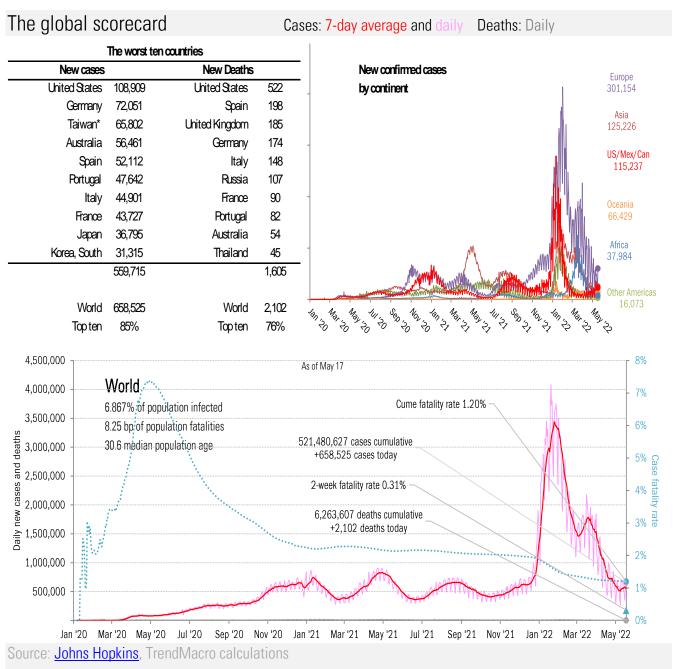


Trend Macrolytics, LLC Donald Luskin, Chief Investment Officer Thomas Demas, Managing Director Michael Warren, Energy Strategist

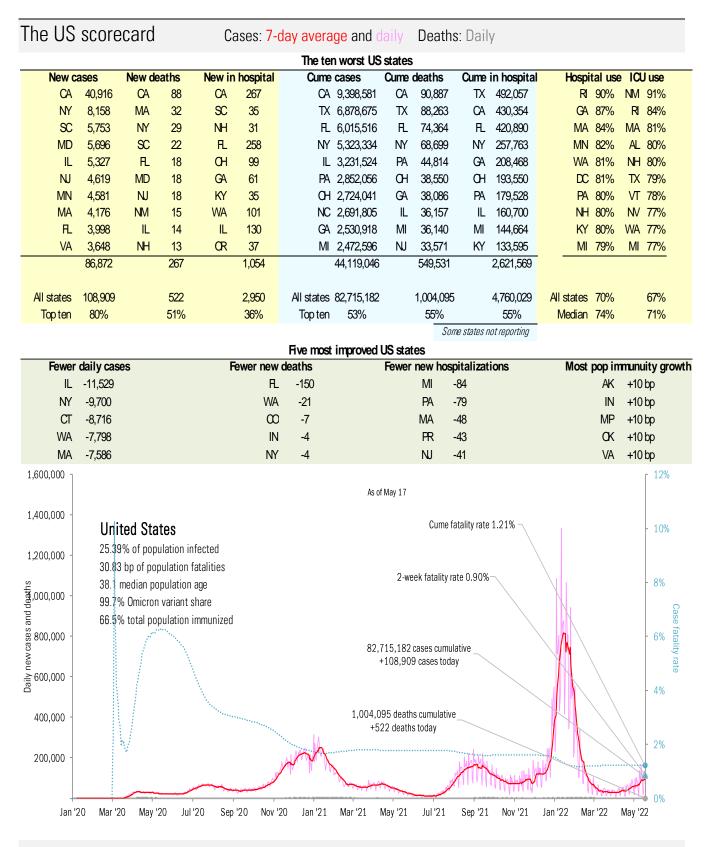
Data Insights: Covid-2019 Monitor

Wednesday, May 18, 2022



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

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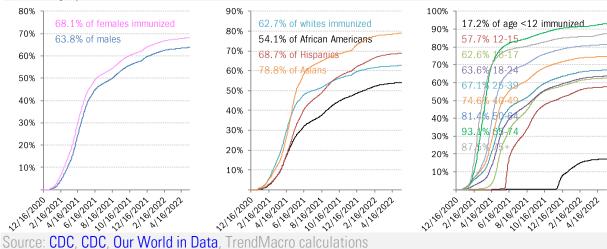


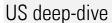
Source: Johns Hopkins, Dept. of Health and Human Services, CDC, TrendMacro calculations

