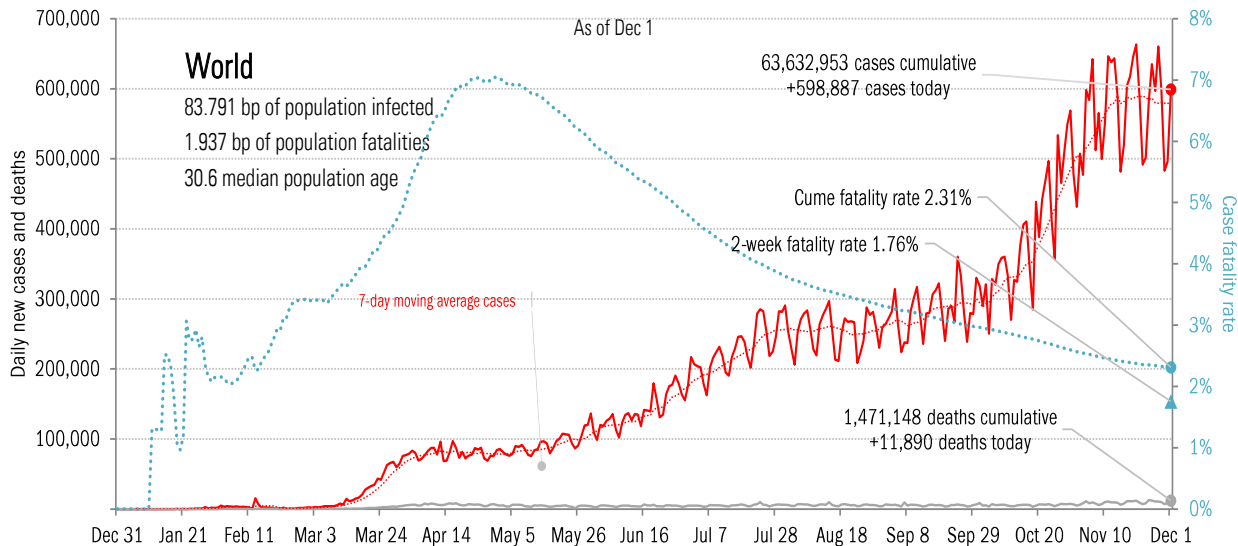
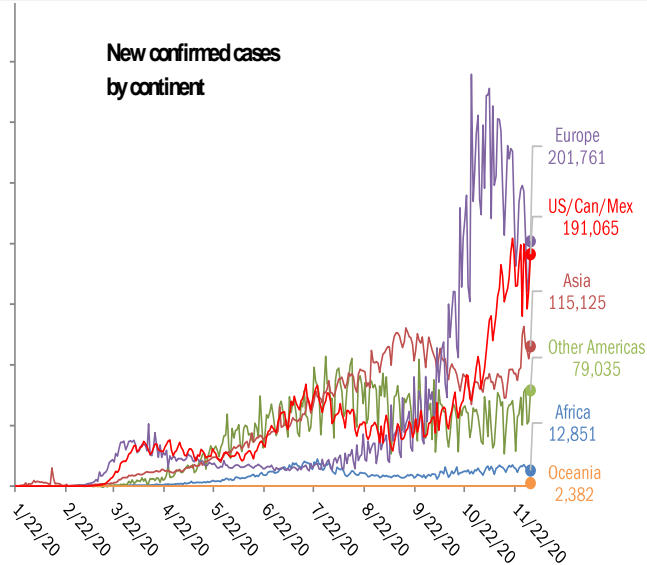


Data Insights: Covid-2019 Monitor

Wednesday, December 2, 2020

The global scorecard

The worst ten countries			
New cases		New Deaths	
United States	+176,751	United States	+2,473
Brazil	+50,909	Mexico	+825
Kazakhstan	+43,217	Italy	+785
Turkey	+30,110	Brazil	+697
Russia	+26,126	United Kingdom	+603
Germany	+24,766	Russia	+559
Italy	+19,347	Germany	+483
Sweden	+17,629	Poland	+449
Iran	+13,881	Kazakhstan	+444
United Kingdom	+13,497	Spain	+442
+416,233		+7,760	
World	+598,887	World	+11,890
Top ten	70%	Top ten	65%



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

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The US scorecard

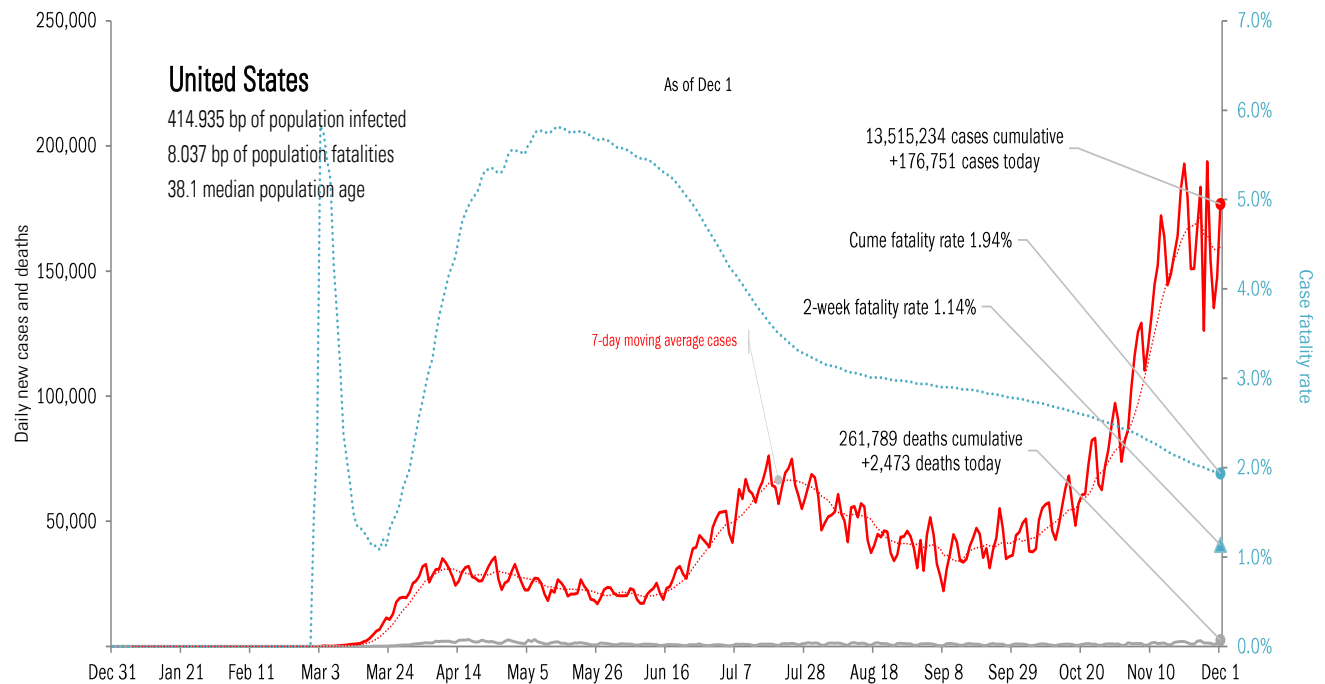
The ten worst US states

New cases		New Deaths		New in hospital		Curre cases		Curre deaths		Curre in hospital	
TX	+16,139	MI	+195	CA	+471	CA	1,225,189	NY	26,816	NY	89,995
IL	+12,542	PA	+180	NY	+242	TX	1,184,250	TX	21,549	FL	55,892
CA	+12,221	MO	+177	NJ	+168	FL	991,910	CA	19,211	NJ	41,305
AZ	+10,322	TX	+170	CH	+166	IL	738,846	FL	18,916	GA	35,063
CH	+9,030	IL	+146	TX	+147	NY	655,265	NJ	17,083	CH	27,449
FL	+8,540	IN	+141	FL	+123	CH	430,093	IL	13,131	IN	26,424
NY	+7,285	CH	+119	PA	+113	GA	424,929	MA	10,778	VA	26,150
MI	+6,511	WI	+117	MO	+101	WI	416,365	PA	10,563	AZ	26,072
TN	+5,693	NJ	+90	VA	+99	MI	395,453	MI	9,759	AL	25,610
PA	+5,676	FL	+82	TN	+98	TN	380,186	GA	9,515	MD	21,206
+93,959		+1,417		+1,728		6,842,486		157,321		375,166	
All states	+176,751	All states	+2,473	All states	+2,638	All states	13,515,234	All states	261,789	All states	576,518
Top ten	53%	Top ten	57%	Top ten	66%	Top ten	51%	Top ten	60%	Top ten	65%

