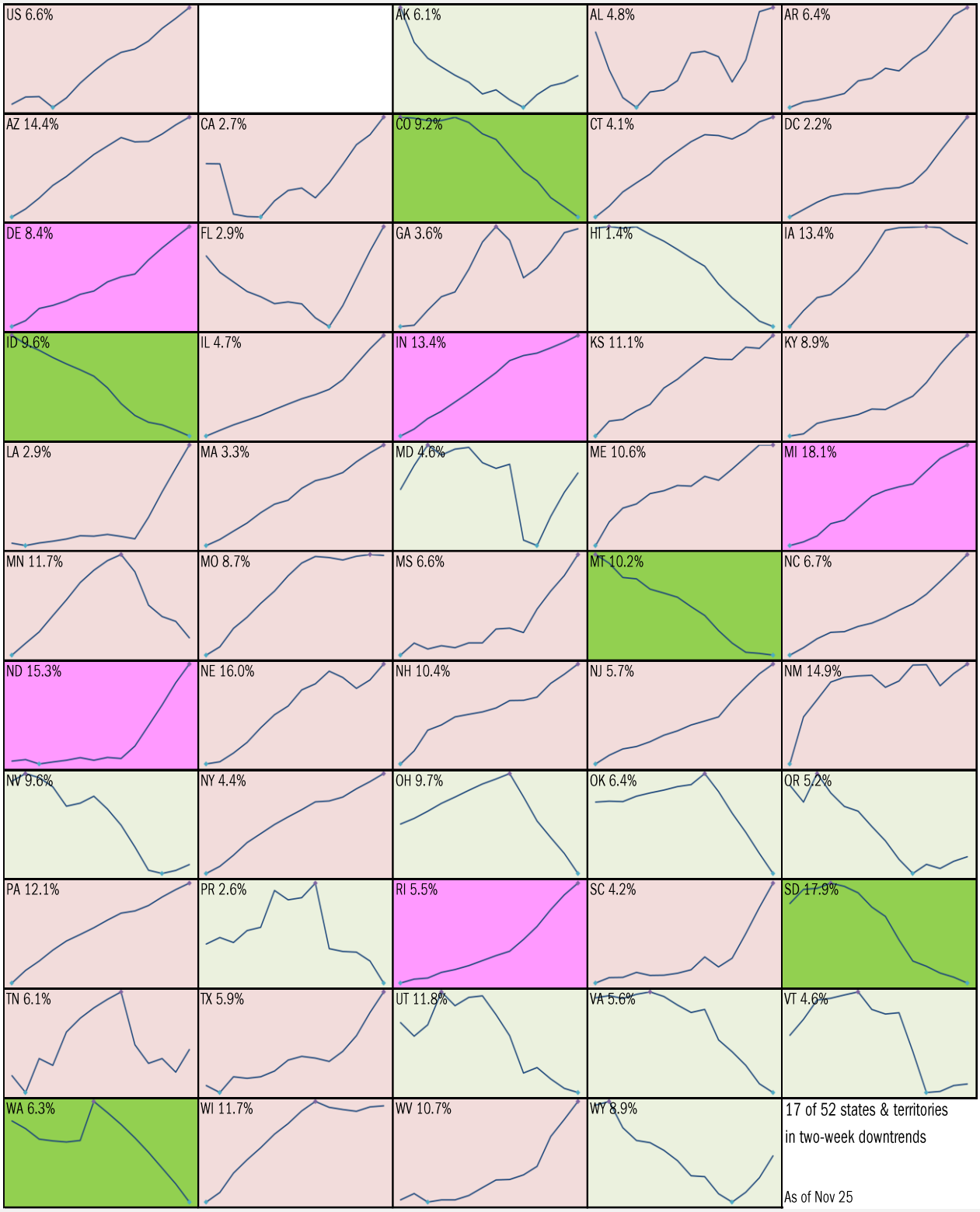


Source: Johns Hopkins, TrendMacro calculations

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

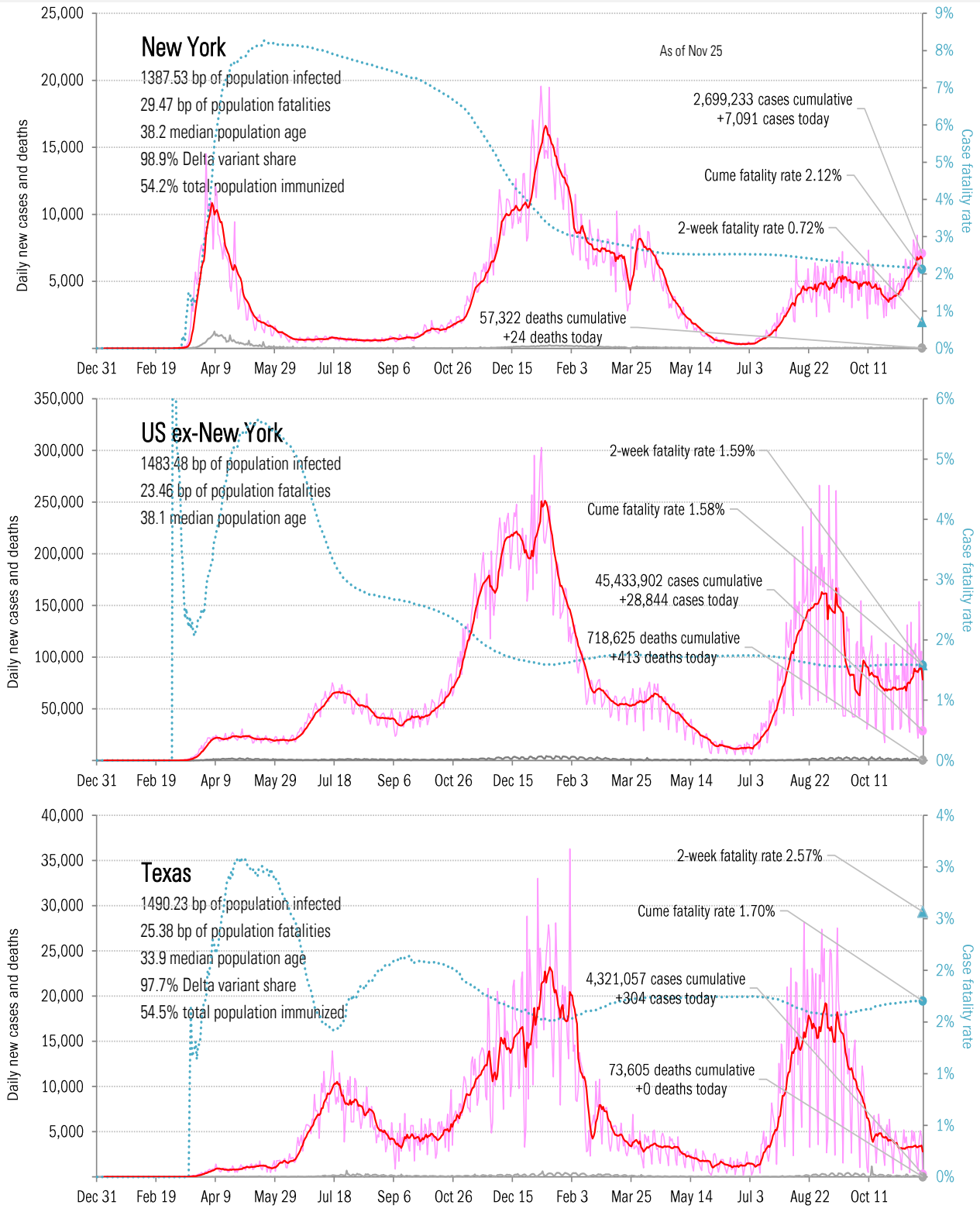
