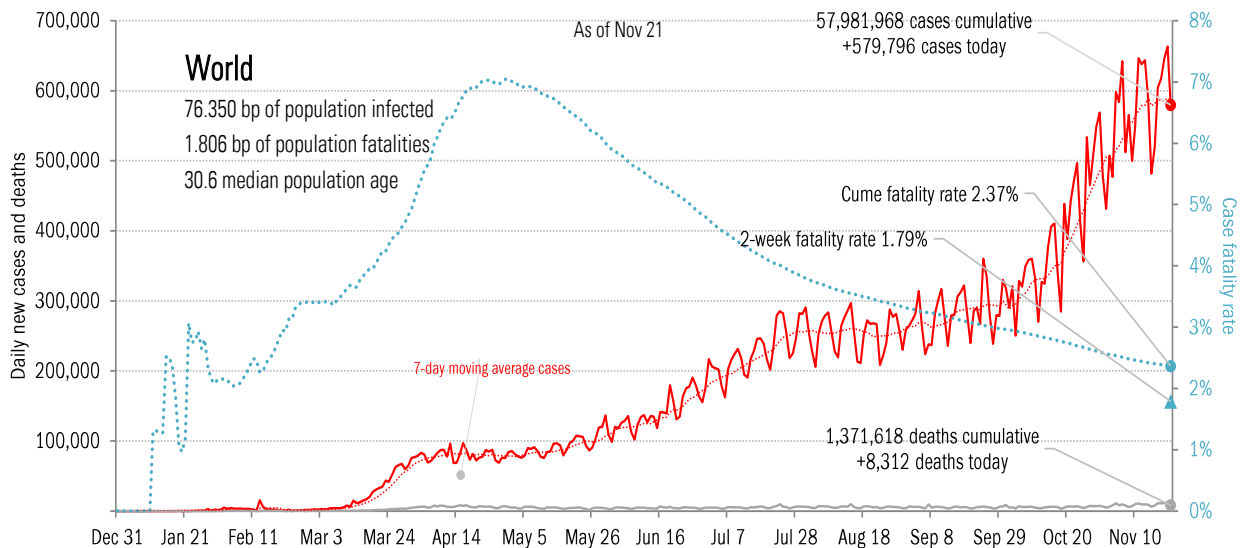
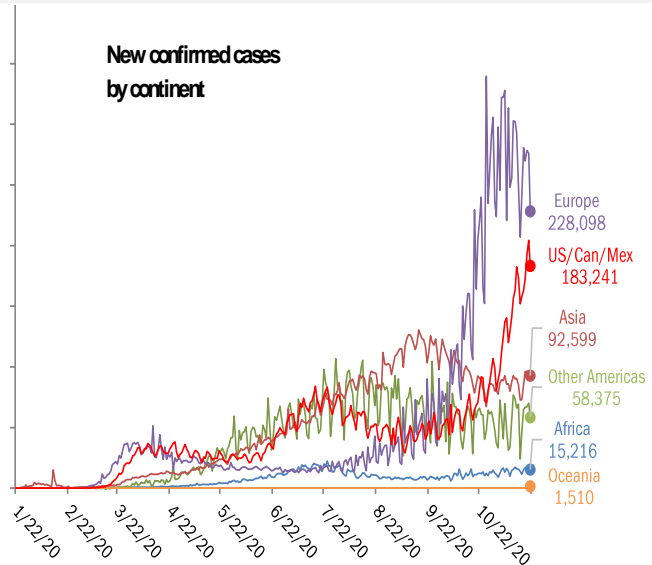


## Data Insights: Covid-2019 Monitor

Sunday, November 22, 2020

### The global scorecard

The worst ten countries			
New cases		New Deaths	
United States	+178,309	United States	+1,506
India	+45,209	Italy	+692
Italy	+34,764	Poland	+574
Brazil	+32,622	India	+501
Russia	+24,538	Russia	+462
Poland	+24,213	Iran	+431
United Kingdom	+19,921	Brazil	+376
France	+17,680	United Kingdom	+340
Ukraine	+14,864	Uruguay	+259
Germany	+13,872	France	+252
<b>+405,992</b>		<b>+5,393</b>	
World	+579,796	World	+8,312
Top ten	70%	Top ten	65%



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

#### For more information contact us:

Donald Luskin: 312 273 6766 [don@trendmacro.com](mailto:don@trendmacro.com)  
 Thomas Demas: 704 552 3625 [tdemas@trendmacro.com](mailto:tdemas@trendmacro.com)

# The US scorecard

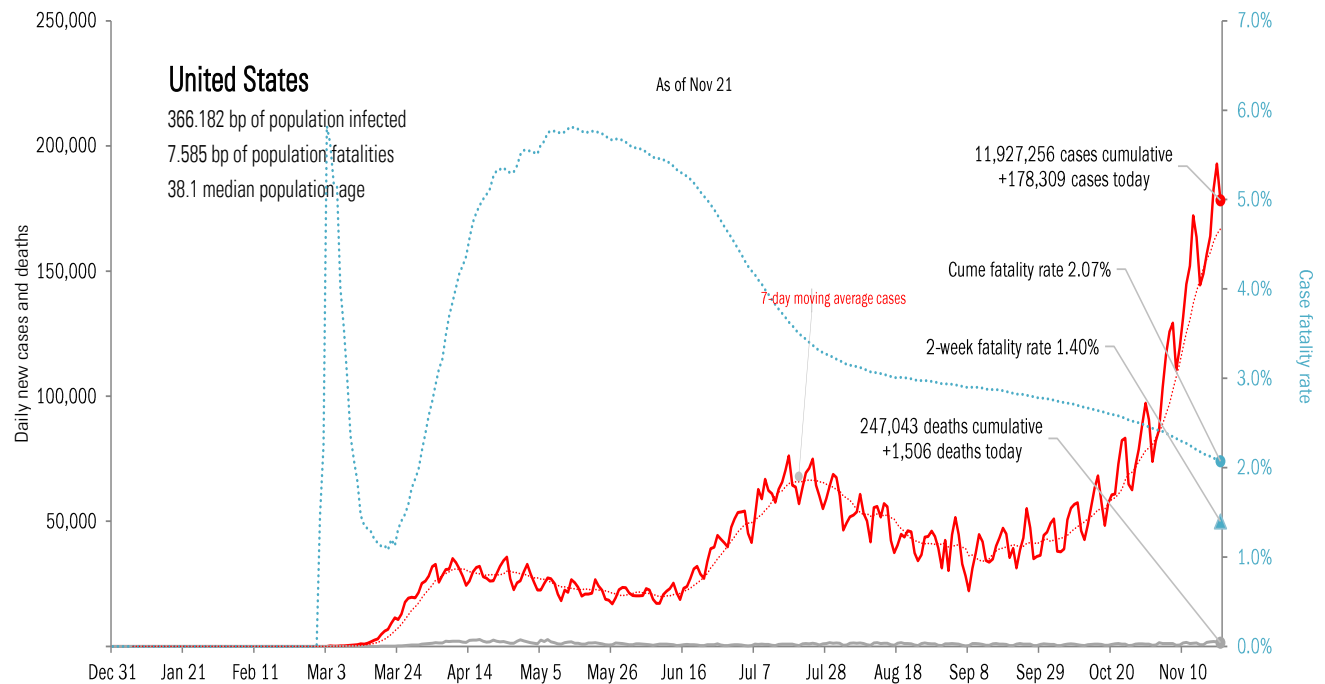
## The ten worst US states

New cases		New Deaths		New in hospital		Curre cases		Curre deaths		Curre in hospital	
CA	+15,442	TX	+171	CA	+248	CA	1,087,714	NY	26,326	NY	89,995
TX	+12,826	IL	+157	PA	+132	TX	1,085,524	TX	20,467	FL	53,929
IL	+11,891	PA	+112	MO	+117	FL	918,240	CA	18,643	NJ	39,993
FL	+8,175	MI	+101	NY	+95	IL	646,286	FL	18,152	GA	34,023
CH	+7,863	CA	+86	IN	+91	NY	590,822	NJ	16,746	VA	24,560
MI	+7,840	WI	+52	AZ	+81	GA	402,435	IL	11,952	CH	24,218
WI	+7,029	MN	+51	TX	+81	WI	372,219	MA	10,488	AZ	24,181
IN	+6,872	NE	+43	OK	+77	CH	343,286	PA	9,801	AL	23,449
PA	+6,778	SC	+43	IL	+64	TN	335,887	GA	9,179	IN	22,874
MN	+6,252	FL	+42	CH	+51	NC	332,261	MI	8,875	MD	19,434
<b>+90,968</b>		<b>+858</b>		<b>+1,037</b>		<b>6,114,674</b>		<b>150,629</b>		<b>356,656</b>	
All states	+178,309	All states	+1,506	All states	+1,049	All states	11,927,256	All states	247,043	All states	540,906
Top ten	51%	Top ten	57%	Top ten	99%	Top ten	51%	Top ten	61%	Top ten	66%

