



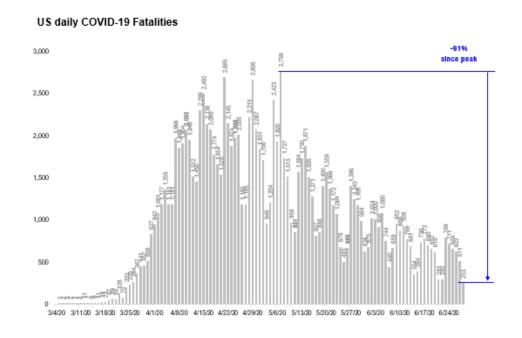
COVID-19 UPDATE: New HIGH in cases and New LOW in deaths. As states 'whack-a-mole' with COVID-19 in F-CAT, deaths far lower than NYC/NY. NYC analog suggests peak within 2 weeks

THIS MESSAGE IS BEING SENT SOLELY TO CLIENTS OF FS INSIGHT

While there were many alarming COVID-19 'headlines' over the weekend, noting 'record case' numbers, daily US deaths attributed to COVID-19 fell to a new low of 253, besting the prior record low of 292 on 6/23/2020 and total deaths are down 91% from the peak.

#4: US Daily New Fatalities...

fundstrat



Source: Fundstrat, COVID-19 Tracking Project, State Department of Health

6/28/2020

5



So, while case numbers suggest an uncontained and rapidly transmitting disease (confirmed cases soared to >45,000 Friday), the human tragedy has a diminishing toll. Still, Multiple states are playing a game of Corona 'whack-a-mole' as confirmed cases have risen. And the situational picture is not entirely clear.

- Is this due to general economic opening since Memorial Day?
- Is this due to the >350 nationwide protests (we believe a major factor)?
- Why is >40% of incremental cases Latino Hispanic?



Source: internet

Generally, the newly infected are younger and hence, hospitalizations and deaths are not rising to the same degree as cases. And medical treatment regimens and general preparedness is much better as well, so there is an overall picture around Healthcare.

FS^{INSIGHT} | www.fsinsight.com



Interestingly, the "course correction" pursued by most states is the same -- "shut down" bars. California is the latest state, issuing this edict last night. Already, Texas and Florida have taken similar actions. Bars make a convenient target since packed crowds plus reduced preparedness (alcohol) and the easy chance for COVID-19 transmission between patrons. I worked as a bartender while an undergrad (Penn Catering and also at the newly opened, back in early 90s, Wharton Executive MBA center) and when bars got busy, and particularly later in the evening, glasses were cleaned in a more expeditious manner (aka dunk in bleach water, vs dishwashing).



State of California— Health and Human Services Agency California Department of Public Health



June 28, 2020

TO: Counties on the County Monitoring List

SUBJECT: Proposal for Selective Sector Closing of Bars in Counties on the

County Monitoring List

Proposal for Selective Sector Closing of Bars in Counties on the County Monitoring List

Background

https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/Bar-Closure-Guidance.aspx



But is it bars? I do not know. But it seems like policymakers feel this is one place they all seem to agree on course correcting.

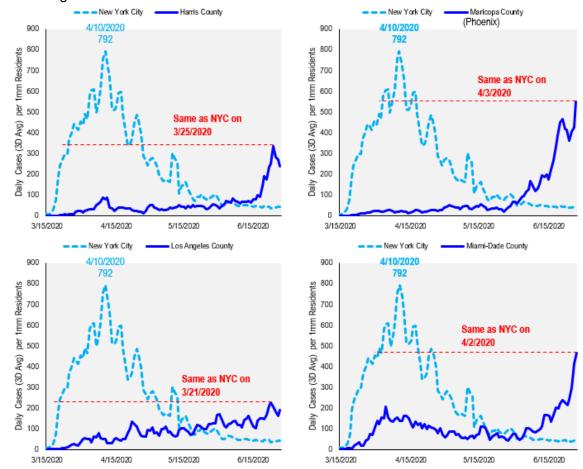
There are multiple states which we can cite as examples of 'safely opening' including: NY, NJ, CT, PA, MA, MD, MN, Michigan, RI, VT, IN, etc. So solely "opening" is not the problem. COVID-19 is a complex and novel disease and is constantly surprising conventional views (ours included).