Downward trajectory Five best Upward trajectory Five worst



Source: Covid Act Now, TrendMacro calculations

From Ground Zero to the Rio Grande

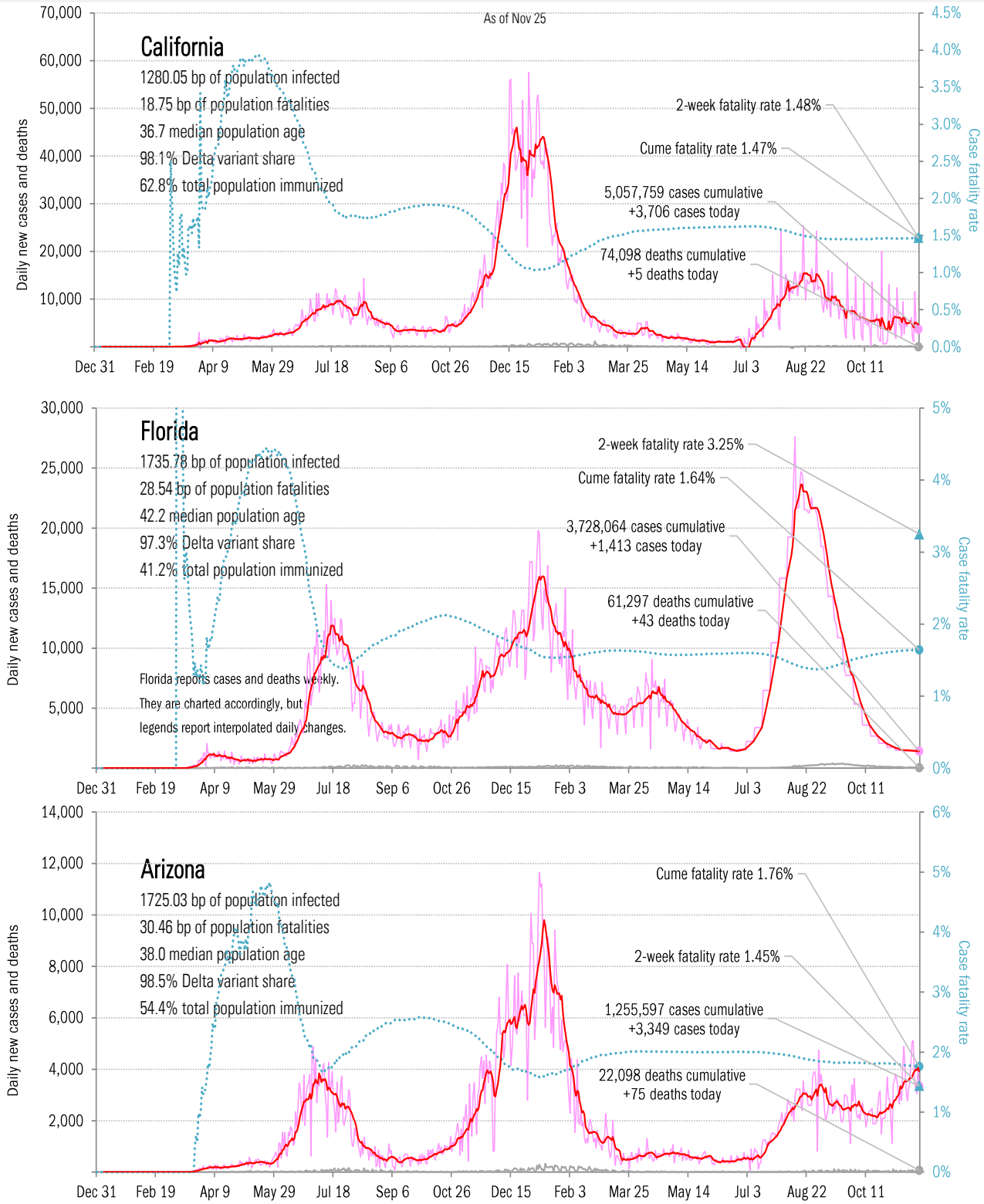
Cases: 7-day average and daily Deaths: Daily



