

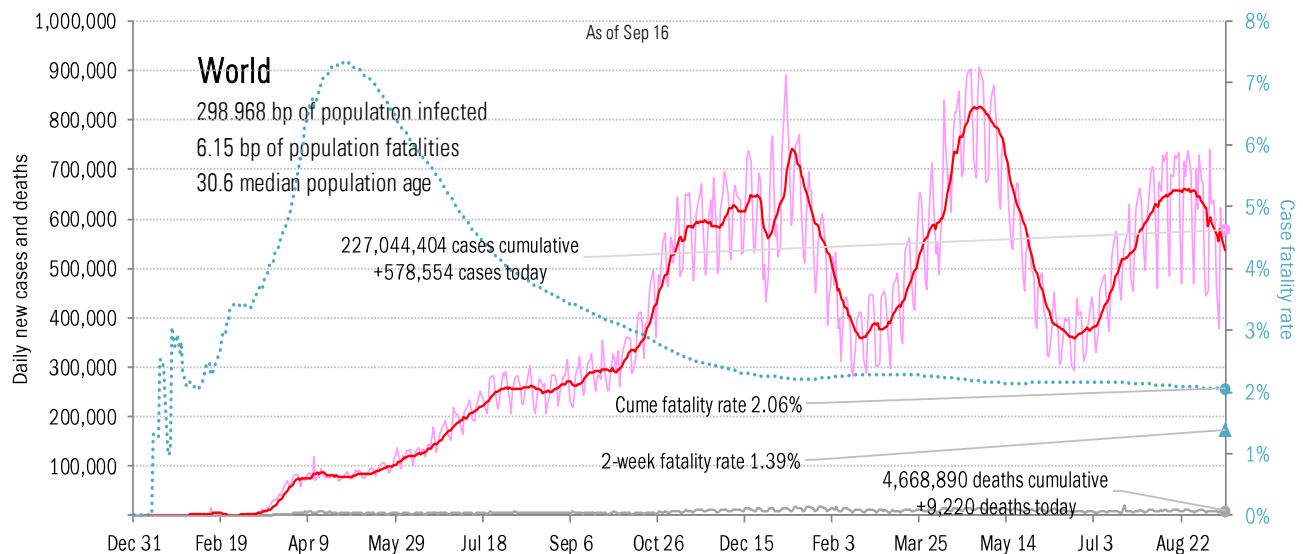
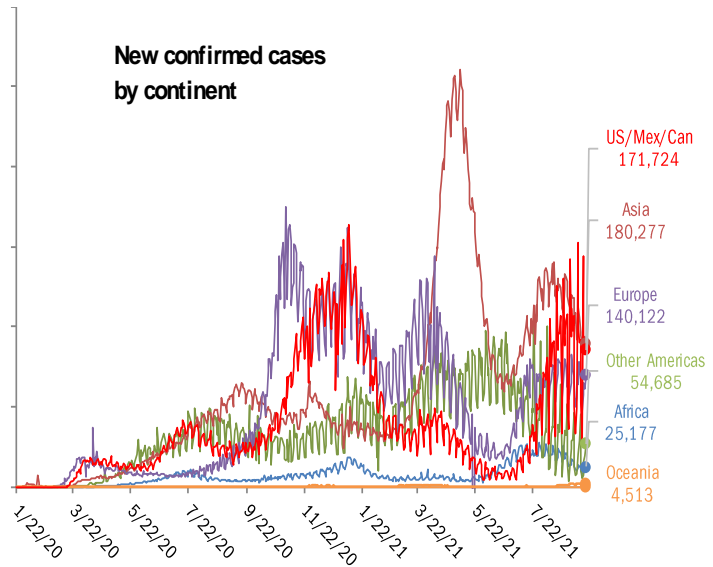
## Data Insights: Covid-2019 Monitor

Friday, September 17, 2021

### The global scorecard

Cases: 7-day average and daily Deaths: Daily

The worst ten countries			
New cases		New Deaths	
United States	+ 160,013	United States	+ 2,202
Brazil	+ 34,407	Russia	+ 774
India	+ 34,403	Brazil	+ 649
Turkey	+ 28,118	Iran	+ 453
United Kingdom	+ 26,619	Mexico	+ 435
Philippines	+ 21,181	Malaysia	+ 346
Russia	+ 19,288	India	+ 320
Malaysia	+ 18,815	South Africa	+ 311
Iran	+ 18,021	Philippines	+ 276
Thailand	+ 13,894	Turkey	+ 262
<b>+ 374,759</b>		<b>+ 6,028</b>	
World	+ 578,554	World	+ 9,220
Top ten	65%	Top ten	65%



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

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# The US scorecard

Cases: 7-day average and daily Deaths: Daily

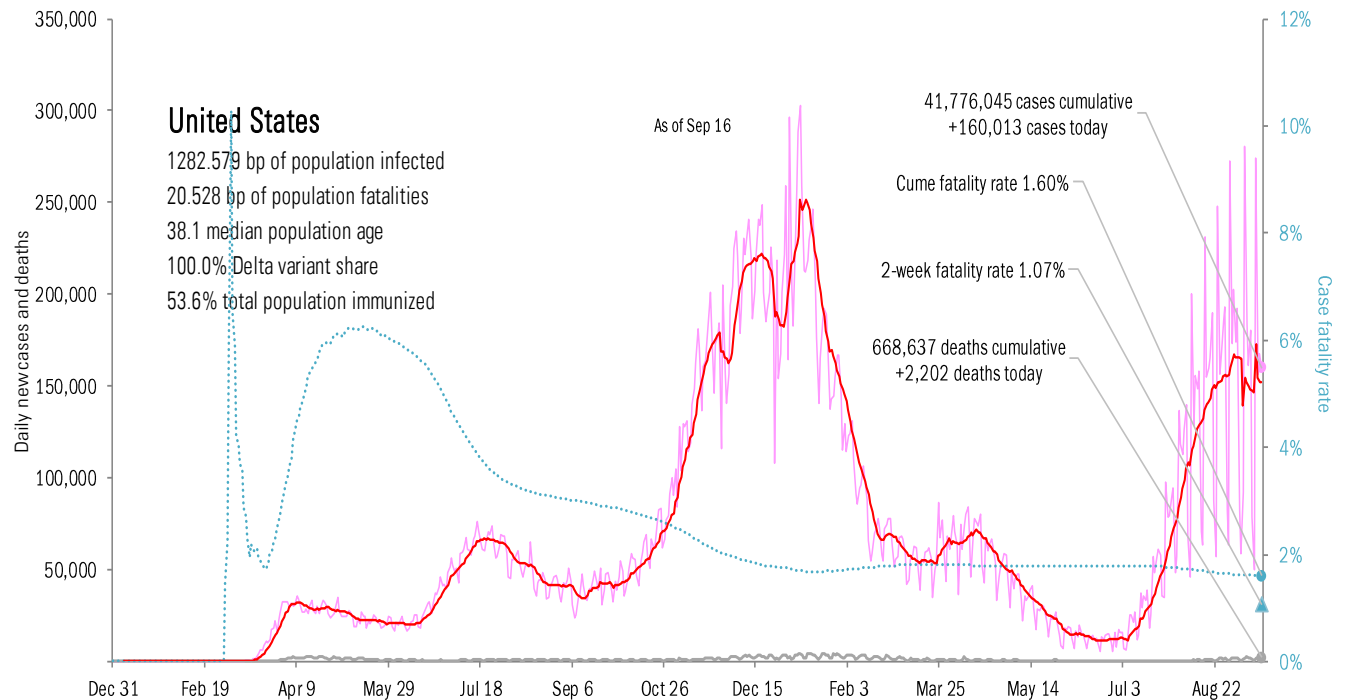
## The ten worst US states

New cases			New Deaths			New in hospital			Cume cases			Cume deaths			Cume in hospital			Hospital use		ICU use	
TX	+17,804		TX	+375		GA	+58		CA	4,610,847		CA	67,668		TX	343,417		RI	90%	AL	101%
CA	+13,264		FL	+363		KY	+45		TX	3,908,248		TX	61,205		FL	297,872		GA	89%	GA	97%
FL	+11,816		GA	+197		CH	+37		FL	3,464,015		NY	54,742		CA	290,908		MA	88%	TX	94%
CH	+8,349		CA	+186		PA	+36		NY	2,356,680		FL	49,448		NY	151,715		PA	86%	MS	94%
NC	+7,160		NC	+115		VA	+26		IL	1,586,741		PA	28,768		GA	145,995		MD	85%	MA	94%
NY	+6,782		AL	+72		WV	+25		GA	1,519,522		NJ	27,148		CH	104,822		SC	84%	KY	93%
GA	+5,852		PA	+72		NE	+21		PA	1,365,049		IL	26,925		KY	102,992		MO	83%	ID	92%
PA	+5,786		MS	+65		MI	+11		CH	1,327,614		GA	24,460		PA	102,289		CT	83%	AR	92%
KY	+4,876		KY	+62		IA	+10		NC	1,322,587		MI	21,920		IL	96,784		FL	82%	FL	90%
SC	+4,475		TN	+61		NM	+8		TN	1,171,722		CH	21,265		MI	80,658		MI	82%	AK	89%
+86,164			+1,568			+277			22,633,025			383,549			1,717,452						
All states	+160,013		+2,202			-1146			All states	41,776,045		668,637			3,043,222			All states	70%	67%	
Top ten	54%		71%			-24%			Top ten	54%		57%			56%			Median	78%	82%	

Some states not reporting

## Five most improved US states

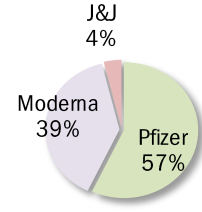
Fewer daily cases		Fewer new deaths		Fewer new hospitalizations		Most pop immunity growth	
MI	-7,757	CK	-232	TX	-367	FR	+40 bp
KS	-3,711	LA	-150	NC	-109	CT	+20 bp
LA	-2,908	SC	-85	SC	-84	FL	+20 bp
TN	-2,803	MI	-66	TN	-66	KY	+20 bp
IA	-2,762	IA	-64	LA	-60	LA	+20 bp



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	393,818,157		+0.772 million		US	53.6%	62.7%	
	<b>One dose</b>	<b>% Pop</b>	<b>Immune</b>	<b>% pop</b>	<b>New immune today</b>	UK	64.9%	71.1%
Total population	215,818,526	65%	184,629,089	55%	+0.400 million	France	63.7%	73.6%
Age 12 to 17	13,261,034	56%	10,520,379	44%	+0.053 million	Spain	76.4%	79.9%
Age 18 to 64	149,006,505	73%	126,486,240	62%	+0.306 million	Germany	62.1%	66.3%
Age 65 and over	52,501,707	96%	46,766,383	86%	+0.039 million	Italy	65.0%	73.0%
						Australia	35.5%	56.7%
						Israel	63.3%	68.9%
						Canada	68.9%	74.9%
						Japan	53.3%	65.6%
						Africa	3.8%	5.9%
						India	13.5%	41.8%
						Brazil	35.9%	67.5%
						China	70.0%	75.8%



State
At least partial immunity as % population
Full immunity as % population



Every American >18 immune in **120 days** by Jan 14, 2022  
 67.1% of population >18 immunized  
 14.2% previously tested positive  
**81.3%** vs 60% adult herd immunity

