



COVID-19 UPDATE: With F-CAT peaking, 9 states near new highs (15% of US, vs 30% F-CAT). Total USA cases adjusted 55,000 down from 59,000 last Sunday

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The trend in US daily COVID-19 cases is improving, after plateauing about two weeks ago, we are seeing a sustained decline in COVID-19 cases nationally and also within the four states that are the current epicenter, FL, CA, AZ, TX, or F-CAT. So, the 8-week surge from early June to July is now over. But investors seem to be weighing a host of new issues, even as US COVID-19 cases are peaking:

- Will other states see a relapse/resurgence?
- What about "back to school"?
- CARES Act is moving slowly but not at pace market wants;
- 2020 elections is proving to be a contested race;
- MLB is seeing renewed outbreaks and postponed 33 games already, only a few weeks into the season;
- Is the vaccine safe and will enough Americans take it?

We discuss some of these topics in this commentary. As we move further into summer, we are starting to see additional but occasional delays in weekend data reporting. For Sunday, three states did not report data:

- Texas missing Sunday, Louisiana and Washington (missed Sat, but 2 days' worth yesterday)
- Of these, TX is arguably the only one that matters given the relatively high level of cases reported by that state which has been around 9,000 in the past few days.

But it seems like the DSHS is undergoing a system upgrade and this is resulting in a delay of results until Monday evening. So, the daily case figure reported yesterday is missing about 9,000 or so cases.

New data will not be posted on this dashboard on Sunday, August 2 due to a scheduled upgrade to the system that processes electronic lab reports. Data for Sunday will be posted with Monday's data update in the files on the Additional Data tab.

<https://txdshs.maps.arcgis.com/apps/opsdashboard/index.html#/ed483ecd702b4298ab01e8b9cafc8b83>

STRATEGY: Everybody is watching the same high-frequency data, but path of cases is more important (but unknown)

One of our favorite weekend reads is Barron's (is it any wonder we wanted to bring their senior editor, Vito Racanelli to our firm?). The article below has a great headline:

"Ignore GDP. Here's What Investors Should Watch for Economic Insights During the Pandemic."

It is referring to the fact investors should focus less on the 2Q GDP print (reported last week) and focus on the high-frequency data. This indeed has been the lens the market has been using. And this data, from credit card, to OpenTable reservations, or Google/Apple mobility data has been slowing. It has been slowing because of the resurgence of cases nationally and the resulting caution.

The screenshot shows the top of a Barron's article. At the top left is a hamburger menu icon. The word "BARRON'S" is centered in a large, serif font. Below it are the links "Subscribe Today" and "Sign In". The article is categorized under "ECONOMY AND POLICY" and "THE ECONOMY". The headline is "Ignore GDP. Here's What Investors Should Watch for Economic Insights During the Pandemic." Below the headline are social media sharing icons for email, Facebook, Twitter, and LinkedIn. The byline reads "By Lisa Beilfuss July 31, 2020 3:15 pm ET". A large photograph of the U.S. Capitol building at night is featured below the byline. The caption for the photo is "Mark Wilson/Getty Images". The first paragraph of the article begins with "Everyone knew it was coming, but the anticipation made it no less ugly: The U.S. economy shrank an annualized 32.9% in the second quarter from the first. Investors should dismiss the historic number—but not just because the worst of the pandemic's toll is over."

https://www.barrons.com/articles/ignore-gdp-heres-what-investors-should-watch-for-economic-insights-during-the-pandemic-51596222901?mod=hp_LEAD_1

This high frequency data is very good at giving us a contemporaneous state of activity (and is a leading metric for GDP, which is measured quarterly). But this data itself is not predictive. Just because data is currently slowing, in response to surging cases, this does not tell us where the data will be if cases/infections fall sharply. Hence, while this high-frequency data is useful, there are limitations.

- at the moment, the flattening of this data is causing investors to remain defensively positioned via bond proxies.

But perhaps the best leading for where the high-frequency data will trend is the forecast for COVID-19 infections. If infections are forecast to continue declining, this should restore a level of confidence among Americans and policymakers. In our view, the model for looking at future infection trends is the model by IHME (used by the White House).

- their model shows 3 paths for future cases.
- if masks remain in place, infections are forecast to decline rapidly
- the purple line (middle) is their projection and even that shows infections slowing



<https://covid19.healthdata.org/united-states-of-america>

So if the US tracks the IHME model, we should start to see cases fall in the next few weeks.

