

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

#### Data Insights: Covid-2019 Monitor

Tuesday, May 11, 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

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# The US scorecard

						The te	n worst US	states						
New cas	æs	New Dea	aths	Newinh	ospital	Qume o	ases	Qume de	eaths	Qume in	n hospital	Hospital u	lse	ICU use
NC	+3,753	R.	+52	IL	+49	CA	3,760,303	CA	62,334	TX	242,383	RI 8	8%	MI 27%
MI	+2,987	NY	+41	GA	+28	TX	2,917,219	NY	52,729	CA	232,240	MA 8	34%	ME 19%
TX	+2,715	MI	+34	CA	+14	Æ	2,272,102	TX	50,665	R.	172,361	PA 8	3%	MD 19%
FL or	+2,296	PA	+33	00	+14	NY	2,074,079	FL	35,783	NY	130,736	MD 8	32%	00 18%
CA	+2,166	TX	+22	OR	+14	IL D	1,356,299	PA	26,526	GA	103,963	MI 8	31%	MN 16%
PA	+1,783	WA	+22	OH	+12	PA	1,175,850	NJ	25,810	#NA	0		31%	WA 15%
VVA	+1,725		+21	KY NC	+10	GA	1,110,418	IL CA	24,590	UH "	169,493		90% 7007	N 14%
INY TNI	+ 1,003	A) CT	+20		+8		1,084,322	GA	20,308	IL IA/	77,815		'9% 700/	PA 14%
IIN II	+ 1,519		+1/	INFI M/I	+7		1,008,040	UH MI	19,428	KY MI	13,238	GA /	'9% 100/	IL 14%
L	+ 1,430	IVIA	+ 10	VVI	+1	NC	904,201	IVII	337.644	IVII	1 270 2/13		9%	ID 14%
	+ <i>22,</i> 02 <i>1</i>		+210		+ 100		11,142,009		337,044		1,270,240			
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Fewer d	aily cases			R	ewer new de	aths		Fewer n	ew hospita	lizations		Most pop	imm	unuity growth
FL	-935				IL	-18			LA	-130			DC	+95bp
NY	-720				CA	-14			AZ	-51			NE	+90 bp
MA	-384				IN	-12			MO	-32			WA	+78 bp
IN	-315				MN	-7			ΤN	-28			СТ	+64 bp
L	-314				NE	-4			AR	-26			MA	+63 bp
250.000														40.0%
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				W WWW	~~~		7-day mov	ing average c	ases				·	T
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Dec 3	51 F	eb 19	Apr 9	Ma	y 29	Jul 18	Sep 6	Oct 2	6 D	ec 15	Feb 3	Mar 25		

