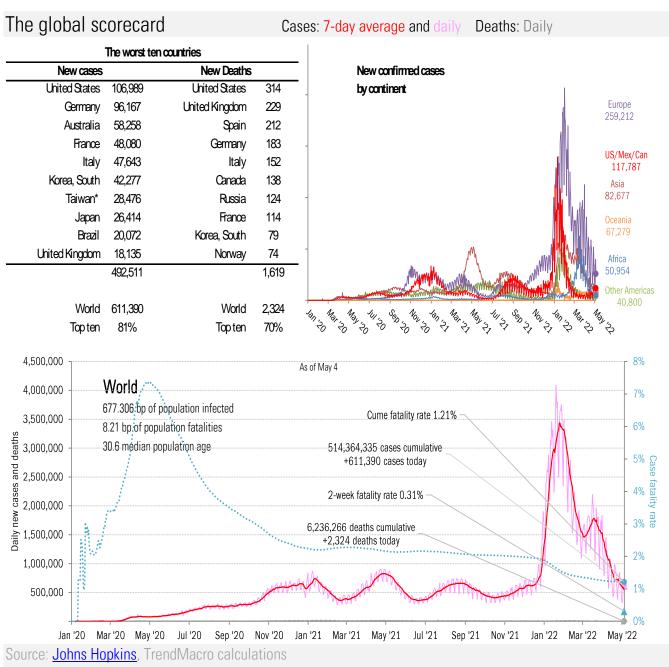


Trend Macrolytics, LLC Donald Luskin, Chief Investment Officer Thomas Demas, Managing Director Michael Warren, Energy Strategist

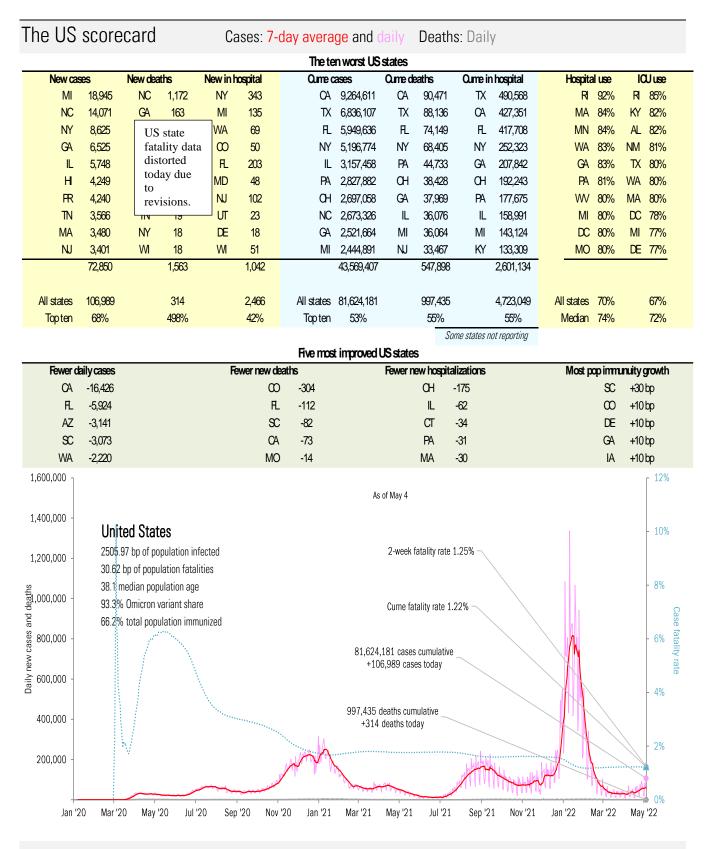
Data Insights: Covid-2019 Monitor

Thursday, May 5, 2022



For more information contact us: Donald Luskin: 214 550 2121 <u>don@trendmacro.com</u> Thomas Demas: 704 552 3625 tdemas@trendmacro.com

Copyright 2022 Trend Macrolytics LLC. All rights reserved. This document is not to be forwarded to individuals or organizations not authorized by Trend Macrolytics LLC to receive it. For information purposes only; not to be deemed to be recommendations for buying or selling specific securities or to constitute personalized investment advice. Derived from sources deemed to be reliable, but no warranty is made as to accuracy.



Source: Johns Hopkins, Dept. of Health and Human Services, CDC, TrendMacro calculations

