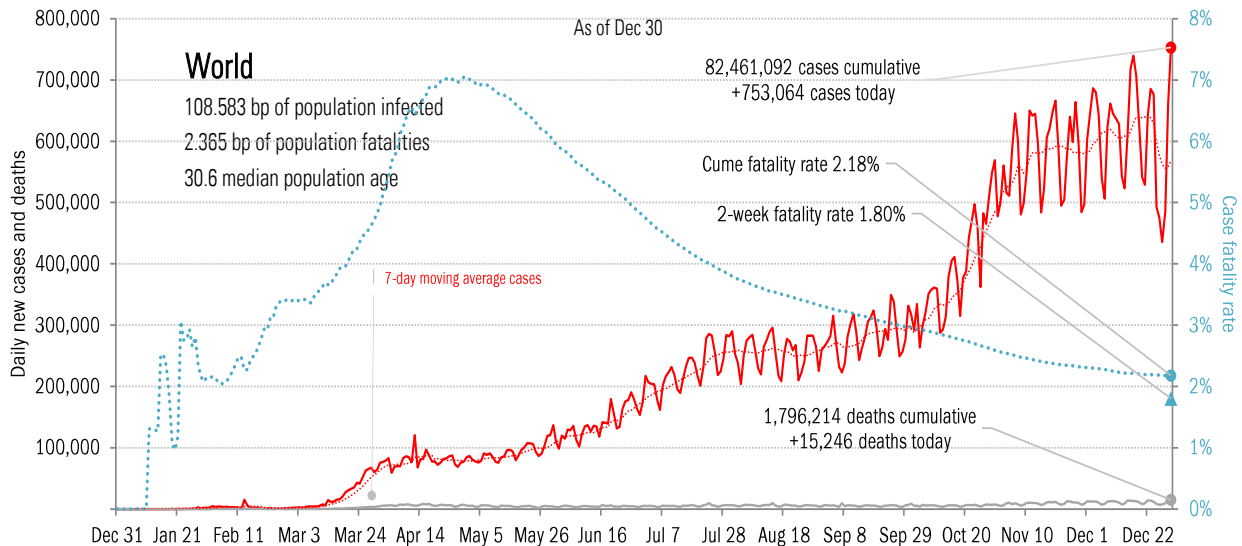
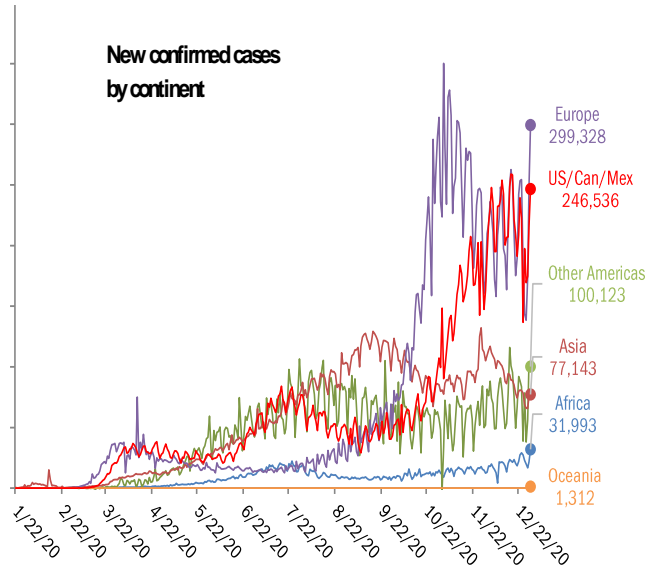


## Data Insights: Covid-2019 Monitor

Thursday, December 31, 2020

### The global scorecard

The worst ten countries			
New cases		New Deaths	
United States	+225,671	United States	+3,903
Brazil	+55,649	Brazil	+1,194
United Kingdom	+50,239	Mexico	+1,052
Germany	+49,044	United Kingdom	+982
France	+26,514	Germany	+963
Russia	+26,095	Russia	+585
India	+21,822	Italy	+575
South Africa	+17,710	Poland	+565
Spain	+16,716	South Africa	+465
Czechia	+16,420	France	+304
<b>+505,880</b>		<b>+10,588</b>	
World	+753,064	World	+15,246
Top ten	67%	Top ten	69%



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

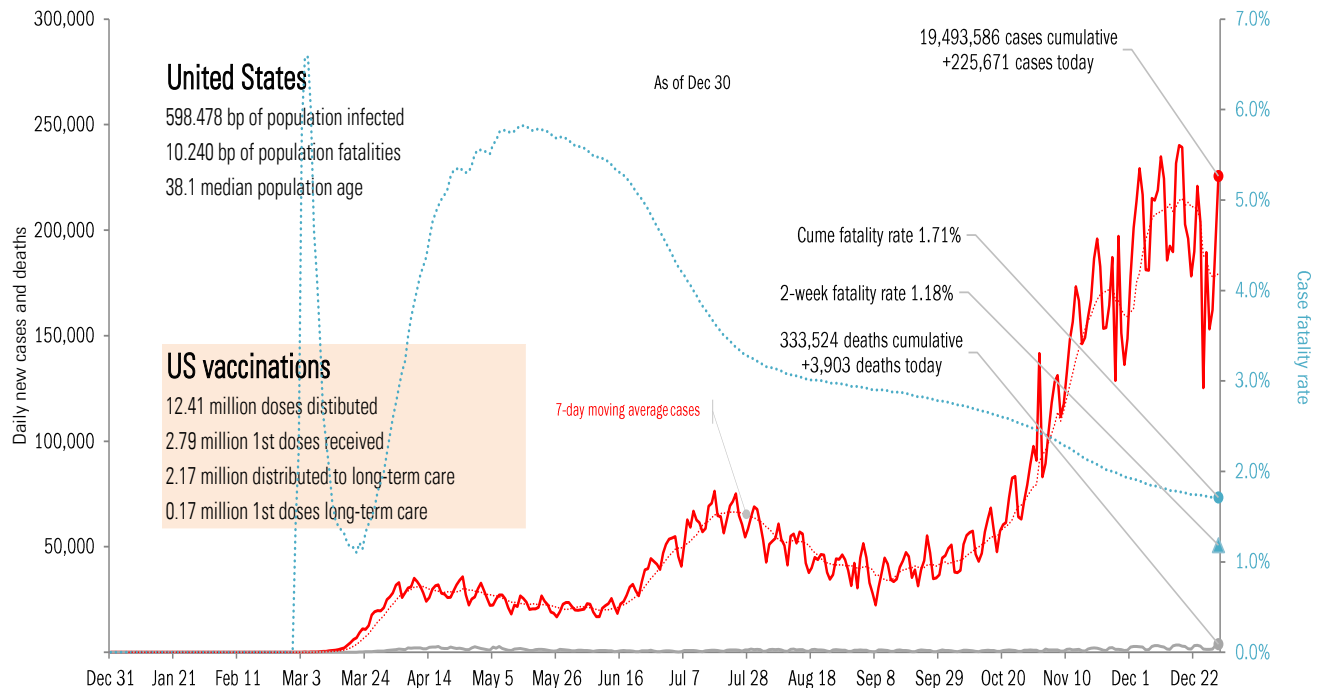
## The ten worst US states

New cases			New Deaths			New in hospital			Curre cases			Curre deaths			Curre in hospital			Hospital use		ICU use	
CA	+30,921		CA	+432		TX	+217		CA	2,218,142		NY	29,905		NY	89,995		NV	169%	NM	98%
TX	+21,469		TX	+326		KS	+213		TX	1,737,447		TX	27,088		FL	63,375		R	87%	AL	92%
FL	+13,638		PA	+319		CA	+193		FL	1,283,701		CA	24,958		NJ	47,090		GA	81%	RI	91%
NY	+13,422		IL	+215		TN	+151		NY	957,412		FL	21,857		GA	41,778		MD	79%	GA	90%
PA	+8,984		KS	+193		GA	+87		IL	955,380		NJ	18,952		CH	38,002		SC	79%	NV	87%
NC	+8,551		NJ	+175		NY	+78		CH	690,748		IL	17,811		AZ	36,784		CA	78%	OK	87%
TN	+8,220		WA	+174		NV	+59		PA	631,333		PA	15,672		IN	34,761		AZ	77%	CA	87%
CH	+8,178		NC	+155		MS	+54		TN	580,809		MI	13,018		AL	33,831		DC	75%	TX	85%
IL	+7,374		NY	+149		AZ	+51		GA	558,177		MA	12,338		MD	26,447		MA	75%	WV	85%
MA	+6,839		FL	+139		SC	+47		NC	532,830		GA	10,846		MN	21,748		FL	75%	TN	84%
+127,596			+2,277			+1,150			10,145,979			192,445			433,811						
All states	+225,671		+3,903			+527			All states	19,493,586		333,524			681,868			All states	70%		76%
Top ten	57%		58%			218%			Top ten	52%		58%			64%			Median	67%		74%