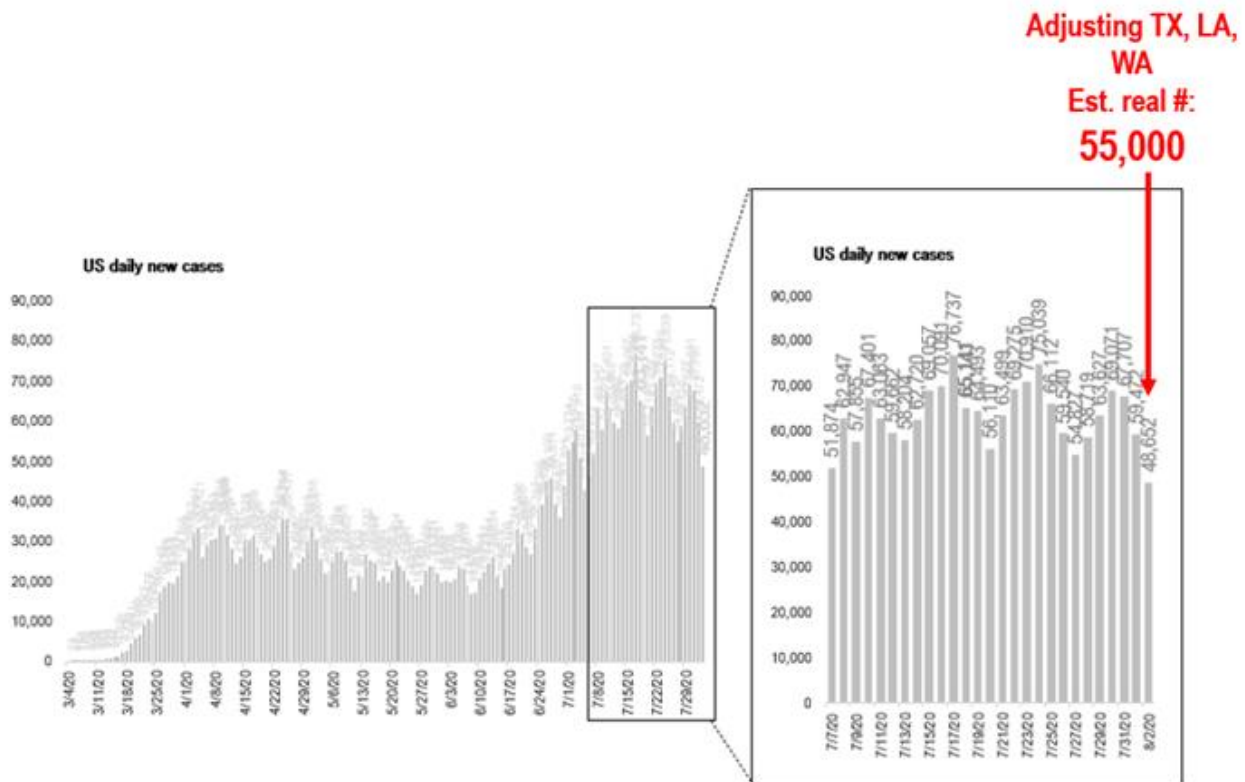
POINT 1: USA COVID-19 cases come in at 48,652 but missing TX, est. real figure likely 55,000 better vs 7D ago...

Total USA COVID-19 cases came in at 48,652 but this is an unusually low weekend number because TX did not report Sunday (usually one or two states miss, but TX is a biggie).

- Texas has averaged 9,000 per day (missing)
- Louisiana reported Sat + Sunday combined today of 3,467 (-1,700)
- Washington reported Sat + Sunday combined today of 1,738 (-800)

So adjusting for this, the adjusted figure is likely around 55,000.

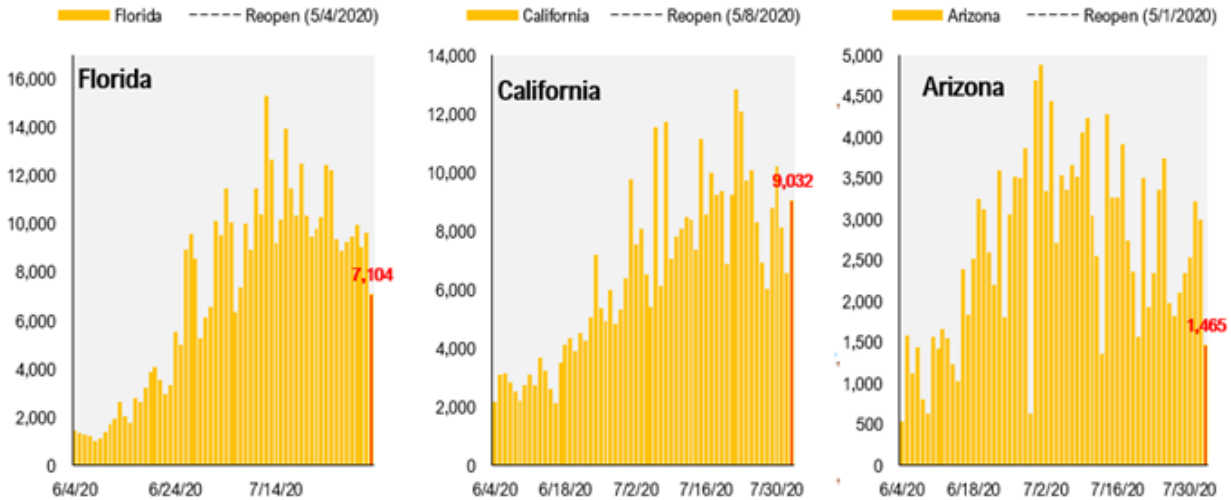
- Last Sunday, total daily new cases were 59,540, so this is an improvement vs 7D ago, the 13th consecutive day.



