

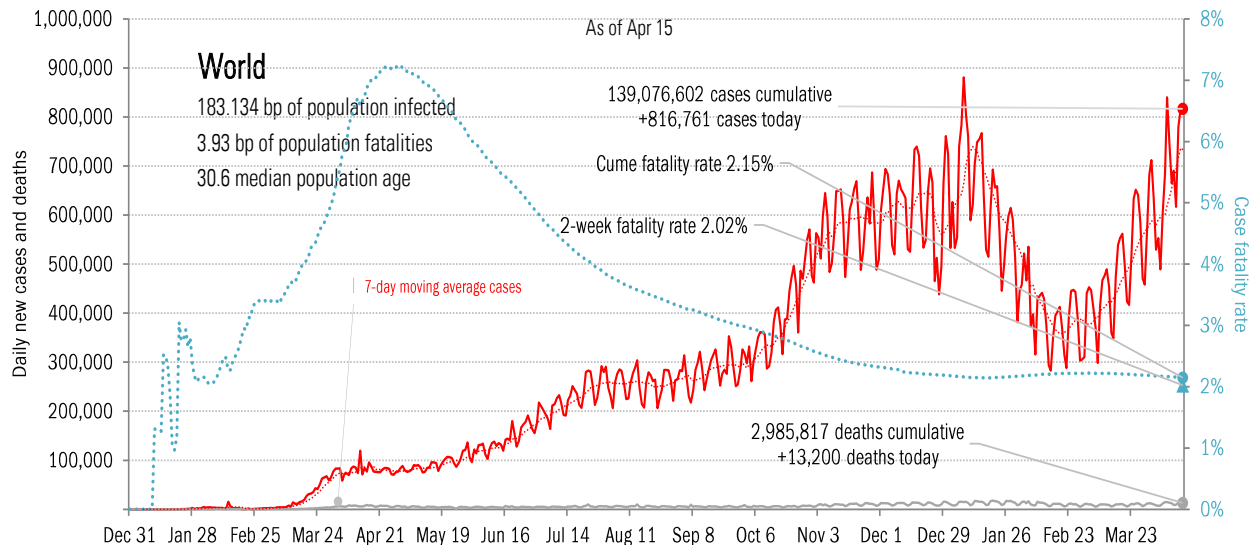
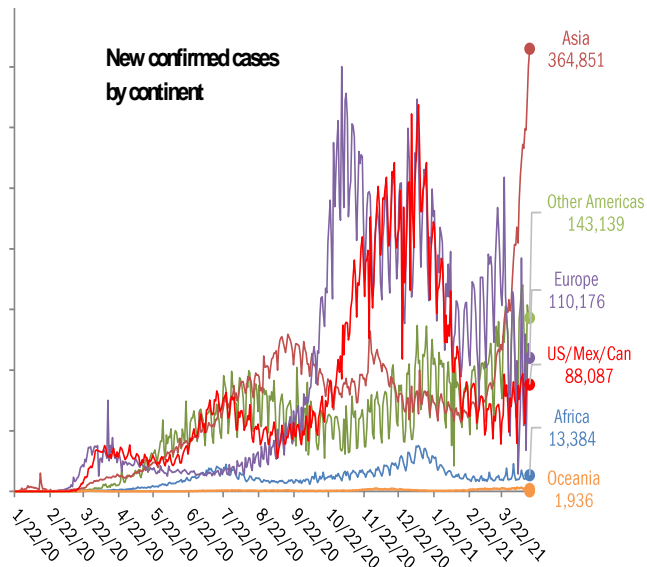
## Data Insights: Covid-2019 Monitor

Friday, April 16, 2021

### The global scorecard

The worst ten countries

New cases		New Deaths	
India	+217,353	Brazil	+3,560
United States	+74,289	India	+1,185
Brazil	+73,174	United States	+887
Turkey	+61,400	Poland	+682
France	+38,081	Ukraine	+439
Germany	+25,110	Mexico	+401
Iran	+25,078	Russia	+392
Argentina	+24,999	Argentina	+383
Poland	+21,126	Colombia	+380
Italy	+16,963	Italy	+380
<b>+577,573</b>		<b>+8,689</b>	
World	+816,761	World	+13,200
Top ten	71%	Top ten	66%



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

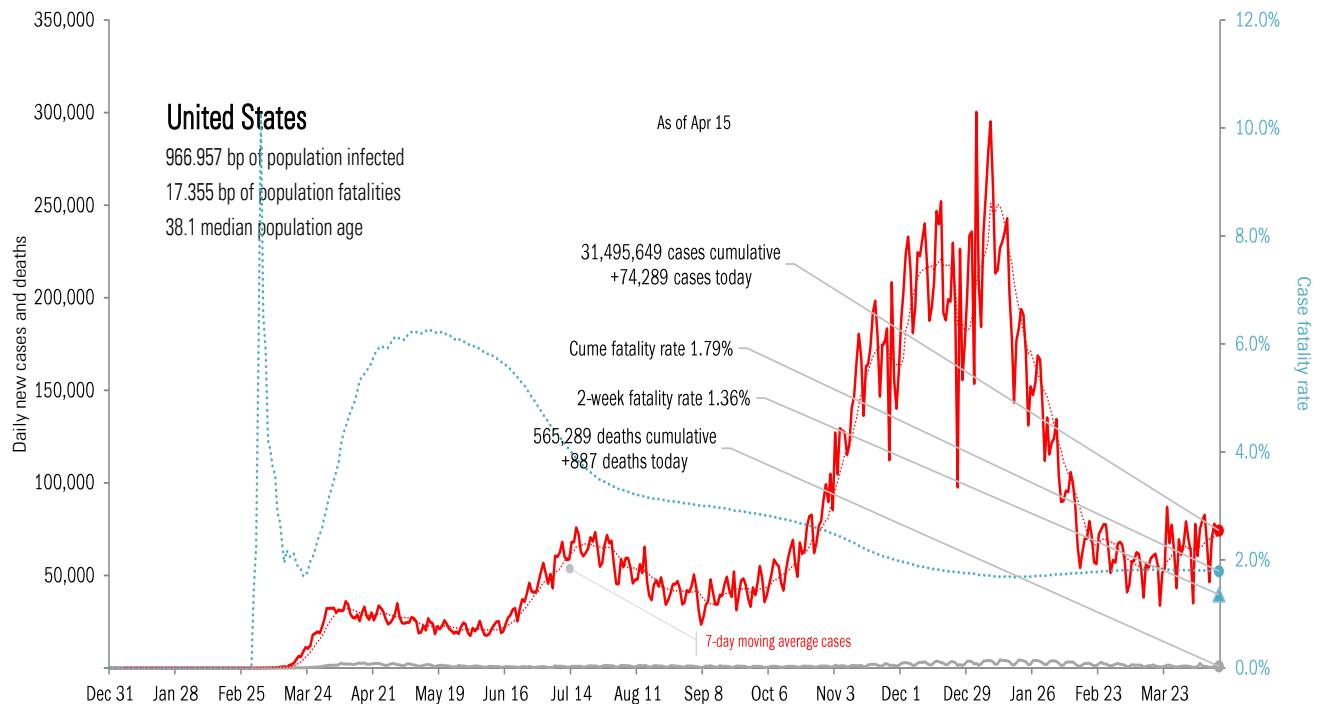
## The ten worst US states

New cases			New Deaths			New in hospital			Curre cases			Curre deaths			Curre in hospital			Hospital use		ICU use	
MI	+7,191		MI	+123		FR	+205		CA	3,711,723		CA	60,808		TX	230,397		R	90%	MI	29%
NY	+7,029		CA	+91		MI	+124		TX	2,843,929		NY	51,418		CA	225,627		MA	84%	MD	25%
FL	+6,762		TX	+82		GA	+108		FL	2,148,448		TX	49,441		FL	157,459		MD	83%	RI	20%
PA	+5,093		FL	+74		IL	+54		NY	1,980,337		FL	34,238		NY	120,811		PA	81%	NY	18%
NJ	+3,958		NY	+68		FL	+38		IL	1,292,421		PA	25,546		GA	96,993		MO	81%	DC	18%
IL	+3,577		GA	+62		NJ	+30		PA	1,095,321		NJ	25,053		CH	77,697		MI	80%	PA	16%
TX	+3,060		NJ	+47		ND	+25		GA	1,079,979		IL	23,896		PA	77,625		CT	80%	MN	16%
CA	+3,007		PA	+44		MN	+24		CH	1,048,109		GA	19,662		IL	70,990		MN	79%	NJ	14%
MN	+2,729		NC	+34		WA	+21		NJ	967,442		CH	18,917		KY	69,597		FL	78%	TX	14%
NC	+2,434		IL	+31		CO	+18		NC	941,218		MI	17,817		AZ	59,058		WV	78%	WV	13%
+44,840			+656			+647			17,108,927			326,796			1,186,254						
All states	+74,289		+887			+776			All states	31,495,649		565,289			2,115,580			All states	70%	67%	
Top ten	60%		74%			83%			Top ten	54%		58%			56%			Median	71%	10%	

Some states not reporting

## Five most improved US states

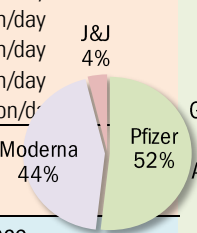
Fewer daily cases		Fewer new deaths		Fewer new hospitalizations		Most pop immunity growth	
MI	-2,158	CA	-79	MI	-93	NH	+85 bp
PA	-1,182	CK	-28	MD	-69	DC	+75 bp
CT	-907	NY	-24	KY	-68	ME	+74 bp
CO	-828	NE	-21	CT	-27	DE	+73 bp
TX	-649	MO	-20	IN	-26	MT	+70 bp



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

# Rolling out the vaccines in the US and the world

US overall	Over last day	Immunity	Full	Partial
266.33 million doses distributed	+4.68 million/day	US	23.5%	37.6%
205.72 million doses administered	+3.60 million/day	UK	12.5%	47.8%
129.74 million persons partially immunized	+1.93 million/day	France	6.1%	17.1%
81.45 million persons fully immunized	+1.86 million/day	Spain	7.0%	18.5%
7.77 million shots long-term care residents/staff	+0.001 million/day	Germany	6.4%	18.4%
<b>77.2% of distributed doses administered</b>		Italy	7.0%	16.6%
<b>38.8% of US pop partial</b>	<b>24.4% full immunity</b>	Australia	0.9%	0.6%
<b>100% of LTC partial</b>	<b>63.9% full immunity</b>	Israel	57.3%	61.7%
		Canada	2.3%	22.1%
		Japan	0.5%	0.9%
		Africa	0.3%	0.7%
		India	1.1%	7.4%
		Brazil	3.8%	11.7%



At today's dosing pace,  
every American >18 immune in  
**67 days**  
by Jun 20, 2021

US achieves adult herd immunity\* in  
**17 days**  
by May 1, 2021

Global data differs from sources, timing

AK
53.4%
38.8%
30.8%

State
Immunities distributed as % population**
Partial immunity as % population
Full immunity as % population



WI
39.8%
40.6%
26.7%

VT
47.8%
44.7%
29.1%

ME
44.5%
46.8%
30.9%

NH
42.3%
56.2%
26.7%

WA	ID	MT	ND	MN	IL	MI	NY	MA		
40.6%	36.6%	43.1%	40.1%	38.8%	42.1%	40.9%	42.4%	44.6%		
38.6%	31.2%	37.2%	37.1%	40.5%	39.8%	36.7%	41.0%	46.2%		
25.4%	21.6%	25.9%	27.9%	27.0%	23.3%	24.3%	26.9%	27.5%		
OR	NV	WY	SD	IA	IN	OH	PA	NJ	CT	RI
40.2%	37.3%	42.7%	47.2%	40.6%	37.4%	40.8%	43.2%	41.4%	48.6%	43.5%
37.0%	35.0%	31.8%	41.9%	39.4%	31.9%	36.5%	41.3%	44.2%	46.4%	42.7%
23.4%	22.5%	23.5%	29.5%	26.6%	21.5%	24.3%	24.4%	28.1%	29.7%	30.4%
CA	UT	CO	NE	MO	KY	WV	VA	MD	DE	
42.6%	35.2%	40.9%	40.8%	38.8%	39.7%	43.1%	40.4%	42.7%	43.3%	
40.8%	34.2%	40.2%	39.4%	32.6%	37.5%	34.1%	40.3%	40.8%	39.9%	
22.7%	17.9%	23.9%	26.3%	21.5%	25.6%	25.0%	24.4%	25.9%	23.5%	
AZ	NM	KS	AR	TN	NC	SC	DC			
40.2%	46.8%	41.5%	39.9%	37.8%	40.2%	39.3%	50.1%			
36.2%	46.0%	38.8%	32.4%	30.9%	35.1%	33.4%	38.3%			
23.0%	30.5%	24.4%	20.1%	19.0%	23.0%	21.6%	21.7%			
OK	LA	MS	AL	GA						
44.7%	39.3%	38.7%	38.3%	39.2%						
36.1%	30.3%	28.6%	29.4%	31.4%						
24.6%	21.9%	20.1%	18.2%	17.3%						
HI	TX	FL	PR							
46.1%	38.6%	42.7%	43.3%							
38.2%	33.8%	36.2%	29.8%							
26.8%	21.2%	22.4%	18.1%							

