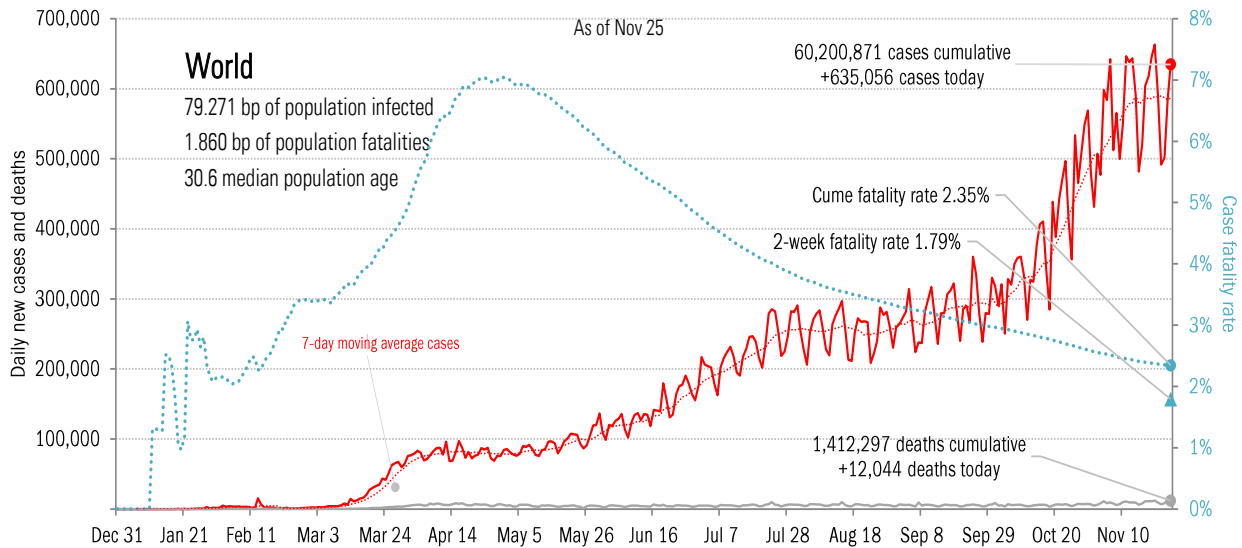
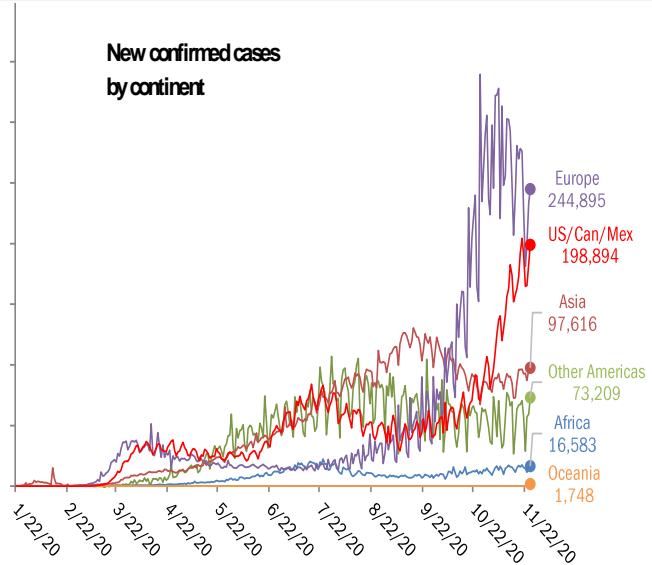


Data Insights: Covid-2019 Monitor

Thursday, November 26, 2020

The global scorecard

The worst ten countries			
New cases		New Deaths	
United States	+183,601	United States	+2,285
Brazil	+47,898	Mexico	+858
India	+44,489	Italy	+722
Germany	+32,687	United Kingdom	+695
Italy	+25,852	Poland	+674
Russia	+23,393	Brazil	+654
United Kingdom	+18,261	India	+524
France	+15,748	Russia	+498
Poland	+15,356	Iran	+469
Ukraine	+14,164	Germany	+378
+421,449		+7,757	
World	+635,056	World	+12,044
Top ten	66%	Top ten	64%



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

For more information contact us:

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 Thomas Demas: 704 552 3625 tdemas@trendmacro.com

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The US scorecard

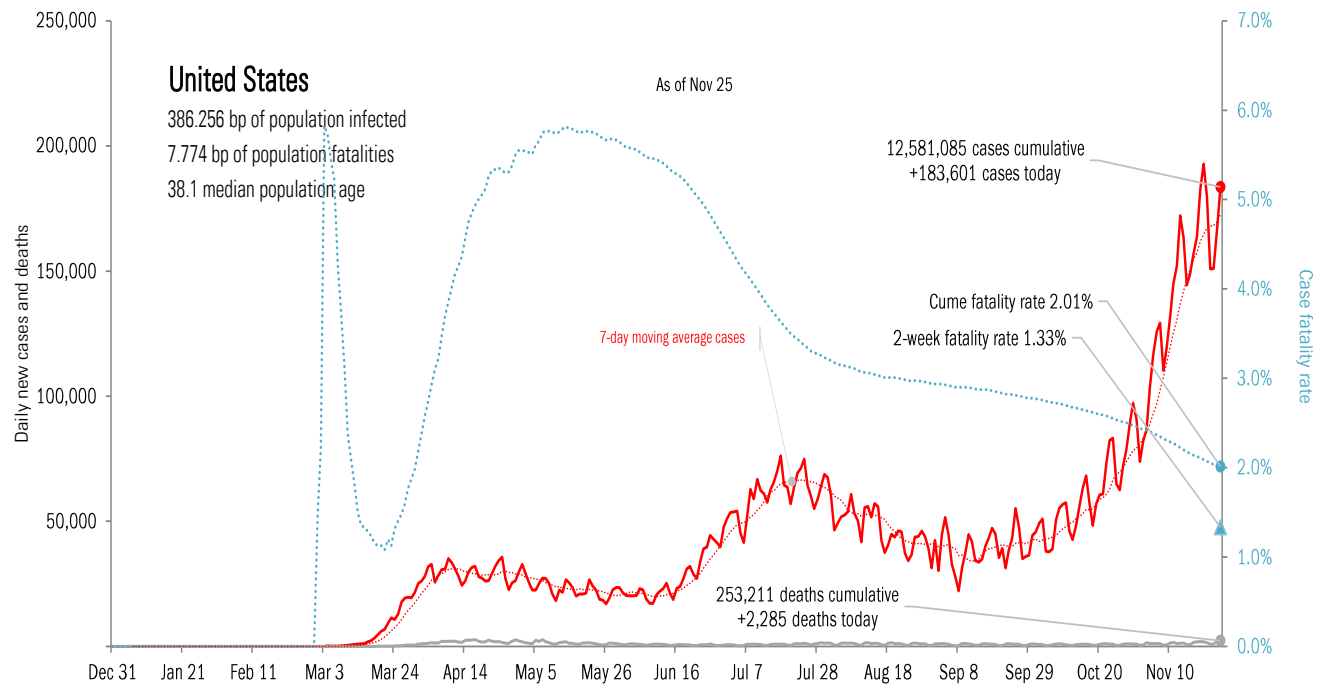
The ten worst US states

New cases		New Deaths		New in hospital		Curre cases		Curre deaths		Curre in hospital	
CA	+18,350	TX	+200	CA	+408	CA	1,144,049	NY	26,482	NY	89,995
TX	+15,609	IL	+178	KS	+230	TX	1,130,980	TX	20,950	TX	54,813
IL	+11,378	CH	+156	AZ	+133	FL	946,956	CA	18,875	NJ	40,706
CH	+10,835	PA	+144	NY	+126	IL	685,467	FL	18,482	GA	34,413
FL	+8,126	CA	+106	NJ	+117	NY	613,266	NJ	16,886	CH	25,486
PA	+6,759	FL	+99	PA	+93	GA	411,002	IL	12,440	VA	25,174
MN	+6,387	TN	+92	CH	+92	WI	392,438	MA	10,604	AZ	24,952
NY	+6,265	GA	+76	TX	+90	CH	382,743	PA	10,095	AL	24,376
WI	+5,997	MI	+76	NC	+87	MI	352,433	GA	9,297	IN	24,217
IN	+5,983	MN	+72	IN	+84	TN	347,972	MI	9,170	MD	20,068
+95,689		+1,199		+1,460		6,407,306		153,281		364,200	
All states	+183,601	All states	+2,285	All states	+1,879	All states	12,581,085	All states	253,211	All states	555,760
Top ten	52%	Top ten	52%	Top ten	78%	Top ten	51%	Top ten	61%	Top ten	66%