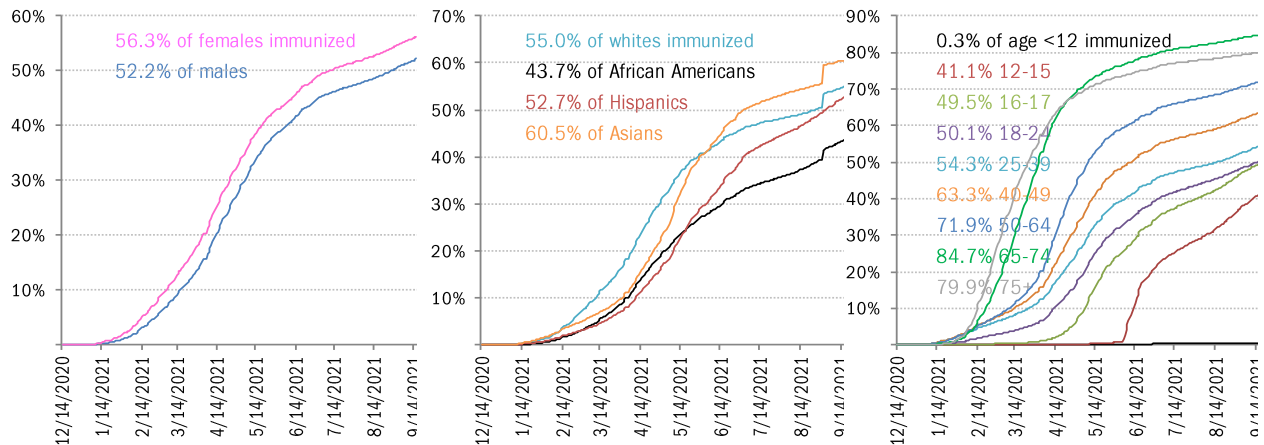
<b>AK</b>
56.2%
48.6%

<b>WI</b>
60.0%
55.3%

<b>ME</b>
73.0%
67.2%

<b>WA</b>	<b>ID</b>	<b>MT</b>	<b>ND</b>	<b>MN</b>	<b>IL</b>	<b>MI</b>	<b>NY</b>	<b>VT</b>	<b>NH</b>	
70.1%	45.8%	53.7%	49.9%	62.8%	67.4%	56.0%	69.6%	77.0%	68.5%	
62.0%	40.5%	47.5%	42.9%	57.3%	52.5%	51.4%	62.1%	68.8%	60.8%	
<b>OR</b>	<b>NV</b>	<b>WY</b>	<b>SD</b>	<b>IA</b>	<b>IN</b>	<b>OH</b>	<b>PA</b>	<b>NJ</b>	<b>MA</b>	
65.7%	59.6%	47.3%	58.0%	57.3%	51.3%	53.4%	71.1%	71.5%	76.5%	
59.5%	49.5%	40.4%	50.5%	53.0%	47.4%	49.3%	56.7%	63.1%	67.0%	
<b>CA</b>	<b>UT</b>	<b>CO</b>	<b>NE</b>	<b>MO</b>	<b>KY</b>	<b>WV</b>	<b>VA</b>	<b>MD</b>	<b>CT</b>	<b>RI</b>
70.4%	57.8%	64.7%	58.6%	53.9%	59.2%	47.7%	66.9%	69.6%	75.0%	73.7%
57.5%	49.1%	58.3%	53.5%	46.7%	50.5%	40.0%	58.8%	63.0%	67.5%	66.5%
	<b>AZ</b>	<b>NM</b>	<b>KS</b>	<b>AR</b>	<b>TN</b>	<b>NC</b>	<b>SC</b>	<b>DC</b>	<b>DE</b>	
	58.3%	71.5%	58.8%	54.8%	51.6%	58.0%	53.8%	69.3%	65.2%	
	50.0%	61.7%	49.9%	44.1%	43.8%	48.3%	45.4%	58.9%	56.5%	
			<b>OK</b>	<b>LA</b>	<b>MS</b>	<b>AL</b>	<b>GA</b>			
			55.3%	50.8%	49.1%	51.5%	53.5%			
			46.0%	43.8%	41.7%	40.7%	43.5%			
			<b>TX</b>					<b>FL</b>		<b>PR</b>
			58.7%					65.8%		77.7%
			49.5%					55.6%		67.4%

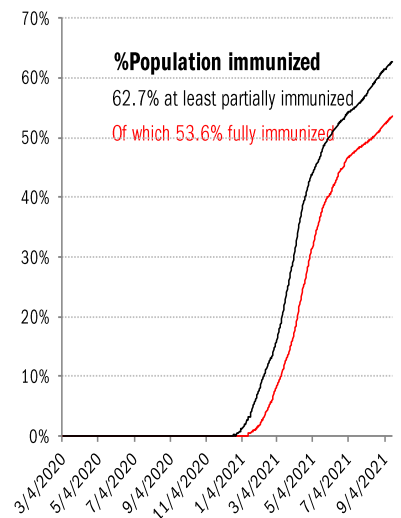
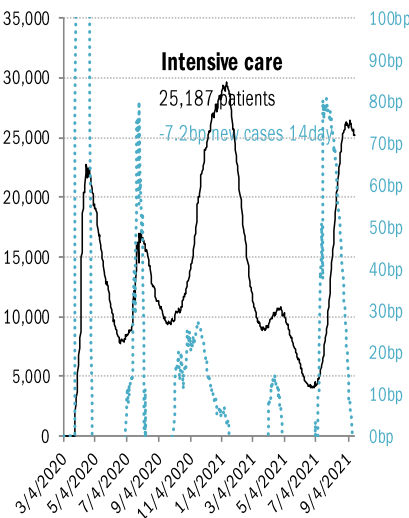
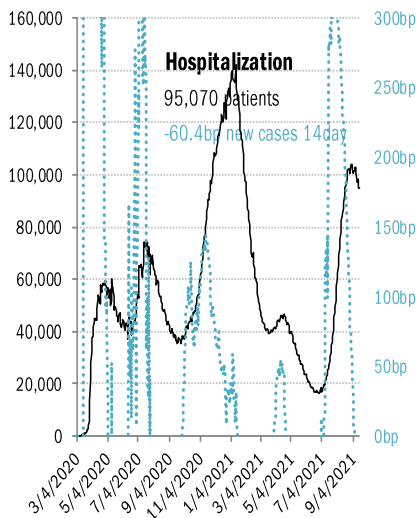
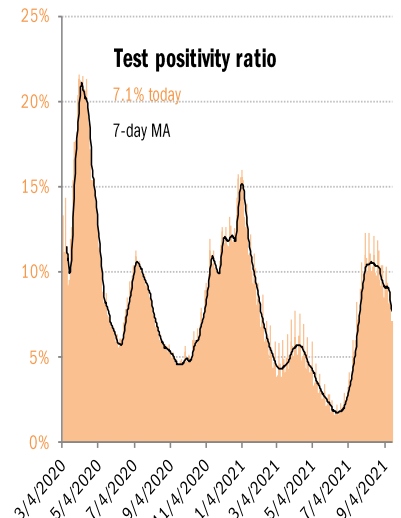
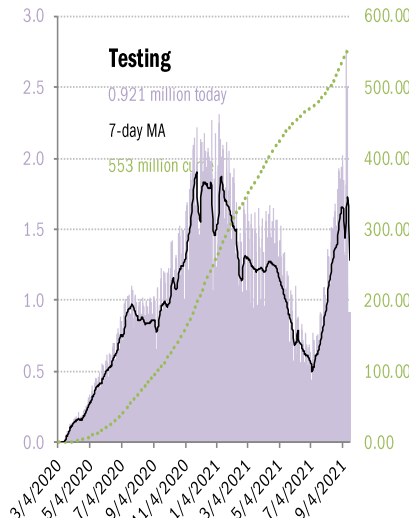
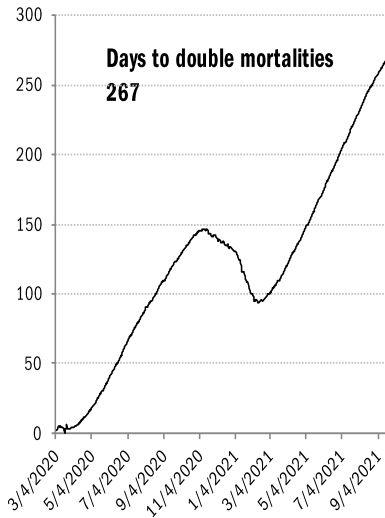
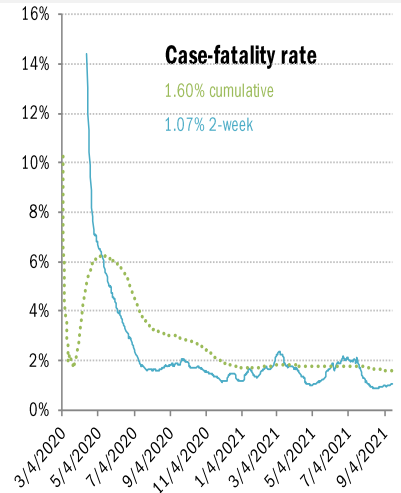
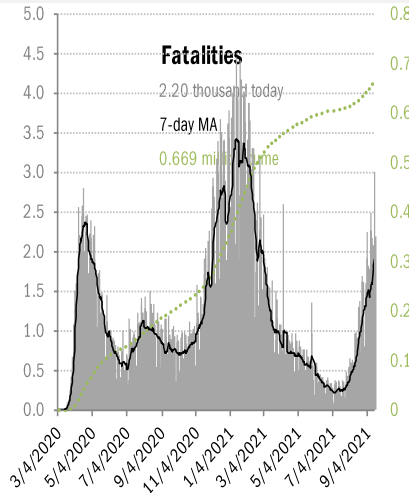
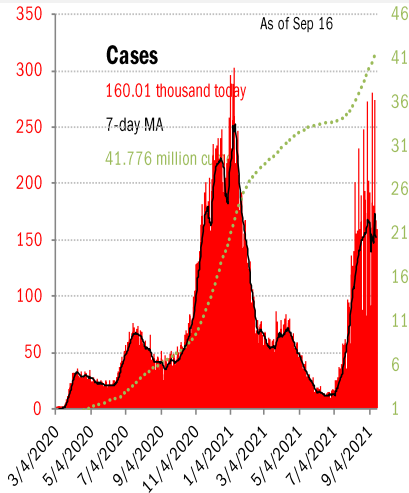
## The demographics of US vaccination