Some states not reporting

Five most improved US states

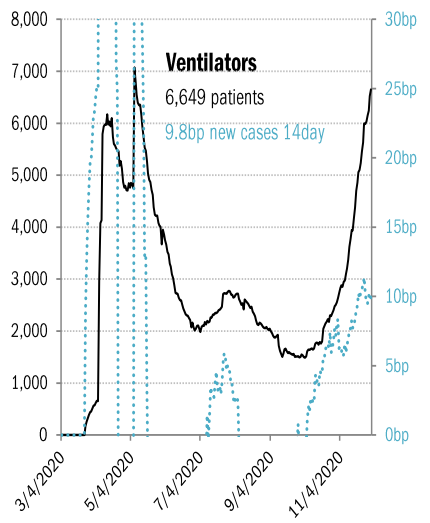
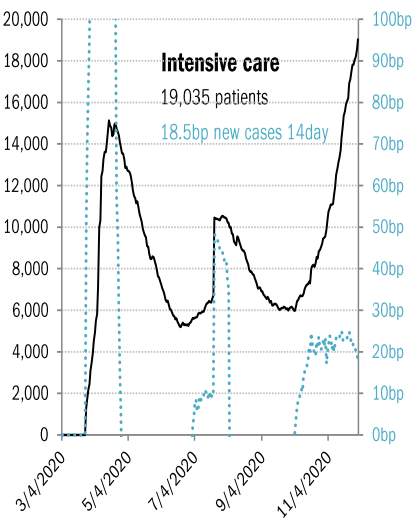
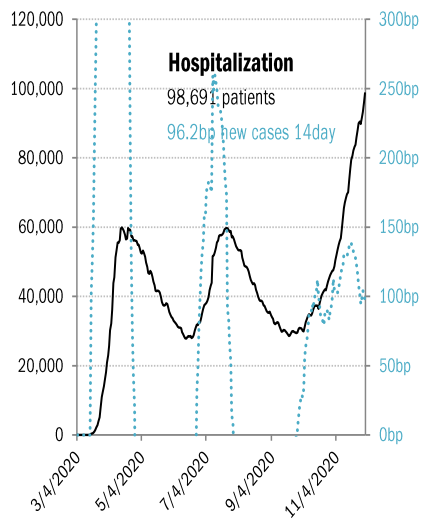
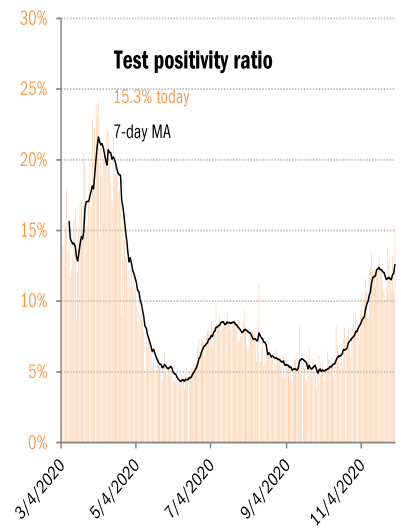
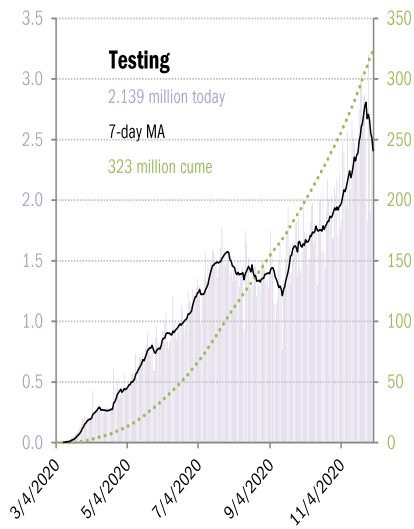
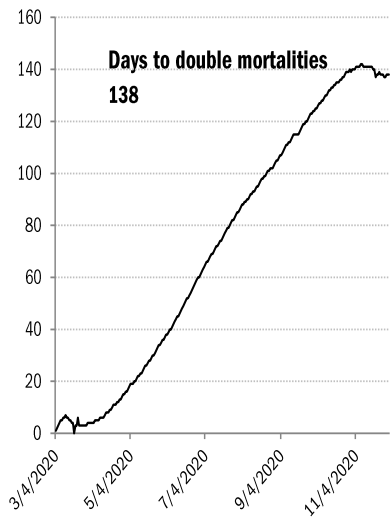
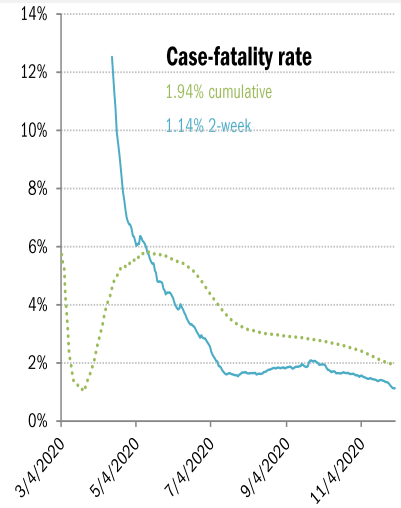
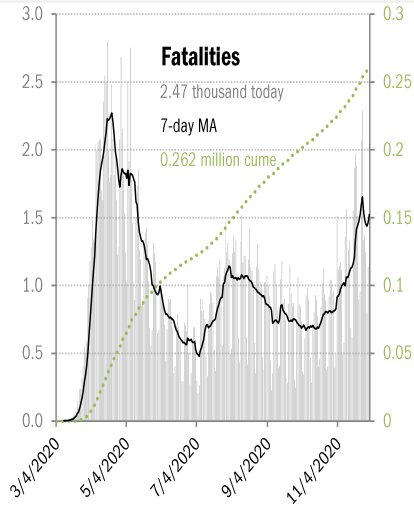
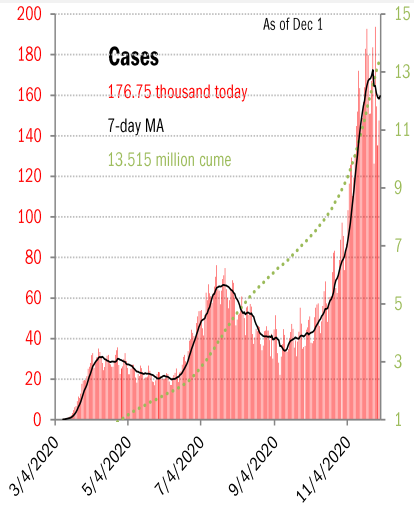
Fewer daily cases		Fewer new deaths		Fewer new hospitalizations		Most recoveries	
KS	-4,425	CO	-96	MI	-245	TX	+13,878
MI	-4,279	CT	-39	TX	-119	CH	+9,390
CT	-3,255	KS	-31	PA	-113	TN	+7,421
TN	-2,282	AR	-22	MA	-76	MIN	+6,932
MN	-2,245	FL	-16	CO	-56	IN	+6,136



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

US deep-dive

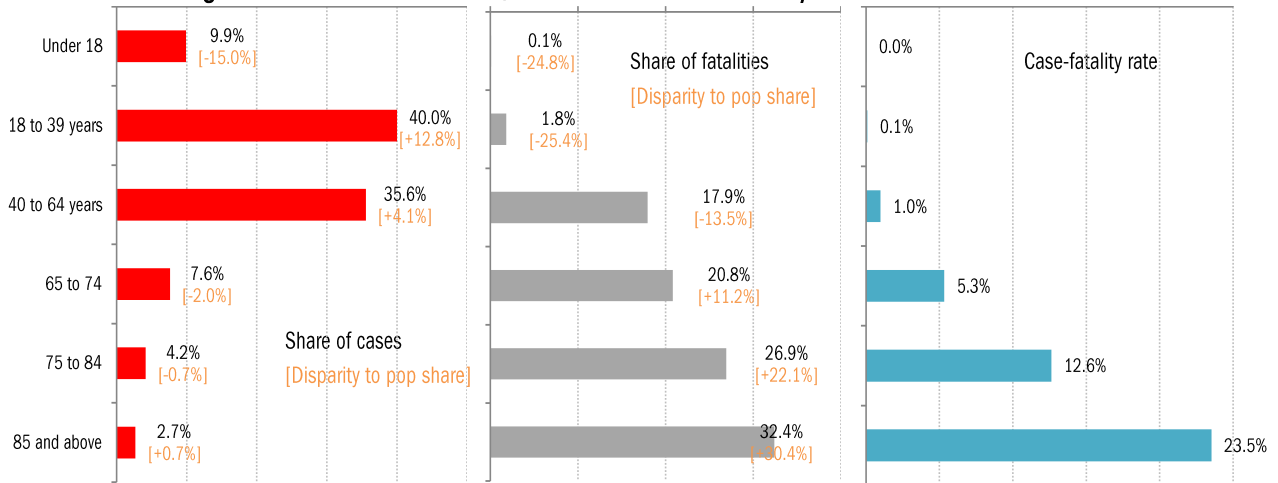
National and state-by-state data do not line up because of different sources



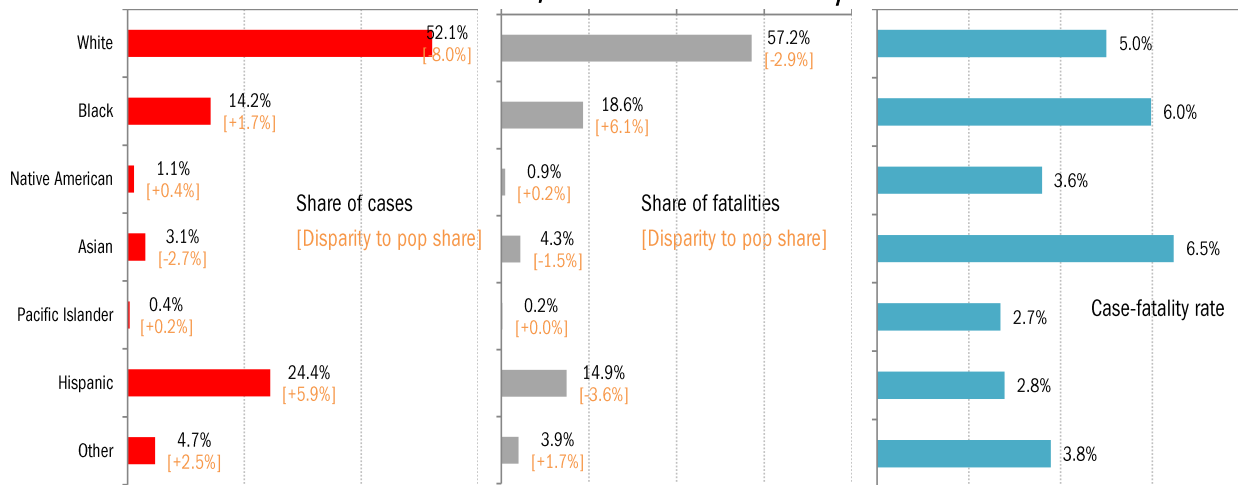
Source: [Covid Tracking Project](https://covidtracking.com), TrendMacro calculations

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

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

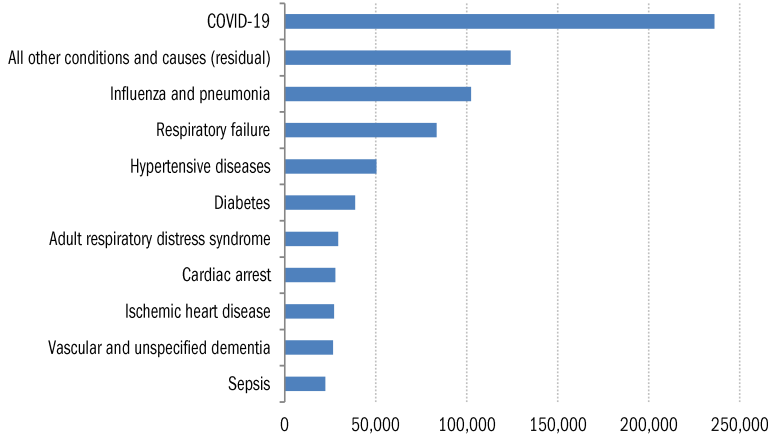


Racial distribution of US cases, fatalities and case-fatality rates



Comorbidities

Top-ten joint causes of Covid mortalities, cumulative



For 6% of the deaths, COVID-19 was the only cause mentioned. For deaths with conditions or causes in addition to COVID-19, on average, there were 2.6 additional conditions or causes per death.

