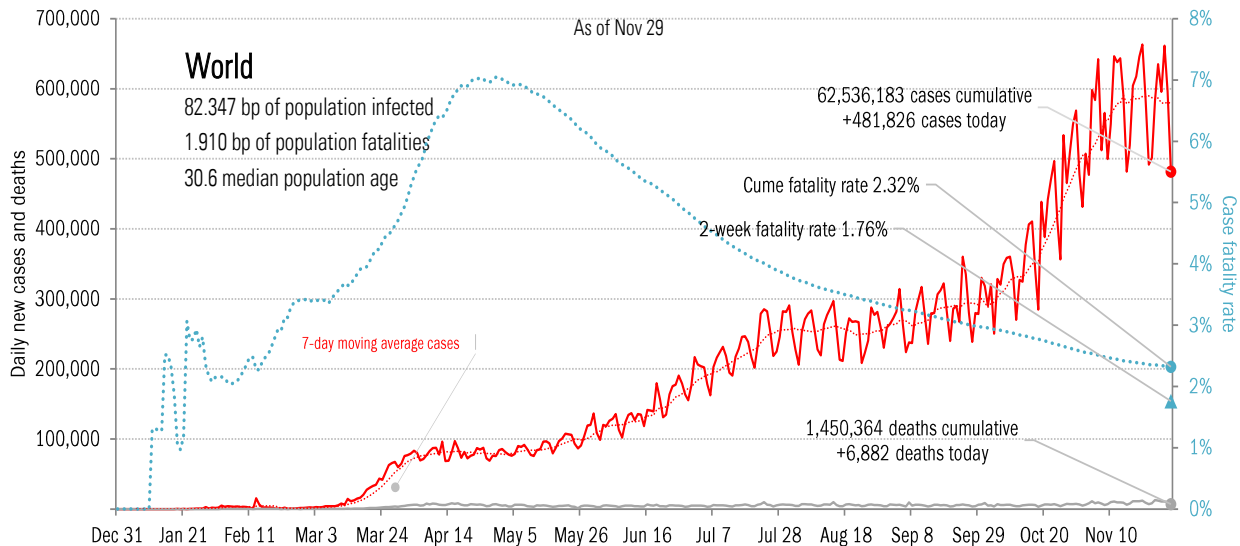
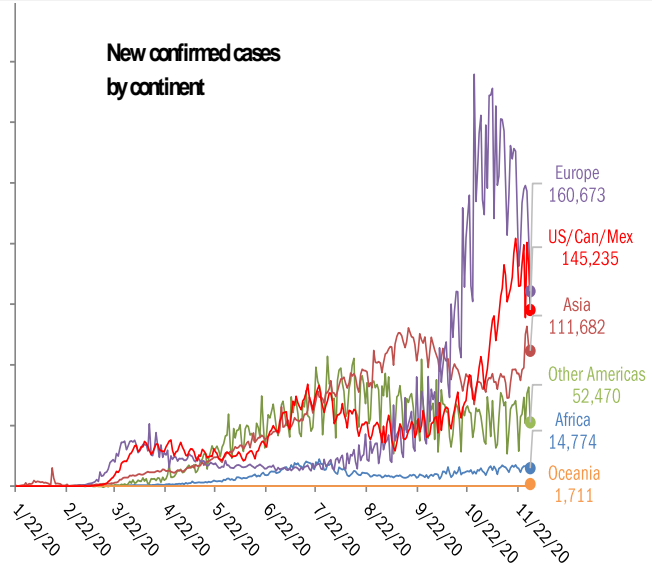


## Data Insights: Covid-2019 Monitor

Monday, November 30, 2020

### The global scorecard

The worst ten countries			
New cases		New Deaths	
United States	+134,184	United States	+801
India	+38,772	Italy	+541
Turkey	+29,281	Russia	+451
Russia	+26,390	India	+443
Brazil	+24,468	Iran	+388
Italy	+20,646	Poland	+283
Ukraine	+13,271	Brazil	+272
Iran	+12,950	Uruguay	+219
United Kingdom	+12,164	United Kingdom	+215
Poland	+11,482	France	+198
<b>+323,608</b>		<b>+3,811</b>	
World	+481,826	World	+6,882
Top ten	67%	Top ten	55%



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

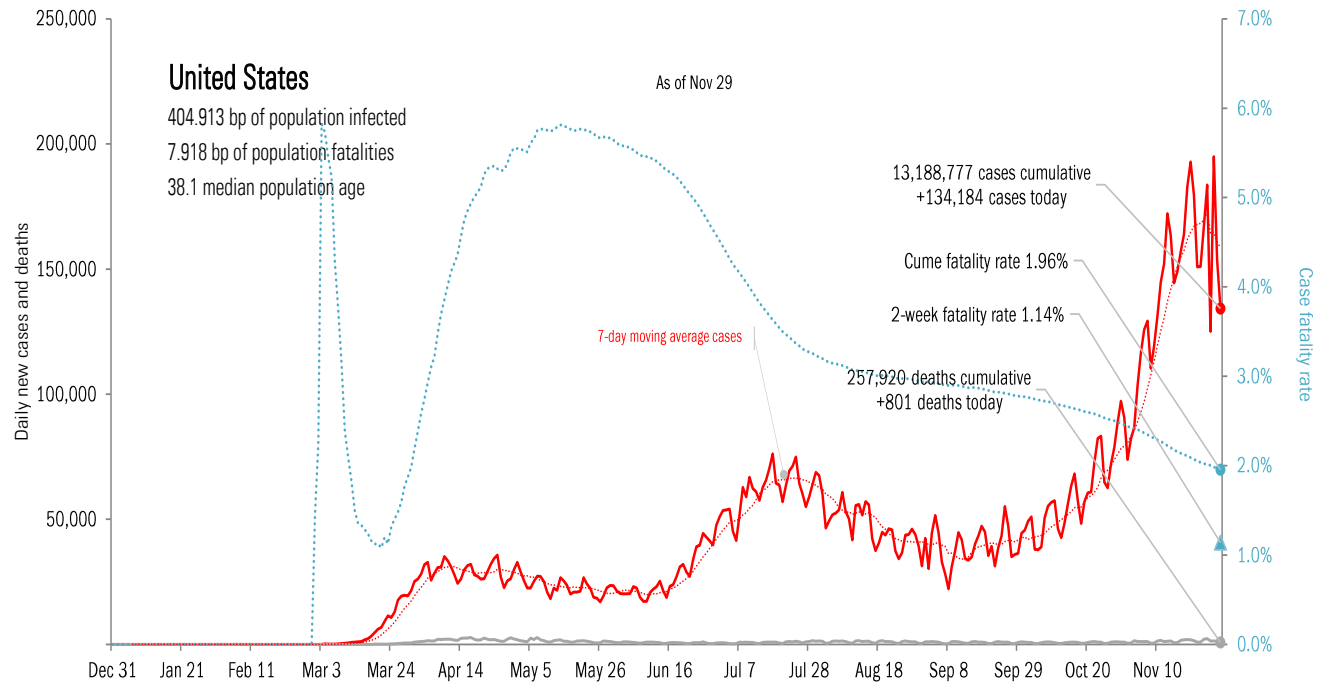
## The ten worst US states

New cases		New Deaths		New in hospital		Curre cases		Curre deaths		Curre in hospital	
CA	+15,614	PA	+76	CA	+514	CA	1,198,934	NY	26,690	NY	89,995
MN	+8,946	FL	+59	CH	+168	TX	1,157,273	TX	21,357	FL	55,393
CH	+7,729	NY	+58	PA	+152	FL	976,944	CA	19,121	NJ	41,213
IL	+7,178	MN	+57	FL	+141	IL	720,114	FL	18,736	GA	34,782
FL	+7,131	TX	+48	GA	+123	NY	641,161	NJ	16,978	CH	26,507
NY	+6,723	MA	+46	LA	+122	GA	420,601	IL	12,882	VA	25,690
TX	+6,204	IL	+44	NY	+85	CH	414,432	MA	10,722	IN	25,632
PA	+5,529	CA	+32	IL	+83	WI	409,054	PA	10,351	AZ	25,568
IN	+4,304	MS	+27	AZ	+75	MI	378,152	MI	9,467	AL	24,670
WI	+4,055	MD	+23	NM	+65	TN	366,518	GA	9,442	MD	20,877
<b>+73,413</b>		<b>+470</b>		<b>+1,528</b>		<b>6,683,183</b>		<b>155,746</b>		<b>370,327</b>	
All states	+134,184	All states	+801	All states	+1,584	All states	13,188,777	All states	257,920	All states	567,421
Top ten	55%	Top ten	59%	Top ten	96%	Top ten	51%	Top ten	60%	Top ten	65%

*Some states not reporting*

## Five most improved US states

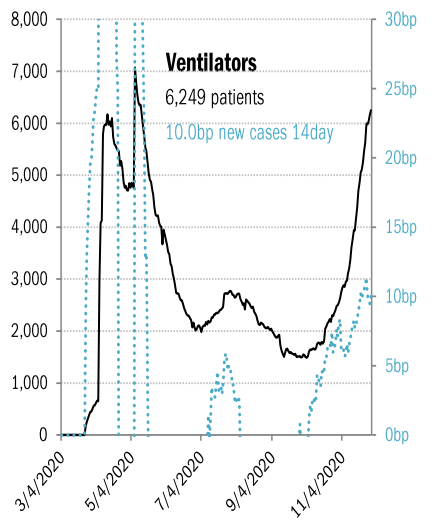
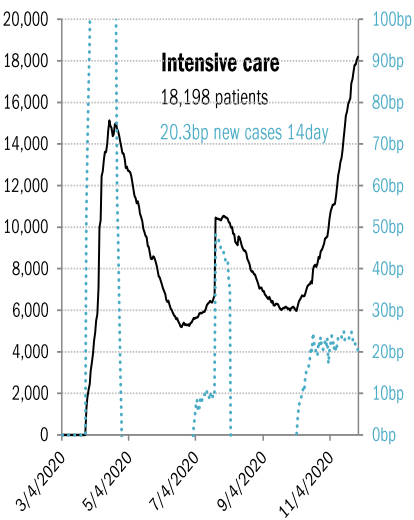
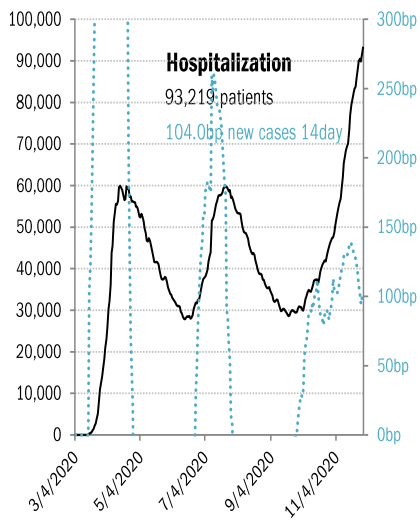
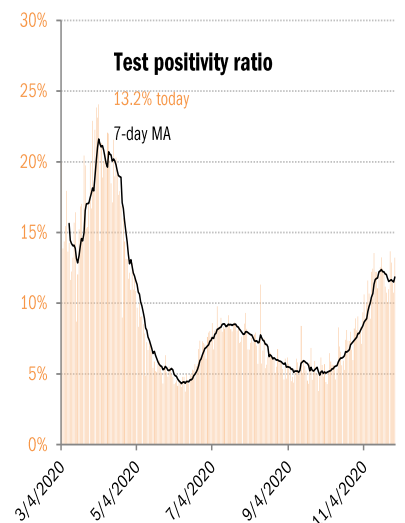
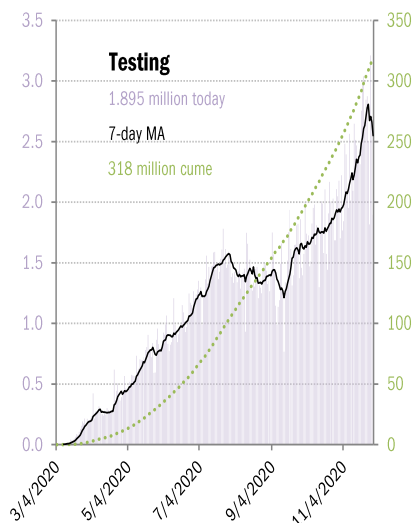
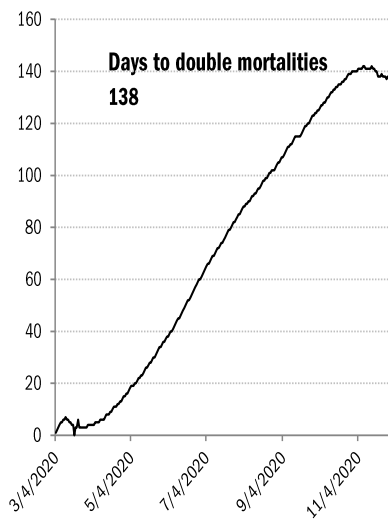
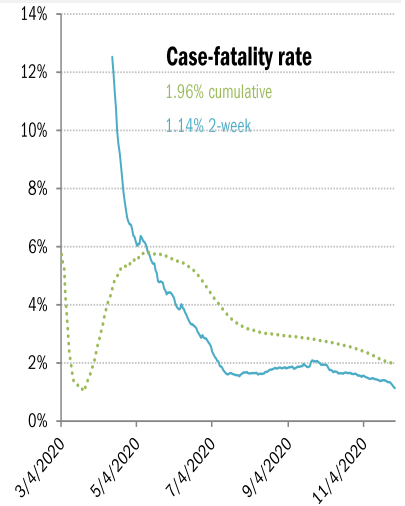
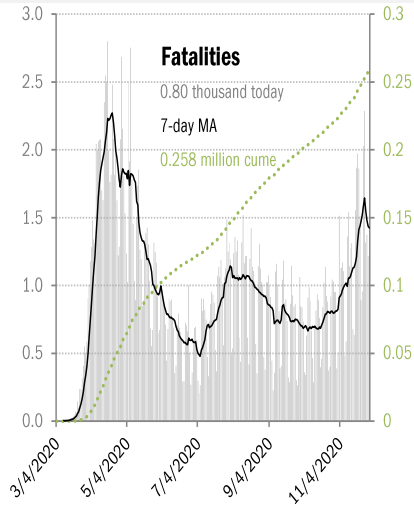
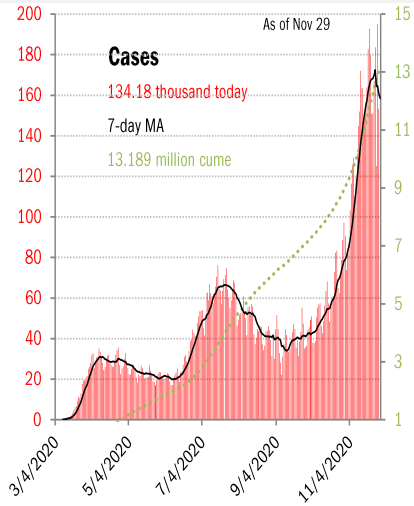
Fewer daily cases		Fewer new deaths		Fewer new hospitalizations		Most recoveries	
MI	-8,351	MI	-110	MO	-229	MN	+7,738
OK	-4,536	IL	-108	WI	-135	CH	+4,988
TN	-3,698	TX	-54	NY	-99	WI	+4,668
PA	-2,524	SD	-53	TN	-92	TX	+3,879
WA	-1,794	IN	-47	IN	-83	TN	+2,617



