

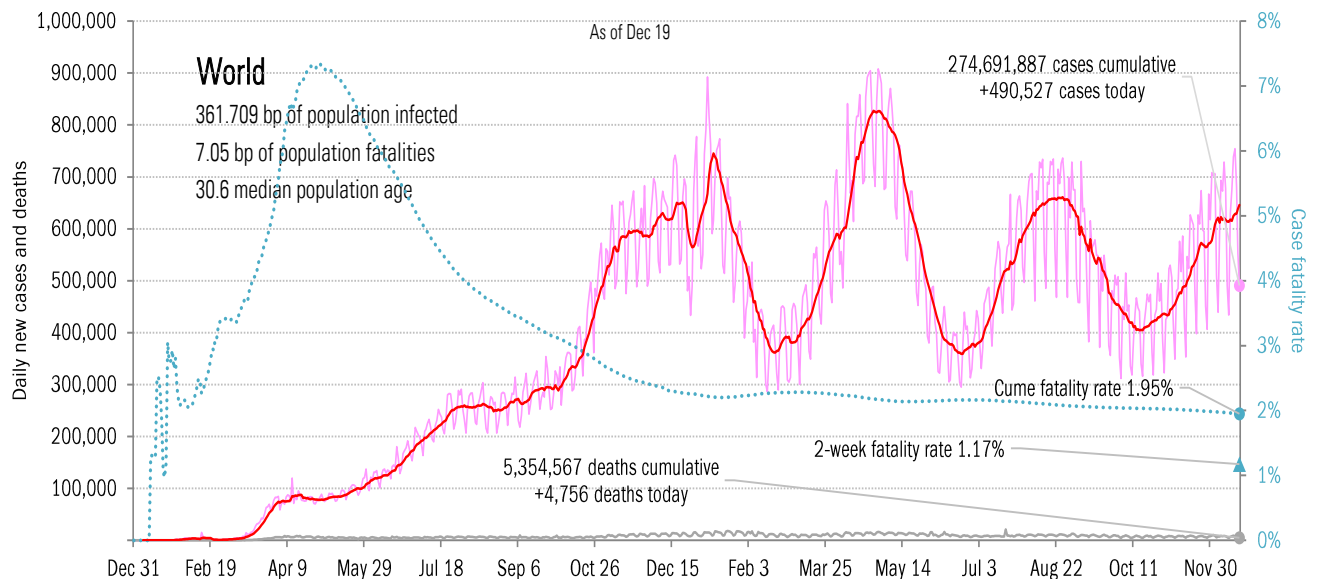
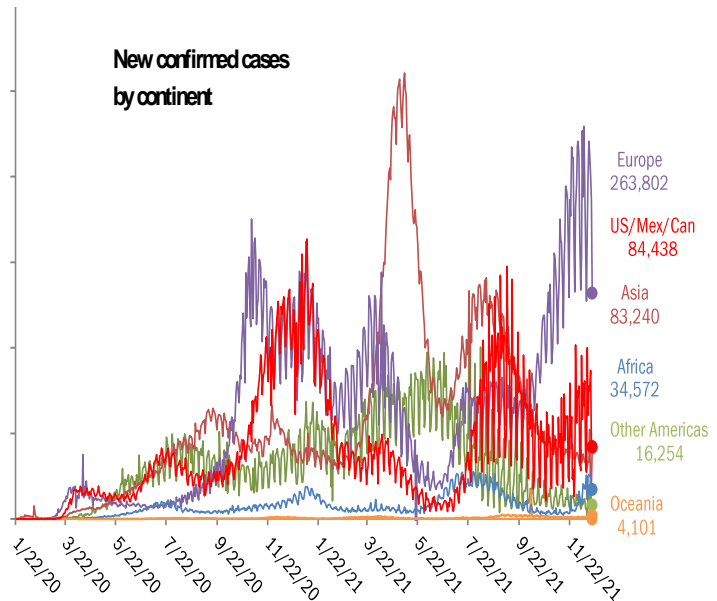
## Data Insights: Covid-2019 Monitor

Monday, December 20, 2021

### The global scorecard

Cases: 7-day average and daily Deaths: Daily

The worst ten countries			
New cases		New Deaths	
United Kingdom	+82,063	Russia	+996
United States	+74,935	Brazil	+408
France	+48,473	India	+396
Turkey	+34,554	Turkey	+362
Russia	+27,680	Mexico	+267
Italy	+24,303	Vietnam	+215
Vietnam	+16,110	Ukraine	+203
Poland	+15,976	United States	+165
South Africa	+15,465	Germany	+118
India	+13,644	Italy	+97
<b>+353,203</b>		<b>+3,227</b>	
World	+490,527	World	+4,756
Top ten	72%	Top ten	68%



Source: [Johns Hopkins](#), 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

Cases: 7-day average and daily Deaths: Daily

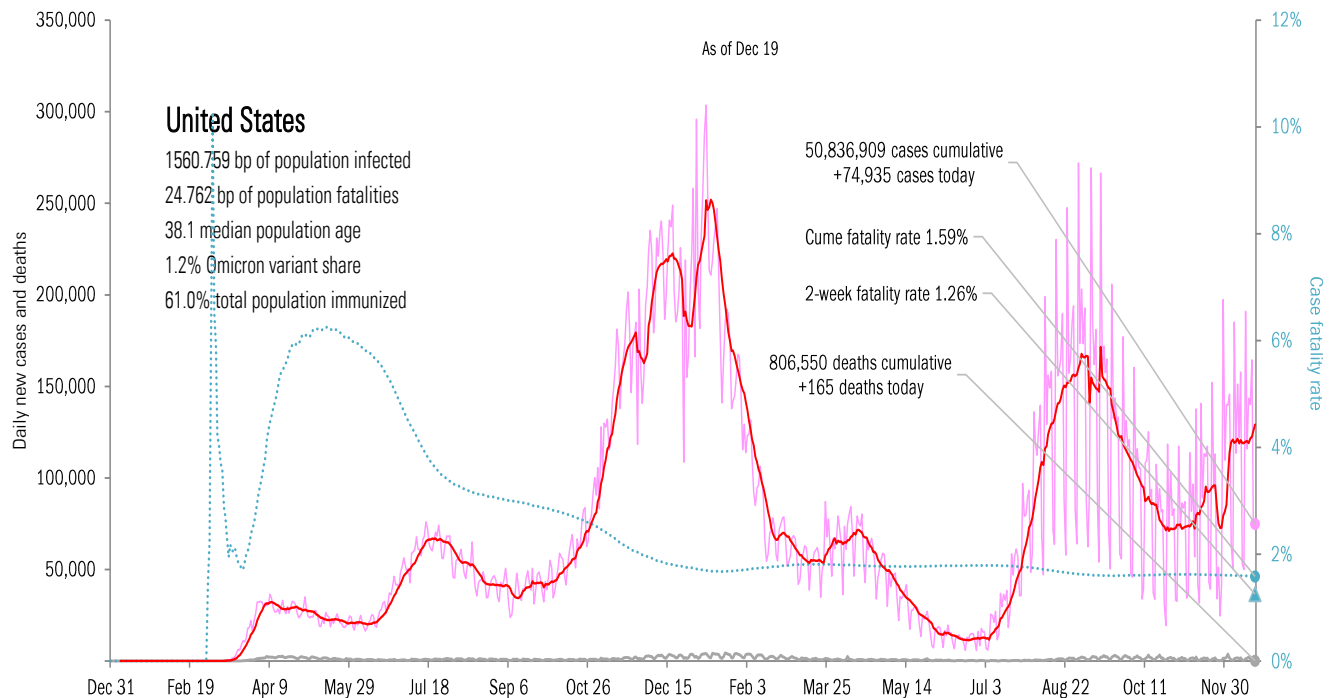
## The ten worst US states

New cases			New Deaths			New in hospital			Cum cases			Cum deaths			Cum in hospital			Hospital use		ICU use	
NY	+25,963		NY	+60		GA	+182		CA	5,206,956		CA	75,727		TX	392,080		RI	89%	DE	90%
CH	+7,639		FL	+28		FL	+94		TX	4,431,974		TX	75,077		CA	327,772		MA	86%	KY	89%
NJ	+7,345		TX	+21		NY	+63		FL	3,772,964		FL	62,331		FL	327,399		AZ	85%	RI	88%
PA	+7,231		PA	+20		NJ	+60		NY	2,960,416		NY	58,600		NY	181,656		PA	85%	MO	88%
TX	+6,543		AR	+14		IN	+55		IL	1,944,056		PA	35,398		GA	165,988		MD	84%	NE	88%
CA	+4,576		CA	+9		TX	+44		PA	1,890,259		GA	30,994		CH	146,817		CT	84%	NM	88%
FL	+4,120		NJ	+6		NC	+43		CH	1,847,140		IL	29,550		PA	136,739		MO	84%	AL	87%
PR	+2,747		AZ	+3		IL	+42		GA	1,691,674		NJ	28,714		IL	118,864		MI	83%	MI	86%
AZ	+2,745		HI	+2		MD	+38		MI	1,614,141		CH	28,028		KY	117,964		MN	82%	IN	86%
MO	+1,774		MO	+1		KS	+30		NC	1,589,054		MI	27,739		MI	112,659		WV	82%	NH	86%
<b>+70,683</b>			<b>+164</b>			<b>+651</b>			<b>26,948,634</b>			<b>452,158</b>			<b>2,027,938</b>						
All states	+74,935			+165			+706		All states	50,836,909			806,550			3,662,110		All states	70%		67%
Top ten	94%			99%			92%		Top ten	53%			56%			55%		Median	77%		80%

Some states not reporting

## Five most improved US states

Fewer daily cases		Fewer new deaths		Fewer new hospitalizations		Most pop immunity growth	
IA	-3,622	PA	-175	MI	-102	IL	+20 bp
CH	-2,495	FL	-55	PA	-84	VT	+20 bp
MO	-1,628	TX	-43	CH	-68	CA	+10 bp
PA	-1,600	CA	-30	SC	-45	CO	+10 bp
ME	-1,079	NJ	-27	KY	-44	CT	+10 bp

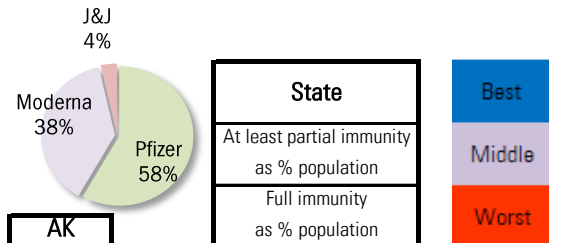


Source: [Johns Hopkins](#), [Dept. of Health and Human Services](#), [CDC](#), TrendMacro calculations

# Rolling out the vaccines in the US and the world

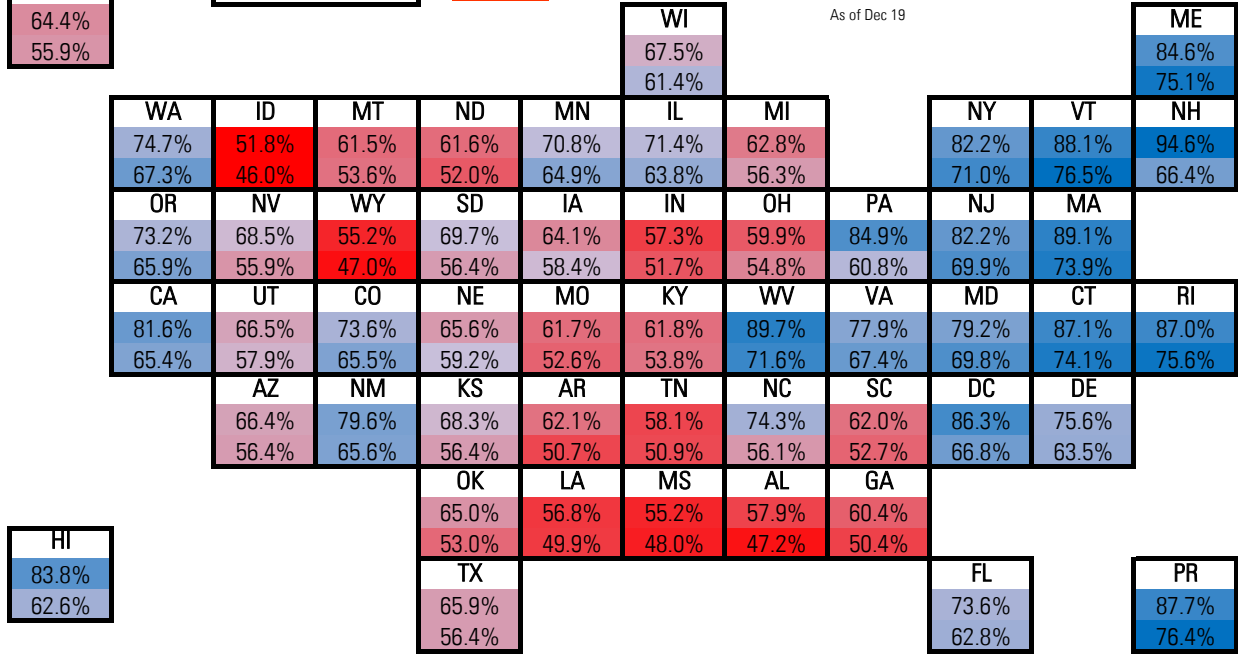
Administered	Cumulative	Today	Immunity	Full	Partial
Doses	508,190,378	+1.493 million	US	61.0%	72.8%
Boosters	61,117,023	+0.921 million	UK	68.9%	75.5%
	<b>One dose</b>	<b>% Pop</b>	<b>Immune</b>	<b>% pop</b>	<b>New immune today</b>
Total population	247,527,615	74%	209,052,699	62%	+0.200 million
Age 12 to 17	15,013,406	63%	12,607,197	53%	+0.012 million
Age 18 to 64	167,429,514	82%	142,521,405	70%	+0.097 million
Age 65 and over	58,062,540	100%	49,554,749	90%	+0.018 million

