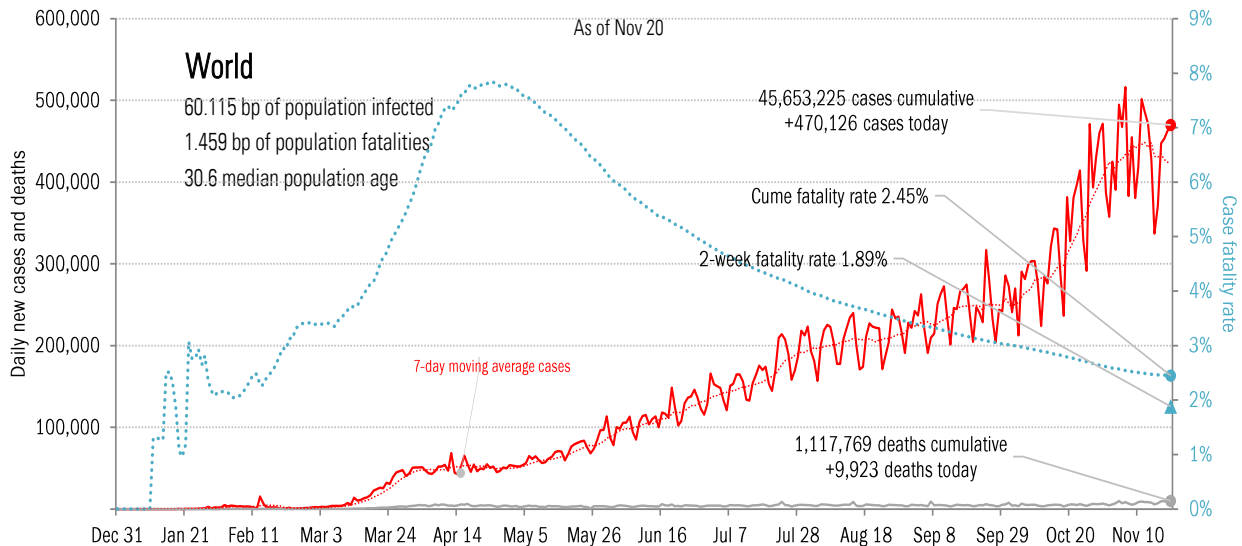
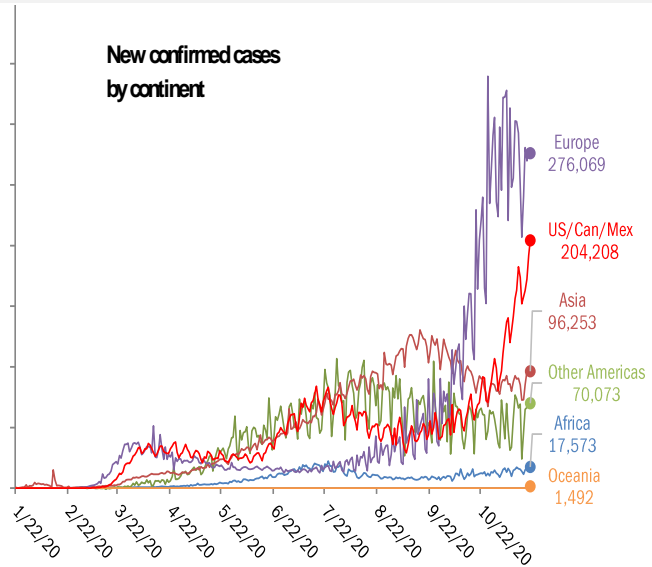


Data Insights: Covid-2019 Monitor

Saturday, November 21, 2020

The global scorecard

The worst ten countries			
New cases		New Deaths	
United States	+192,805	United States	+1,862
India	+46,232	France	+1,140
Brazil	+38,397	Mexico	+719
Italy	+37,239	Italy	+699
Russia	+24,059	Poland	+626
France	+23,247	India	+564
Germany	+22,593	Brazil	+552
Poland	+22,464	United Kingdom	+511
United Kingdom	+20,274	Iran	+479
Spain	+15,156	Russia	+455
+442,466		+7,607	
World	+470,126	World	+9,923
Top ten	94%	Top ten	77%



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

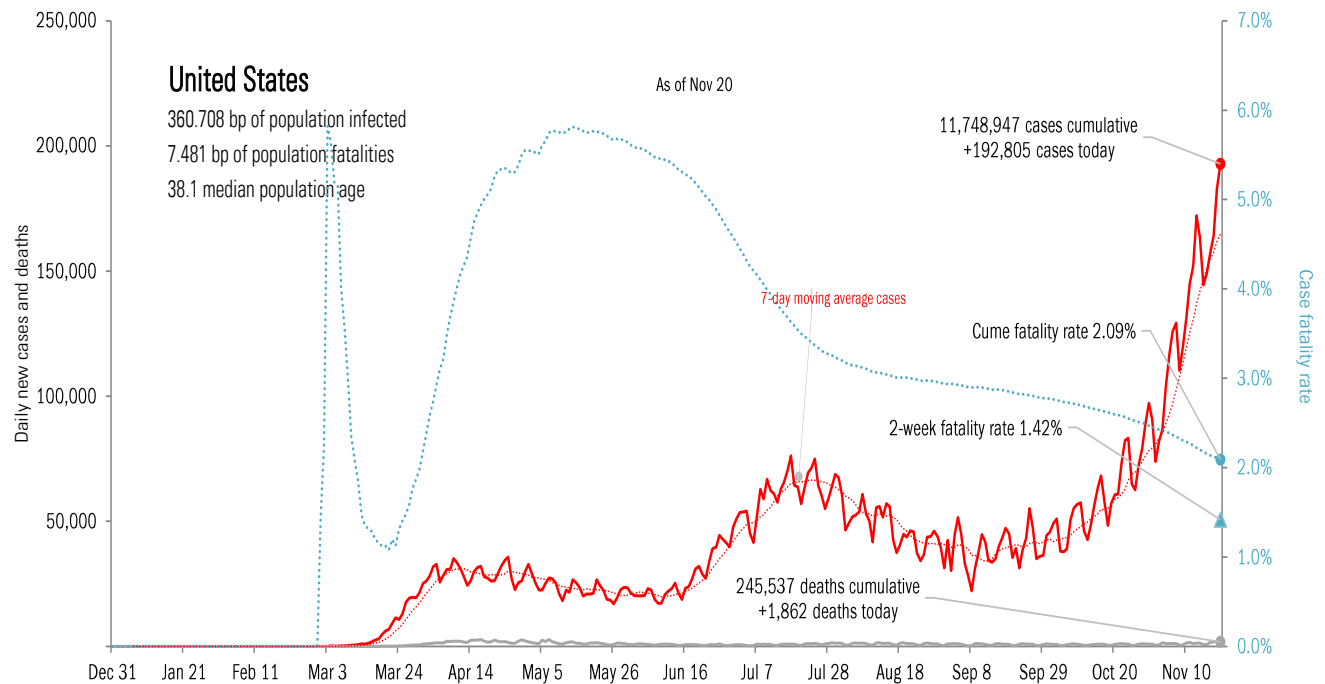
The ten worst US states

New cases		New Deaths		New in hospital		Curre cases		Curre deaths		Curre in hospital	
IL	+13,012	TX	+183	PA	+210	TX	1,072,698	NY	26,292	NY	89,995
CA	+13,005	IL	+147	TX	+182	CA	1,072,272	TX	20,296	TX	53,749
TX	+11,815	PA	+108	CA	+178	FL	910,065	CA	18,557	NJ	39,825
MI	+10,140	CA	+91	MO	+146	IL	634,395	FL	18,110	GA	33,897
FL	+8,831	KS	+84	CO	+130	NY	584,850	NJ	16,712	VA	24,456
CH	+8,808	WI	+81	CH	+107	GA	399,410	IL	11,795	AZ	24,052
WI	+7,077	FL	+80	IL	+74	WI	365,190	MA	10,469	CH	23,958
IN	+6,808	TN	+74	NY	+72	CH	335,423	PA	9,689	AL	23,449
PA	+6,808	MN	+68	WA	+64	TN	331,532	GA	9,142	IN	22,512
MN	+6,794	CH	+65	MI	+63	NC	328,846	MI	8,774	MD	19,282
+93,098		+981		+1,226		6,034,681		149,836		355,175	
All states	+192,805	All states	+1,862	All states	+1,480	All states	11,748,947	All states	245,537	All states	537,665
Top ten	48%	Top ten	53%	Top ten	83%	Top ten	51%	Top ten	61%	Top ten	66%