Some states not reporting

## Five most improved US states

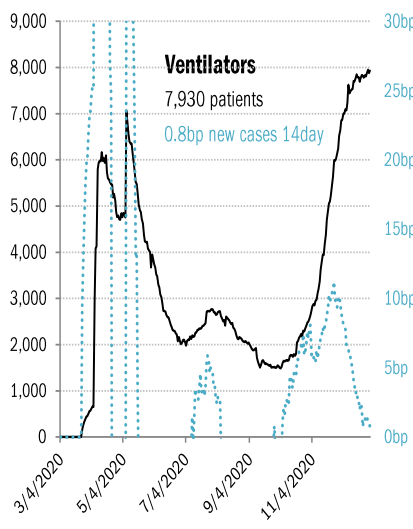
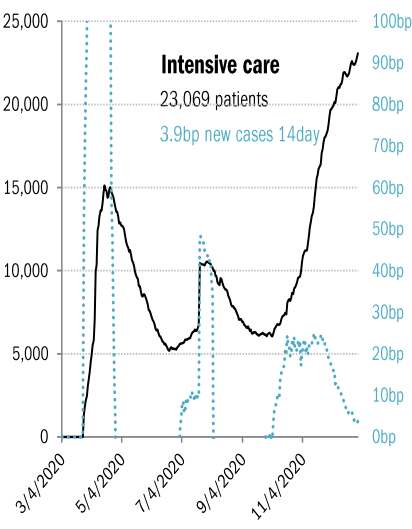
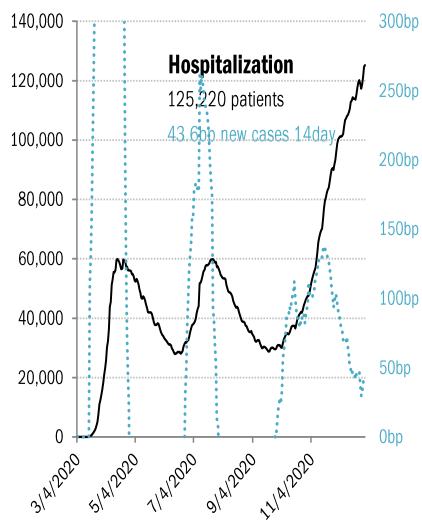
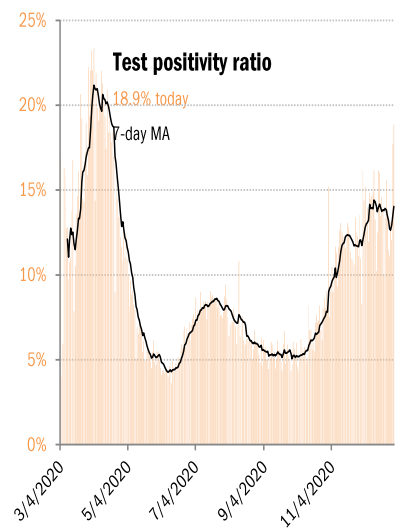
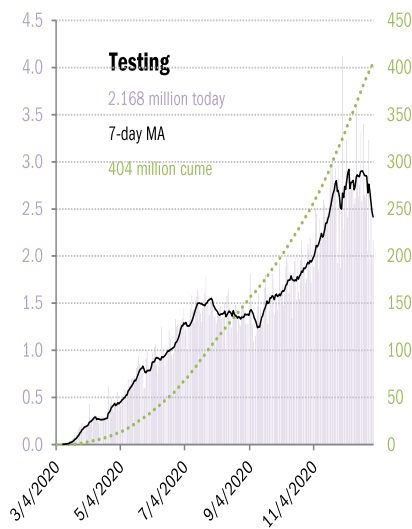
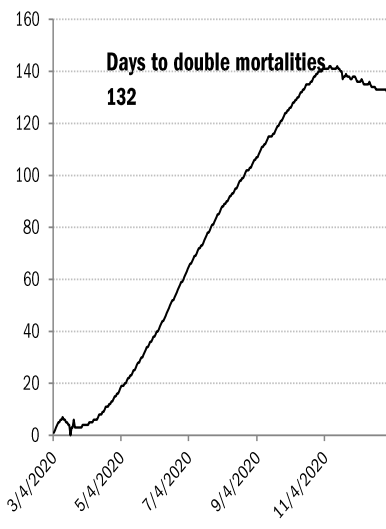
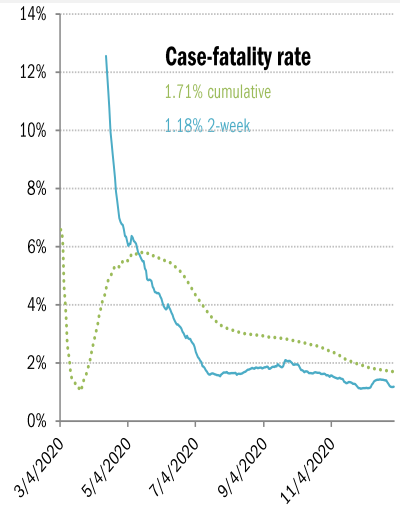
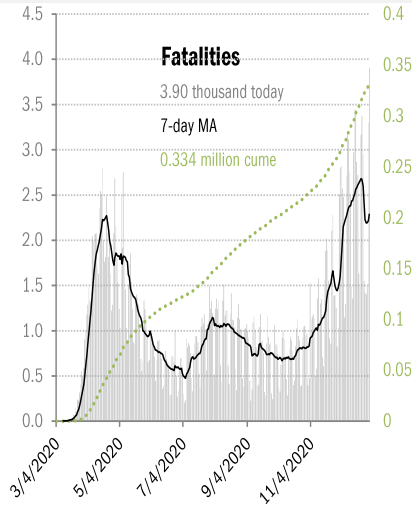
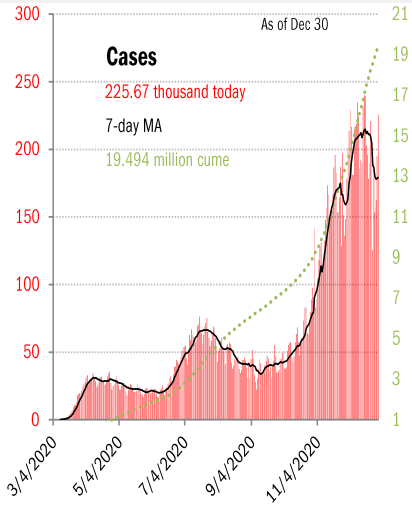
Fewer daily cases		Fewer new deaths		Fewer new hospitalizations		Most recoveries	
TX	-11,083	MI	-160	CA	-405	LA	+16,211
FR	-2,034	AZ	-93	MI	-243	TX	+14,978
NH	-482	MO	-59	NC	-223	PA	+12,153
GA	-388	IA	-57	OK	-209	CH	+10,818
CA	-324	MS	-57	TX	-207	AL	+8,988



Source: [Covid Tracking Project](#), [Dept. of Health and Human Services](#), [CDC](#), TrendMacro calculations

# US deep-dive

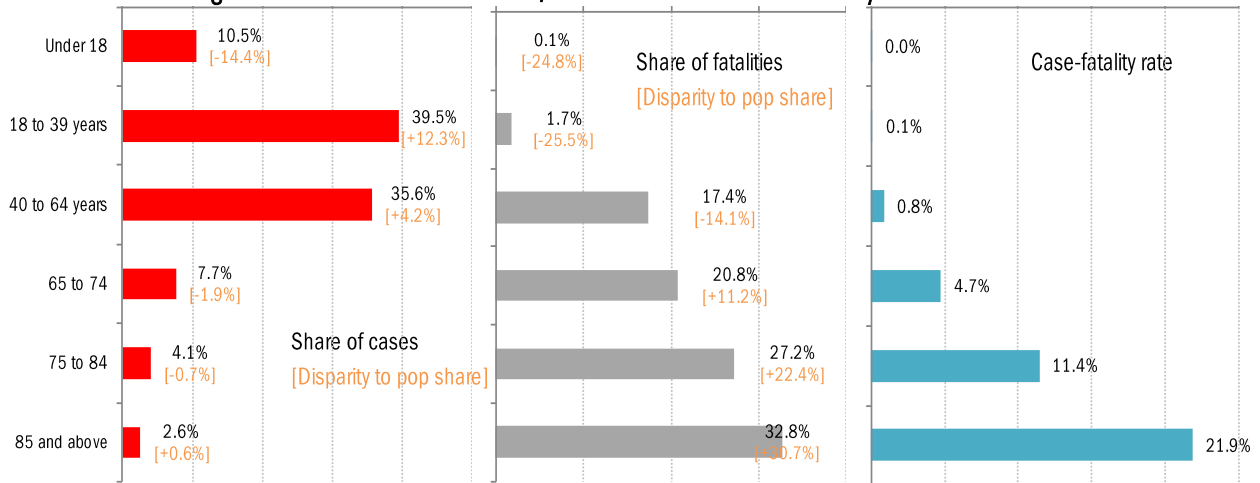
National and state-by-state data do not line up because of different sources



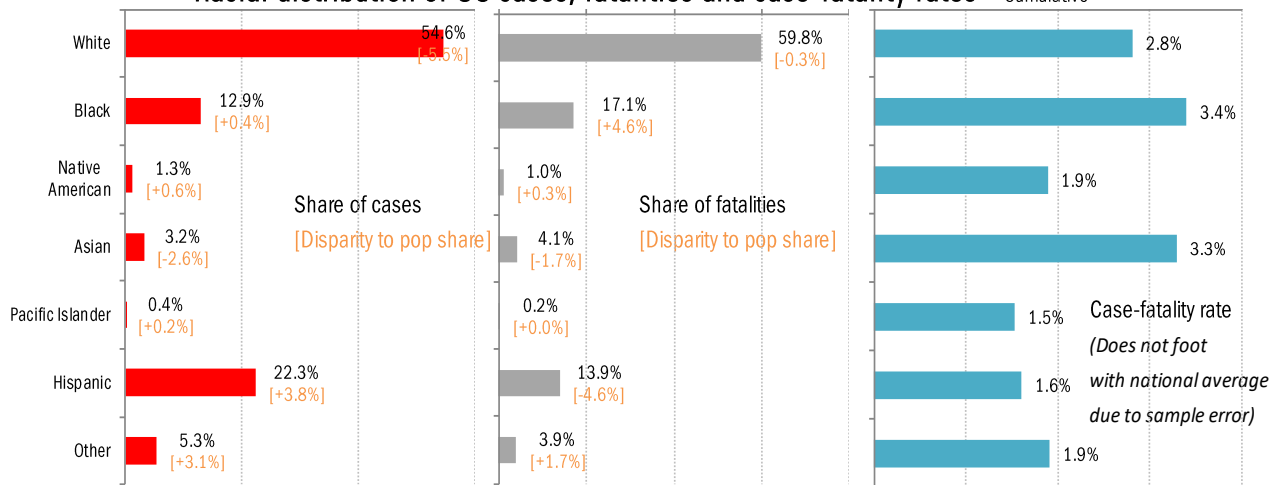
Source: [Covid Tracking Project](#), TrendMacro calculations

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

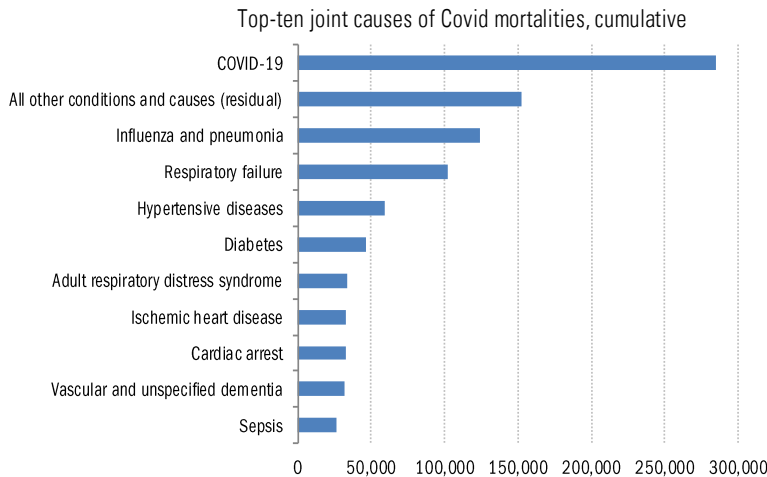
## Age distribution of US cases, fatalities and case-fatality rates



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



## Comorbidities



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 2.9 additional conditions or causes per death.

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

## Recommended reading

[Dawn Wells, 'Gilligan's Island's' Mary Ann, Dies of COVID at 82](#)

Dawn Wells, 'Gilligan's Island's' Mary Ann, Dies of COVID at 82

*Variety*

December 30, 2020

[Study shows Wuhan coronavirus cases may have been 10 times higher than reported](#)

Celine Castronuovo

*The Hill*

December 29, 2020

[Congressional staffers eligible to receive coronavirus vaccine](#)

Kyle Cheney

*Politico*

December 28, 2020

[Covid-19 Mortality: A Matter of Vulnerability Among Nations Facing Limited Margins of Adaptation](#)

Quentin De Larochelambert et al.