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

# US deep-dive

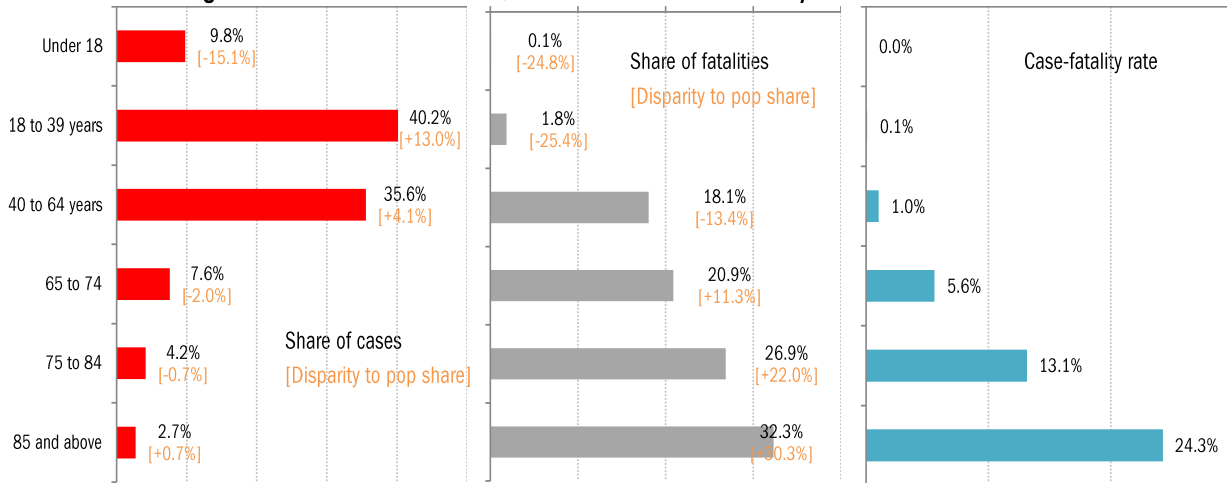
National and state-by-state data do not line up because of different sources



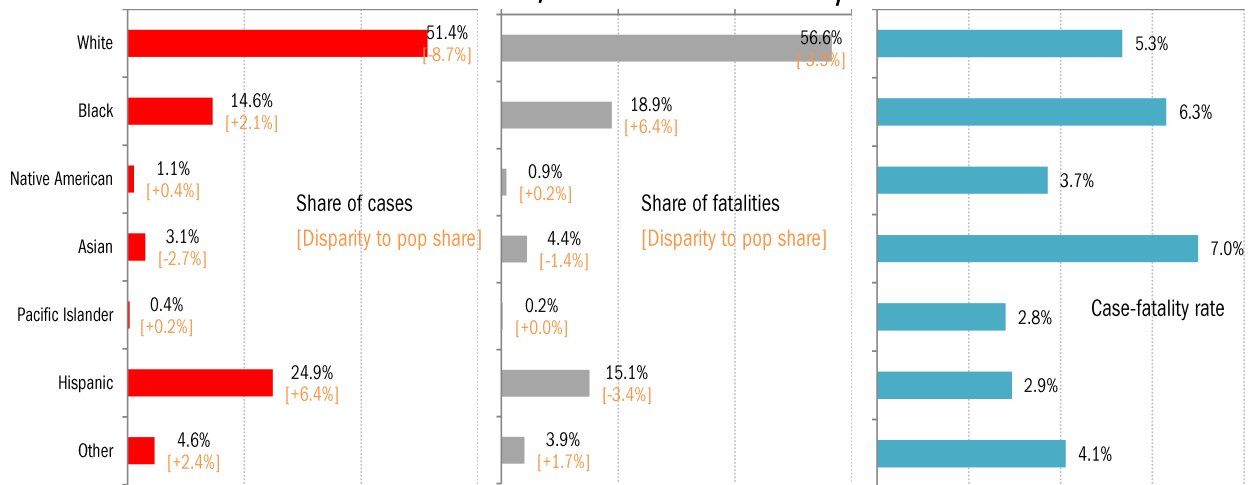
Source: [Covid Tracking Project](#), TrendMacro calculations

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

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

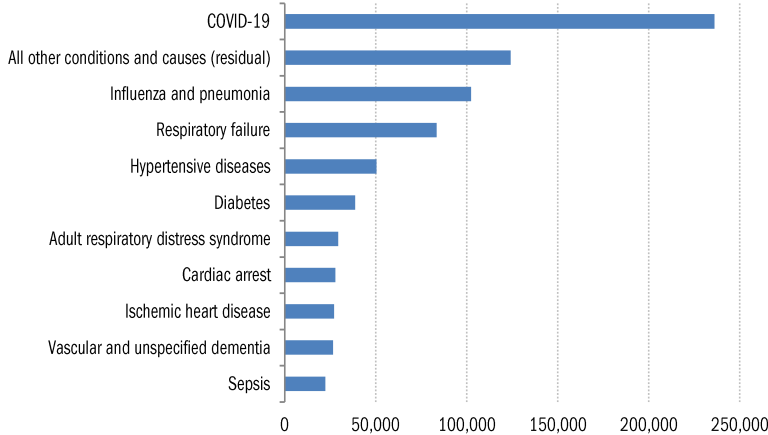


## Racial distribution of US cases, fatalities and case-fatality rates



## 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

### [Moderna to seek emergency FDA authorization for coronavirus vaccine](#)

Zachary Brennan  
*Politico*  
November 30, 2020

### [Reasons why the 2020 presidential election is deeply puzzling](#)

Patrick Basham  
*The Spectator*  
November 27, 2020

### [Biden, Iran and the Bomb](#)

*Wall Street Journal*  
November 27, 2020

### [How many years of life are lost to covid?](#)

Sebastian Rushworth  
*Sebastian Rushworth*  
November 29, 2020

### [Team Obama's Iran Illusions](#)

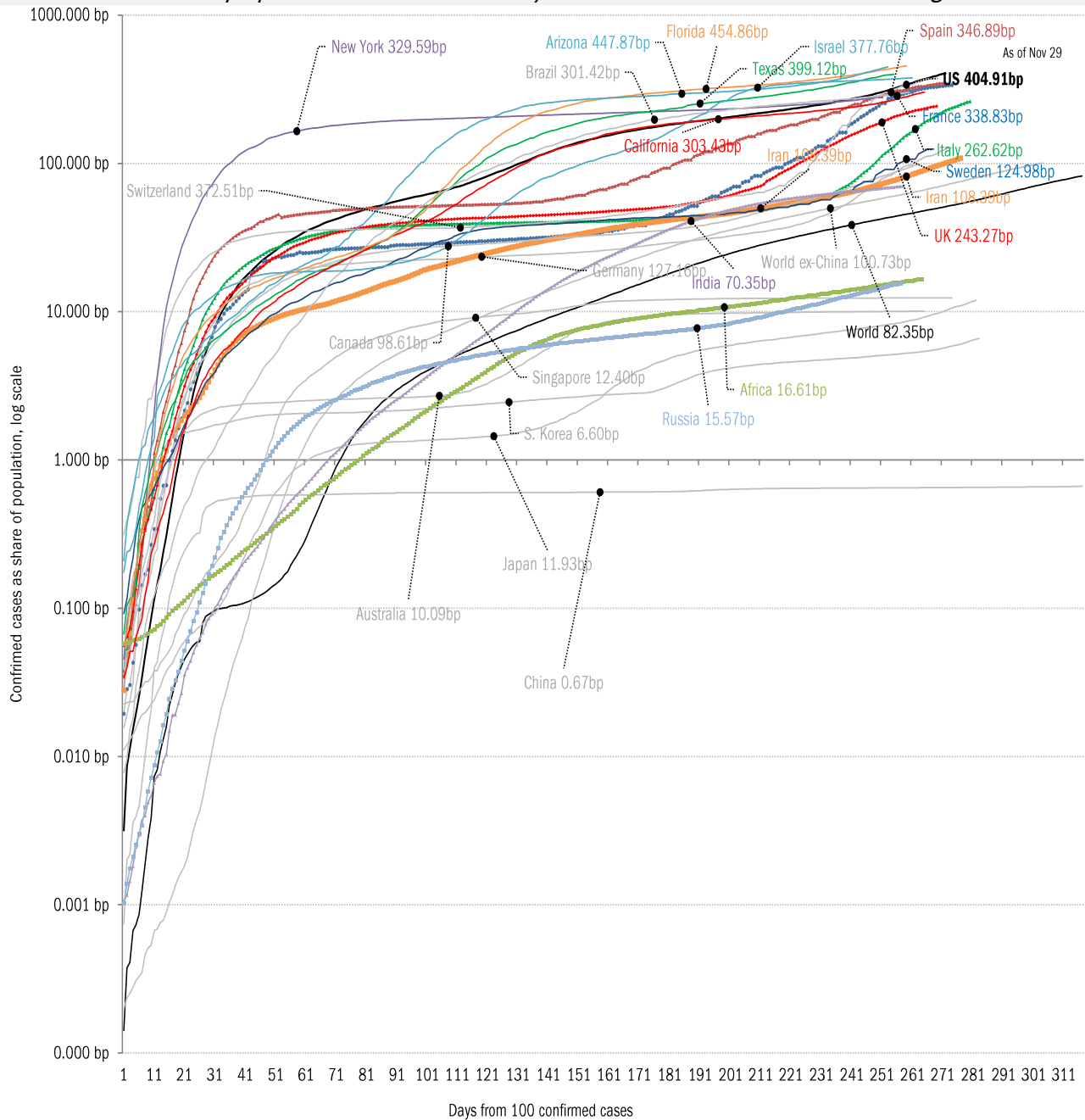
*Wall Street Journal*  
November 29, 2020

