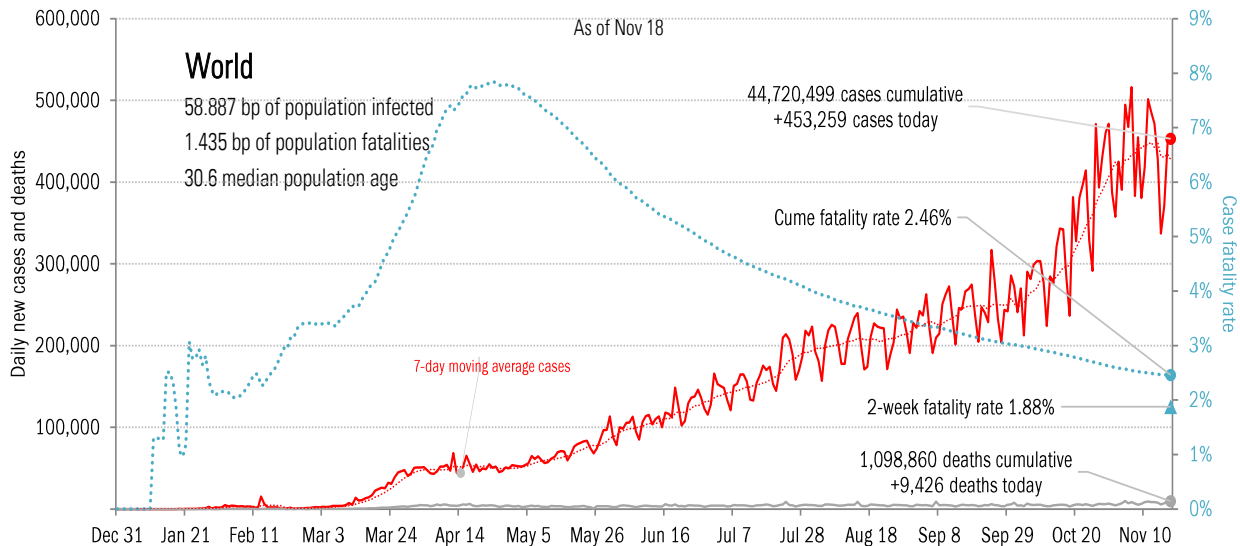
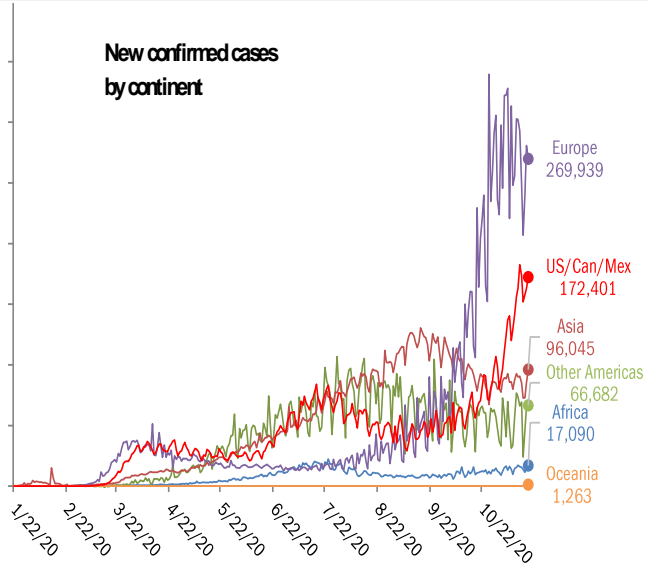


Data Insights: Covid-2019 Monitor

Thursday, November 19, 2020

The global scorecard

The worst ten countries			
New cases		New Deaths	
United States	+163,975	United States	+1,869
India	+45,576	Brazil	+756
Italy	+34,280	Italy	+753
Brazil	+34,091	Poland	+603
France	+28,534	India	+585
Germany	+23,727	United Kingdom	+529
Russia	+20,717	Mexico	+502
Poland	+19,883	Iran	+480
United Kingdom	+19,645	Russia	+449
Spain	+15,318	France	+426
+405,746		+6,952	
World	+453,259	World	+9,426
Top ten	90%	Top ten	74%



Source: [Johns Hopkins](#), [Covid Tracking Project](#), 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

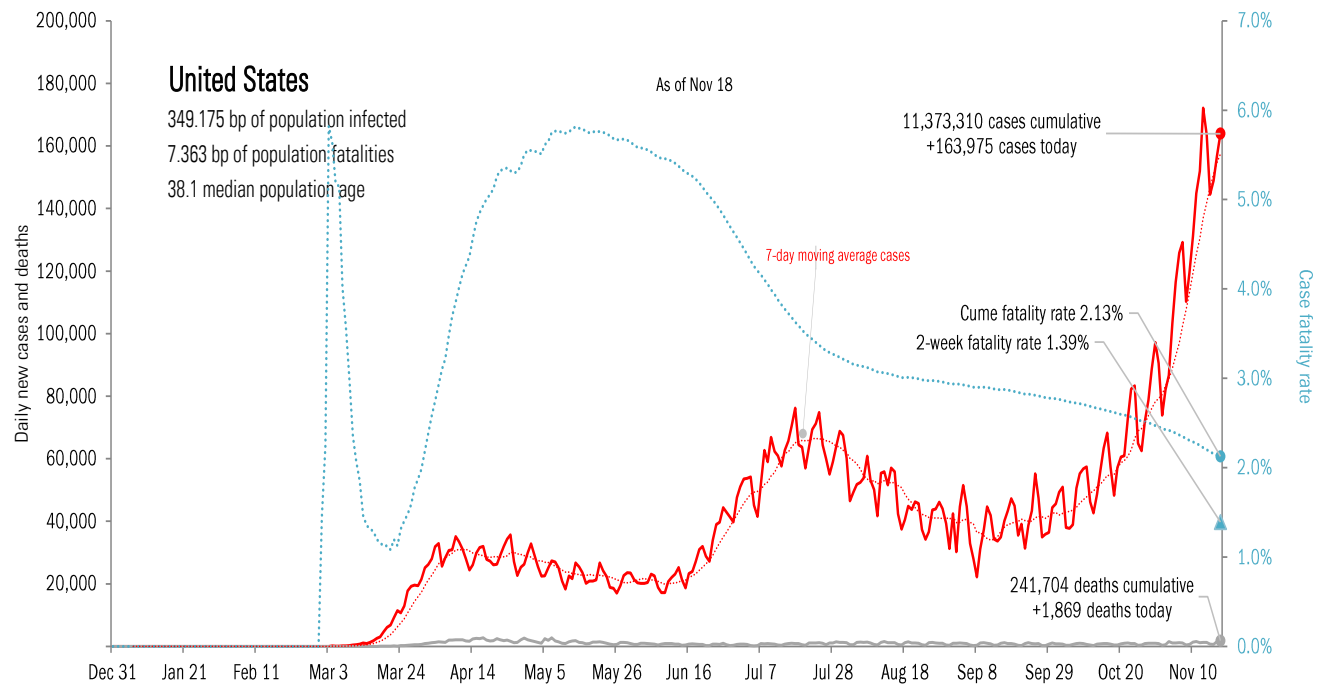
The ten worst US states

New cases		New Deaths		New in hospital		Curre cases		Curre deaths		Curre in hospital	
CA	+9,811	TX	+187	KS	+488	TX	1,048,383	NY	26,225	NY	89,995
IL	+8,922	IL	+151	CA	+193	CA	1,047,789	TX	19,883	TX	53,283
TX	+8,870	PA	+110	PA	+167	FL	892,352	CA	18,360	NJ	39,248
WI	+8,510	FL	+88	NJ	+126	IL	606,771	FL	17,949	GA	33,667
FL	+7,727	MN	+67	TX	+117	NY	574,072	NJ	16,655	VA	24,063
CH	+6,385	MI	+62	MD	+98	GA	393,890	IL	11,468	AZ	23,473
PA	+6,339	CA	+61	IN	+89	WI	350,665	MA	10,407	CH	23,217
MI	+6,218	KS	+60	NV	+87	TN	325,201	PA	9,465	AL	23,088
IN	+6,015	IN	+59	MS	+80	NC	320,862	GA	9,065	IN	21,737
KS	+5,853	WI	+58	NY	+78	CH	318,828	MI	8,573	MD	18,959
+74,650		+903		+1,523		5,878,813		148,050		350,730	
All states	+163,975	All states	+1,869	All states	+2,452	All states	11,373,310	All states	241,704	All states	529,168
Top ten	46%	Top ten	48%	Top ten	62%	Top ten	52%	Top ten	61%	Top ten	66%

