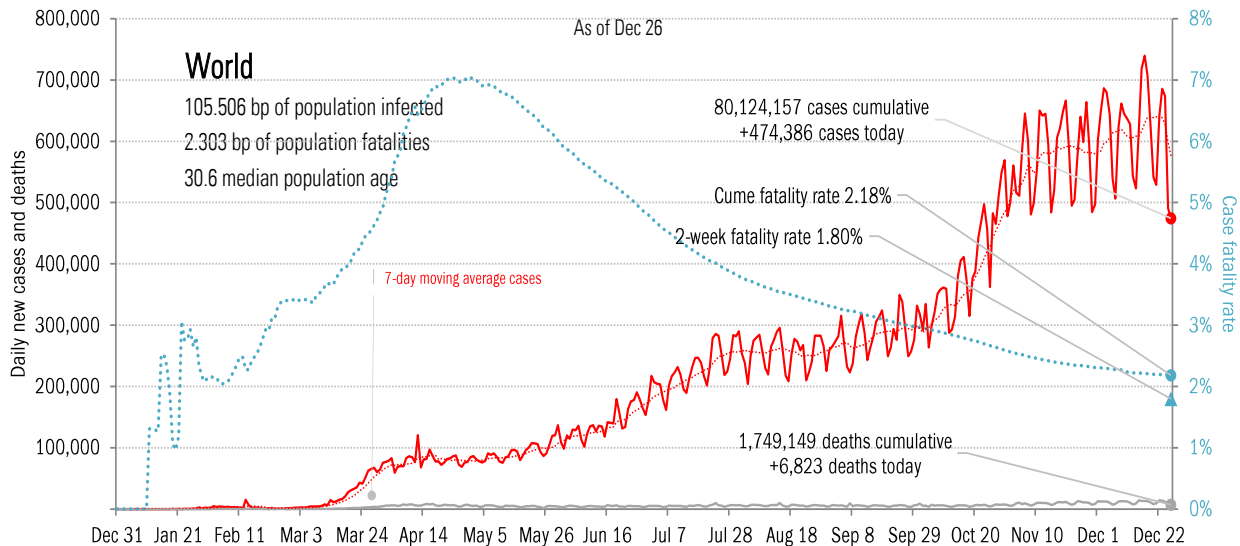
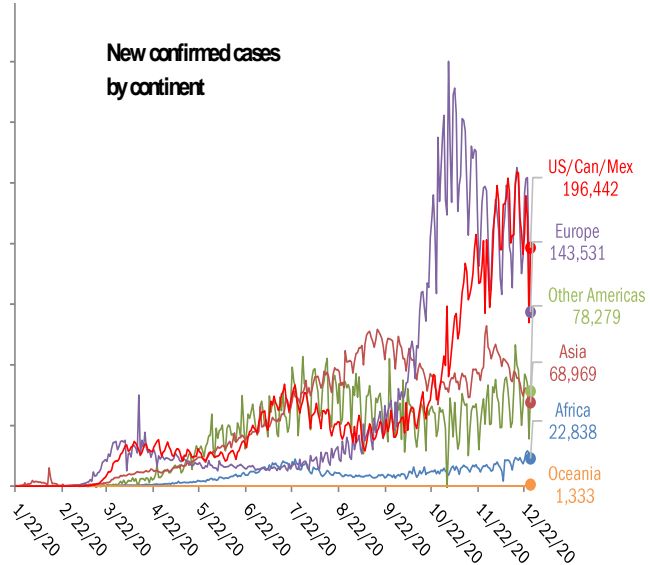


## Data Insights: Covid-2019 Monitor

Sunday, December 27, 2020

### The global scorecard

The worst ten countries			
New cases		New Deaths	
United States	+189,268	United States	+1,409
United Kingdom	+34,788	Russia	+554
Russia	+28,833	Germany	+366
India	+18,732	Brazil	+307
Brazil	+17,246	India	+279
Turkey	+15,118	Italy	+261
Germany	+13,504	Colombia	+253
South Africa	+11,552	Turkey	+253
Italy	+10,405	South Africa	+245
Colombia	+10,196	United Kingdom	+211
<b>+349,642</b>		<b>+4,138</b>	
World	+474,386	World	+6,823
Top ten	74%	Top ten	61%



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

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Thomas Demas: 704 552 3625 [tdemas@trendmacro.com](mailto:tdemas@trendmacro.com)

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# The US scorecard

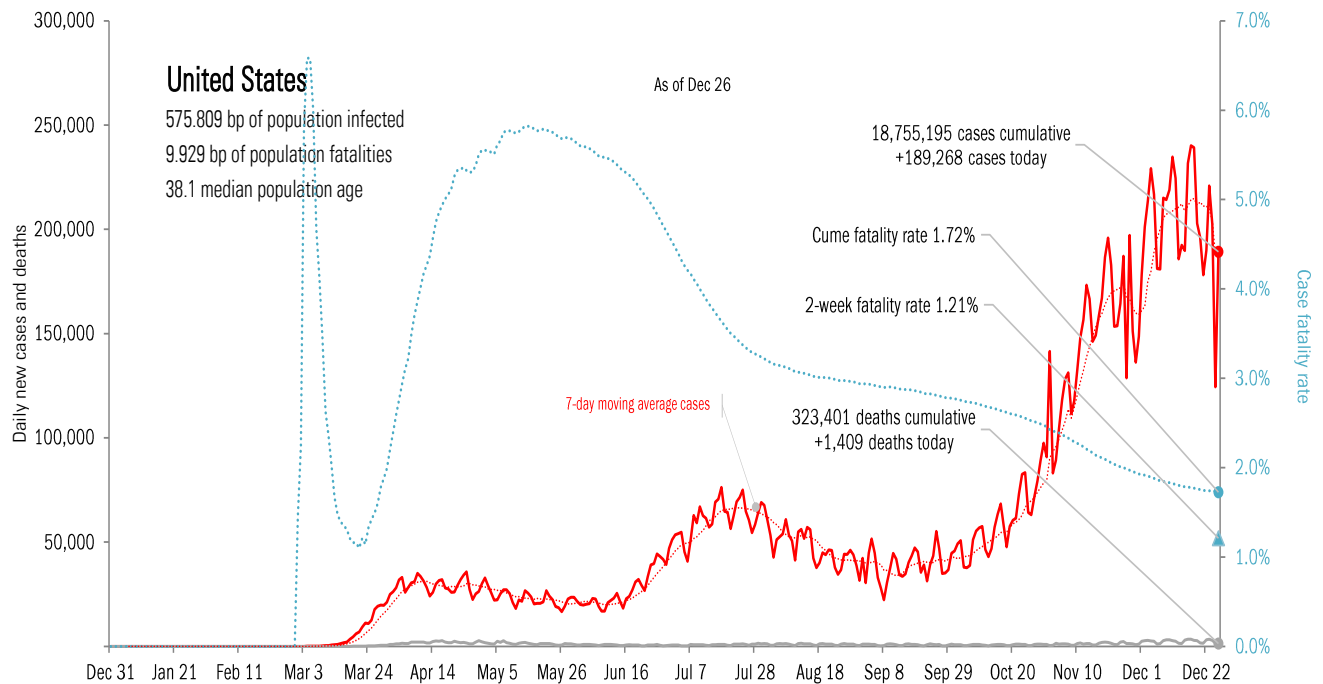
## The ten worst US states

New cases			New Deaths			New in hospital			Curre cases			Curre deaths			Curre in hospital			Hospital use		ICU use	
CA	+30,375		MI	+275		FL	+190		CA	2,072,665		NY	29,396		NY	89,995		R	90%	NM	96%
NC	+19,419		NC	+166		GA	+109		TX	1,660,551		TX	26,421		FL	62,118		GA	84%	NV	91%
FL	+16,588		FL	+142		CA	+26		FL	1,243,118		CA	23,983		NJ	46,257		MD	82%	AL	91%
TN	+14,395		NY	+126		AL	+5		IL	934,142		FL	21,437		GA	40,648		DC	82%	RI	90%
CH	+11,018		SC	+81		GJ	+1		NY	914,522		NJ	18,613		CH	36,513		SC	82%	GA	89%
NY	+10,806		IL	+70		AS	+0		CH	664,668		IL	17,224		AZ	35,337		NV	81%	OK	88%
MI	+7,877		KY	+68		CT	+0		PA	605,141		PA	14,883		IN	33,835		FL	79%	CA	86%
MA	+7,677		MN	+57		HI	+0		TN	560,892		MI	12,690		AL	32,115		CA	79%	MO	85%
PA	+7,581		GA	+54		ID	+0		GA	540,758		MA	12,010		MD	25,717		AZ	79%	DC	85%
AZ	+6,106		MA	+47		KS	+0		MI	516,326		GA	10,685		MN	21,213		MA	78%	TX	84%
+131,842			+1,086			+331			9,712,783			187,342			423,748			All states 73%		78%	
All states +189,268			+1,409			-1604			All states 18,755,195			323,401			664,967			All states 73%		78%	
Top ten 70%			77%			-21%			Top ten 52%			58%			64%			Median 71%		76%	

