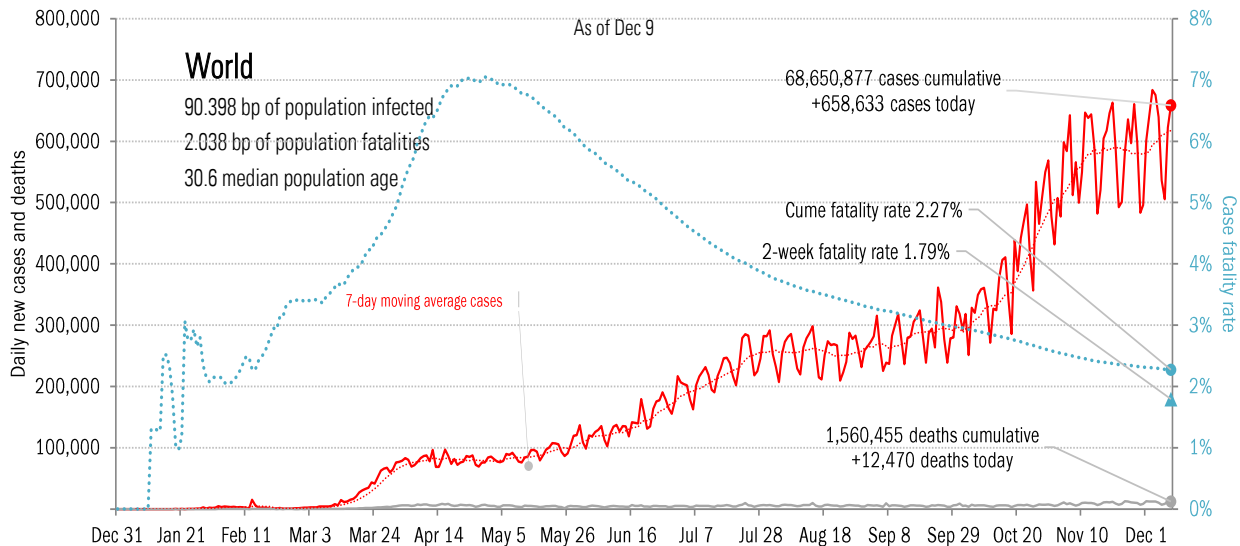
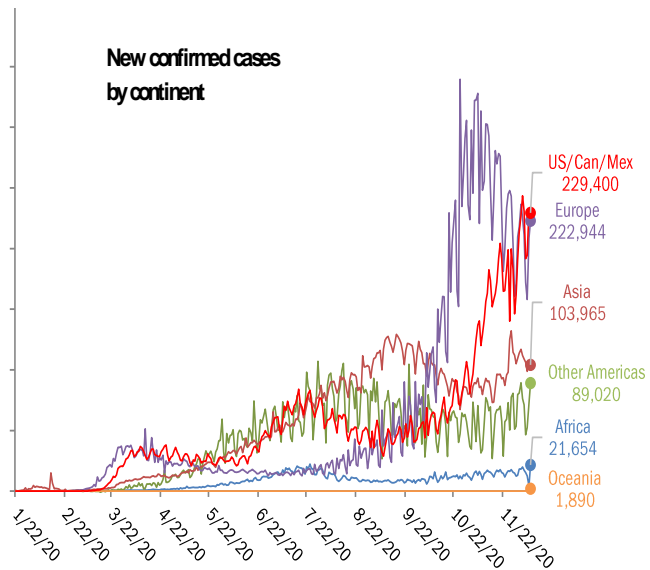


## Data Insights: Covid-2019 Monitor

Thursday, December 10, 2020

### The global scorecard

The worst ten countries			
New cases		New Deaths	
United States	+211,027	United States	+3,054
Brazil	+53,453	Brazil	+836
Turkey	+31,712	Mexico	+781
India	+31,521	Poland	+568
Russia	+25,838	Russia	+546
Germany	+25,089	United Kingdom	+533
United Kingdom	+16,634	Italy	+499
France	+14,717	Germany	+458
Ukraine	+12,937	India	+412
Italy	+12,755	Spain	+373
<b>+435,683</b>		<b>+8,060</b>	
World	+658,633	World	+12,470
Top ten	66%	Top ten	65%



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](mailto:tdemas@trendmacro.com)

# The US scorecard

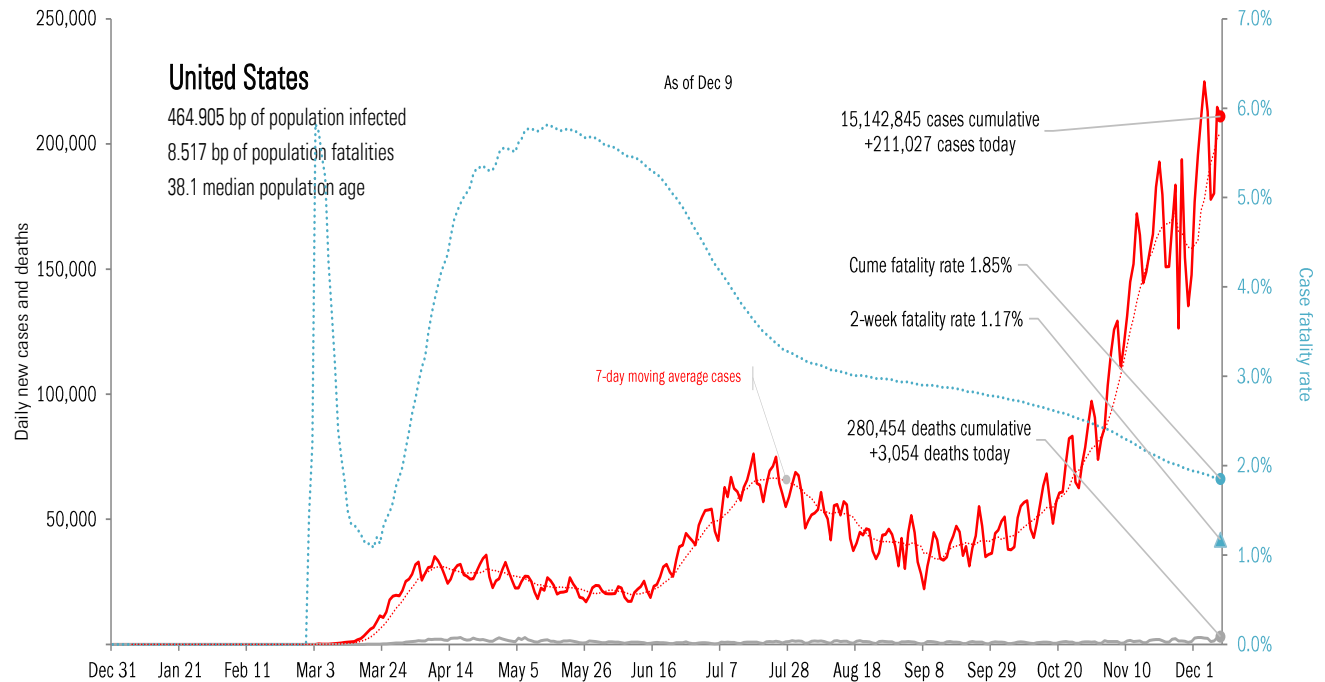
## The ten worst US states

New cases		New Deaths		New in hospital		Curre cases		Curre deaths		Curre in hospital	
CA	+30,851	TX	+273	KS	+486	CA	1,420,558	NY	27,404	NY	89,995
TX	+11,170	IL	+229	CA	+454	TX	1,283,674	TX	23,081	FL	57,957
NY	+10,600	PA	+220	PA	+291	FL	1,065,476	CA	20,243	NJ	43,075
CH	+10,094	CA	+196	NY	+158	IL	812,430	FL	19,716	GA	36,740
FL	+9,411	CO	+149	AZ	+130	NY	733,064	NJ	17,542	CH	30,690
PA	+8,703	NJ	+116	VA	+117	CH	520,112	IL	14,613	IN	29,412
IL	+8,256	AZ	+108	ID	+95	GA	456,113	PA	11,762	AZ	28,880
TN	+8,213	IA	+102	IL	+85	WI	452,180	MA	11,166	AL	27,618
NC	+6,495	NY	+97	NC	+67	MI	448,418	MI	10,706	MD	22,622
MA	+5,965	IN	+96	MD	+62	PA	445,317	GA	9,921	MN	18,809
<b>+109,758</b>		<b>+1,586</b>		<b>+1,945</b>		<b>7,637,342</b>		<b>166,154</b>		<b>385,798</b>	
All states	+211,027	All states	+3,054	All states	+2,098	All states	15,142,845	All states	280,454	All states	599,121
Top ten	52%	Top ten	52%	Top ten	93%	Top ten	50%	Top ten	59%	Top ten	64%