*Some states not reporting*

## Five most improved US states

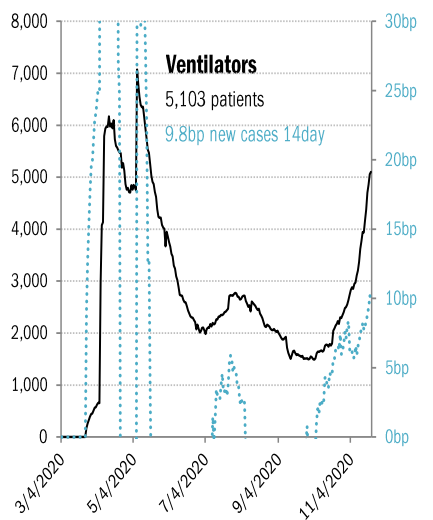
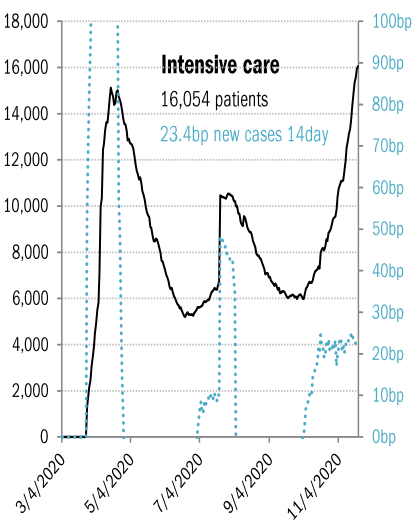
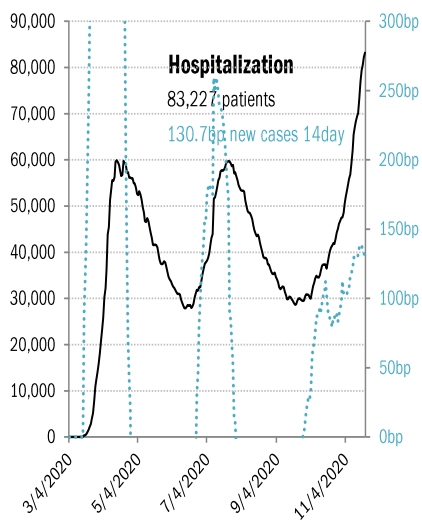
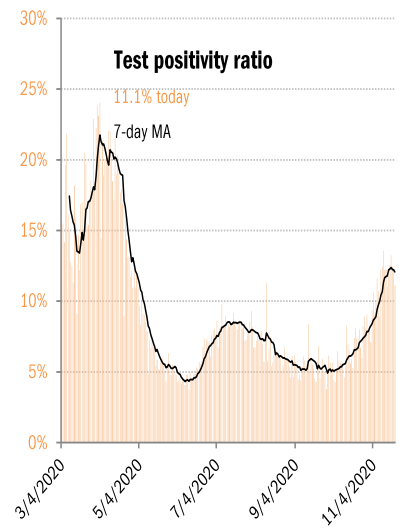
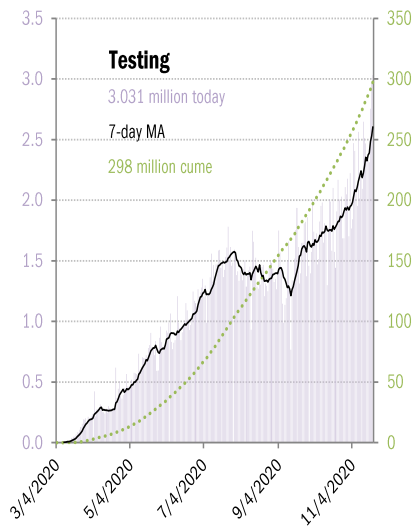
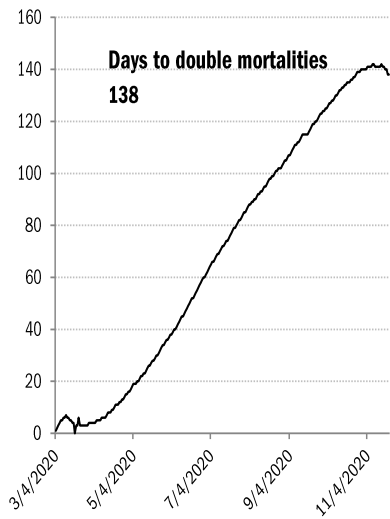
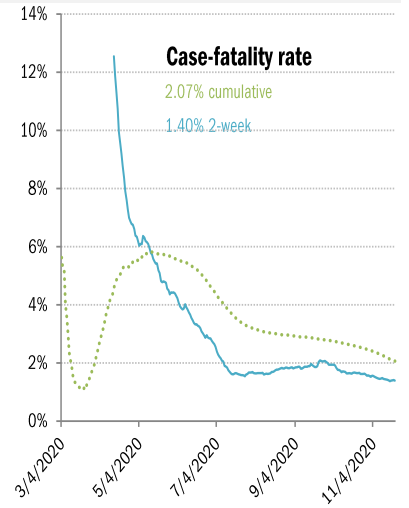
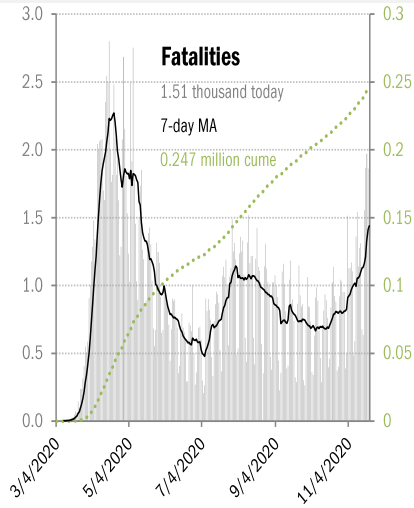
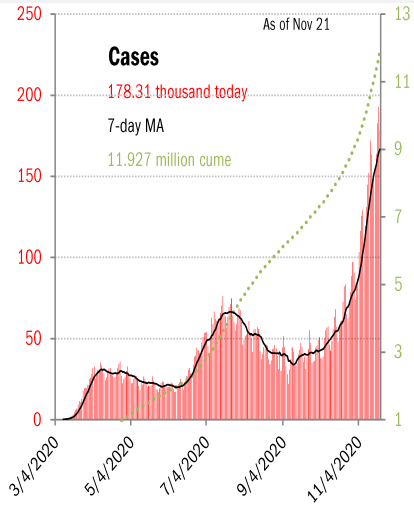
Fewer daily cases		Fewer new deaths		Fewer new hospitalizations		Most recoveries	
KS	-5,939	KS	-84	CO	-150	MI	+13,405
LA	-4,743	TN	-65	FL	-102	MN	+9,081
MI	-2,300	FL	-38	TX	-101	MT	+8,144
CT	-2,088	CH	-36	PA	-78	TX	+7,194
UT	-1,193	LA	-34	MI	-63	WI	+5,900



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

[The End of the Pandemic Is Now in Sight](#)