*Frontiers in Public Health*

November 19, 2020

[U.S. Reports First Case of New Covid-19 Variant](#)

Lukas I. Alpert and Daniela Hernandez

*Wall Street Journal*

December 29, 2020

[Louisiana GOP Congressman-Elect Luke Letlow Dies of Covid-19](#)

Natalie Andrews

*Wall Street Journal*

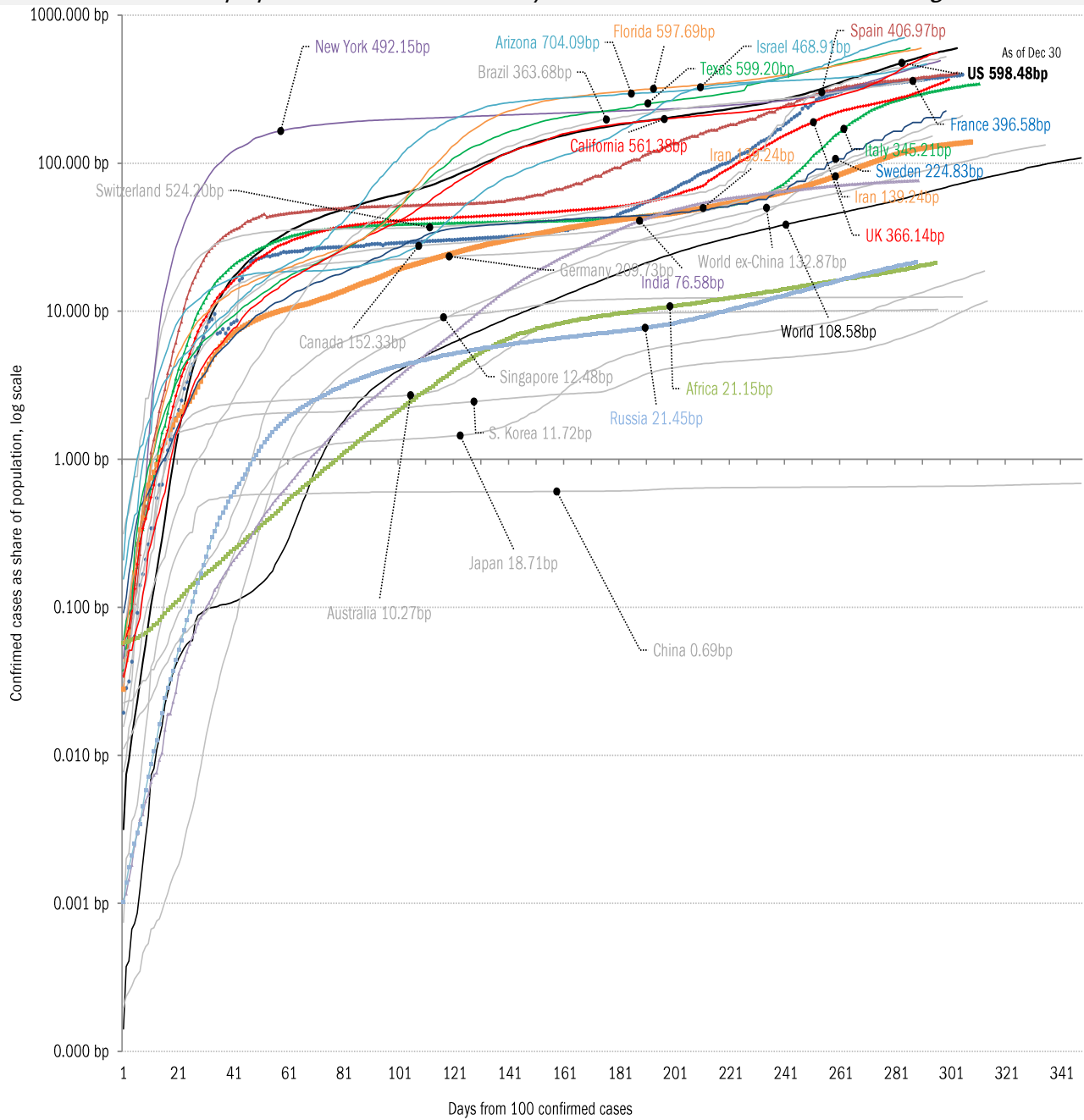
December 30, 2020

## Meme of day



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

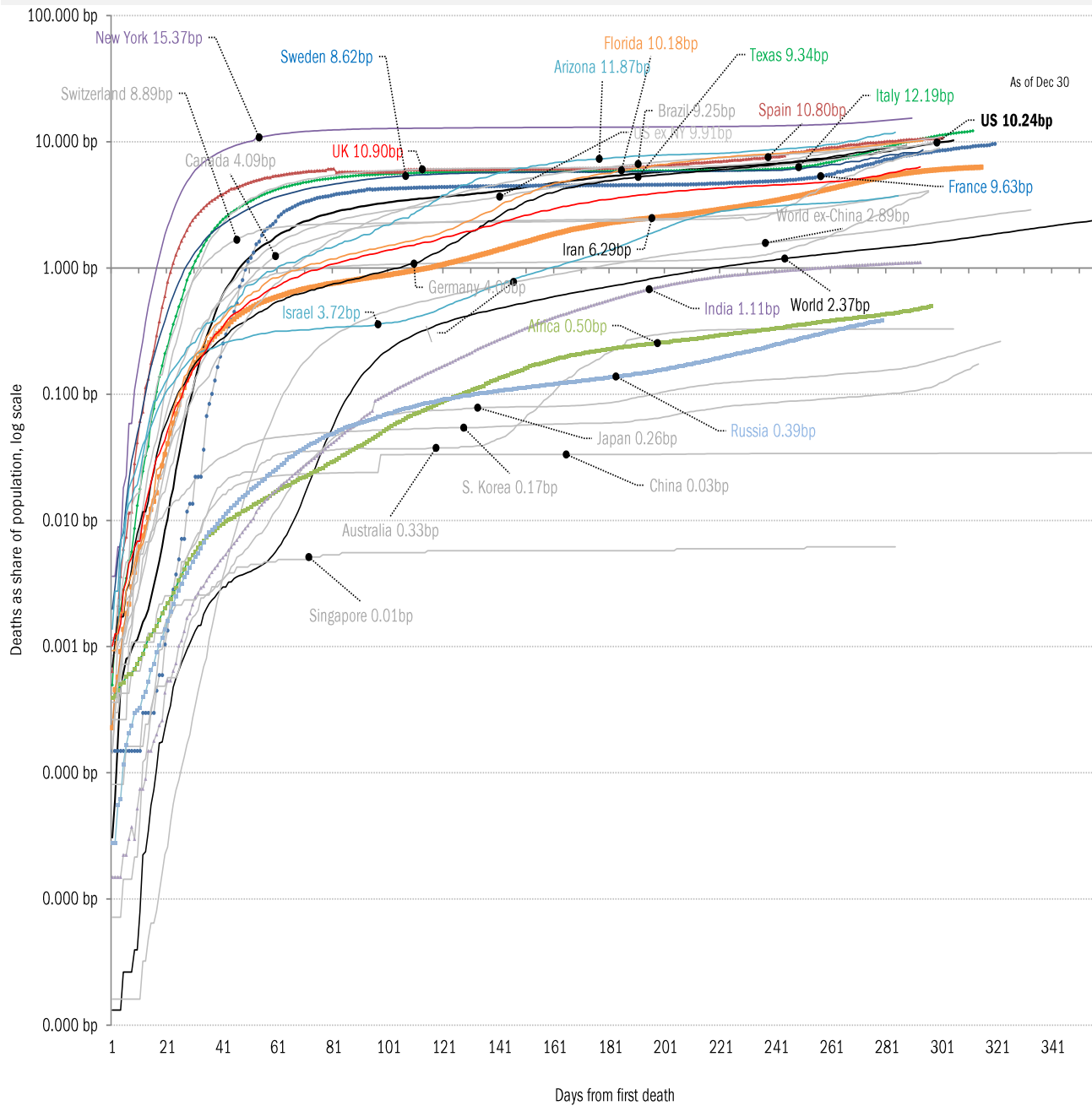
The coronavirus case accelerometer... tracking the world's infection curves  
*Share of infected population from first day with 100 confirmed cases, log scale*