Some states not reporting

Five most improved US states

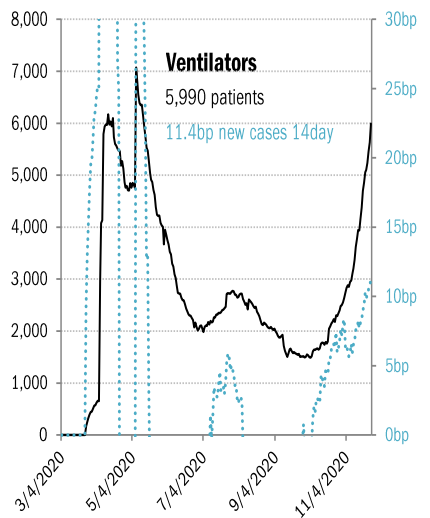
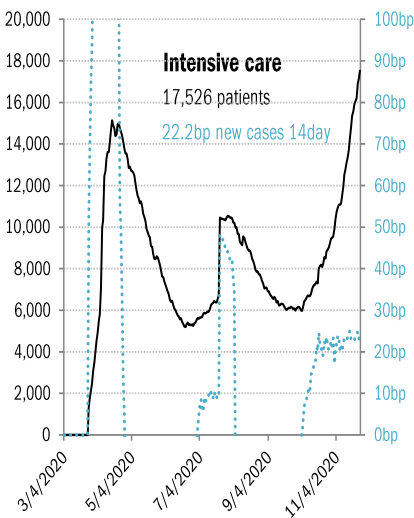
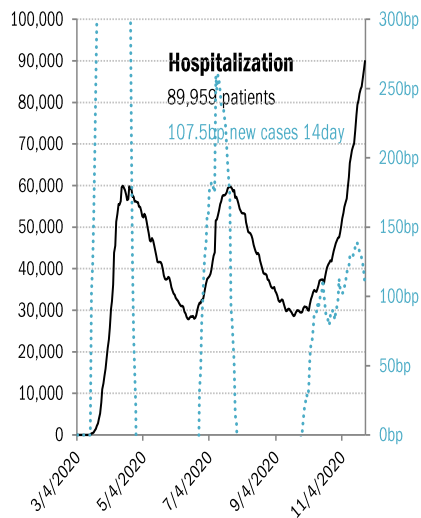
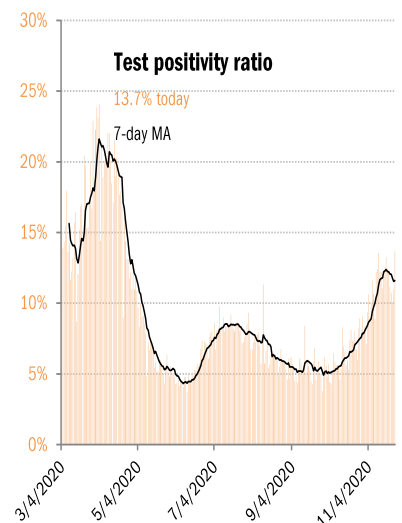
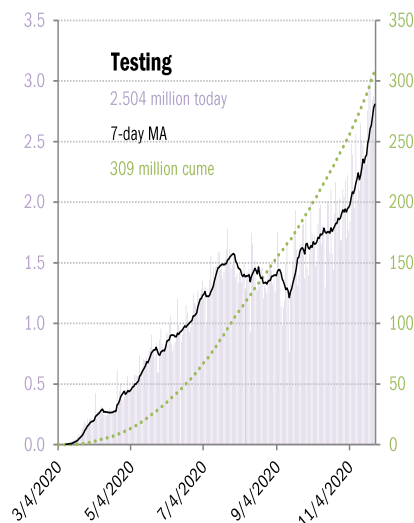
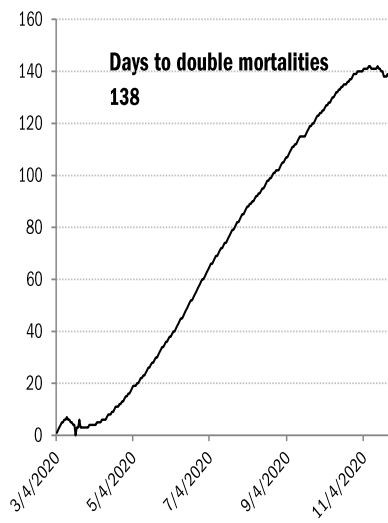
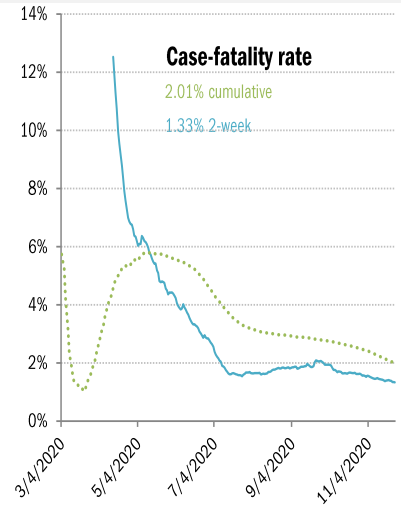
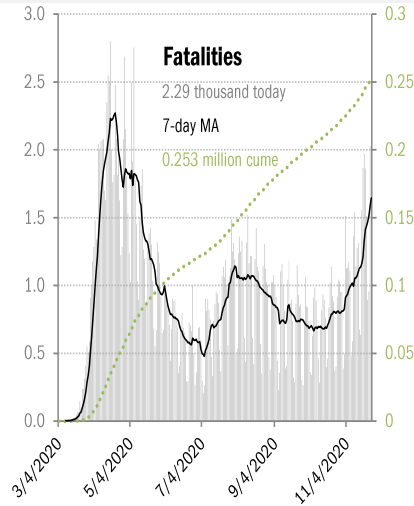
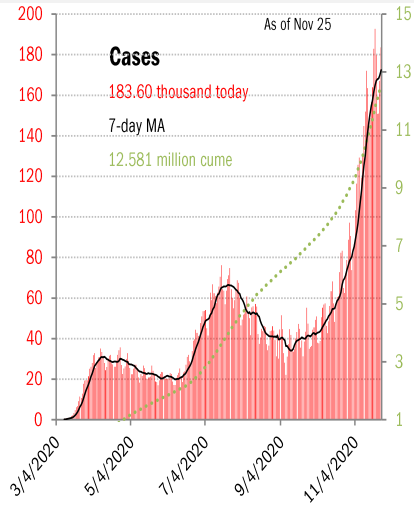
Fewer daily cases		Fewer new deaths		Fewer new hospitalizations		Most recoveries	
WA	-2,795	MO	-163	PA	-345	AL	+71,244
MI	-2,095	MI	-78	NV	-110	TX	+7,680
LA	-2,008	WI	-43	FL	-83	MN	+6,873
UT	-920	AZ	-42	WI	-81	LA	+6,528
WI	-751	IN	-40	MN	-66	WI	+6,066



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

[Supreme Court Blocks Covid-19 Restrictions on Religious Services in New York](#)

Jess Bravin
Wall Street Journal
November 26, 2020

[Evidence Builds That an Early Mutation Made the Pandemic Harder to Stop](#)

James Glanz, Benedict Carey and Hannah Beech
New York Times
November 24, 2020

[Scott Peterson, thousands of California inmates carried out 'staggering' Covid fraud, officials say](#)

Tim Stelloh
NBC News
November 24, 2020

[U.S. Working on Guidance to Shorten Covid Quarantine Period](#)

Emma Court and Jacquie Lee
Bloomberg
November 24, 2020

[Study of Teaching and Learning During the Covid-19 Pandemic](#)

Office of Research and Strategic Improvement
Fairfax County Public Schools
November 2020

[Too Much Caution Is Killing Covid Patients](#)

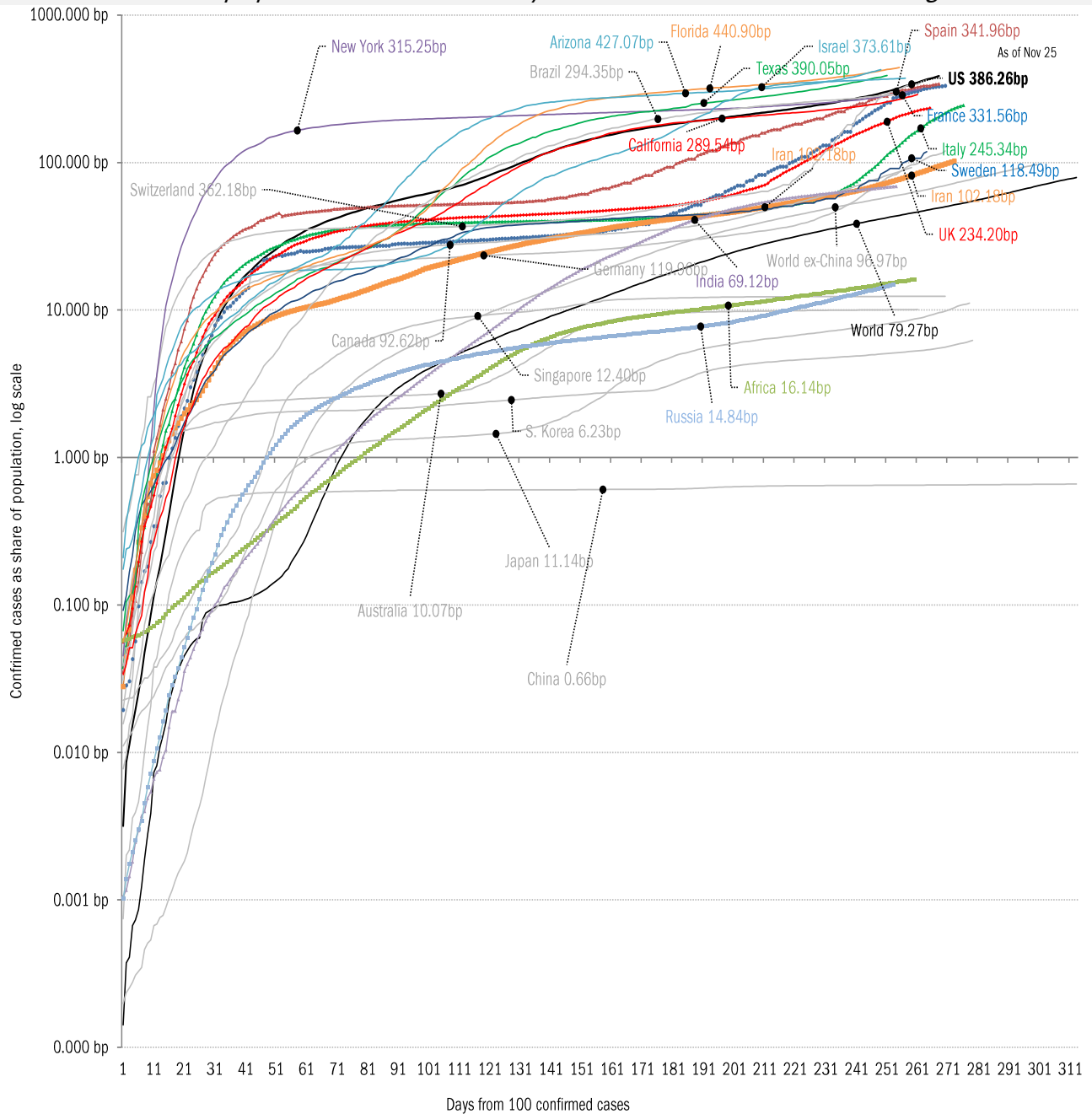
Joseph A. Ladapo
Wall Street Journal
November 24, 2020