Some states not reporting

## Five most improved US states

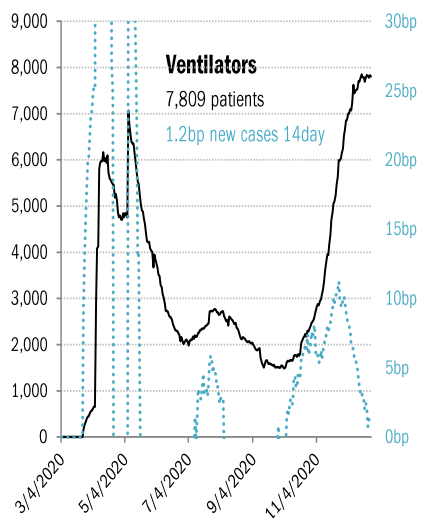
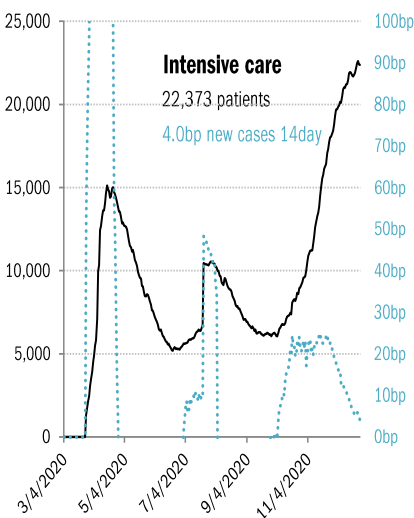
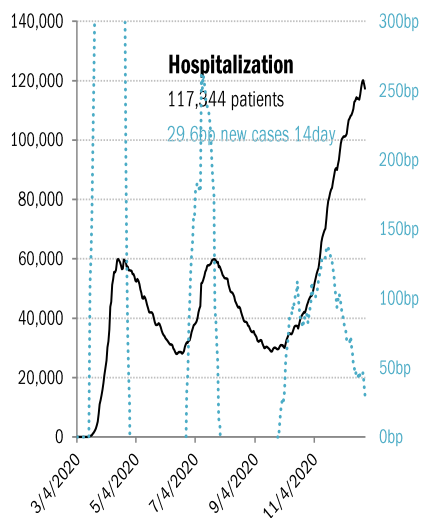
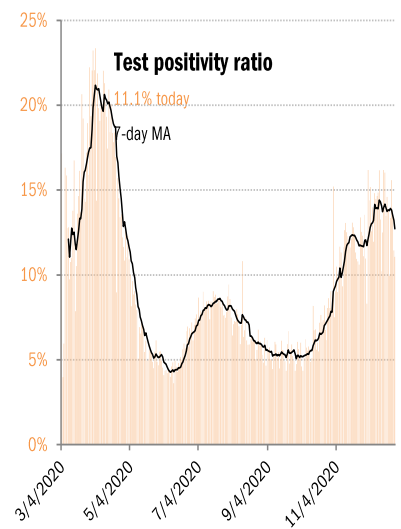
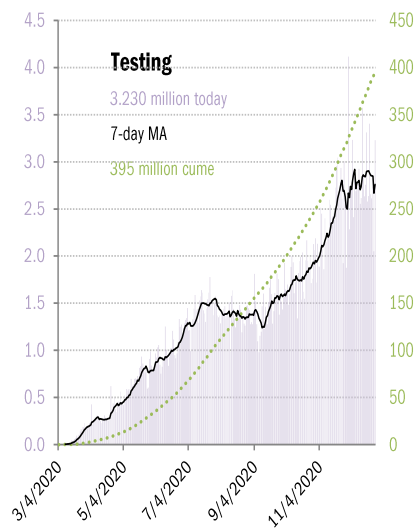
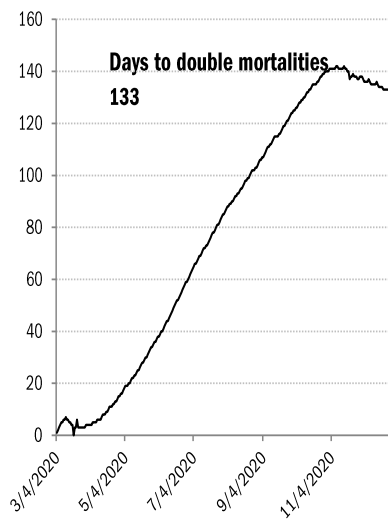
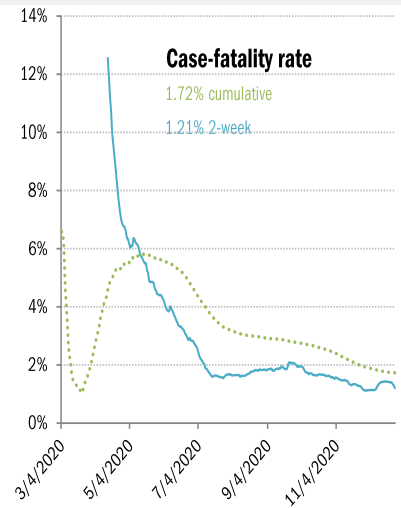
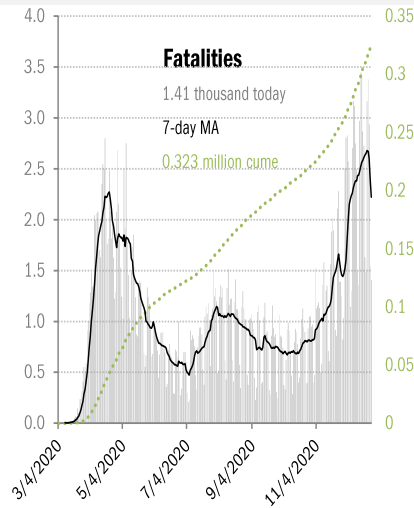
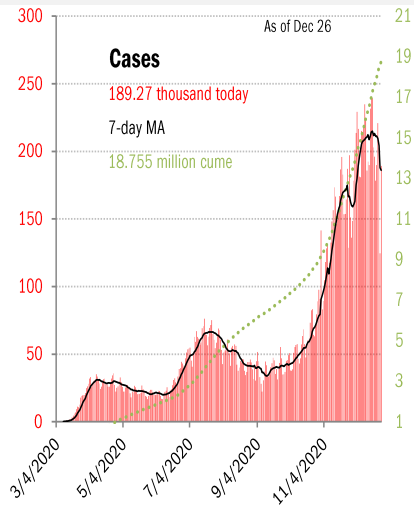
Fewer daily cases		Fewer new deaths		Fewer new hospitalizations		Most recoveries	
CA	-8,769	CA	-276	TX	-239	MI	+33,658
WA	-2,891	TX	-187	CH	-196	CH	+20,524
AL	-2,593	IL	-124	IL	-195	TN	+14,006
VA	-2,494	PA	-113	MO	-154	PA	+9,295
IL	-2,449	AZ	-100	KY	-133	UT	+6,629



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

# US deep-dive

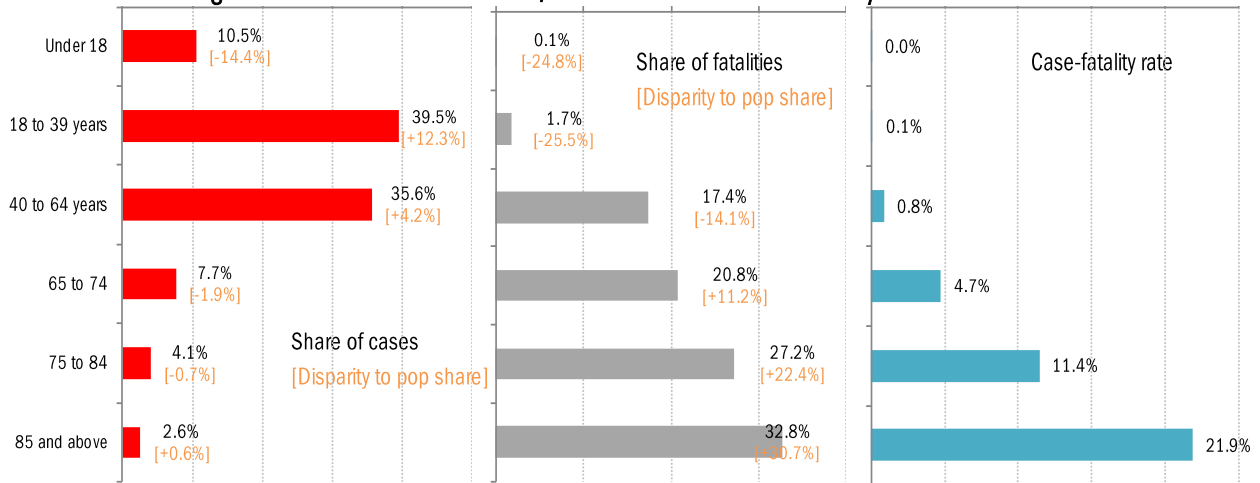
National and state-by-state data do not line up because of different sources



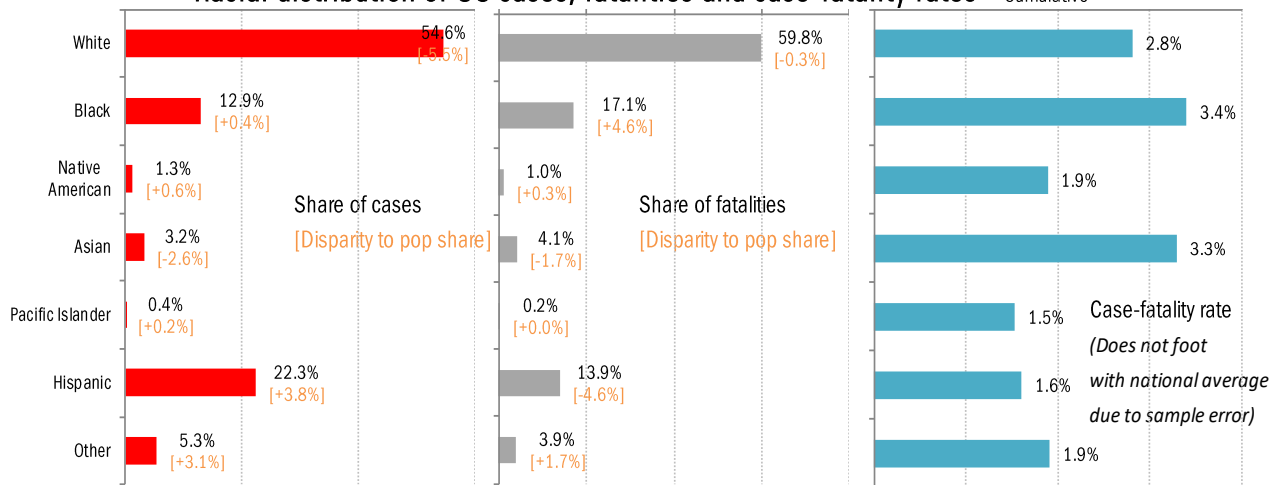
Source: [Covid Tracking Project](https://covidtracking.com), TrendMacro calculations

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

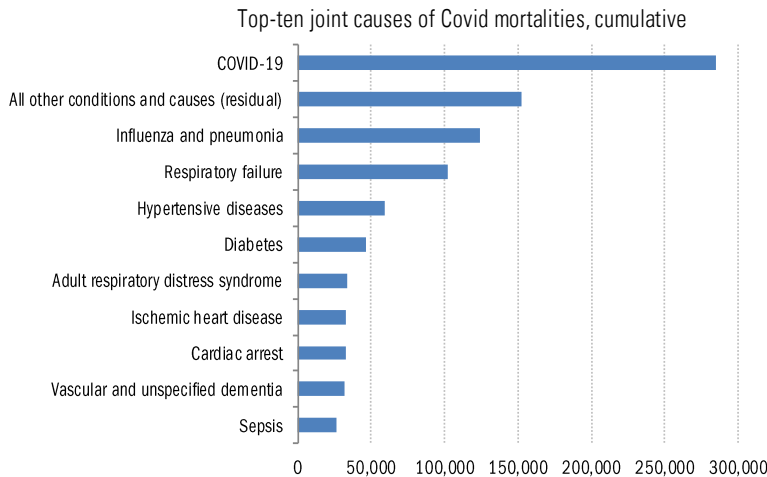
## Age distribution of US cases, fatalities and case-fatality rates



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



## Comorbidities



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

[More Than 4.2 Million Shots Given: Covid-19 Vaccine Tracker](#)

*Bloomberg*

December 26, 2020

[Early Vaccine Doubters Now Show a Willingness to Roll Up Their Sleeves](#)

Jan Hoffman

*New York Times*

December 26, 2020

[Dad Got the Vaccine, but No One Else Did — Yet](#)