France	71.8%	77.6%
Spain	80.8%	82.6%
Germany	69.7%	72.7%
Italy	73.6%	79.4%
Australia	75.8%	78.8%
Israel	62.8%	69.5%
Canada	76.9%	82.6%
Japan	78.0%	79.5%
Africa	8.4%	12.9%
India	39.3%	59.5%
Brazil	66.1%	77.3%
China	80.5%	84.8%

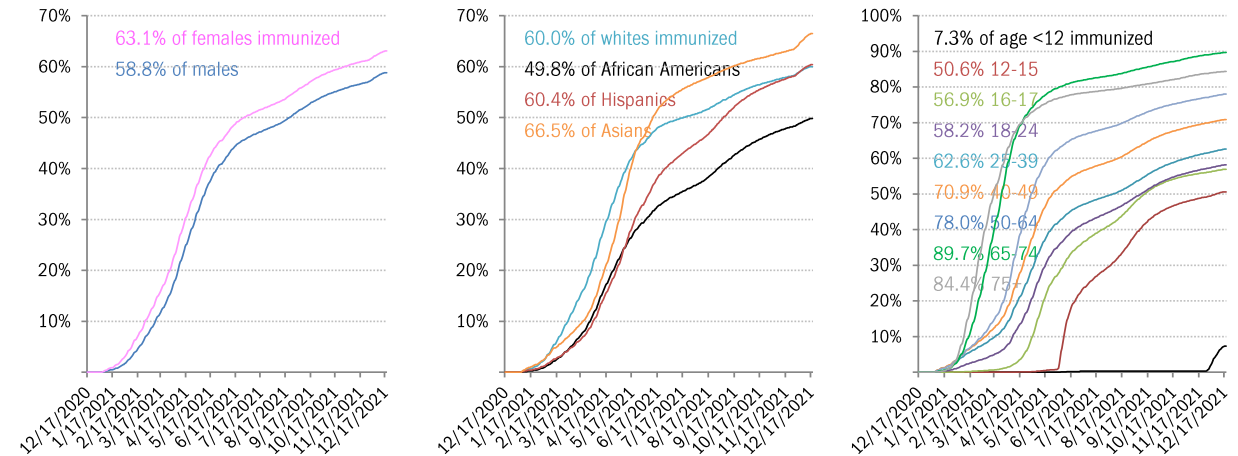


Every American >18 immunized in **102 days** by Mar 31, 2022  
 74.2% of population >18 immunized  
 17.9% previously tested positive  
**92.1%** vs 60% adult herd immunity

Global data differs due to sources, timing



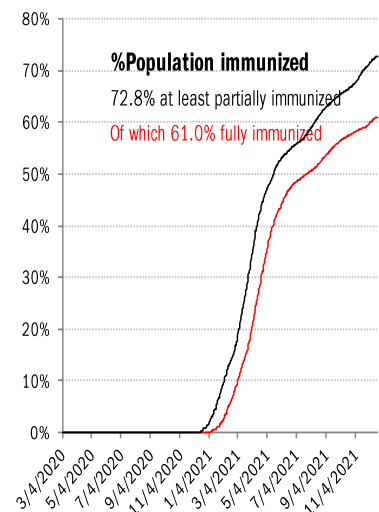
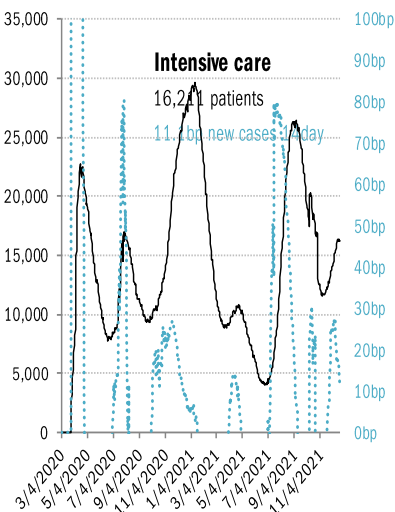
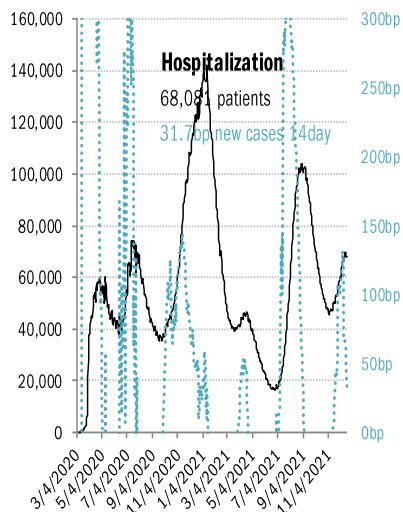
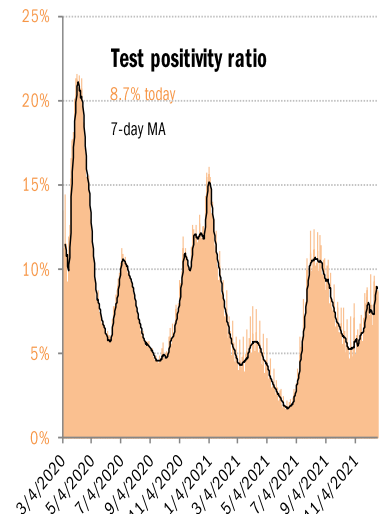
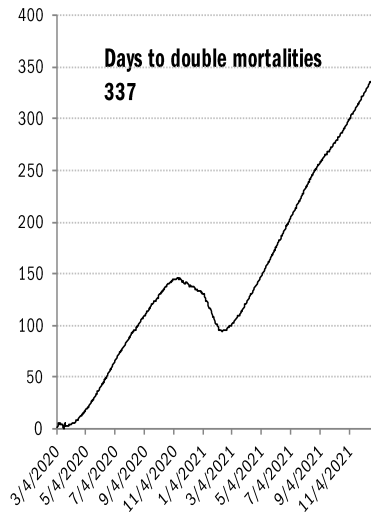
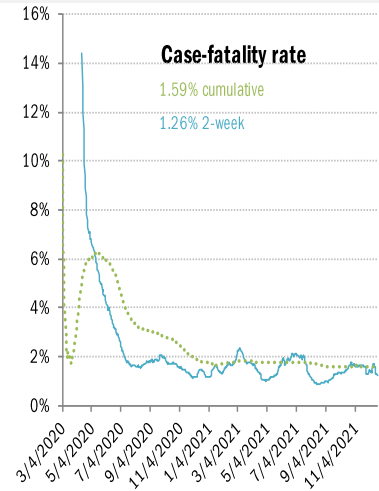
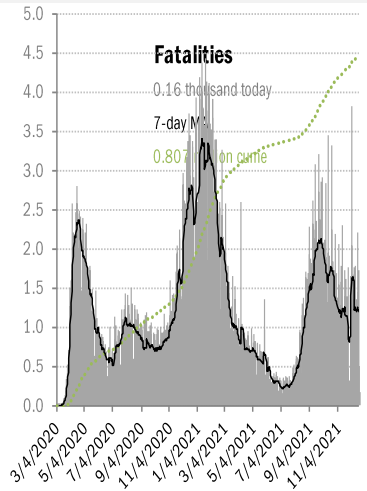
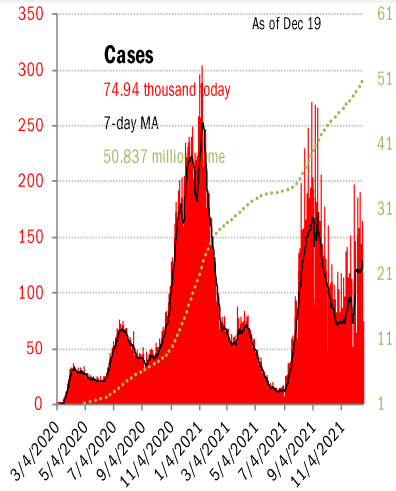
## The demographics of US vaccination



Source: [CDC](#), [CDC](#), [Our World in Data](#), TrendMacro calculations

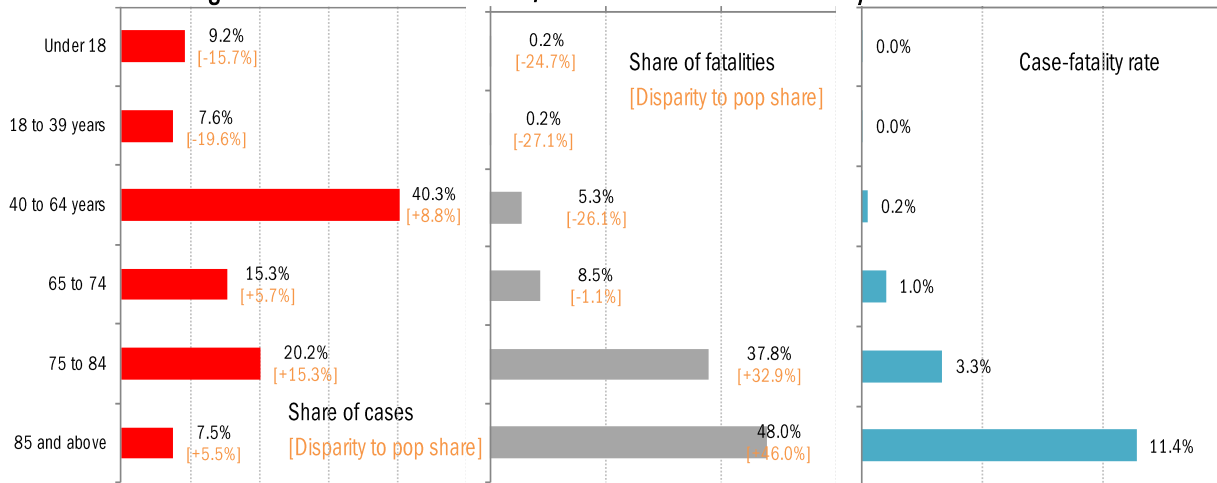
# US deep-dive

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

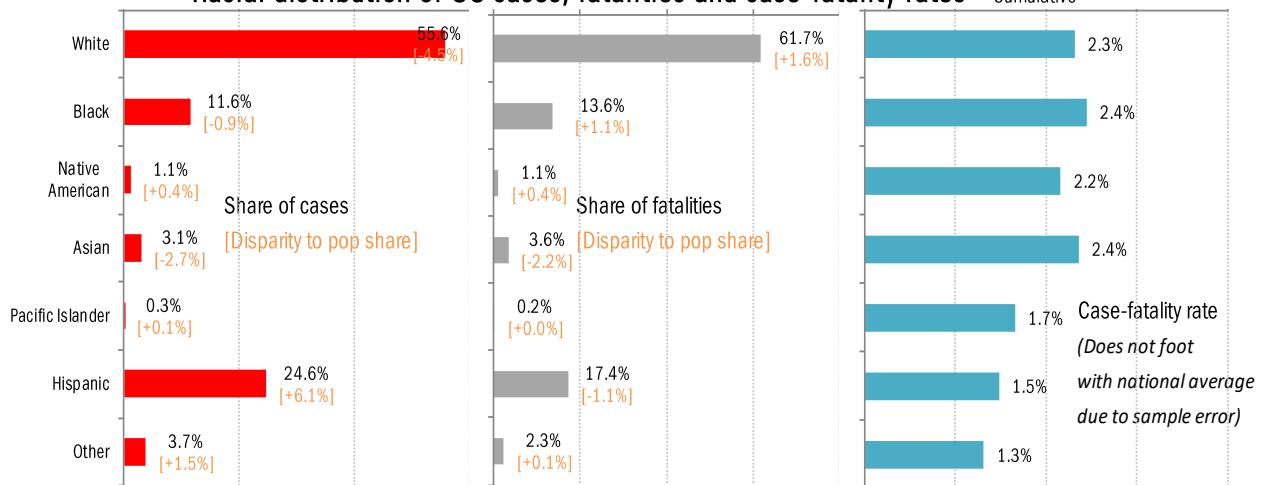


Source: [Johns Hopkins](#), [Covid Act Now](#), TrendMacro calculations

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

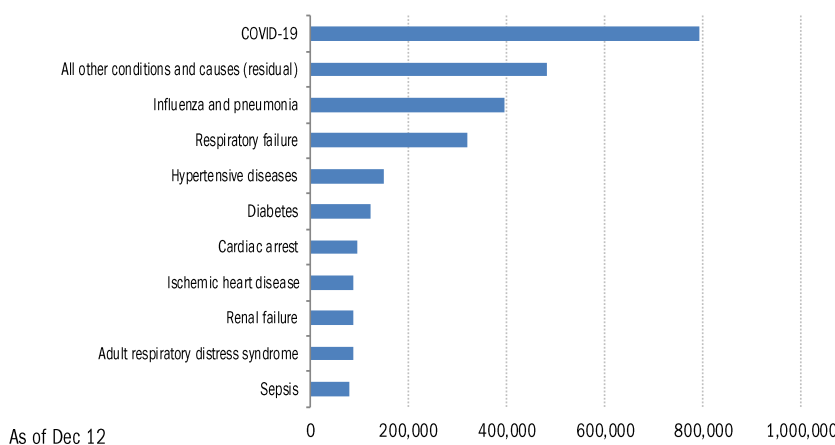


Racial distribution of US cases, fatalities and case-fatality rates



Comorbidities

Top-ten joint causes of Covid mortalities, cumulative



For over 5% of these deaths, COVID-19 was the only cause mentioned on the death certificate. For deaths with conditions or causes in addition to COVID-19, on average, there were 4.0 additional conditions or causes per death.