Meme of day



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

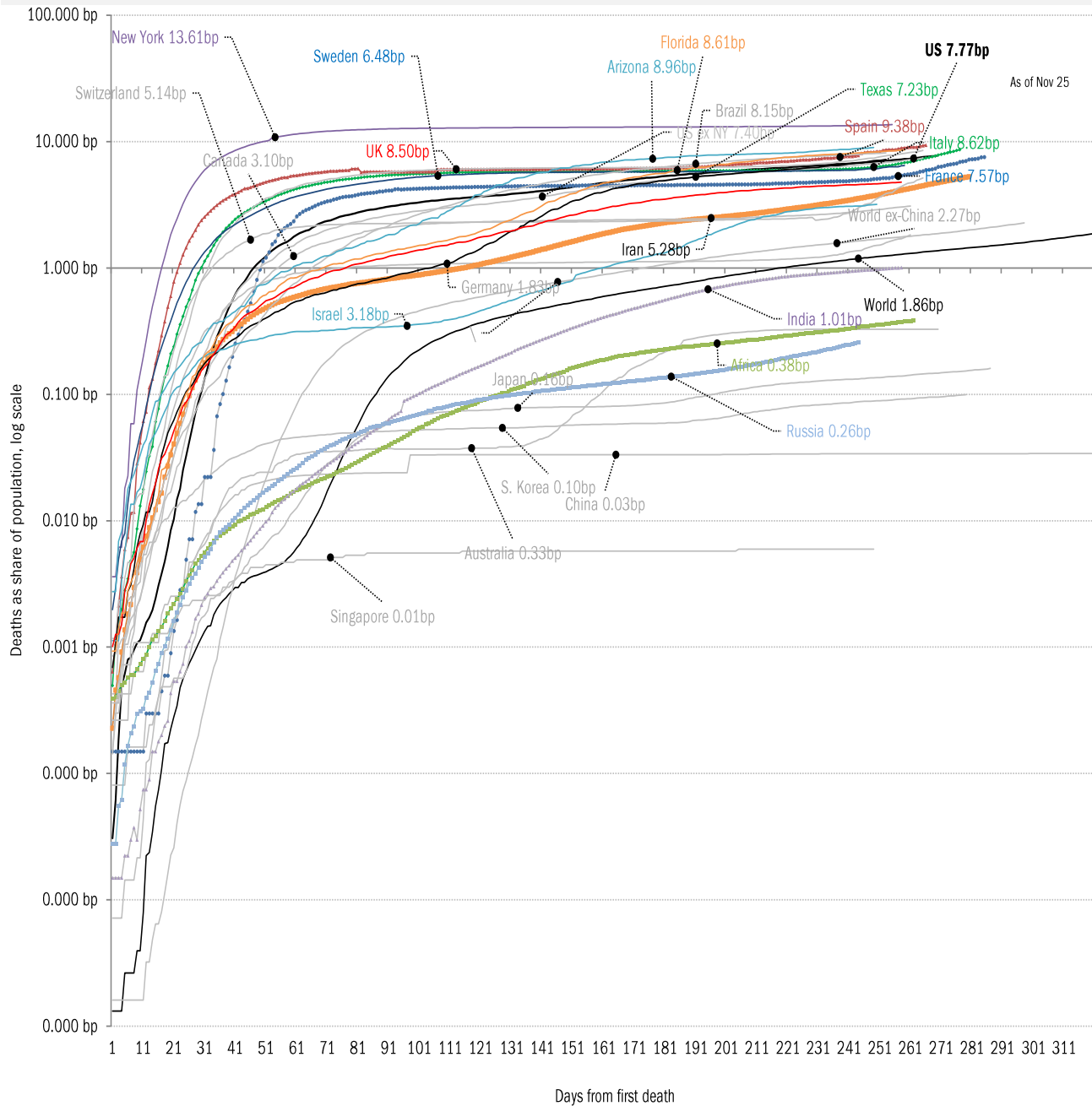
The coronavirus case accelerometer... tracking the world's infection curves
Share of infected population from first day with 100 confirmed cases, log scale



