

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

Data Insights: Covid-2019 Monitor

Friday, May 21, 2021

The global scorecard



For more information contact us: Donald Luskin: 312 273 6766 don@trendmacro.com Thomas Demas: 704 552 3625 tdemas@trendmacro.com

Thomas Demas: 704 552 3625 tdemas@trendmacro.com

Copyright 2021 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.

The US scorecard

New cases New Deaths New in hospital Oume cases Oume deaths Oume in hospital Hospital Use IU use RL +2,893 MI +82 MN +28 CA 3,774,494 CA 62,817 TX 244,459 RI 92% MI 239 CA +1,792 RL +76 NV +11 TX 2,938,261 NY 53,070 CA 233,543 MA 83% CO 179 PA +1,709 CA +52 WI +111 RL 2,302,489 TX 51,128 RL 175,123 MD 82% MD 159 TX +1,647 PA +50 AL +8 NY 2,091,342 RL 36,347 NY 132,106 PA 81% MN 159 NY +1,644 IL +49 UT +7 IL 1,371,791 PA 26,924 GA 104,915 MO 80%	se 3%
RL +2,893 MI +82 MN +28 CA 3,774,494 CA 62,817 TX 244,459 RI 92% MI 233 CA +1,792 RL +76 NV +11 TX 2,938,261 NY 53,070 CA 233,543 MA 83% CO 179 PA +1,709 CA +52 WI +11 RL 2,302,489 TX 51,128 RL 175,123 MD 82% MD 159 TX +1,647 PA +50 AL +8 NY 2,091,342 RL 36,347 NY 132,106 PA 81% MN 159 NY +1,644 IL +49 UT +7 IL 1,371,791 PA 26,924 GA 104,915 MO 80% WA 149 MI +1,570 TX +47 NC +6 PA 1,192,678 NJ 26,053 PA 87,812 CT 79% ME 149 IL +1,544	3%
CA +1,792 FL +76 NV +11 TX 2,938,261 NY 53,070 CA 233,543 MA 83% CO 17% PA +1,709 CA +52 WI +11 FL 2,302,489 TX 51,128 FL 175,123 MD 82% MD 15% TX +1,647 PA +50 AL +8 NY 2,091,342 FL 36,347 NY 132,106 PA 81% MN 15% NY +1,644 IL +49 UT +7 IL 1,371,791 PA 26,924 GA 104,915 MO 80% WA 14% MI +1,570 TX +47 NC +6 PA 1,192,678 NJ 26,053 PA 87,812 CT 79% ME 14% IL +1,544 AL +32 R +5 GA 1,118,308 IL 24,913 CH 83,908 FL 78% WV 14% IL +1,544	
PA +1,709 CA +52 WI +11 FL 2,302,489 TX 51,128 FL 175,123 MD 82% MD 15% TX +1,647 PA +50 AL +8 NY 2,091,342 FL 36,347 NY 132,106 PA 81% MN 15% NY +1,644 IL +49 UT +7 IL 1,371,791 PA 26,924 CA 104,915 MO 80% WA 14% MI +1,570 TX +47 NC +6 PA 1,192,678 NJ 26,053 PA 87,812 CT 7% ME 149 IL +1,544 AL +32 R +5 GA 1,118,308 IL 24,913 CH 83,908 FL 7% WV 149 IL +1,220 NV 42 QL 424,913 CH 83,908 FL 7% WV 149	%
