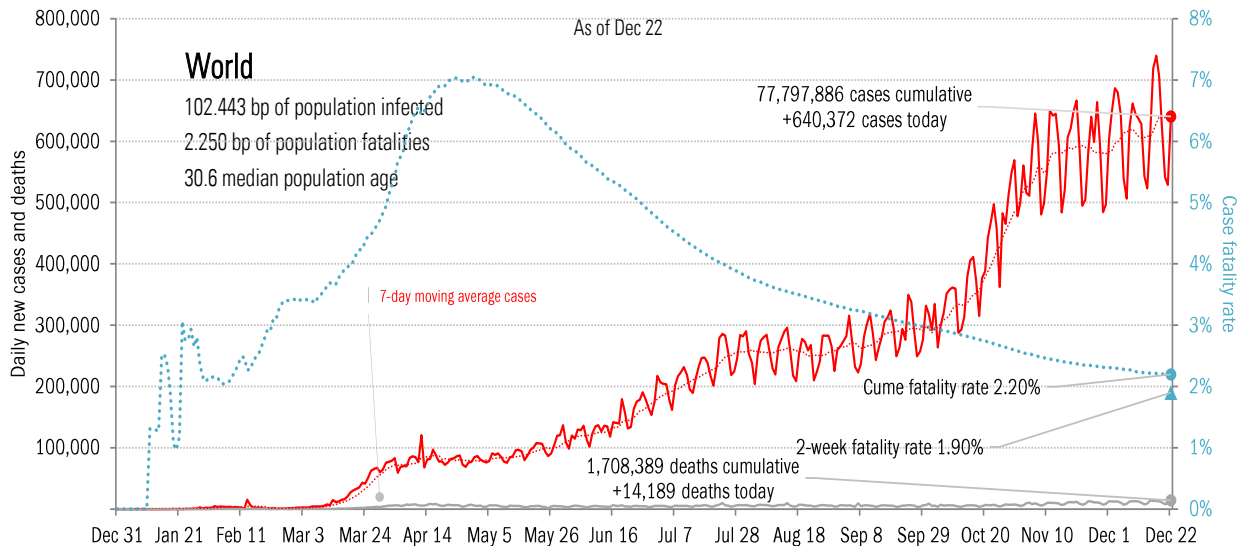
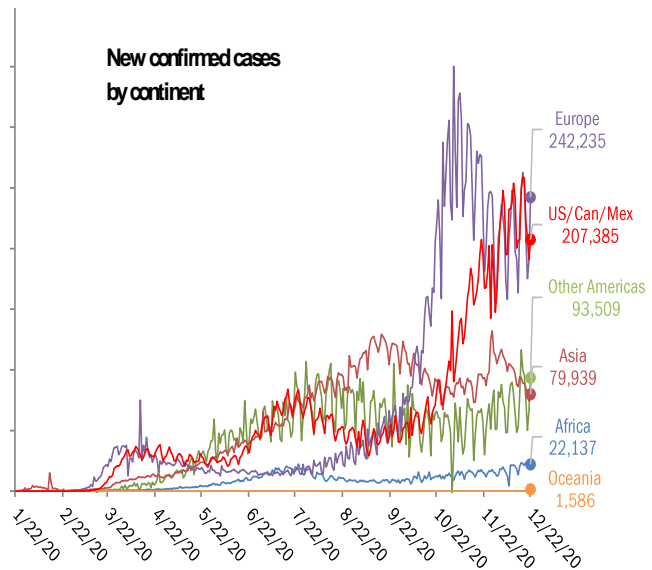


## Data Insights: Covid-2019 Monitor

Tuesday, December 23, 2020

### The global scorecard

The worst ten countries			
New cases		New Deaths	
United States	+188,614	United States	+3,131
Brazil	+55,202	Germany	+986
United Kingdom	+36,931	Brazil	+968
Germany	+36,153	Mexico	+897
Russia	+28,340	France	+802
India	+23,950	United Kingdom	+691
Sweden	+22,319	Italy	+628
Turkey	+19,256	Russia	+551
Italy	+13,316	South Africa	+339
Colombia	+12,526	India	+333
<b>+436,607</b>		<b>+9,326</b>	
World	+640,372	World	+14,189
Top ten	68%	Top ten	66%



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

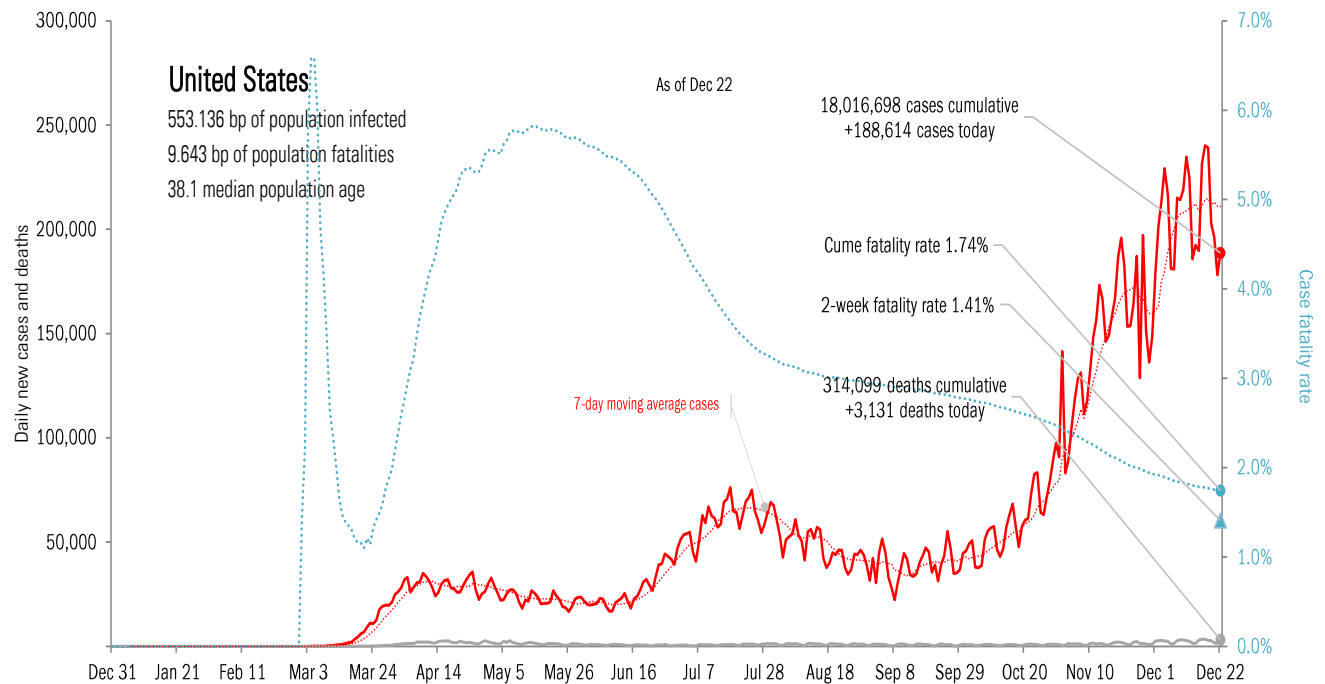
## The ten worst US states

New cases			New Deaths			New in hospital			Curre cases			Curre deaths			Curre in hospital			Hospital use		ICU use	
CA	+32,659		CA	+247		CA	+602		CA	1,925,007		NY	28,850		NY	89,995		R	90%	NM	94%
TX	+21,147		PA	+231		NY	+330		TX	1,613,095		TX	25,606		FL	61,279		MD	82%	RI	93%
FL	+10,204		MO	+211		TX	+290		FL	1,202,660		CA	22,923		NJ	45,544		GA	81%	AL	91%
NY	+9,716		TX	+191		NC	+184		IL	911,308		FL	21,052		GA	39,836		DC	79%	GA	88%
PA	+7,962		MI	+189		GA	+177		NY	866,765		NJ	18,326		CH	35,594		NV	79%	OK	87%
CH	+7,678		AZ	+153		NJ	+128		CH	637,032		IL	16,671		AZ	33,619		SC	79%	NV	87%
IL	+6,239		IL	+144		FL	+122		PA	571,551		PA	14,212		IN	32,992		FL	77%	TN	86%
GA	+6,203		IN	+143		TN	+117		TN	534,019		MI	12,342		AL	31,305		CA	77%	MS	85%
AZ	+5,870		NY	+141		IL	+111		GA	518,902		MA	11,804		MD	24,955		AZ	77%	CA	85%
NC	+5,255		TN	+133		IN	+97		MI	504,629		GA	10,463		MN	20,816		NC	76%	TX	84%
+112,933			+1,783			+2,158			9,284,968			182,249			415,935						
All states	+188,614			+3,131			+2426		All states	18,016,698			314,099			651,544		All states	71%		76%
Top ten	60%			57%			89%		Top ten	52%			58%			64%		Median	68%		74%