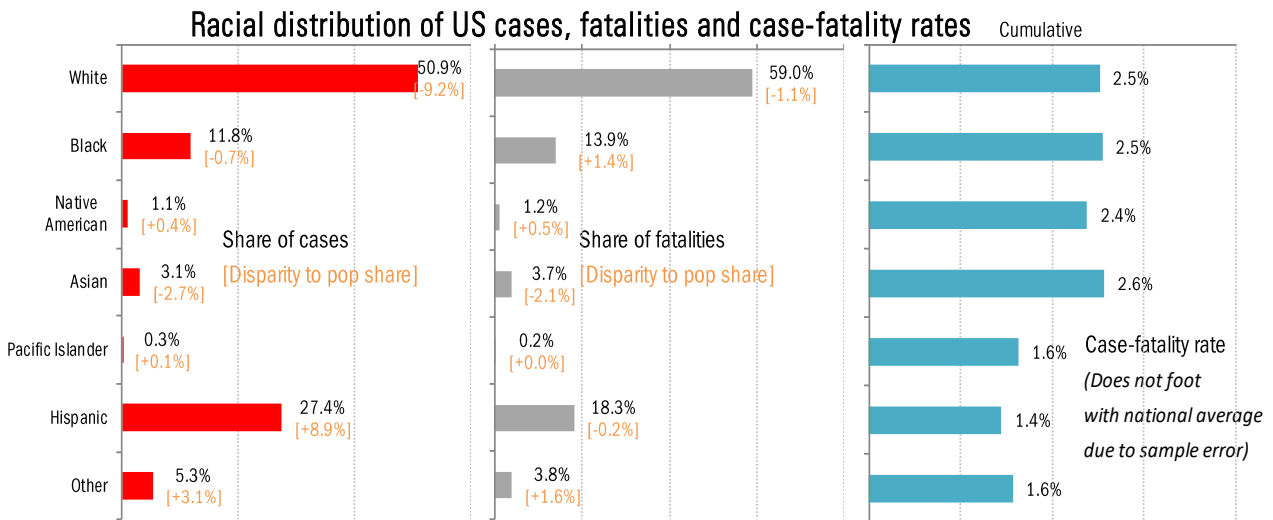
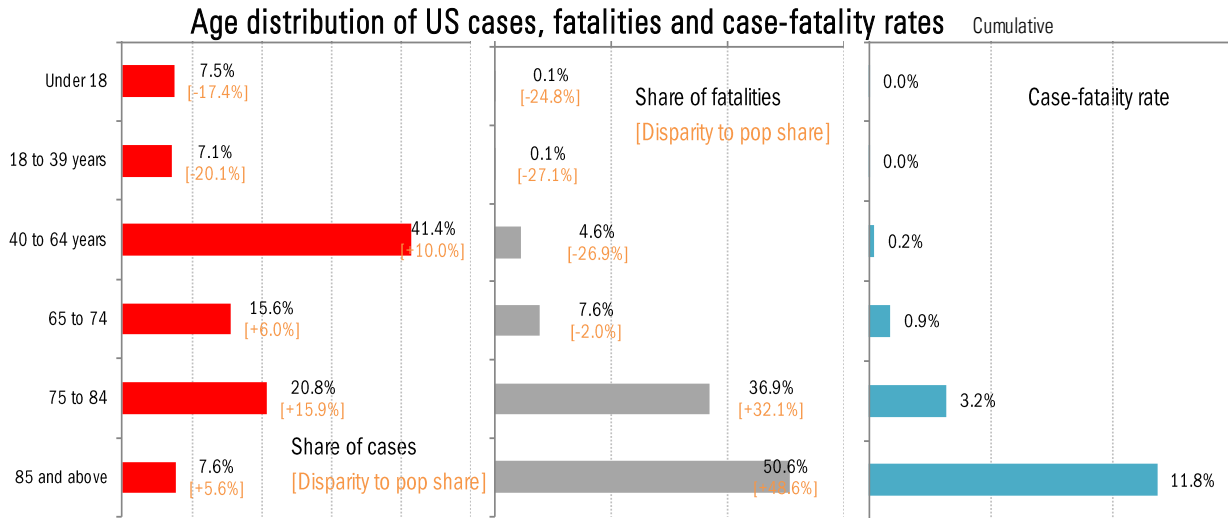
Source: [CDC](#), [CDC](#), [Our World in Data](#), TrendMacro calculations

# US deep-dive

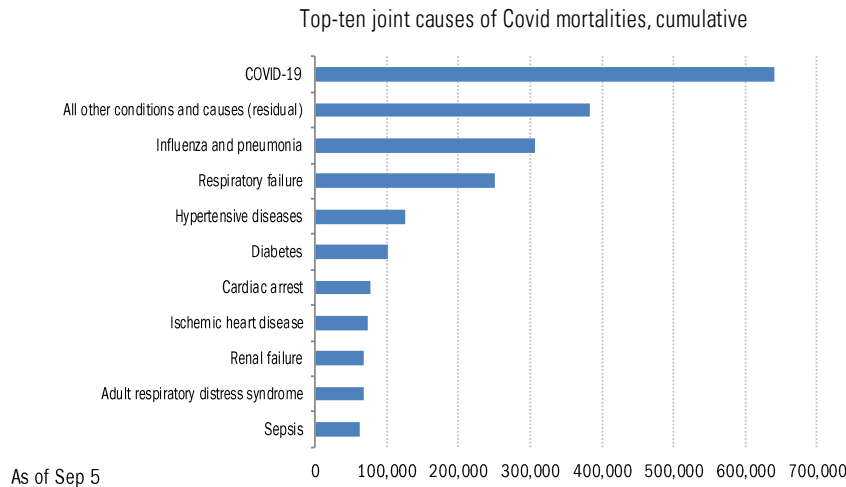
National and state-by-state data do not line up because of different sources



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



### Comorbidities



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.

## Recommended reading

### [Protection of BNT162b2 Vaccine Booster against Covid-19 in Israel](#)

Yinon M. Bar-On et al.  
*New England Journal of Medicine*  
September 15, 2021

### [Vaccine Mandates Can't Stop Covid's Spread](#)

Joseph A. Ladapo  
*Wall Street Journal*  
September 16, 2021

### [New Study of Covid Booster Shots Fans Debate Over Benefits](#)

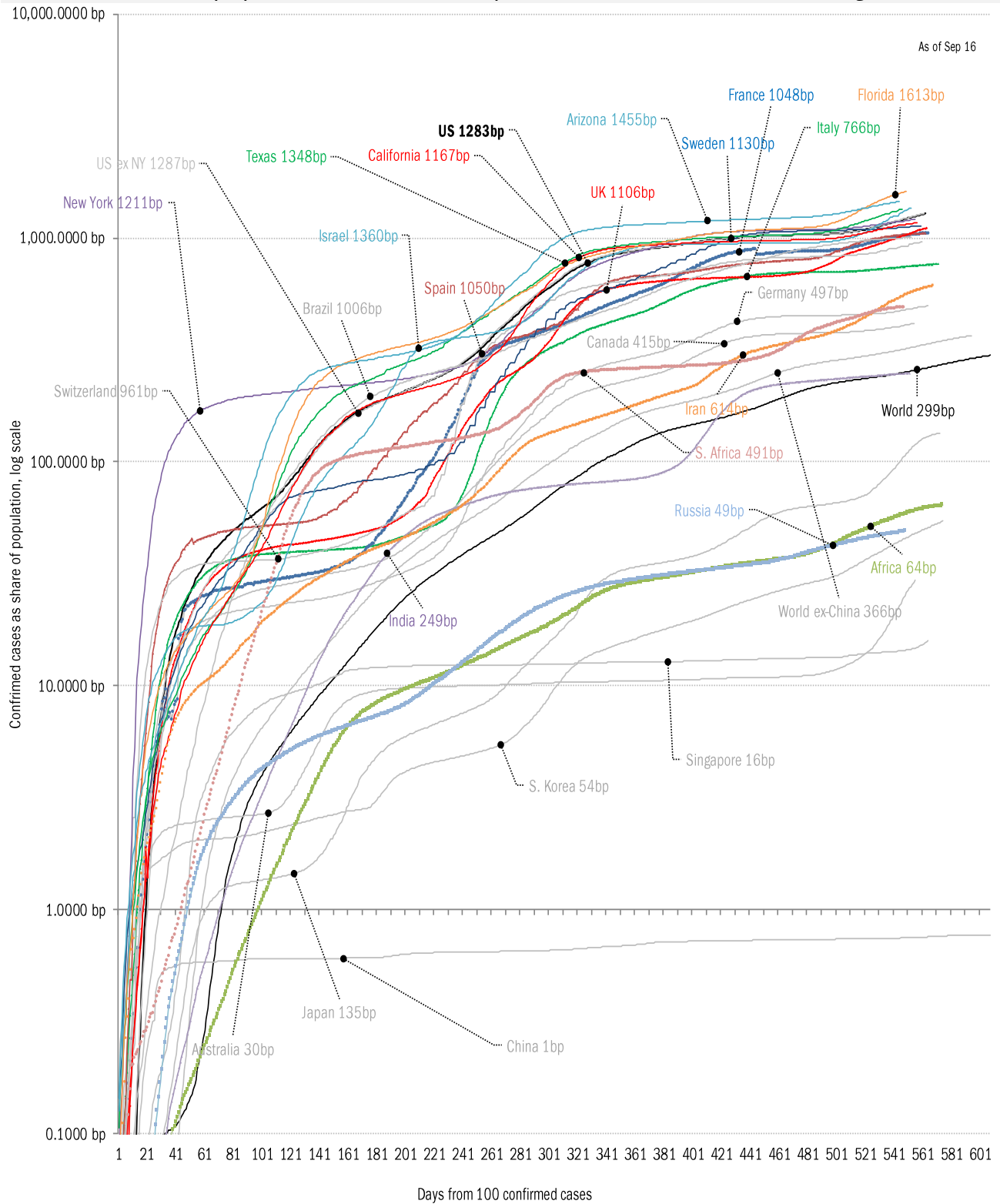
Apoorva Mandavilli  
*New York Times*  
September 15, 2021

## Meme of the day



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

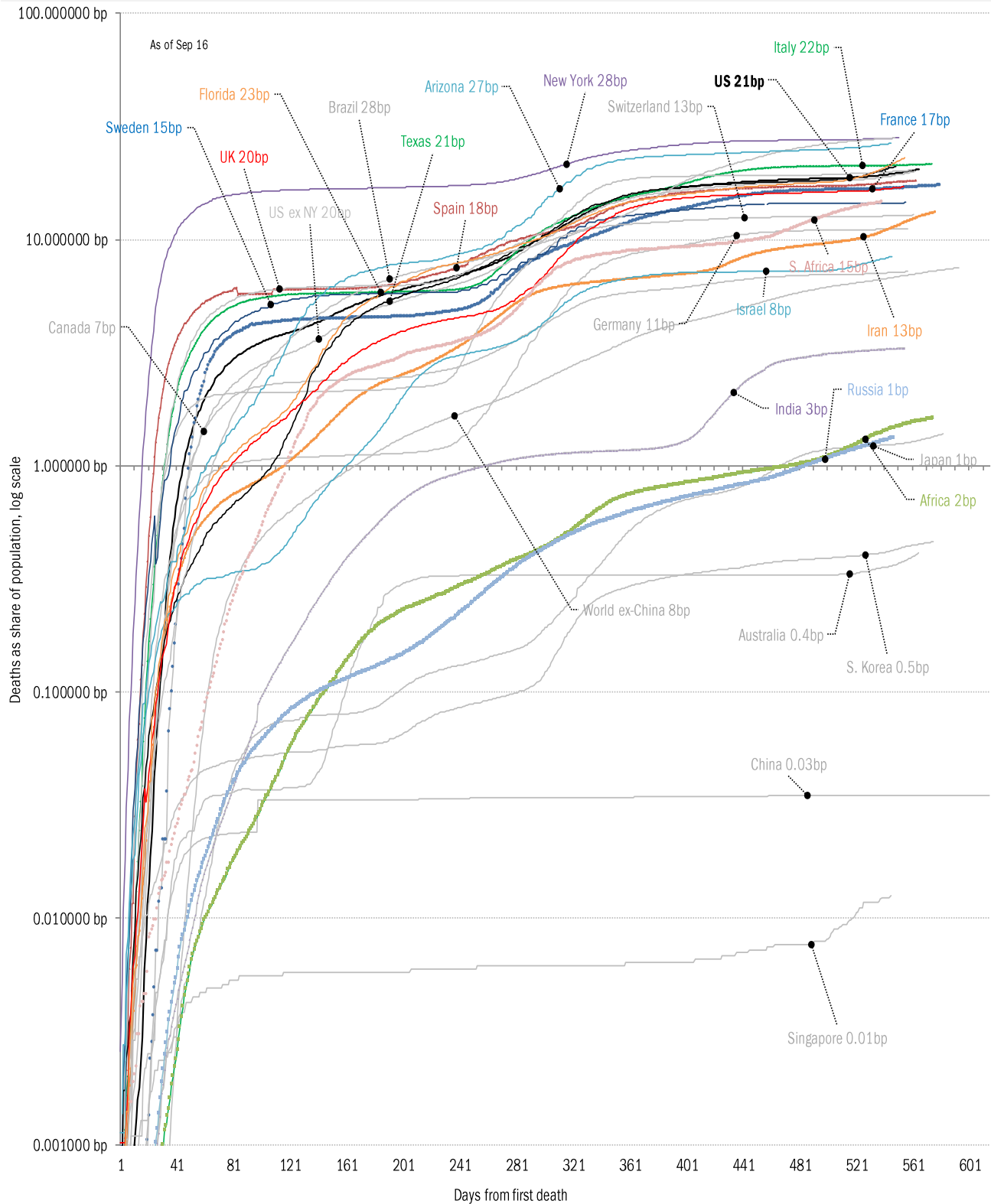
The coronavirus case accelerometer... tracking the world's infection curves  
*Share of infected population from first day with 100 confirmed cases, log scale*