Source: COVID-19 Tracking Project

The trends in the other "epicenter" states has been good. Take a look at the rest of F-CAT:

- FL 7,104 is the best in 3 weeks
- CA 9,032 is well off the 13,000 peak
- AZ cases the lowest in 4 weeks



Source: COVID-19 Tracking Project

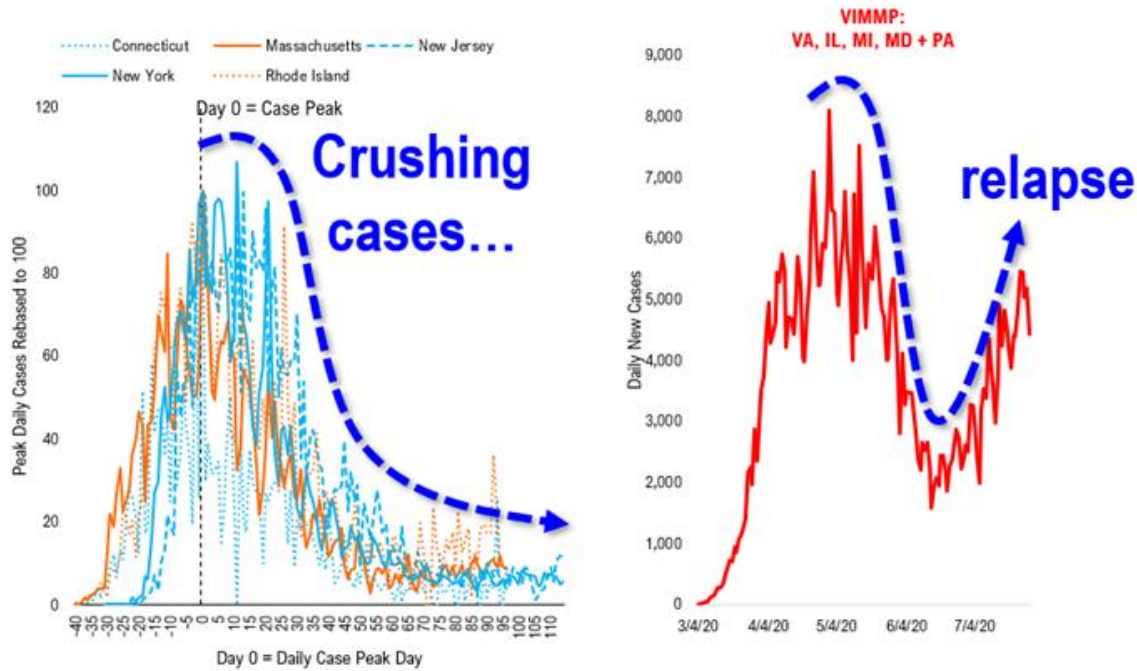
So even without Texas, the F-CAT states are seeing a significant easing in total cases.

Where will cases be in a few weeks? Will it follow NY tristate + MA + RI or will it follow VIMMP?

But this leads us to think about where cases will be in a few weeks. As we wrote about in a few recent commentaries, there are two paths, the path of NY tristate (plus MA and RI) and the path of VA, IL, MI, MD and PA (VIMMP).

TWO PATHS: states that opened last have demonstrated two virus paths

NY, NJ, CT, MA and RI (left chart) have seen daily cases absolutely collapse since their respective peaks, while daily cases in VIMMP (VA, IL, MI, MD + PA) quadrupled, after falling 88% from their peaks.