*Some states not reporting*

## Five most improved US states

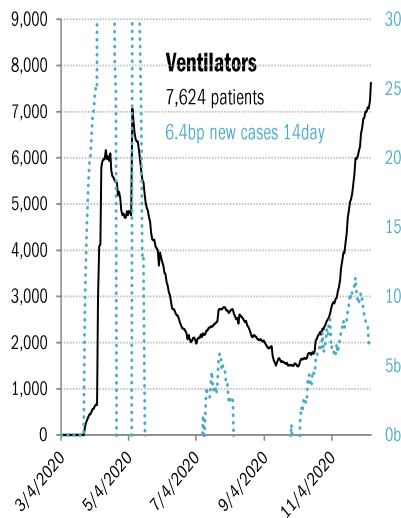
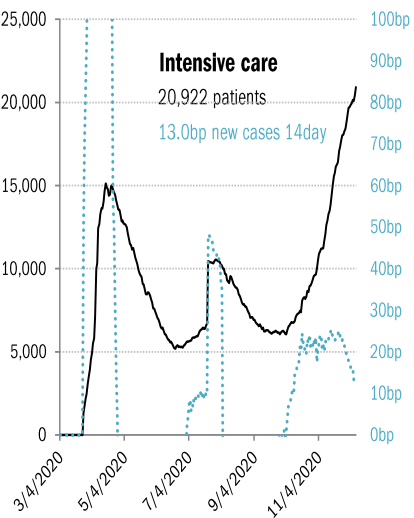
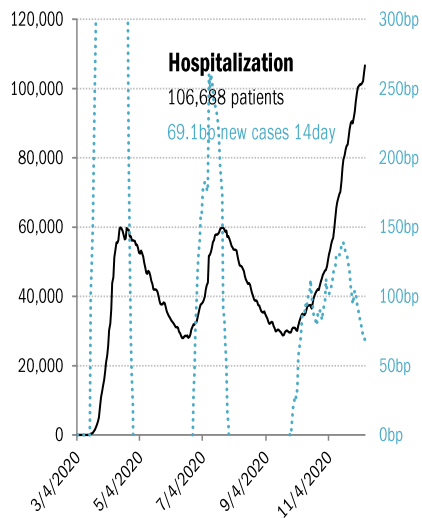
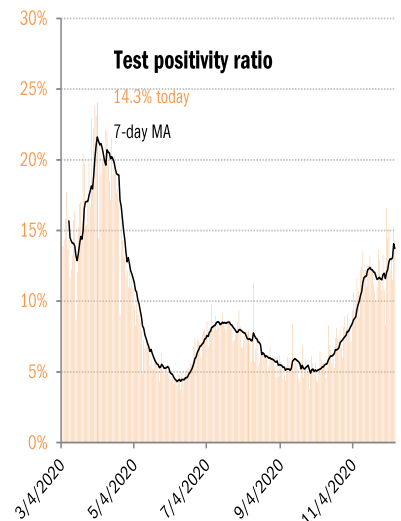
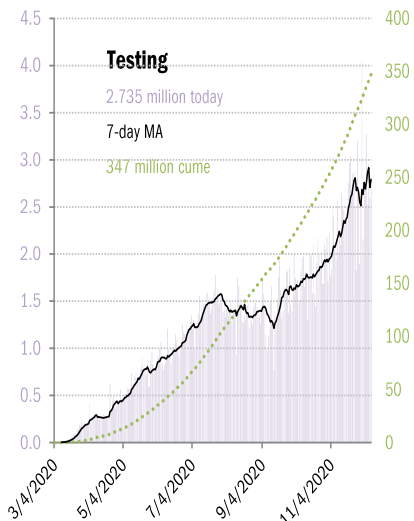
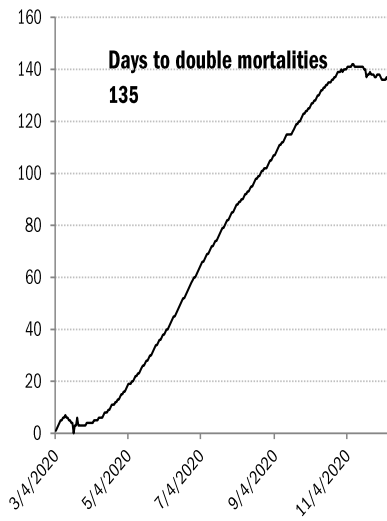
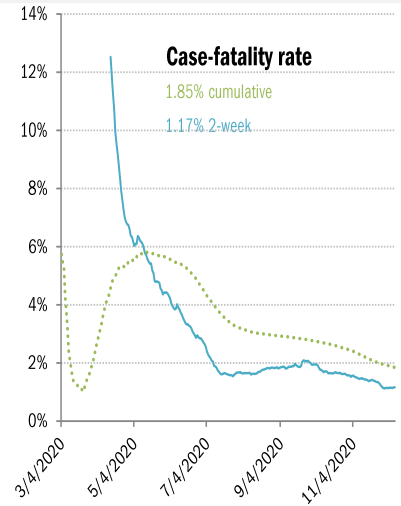
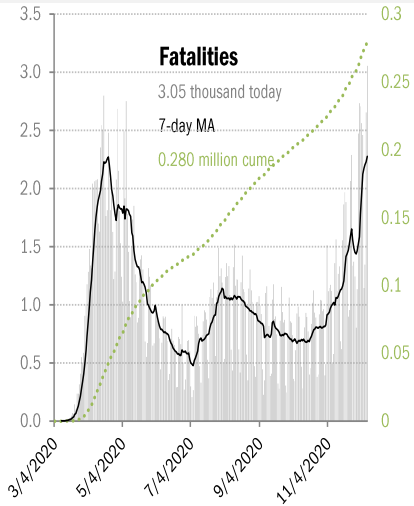
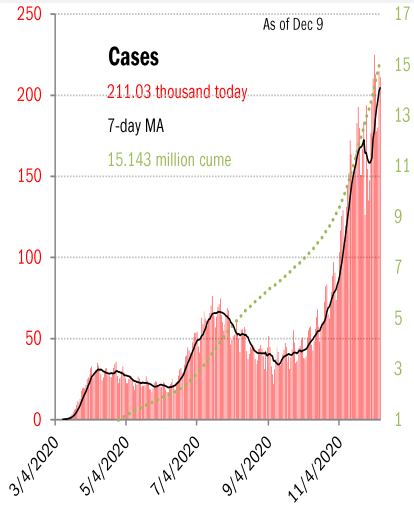
Fewer daily cases		Fewer new deaths		Fewer new hospitalizations		Most recoveries	
CH	-15,627	MO	-133	TX	-213	LA	+15,039
AZ	-7,870	MI	-122	MI	-135	TX	+11,982
WA	-4,034	IA	-99	MO	-127	CH	+10,260
TX	-3,120	AR	-39	SC	-116	PA	+9,414
AR	-2,283	TN	-38	MN	-96	WI	+6,752



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

# US deep-dive

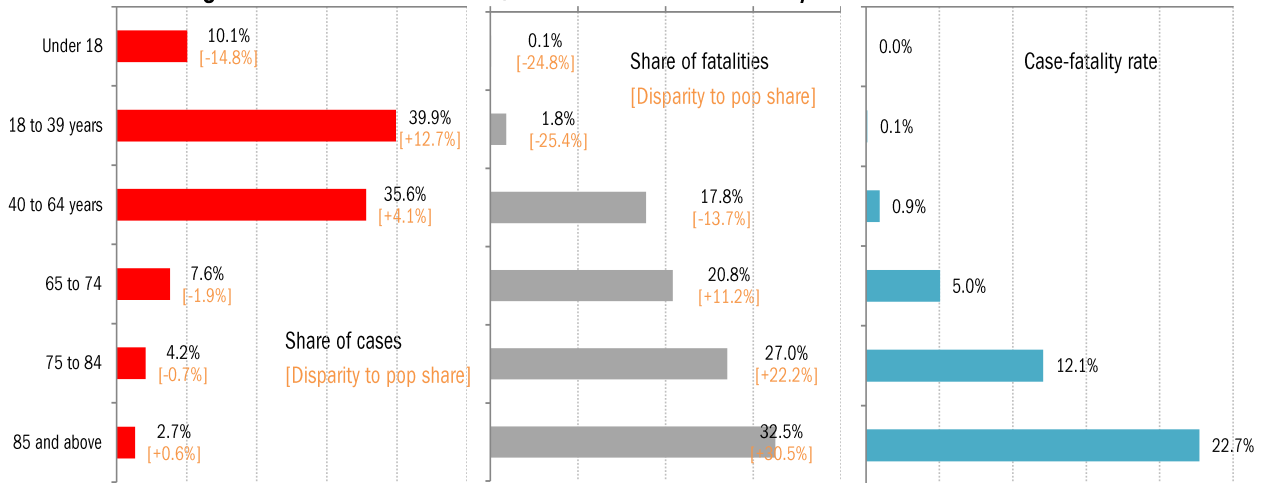
National and state-by-state data do not line up because of different sources



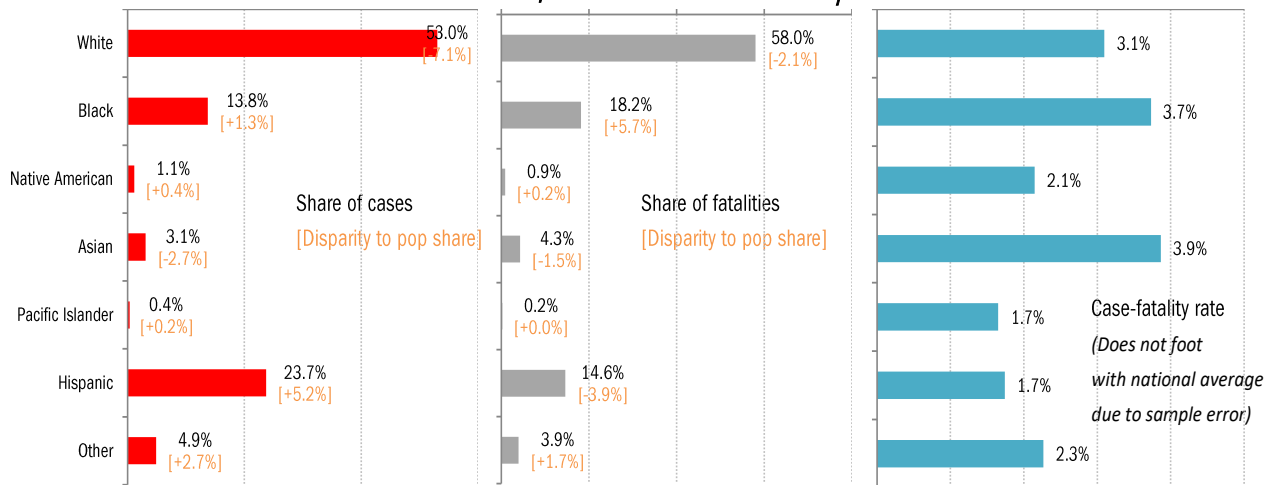
Source: [Covid Tracking Project](https://covidtracking.com/), TrendMacro calculations

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

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

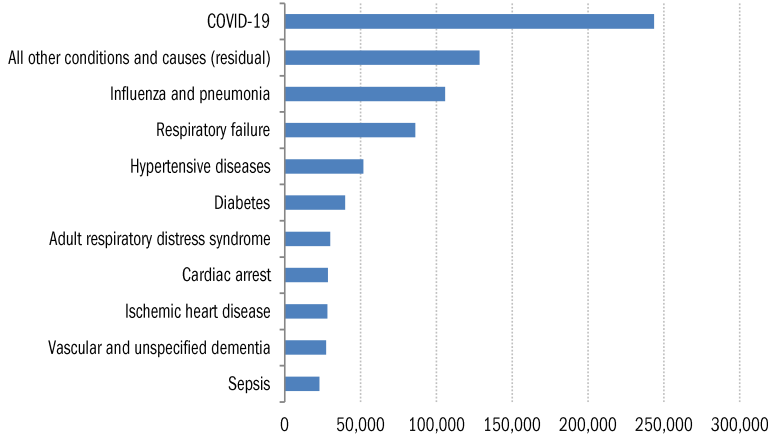


## Racial distribution of US cases, fatalities and case-fatality rates



## 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

[Paper-based electrochemical sensor can detect COVID-19 in less than five minutes](#)

*Science Daily*  
December 7, 2020

[Pandemic Penitents](#)

John Tierney  
*City Journal*  
December 7, 2020

[Restaurant Closings Top 110,000 With Industry in 'Free Fall'](#)

Carolina Gonzalez  
*Bloomberg*  
December 7, 2020

[Despite Pandemic, Thanksgiving Travel Higher in 80% of Counties From 2019](#)

Andre Tartar, Mira Rojanasakul and Pablo Robles  
*Bloomberg*  
December 9, 2020

[Covid vaccine from China's Sinopharm is 86% effective, says UAE](#)