Katherine J. Wu

*New York Times*

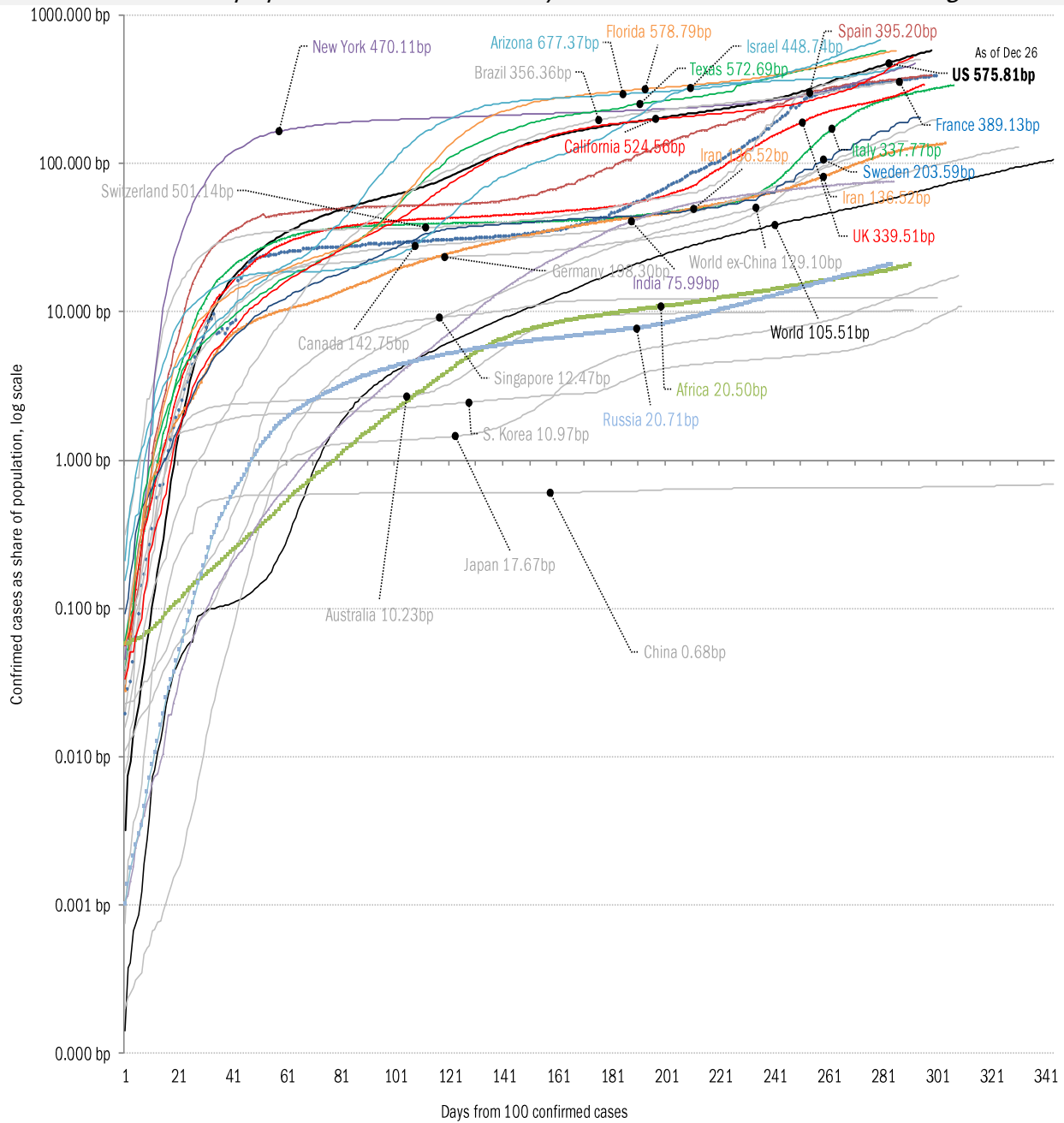
December 26, 2020

## Meme of day



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

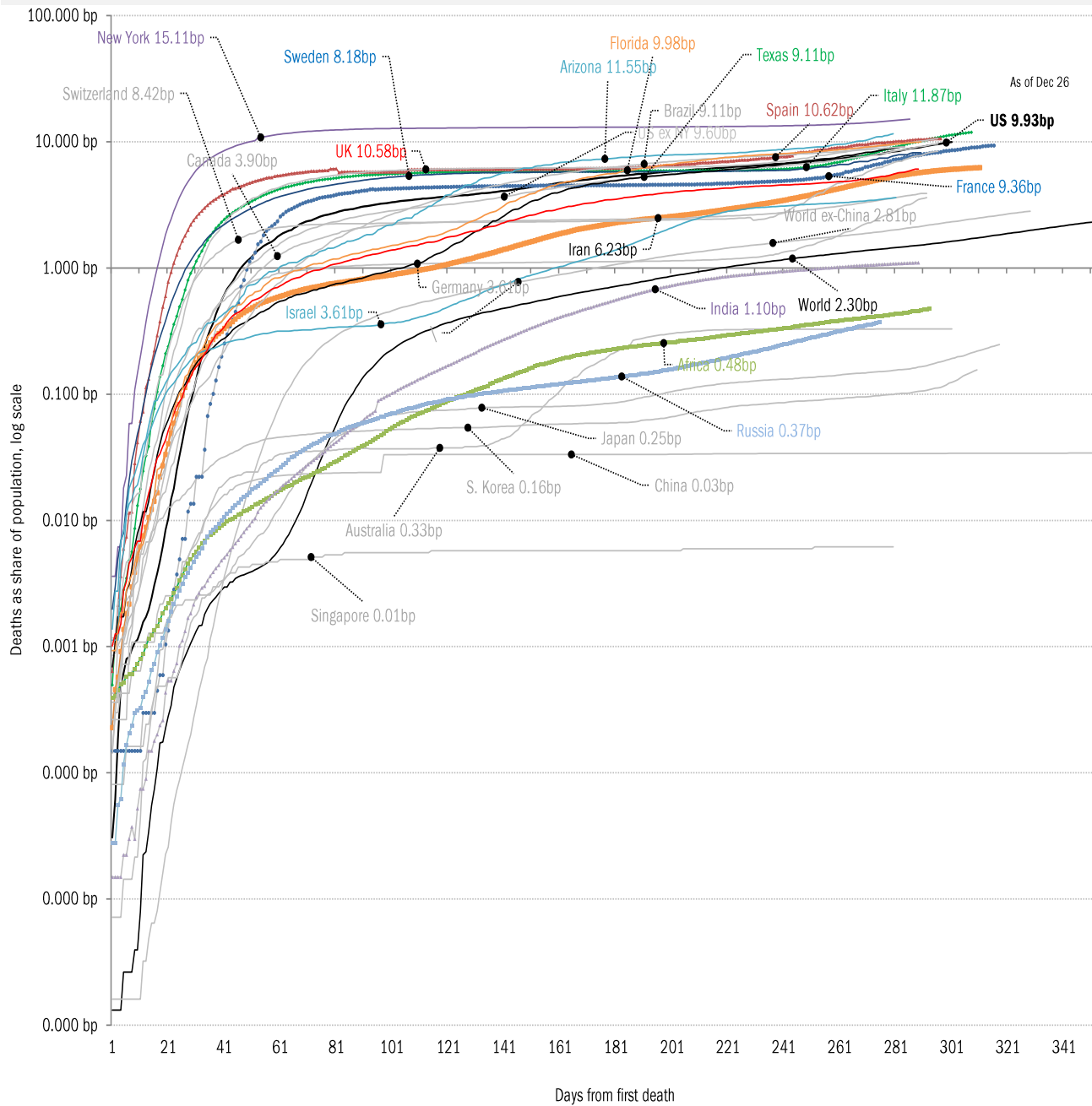
The coronavirus case accelerometer... tracking the world's infection curves  
*Share of infected population from first day with 100 confirmed cases, log scale*



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

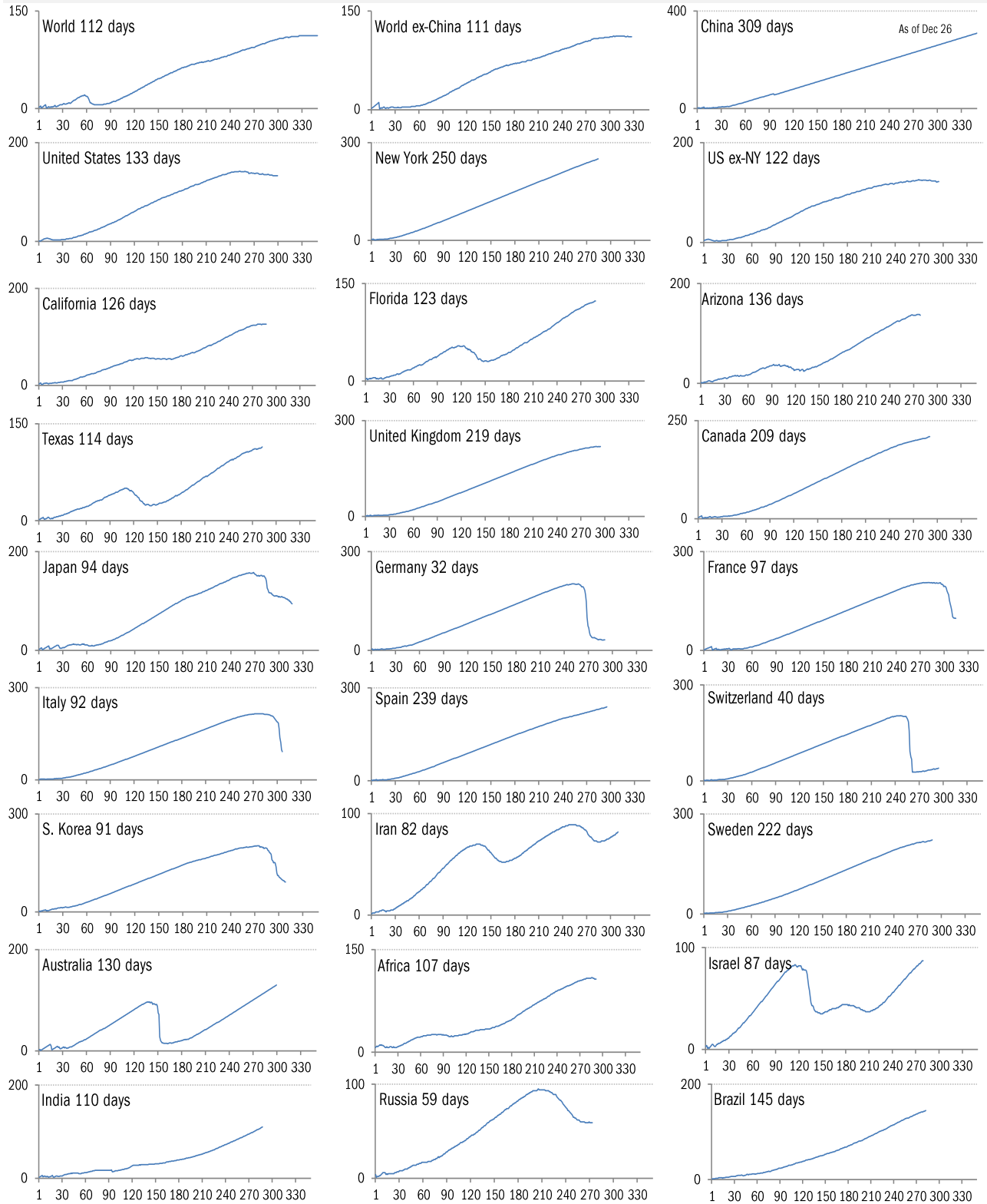


Source: [Johns Hopkins](#), [Covid Tracking Project](#), TrendMacro calculations

# "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



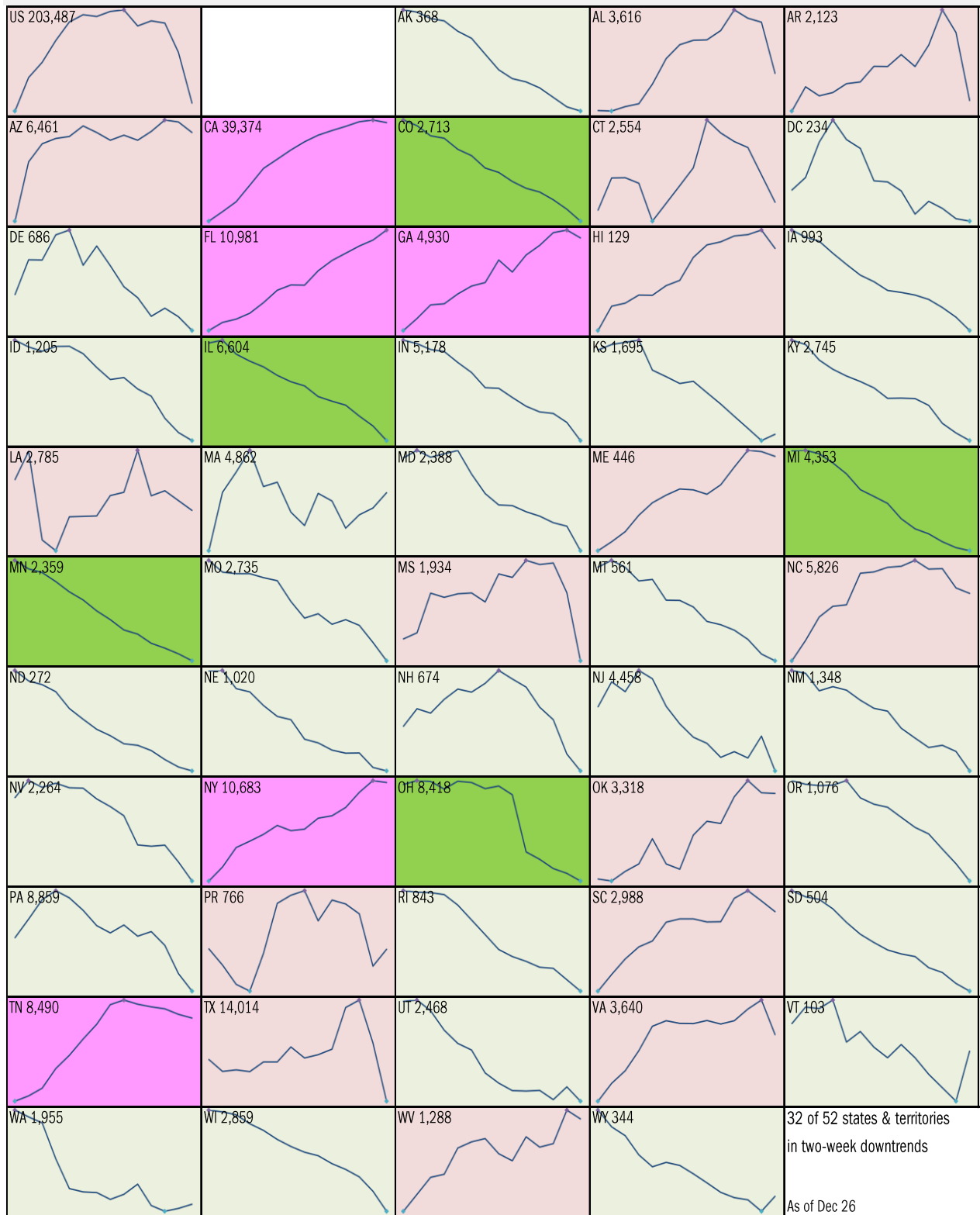
Source: [Johns Hopkins, Covid Tracking Project](#), TrendMacro calculations