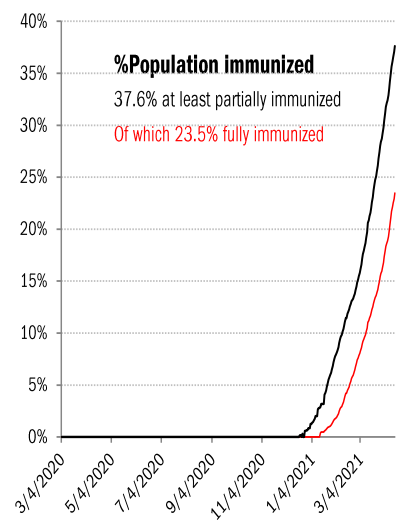
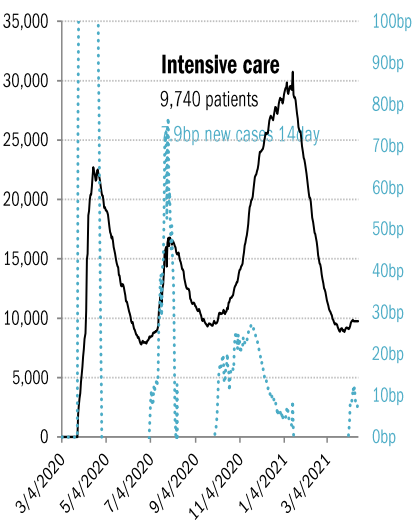
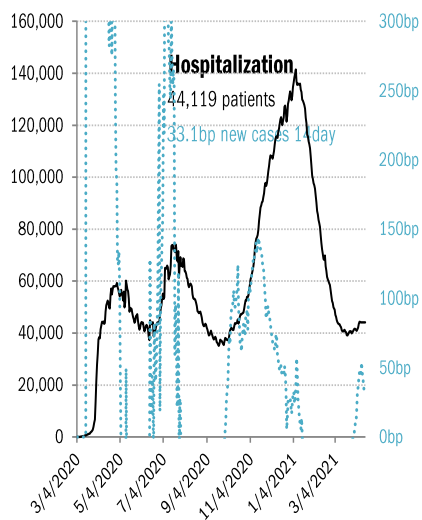
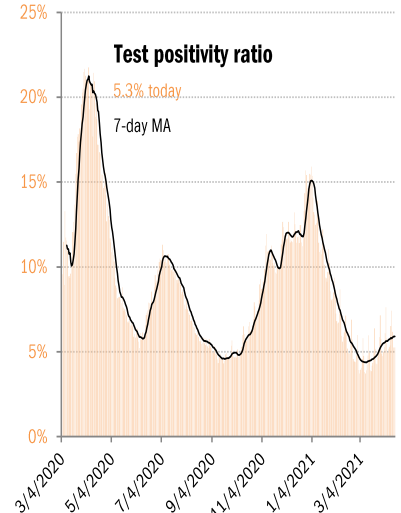
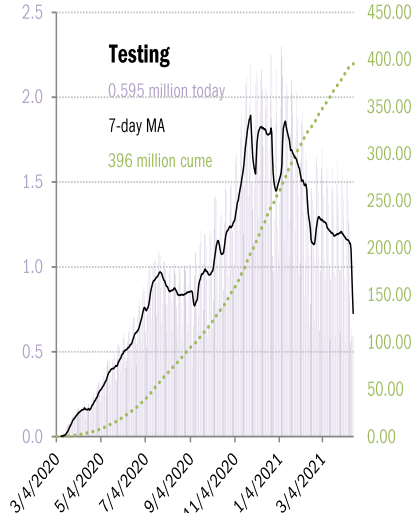
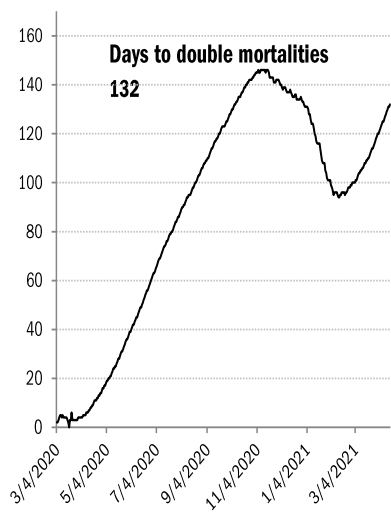
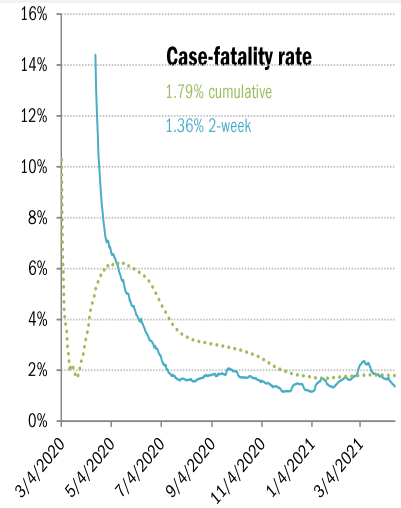
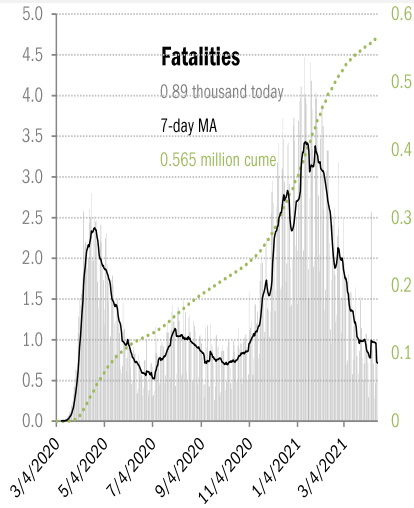
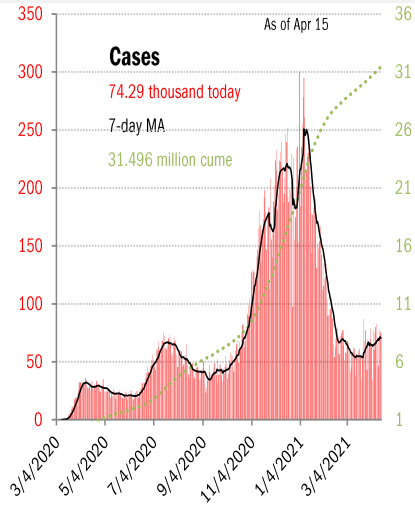
As of Apr 15

\* Adult herd immunity is 60% of population over 18 years either fully vaccinated or prior tested positive, no overlap  
 \*\* One dose of Pfizer/Moderna counts as half an immunity, one dose of J&J as a full immunity

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

# US deep-dive

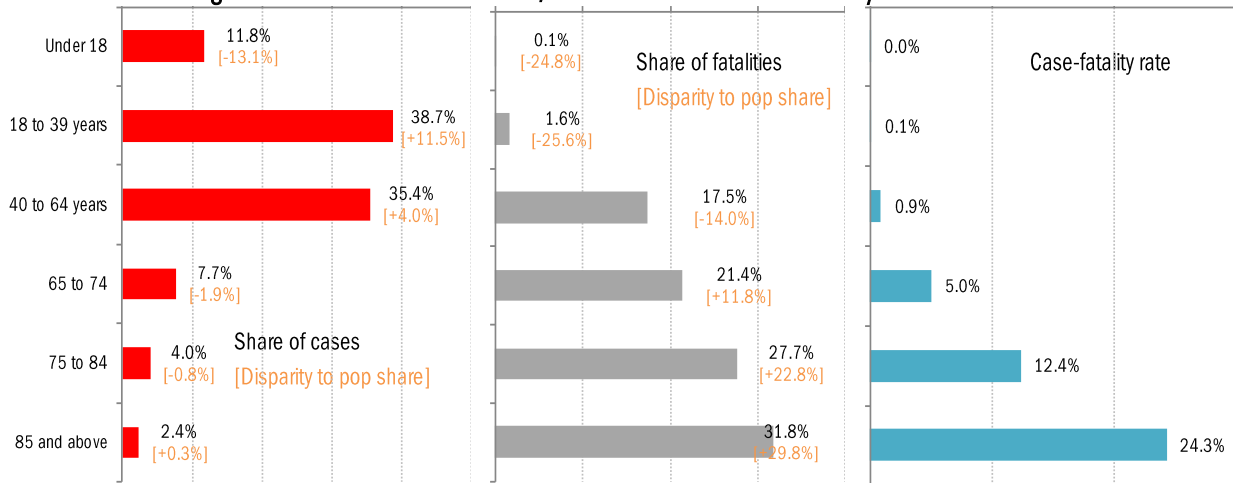
National and state-by-state data do not line up because of different sources



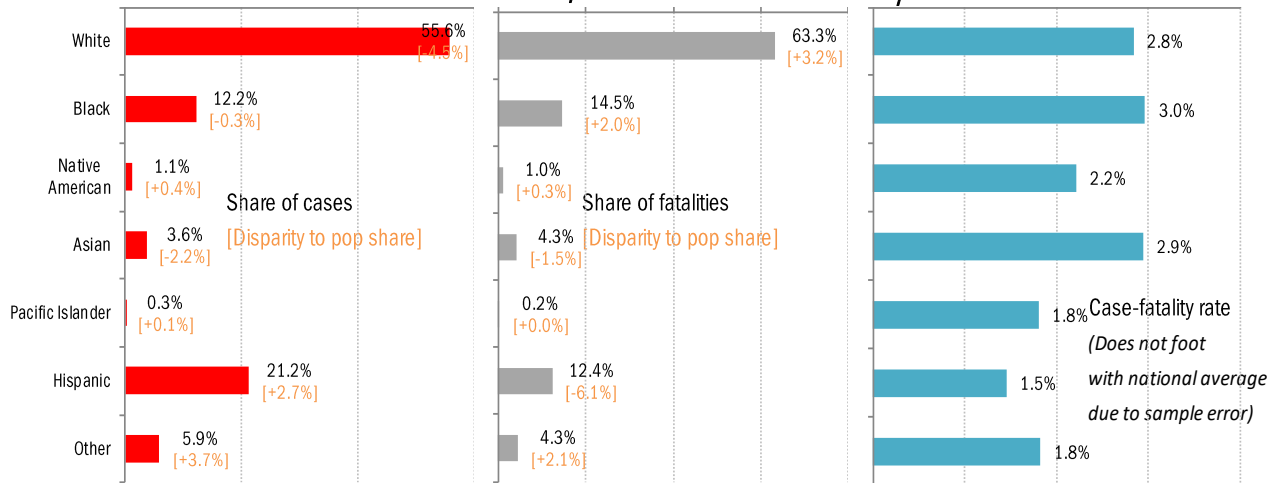
Source: [Johns Hopkins](#), [Covid Act Now](#), TrendMacro calculations

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

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

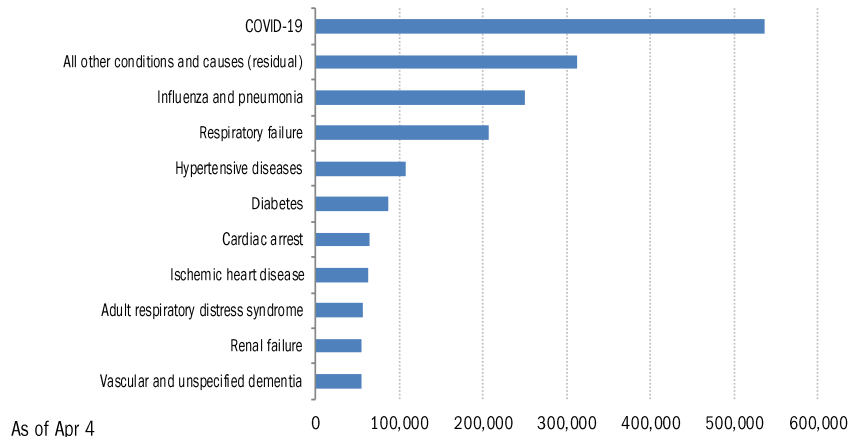


## Racial distribution of US cases, fatalities and case-fatality rates



## Comorbidities

Top-ten joint causes of Covid mortalities, cumulative



For 6% of 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

[Jim Jordan's Nuclear 'Rant' Against Dr. Fauci Speaks for Americans Fed Up with Violations of Their Liberty](#)

yle Becker  
*Becker News*  
April 15, 2021

[Can the Covid Vaccine Protect Me Against Virus Variants?](#)

Tara Parker-Pope  
*New York Times*  
April 15, 2021

[I'm a Virus Expert Who Got the J & J Vaccine. I'm Not Losing Sleep.](#)

Angela L. Rasmussen  
*New York Times*  
April 15, 2021

[Czech Republic: Obesity is big factor in fight against COVID-19](#)