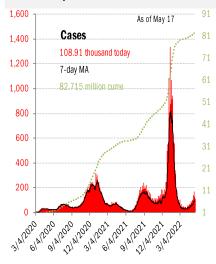
Rolling out the vaccines in the US and the world												
Administered Cumulative						То	day	Immunity	Full	Partial		
Doses 597,725,813						+0.254	million	US	66.5%	77.7%		
Boosters 44,64		4,642,325					+0.018	million	UK	73.1%	78.2%	
One dose			% Pop	Imm	Immune		New immune today		France	78.3%	80.7%	
	Total population 265,751,673		5,751,673			7,000,460	68%	+0.032 million		Spain	86.6%	88.2%
-		7,745,287	70%	15,187,111		60% 75%	+0.002 million		Germany	76.8%	76.9%	
Age 18 to 64			8,623,675	88%		151,956,208		+0.016 million		Italy	79.4%	84.1%
Age 65 and	ge 65 and over 58,993,360 100% 5 [.]		51,463,390	94%	+0.010	million	Australia	83.7%	86.5%			
T&I										Israel	66.1%	72.2%
3%									Canada	82.4%	86.2%	
Madarna		Sta	ate	Best						Japan	80.8%	82.1%
Pfizer 59% as										Africa	17.1%	22.4%
			tial immunity	Midd	e					India	62.9%	72.4%
			as % population Full immunity							Brazil	77.2%	85.6%
			-	Wors	t					China	86.7%	89.1%
AK			pulation					A (M 17		Global data diff		rces, timing
69.9% "Immunity" - two o		"immunity" = ti	vo doses	W				As of May 17			ME	
					72.0%					90.9%		
	WA	ID	MT	ND	MN	65.7% IL	MI	т	NY	VT	79.9% NH	
	81.0%	61.8%	65.4%	65.7%	75.2%	76.8%	67.1%		90.4%	93.8%	88.6%	
	72.8%	54.7%	56.9%	55.7%	69.3%	69.1%	60.3%		77.2%	81.4%	70.8%	
	0R	NV	WY	SD	IA	IN	00.070 OH	PA	NJ	MA	70.070	
	78.1%	75.5%	58.1%	76.9%	68.1%	61.6%	63.7%	85.2%	90.7%	95.0%		
	69.8%	61.0%	51.0%	61.8%	62.1%	55.0%	58.9%	68.8%	75.9%	79.3%		
	CA	UT	CO	NE	MO	KY	WV	VA	MD	СТ	RI	
	82.4%	72.2%	79.6%	70.4%	66.3%	66.3%	65.1%	86.0%	86.7%	95.0%	95.0%	
	72.4%	64.4%	70.4%	63.7%	56.2%	57.5%	57.7%	73.5%	75.9%	79.5%	82.9%	
		AZ	NM	KS	AR	TN	NC	SC	DC	DE		
		73.3%	88.1%	74.7%	66.9%	62.3%	84.6%	67.9%	95.0%	83.4%		
		61.8%	71.4%	61.7%	54.6%	54.6%	61.6%	57.2%	78.0%	69.4%		
				OK	LA	MS	AL	GA				
	l			71.3%	61.1%	59.7%	62.9%	65.6%				
HI				57.5%	53.6%	52.0%	51.3%	54.9%		1 r		1
87.6%				TX					FL 70.0%		PR	
78.4%			73.5%					79.6%		95.0%		
			l	61.7%					67.2%	j l	83.2%	l

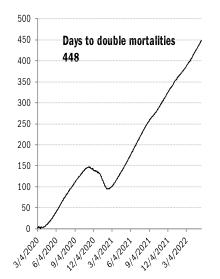
Rolling out the vaccines in the US and the world