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*



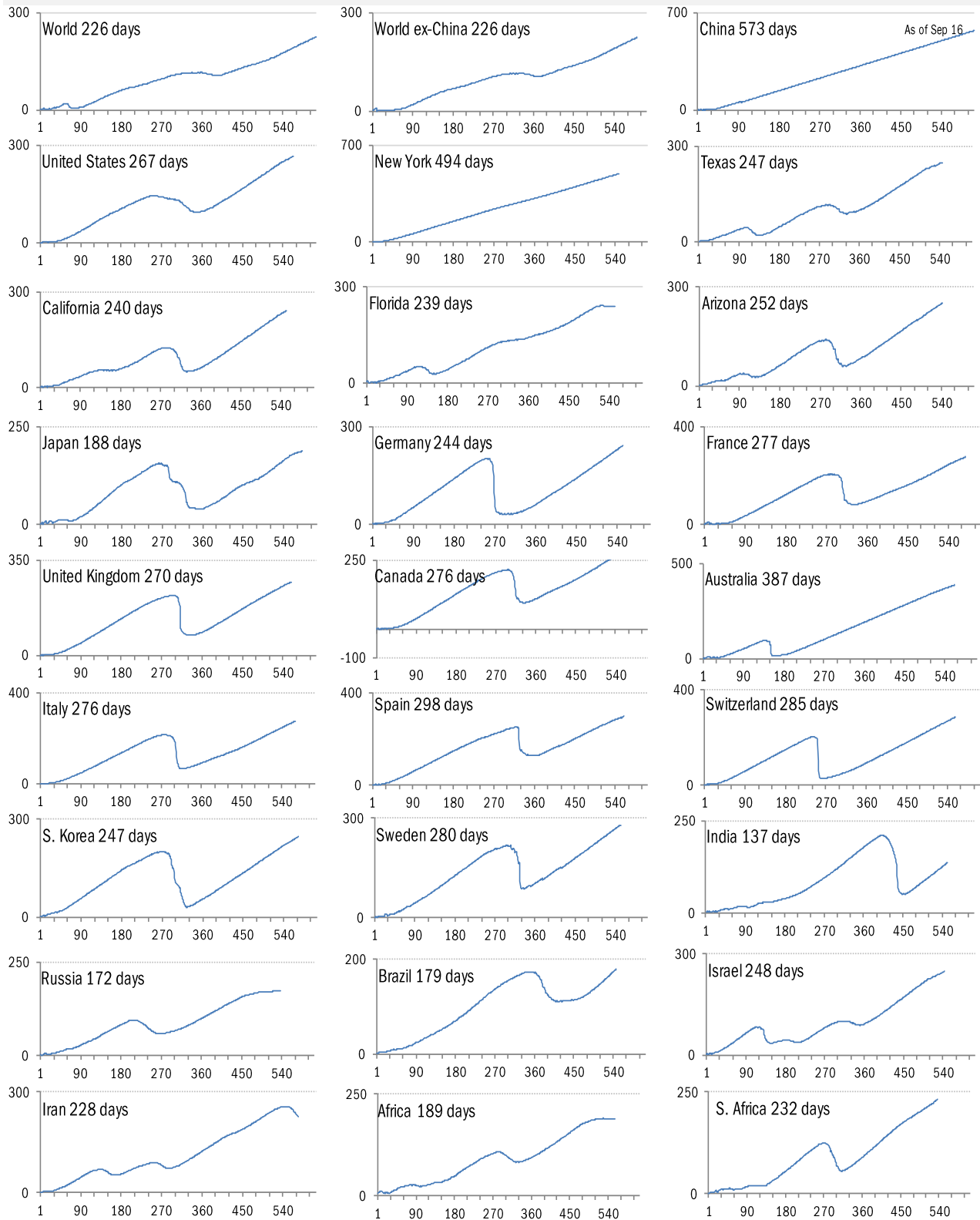
Source: [Johns Hopkins](#), TrendMacro calculations



# "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

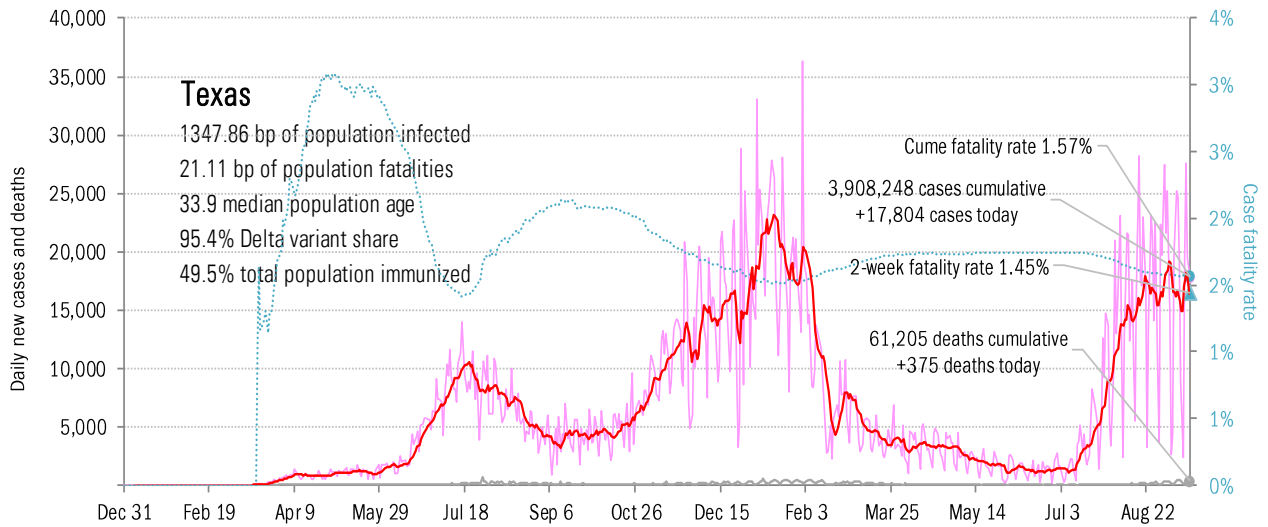
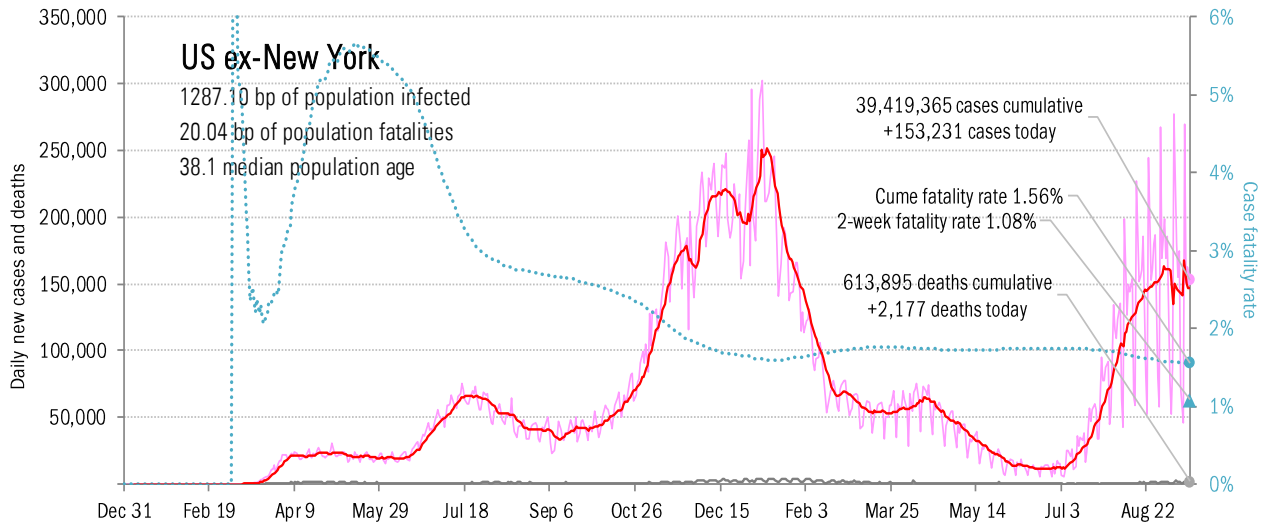
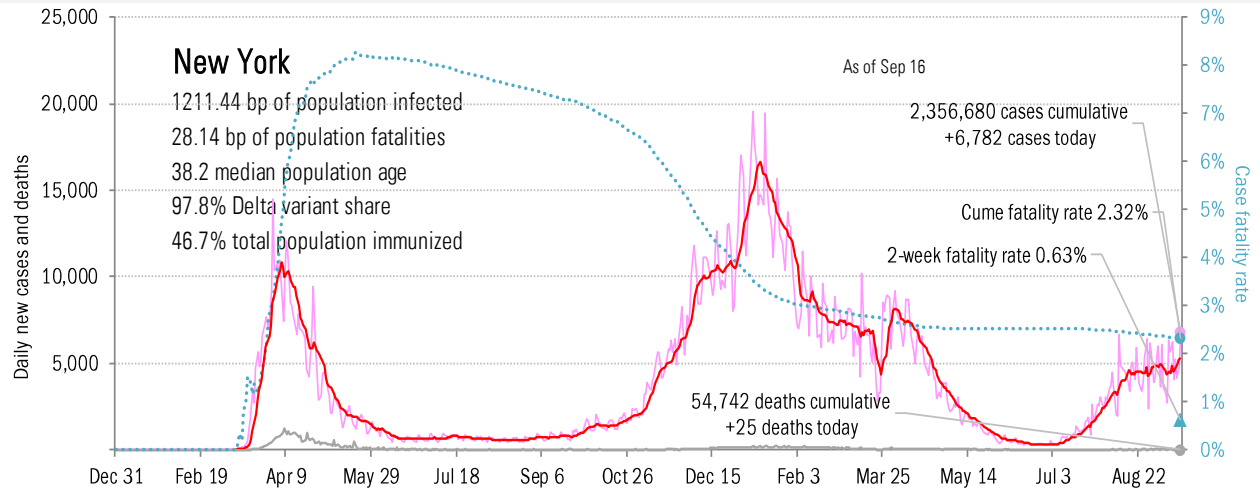
■ Downward trajectory ■ Five best ■ Upward trajectory ■ Five worst