## Meme of day



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

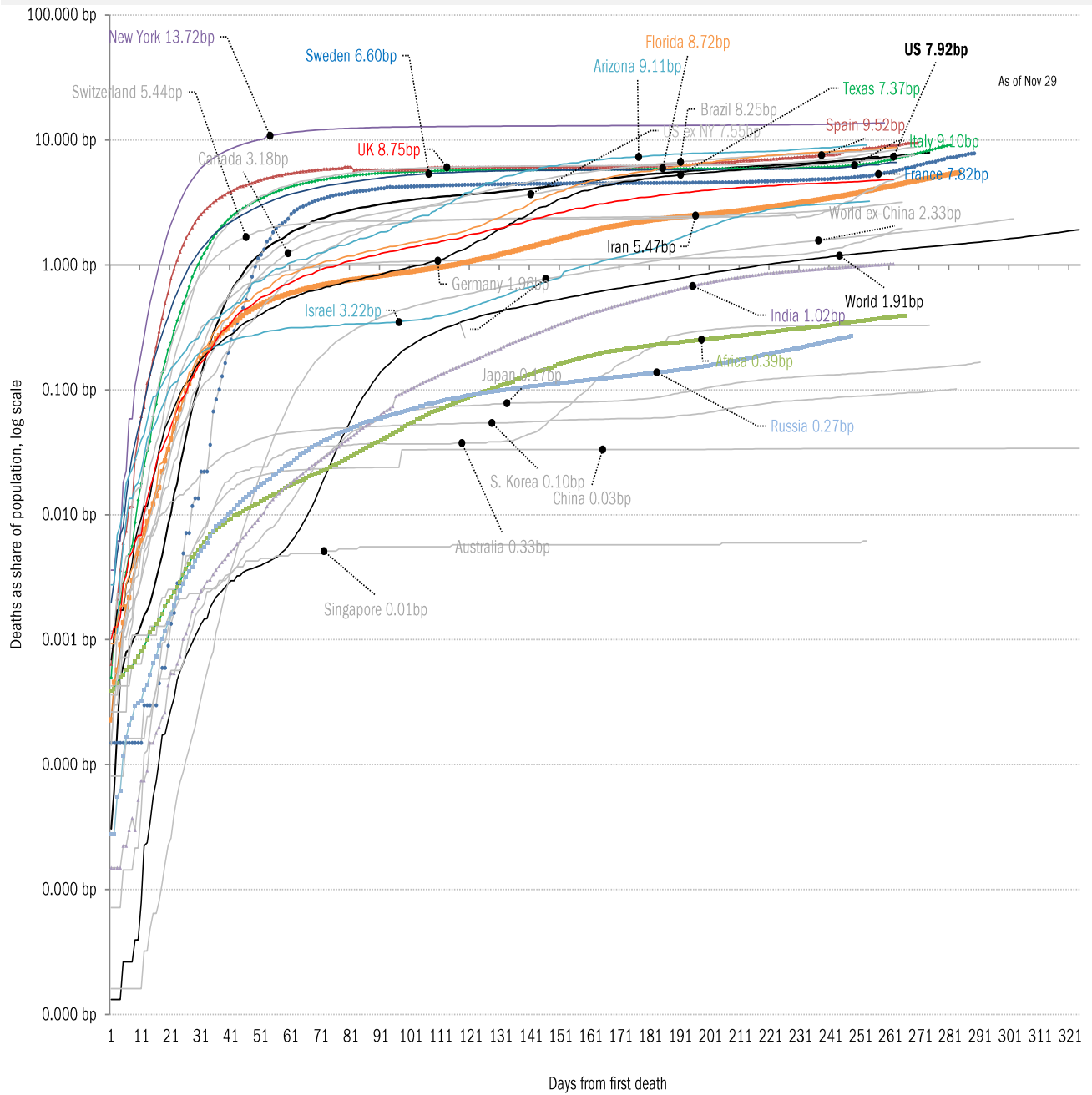
The coronavirus case accelerometer... tracking the world's infection curves  
*Share of infected population from first day with 100 confirmed cases, log scale*



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

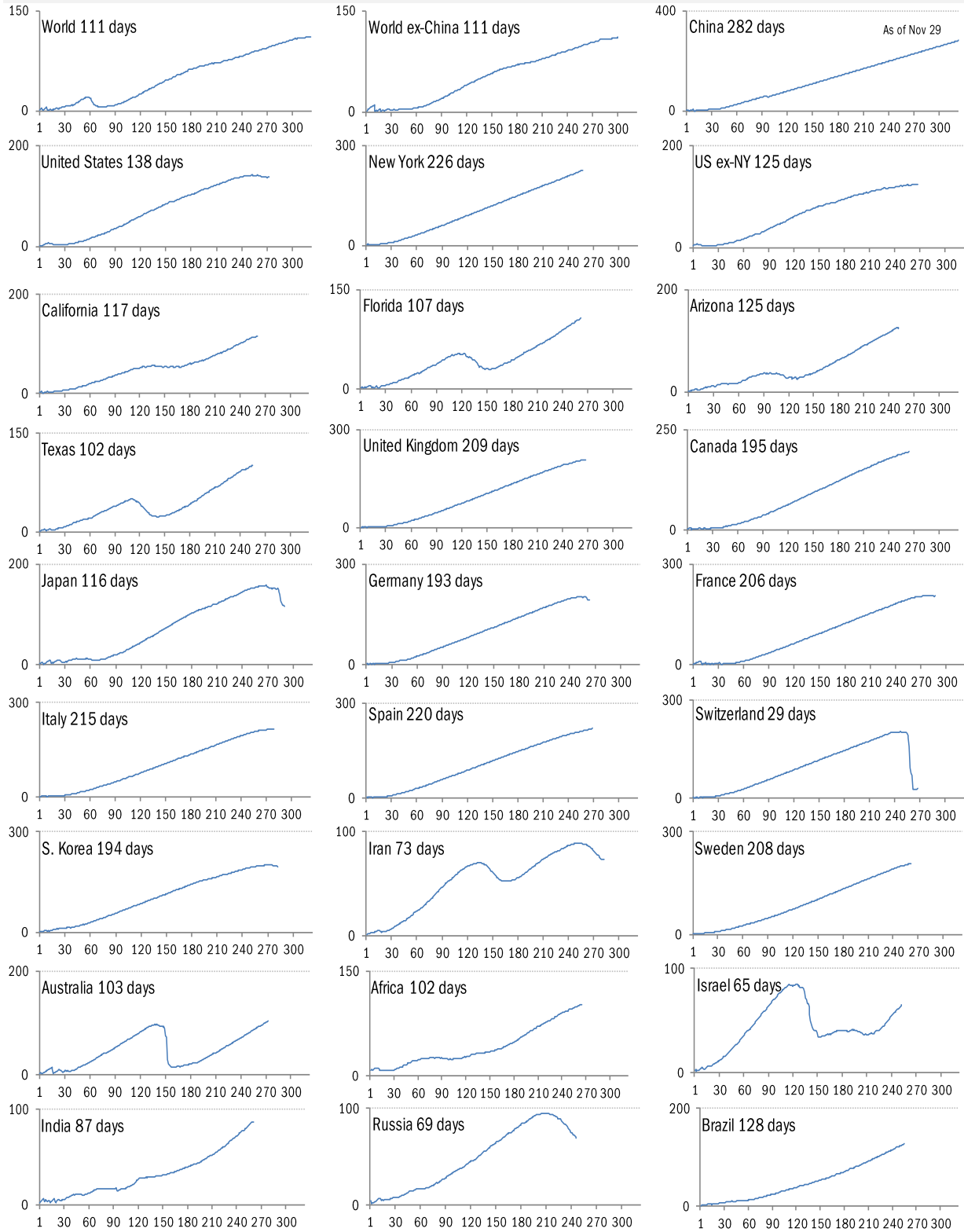


Source: [Johns Hopkins](#), [Covid Tracking Project](#), TrendMacro calculations

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

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

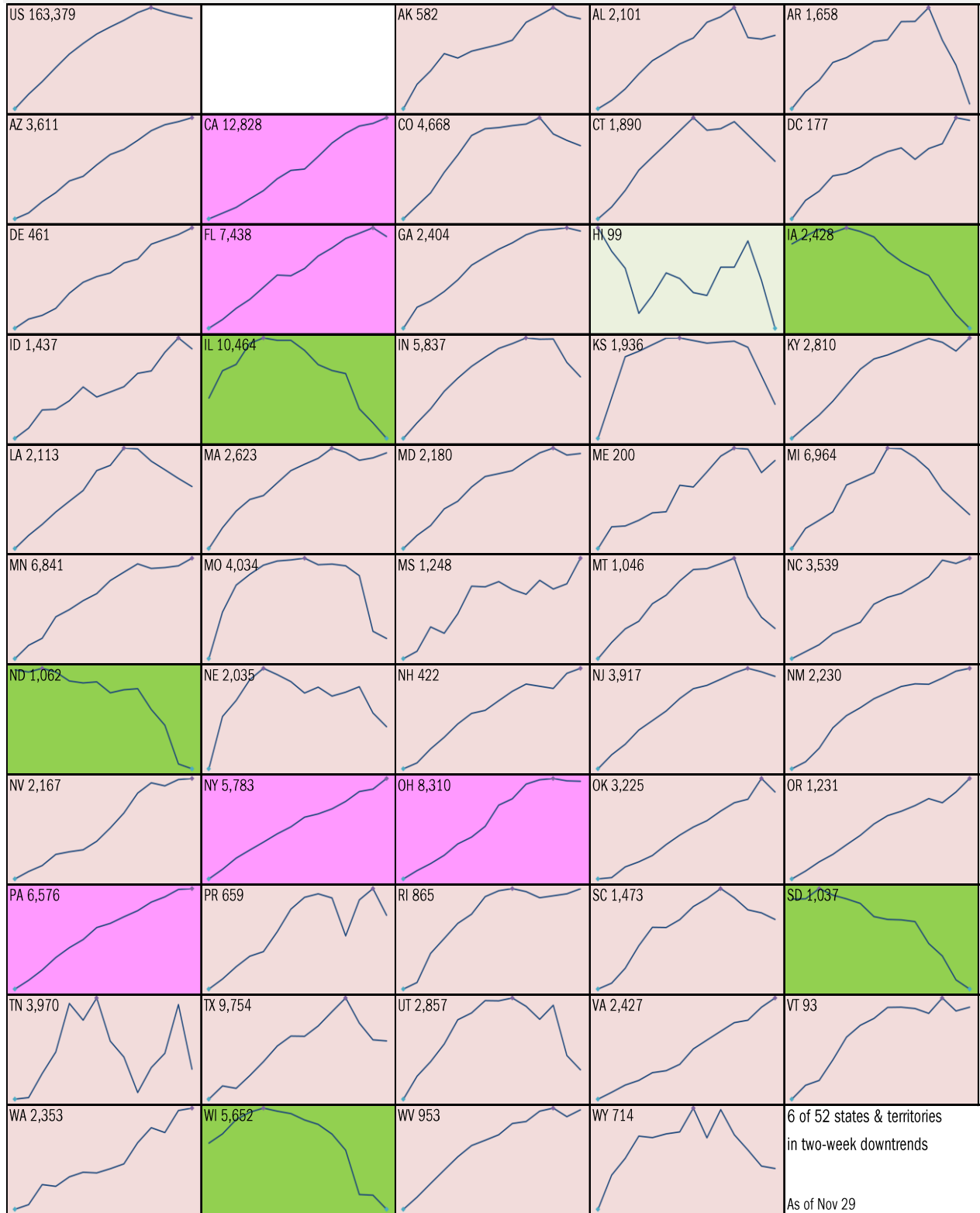
Flat indicates exponential spread Declining indicates supra-exponential spread Rising indicates sub-exponential spread