Simeon Kerr and Christian Shepherd  
*Financial Times*  
December 9, 2020

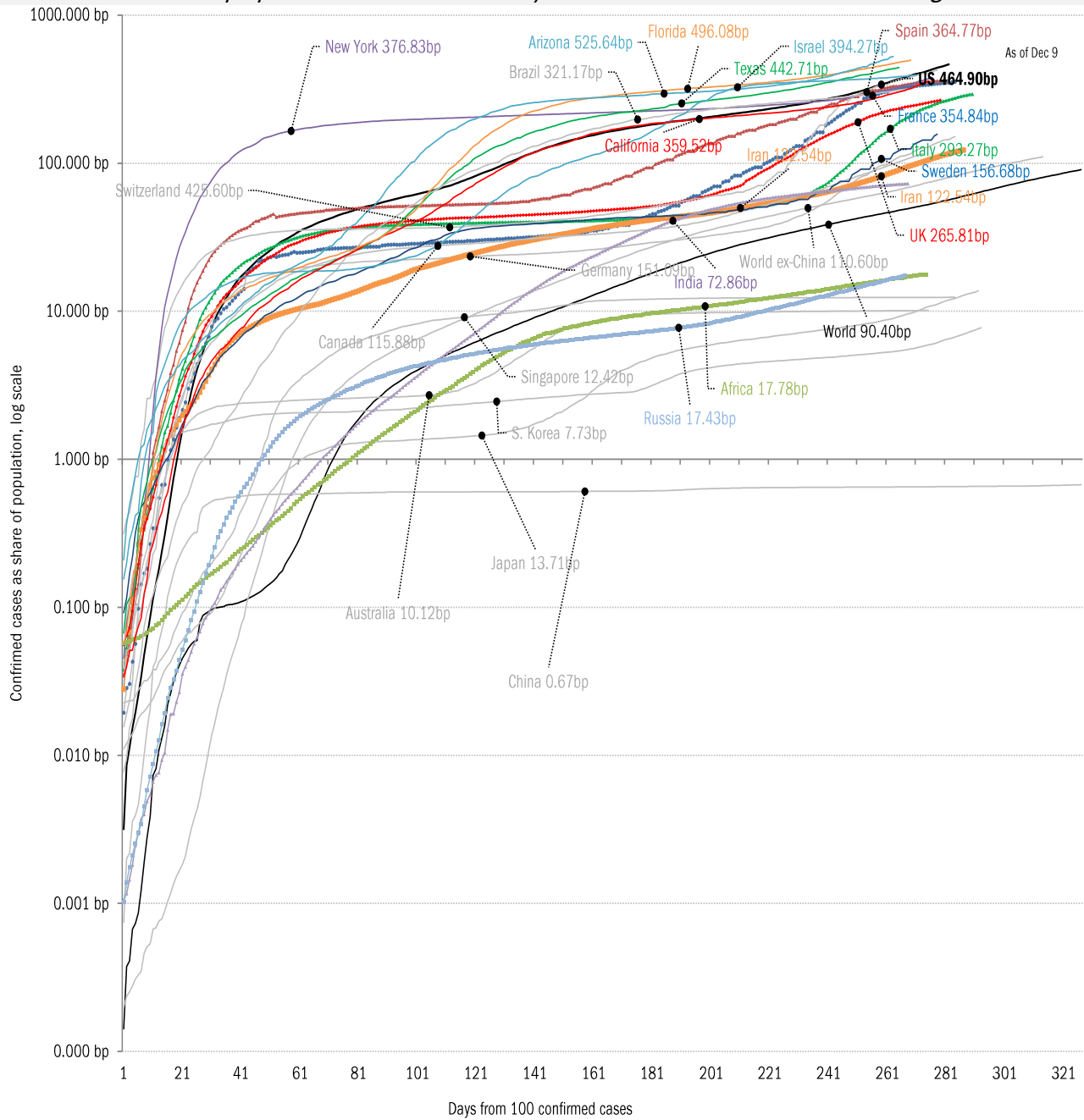
## Meme of day



**Help At Last: House Relief Bill Will Provide Free 'Going Out Of Business' Signs To Small Business Owners**

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

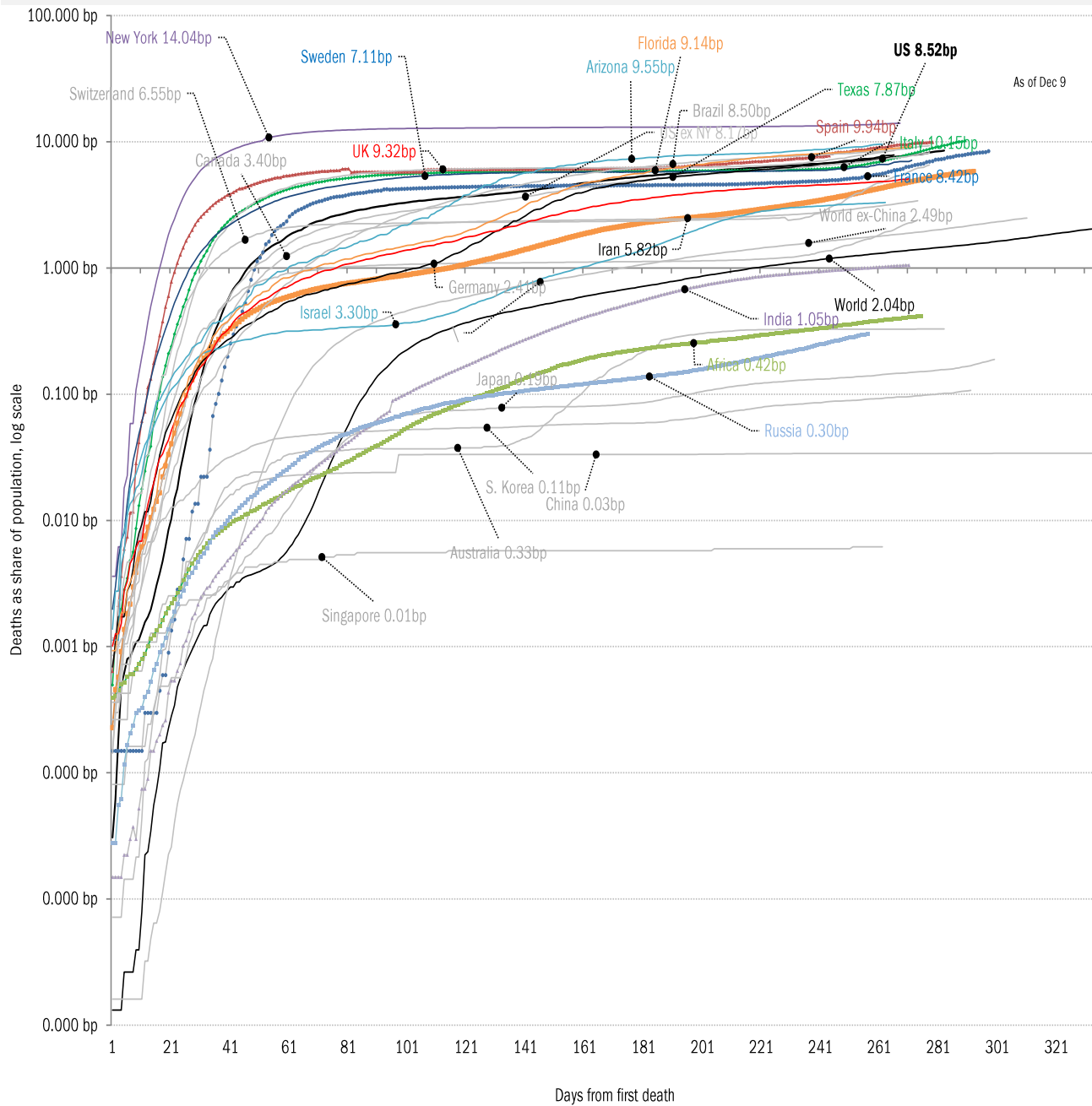
The coronavirus case accelerometer... tracking the world's infection curves  
*Share of infected population from first day with 100 confirmed cases, log scale*



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



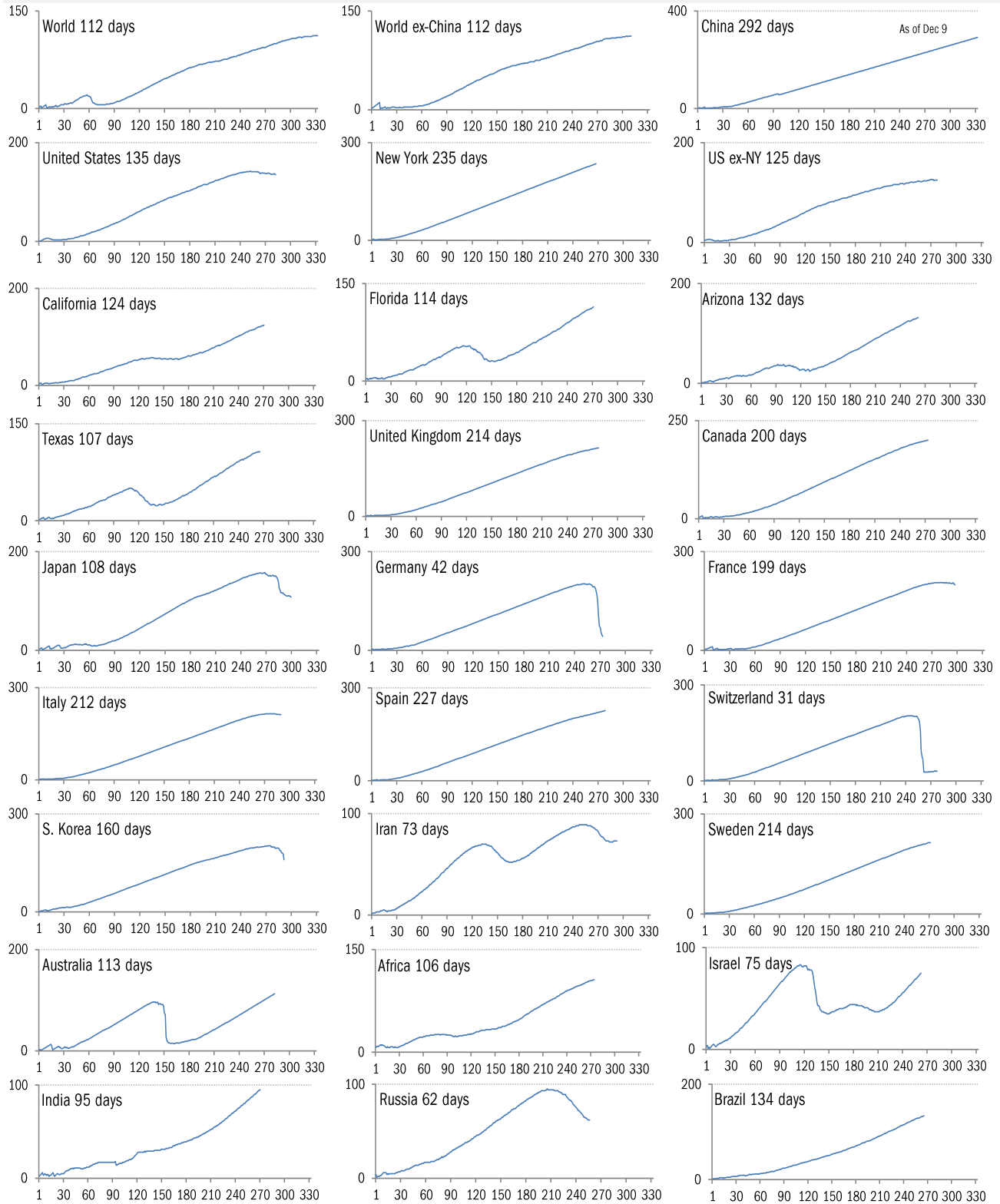
Source: [Johns Hopkins](#), [Covid Tracking Project](#), TrendMacro calculations