Some states not reporting

Five most improved US states

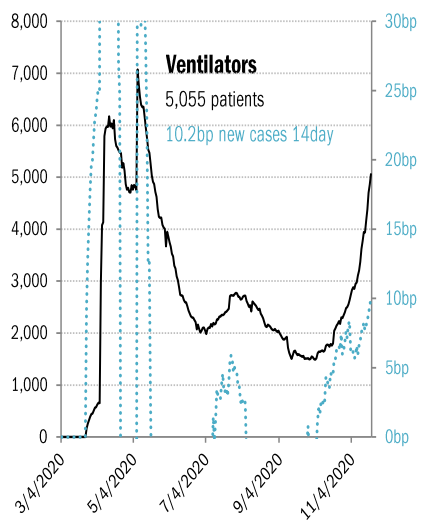
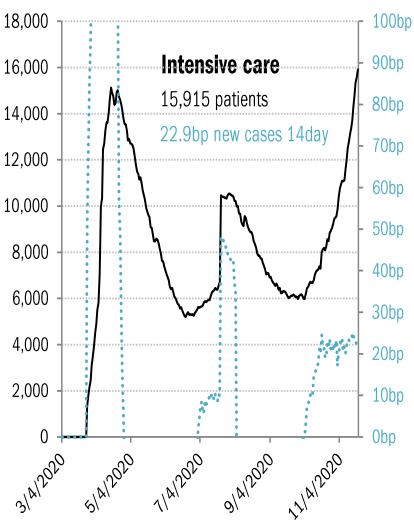
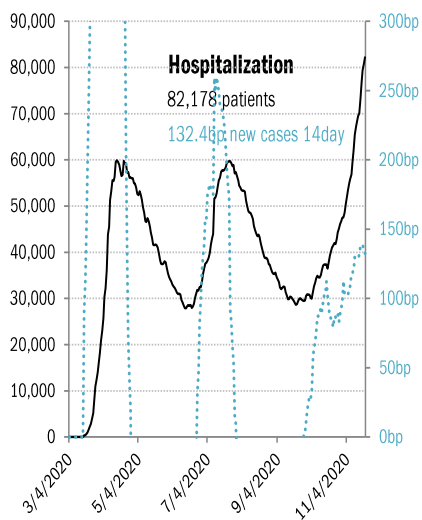
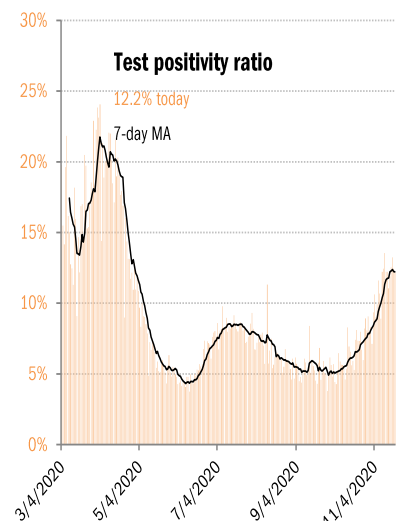
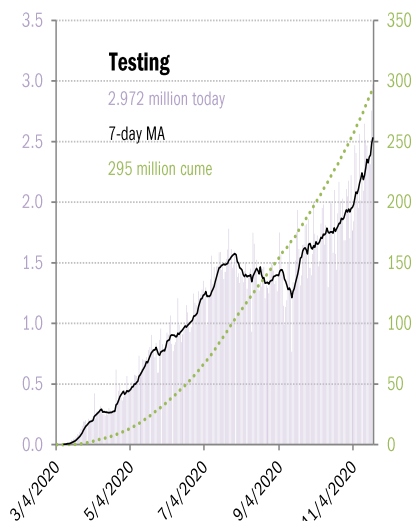
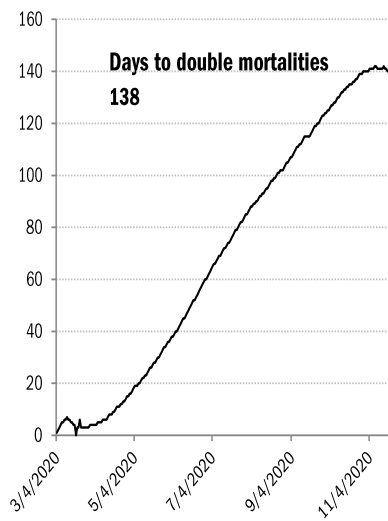
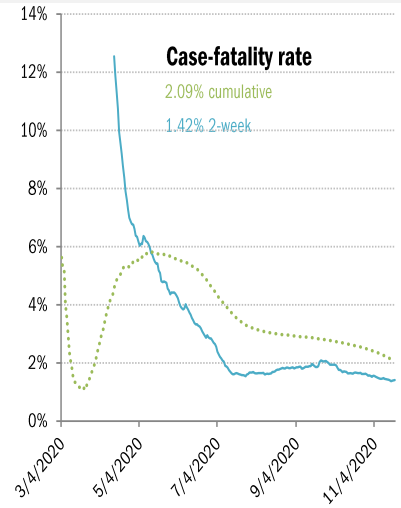
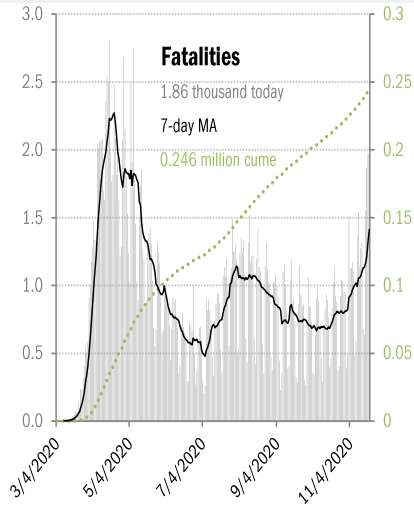
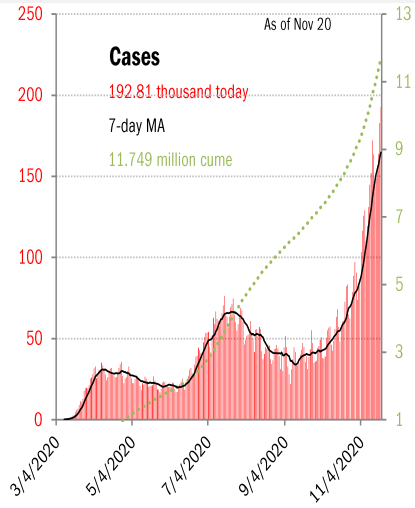
Fewer daily cases		Fewer new deaths		Fewer new hospitalizations		Most recoveries	
IL	-1,600	MI	-87	VA	-159	WI	+6,327
MN	-1,069	TX	-47	WI	-113	TX	+5,752
TX	-685	AL	-40	CA	-63	TN	+4,123
NM	-683	IL	-33	IA	-58	MN	+4,067
NC	-608	CO	-21	AZ	-57	CH	+3,662



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

[Even a Military-Enforced Quarantine Can't Stop the Virus, Study Reveals](#)

Jeffrey A. Tucker
American Institute for Economic Research
November 13, 2020

[When Trump Was Right and Many Democrats Wrong](#)

Nicholas Kristof
New York Times
November 18, 2020

[SARS-CoV-2 Transmission among Marine Recruits during Quarantine](#)

Andrew G. Letizia et al.
New England Journal of Medicine
November 11, 2020

[A Global Covid Vaccine Heist](#)

Wall Street Journal
November 19, 2020

[EU Could Approve BioNTech, Moderna Vaccines in December](#)

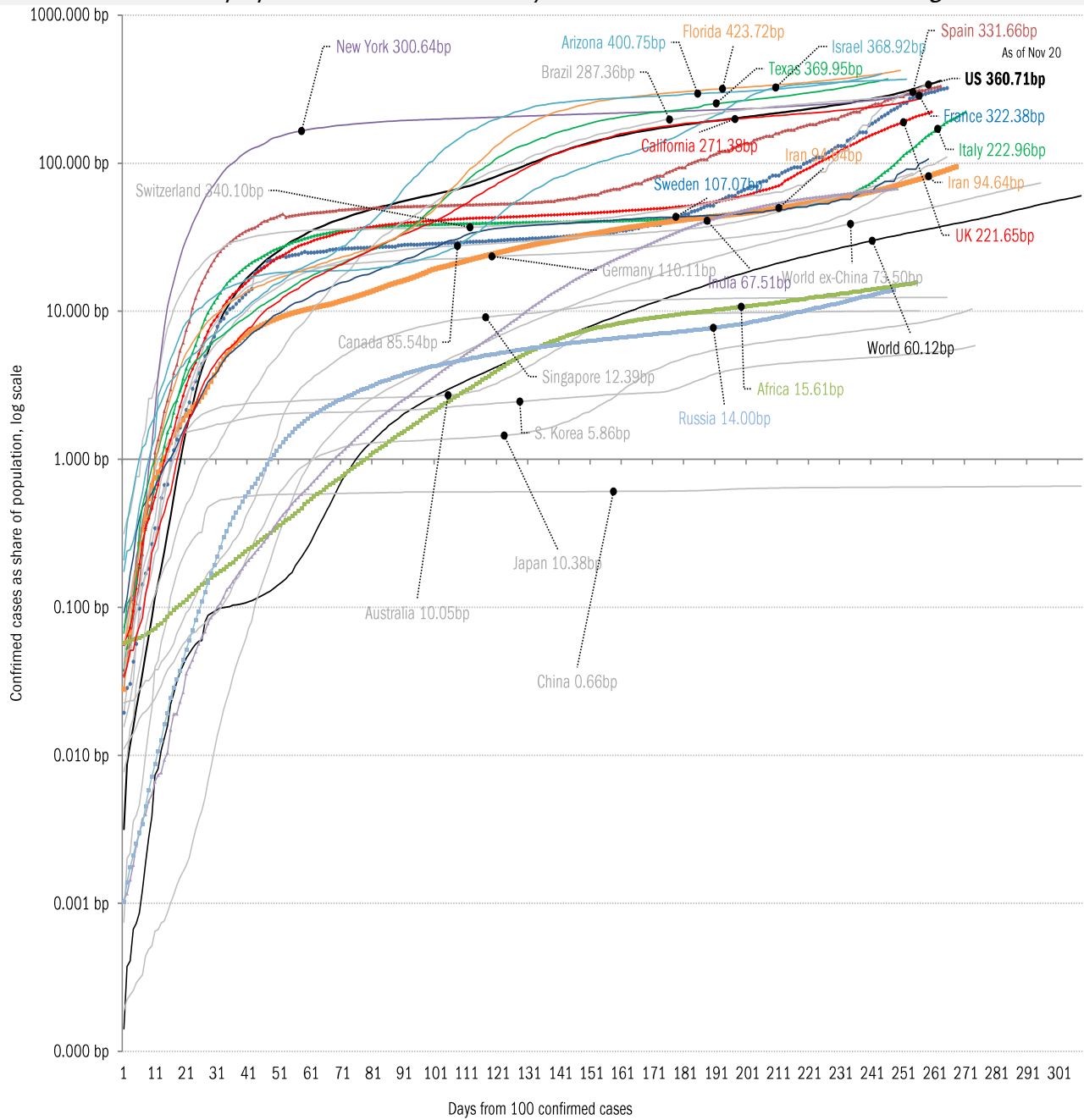
Jinshan Hong
Bloomberg
November 19, 2020