Sarah Zhang

*The Atlantic*

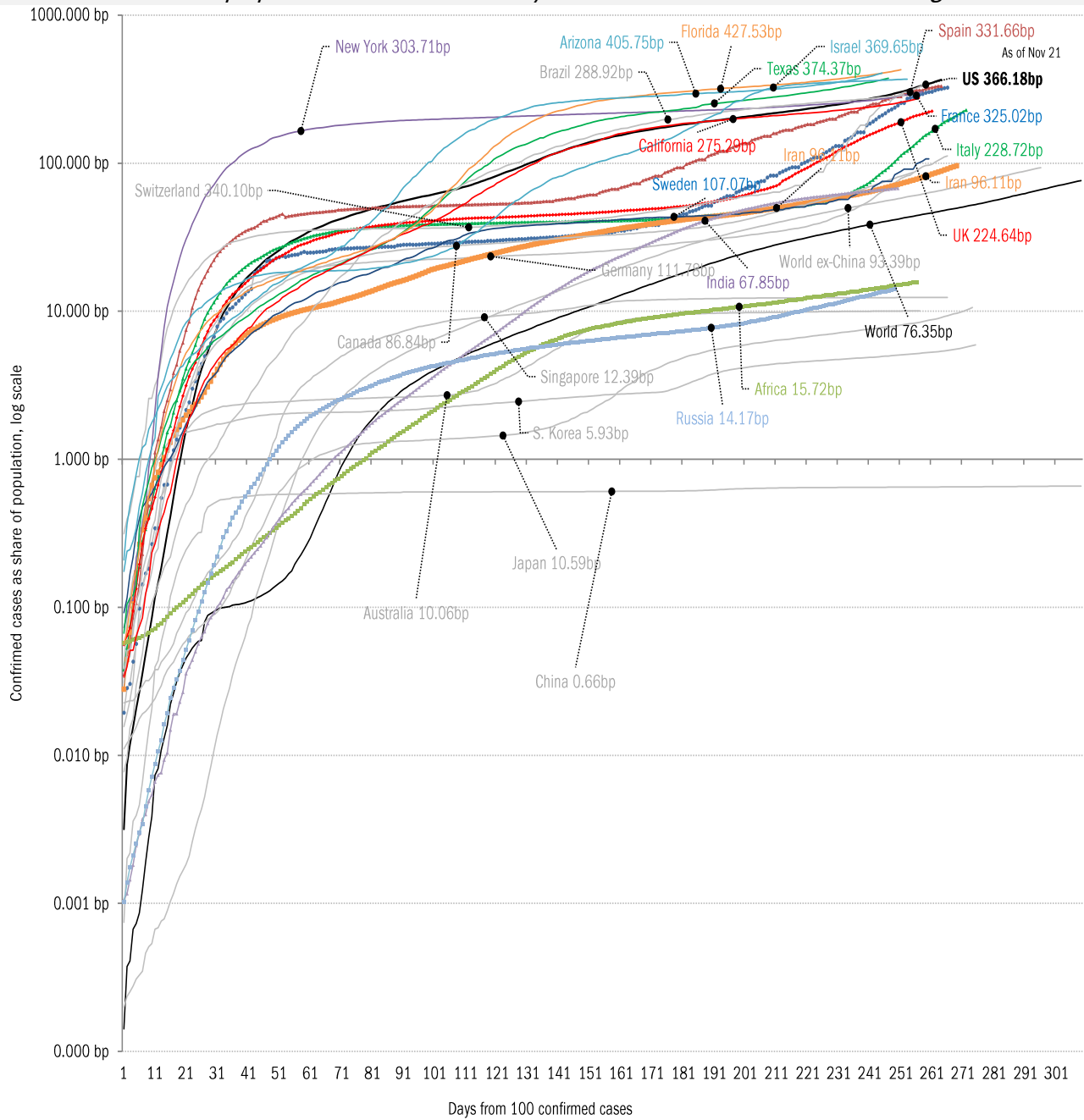
November 18, 2020

## Meme of day



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

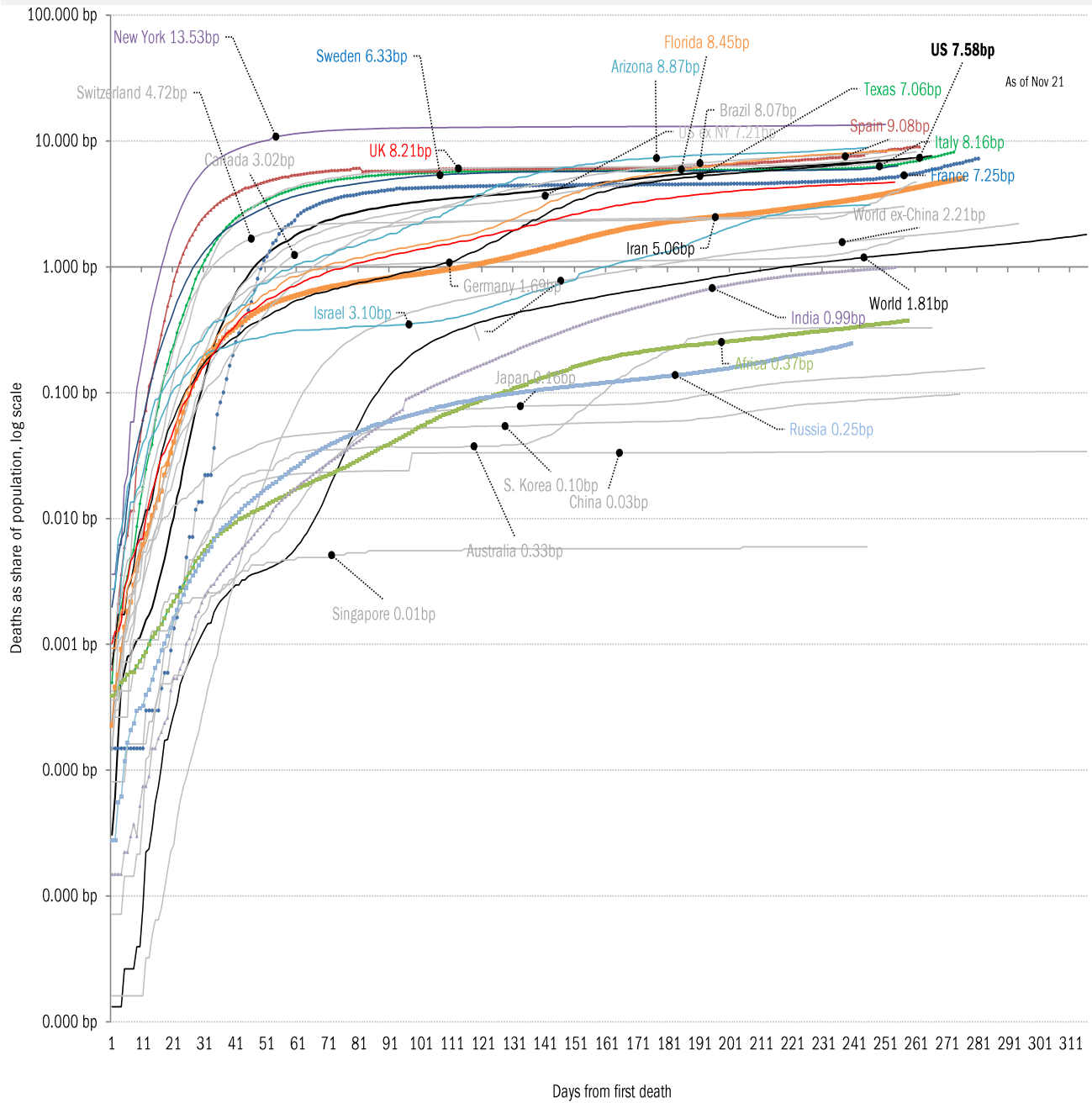
The coronavirus case accelerometer... tracking the world's infection curves  
*Share of infected population from first day with 100 confirmed cases, log scale*



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

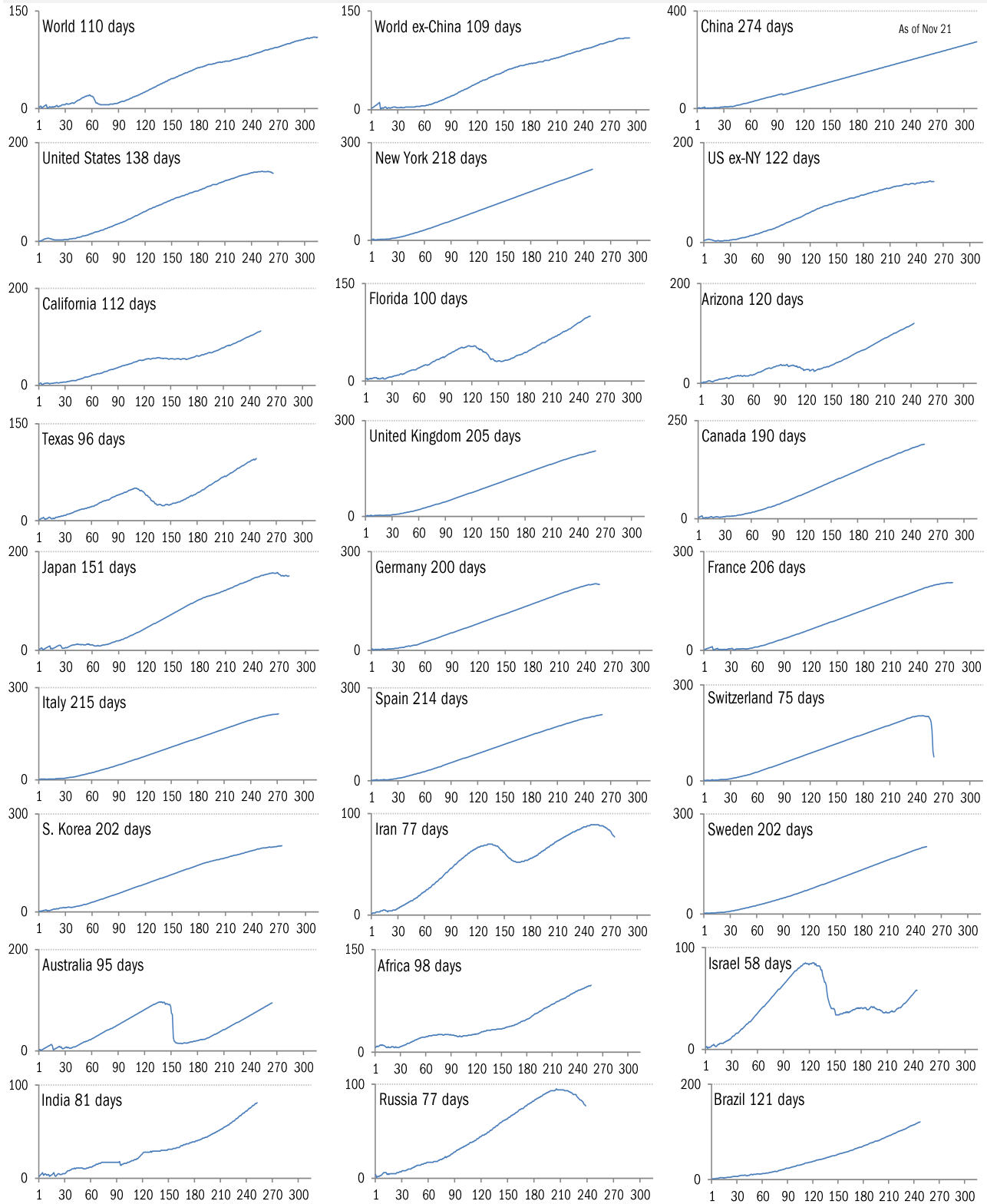


Source: [Johns Hopkins](#), [Covid Tracking Project](#), TrendMacro calculations

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

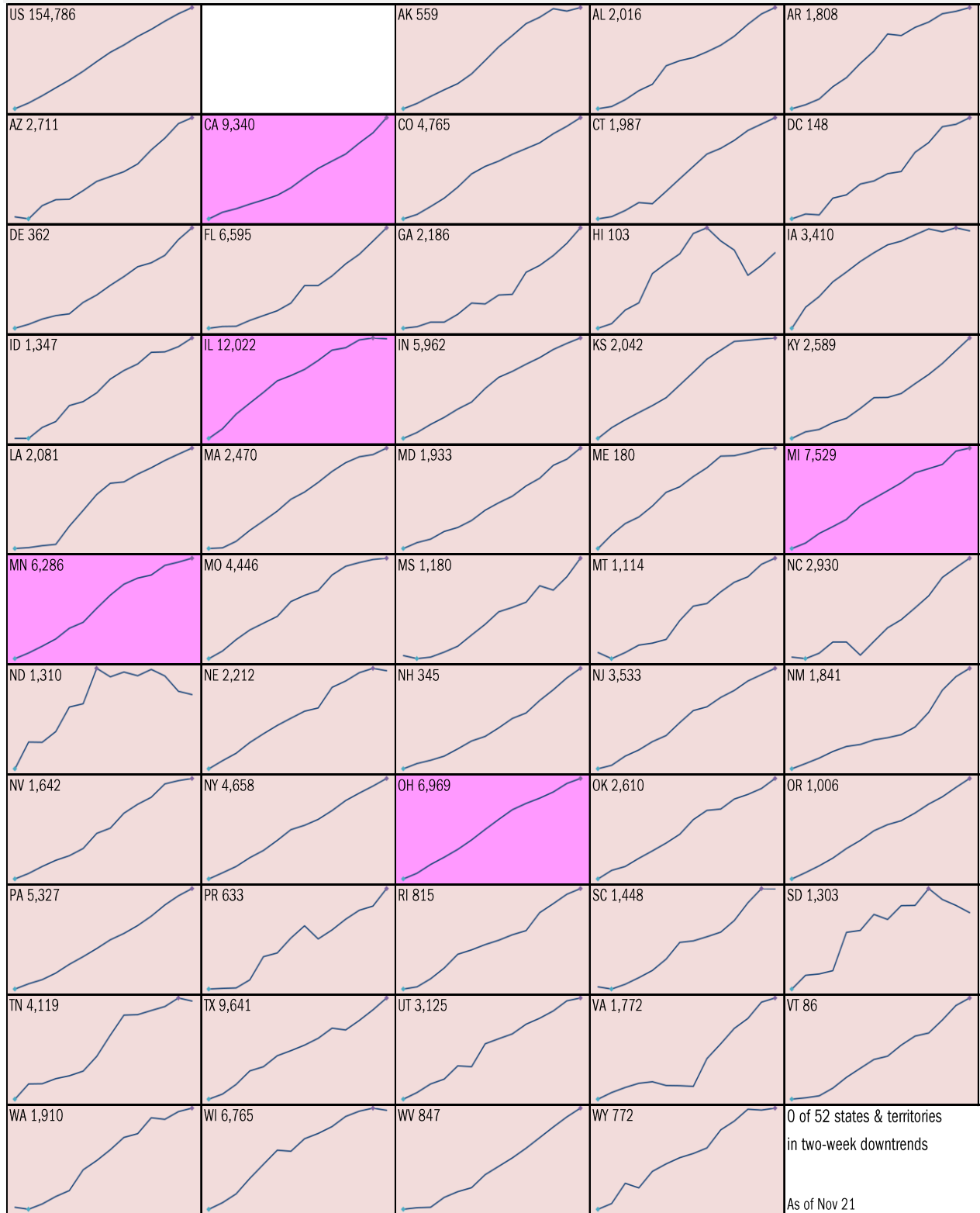
Vertical: days to double deaths Horizontal: days from first death