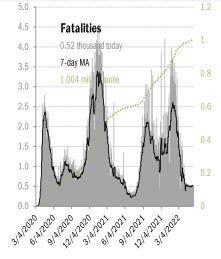
The demographics of US vaccination

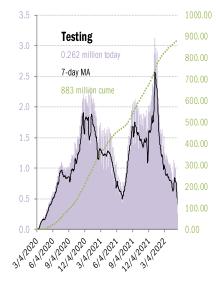


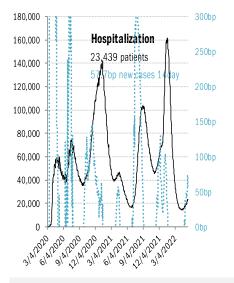


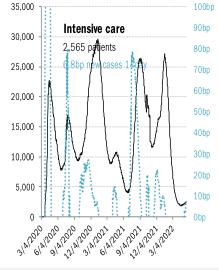


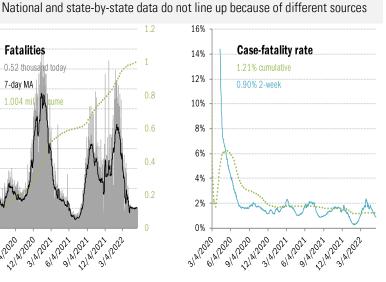


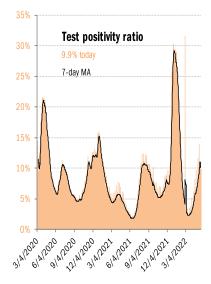


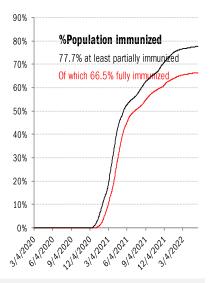




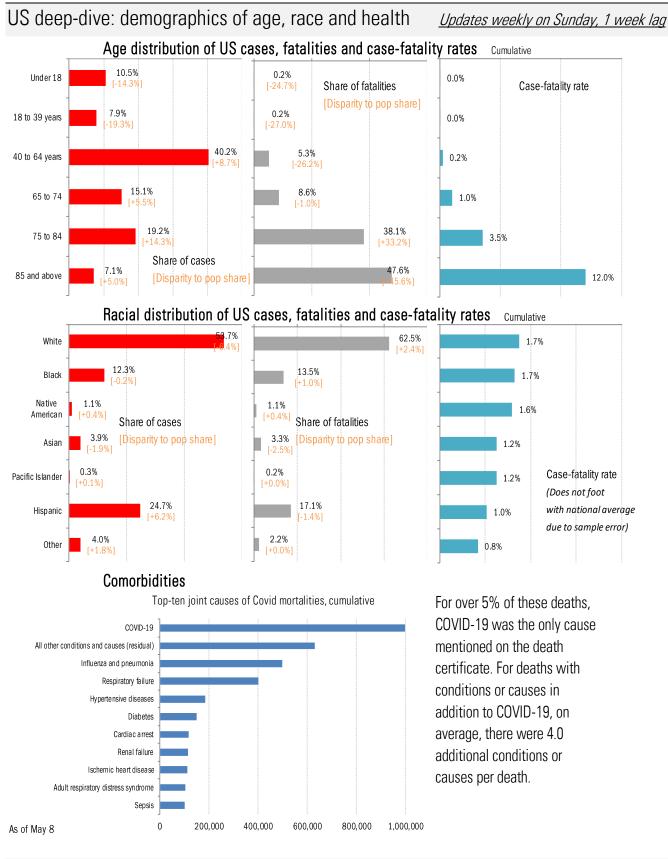








Source: Johns Hopkins, Covid Act Now, TrendMacro calculations



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

Recommended reading

How big is the latest U.S. coronavirus wave? No one really knows. Fenit Nirappil, Katie Shepherd and Dan Keating *Washington Post* May 17, 2022

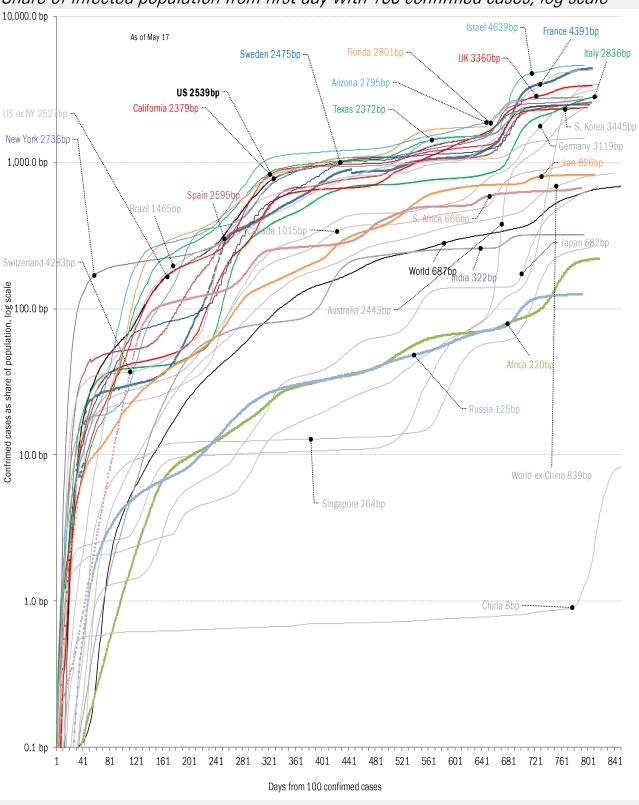
Study Finds 'Positive Correlation' Between Higher Mask Usage And COVID-19 Deaths.