Luboš Palata  
*Deutsche Welle*  
April 14, 2021

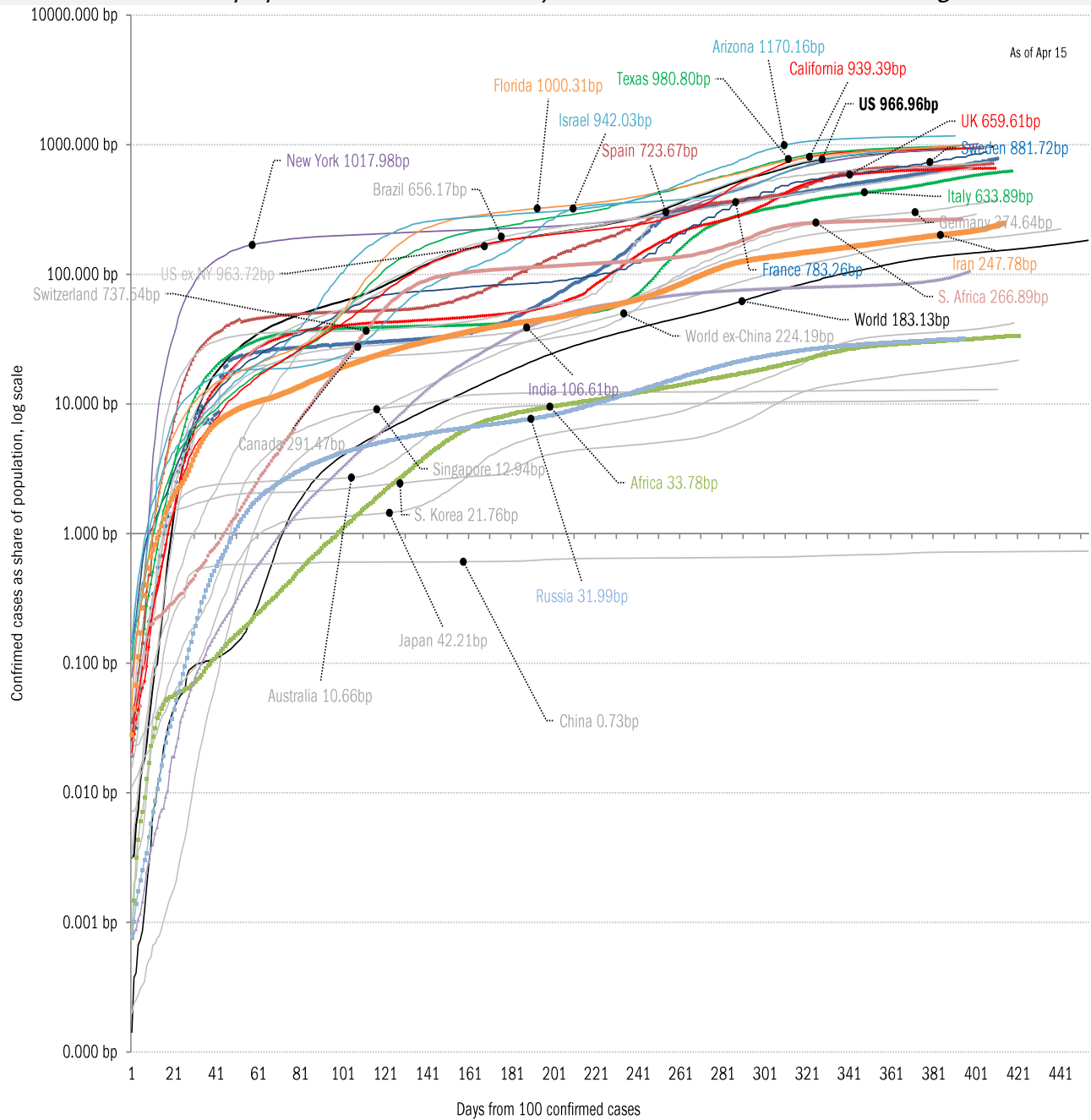
## Meme of the day



**Vaccine Recalled After Two People Who Took It Fell Down A Manhole And Died**

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

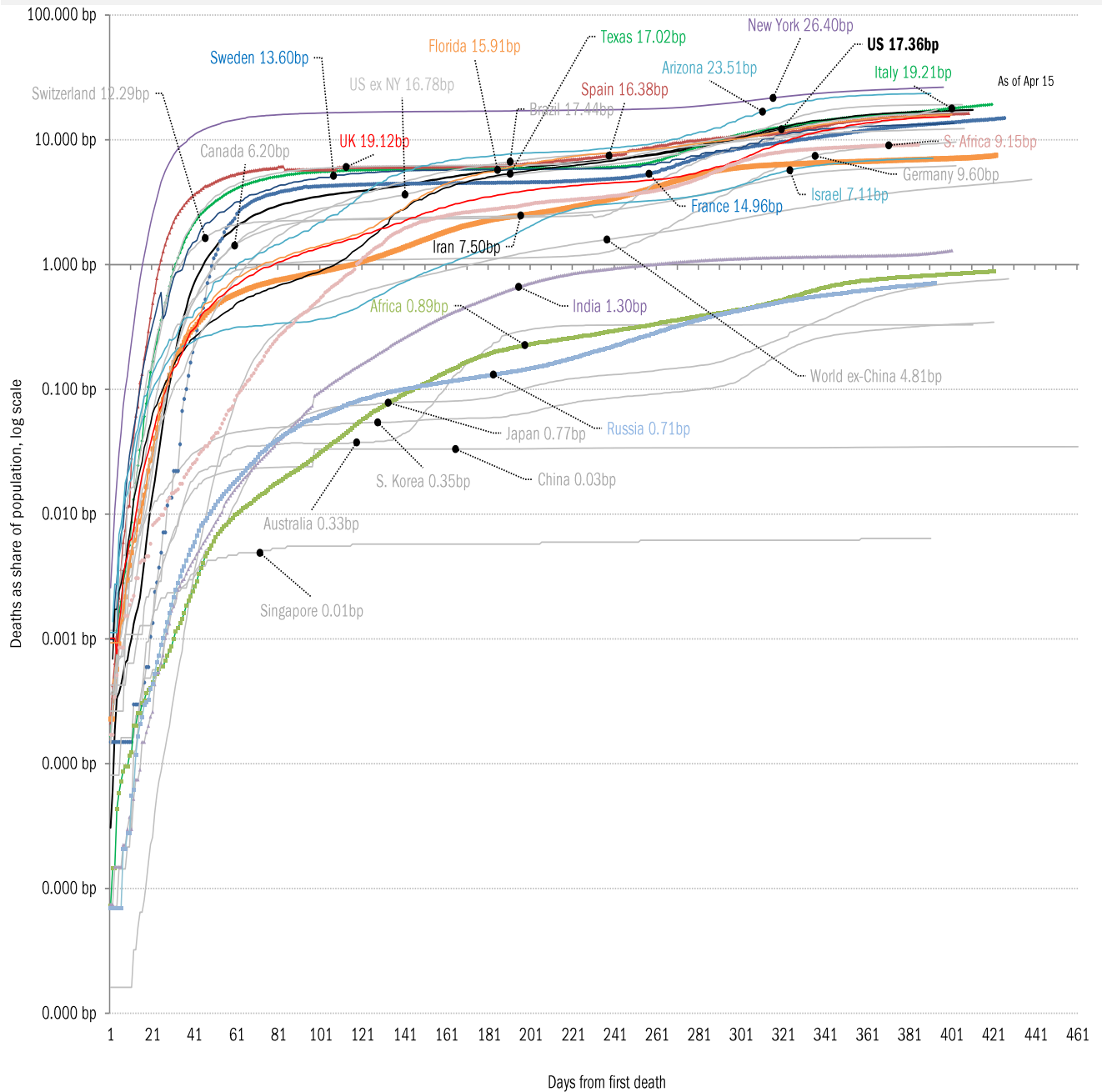
The coronavirus case accelerometer... tracking the world's infection curves  
*Share of infected population from first day with 100 confirmed cases, log scale*



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

# The coronavirus mortality accelerometer ... tracking the world's fatality curves

## Share of deceased population from day of first fatality



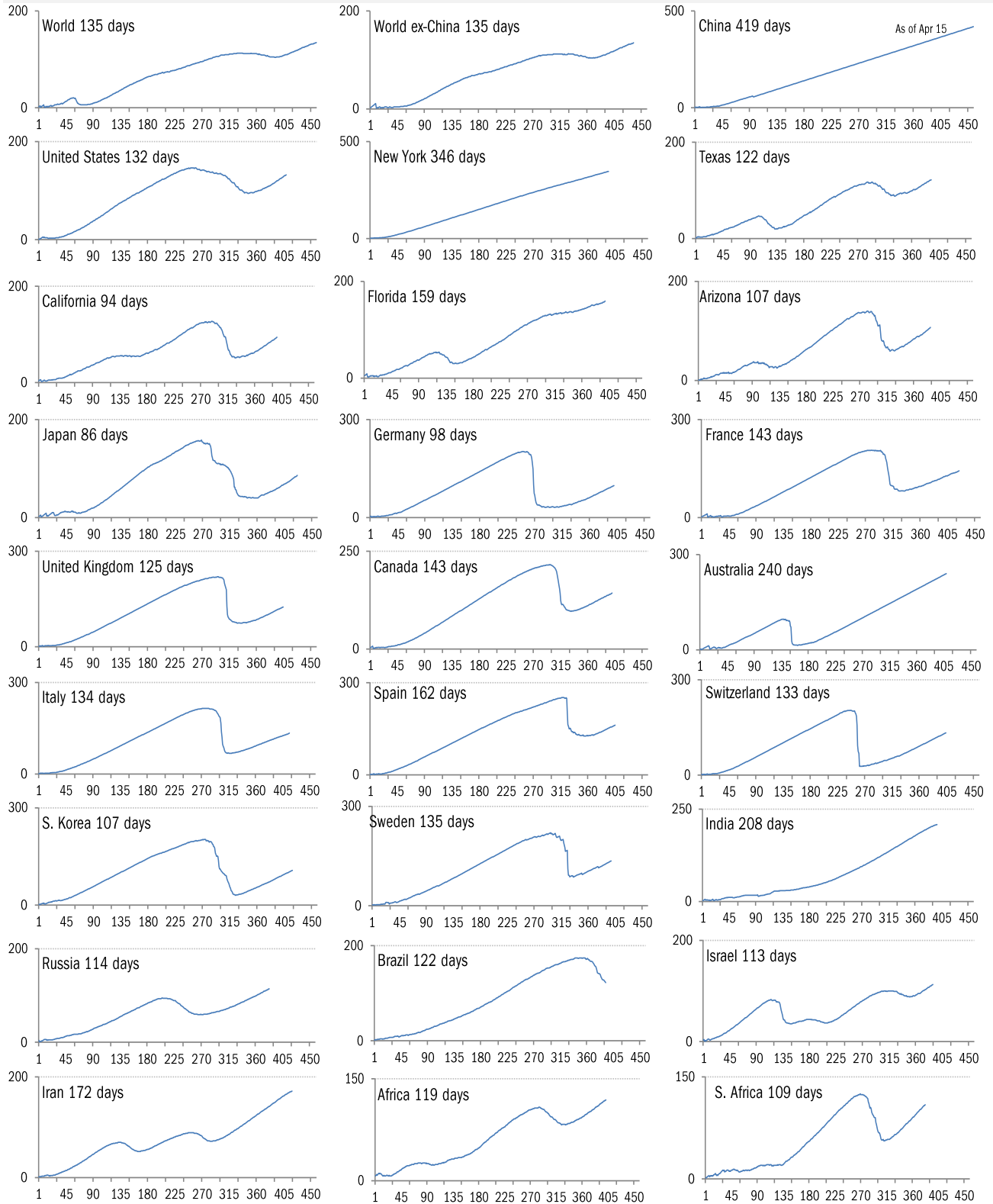
Source: [Johns Hopkins](#), TrendMacro calculations