Some states not reporting

## Five most improved US states

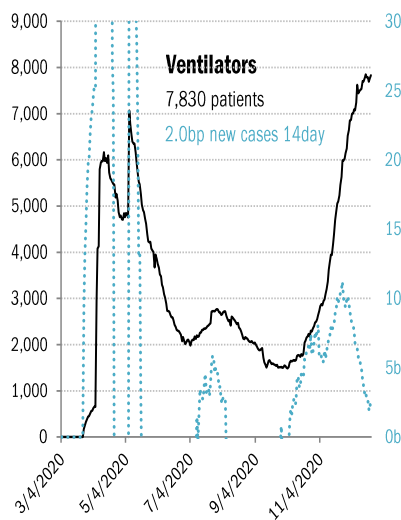
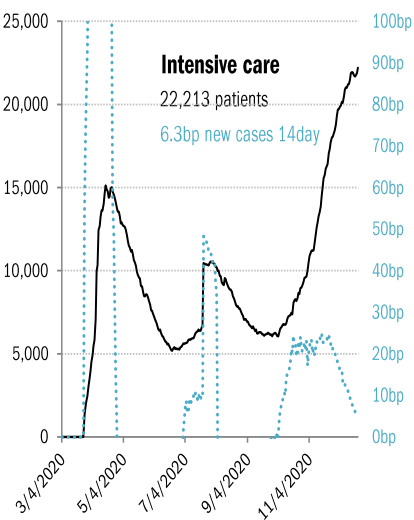
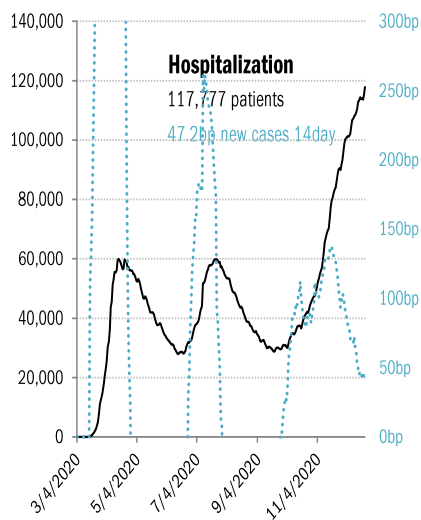
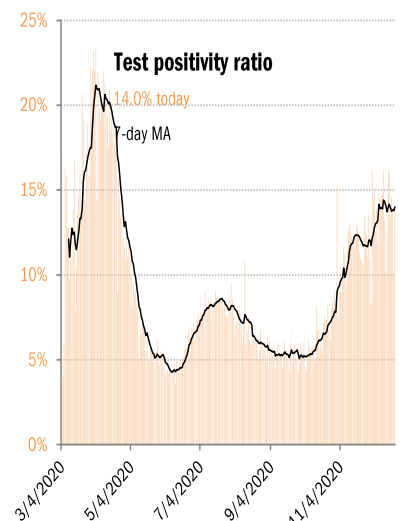
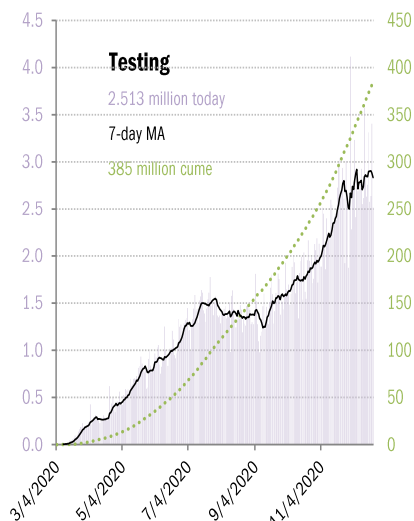
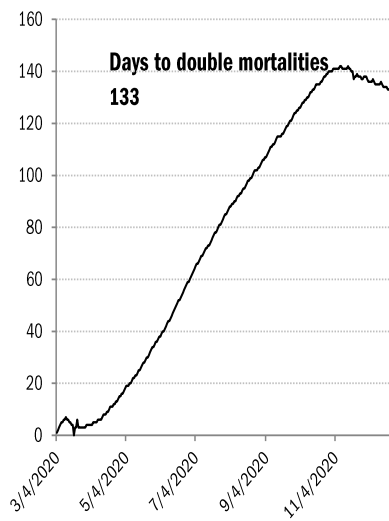
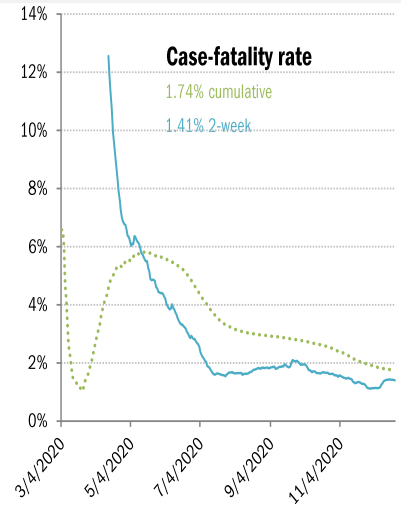
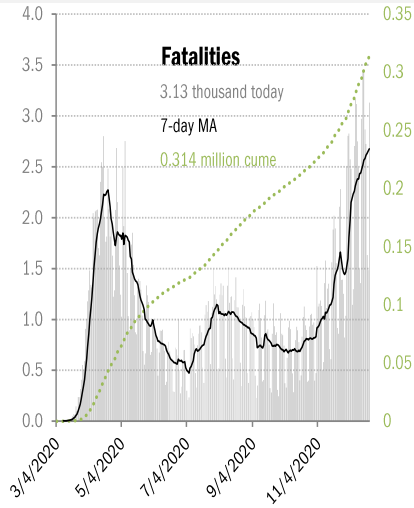
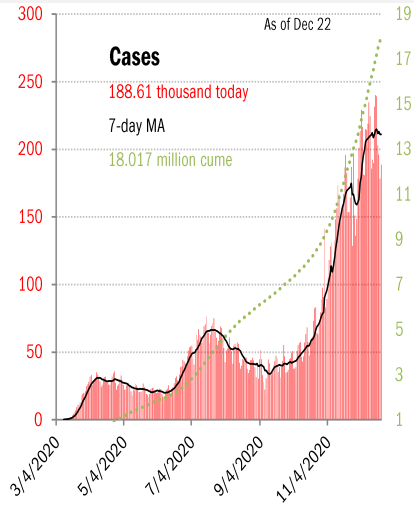
Fewer daily cases		Fewer new deaths		Fewer new hospitalizations		Most recoveries	
TN	-5,450	KS	-107	VA	-313	TX	+18,227
CA	-5,233	CT	-68	AL	-188	CH	+13,216
KS	-4,174	FL	-39	FL	-155	TN	+9,960
CT	-3,012	SD	-20	ID	-122	IN	+6,774
AZ	-1,878	CO	-19	WI	-74	PA	+4,857



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

# US deep-dive

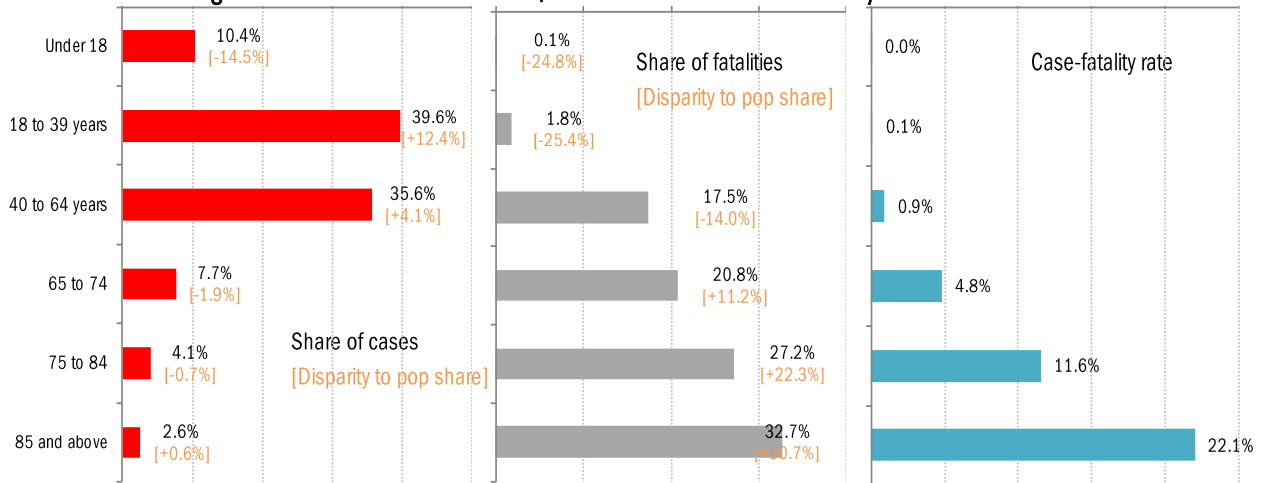
National and state-by-state data do not line up because of different sources



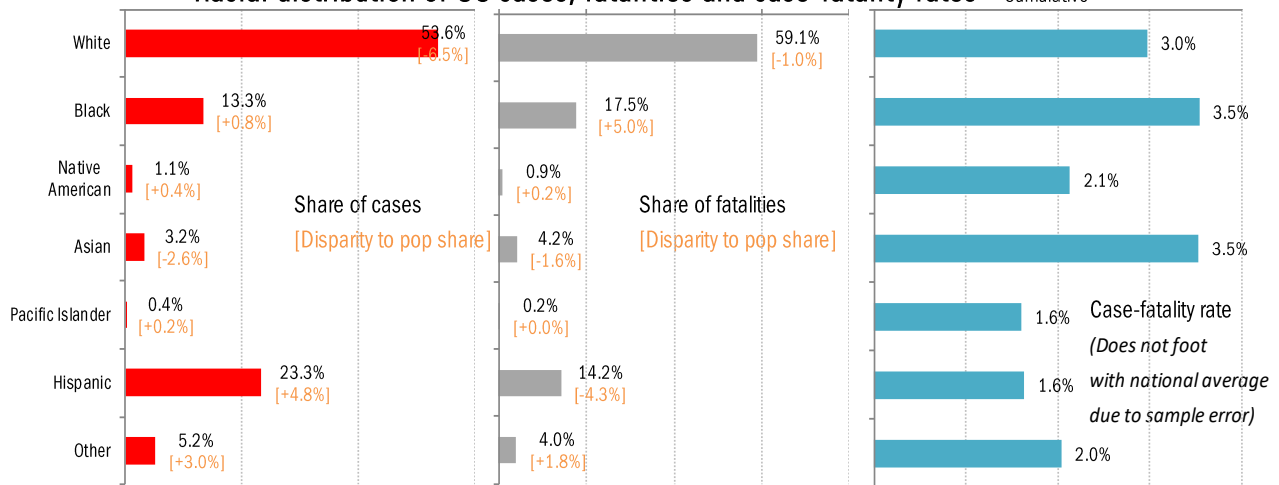
Source: [Covid Tracking Project](#), TrendMacro calculations

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

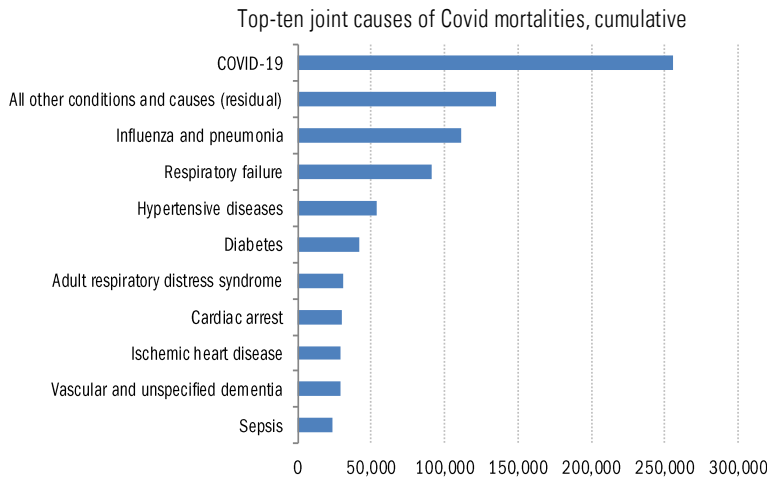
## Age distribution of US cases, fatalities and case-fatality rates



## 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

### [A Sincere Government Apology](#)

*Wall Street Journal*

December 22, 2020

### [Look who's back! Professor Lockdown Neil Ferguson - who broke the rules to see his lover - had key role in PM's dramatic U-turn on Christmas](#)