Some states not reporting

Five most improved US states

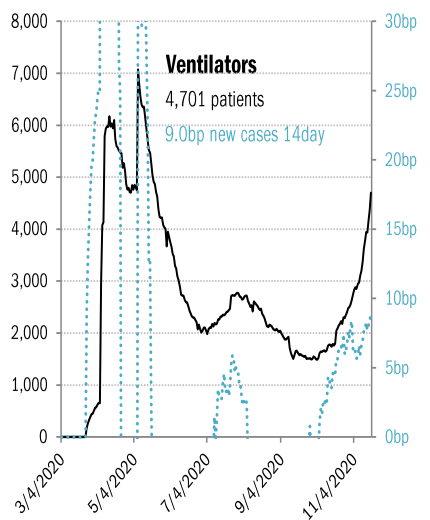
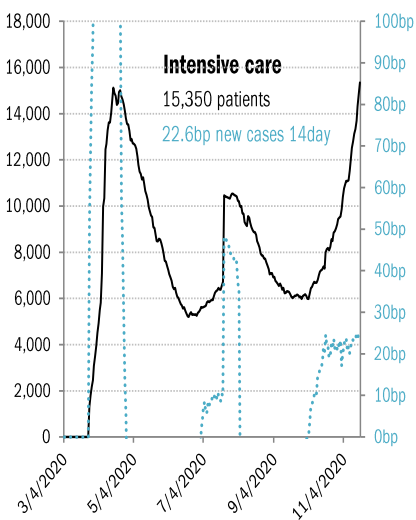
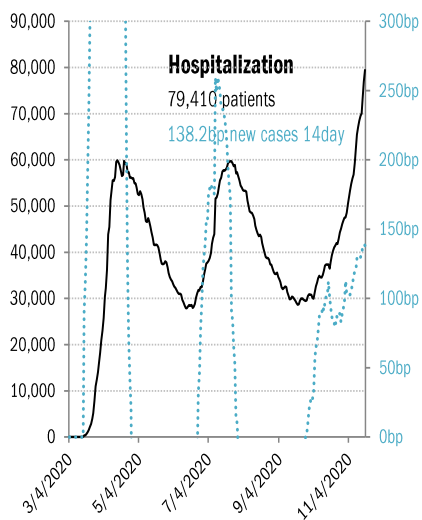
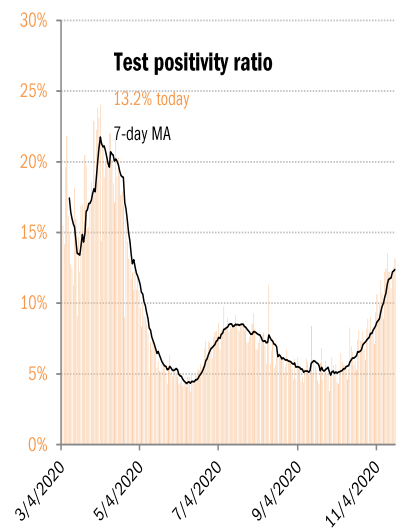
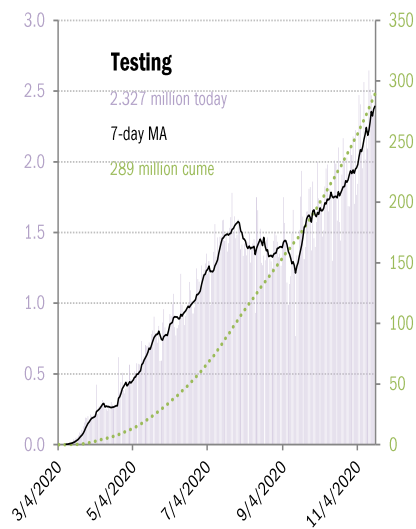
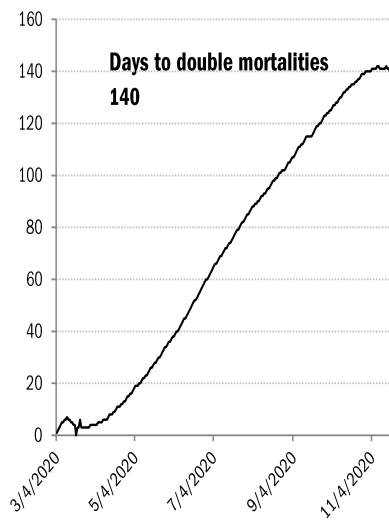
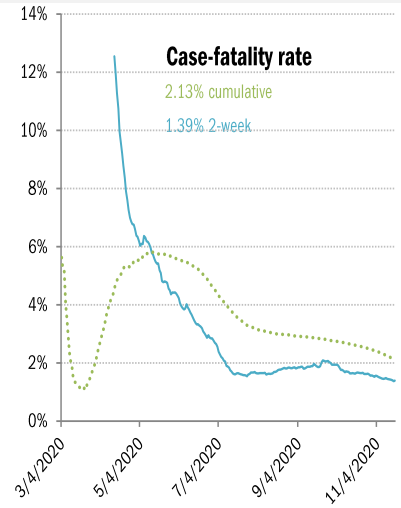
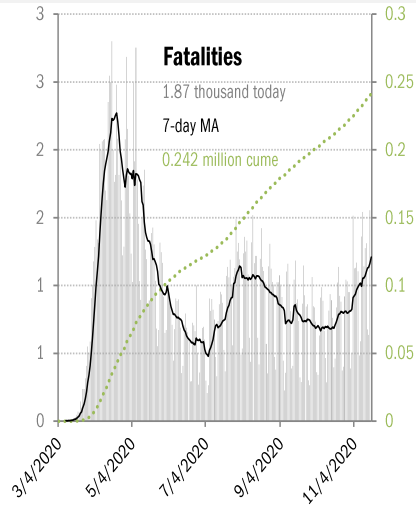
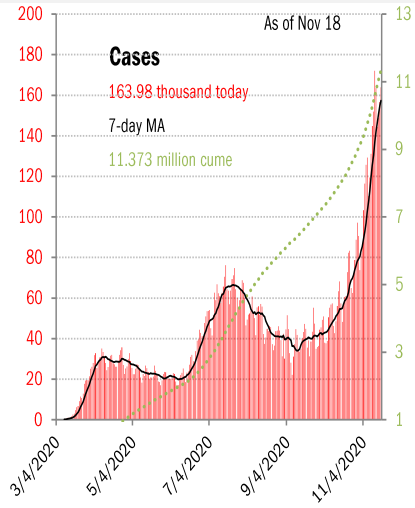
Fewer daily cases		Fewer new deaths		Fewer new hospitalizations		Most recoveries	
IL	-3,679	WI	-45	TX	-256	LA	+9,853
TX	-2,754	MO	-43	IL	-240	MN	+7,189
MI	-1,668	IN	-30	CH	-193	TX	+5,876
NE	-1,236	NV	-24	FL	-143	WI	+5,665
MO	-1,130	TN	-19	CA	-133	CH	+3,768



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

US deep-dive

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



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

Recommended reading

[Effectiveness of Adding a Mask Recommendation to Other Public Health Measures to Prevent SARS-CoV-2 Infection in Danish Mask Wearers](#)

Henning Bundgaard et al.
Annals of Internal Medicine
November 18, 2020

[Landmark Danish study shows face masks have no significant effect](#)

Carl Heneghan & Tom Jefferson
The Spectator
November 19, 2020

[Immunity to the Coronavirus May Last Years, New Data Hint](#)

Apoorva Mandavilli
New York Times
November 17, 2020

[“Denmark throws epidemic law in the bin” A week long fight with pots and pans and the people win.](#)

Phil Stone
Philosopher's Stone
November 15, 2020

[COVID cases are spiking, but our attention isn't](#)

Neal Rothschild, Sara Fischer
Axios
November 17, 2020

[FDA authorizes first at-home coronavirus test](#)

David Lim
Politico
November 17, 2020

[Tucson Medical Center CEO calls on educators to expand in-person learning](#)

Dan Marries
KOLD News
November 17, 2020

[The return of lockdown lunacy](#)

Stephen Moore
The Hill
November 17, 2020

[German police fire water cannon to disperse anti-lockdown protesters](#)

Guy Chazan
Financial Times
November 18, 2020

[Pfizer Reaches Safety Milestone for Covid Vaccine, CEO Says](#)

Riley Griffin and Robert Langreth
Bloomberg
November 17, 2020

[Having This Pet Increases Your Chances of Catching COVID by 80 Percent](#)

Zachary Mack
MSN
November 17, 2020

[A Vaccine Is Already Helping](#)

Holman Jenkins
Wall Street Journal
November 17, 2020

[Judy Shelton's Heresy](#)

Wall Street Journal
November 17, 2020

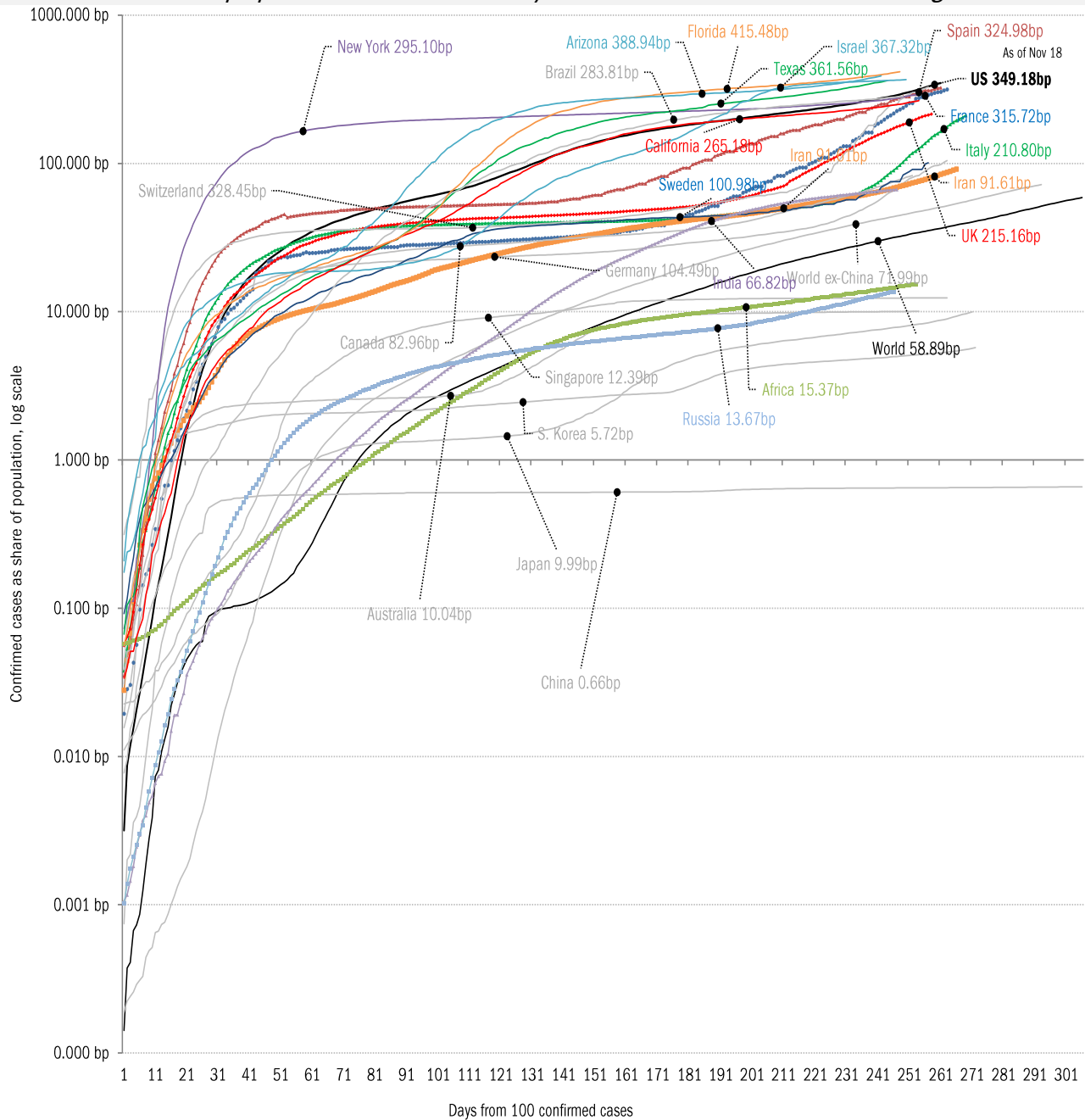
Meme of day



Fauci: 'We Must Obey The Government Without Question As The Founding Fathers Intended'