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

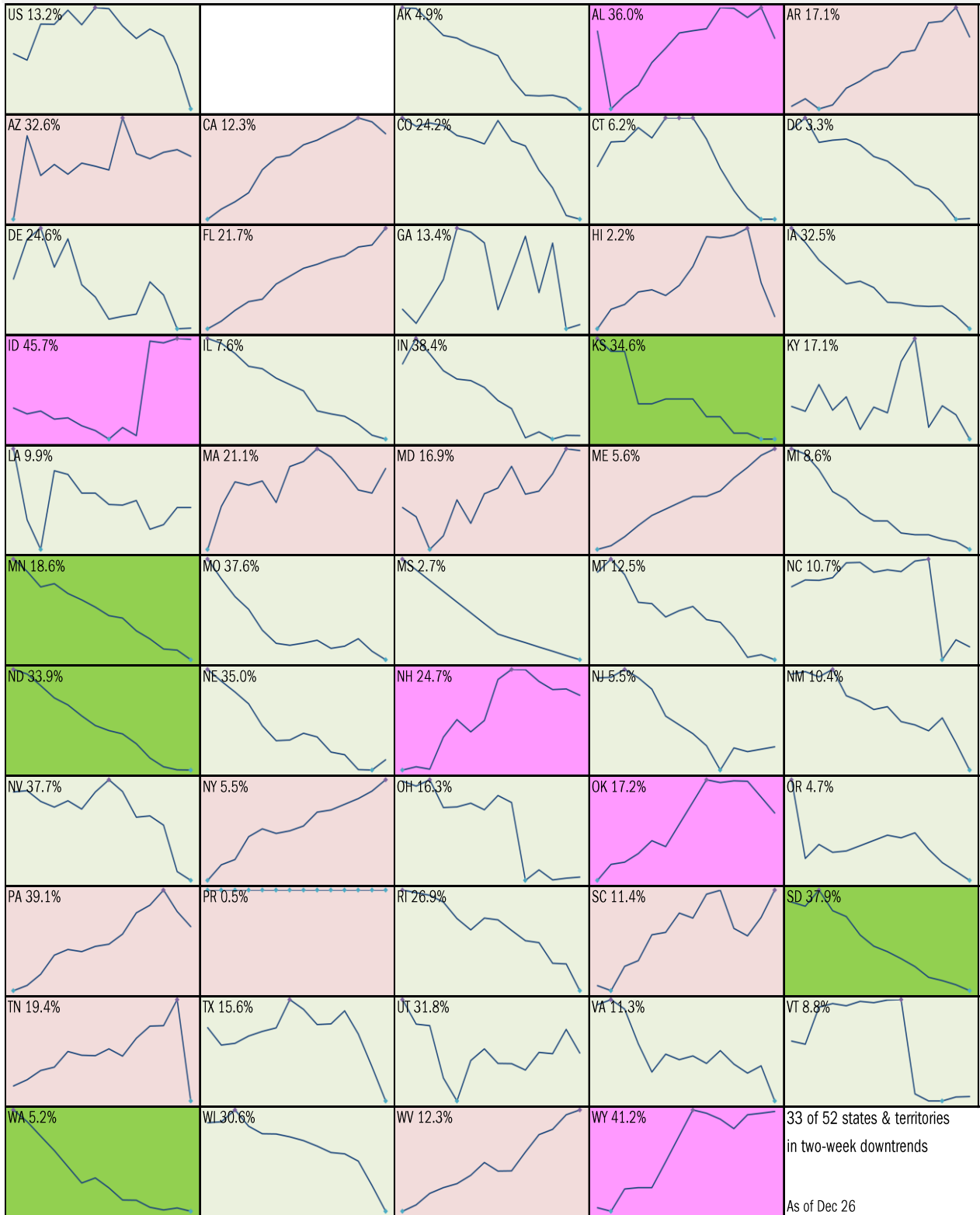
■ Downward trajectory ■ Five best ■ Upward trajectory ■ Five worst



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



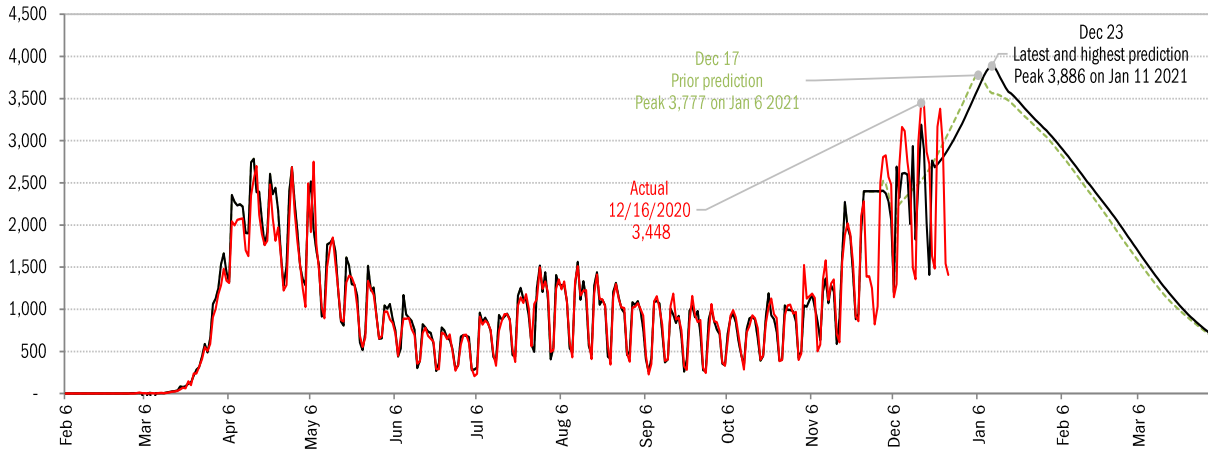
Source: [Covid Tracking Project](#), TrendMacro calculations