Meme of day



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

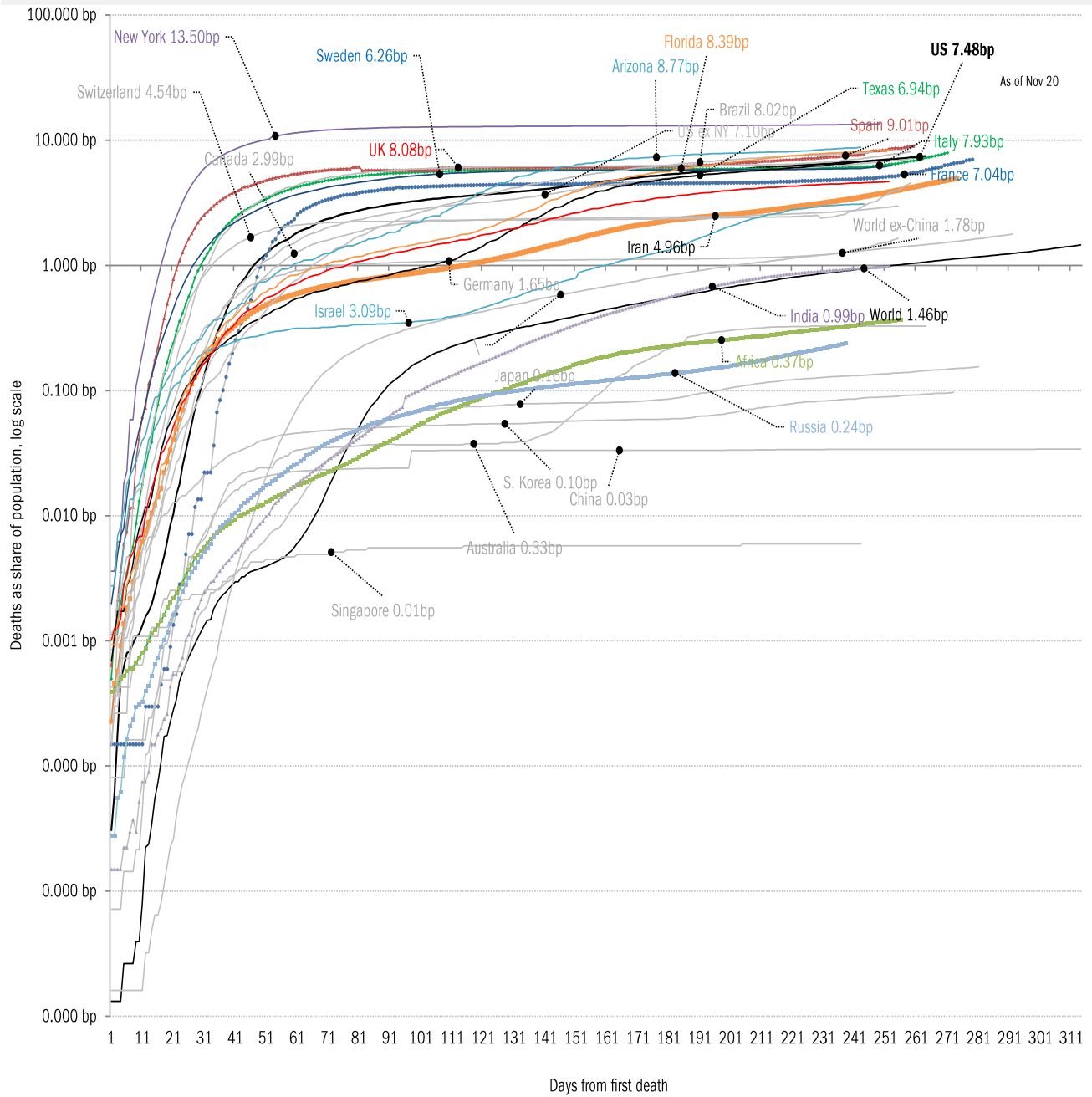
The coronavirus case accelerometer... tracking the world's infection curves
Share of infected population from first day with 100 confirmed cases, log scale



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

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

Share of deceased population from day of first fatality

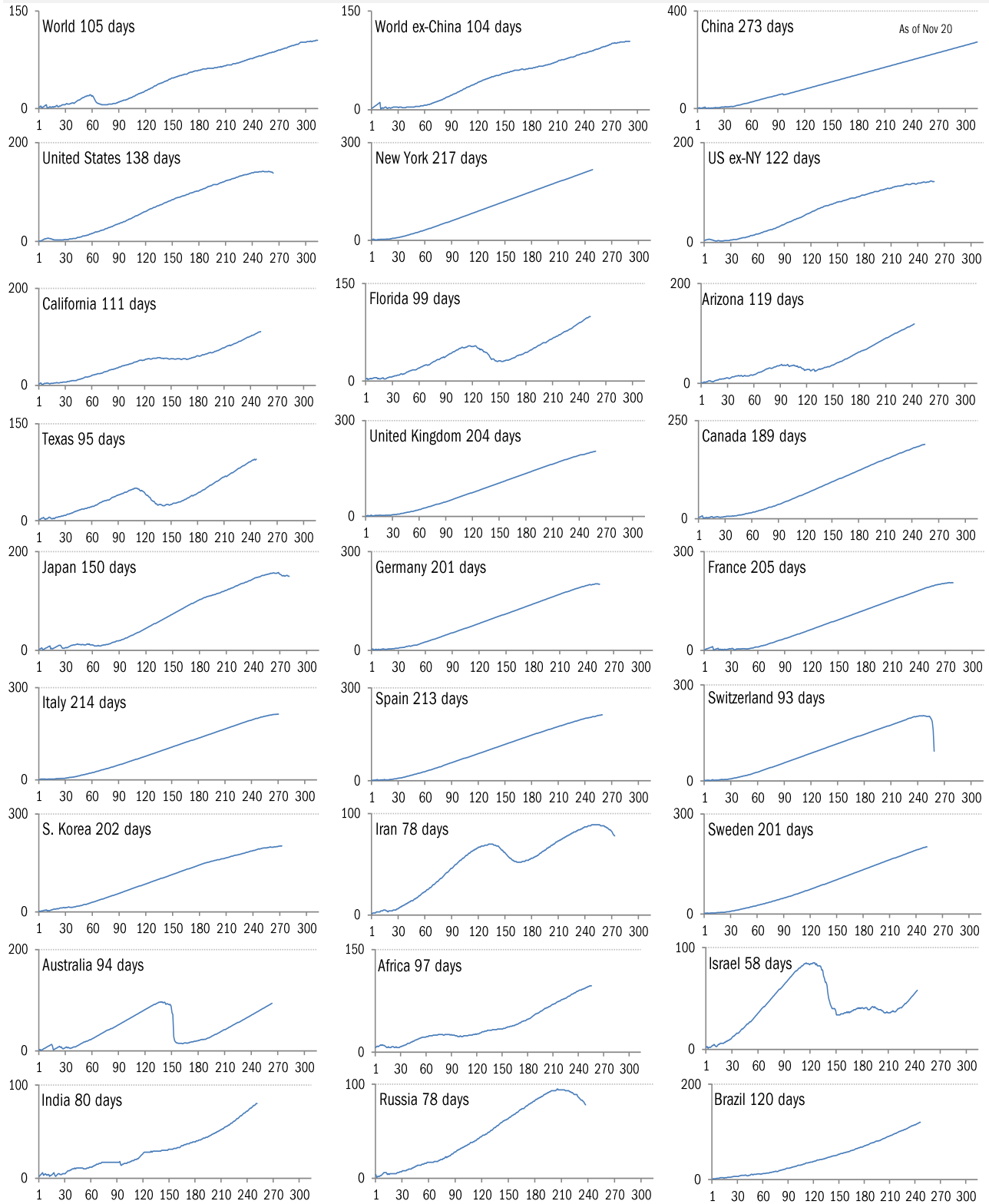


Source: [Johns Hopkins](#), [Covid Tracking Project](#), TrendMacro calculations

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

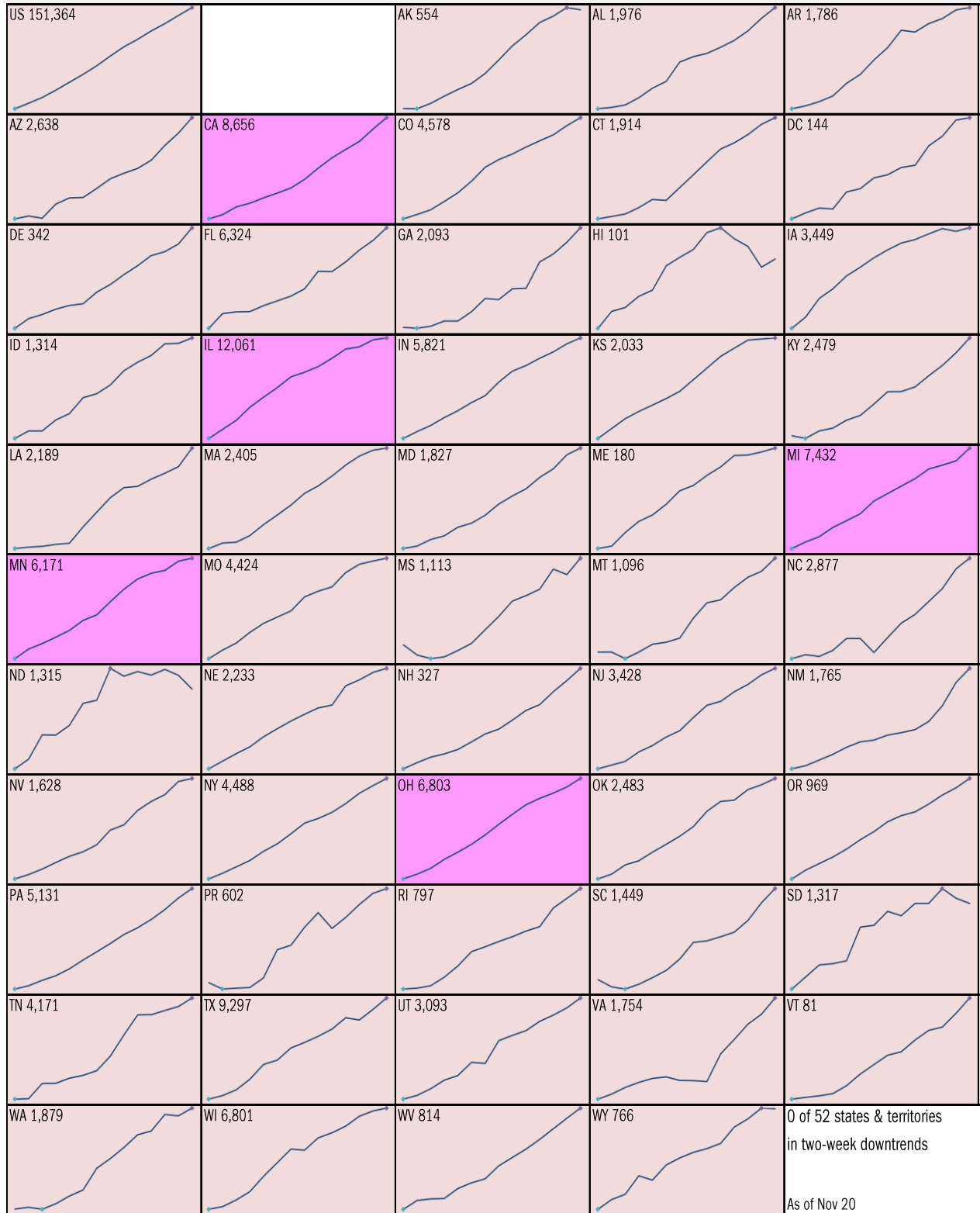
Vertical: days to double deaths Horizontal: days from first death