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

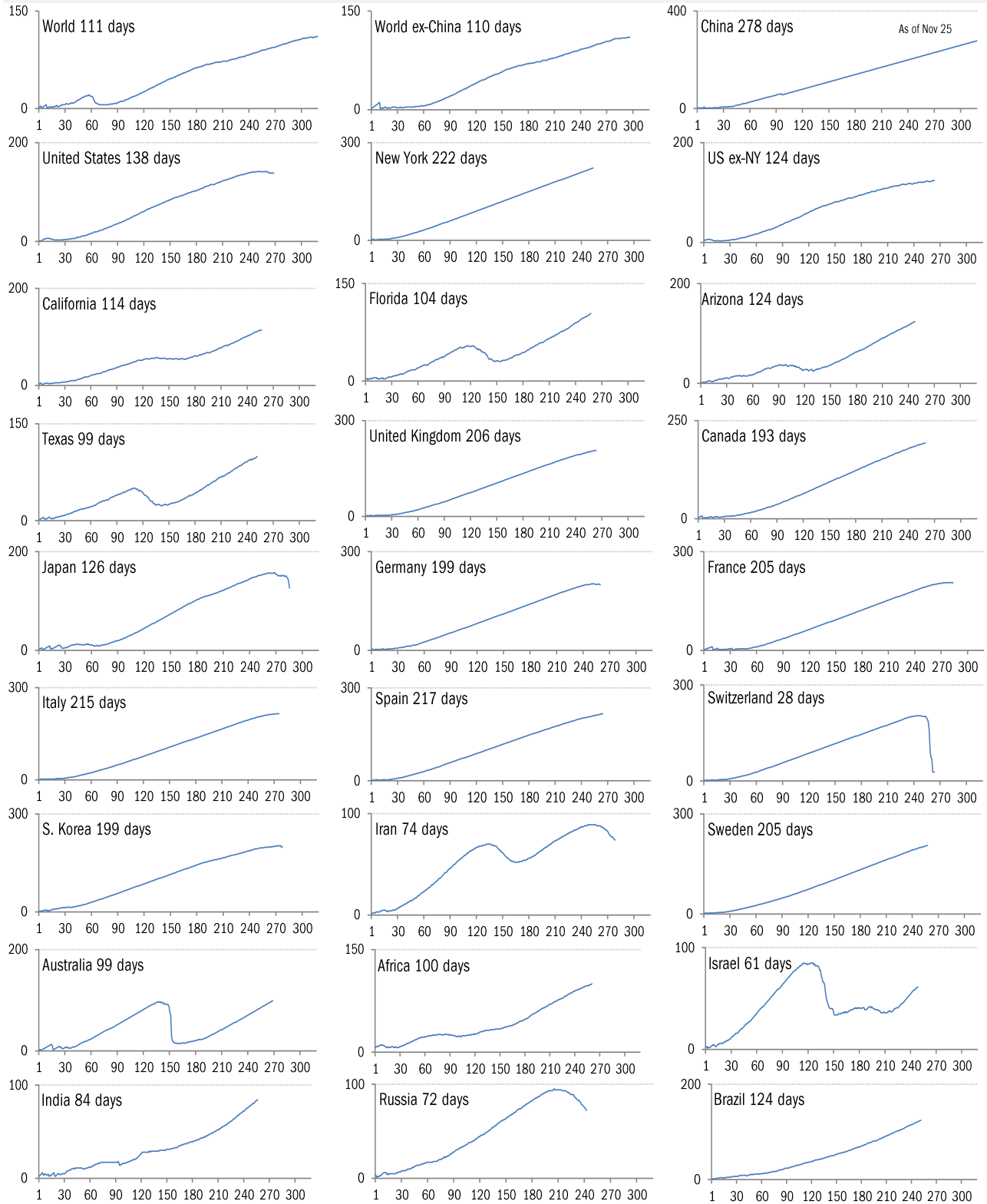


Source: [Johns Hopkins](#), [Covid Tracking Project](#), TrendMacro calculations

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

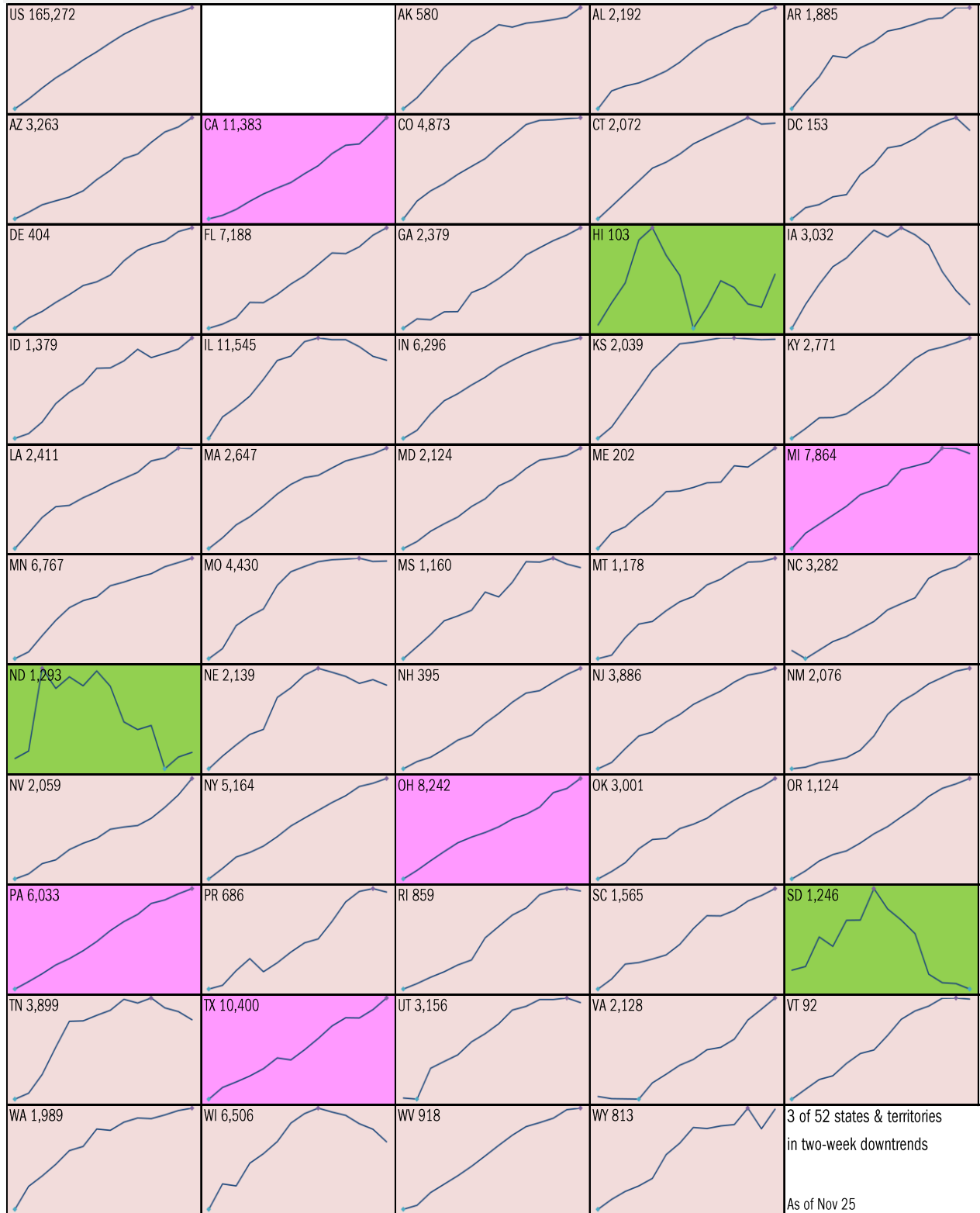


Source: [Johns Hopkins, Covid Tracking Project](#), TrendMacro calculations

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

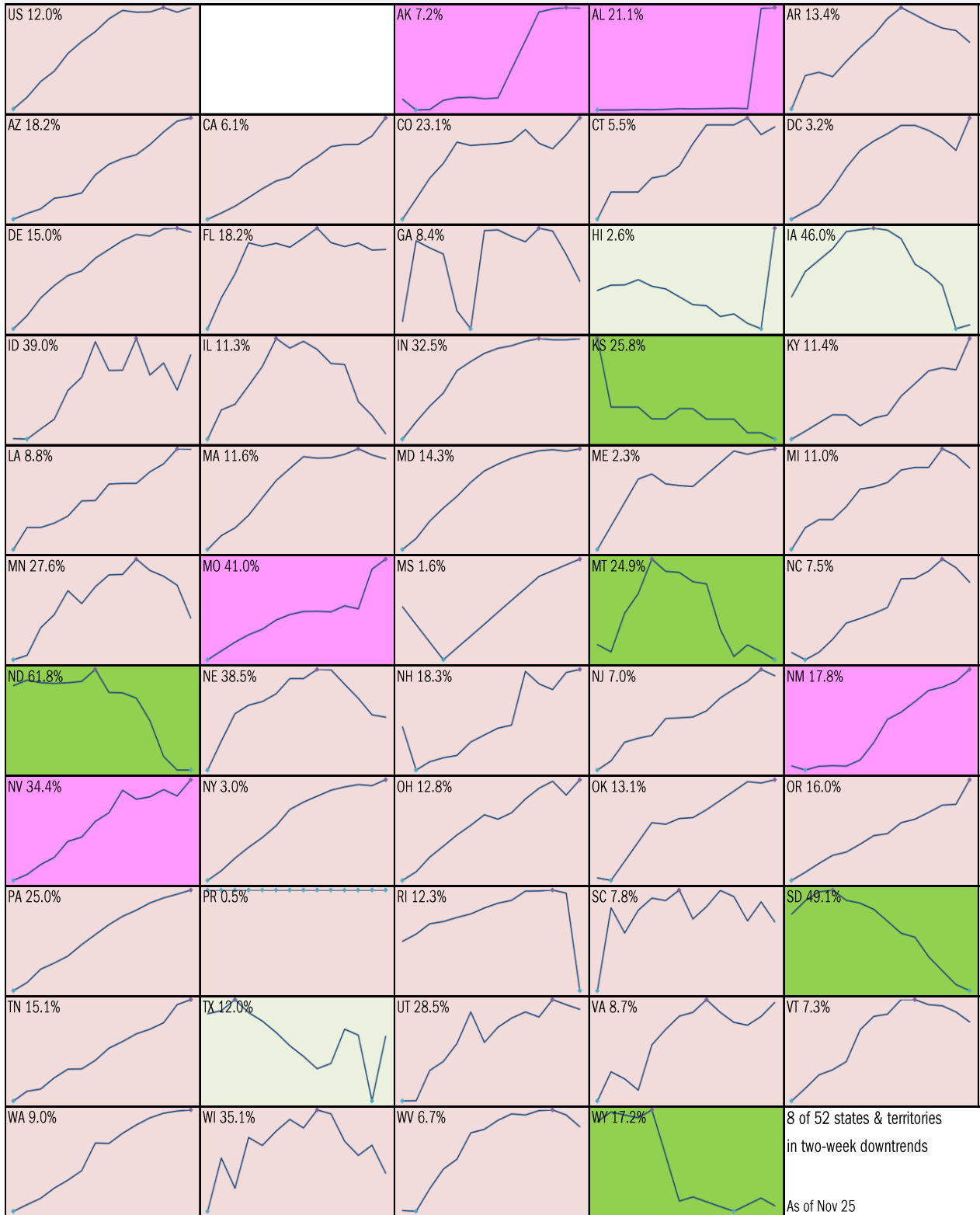


Source: [Covid Tracking Project](#), TrendMacro calculations

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



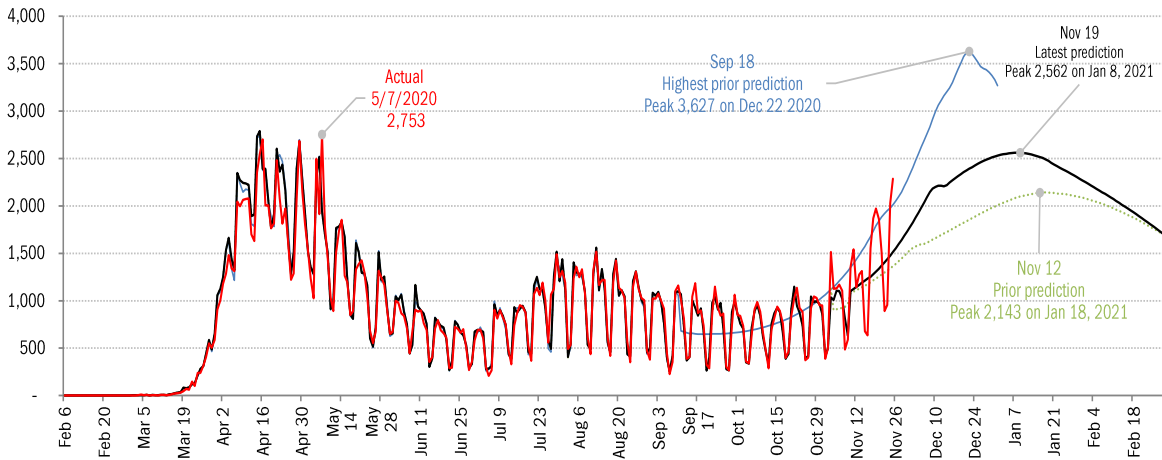
Source: [Covid Tracking Project](#), TrendMacro calculations

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

New daily fatalities

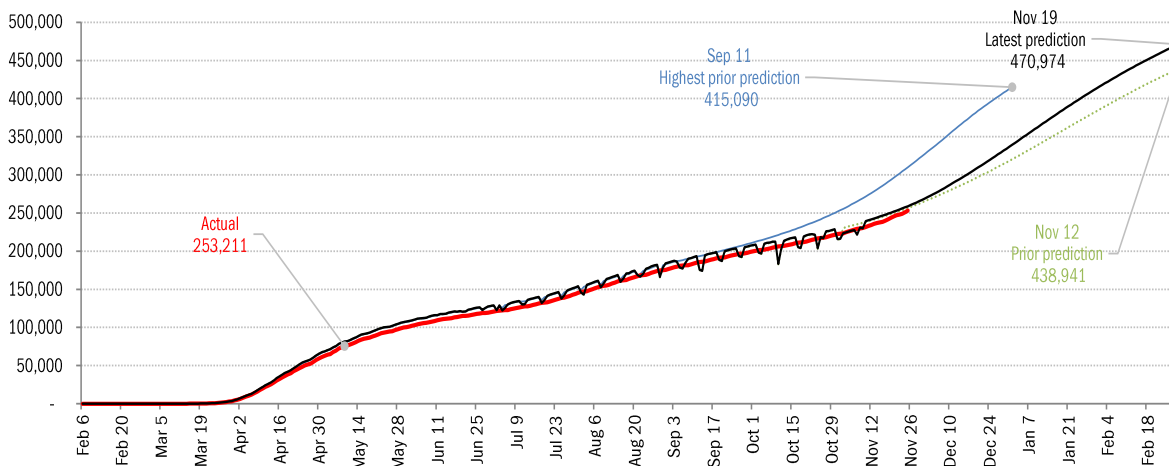
As of Nov 25

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

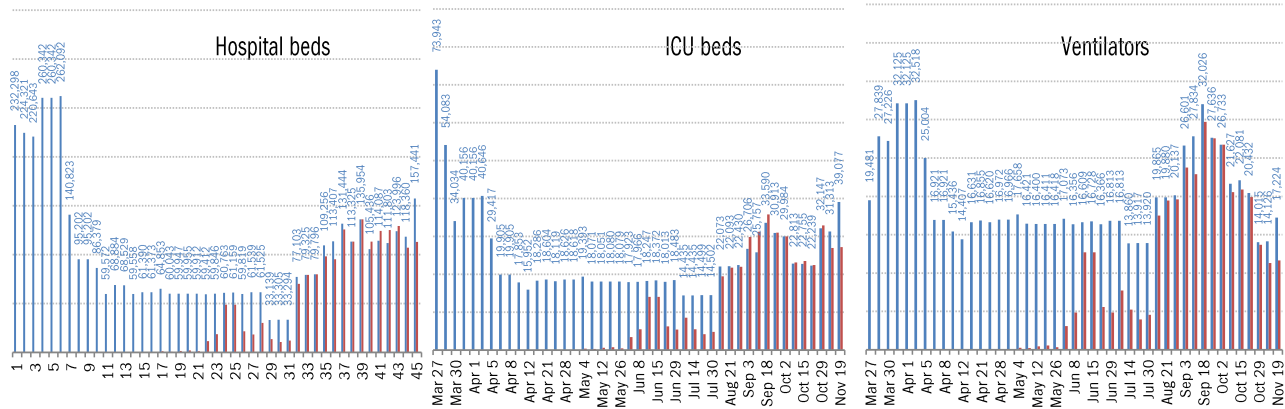


Cumulative fatalities

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

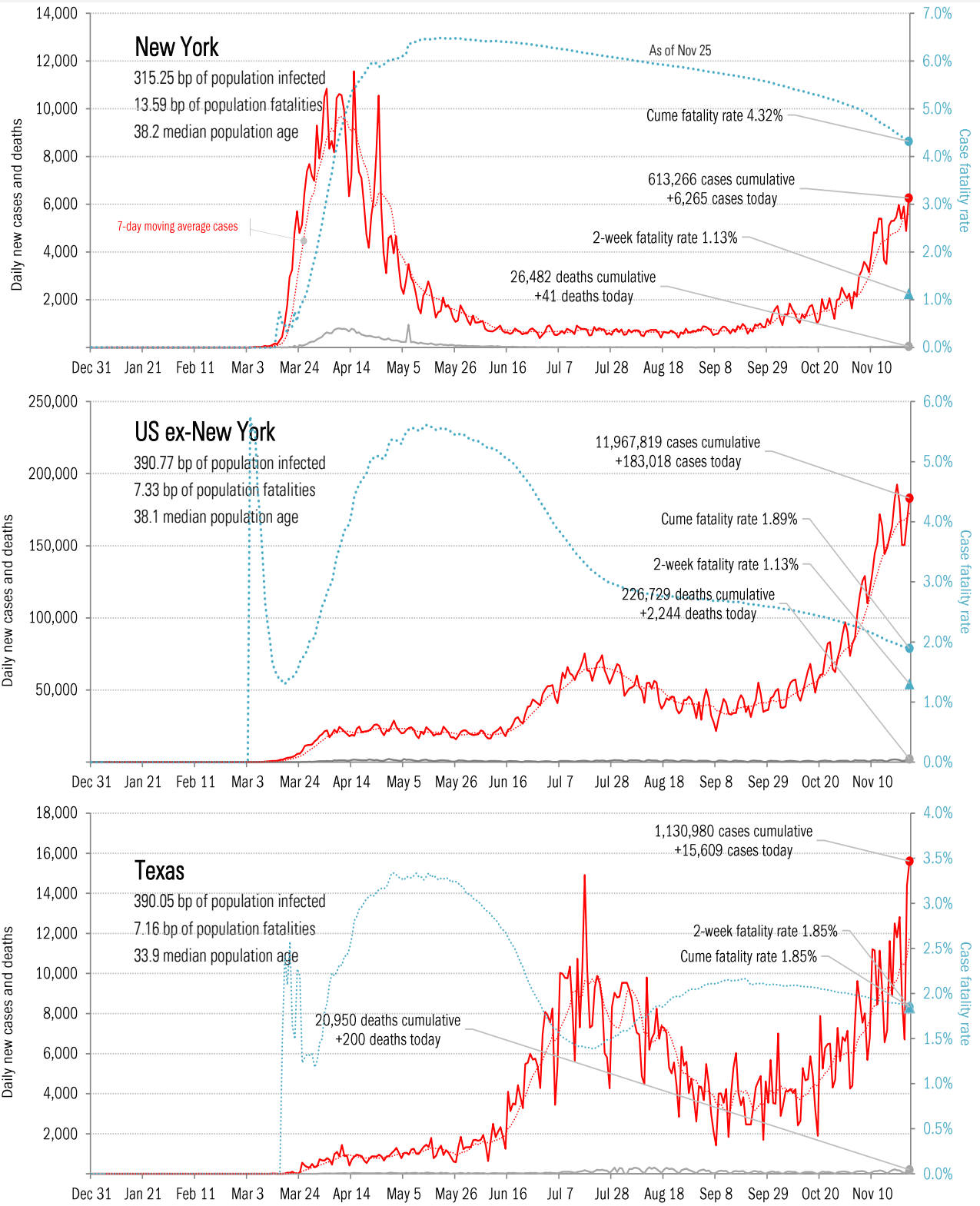


Healthcare system stress, **peak** and **ultimate** estimated at each model revision