Source: COVID-19 Tracking Project, Johns Hopkins, Fundstrat

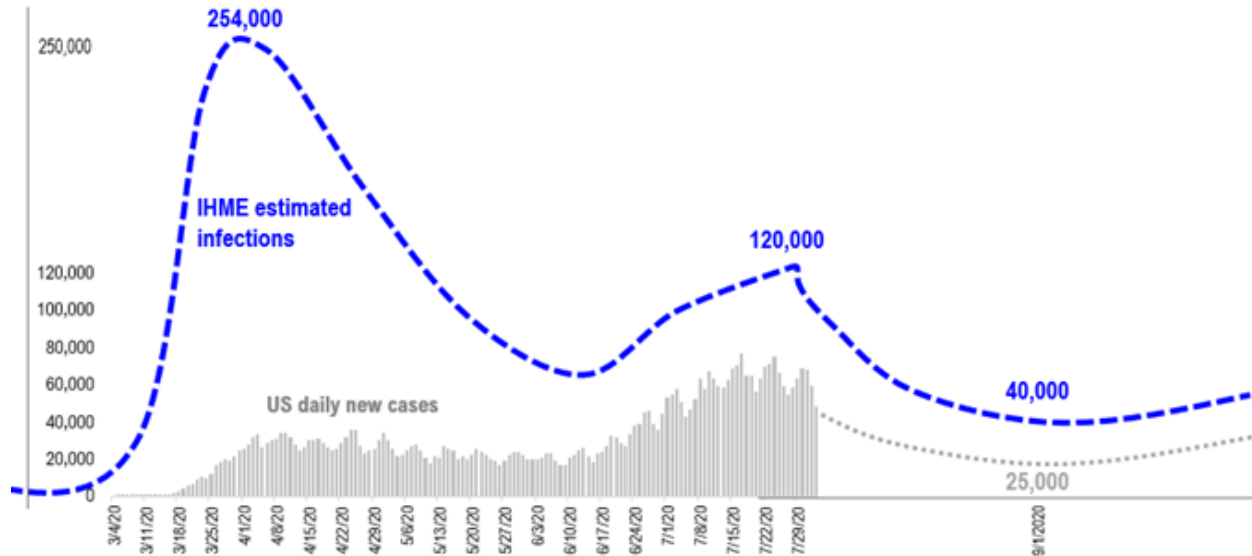
But at the national level, the IHME forecast, particularly with masks is showing a pretty steep forecasted drop in infections within the next 4 weeks.



<https://covid19.healthdata.org/united-states-of-america>

If we add this IHME model to "detected" cases (confirmed via PCR + serology tests), this IHME forecast shows a few interesting things:

- USA infections probably recently peaked at 120,000 infections
 - detected cases reached ~77,000, or about 64% of infections detected
 - by September, the IHME forecast is 40,000 infections
 - at 64% detection, this implies 25,000 cases within 4 weeks
- At that pace, we would view this as a steep drop-off.



<https://covid19.healthdata.org/united-states-of-america>

6 states had sizable 3D increase

Louisiana	3,467 vs 1,799 (Fri)	+1,668
California	9,032 vs 8,086	+946
Washington	1,738 vs 818	+920
Puerto Rico	292 vs 77	+215
Alabama	2,095 vs 1,961	+134
Wisconsin	922 vs 832	+90
Total 6 states		+3,973

6 states had sizable 3D declines

Florida	7,104 vs 9,007 (Fri)	-1,903
Arizona	1,465 vs 3,212	-1,747
Tennessee	1,443 vs 3,088	-1,645
Missouri	582 vs 1,489	-907
Georgia	3,165 vs 4,066	-901
North Carolina	1,341 vs 1,954	-613
Total 6 states		-7,716

Daily Case Increases (by State) (08/02)

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

Sorted

Last 3-day trend growth rates

GT and RI do not report over the weekend...
LA and WA stats on Sunday reflect two-day change...
TX did not report on Sunday due to system upgrade...

	7/31/20	8/1/20	8/2/20	
United States	67,707	59,472	48,652	-10,820
States:				
1 California	8,086	6,542	9,032	
2 Florida	9,007	9,642	7,104	
3 Louisiana	1,799	0	3,467	<-higher
4 Georgia	4,066	3,660	3,165	
5 Alabama	1,961	1,626	2,095	
6 Washington	818	0	1,738	<-higher
7 Illinois	1,980	1,639	1,467	
8 Arizona	3,212	2,992	1,465	
9 Tennessee	3,088	2,225	1,443	
10 North Carolina	1,954	1,730	1,341	
11 South Carolina	1,444	1,583	1,189	
12 Nevada	1,264	986	1,131	
13 Virginia	984	913	981	
14 Ohio	1,533	928	944	
15 Wisconsin	832	1,062	922	
16 Maryland	1,169	1,019	909	
17 Minnesota	771	725	759	
18 Indiana	901	968	735	
19 Mississippi	1,168	1,134	672	
20 Pennsylvania	970	888	654	
21 Arkansas	752	662	637	
22 Missouri	1,489	935	582	
23 New York	644	753	531	
24 Iowa	544	394	516	
25 Oklahoma	747	1,244	494	
26 Utah	500	506	473	
27 Kentucky	765	572	462	
28 Colorado	605	458	449	
29 Michigan	734	735	426	
30 Massachusetts	514	428	418	
31 New Jersey	690	369	321	
32 Nebraska	445	180	311	
33 Puerto Rico	77	546	292	
34 Oregon	361	325	280	
35 Idaho	475	393	230	
36 New Mexico	212	196	220	
37 Alaska	112	146	144	
38 West Virginia	220	93	119	
39 Montana	151	115	113	
40 South Dakota	79	103	88	
41 Delaware	99	89	72	
42 District of Columbia	69	79	69	
43 North Dakota	168	133	58	
44 Hawaii	122	86	45	
45 Wyoming	40	43	39	
46 New Hampshire	39	30	21	
47 Maine	24	25	21	
48 Vermont	7	7	5	
49 Northern Mariana Islands	0	0	3	
50 U.S. Virgin Islands	21	15	0	
51 Texas	8,839	9,539	0	
52 Rhode Island	72	0	0	
53 Kansas	942	0	0	
54 Guam	2	11	0	
55 Connecticut	140	0	0	
56 American Samoa	0	0	0	