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

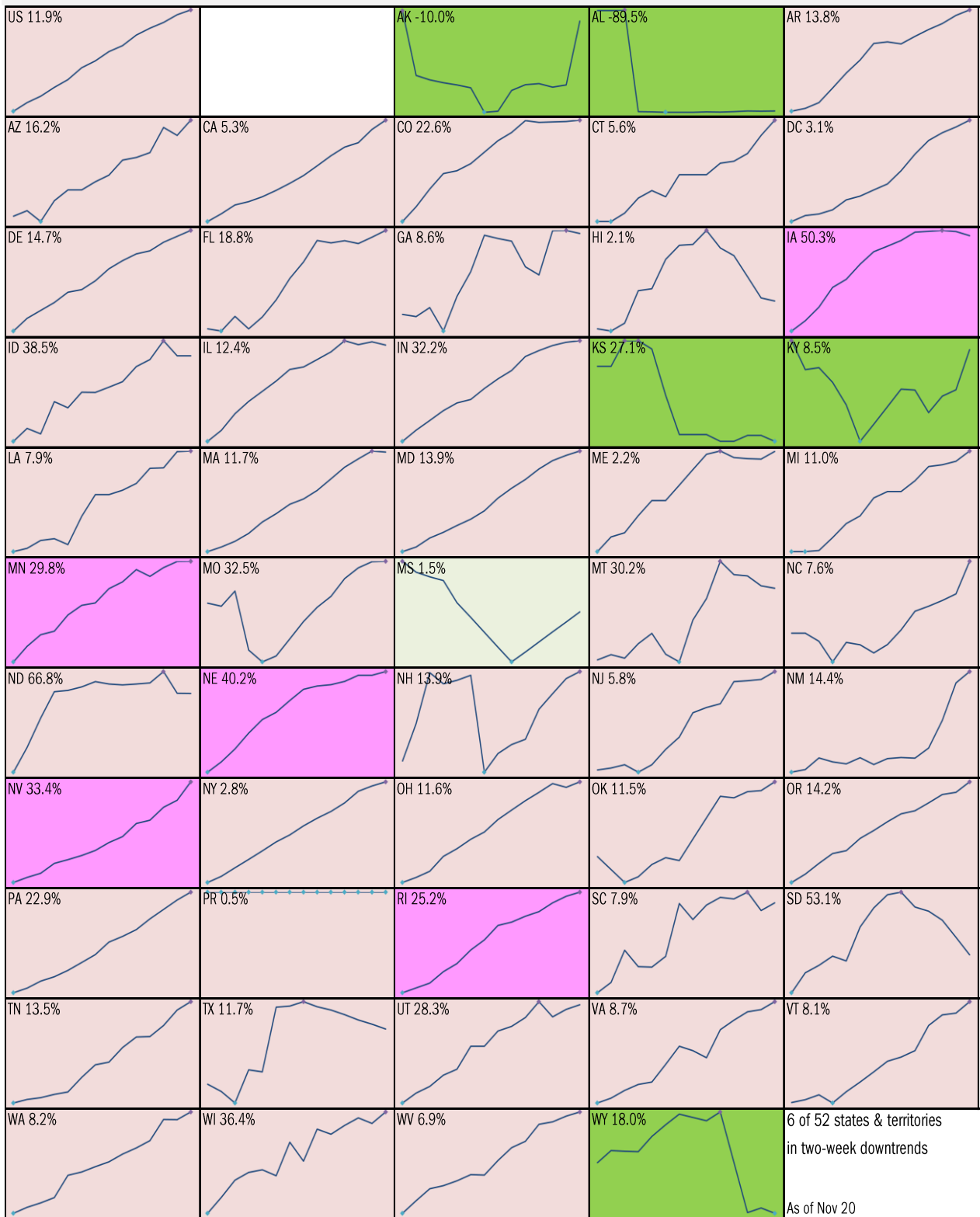


Source: [Covid Tracking Project](#), TrendMacro calculations

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



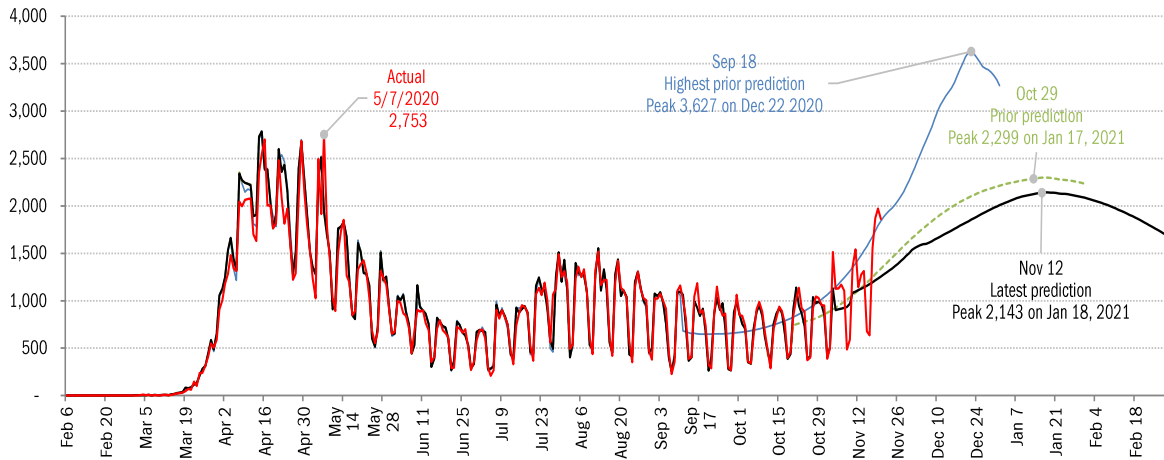
Source: [Covid Tracking Project](#), TrendMacro calculations