Source: Johns Hopkins, TrendMacro calculations

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

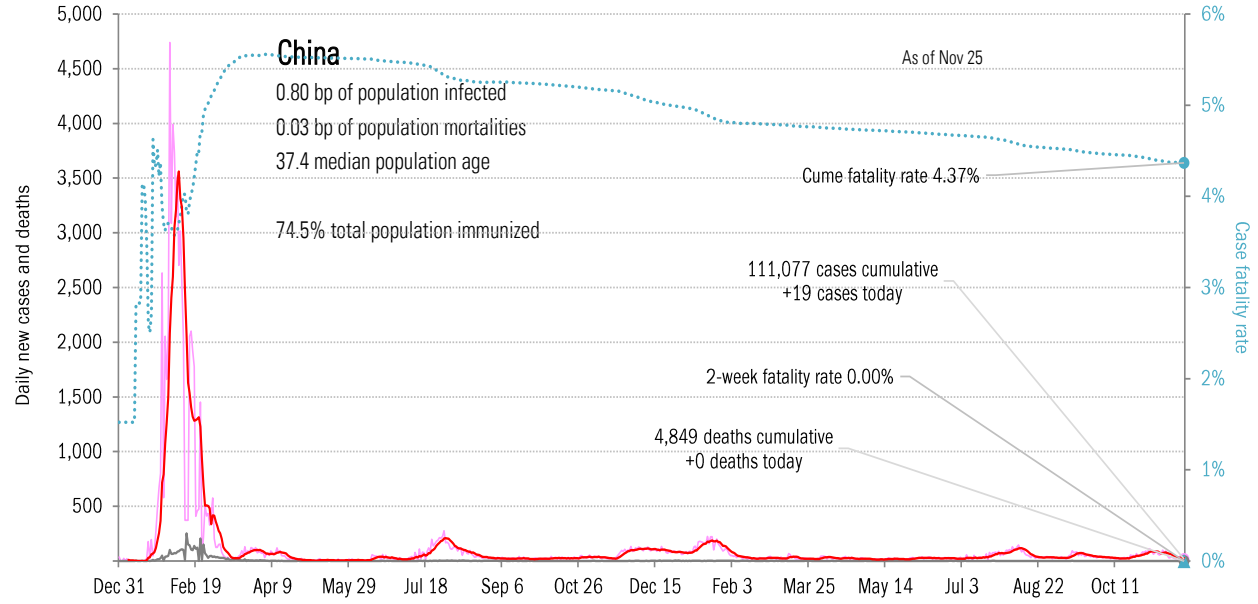
Cases: 7-day average and daily Deaths: Daily

