



COVID-19 UPDATE: Weekend takeaway --> "it could have been worse" = "half-full" and positivity rate is plateauing

THIS MESSAGE IS BEING SENT SOLELY TO CLIENTS OF FS INSIGHT

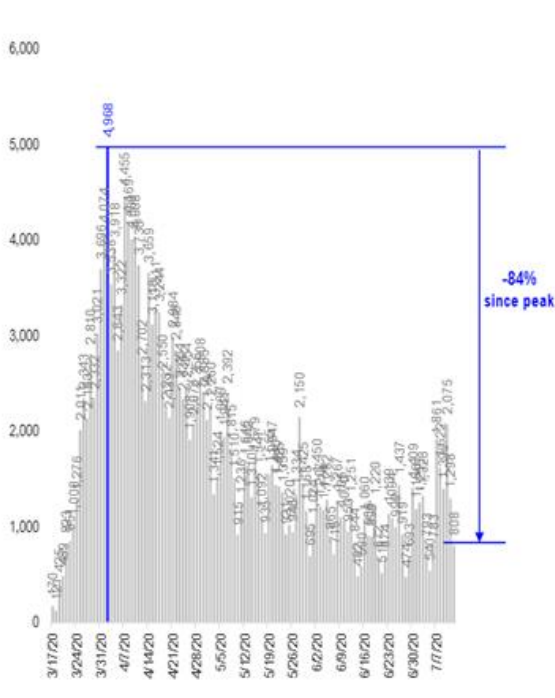
The data over the weekend highlights the continuing rapid spread of COVID-19 across much of the US as US cases remained >60,000 for much of the weekend (testing did reach an all-time high of 823,000) but the "half-full" side is that reported deaths eased with 476 deaths reported on Sunday. This highlights the dilemma facing both policy makers and financial markets.

- *uncontained rapid spread of COVID-19 risks eventually reaching the "vulnerable" population*
- *but there is offset of tremendous economic and social carnage from closing economies.*

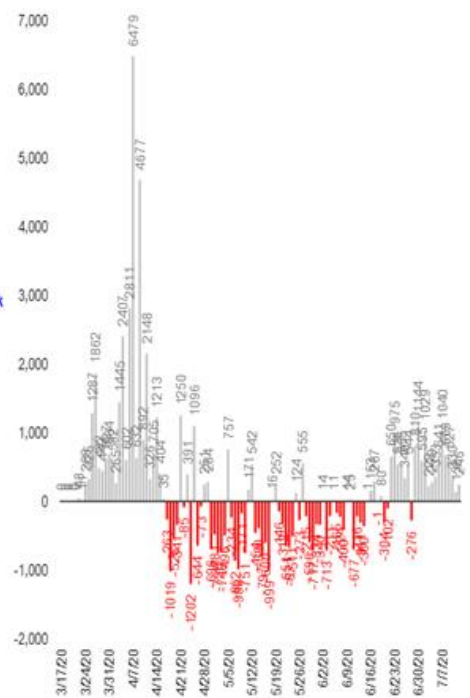
The resilience in equity markets in the past week and Sunday evening show that markets have been bracing for a more dire path regarding COVID-19. In fact, as we discuss below, positioning data shows how abruptly hedge funds switched to bearish positioning in June. And coupled with high levels of mutual fund cash, balanced funds have the highest cash balances (% of AUM) since before 2009. Thus, the fact "it could have been worse" = risk-on.

The hospitalizations and the daily deaths also eased over the weekend. Notice how much both "gross hospitalizations" and "net hospitalizations" fell over the weekend. While I am not positive on the following, admissions to hospitals should not be affected by the "weekend" effect, meaning, a drop over the weekend is a drop. So, this is encouraging.

US Gross Hospitalizations
(Composite of 33 states that report "gross hospitalizations")



US Net Hospitalizations
(Composite of 18 states that report "net/current hospitalizations")

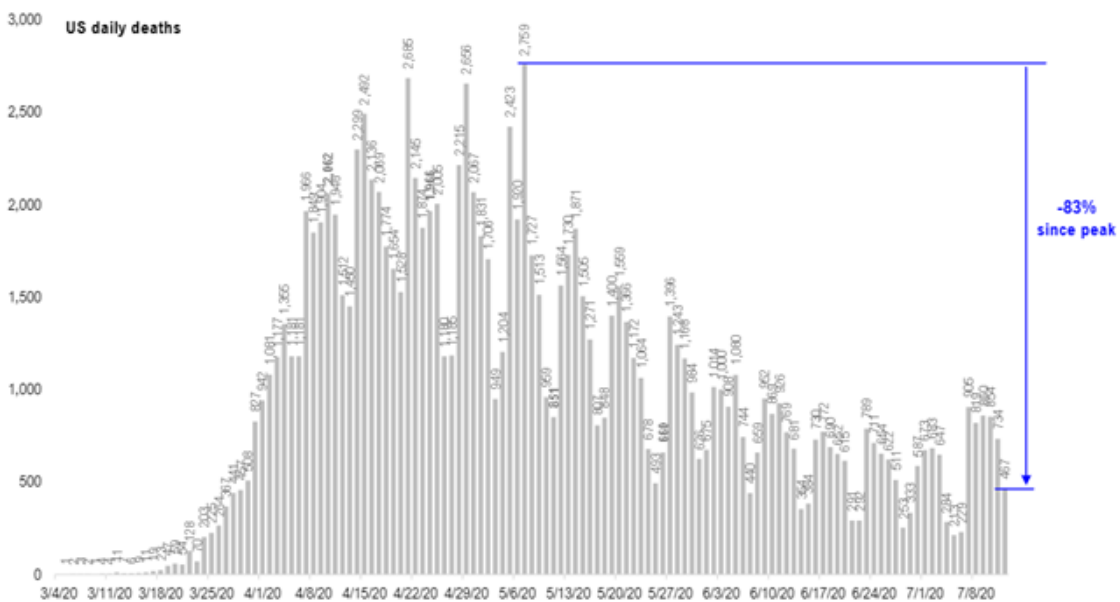


Source: Fundstrat, COVID-19 Tracking Project, State Department of Health.

7/12/2020 4

Source: COVID-19 Tracking Project

US daily COVID-19 Fatalities



Source: COVID-19 Tracking Project

Still, there is a tragedy unfolding across the US. Even the mayor of Houston mentioned that in retrospect, perhaps, the opening was done too liberally. In his words:

“We have to acknowledge the fact that we opened too quickly, too soon,” said Turner. “We have to acknowledge the fact that the numbers are continuing to rise. We have to recognize the fact that not everybody is going to put on this mask. Let’s just be real, even with the requirement. Knowing all of that and knowing what works, you’ve got to recalibrate.”



<https://twitter.com/carlquintanilla/status/1282373841776451585>

But the good news is that every state facing an outbreak is indeed "course correcting." Goldman Sachs economics team posted a useful table highlighting actions taken by states over the past few weeks. As you can see, every state has responded and more intense measures were taken by states facing greater outbreaks.

Exhibit 1: Many States Have Recently Paused Reopening or Implemented Expanded Mask Mandates

Policies Implemented Since the Week of June 22
• Arizona: executive order requiring bars, gyms, and movie theaters to shut down.
• California: 19 counties required to shut down indoor businesses for three weeks.
• Texas: closed bars, prohibited elective surgeries, statewide mask order.
• Florida, Michigan, Delaware, Texas: bar closures.
• California, Washington, Nevada, North Carolina, Oregon, Kansas, Texas, West Virginia, Pennsylvania, Utah: new or expanded mask mandates.
• Arkansas, Connecticut, Delaware, Idaho, Louisiana, Michigan, Nevada, New Jersey, New Mexico, New York, North Carolina, Ohio, Washington: paused reopening.

Source: Goldman Sachs Global Investment Research

Dr. Scott Gottlieb says Southern states cases peak next 2-3 weeks...