Source: Distributions [CDC](#), Comorbidities [CDC](#), TrendMacro calculations

Recommended reading

[Injection of hope: Britain approves a covid-19 vaccine](#)

The Economist

December 2, 2020

[Vitamin D Insufficiency May Account for Almost Nine of Ten COVID-19 Deaths: Time to Act.](#)

Hermann Brenner

MDPI

November 27, 2020

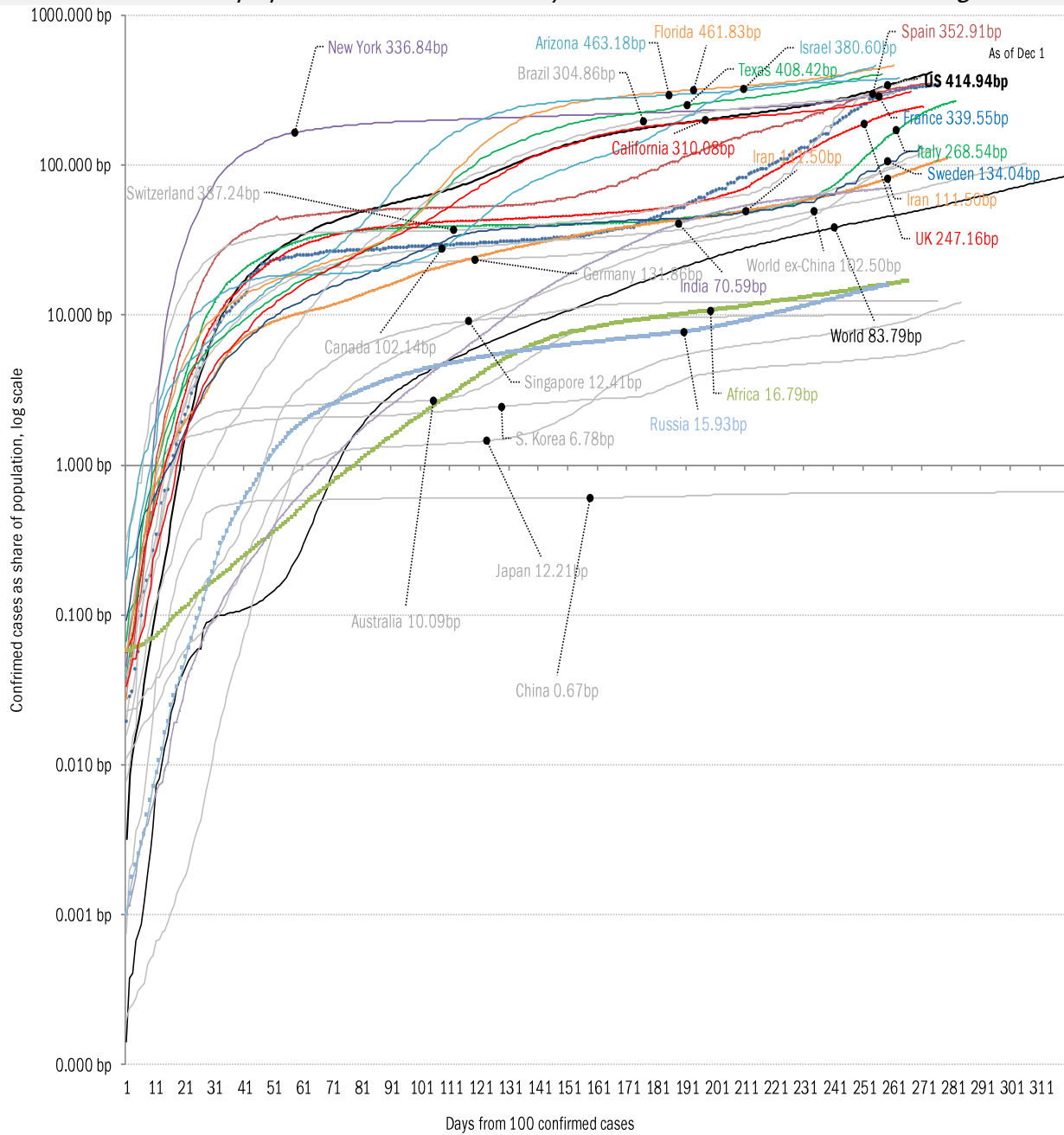
Meme of day

Day 18 of lock down. Filled the dog with helium.



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

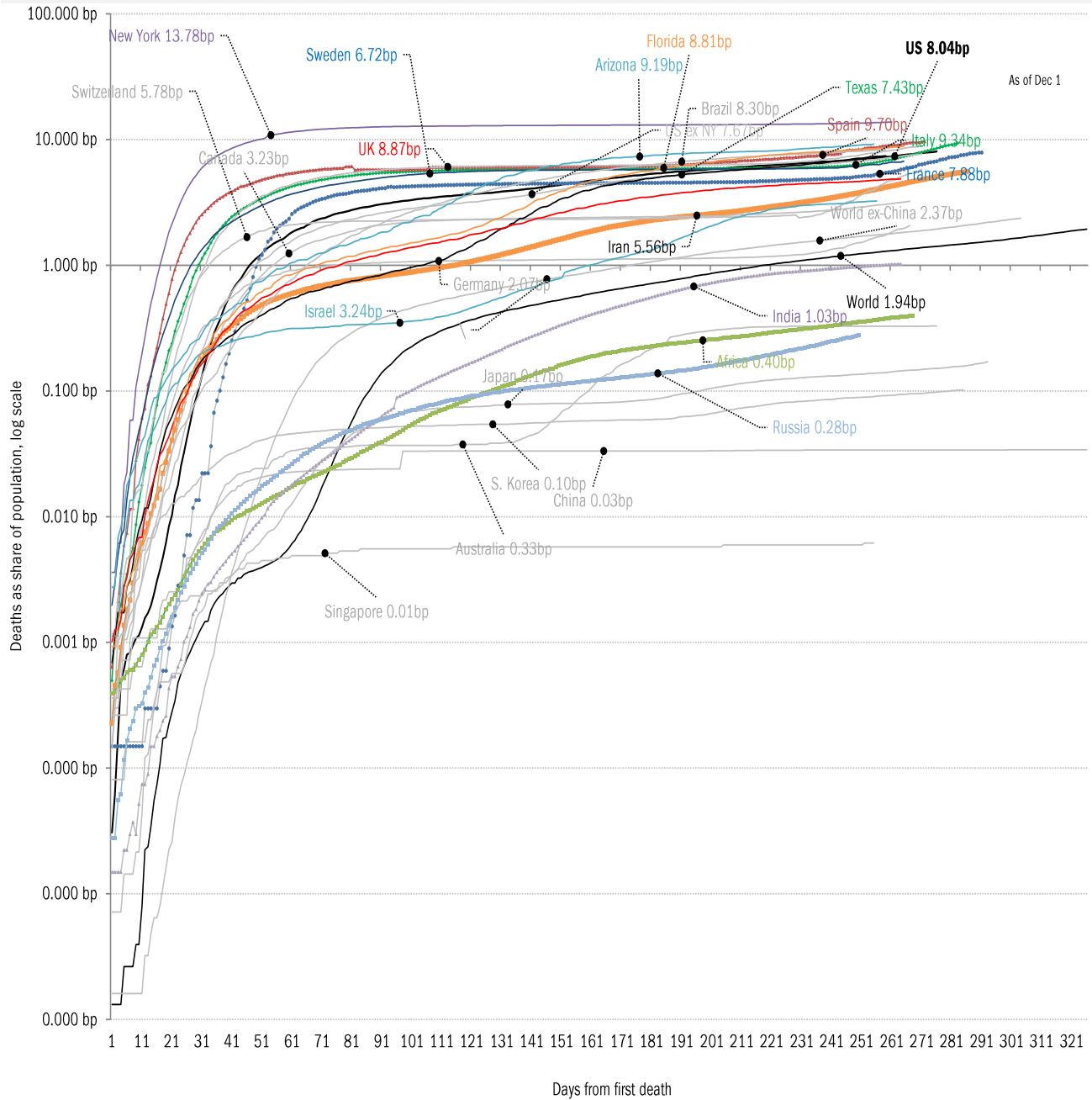
The coronavirus case accelerometer... tracking the world's infection curves
Share of infected population from first day with 100 confirmed cases, log scale