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

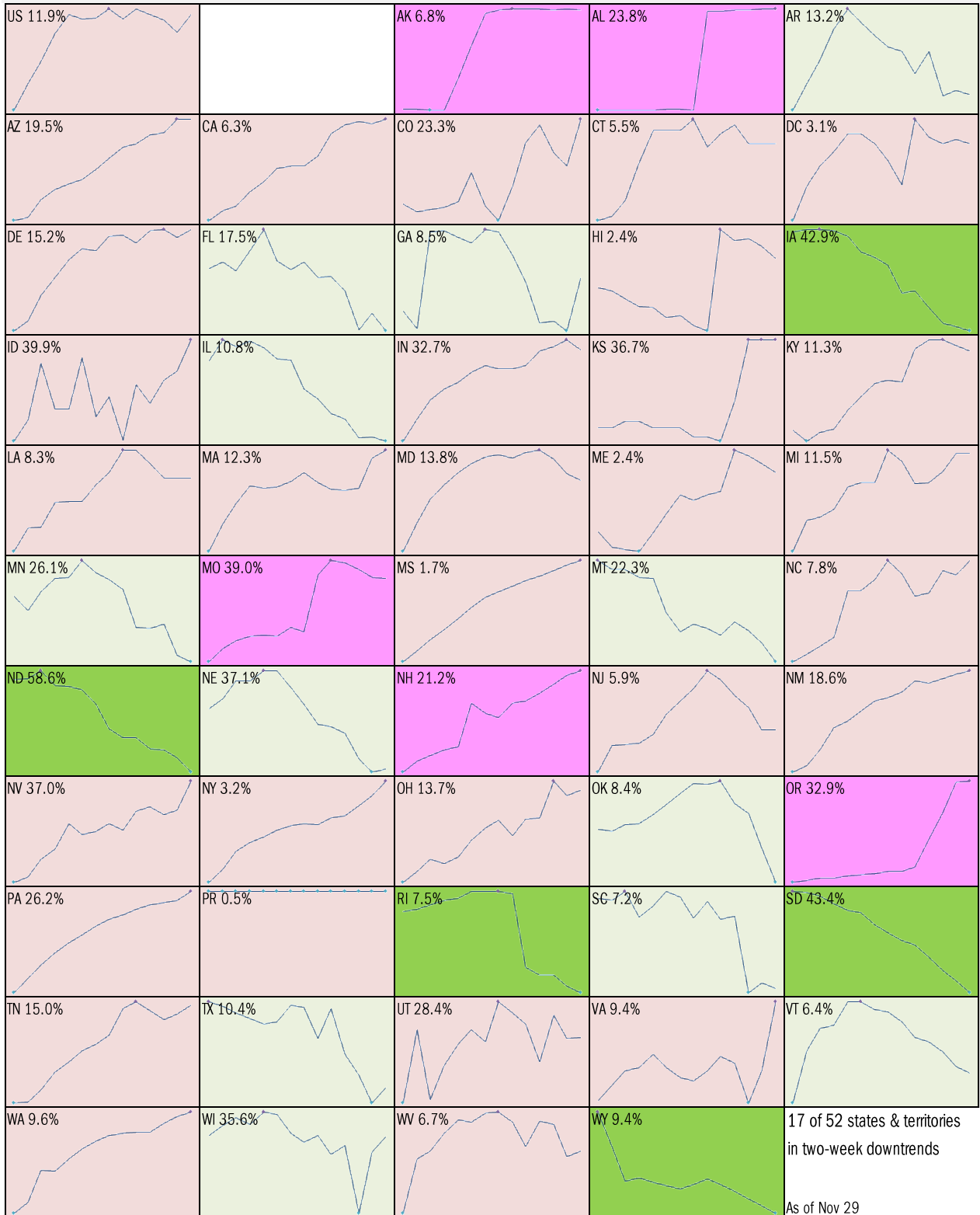


Source: [Covid Tracking Project](#), TrendMacro calculations

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



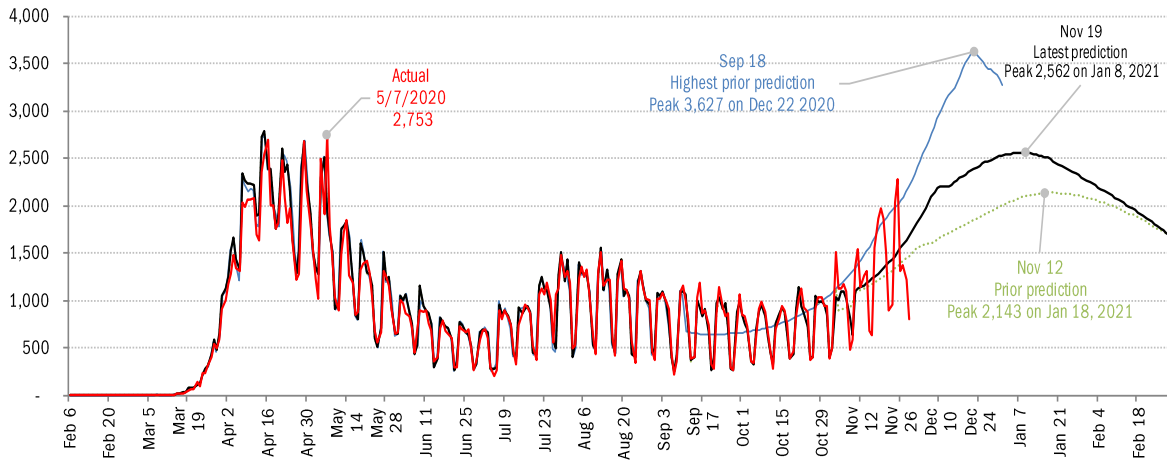
Source: [Covid Tracking Project](#), TrendMacro calculations