Source: COVID-19 Tracking Project

POINT 2: New heatmaps to track outbreaks by state --> Slide 3 + 4

With F-CAT seeing a plateau in cases, the good news is that about 60%-70% of the US has seen a large enough outbreak in cases (>12,500 cases per 1mm residents) to see infection rates slow (infection break point?). But this does not mean other states will not see a relapse, particularly those with lower prevalence rates.

So we are adding a few new heatmaps to track this across the US. These are now slide 3 and 4 in the attached chartbook (updated daily).

Slide 3 Heatmaps:

- Daily New cases (absolute number)
- 7D delta in daily cases (absolute number)
- Daily New cases per 1mm residents (common-size)
- 7D delta in daily new cases per 1mm residents (common-size)

The more "red" the state, the larger its contribution. Thus, watch for "red"

Slide 4 Heatmap:

- # days since a peak in daily cases
- if days 0-7, these states are making new highs...

Taking a look at this case heat map, I marked states that stand out in each of these 4 maps. Looking at these 4 heatmaps, few states are seeing a surge in cases enough to overtake F-CAT:

top-left --> Maybe GA cases are large enough to overtake AZ, but this is not a large state overall

top-right --> Increases in daily cases (7D delta) is shown by these states:

- OR
- NV
- MI
- IL
- TN
- OK

#2: USA COVID-19 Heat Map*...



Daily Case Increases



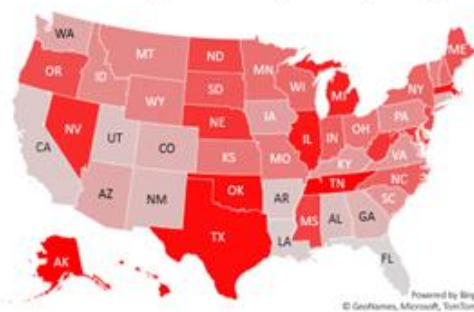
7D Delta in Daily New Cases (3D Avg)



Daily Case Increases per 1mm Resident



7D Delta in Daily New Cases per 1mm (3D Avg)



* Charts as of Saturday August 1st due to the stats of Texas

8/2/2020

3

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

9 states are seeing new highs in COVID-19 daily cases, and these are 15% of US population, half of F-CAT

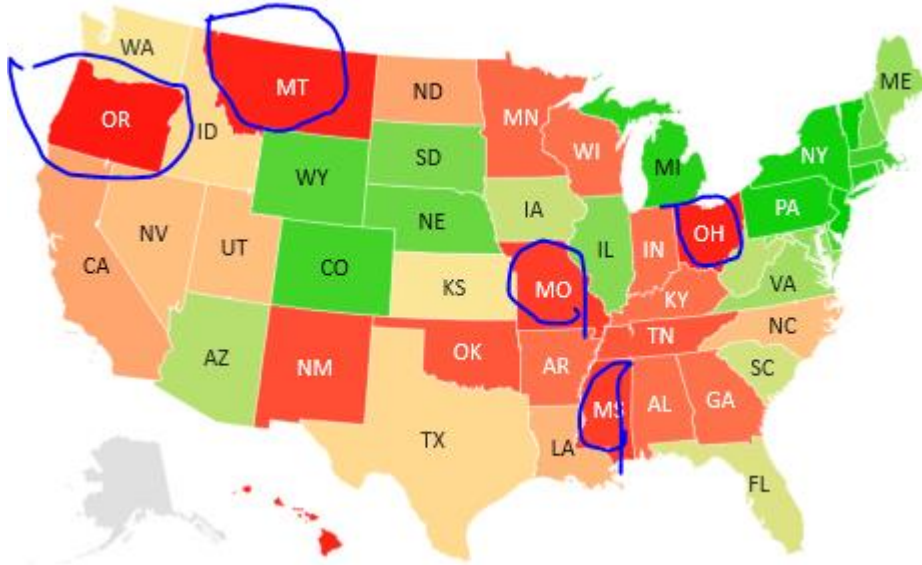
The charts below highlight how many days since a state made an all-time high. The more "green" the longer since a new high. We marked those states with the most recent new highs. I think OR remains interesting. This is the state that is having widespread protests and even had the intervention of Federal officers.