Rolling	out th	ne vacc	ines in	the US	S and t	he wor	ld					
Administered Cumulative								То	day	Immunity	Full	Partial
Doses	oses 592,598,775							+0.188	8 million	US	66.2%	77.7%
Boosters	oosters 102,205,89		02,205,890					+0.036	6 million	UK	72.9%	78.0%
	One dose		dose	% Рор			% pop New immune today		France	78.2%	80.6%	
Total popul	Total population 265,658,662			80%	226,205,319		68%	+0.027 million		Spain	86.5%	88.1%
Age 12 to 1			17,734,368	70%	15,124,992		60%	+0.002 million		Germany	76.8%	76.9%
Age 18 to 6			78,646,376	88%		51,529,505	74%	+0.014	million	Italy	79.4%	84.1%
Age 65 and			58,953,248	100%	51,235,030		94%	+0.008	8 million	Australia	83.5%	86.4%
J&J									Israel	66.1%	72.2%	
3%										Canada	82.3%	87.3%
Moderna	Moderna		ate	Best	t .					Japan	80.6%	81.9%
38%					-					Africa	16.7%	22.1%
Pfizer At least partial in				Midd	le					India	61.9%	72.1%
	59% as % populati									Brazil	76.8%	85.4%
			imunity	Wors	st					China	86.5%	89.0%
AK			pulation			14/	1	A = ={ M=== 4		Global data differ		s, timing
69.8% "Immunity" = two doses			o doses			WI		As of May 4			ME	
62.3%	62.3%					71.9%					90.5%	
	14/4		MT	ND	N 4NI	65.6%	N 41	1	NIV/	١/T	79.6%	
	WA	ID	MT	ND	MN		MI		NY	VT	NH	
	80.8%	61.1%	65.3%	64.9%	75.1%	76.7%	67.0%		90.2%	93.5%	88.2%	
	72.6%	54.1%	56.8%	54.9%	69.2%	68.8%	60.2%	DA	77.0%	81.2%	70.4%	
	OR	NV	WY	SD	IA CO. 00/		OH	PA	NJ	MA		
	77.9% 69.7%	75.3% 60.8%	58.8% 51.6%	76.6% 61.5%	68.0% 62.0%	61.5% 54.8%	63.6% 58.4%	84.9% 68.5%	90.4% 75.7%	95.0% 79.0%		
	CA	U.6 %	CO	NE	MO	04.0%	00.4 %	VA	MD	79.0% CT	RI	1
	83.8%	72.1%	79.4%	70.3%	66.2%	66.2%	65.0%	85.7%	86.5%	95.0%	95.0%	
	72.1%	64.3%	70.3%	63.6%	56.1%	57.4%	57.6%	73.2%	75.7%	79.2%	82.6%	
l	12.1/0	AZ	NM	KS	AR	57.470 TN	NC	SC	DC	DE	02.070	1
		73.1%	87.7%	74.5%	66.7%	62.2%	84.3%	67.7%	95.0%	83.2%		
		61.6%	71.1%	61.5%	54.5%	54.5%	61.2%	57.0%	77.6%	69.2%		
		01.070	71.170	01.070 OK	LA	MS	AL	GA	77.070	00.270		
				71.1%	61.0%	59.6%	62.7%	65.4%				
HI				57.3%	53.5%	51.8%	51.1%	54.8%				
87.4%				TX	00.070	01.070	01.170	01.070	FL	1 I	PR	Î
78.3%				73.2%					79.3%	1 1	95.0%	
				61.5%					67.0%		83.0%	
				0.1070								
The demog	raphics of	US vaccinat	tion									
80%	• •							·ر ۲				
67.9% of females immunized				90%	62.5% of wh	nites immunize	d	90% -	17.1% of age <12 immunized			
70% 63.6% of males				80%	53.9% of Af	rican America	ıs		57.4% 12-15			
60%				70%	68.5% of Hi	spanics		80% -	62.3% 10-17			
50%				60%		jans		70% 63.4%/18-24				
50%				50%			/	60% -	66.9% 25-39			
40%				50%	/		-	FOW	50% 74.5% 10.19			

Rolling out the vaccines in the US and the world



1216206 128 188 188 1891 201 1291 1291 1291 1291 1292

40%

30%

20%

10%

Source: CDC, CDC, Our World in Data, TrendMacro calculations

40%

30%

20%

10%

74.5

81

92

87

50%

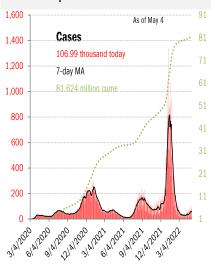
40%

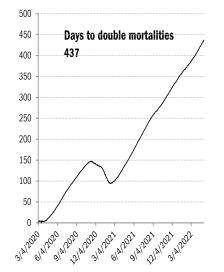
30%

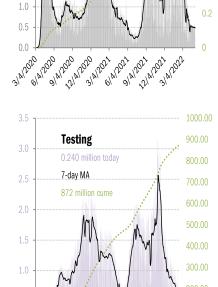
20%

10%









Fatalities

7-day MA

0.31 thousand toda

illion cume

5.0

4.5

4.0

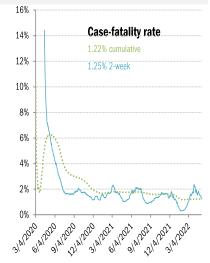
3.5

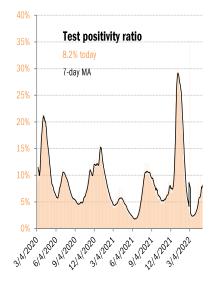
3.0

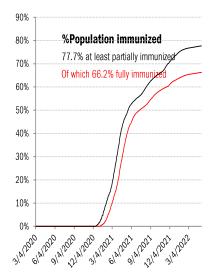
2.5

2.0

1.5







180,000 300bp Hospitalization 160,000 18,532 patients 140,000 op new cases 14 120,000 100,000 150bp 80,000 60,000 40,000 50bp 20,000 0 0bp 31412020 61412020 9/4/2020 121412020 3/4/2021 61412021 . 91412021 121412021 31412022