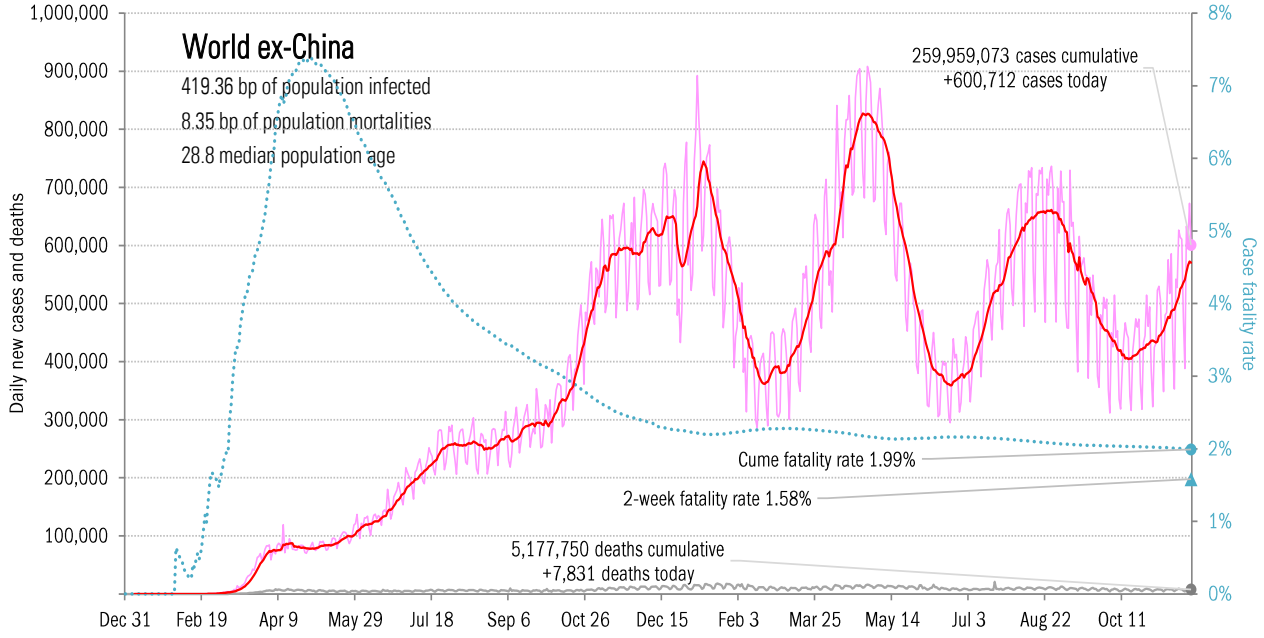


Source: Johns Hopkins, TrendMacro calculations

Patient zero… and then everyone else

Cases: 7-day average and daily Deaths: Daily

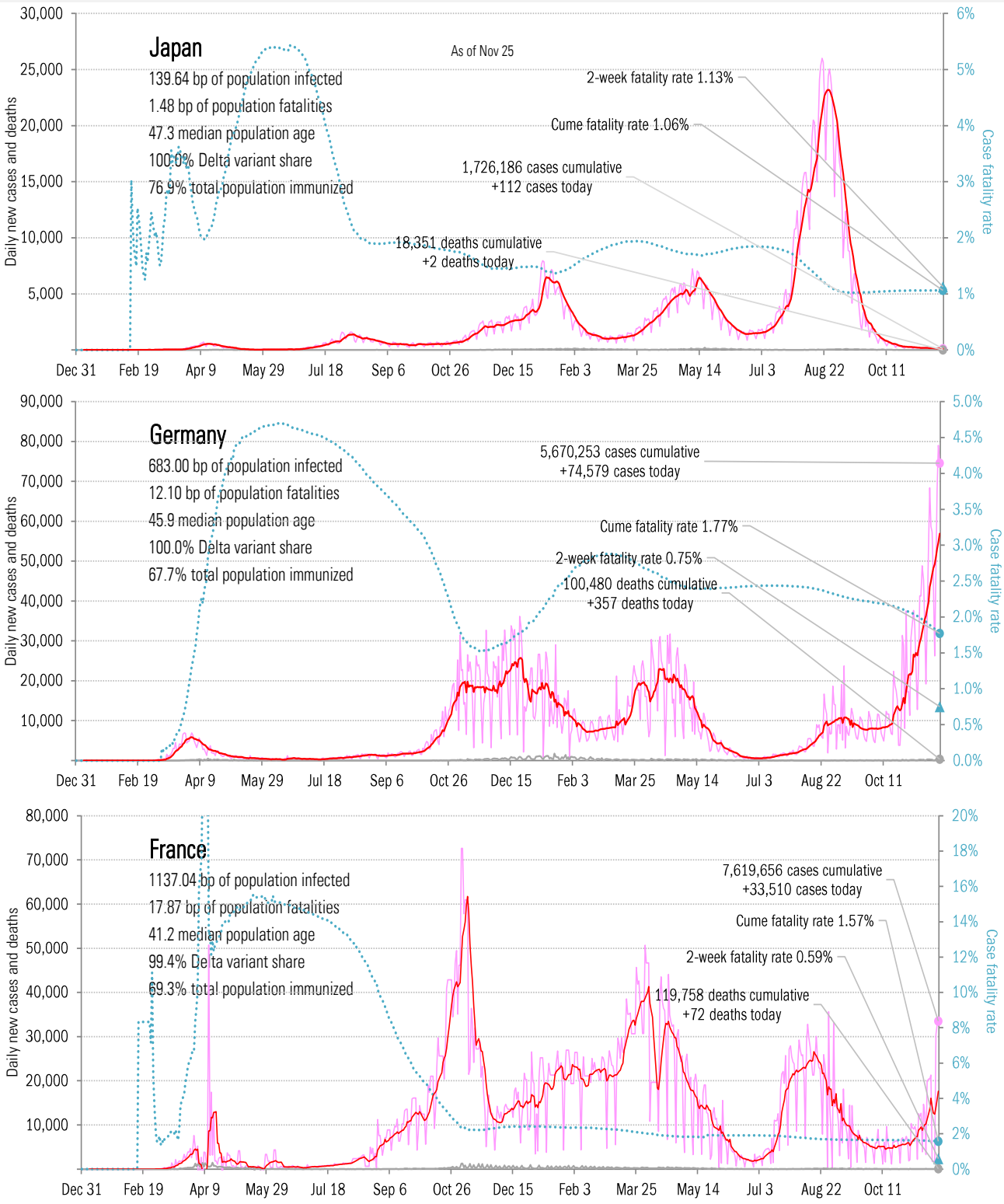




Source: Johns Hopkins, TrendMacro calculations