Jim Norton

*Daily Mail*

December 20, 2020

### [Jay Bhattacharya on the Pandemic](#)

Russ Roberts

*EconTalk*

December 21, 2020

## Meme of day

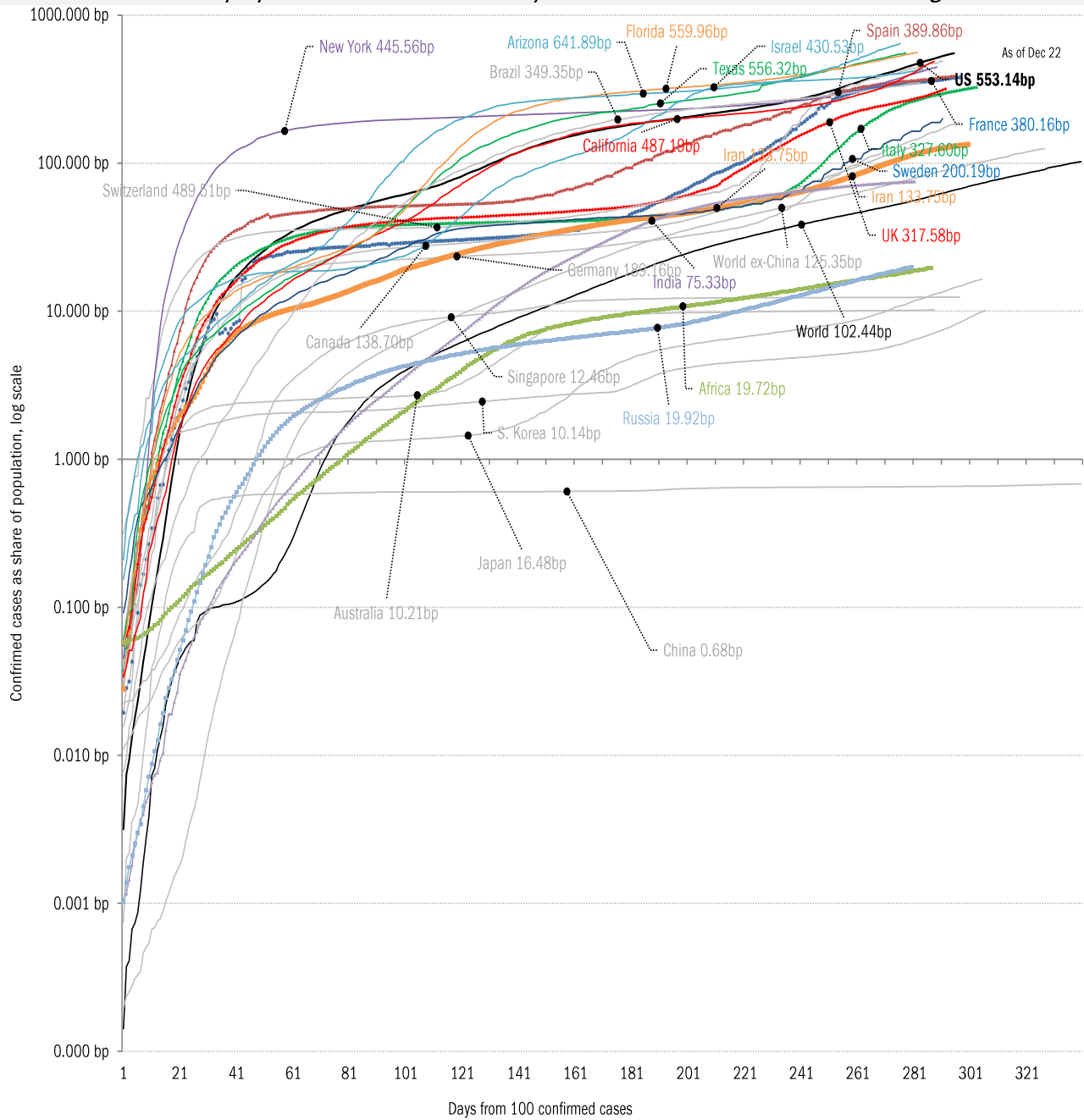


## Jupiter And Saturn Fined For Not Obeying Social Distancing

SOLAR SYSTEM—Astronomers at NASA have fined two planets in our solar system, Saturn and Jupiter, for callously disregarding social distancing rules as their paths cross in the night sky... [Read more](#)

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

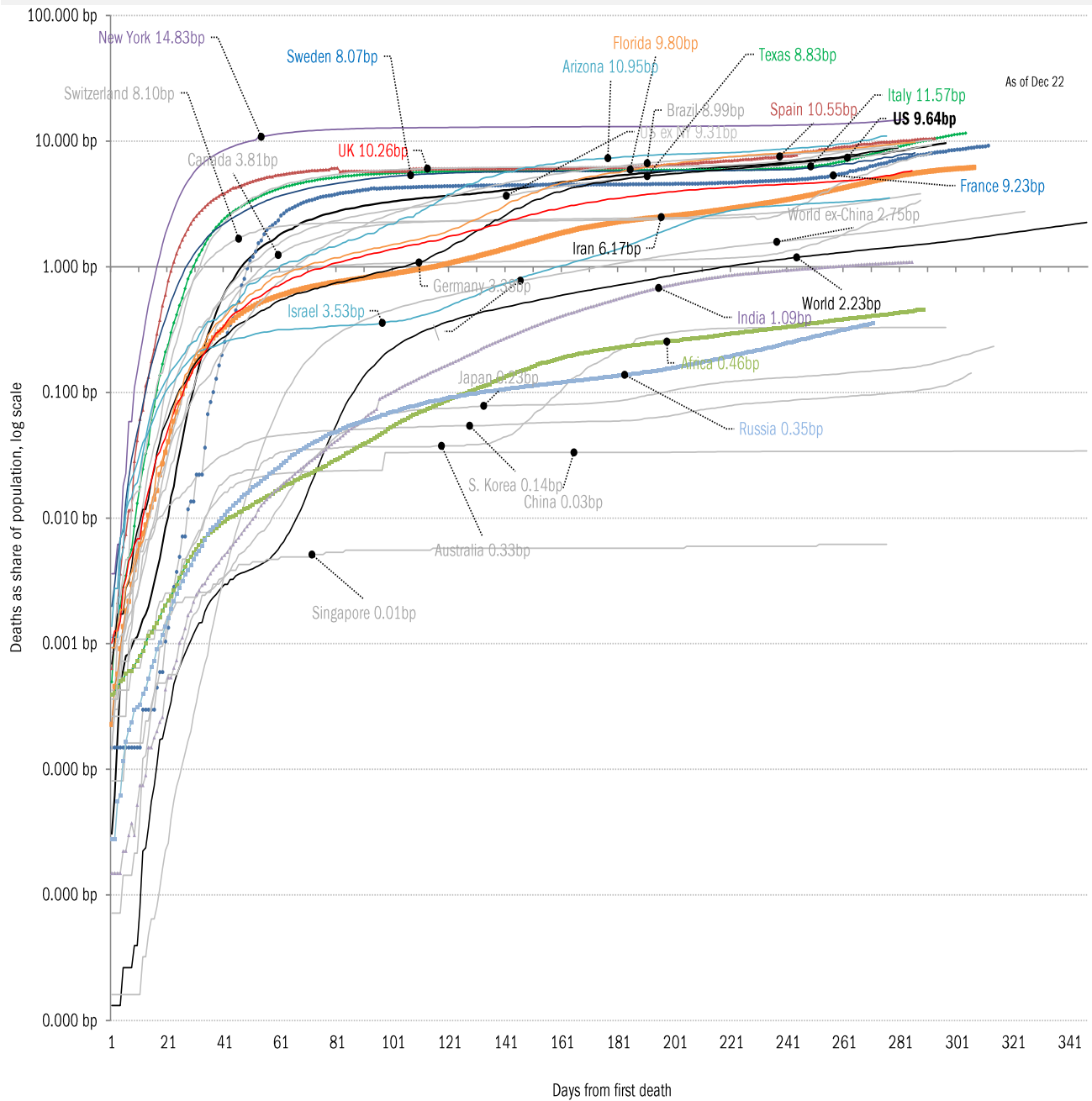
The coronavirus case accelerometer... tracking the world's infection curves  
*Share of infected population from first day with 100 confirmed cases, log scale*