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

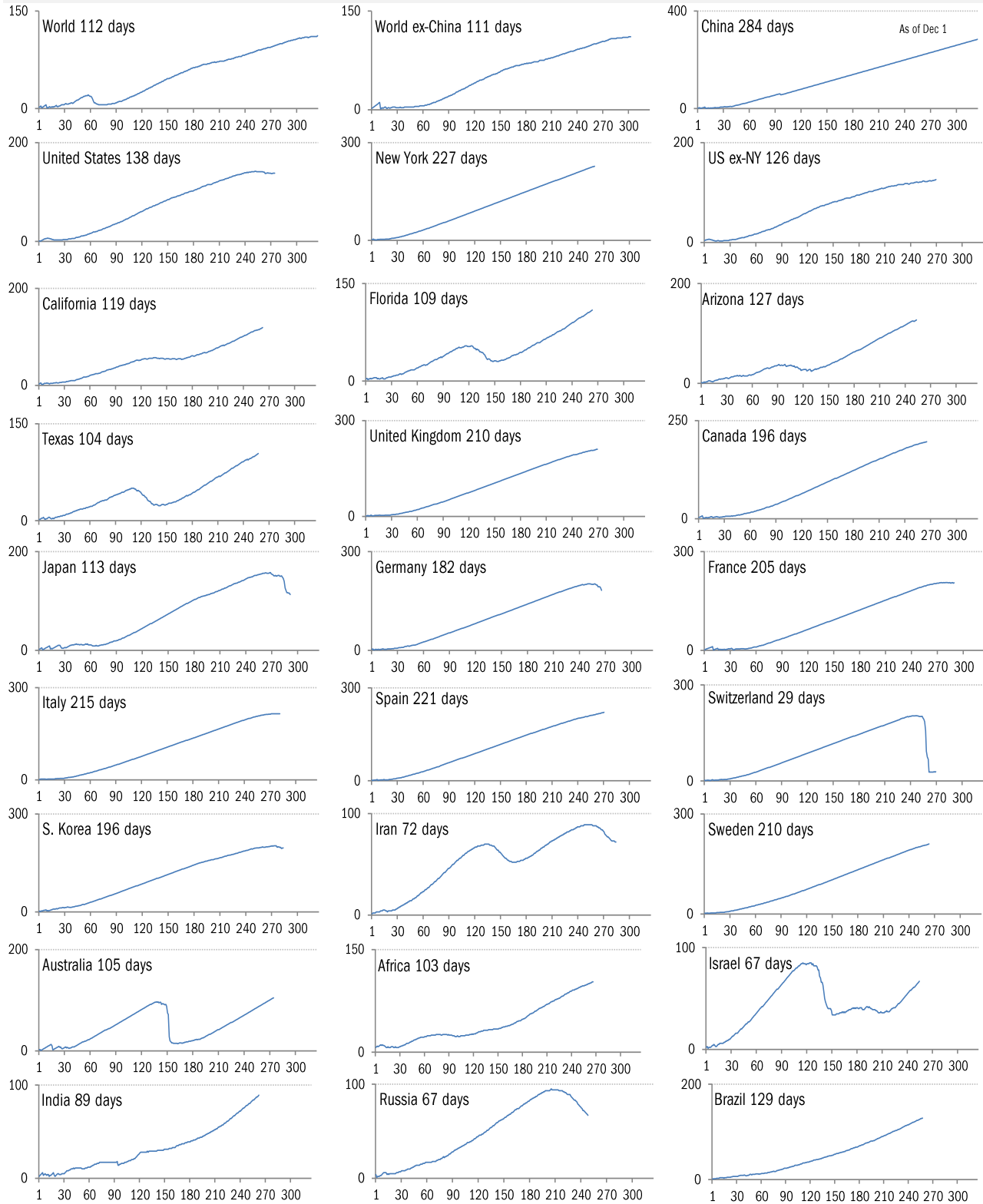


Source: [Johns Hopkins](#), [Covid Tracking Project](#), TrendMacro calculations

"Exponential"? Our most reliable evidence of the rate of spread of Covid-2019

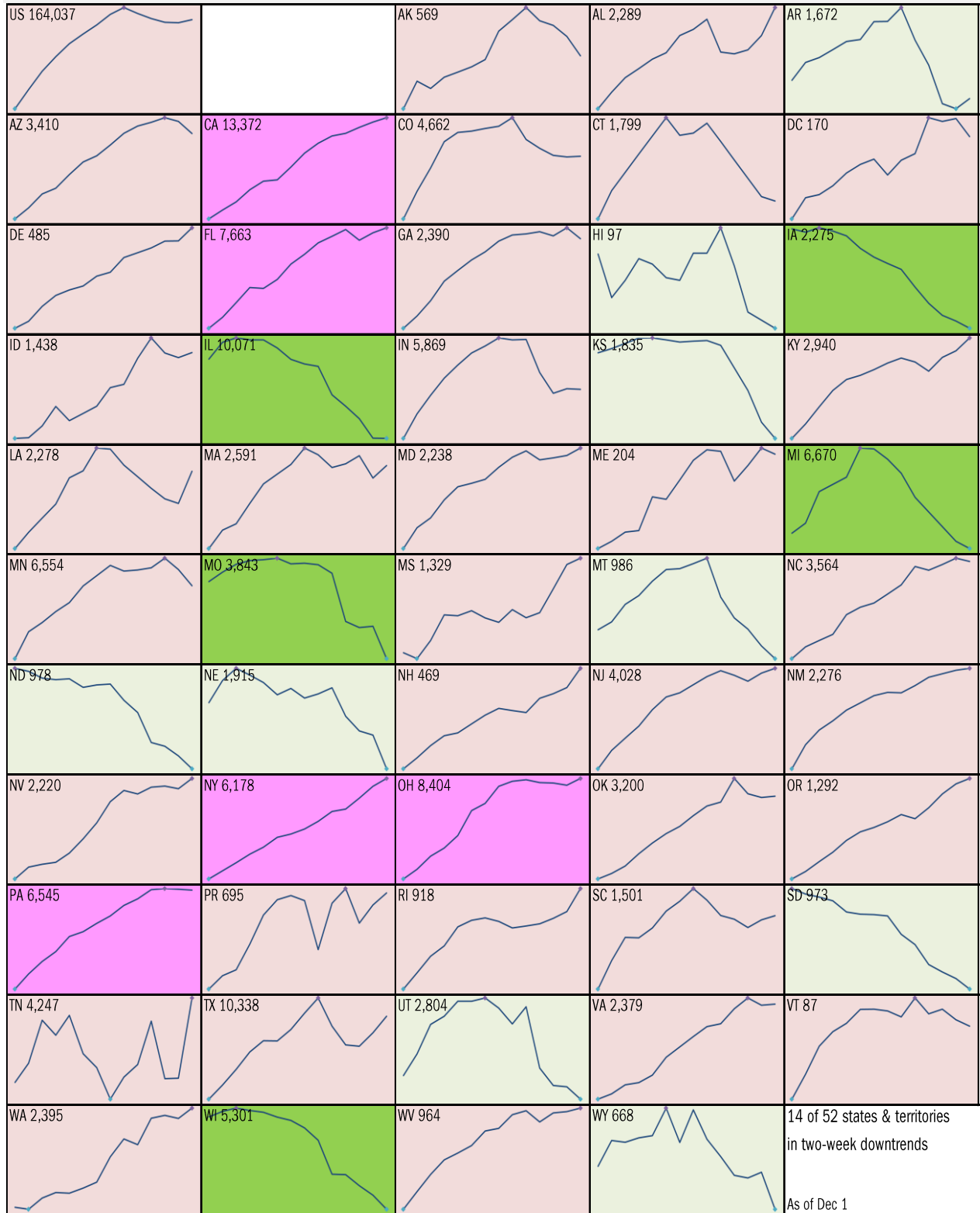
Vertical: days to double deaths Horizontal: days from first death

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



Source: [Johns Hopkins](#), [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

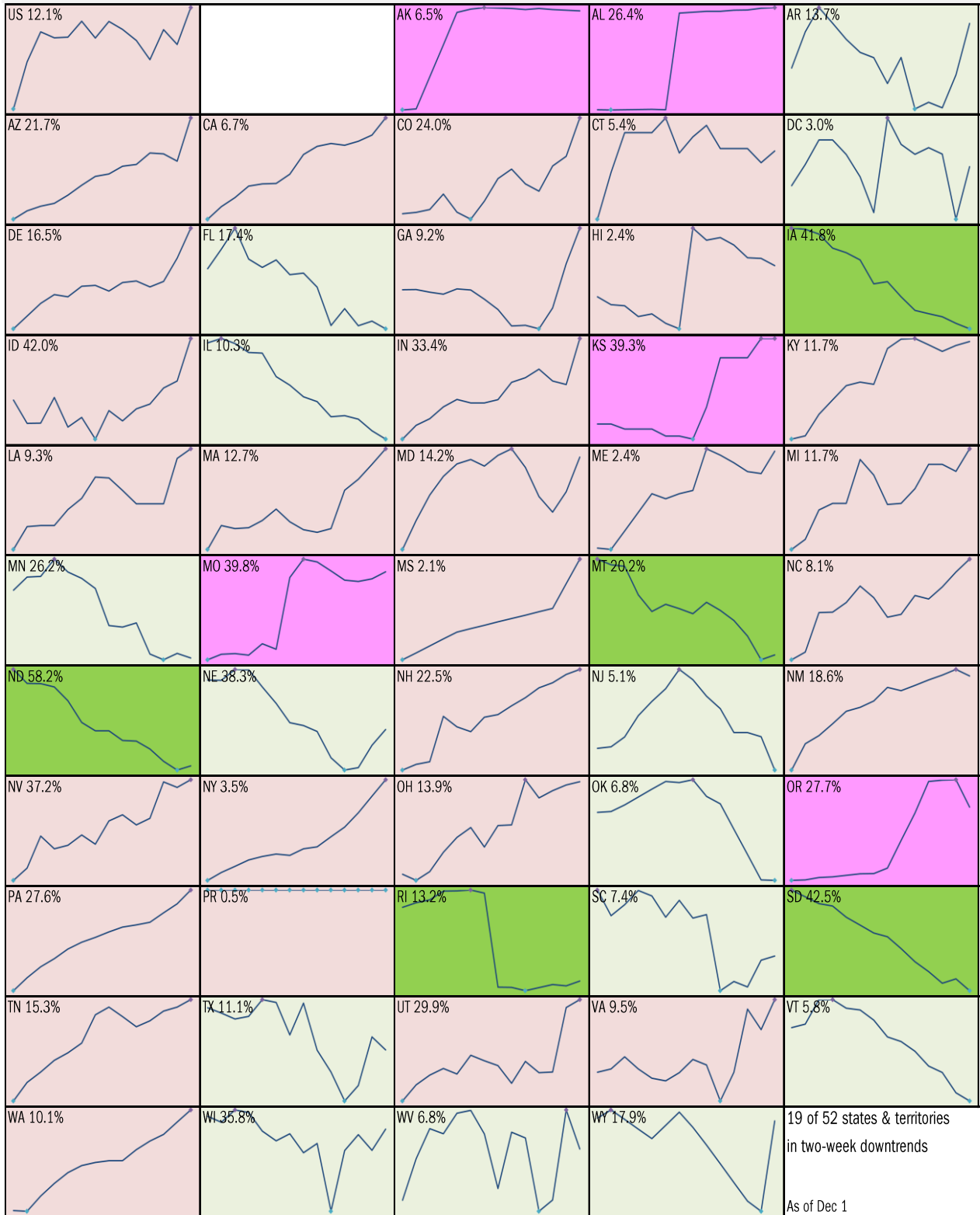


Source: [Covid Tracking Project](#), TrendMacro calculations

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



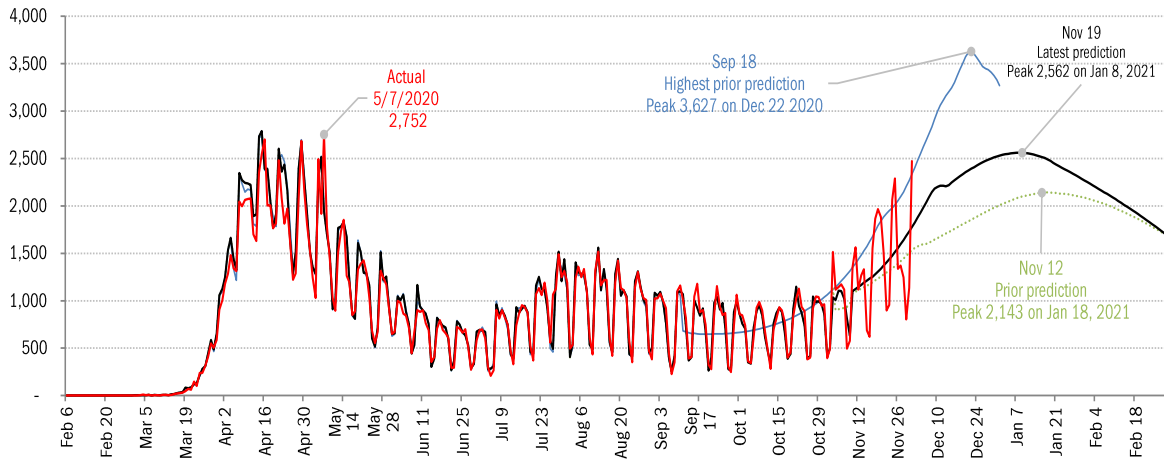
Source: [Covid Tracking Project](#), TrendMacro calculations