The biggest breakouts are in F-CAT --> Florida, CA, AZ and Texas. If NYC is analog, peak <2 weeks away...

Additionally, we also know the biggest breakout of new cases is concentrated in 4 states. And we showed the daily case growth (daily cases per 1mm residents) in the hardest county of each state and compared this trajectory to NYC. NYC peaked in daily cases on 4/2/2020 (stock market bottomed on 3/23/2020, or 11 days before that).

Here is what is interesting:

- Phoenix + Miami daily case gains are about where NYC was on 4/2 or 4/3, or <1 week to peak to match NYC
- Houston is where NYC was on 3/25/2020 (or 11 days)
- Los Angeles is where NYC was on 3/21/2020

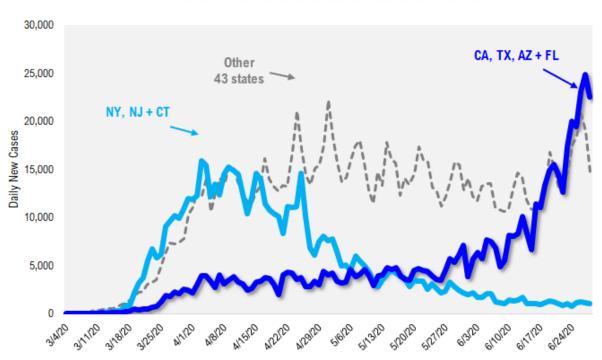




Source: COVID-19 Tracking Project

NYC was the epicenter of the COVID-19 crisis and was the worst hit of any of the major top 25 cities in the US (based on cases per 1mm residents). So, comparing these F-CAT largest counties to NYC is almost a worst-case scenario. The point of this is that these 4 states, F-CAT are not months away from reaching the same type of "breaking point" of COVID-19 to match NYC. These counties are experiencing daily case gains that mirror what NYC saw in its darkest days of late-March/early-April. Of course, the "half-empty" argument would be that these counties see case growth blow past NYC -- we do not expect this.

Not a second wave...



Source: COVID-19 Tracking Project

STRATEGY: Retail investor is still underweight equities...

And while many are inclined to become "full blown" bearish again, we think the divergence in healthcare in COVID-19 (cases vs deaths) and the trajectories mirroring NYC near its peak tells us the "break point" is closer --breakpoint as in the cases begin to slow. And we also believe investor positioning remains cautious.

In fact, in the latest JPMorgan Flows and Liquidity, Mr. Panizgirtzolou makes a point that we have been writing about for some time. That the older retail investor, who controls 76% of the \$100T of US household net worth, has not been buying stocks. But he believes that these retail investors will rotate out of bonds into stocks in 2H2020 (See below).

This is obviously bullish for stocks.



J.P.Morgan

Flows & Liquidity

Equity fund buying should strengthen into the second half

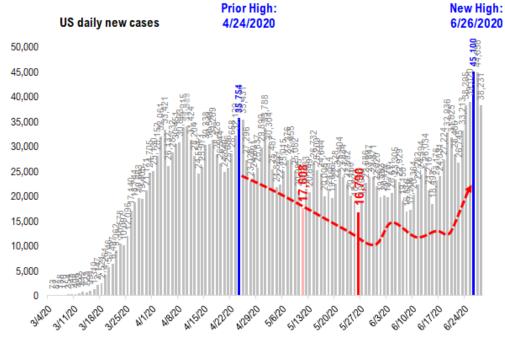
- Since June, investors started withdrawing their cash from government money funds consistent with the idea that some of the previously accumulated liquidity due to risk reduction, has started being deployed into non-cash assets such as bonds and equities.
- Cumulatively, around \$1.2tr had entered US government money funds between mid-February and mid-May.
- So far it appears that bonds have been the main beneficiaries of this liquidity deployment.
- The weaker flow picture in equity funds suggests that the <u>older cohorts</u>
 of US retail investors has been so far more cautious on equities as they
 have preferred to deploy their excess liquidity to bond funds to perhaps
 take advantage of the value that still exists in credit.
- Instead millennials have been more bullish on equities, preferring to deploy their excess liquidity into individual equities via retail brokers such as Robinhood rather than via equity funds.
- Going forward we believe that the equity buying by retail investors will likely strengthen as the older cohorts which have so far preferred to extract any remaining value in credit via buying corporate bond funds, will switch later in the year into equity funds once credit spreads normalize and value gets exhausted in credit.
- And retail investors' positioning backdrop favors such a switch as the share of equities in the total fund universe remains rather low relative to recent years.
- G4 central bank absorption of government duration set to slow significantly in 2H.

