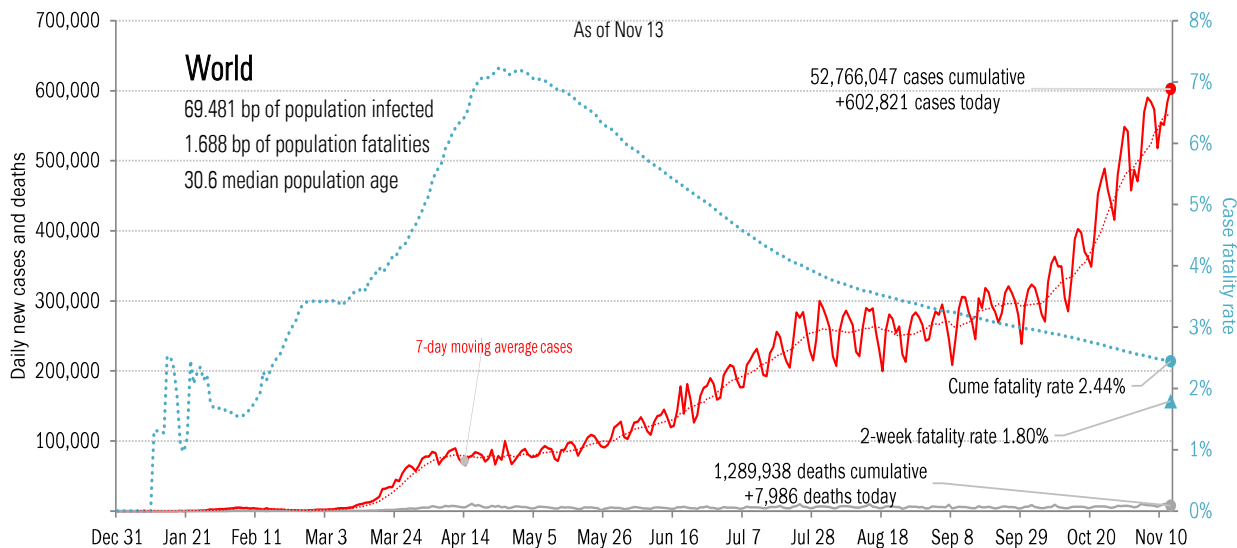
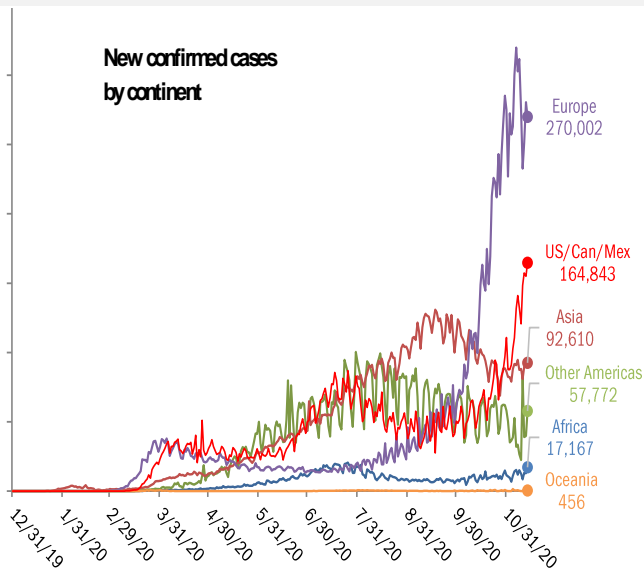


Data Insights: Covid-2019 Monitor

Friday, December 13, 2020

The global scorecard

The worst ten countries			
New cases		New Deaths	
US	+153,669	Italy	+636
India	+44,879	US	+630
Italy	+37,977	Mexico	+626
UK	+33,470	UK	+563
France	+33,172	India	+547
Brazil	+25,012	Iran	+457
Germany	+23,542	Russia	+439
Poland	+22,683	France	+425
Russia	+21,608	Spain	+356
Spain	+19,511	Poland	+275
+415,523		+4,954	
World	+602,821	World	+7,986
Top ten	69%	Top ten	62%



Source: [ECDC](https://ecdc.europa.eu/en), TrendMacro calculations

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Thomas Demas: 704 552 3625 tdemas@trendmacro.com

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The US scorecard

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

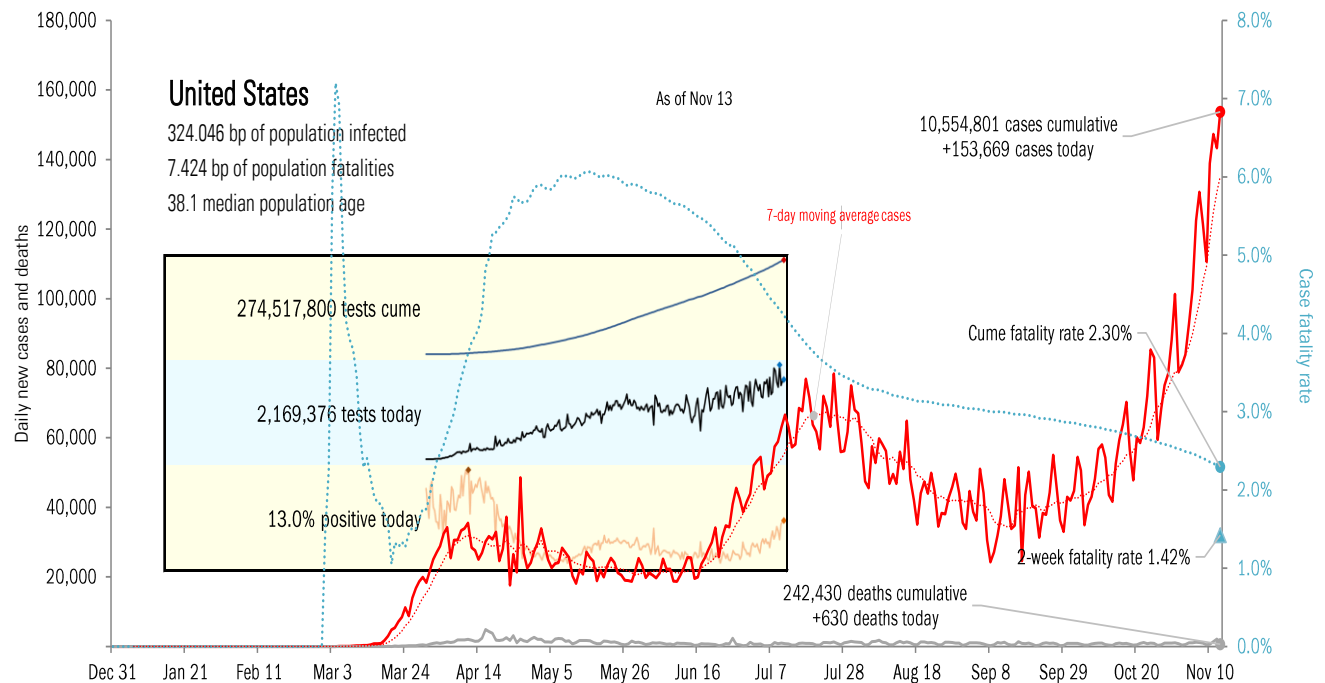
The ten worst US states

New cases		New Deaths		New in hospital		Curre cases		Curre deaths		Curre in hospital	
IL	+12,702	TX	+143	IL	+216	TX	993,841	NY	26,055	NY	89,995
TX	+8,461	GA	+75	TX	+146	CA	991,609	TX	19,147	FL	51,892
WI	+8,223	FL	+73	CH	+144	FL	851,825	CA	18,108	NJ	38,761
MI	+7,311	WI	+67	KY	+122	NY	545,762	FL	17,585	GA	32,947
MN	+7,225	IN	+51	MI	+116	IL	536,542	NJ	16,495	VA	23,315
CH	+7,101	MI	+49	PA	+116	GA	380,190	IL	10,846	AZ	22,576
CA	+6,927	PA	+49	MO	+91	WI	309,572	MA	10,242	AL	22,190
IN	+6,591	IL	+48	ID	+73	NC	303,454	PA	9,194	CH	21,558
FL	+5,504	LA	+39	TN	+69	TN	296,725	GA	8,881	IN	19,573
PA	+5,488	MN	+39	MD	+58	CH	274,457	MI	8,185	MD	18,139
+75,533		+633		+1,151		5,483,977		144,738		340,946	
All states	+150,526	All states	+1,104	All states	+1,723	All states	10,417,836	All states	234,328	All states	507,933
Top ten	50%	Top ten	57%	Top ten	67%	Top ten	53%	Top ten	62%	Top ten	67%

Some states not reporting

Five most improved US states

Fewer daily cases		Fewer new deaths		Fewer new hospitalizations		Most recoveries	
KS	-5,672	IL	-105	TX	-463	TX	+7,150
TX	-2,689	AL	-69	KS	-310	MA	+5,776
WA	-1,441	TN	-62	IN	-183	WI	+4,633
IA	-647	CH	-41	CA	-173	LA	+3,897
AZ	-631	KS	-34	CK	-146	PA	+3,896



Source: States and test data [Covid Tracking Project](#), US data [ECDC](#), TrendMacro calculations

Recommended reading

[Who Would Rig This Vote? The Fraud Was Real \(and Feathers Were Ruffled\)](#)

Mike Ives
New York Times
November 10, 2020

[Joe Biden's Lockdown Lobby](#)

Wall Street Journal
November 12, 2020

[We Don't Need Government Mandates for Covid Vaccination](#)

Joel M. Zinberg
Wall Street Journal
November 12, 2020

[Covid and the Church in Delaware](#)

New York Times
November 12, 2020

[Covid survivors could have potentially life-threatening allergic reaction to hair dye](#)