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

New daily fatalities

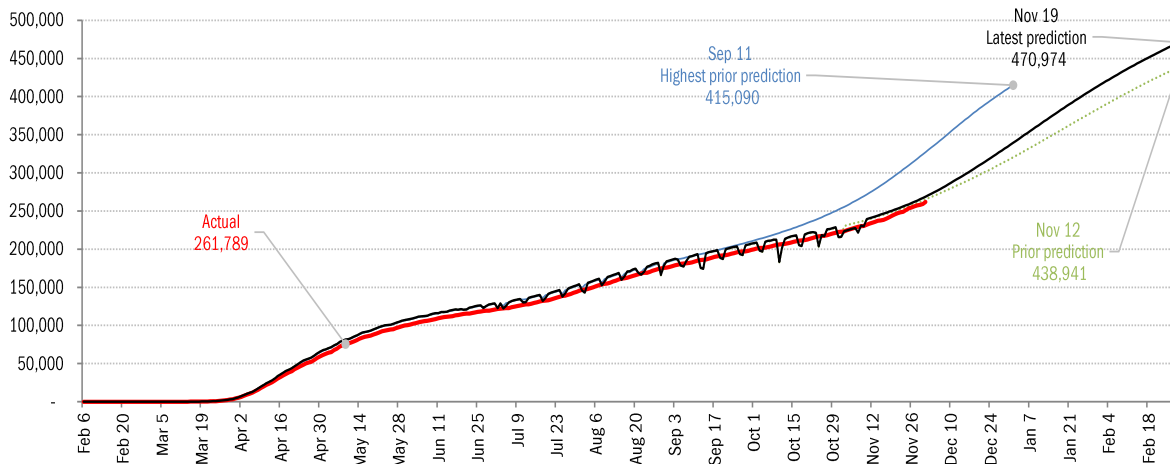
As of Dec 1

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

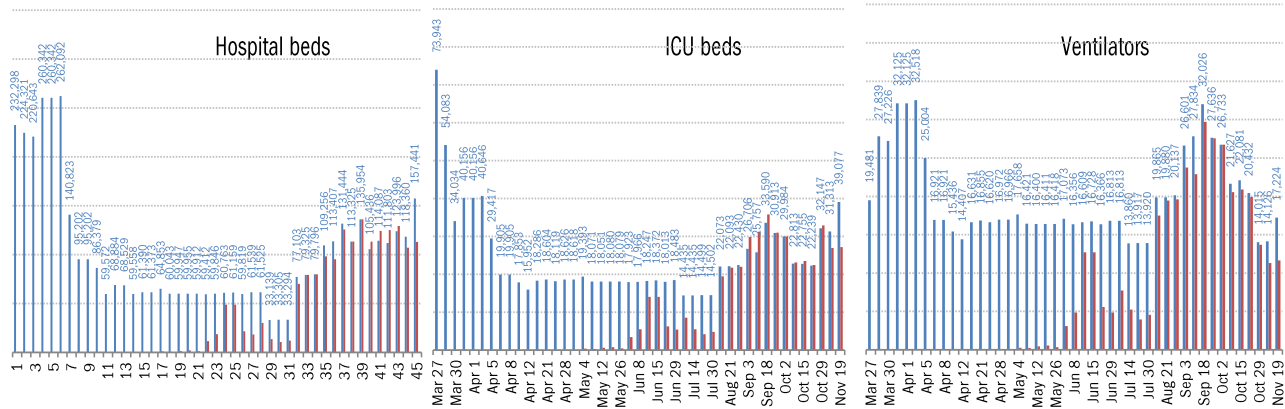


Cumulative fatalities

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

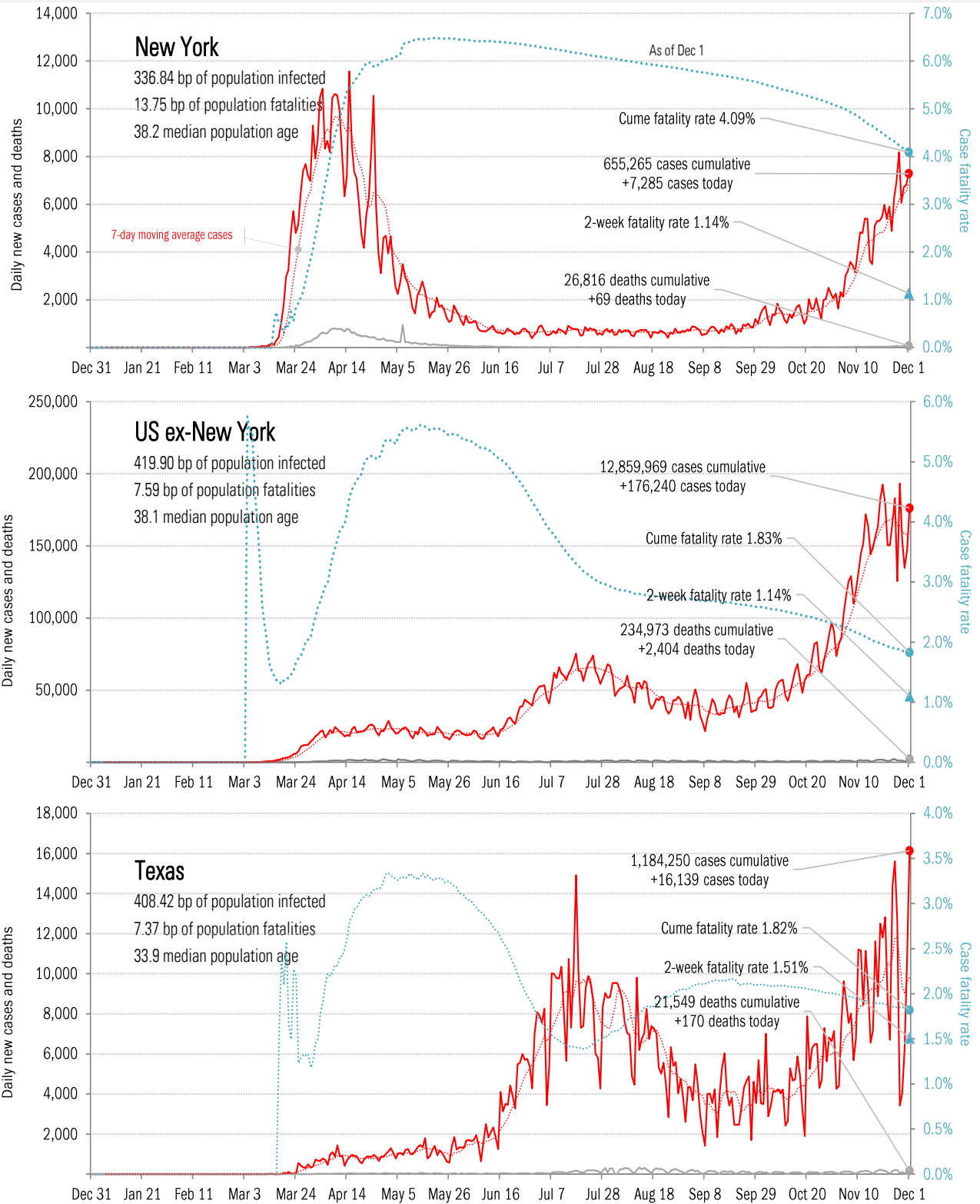


Healthcare system stress, **peak** and **ultimate** estimated at each model revision



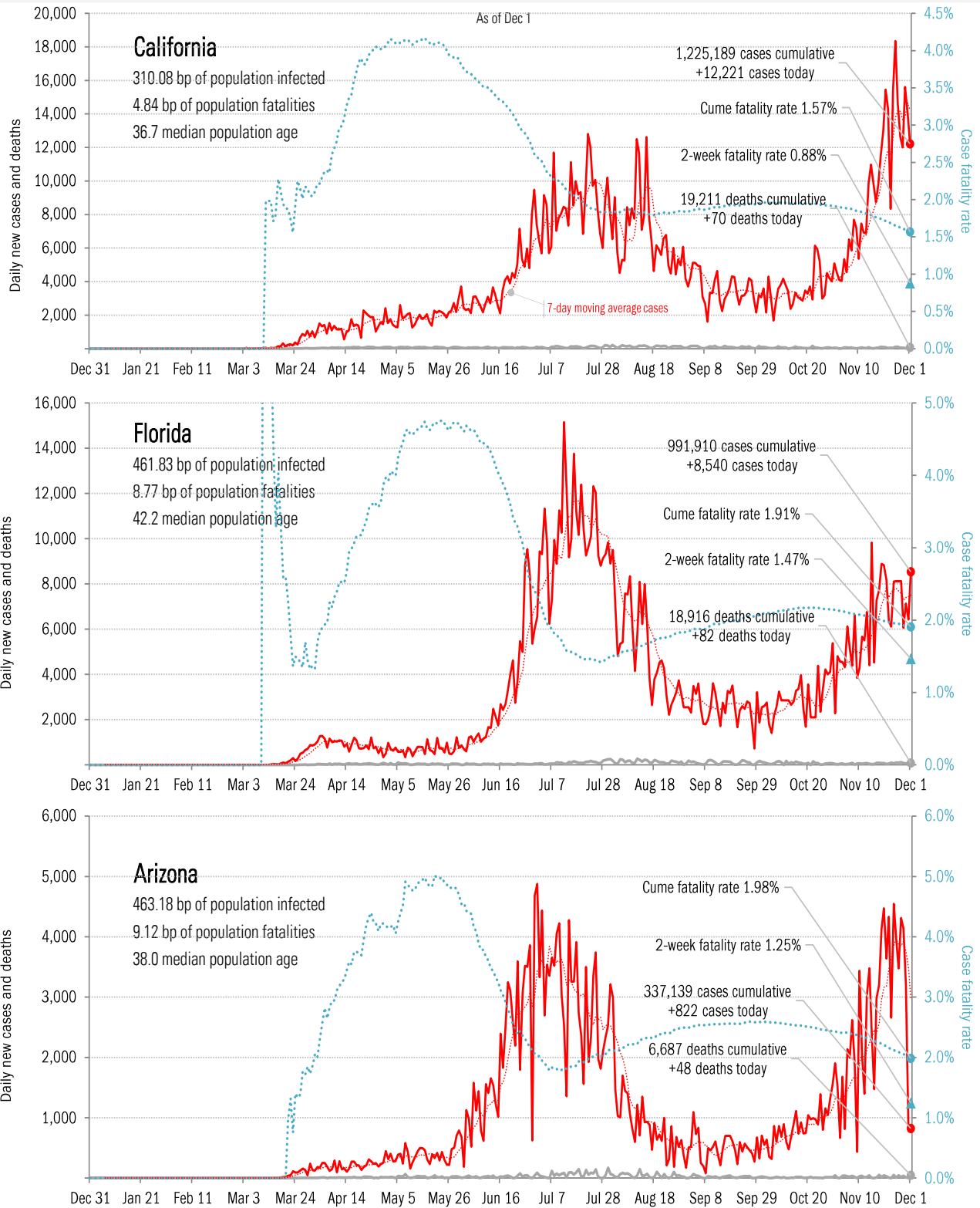
Source: [IHME](#), [Covid Tracking Project](#), TrendMacro calculations