Source: JPMorgan



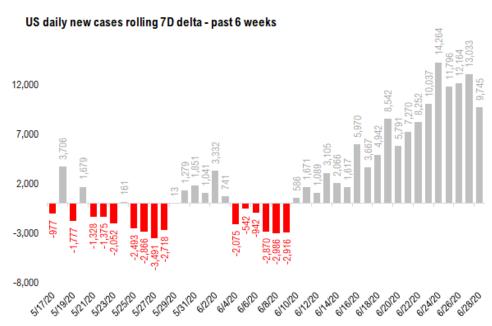
POINT #1: Daily cases surge >45,000 over weekend but ease to 38,231 on Sunday...

This is one of those half-full vs half-empty case updates as the Sunday tally is 38,231, which is an exceptionally high tally for COVID-19 cases, but it is meaningfully lower than the >45,000 seen in the past few days.



Source: COVID-19 Tracking Project

We can see this improvement of case growth when comparing daily reported cases vs 7D ago. NJ made a strange 1-time adjustment for probable deaths/cases, so it distorts these slightly. But as you can see, the daily confirmed cases is rising at a slower rate.



Source: COVID-19 Tracking Project



For looking at the state-level daily increases, we are comparing these vs 2D ago (Friday), so one can get a better sense for trends in the past few days:

6 states with sizable increases:

Nevada	821 vs	381	(Fri) +440
Arizona	3,857 vs	3,518	+339
Georgia	2,225 vs	1,900	+325
Delaware	135 vs	37	+98
South Carolina	1,381 vs	1,313	+68
Washington	549 vs	498	+51
Total 6 states			+1,321

6 states had a sizable decline

Alabama	358 vs	977 (Fri) -619
Florida	8,530 vs 8	3,942	-412
Texas	5,357 vs	5,707	-350
Illinois	646 vs	910	-264
Utah	472 vs	676	-204
Mississippi	361 vs	550	-189
Total 6 states			-2.038



Daily Case Increases (by State) (06/28)

% total new cases (state cases/ total US cases) % total US pop (state population/ total US population)

Last 3-day trend growth rates

4 states (RI, PA, OR, KS) didn't report stats over the weekena 3 states (TN, LA, ID) didn't report stats on Sunday...

3 states (TN, LA, ID) didn't report stats on Sunday					
		6/26/20	6/27/20	6/28/20	
	United States	45,100	44,858	38,231	-6,627
	States:				
1	Florida	8,942	9,585	8,530	
2	Texas	5,707	5,747	5,357	
3	California	4,890	5,972	4,810	
4	Arizona	3,518	3,503	3,857	
5	Georgia	1,900	1,990	2,225	
6	North Carolina	1,635	1,719	1,605	
7	South Carolina	1,313	1,604	1,381	
8	Ohio	987	817	854	
9	Nevada	381	1,099	821	
10	Illinois	910	786	646	
11	New York	805	703	616	
12	Washington	498	488	549	
13	Minnesota	493	417	516	
14	Arkansas	678	570	508	
15 16	Virginia	624	677	489	
17	lowa	489	326	477	
18	Utah Wisconsin	676 520	578 539	472 457	
19	Wississippi	550	465	361	
20	Alabama	977	900	358	
21	Indiana	485	435	355	
22	Maryland	338	335	327	
23	Missouri	493	347	314	
24	New Jersey	388	289	309	
25	Oklahoma	395	299	302	
26	Colorado	317	226	285	
27	Michigan	389	314	252	
28	Massachusetts	233	373	224	
29	New Mexico	216	211	190	
30	Delaware	37	74	135	<higher< td=""></higher<>
31	Nebraska	178	251	124	
32	Connecticut	65	147	97	
33	Kentucky	242	308	65	
34	West Virginia	51	49	56	
35	South Dakota	56	91	55	
36 37	North Dakota Maine	28	37	37	
38	District of Columbia	32 26	52 31	37 32	
39	New Hampshire	33	46	30	
40	Alaska	20	18		<higher< td=""></higher<>
41	Hawaii	16	6		<-higher
42	Wyoming	42	24	25	
43	Puerto Rico	4	19	22	
44	Montana	26	23	11	
45	Vermont	7	2	2	
46	U.S. Virgin Islands	1	0	0	
47	Tennessee	1,410	728	0	
48	Rhode Island	21	0	0	
49	Pennsylvania	600	0	0	
50	Oregon	250	0	0	
51	Northern Mariana Islands	0	0		#DIV/0!
52	Louisiana	1,354	1,467	0	
53 54	Kansas Idaho	568	171	0	
55	Idaho Guam	283 3	171 0	0	
56	American Samoa	0	0		
30	PHINOIDALI GALLIDA	U	U	U	