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

## New daily fatalities

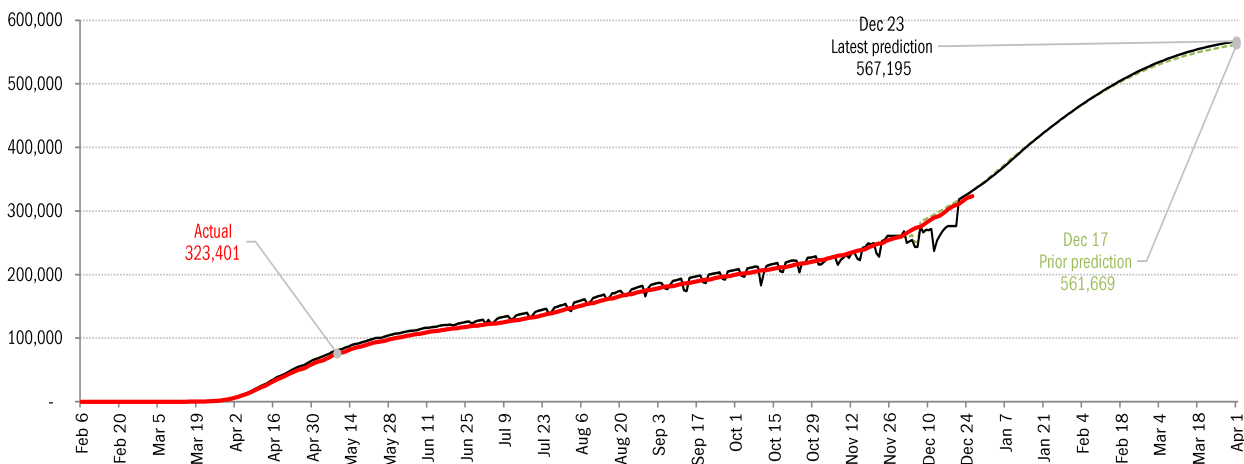
As of Dec 26

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

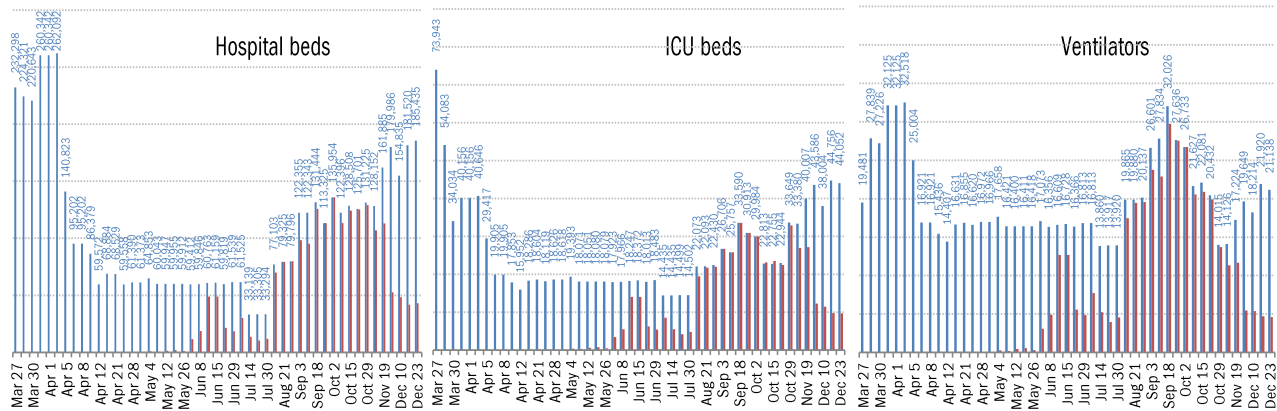


## Cumulative fatalities

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

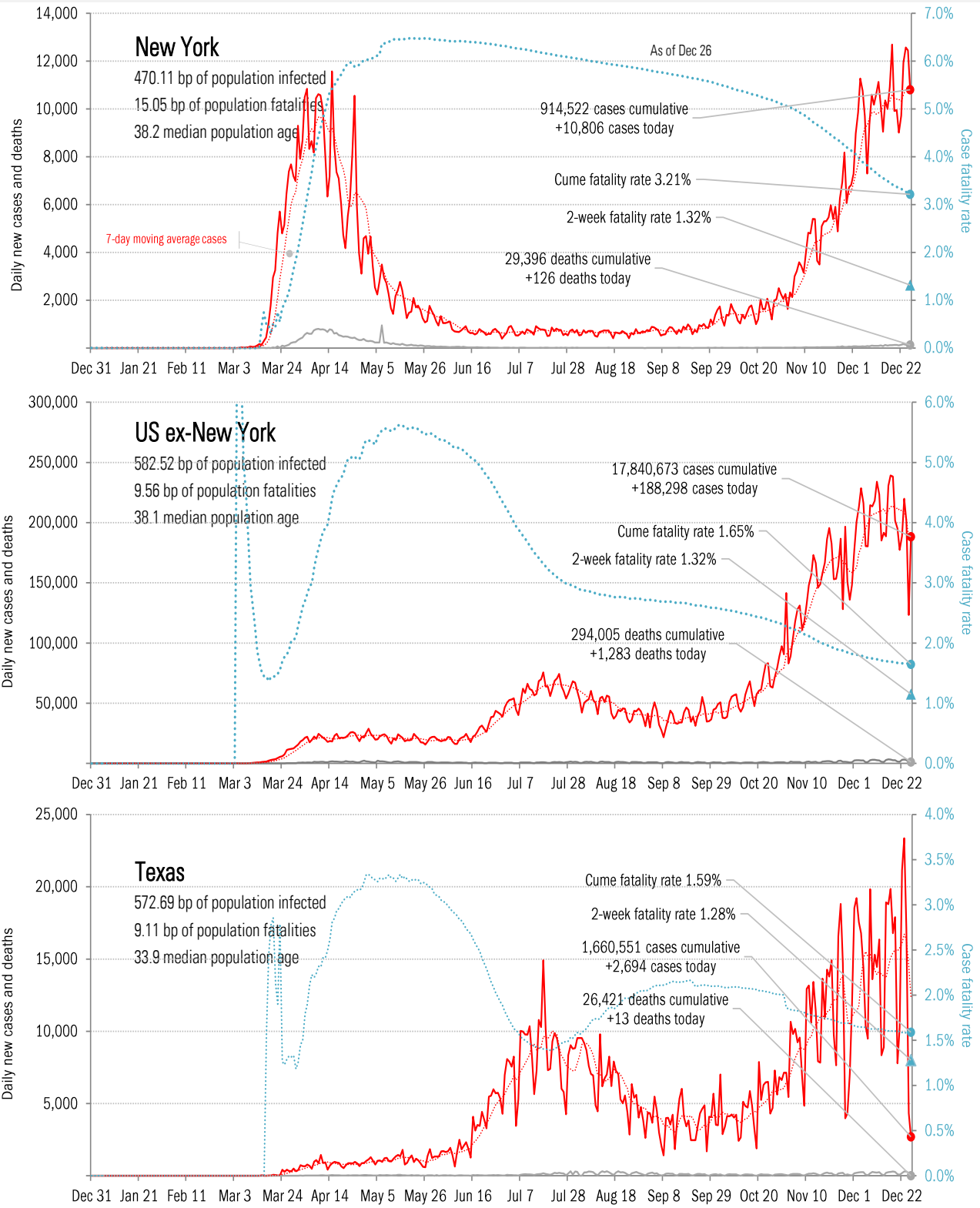


## Healthcare system stress, **peak** and **ultimate** estimated at each model revision



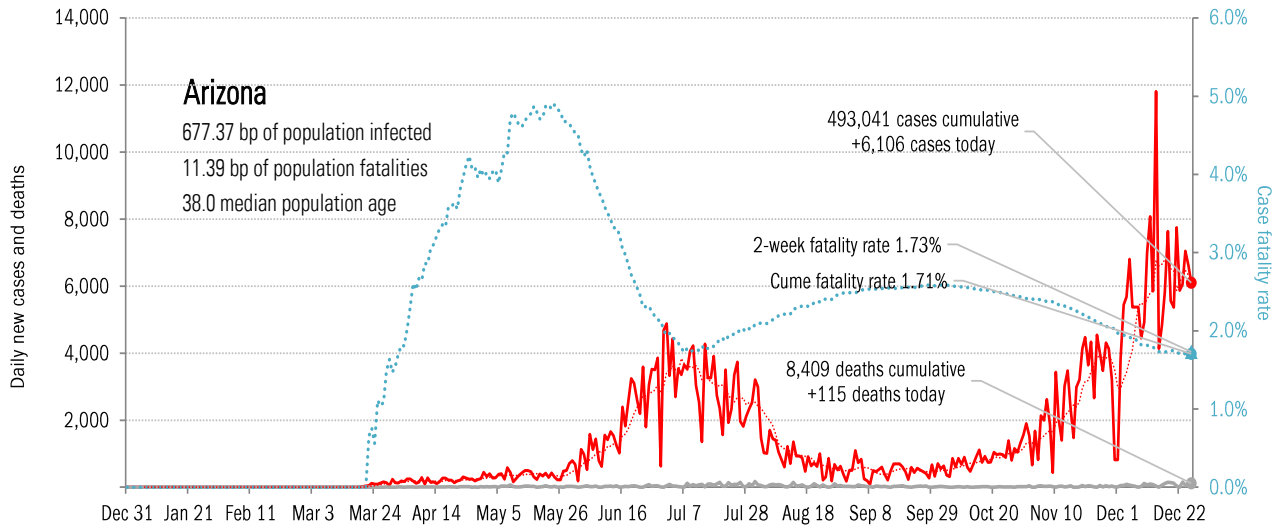
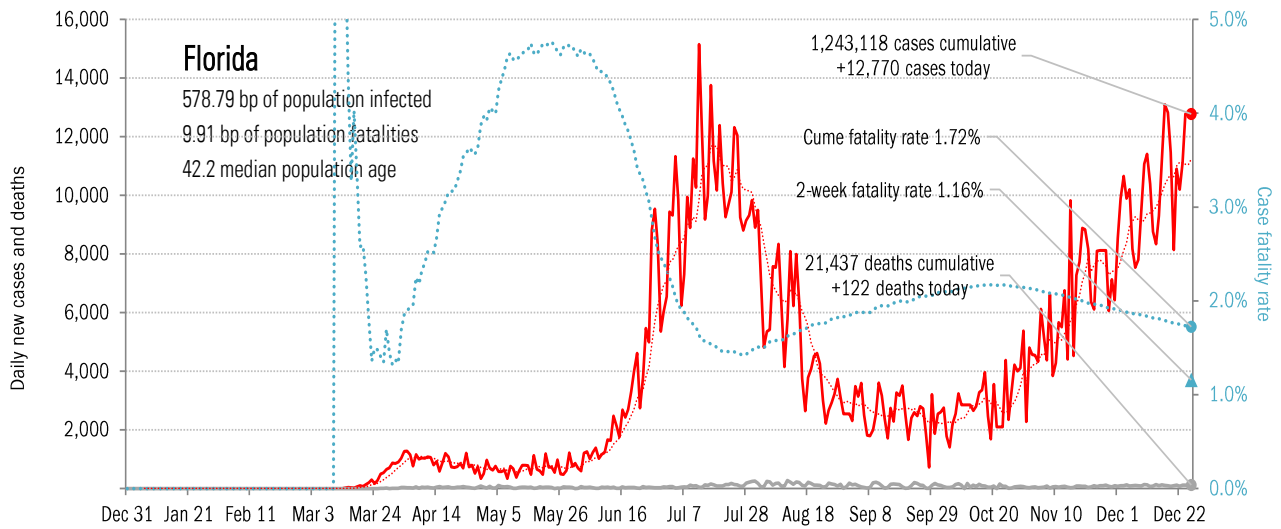
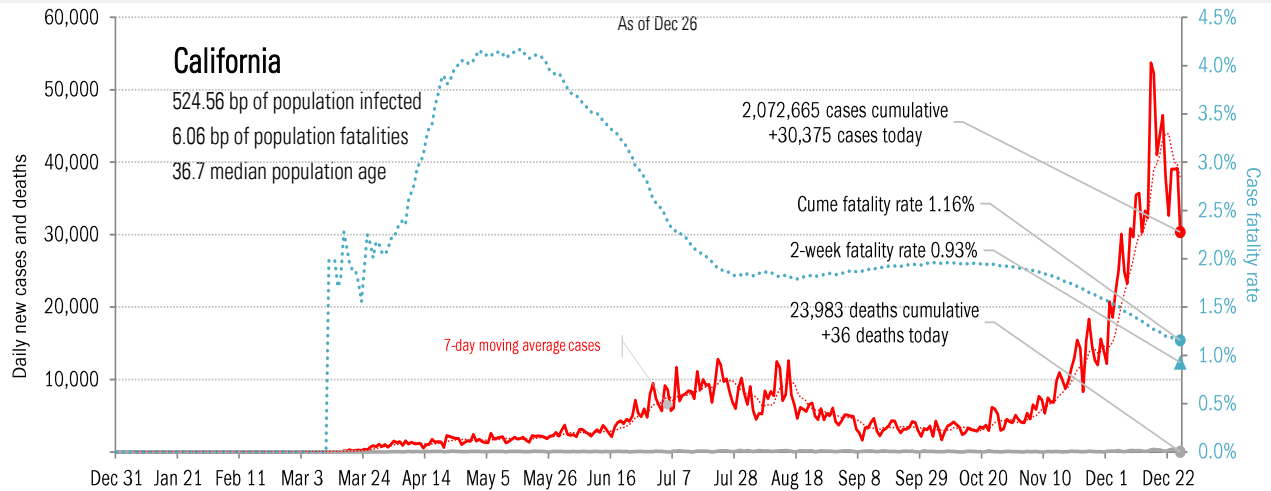
Source: [IHME](#), [Covid Tracking Project](#), TrendMacro calculations

# From Ground Zero to the Rio Grande



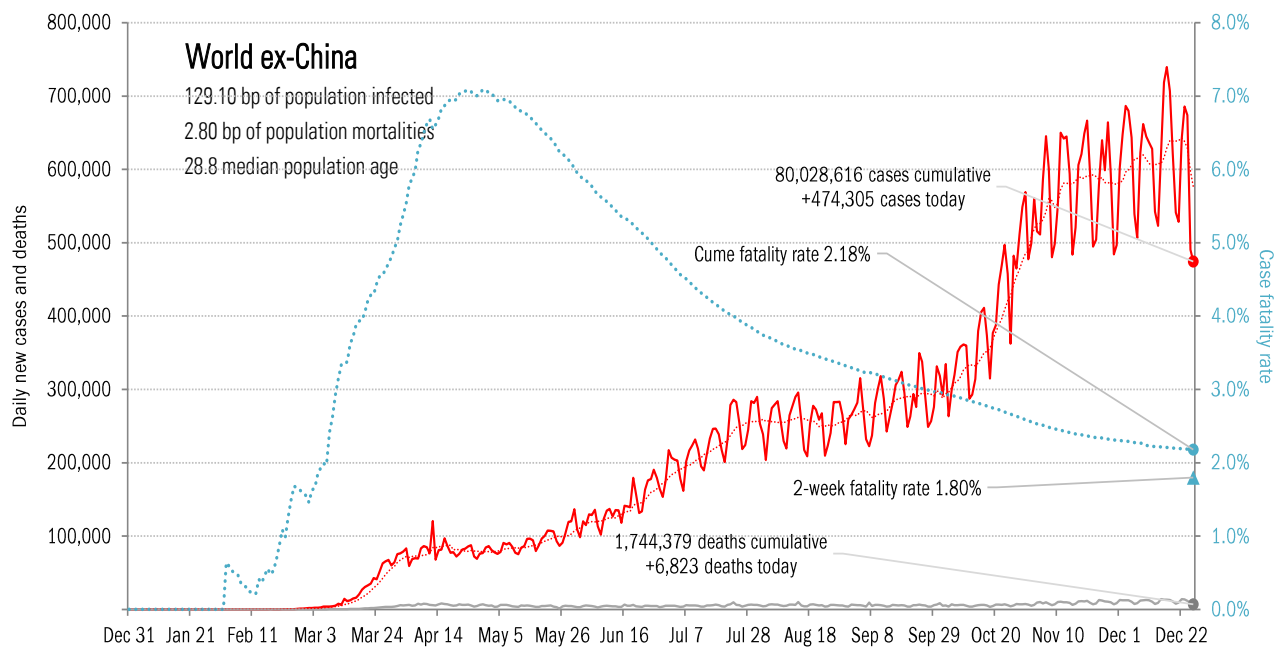
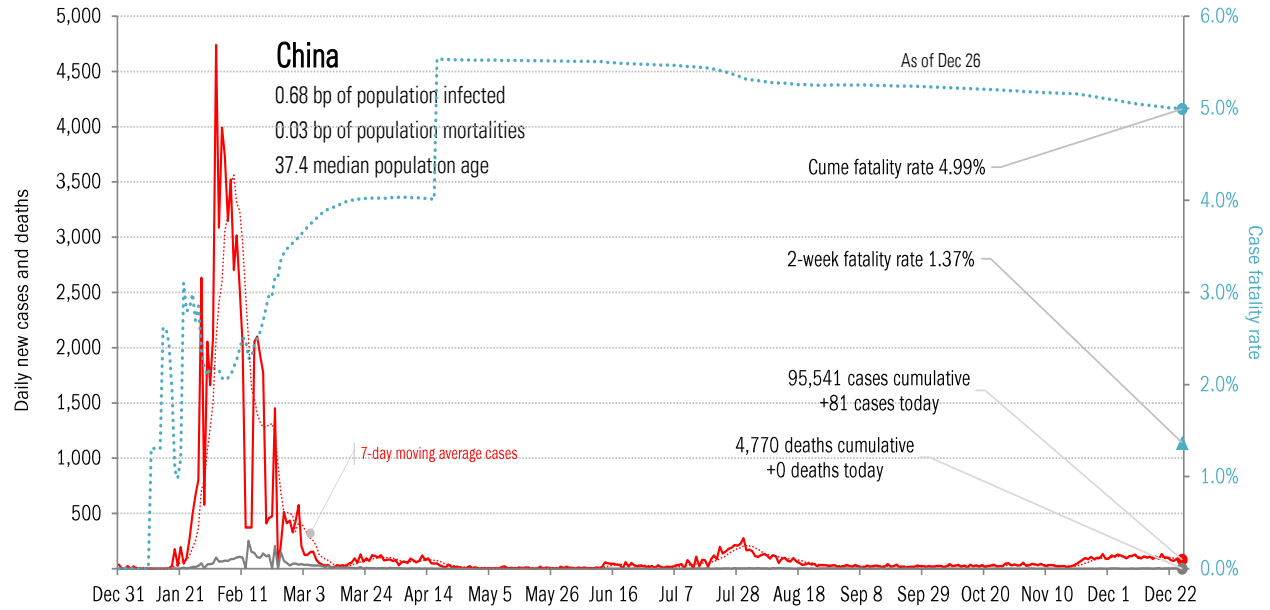
Source: [Covid Tracking Project](#), TrendMacro calculations