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

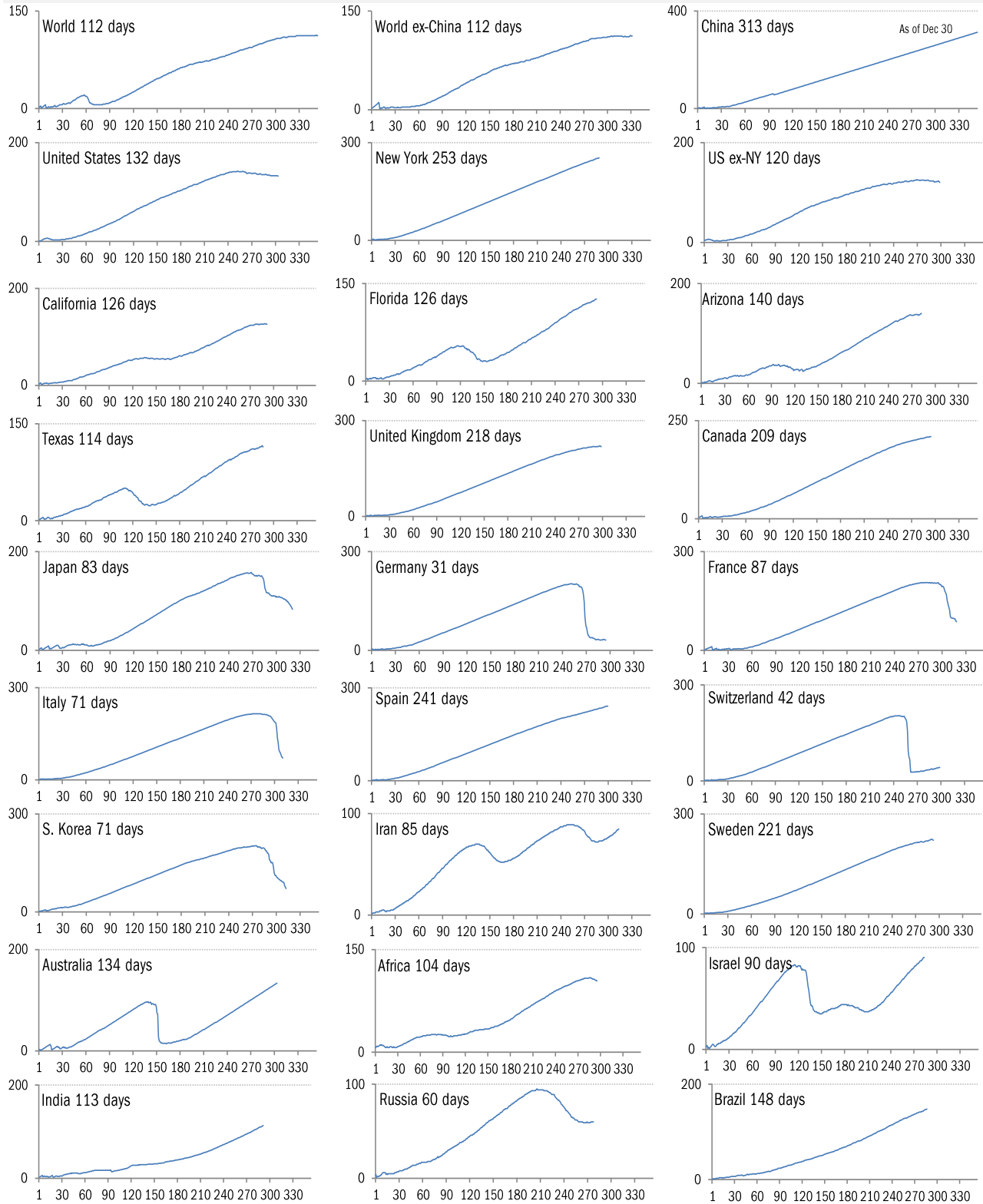


Source: [Johns Hopkins](#), [Covid Tracking Project](#), TrendMacro calculations

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

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

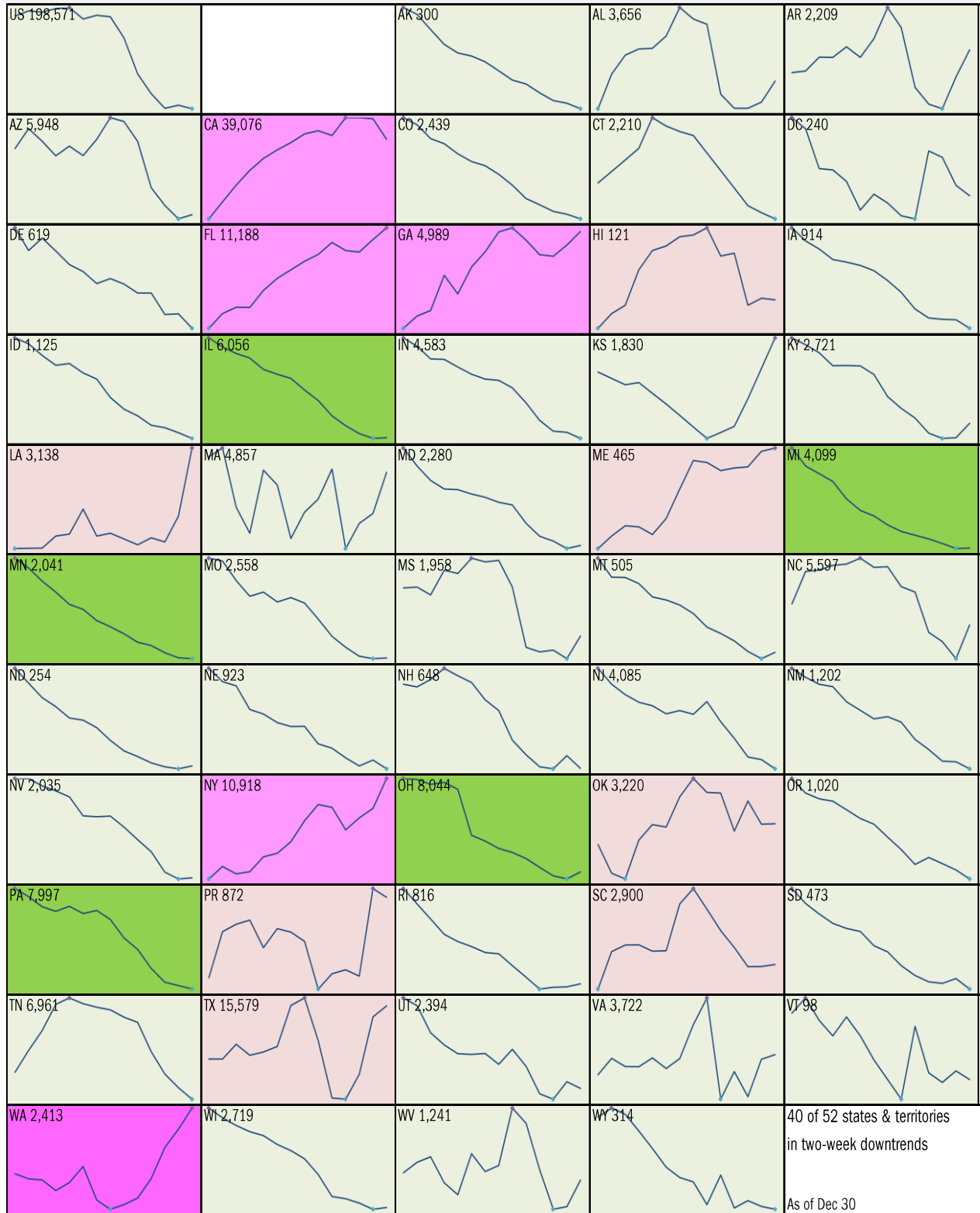
Flat indicates exponential spread Declining indicates supra-exponential spread Rising indicates sub-exponential spread



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



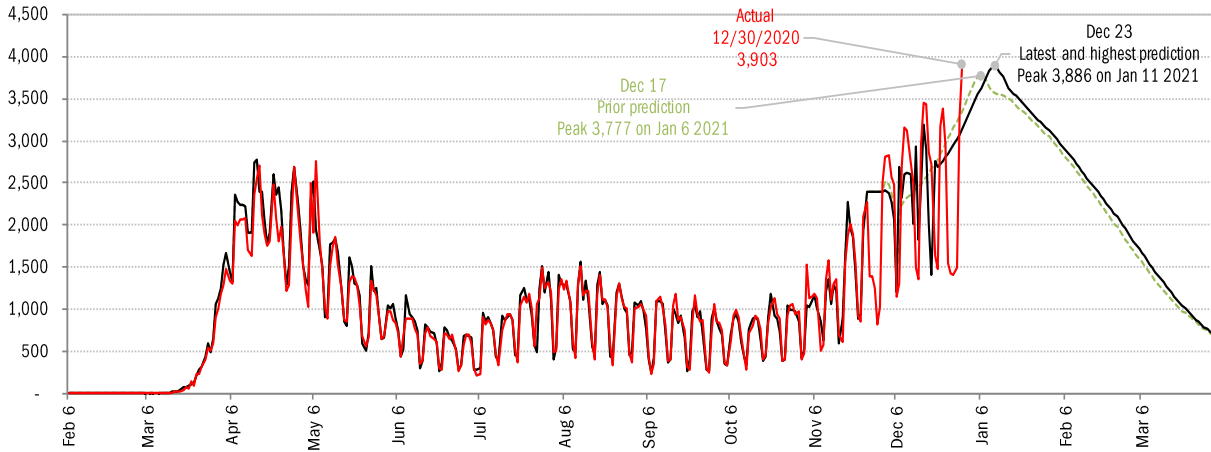
Source: [Covid Tracking Project](#), TrendMacro calculations