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

# From Ground Zero to the Rio Grande

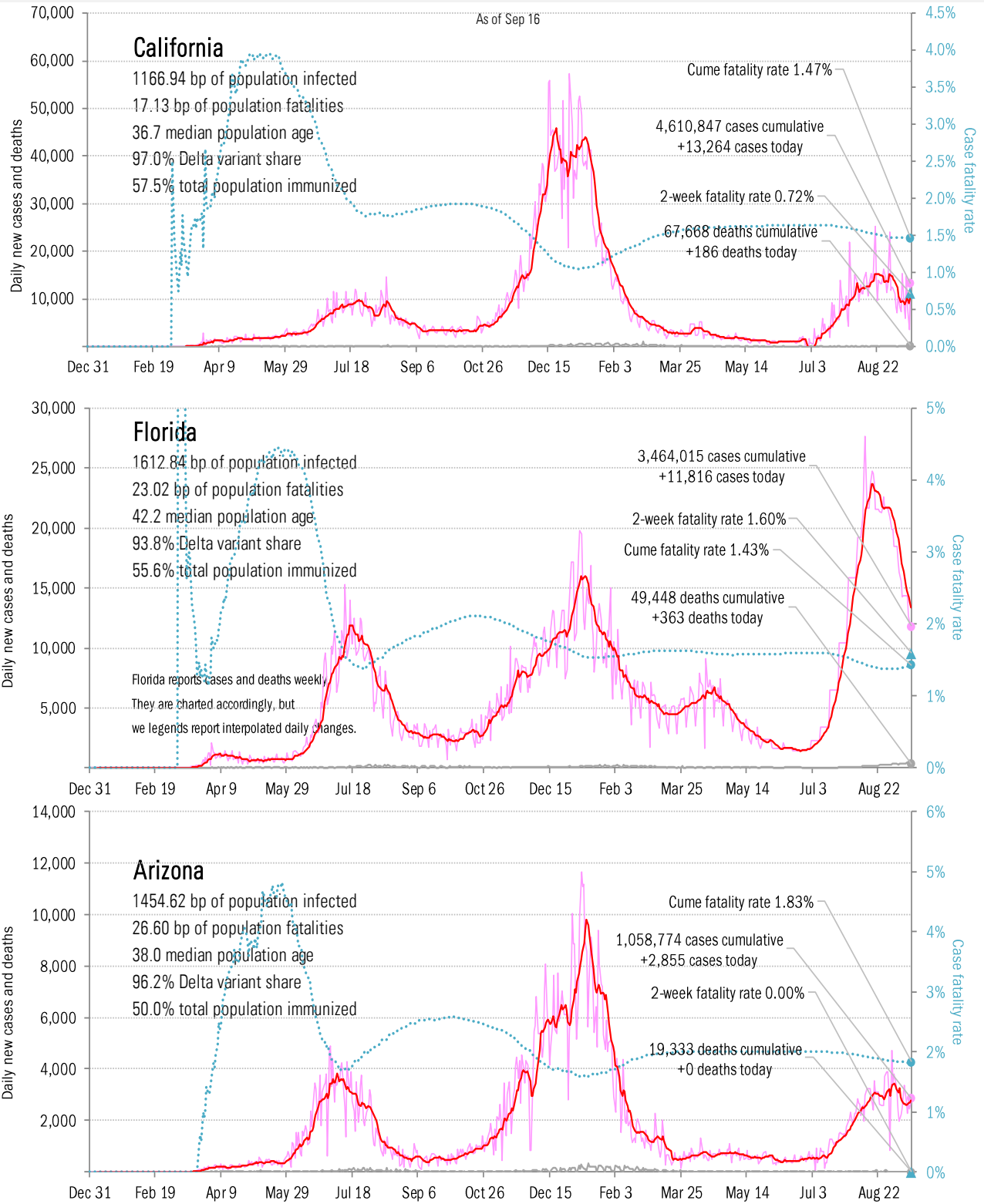
Cases: 7-day average and daily Deaths: Daily



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

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

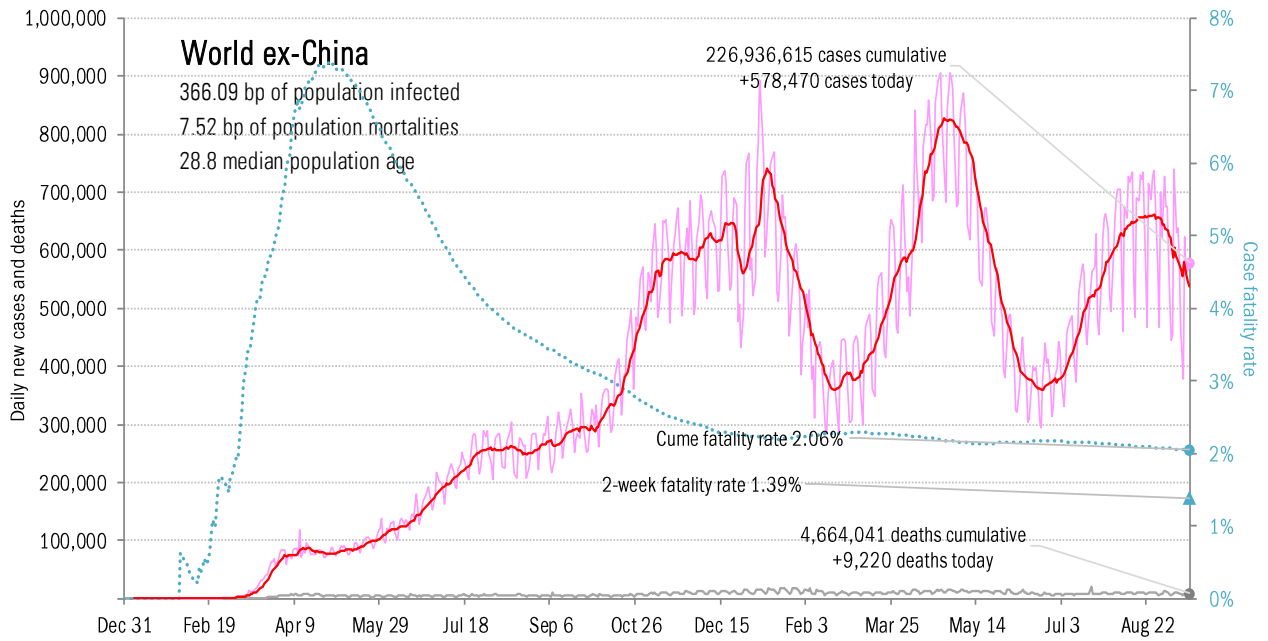
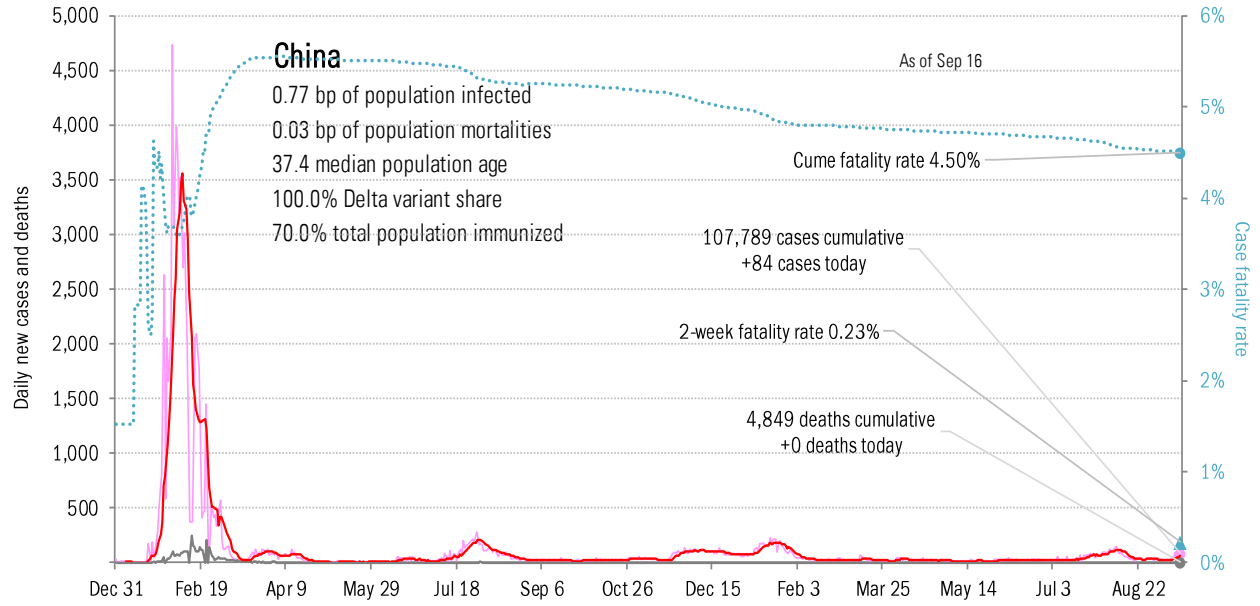
Cases: 7-day average and daily Deaths: Daily



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

# Patient zero... and then everyone else

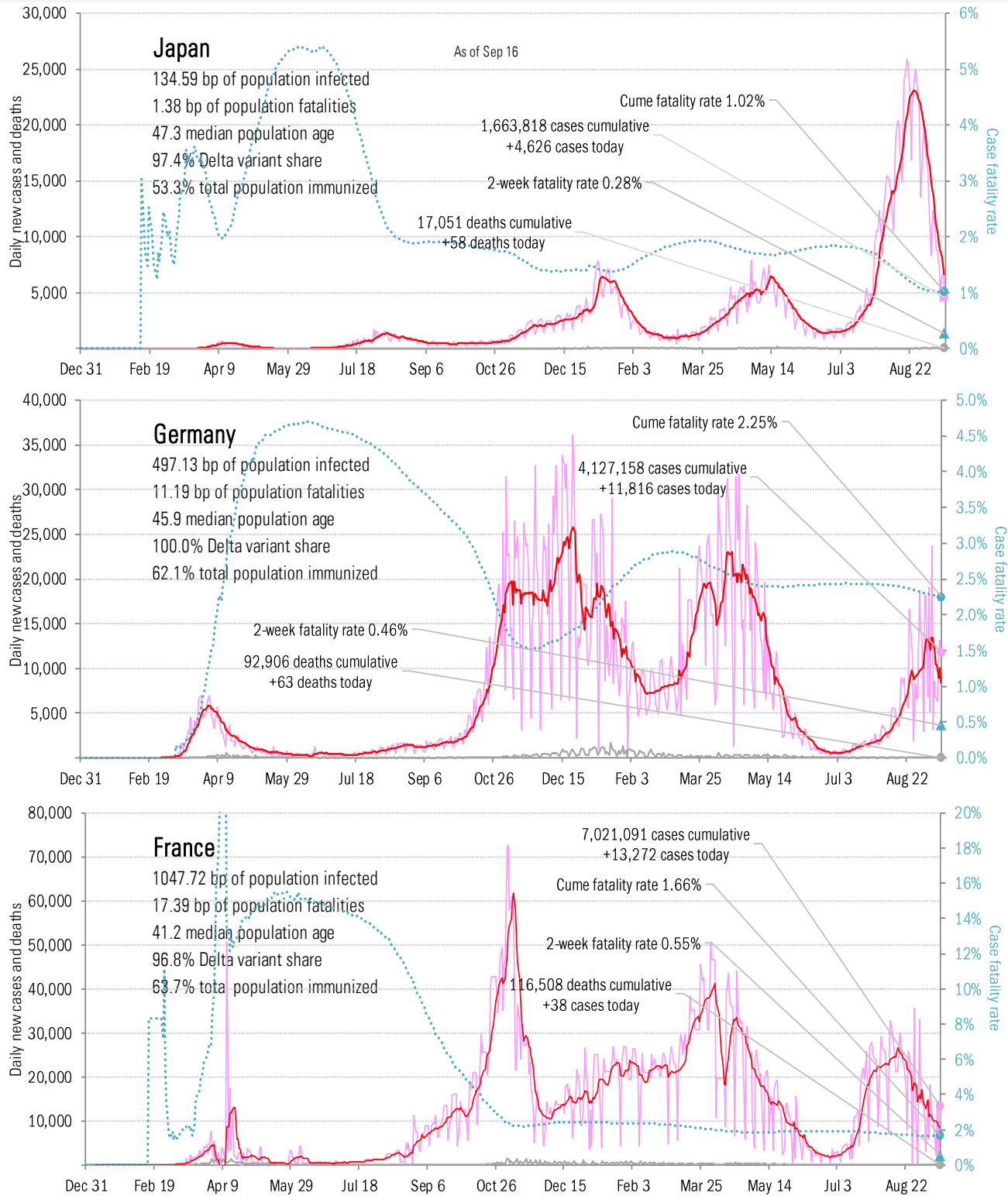
Cases: 7-day average and daily Deaths: Daily