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



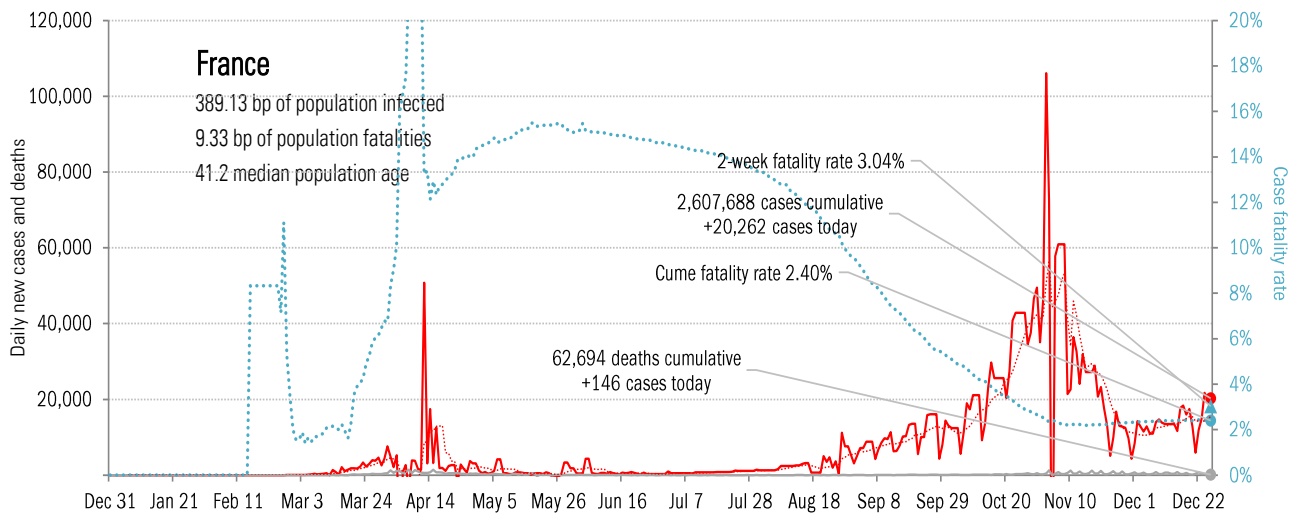
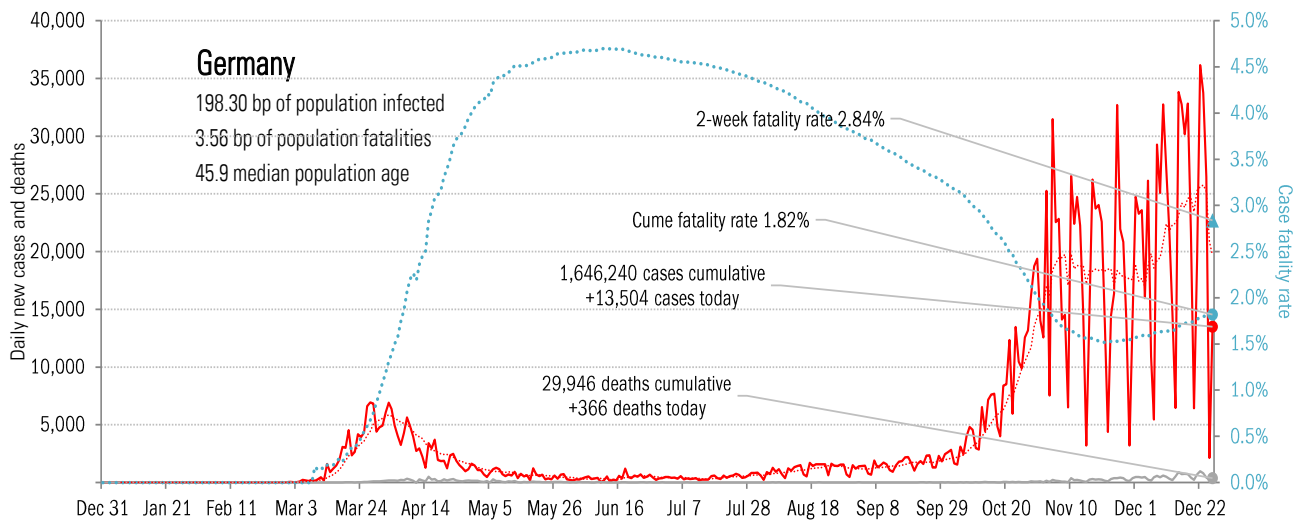
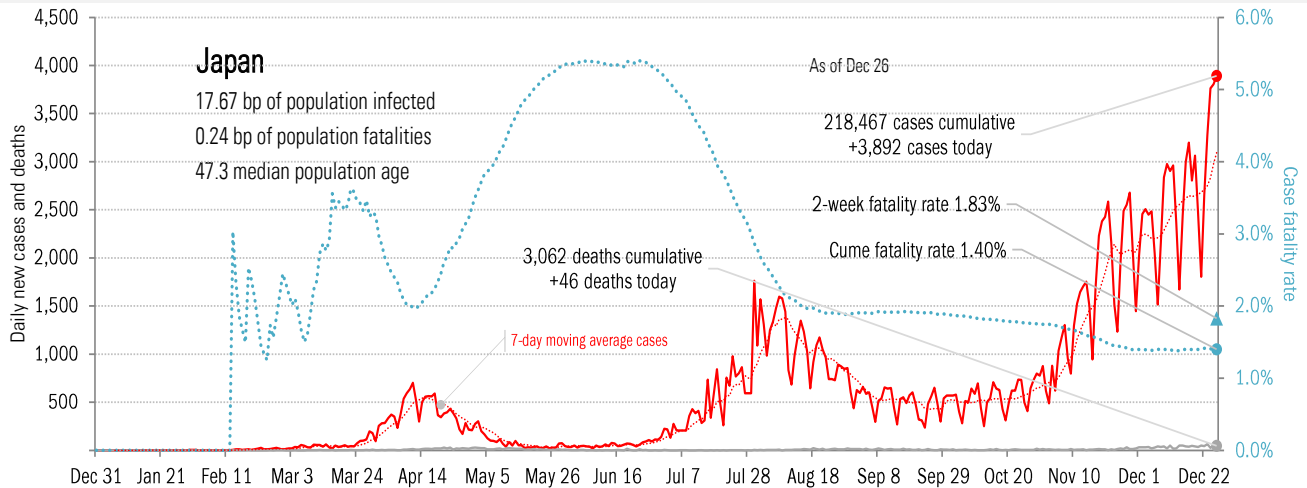
Source: [Covid Tracking Project](#), TrendMacro calculations

# Patient zero... and then everyone else



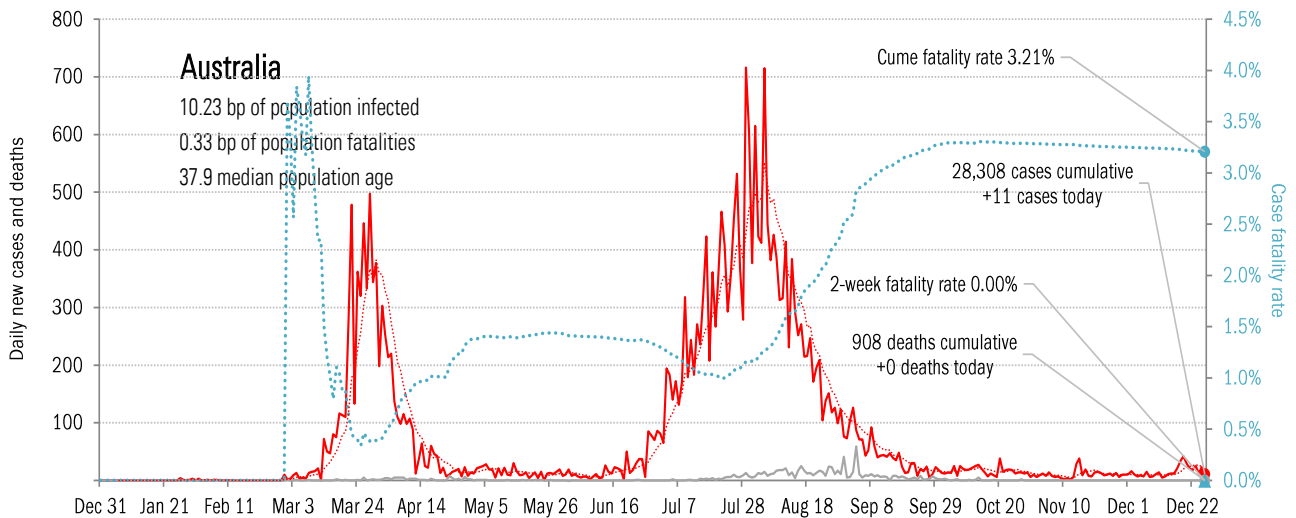
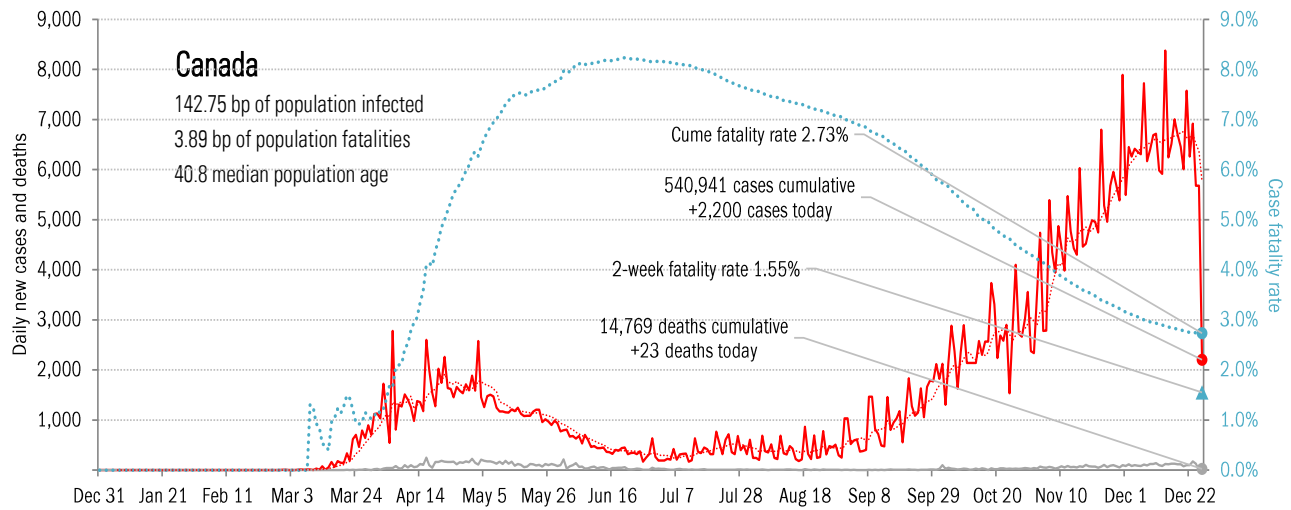
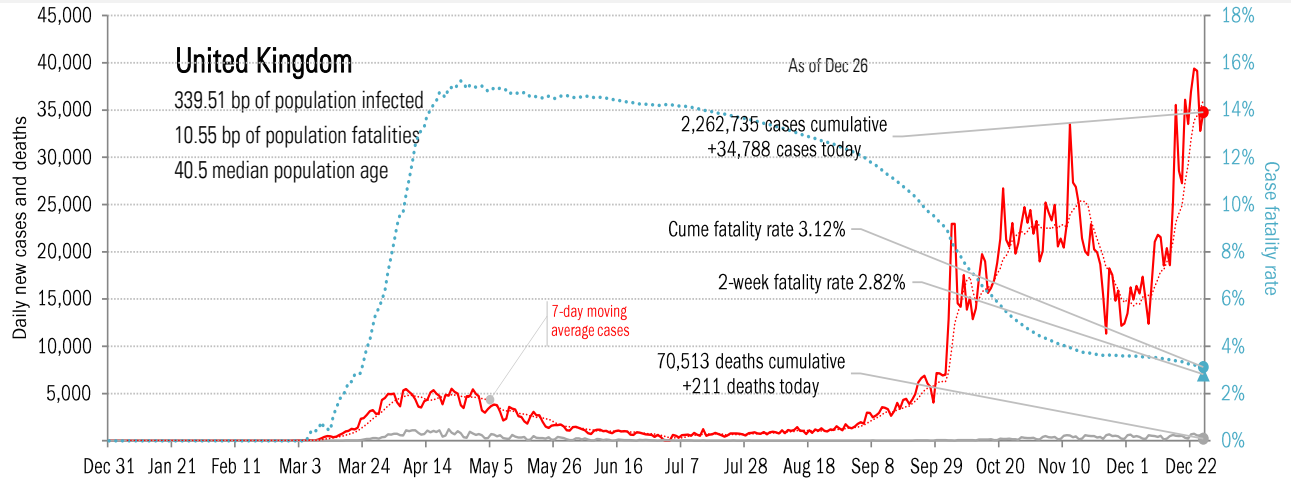
Source: [Johns Hopkins](#), [Covid Tracking Project](#), TrendMacro calculations