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

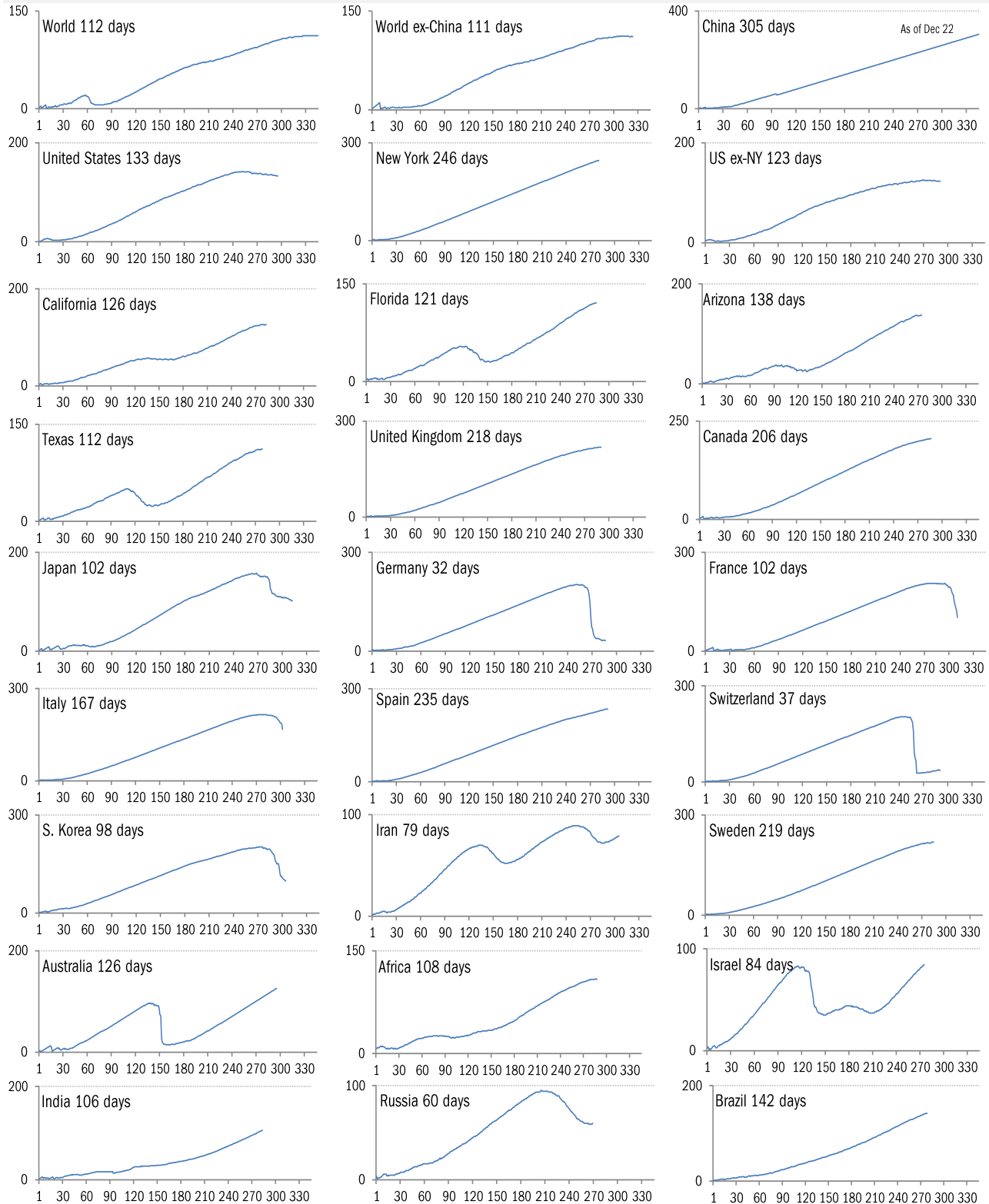


Source: [Johns Hopkins](#), [Covid Tracking Project](#), TrendMacro calculations

# "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



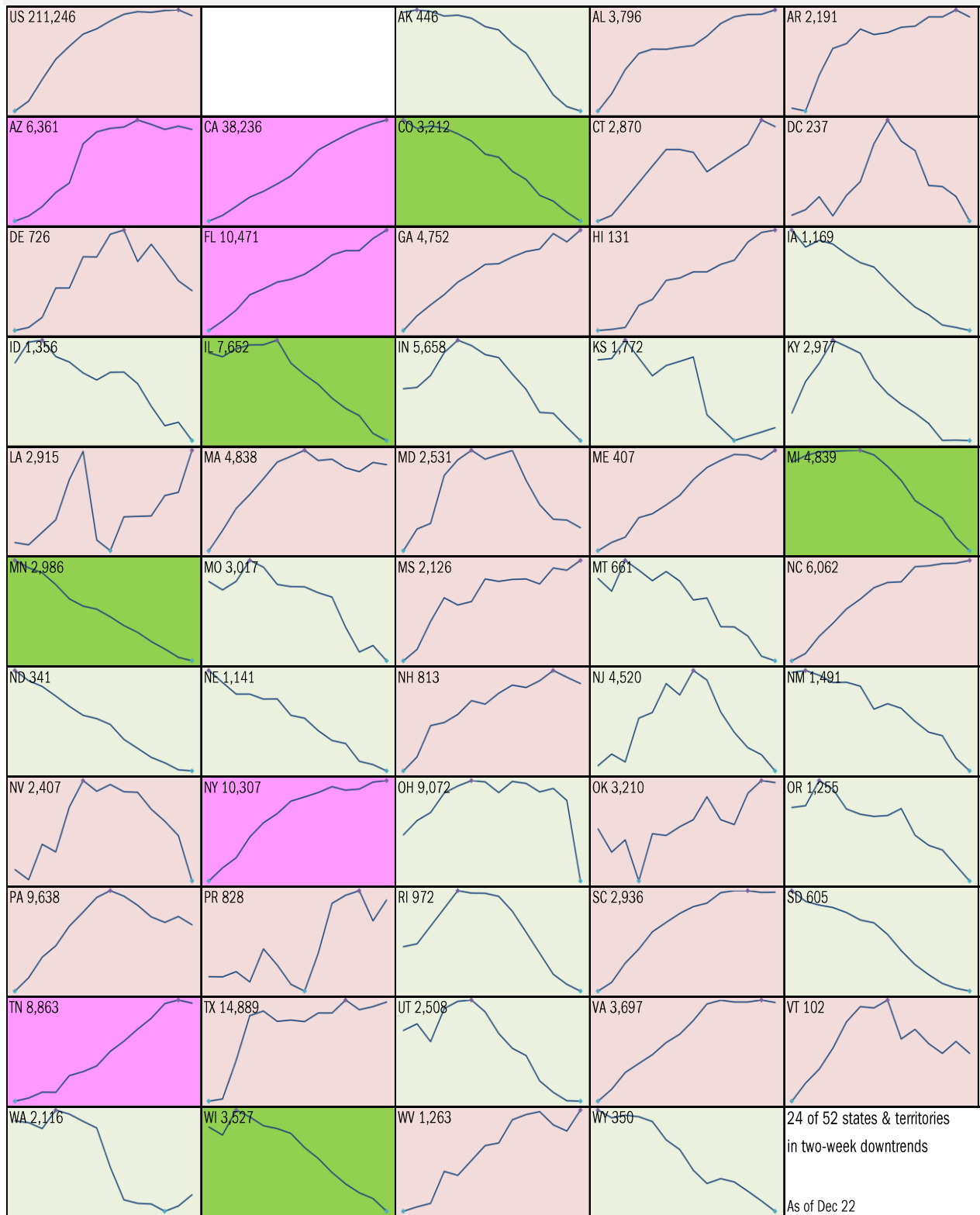
Source: [Johns Hopkins, Covid Tracking Project](#), TrendMacro calculations



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

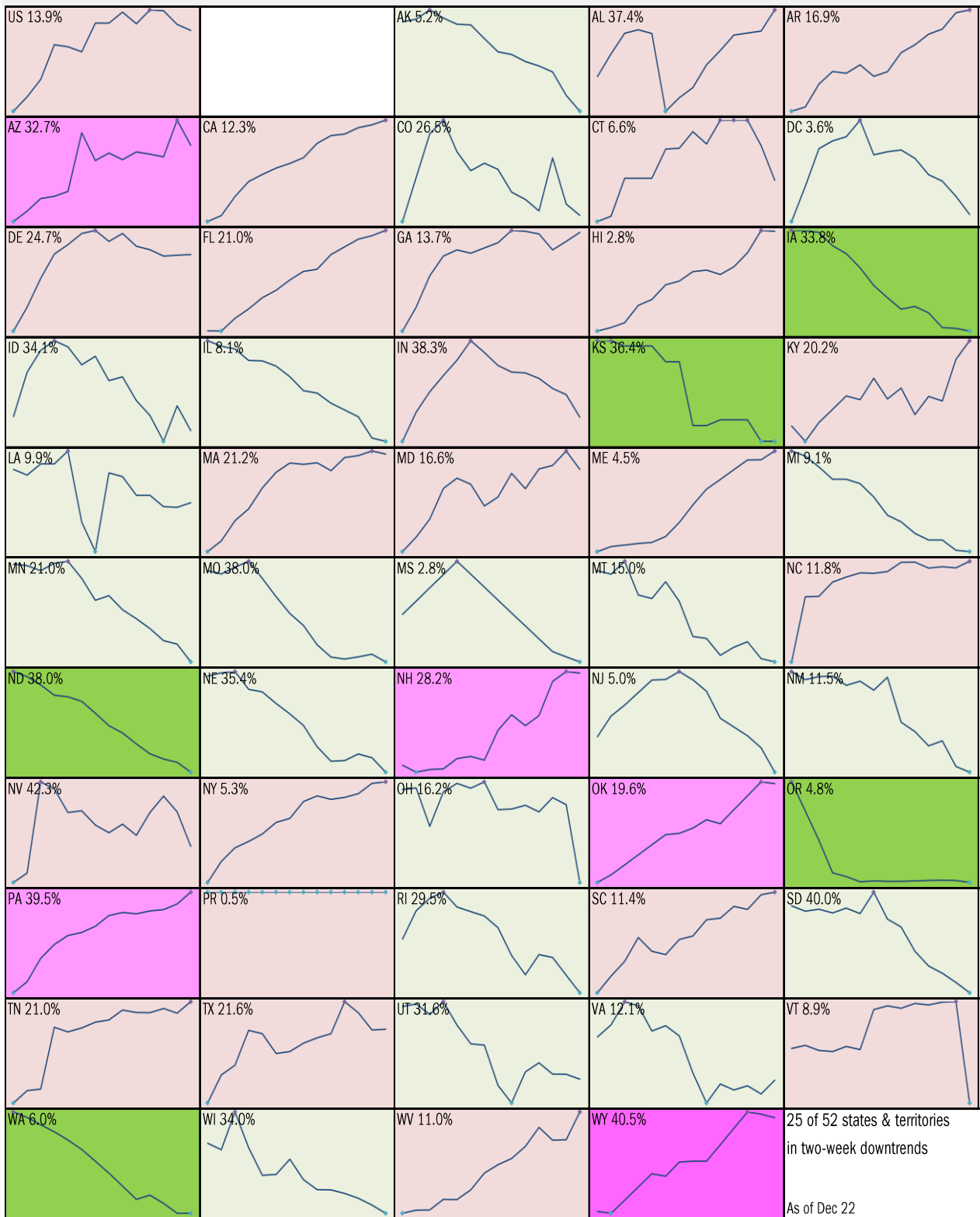
■ Downward trajectory ■ Five best ■ Upward trajectory ■ Five worst



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



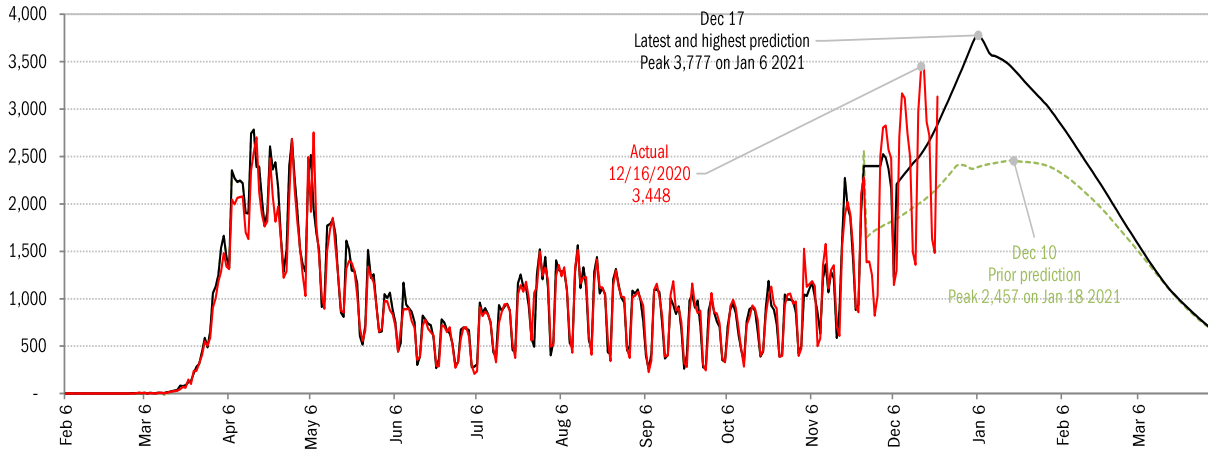
Source: [Covid Tracking Project](#), TrendMacro calculations