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



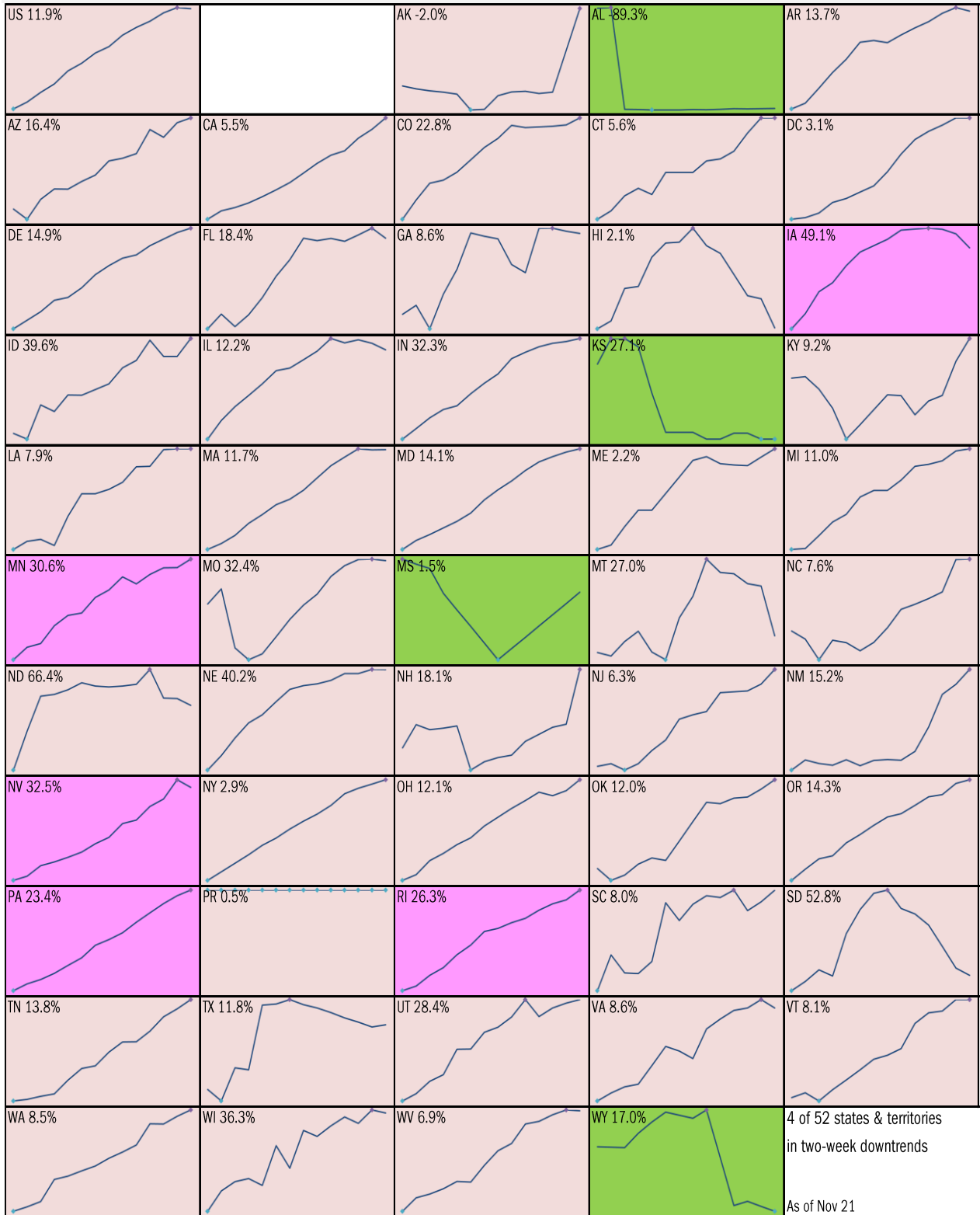
Source: [Covid Tracking Project](#), TrendMacro calculations



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



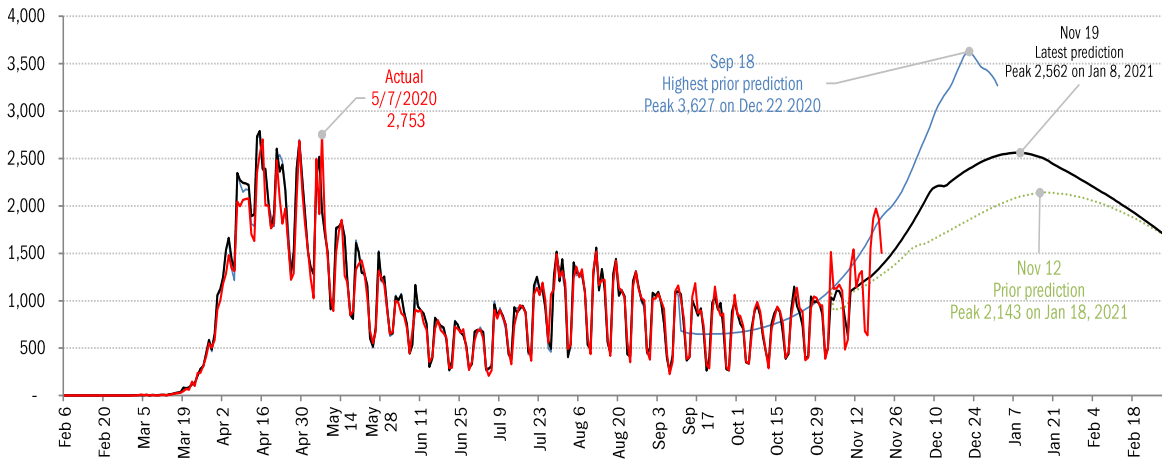
Source: [Covid Tracking Project](#), TrendMacro calculations