Dr. Scott Gottlieb was on Face the Nation Sunday (thanks for the heads up @ApeGator) and in his interview, he mentioned that some "models" forecast cases in the Southern states to peak in the next 2 to 3 weeks. In his interview, he continues to distinguish how some regions see a massive spike, ala NYC, vs regions where cases remain elevated for weeks (Brazil). But his observation is relevant to market's thinking. If F-CAT peak within the next 2-3 weeks, markets will become a lot more comfortable about the path of the COVID-19 disease.

FACE NATION Face The Nation ✓
@FaceTheNation

.@ScottGottliebMD predicts southern states are likely to see cases peak in the next two to three weeks, but warns of "an extended plateau" following that.

He tells @margbrennan a lack of a national strategy has created unique regional circumstances

AMERICA IN CRISIS
FACE NATION
0:47 | 60.6K views

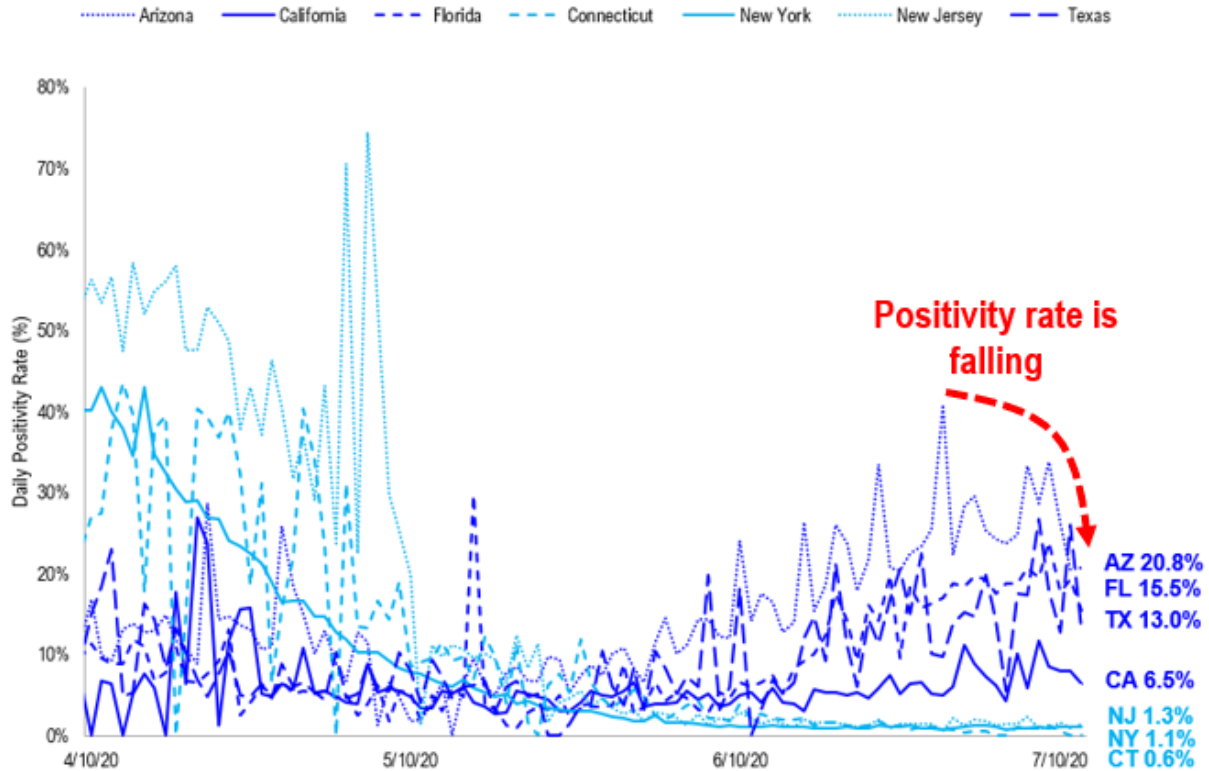
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<https://twitter.com/FaceTheNation/status/1282335730472189954>

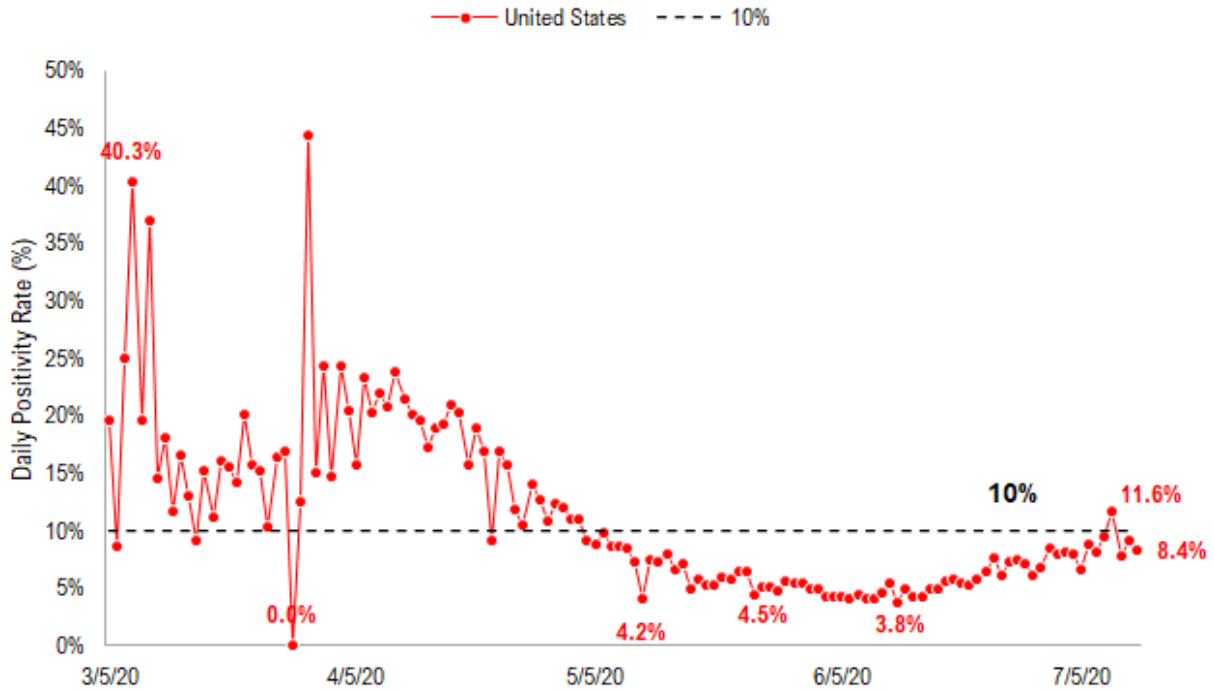
F-CAT positivity rate is actually starting to plateau...

A potentially encouraging development over the weekend (despite record rises in testing) is the positivity rates are plateauing and/or falling in the 4 hardest hit states: FL, CA, AZ, TX, or F-CAT. As this chart shows, even AZ has managed to get positivity rates down to ~20% from nearly 30% last week. 10% is considered an acceptable level of positivity rate, so getting this figure to fall is a necessary development.



Source: COVID-19 Tracking Project

And for the US overall, it fell below 10% again for the past 3 days. So, despite this massive surge in cases over the past few days, there is at least a sense that testing is doing a good job of detecting this spread. And by detecting the spread, this prepares policymakers to be equipped to make an informed (and hopefully useful) decision.



Source: COVID-19 Tracking Project

In our view, the daily death statistics are the most important metric to watch. And as long as deaths remain trending flat/lower and now with states set to see a peak in the next 2-3 weeks, this surely feels like risk-on makes sense

STRATEGY: Cautious positioning even as S&P 500 futures rise Sunday evening (closing in on June 8, highs)

Despite record case figures reported over the weekend, the S&P 500 futures (ESA BBG <<GO>>) are up +12 points (as of Sunday 7 PM) to 3,195 and approaching within 25 points of the June 8, 2020 highs of 3,220. This is the curiosity of markets. Despite the fact COVID-19 is spreading at an uncontained rate, and that daily deaths are starting to curl up (well behind the case surge), equity markets have not weakened sharply. Instead, we are approaching the June 8, 2020 highs and potentially could take them out.