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

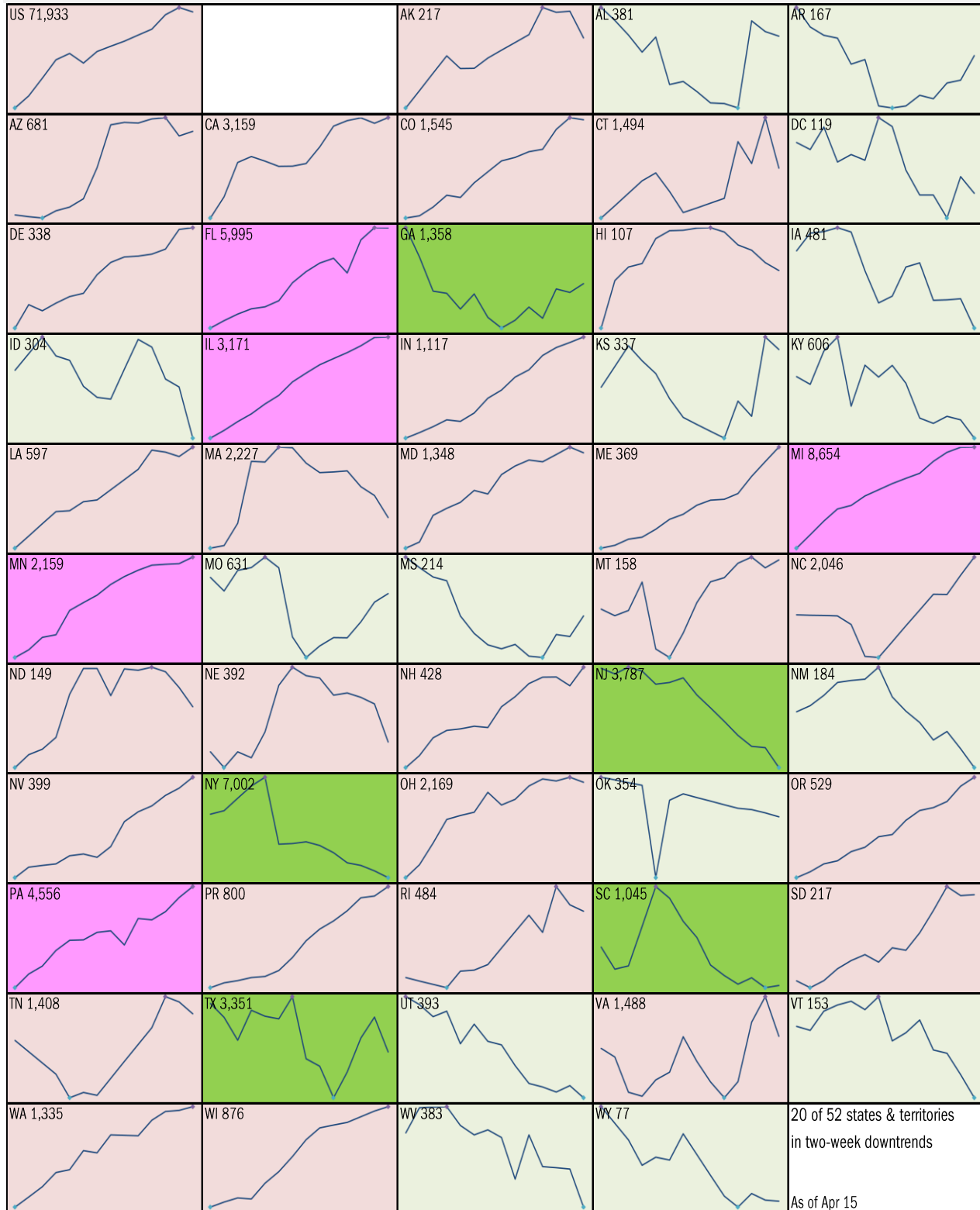
Vertical: days to double deaths Horizontal: days from first death

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

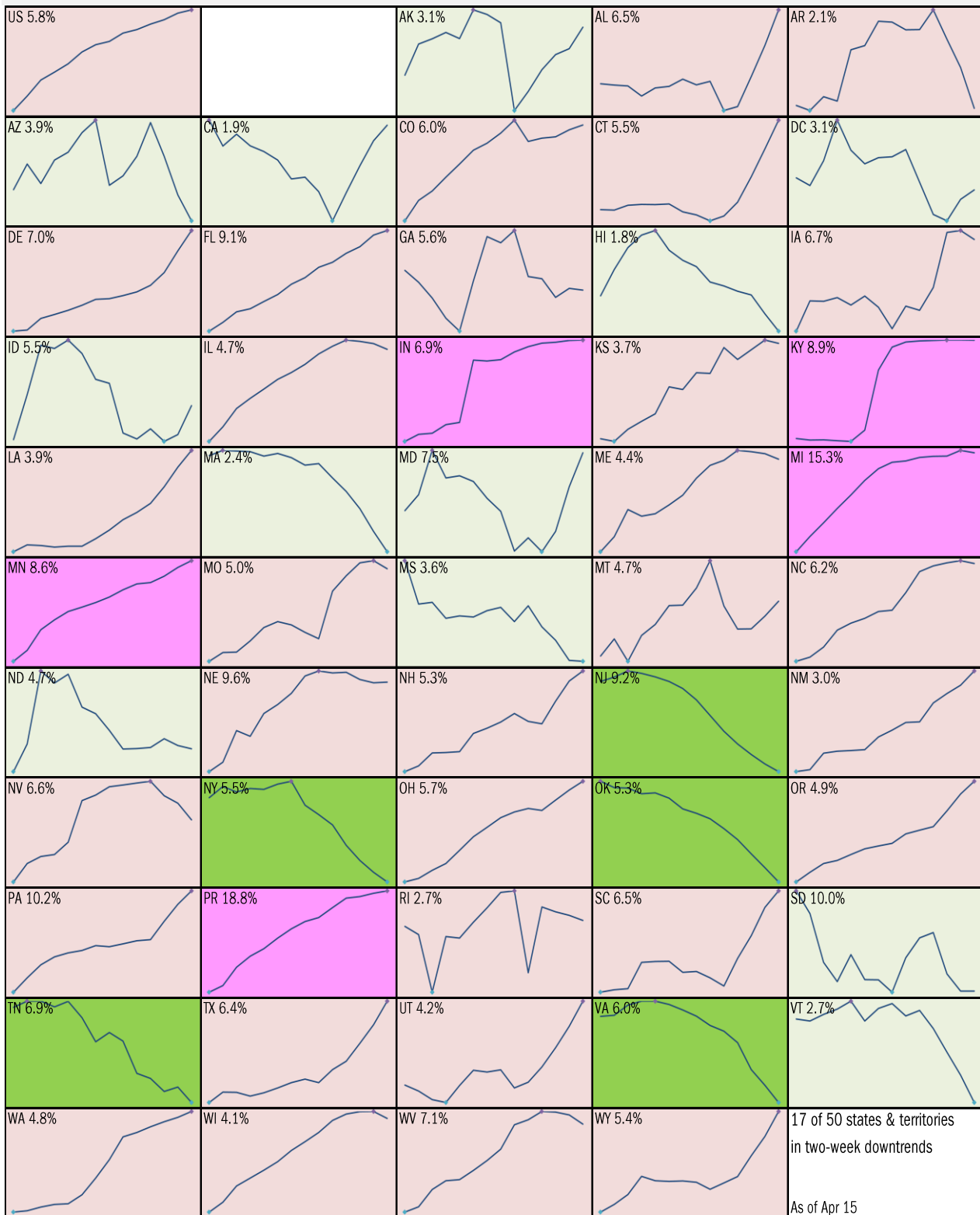


Source: [Johns Hopkins](#), TrendMacro calculations

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

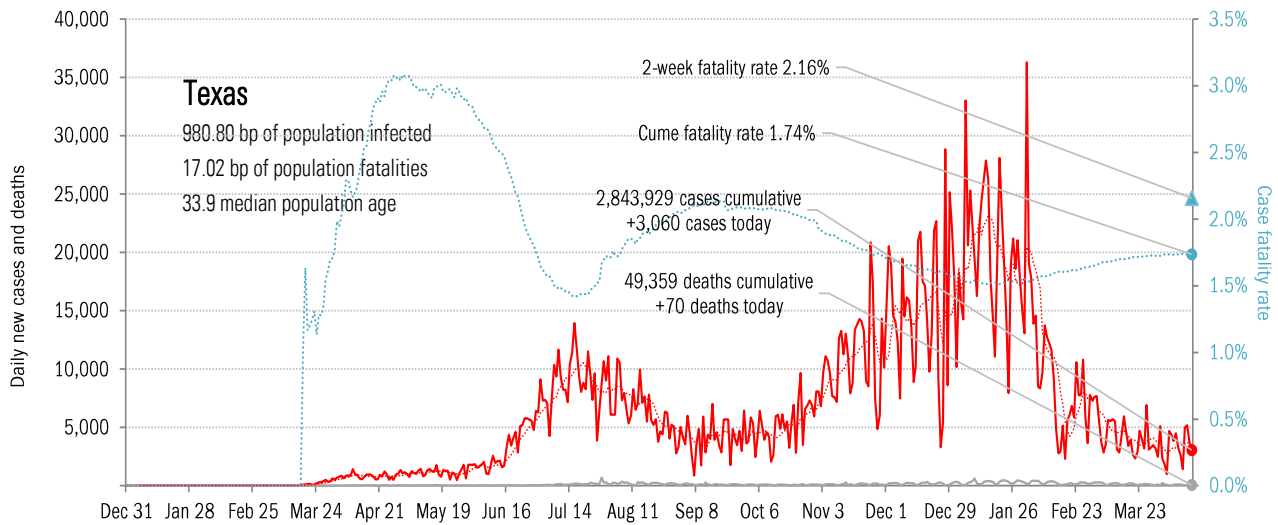
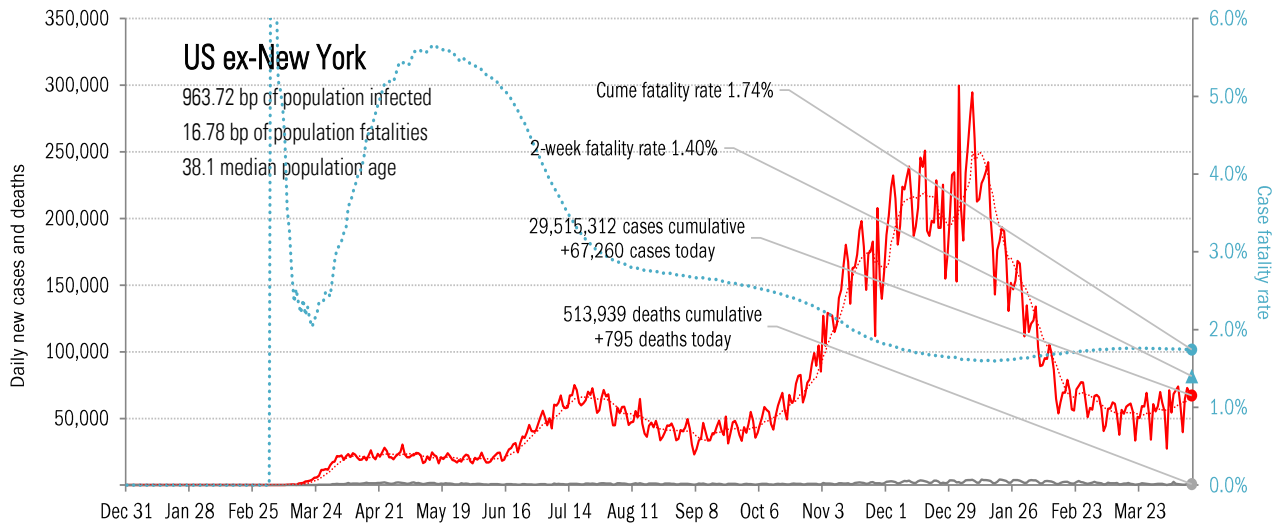
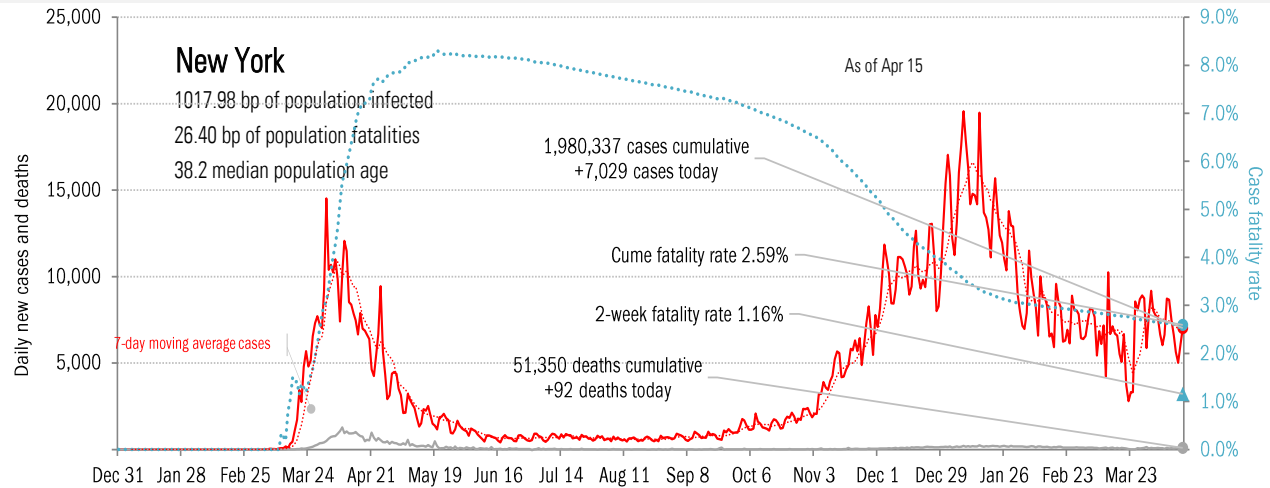
14-day moving average, last 14 days Most recent value displayed ● High ● Low