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

## New daily fatalities

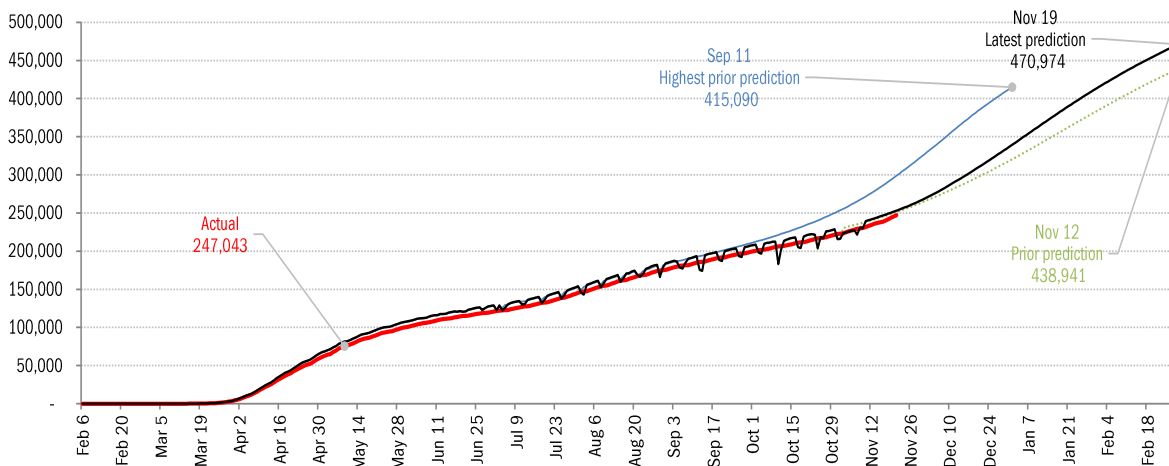
As of Nov 21

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

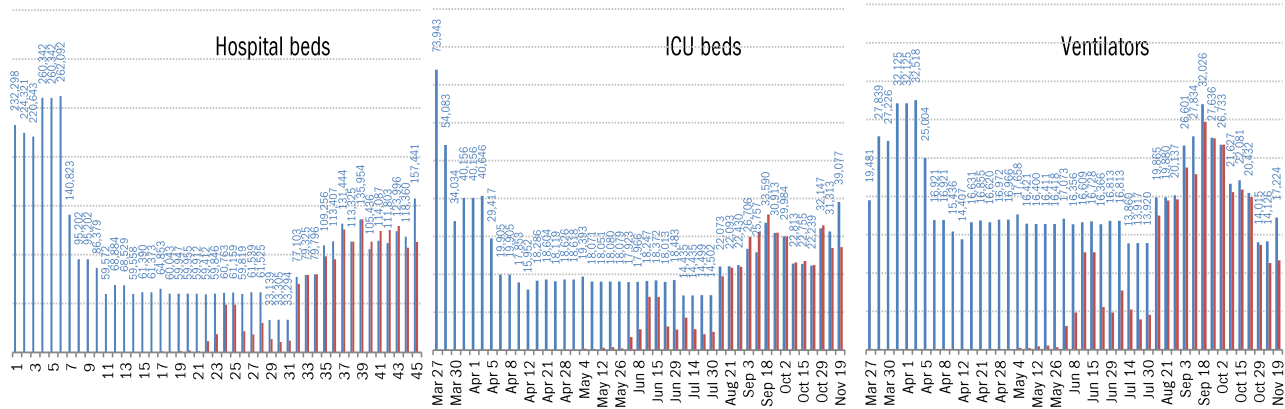


## Cumulative fatalities

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

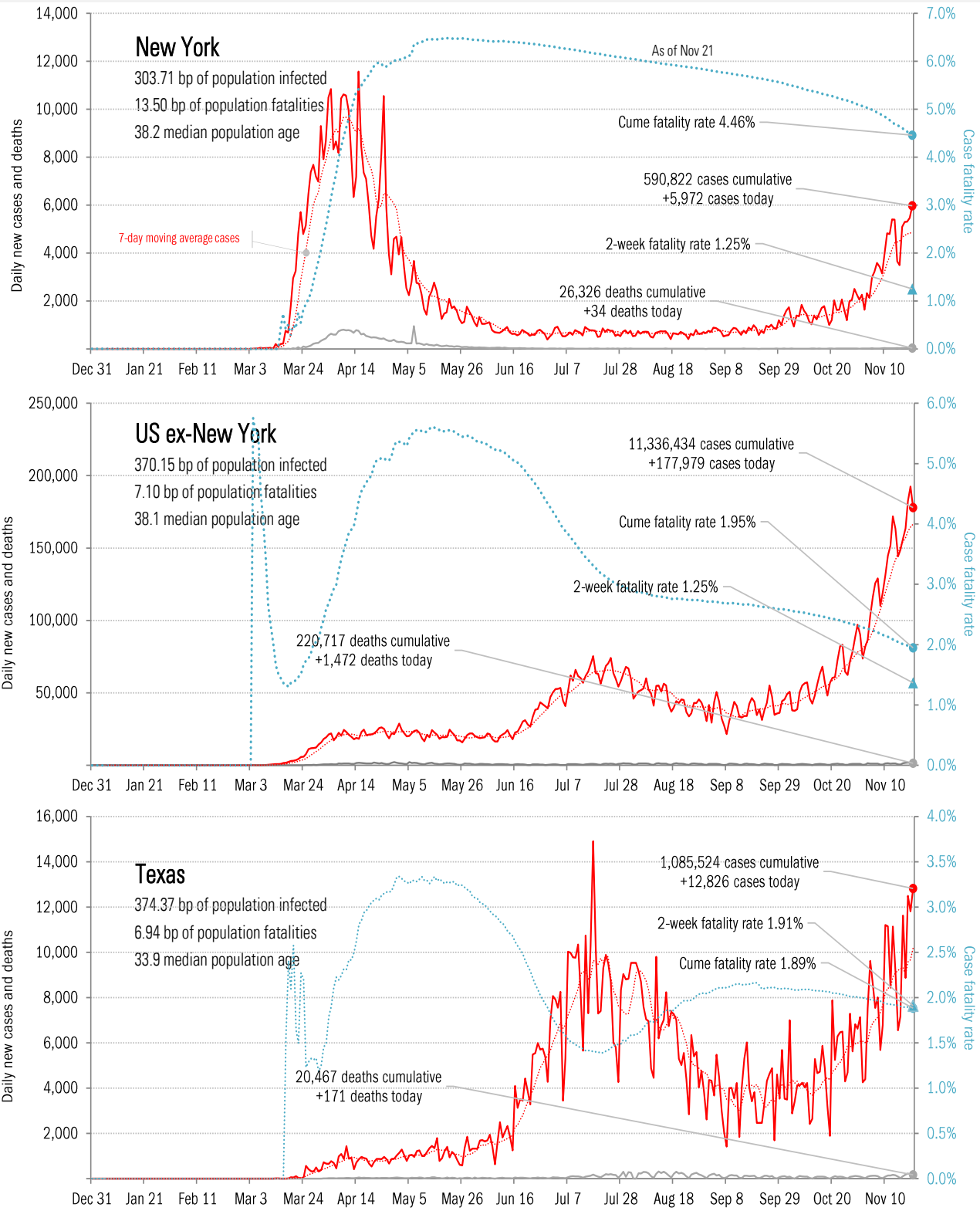


## Healthcare system stress, **peak** and **ultimate** estimated at each model revision



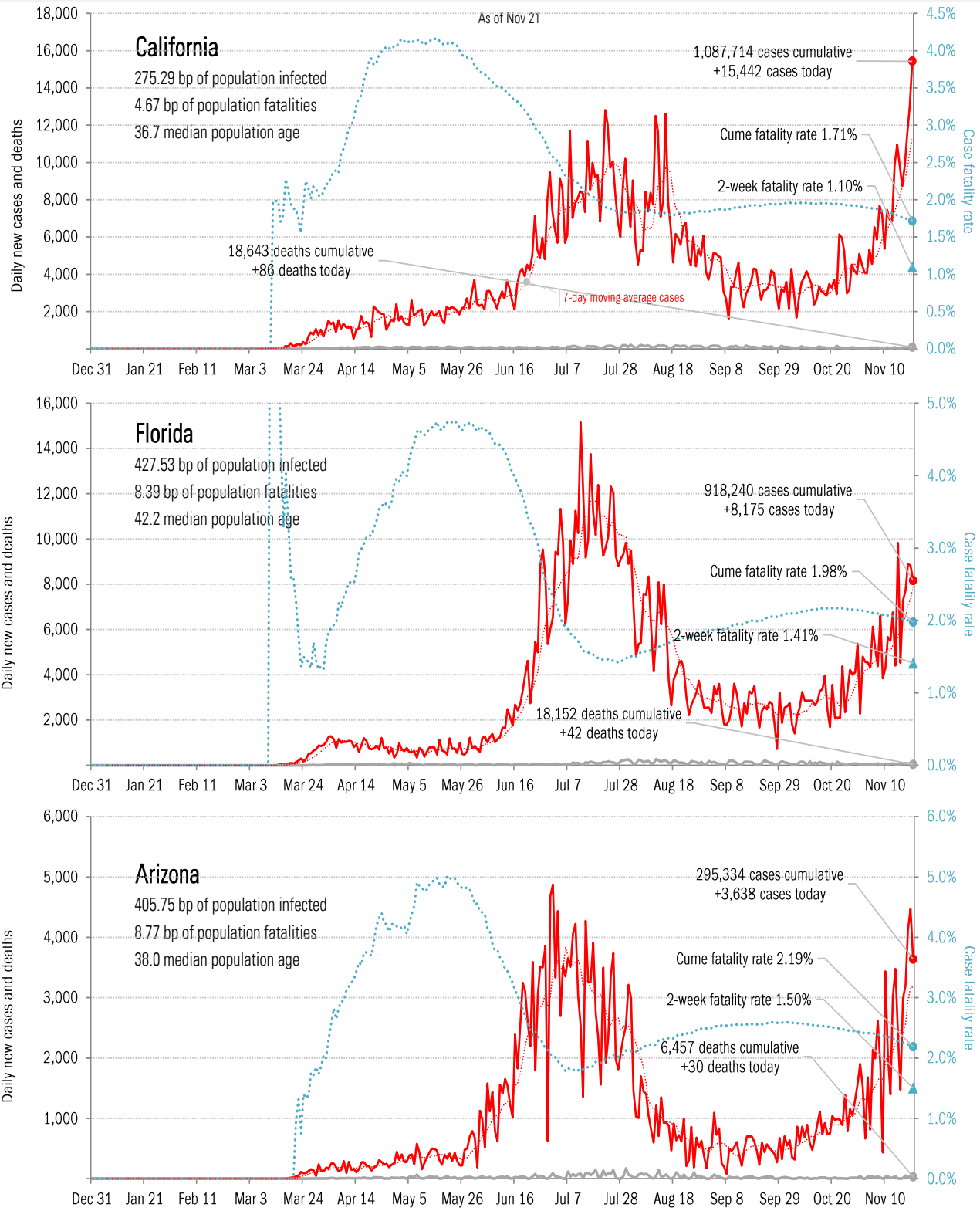
Source: [Covid Tracking Project](#), [IHME](#), TrendMacro calculations

# From Ground Zero to the Rio Grande



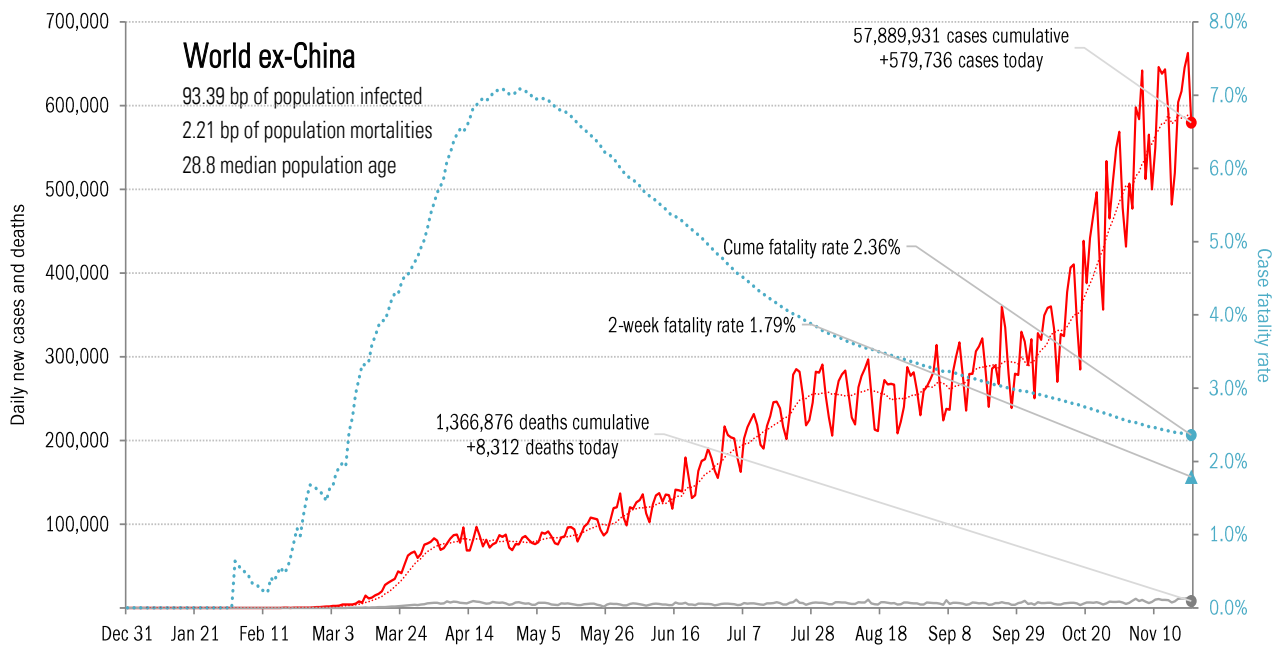
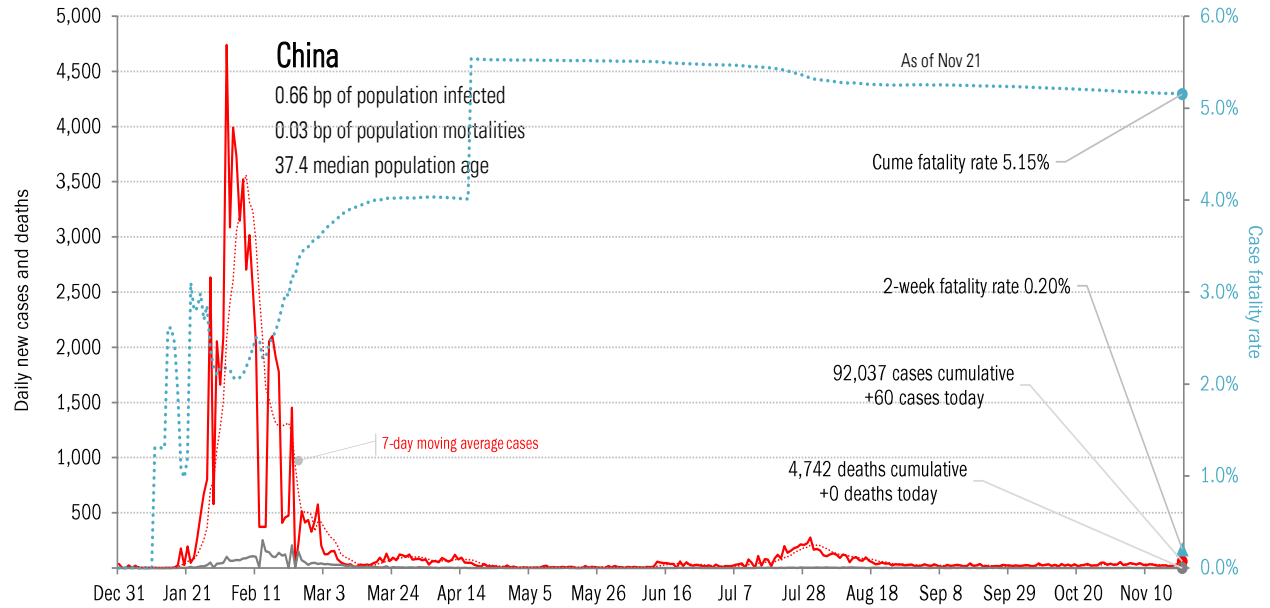
Source: [Covid Tracking Project](#), TrendMacro calculations