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

341.92 million doses distributed +0.00 million/day US 34.5% 45.7%   270.16 million doses administered +1.89 million/day J&J UK 26.3% 52.3%   157.09 million persons partially immunized +0.70 million/day 4% France 11.6% 26.2%   19.15 million persons fully immunized +1.28 million/day 4% France 11.6% 26.2%   79.0% of distributed doses administered +1.28 million/day 4% France 11.6% 26.2%   79.0% of US pop partial 35.7% full immunity 43% Sammunized 9.3% 32.6%   Moderna 43% Yac Canada 3.4% 39.7%   At today's dosing pace, every American >18 immunized 1.3% 2.6% 9.8%   Brazi T.28% pazai 1.0% 2.8%   Aft today's dosing pace, every American >18 immunized 13.8% 9.8% 10.1% 10.8% 2.8%   Middle Worst 56.4% of population >18 immunized 13.8% 15.1% 10.1% 10.1% 10.1% 10.1% 10.1% 10.1% 10.1% 10.1% 10.1% 10
270.16 million doses administered +1.89 million/day J&J UK 26.3% 52.3%   157.09 million persons partially immunized +0.70 million/day 4% France 11.6% 26.2%   19.15 million doses administered +1.28 million/day 4% France 11.6% 26.2%   79.0% of distributed doses administered Modema Pfizer Spain 13.3% 29.5%   79.0% of US pop partial 35.7% full immunity 43% 9.8% Los 7% Canada 3.4% 39.7%   8 State Immunities distributed as % population** At today's dosing pace, every American >18 immune in 1.0% 2.8%   AK State Immunity 56.4% of population >18 immunized 3.8% 98.8%   Best Followid ada differs from sources, timing China NA ME 0.1% 57.2%   42.9% 37.0% ID MT ND MN IL MI 60.1% 57.6%   43.4% 33.2% 50.0% 45.0% 50.0% 52.0% 52.0% 52.0% 52.0% 52.0% 52.0% 52.0% 52.0% 52.0% </td
157.09 million persons partially immunized +0.70 million/day 4% France 11.6% 26.2%   119.15 million persons fully immunized +1.28 million/day 4% France 11.6% 26.2%   79.0% of distributed doses administered Moderna 43% 9.3% 32.6%   79.0% of US pop partial 35.7% full immunity 43% France 11.6% 26.2%   State Moderna 43% 53.7% 62.7% 28.3%   Immunities distributed as % population** At today's dosing pace, every American >18 immune in 1.0% 2.8%   AK 56.9% 42.9% 56.4% of population >18 immunized 3.8% previously tested positive 3.8% Beat   56.9% 42.9% State Middle Werst Wi 50.3% 44.5% 51.8%   50.3% 42.9% So population Middle Wi 50.3% 43.4% 33.2%   WA ID MT ND MN IL MI 61.9% 57.6%   43.4% 33.6% 50.0% 50.0% 52.0% 52.0% 52.0% 52.0% 52.0%
119.15 million persons fully immunized +1.28 million/day Spain 13.3% 29.5%   79.0% of distributed doses administered Moderna 43% Pfizer 14J 12.5% 28.3%   47.0% of US pop partial 35.7% full immunity 43% 43% Pfizer 1.1% 0.6%   Immunities distributed as % population** At today's dosing pace, every American >18 immune in 1.0% 2.8%   AK 56.9% 42.9% 32.6% 9.8% Brazil 7.2% 15.1%   Global data differs from sources, timing Full immunity as % population 1.1% 1.0% 2.8%   42.9% 37.0% Worst Widdle Wi 50.3% 44.5% 57.2%   Worst Widdle Wi 50.3% 43.4% 33.2% 43.4% 33.2%
State   Moderna   Africa   0.4%   32.6%     Immunities distributed as % population**   At today's dosing pace, every American >18 immune in 1.0%   At today's dosing pace, every American >18 immune in 1.0%   1.7%   0.6%     K   56.9%   2.8%   Africa   0.4%   1.1%     AK   56.9%   2.6%   Full immunity   2.8%     Full immunity as % population   Best   Niddle   Niddle   Niddle   Niddle     Worst   Niddle   Wi   50.3%   32.6%   44.5%     Worst   Niddle   Ni   Ni   Ni   2.8%     Middle   Ni   Ni   Ni   0.4%   1.1%     State   Immunities distributed as % population   5.7%   60% adult herd immunity*   60.1%     7.2%   5.1%   64.5%   56.1%   61.9%   57.2%     42.9%   37.0%   NI   NI   NI   60.1%   57.2%     43.4%   33.2%   NI   57.6%   56.1%   61.9%   57.6%     55.0%<