35,000 90bp Intensive care 30,000 2,058 patients 80bp 25.000 70bp 60bp 20,000 50bp 15.000 40bp 30bp 10,000 20bp 5,000 10bp 0 0bp 61412020 91412020 12/4/2020 31412021 61412021 9/4/2021 1214/2021 31412020 31412022

3/4/2021

61412021 91412021 121412021

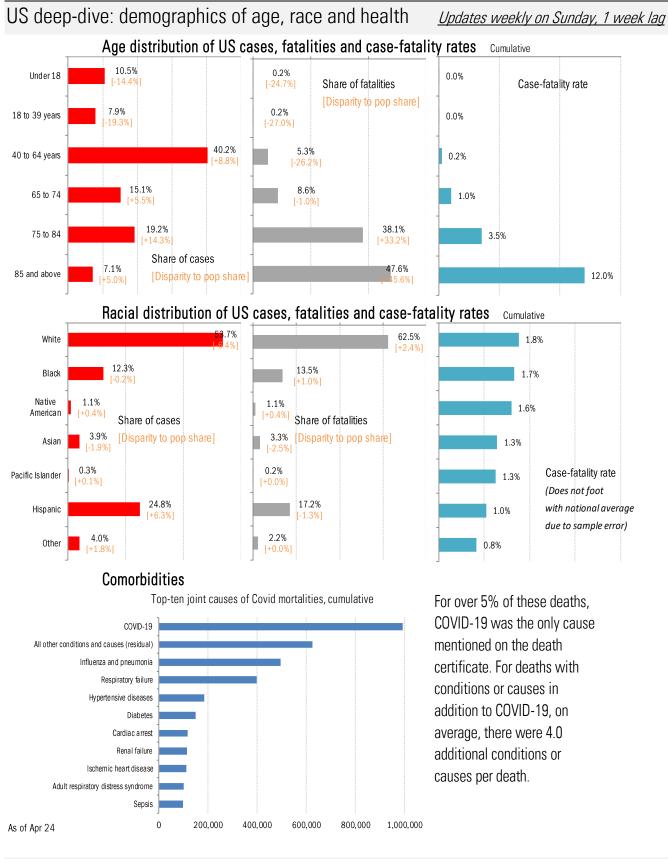
3/4/2020 61412020 914/2020 121412020 3/4/2022

Source: Johns Hopkins, Covid Act Now, TrendMacro calculations

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

0.8

0.4



Source: Distributions <u>CDC</u>, Comorbidities <u>CDC</u>, TrendMacro calculations

Recommended reading

<u>COVID-19 hospital admissions, deaths forecasted to</u> rise in the US for first time in months

Arielle Mitropoulos *ABC* May 4, 2022

<u>A new subvariant is spreading rapidly in the United</u> <u>States.</u> Isabella Grullón Paz

New York Times May 4, 2022

Antony Blinken tests positive for COVID-19 after WH Correspondents' Dinner

AP May 4, 2022

<u>Apple employees refuse office return because it will</u> make company 'whiter, more male-dominated'

Joe Pinkstone *Yahoo! News* May 1, 2022

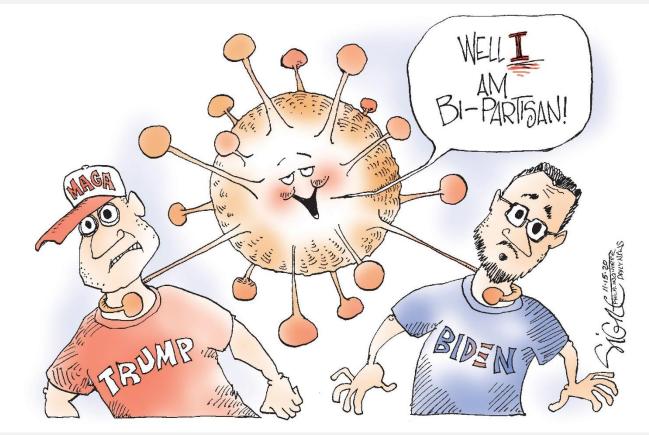
Pfizer accused of Covid profiteering as first-quarter sales hit \$26bn