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



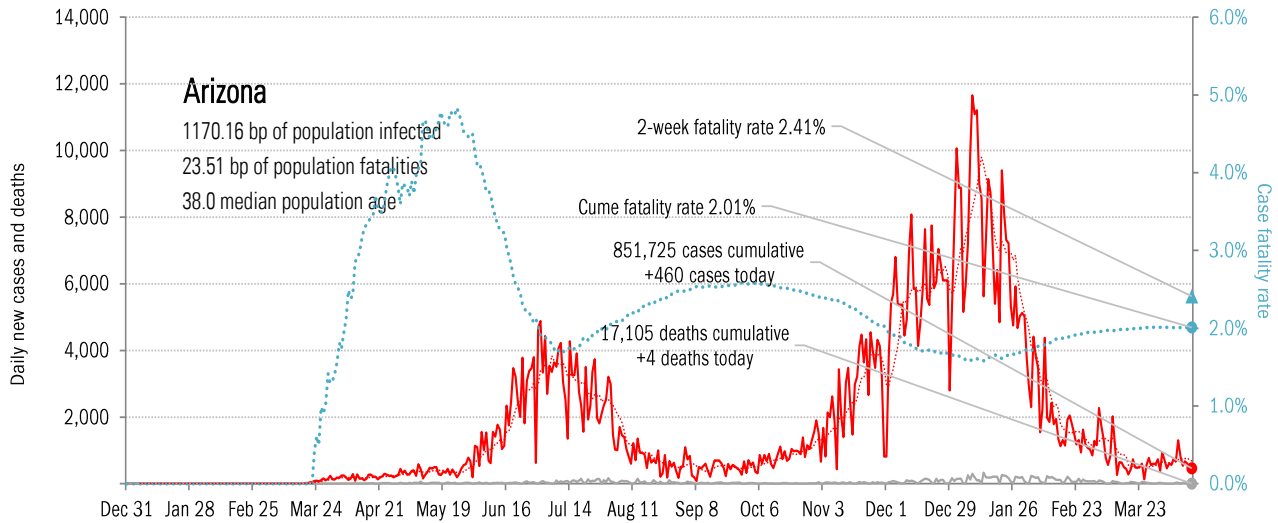
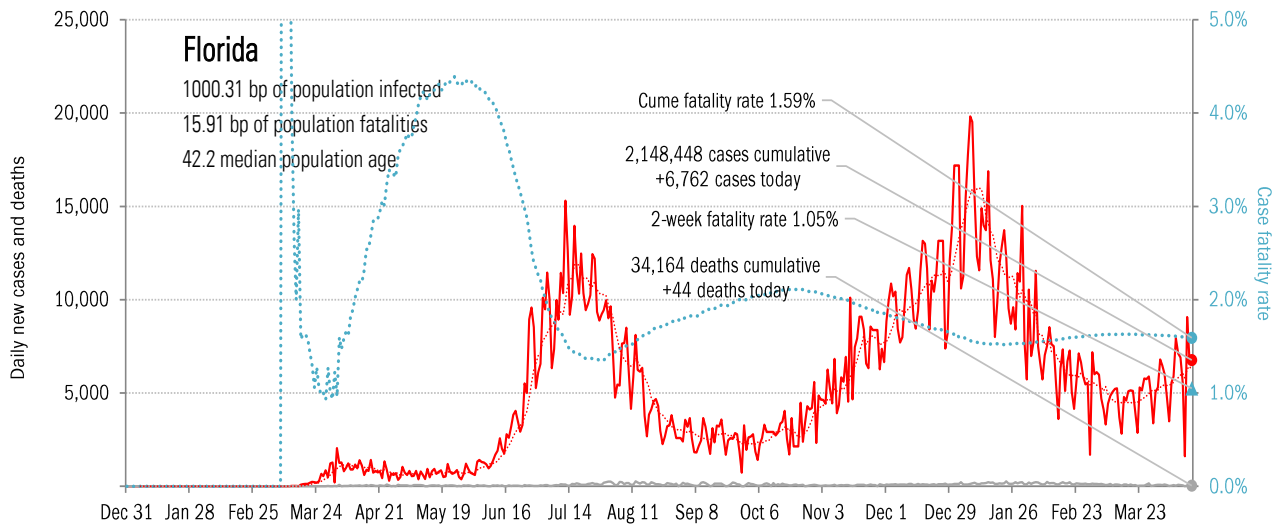
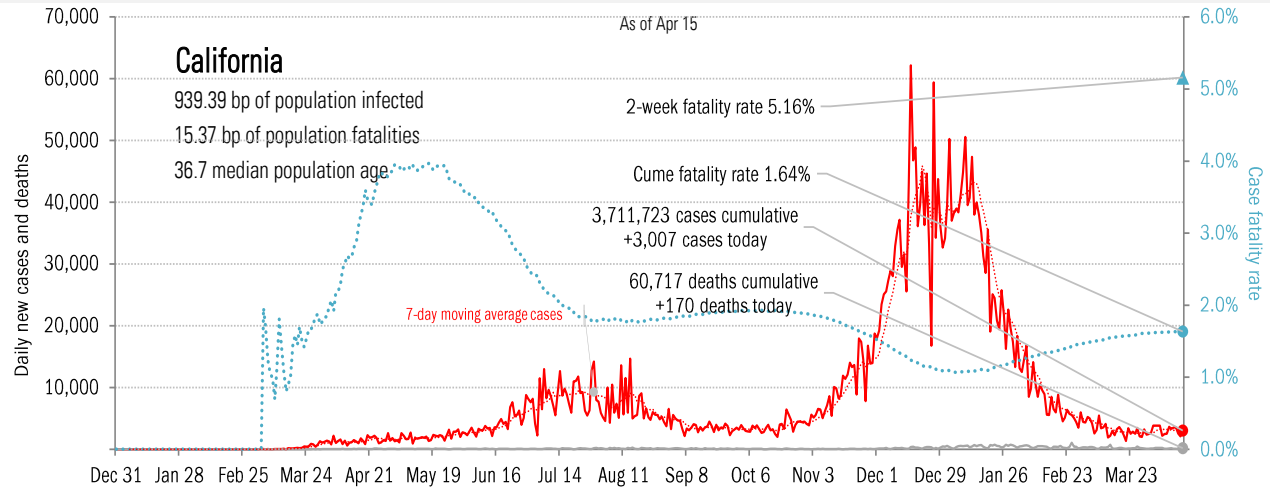
Source: [Covid Act Now](#), TrendMacro calculations

# From Ground Zero to the Rio Grande



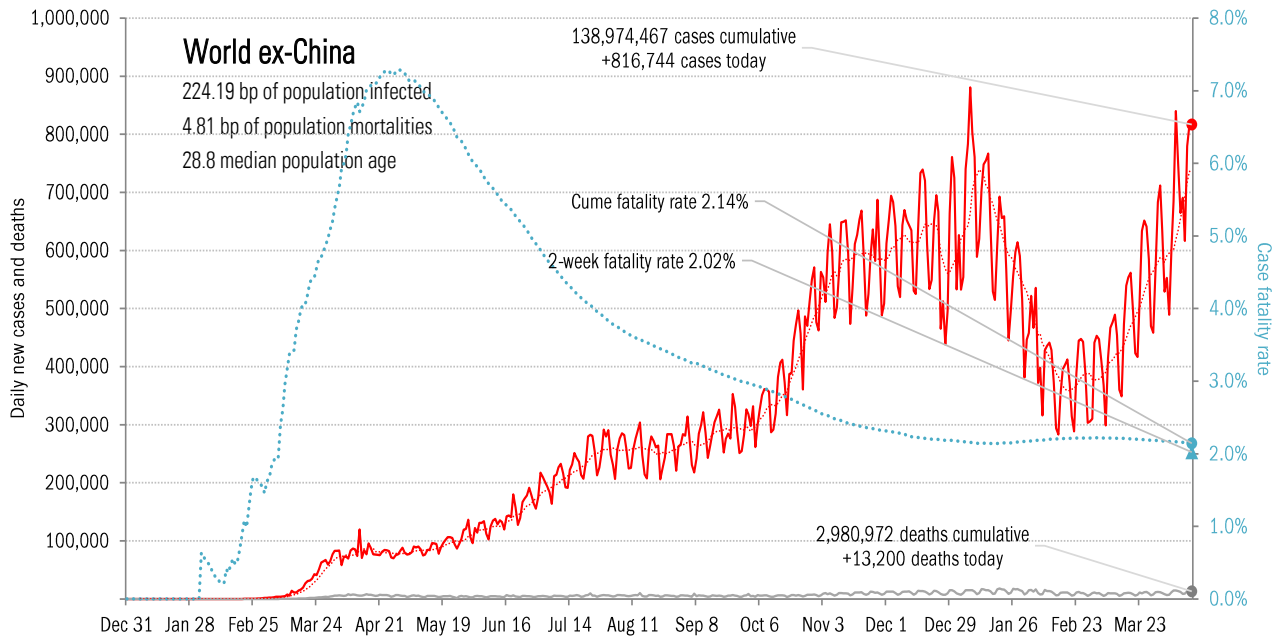
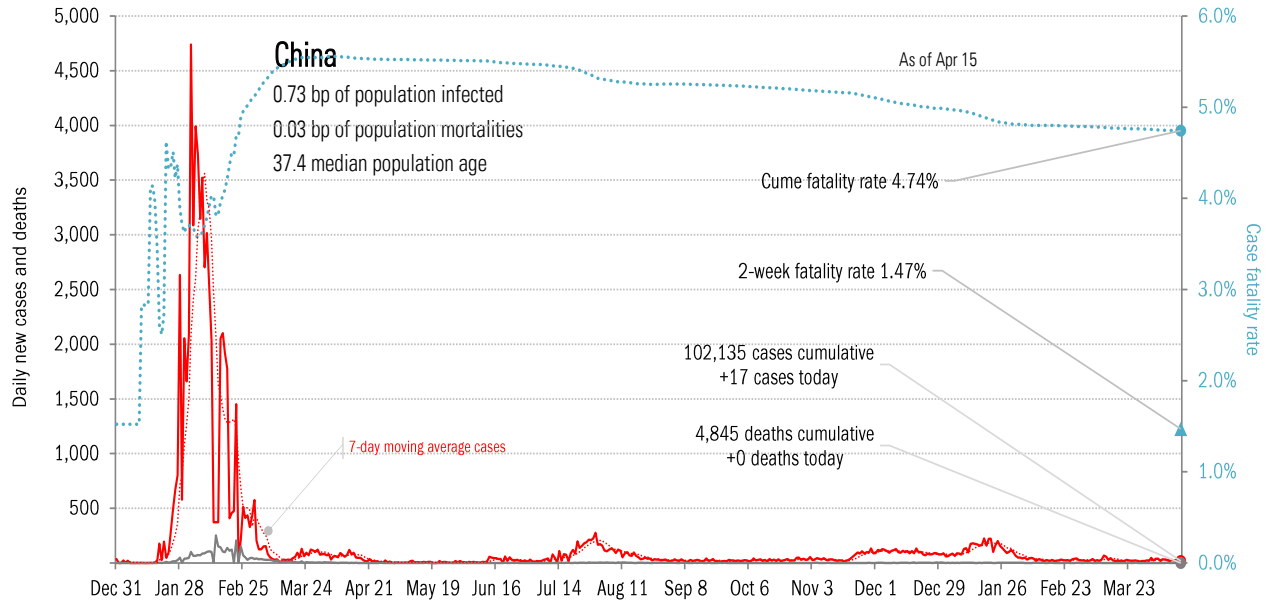
Source: [Johns Hopkins](#), TrendMacro calculations