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

# Impact in the largest economies

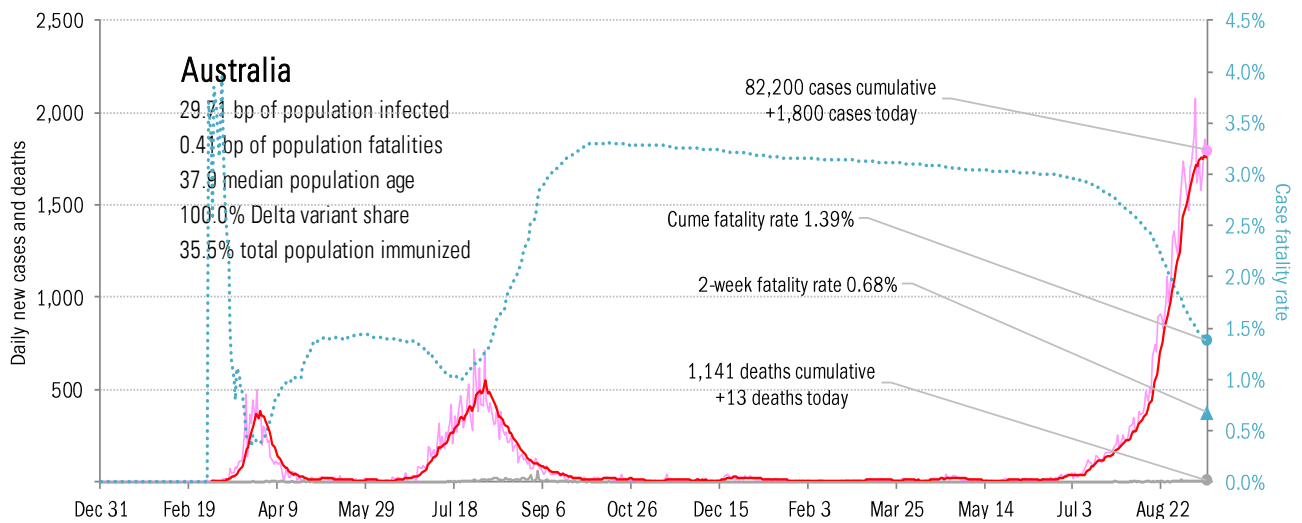
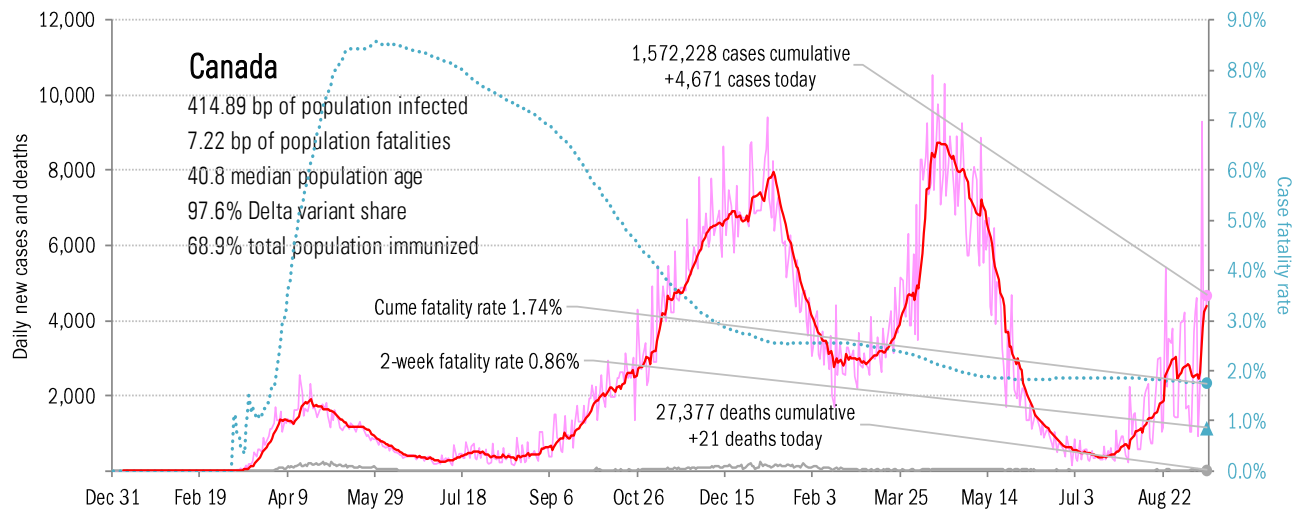
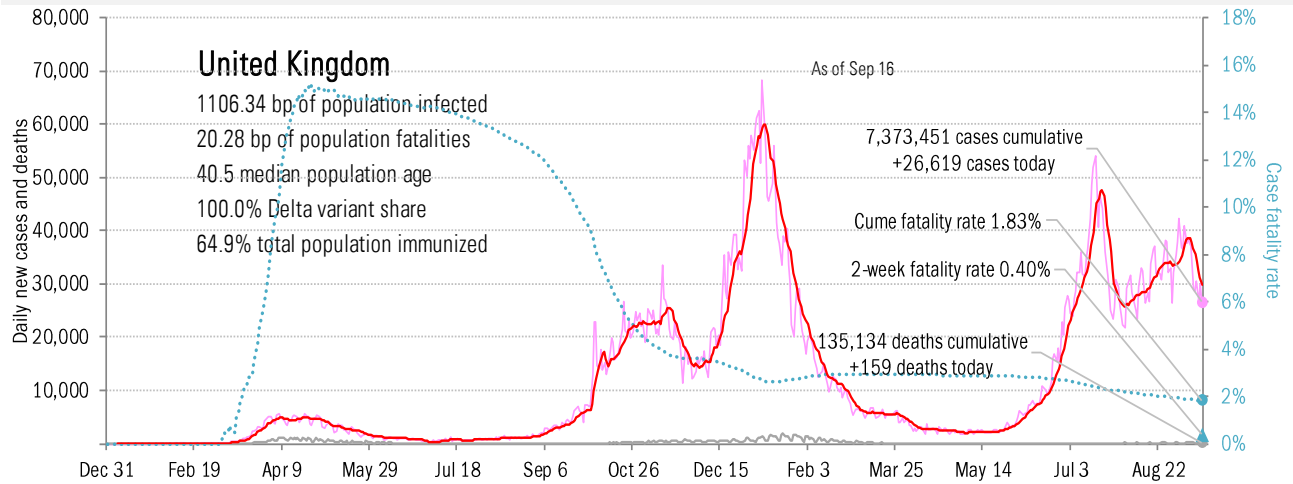
Cases: 7-day average and daily Deaths: Daily