Investor positioning remains cautious...

The equity markets took on a different character in June. Rather than the relentless rally from late March to April to May, stocks stalled during June. JPMorgan's latest Flows and Liquidity report, by Nikolaos Panigirtzoglou, really highlights how cautious investor positioning is at the moment:

- Implied equity beta of Equity/LS hedge funds was negative in June (-0.10) vs +0.75 in May
- Implied equity beta of macro HF (ex-CTA) was -0.05 in June vs +0.35 in May
- Both equity and hybrid mutual funds sitting on elevated cash balance (hybrid is the highest since pre-2009)

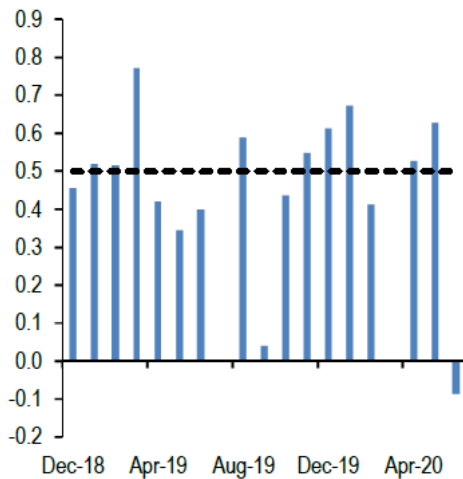
Equity L/S HF have not had negative beta to equities since prior to 2018... even during Feb/March crash, equity beta was positive

Based on analysis by JPMorgan, equity L/S hf did not have negative beta for more than 3 years and even during the Feb/March crash, equity beta was positive.

- so the negative positioning in June is quite unusual

Figure 1: Implied equity beta of monthly reporting Equity Long/Short hedge funds

Proxied by the ratio of the monthly performance of HFRI Asset-Weighted Equity Hedge fund index divided by the monthly performance of MSCI AC World index.

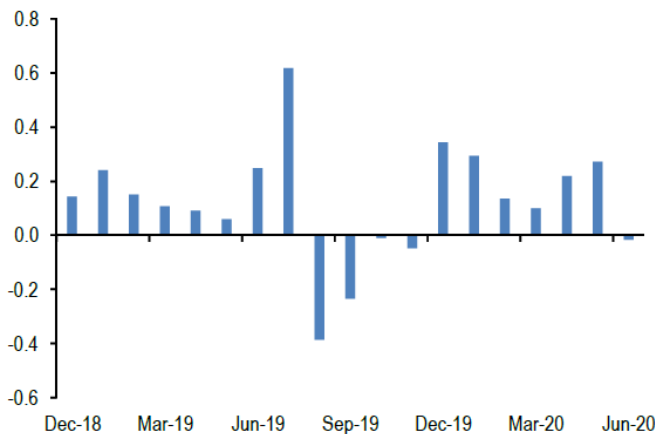


Source: HFR, J.P. Morgan

Similarly, macro HF also became cautiously positioned in the month of June, paring exposure to levels seen in November 2019, shortly before the strong December 2019 equity rally.

Figure 2: Implied equity beta of monthly reporting Macro hedge funds ex CTAs

Proxied by the ratio of the monthly performance of HFRI Macro hedge fund index excluding CTAs divided by the monthly performance of MSCI AC World index



Source: HFR, J.P. Morgan

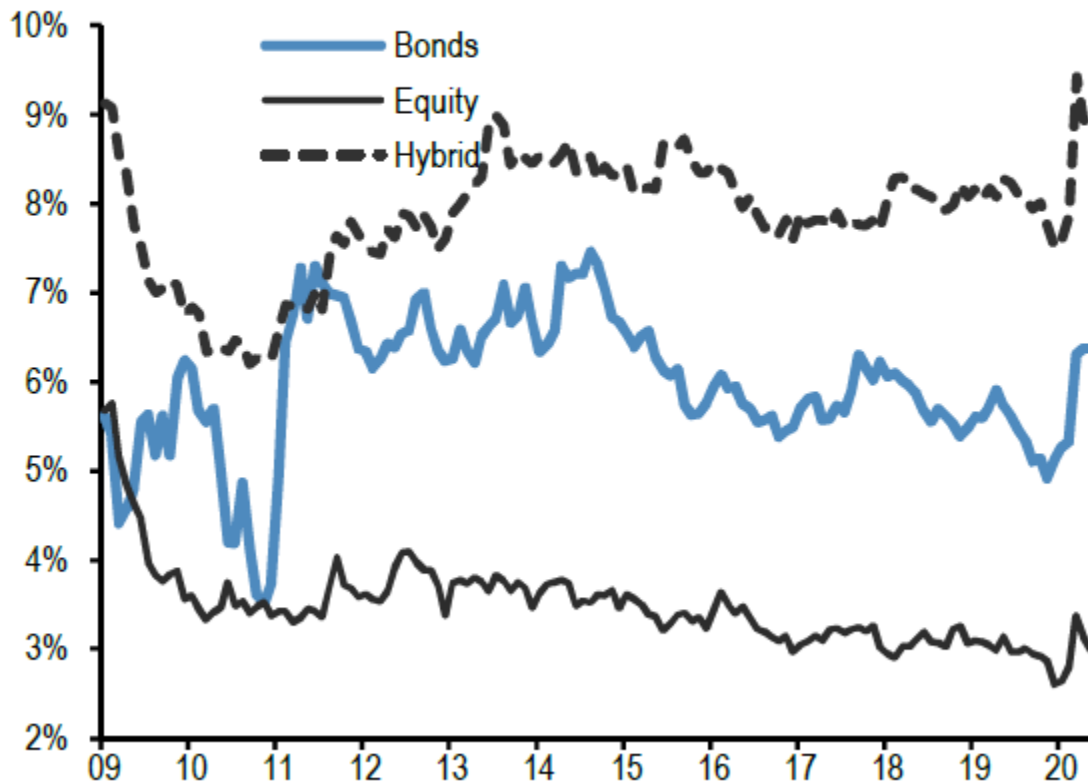
Even mutual funds have elevated cash positions...

I was pretty surprised to see JPMorgan's analysis showing elevated cash positions. Not only did HF become cautious given the worsening of the path for the disease, but Niko's work shows that even mutual funds ended carrying elevated cash positions.

- the cash positions rose sharply in March and have remained pinned high, even as stocks rallied
- hybrid/balanced funds carry more cash (% assets) than any time in the 12 years!!!

Figure 5: Mutual Fund cash balances as a % of total assets

For both US and Euro area domiciled mutual funds. Last obs is for May'20



Source: ICI, ECB, J.P. Morgan

Ultimately, this equities near June highs + high level of cautious positioning = stay OVERWEIGHT EQUITIES

The bottom line, this combination of stocks near highs + cautious positioning = stay overweight stocks. Earnings season starts in 2 weeks. It is going to be lousy earnings, but this has been well telegraphed. And there will be little/no guidance.

That said, we believe stocks have upside drivers. This table below highlights our positive stance over the next 6 months.