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

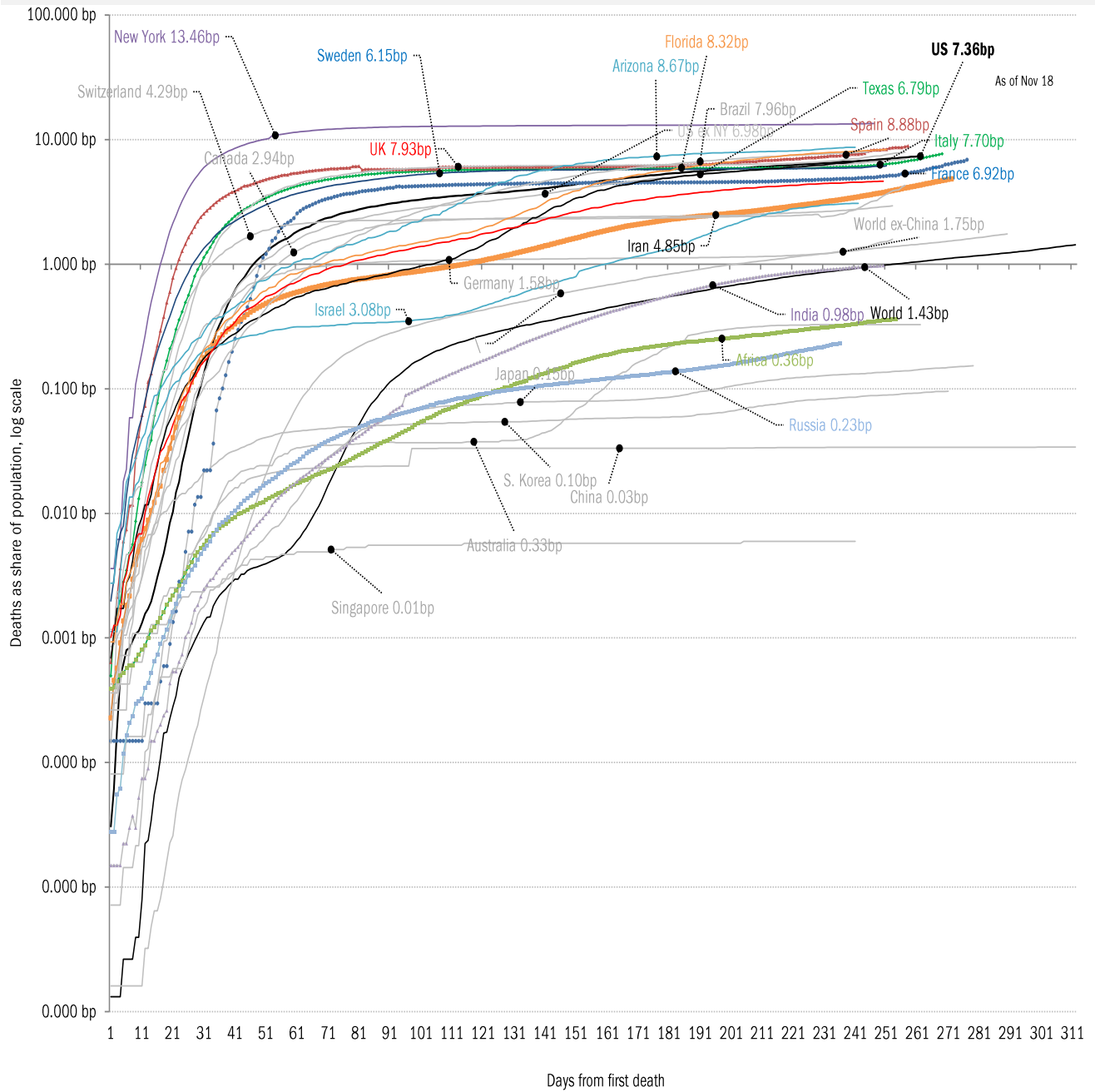
The coronavirus case accelerometer... tracking the world's infection curves
Share of infected population from first day with 100 confirmed cases, log scale



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

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

Share of deceased population from day of first fatality

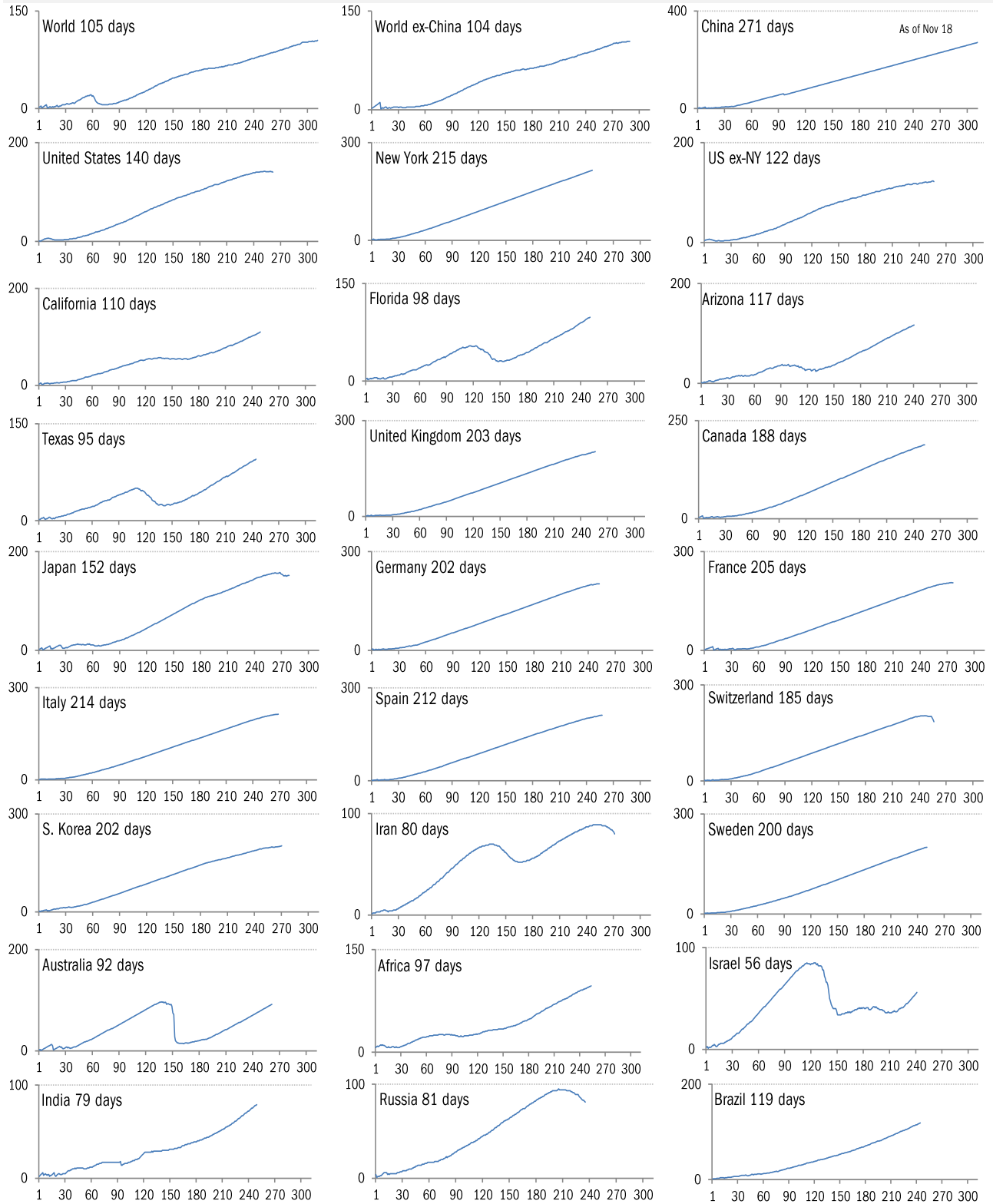


Source: [Johns Hopkins](#), [Covid Tracking Project](#), TrendMacro calculations

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

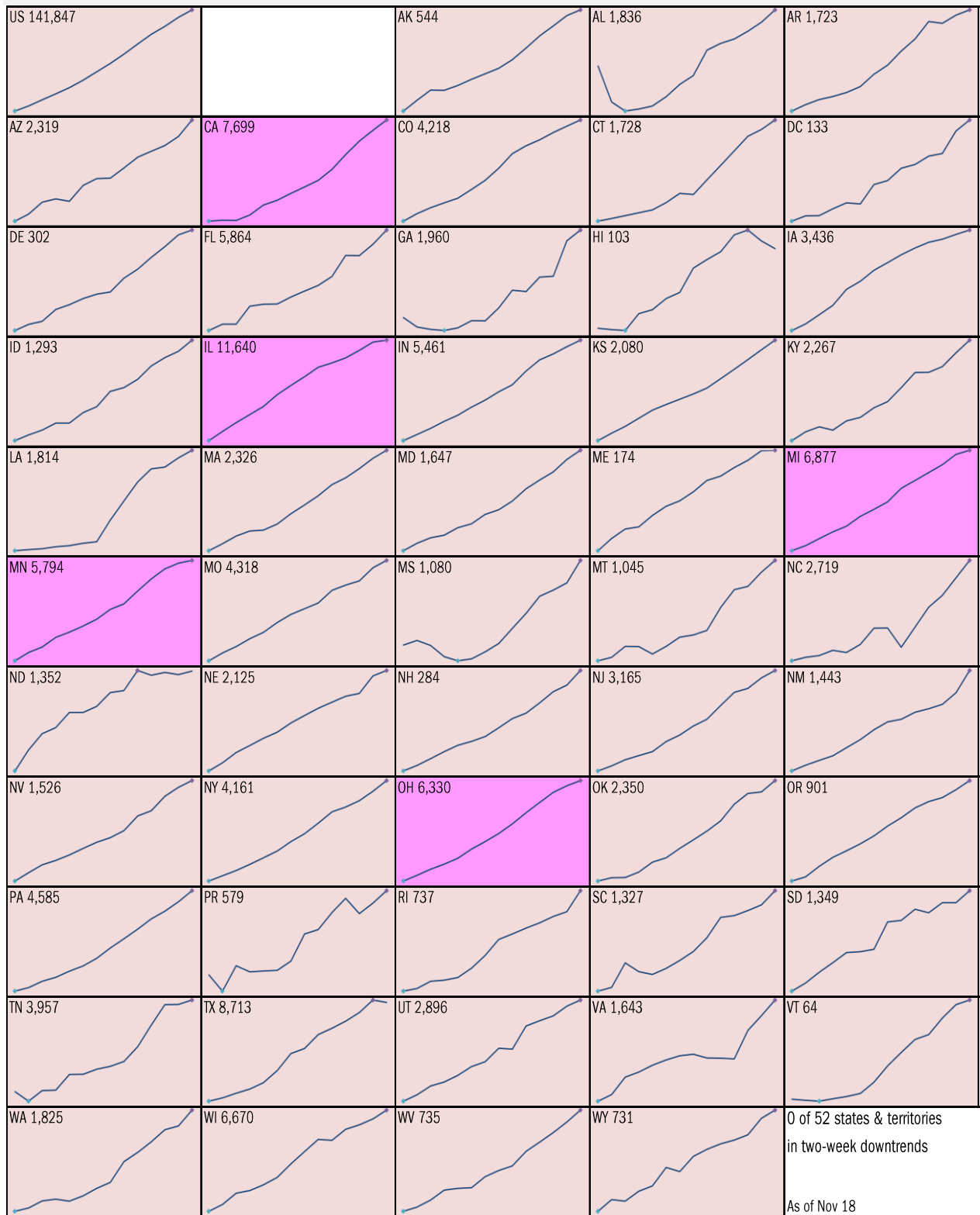
Vertical: days to double deaths Horizontal: days from first death