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

## New daily fatalities

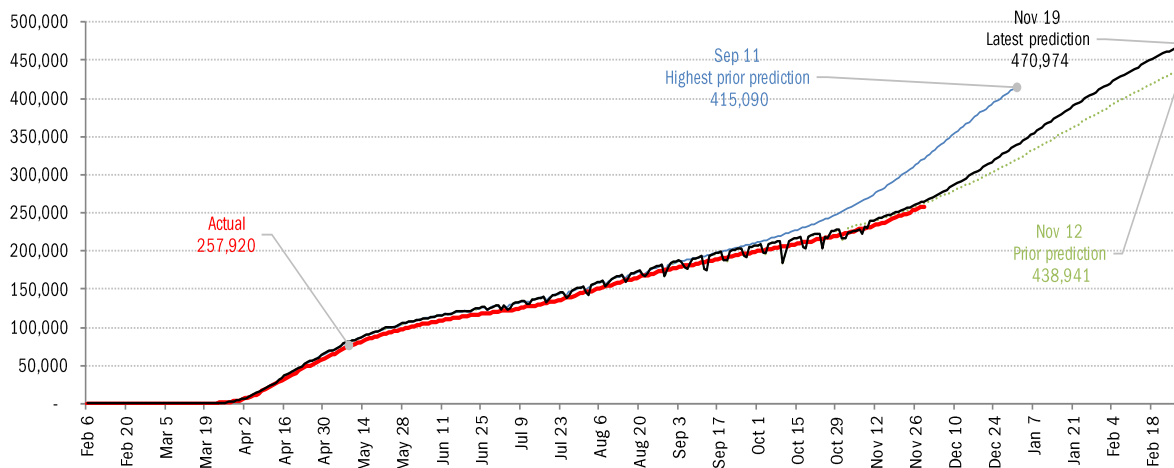
As of Nov 29

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

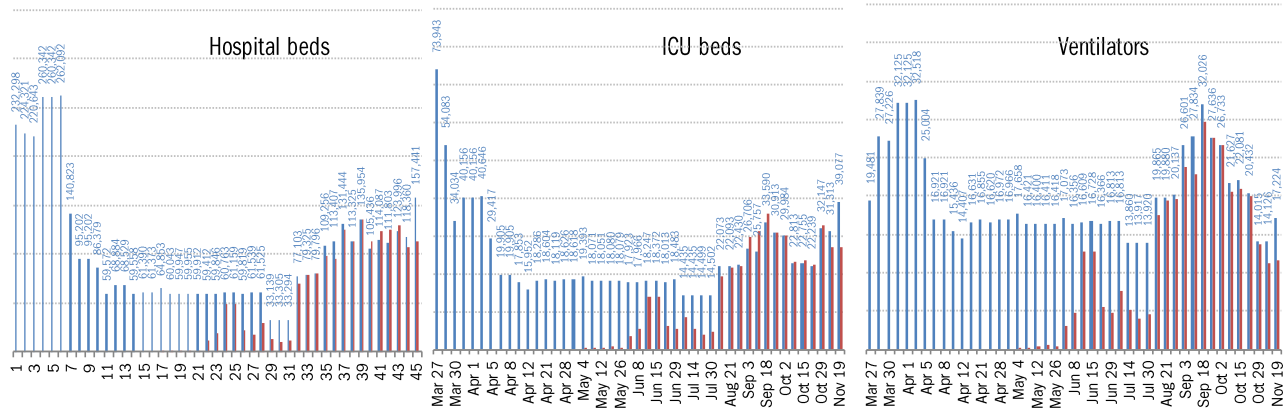


## Cumulative fatalities

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

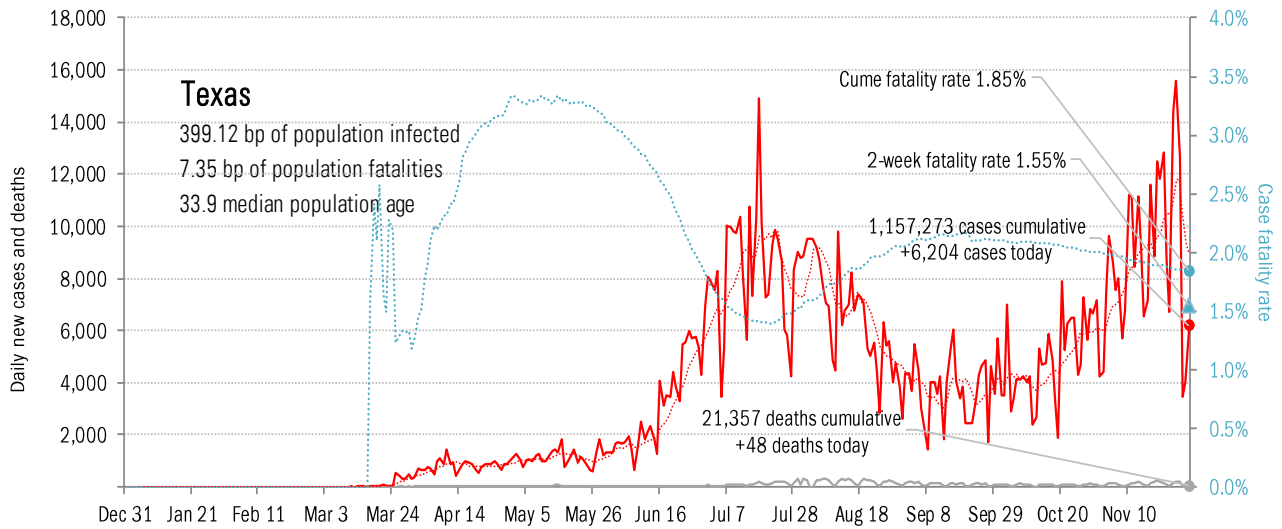
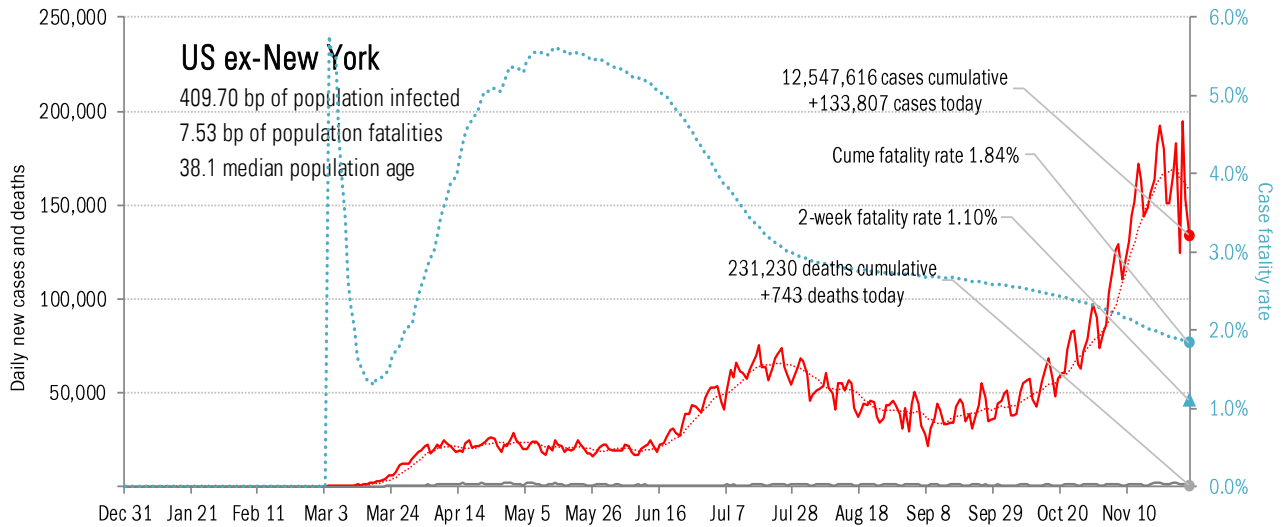
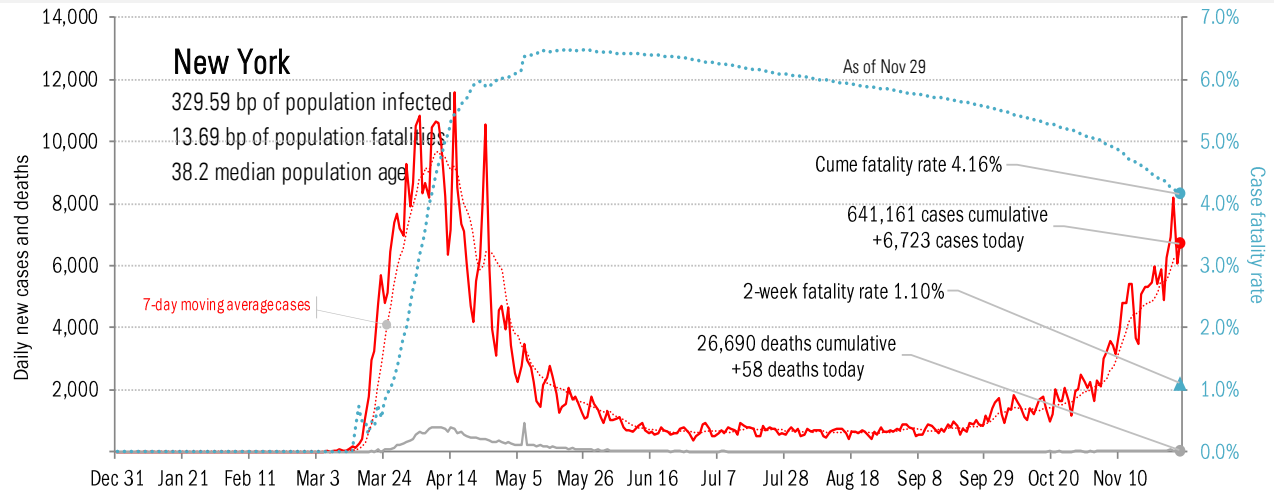


## Healthcare system stress, **peak** and **ultimate** estimated at each model revision



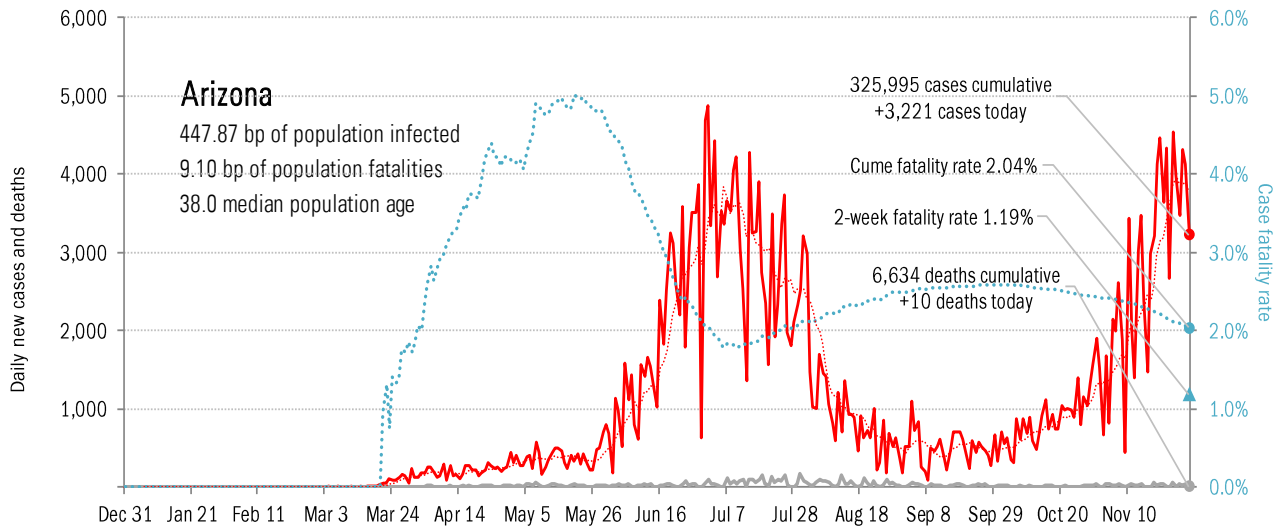
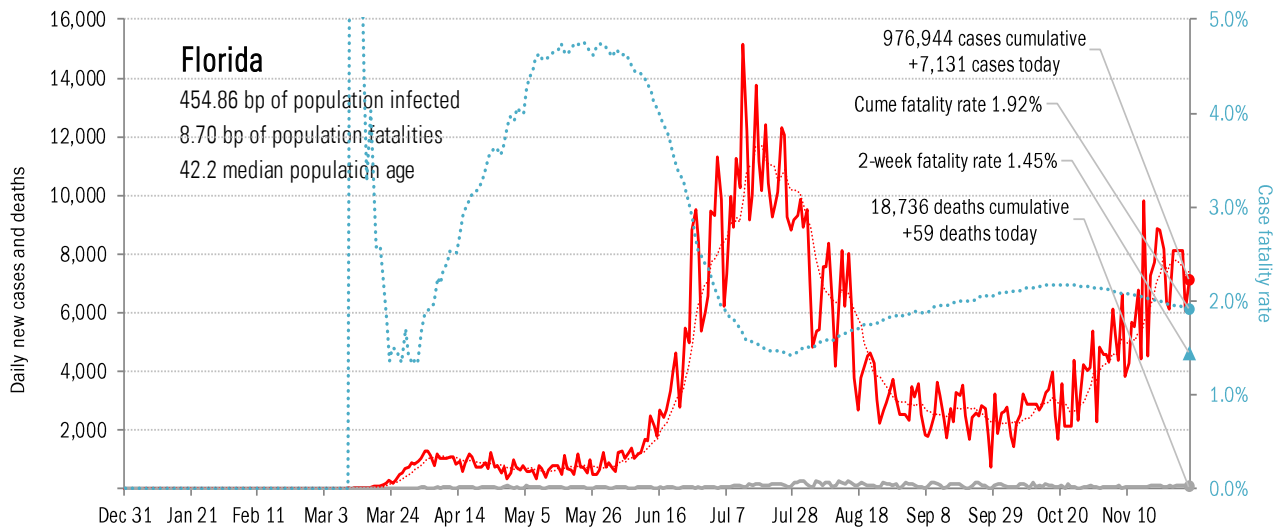
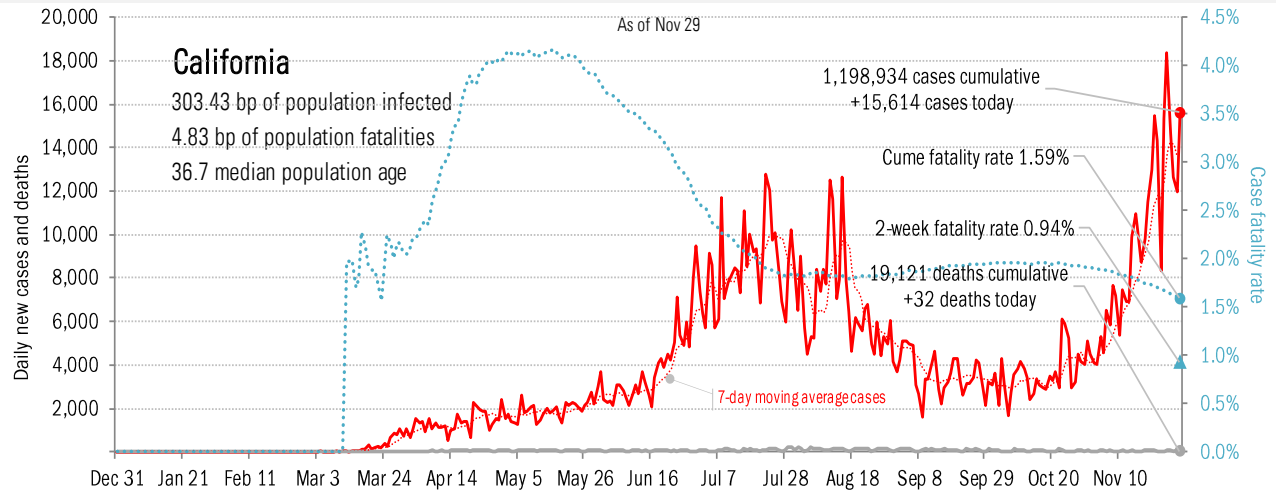
Source: [IHME](#), [Covid Tracking Project](#), TrendMacro calculations