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

## New daily fatalities

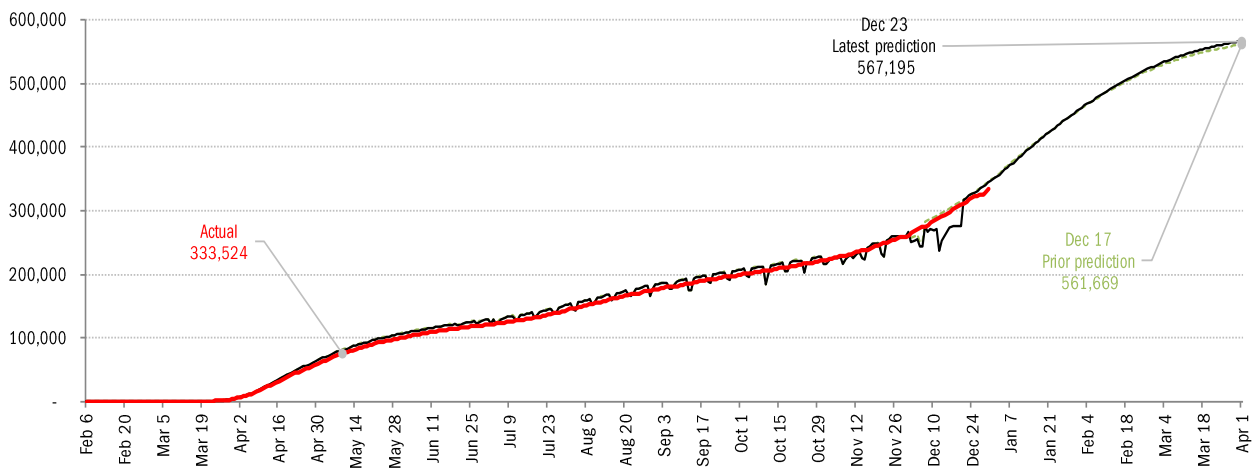
As of Dec 30

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

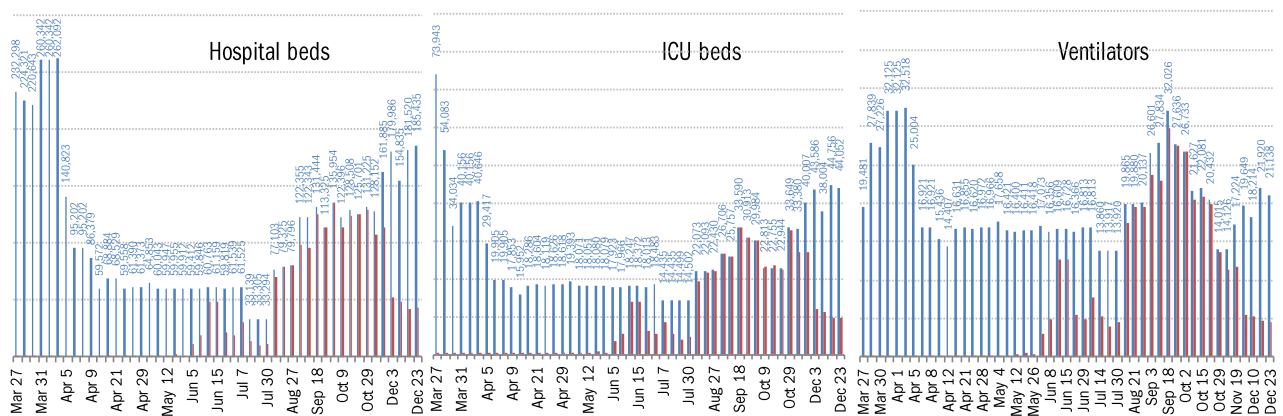


## Cumulative fatalities

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

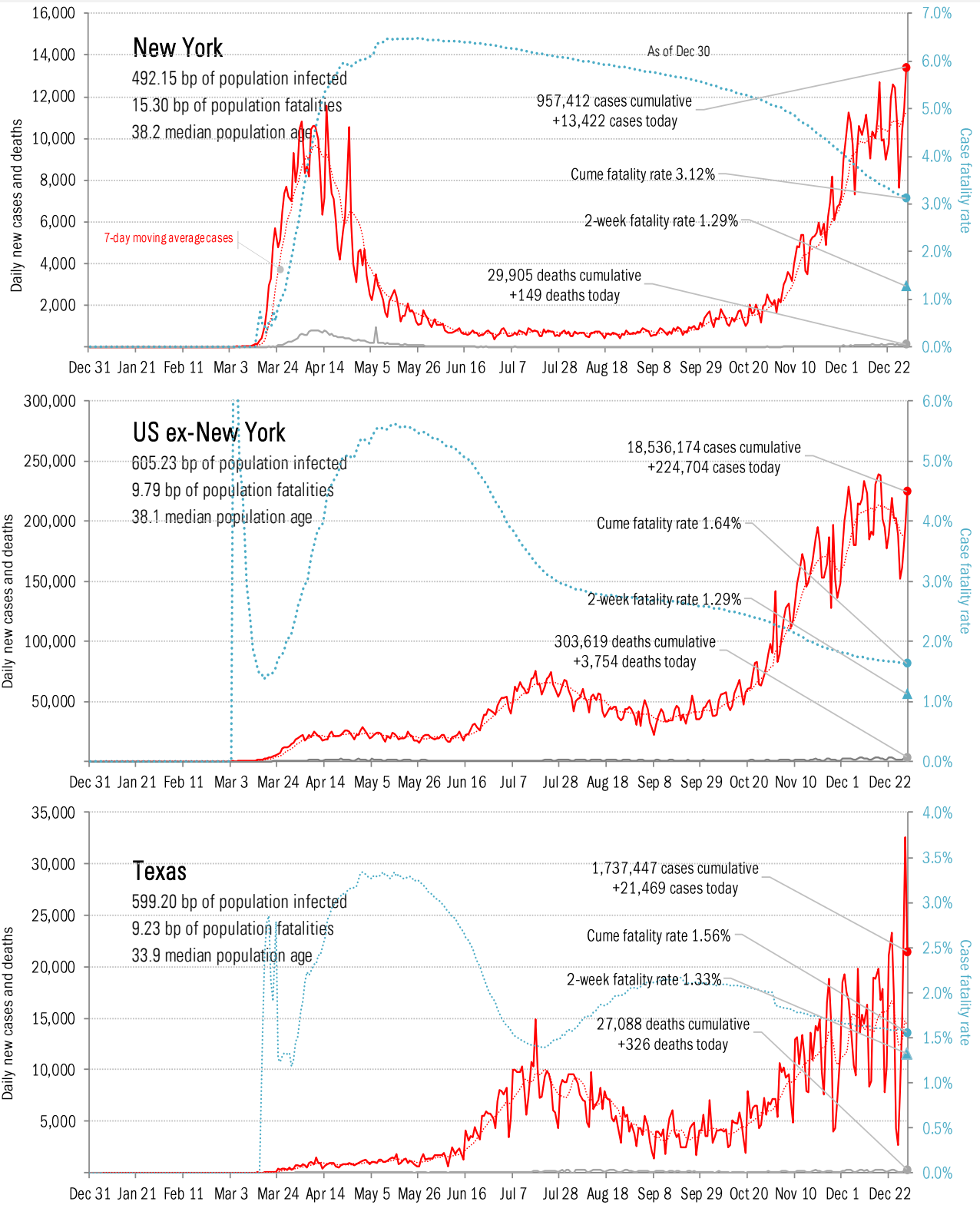


## Healthcare system stress, **peak** and **ultimate** estimated at each model revision



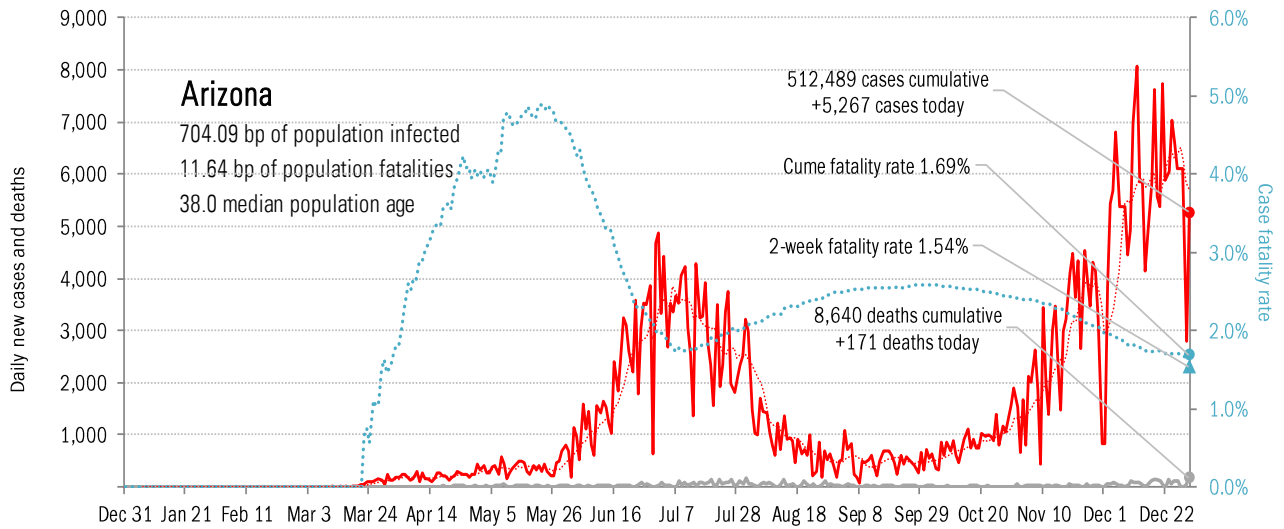
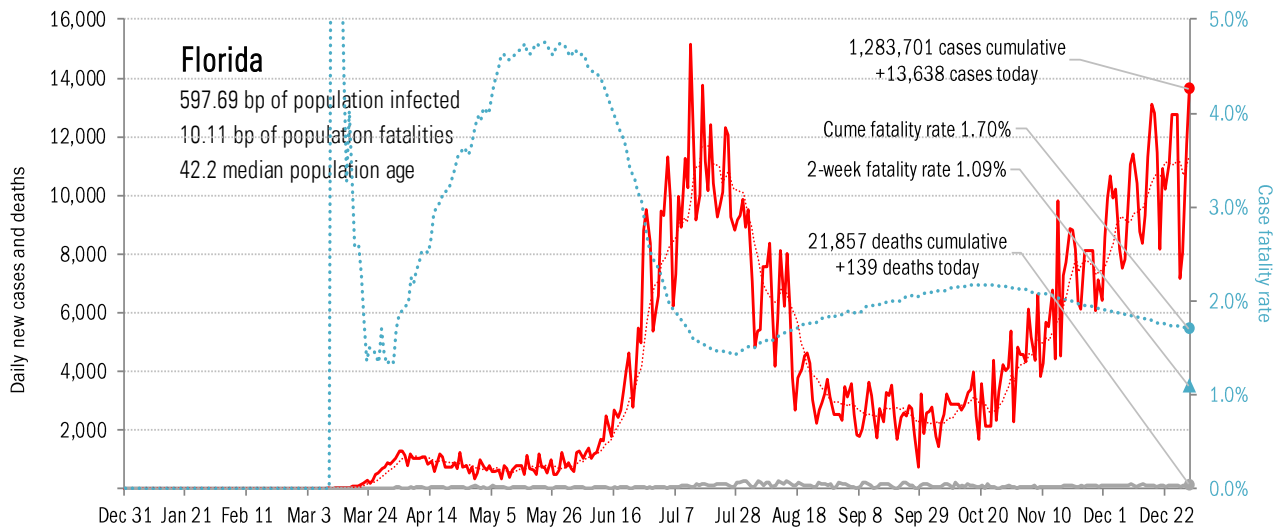
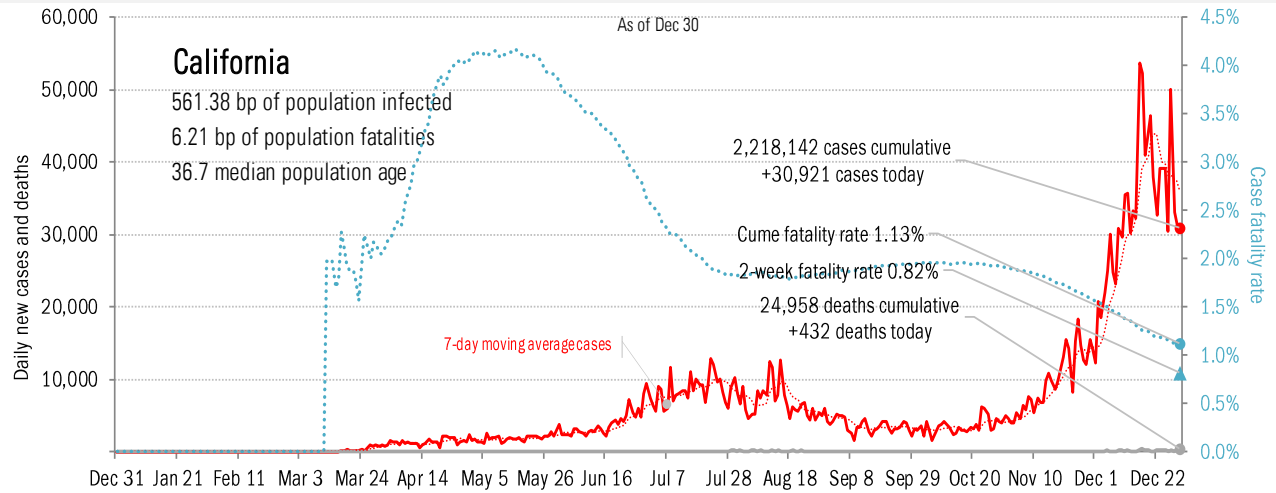
Source: [IHME Covid Tracking Project](#), TrendMacro calculations

# From Ground Zero to the Rio Grande



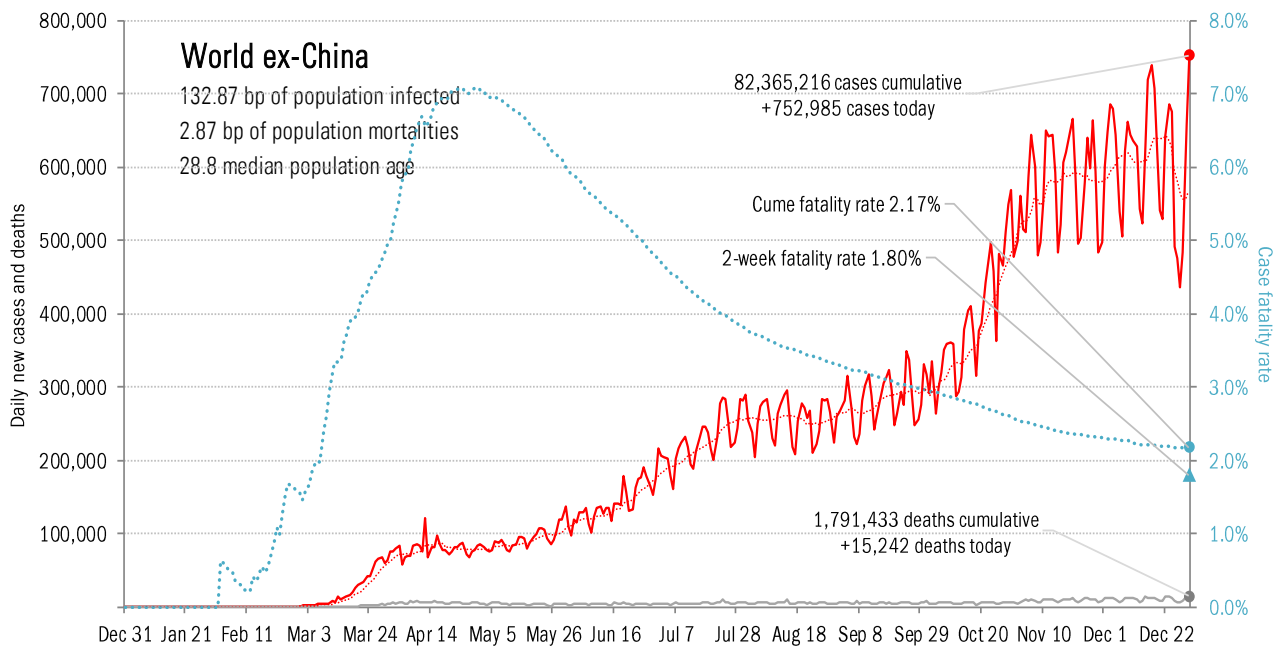
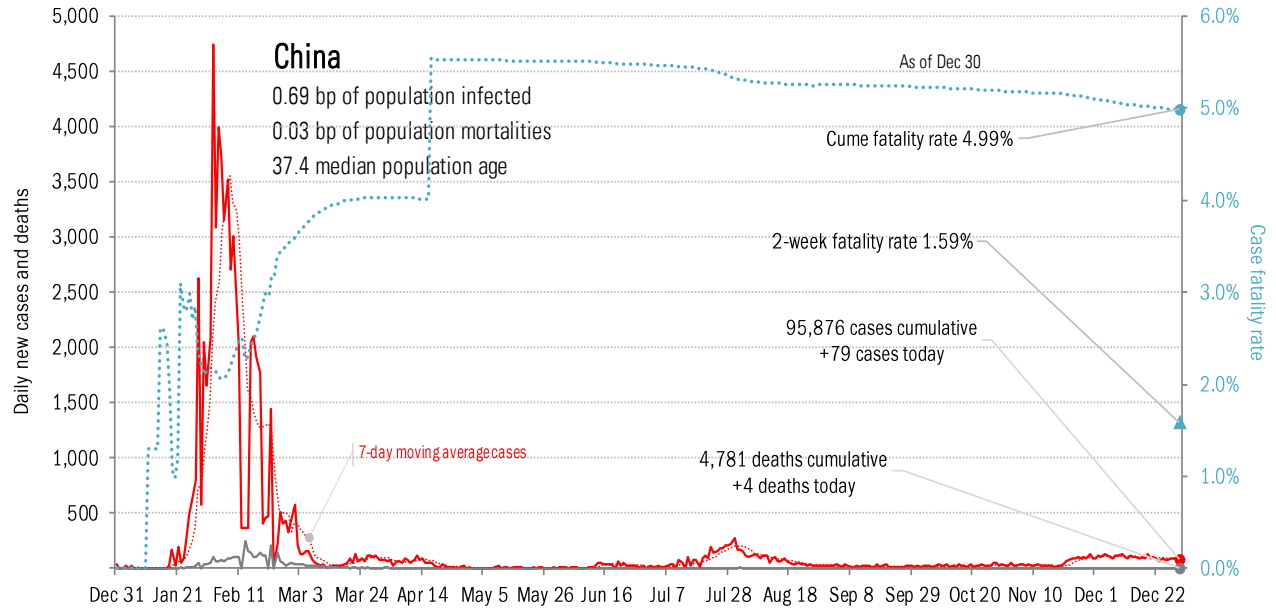
Source: [Covid Tracking Project](#), TrendMacro calculations