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



Source: [Johns Hopkins, Covid Tracking Project](#), 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

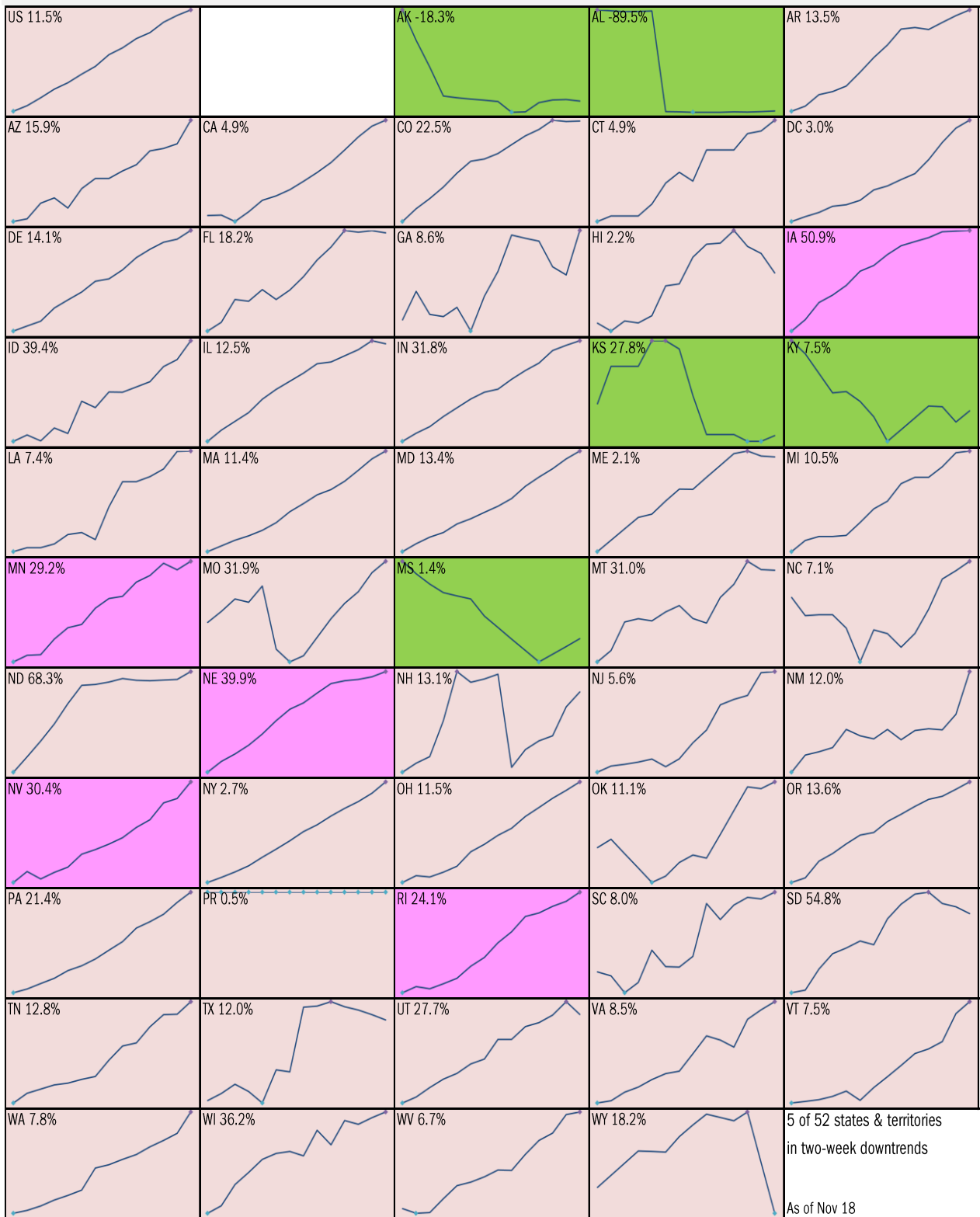


Source: [Covid Tracking Project](#), TrendMacro calculations

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



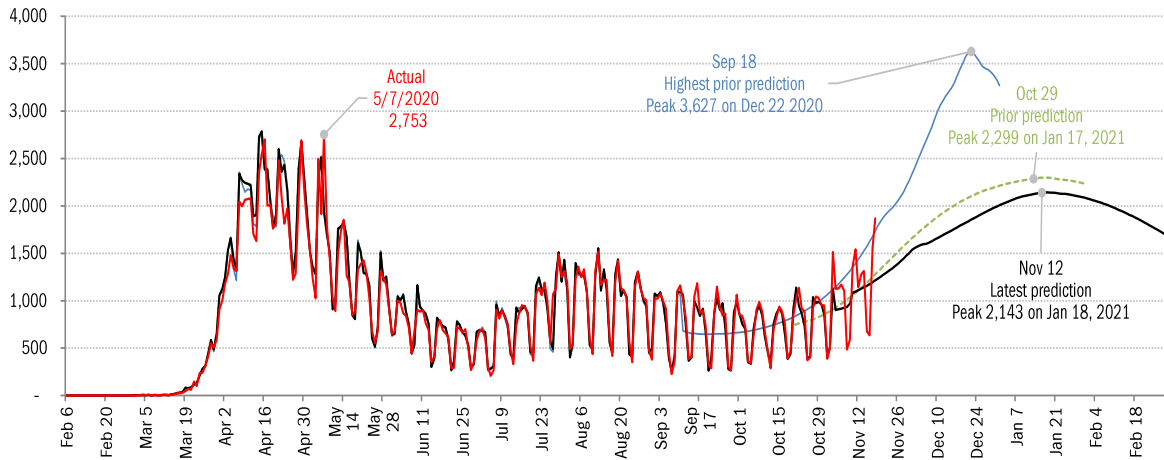
Source: [Covid Tracking Project](#), TrendMacro calculations