Julia Kollewe *The Guardian* May 3, 2022

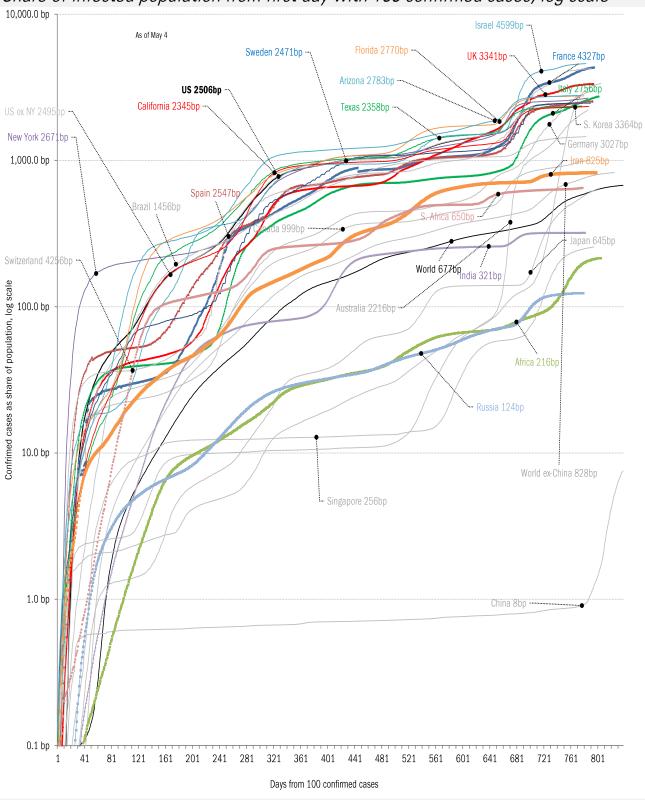
The Vanishing Variants: Lessons from Gamma, lota and Mu

Emily Anthes *New York Times* May 4, 2022

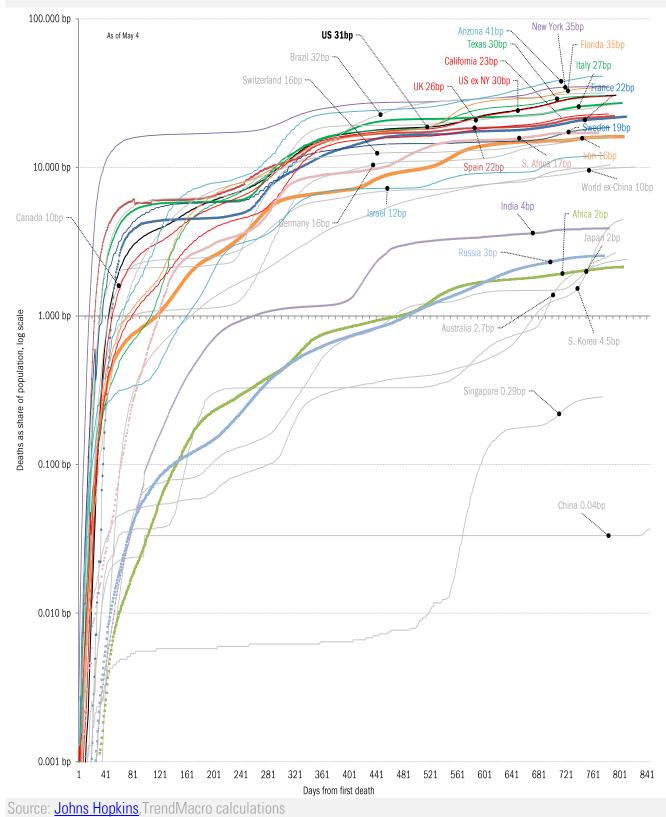
Meme of the day



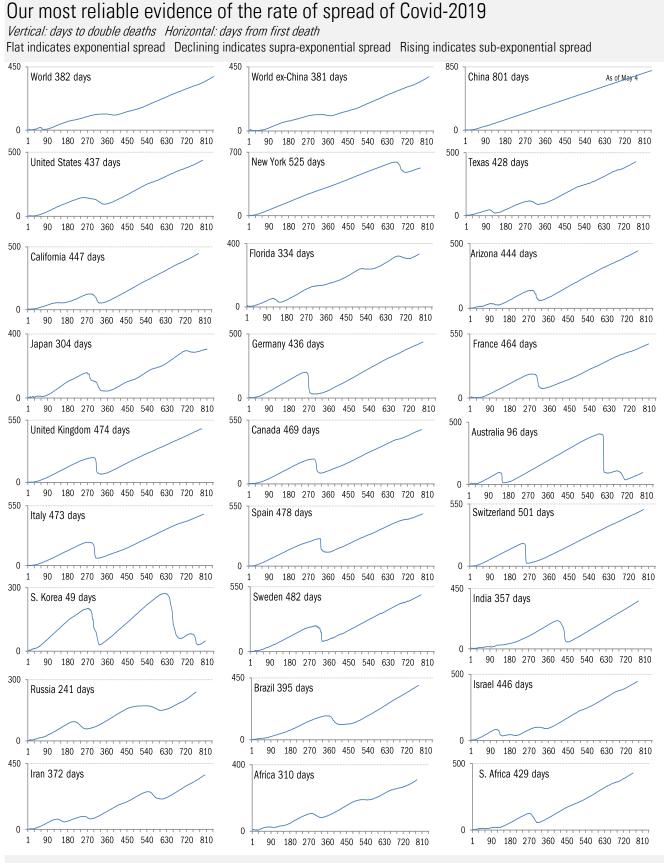
Source: Our beloved clients, Power Line blog "The Week in Pictures" and CTUP