Impact in the largest economies

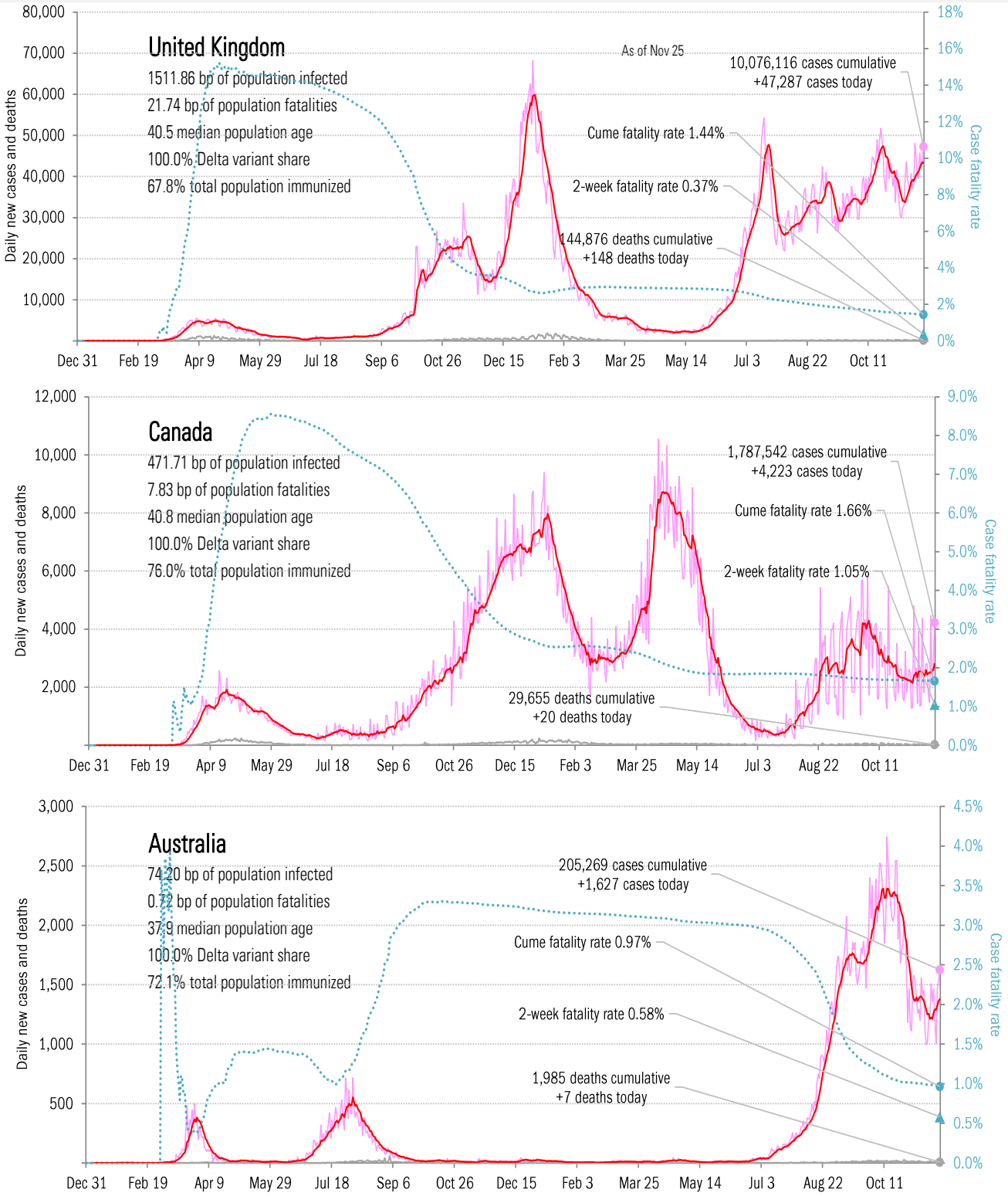
Cases: 7-day average and daily Deaths: Daily



Source: Johns Hopkins, TrendMacro calculations

Impact in The Anglosphere

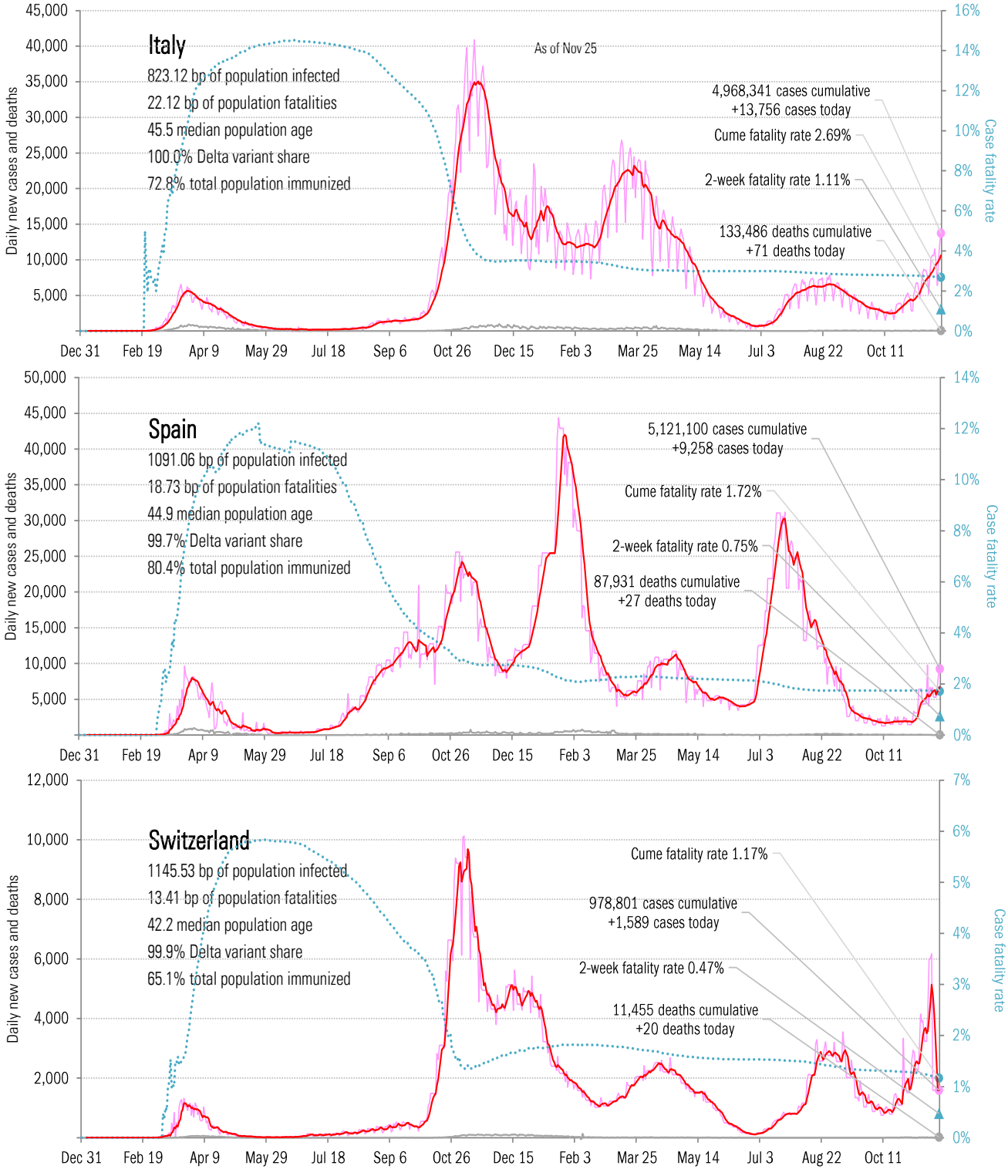
Cases: 7-day average and daily Deaths: Daily