From Ground Zero to the Rio Grande



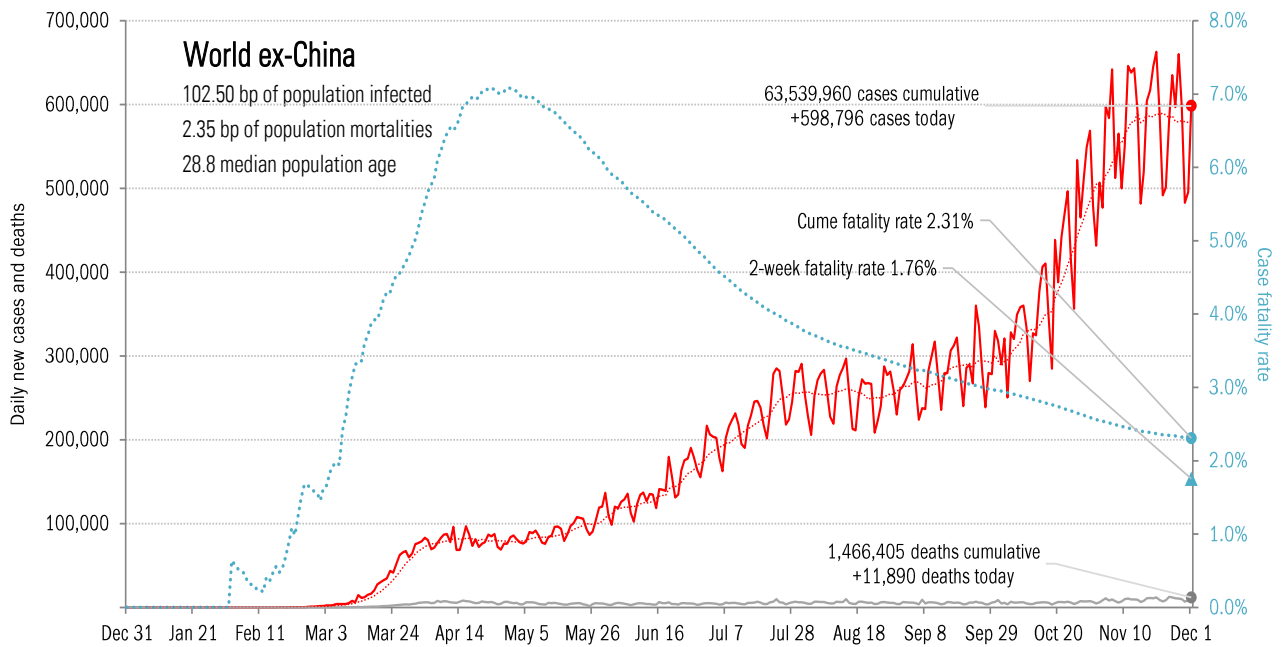
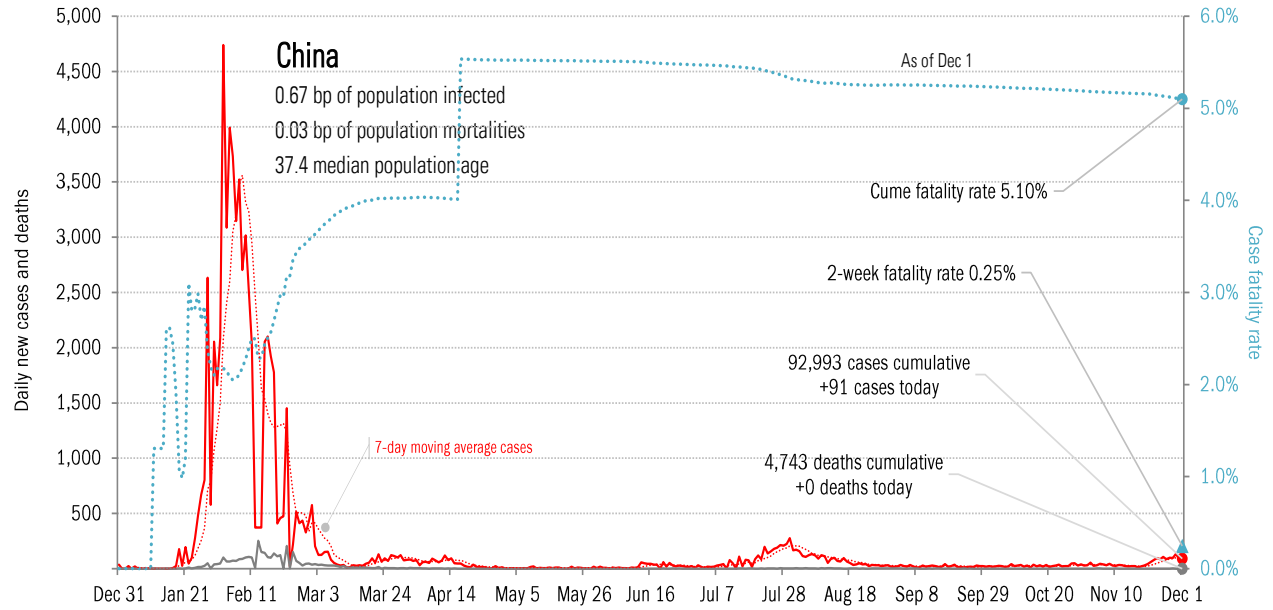
Source: [Covid Tracking Project](#), TrendMacro calculations

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



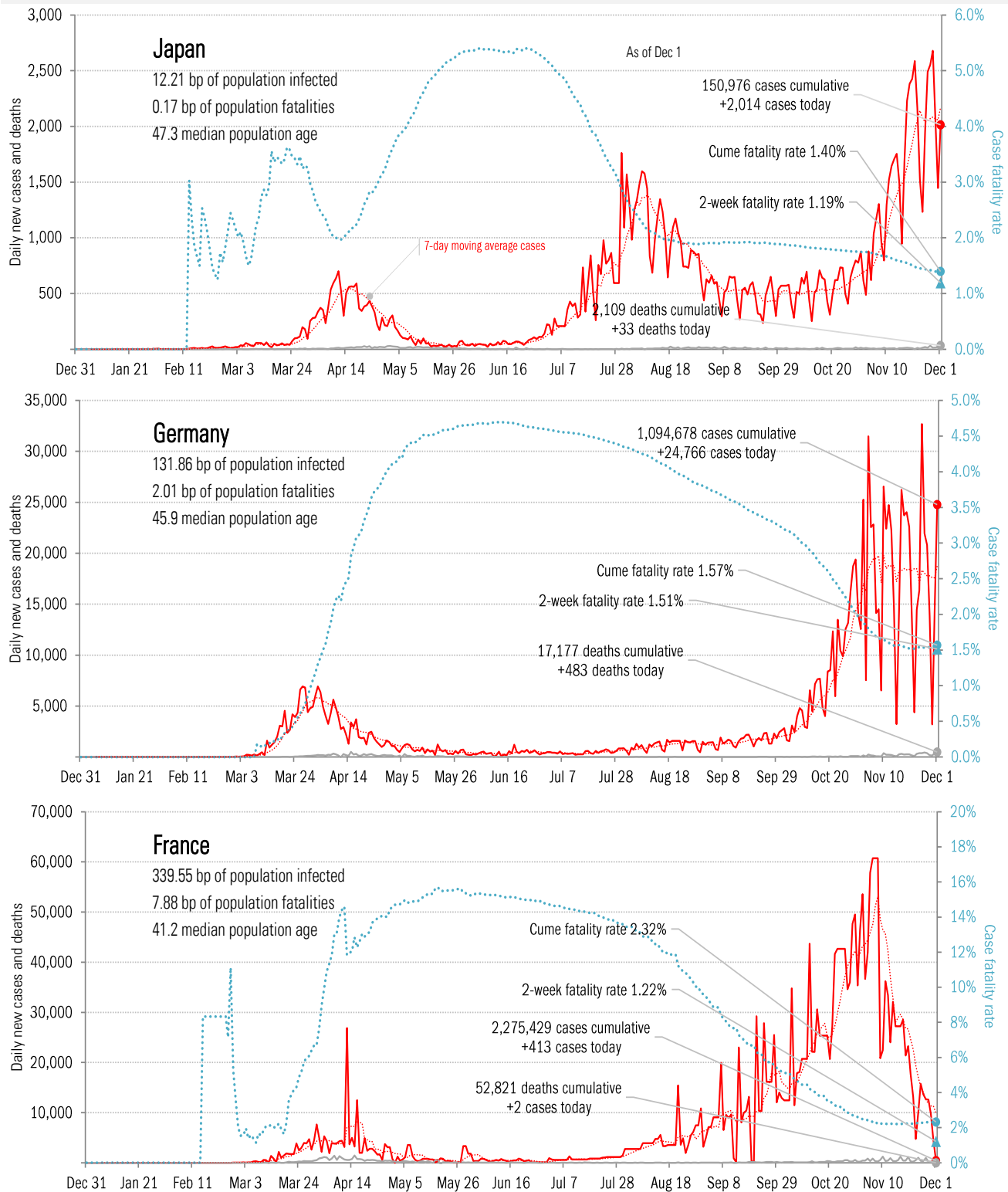
Source: [Covid Tracking Project](#), TrendMacro calculations