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

# Impact in The Anglosphere

Cases: 7-day average and daily Deaths: Daily

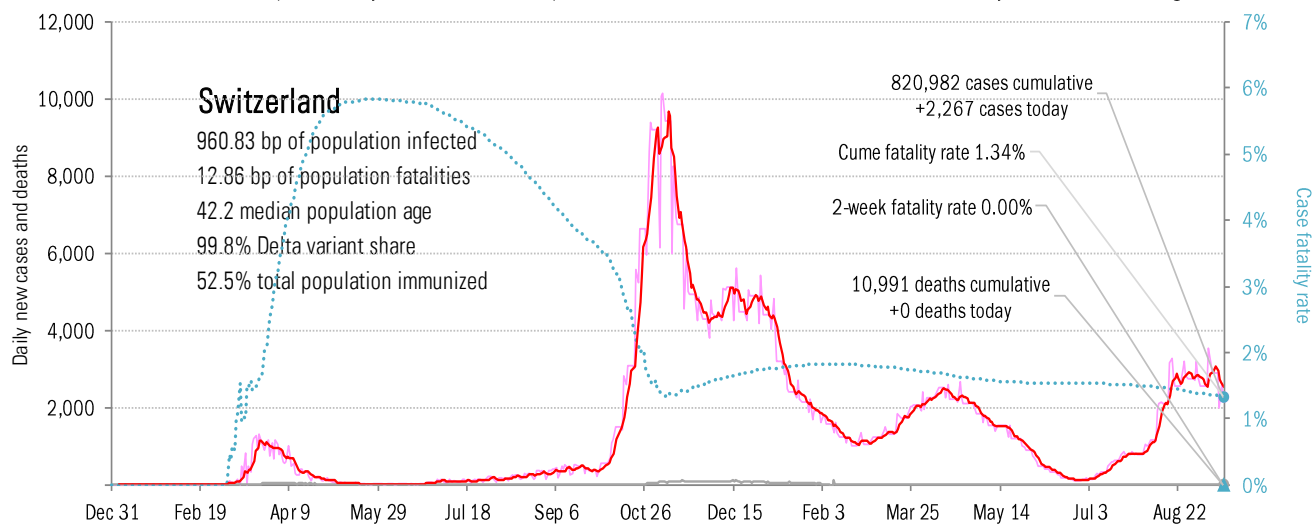
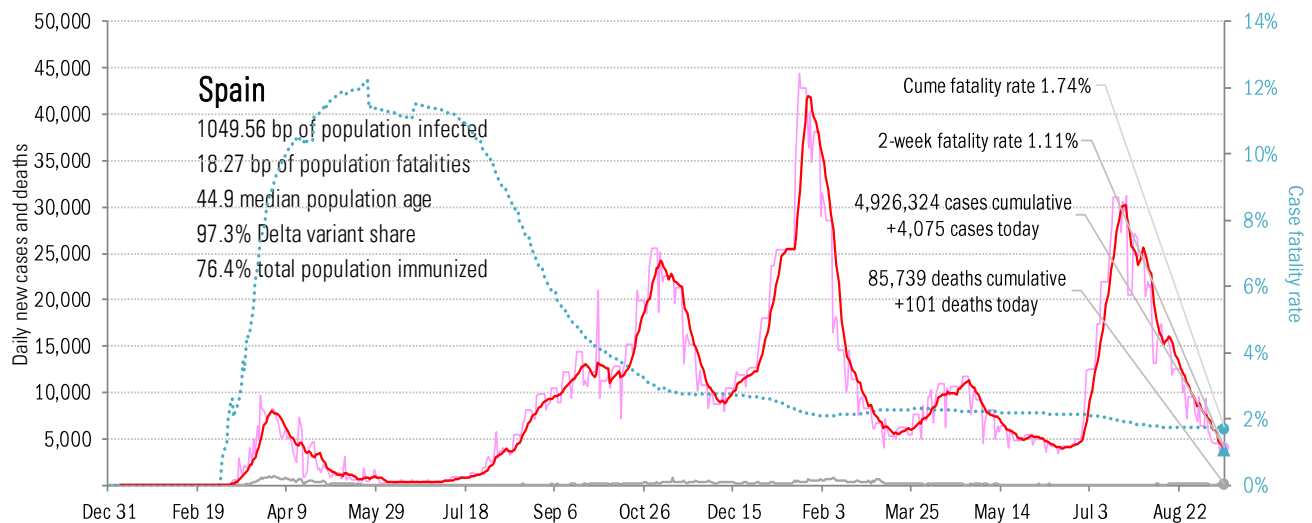
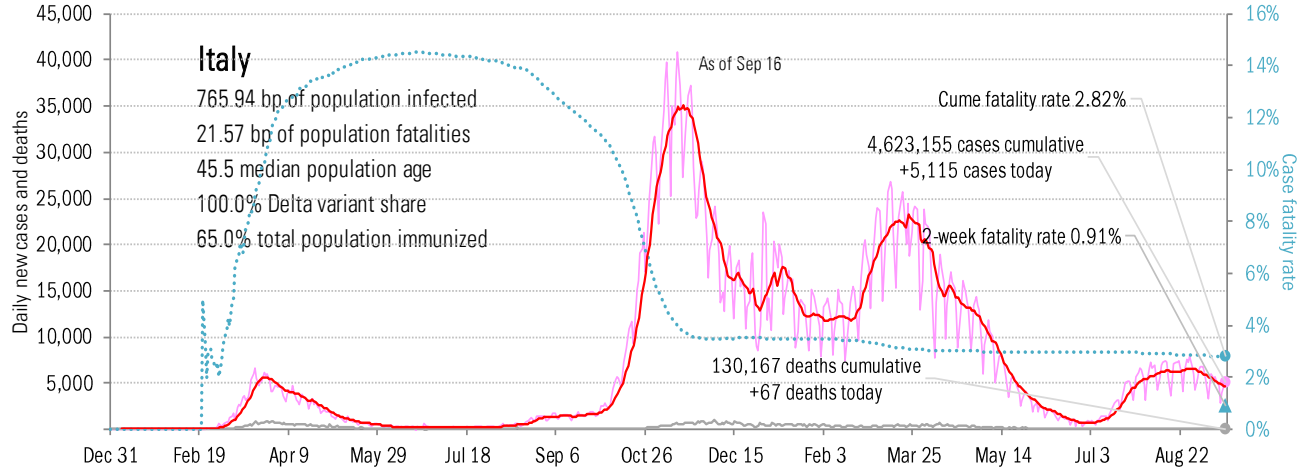


Source: [Johns Hopkins](#), TrendMacro calculations



# Impact in continental Europe

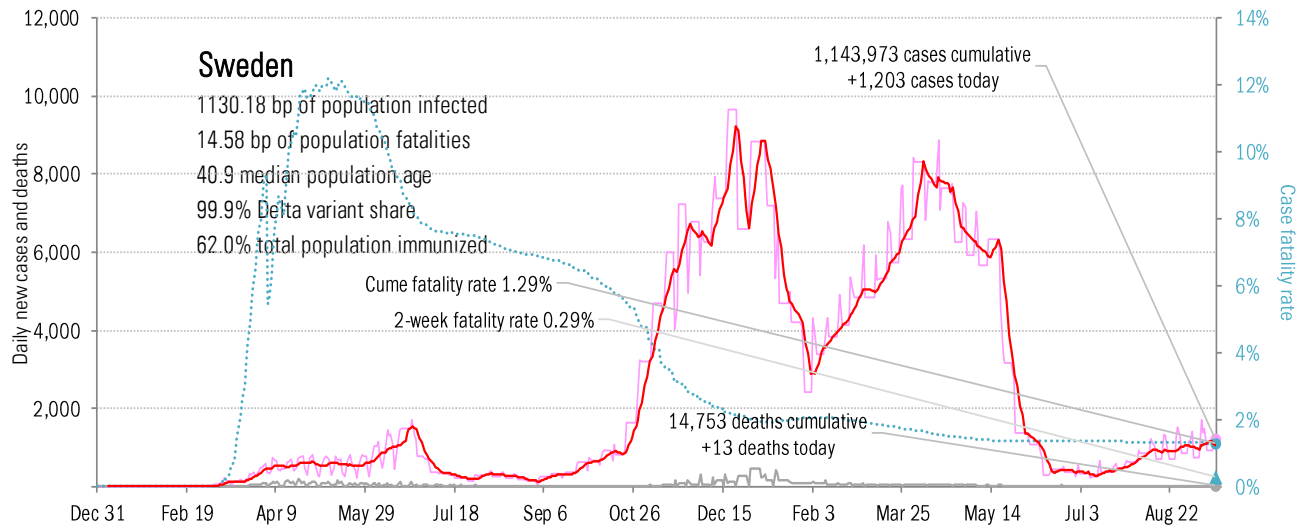
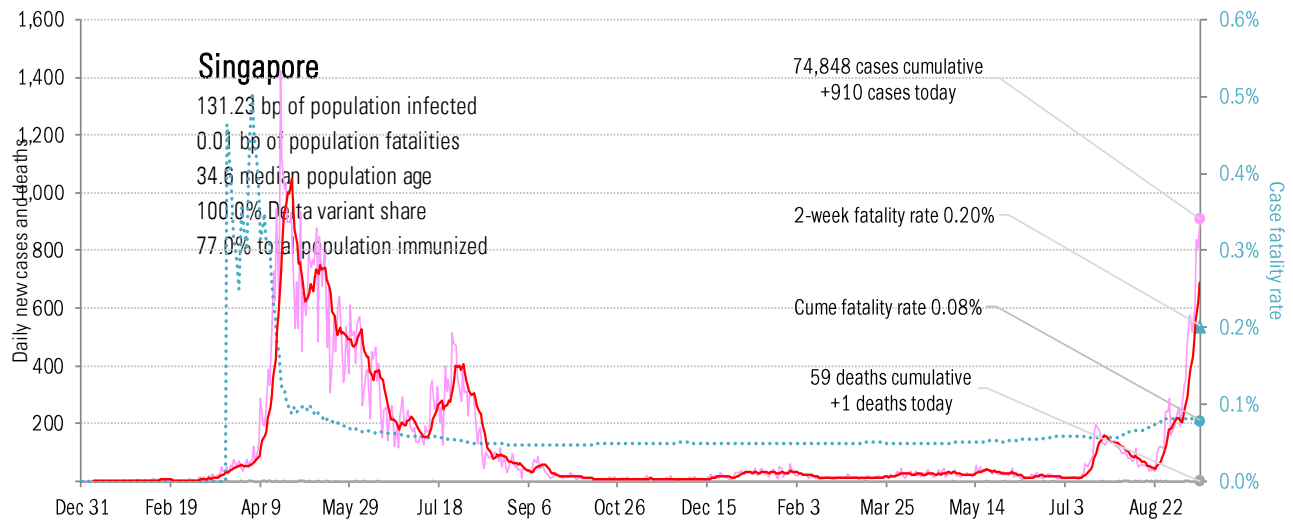
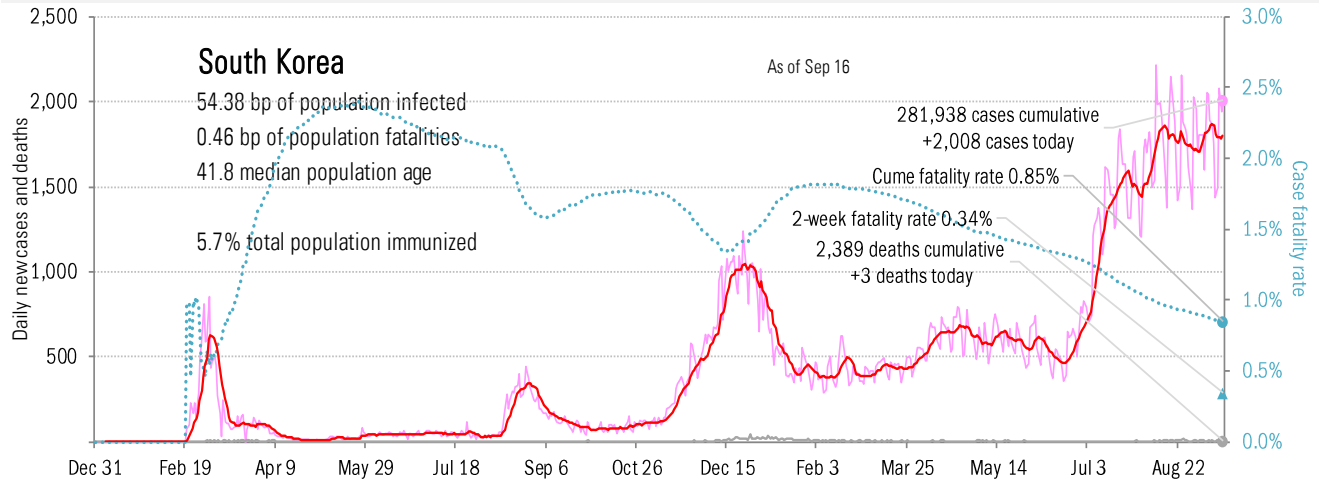
Cases: 7-day average and daily Deaths: Daily