# Impact in the largest economies



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

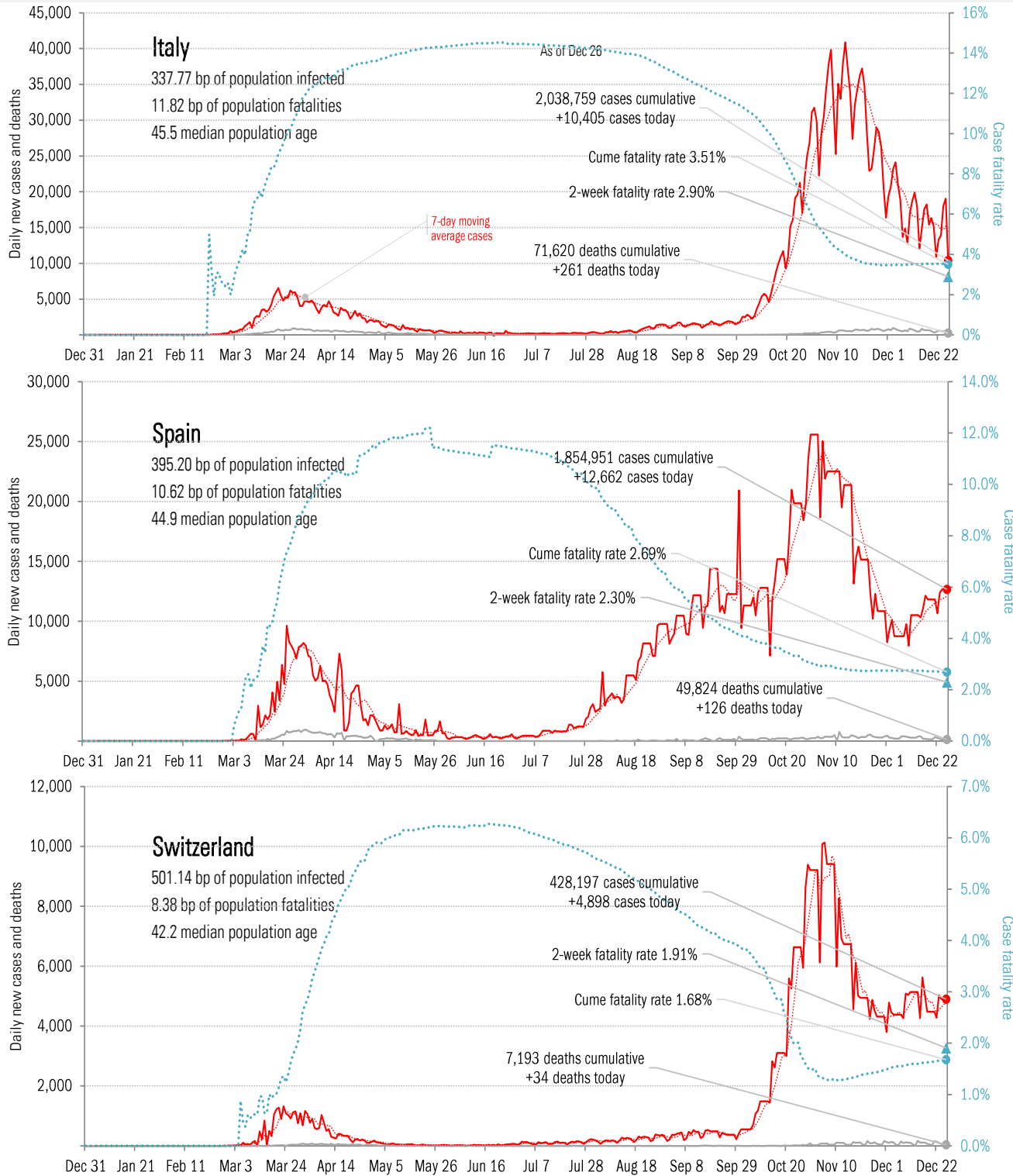
# Impact in The Anglosphere



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

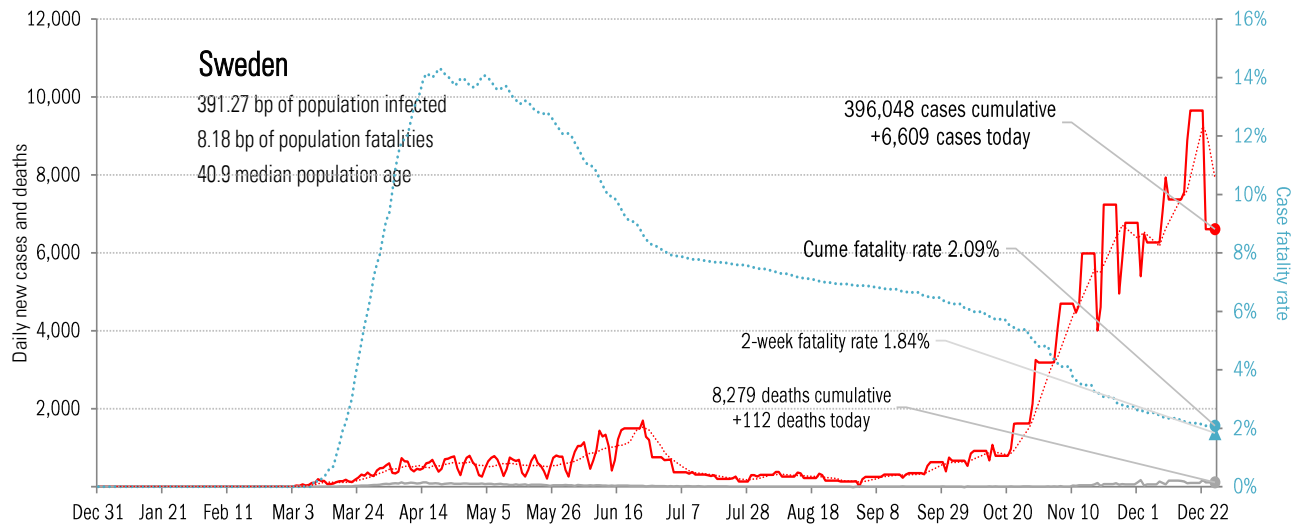
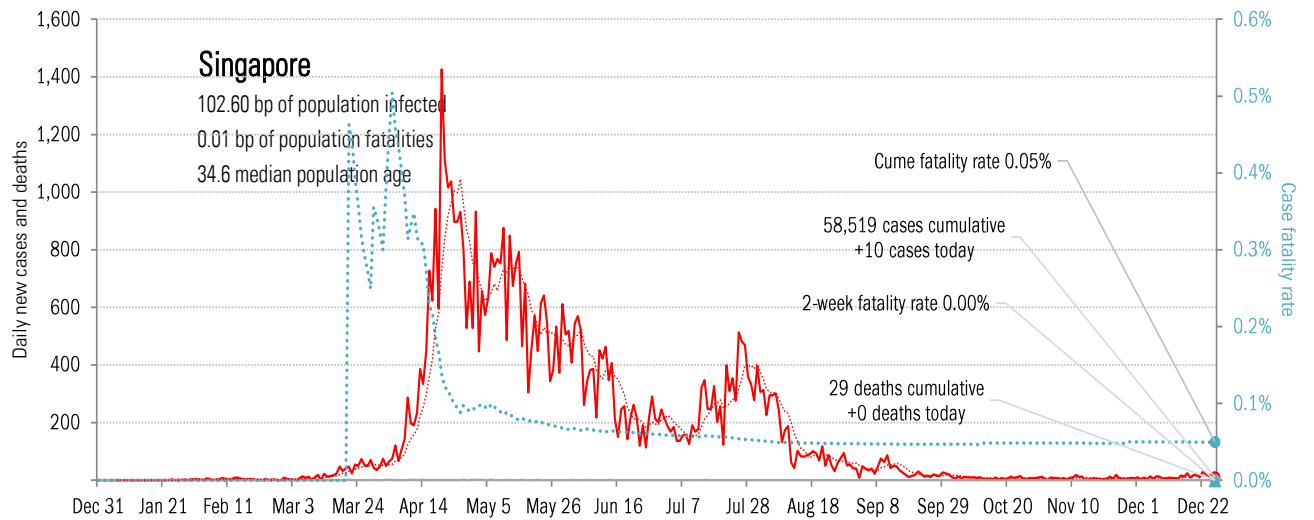
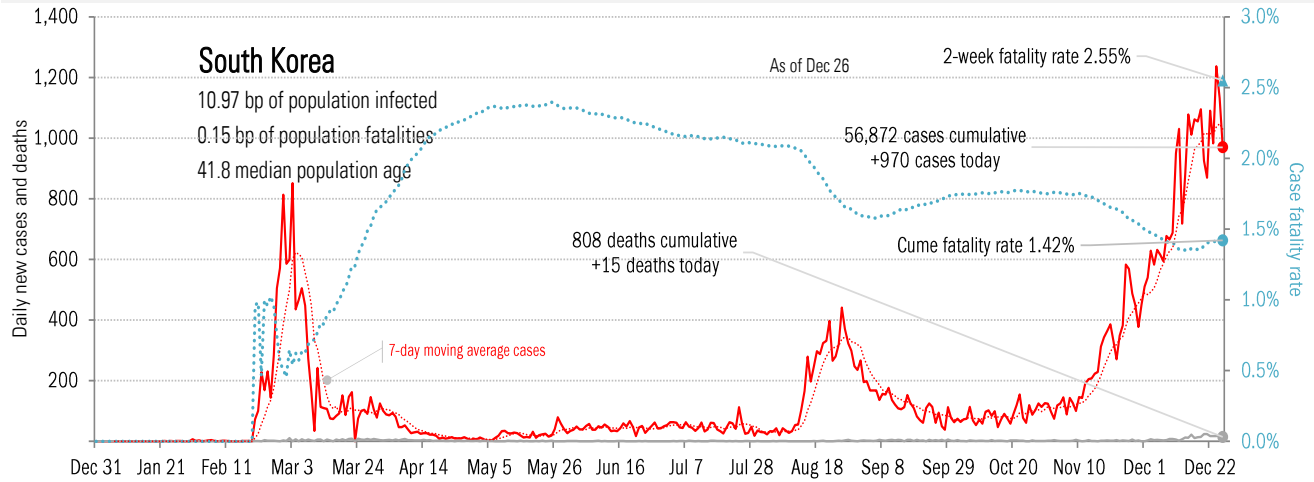