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



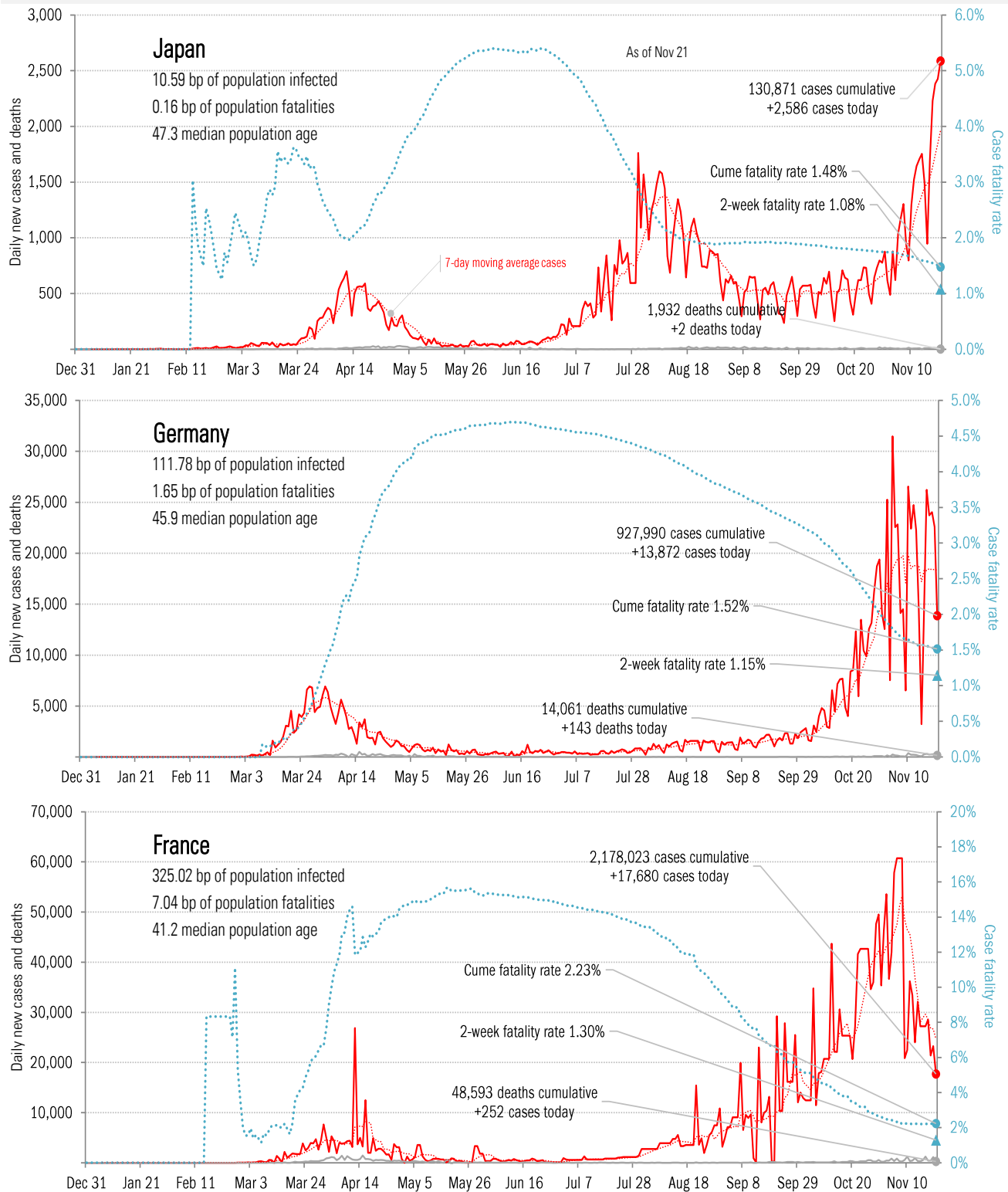
Source: [Covid Tracking Project](#), TrendMacro calculations

# Patient zero... and then everyone else



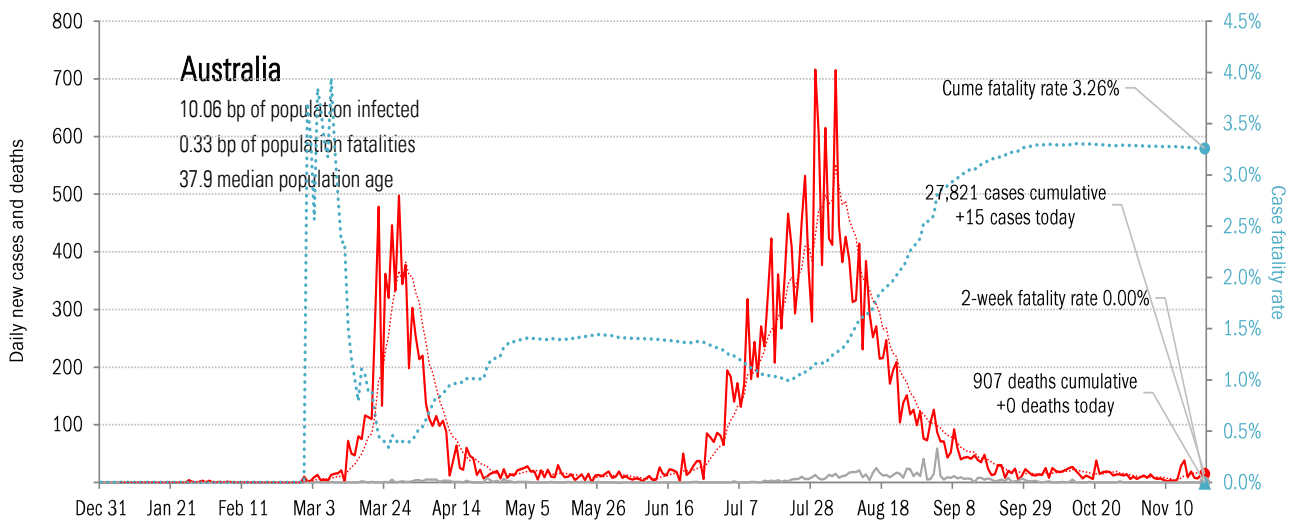
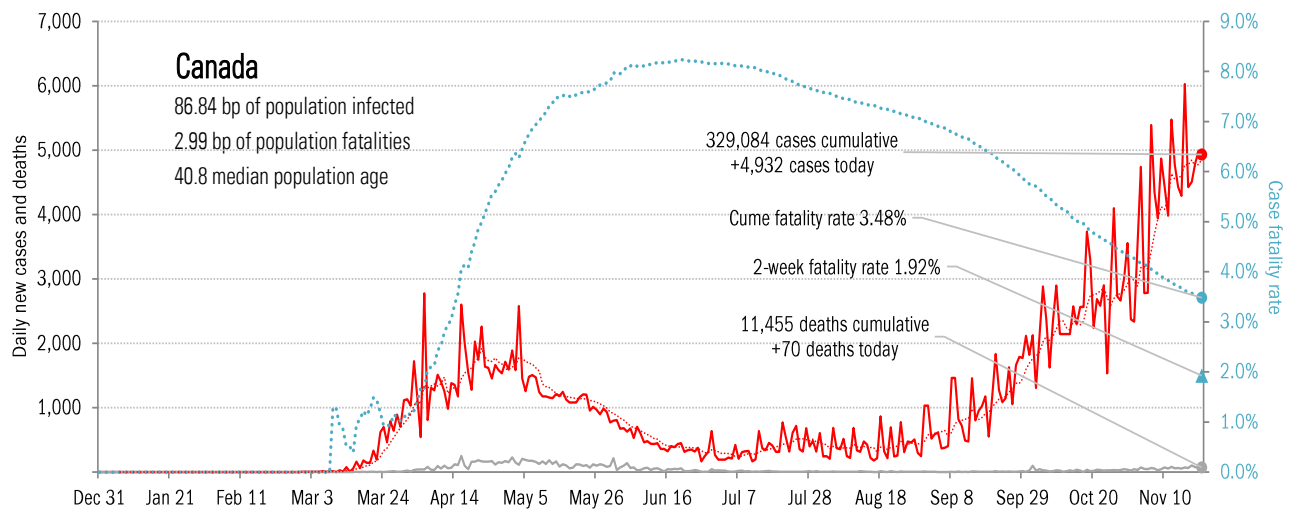
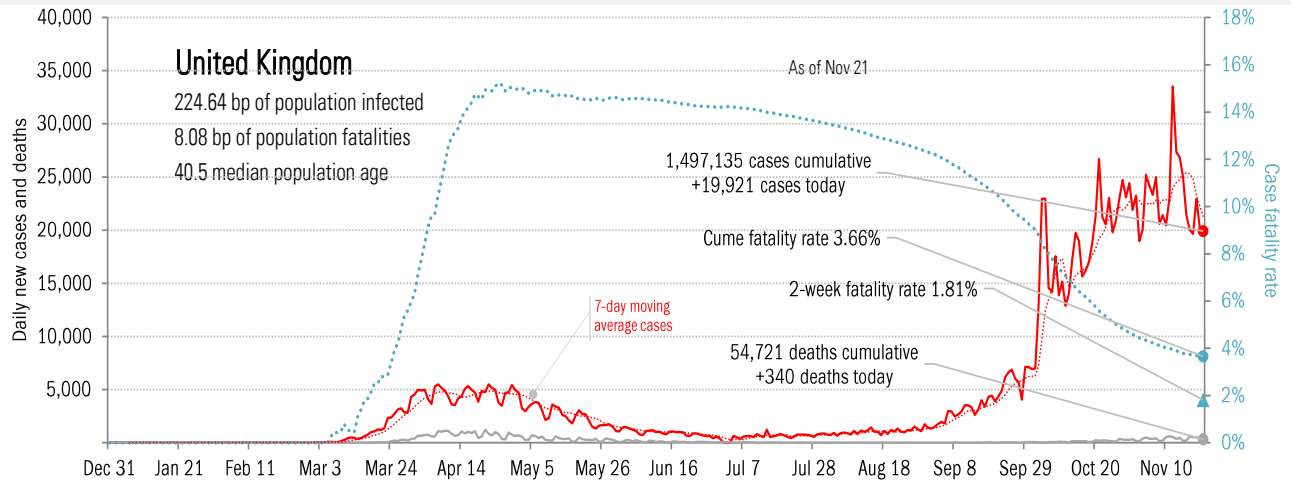
Source: [Johns Hopkins](#), [Covid Tracking Project](#), TrendMacro calculations