Patient zero... and then everyone else



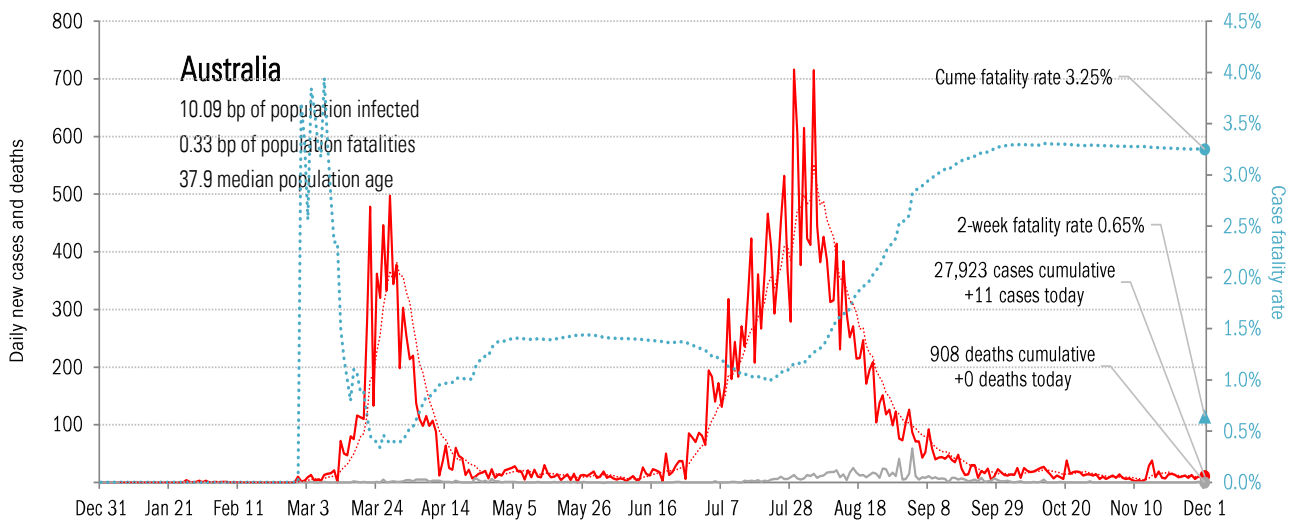
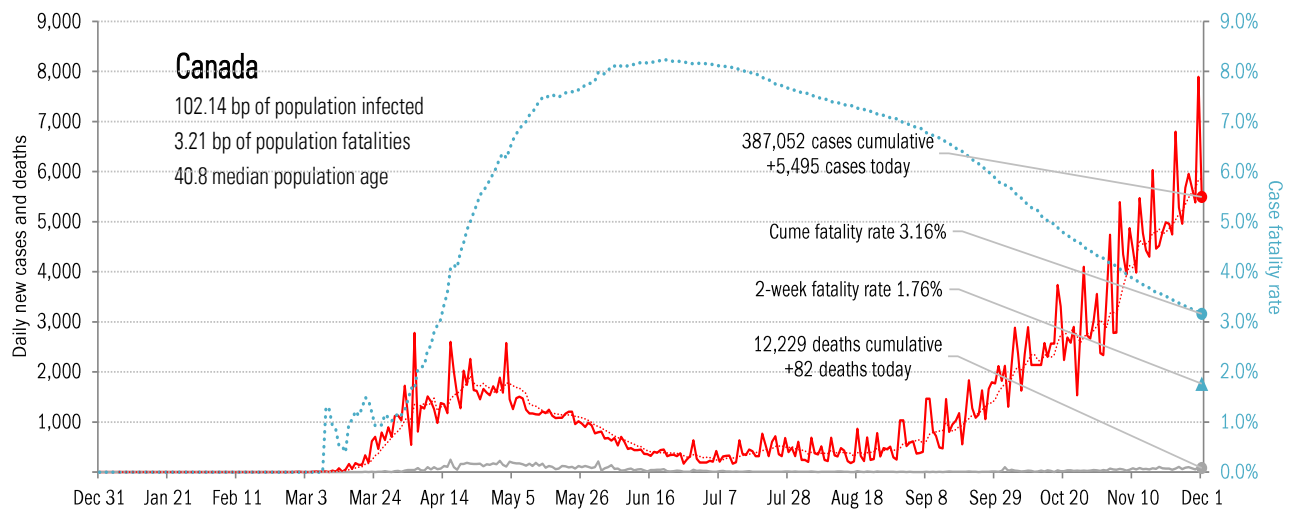
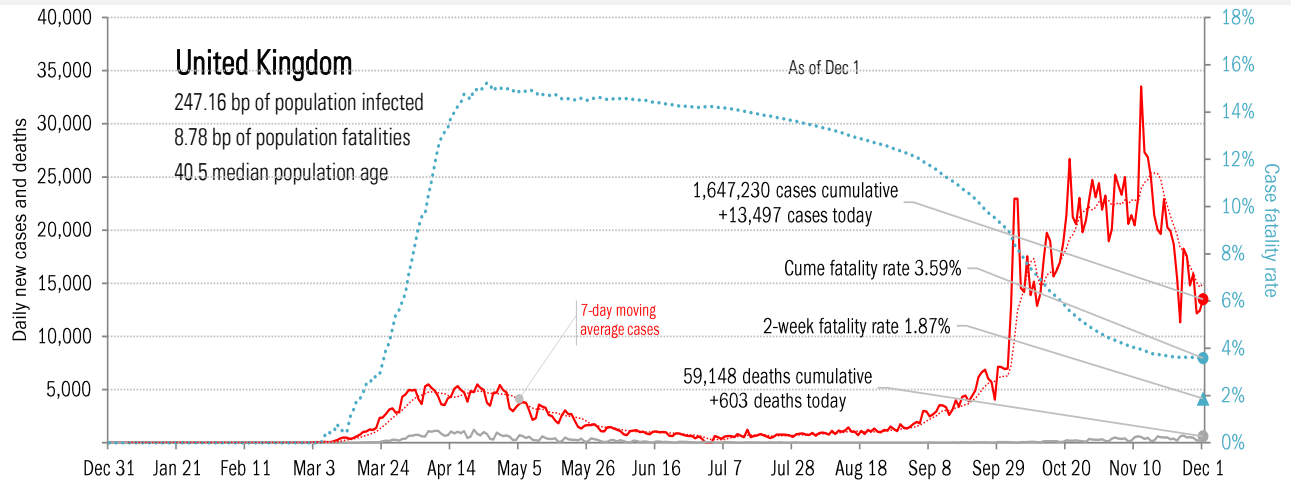
Source: [Johns Hopkins, Covid Tracking Project](#), TrendMacro calculations

Impact in the largest economies



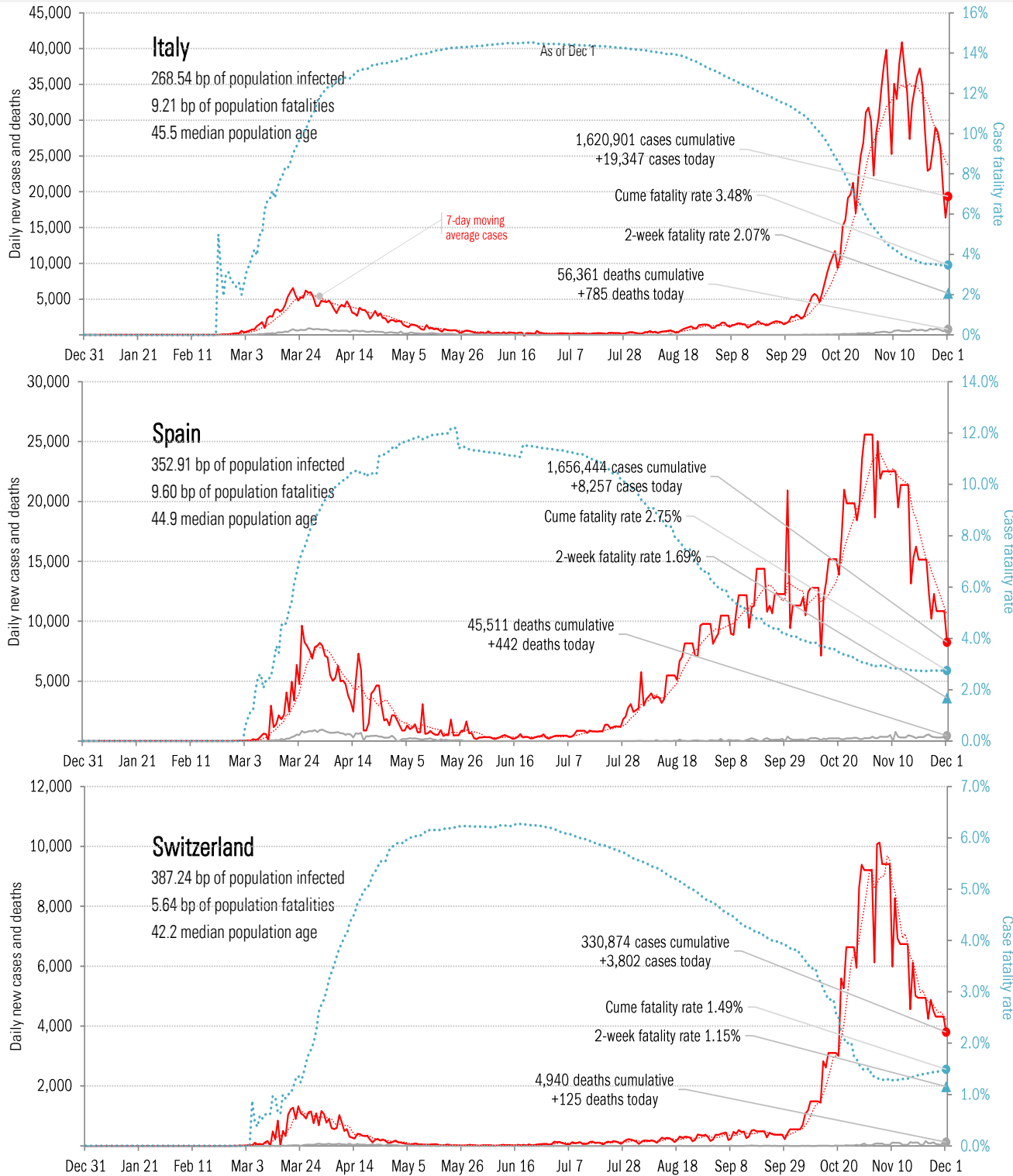
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in The Anglosphere



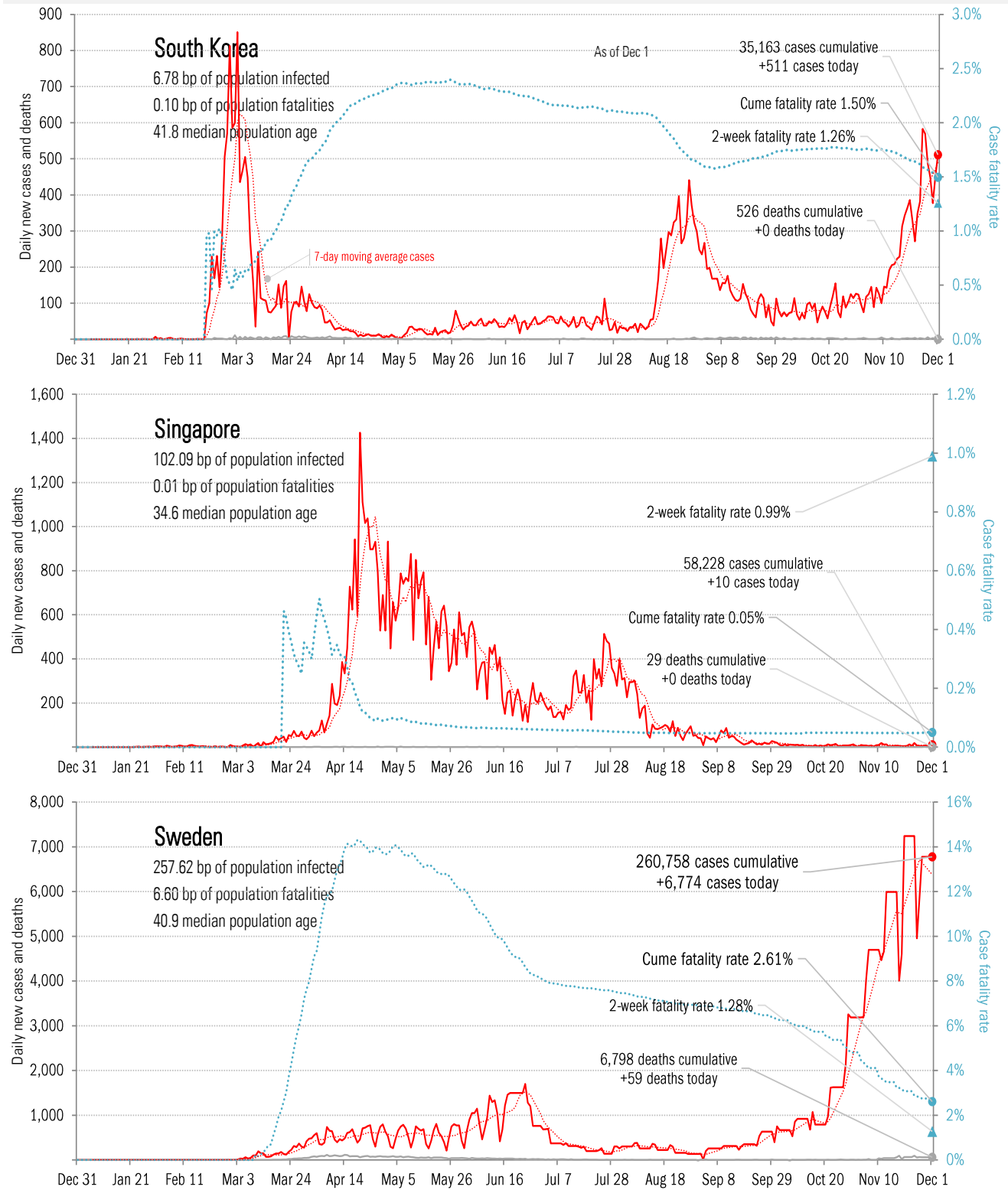
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in continental Europe