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



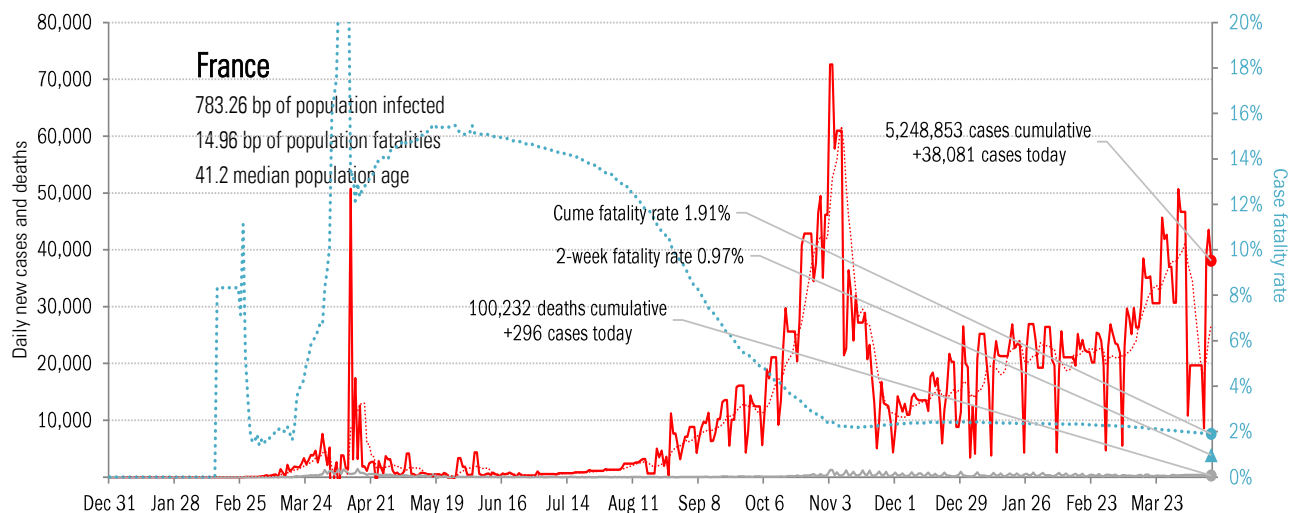
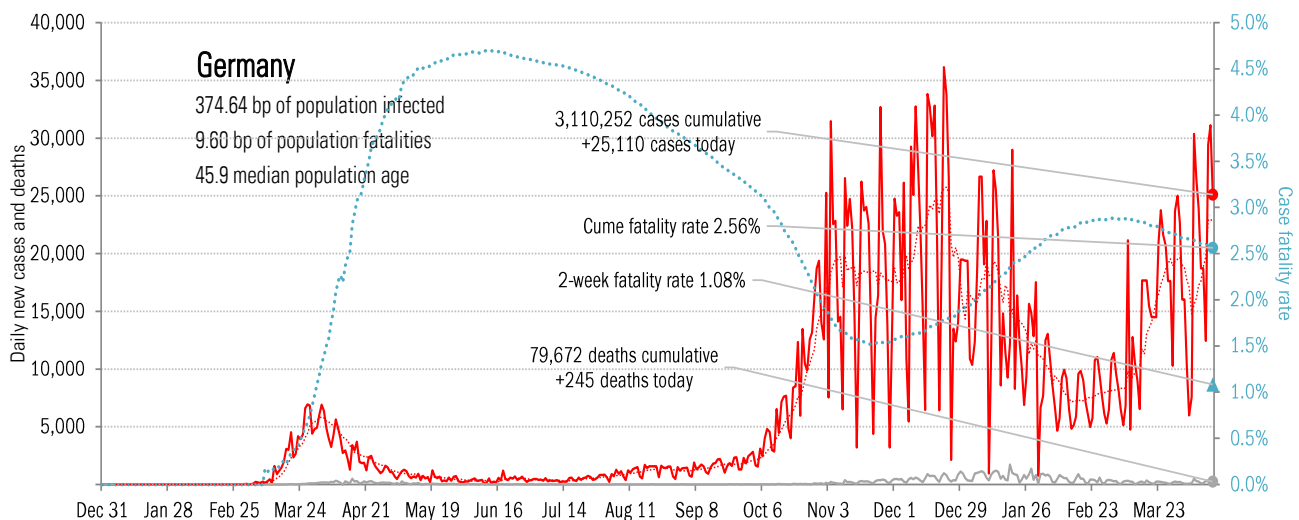
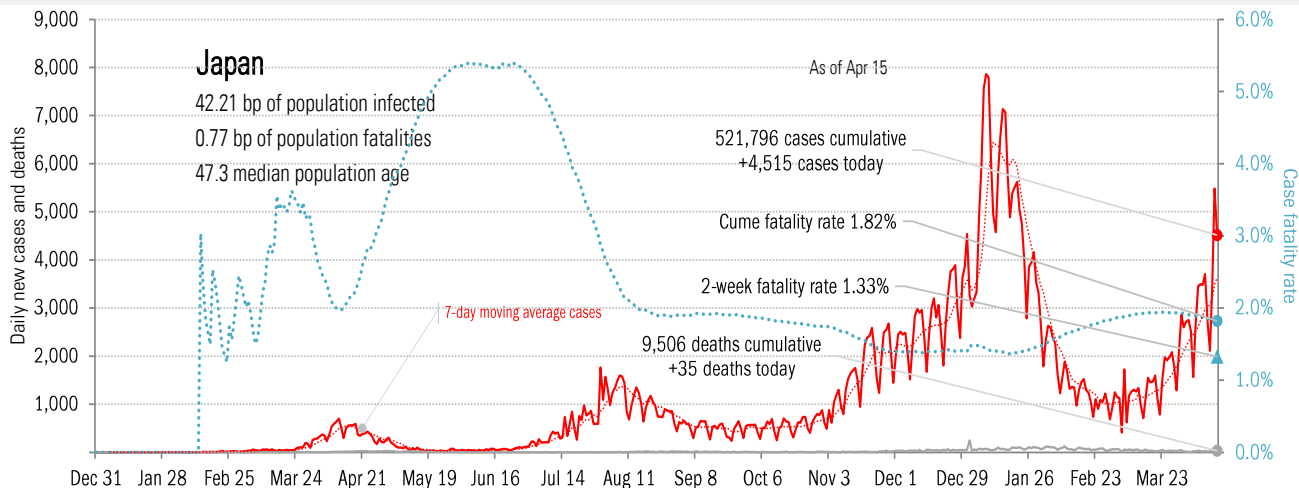
Source: [Johns Hopkins](#), TrendMacro calculations

# Patient zero... and then everyone else



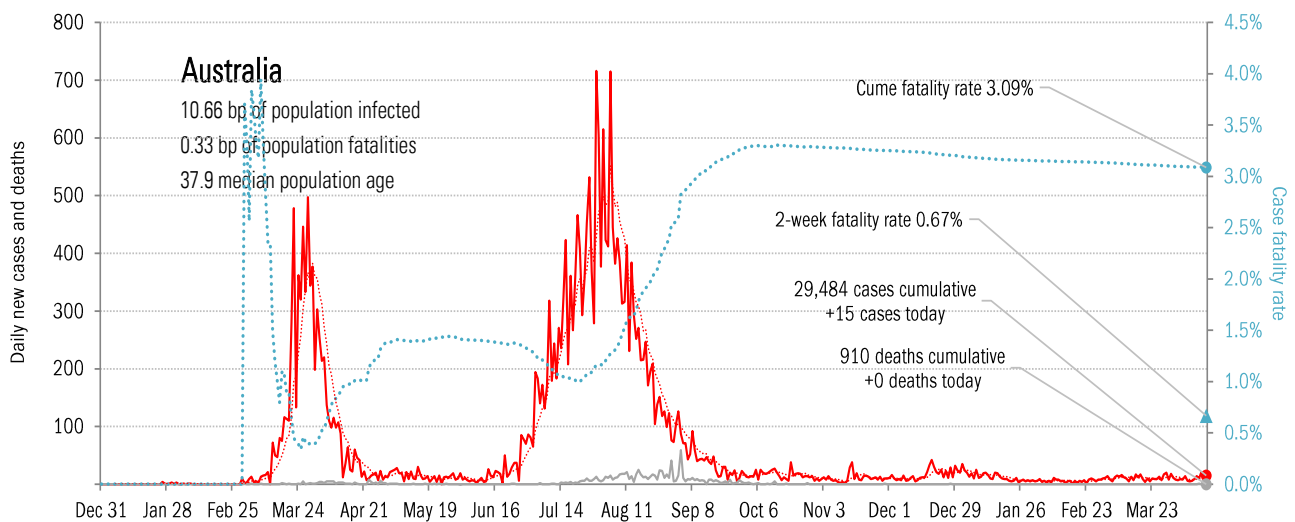
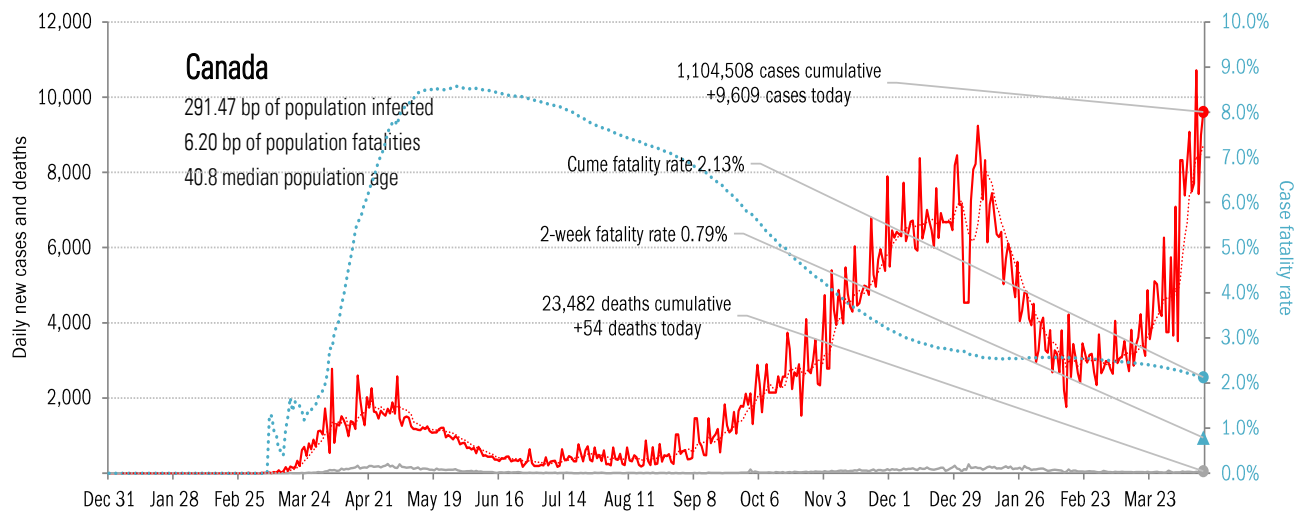
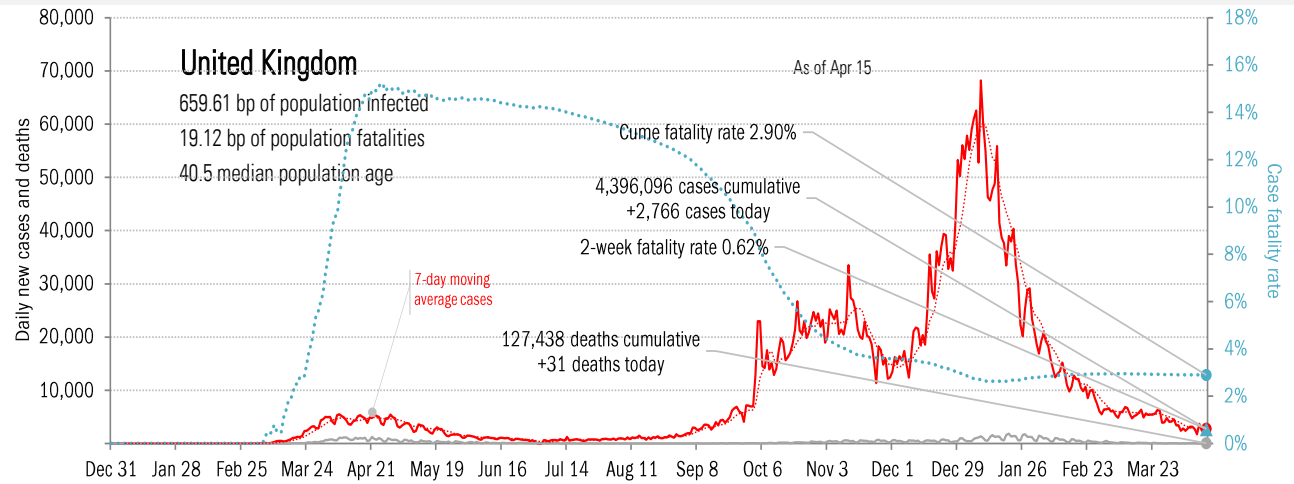
Source: [Johns Hopkins](#), TrendMacro calculations