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

## Recommended reading

[Moderna Says Covid-19 Booster Dose Works Against Omicron Variant in Lab Tests](#)

Peter Loftus  
*Wall Street Journal*  
December 20, 2021

[My Twitter conversation with the chairman of the Sage Covid modelling committee](#)

Fraser Nelson  
*The Spectator*  
December 18, 2021

[Most of the World's Vaccines Likely Won't Prevent Infection From Omicron](#)

Stephanie Nolen  
*New York Times*  
December 19, 2021

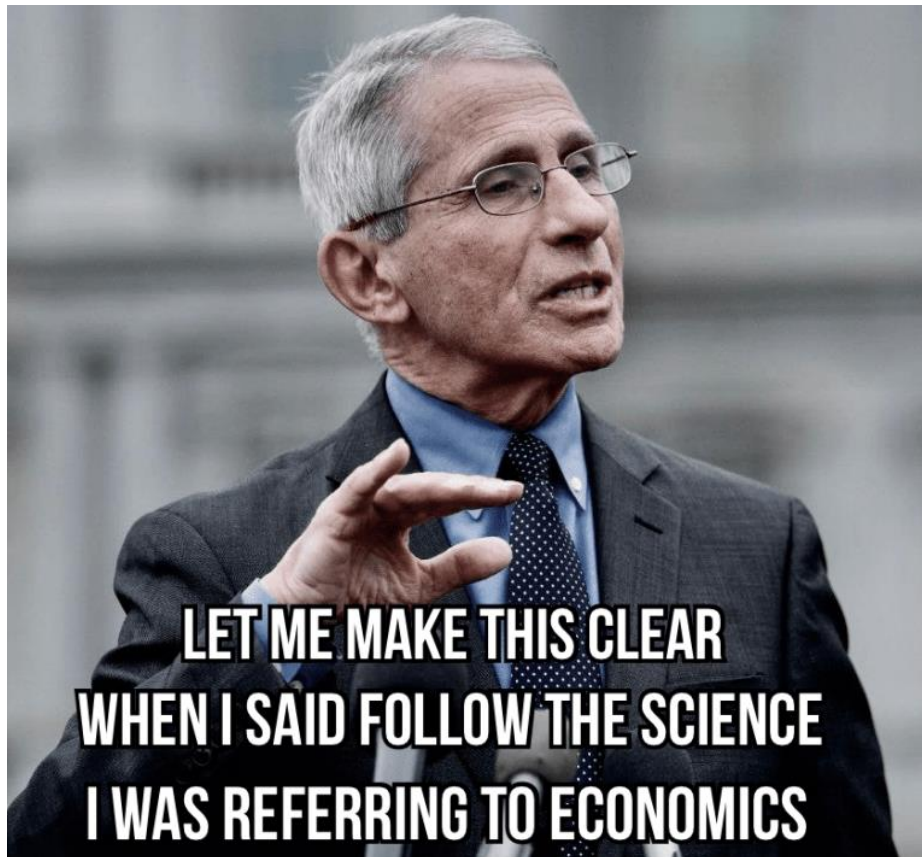
[We Know Enough About Omicron to Know That We're in Trouble](#)

Sarah Zhang  
*The Atlantic*  
December 17, 2021

[The Fickle 'Science' of Lockdowns](#)

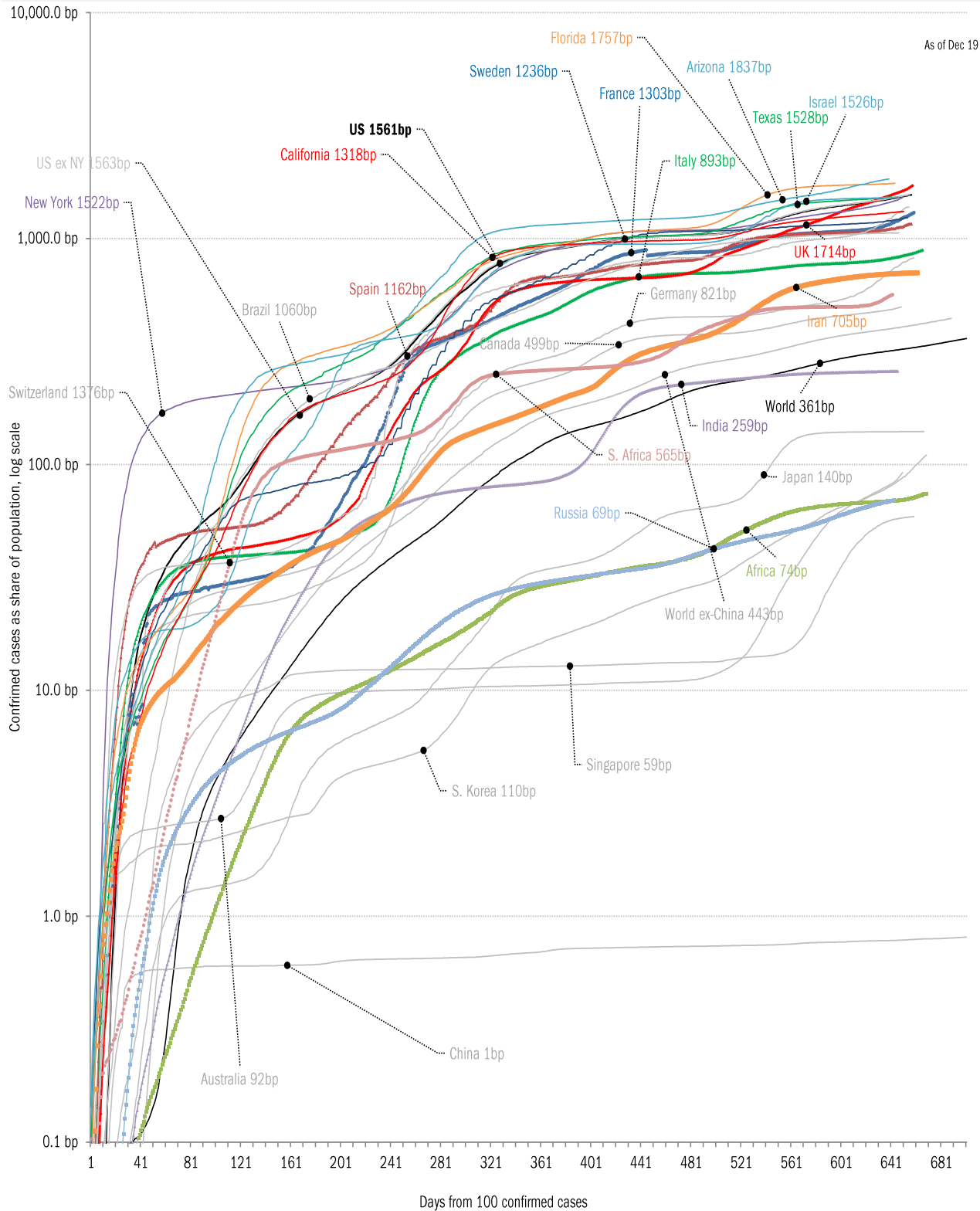
Phillip W. Magness and Peter C. Earle  
*Wall Street Journal*  
December 19, 2021

## Meme of the day



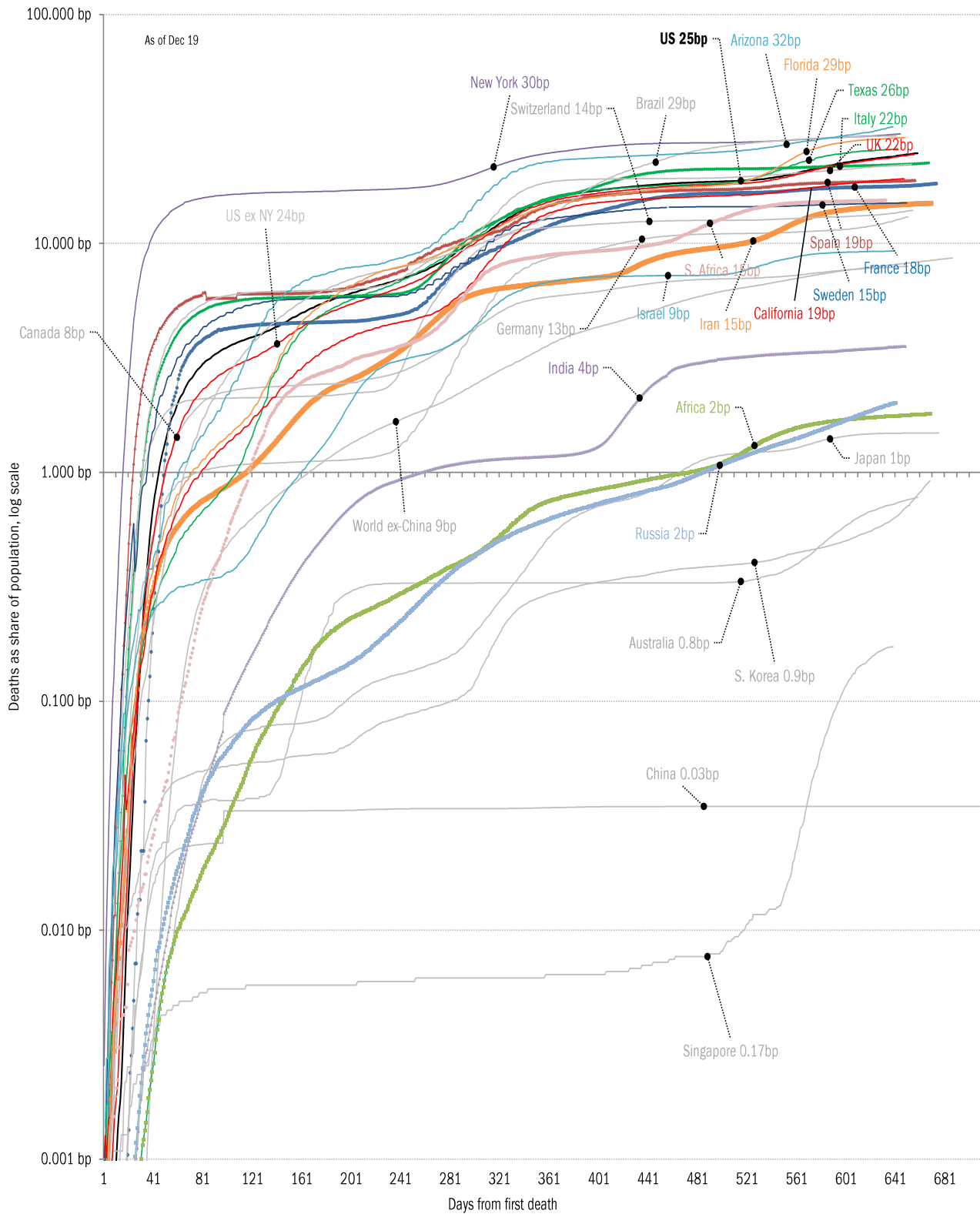
Source: Our beloved clients, [Power Line blog "The Week in Pictures"](#) and [CTUP](#)

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](#), TrendMacro calculations

The coronavirus mortality accelerometer ... tracking the world's fatality curves  
*Share of deceased population from day of first fatality, log scale*