Natalie Winters *National Pulse* May 16, 2022

Meme of the day

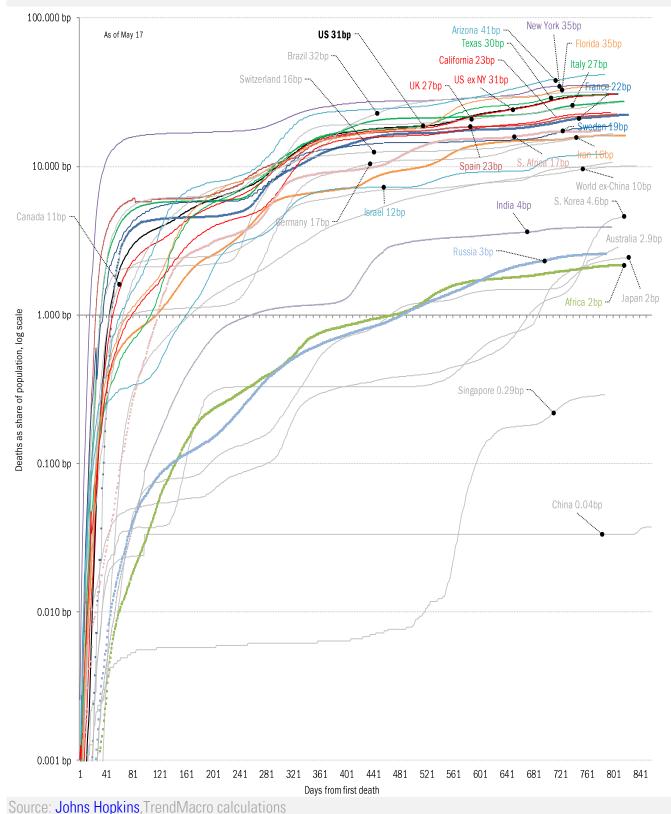


Source: Our beloved clients, Power Line blog "The Week in Pictures" and CTUP

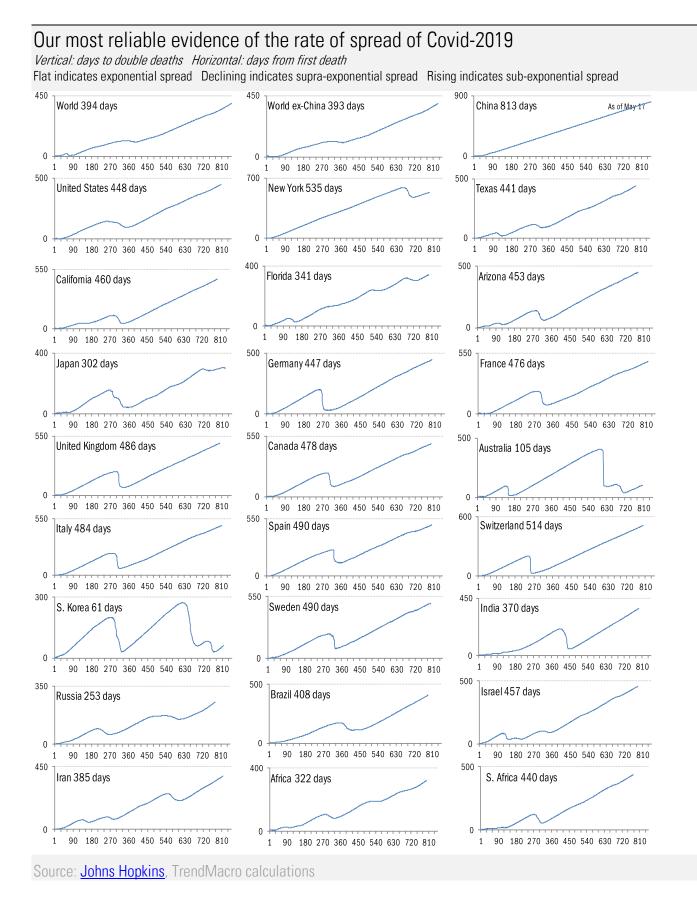


The coronavirus <u>case</u> accelerometer... tracking the world's infection curves Share of infected population from first day with 100 confirmed cases, log scale