79.0% of distributed doses administered Modema 47.0% of US pop partial Pfizer 43% Italy 12.5% 28.3%   47.0% of US pop partial 35.7% full immunity 43% 53% Australia 1.7% 0.6%   47.0% of US pop partial 35.7% full immunity 43% 53% Australia 1.7% 0.6%   Israel 58.7% 62.7% Canada 3.4% 39.7%   Japan 1.0% 2.8%   At today's dosing pace, every American >18 immune in 1.09 1.0% 2.8%   Material and the stributed as % population** At least partial immunity as % population by Aug 26, 2021 56.4% of population >18 immunized 13.8% previously tested positive 70.2% State Best   Widdle Worst Wi 60.1% 57.2% 44.5%   Worst Wi 50.3% 41.9% 56.1% 61.9% 57.6%   WA ID MT ND MN IM NY MA 33.2%
47.0% of US pop partial 35.7% full immunity 43.0 53.% Australia 1.7% 0.6%   47.0% of US pop partial 35.7% full immunity 1.7% 0.6% 1.7% 0.6%   Israel 58.7% 62.7% 62.7% 62.7%   At today's dosing pace, every American >18 immune in 1.0% 2.8%   Immunities distributed as % population** 1.0% 2.8%   At least partial immunity as % population Best 56.4% of population >18 immunized 13.8% previously tested positive 60.1%   70.2% Vs 60% adult herd immunity* ME 60.1% 57.2%   Worst Wi 50.3% 43.5% 57.6%   Wi 50.3% 32.6% 57.6% 33.2%   WA ID MT ND MN IL MI   VA 297 51.0% 50.0% 52.4% 52.4% 54.6% 61.5%
AK State   Immunities distributed as % population** At today's dosing pace, every American >18 immune in 10% 2.8%   AK 109 days   S6.9% 32.6% 9.8%   Brazil 7.2% 15.1%   Best   Middle   Worst   W   Vorst   W   S0.3%   43.4% 33.2%   Worst   W   S0.3%   43.4%   S1.1%   Best   Middle   W   W   Middle   W   S0.3%   S2.6%   S2.6%   S3.8%   Best   Middle   W   S0.3%   S7.0%   S3.8%   Best   Middle   W   S0.3%   S1.6%   S0.3%   S1.6%   S1.6%   S2.6%   S2.6%   S2.6%   S2.6%   S2.6%
AK State   Immunities distributed as % population** Immunities distributed as % population Immunity   AK 56.9%   42.9% Full immunity as % population Best   Worst W   0.3% Worst   Worst W   0.3% 9.8%   0.4% 1.1%   1.1% 1.1%   0.4% 1.1%   0.4% 1.1%   0.4% 1.1%   0.4% 1.1%   0.4% 1.1%   0.4% 1.1%   0.4% 1.1%   0.4% 1.1%   0.4% 1.1%   0.4% 1.1%   0.4% 1.1%   0.4% 1.1%   0.4% 1.1%   0.4% 1.1%   0.4% 1.1%   0.4% 1.1%   0.4% 1.1%   0.4% 1.1%   0.4% 1.1%   0.9% 1.0%   0.1% 1.1%   0.1% 1.1%
State   Immunities distributed   as % population**   At least partial immunity   S6.9%   42.9%   37.0%       Worst       Will       0.4%       AK   56.9%   42.9%   37.0%       Worst       Widdle       Worst       Wa ID MT ND MN IL MI       WA ID MT ND MN IL MI       VA ID MT ND MN IL MI
State India 2.6% 9.8%   Immunities distributed as % population** by Aug 26, 2021   AK 56.4% of population >18 immunized   13.8% previously tested positive Global data differs from sources, timing   Full immunity as % population Middle   Worst WI   50.3% 44.5%   44.5% 56.1%   60.1% 57.2%   44.5% 44.5%   Worst WI   50.3% 43.4%   43.9% 57.6%   44.5% 56.1%   61.9% 57.6%   44.5% 44.5%   Worst Solow   Worst Solow   Solow 43.4%   33.2% 50.0%   WA D MT   V F0.0% F2.9% F3.4%
AK AK At least partial immunity Best by Aug 26, 2021 Brazil 7.2% 15.1%   56.9% At least partial immunity as % population Best 56.4% of population >18 immunized 13.8% previously tested positive China NA ME   56.9% 42.9% 37.0% Full immunity Middle Wi 57.2%   42.9% 37.0% Full immunity Middle WI 57.2%   44.5% S6.1% 61.9% 57.6%   43.4% 33.2% 33.2%
AK At least partial immunity 56.4% of population >18 immunized Global data differs from sources, timing   56.9% At least partial immunity as % population Best 70.2% vs 60% adult herd immunity* China NA ME   56.9% Full immunity as % population Middle WI 57.2% 44.5%   70.2% Vs 60% adult herd immunity* VT NH   60.1% 57.2% 44.5% 56.1%   61.9% 57.6% 39.6% 43.4% 33.2%   WA ID MT ND MN IL MI   F50.0% F50.0% F2.9% F3.4% F4.6% F1.6%