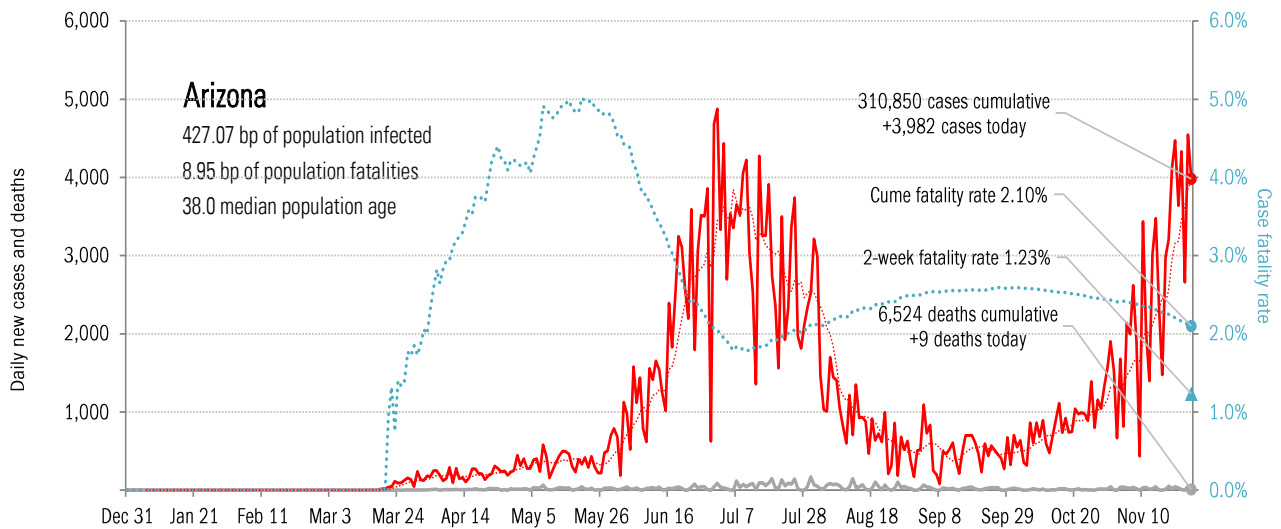
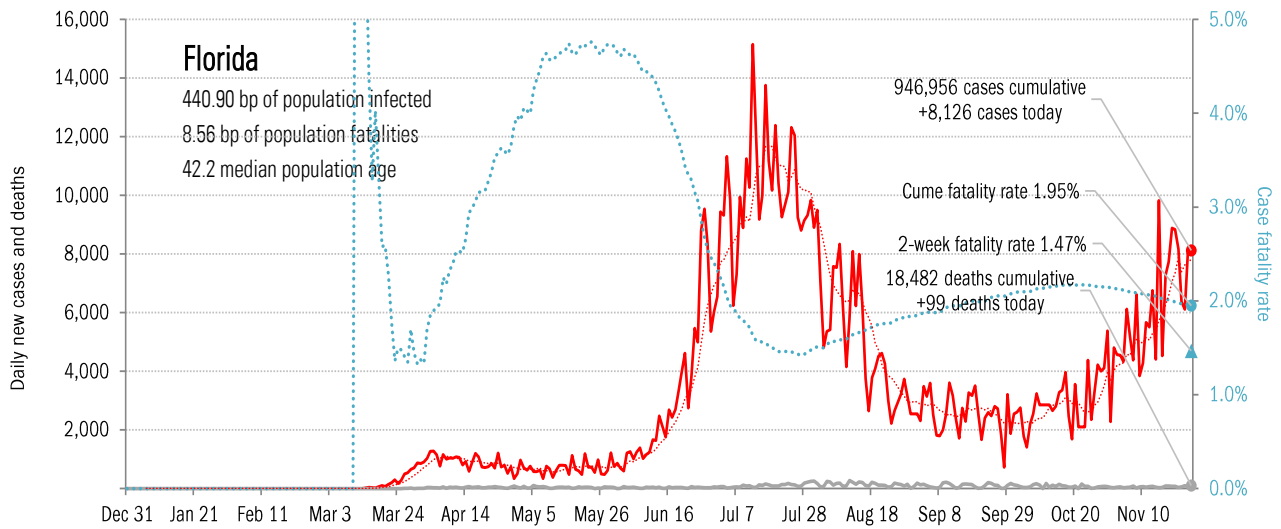
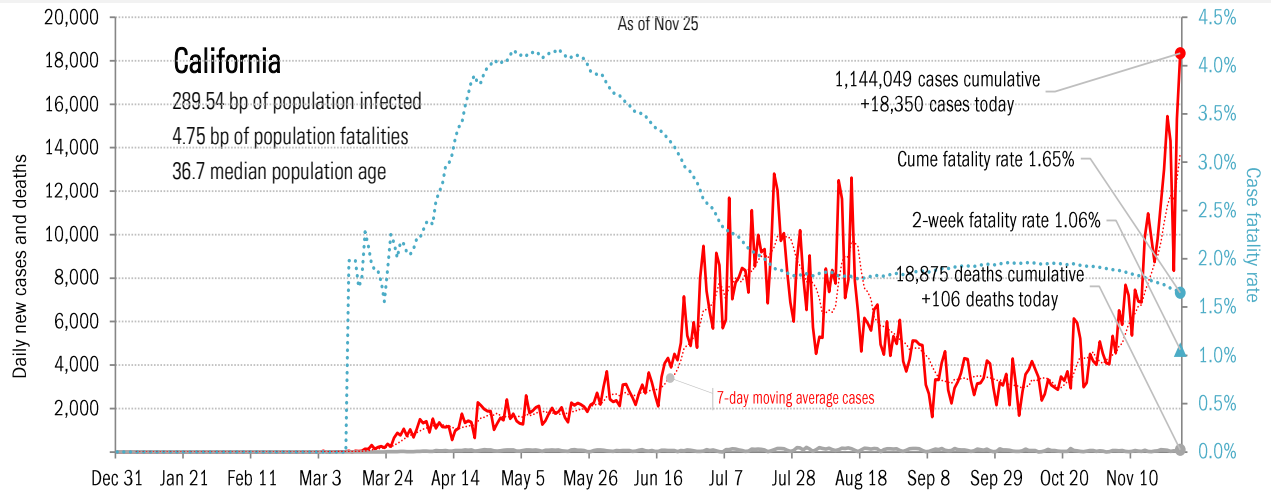
Source: [IHME](#), [Covid Tracking Project](#), TrendMacro calculations

From Ground Zero to the Rio Grande



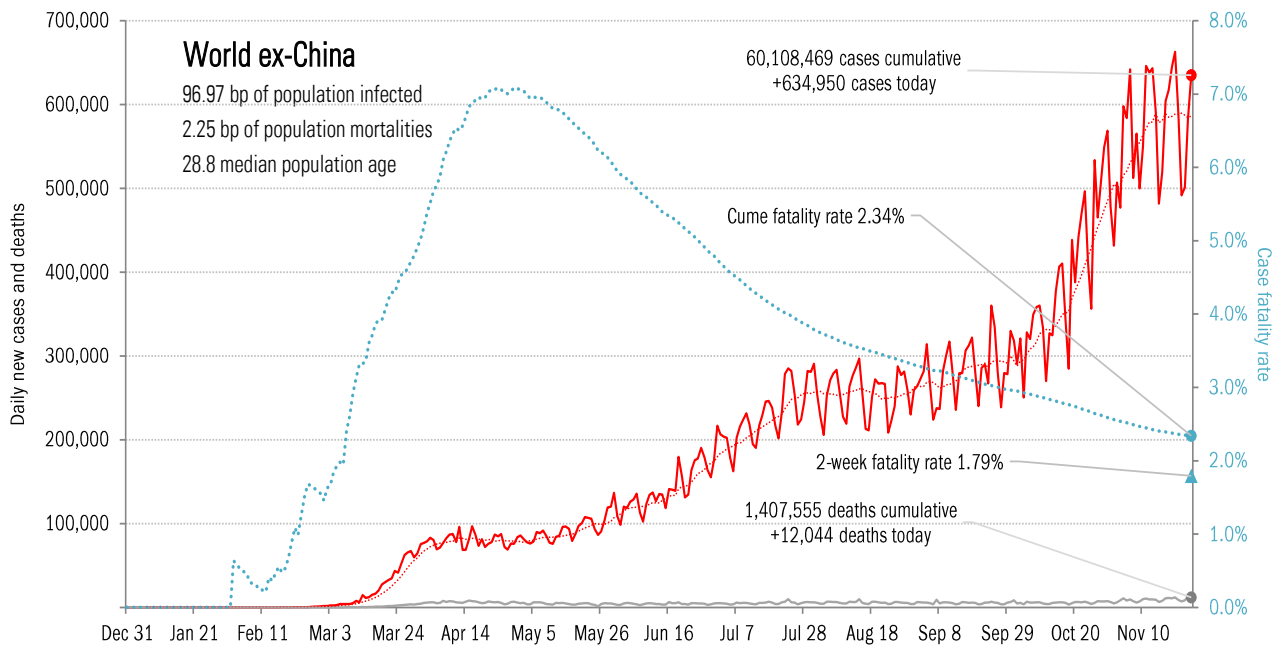
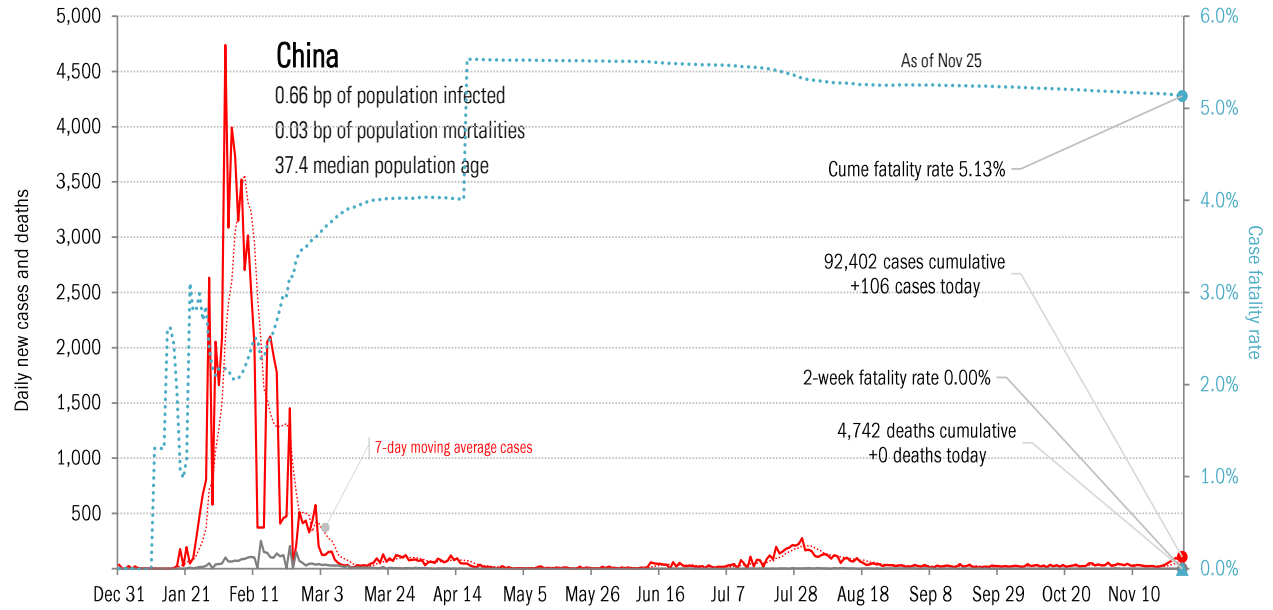
Source: [Covid Tracking Project](#), TrendMacro calculations