# From Ground Zero to the Rio Grande



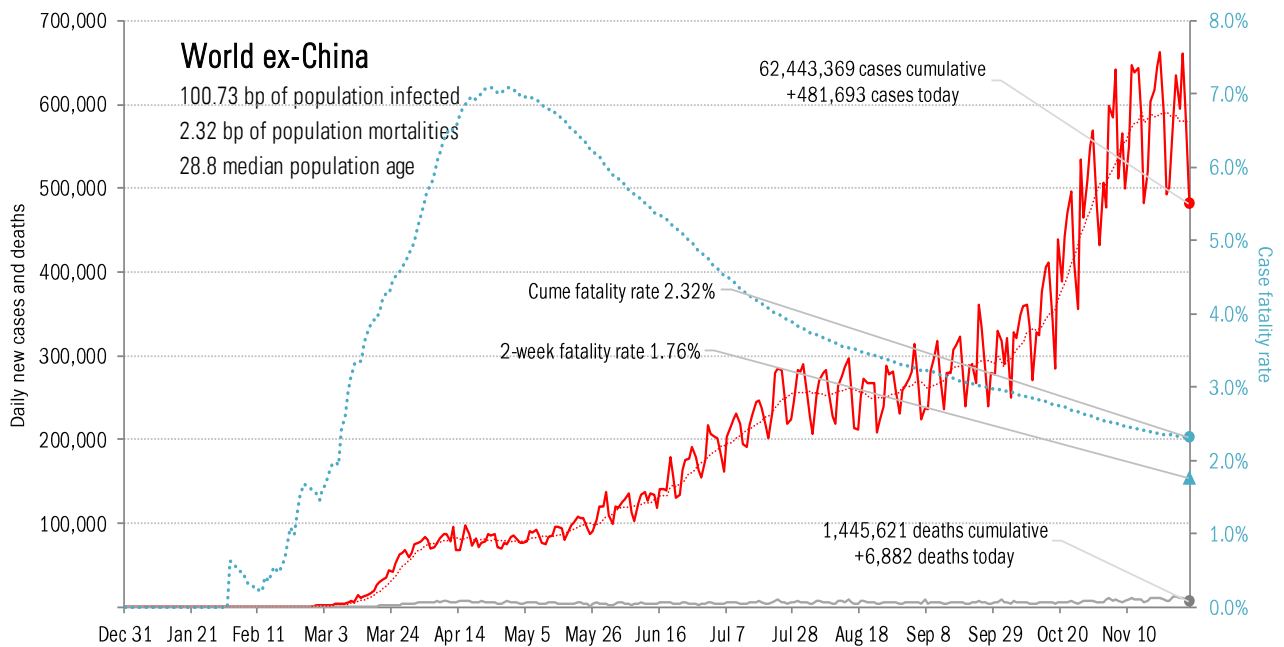
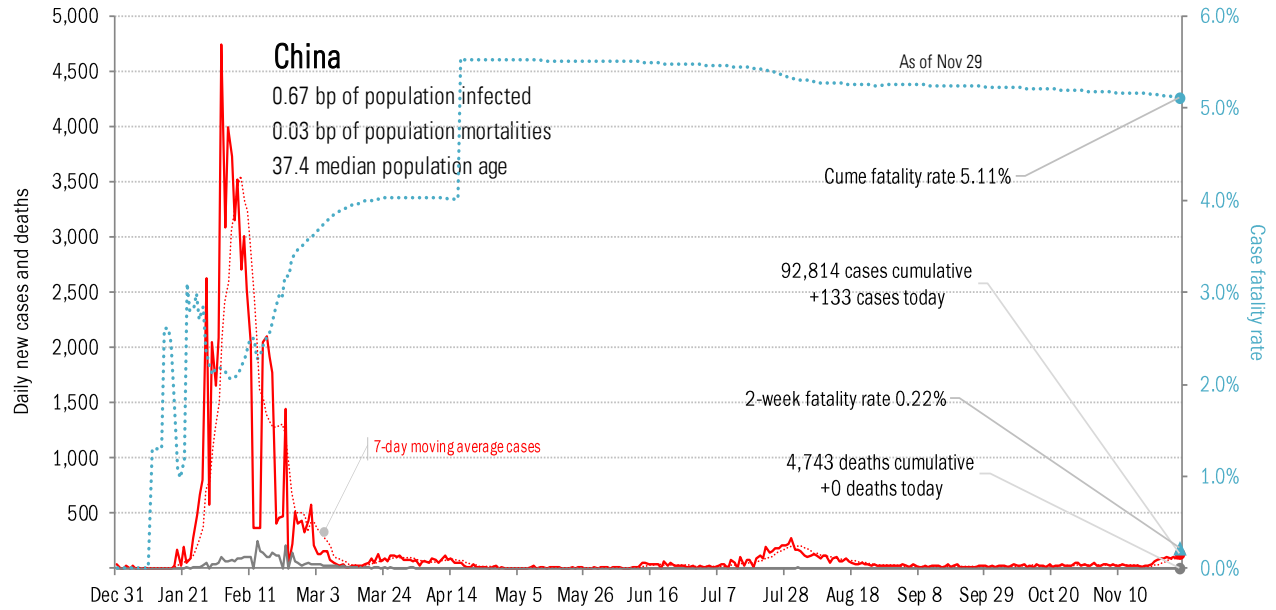
Source: [Covid Tracking Project](#), TrendMacro calculations

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



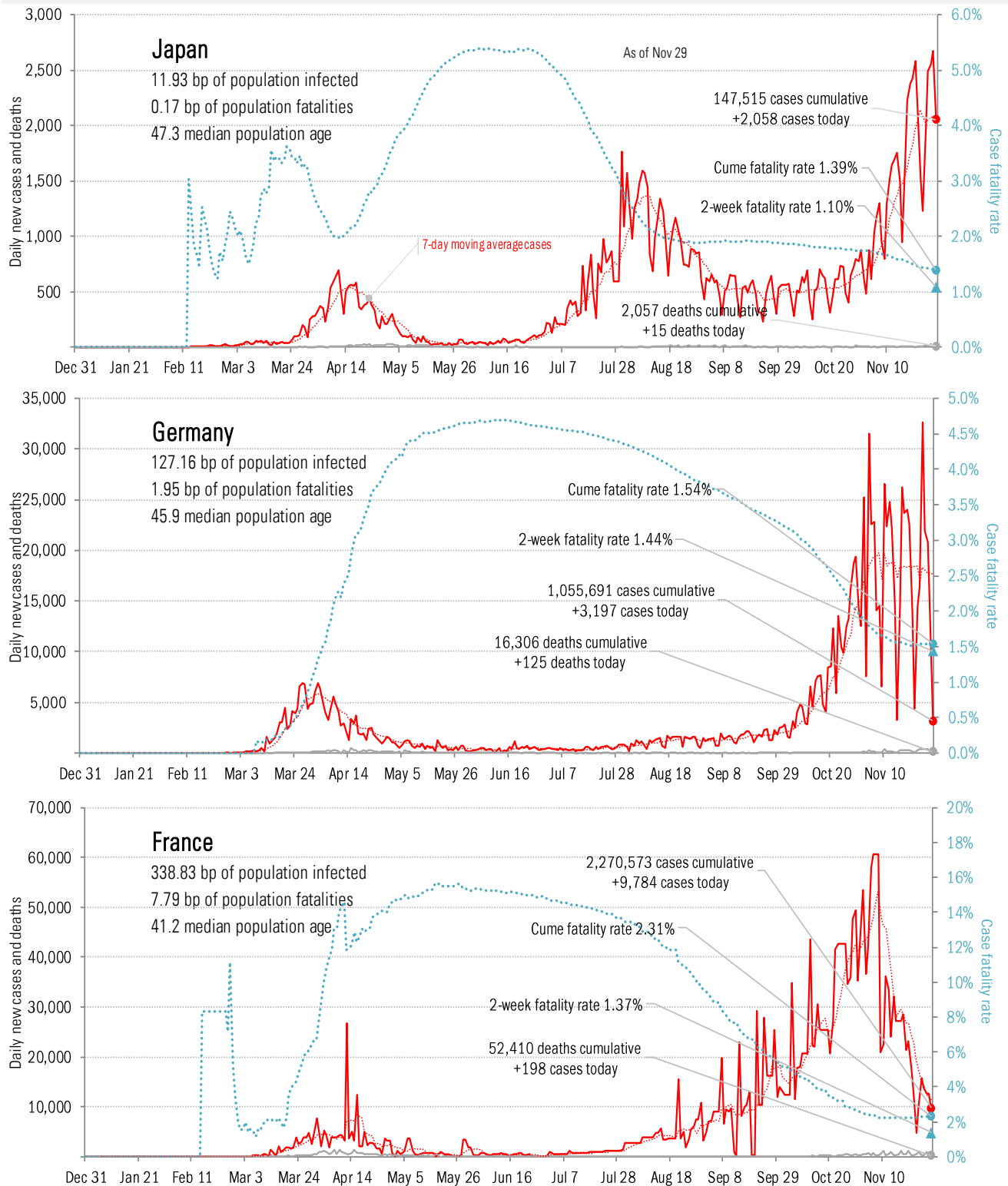
Source: [Covid Tracking Project](#), TrendMacro calculations

# Patient zero... and then everyone else



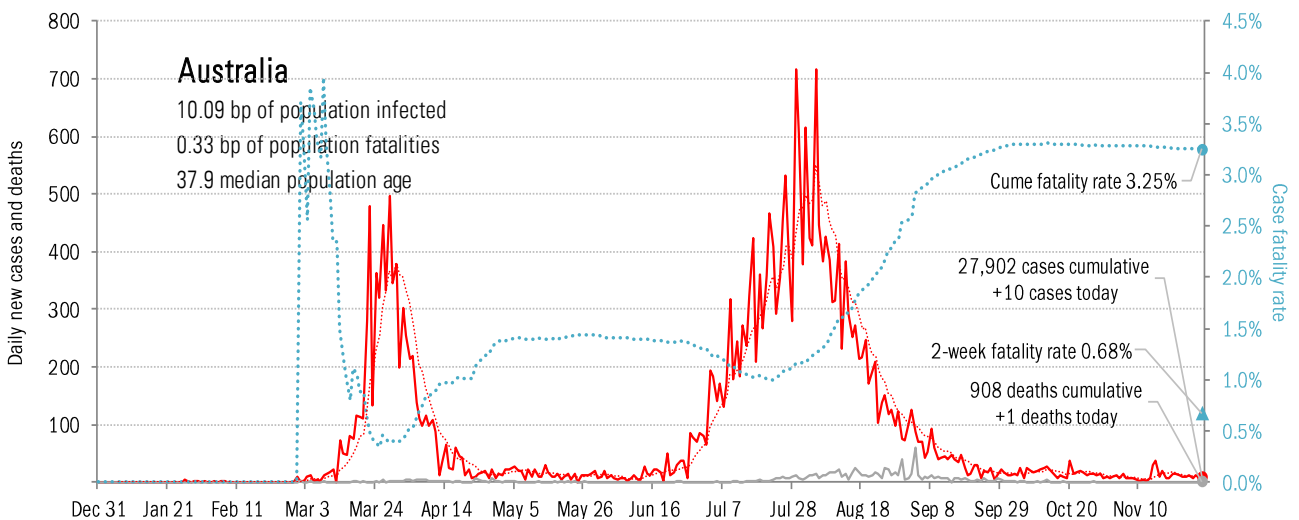
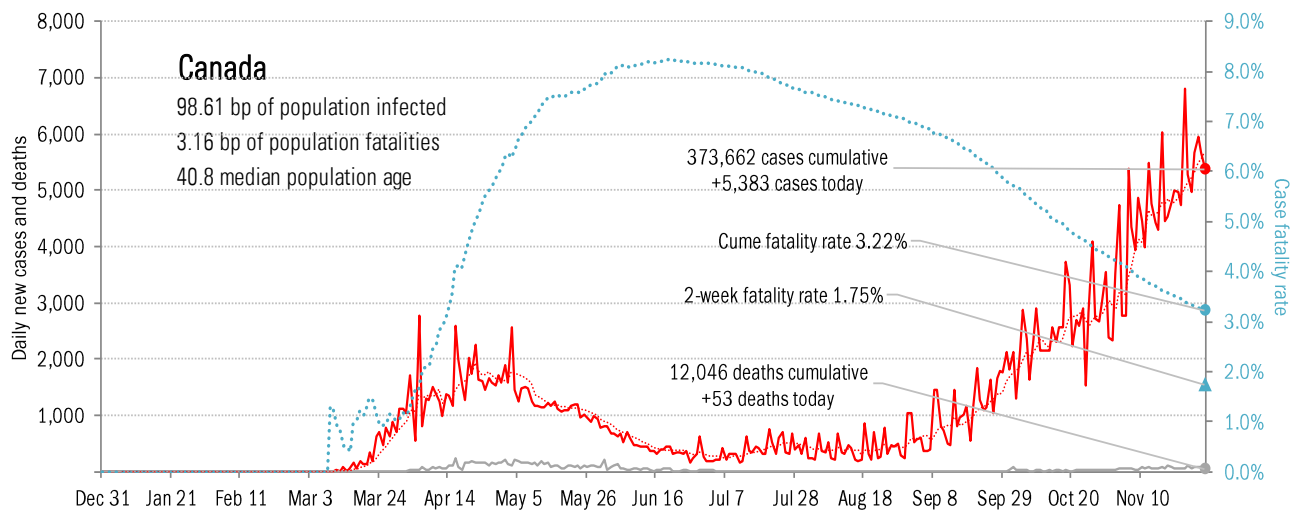
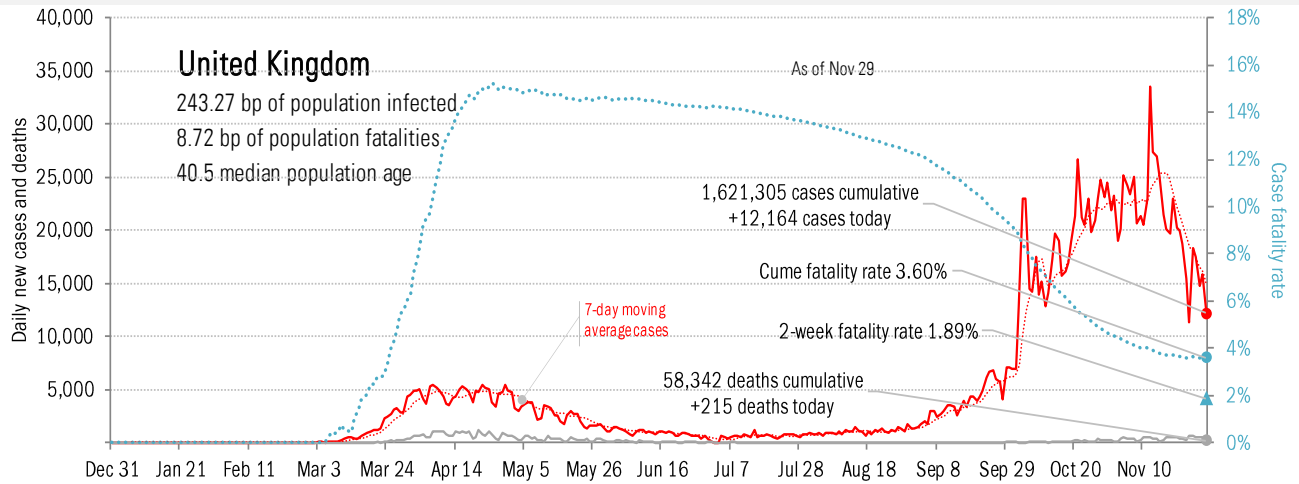
Source: [Johns Hopkins](#), [Covid Tracking Project](#), TrendMacro calculations