Laura SharmanSarah Ward
The Mirror
November 12, 2020

[Nearly 10,000 mink dead from Covid-19 outbreak at Utah fur farms](#)

Victoria Bekiempis
The Guardian
October 11, 2020

[The Children Never Had the Coronavirus. So Why Did They Have Antibodies?](#)

Gina Kolata
New York Times
November 10, 2020

[Are we overly worried about antivaxxers?](#)

Tom Chivers
UnHerd
November 12, 2020

[Biden Covid advisor says U.S. lockdown of 4 to 6 weeks could control pandemic and revive economy](#)

Will Feuer
CNBC
November 11, 2020

[Exclusive: Europe to pay less than U.S. for Pfizer vaccine under initial deal: source](#)

Francesco Guarascio
Reuters
November 11, 2020

Meme of day

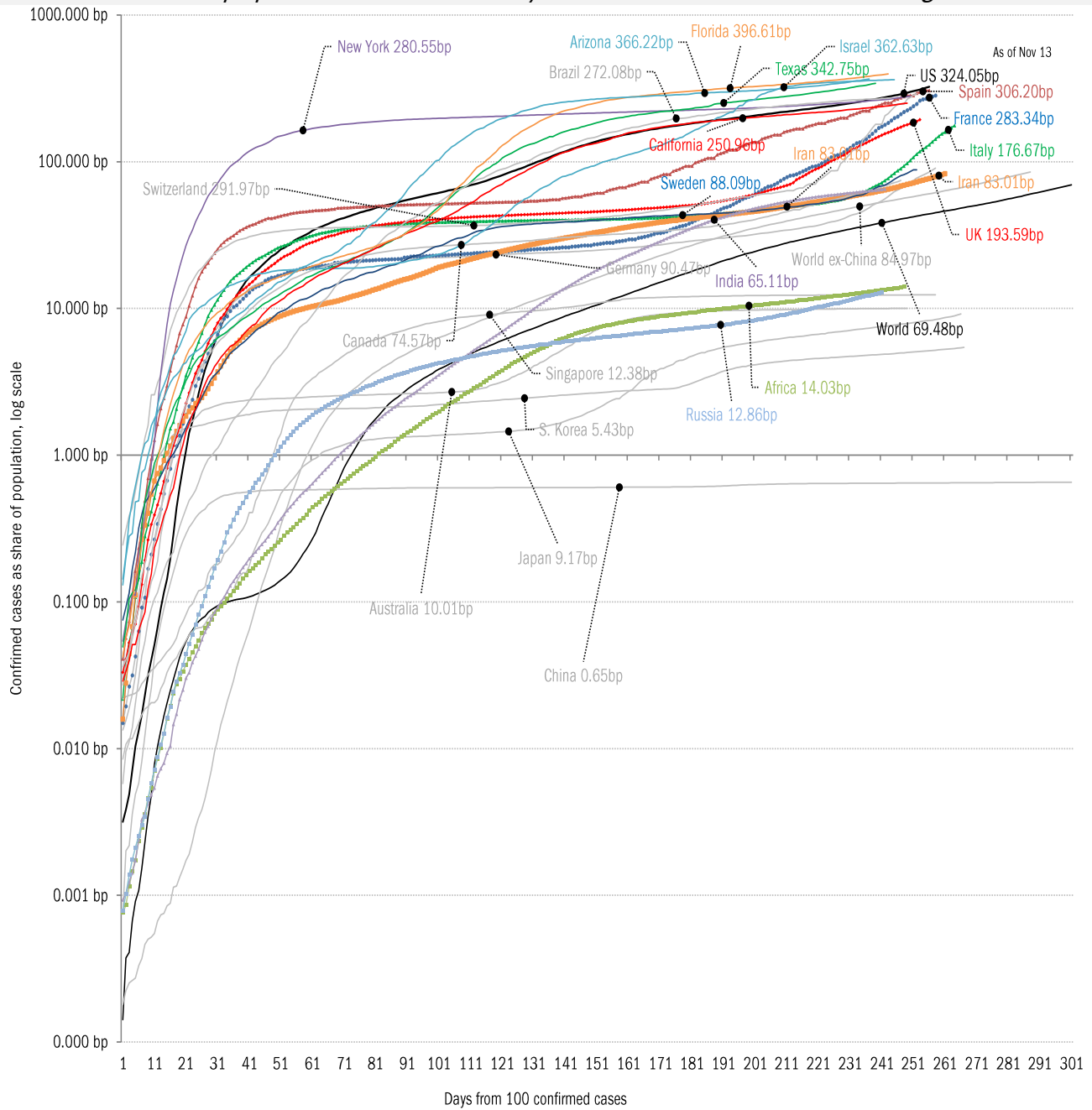


Good morning doctor

Ma'am... I'm your hairdresser

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

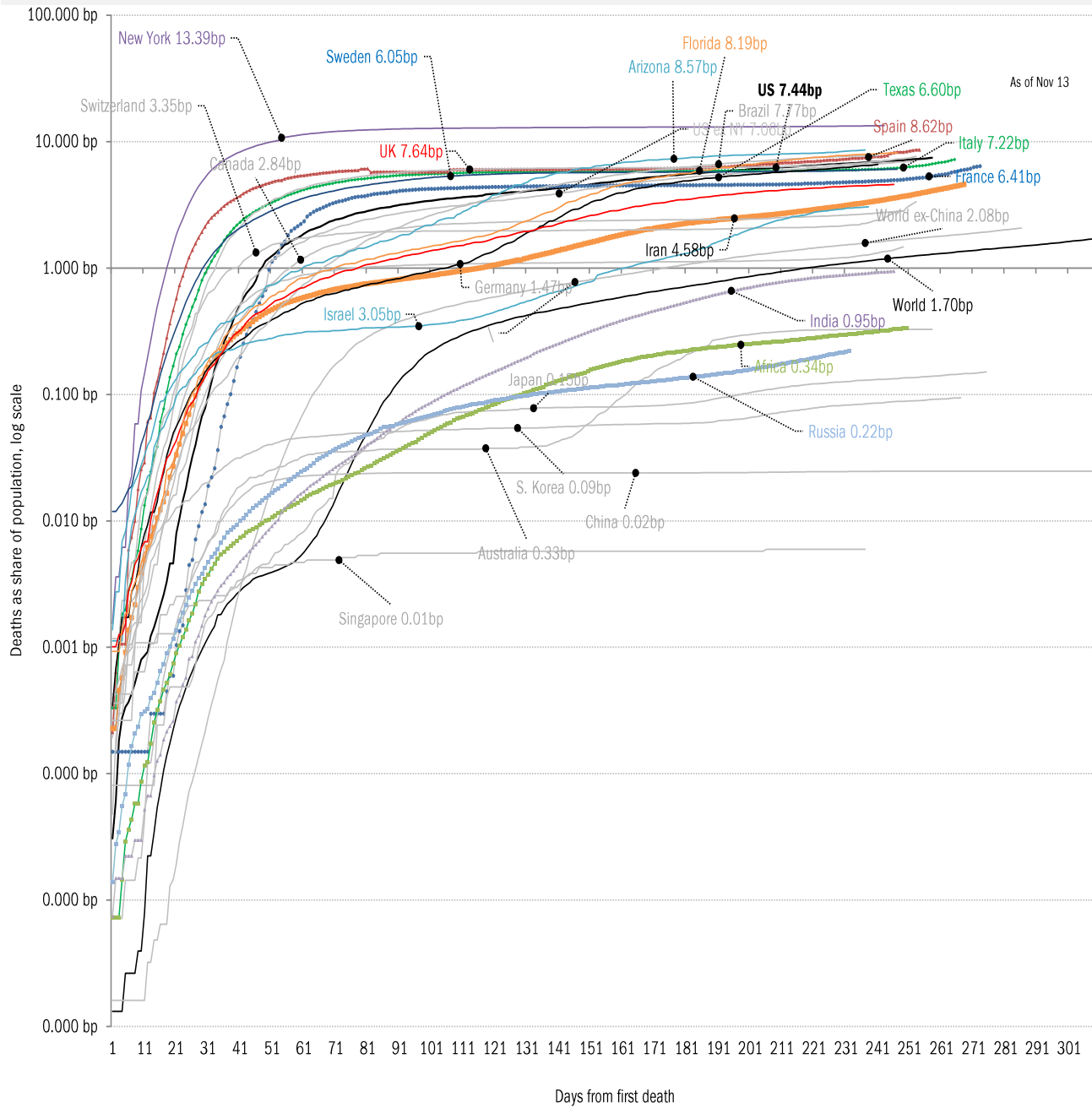
The coronavirus case accelerometer... tracking the world's infection curves
Share of infected population from first day with 100 confirmed cases, log scale