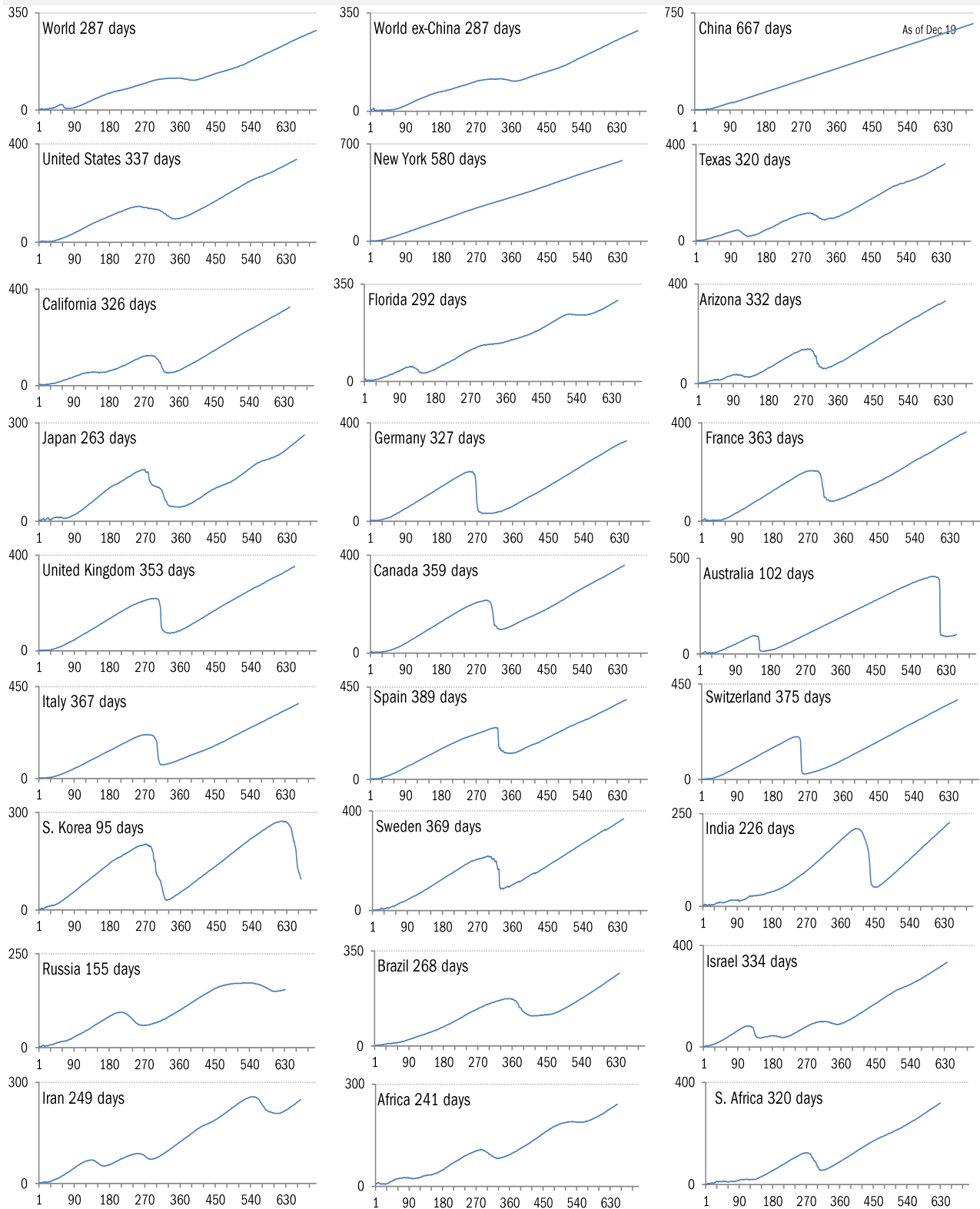
Source: [Johns Hopkins](#), TrendMacro calculations



# "Exponential"? Our most reliable evidence of the rate of spread of Covid-19

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

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

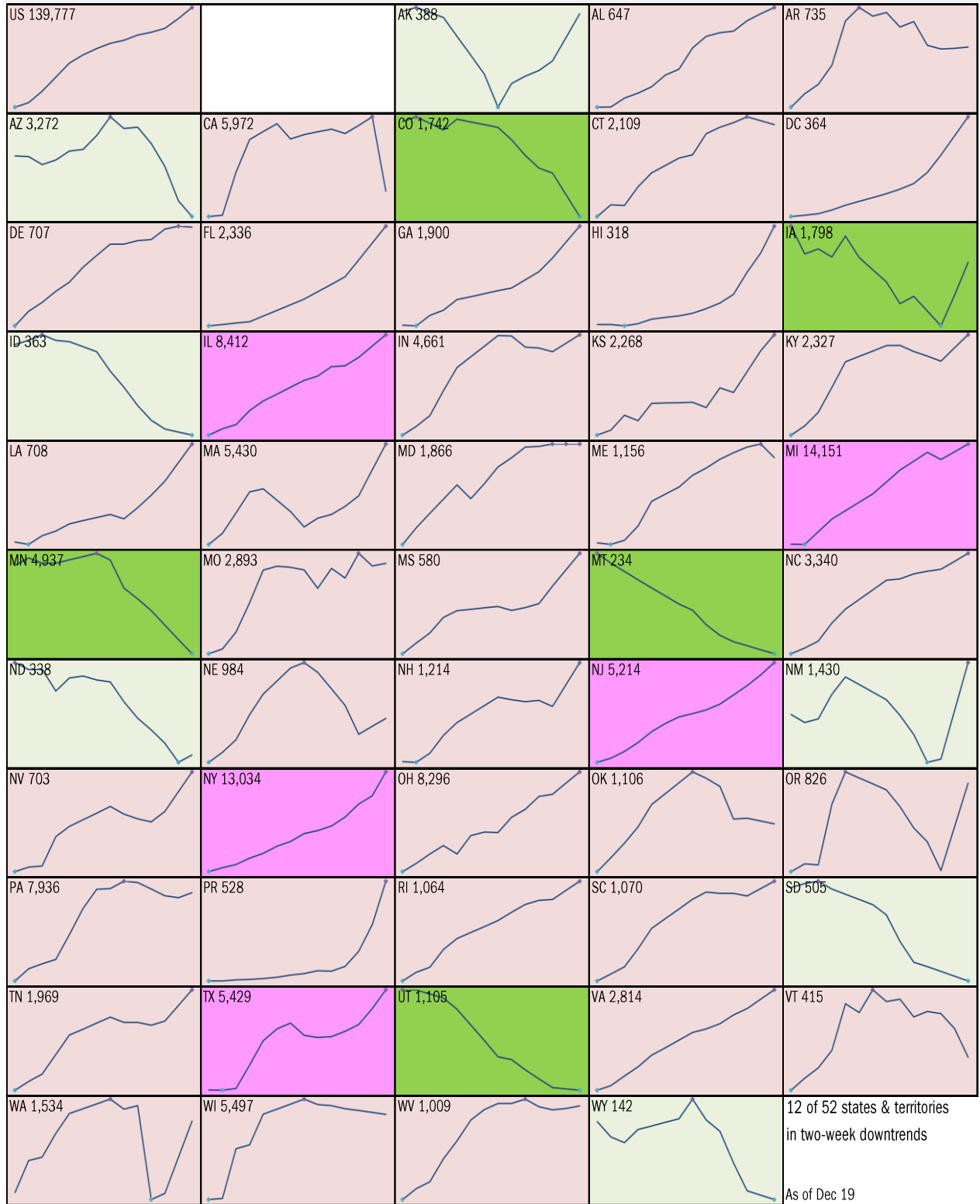


Source: [Johns Hopkins](#), TrendMacro calculations

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

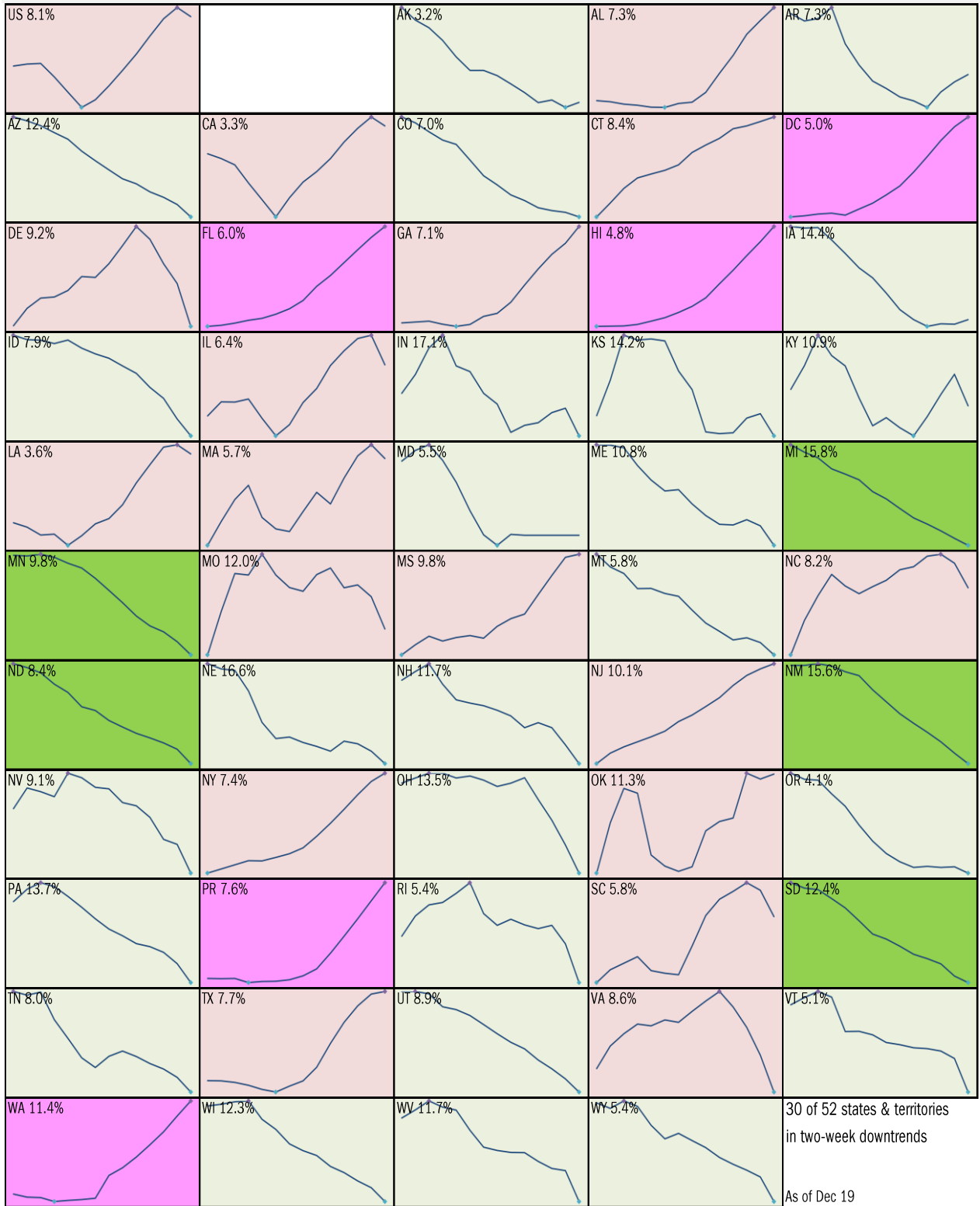
■ Downward trajectory ■ Five best ■ Upward trajectory ■ Five worst



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

Alt requirement to [Open Up America Again](#): 14-day “downward trajectory” in pos tests