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

New daily fatalities

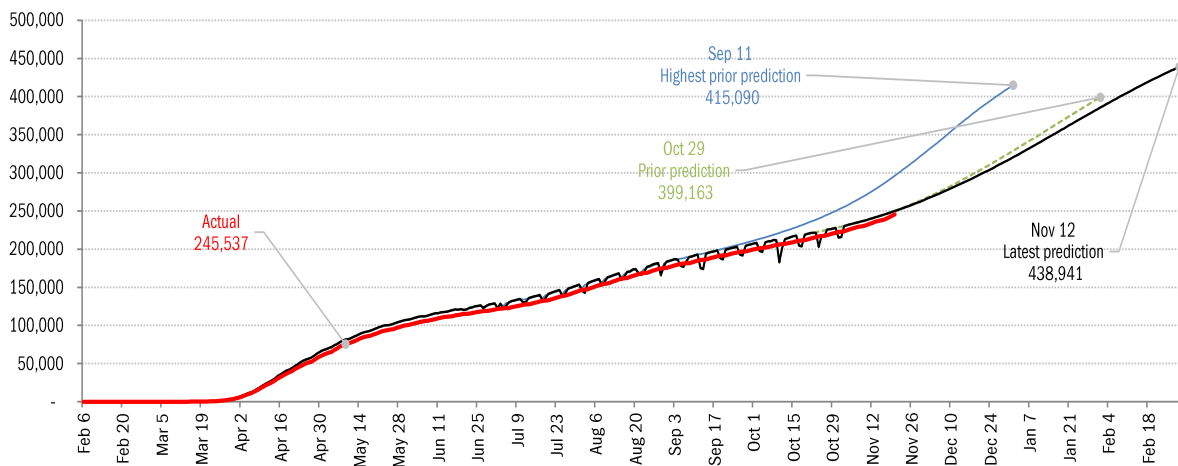
As of Nov 20

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

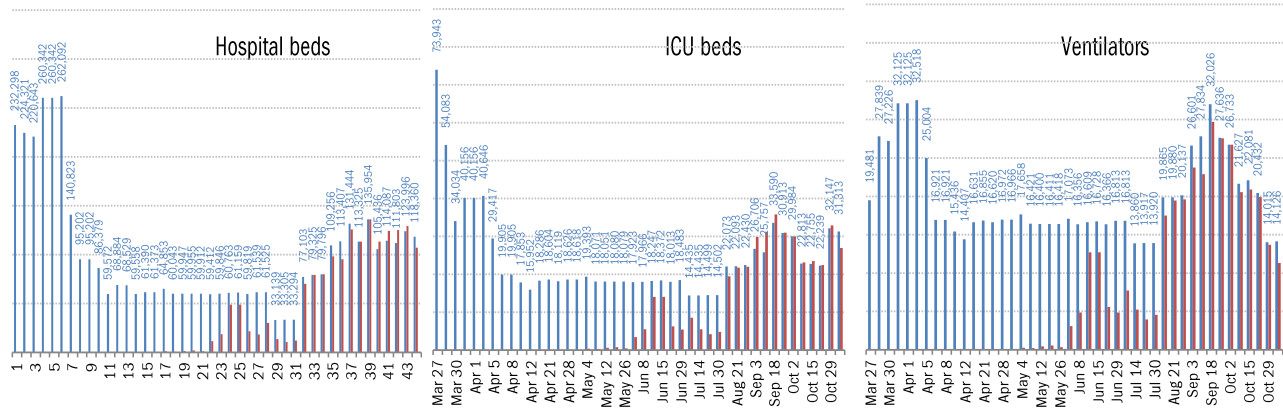


Cumulative fatalities

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

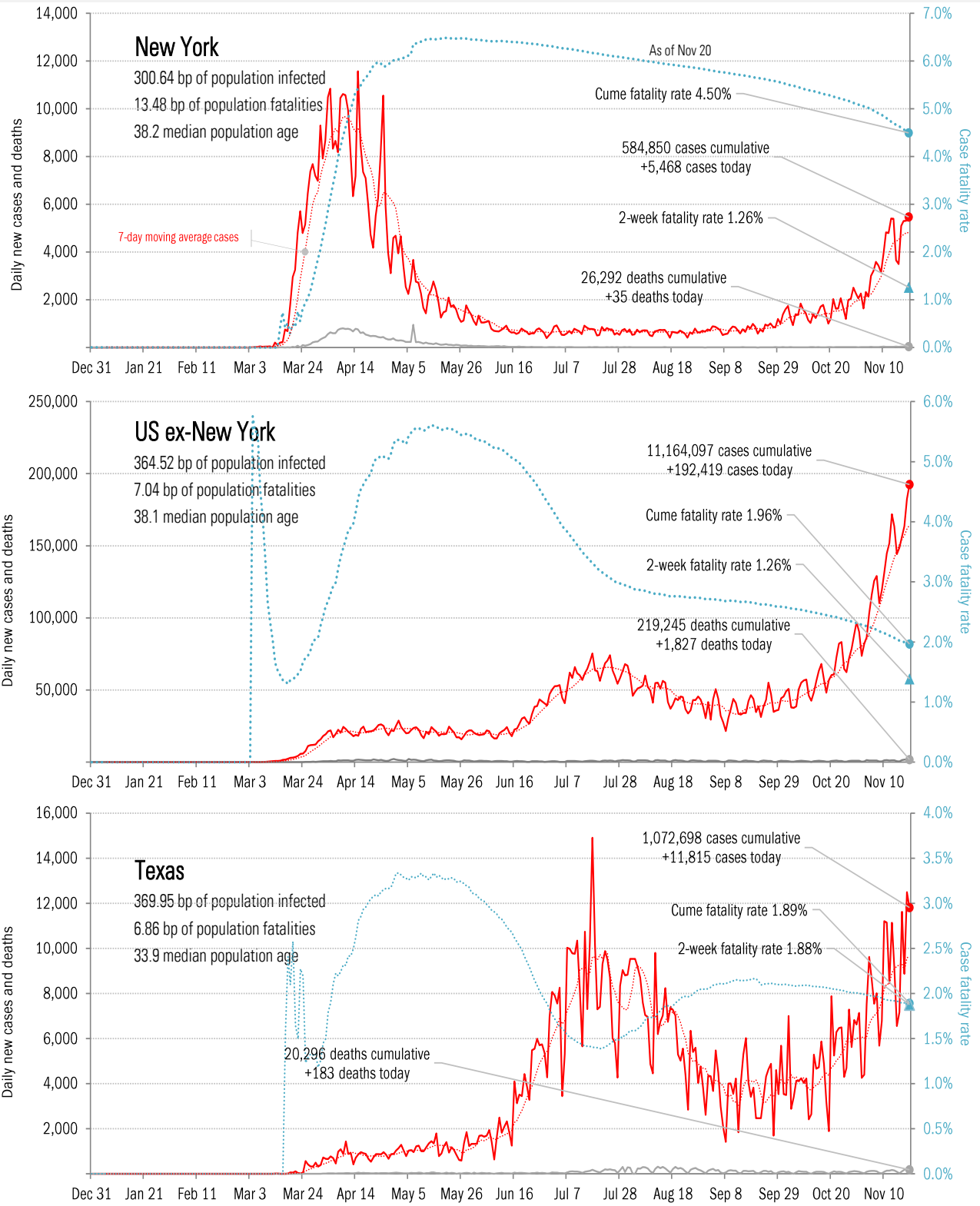


Healthcare system stress, **peak** and **ultimate** estimated at each model revision



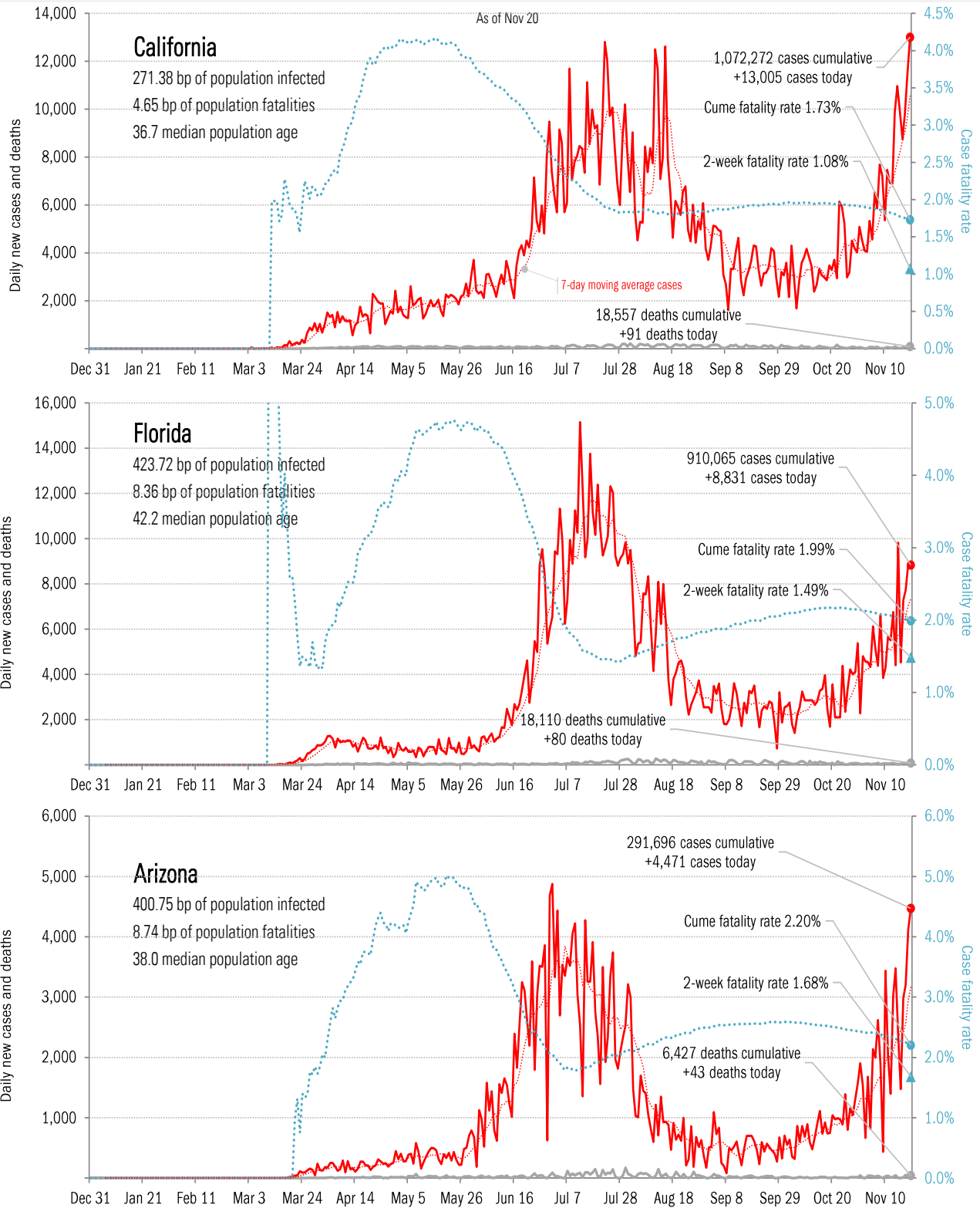
Source: [Covid Tracking Project](#), [IHME](#), TrendMacro calculations

From Ground Zero to the Rio Grande



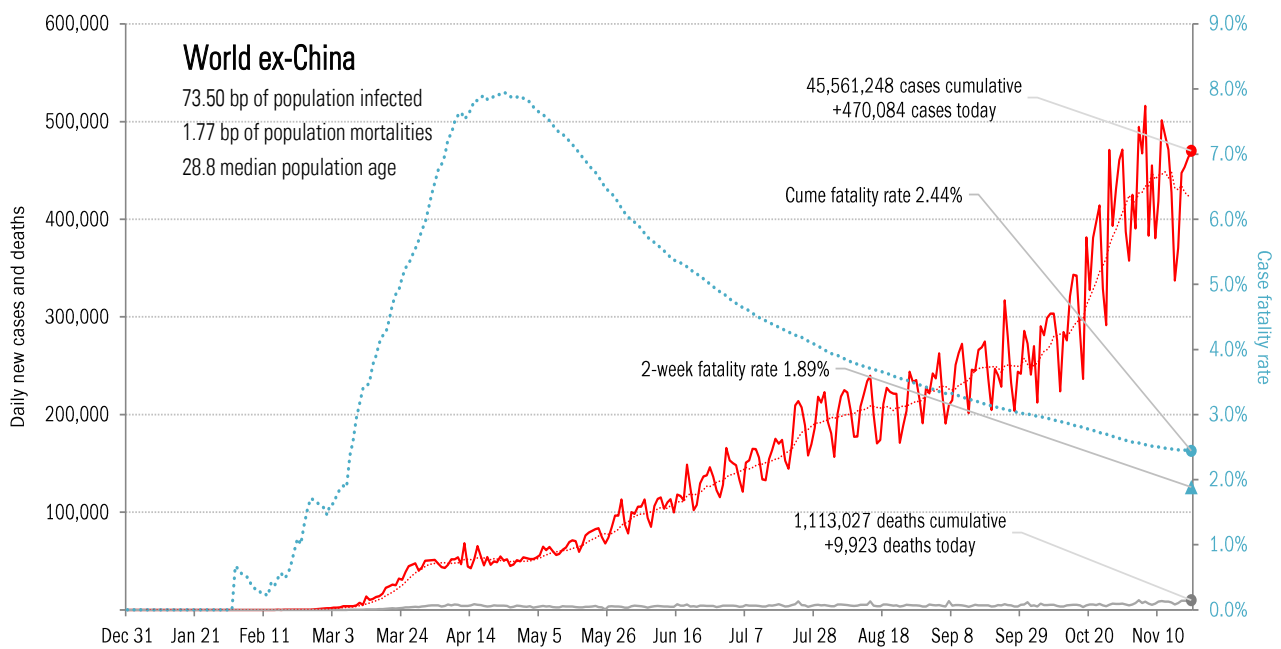
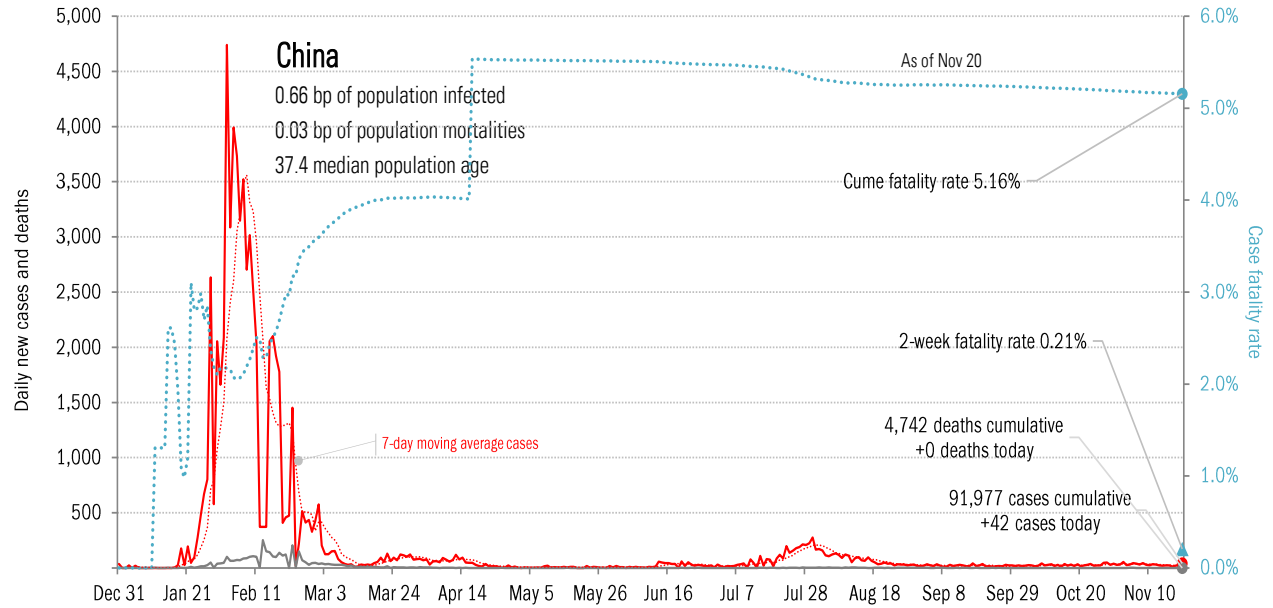
Source: [Covid Tracking Project](#), TrendMacro calculations