Source: [ECDC](#), TrendMacro calculations

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

Share of deceased population from day of first fatality

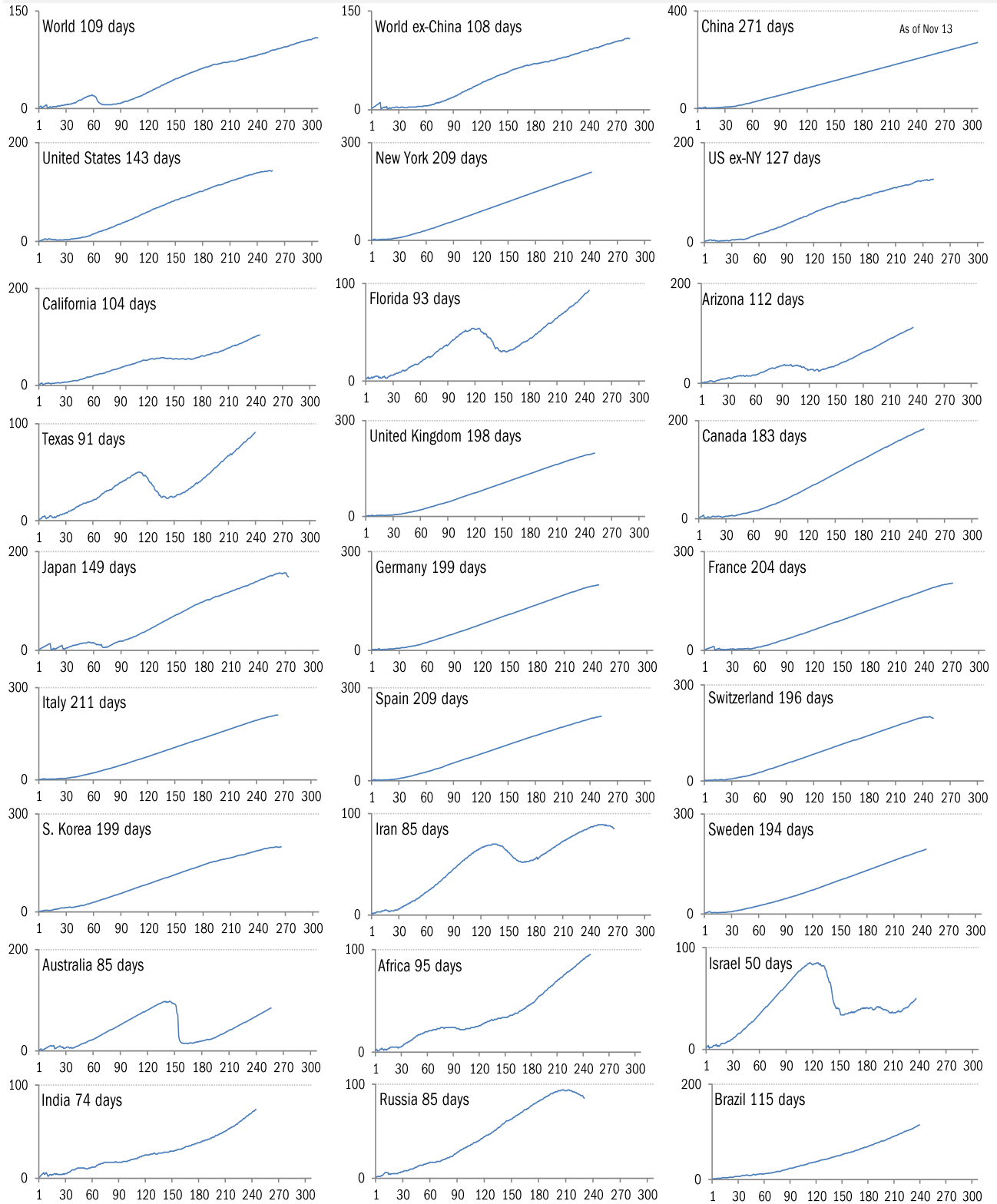


Source: [ECDC](#), TrendMacro calculations

Our most reliable evidence of slowing exponential growth of Covid-2019

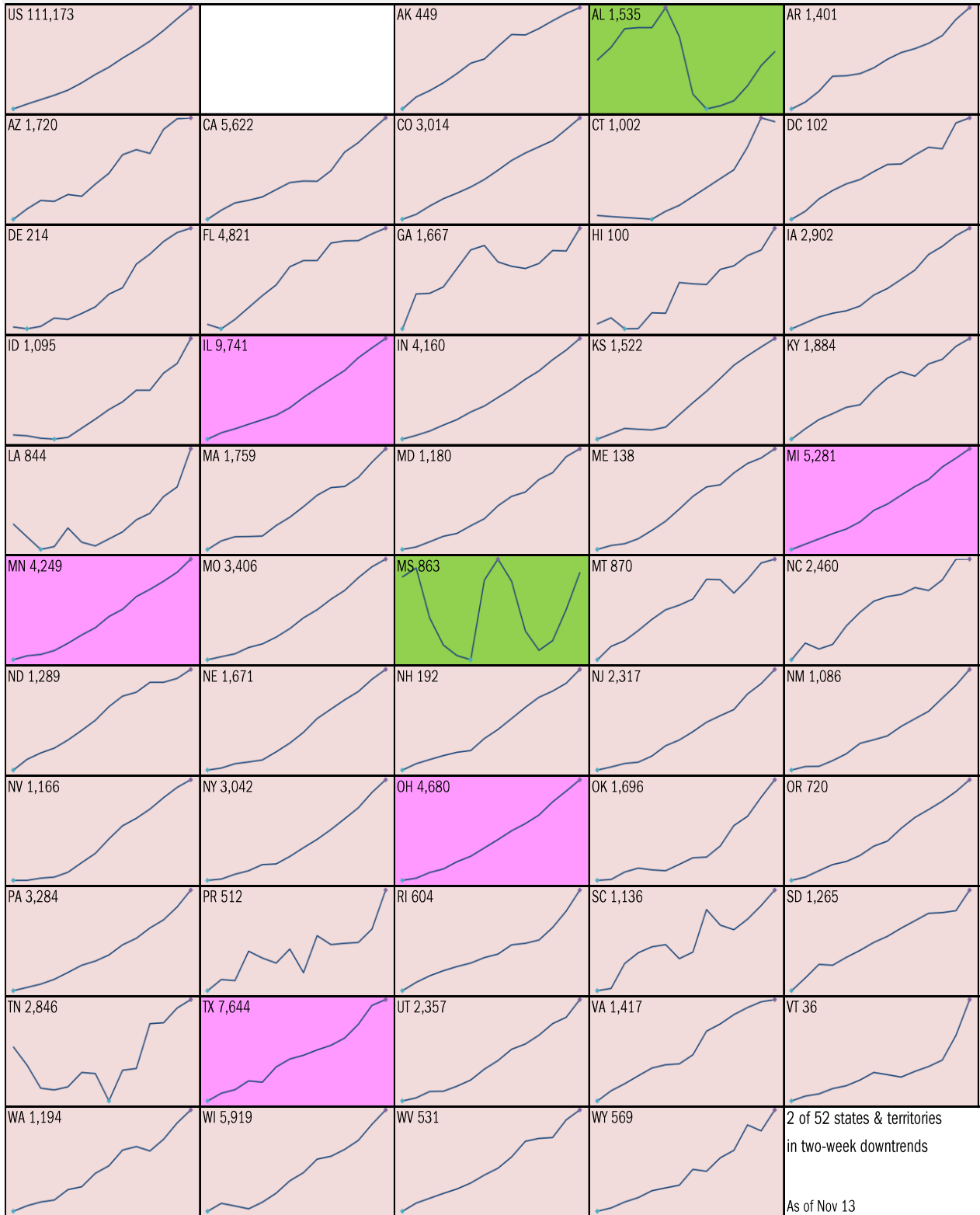
Vertical: days to double deaths Horizontal: days from first death

Flat indicates exponential spread Declining indicates supra-exponential spread Rising indicates sub-exponential spread