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

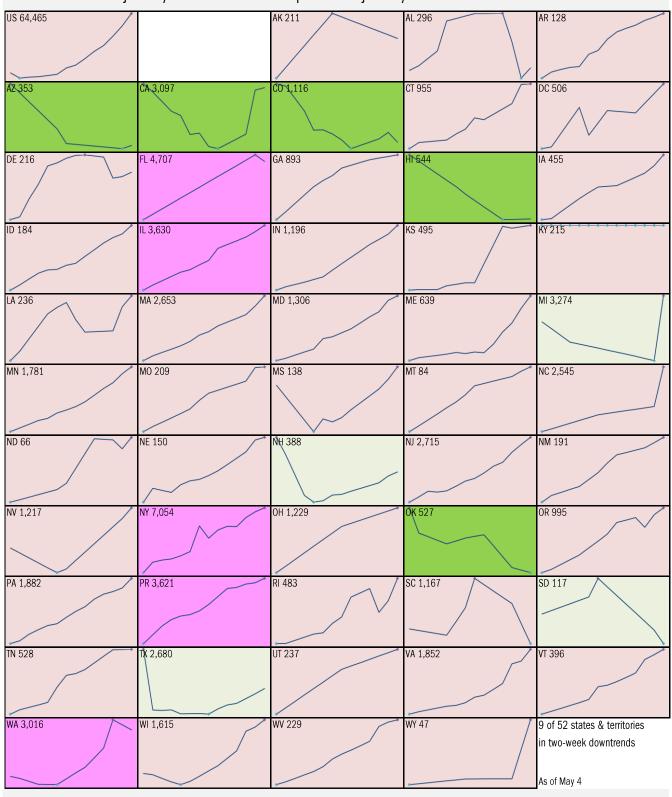


The coronavirus <u>mortality</u> accelerometer ... tracking the world's fatality curves *Share of deceased population from day of first fatality, log scale*



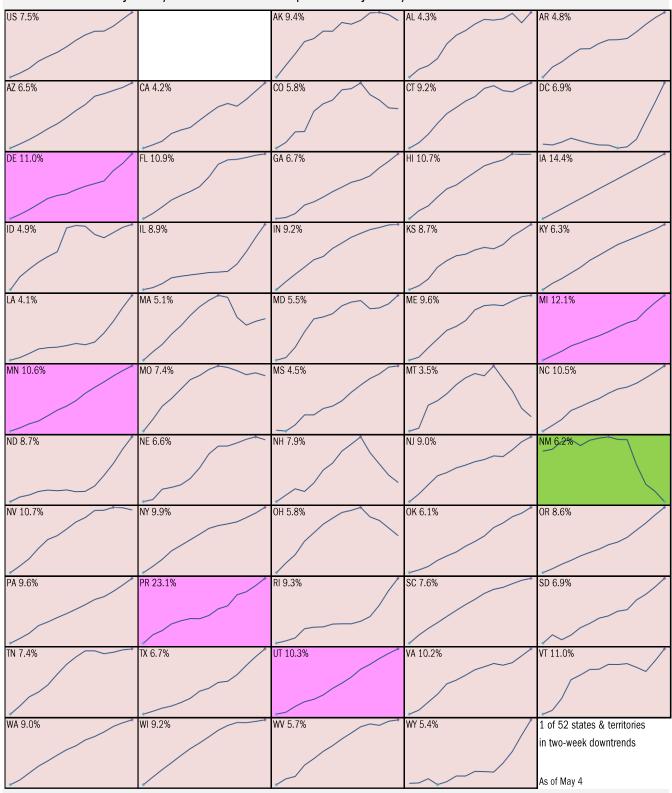
14-day trajectory in new cases

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



14-day trajectory in test-positivity ratio

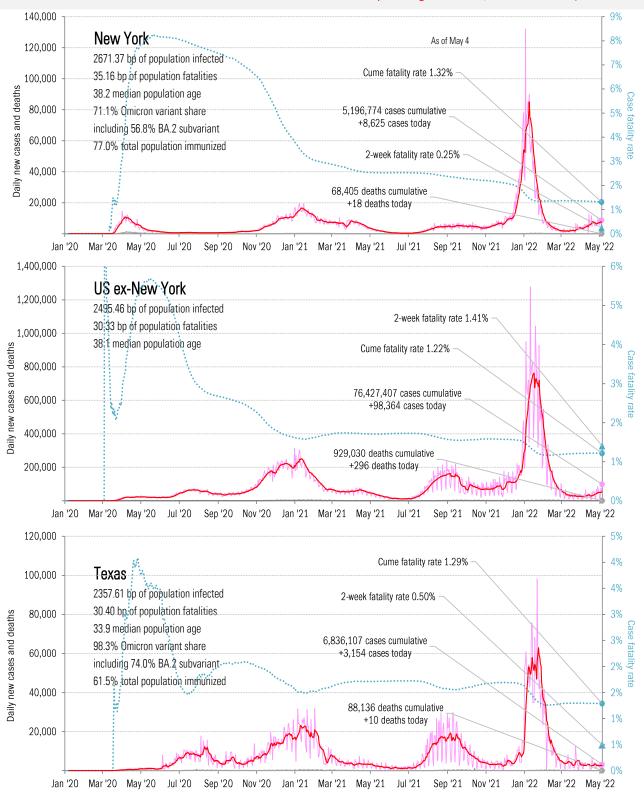
14-day moving average, last 14 days Most recent value displayed • High • Low
Downward trajectory Five best Upward trajectory Five worst