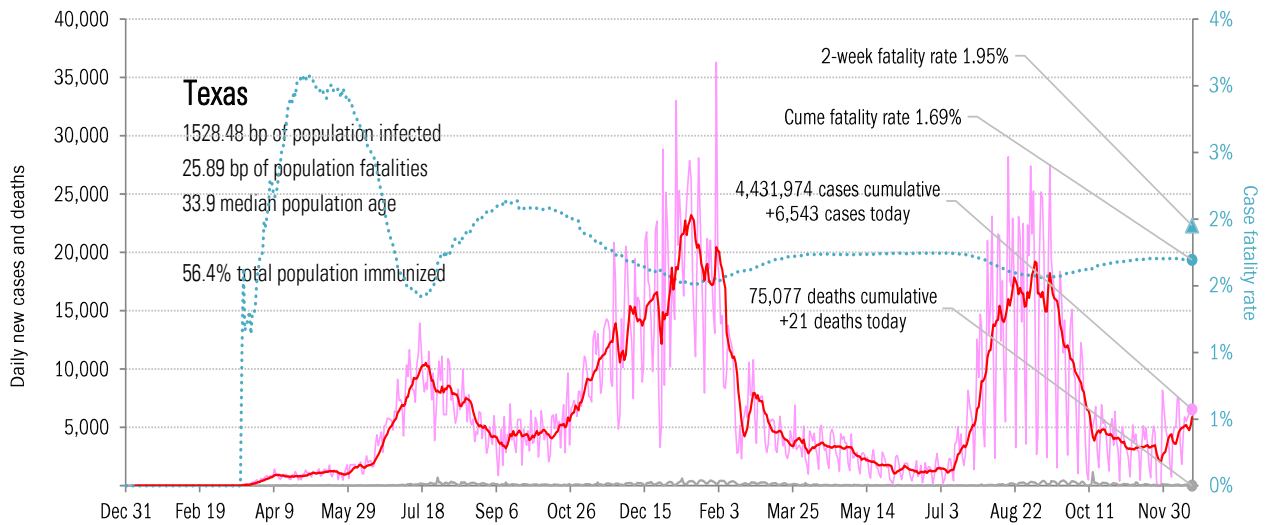
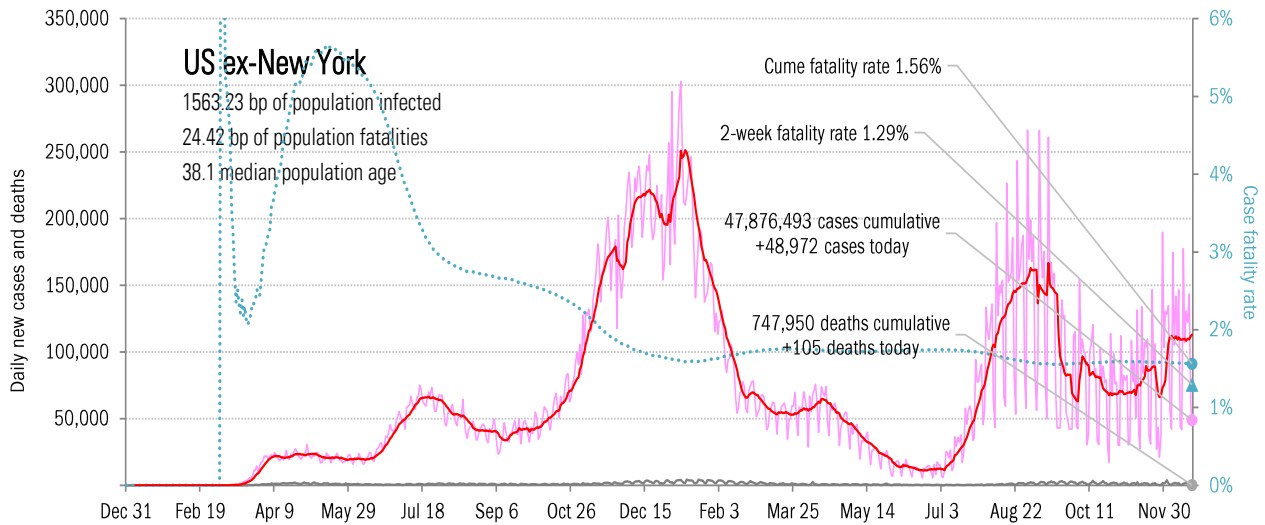
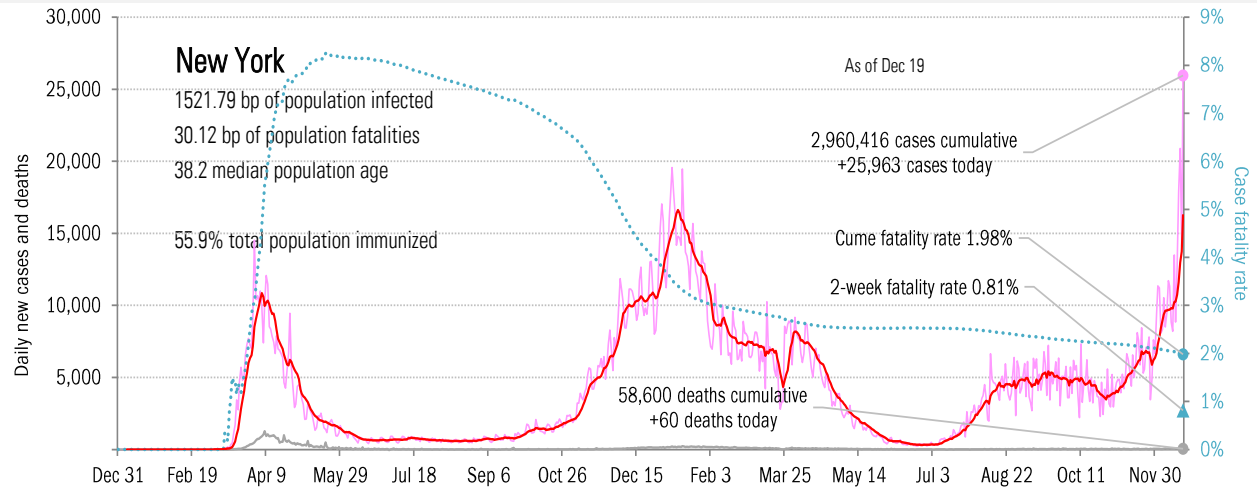
14-day moving average, last 14 days Most recent value displayed ● High ● Low  
 ■ Downward trajectory ■ Five best ■ Upward trajectory ■ Five worst



Source: [Covid Act Now](#), TrendMacro calculations

# From Ground Zero to the Rio Grande

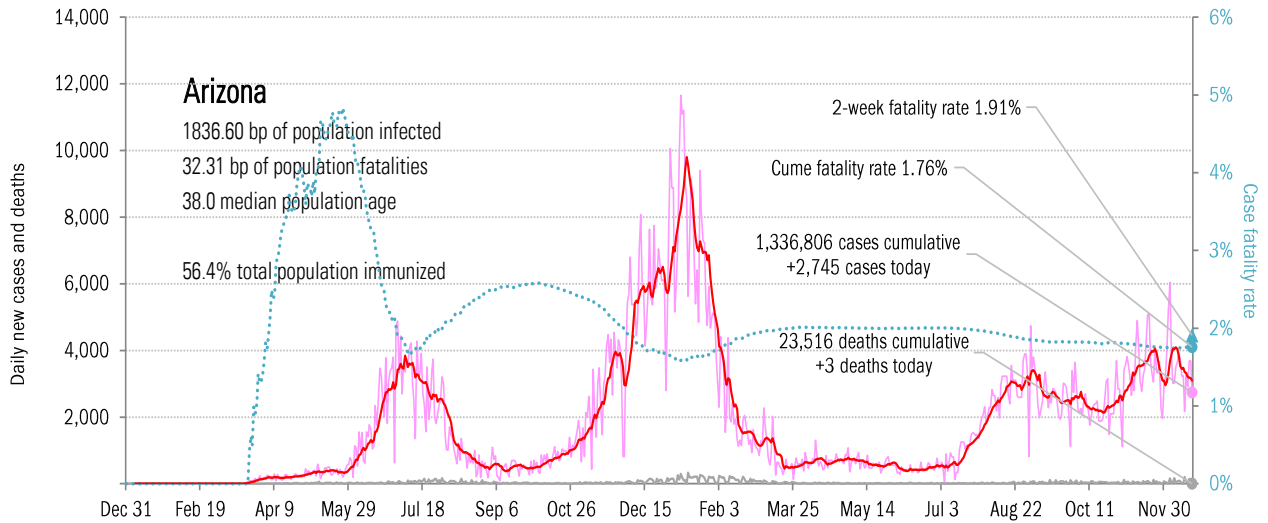
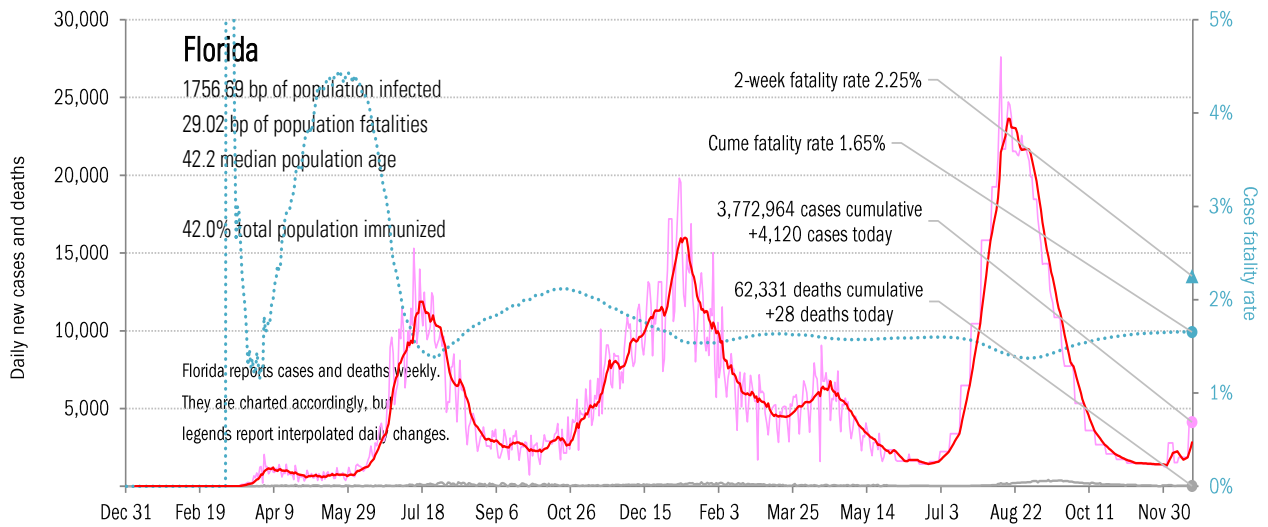
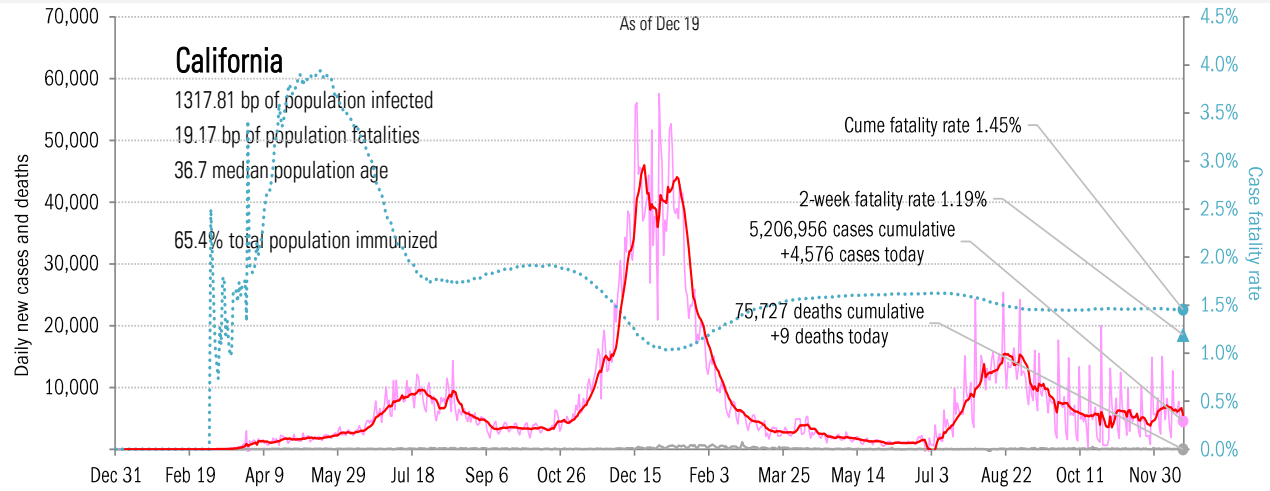
Cases: 7-day average and daily Deaths: Daily