Source: [ECDC](#), 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

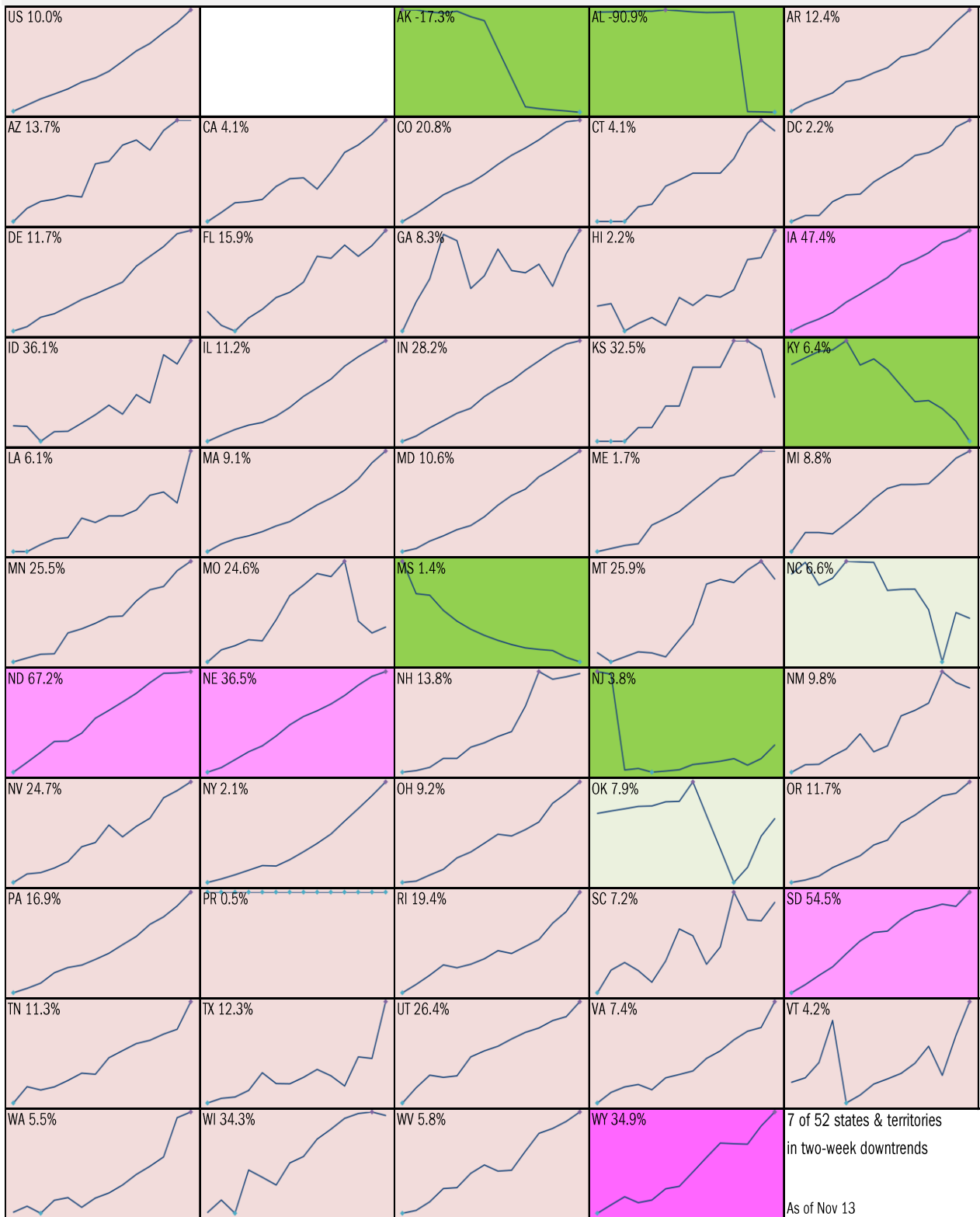


Source: [Covid Tracking Project](#), TrendMacro calculations

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



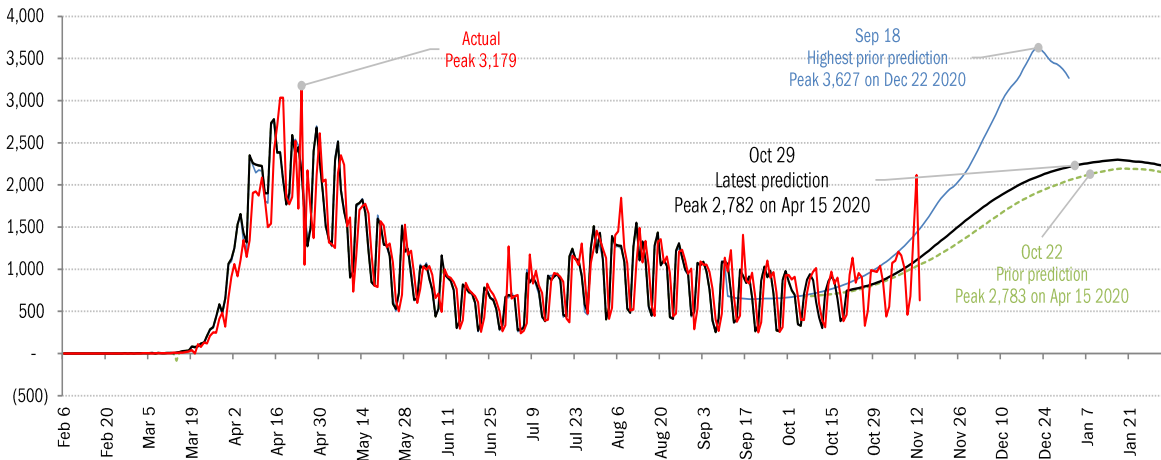
Source: [Covid Tracking Project](#), TrendMacro calculations

Reality-checking the models: actuals versus [IHME](#) predictions

New daily fatalities

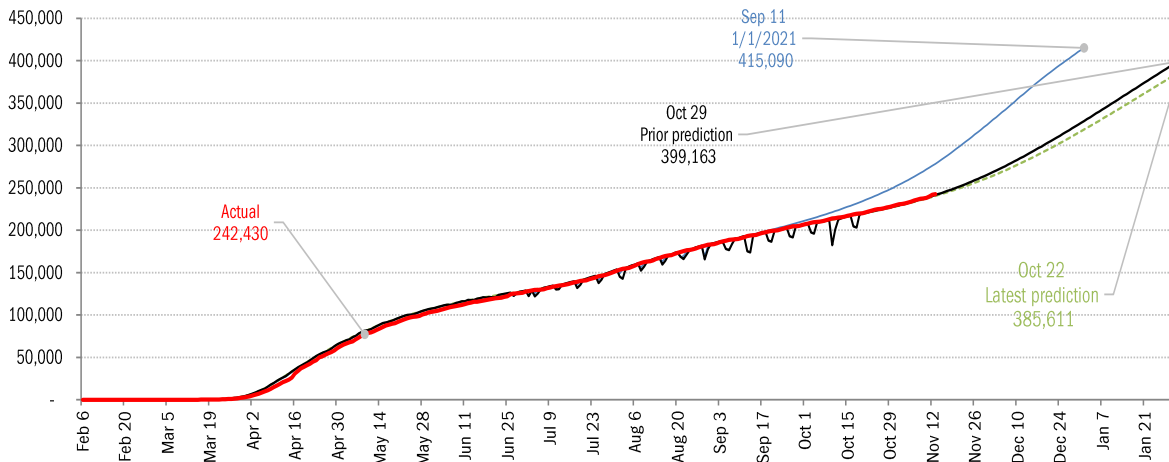
As of Nov 13

Actual versus first, highest, lowest and latest model mean predictions

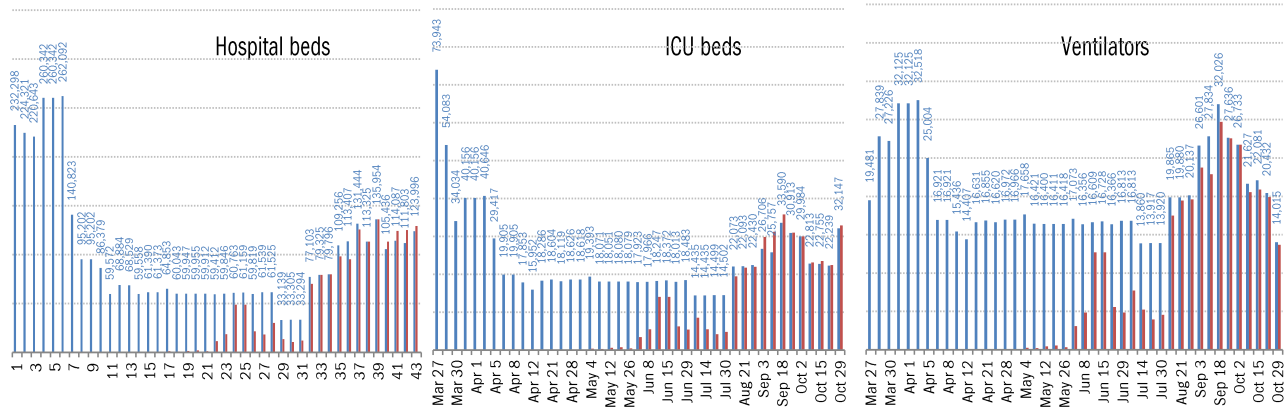


Cumulative fatalities

Actual versus first, highest, lowest and latest model mean predictions

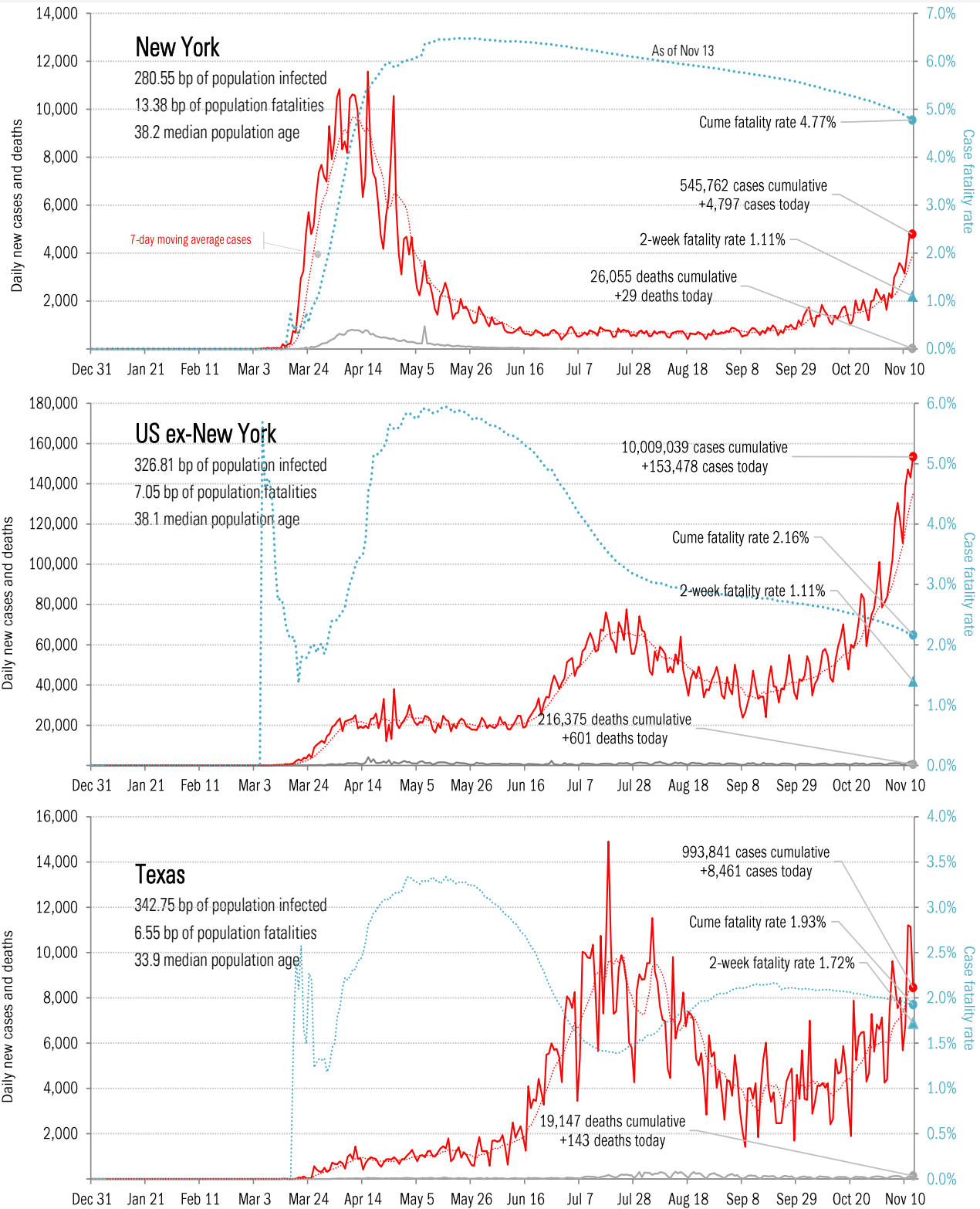


Healthcare system stress, **peak** and **ultimate** estimated at each model revision