Source: COVID-19 Tracking Project

FS^{INSIGHT} | www.fsinsight.com | Page 9



POINT #2: Comparing F-CAT mortality vs NYC highlights major divergence

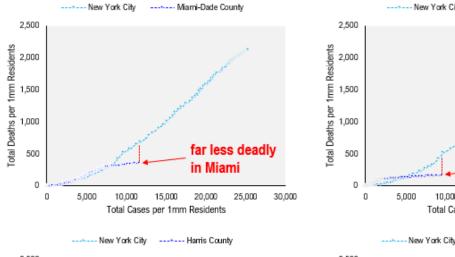
We have talked about for some time about the curious divergence between the soaring case figures reported by F-CAT and the muted deaths, and more muted hospitalizations. And while policymakers attribute this to younger infected, along with better treatment regimens, many observers from the NYC/East Coast area view what is happening with alarm.

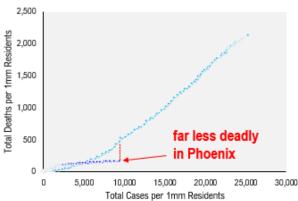
But to really underscore and compare the case growth in these F-CAT areas with NY/NYC, we made 4 scatters:

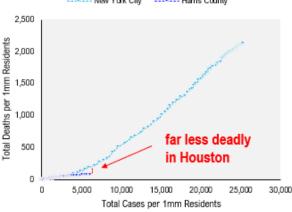
- X-axis is total cases per 1mm residents
- Y-axis is total deaths per 1mm residents
- we took 4 largest counties in F-CAT and compared to NYC

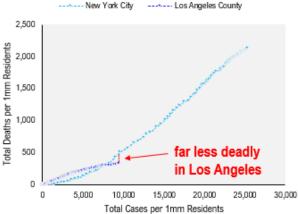
The reason to compare to NYC is to see whether the level of mortality is higher or lower than a comparable point in the case curve vs NYC. If the F-CAT plots (dark blue) are below NYC (light blue), then that respective county is seeing fewer deaths vs NYC at the same point.

- in 4 of 4 cases, we see the level of deaths seen at each point in case prevalence is FAR LOWER than NYC.









Source: COVID-19 Tracking Project



As to why, we are not entirely sure. Was NYC death rates higher due to nursing homes? Maybe. Are healthcare systems better prepared? Yes.

Even looking at cumulative mortality rate, we see huge differences:

- NY/NJ/CT are 6.3%, 7.7% and 9.2%
- F-CAT is: 2.5%, 2.8%, 2.1% and 1.6%, respectively

FAR FAR LOWER

FS^{INSIGHT} | www.fsinsight.com | Page 11



Cumulative Death Rate (by State) (06/28)