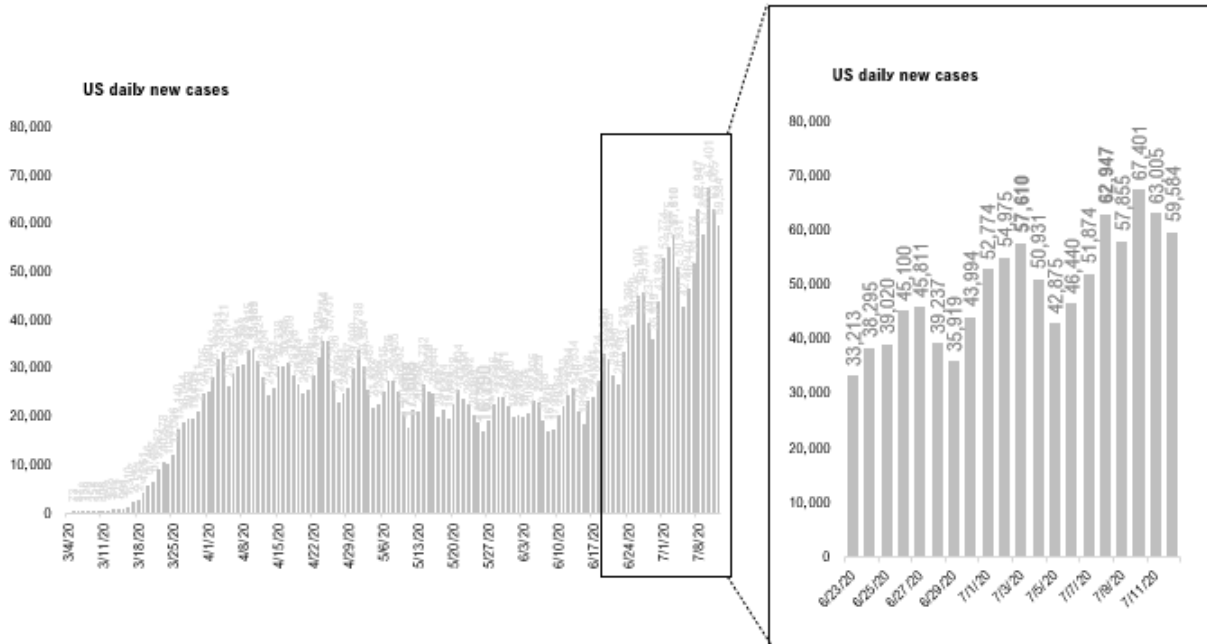
2020: Why stocks will recover

	<u>Description</u>	<u>Impact</u>
Disease	5 th US pandemic since 1900	US recovered every time
Economy bottomed	US economy already bottomed	Stocks bottom <i>before</i> economy bottoms
V-shape	Stocks always V-shaped recovery	S&P 500 could make all-time high in Summer 2020
Cost cutting	Companies cut costs in recession	2021 EPS \$190 or higher
Fed	“whatever it takes”	“don’t fight the Fed”

Source: Fundstrat

POINT #1: US daily cases surpass 67,000 on Friday, and testing >800,000

The case trends over the weekend were bad. The US saw >67,000 cases over the weekend. This reflects continued surge in COVID-19 across much of the US.



Source: COVID-19 Tracking Project

As this table highlights, FL and CA are the biggest contributors to the surge over the weekend. FL in particular reported 15,000 cases. As discussed in the next section, FL also saw testing surge >98,000 or nearly 1/8 of all tests in the US

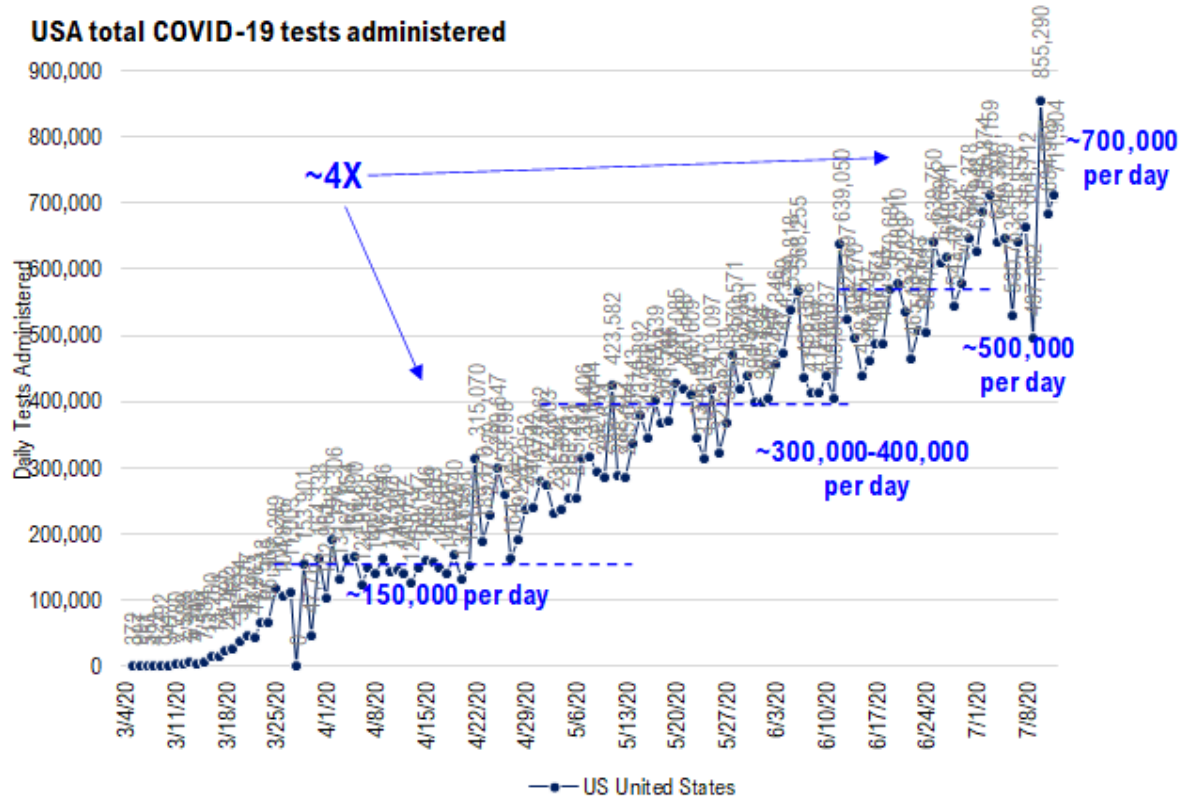
6 states reported big rises in past 3D

Florida	15,300 vs 11,433 (Fri)	+3,867
California	8,460 vs 7,798	+662
Alabama	1,640 vs 1,334	+306
South Carolina	1,949 vs 1,728	+221
Maryland	642 vs 463	+179
Minnesota	710 vs 604	+106
Total 6 states		+5,341

6 states reporting sizable declines in past 3D

Georgia	2,525 vs 4,484 (Fri)	-1,959
Arizona	2,537 vs 4,221	-1,684
Texas	8,196 vs 9,765	-1,569
Louisiana	1,319 vs 2,642	-1,323
Tennessee	954 vs 1,955	-1,001
Illinois	954 vs 1,327	-373
Total		-7,909

Perhaps the "half-full" side of that observation is that total testing surged as well, exceeding 855,000 on Friday.



Source: COVID-19 Tracking Project

Daily Case Increases (by State) (07/12)

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

Sorted
Last 3-day trend growth rates

CT, RI, KS do not report stats over the weekend...
WA didn't report Sunday's stats as of Sunday 9 PM ET...