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

## New daily fatalities

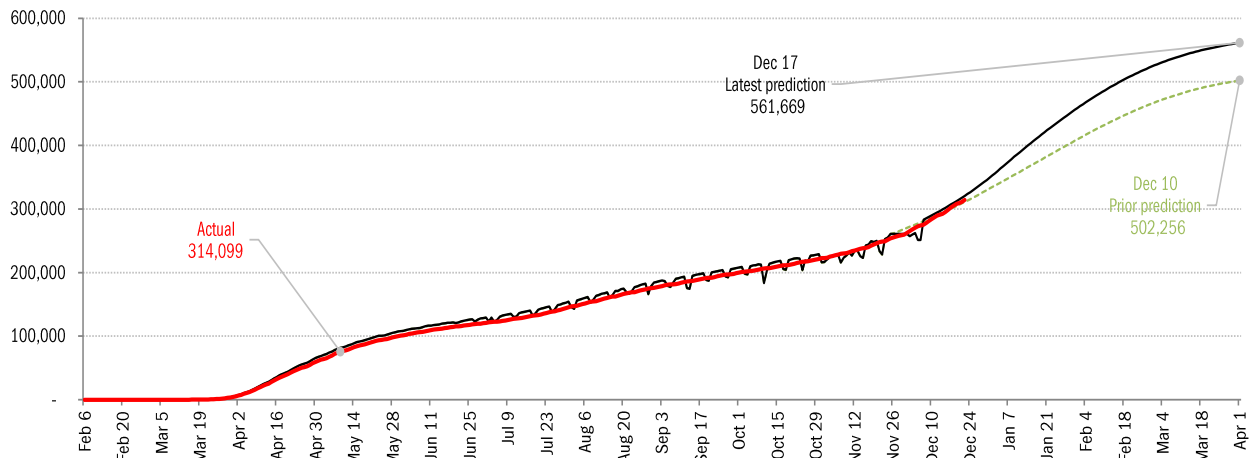
As of Dec 22

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

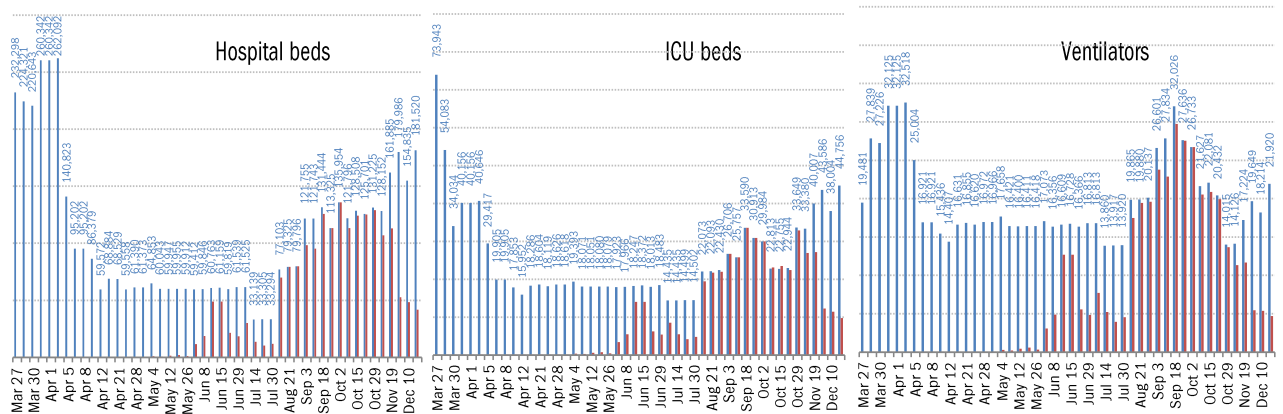


## Cumulative fatalities

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

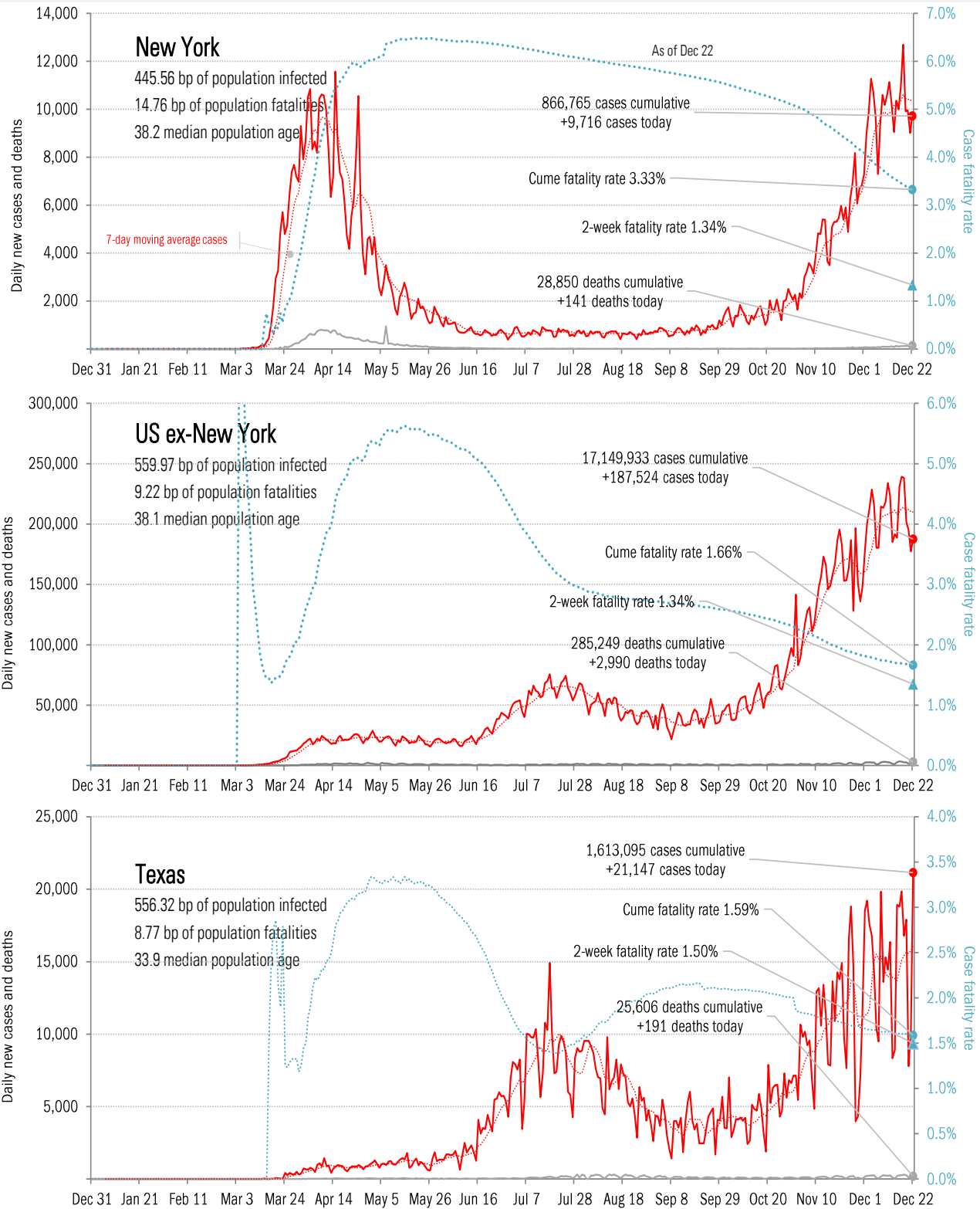


## Healthcare system stress, **peak** and **ultimate** estimated at each model revision



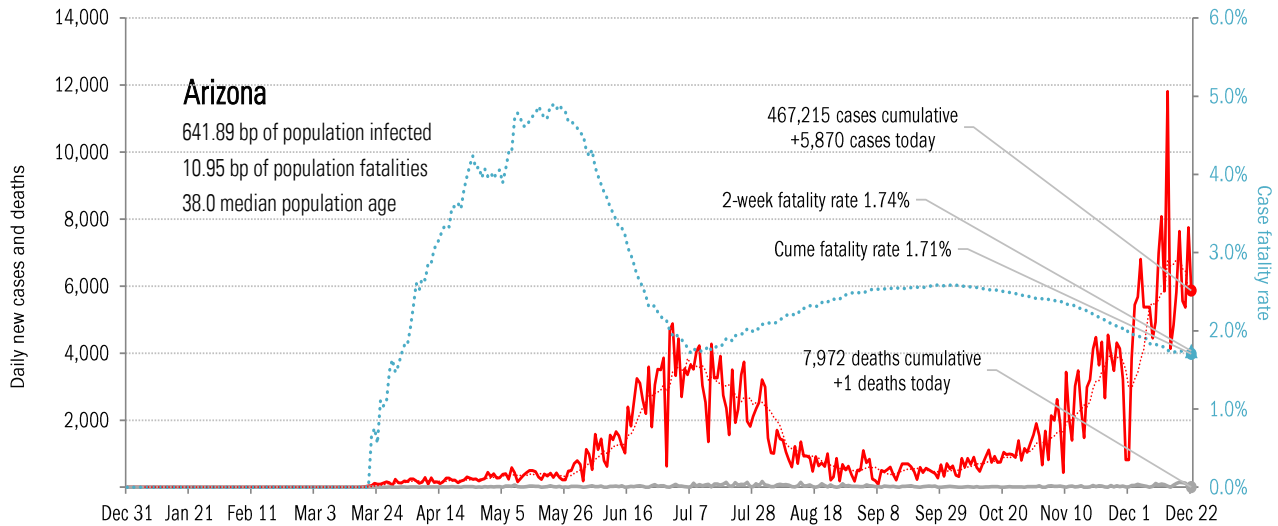
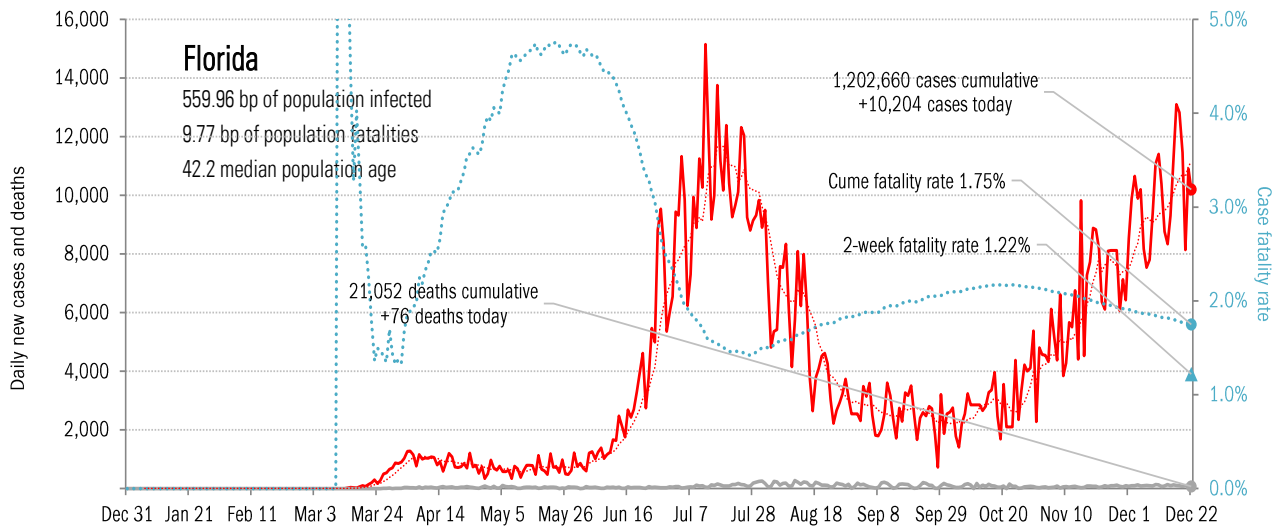
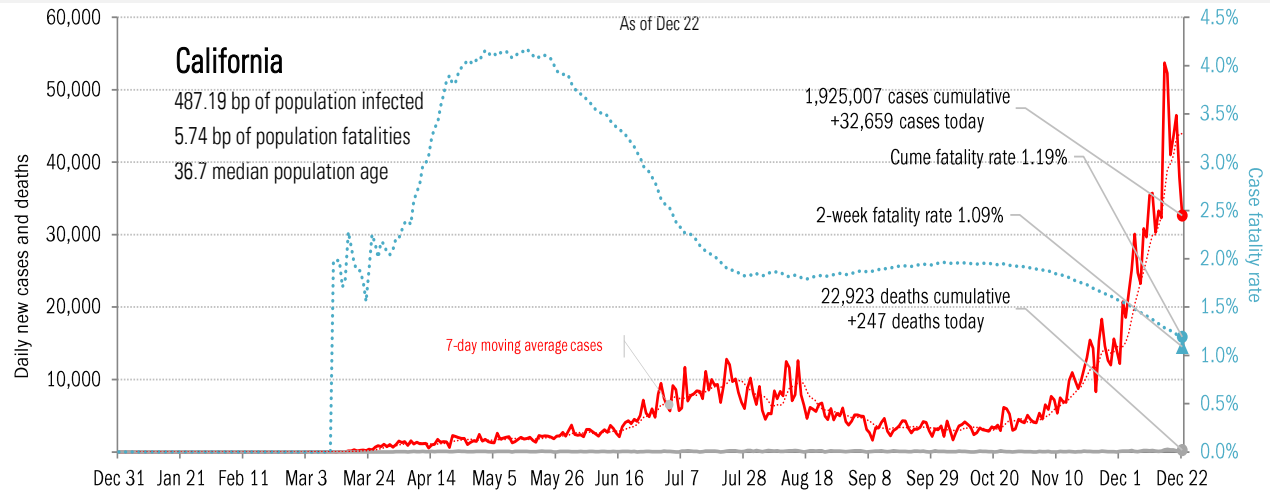
Source: [IHME Covid Tracking Project](#), TrendMacro calculations