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

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

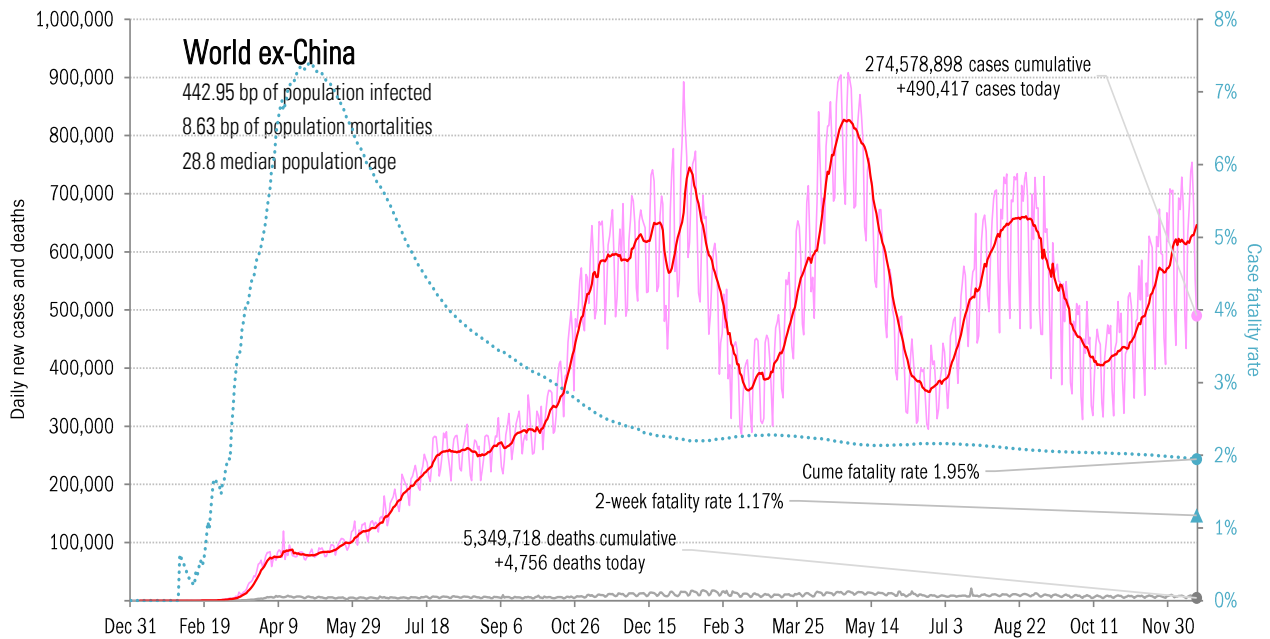
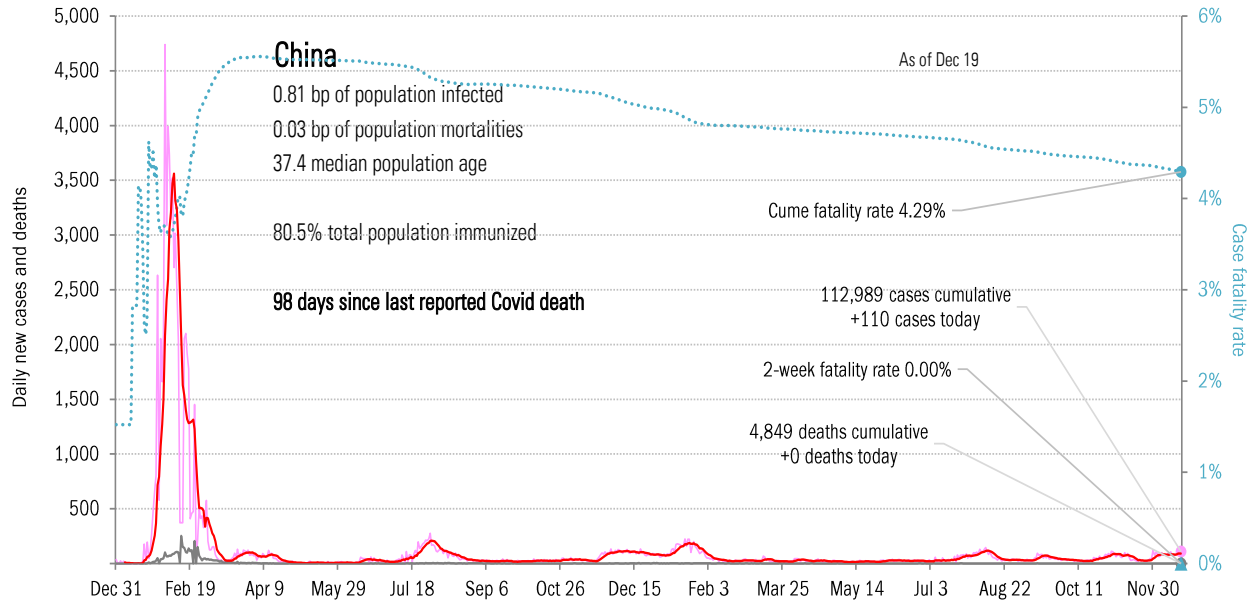
Cases: 7-day average and daily Deaths: Daily



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

# Patient zero... and then everyone else

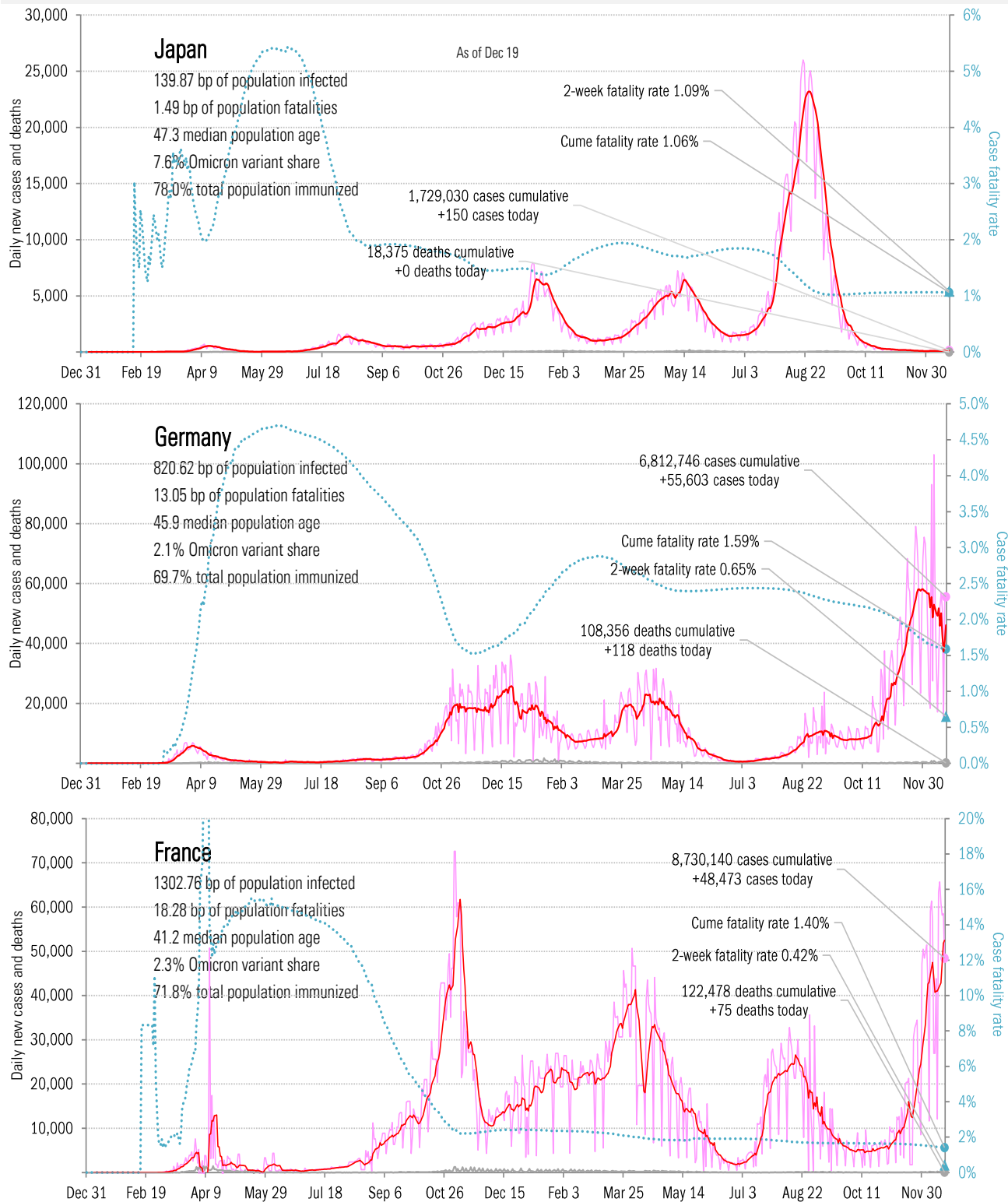
Cases: 7-day average and daily Deaths: Daily



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

# Impact in the largest economies

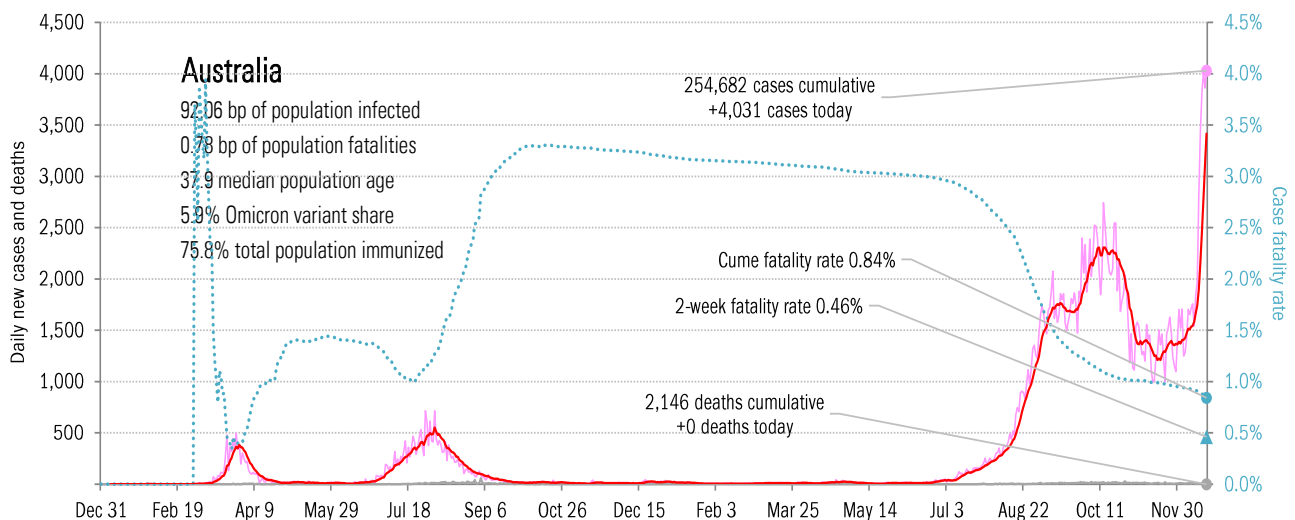
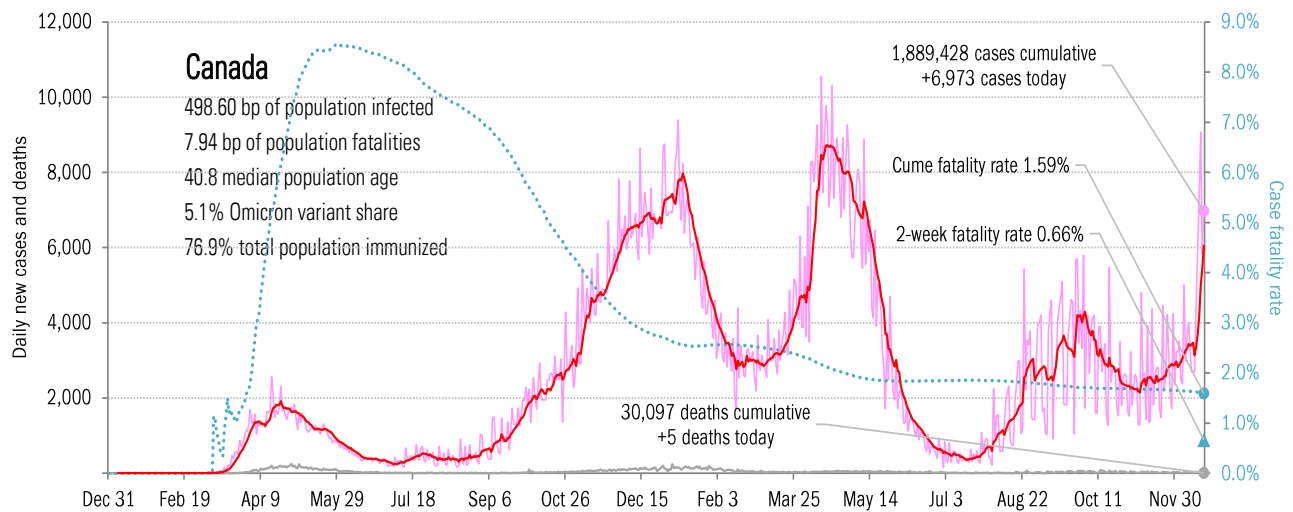
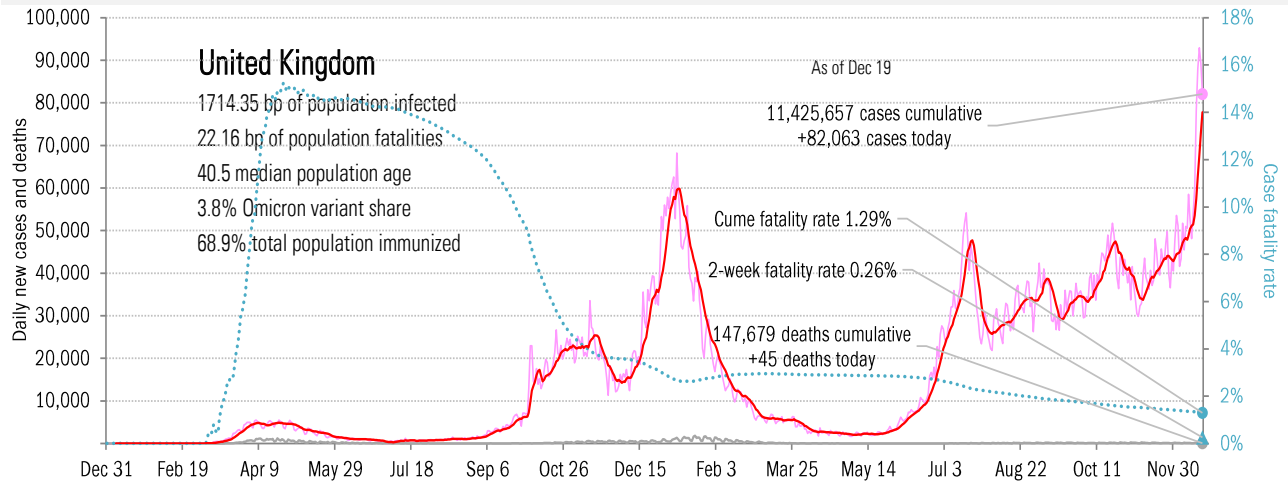
Cases: 7-day average and daily Deaths: Daily