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



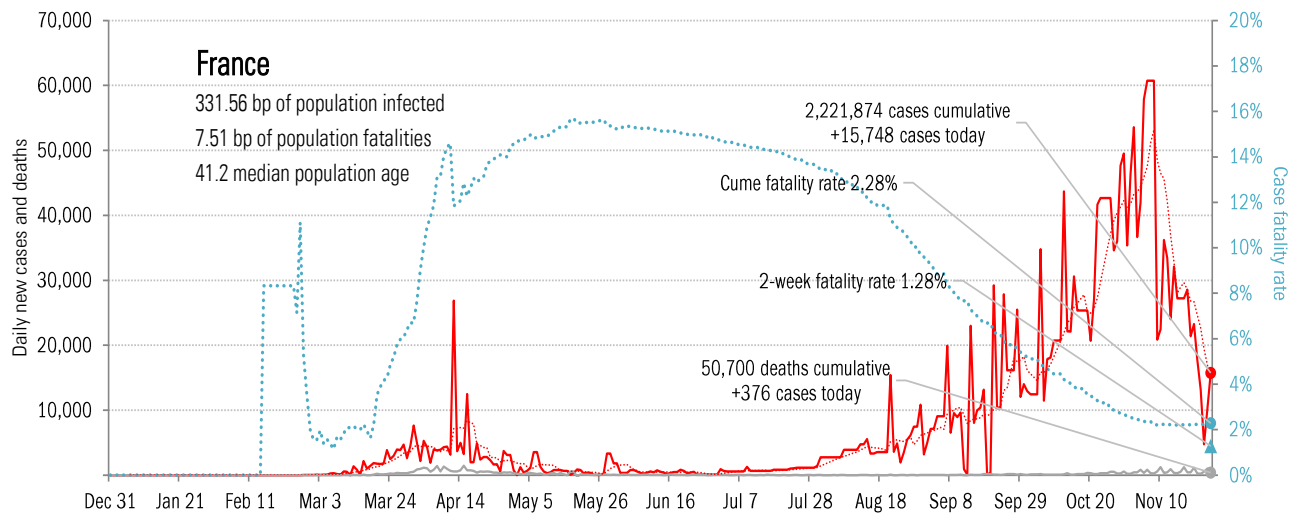
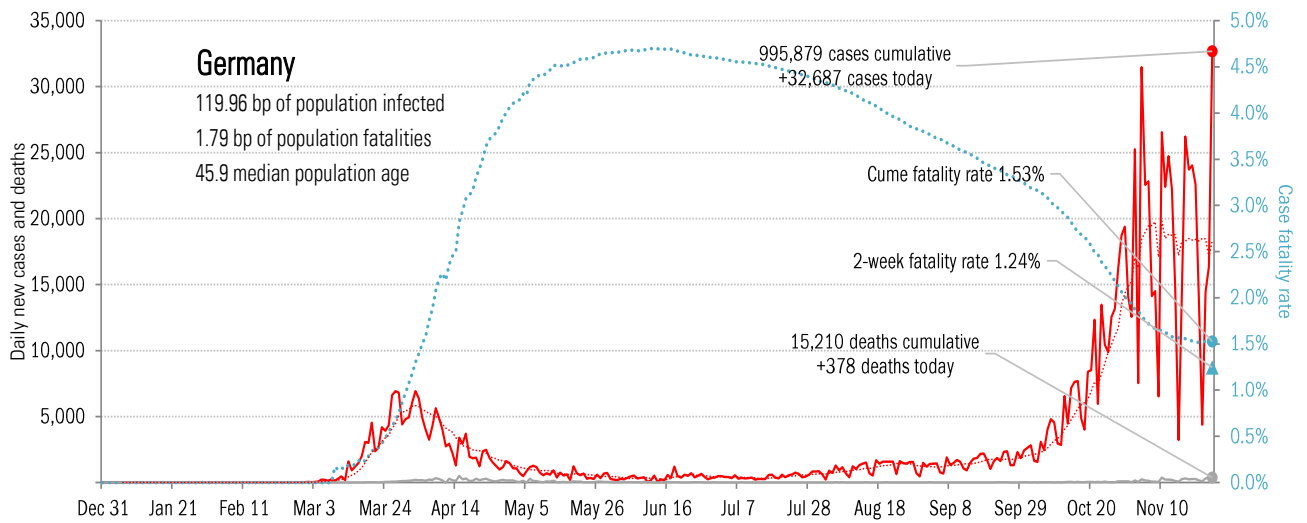
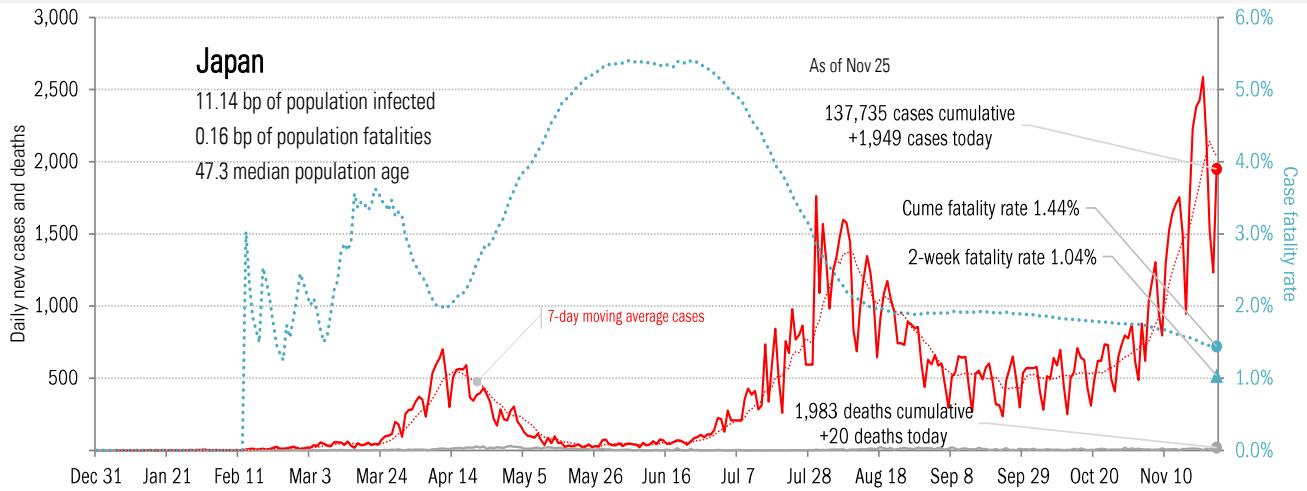
Source: [Covid Tracking Project](#), TrendMacro calculations