# "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



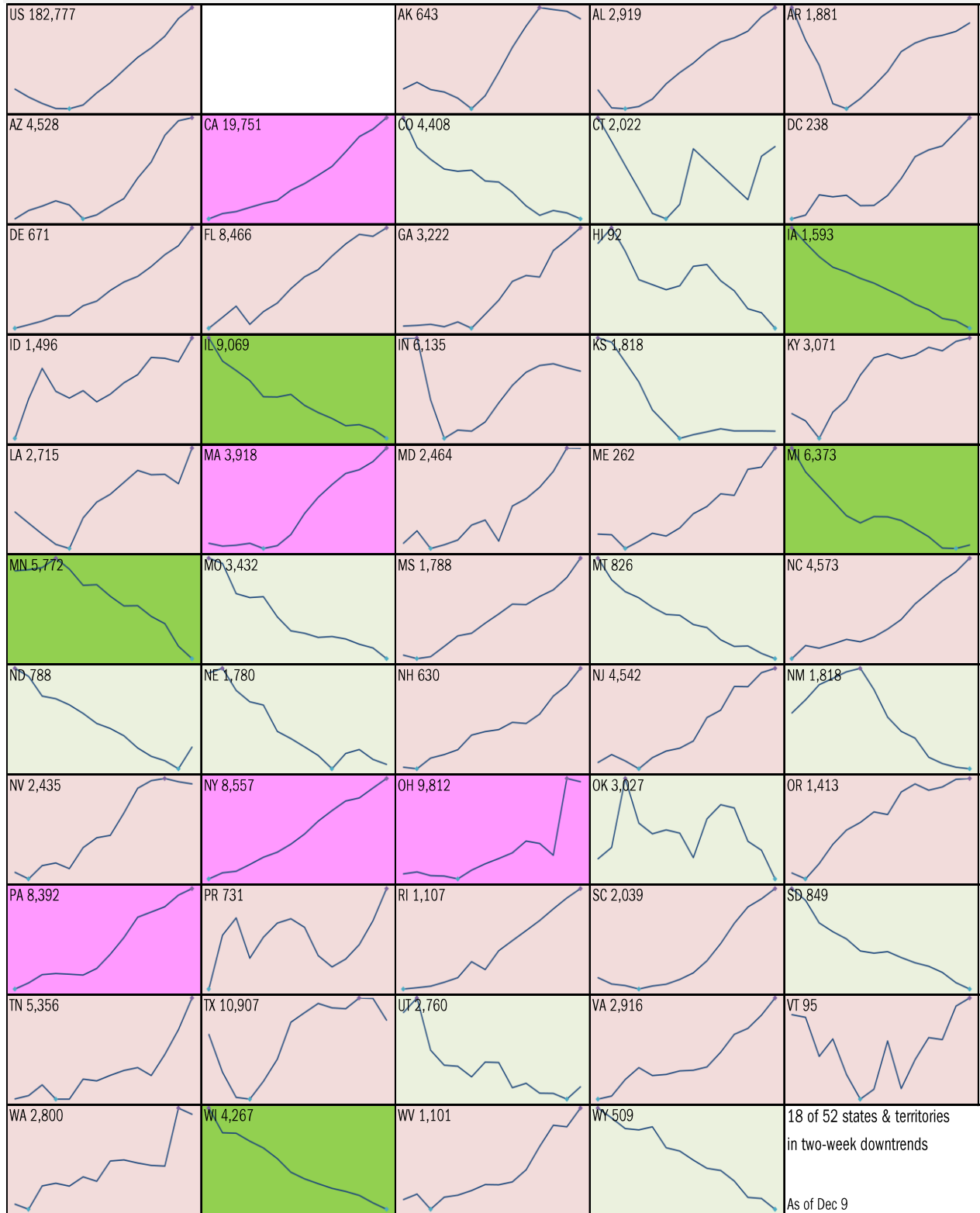
Source: [Johns Hopkins, Covid Tracking Project](#), TrendMacro calculations



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

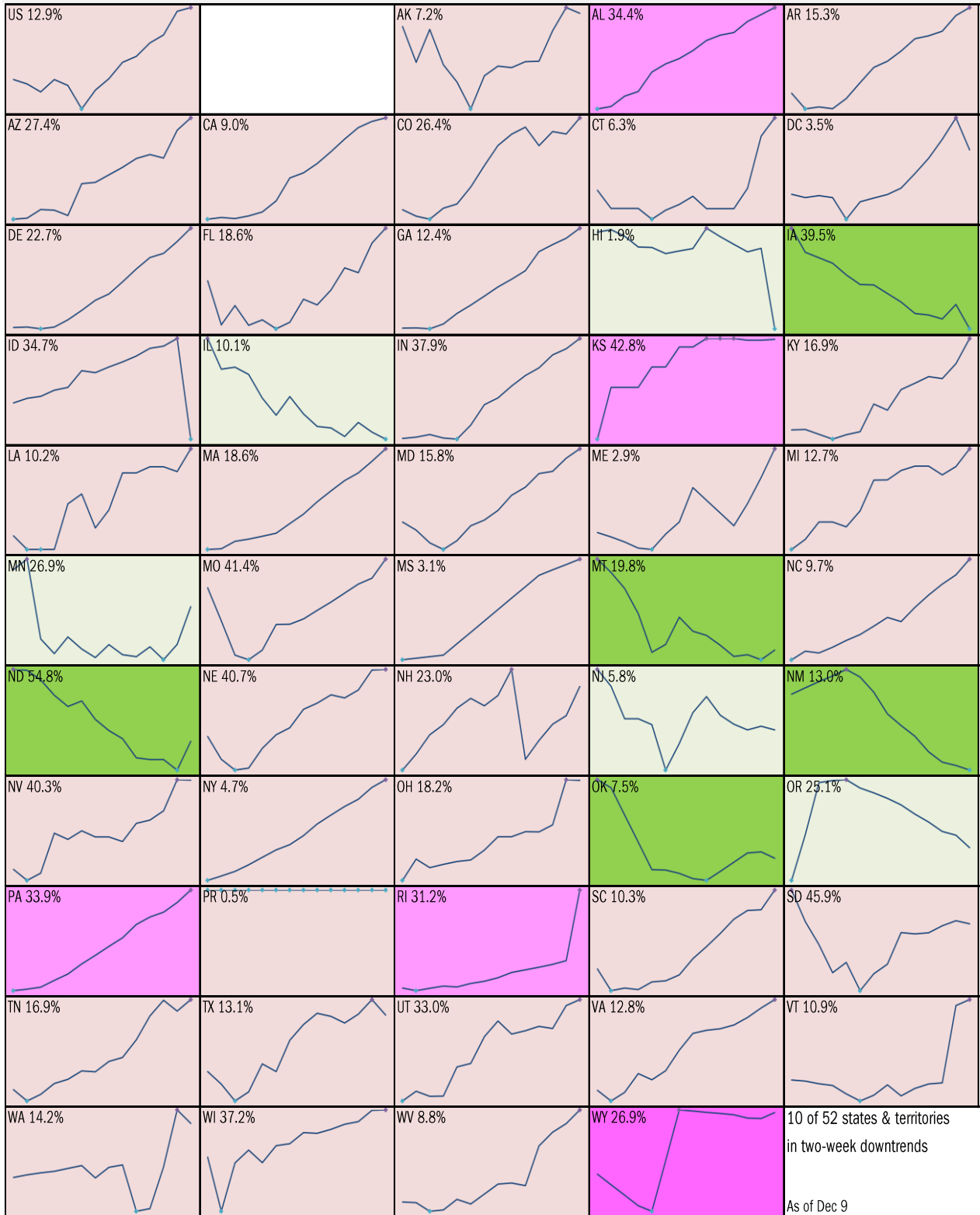


Source: [Covid Tracking Project](#), TrendMacro calculations

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



As of Dec 9

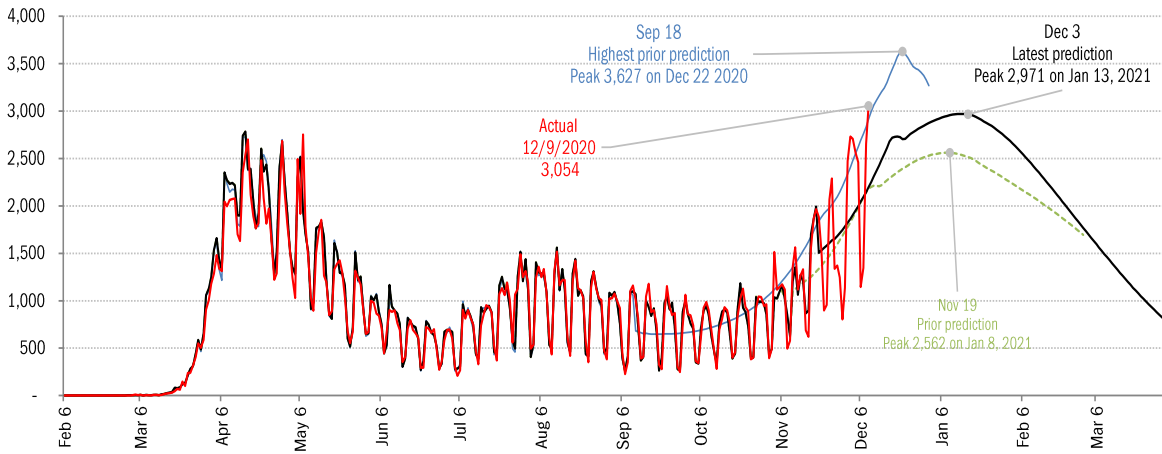
Source: [Covid Tracking Project](#), TrendMacro calculations