# From Ground Zero to the Rio Grande



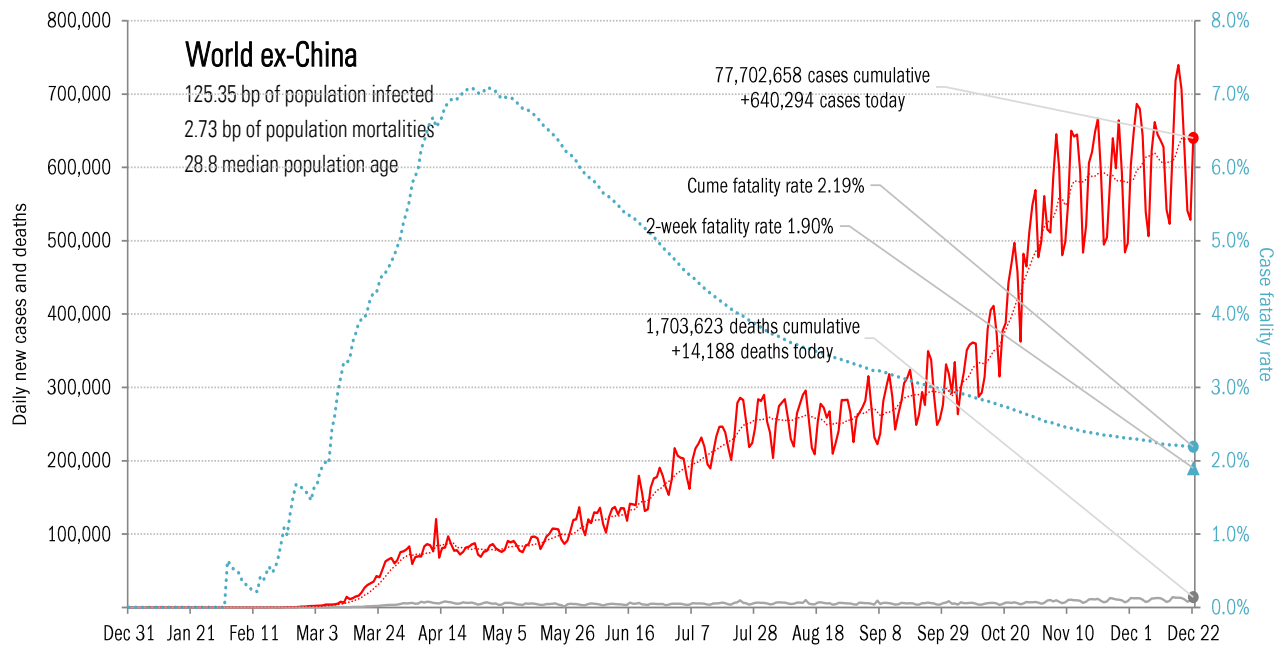
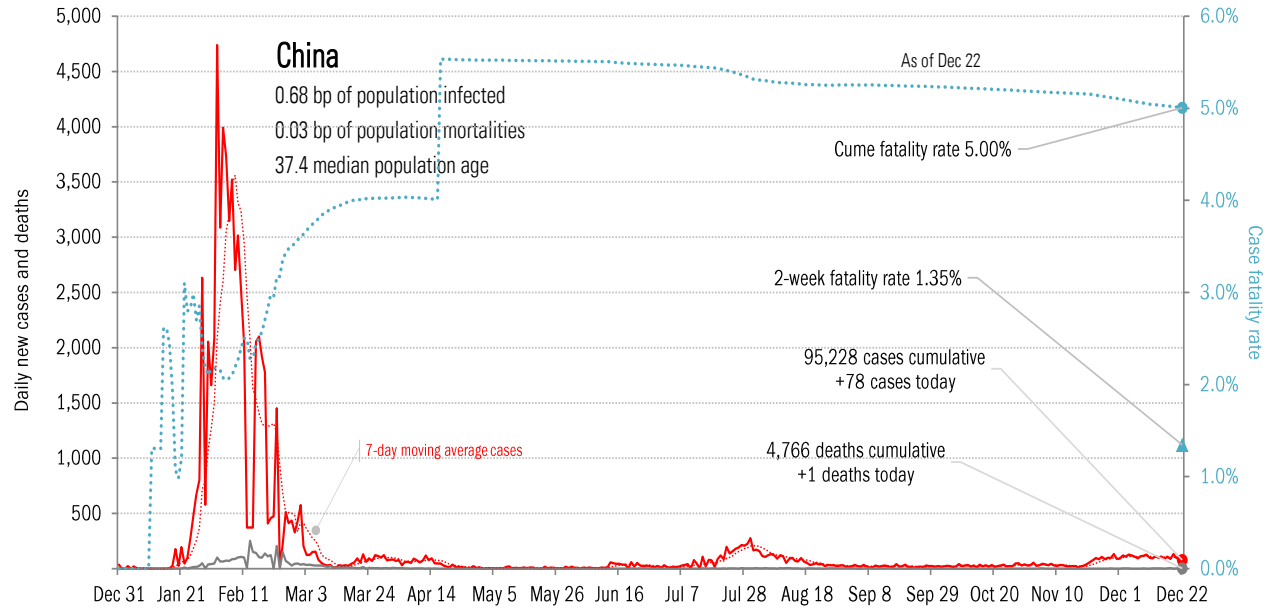
Source: [Covid Tracking Project](#), TrendMacro calculations

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



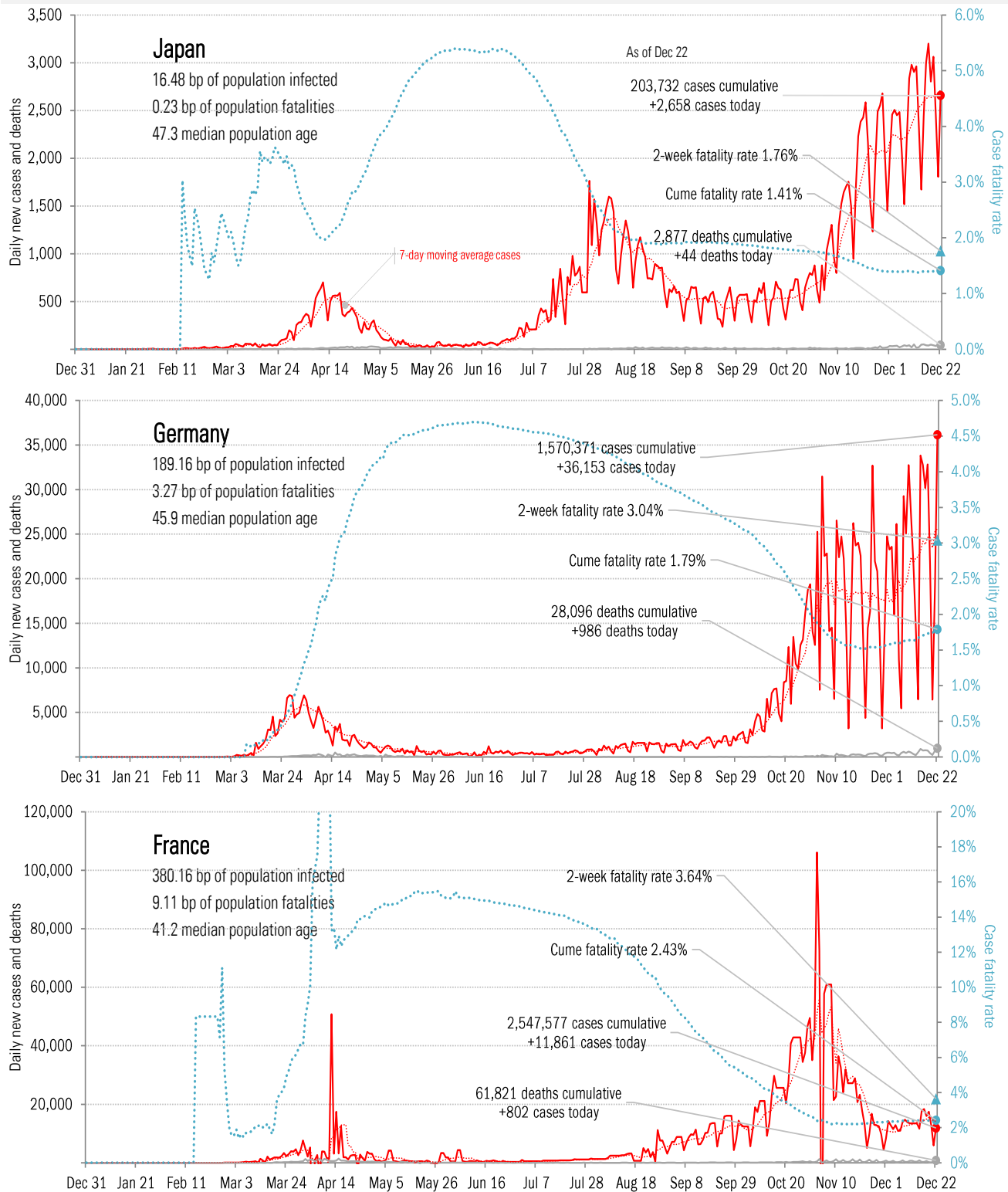
Source: [Covid Tracking Project](#), TrendMacro calculations

# Patient zero... and then everyone else



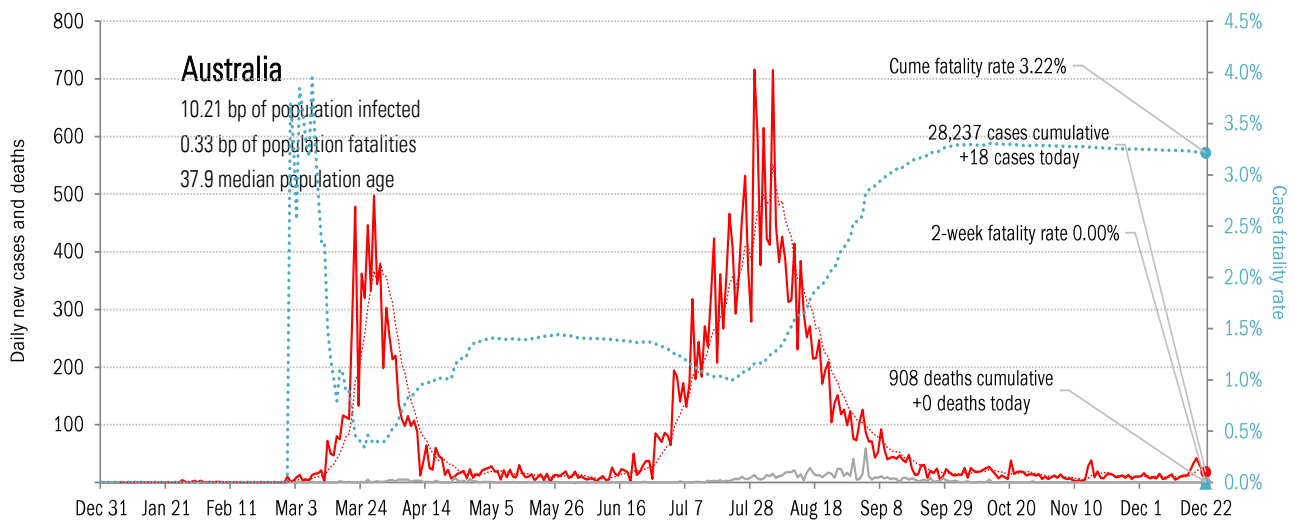
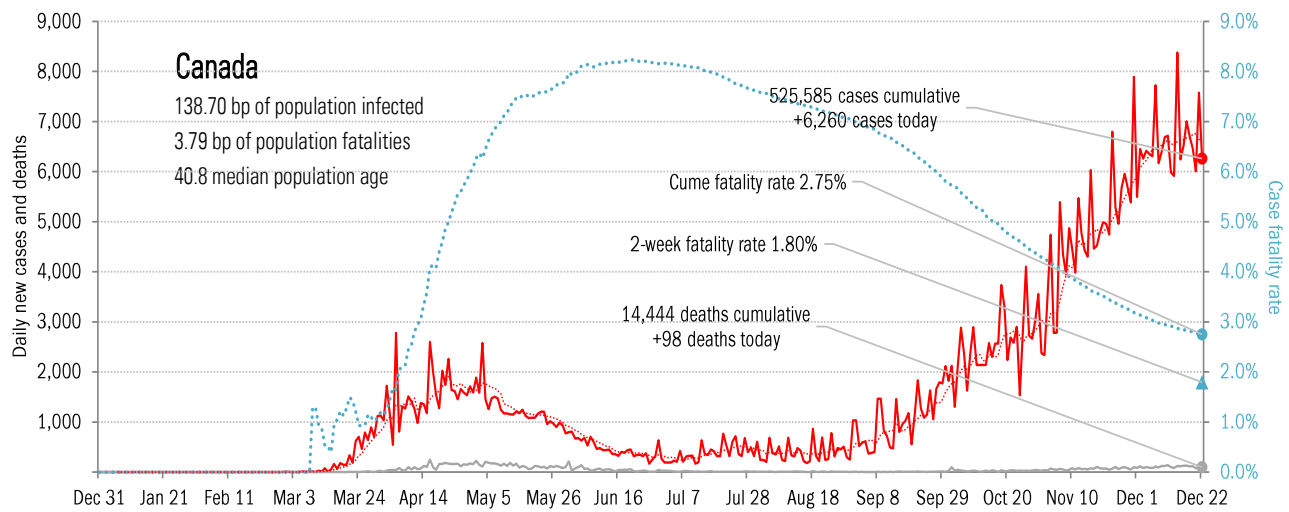
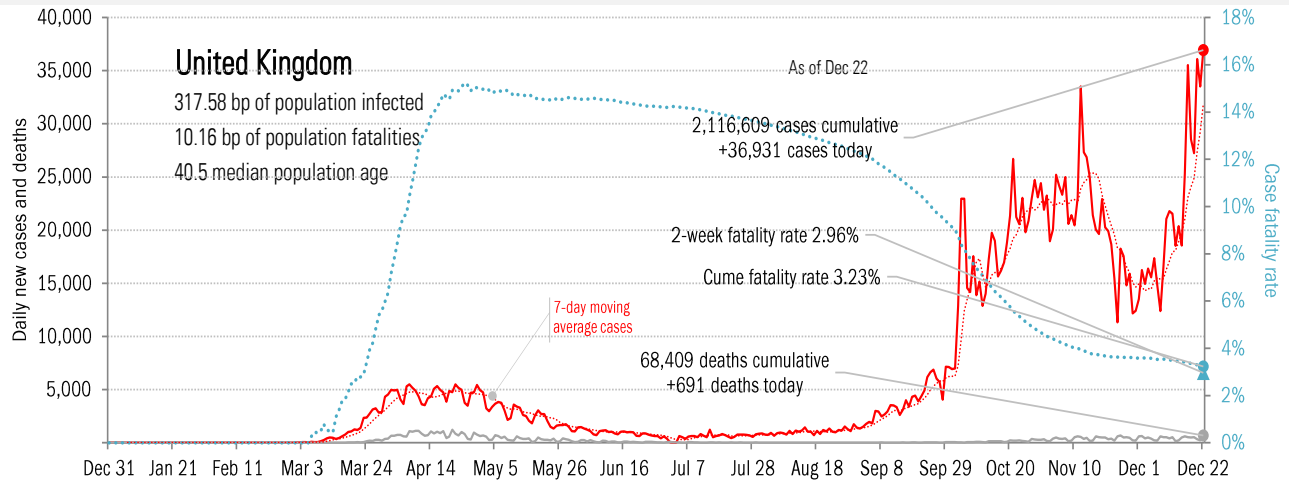
Source: [Johns Hopkins](#), [Covid Tracking Project](#), TrendMacro calculations