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

Impact in other hot-spots

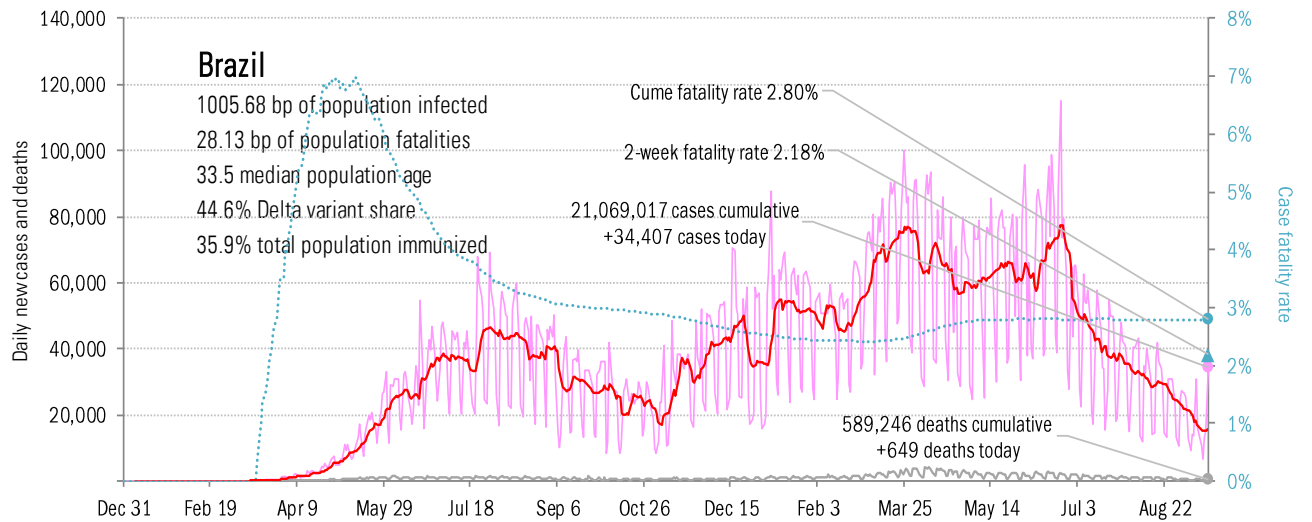
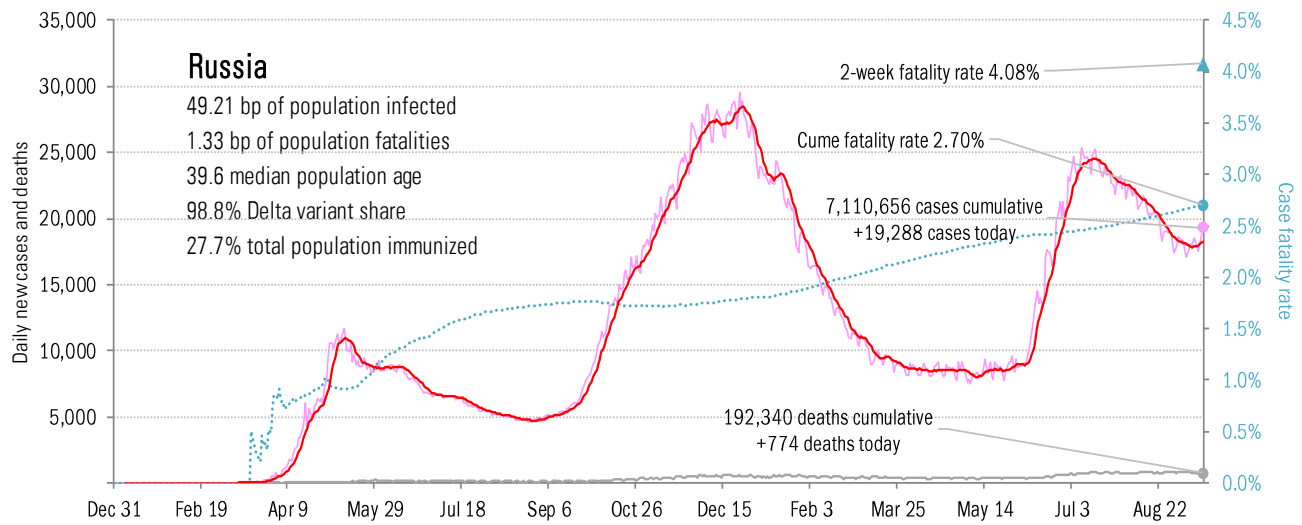
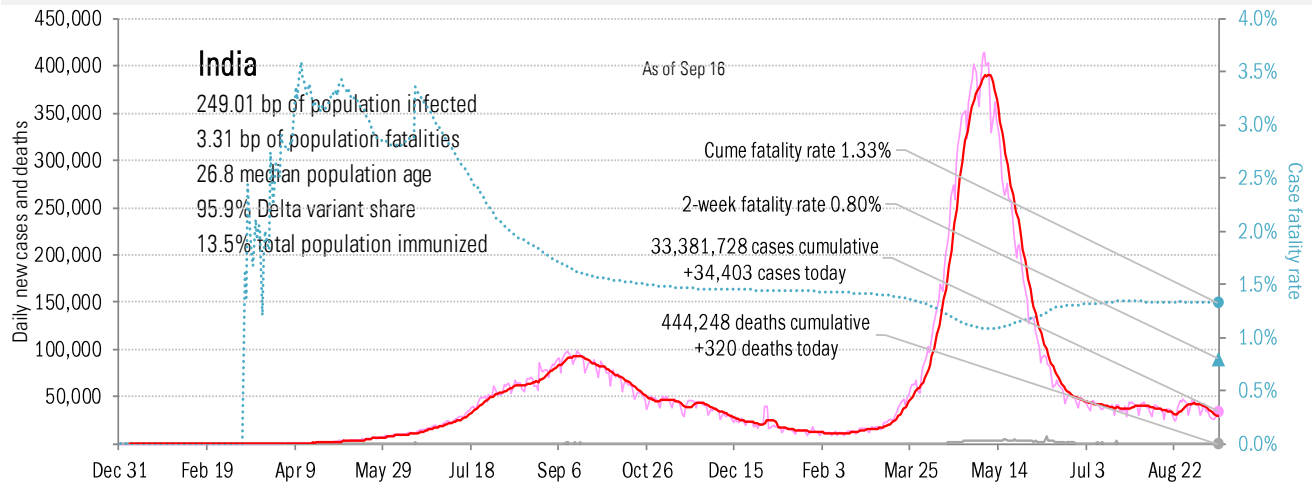
Cases: 7-day average and daily Deaths: Daily



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

# Impact in the BRICs ex-China

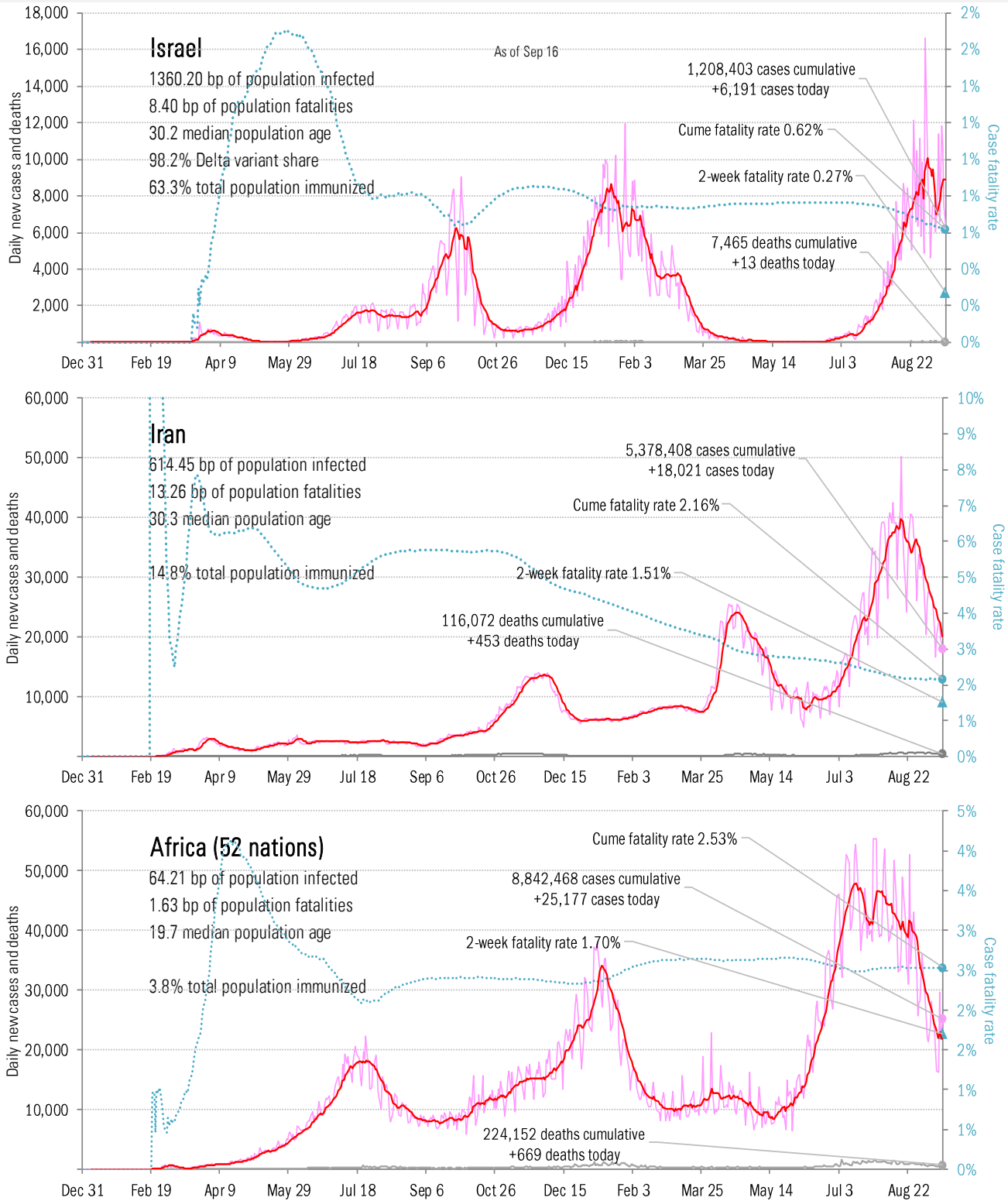
Cases: 7-day average and daily Deaths: Daily



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

# Impact in the Middle East and Africa

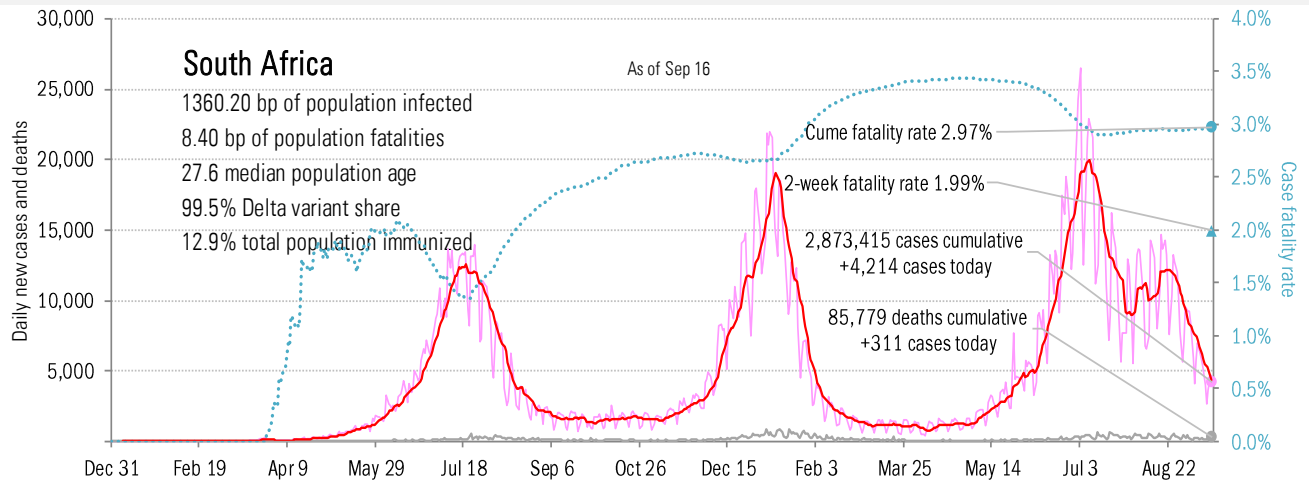
Cases: 7-day average and daily Deaths: Daily



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

# Impact in Africa, continued

Cases: 7-day average and daily Deaths: Daily



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