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

## New daily fatalities

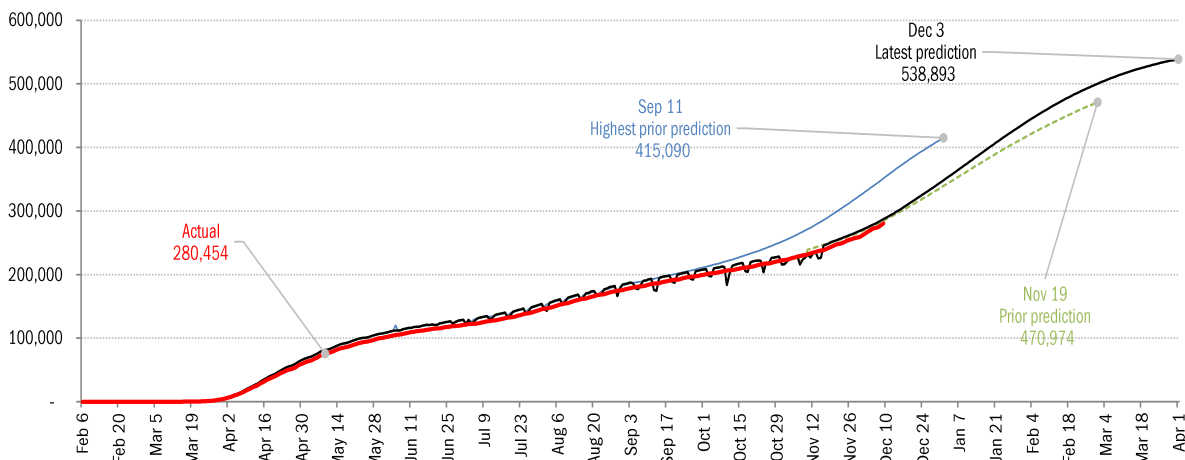
As of Dec 9

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

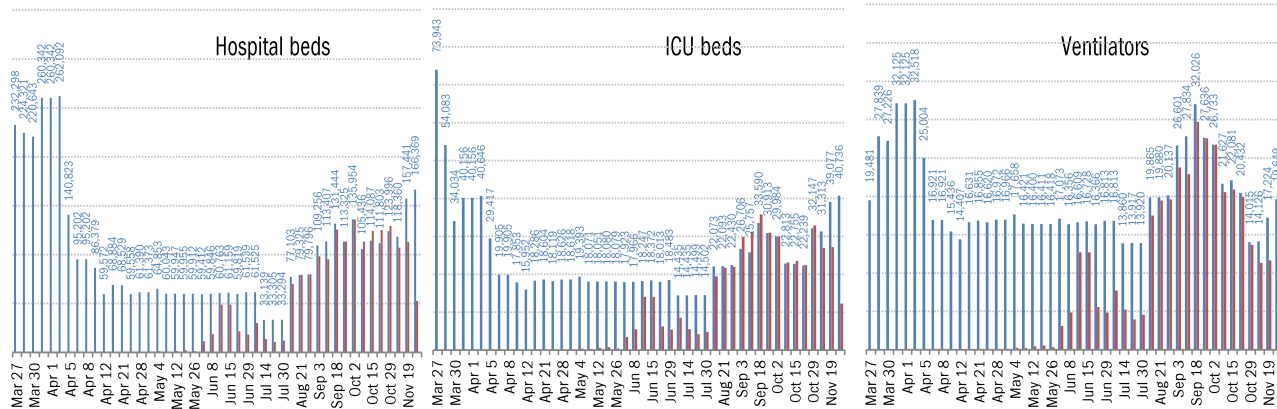


## Cumulative fatalities

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

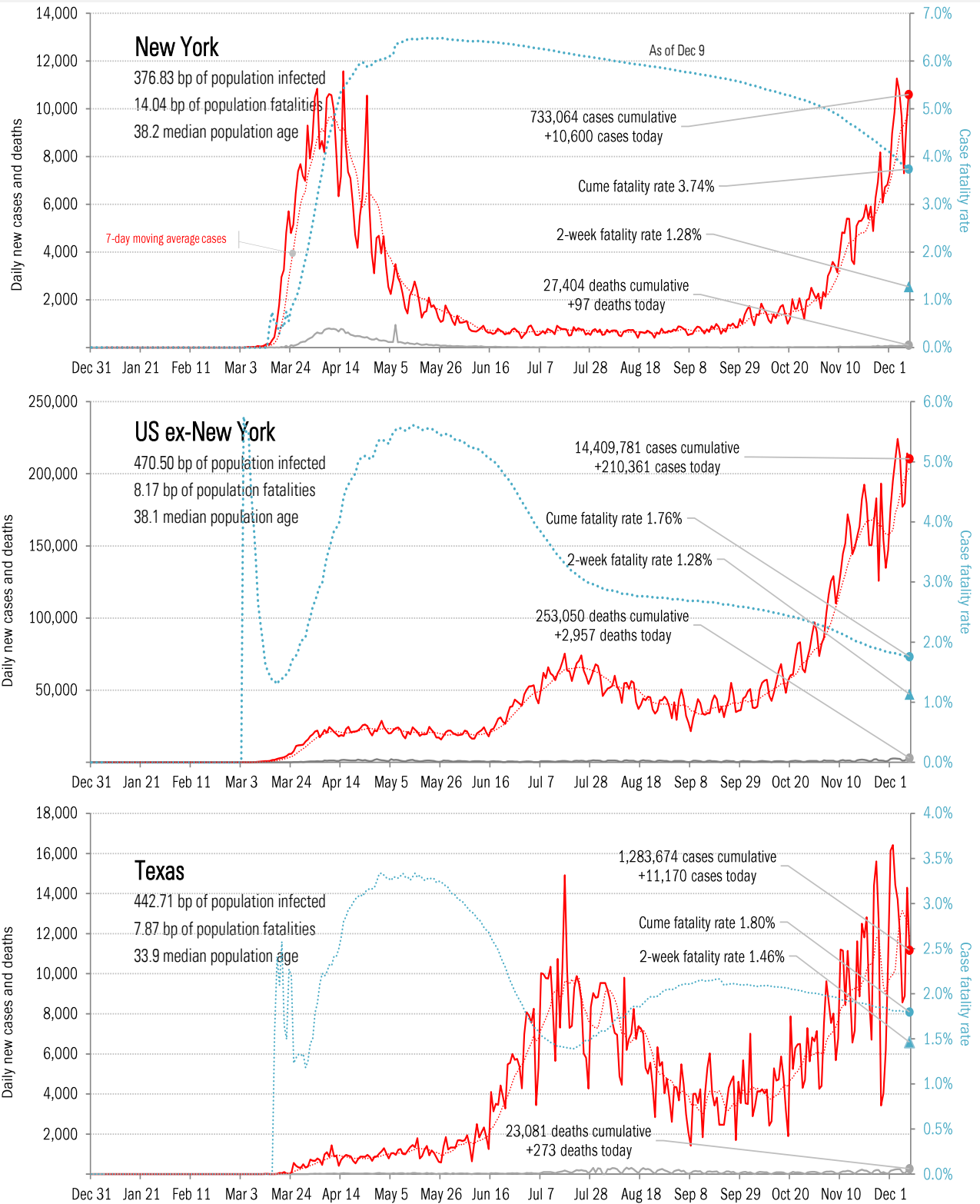


## Healthcare system stress, **peak** and **ultimate** estimated at each model revision



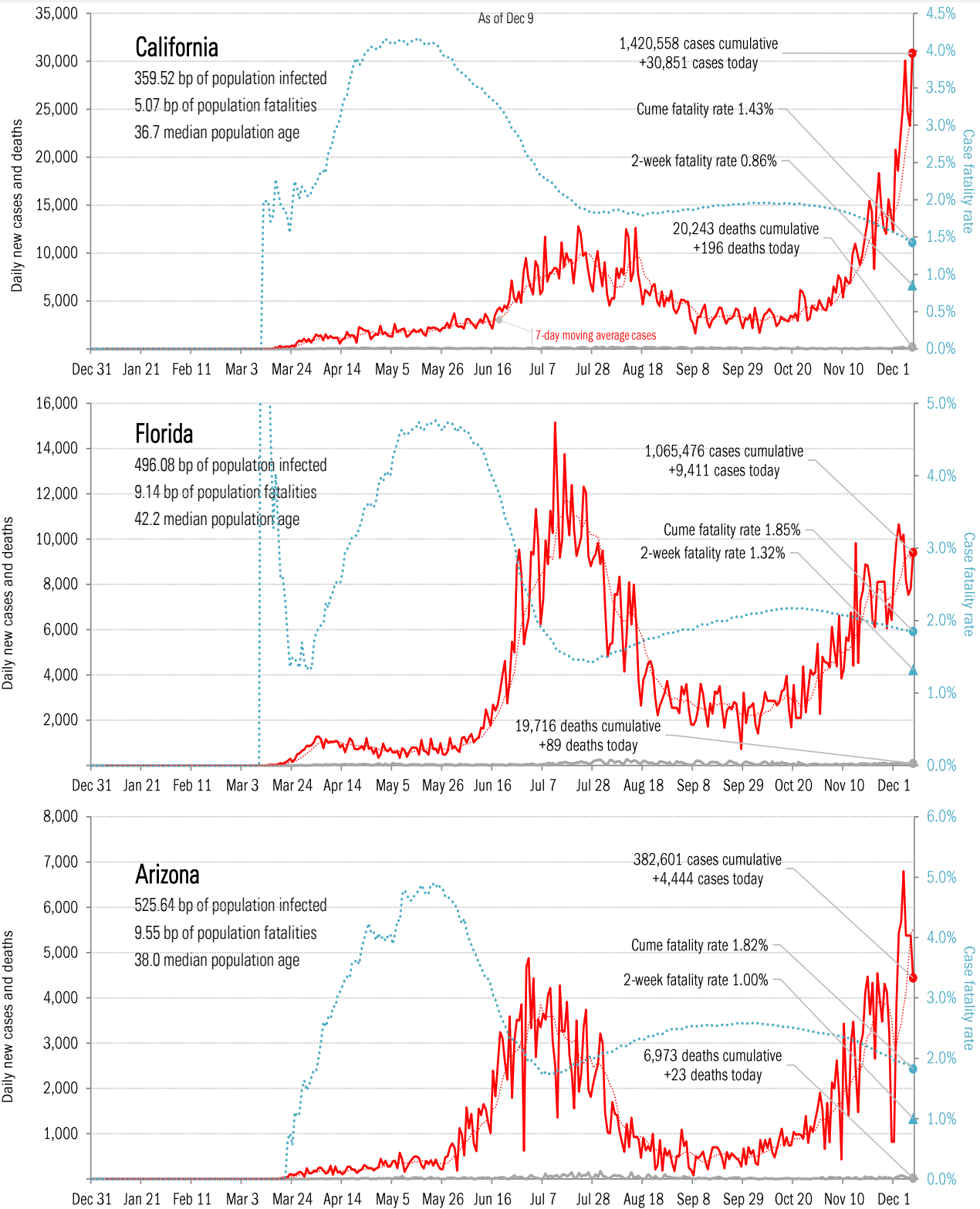
Source: [IHME](#), [Covid Tracking Project](#), TrendMacro calculations