% cumulative deaths/ cumulative cases

Sorted Last 3-day trend death rates

					% US
		6/26/20	6/27/20	6/28/20	GDP
	United States	4.8%	4.7%	4.7%	100%
	States:				
1	Michigan	9.8%	9.8%	9.7%	3%
2	Puerto Rico	9.5%	9.5%	9.4%	0%
→ 3	Connecticut	9.3%	9.2%	9.2%	1%
4	Pennsylvania	7.8%	7.8%	7.8%	4%
→ 5	New Jersey	7.7%	7.7%	7.7%	3%
6	Massachusetts	7.4%	7.4%	7.4%	3%
7	U.S. Virgin Islands	7.4%	7.4%	7.4%	0%
8	Northern Mariana Islands	6.7%	6.7%	6.7%	0%
9	New Hampshire	6.4%	6.4%	6.4%	0%
→ 10	New York	6.3%	6.3%	6.3%	8%
11	Indiana	5.9%	5.9%	5.8%	2%
12	Ohio	5.7%	5.7%	5.6%	3%
13	Rhode Island	5.6%	5.6%	5.6%	0%
14	Louisiana	5.7%	5.5%	5.5%	1%
15	District of Columbia	5.4%	5.4%	5.4%	1%
16	Colorado	5.3%	5.2%	5.2%	2%
17	Illinois	5.0%	5.0%	5.0%	4%
18	Missouri	5.0%	4.9%	4.8%	2%
19	Maryland	4.8%	4.8%	4.7%	2%
20	Vermont	4.7%	4.7%	4.7%	0%
21	Delaware	4.6%	4.6%	4.5%	0%
22	New Mexico	4.3%	4.2%	4.2%	0%
23	Washington	4.3%	4.2%	4.1%	3%
24	Minnesota	4.2%	4.1%	4.1%	2%
25	Mississippi	4.1%	4.1%	4.0%	1%
26	Kentucky	3.7%	3.7%	3.7%	1%
27	Georgia	3.8%	3.7%	3.6%	3%
28	West Virginia	3.4%	3.4%	3.3%	0%
29	Maine	3.3%	3.3%	3.3%	0%
30	Oklahoma	3.1%	3.0%	3.0%	1%
31 32	Nevada	3.3%	3.1%	2.9%	1%
33	Virginia	2.8%	2.8%	2.8% 2.8%	3% 2%
→ 34	Wisconsin California	2.9%	2.8%	2.8%	15%
35	Alabama	2.7%	2.6%	2.6%	1%
36	Oregon	2.6%	2.6%	2.6%	1%
37	Montana	2.7%	2.6%	2.5%	0%
38	North Dakota	2.5%	2.5%	2.5%	0%
→ 39	Florida	2.8%	2.6%	2.5%	5%
40	lowa	2.5%	2.5%	2,5%	1%
41	South Carolina	2.3%	2,2%	2.1%	1%
→ 42	Arizona	2.3%	2.3%	2.1%	2%
43	North Carolina	2.2%	2.2%	2.1%	3%
44	Guam	2.0%	2.0%	2.0%	0%
45	Hawaii	2.0%	2.1%	2.0%	0%
46	Kansas	2.0%	2.0%	2.0%	1%
47	Idaho	1.7%	1.7%	1.7%	0%
→ 48	Texas	1.7%	1.7%	1.6%	9%
49	Alaska	1.7%	1.6%	1.6%	0%
50	Tennessee	1.5%	1.5%	1.5%	2%
51	Nebraska	1.4%	1.4%	1.4%	1%
52	Wyoming	1.5%	1.4%	1.4%	0%
53	South Dakota	1.3%	1.4%	1.4%	0%
54	Arkansas	1.3%	1.3%	1.3%	1%
55	Utah	0.8%	0.8%	0.8%	1%
56	American Samoa	_	-	_	0%

Source: COVID-19 Tracking Project

FS^{INSIGHT} | www.fsinsight.com | Page 12

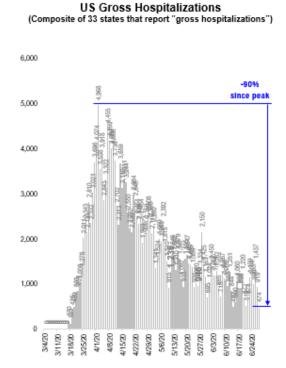


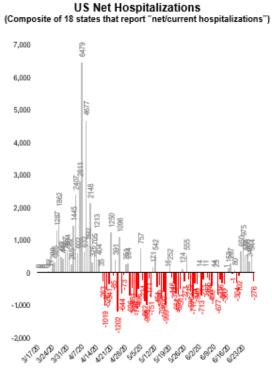
POINT #3: Overall Hospitalization and Death trends in USA are improving...

Similarly, the hospitalization data for the US overall is encouraging. As you can see, both gross and net hospitalizations for USA, in aggregate, fell in the past few days.