Source: Johns Hopkins, TrendMacro calculations

Impact in continental Europe

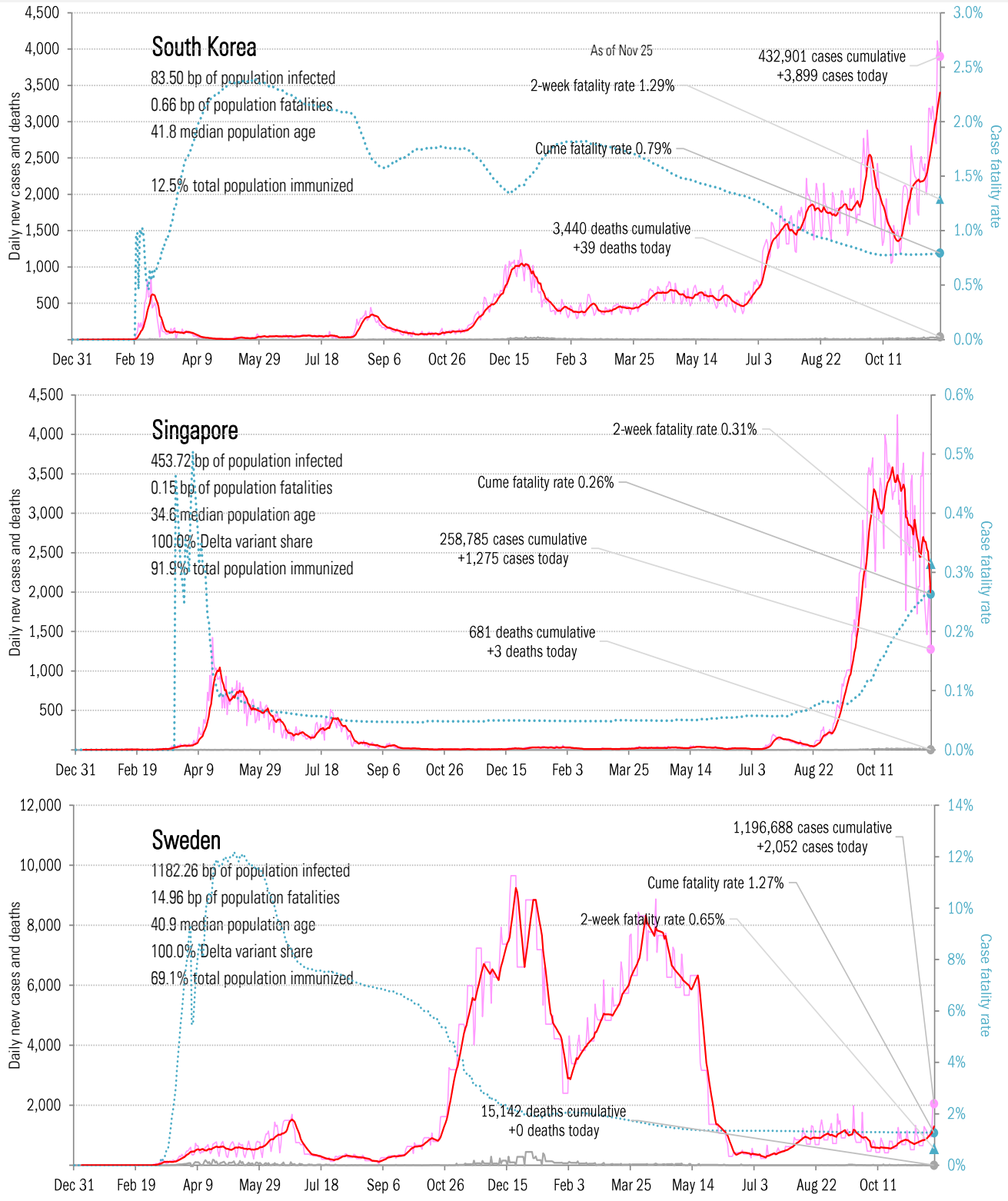
Cases: 7-day average and daily Deaths: Daily