# From Ground Zero to the Rio Grande



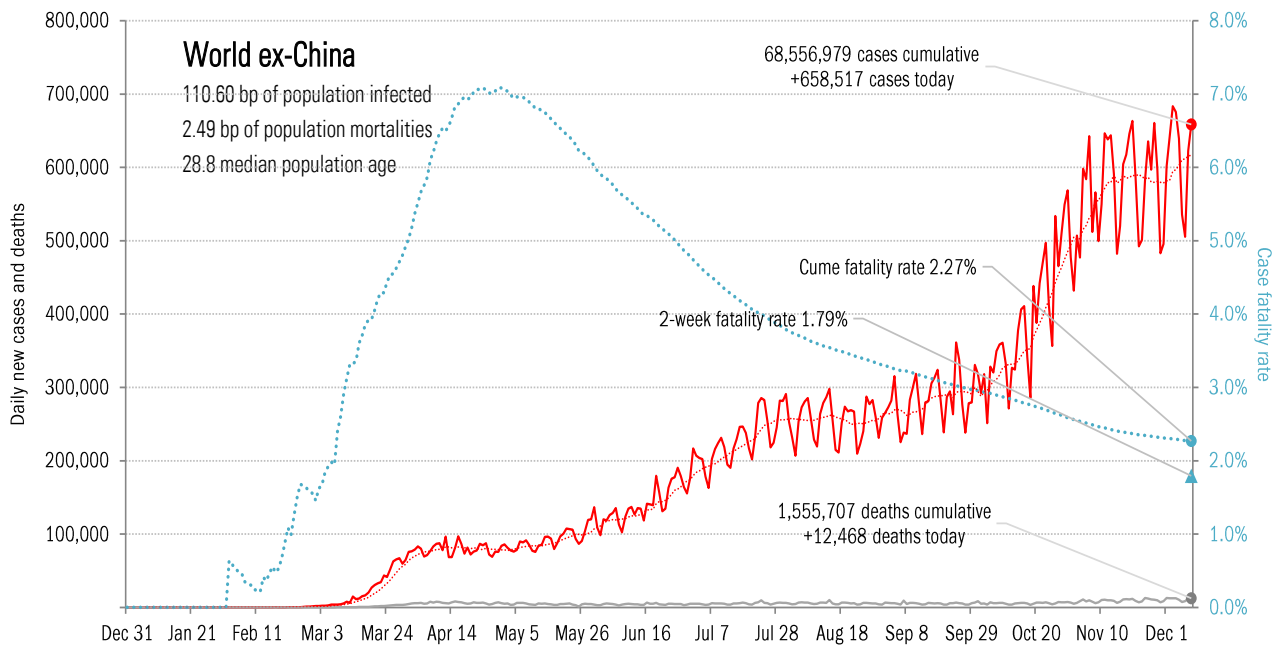
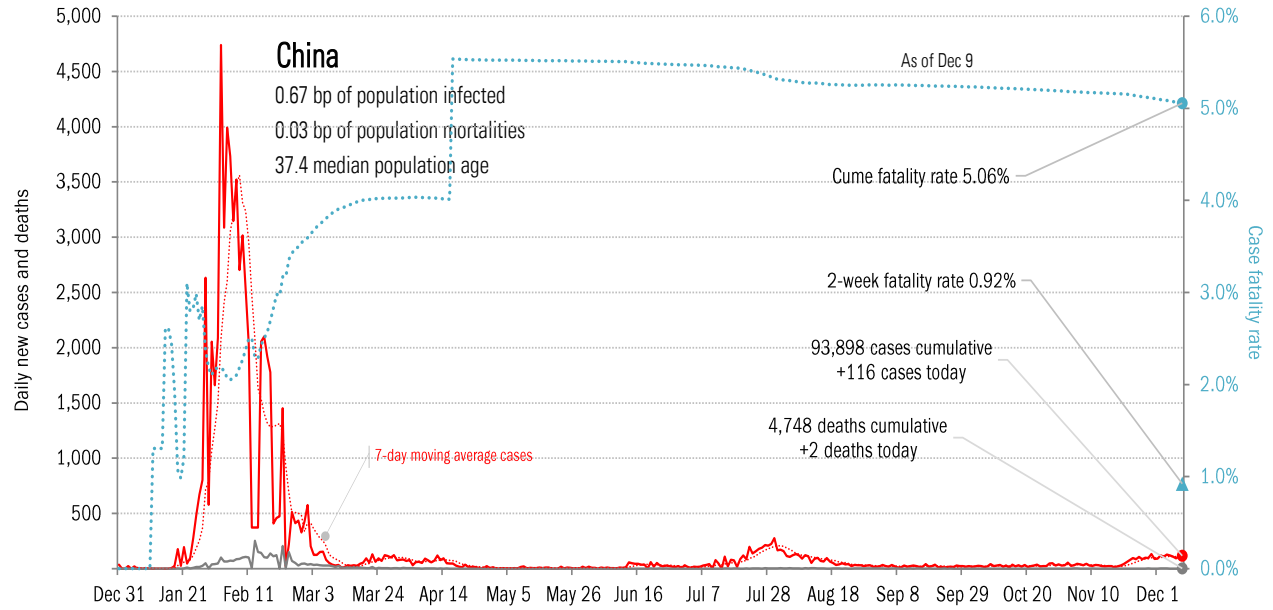
Source: [Covid Tracking Project](#), TrendMacro calculations

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



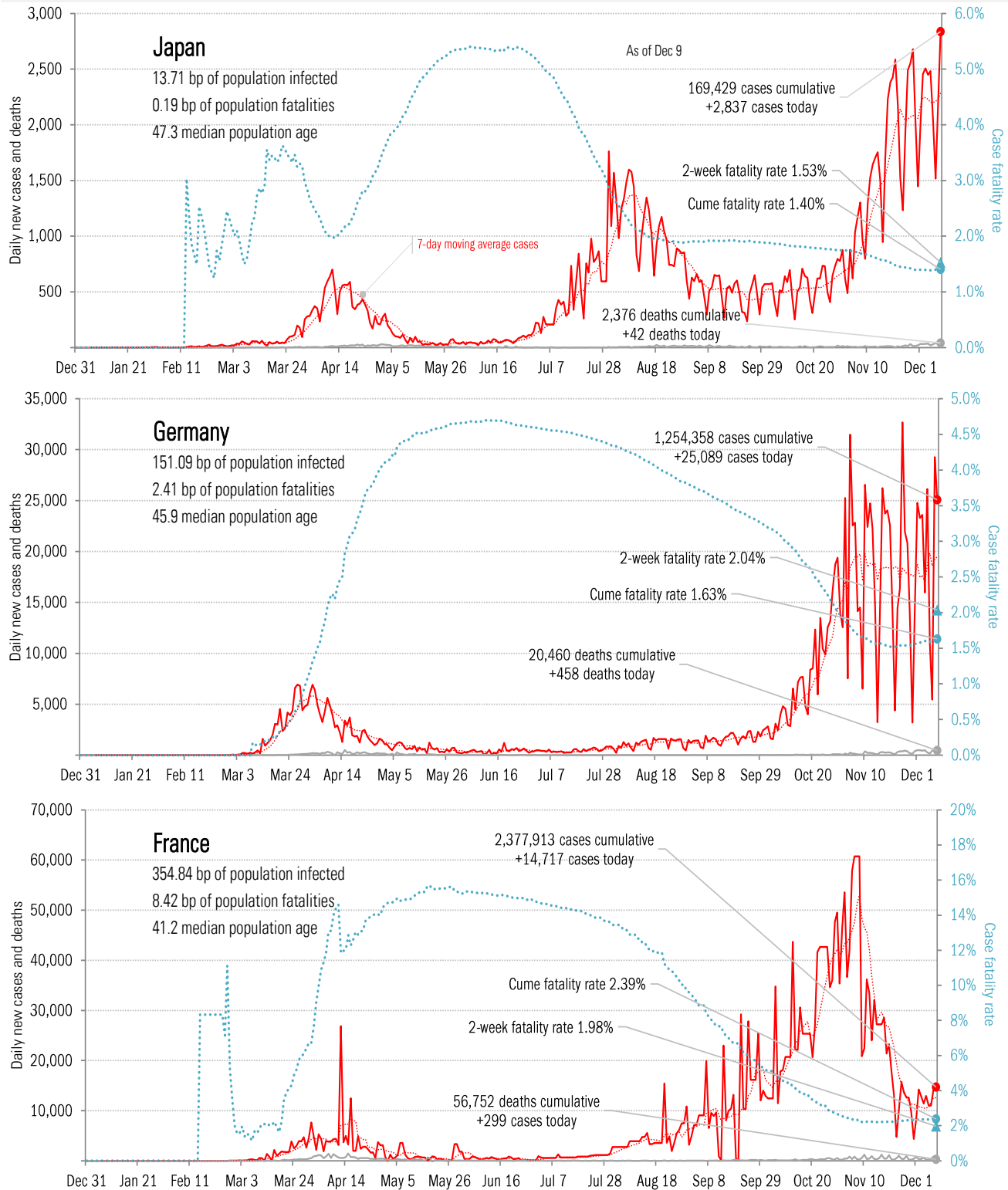
Source: [Covid Tracking Project](#), TrendMacro calculations