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



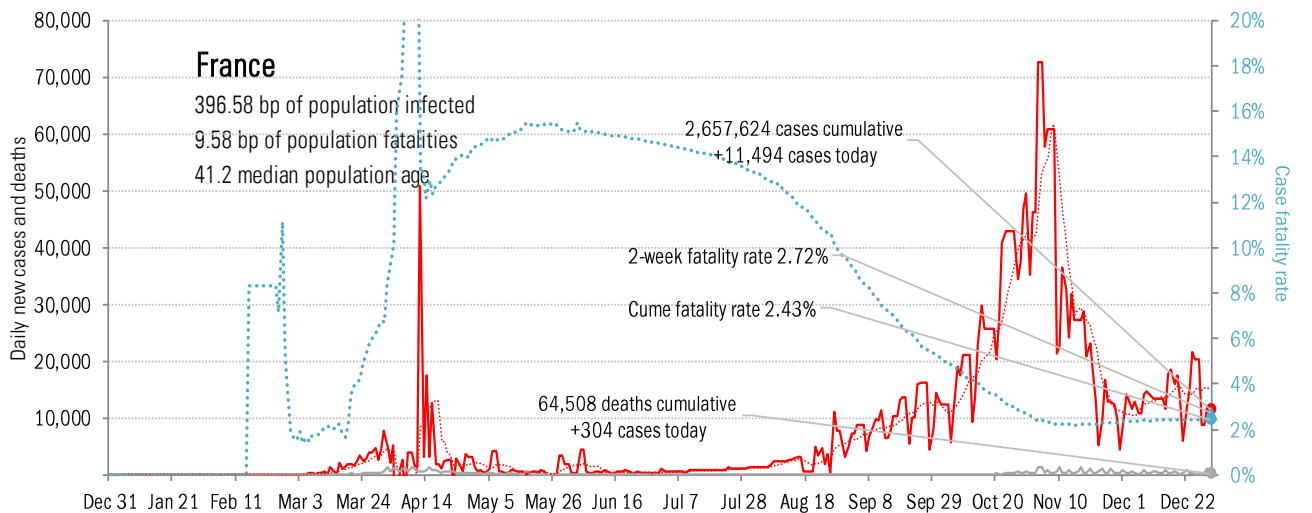
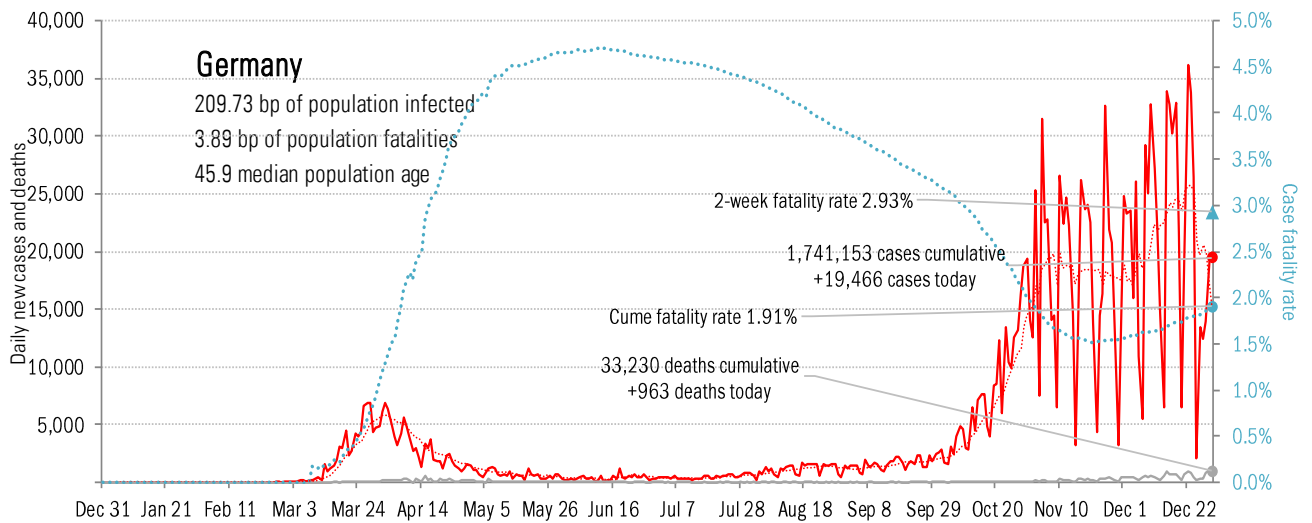
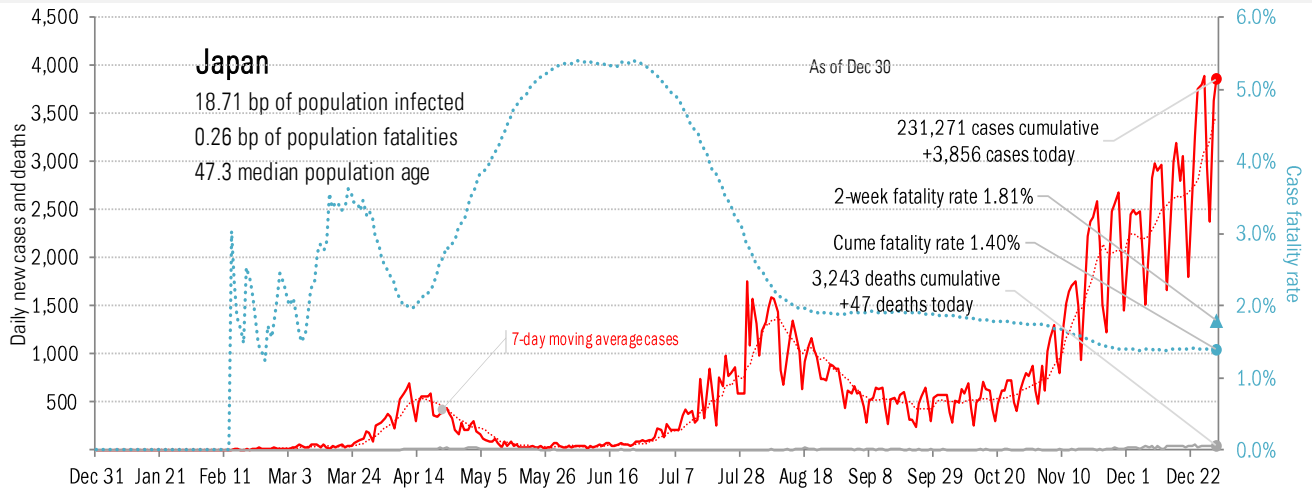
Source: [Covid Tracking Project](#), TrendMacro calculations

# Patient zero... and then everyone else



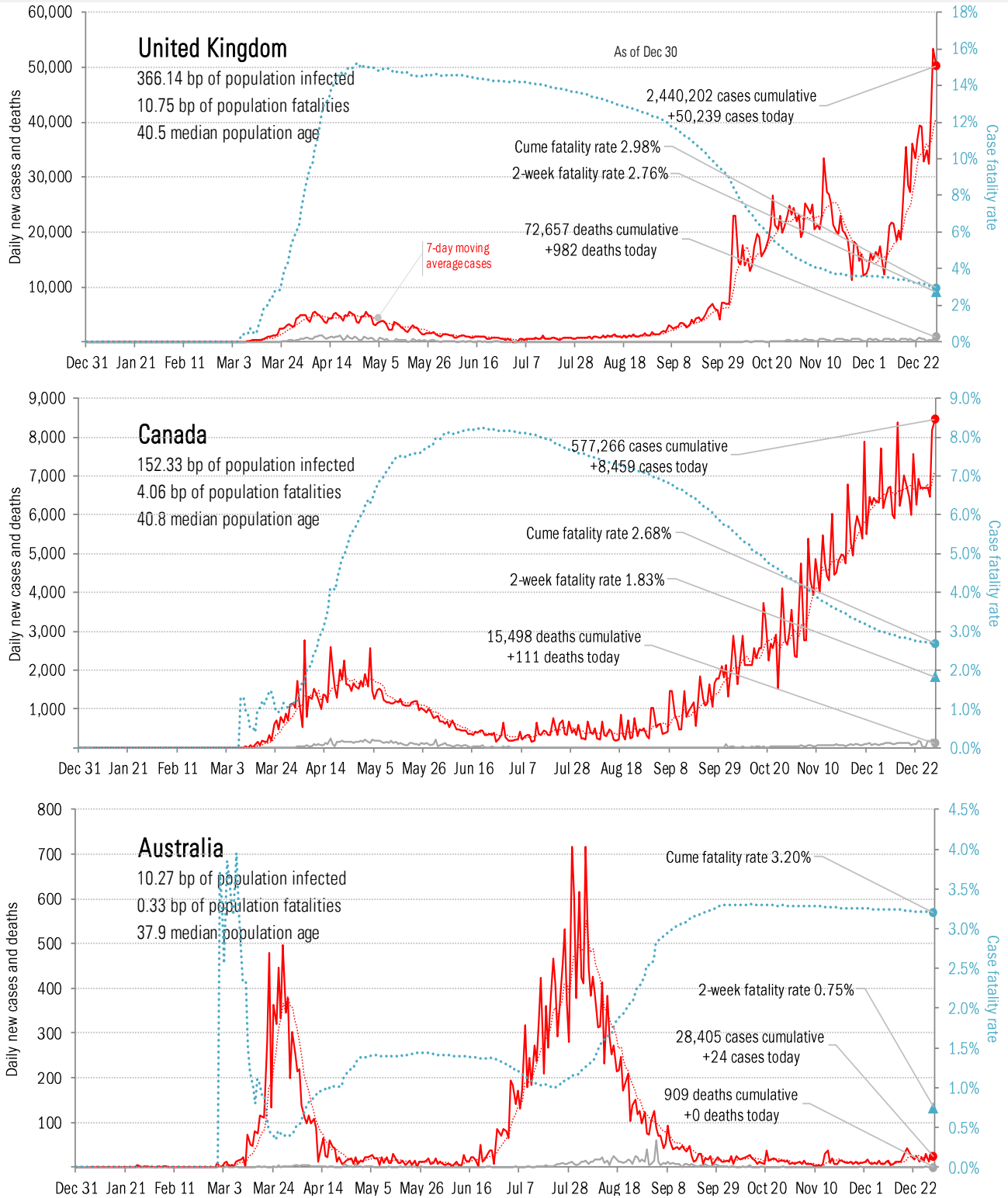
Source: [Johns Hopkins](#), [Covid Tracking Project](#), TrendMacro calculations