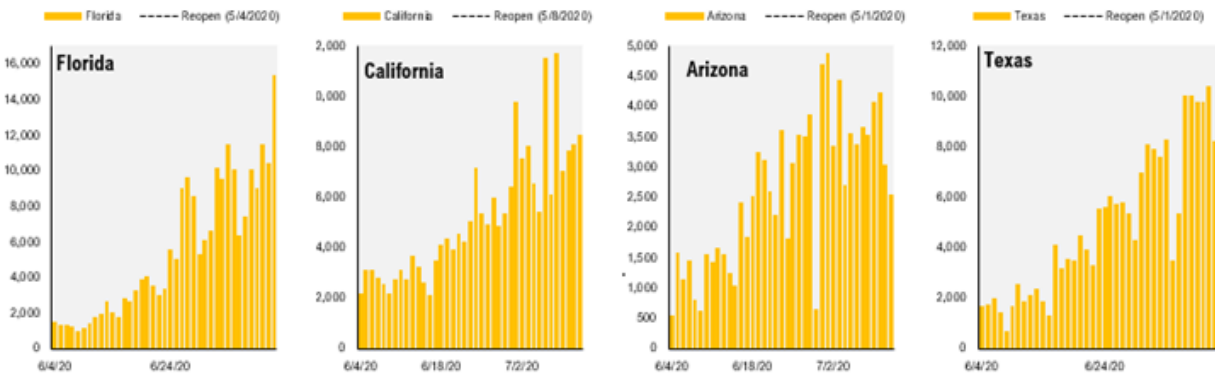
	7/10/20	7/11/20	7/12/20	
United States	67,401	63,005	59,584	-3,421
States:				
1 Florida	11,433	10,360	15,300	<-higher
2 California	7,798	8,047	8,460	
3 Texas	9,765	10,351	8,196	
4 Arizona	4,221	3,038	2,537	
5 Georgia	4,484	3,190	2,525	
6 South Carolina	1,728	2,280	1,949	
7 North Carolina	1,982	2,462	1,908	
8 Alabama	1,334	1,439	1,640	
9 Ohio	1,525	1,358	1,378	
10 Louisiana	2,642	2,167	1,319	
11 Tennessee	1,955	1,460	954	
12 Illinois	1,327	1,195	954	
13 Virginia	943	851	888	
14 Mississippi	1,031	797	868	
15 Nevada	1,004	930	845	
16 Wisconsin	845	926	769	
17 Pennsylvania	1,009	813	725	
18 Minnesota	604	804	710	
19 New York	786	730	677	
20 Maryland	463	557	642	
21 Utah	867	632	629	
22 Indiana	725	779	533	
23 Arkansas	751	1,061	503	
24 Oklahoma	596	687	456	
25 Iowa	744	663	424	
26 Idaho	500	577	397	
27 Michigan	612	653	390	
28 New Jersey	388	331	339	
29 Colorado	666	400	322	
30 Oregon	266	397	319	
31 Missouri	662	472	310	
32 Kentucky	425	451	268	
33 New Mexico	298	224	255	
34 Massachusetts	213	288	199	
35 Nebraska	154	221	174	
36 Puerto Rico	116	84	148	<-higher
37 West Virginia	157	91	133	
38 Alaska	51	63	93	<-higher
39 North Dakota	84	89	91	
40 Montana	127	82	83	
41 Delaware	121	91	61	
42 District of Columbia	64	58	46	
43 South Dakota	65	53	45	
44 New Hampshire	18	33	30	
45 Wyoming	16	49	23	
46 Hawaii	28	41	21	
47 Maine	13	21	19	
48 U.S. Virgin Islands	9	14	14	
49 Vermont	5	6	13	<-higher
50 Northern Mariana Islands	0	0	2	
51 Washington	640	637	0	
52 Rhode Island	69	0	0	
53 Kansas	993	0	0	
54 Guam	1	2	0	
55 Connecticut	78	0	0	
56 American Samoa	0	0	0	

Source: COVID-19 Tracking Project

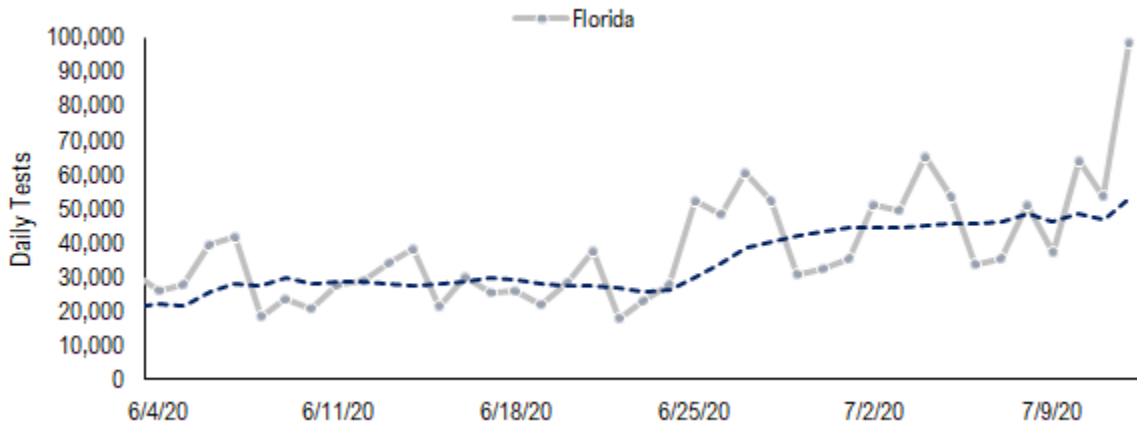
POINT #2: F-CAT: Cases surge in FL, but positivity rates are plateauing.

The epicenter of cases remain these 4 states, F-CAT. And we have been suggesting TX had peaked and that AZ, FL were probable. But the data over the weekend has changed our views:

- AZ looks like it indeed has peaked, although positivity rate is still quite high
- FL reported record new cases of 15,000, but total number of tests in Florida hit 98,000 on that date, vs 50,000 avg for the past 7D.
- FL represented nearly 1/8 of all tests in the US over the weekend
- TX looks "plateau"-ish and Houston still looks like cases peaked on 6/23/2020, despite vastly higher testing levels.



Source: COVID-19 Tracking Project



Source: COVID-19 Tracking Project

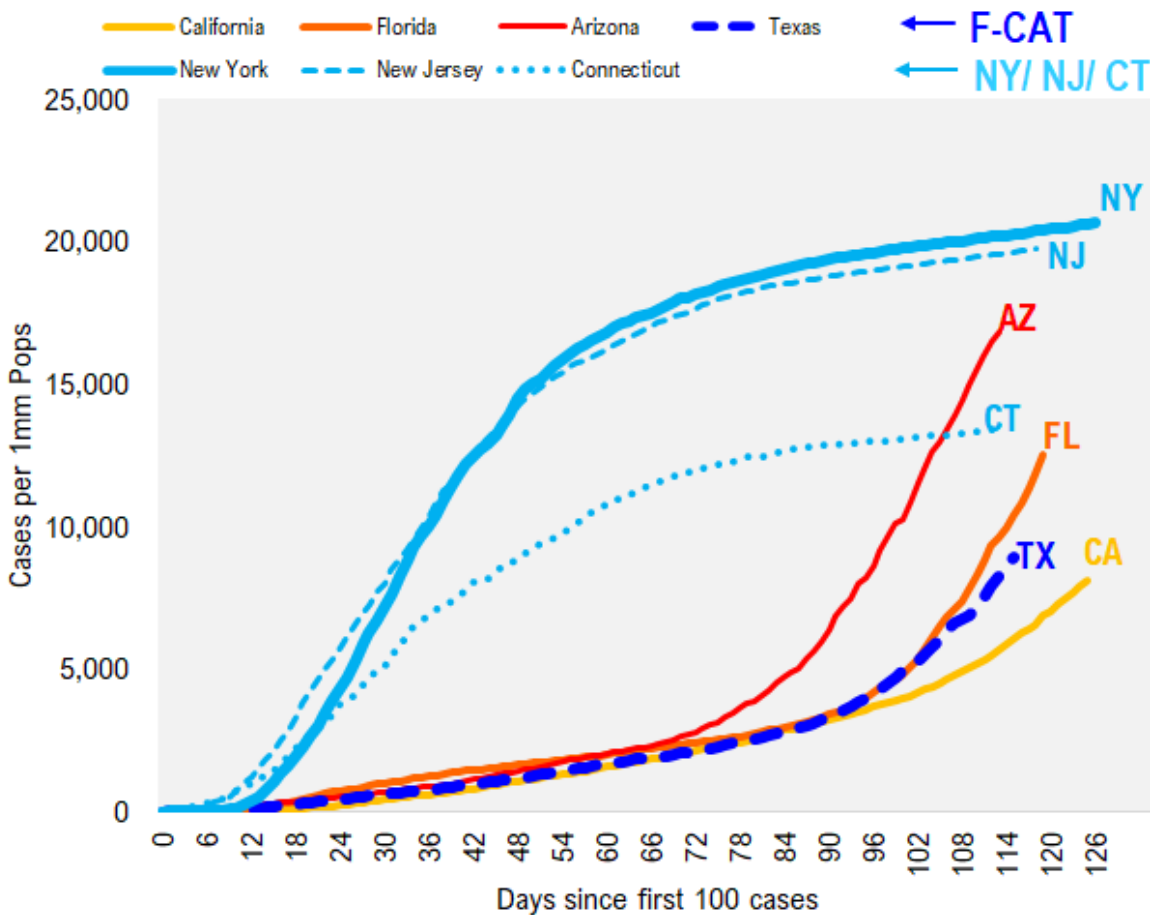
Recall, Mayor DeBlasio was still calling for a massive increase in ICUs in mid-April, even as NYC was well past its apex