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

New daily fatalities

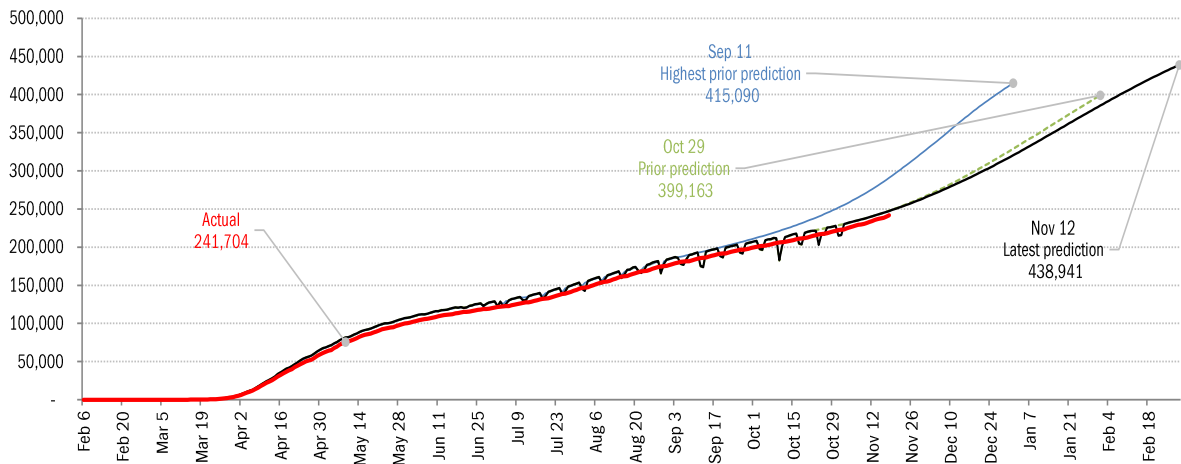
As of Nov 18

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

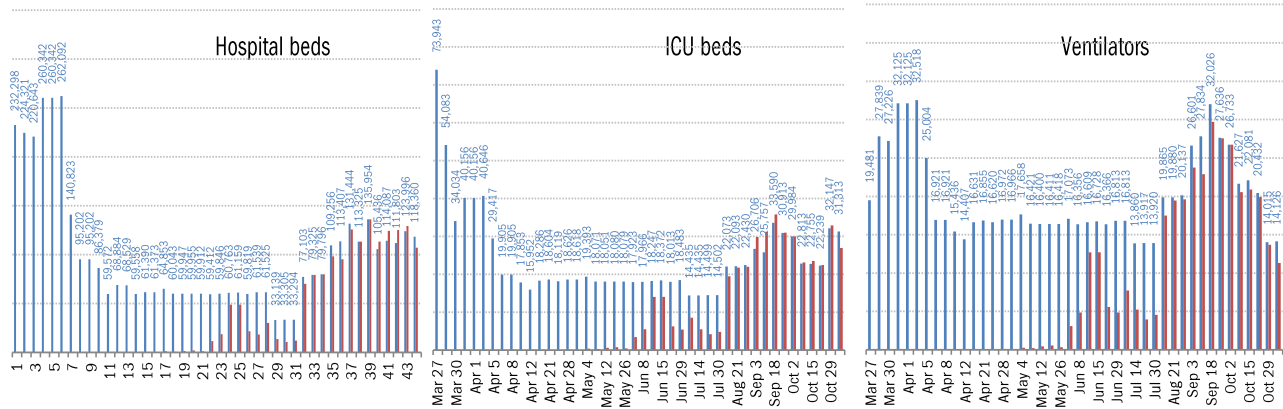


Cumulative fatalities

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

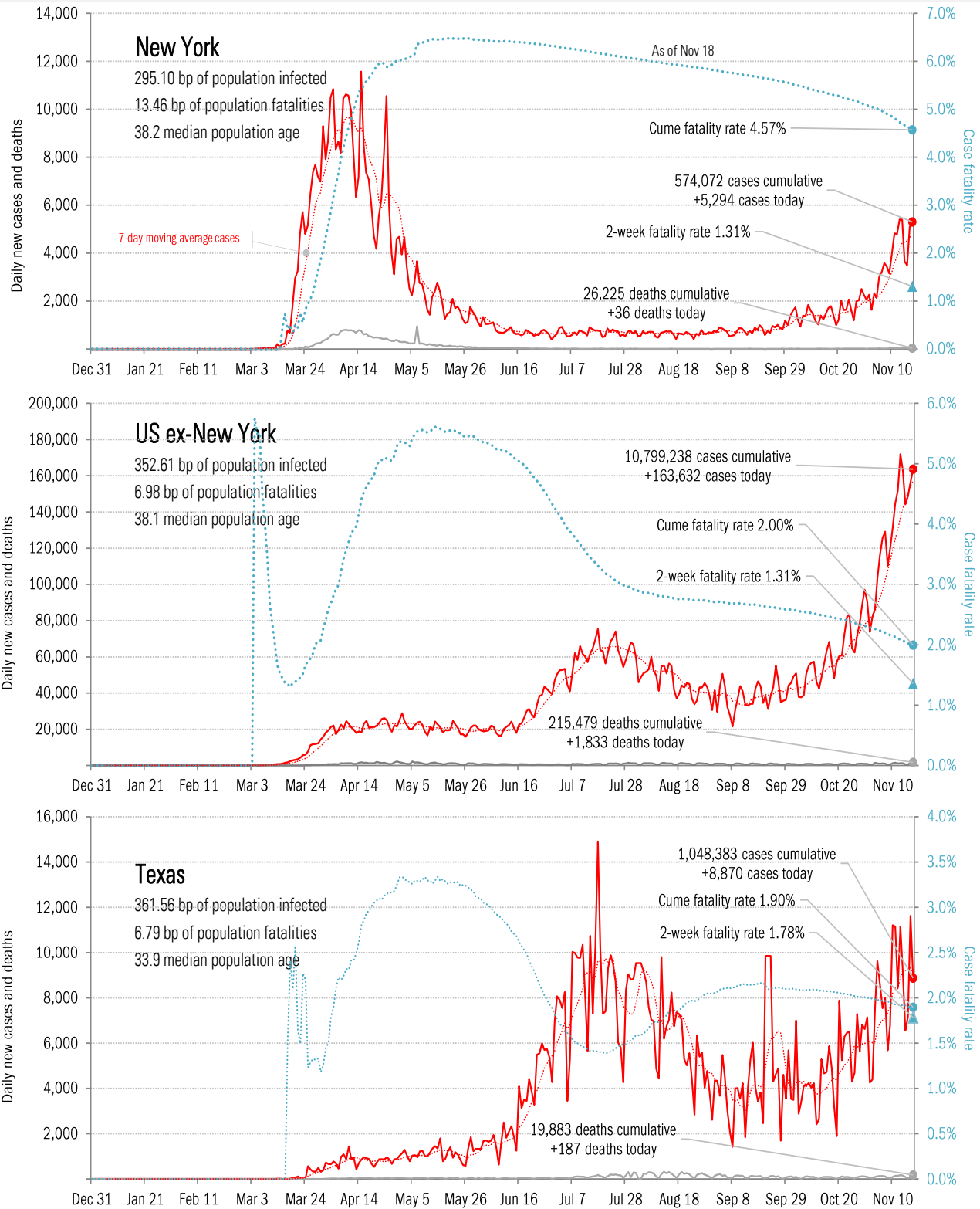


Healthcare system stress, **peak** and **ultimate** estimated at each model revision



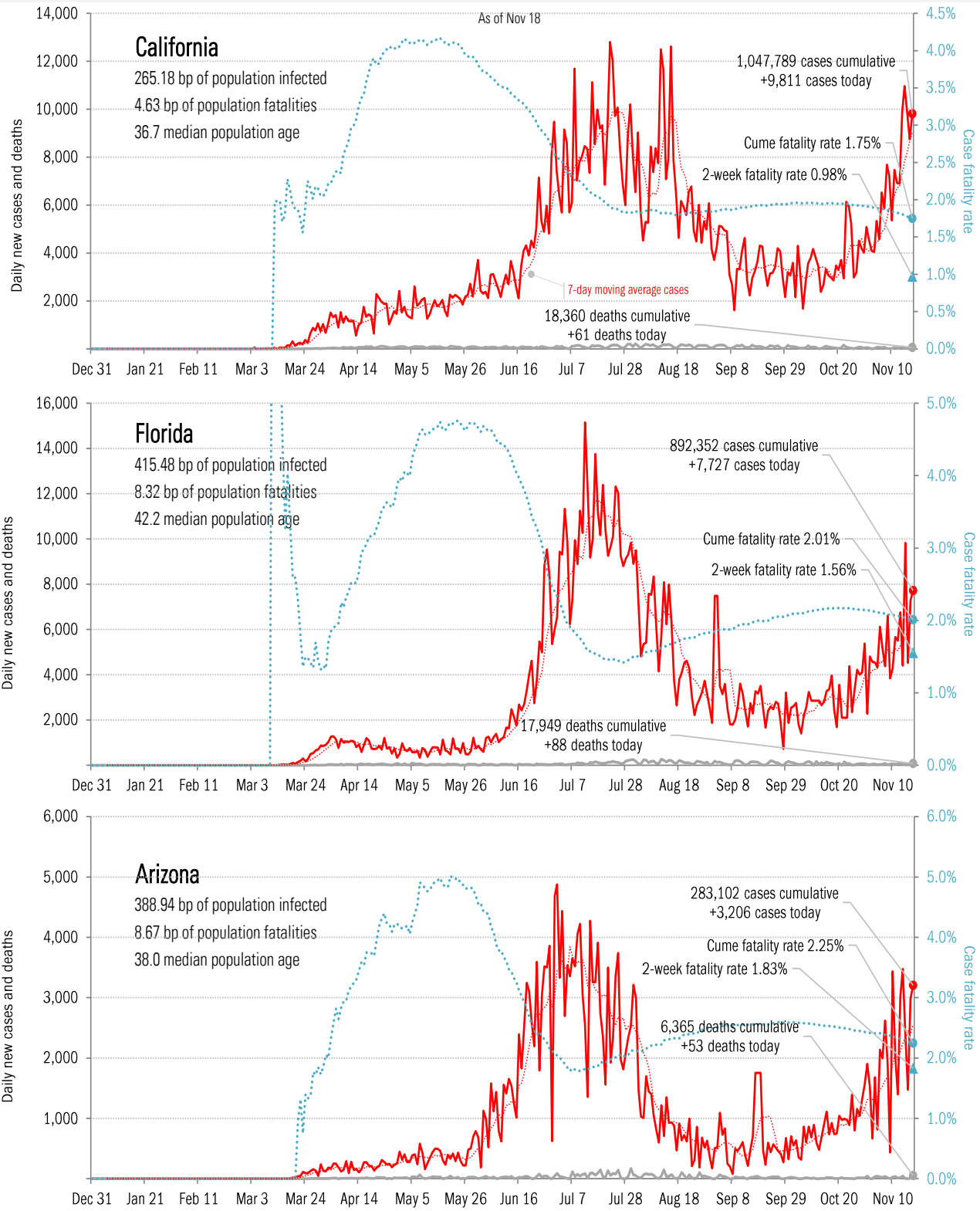
Source: [Covid Tracking Project](#), [IHME](#), TrendMacro calculations