# Impact in the largest economies



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

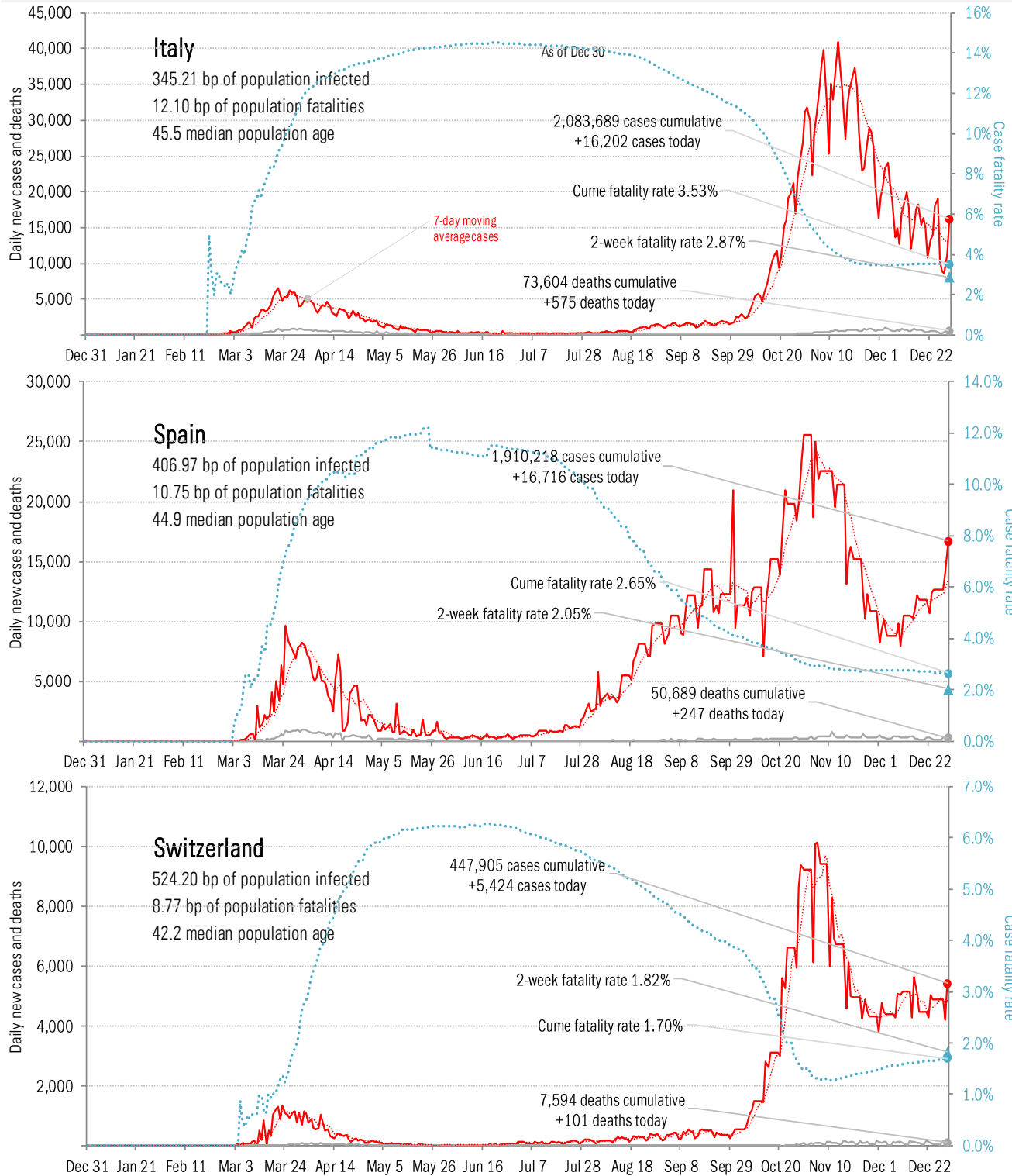
# Impact in The Anglosphere



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

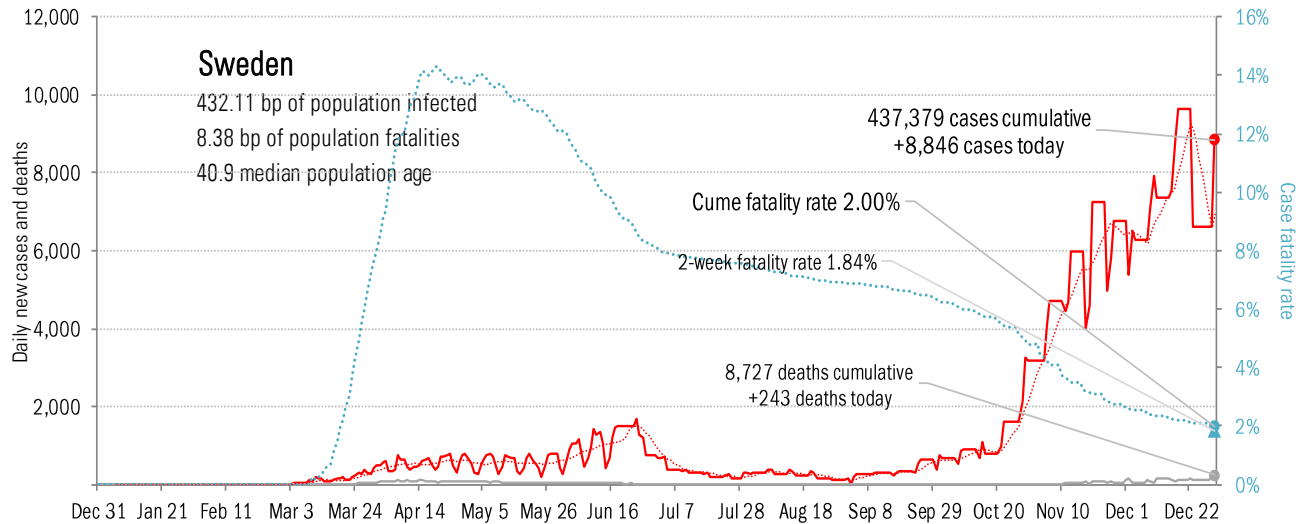
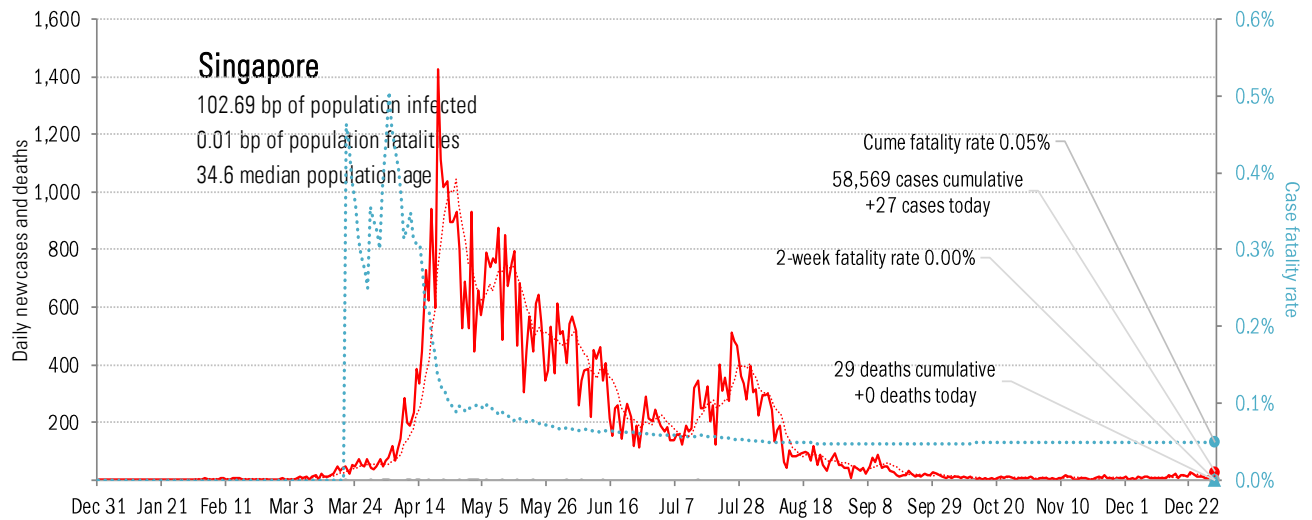
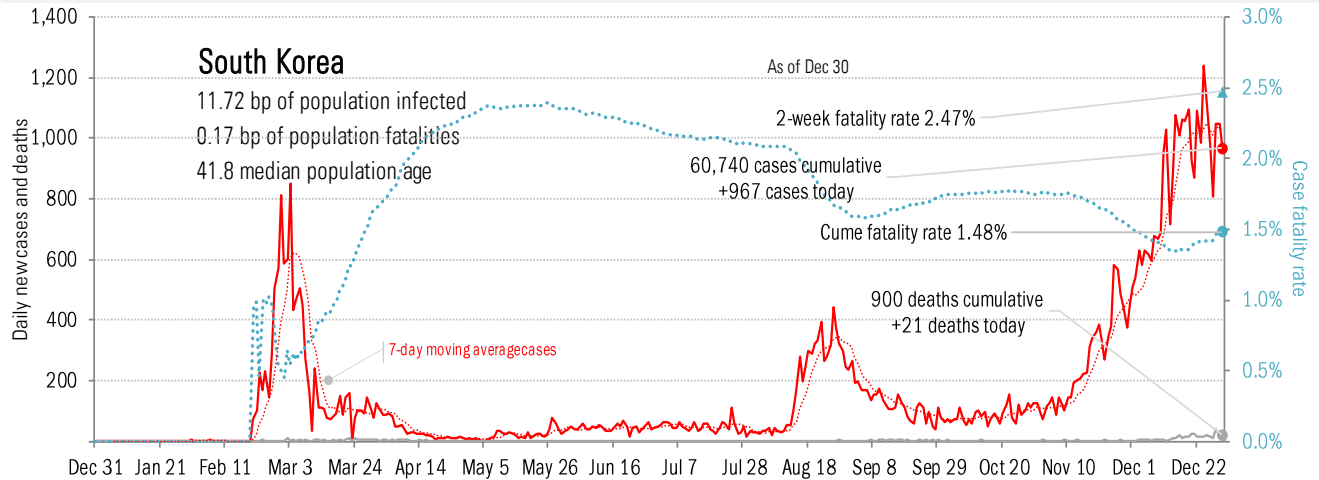