Source: Johns Hopkins, TrendMacro calculations



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



Source: Johns Hopkins, TrendMacro calculations

14-day trajectory in test-positivity ratio

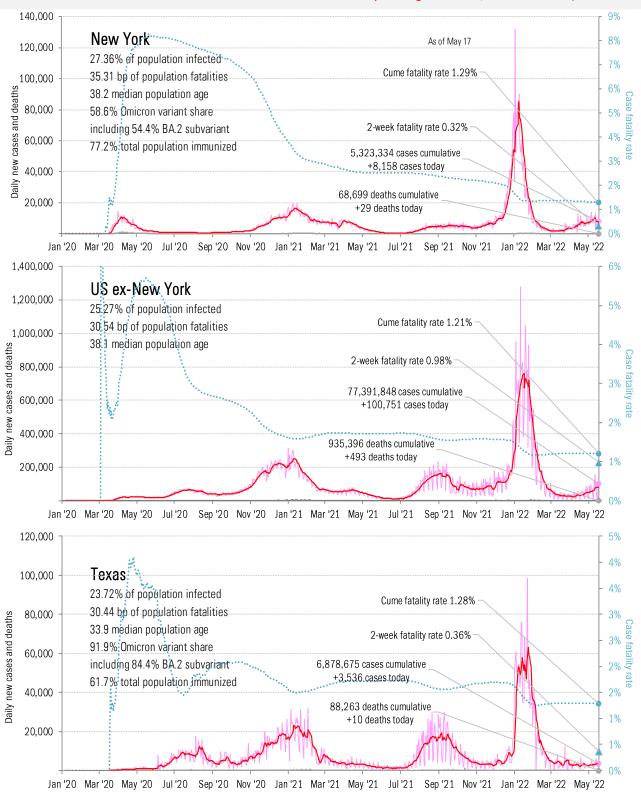
14-day moving average, last 14 daysMost recent value displayed• High • LowDownward trajectoryFive bestUpward trajectoryFive worst

-				
US 10.0%		AK 9.9%	AL 7.8%	AR 6.4%
AZ 9.9%	CA 4.9%	CO 7.9%	CT 12.9%	DC 7.7%
HZ 9.976	CA 4.3%	001.3%	0112.9%	
DE 15.8%	FL 13.7%	GA 9.4%	HI 16.9%	IA 14.4%
1			/	/
ID 8.0%	IL 8.6%	IN 13.9%	KS 10.7%	KY 10.1%
\sim				
/	/	/	/	1
LA 6.3%	MA 8.6%	MD 7.9%	ME 10.9%	MI 17.3%
MN 13.1%	MO 11 F0/		MT 4 40/	NC 15.2%
WIN 13.1%	MO 11.5%	MS 9.9%	MT 4.4%	NC 15.2%
			\sim	
			\sim	
ND 9.1%	NE 11.3%	NH 11.3%	NJ 12.4%	NM 7.7%
				\sim
NV 18.0%	NY 11.0%	ОН 8.6%	OK 8.9%	OR 9.9%
-		,	1	/
PA 14.3%	PR 25.8%	RI 10.0%	SC 12.6%	SD 8.5%
TH 0 70%	7			
TN 8.7%	TX 11.3%	UT 17.3%	VA 14.2%	VT 9.1%
WA 34.0%	WI 13.8%	WV 10.2%	WY 5.5%	4 of 52 states & territories
MA 34.070	10.0/0	10.270	10.070	
				in two-week downtrends
(\sim	
				As of May 17

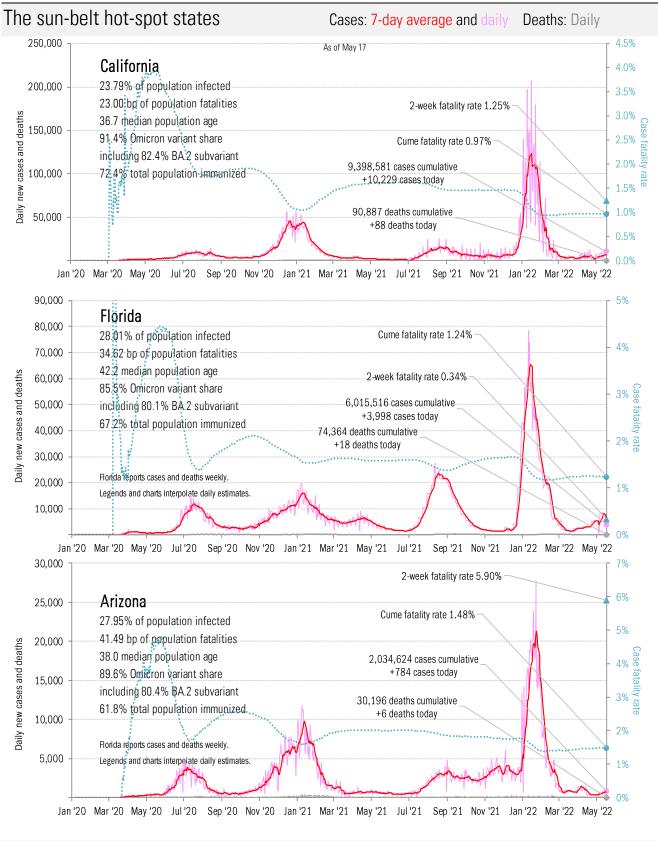
Source: <u>Covid Act Now</u>, TrendMacro calculations