Patient zero... and then everyone else



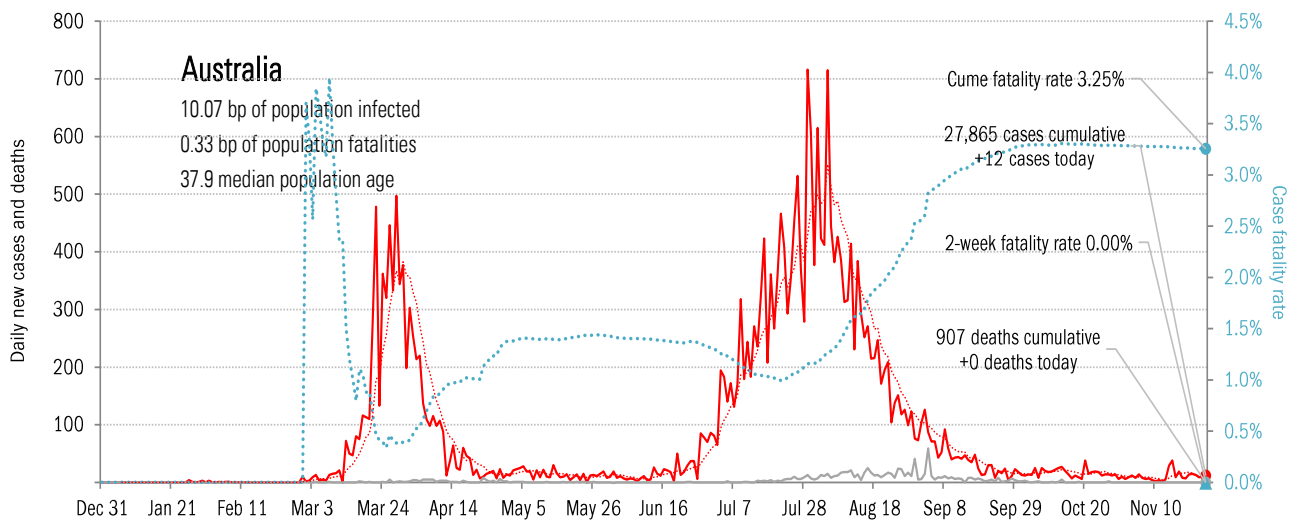
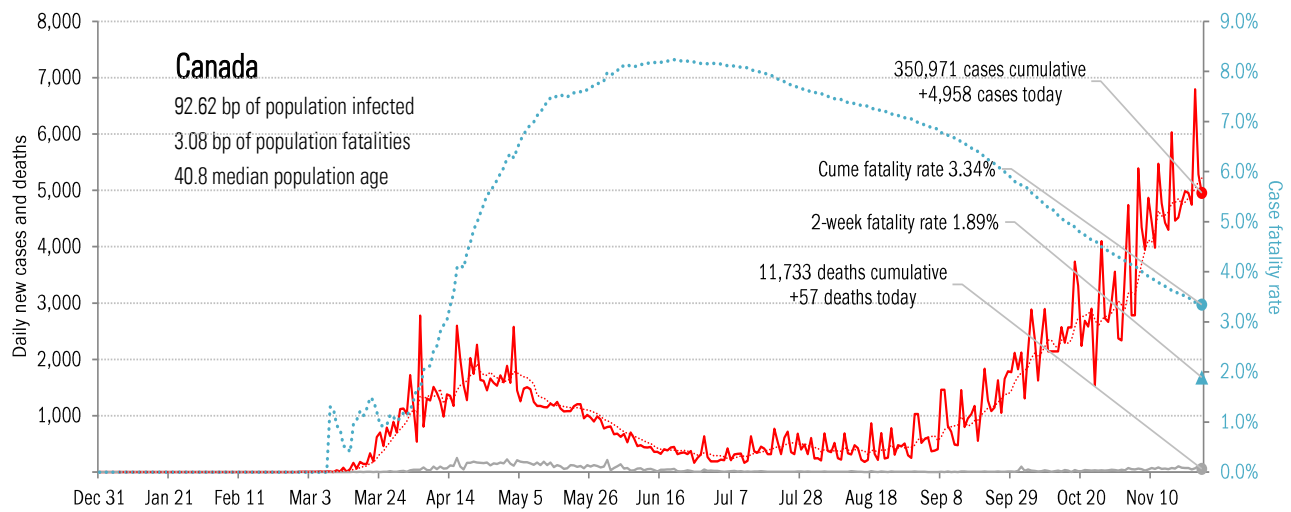
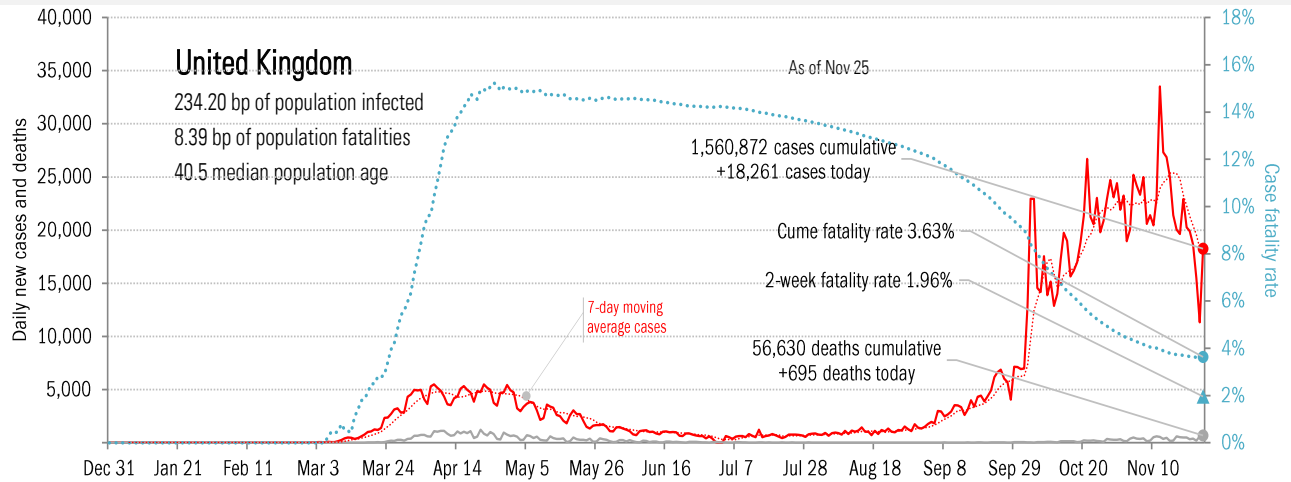
Source: [Johns Hopkins](#), [Covid Tracking Project](#), TrendMacro calculations

Impact in the largest economies



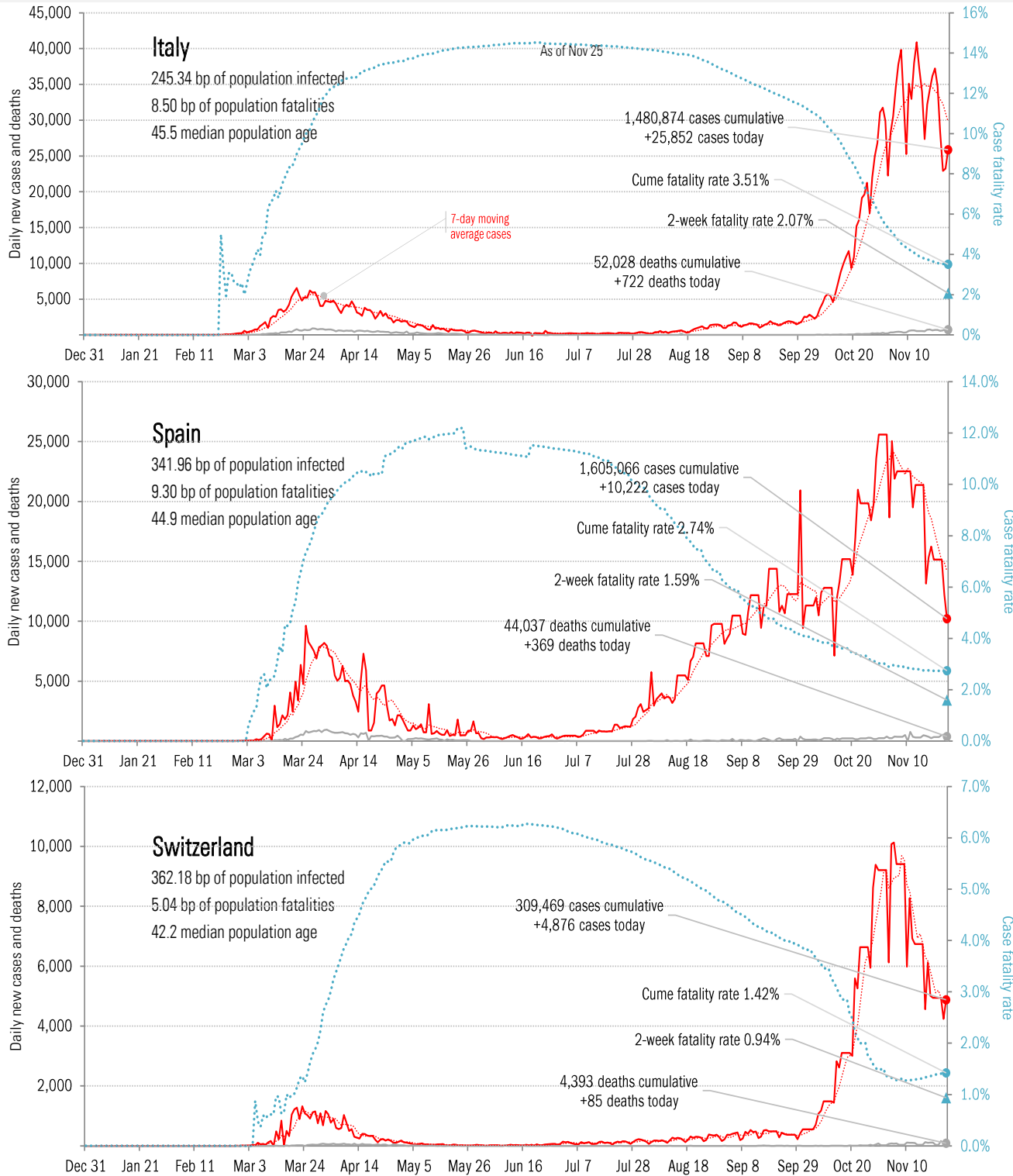
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in The Anglosphere



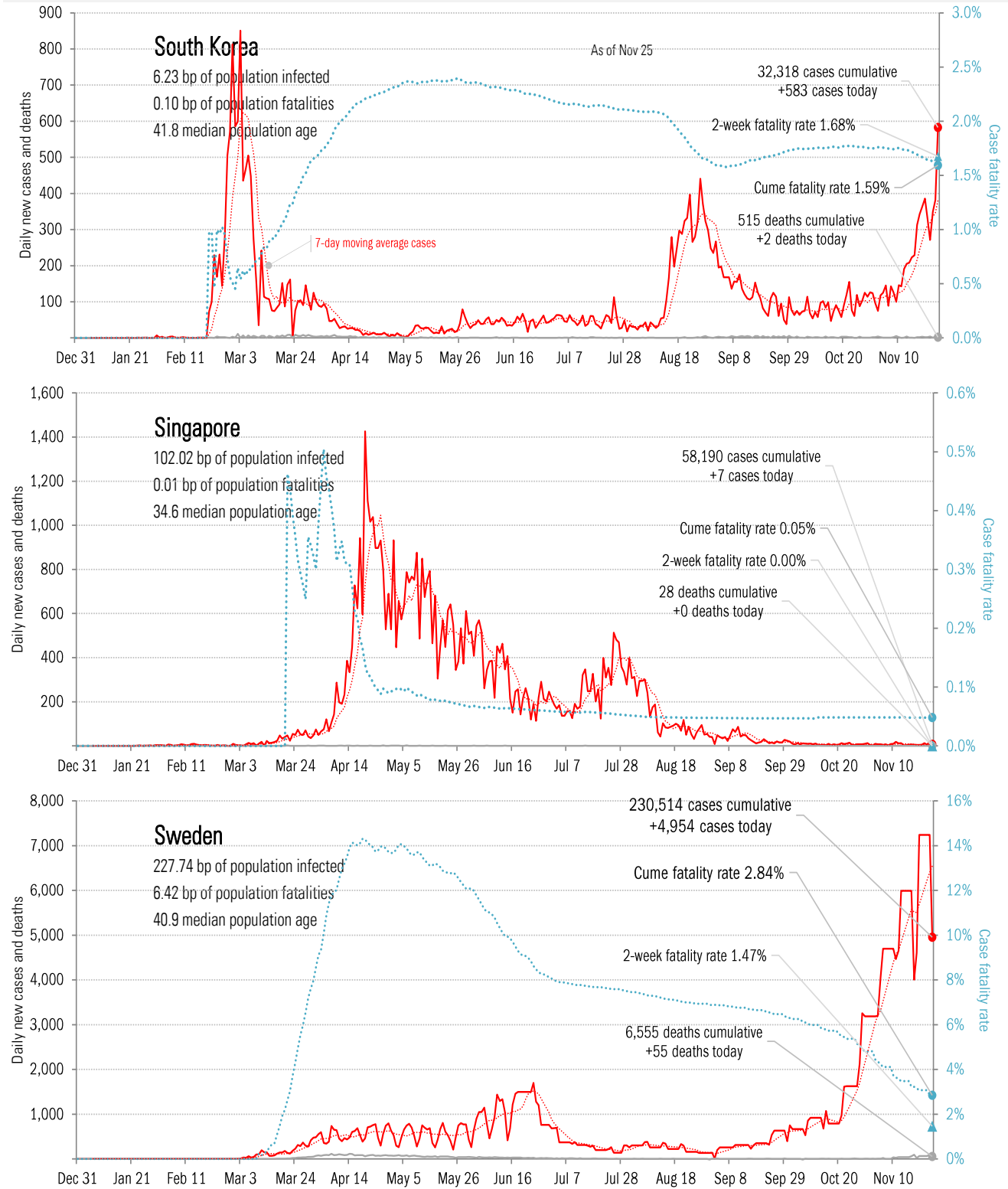
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in continental Europe