# Impact in the largest economies



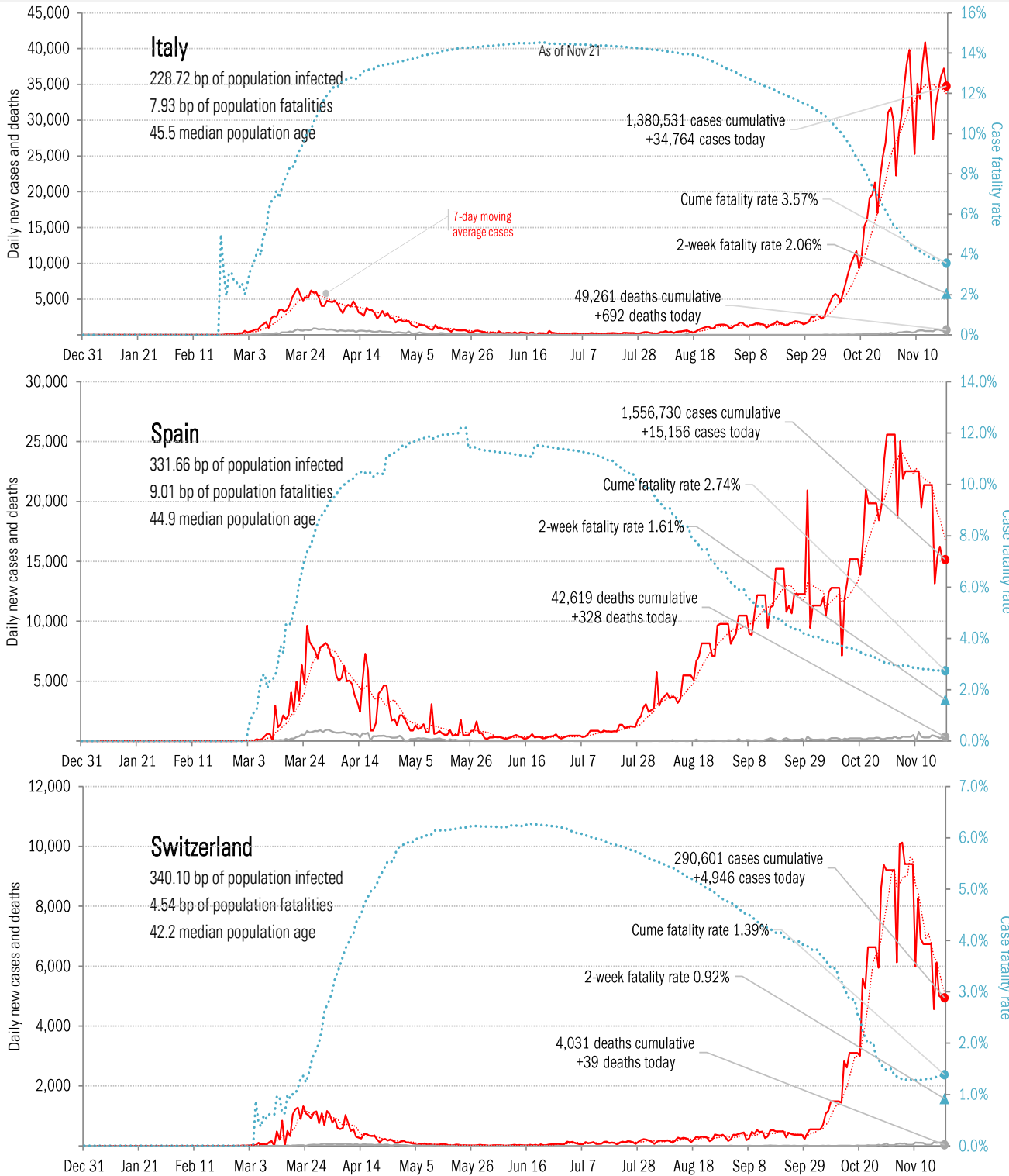
Source: [Johns Hopkins](#), TrendMacro calculations