# Impact in the largest economies



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

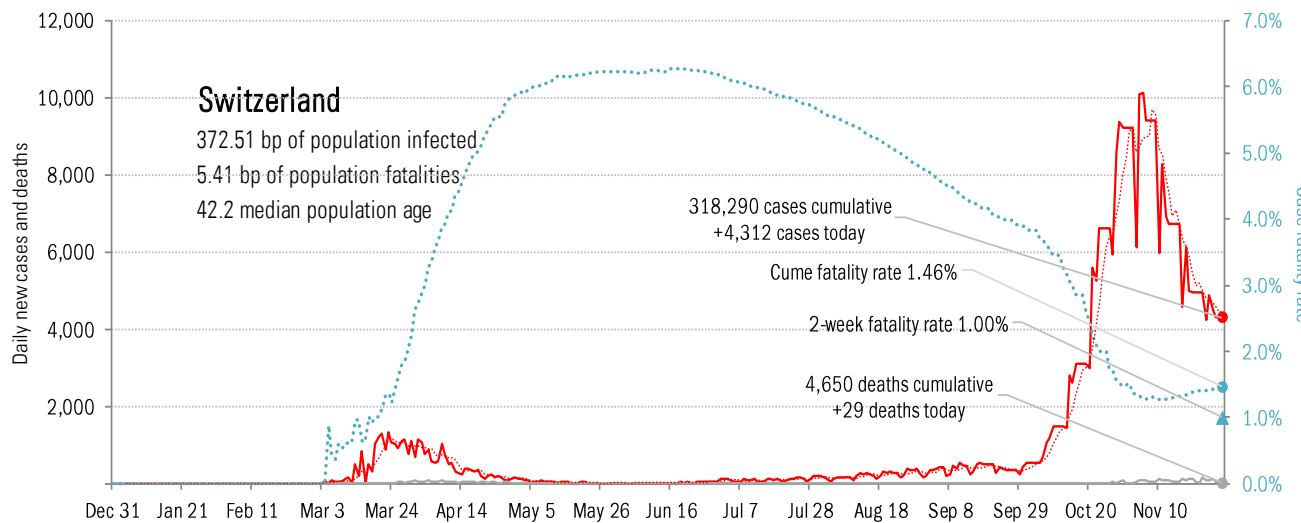
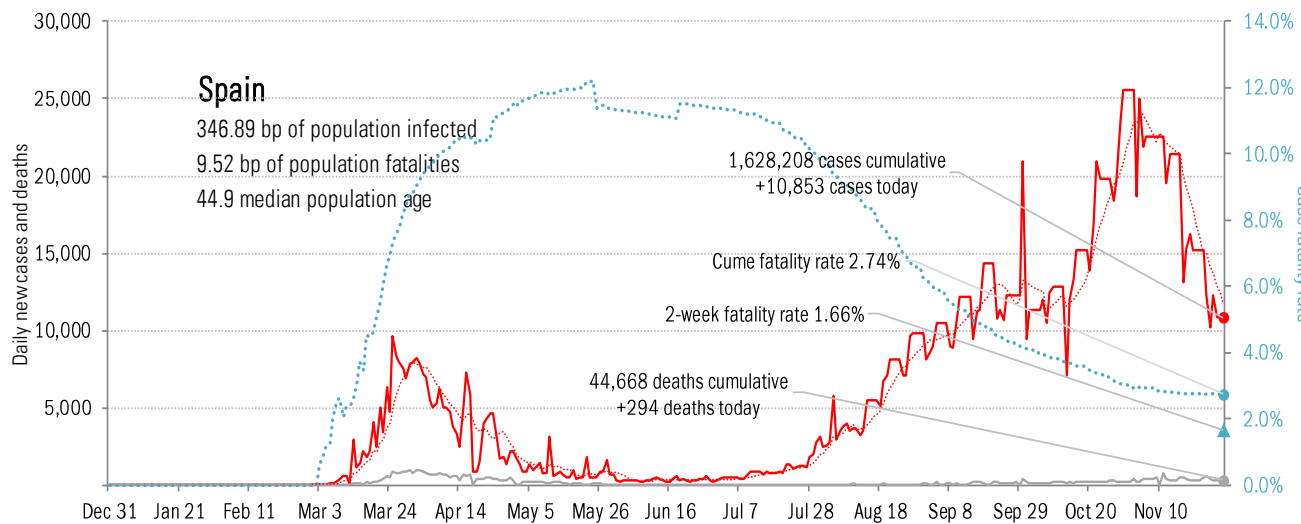
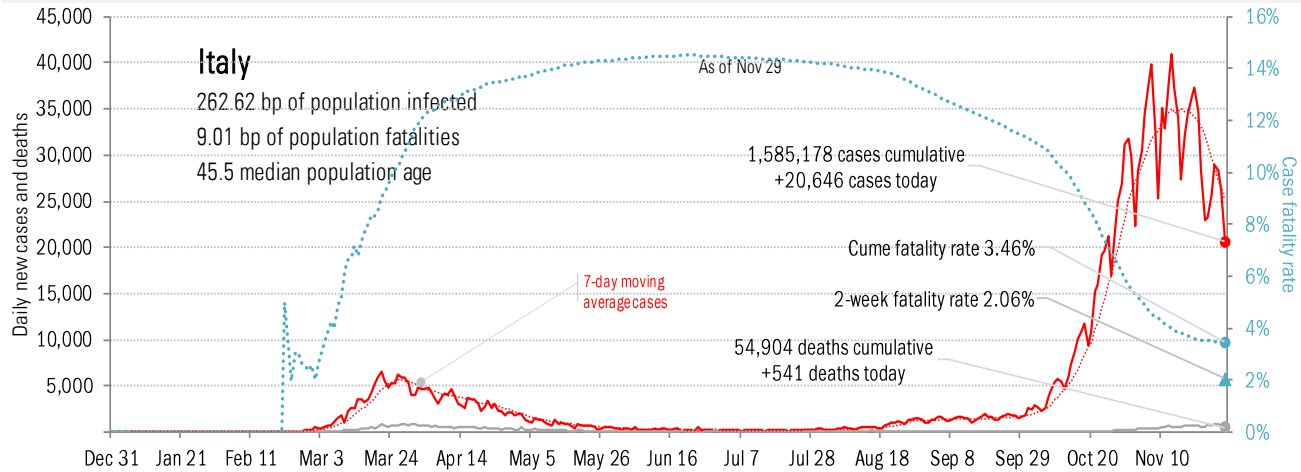
# Impact in The Anglosphere



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

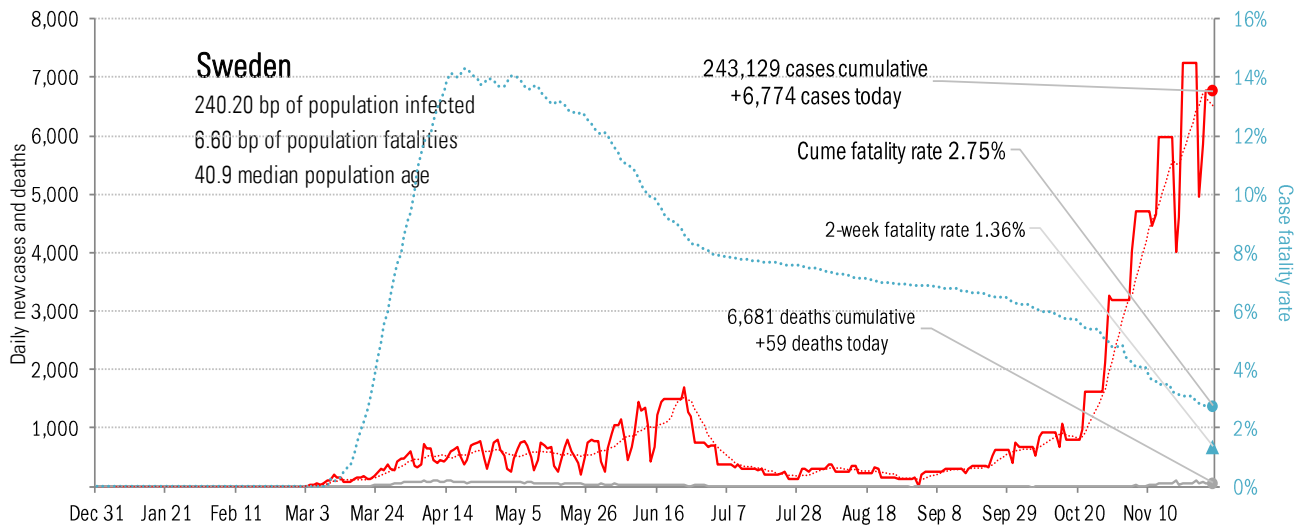
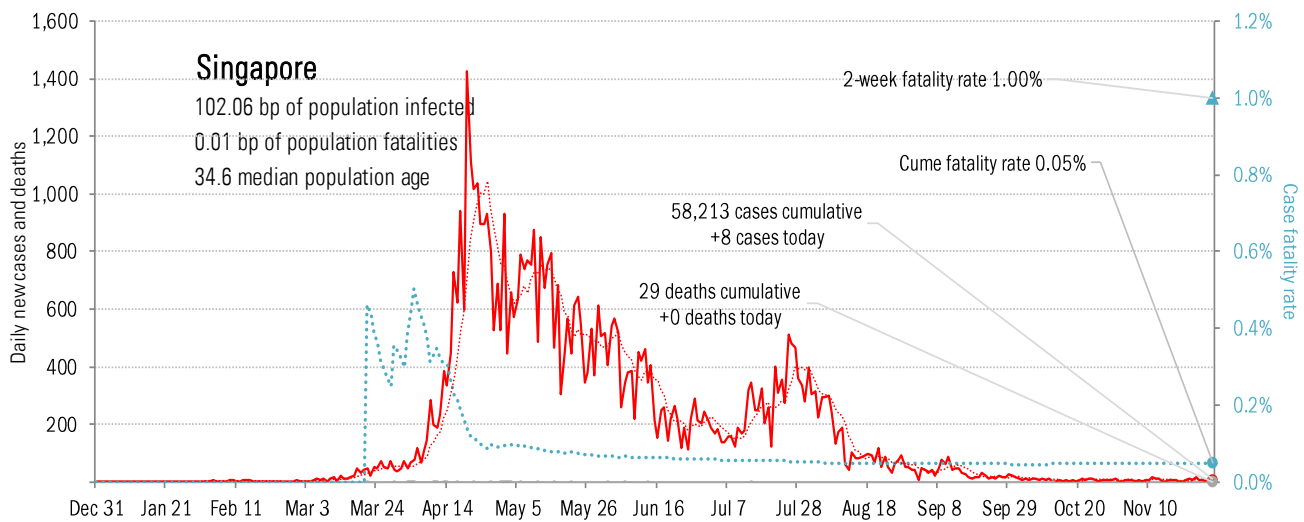
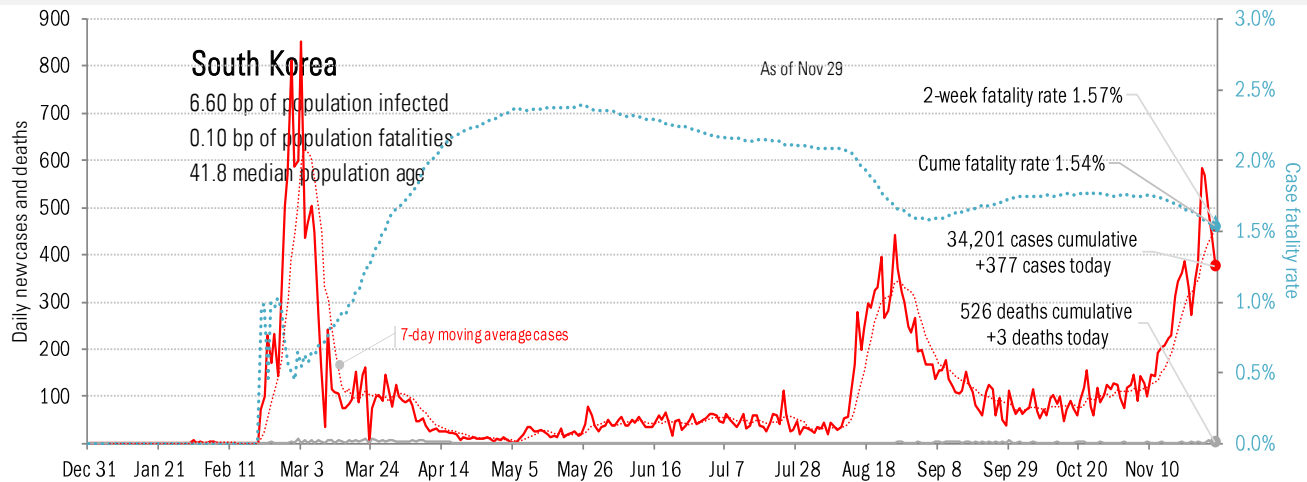