From Ground Zero to the Rio Grande

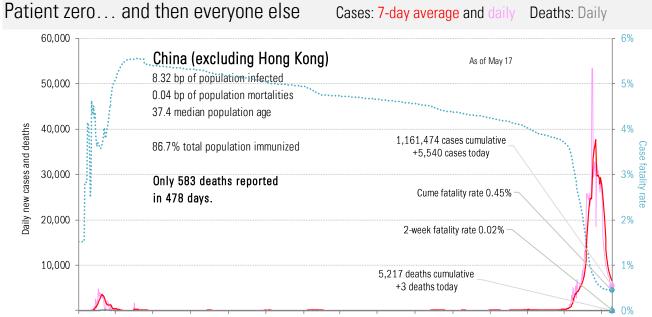
Cases: 7-day average and daily Deaths: Daily



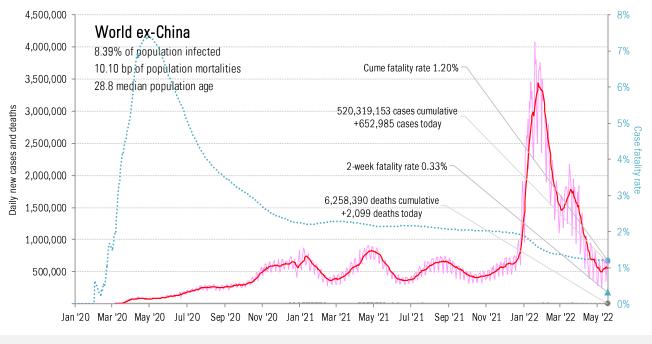
Source: Johns Hopkins, TrendMacro calculations



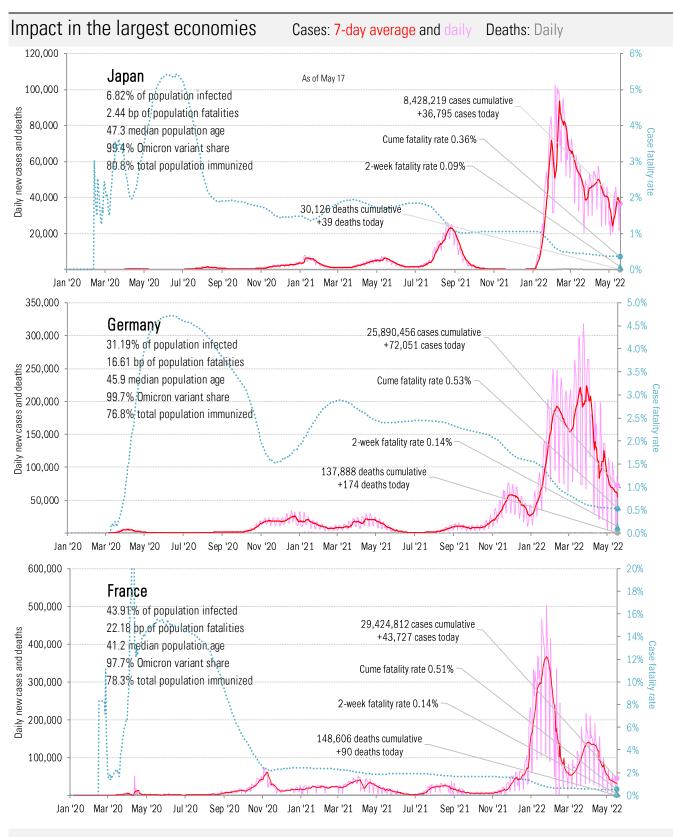
Source: Johns Hopkins, TrendMacro calculations



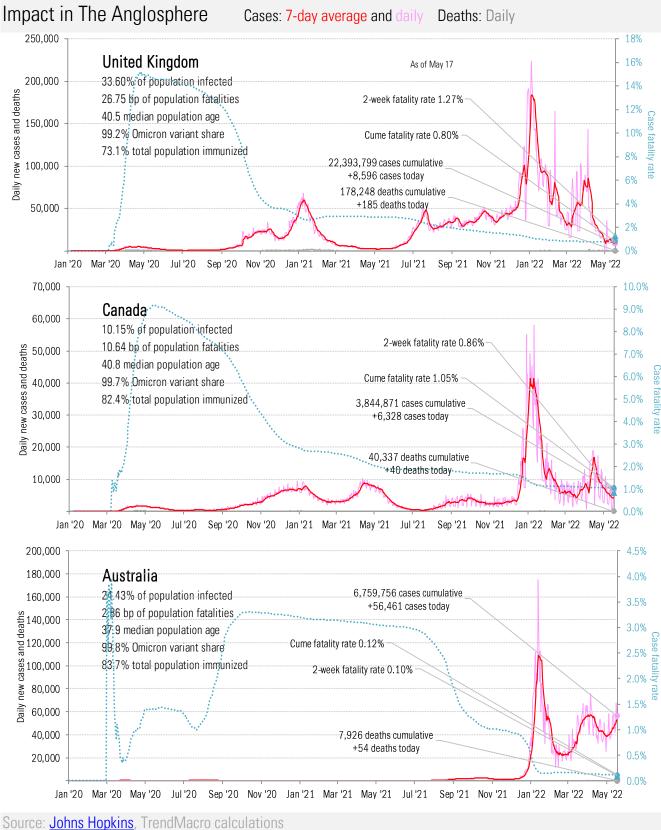
Jan '20 Mar '20 May '20 Jul '20 Sep '20 Nov '20 Jan '21 Mar '21 May '21 Jul '21 Sep '21 Nov '21 Jan '22 May '22