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

# Impact in The Anglosphere

Cases: 7-day average and daily Deaths: Daily

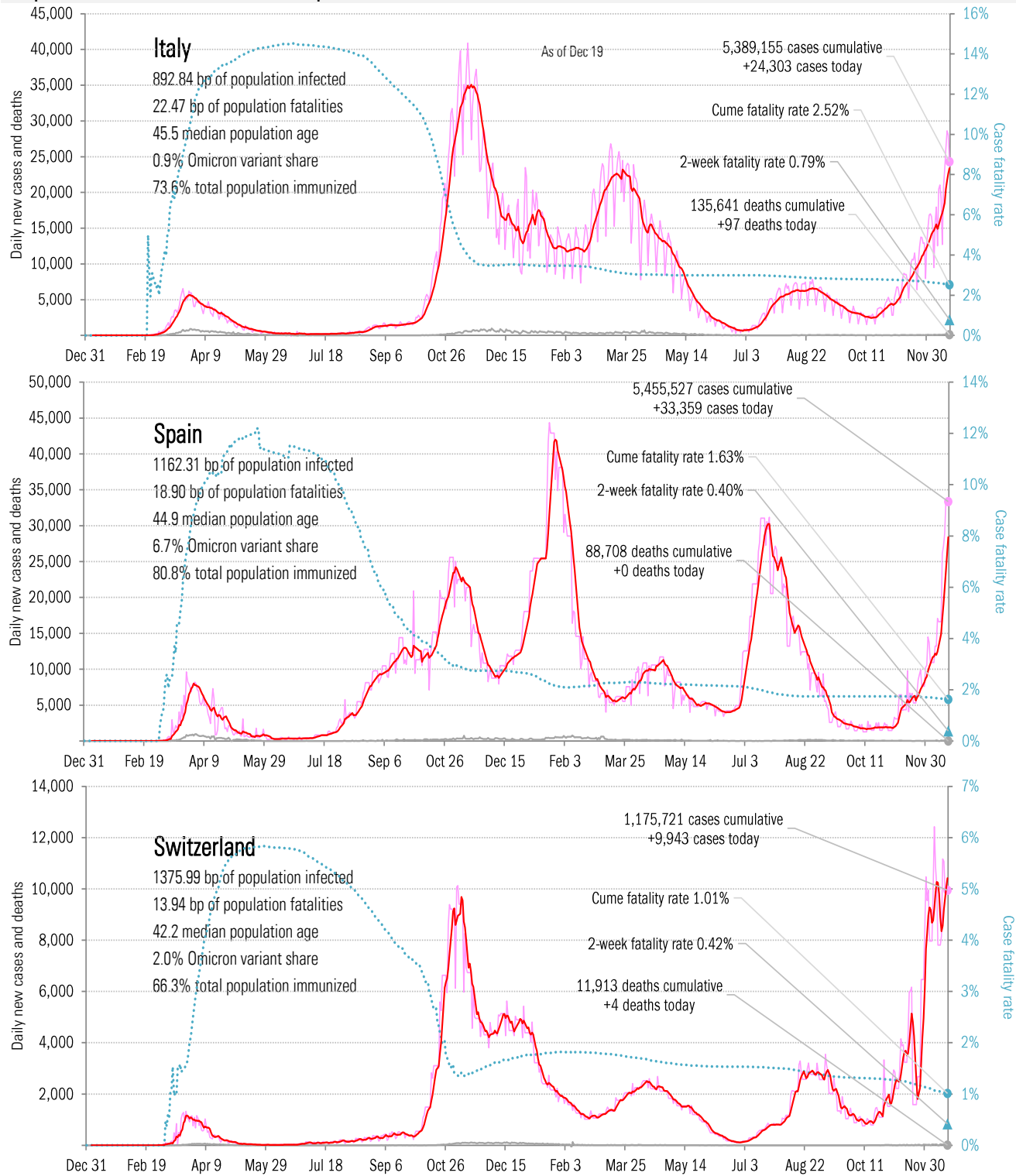


Source: [Johns Hopkins](#), TrendMacro calculations



# Impact in continental Europe

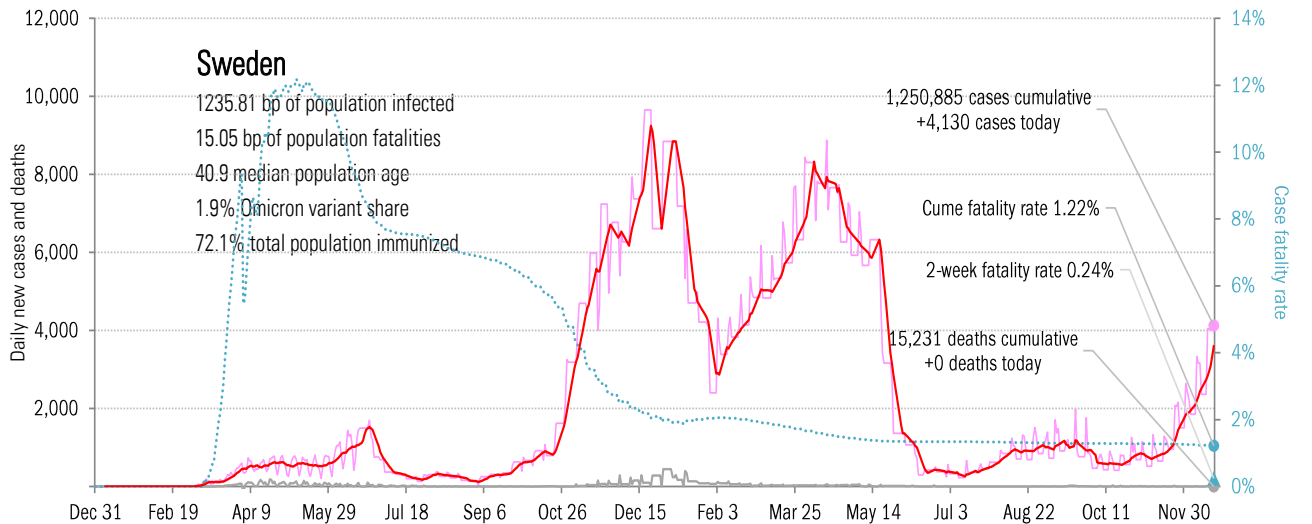
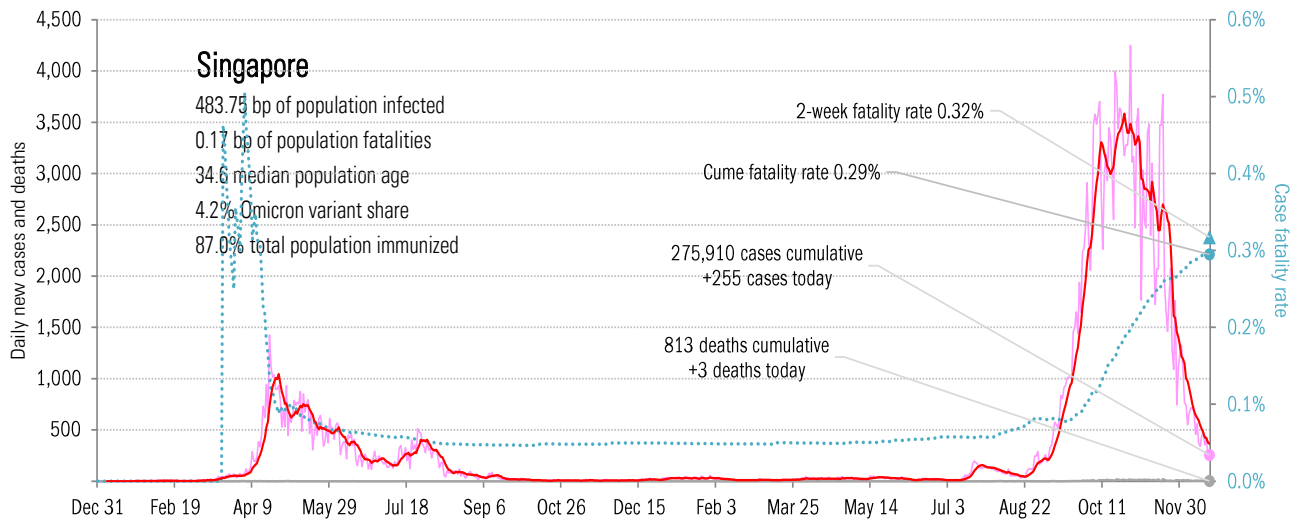
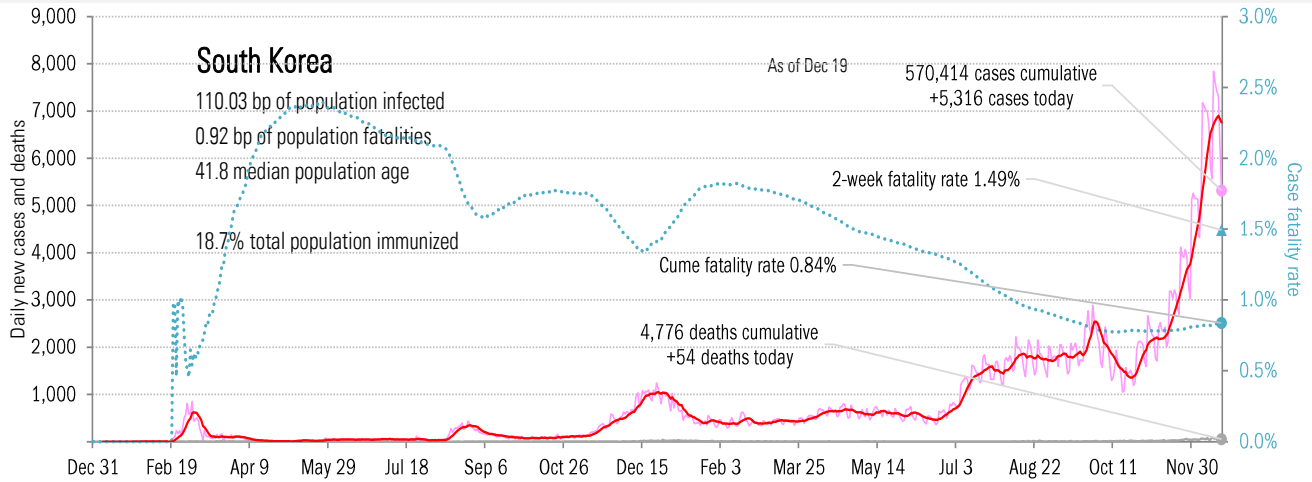
Cases: 7-day average and daily Deaths: Daily