# Patient zero... and then everyone else



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

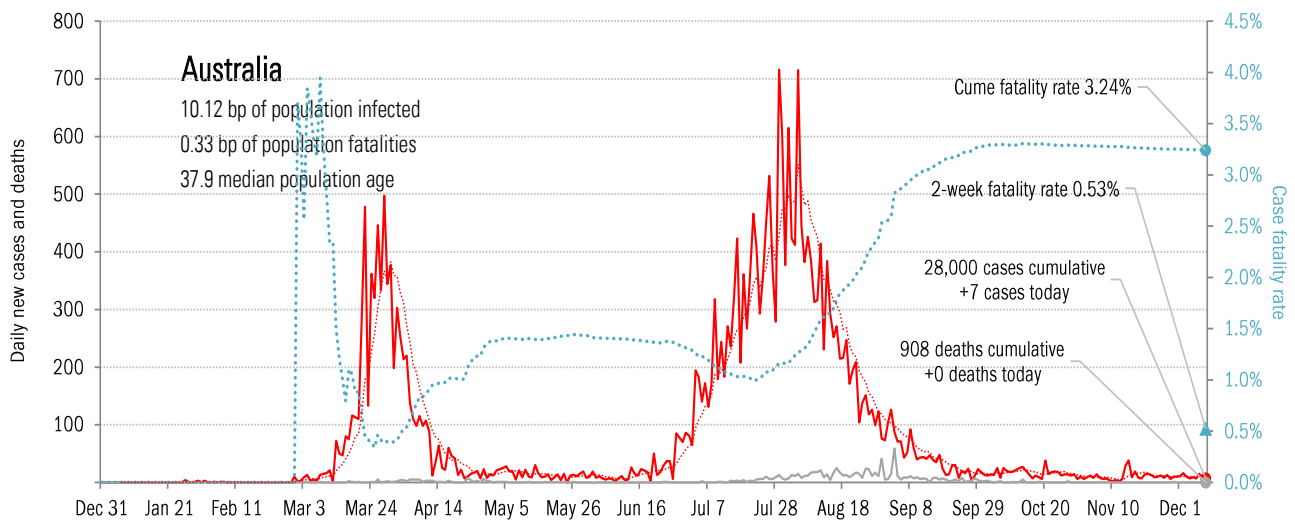
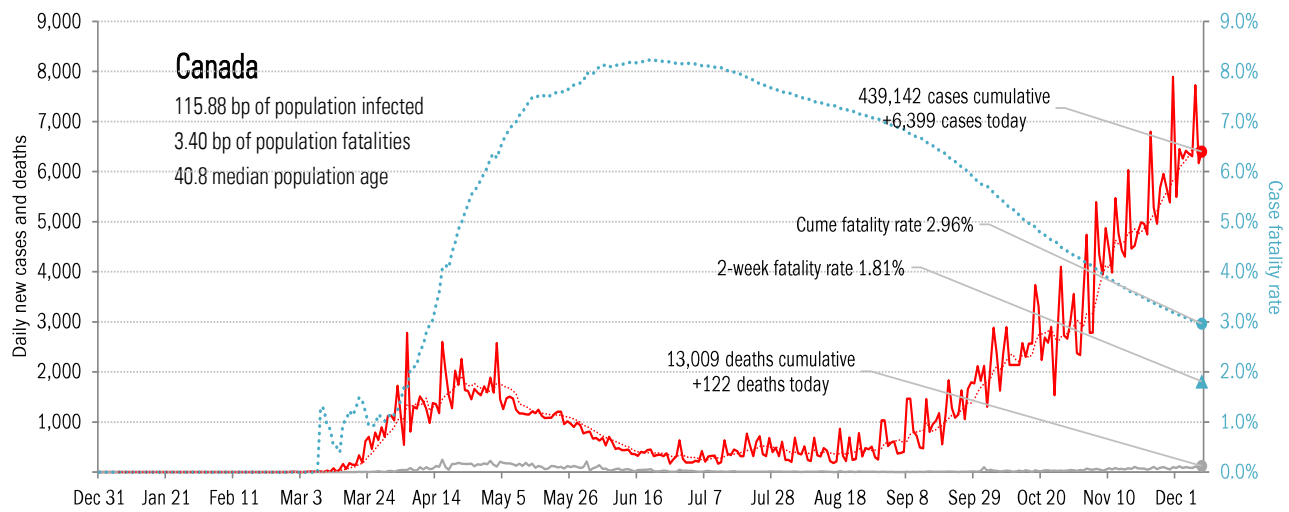
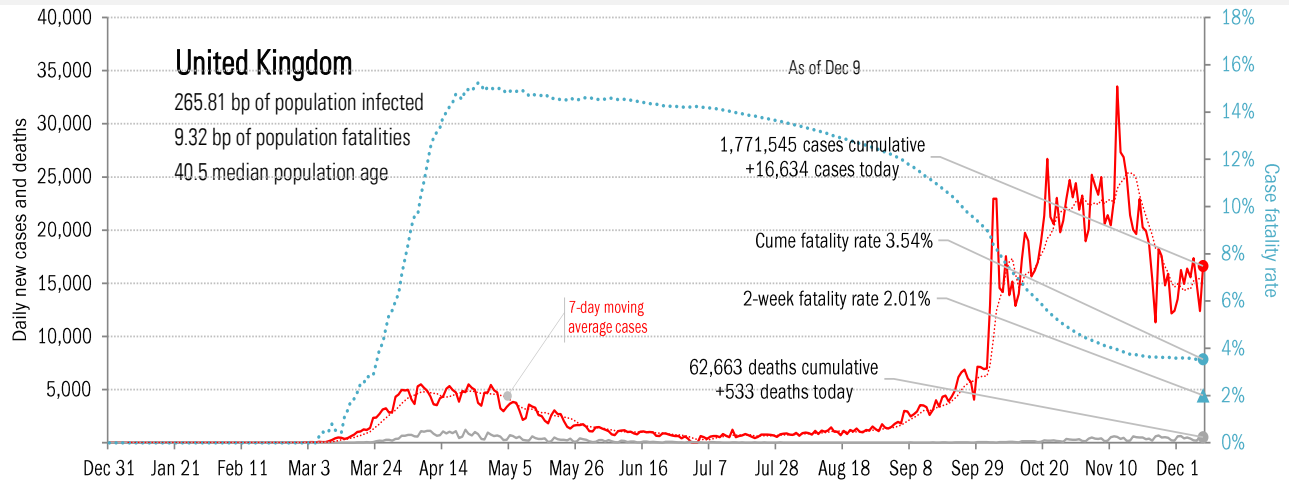
# Impact in the largest economies



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

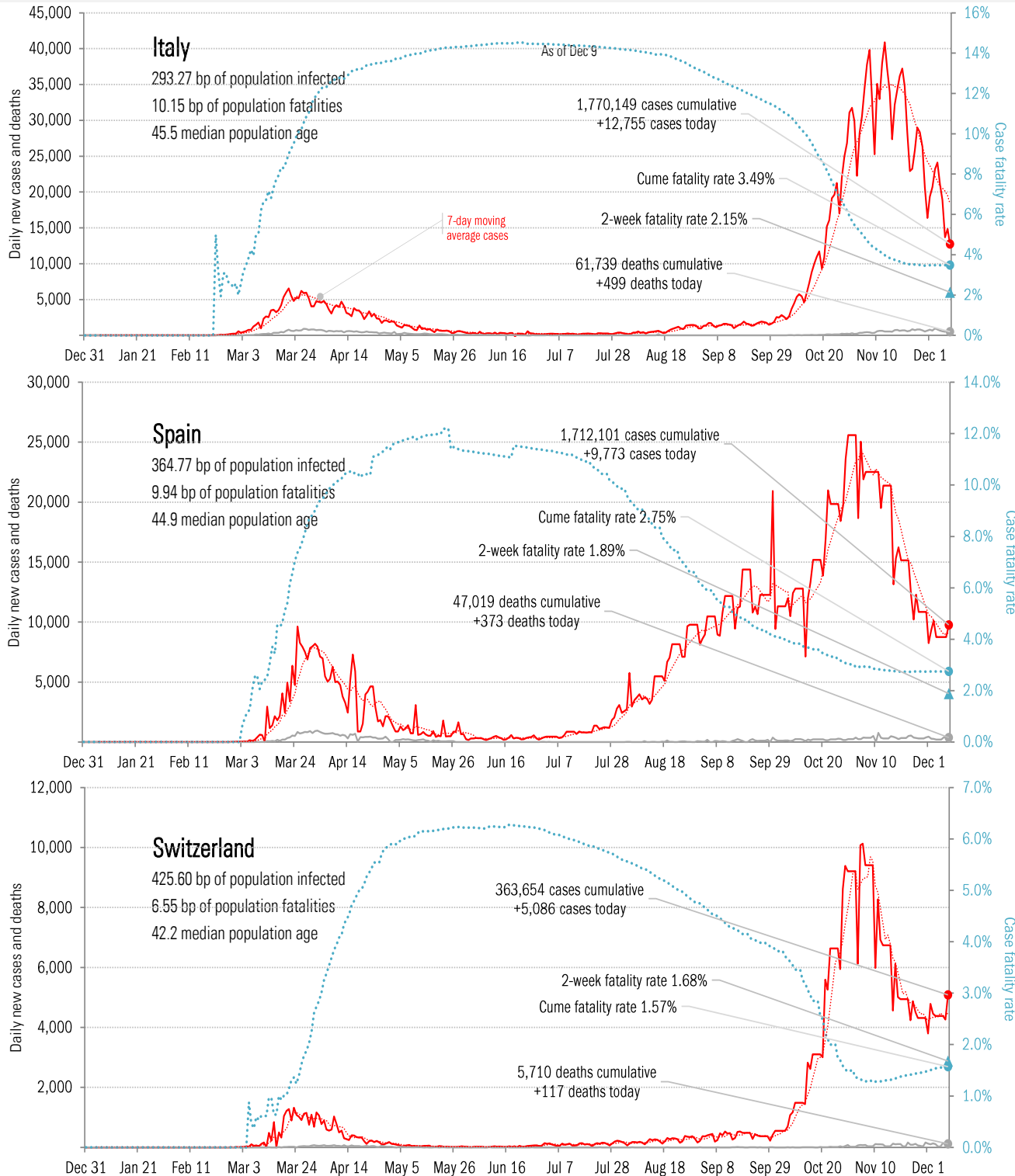


# Impact in The Anglosphere



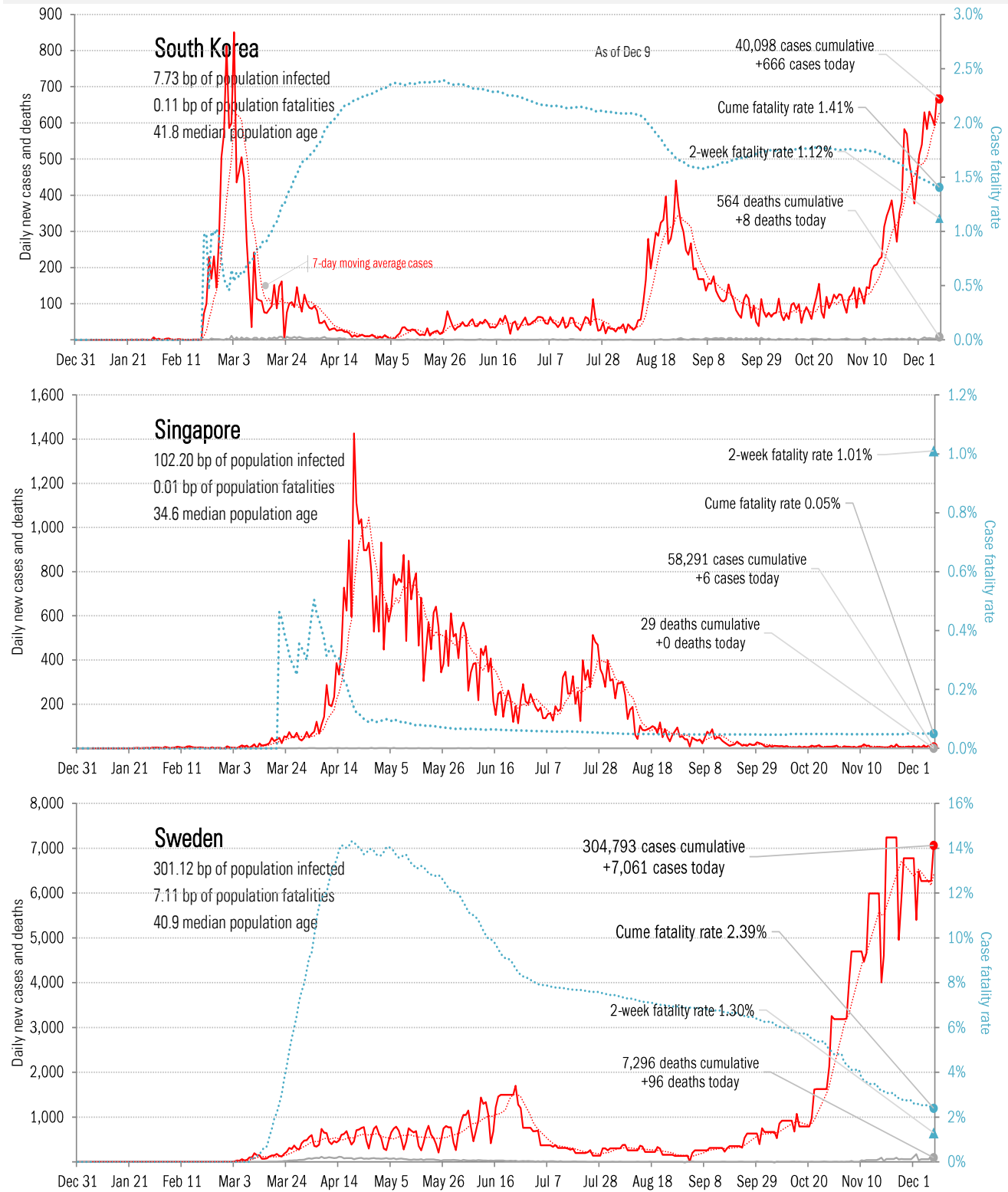
Source: [Johns Hopkins](#), TrendMacro calculations