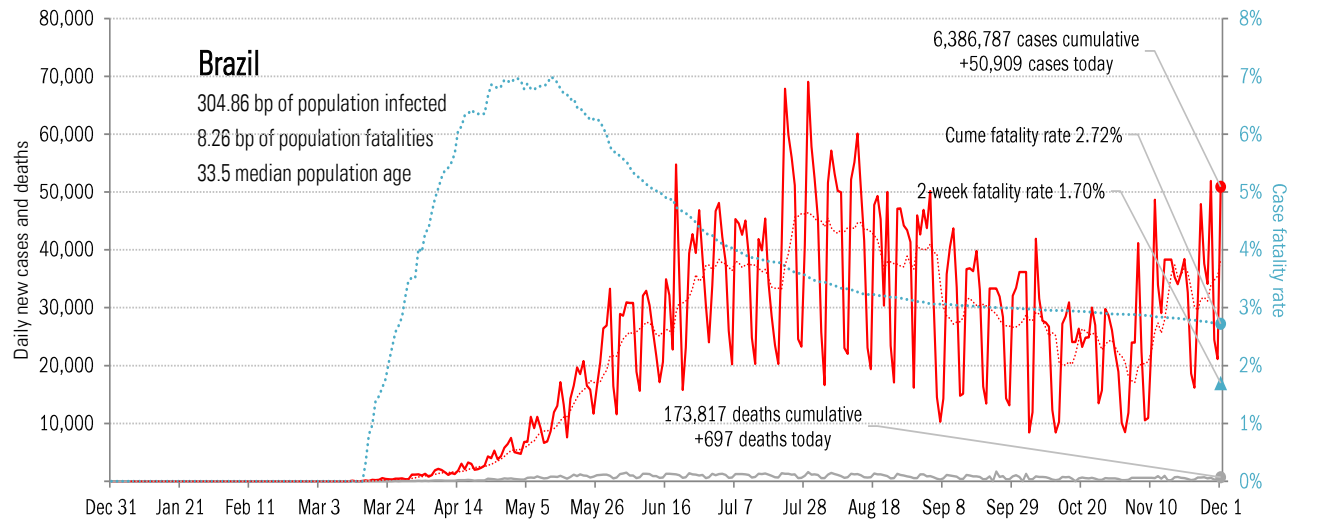
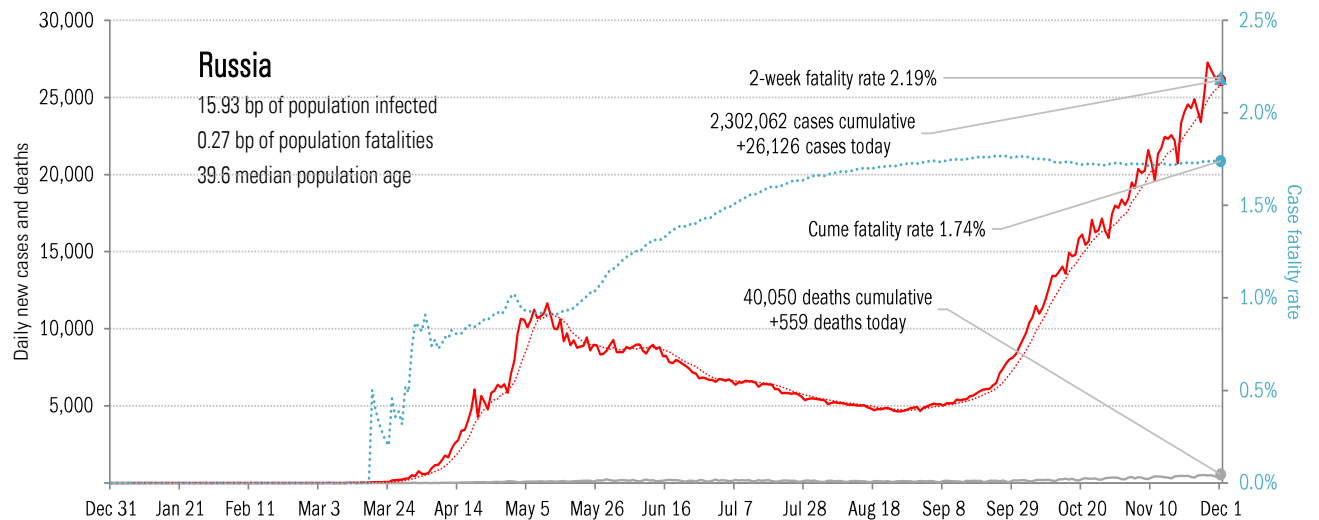
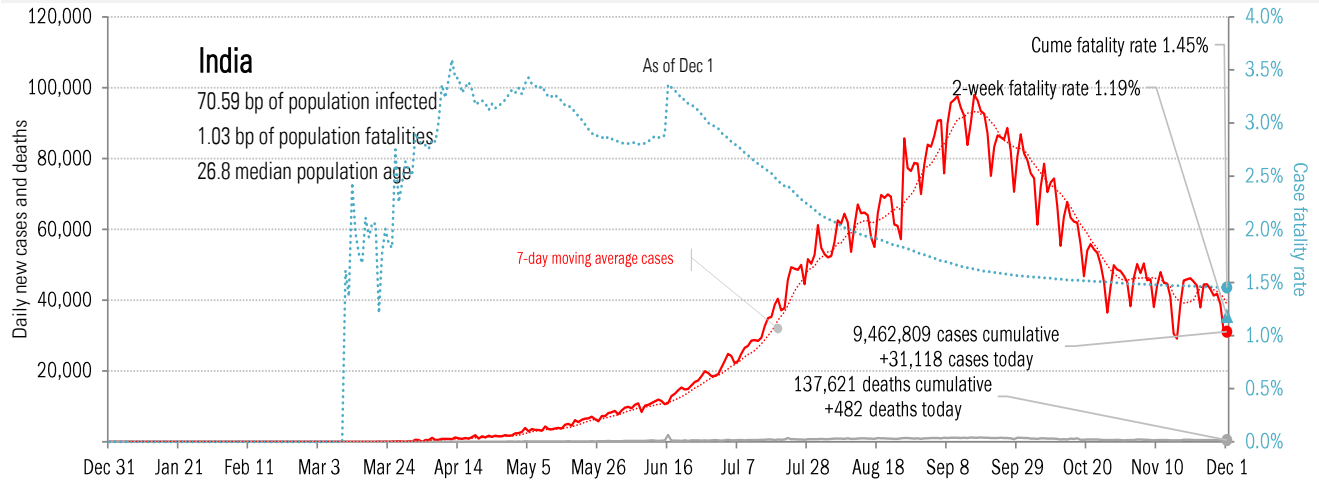
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in other hot-spots



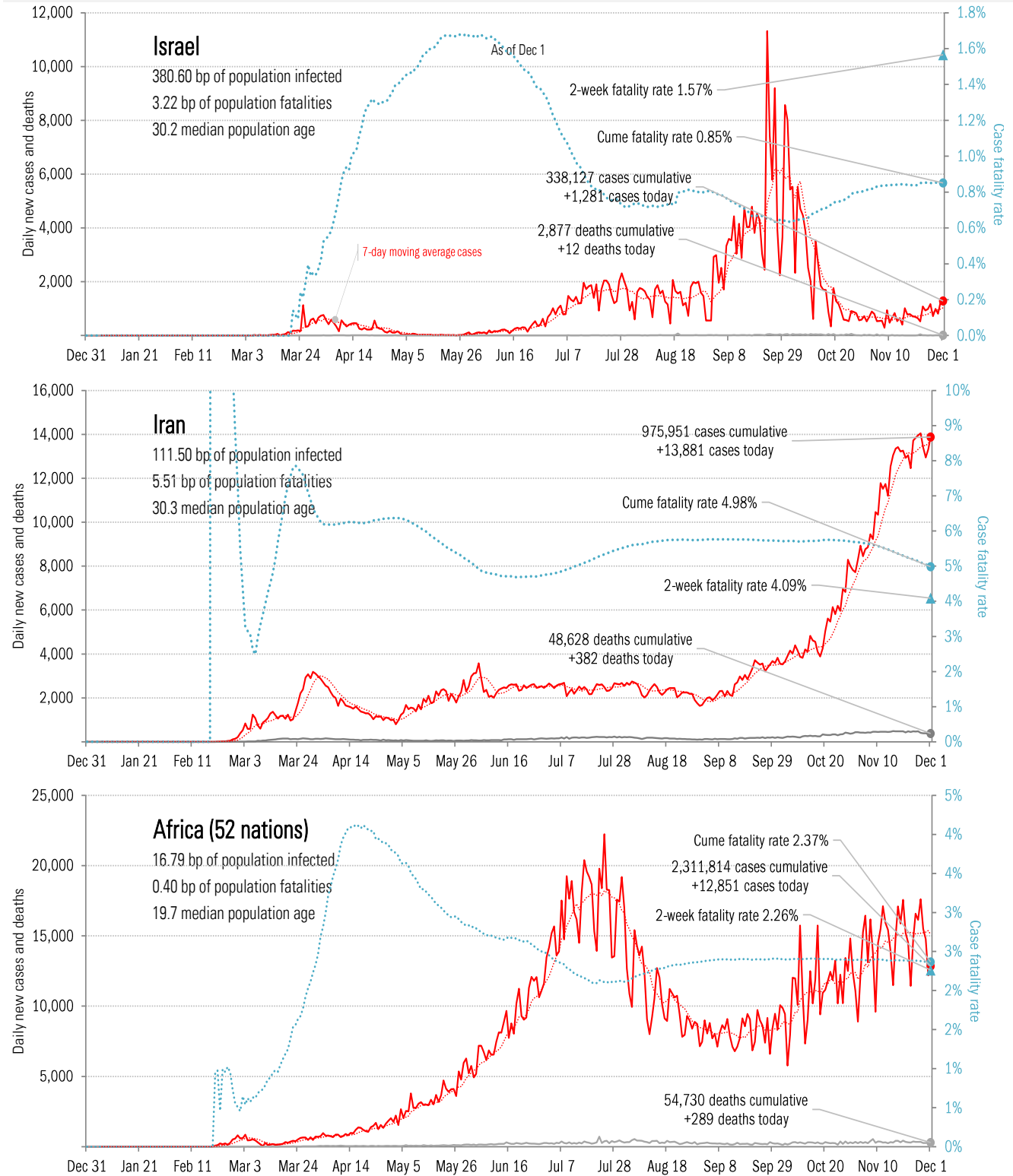
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in the BRICs ex-China



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

Impact in the Middle East and Africa



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