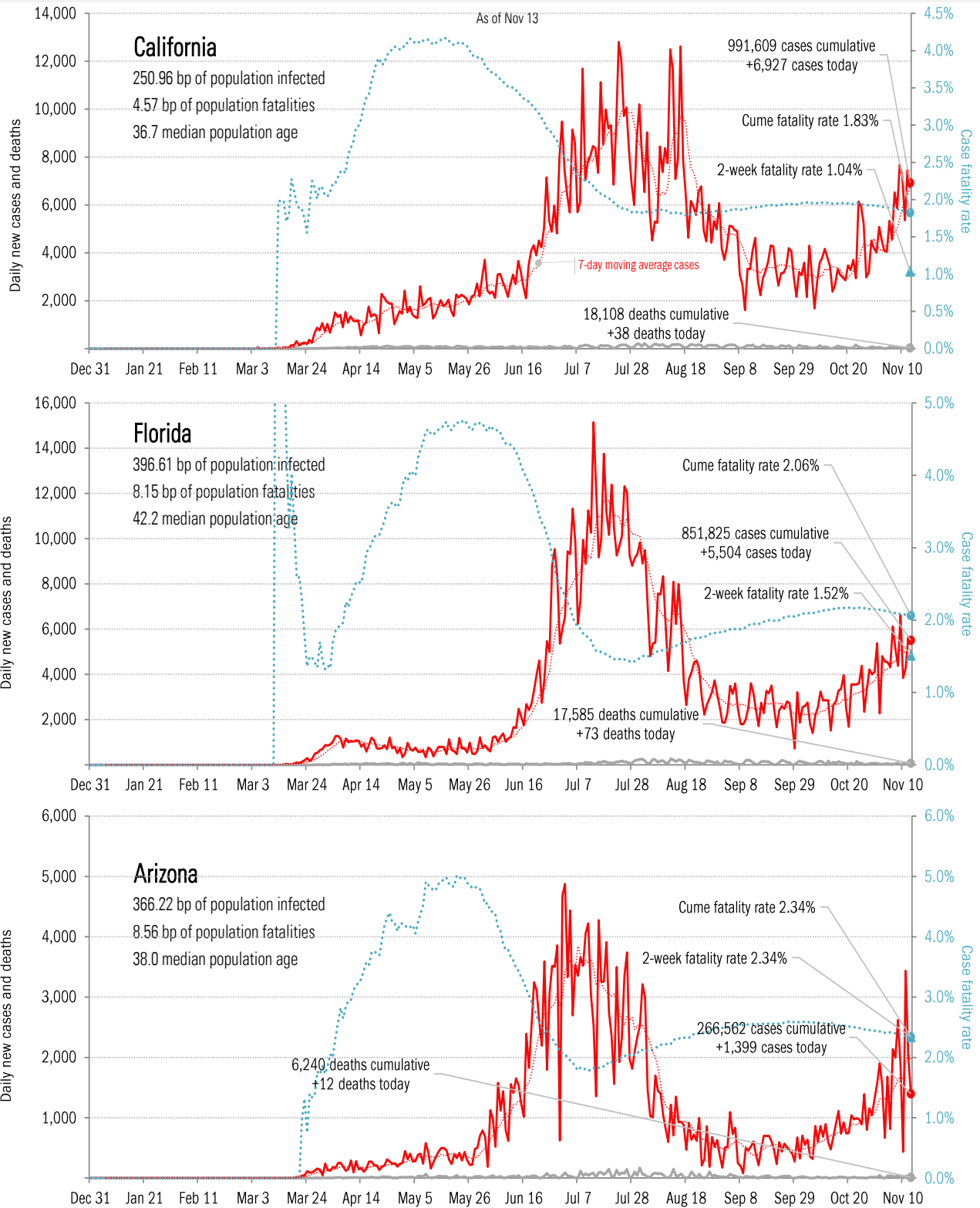
Source: [ECDC](#), [IHME](#), TrendMacro calculations

From Ground Zero to the Rio Grande



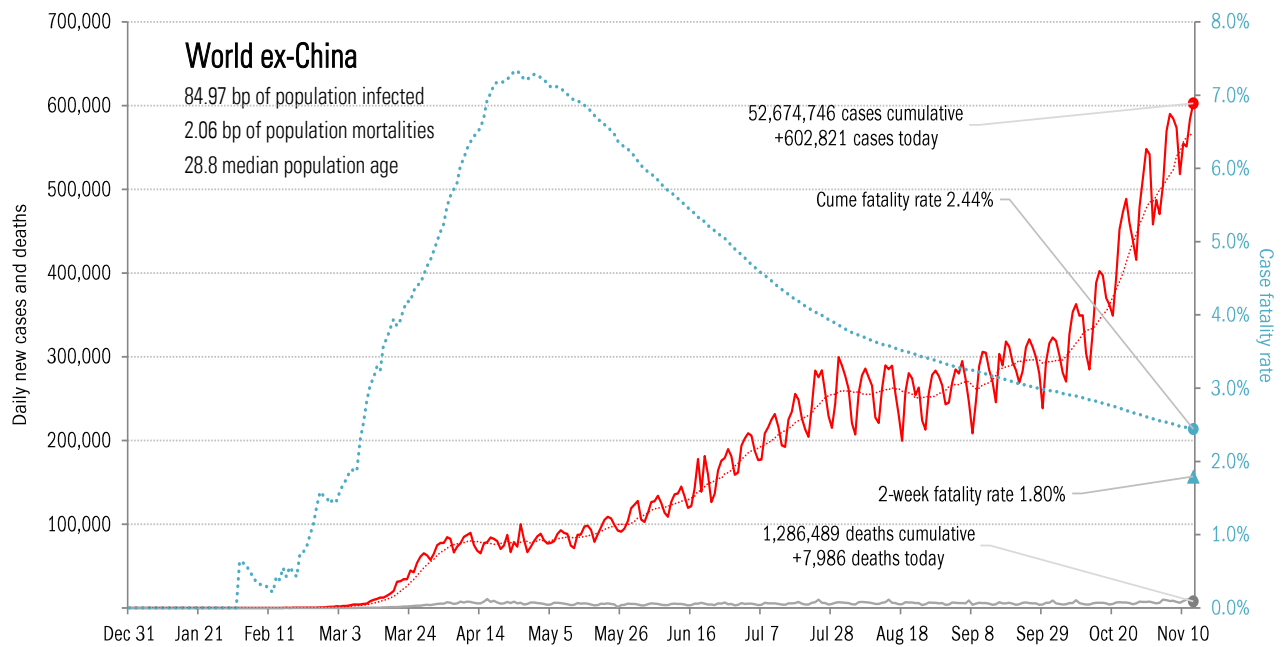
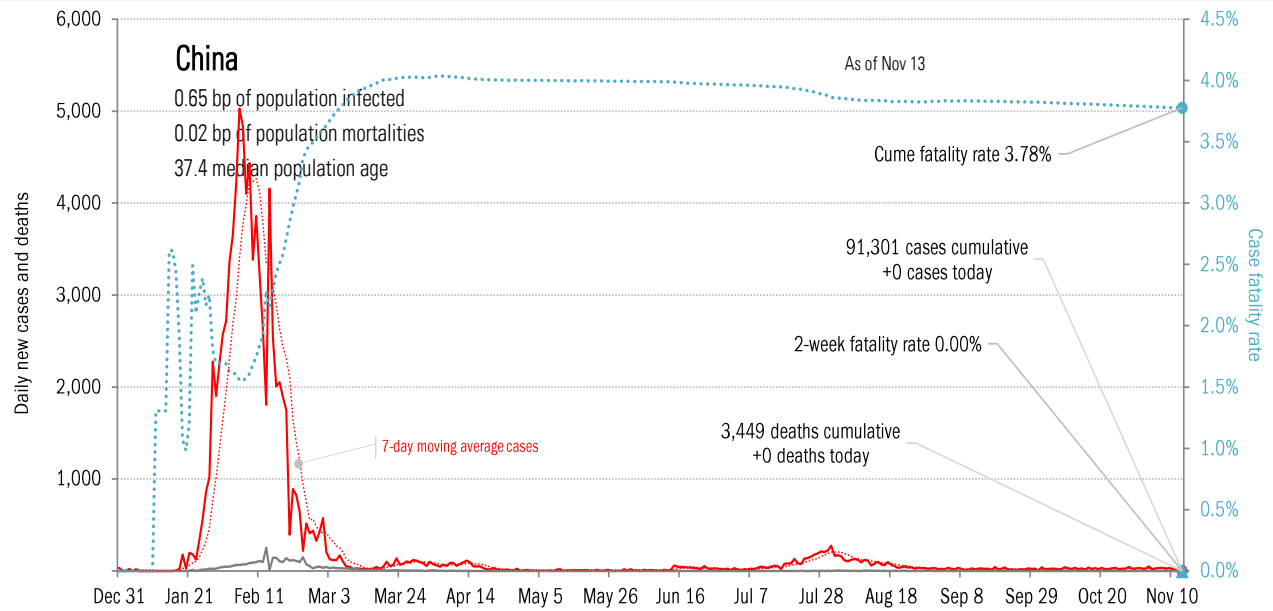
Source: [ECDC](#), TrendMacro calculations