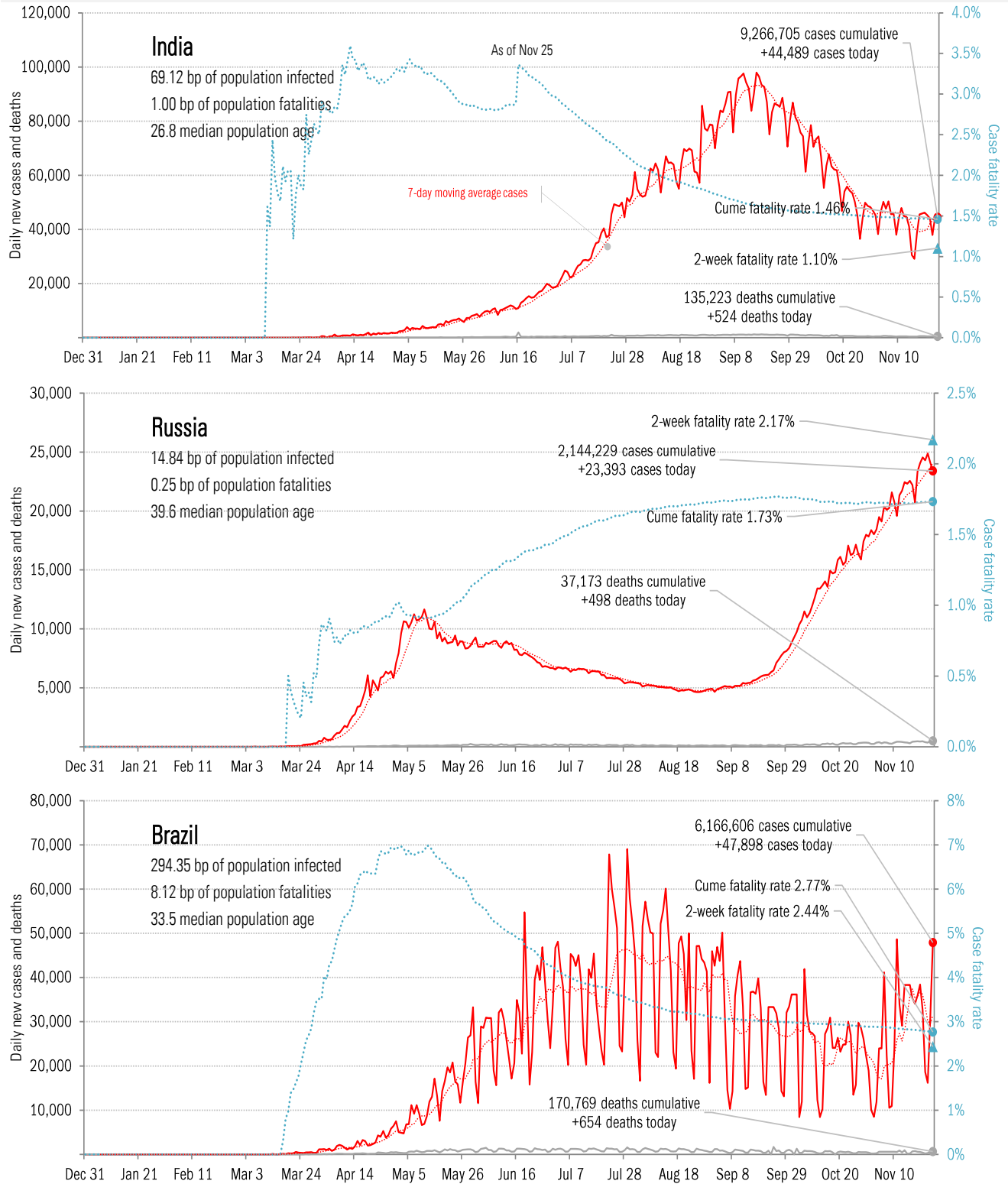
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in other hot-spots



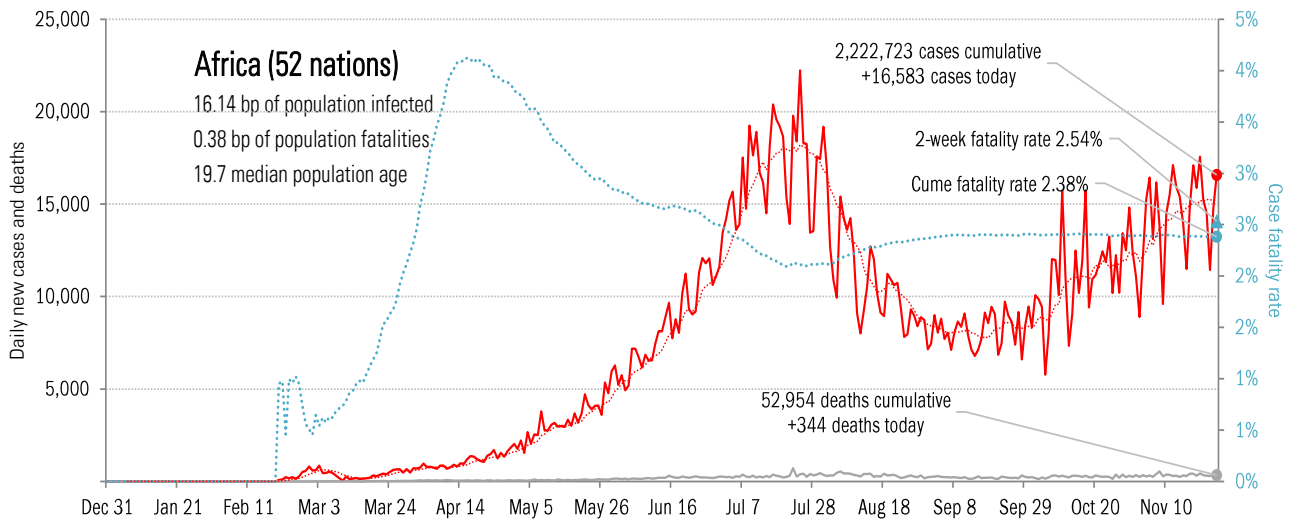
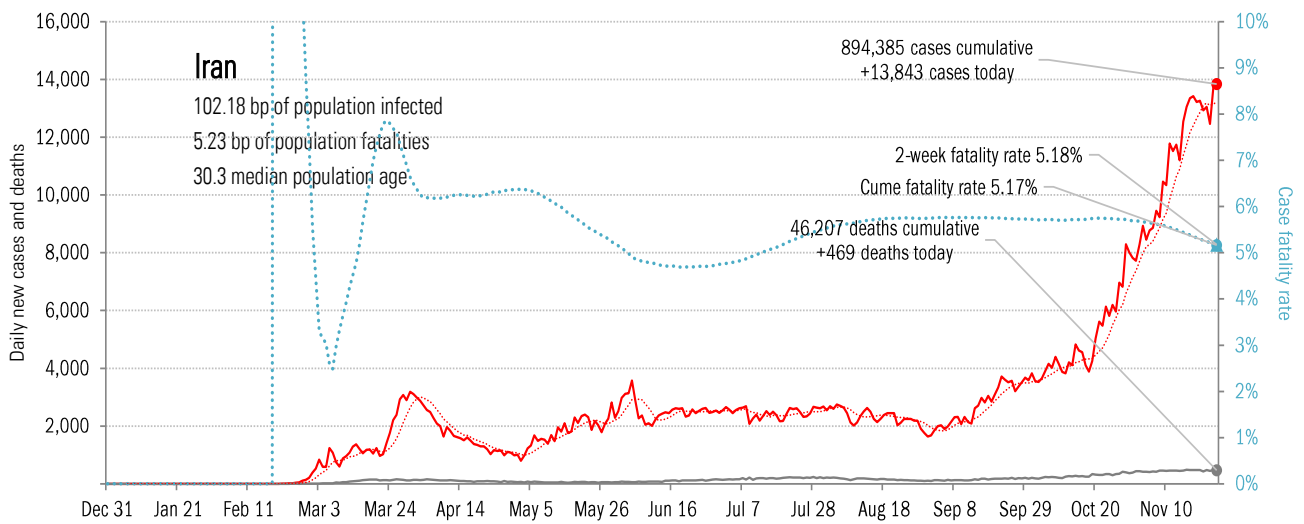
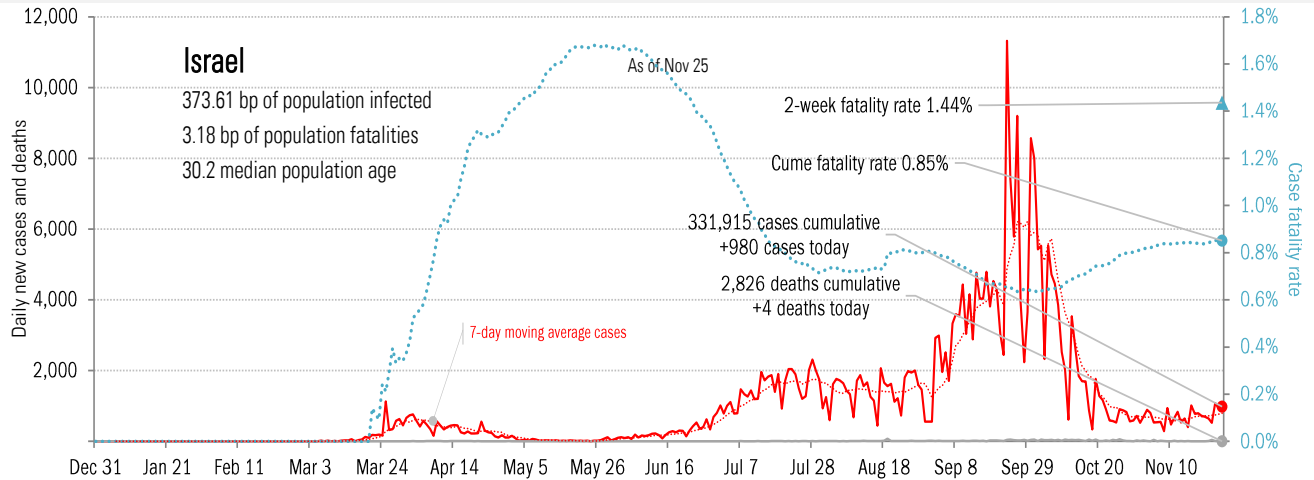
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in the BRICs ex-China



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

Impact in the Middle East and Africa



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