# Impact in the largest economies



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

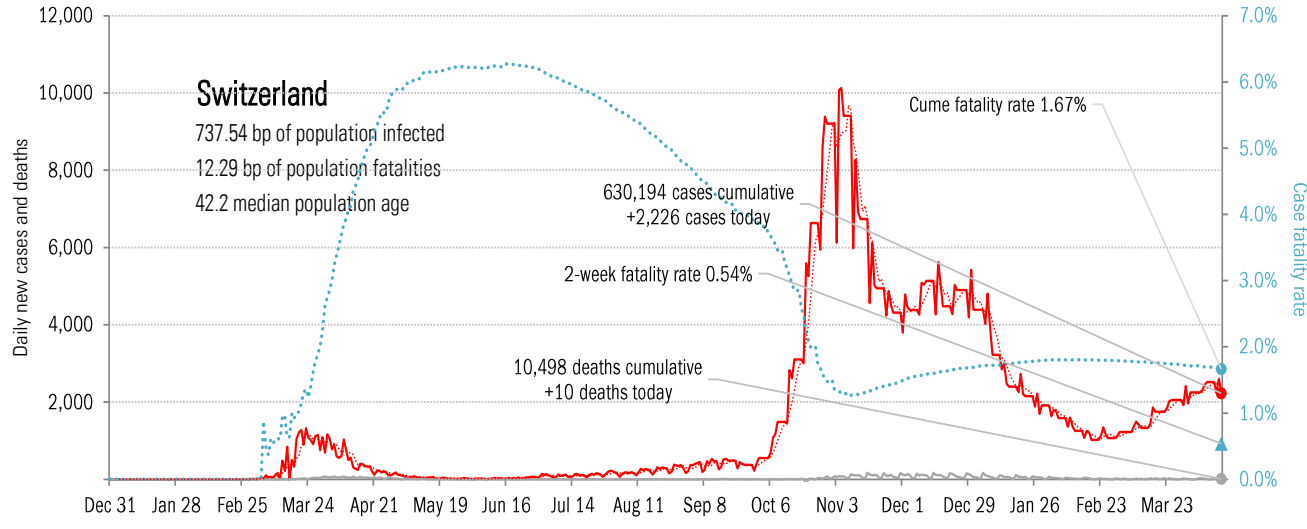
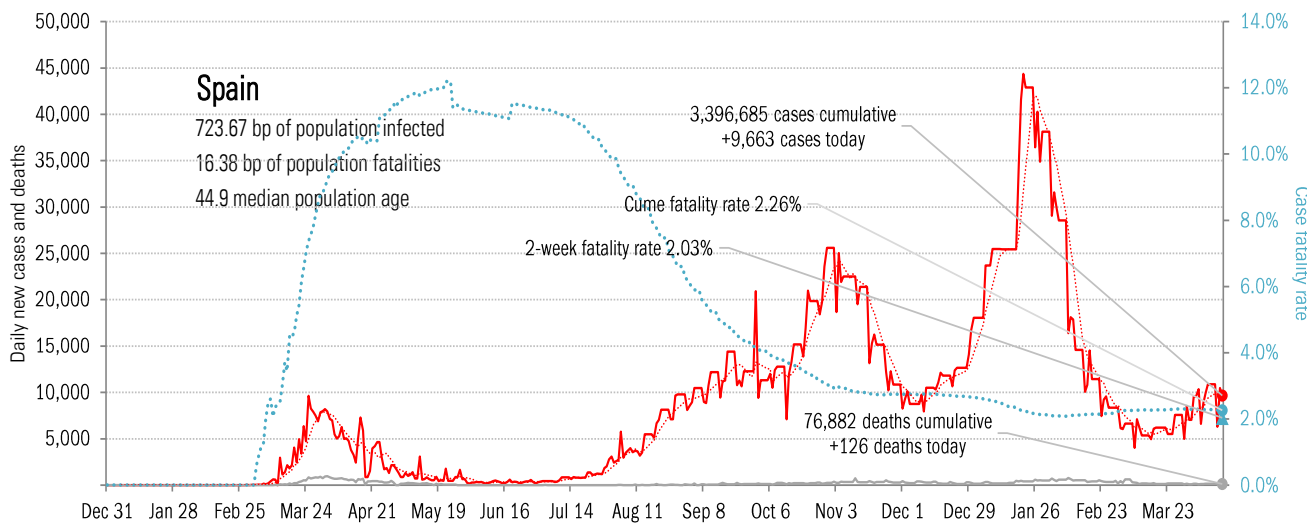
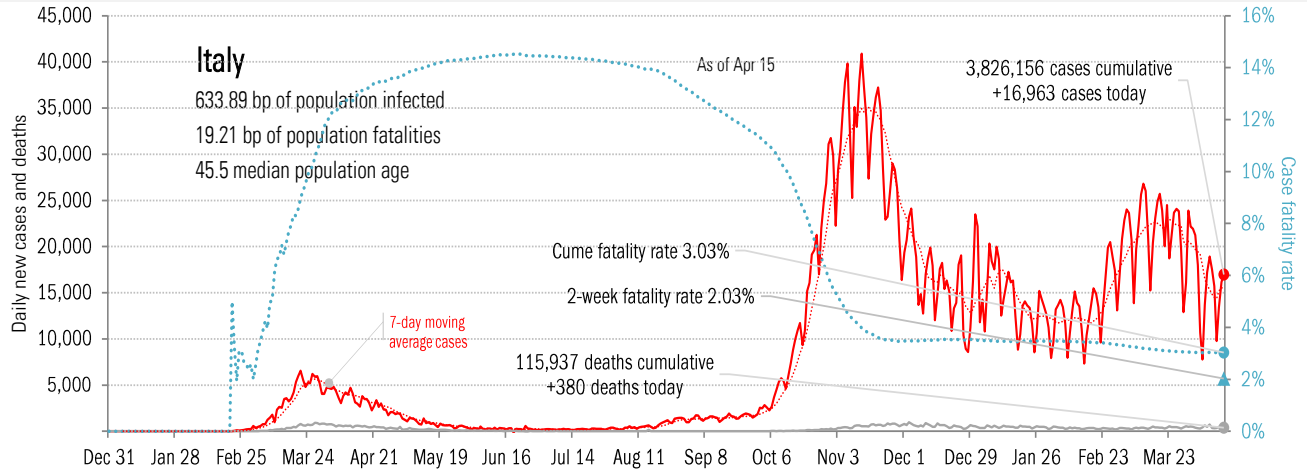
# Impact in The Anglosphere



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

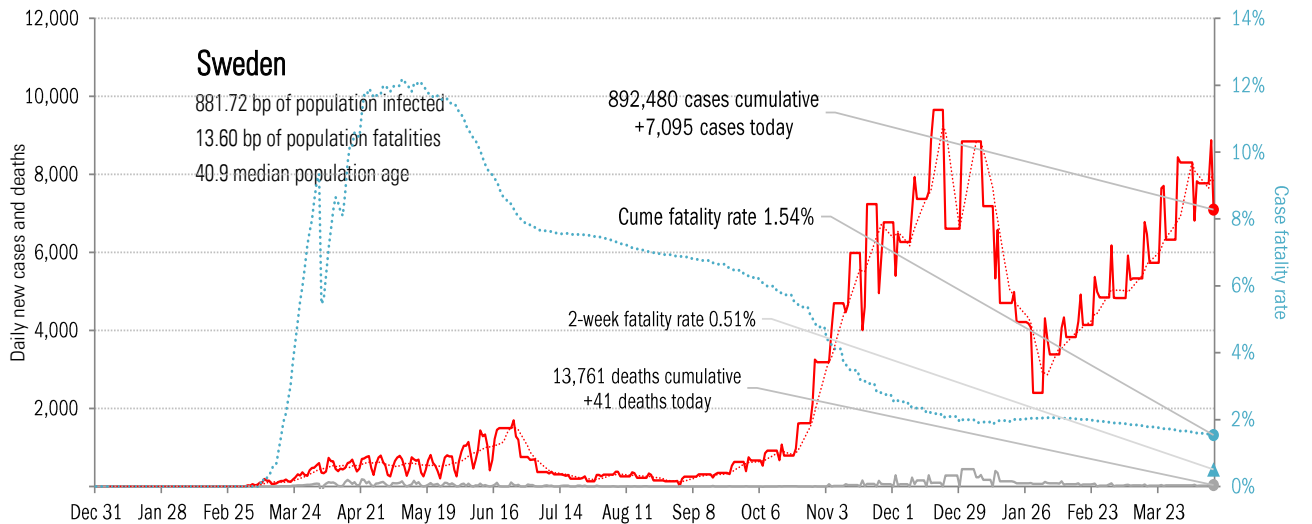
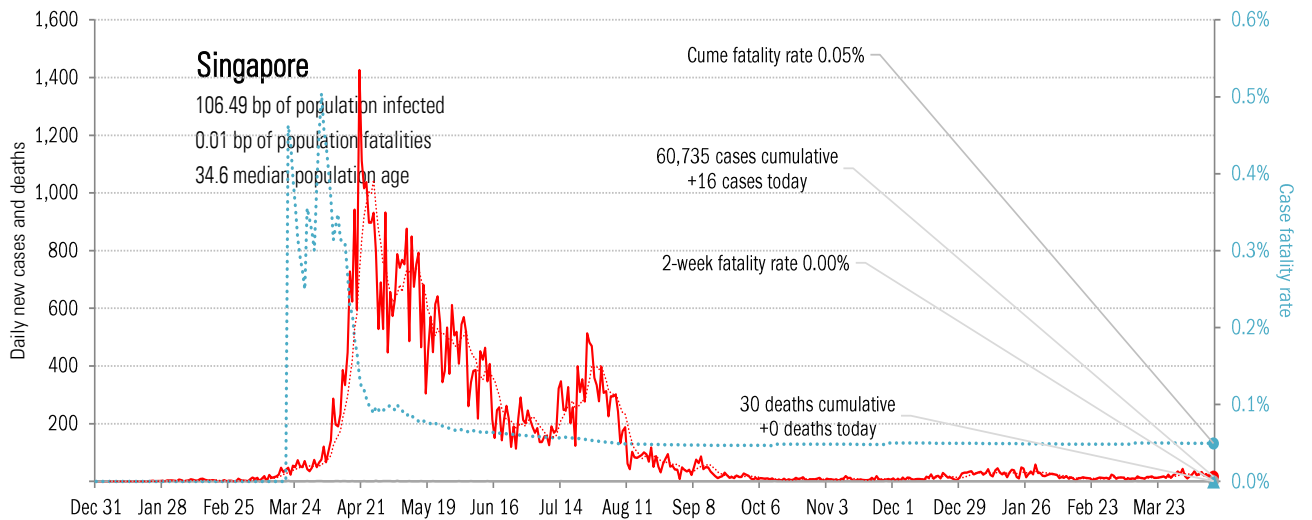
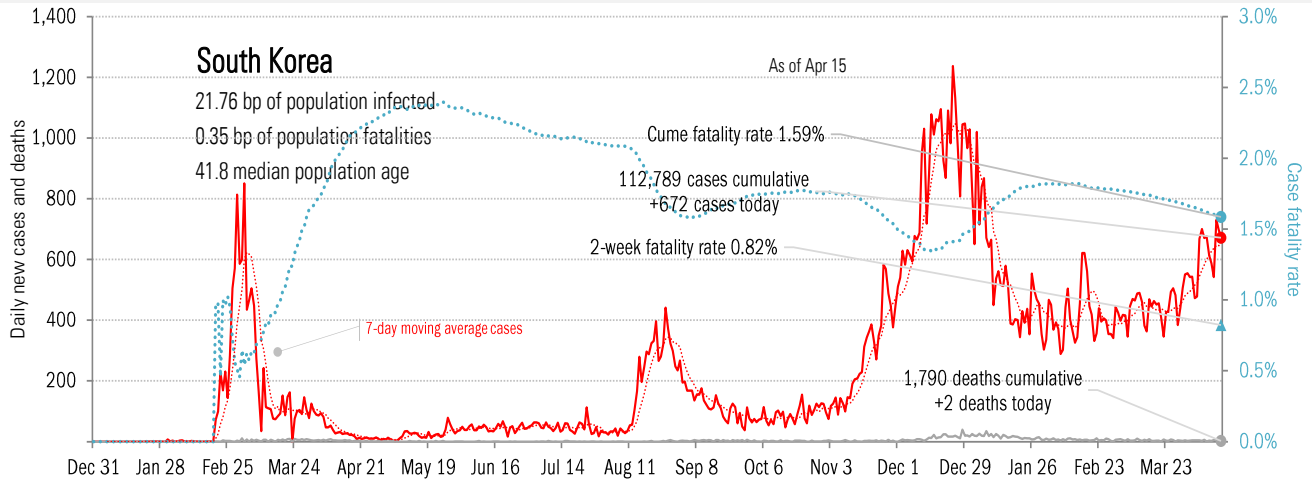