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



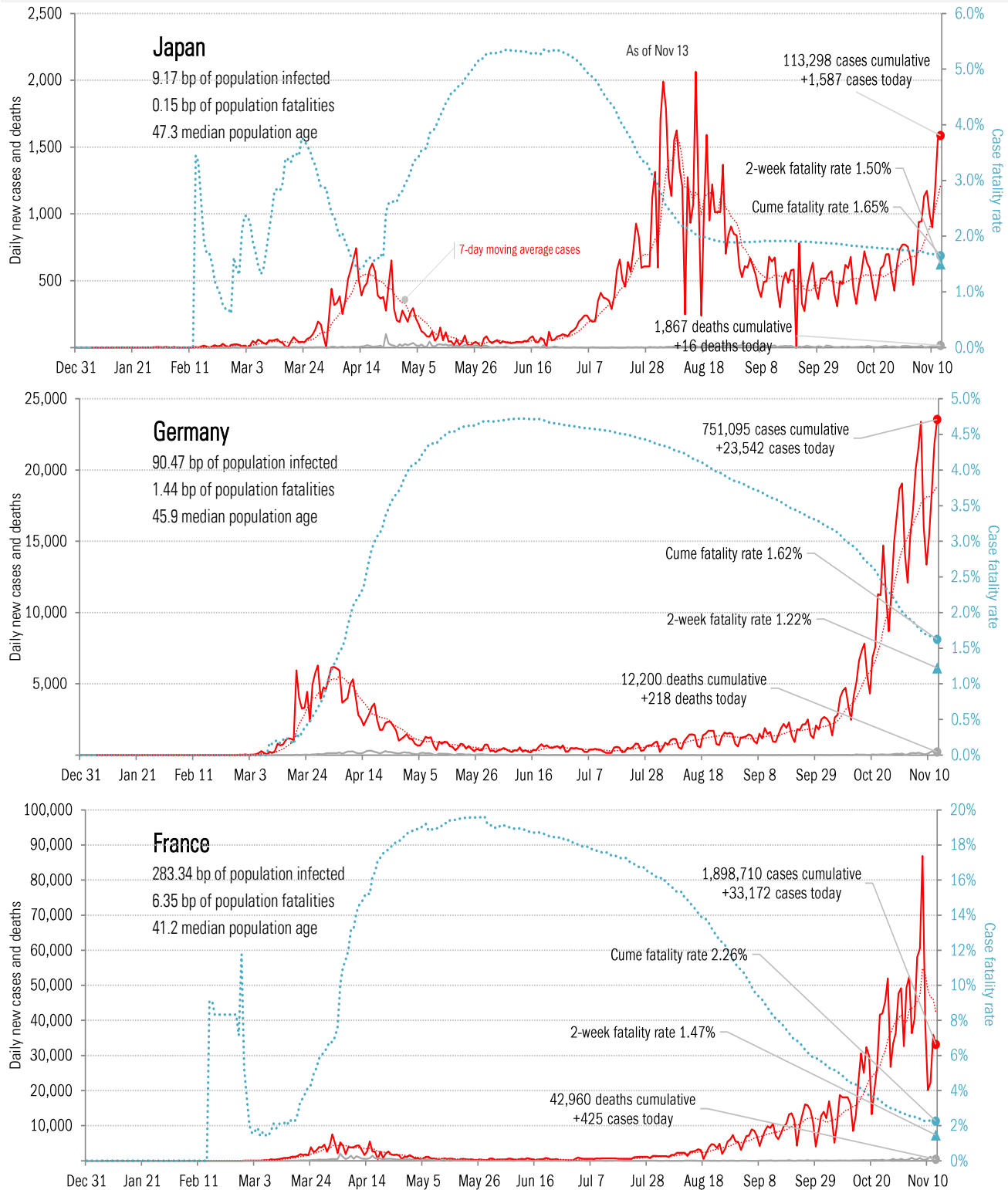
Source: [ECDC](#), TrendMacro calculations

Patient zero... and then everyone else



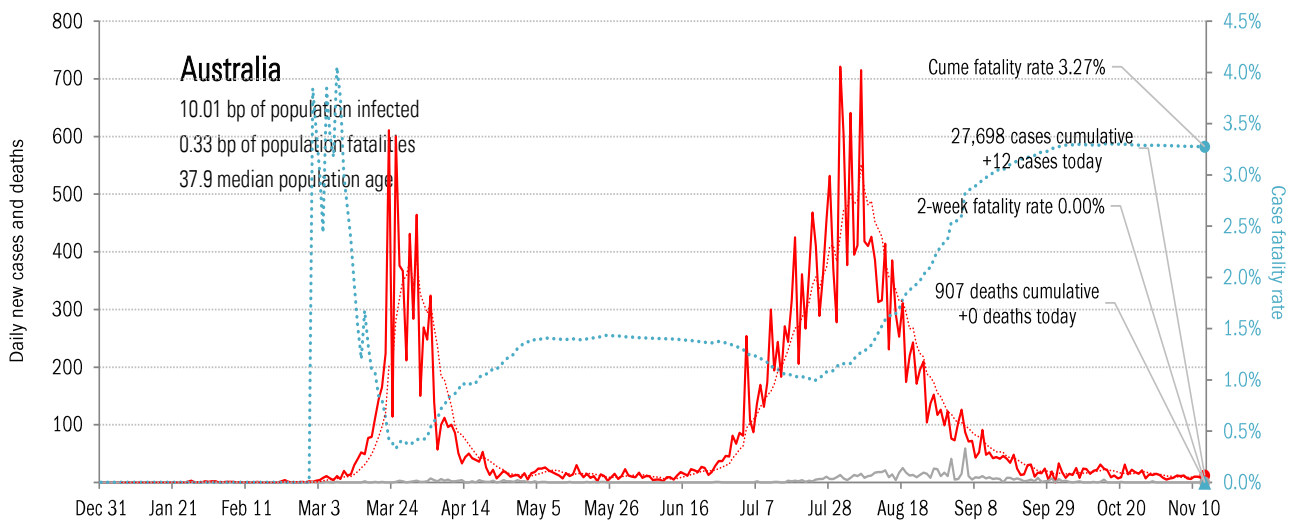
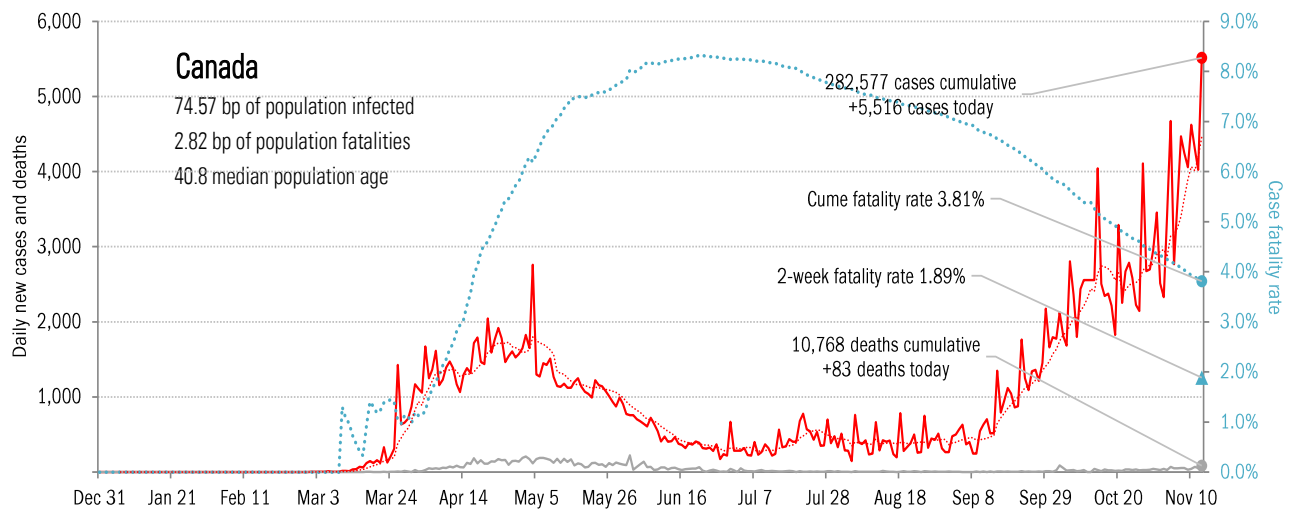
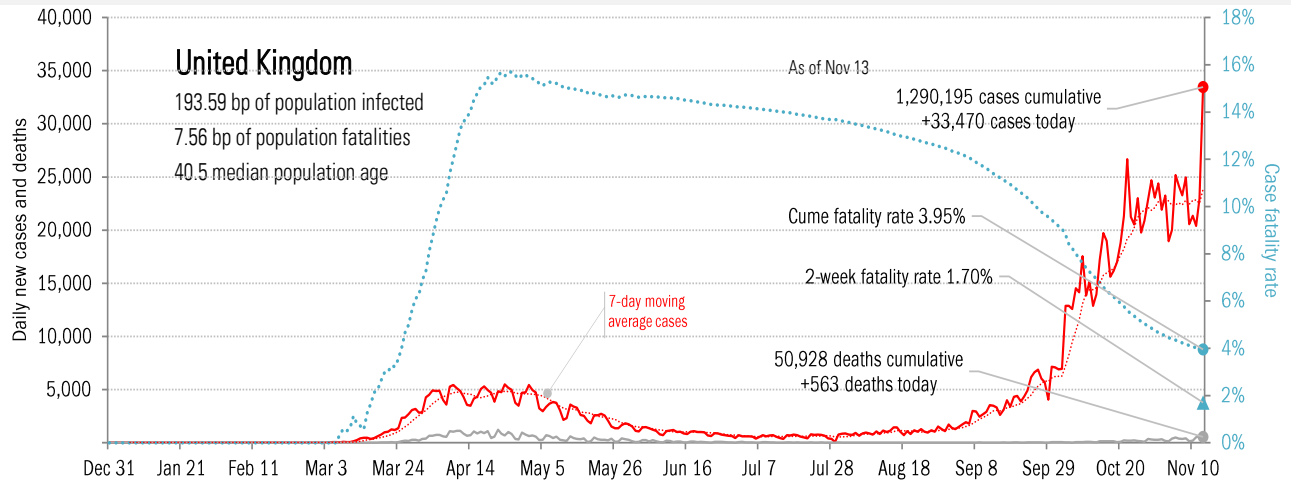
Source: [ECDC](#), TrendMacro calculations