Policymakers at the local level are responding to the level of the crisis, and also the growing panic in the populace. Thus, they may not be aware that cases could indeed be apexing. Akin to Gottlieb's comments above, we think the apex is not months away, but near. The obvious question is whether cases fall as quickly as they did in the NY tristate area. If they do, this would be a positive surprise.

Arizona has now surpassed CT is cases per 1mm resident and FL is nearly matching CT today...

We have plotted the cumulative COVID-19 cases per 1mm residents for F-CAT and the NY tristate area. These charts are rebased so day 0 = first date >100 cases total.

- F-CAT is beginning to converge on case prevalence rates matching the NY tri-state area. AZ and FL, in particular, already match CT.
- TX and CA have similar case prevalence today, but at 10,000 per 1mm, it is about half of NY tri-state area



Source: COVID-19 Tracking Project

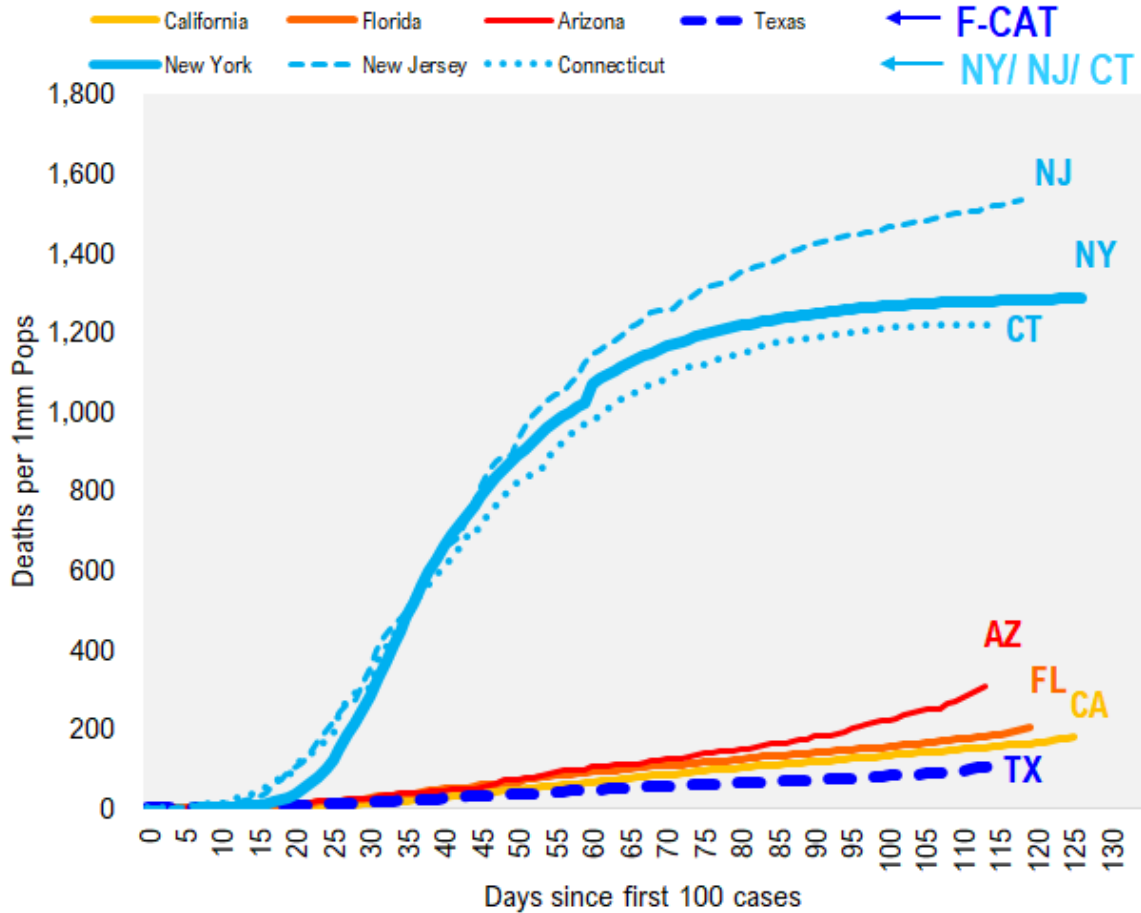
But even as cases soar, the images that really amplified the tragedy taking place in the NYC/NY tri-state area was the refrigerated trucks and body bags used to store the COVID-19 deceased. It was this horrifying images that really rattled the World during the depths of the crisis in March/April.

- so the primary difference of F-CAT vs NY tristate is the sharply lower levels of mortality associated with these high case levels.



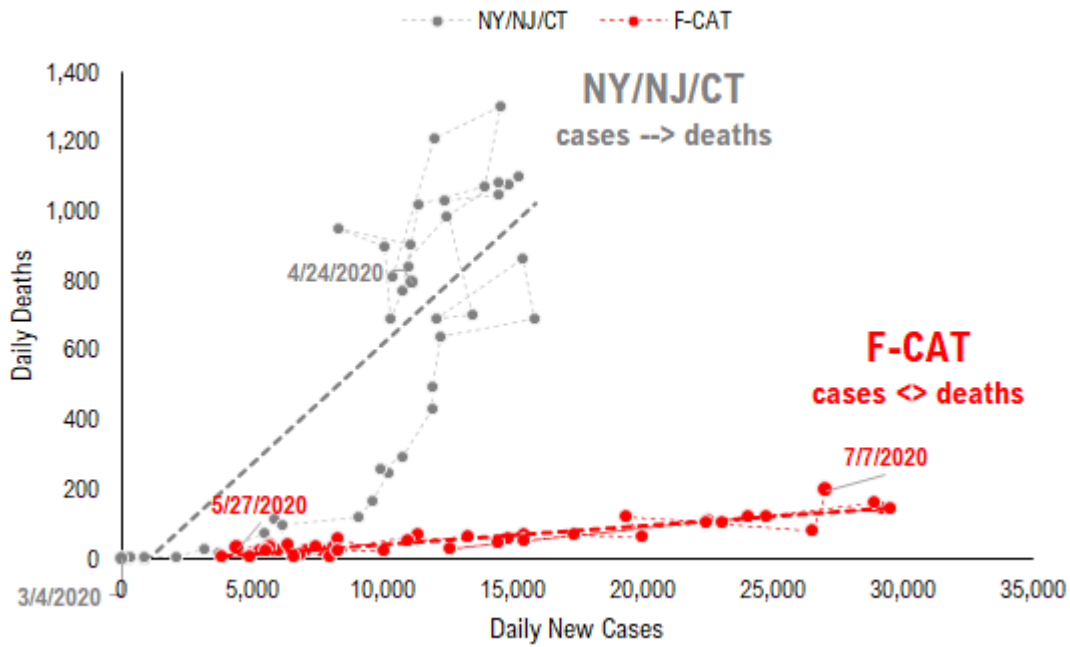
Source: NY News

So far, we have not yet seen these images for F-CAT. And that is a good thing. Deaths per 1mm residents in F-CAT have been drastically lower than NY tristate despite case prevalence matching/approaching CT



Source: COVID-19 Tracking Project

This difference in trends is highlighted looking at daily cases and daily deaths. We will be doing a version showing the cumulative data, so that we can get a better sense of the similar levels of case prevalence but far lower cumulative mortality.