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



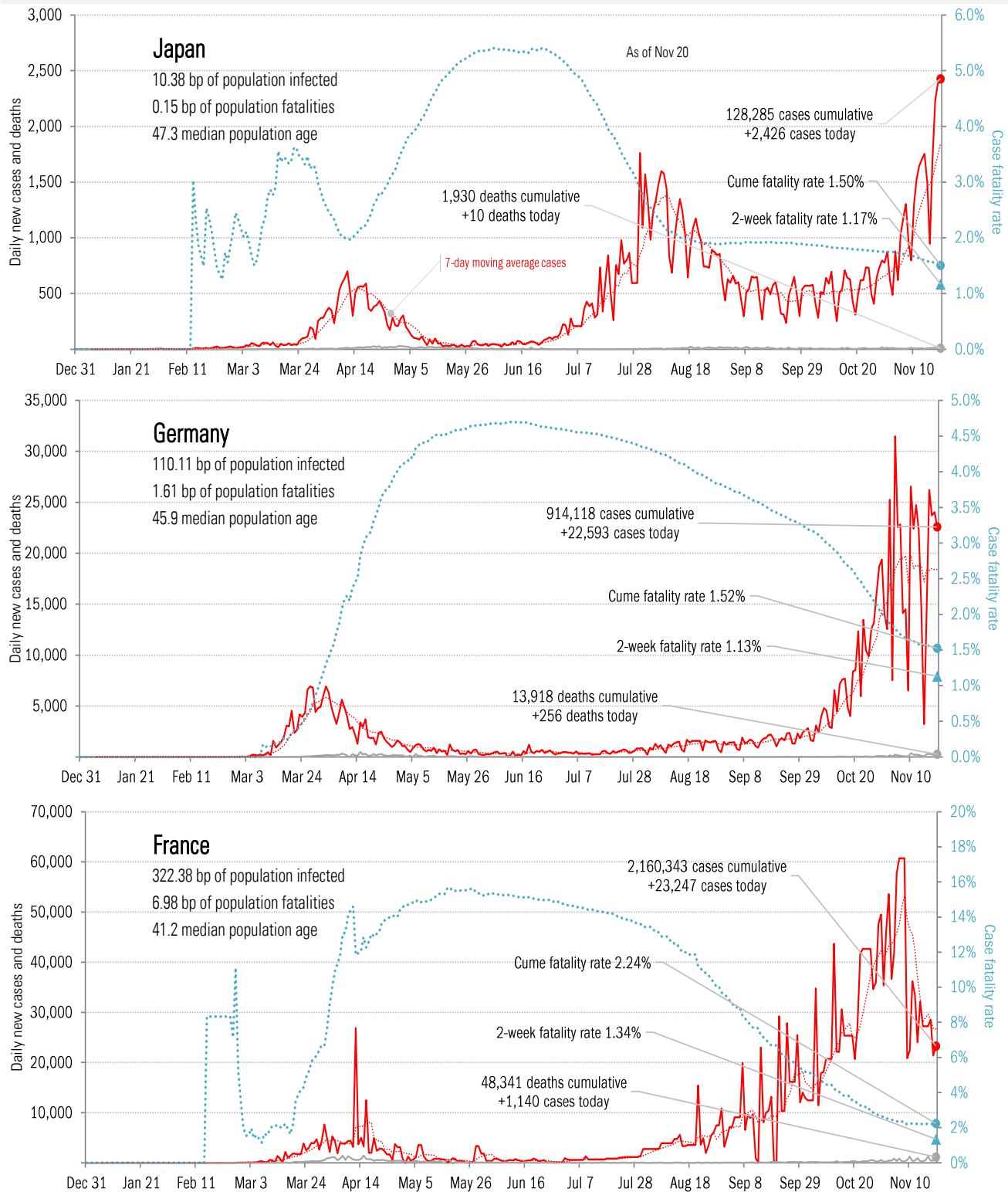
Source: [Covid Tracking Project](#), TrendMacro calculations

Patient zero... and then everyone else



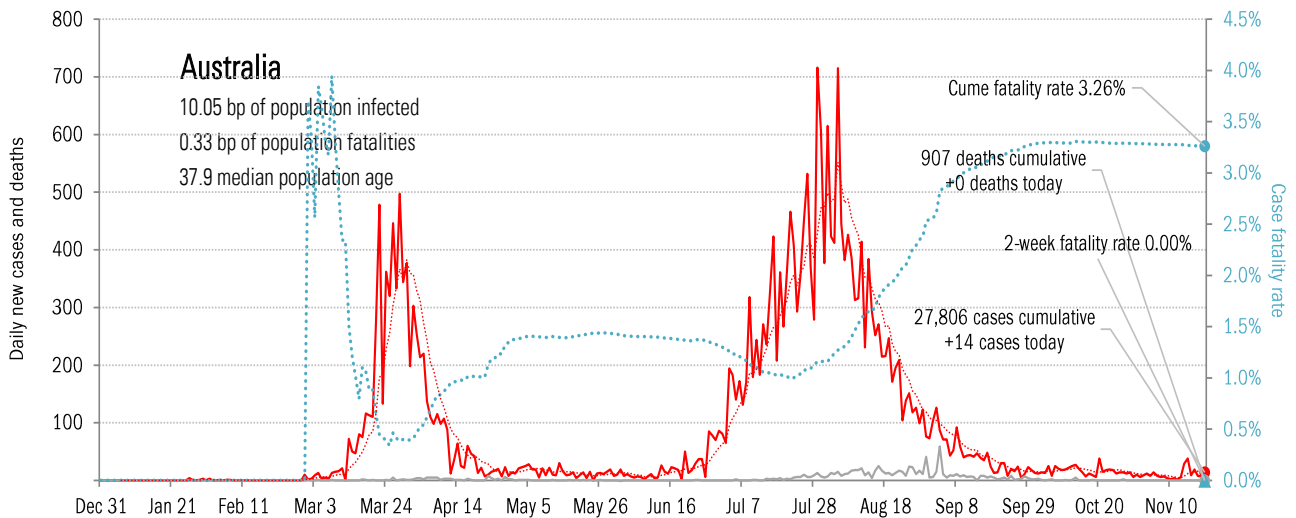
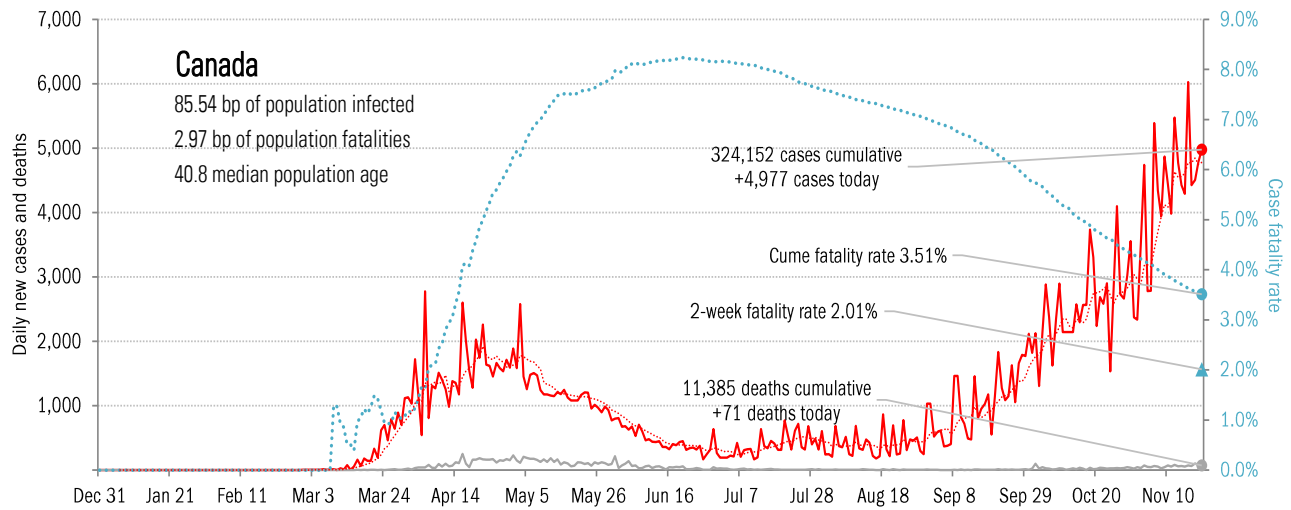
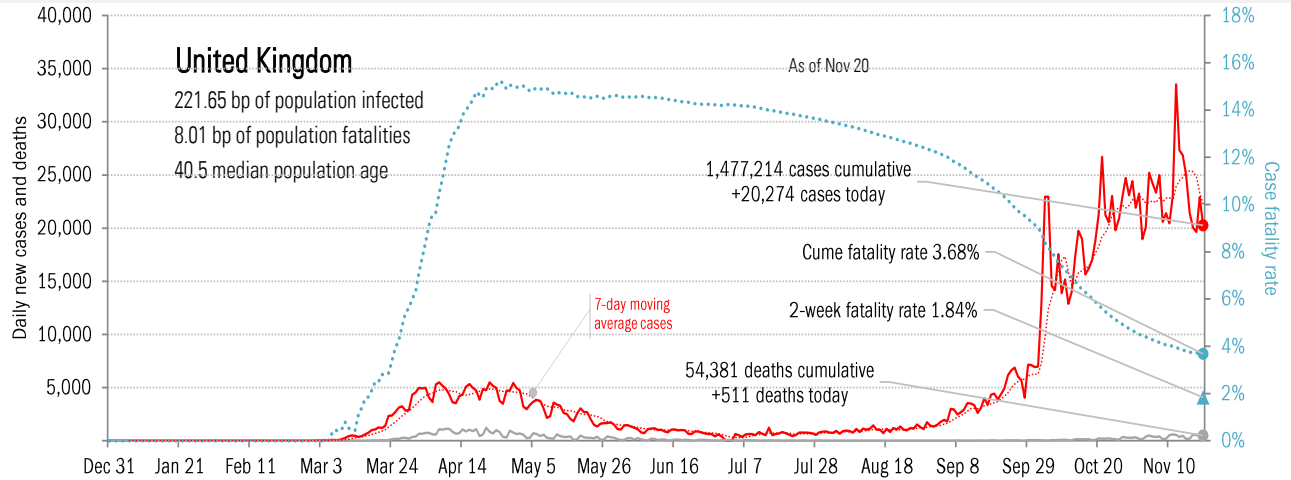
Source: [Johns Hopkins](#), [Covid Tracking Project](#), TrendMacro calculations