Impact in the largest economies



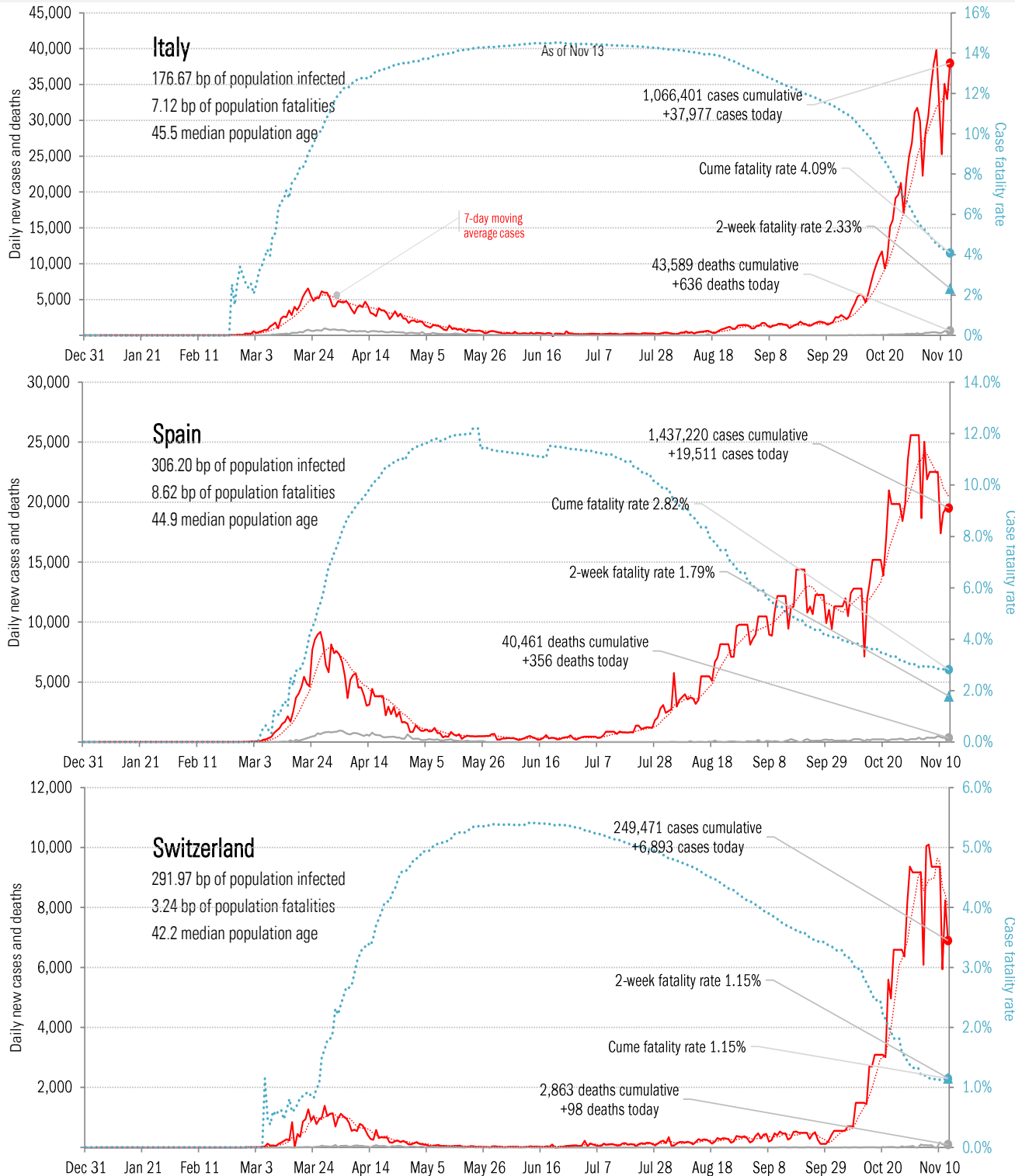
Source: [ECDC](#), TrendMacro calculations

Impact in The Anglosphere



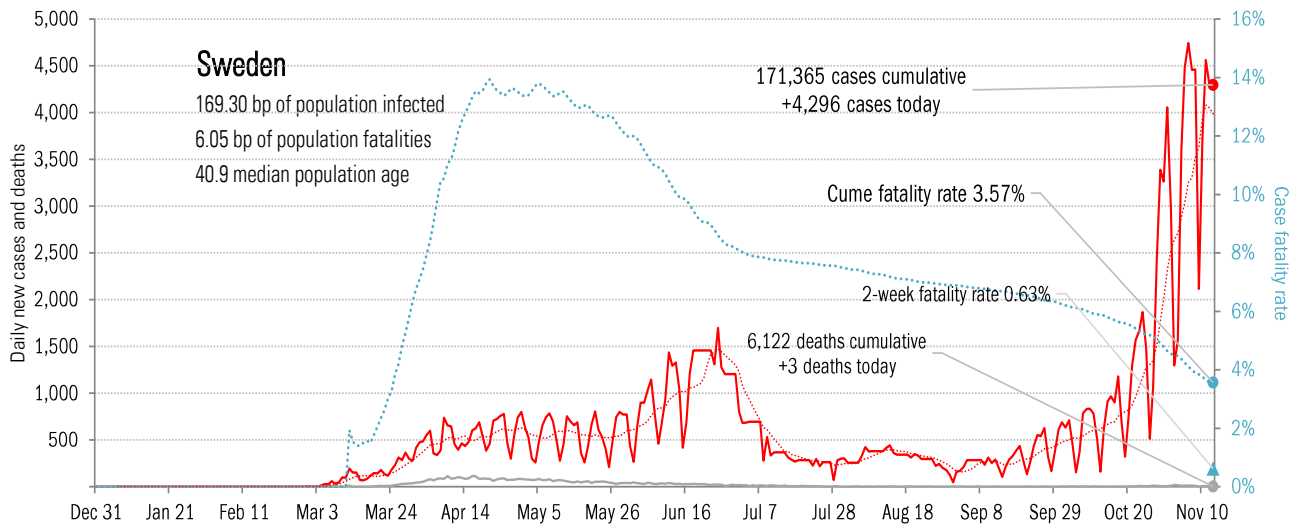
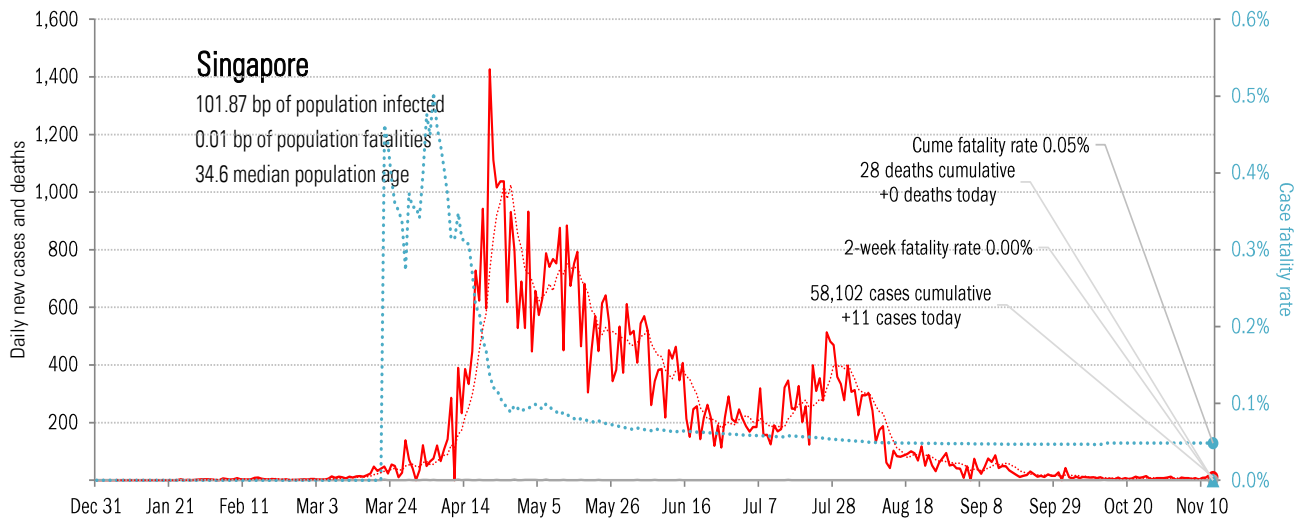
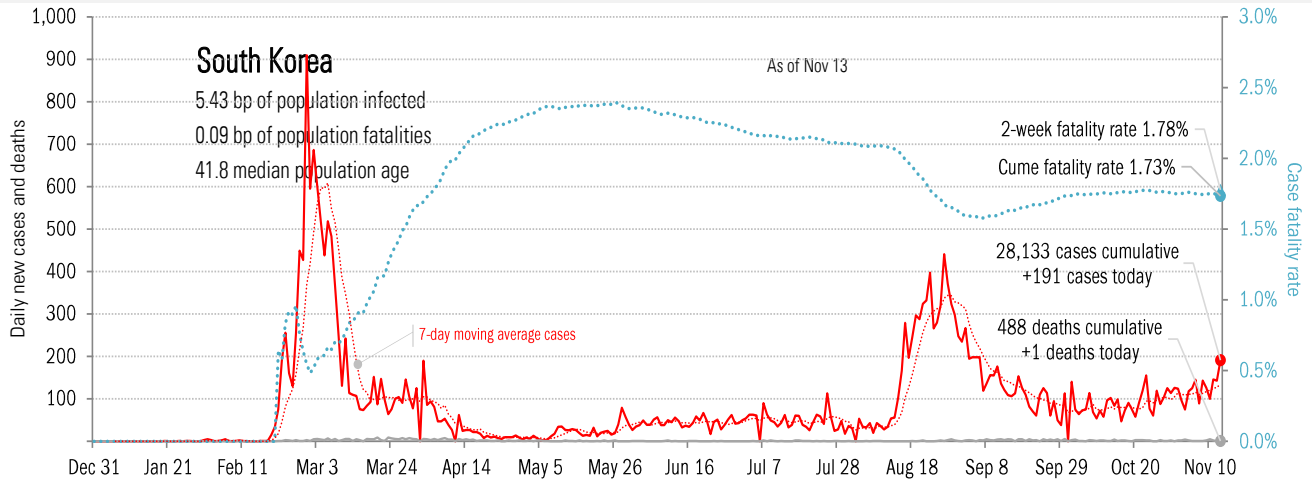
Source: [ECDC](#), TrendMacro calculations