# Impact in the largest economies



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

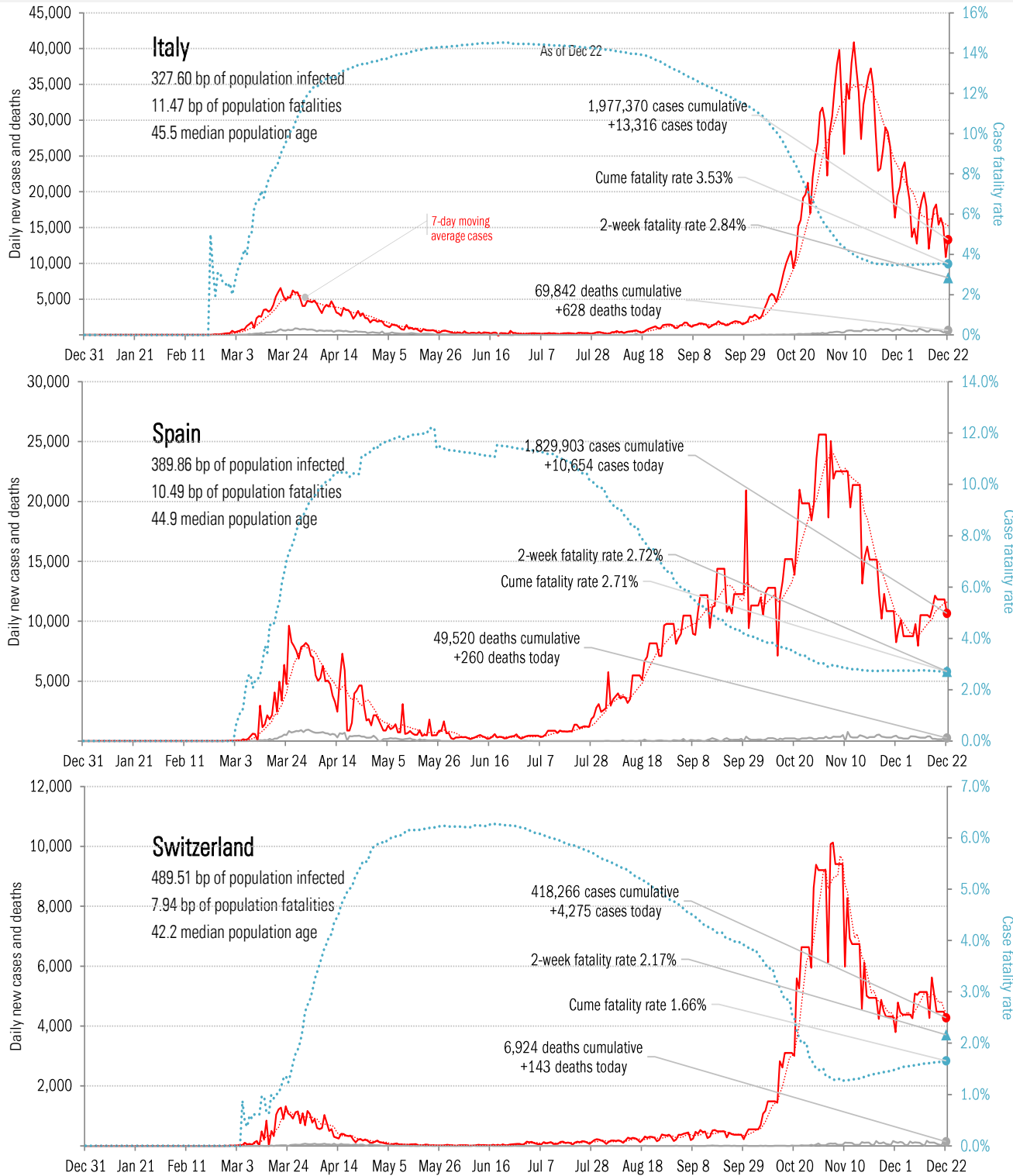
# Impact in The Anglosphere



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

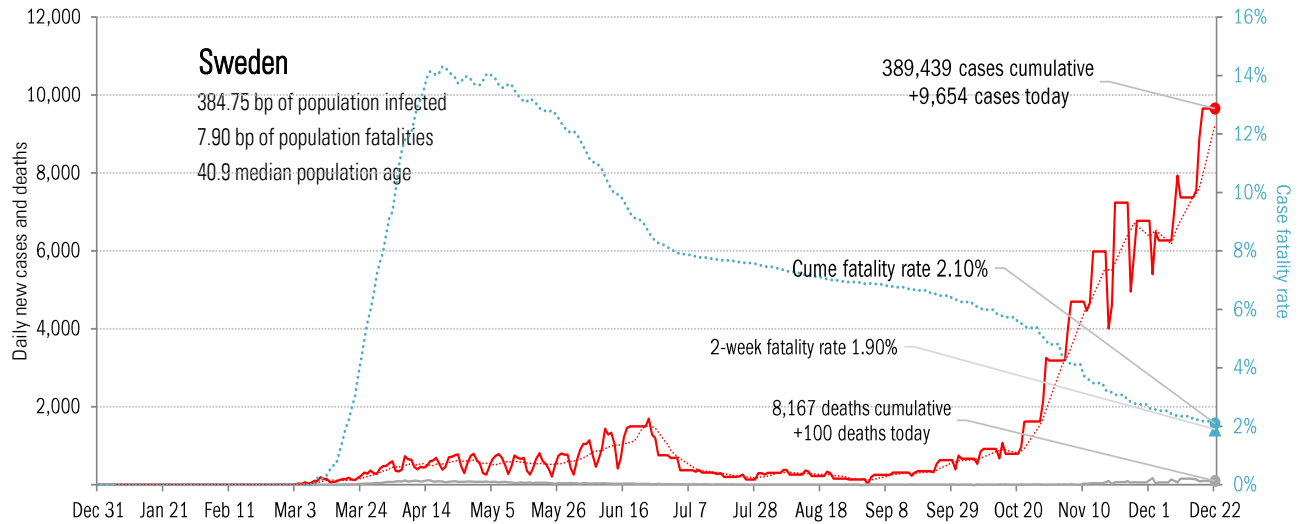
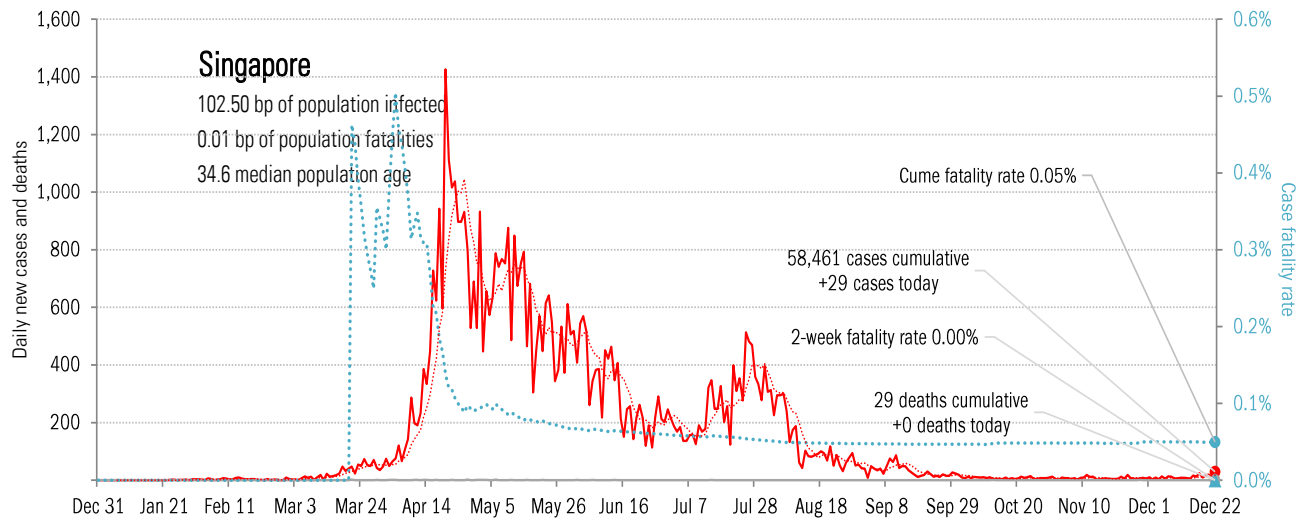
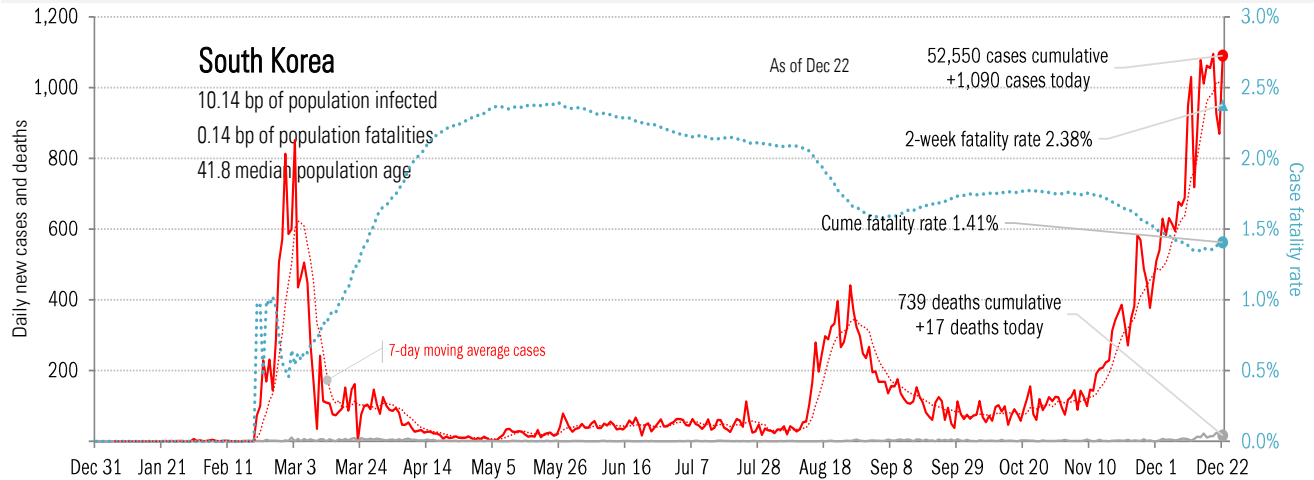