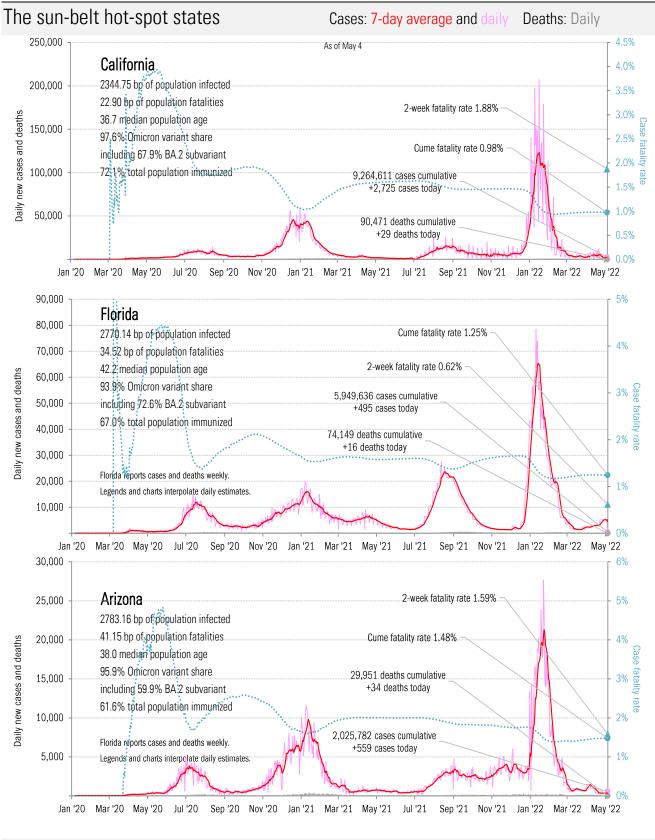
Source: Covid Act Now, TrendMacro calculations

From Ground Zero to the Rio Grande

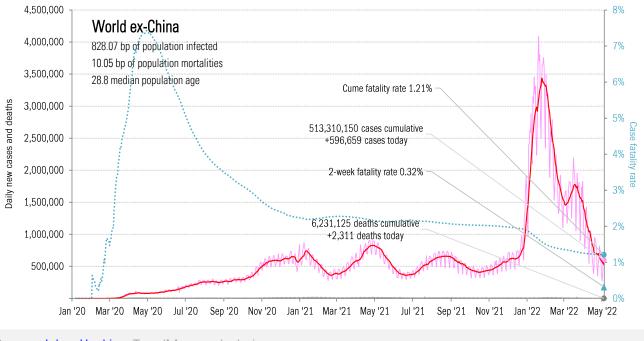
Cases: 7-day average and daily Deaths: Daily