AK At least partial immunity as % population Best 13.8% previously tested positive 70.2% vs 60% adult herd immunity* China NA ME   56.9% 42.9% 37.0% Full immunity as % population Middle WI 57.2% 44.5%   Worst Wi 50.3% 47.3% 39.6% VT NH   64.5% 56.1% 61.9% 57.6% 43.4% 33.2%   WA ID MT ND MN IL MI   F5.0% 41.9% F1.0% F2.2% F3.4% F1.5%
56.9% as % population To.2% vs 60% adult herd immunity* 60.1%   42.9% Full immunity Middle 44.5%   37.0% Worst Wi 57.2%   Worst Wi 50.3% 64.5% 56.1%   61.9% 57.6% 39.6% 43.4% 33.2%   WA ID MT ND MN IL Mi   F5.0% F5.0% F5.0% F5.0% F5.6% F5.6%
42.9% Full immunity as % population Middle 57.2%   WI 44.5% 44.5%   Worst 50.3% 64.5% 56.1%   61.9% 57.6% 39.6% 43.4% 33.2%   WA ID MT ND MN IL MI   F5.0% 41.2% 50.0% 52.9% 52.4% 54.6% 51.5%
37.0%   as % population   VII Under   44.5%     Wi   50.3%   64.5%   56.1%     47.3%   39.6%   43.4%   33.2%     WA   ID   MT   ND   MN   IL   MI     F5.0%   41.2%   F0.0%   F2.8%   F3.4%   F1.5%
Wi   Sold Sector   Vi   NH     50.3%   64.5%   56.1%     47.3%   61.9%   57.6%     39.6%   43.4%   33.2%     WA   ID   MT   ND   MI     F5.0%   F3.4%   F3.2%   F3.4%
50.3%   64.5%   56.1%     47.3%   61.9%   57.6%     39.6%   43.4%   33.2%     WA   ID   MT   ND   MI     F5.0%   F2.9%   F2.9%   F2.4%
47.3%   01.5%   37.0%     39.6%   43.4%   33.2%     WA   ID   MT   ND   MI   NY   MA     E5.0%   51.0%   52.9%   52.9%   52.4%   54.6%   51.5%
WA   ID   MT   ND   MN   IL   MI   NY   MA     EE 0%   44.2%   E1 0%   45.2%   E0 0%   E2 0%   E2 0%   E2 0%   E1 0%   61 E9
EE 00/ 14 20/ E1 09/ 1E 20/ E2 00/ E2 00/ E2 10/ E4 60/ E1 E9/
JJ.U 70 44.5 70 JI.U 70 4J.S 70 JU.U 70 JJ.O 70 JJ.U 70
50.0% 35.0% 42.1% 40.1% 49.6% 49.1% 44.6% 50.3% 60.6%
37.0%   29.1%   34.8%   34.4%   38.8%   34.2%   36.3%   39.9%   43.0%
OR NV WY SD IA IN OH PA NJ CT RI
53.1%   45.5%   45.2%   54.6%   49.9%   45.3%   49.7%   56.8%   56.5%   60.5%   63.7%
48.5%   41.5%   34.8%   45.6%   45.8%   38.1%   41.9%   52.7%   54.5%   57.6%   55.2%
35.8% 31.9% 29.4% 39.7% 38.6% 30.4% 35.9% 36.4% 41.5% 45.0% 41.7%
50.5% 45.0% 53.0% 50.5% 47.2% 48.5% 43.8% 53.7% 56.2% 57.3%
35 5% <b>26 3%</b> 38 3% 38 0% 30 9% 34 6% 32 0% 37 7% 39 1% 37 2%
AZ NM KS AR TN NC SC DC
51.4% 53.5% 51.2% 47.1% 44.1% 52.6% 48.6% 68.6%
42.5% <b>53.2%</b> 43.8% <b>36.8% 35.9%</b> 40.6% <b>38.0% 51.6%</b>
<b>31.9% 41.9% 35.1% 27.9% 28.0% 32.7% 30.3% 35.2%</b>
OK LA MS AL GA
51.1% 42.9% 44.6% 46.3% 49.3%
39.5% 33.5% 32.0% 33.8% 36.6%
31.5% <u>28.8% <u>25.1%</u> <u>26.0%</u> <u>27.8%</u></u>
<b>58.8%</b>
40.8% As of May 10 33.2%

# Rolling out the vaccines in the US 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

# F.D.A. Authorizes Pfizer-BioNTech Vaccine for Children 12 to 15

Apoorva Mandavilli *New York Times* May 10, 2021

## Fauci says wearing masks may eventually become 'seasonal'

Mark Moore *New York Post* May 9, 2021

### WORLD WAR FLU China 'probed WEAPONISING coronaviruses five years before Covid outbreak & predicted WW3 fought with bio-weapons'

Henry Holloway *The Sun* May 7, 2021

Fauci Says 'No Doubt' U.S. Has Undercounted Covid Deaths

Ros Krasny and Tony Czuczka *Bloomberg* May 9, 2021

## Meme of the day



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* 

Source: Johns Hopkins, Trend Macro 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



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: <u>Covid Act Now</u>, 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





Source: Johns Hopkins, TrendMacro calculations



Source: Johns Hopkins, TrendMacro calculations

## Impact in Africa, continued