# Impact in The Anglosphere



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

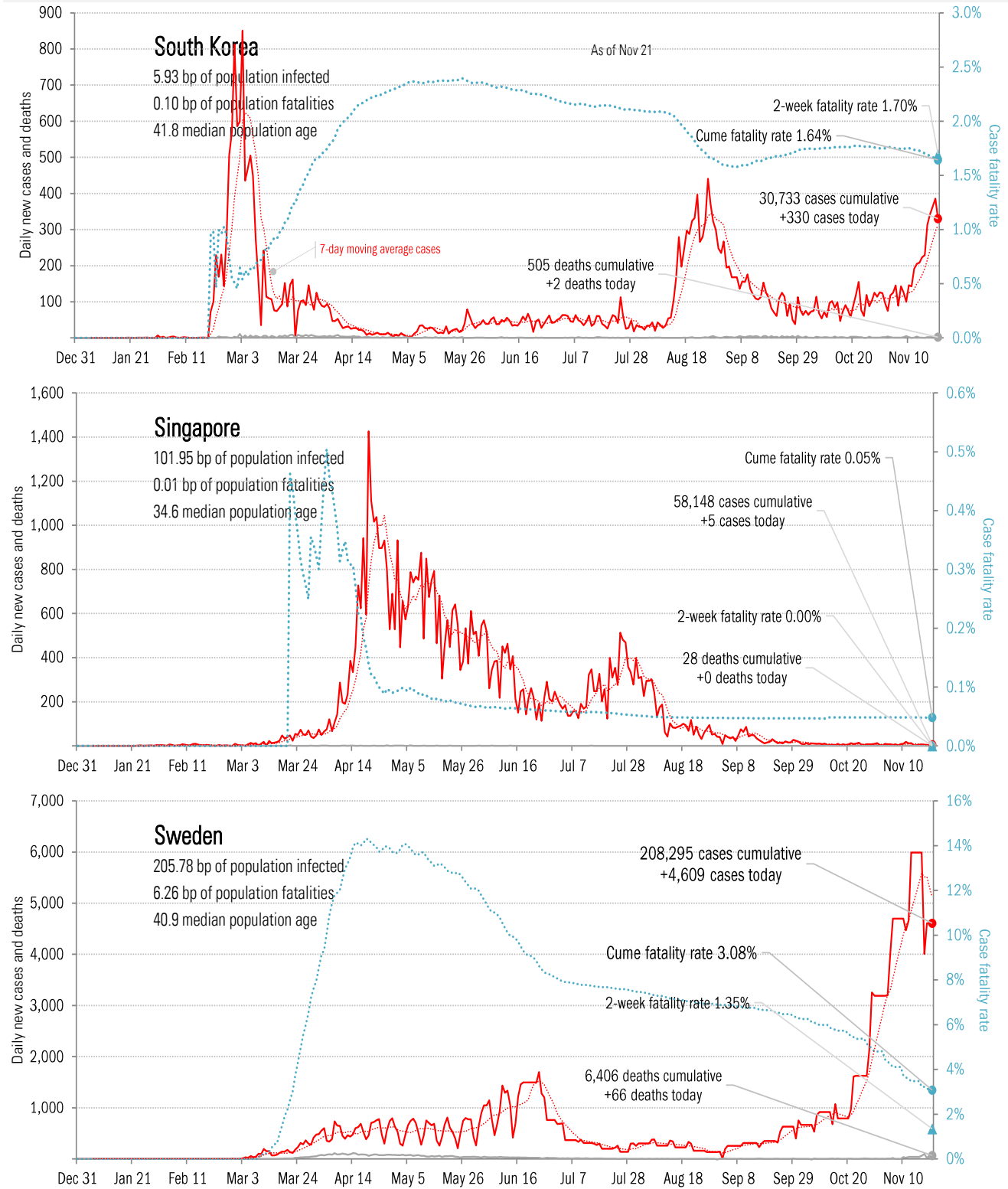
# Impact in continental Europe



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

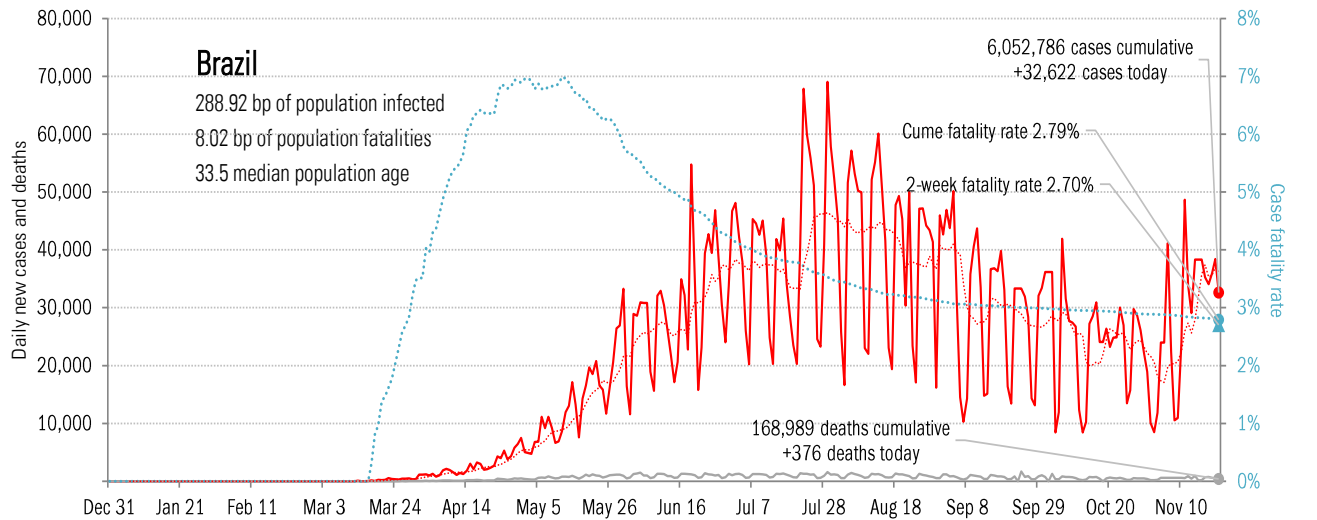
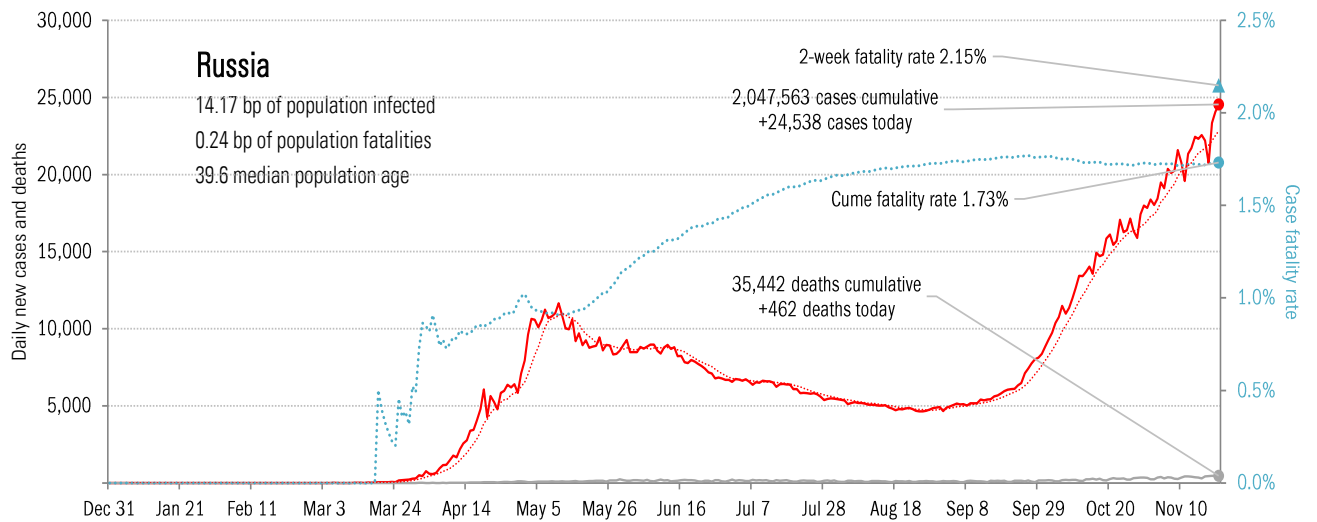
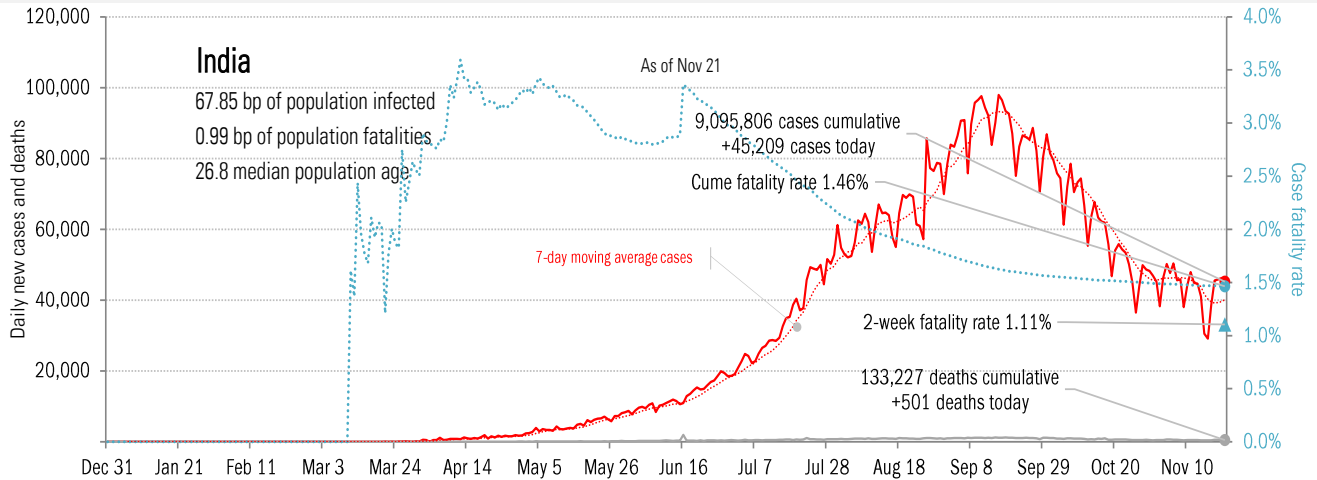


# Impact in other hot-spots



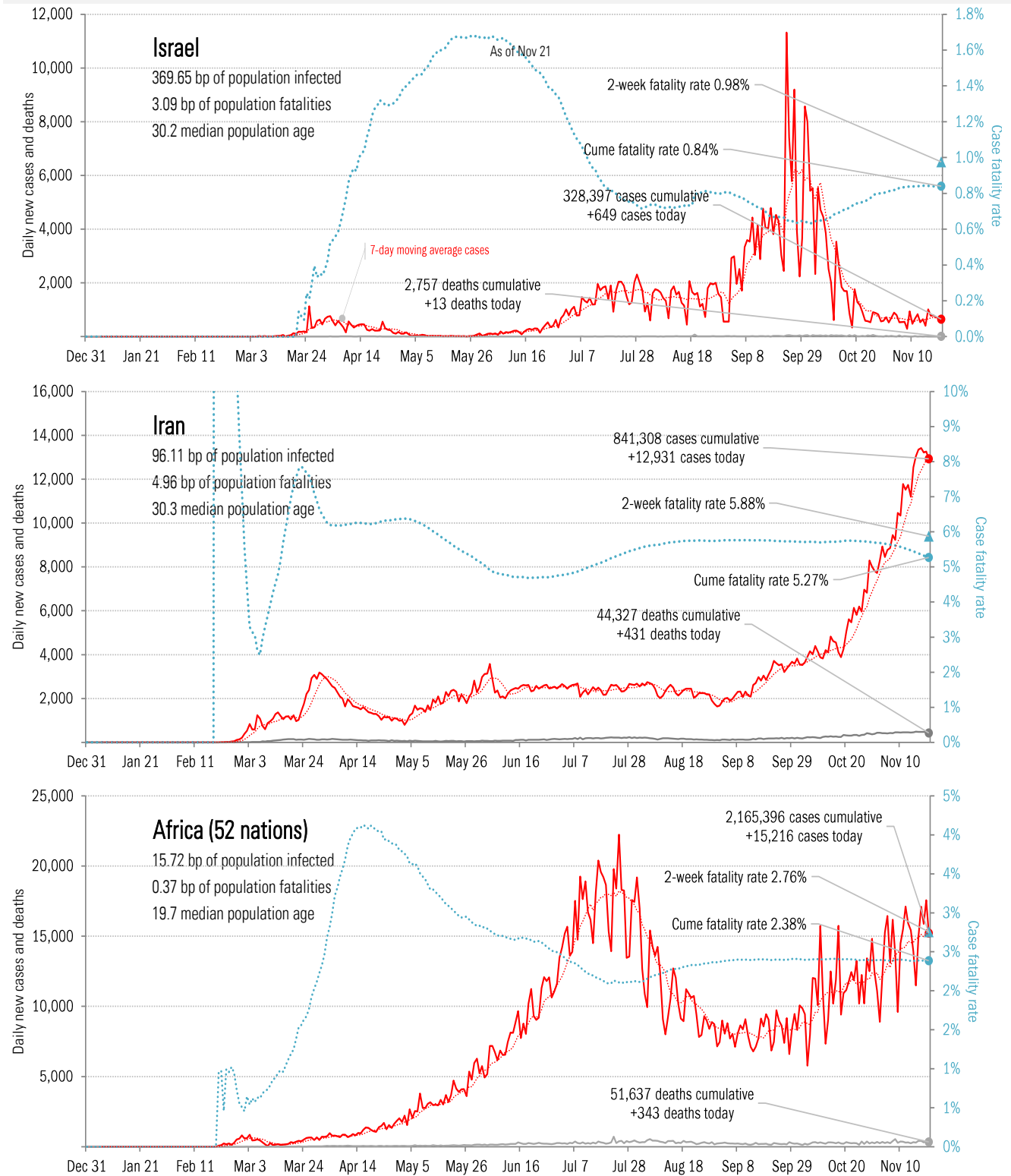
Source: [Johns Hopkins](#), TrendMacro calculations

# Impact in the BRICs ex-China



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

# Impact in the Middle East and Africa



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