From Ground Zero to the Rio Grande



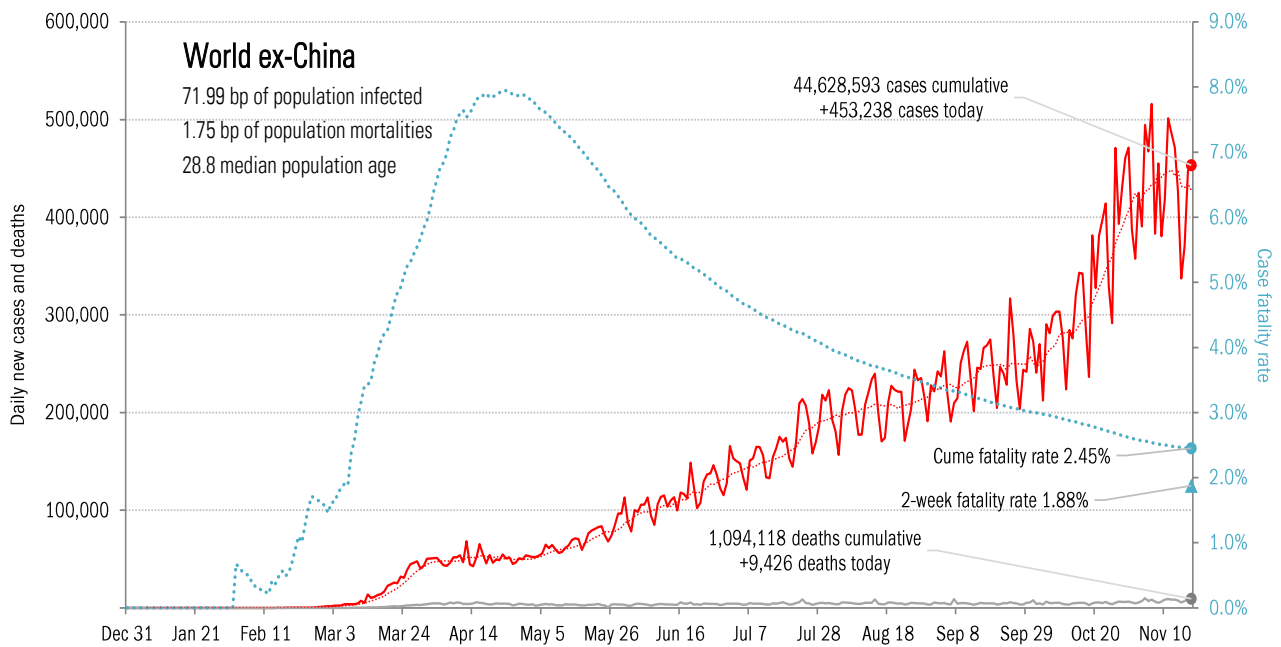
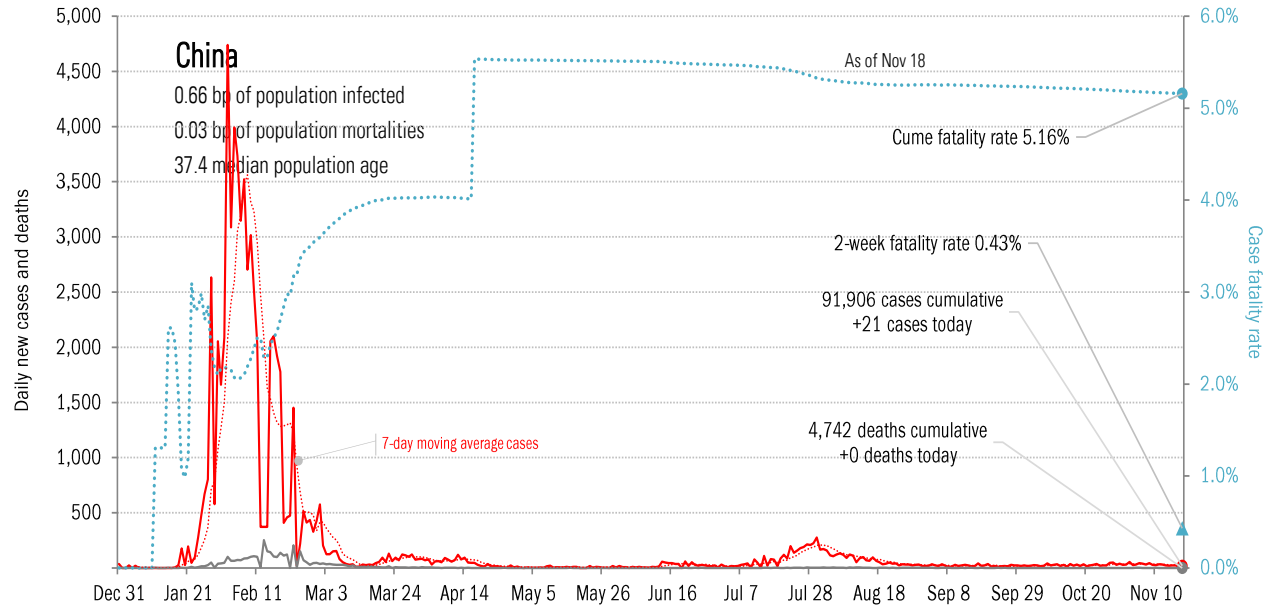
Source: [Covid Tracking Project](#), TrendMacro calculations

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



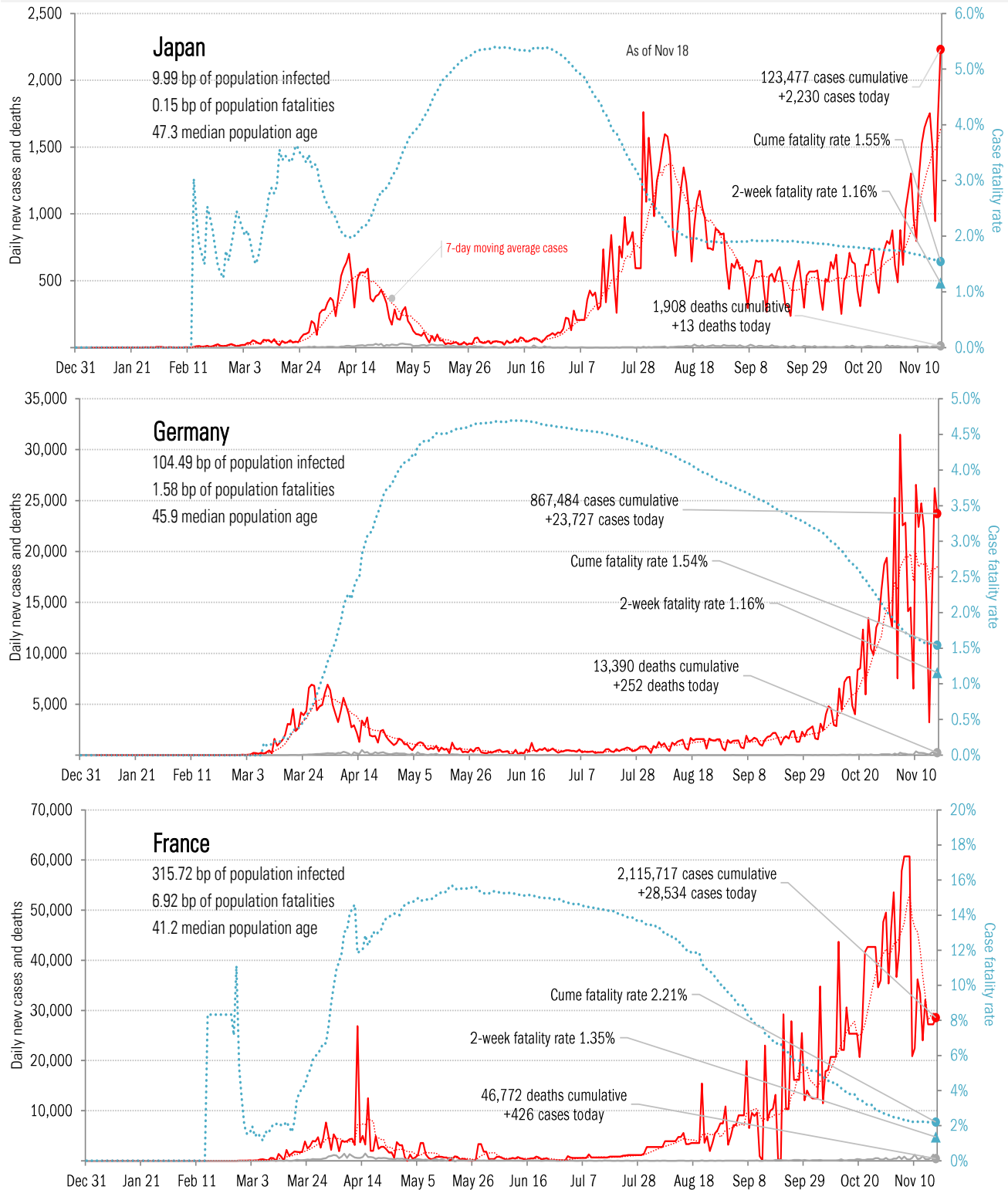
Source: [Covid Tracking Project](#), TrendMacro calculations

Patient zero... and then everyone else



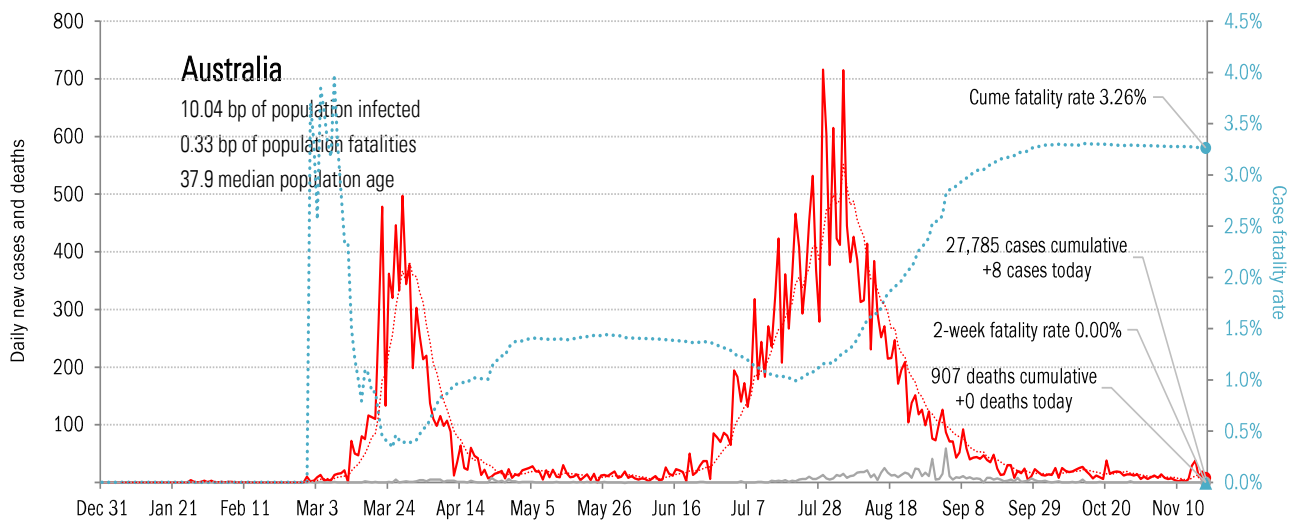
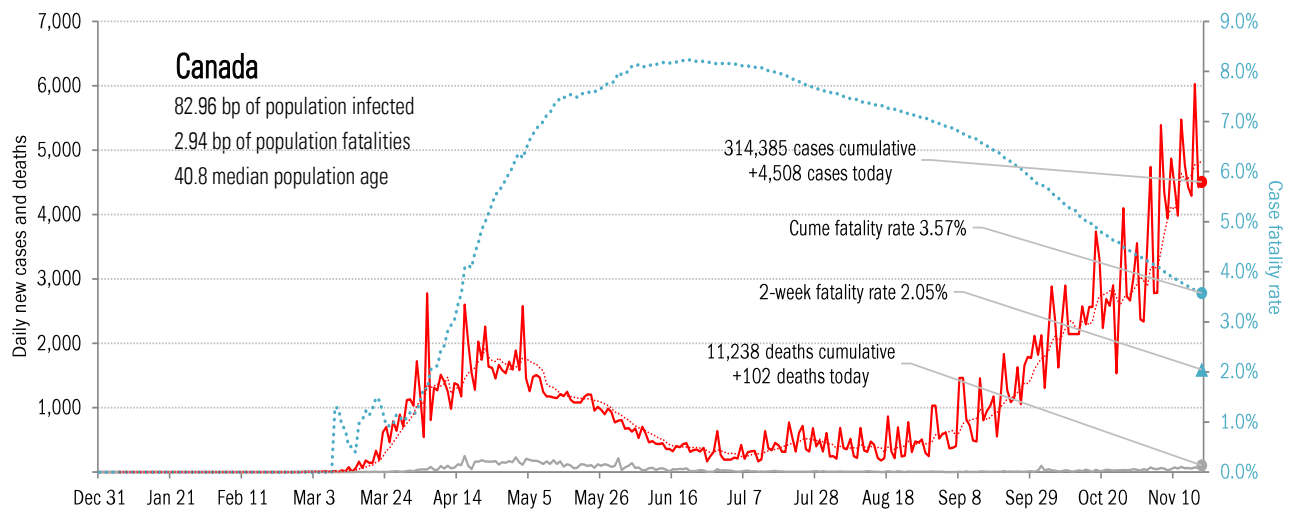
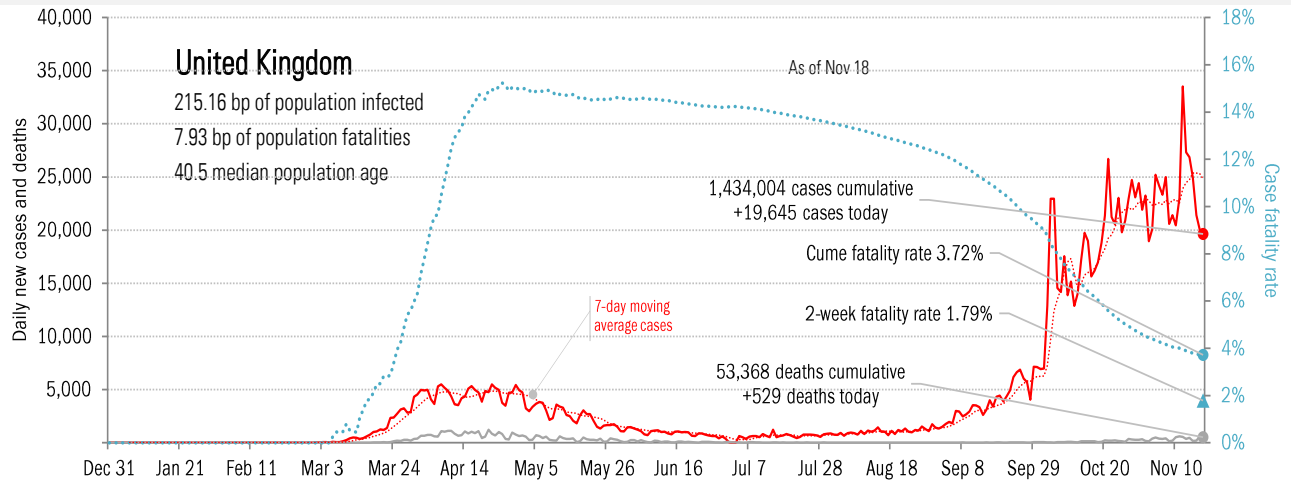
Source: [Johns Hopkins](#), [Covid Tracking Project](#), TrendMacro calculations