Impact in the largest economies



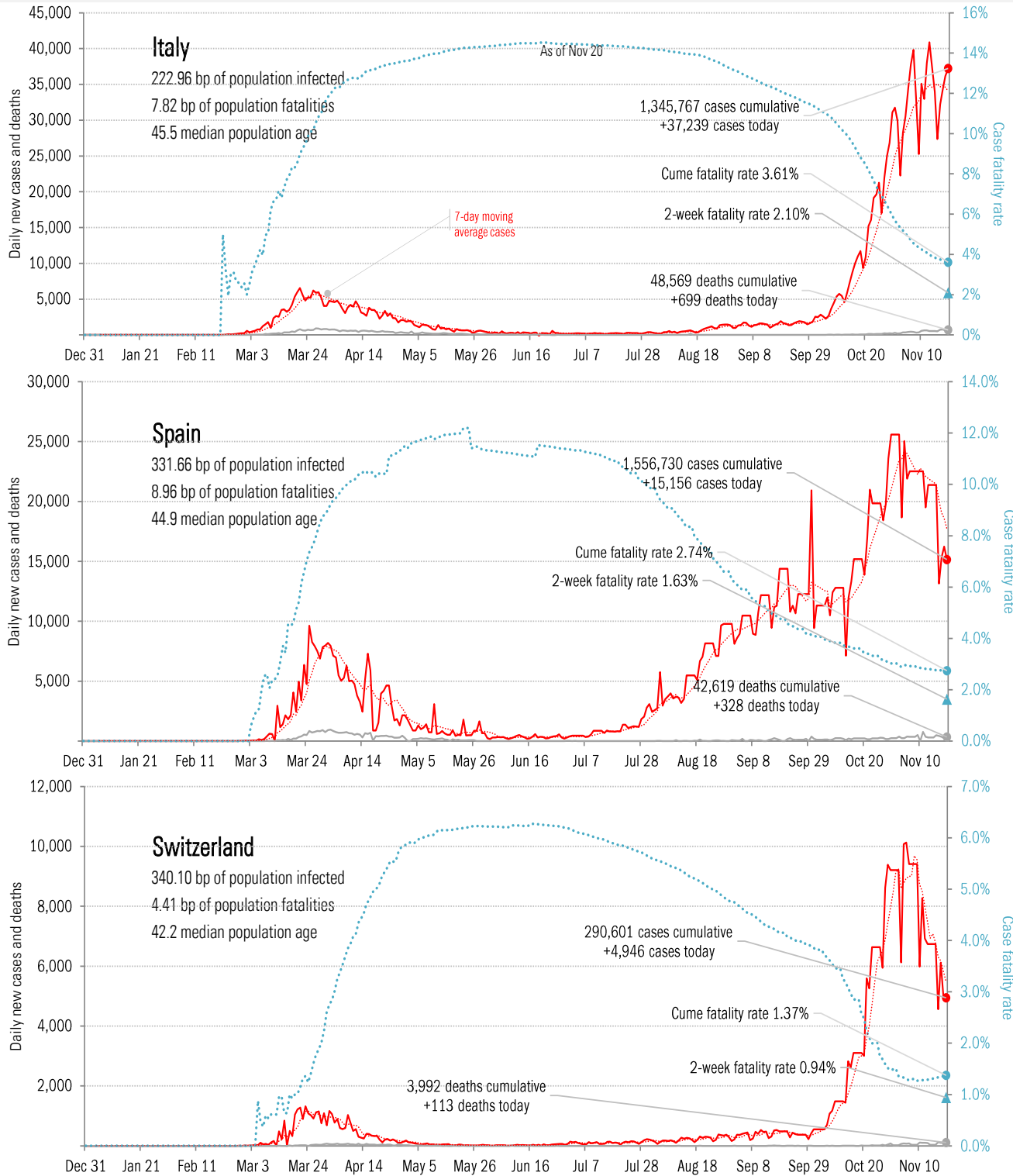
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in The Anglosphere



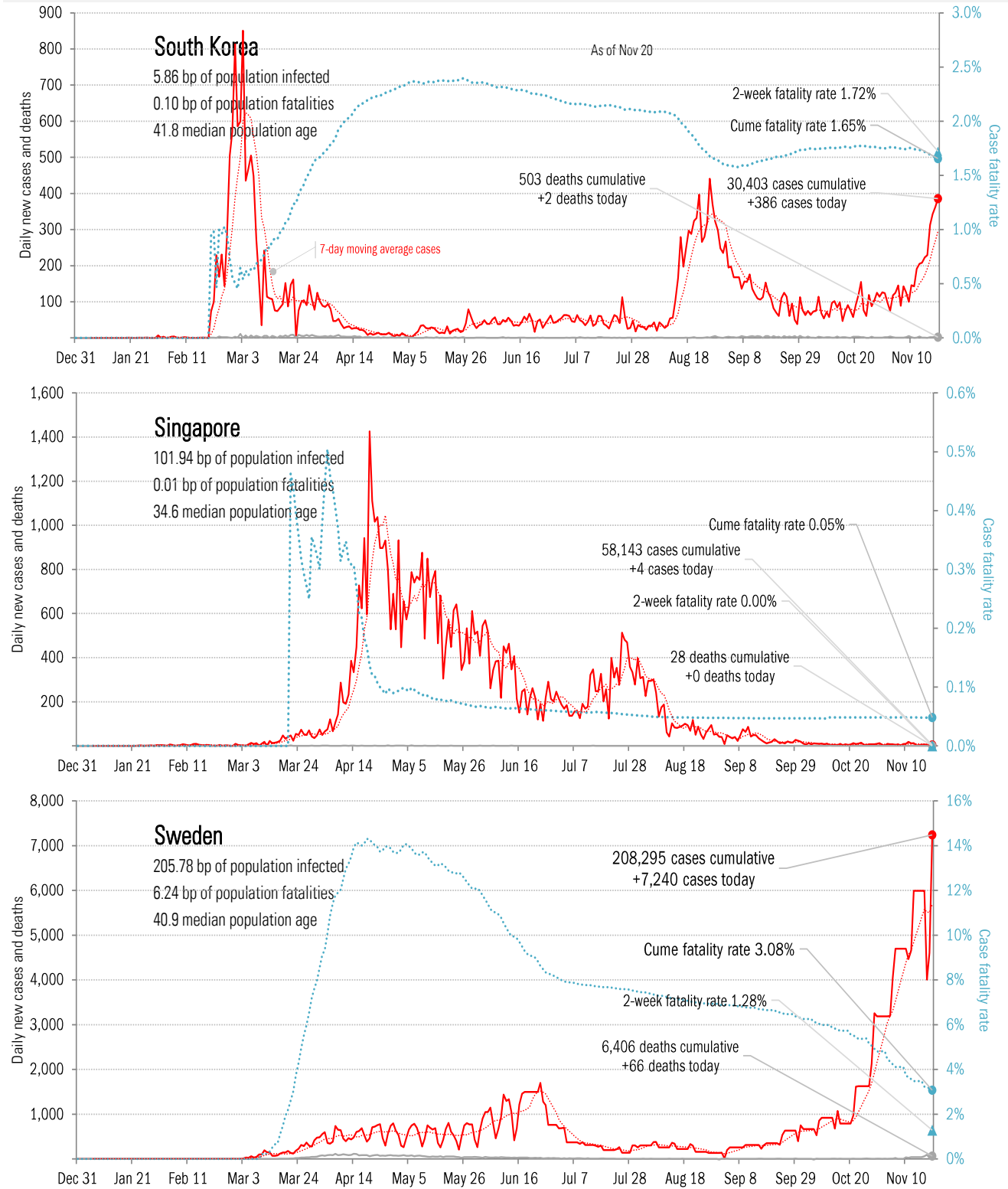
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in continental Europe