# Impact in continental Europe



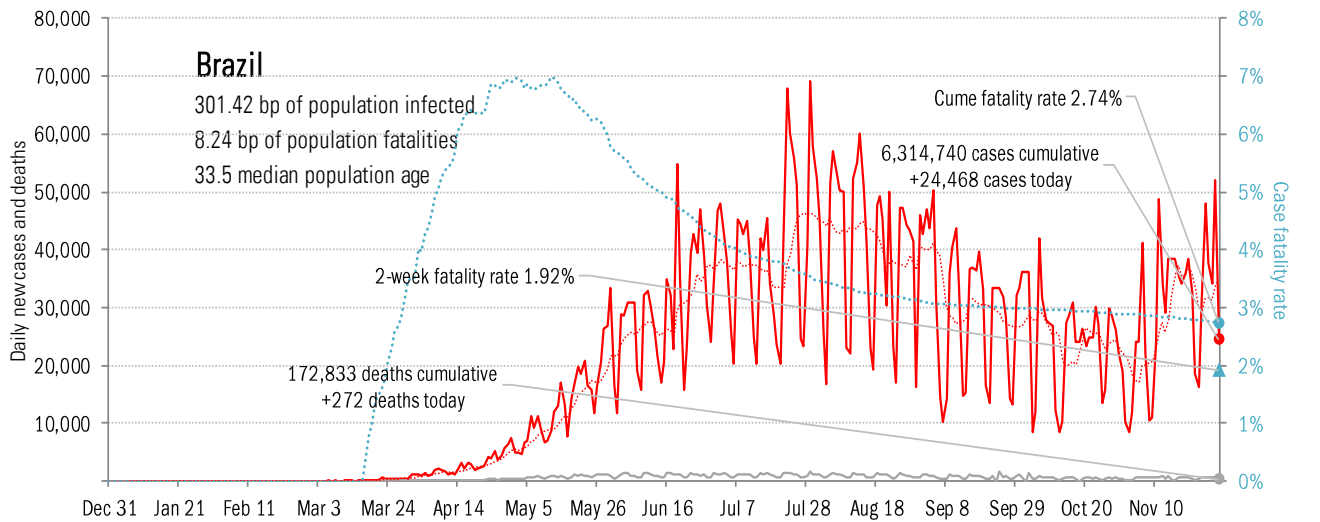
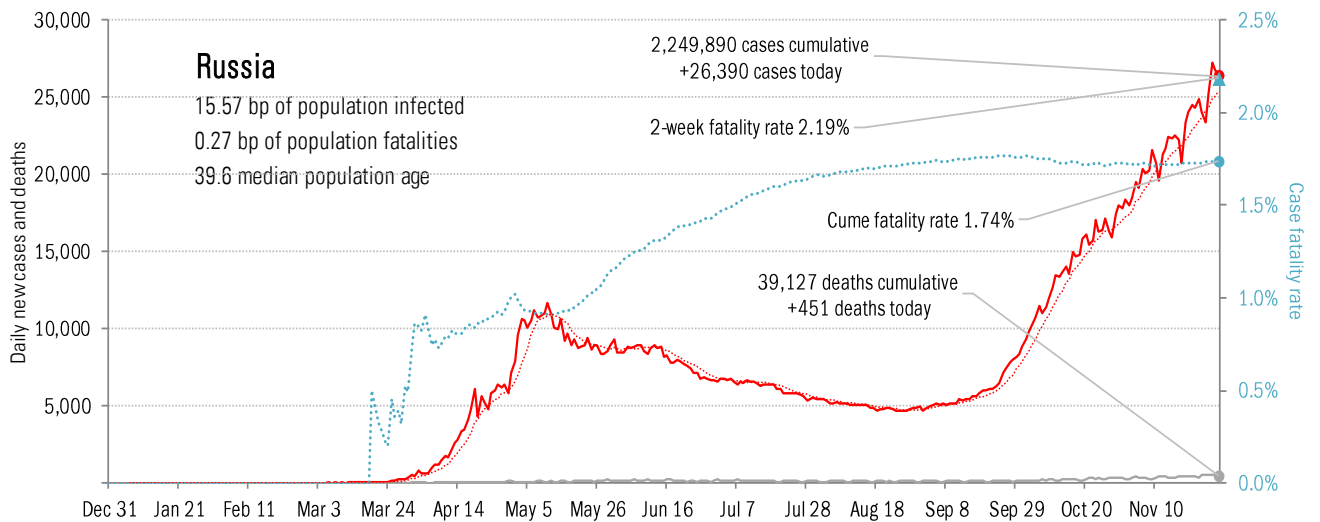
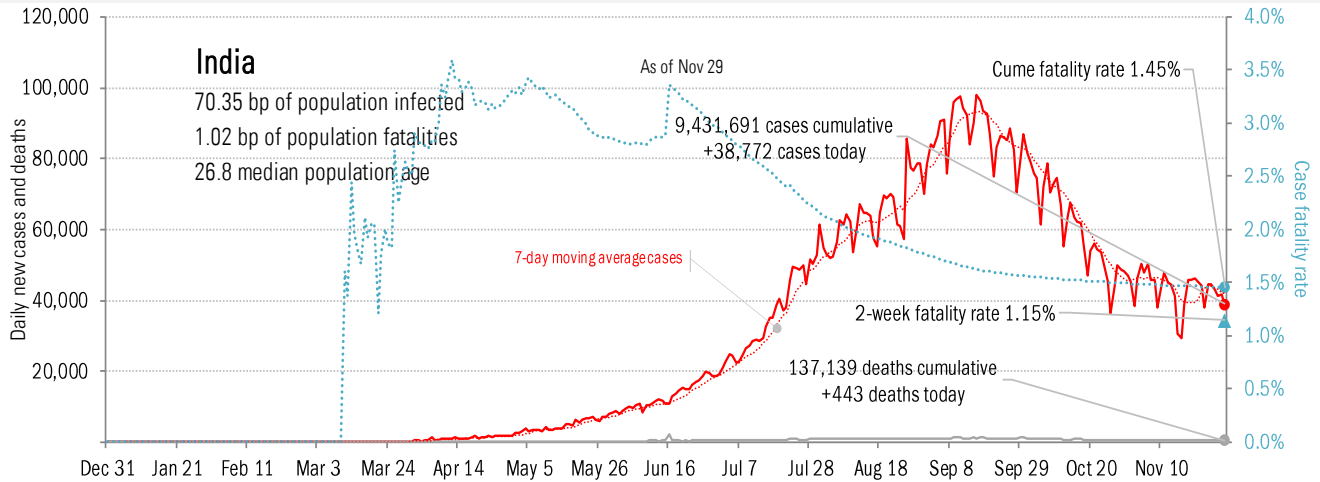
Source: [Johns Hopkins](#), TrendMacro calculations

# Impact in other hot-spots



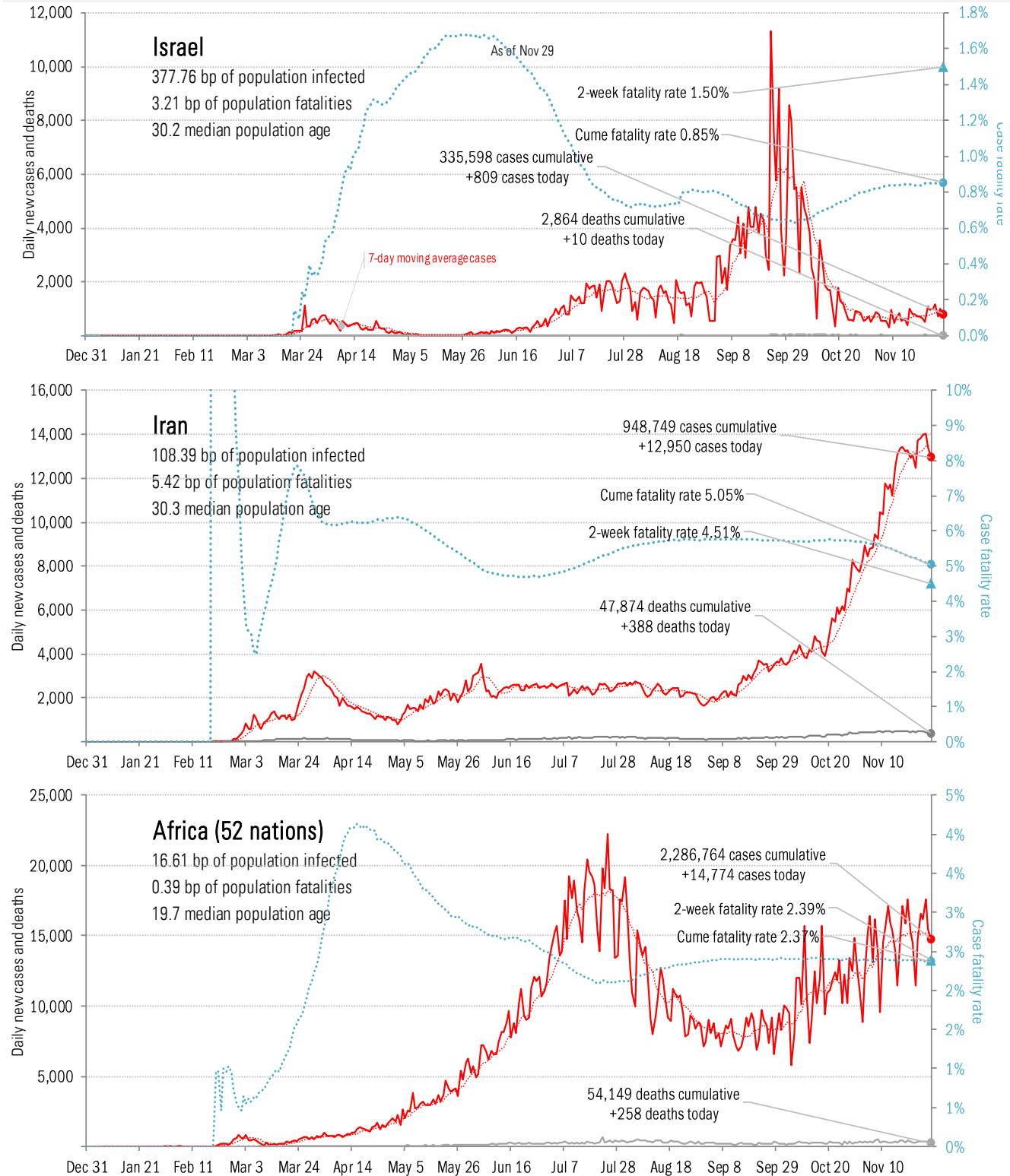
Source: [Johns Hopkins](#), TrendMacro calculations

# Impact in the BRICs ex-China



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

# Impact in the Middle East and Africa



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