- OR is another argument pointing to protests as having a role in the resurgence of cases

In total 9 states made a new high within the past week and this is about 15% of the US. So even if the case prevalence in these states surge ala F-CAT, their amplitude will be half of F-CAT:

- F-CAT peaked at 40,000 cases
- these 9 states might peak at 20,000 cases

Overall, these states do not likely lead to a new high in overall US cases



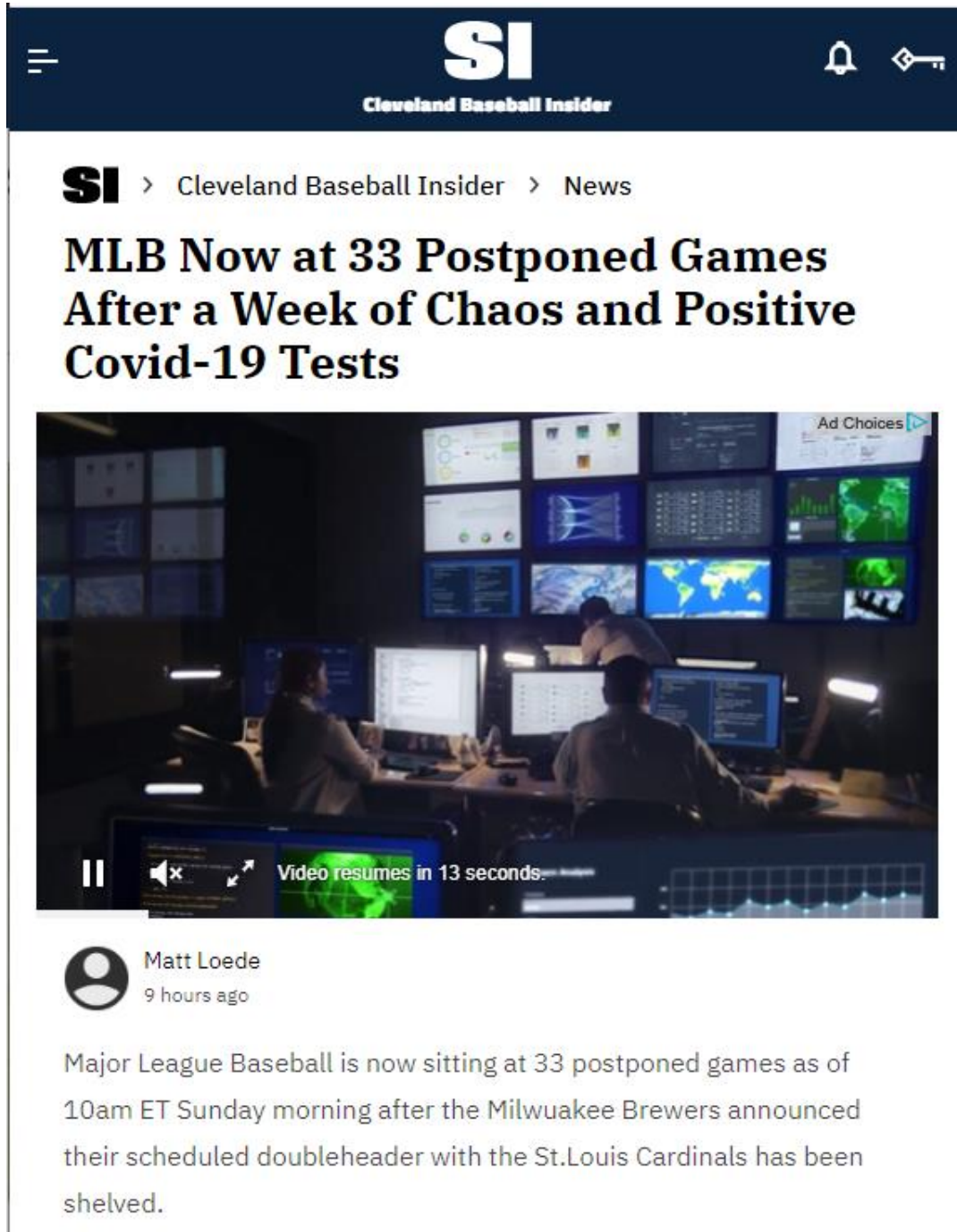
Source: Fundstrat Chart #4 in Chartbook
Days since Daily Cases (3D Avg) Peak (as of 8/2)