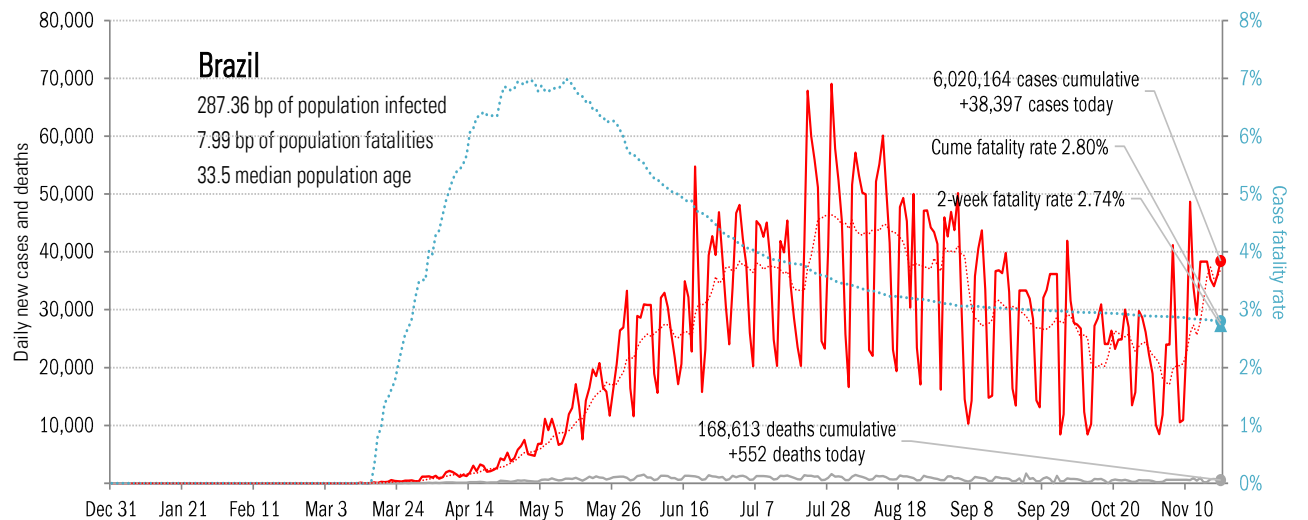
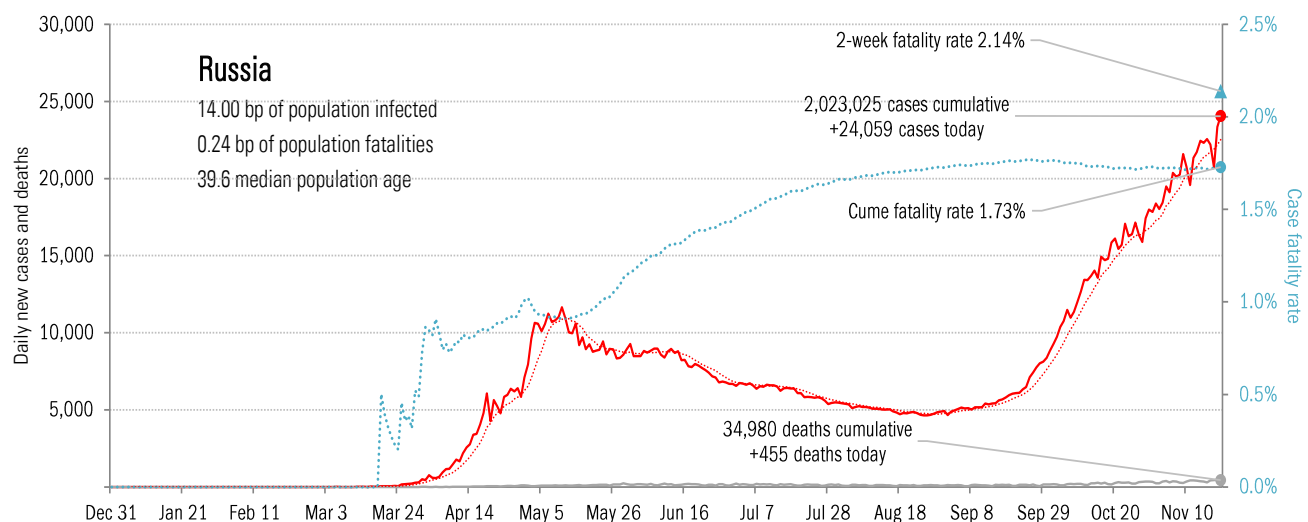
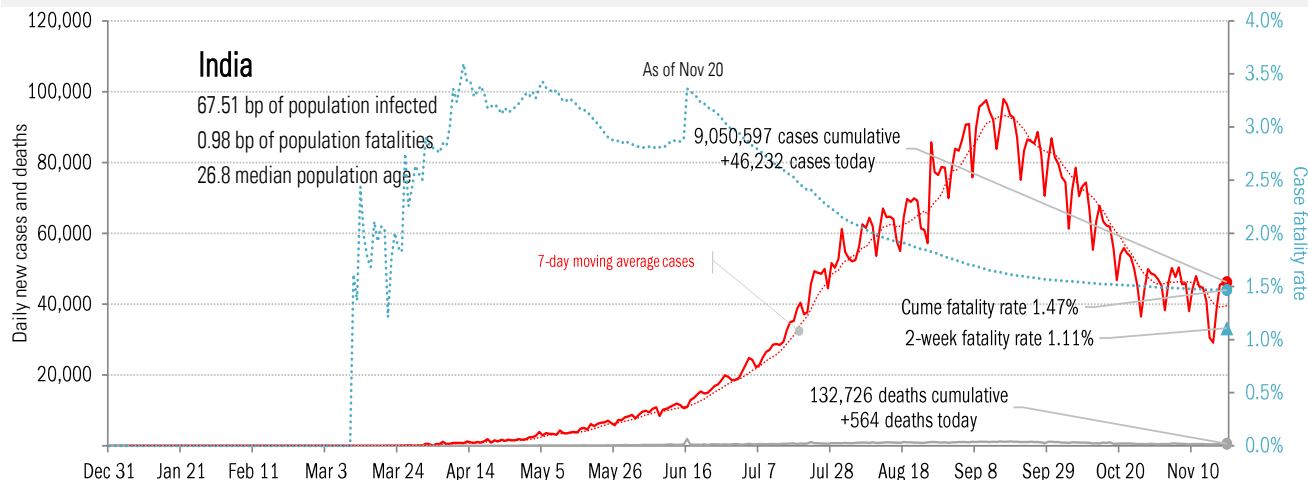
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in other hot-spots



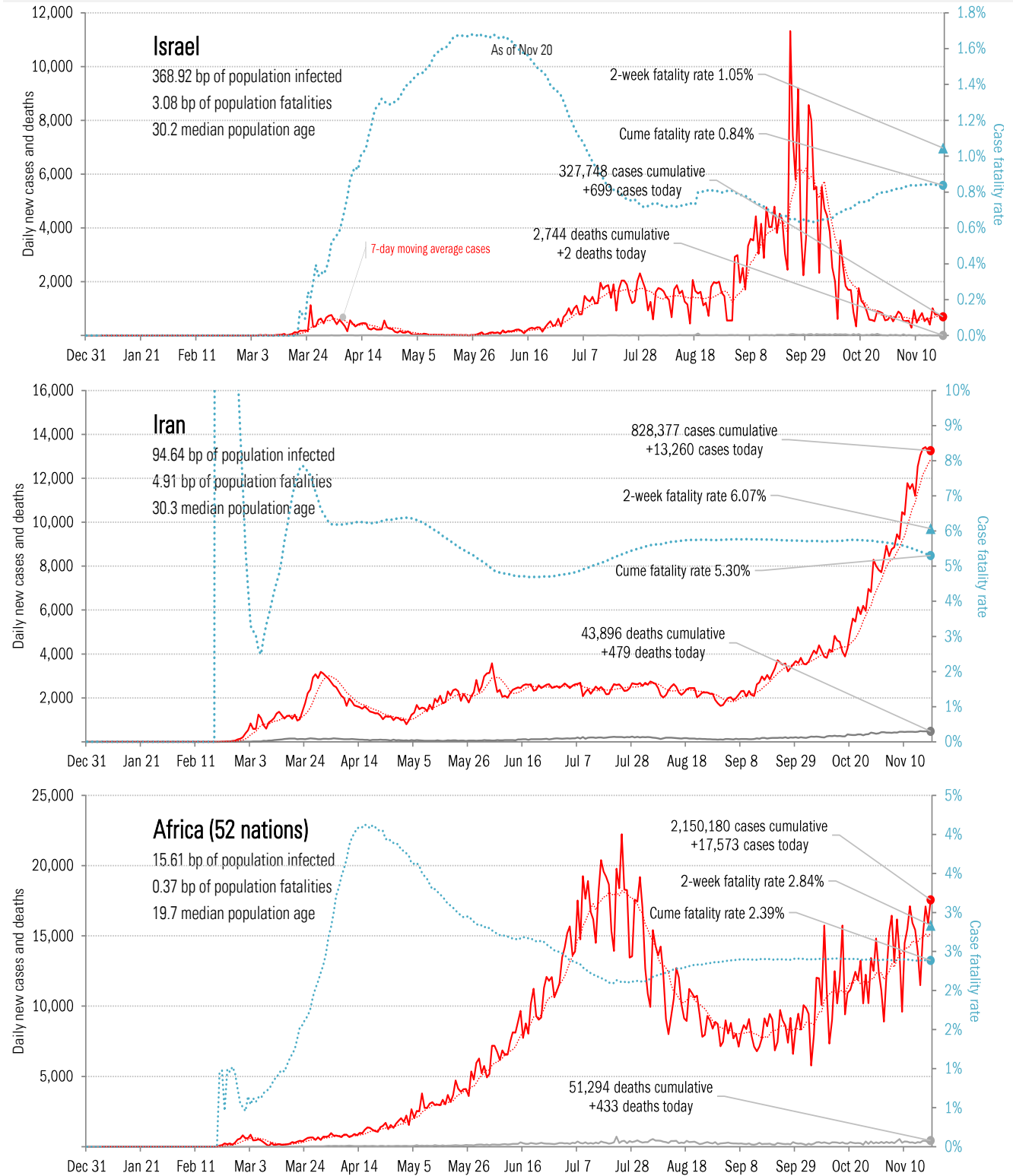
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in the BRICs ex-China



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

Impact in the Middle East and Africa



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