TX +1,647 PA +50 AL +8 NY 2,091,342 FL 36,347 NY 132,106 PA 81% MN 159 NY +1,644 IL +49 UT +7 IL 1,371,791 PA 26,924 GA 104,915 MO 80% WA 149 MI +1,570 TX +47 NC +6 PA 1,192,678 NJ 26,053 PA 87,812 CT 79% ME 149 IL +1,544 AL +32 PL +5 GA 1,118,308 IL 24,913 CH 83,908 FL 78% W 149 IL +1,544 AL +32 PL +5 GA 1,118,308 IL 24,913 CH 83,908 FL 78% W 149	5%
NY +1,644 IL +49 UI +7 IL 1,371,791 PA 26,924 GA 104,915 MO 80% WA 149 MI +1,570 TX +47 NC +6 PA 1,192,678 NJ 26,053 PA 87,812 CT 79% ME 149 IL +1,544 AL +32 R +5 GA 1,118,308 IL 24,913 CH 83,908 FL 78% WV 149 IL +1,544 AL +32 R +5 GA 1,118,308 IL 24,913 CH 83,908 FL 78% WV 149	5%
MI +1,570 IX +47 NC +6 PA 1,192,678 NJ 26,063 PA 87,812 CI 79% ME 149 IL +1,544 AL +32 RI +5 GA 1,118,308 IL 24,913 CH 83,908 FL 78% WV 149	1 %
IL +1,544 AL +32 R +5 GA 1,118,308 IL 24,913 CH 83,908 HL 78% WV 149	1%
	1% m/
OH +1,208 NY +20 AZ +4 OH 1,094,742 GA 20,991 IL 78,829 DC 78% MO 1.39	5% 207
MC + 1, 107 $MU + 23$ $ME + 3$ $MU 1, 012, 757$ $MI 20,013$ $K1 74,032$ $GA 76%$ $MU 127$	<u>~</u> %0 00/
	2/0
All states + 30,141 + 665 -531 All states 33,056,765 588,539 2,302,479 All states 70% 670	7%
Top ten 54% 69% -16% Top ten 58% 56% Median 72% 9%	9%
Some states not reporting	,,,,
Five most improved US states	
Fewer daily cases Fewer new deaths Fewer new hospitalizations Most pop inmunuity grow	wth
DE -650 OK -40 NM -156 MA +68 bp	
KS -471 TX -22 TX -71 PR +60 bp	
MI -380 GA -15 GA -70 DC +60 bp	
TX -375 NC -15 CA -36 MD +58 bp	
00 -293 KS -13 KS -28 H +57 bp	
350.000 - 12.0%	
300,000 - United States As of May 20	
1014.885 bp of population infected	
18.069 bp of population fatalities	
250,000 - 38.1 median population age Cume fatality rate 1.78%	
ਉੱ 200,000 - 2-week fatality rate 1.21%	Case
	e fata
33,056,765 cases cumulative	ality
≧ 150,000 - +30,141 cases today	rate
100 000	
AAA A AAAA AAAAA AAAAAA AAAAAAA AAAAAAA	
50,000 - March Mar	
588,539 deaths cumulative	
Dec 31 Feb 19 Apr 9 May 29 Jul 18 Sep 6 Oct 26 Dec 15 Feb 3 Mar 25 May 14	