	Sorted			Sorted			
	Peak Date	8/2/20	% US Pop	Peak Date	8/2/20	% US Pop	
United States	7/17/20	16	100%	United States	7/17/20	16	100%
States:				States:			
Northern Mariana Is	4/3/20	121	0.0%	Kansas	7/15/20	18	0.9%
Vermont	4/5/20	119	0.2%	Texas	7/17/20	16	8.7%
New Jersey	4/5/20	119	2.7%	Idaho	7/17/20	16	0.5%
Pennsylvania	4/10/20	114	3.9%	Utah	7/18/20	15	1.0%
New York	4/10/20	114	5.9%	Nevada	7/18/20	15	0.9%
Connecticut	4/22/20	102	1.1%	North Carolina	7/18/20	15	3.2%
Michigan	4/24/20	100	3.0%	Louisiana	7/21/20	12	1.4%
Rhode Island	4/25/20	99	0.3%	North Dakota	7/24/20	9	0.2%
Massachusetts	4/25/20	99	2.1%	California	7/24/20	9	11.9%
Colorado	4/26/20	98	1.7%	Wisconsin	7/25/20	8	1.8%
Delaware	4/28/20	96	0.3%	Kentucky	7/25/20	8	1.3%
Wyoming	4/29/20	95	0.2%	Indiana	7/25/20	8	2.0%
New Hampshire	5/2/20	92	0.4%	Georgia	7/25/20	8	3.2%
Nebraska	5/2/20	92	0.6%	Arkansas	7/25/20	8	0.9%
District of Columbia	5/3/20	91	0.2%	Alabama	7/25/20	8	1.5%
South Dakota	5/9/20	85	0.3%	Minnesota	7/26/20	7	1.7%
Illinois	5/14/20	80	3.8%	Tennessee	7/28/20	5	2.1%
Maryland	5/21/20	73	1.8%	Oklahoma	7/28/20	5	1.2%
Maine	5/22/20	72	0.4%	New Mexico	7/29/20	4	0.6%
Virginia	5/27/20	67	2.6%	Mississippi	7/30/20	3	0.9%
Guam	6/20/20	43	0.0%	Missouri	7/30/20	3	1.8%
Arizona	7/2/20	31	2.2%	Ohio	7/31/20	2	3.5%
West Virginia	7/10/20	23	0.5%	Montana	7/31/20	2	0.3%
Iowa	7/11/20	22	1.0%	Hawaii	7/31/20	2	0.4%
South Carolina	7/12/20	21	1.6%	Oregon	8/1/20	1	1.3%
Florida	7/13/20	20	6.5%	Puerto Rico	8/2/20	0	1.0%
Washington	7/15/20	18	2.3%	American Samoa	8/2/20	0	0.0%
U.S. Virgin Islands	7/15/20	18	0.0%				

Source: Fundstrat Chart #4 in Chartbook

POINT 3: MLB, a live experiment of a fully open economy

So far, a few weeks into Major League Baseball season, 33 games have been postponed due to coronavirus cases, primarily within two teams -- Miami Marlins (20 players) and St Louis Cardinals (6 players). In total, more than 30 players and team staff have tested positive for COVID-19 so far.



SI > Cleveland Baseball Insider > News

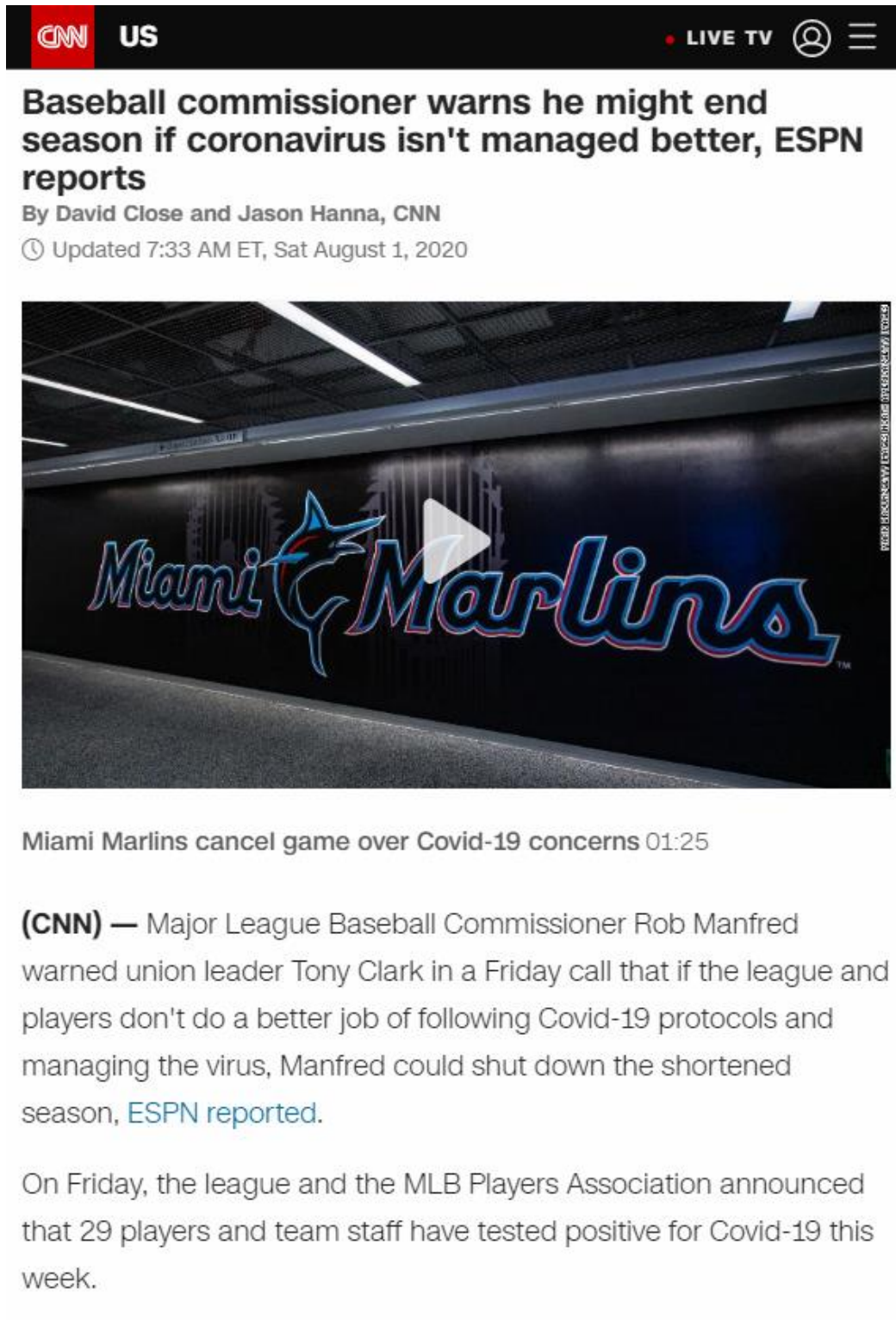
MLB Now at 33 Postponed Games After a Week of Chaos and Positive Covid-19 Tests