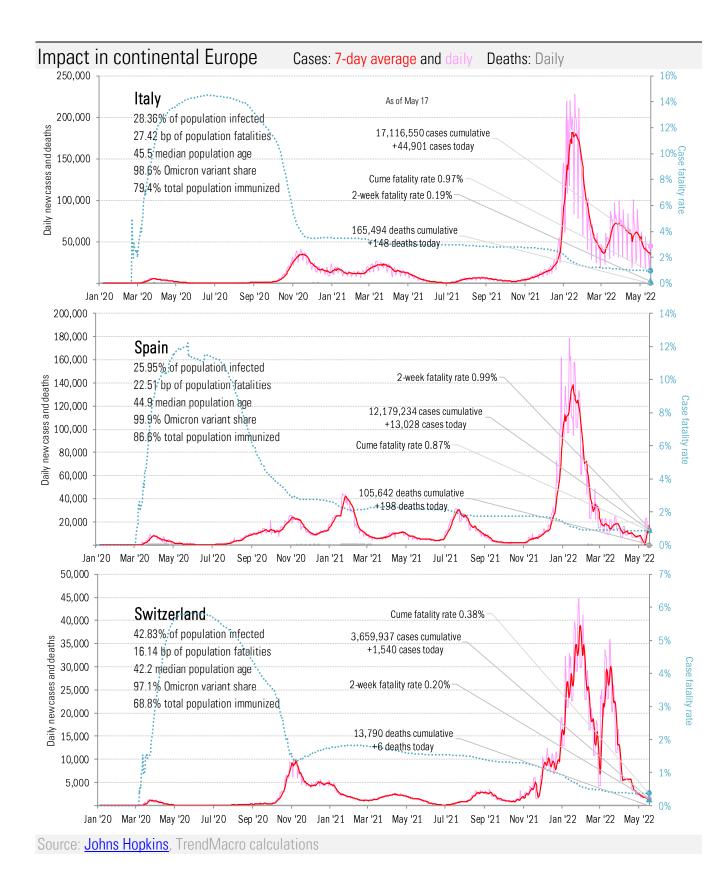


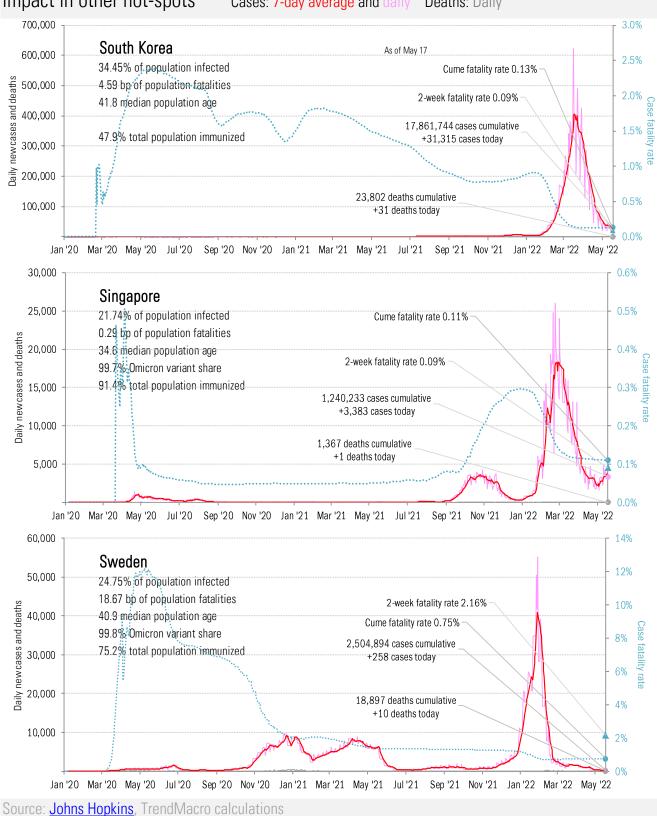
Source: Johns Hopkins, TrendMacro calculations