# Impact in continental Europe



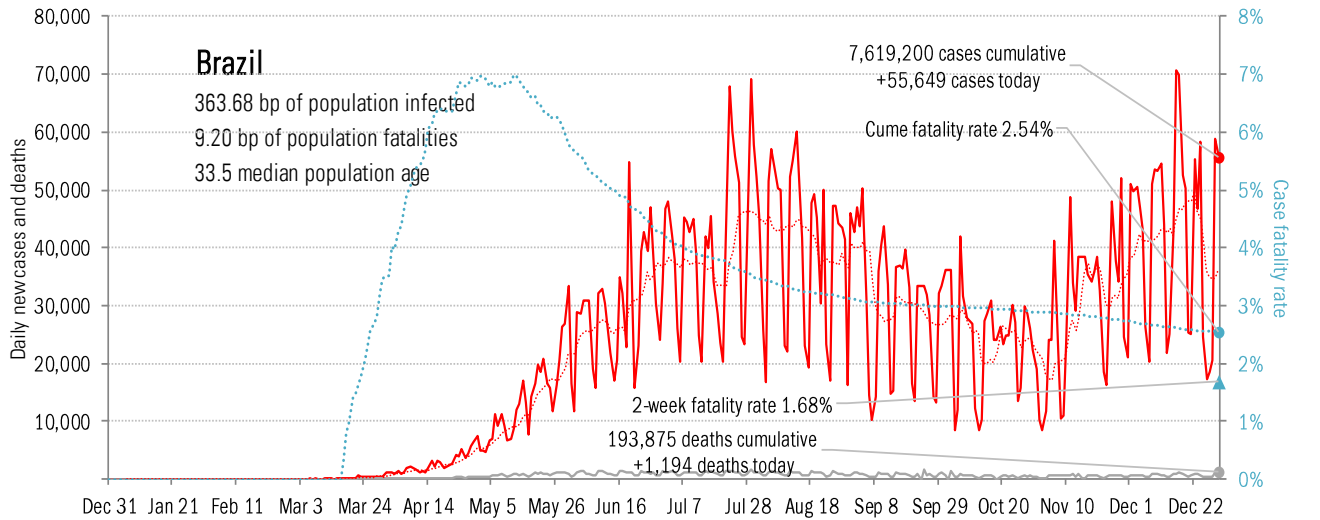
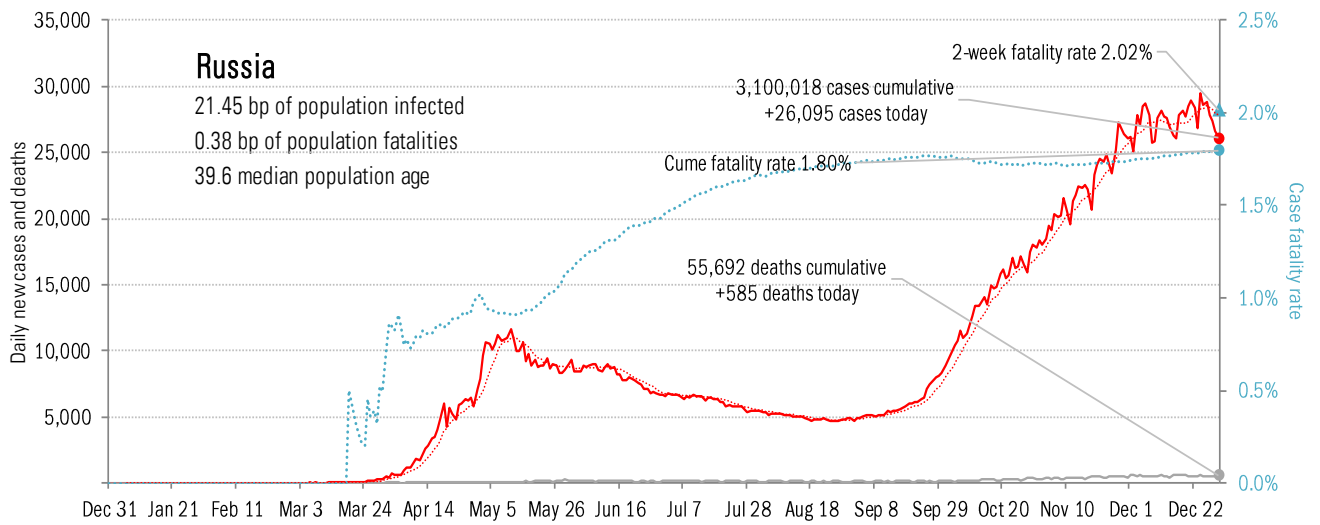
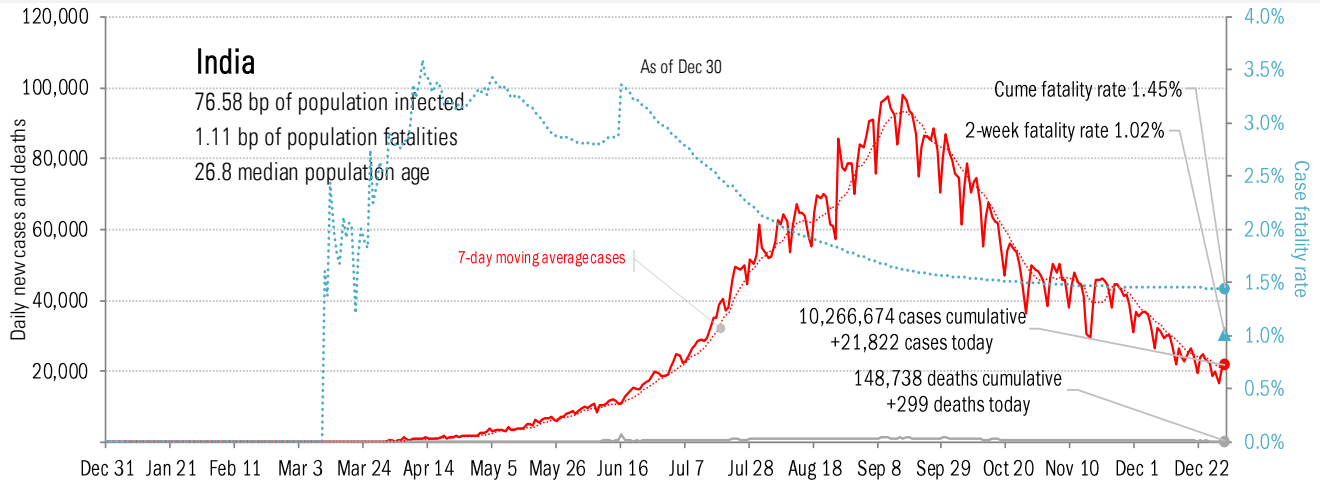
Source: [Johns Hopkins](#), TrendMacro calculations

# Impact in other hot-spots



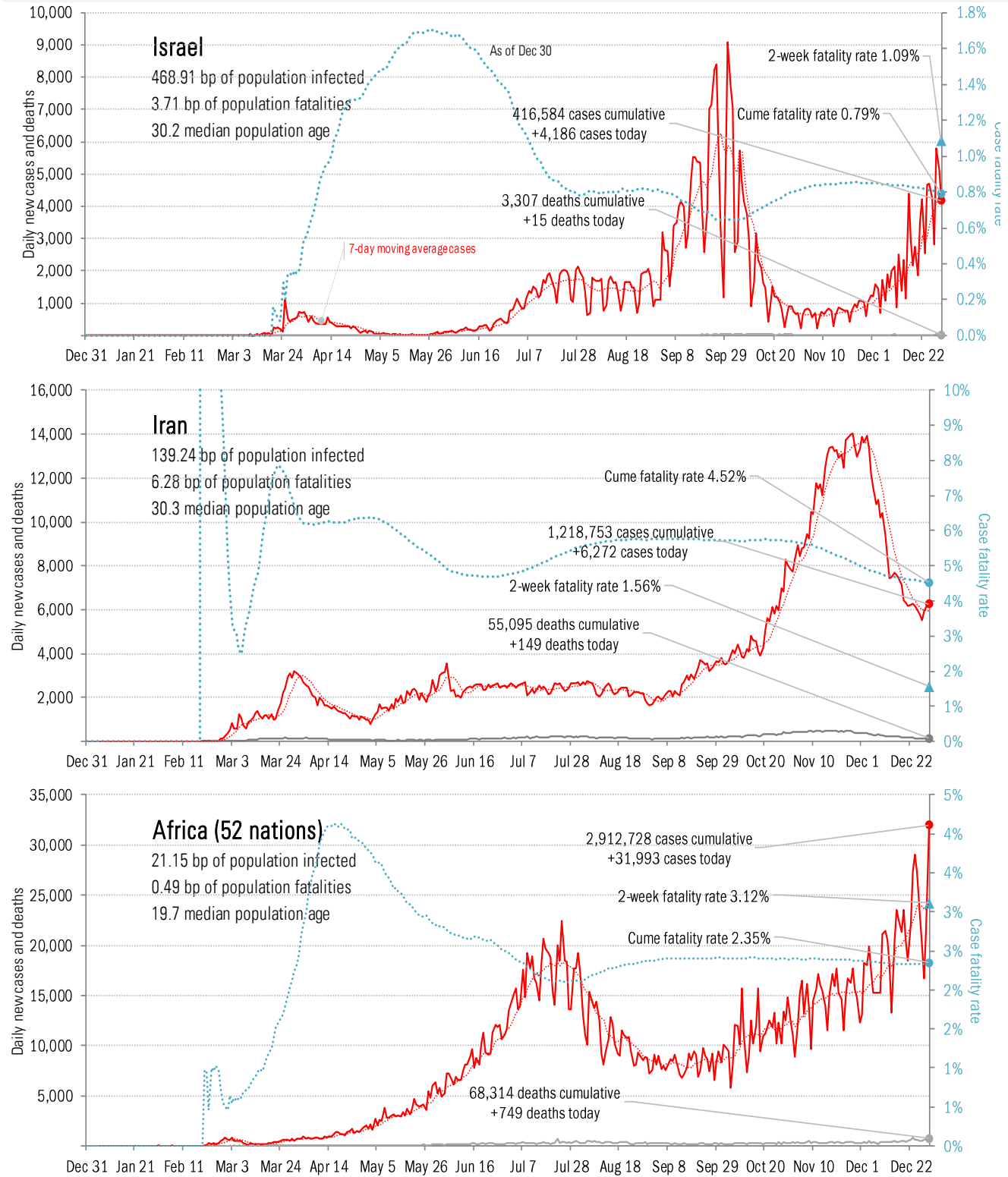
Source: [Johns Hopkins](#), TrendMacro calculations

# Impact in the BRICs ex-China



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

# Impact in the Middle East and Africa



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