# Impact in continental Europe



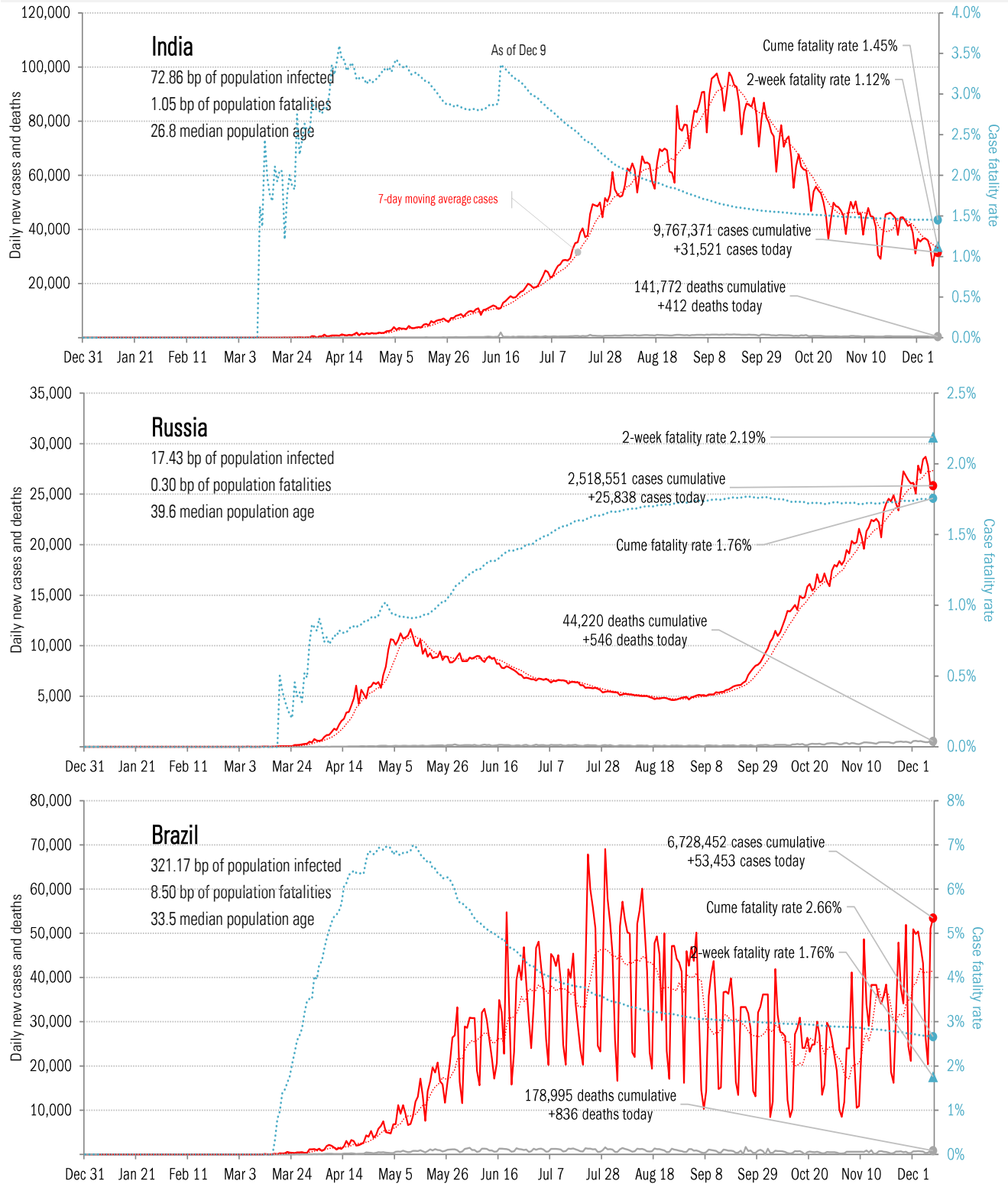
Source: [Johns Hopkins](#), TrendMacro calculations

# Impact in other hot-spots



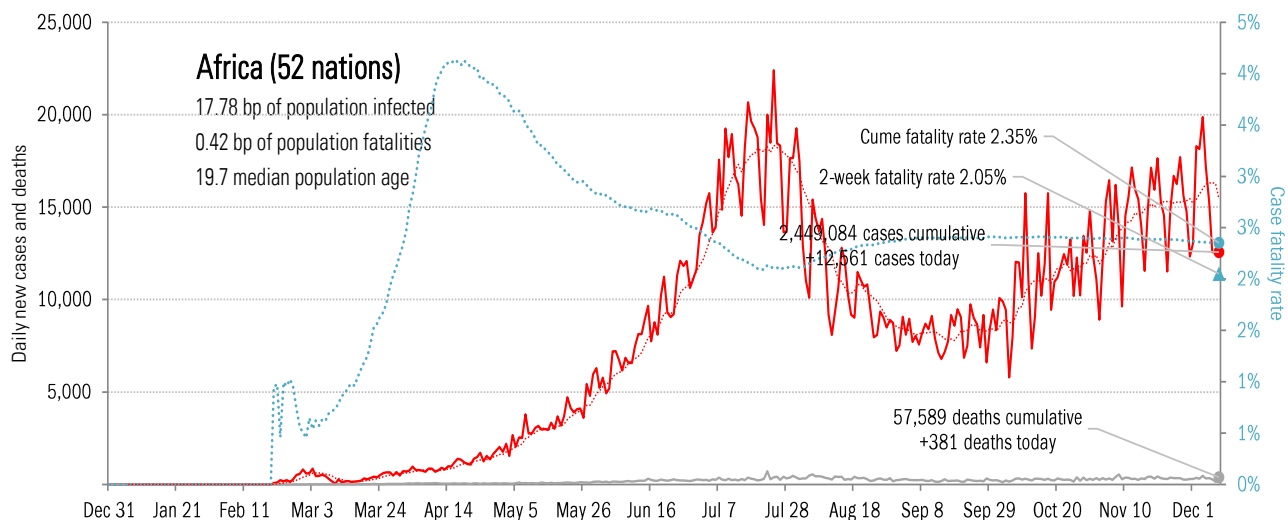
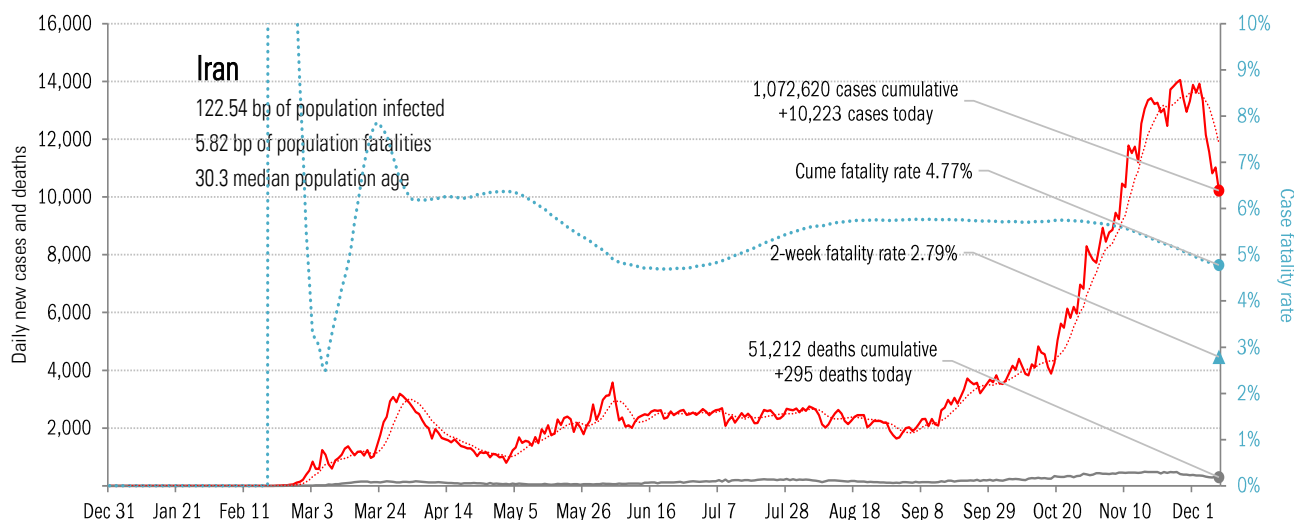
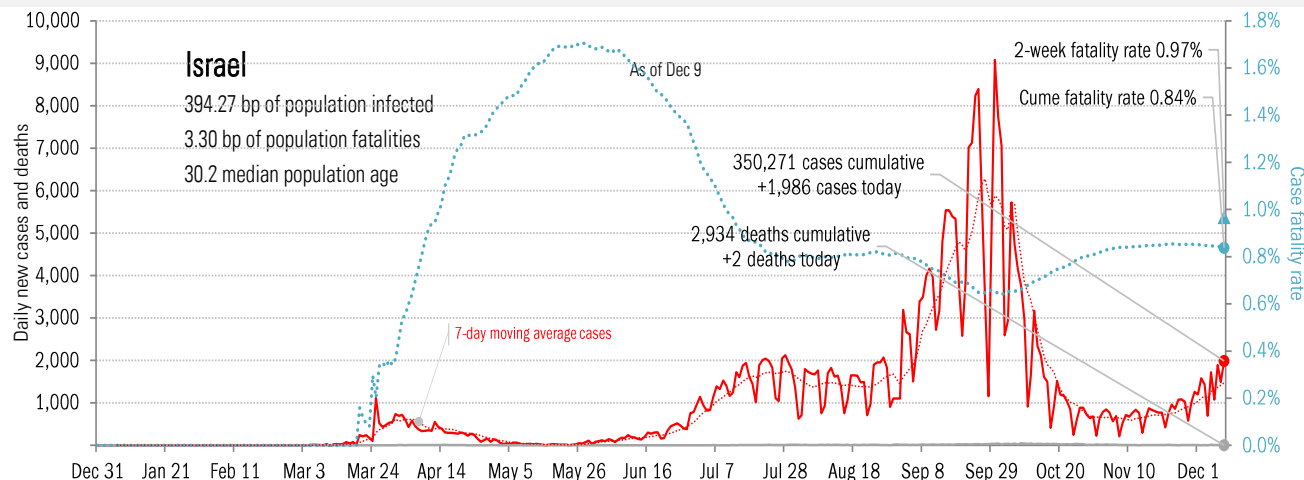
Source: [Johns Hopkins](#), TrendMacro calculations

# Impact in the BRICs ex-China



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

# Impact in the Middle East and Africa



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