Impact in the largest economies



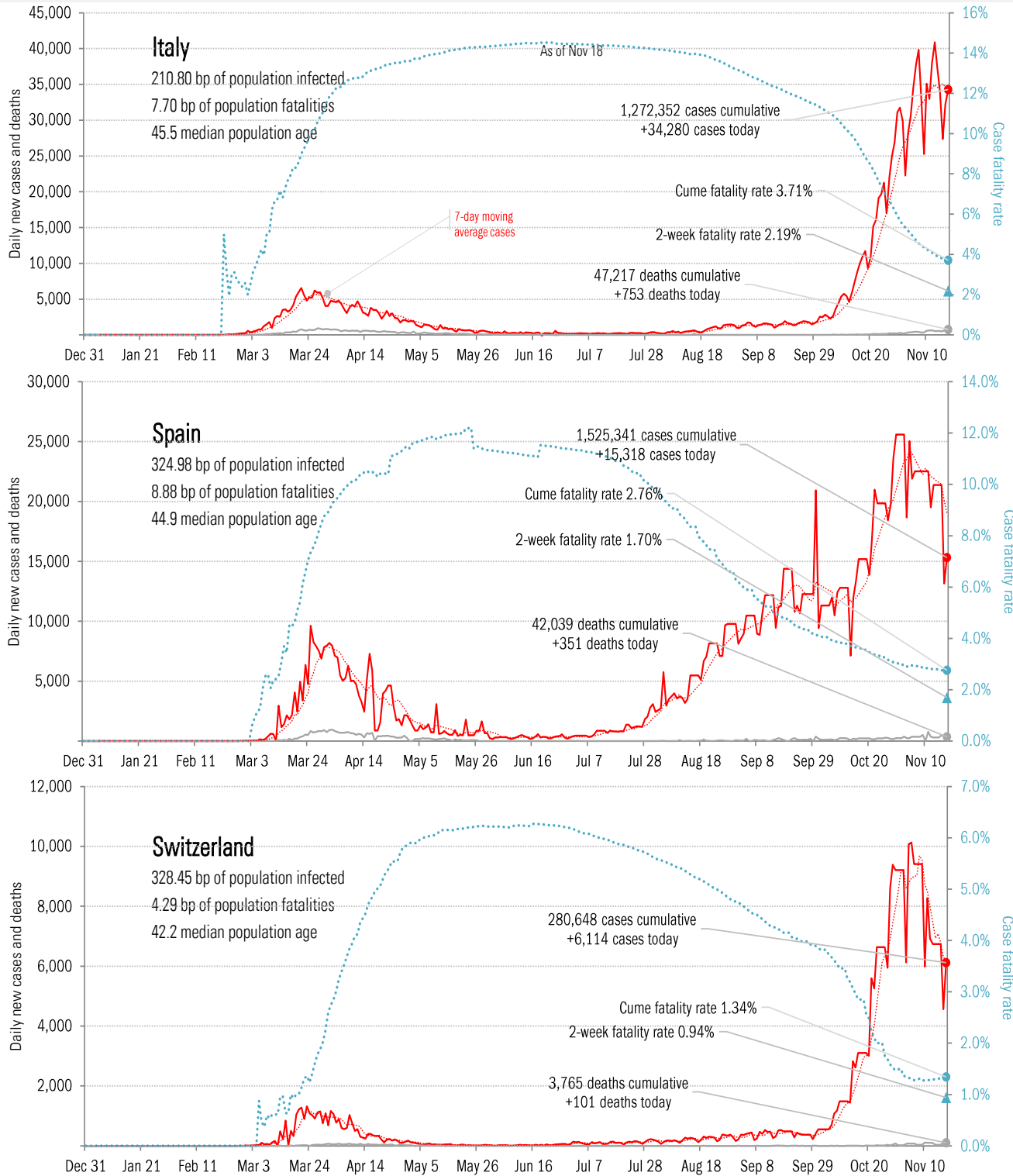
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in The Anglosphere



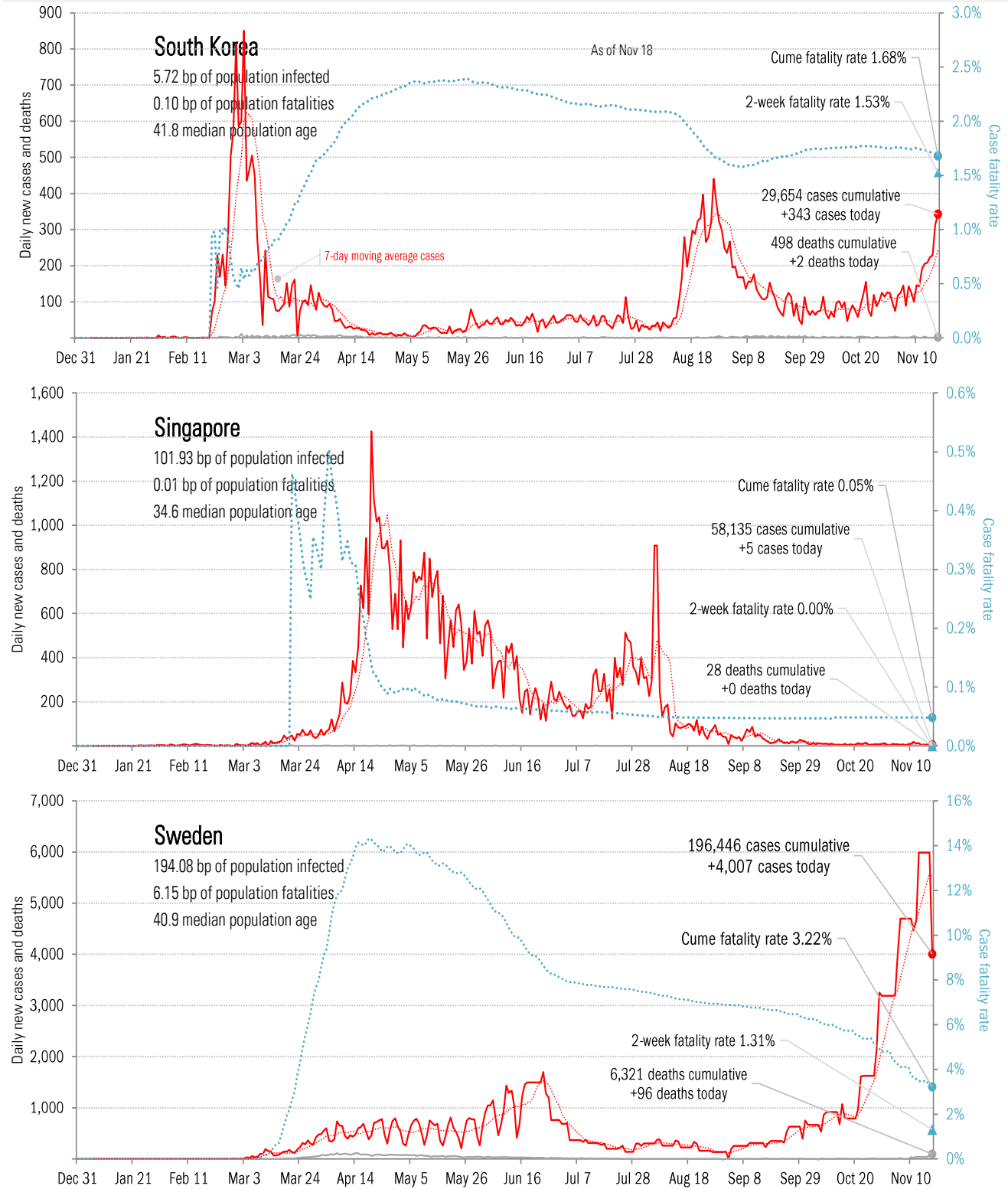
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in continental Europe