Source: Johns Hopkins, TrendMacro calculations





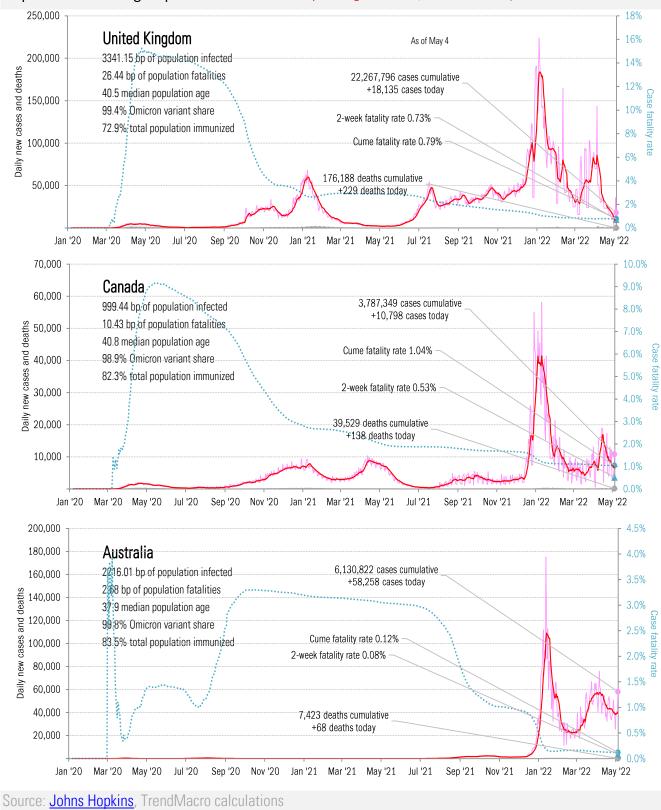


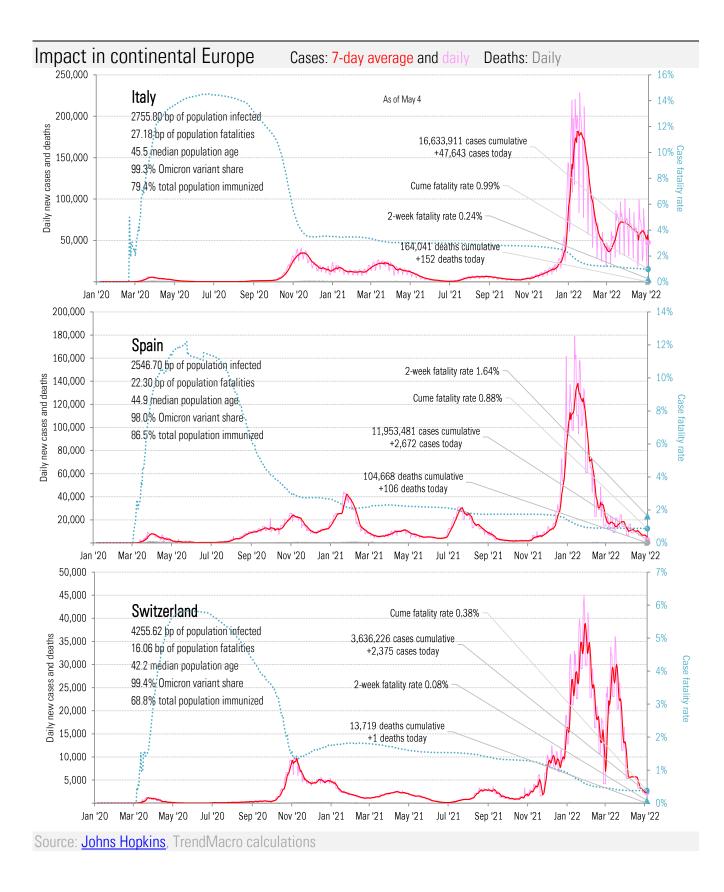
Source: Johns Hopkins, TrendMacro calculations

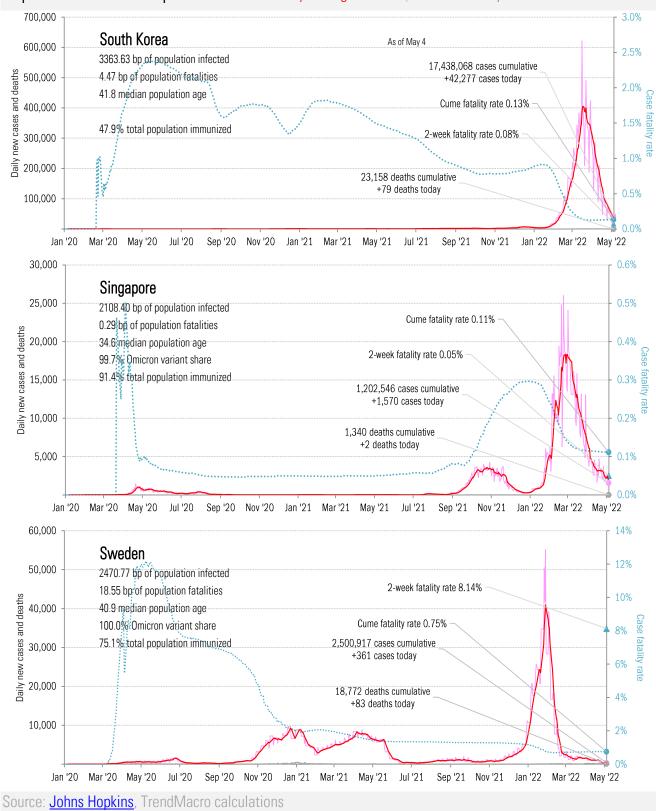
Impact in the largest economies Cases: 7-day average and daily Deaths: Daily 120,000 6% Japan As of May 4 100,000 5% 645.08 bp of population infected 7.974.232 cases cumulative +26,414 cases today 2.40 bp of population fatalities Daily new cases and deaths 80,000 47.3 median population age Cume fatality rate 0.37% Jase fatality rate 99.4% Omicron variant share 60,000 3% 80.6% total population immunized 2-week fatality rate 0.08% 40,000 2% 29,706 deaths cumulative 20,000 1% +20 deaths today 0% Jan '20 Mar '20 May '20 Sep '20 Nov '20 Jan '21 Mar '21 May '21 Jul '21 Nov '21 Jan '22 Jul '20 Sep '21 Mar '22 May '22 350,000 5.0% Germany 4.5% 300,000 3027.03 bp of population infected 4.0% 25,130,137 cases cumulative 250,000 200,000 150,000 100,000 16.40 bp of population fatalities +96,167 cases today 3.5% 45.9 median population age 99.8% Omicron variant share 3.0% Cume fatality rate 0.54 76.8% total population immunized 2.5% 2-week fatality rate 0.16% 2.0% គ្ន 1.5% 136,125 deaths cumulative +183 deaths today 1.0% 50,000 0.5% 0.0% Jan '20 Sep '21 Mar '20 May '20 Jul '20 Sep '20 Nov '20 Jan '21 Mar '21 May '21 Jul '21 Nov '21 Jan '22 Mar '22 May '22 600,000 20% France 18% 500,000 4327.02 bp of population infected 16% 28,996,577 cases cumulative 22.00 bp of population fatalities +48,080 cases today Daily new cases and deaths 14% 400,000 41.2 median population age 98.2% Omicron variant share 12% Cume fatality rate 0.51% 78.2% total population immunized 300,000 10% 2-week fatality rate 0.11% 8% 200,000 6% 147,413 deaths cumulative +114 deaths today 4% 100,000 2% Jan '20 Mar '20 May '20 Jul '20 Sep '20 Nov '20 Jan '21 Mar '21 May '21 Jul '21 Sep '21 Nov '21 Jan '22 Mar '22 May '22