# Impact in continental Europe



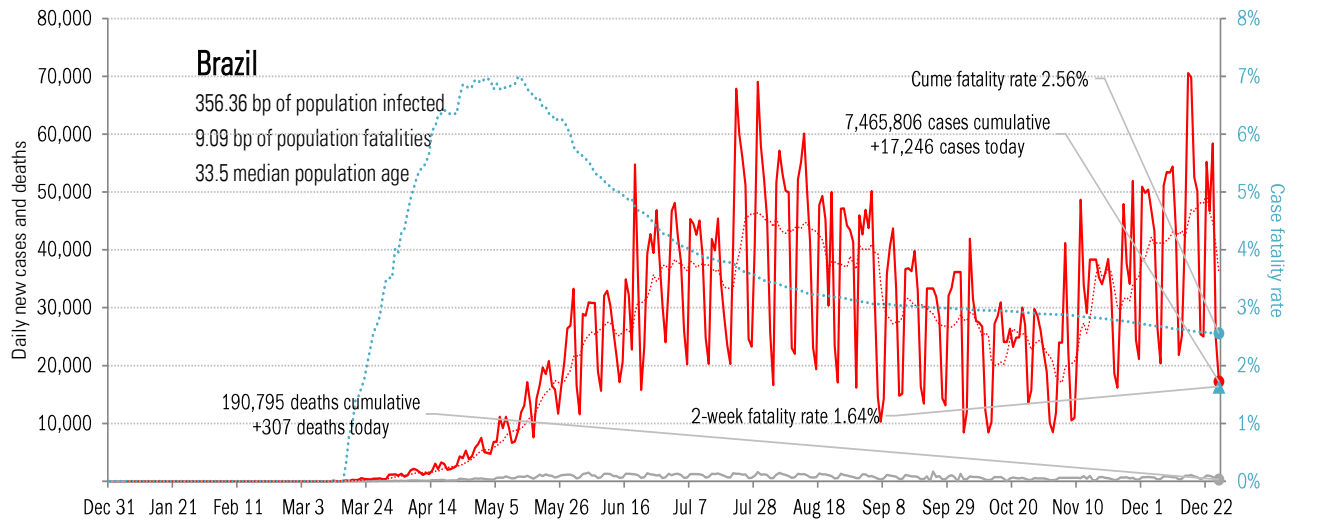
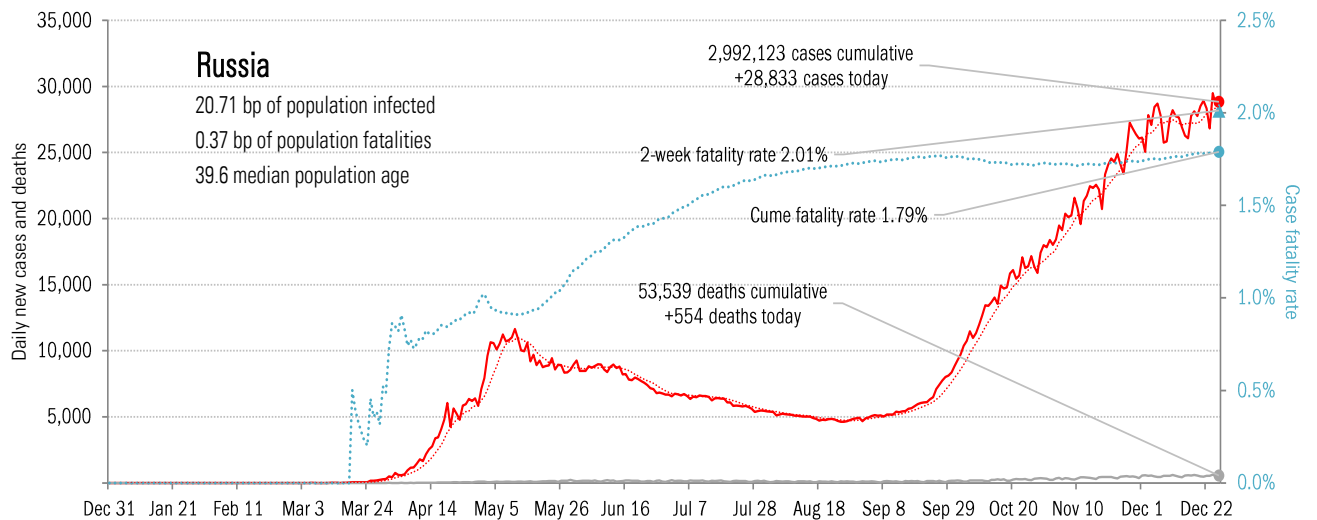
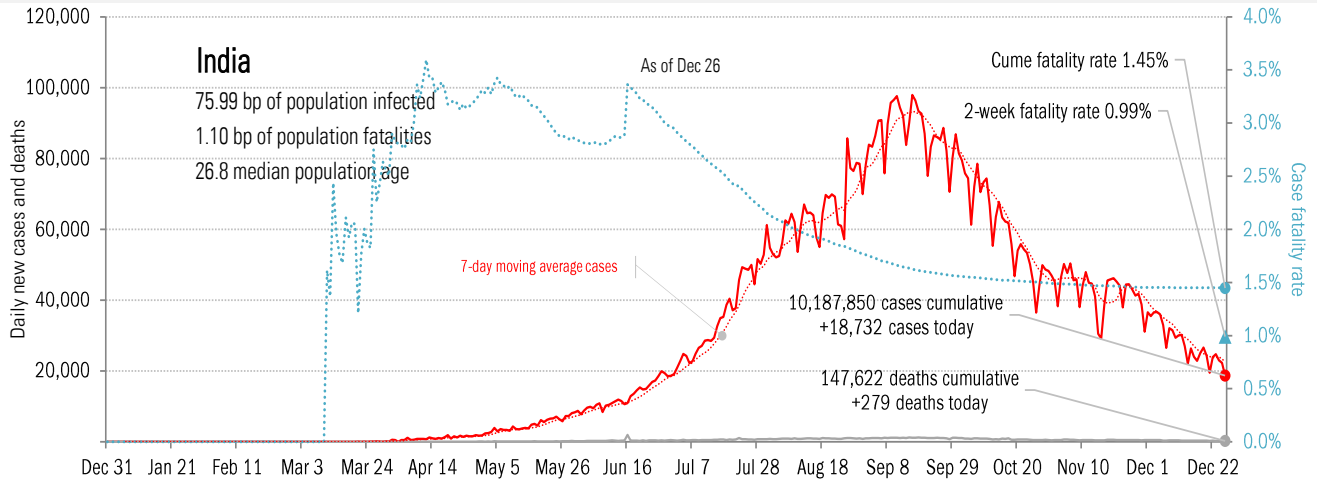
Source: [Johns Hopkins](#), TrendMacro calculations

# Impact in other hot-spots



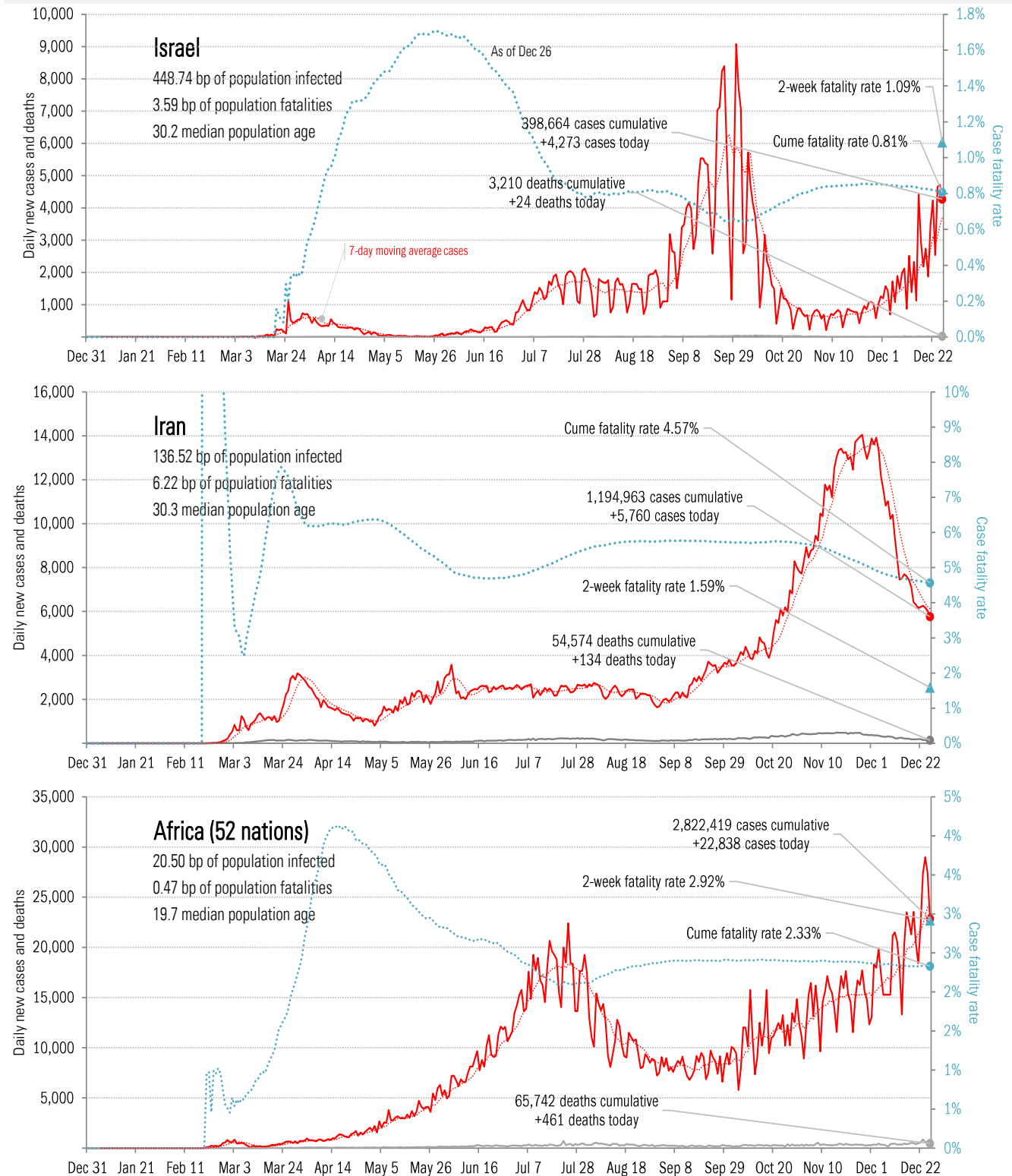
Source: [Johns Hopkins](#), TrendMacro calculations

# Impact in the BRICs ex-China



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

# Impact in the Middle East and Africa



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