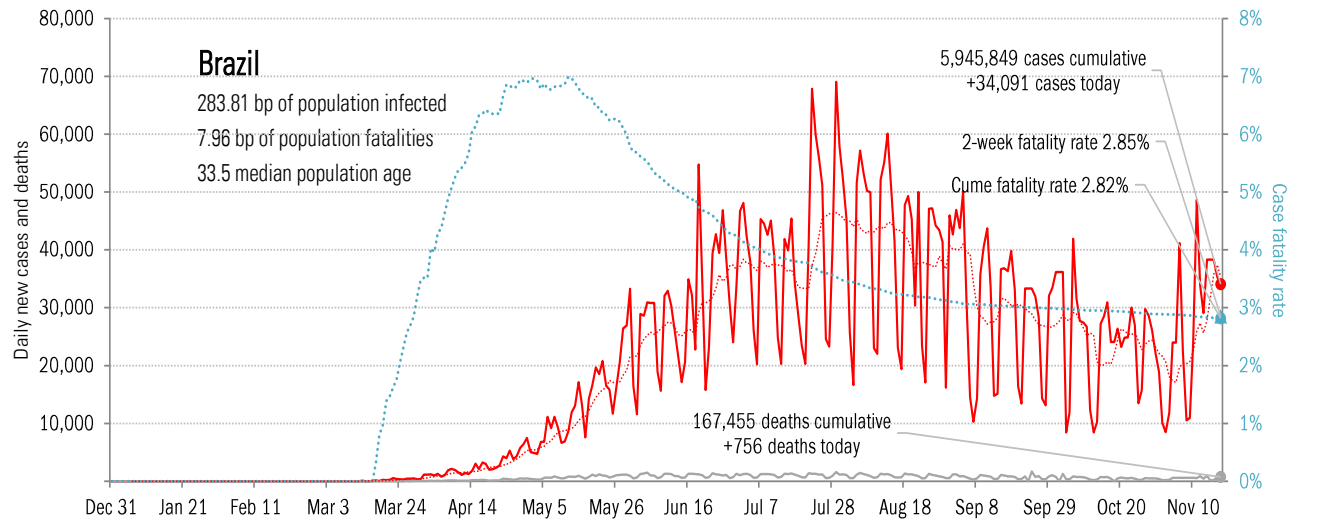
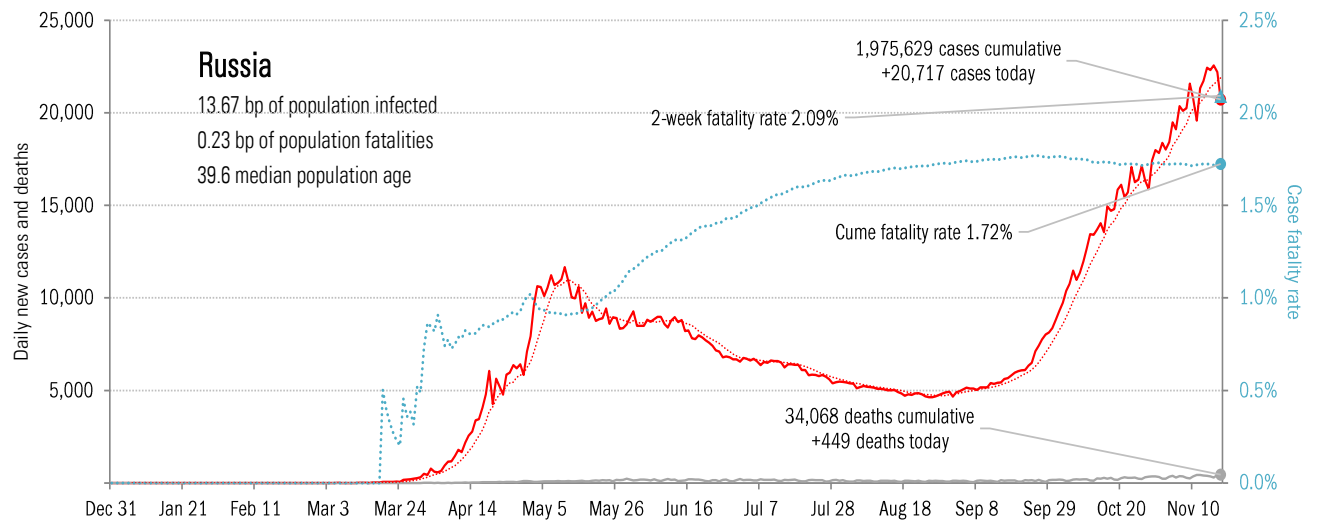
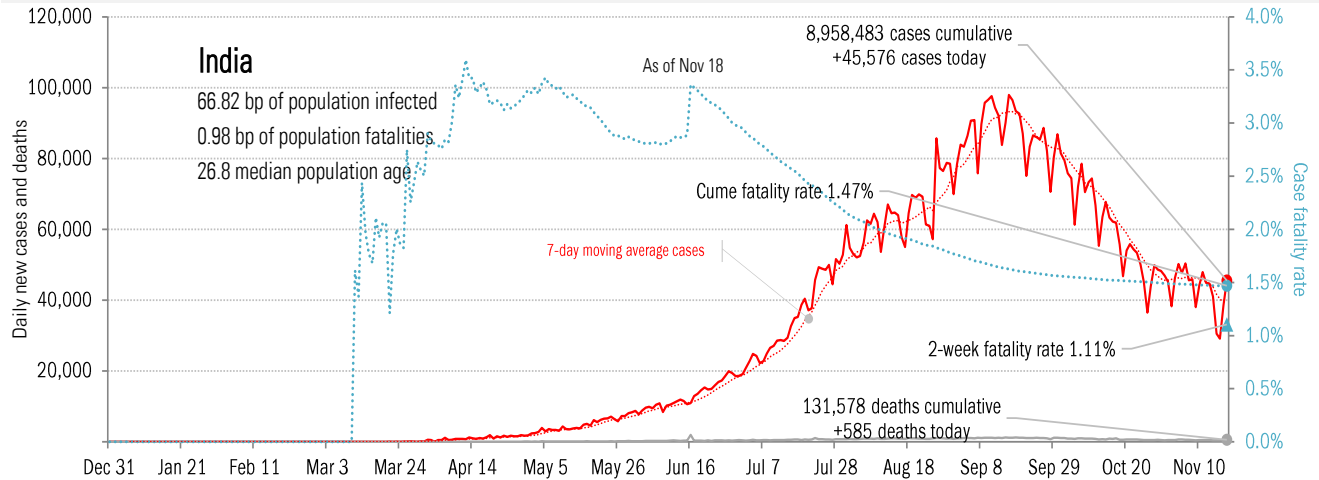
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in other hot-spots



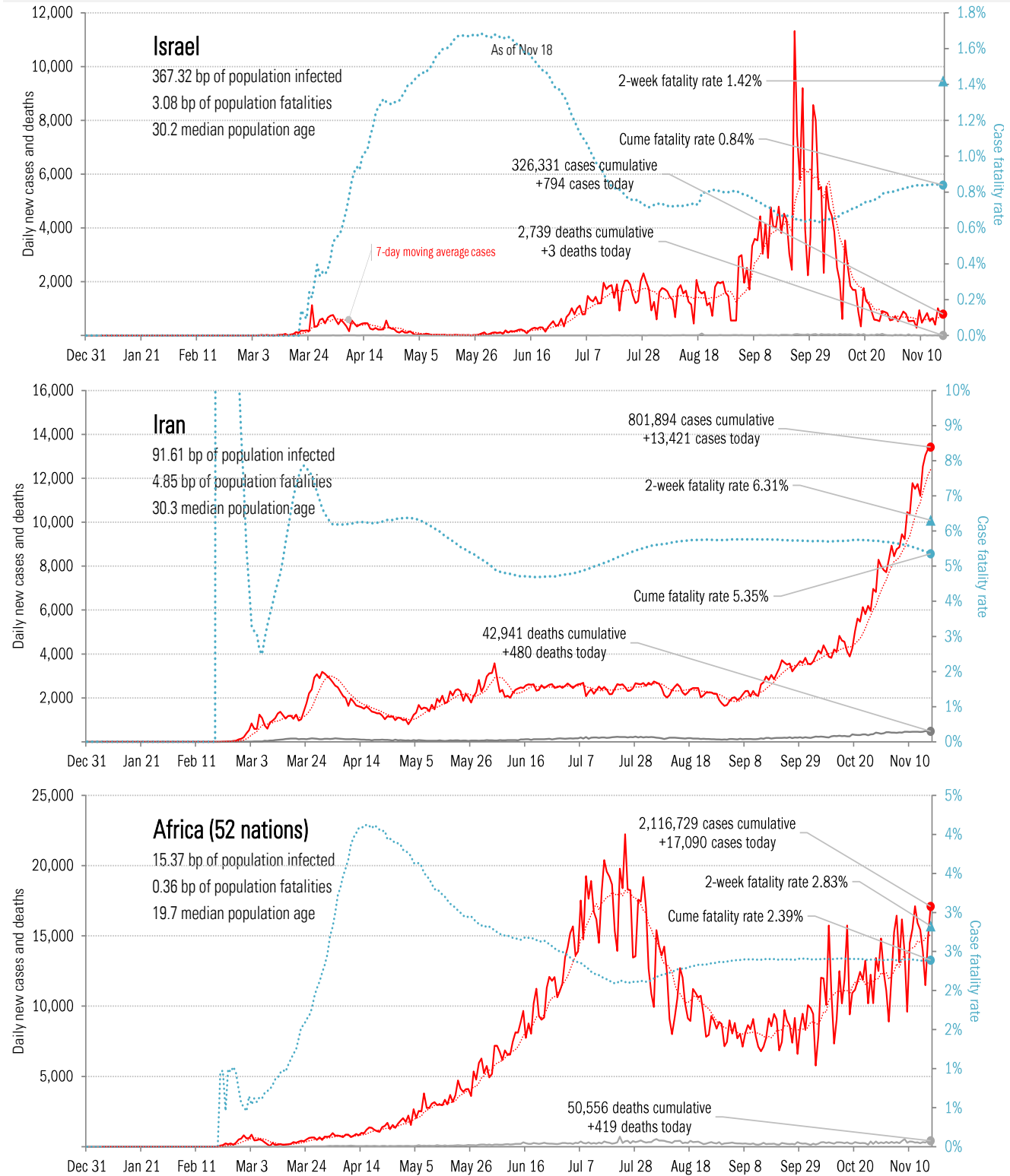
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in the BRICs ex-China



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

Impact in the Middle East and Africa



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