#3: US Daily Hospitalizations...(aggregated by data type)

fundstrat





Source: Fundstrat, COVID-19 Tracking Project, State Department of Health

6/28/2020

 $\mathsf{FS}^{\mathsf{INSIGHT}} \mid \mathsf{www.fsinsight.com}$

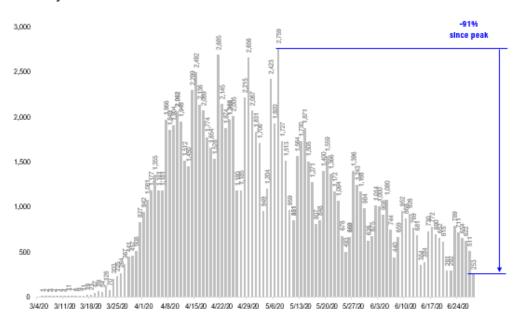


And as we mentioned above, USA daily deaths fell to a new low of 259, below the prior record low of 292 on 6/23/2020. And this is down 91% from its peak.

#4: US Daily New Fatalities...

fundstrat

US daily COVID-19 Fatalities



Source: Fundatival, COVID-19 Tracking Project, State Department of Health

6/28/2020

5



Disclosures

This research is for the clients of FS Insight only. For additional information, please contact your sales representative or FS Insight at http://www.fsinsight.com/.

Conflicts of Interest

This research contains the views, opinions and recommendations of FS Insight. At the time of publication of this report, FS Insight does not know of, or have reason to know of any material conflicts of interest.

General Disclosures

FS Insight is an independent research company and is not a registered investment advisor and is not acting as a broker dealer under any federal or state securities laws.

FS Insight is a member of IRC Securities' Research Prime Services Platform. IRC Securities is a FINRA registered broker-dealer that is focused on supporting the independent research industry. Certain personnel of FS Insight (i.e. Research Analysts) are registered representatives of IRC Securities, a FINRA member firm registered as a broker-dealer with the Securities and Exchange Commission and certain state securities regulators. As registered representatives and independent contractors of IRC Securities, such personnel may receive commissions paid to or shared with IRC Securities for transactions placed by FS Insight clients directly with IRC Securities or with securities firms that may share commissions with IRC Securities in accordance with applicable SEC and FINRA requirements. IRC Securities does not distribute the research of FS Insight, which is available to select institutional clients that have engaged FS Insight.

As registered representatives of IRC Securities our analysts must follow IRC Securities' Written Supervisory Procedures. Notable compliance policies include (1) prohibition of insider trading or the facilitation thereof, (2) maintaining client confidentiality, (3) archival of electronic communications, and (4) appropriate use of electronic communications, amongst other compliance related policies.

FS Insight does not have the same conflicts that traditional sell-side research organizations have because FS Insight (1) does not conduct any investment banking activities, (2) does not manage any investment funds, and (3) our clients are only institutional investors.

This research is for the clients of FS Insight only. Additional information is available upon request. Information has been obtained from sources believed to be reliable, but FS Insight does not warrant its completeness or accuracy except with respect to any disclosures relative to FS Insight and the analyst's involvement (if any) with any of the subject companies of the research. All pricing is as of the market close for the securities discussed, unless otherwise stated. Opinions and estimates constitute our judgment as of the date of this material and are subject to change without notice. Past performance is not indicative of future results. This material is not intended as an offer or solicitation for the purchase or sale of any financial instrument. The opinions and recommendations herein do not take into account individual client circumstances, risk tolerance, objectives, or needs and are not intended as recommendations of particular securities, financial instruments or strategies. The recipient of this report must make its own independent decision regarding any securities or financial instruments mentioned herein. Except in circumstances where FS Insight expressly agrees otherwise in writing, FS Insight is not acting as a municipal advisor and the opinions or views contained herein are not intended to be, and do not constitute, advice, including within the meaning of Section 15B of the Securities Exchange Act of 1934. All research reports are disseminated and available to all clients simultaneously through electronic publication to our internal client website, fsinsight.com. Not all research content is redistributed to our clients or made available to third-party aggregators or the media. Please contact your sales representative if you would like to receive any of our research publications.

The Yellow Thunderlight over the "BLAST" logo is designed by rawpixel.com / cited from Freepik.

Copyright 2020 FS Insight LLC. All rights reserved. No part of this material may be reprinted, sold or redistributed without the prior written consent of FS Insight LLC.