Source: Johns Hopkins, TrendMacro calculations

Impact in other hot-spots

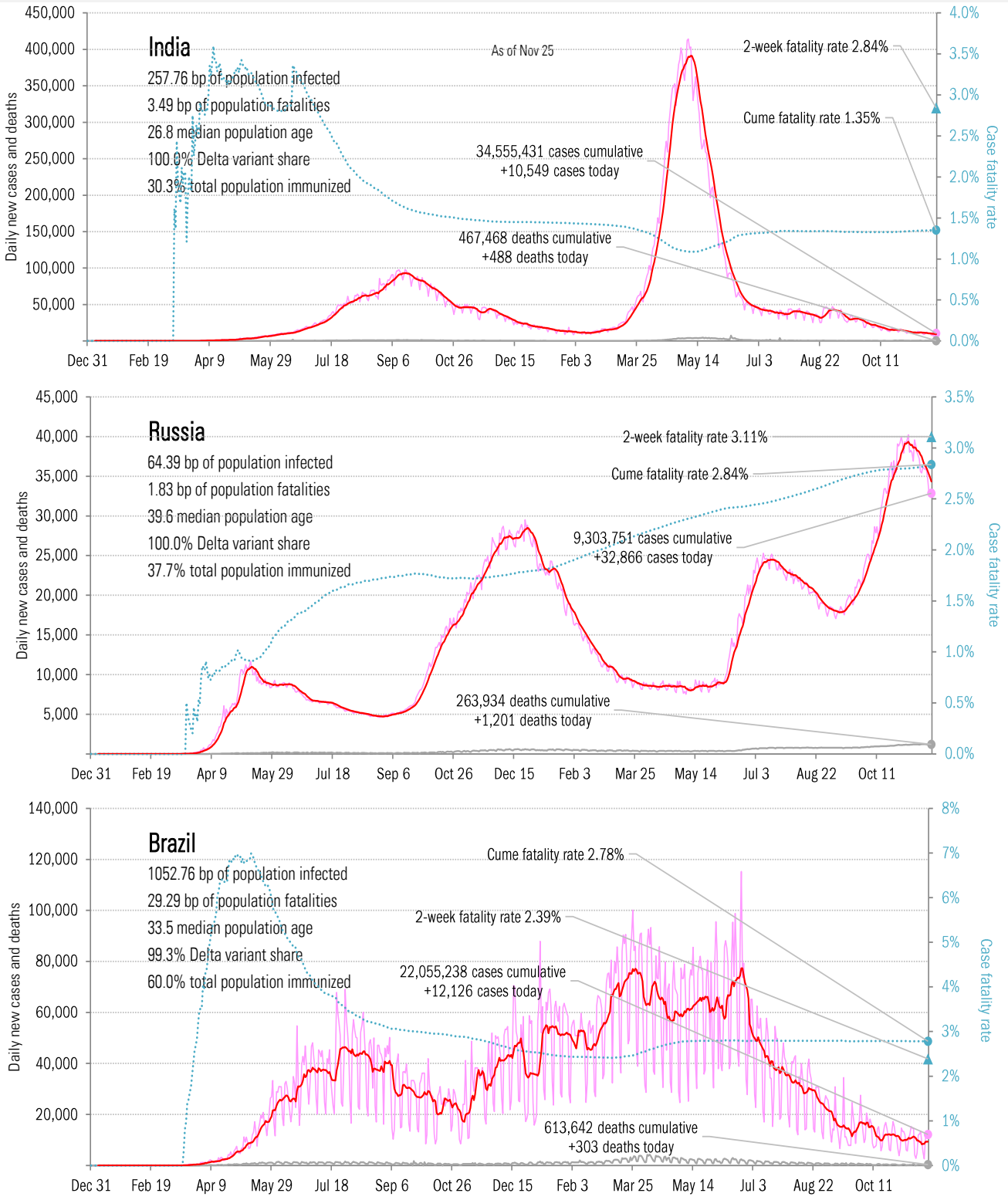
Cases: 7-day average and daily Deaths: Daily