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

noning	outin		11169 111				u					
US overall Total						To	day	Immunity	Full	Partial		
Doses distributed		364,308,625						+2.748	million	US	37.9%	47.9%
Doses administered		288,250,369					+2.146 million		UK	31.3%	54.9%	
Administered One		dose	% Рор	Imi	nune	% рор	New immune today		France	14.0%	32.0%	
Total population		16	64,553,777	49%	1	30,391,947	39%	+1.171 million		Spain	16.5%	34.3%
Age 12 to 17		4,082,606		16%		1,770,748	7% +0.069 million		million	Germany	13.0%	39.2%
Age 18 to 64		112,480,815		55%		87,083,853	43%	+0.974 million		ltaly	15.7%	33.5%
Age 65 and over		4	48,004,847	88%		41,528,826	76%	+0.129 million		Australia	2.0%	5.1%
J&J									Israel	59.1%	62.8%	
3%					At today's dosing pace,					Canada	4.1%	48.5%
					every American >18 immune				in	Japan	2.0%	4.4%
Moderna	Pfizer	St	ate	SVCh DS						Africa	0.5%	1.4%
43%	54% O9 Uays							India	3.0%	10.6%		
Immuniti		Immunities	munities distributed		by Aug 17, 2021					Brazil	8.5%	17.9%
as % po			oulation**			61.5% of population >18 immunized					rs from sources,	timing
AK	AK At least partial immunit		tial immunity	13.9% previously tested positiv					e	China NA	ME	
58.5%	58.5% as % population		pulation	00	or.	75.4%	vs 60% ad	ult herd im	imunity*		67.0%	
44.5% Full immunity			Mid	Idlo						60.3%		
38.2% as % population				IVIIC	Juio						50.6%	
			10/2	wet	WI				VT	NH		
			52.2%						72.3%	62.6%		
			48.9%						66.2%	62.1%		
				42.3%						49.0%	38.0%	
	WA	ID	MT	ND	MN	IL	MI		NY	MA		
	58.7%	46.4%	52.9%	46.4%	55.7%	56.3%	57.1%		59.0%	66.8%		
	53.1%	36.3%	43.6%	41.0%	51.9%	51.7%	46.6%		52.8%	63.5%		
	41.8%	31.3%	36.7%	35.5%	42.9%	37.5%	39.6%		43.8%	48.4%		
	OR	NV	WY	SD	IA	IN	OH	PA	NJ	CT	RI	
	61.1%	47.6%	45.9%	55.6%	53.3%	48.4%	52.1%	60.6%	62.5%	64.8%	70.3%	
	51.6%	43.3%	35.9%	46.9%	47.3%	39.9%	43.7%	55.7%	57.3%	60.3%	57.9%	
	40.4%	34.5%	30.8%	41.4%	41.5%	33.3%	38.3%	40.5%	45.6%	49.8%	48.4%	
	CA	UT	CO	NE	MÜ	KY	WV	VA	MD	DE		
	61.0%	49.5%	59.4%	53.3%	49.2%	49.9%	52.3%	57.7%	65.1%	63.2%		
	54.1%	43.5%	51.4%	46.5%	40.6%	44.2%	38.7%	52.4%	54.7%	51.3%		
	39.8%	30.6%	42.3%	40.3%	33.0%	36.8%	33.1%	41.7%	44.2%	40.0%		
		AZ	NM	KS	AK	IN		SU	DC			
		54.9%	56.0%	52.7%	48.1%	45.5%	55.2%	50.7%	73.6%			
		44.3%	55.2%	45.1%	38.0%	37.7%	41.9%	39.3%	54.8%			
		34.1%	45.2%	36.9%	29.7%	30.3%	34.6%	32.2%	42.1%			
						IMIS		GA				
				51.7%	43.6%	45.5%	47.8%	51.7%				
				40.5%	34.5%	33.0%	35.2%	38.1%				
	1			32.7%	30.0%	26.4%	28.2%	30.0%		1 I		1
HI					FL FL						PK	
64.2%				53.4%	56.6%						62.0%	
63.5%				41.9%	46.69						46.6%	
45.2%				33.3%	As of May 20				36.5%	1 I	32.7%	

Rolling out the vaccines in the LIS and the world

* Includes persons >18 fully immunized or previosuly tested positive, no overlap. Disregards untested positives, natural immunities.

** 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



Source: Johns Hopkins, Covid Act Now, TrendMacro calculations



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

Recommended reading

<u>'This Day Was Bound to Come': Taiwan Confronts a</u> Covid Flare-Up

Raymond Zhong and Amy Chang Chien *New York Times* May 20, 2021

<u>Severe Covid Is More Often Fatal in Africa Than in</u> <u>Other Regions</u>

Denise Grady *New York Times* May 20, 2021

<u>Japanese pensioners with US stimulus cheques</u> descend on Tokyo banks

Robin Harding, Kana Inagaki and James Politi *Financial Times* May 19, 2021

Meme of the day

Fauci Underling Serves On Board For Wuhan Lab Journal

Natalie Winters *The National Pulse* May 18, 2021

Communist Professor Declares That U.S. Was Defeated In 'Biological War' With China

Steve Watson *Summit News* May 19, 2021



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



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*





"Exponential"? Our most reliable evidence of the rate of spread of Covid-2019

Source: Johns Hopkins, TrendMacro calculations

Requirement to <u>Open Up America Again</u>: 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 <u>Open Up America Again</u>: 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



Source: Johns Hopkins, TrendMacro calculations



Source: Johns Hopkins, TrendMacro calculations



Patient zero... and then everyone else

Source: Johns Hopkins, TrendMacro calculations



Source: Johns Hopkins, TrendMacro calculations







Source: Johns Hopkins, TrendMacro calculations

Impact in other hot-spots



Impact in the BRICs ex-China





Impact in the Middle East and Africa



Source: Johns Hopkins, TrendMacro calculations