Impact in The Anglosphere Cases: 7-day average and daily Deaths: Daily



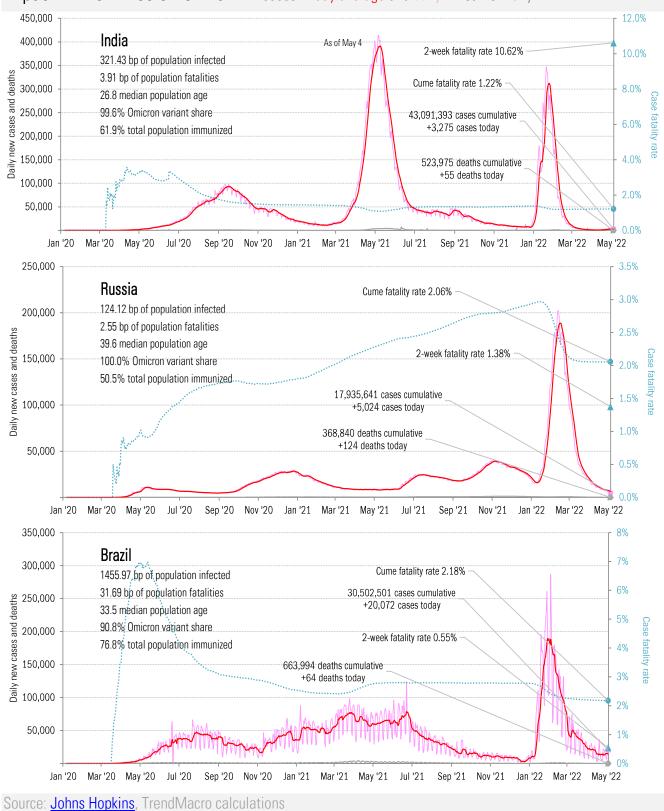


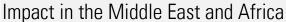


Impact in other hot-spots Cases: 7-day average and daily Deaths: Daily

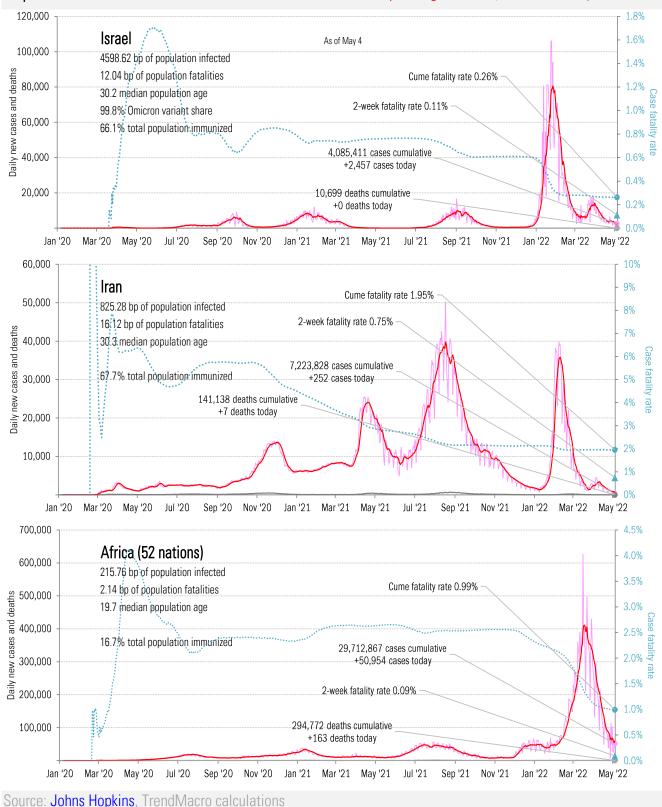
Impact in the BRICs ex-China Cases: 7-d

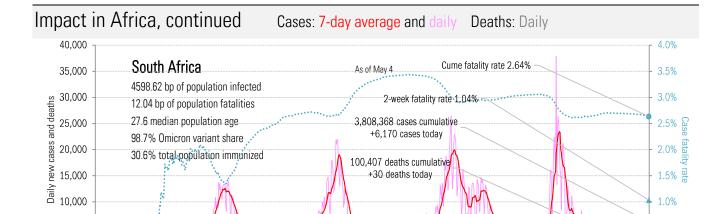
Cases: 7-day average and daily Deaths: Daily





Cases: 7-day average and daily Deaths: Daily





Mar '20 May '20 Jul '20 Sep '20 Nov '20 Jan '21 Mar '21 May '21 Jul '21

W

Sep '21 Nov '21 Jan '22 Mar '22 May '22

Source: Johns Hopkins, TrendMacro calculations

5,000

Jan '20

1.0%

0.5% 0.0%