# Impact in continental Europe



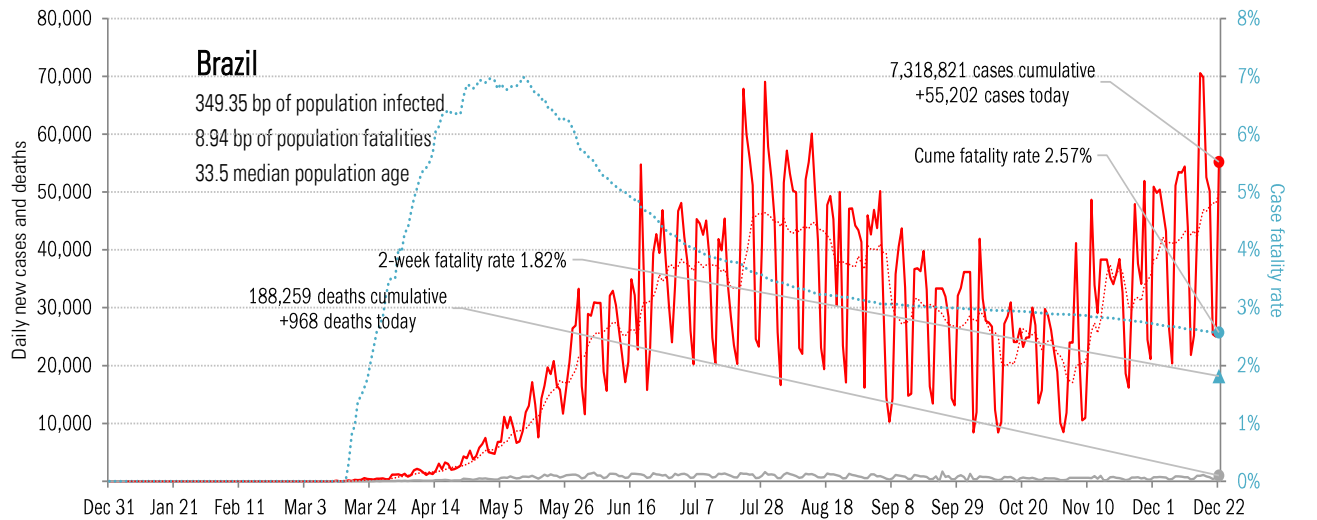
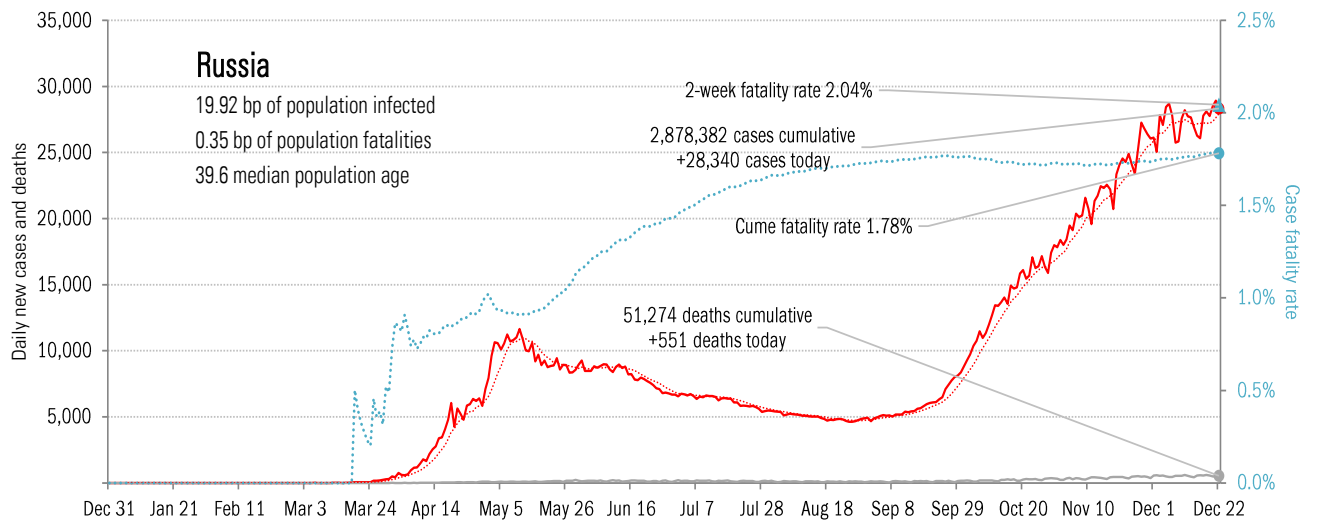
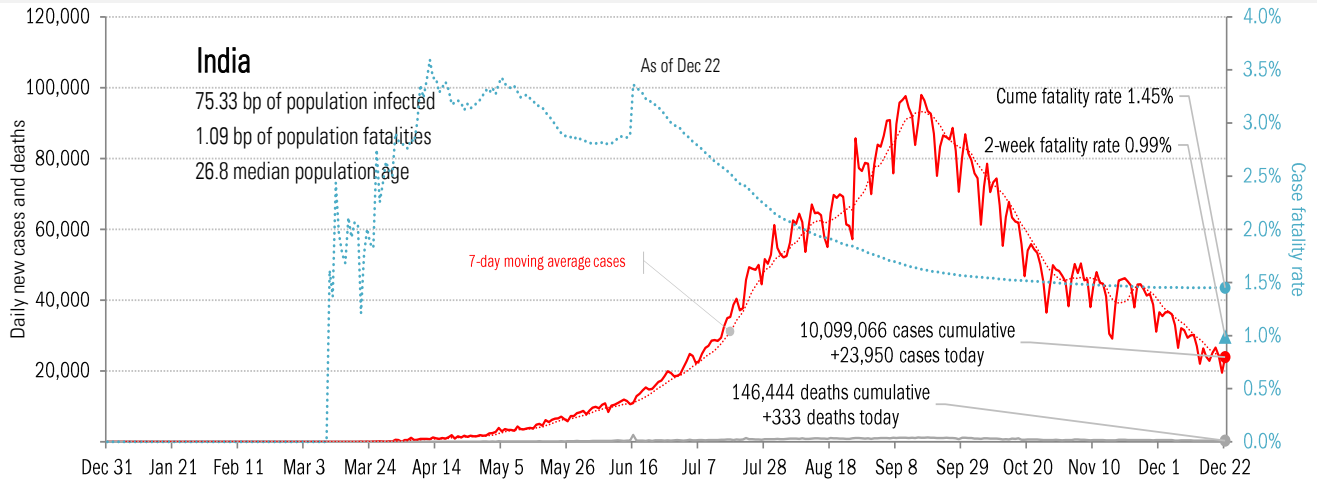
Source: [Johns Hopkins](#), TrendMacro calculations

# Impact in other hot-spots



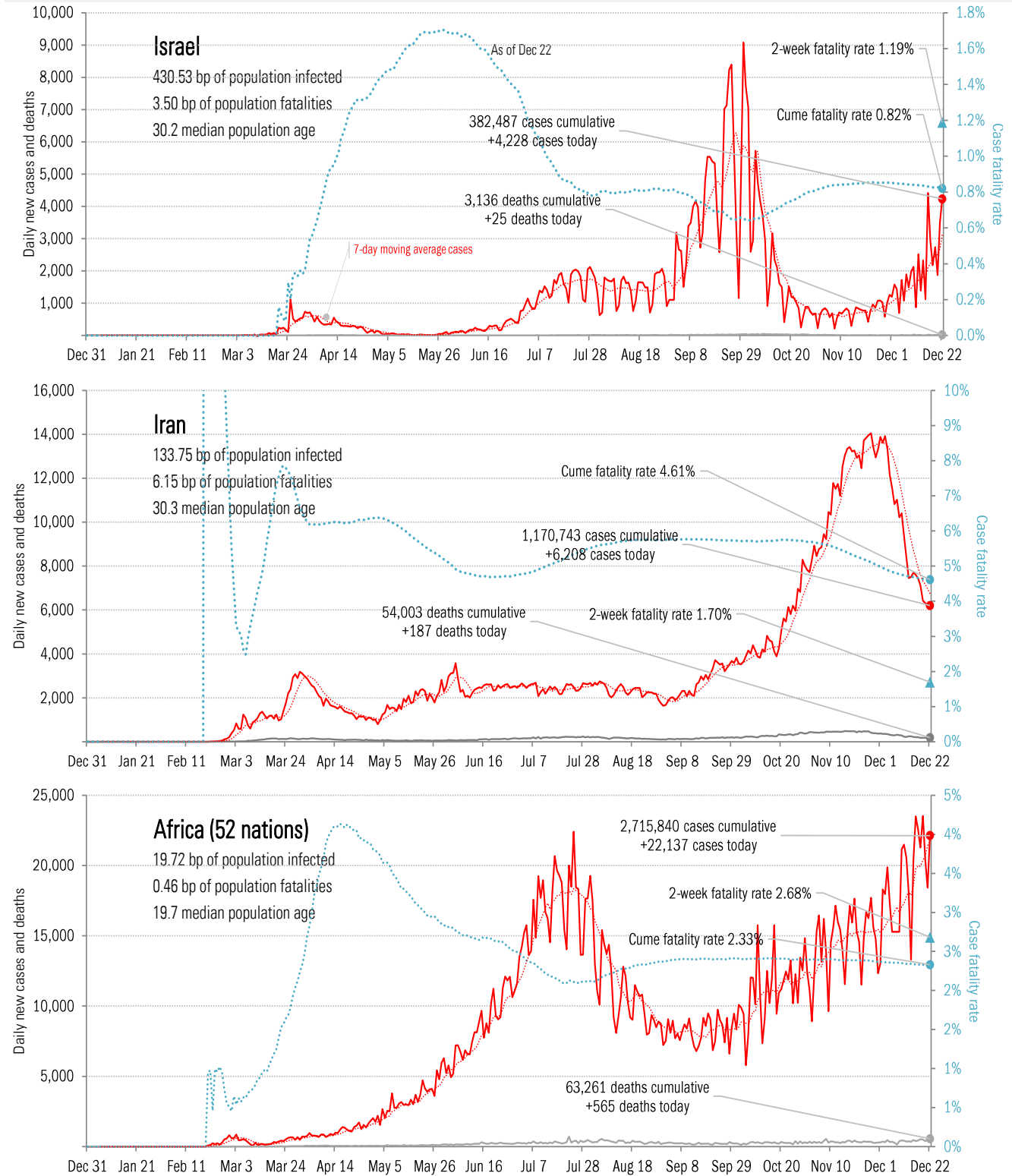
Source: [Johns Hopkins](#), TrendMacro calculations

# Impact in the BRICs ex-China



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

# Impact in the Middle East and Africa



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