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

# Impact in other hot-spots

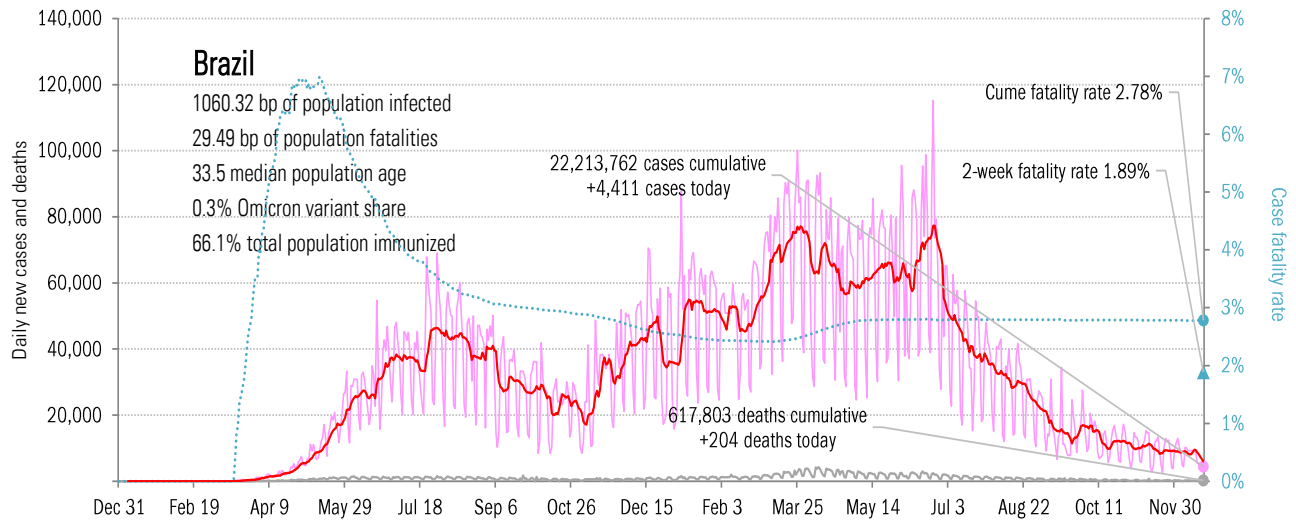
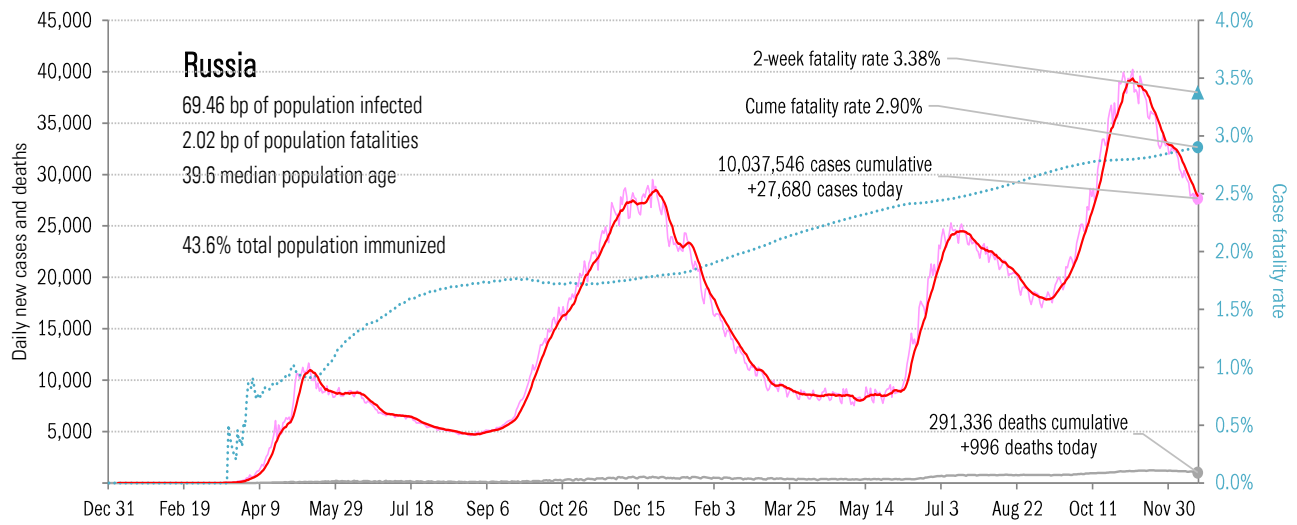
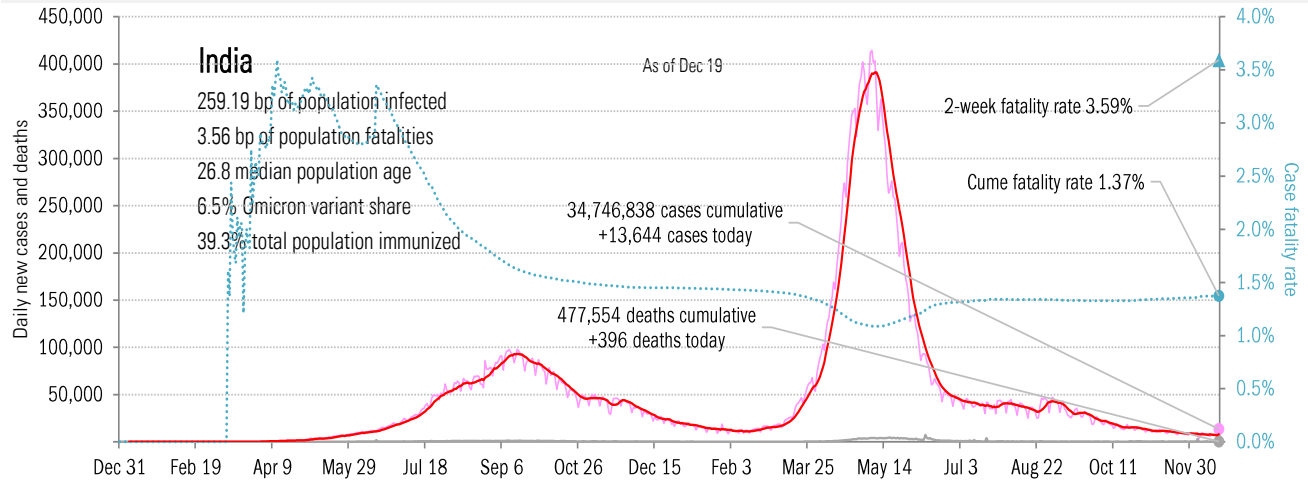
Cases: 7-day average and daily Deaths: Daily



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

# Impact in the BRICs ex-China

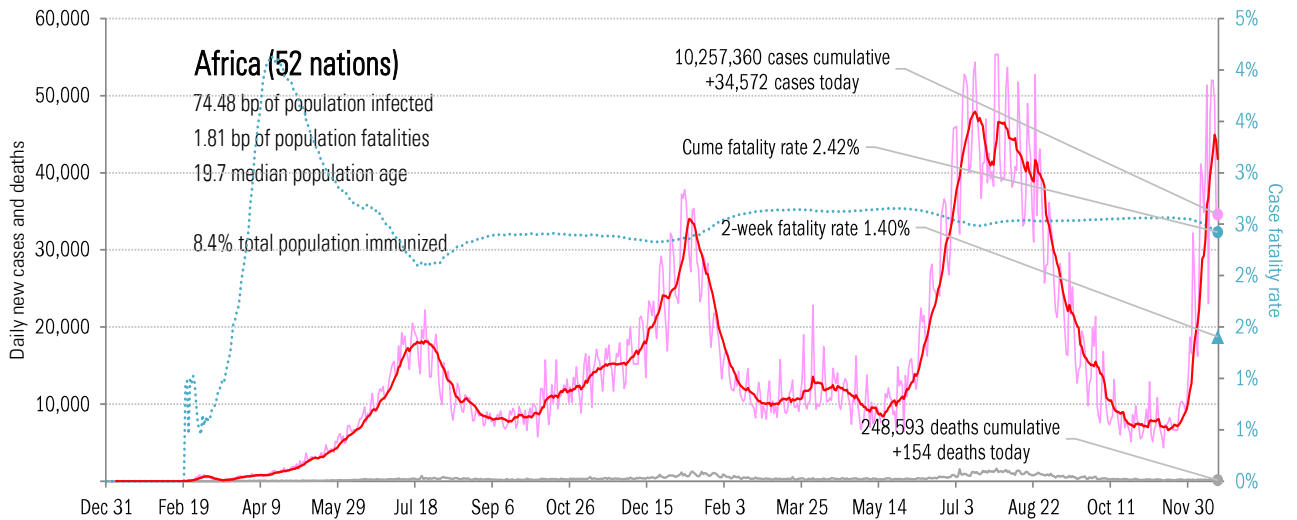
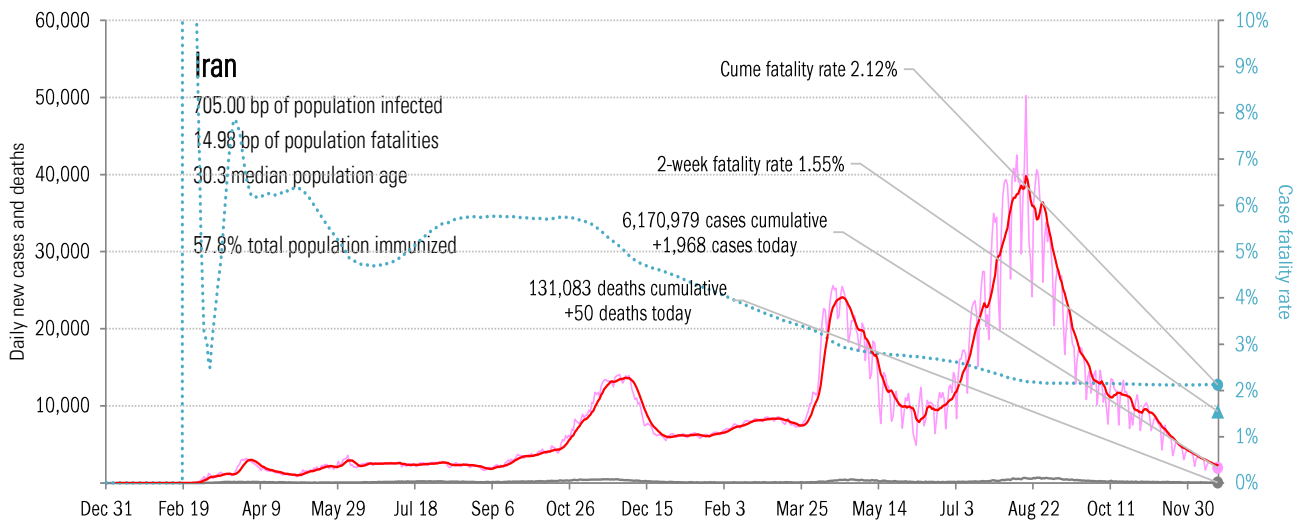
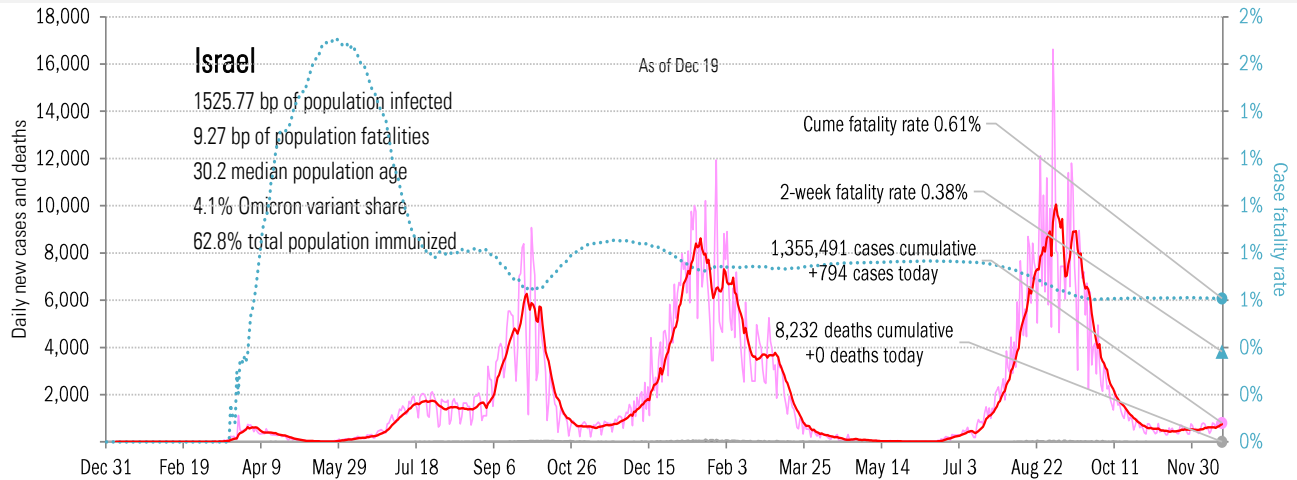
Cases: 7-day average and daily Deaths: Daily



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

# Impact in the Middle East and Africa

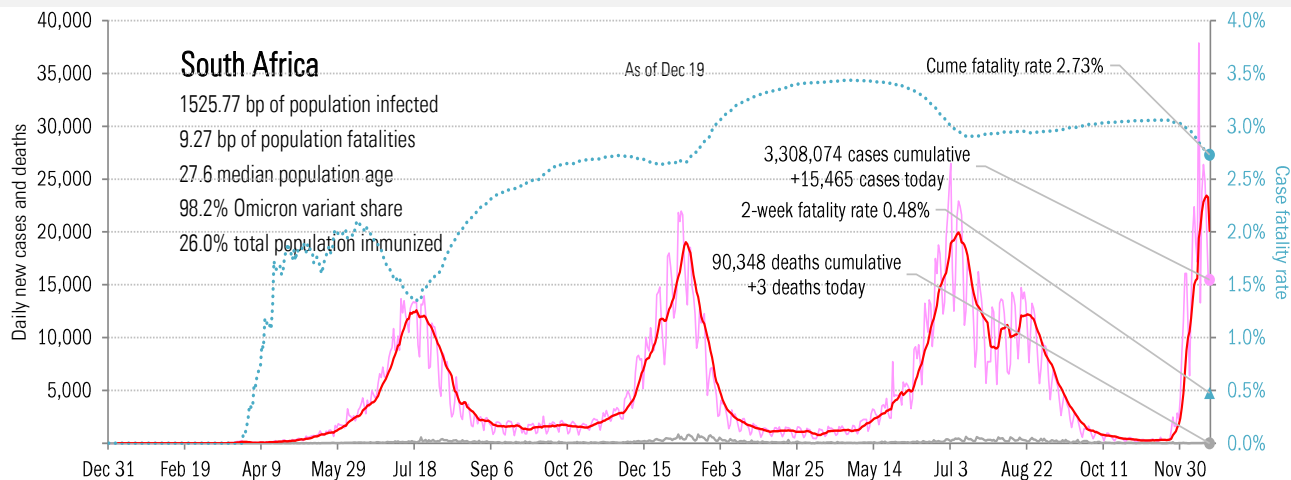
Cases: **7-day average** and **daily** Deaths: Daily



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

# Impact in Africa, continued

Cases: 7-day average and daily Deaths: Daily



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