Source: COVID-19 Tracking Project

POINT #3: COVID-19 deaths: delta from "reported" date and "actual" date

The amount of data and its high frequency reported for COVID-19 has never been generated by states with such intensity and regularity previously. And as such, the eccentricities, delays, etc. are not well understood -- at least for me that is true. There has been some discussion out there about how states have reported COVID-19 deaths and in some cases, also added "probable" deaths to their totals.

We have been trying to get a better understanding of the potential lags, restatements, etc. for some time but even tireless Ken has reported that it is very hard to know how each state classifies a death and when that actually happens. For instance, Ken had a conversation in March with someone from a reporting group at CDC and was told that there is up to 2-3 weeks lag in when CDC receives reports of deaths from all causes.

The reason we point this out is that in the past, states were the ones lagging in providing the data, but in this COVID-19 era, we are now getting daily reports of deaths. Sometimes, these are updated several times a day. Not to sound too grim, but I generally assumed that as soon as someone passed away from COVID-19, this was quickly reported as a death in the statistics the very same day. But of course, this is not realistic.

- Deaths are reported by various groups (nursing homes, hospitals, etc.)
- These are collected locally
- Then collected by the state
- Many states are re-examining past deaths, and adjusting their data to reflect further probable deaths

So you can see the many avenues of where the data can be out of sync.

One of my clients on the West Coast, shared me some work by Kyle Lamb (twitter: @kylamb8). Kyle is a sports podcaster in Ohio but like many, have taken an intense interest in COVID-19. According to his bio, he studied Actuarial Science at Bowling Green State University. So, he has some background for understanding death statistics (actuaries are fin-tech of morticians).

Kyle Lamb has put together an analysis, attempting to identify when the COVID-19 death actually took place. He used CDC data to identify the date of the actual death. The data reported by states daily (hourly) is the latter, the "reported" date.

He created the table below, to reconcile these two dates.

- there is the "actual" date of death
- then there is the "reported" date



Kyle Lamb
@kylamb8

Top row: Deaths reported publicly by week

West to East: Provisional death counts by CDC when death occurred, columns representing the week when CDC added them.

Color striping indicates a way to track trends based reporting week. First red = 1st week of data, Orange = 2nd, etc.

CTP TOTAL:	126,444		PUBLIC REPORT:	6,962	13,377	12,026	13,421	13,273	12,703	9,967	8,427	5,549	7,496	5,353	4,268	5,828	3,508	4,284
ALL-CAUSE	COVID-19	%CV19	WEEK UPDATED:	Apr. 4	Apr. 11	Apr. 18	Apr. 25	May 2	May 9	May 16	May 23	May 30	Jun 6	Jun 13	Jun 20	Jun 27	Jul 4	Jul 11
1,345,941	119,318	8.9%	WEEK OF DEATH:	0	4,979	8,146	11,425	12,752	9,817	13,170	13,342	9,503	8,415	7,135	6,520	3,972	3,513	6,617
58,633	33	0.1%	3/7/2020	18	2	1	4	4	3	0	0	0	0	0	0	1	0	0
57,660	52	0.1%	3/14/2020	45	-1	5	0	1	1	0	0	0	1	0	0	0	0	0
58,502	561	1.0%	3/21/2020	423	31	24	15	11	13	15	8	5	2	1	3	1	9	
62,464	3,124	5.0%	3/28/2020	1,891	448	230	143	59	126	67	34	18	18	5	11	6	44	
71,627	9,904	13.8%	4/4/2020	2,602	2,855	1,926	699	355	456	322	147	50	50	28	14	14	386	
78,296	16,004	20.4%	4/11/2020		4,811	5,147	2,304	999	1,026	744	316	158	105	60	28	20	286	
75,957	16,886	22.2%	4/18/2020			4,092	6,316	2,148	1,521	1,234	474	255	165	102	41	23	513	
72,827	15,199	20.9%	4/25/2020				3,271	4,604	2,885	1,697	751	477	237	129	52	40	1,056	
68,011	12,949	19.0%	5/2/2020					1,636	4,828	2,895	968	642	420	186	95	44	1,235	
65,138	10,933	16.8%	5/9/2020						2,311	4,453	2,164	849	483	329	156	55	131	
62,182	8,917	14.3%	5/16/2020							1,915	3,455	1,952	767	454	229	79	66	
58,607	6,915	11.8%	5/23/2020								1,180	2,845	1,648	715	278	138	111	
55,608	5,817	10.5%	5/30/2020									1,163	2,389	1,444	449	225	147	
53,952	4,577	8.5%	6/6/2020										851	2,243	790	402	271	
51,372	3,577	7.0%	6/13/2020											804	1,344	994	435	
46,570	2,532	5.4%	6/20/2020												481	1,159	892	
35,650	1,024	2.9%	6/27/2020													313	711	
20,687	302	1.5%	7/4/2020														302	
N/A	N/A	0.0%	7/11/2020															

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<https://twitter.com/kylamb8/status/1282005890237976578?s=20>

The table is quite difficult to understand at a glance. So I added some notations.

- The top row is the "reported" data and what we generally see as "death" statistics
- The following rows are the "actual" date of death and then the spreadsheet shows the distribution of when those deaths were subsequently reported

Data shows that about half of the COVID-19 deaths reported in the week of July 11th actually happened in April/early May

This data, if correct, shows that as much as half of the deaths reported in the week of July 11th (last week), actually took place in April or early May. It was the collection lag that resulted in these figures being reported this past week.

- Most of the deaths are reported within 1-2 weeks of when they happen.
- For instance, of the 16,004 deaths that actually happened the week of April 11th, 9,958 were reported within two weeks.
- **But even 286 were reported the week of July 11th -- a full 3 months later**

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1,345,941	119,318	8.9%	0	4,979	8,146	11,425	12,752	9,817	13,170	13,342	9,503	8,415	7,135	6,520	3,972	3,513	6,617
58,633	33	0.1%	3/7/2020	18	2	1	4	4	3	0	0	0	0	0	1	0	0
57,660	52	0.1%	3/14/2020	45	-1	5	0	1	1	0	0	1	0	0	0	0	0
58,502	561	1.0%	3/21/2020	423	31	24	15	11	13	15	8	5	2	1	3	1	9
62,464	3,124	5.0%	3/28/2020	1,891	448	230	143	59	126	67	36	18	18	5	11	6	66
71,627	9,904	13.8%	4/4/2020	2,602	2,855	1,926	699	355	456	322	147	50	28	14	14	386	
78,296	16,004	20.4%	4/11/2020	4,811	5,147	2,304	999	1,026	744	316	158	105	60	28	20	286	
75,957	14,886	22.2%	4/18/2020			4,092	6,316	2,148	1,521	1,234	476	255	165	102	41	23	513
72,827	15,199	20.9%	4/25/2020				3,271	4,604	2,885	1,697	751	477	237	129	52	40	1,056
68,011	12,949	19.0%	5/2/2020					1,434	4,828	2,895	968	642	420	186	95	44	1,235
65,138	10,933	16.8%	5/9/2020						2,311	4,453	2,146	849	483	329	156	55	131
62,182	8,917	14.3%	5/16/2020							1,915	3,455	1,952	767	454	229	79	66
58,607	6,915	11.8%	5/23/2020								1,180	2,845	1,448	715	278	138	111
55,608	5,817	10.5%	5/30/2020									1,163	2,389	1,444	449	225	147
53,952	4,577	8.5%	6/6/2020										851	2,263	790	402	271
51,372	3,577	7.0%	6/13/2020											504	1,344	994	435
46,570	2,532	5.4%	6/20/2020												481	1,159	892
35,650	1,024	2.9%	6/27/2020													313	711
20,687	302	1.5%	7/4/2020														302
N/A	N/A	0.0%	7/11/2020														