Impact in continental Europe



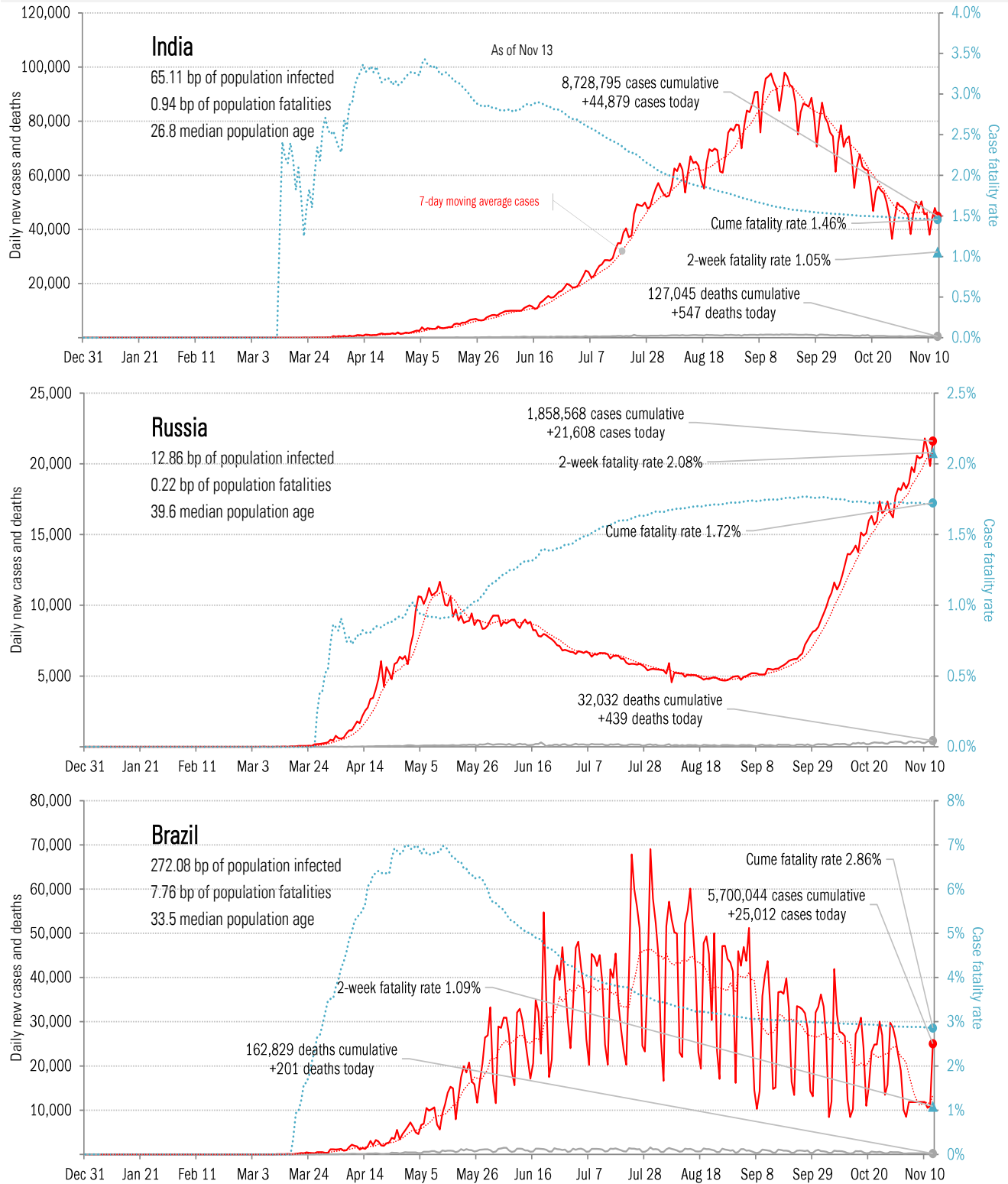
Source: [ECDC](#), TrendMacro calculations

Impact in other hot-spots



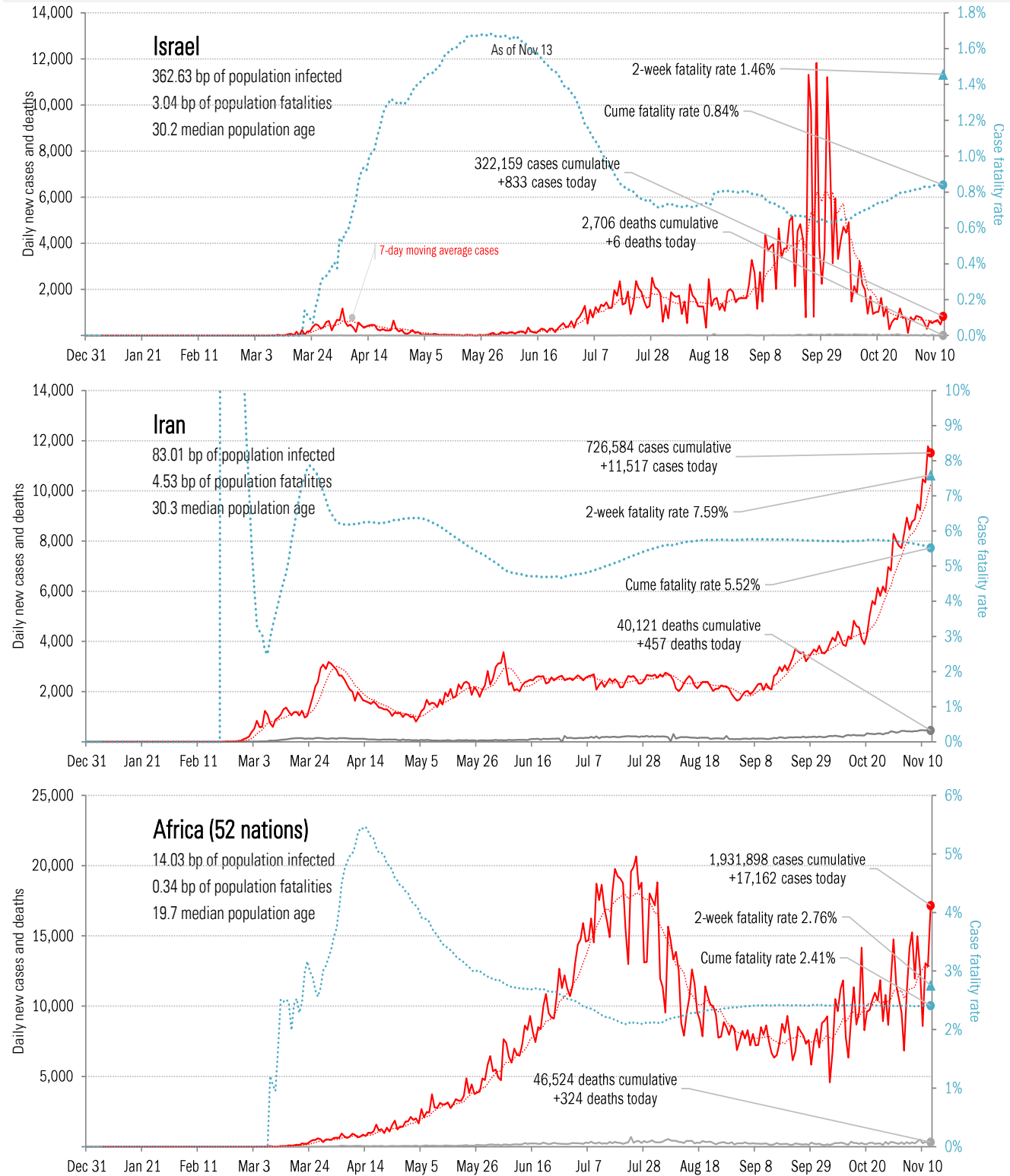
Source: [ECDC](#), TrendMacro calculations

Impact in the BRICs ex-China



Source: [ECDC](#), TrendMacro calculations

Impact in the Middle East and Africa



Source: [ECDC](#), TrendMacro calculations