SI > Cleveland Baseball Insider > News

Major League Baseball is now sitting at 33 postponed games as of 10am ET Sunday morning after the Milwaukee Brewers announced their scheduled doubleheader with the St. Louis Cardinals has been shelved.

<https://www.si.com/mlb/indians/news/mlb-now-at-33-postponed-games-after-a-week-of-chaos-and-positive-covid-19-tests>

In fact, the MLB Commissioner Rob Manfred warned that he may shut down the shortened season if players and team do not do a better job of managing existing protocols.



The image is a screenshot of a news article from CNN US. At the top, the CNN logo and 'US' are on the left, and 'LIVE TV' with a play button icon and a menu icon are on the right. The main headline reads: "Baseball commissioner warns he might end season if coronavirus isn't managed better, ESPN reports". Below the headline, it says "By David Close and Jason Hanna, CNN" and "Updated 7:33 AM ET, Sat August 1, 2020". The main image shows the Miami Marlins logo on a dark wall in a stadium, with a white play button icon overlaid on it. Below the image, there is a video player with the title "Miami Marlins cancel game over Covid-19 concerns 01:25". The article text begins with "(CNN) — Major League Baseball Commissioner Rob Manfred warned union leader Tony Clark in a Friday call that if the league and players don't do a better job of following Covid-19 protocols and managing the virus, Manfred could shut down the shortened season, ESPN reported." It continues with "On Friday, the league and the MLB Players Association announced that 29 players and team staff have tested positive for Covid-19 this week."

<https://www.cnn.com/2020/07/31/us/mlb-coronavirus-cardinals-brewers/index.html>

Here is a selection of games postponed in the past few days stemming from the outbreak seen at these two teams. Because teams play at other cities (serially) and these games are multi-day series, a postponement creates a daisy chain cascade of delays.

Date	Postponed Games
7/27/20	Yakees at Phillies Orioles at Marlins
7/28/20	Yakees at Phillies Orioles at Marlins
7/29/20	Phillies at Yankees Orioles at Marlins
7/30/20	Phillies at Yankees Orioles at Marlins Yankees at Orioles
7/31/20	Cardinals at Brewers Phillies at Blue Jays Nationals at Marlins
Weekend (Sat and Sun)	Phillies at Blue Jays Nationals at Marlins

Source: ESPN

An obvious observation, but the MLB is a microcosm of the US economy, and MLB will be useful to monitor...

There is obvious disappointment with the postponement and COVID-19 outbreaks within the teams, particularly for sports fans and sponsors. The outbreaks are a reminder that COVID-19 is highly contagious and like the economy overall, every person needs to play a role in mitigation of spread. Fortunately, most cases so far have been asymptomatic.

But at the same time, the league is a mini-economy, in the sense that teams interact with other teams across various cities. So, there is a lot to be gained from monitoring how the league manages these outbreaks and we expect them to ultimately mitigate these spreads. But among the things we think will prove to be worthy useful insights:

- what percentage of cases prove to be asymptomatic --> MLB is testing far more regularly than the overall US
- what will contact tracers determine to be the primary source of spread --> still not known --> clubhouse, the ball, travel
- what protocols limit spread and infection?
- can a player be infected twice?
- if cases continue to spread, what will be the "herd immunity" for the league?

In other words, the MLB is a fully open US mini economy.

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