Publicly reported COVID-19 deaths ↓

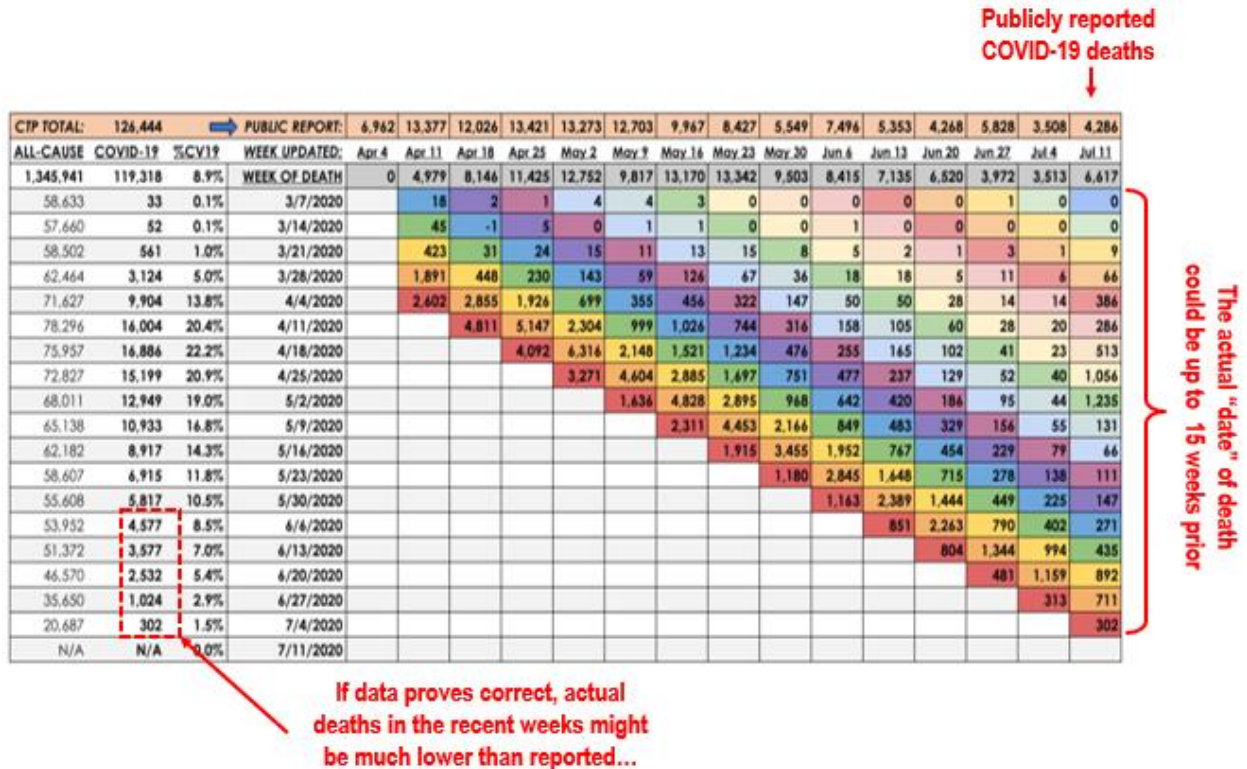
The actual "date" of death could be up to 15 weeks prior

~3,000 deaths reported this past week actually happened April to early May

This data is reported with a lag. That is, some cities/states may not provide the necessary information for deaths happening in recent weeks, and could take up to 15 weeks into the totals.

- But notice how recent COVID-19 deaths are actually trending lower at a pretty fast rate.

This is what does not feel comfortable making too many conclusions about.



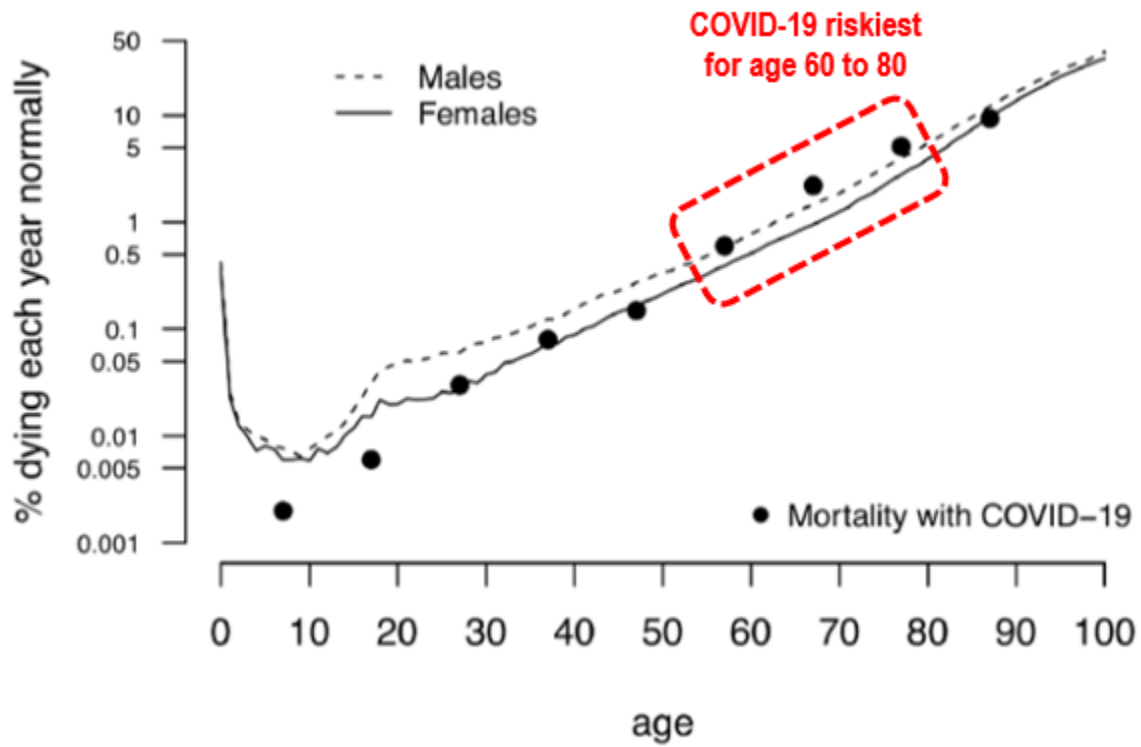
% of American deaths from COVID-19

Another takeaway from the table is the estimated deaths from COVID-19. The table above shows this percentage has fallen to 2-3% of total US deaths in the most recent weeks. Someone coincidentally asked if someone has compared:

- COVID-19 death risk by age
- Normal probability of death by age

There is a previous study done by Winton Center at the University of Cambridge. The chart below compares "annual" mortality by age group and the case fatality rate for COVID-19.

- there is elevated risk for those age 60-80
- below age 50, the mortality rate from COVID-19 is below that of typical "annual" risk of death



<https://medium.com/wintoncentre/how-much-normal-risk-does-covid-represent-4539118e1196>

RANDOM: Great image on how masks reduce emissions...

This image shared by @AwardsDarwin on twitter



<https://twitter.com/AwardsDarwin/status/1282053165135941633?s=20>

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