# Impact in continental Europe



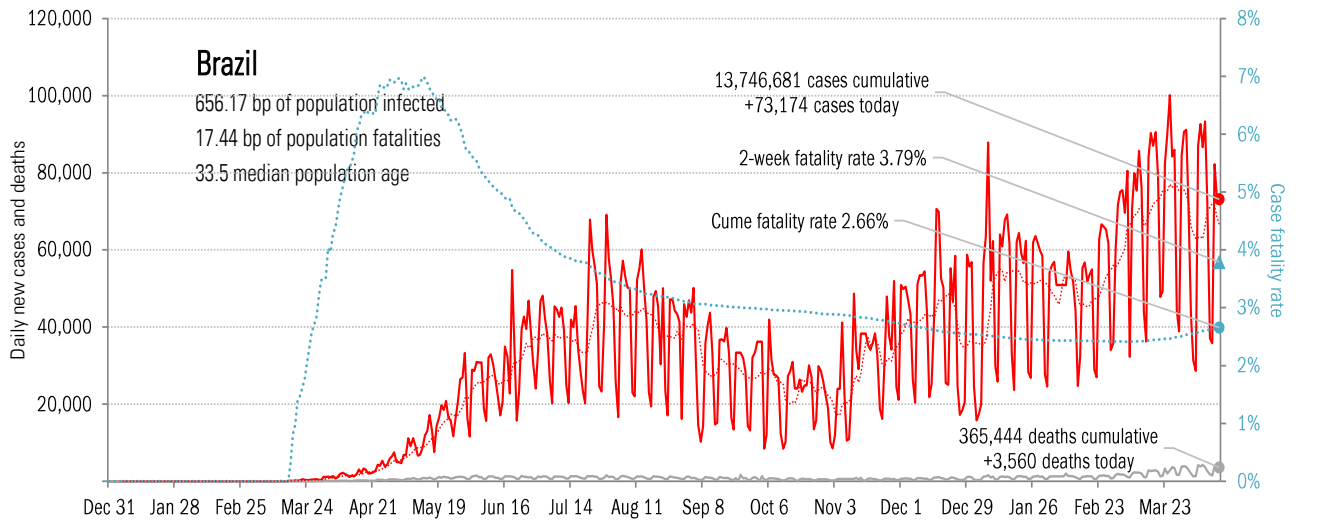
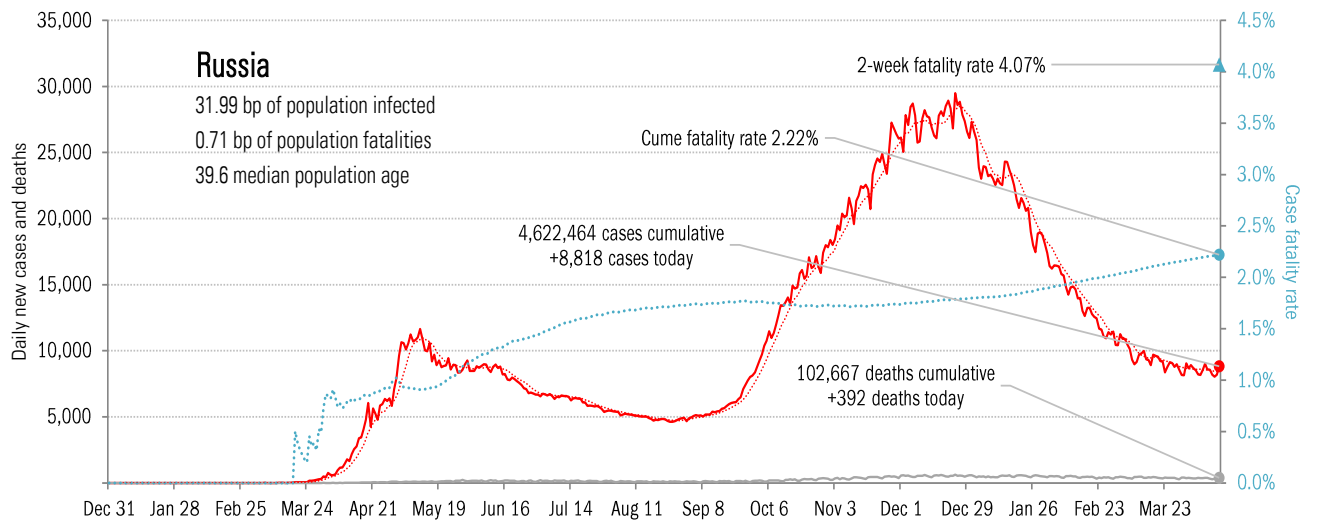
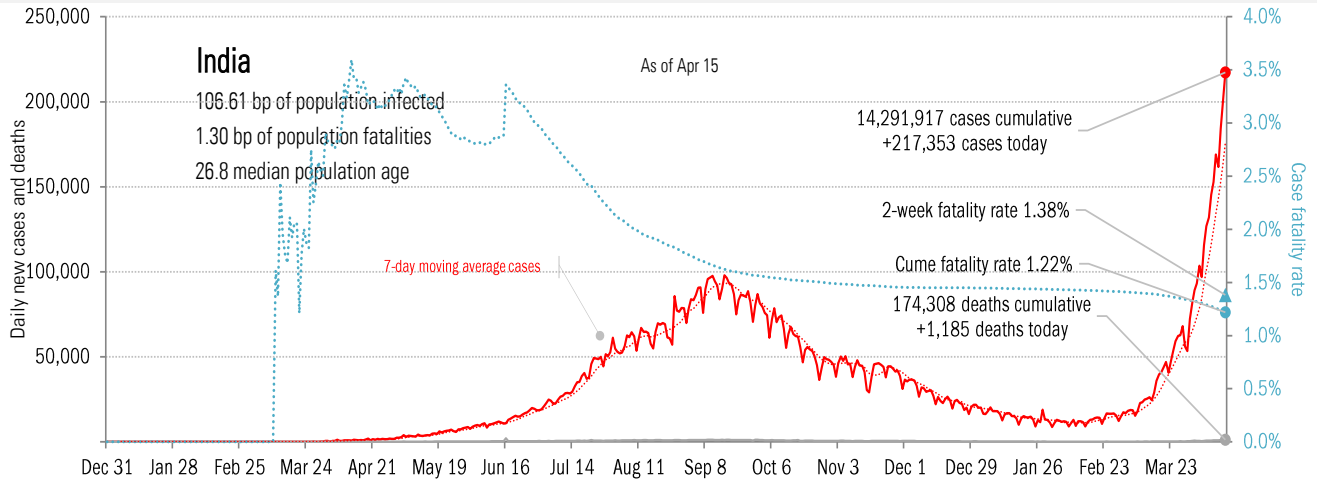
Source: [Johns Hopkins](#), TrendMacro calculations

# Impact in other hot-spots



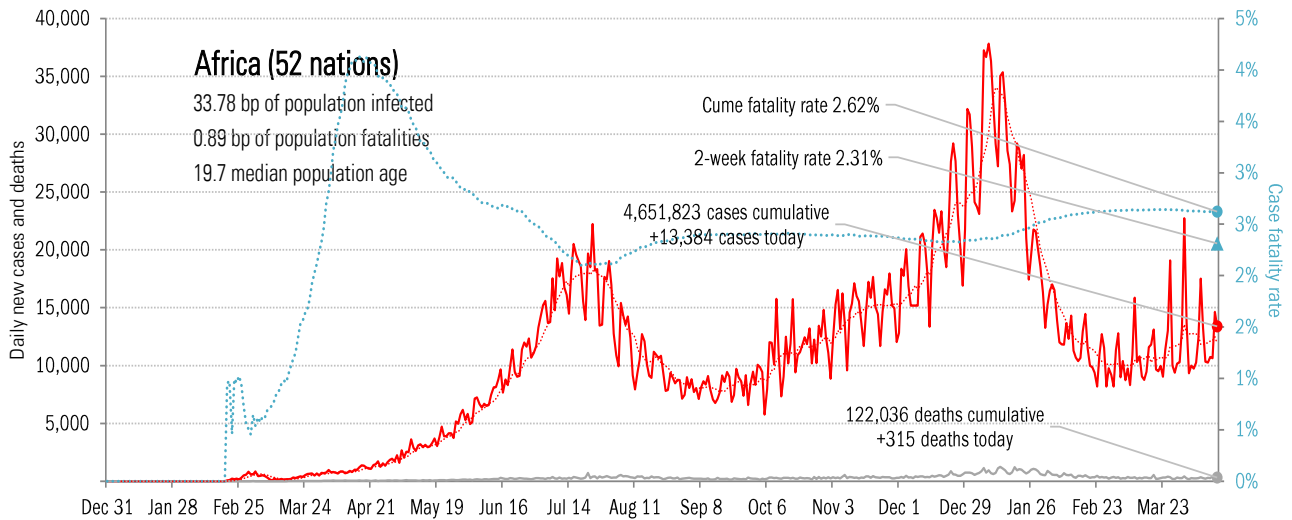
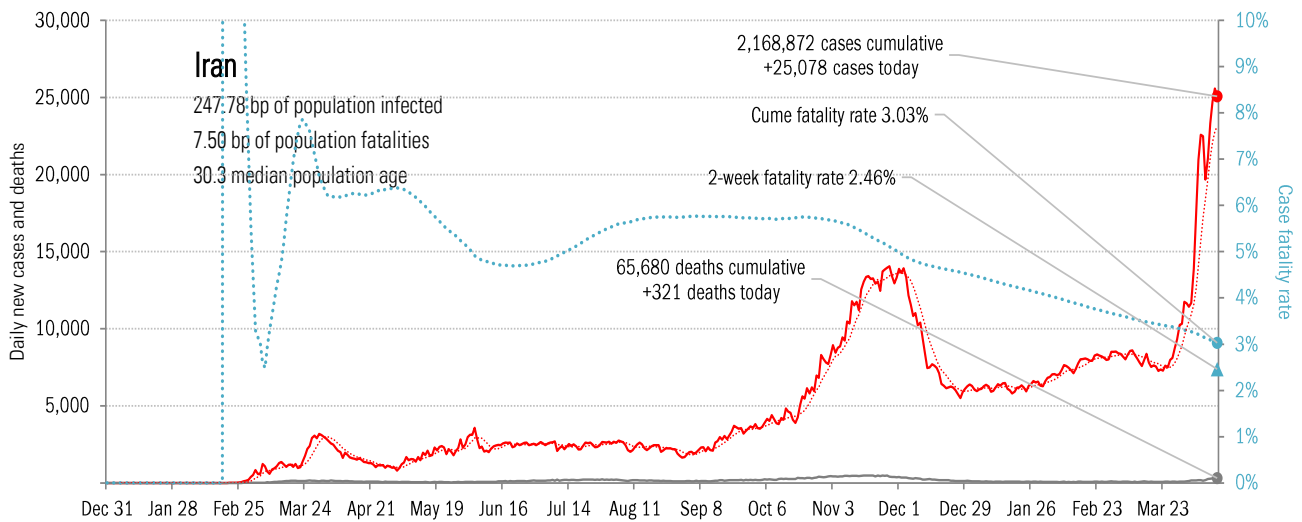
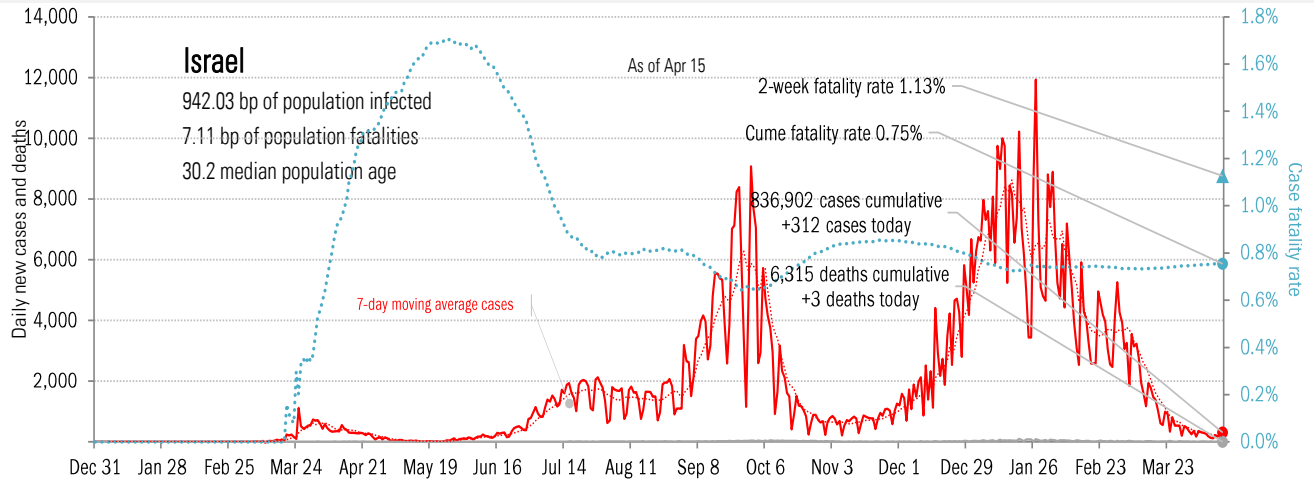
Source: [Johns Hopkins](#), TrendMacro calculations

# Impact in the BRICs ex-China



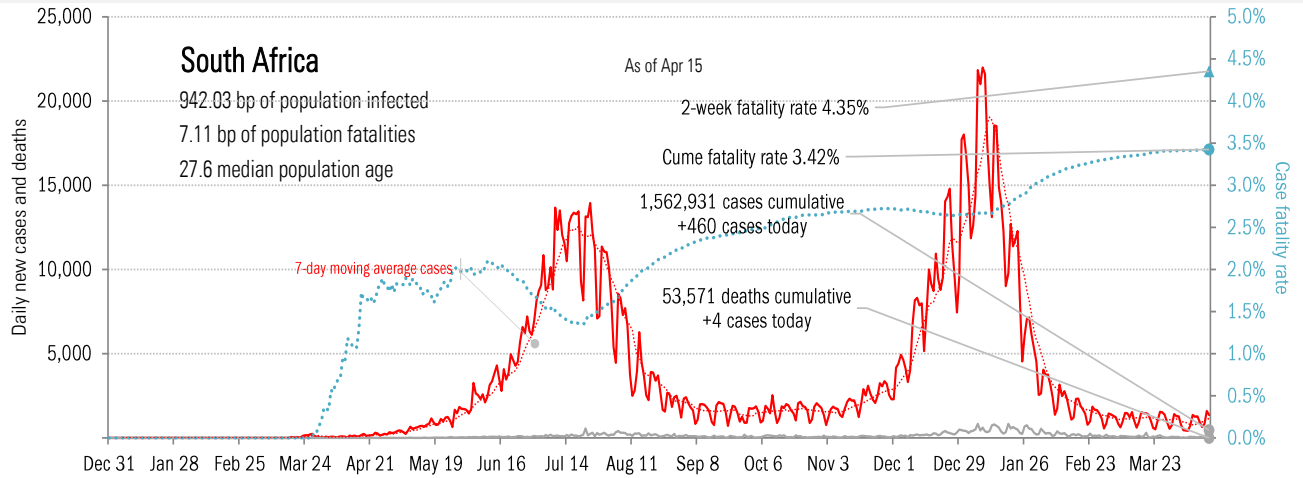
Source: [Johns Hopkins](#), TrendMacro calculations

# Impact in the Middle East and Africa



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

# Impact in Africa, continued



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