Source: Johns Hopkins, TrendMacro calculations



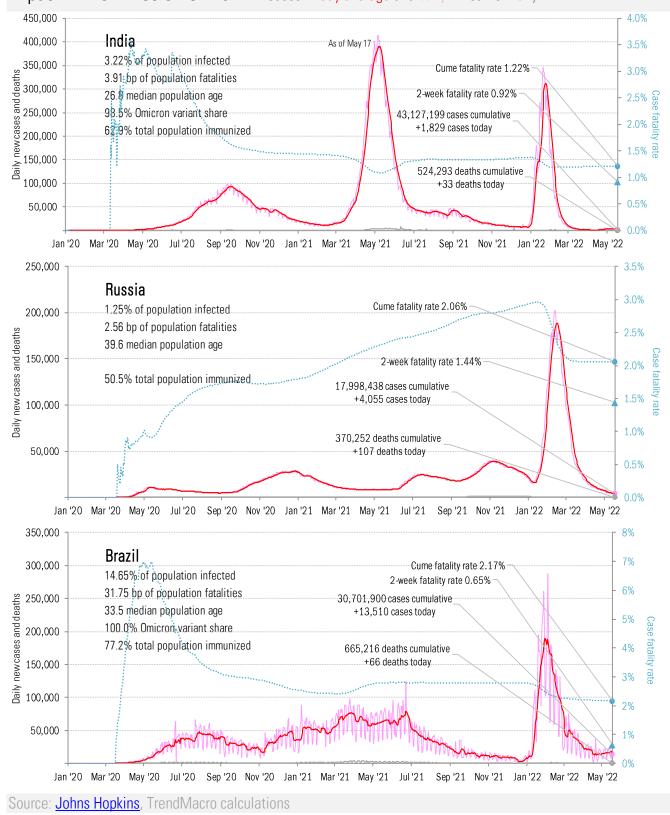


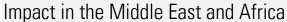


Impact in other hot-spots Cases: 7-day average and daily Deaths: Daily

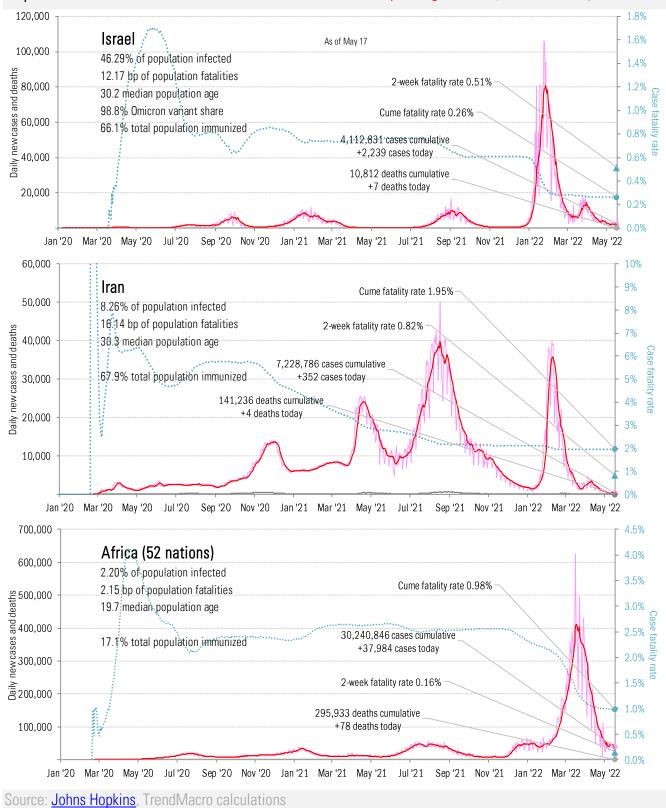
Impact in the BRICs ex-China

Cases: 7-day average and daily Deaths: Daily

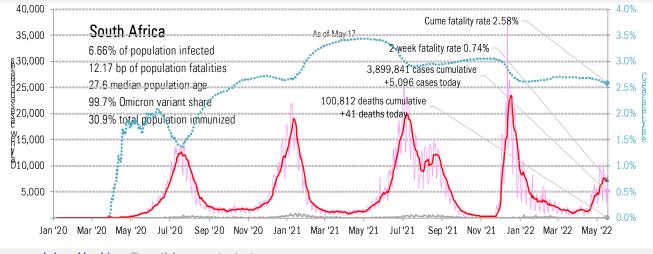




Cases: 7-day average and daily Deaths: Daily



Impact in Africa, continued Cases: 7-day average and daily Deaths: Daily



Source: Johns Hopkins, TrendMacro calculations