Source: Johns Hopkins, TrendMacro calculations

Impact in the BRICs ex-China

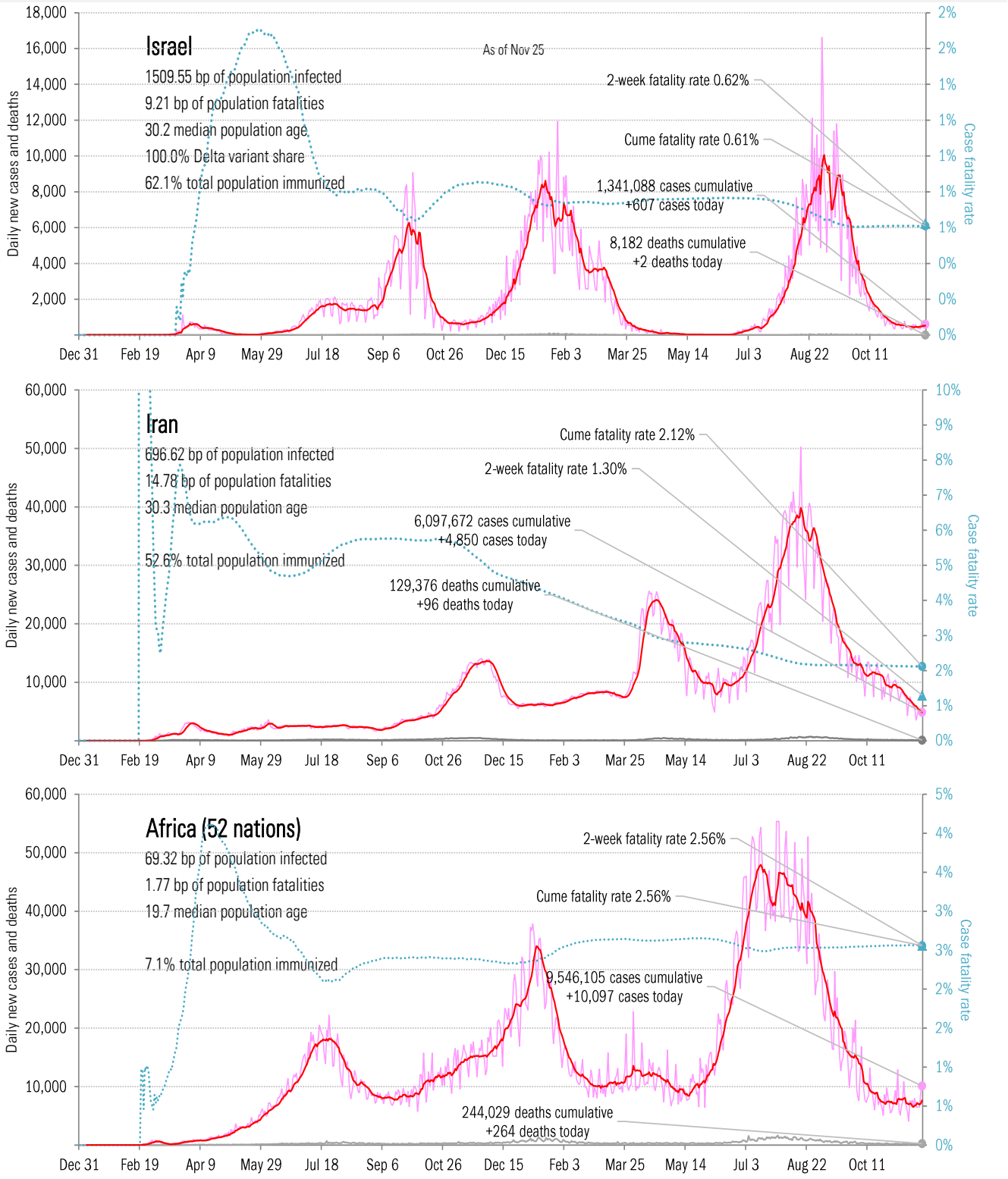
Cases: 7-day average and daily Deaths: Daily



Source: Johns Hopkins, TrendMacro calculations

Impact in the Middle East and Africa

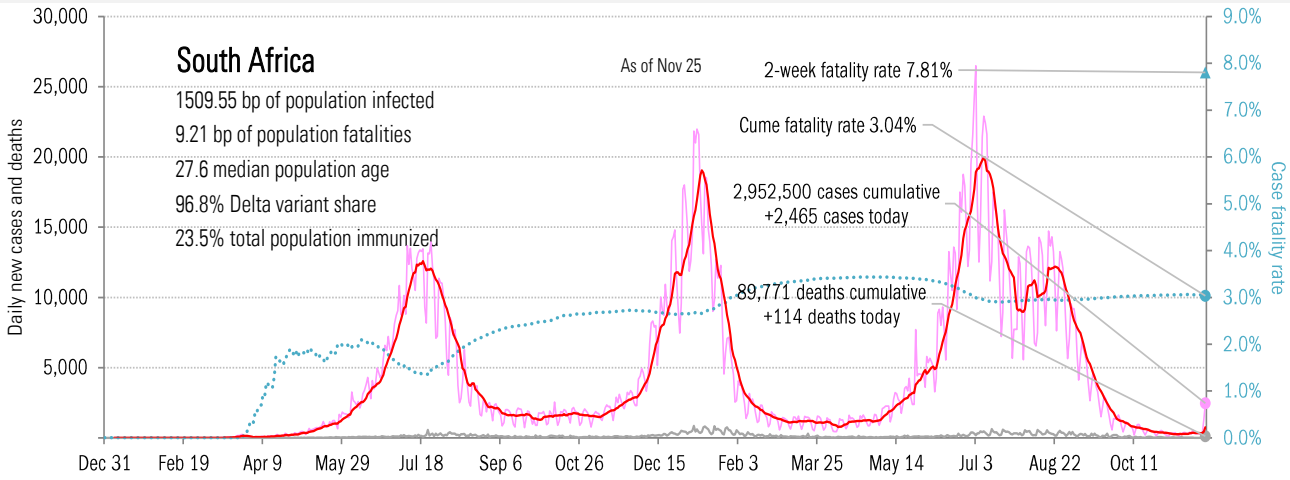
Cases: 7-day average and daily Deaths: Daily



Source: Johns Hopkins, TrendMacro calculations

Impact in Africa, continued

Cases: 7-day average and daily Deaths: Daily



Source: Johns Hopkins, TrendMacro calculations