

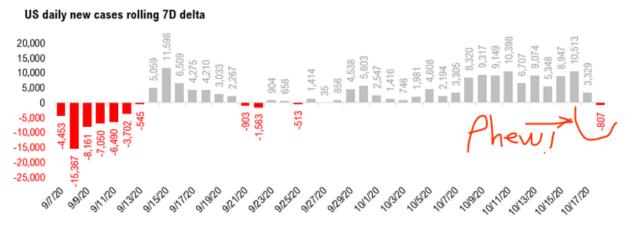


COVID-19 UPDATE: Phew. Daily cases flat/down last 2 days. Policymakers are not panicking about wave 3, because there is nothing to panic about yet

THIS MESSAGE IS BEING SENT SOLELY TO CLIENTS OF FS INSIGHT

STRATEGY: Stimulus is singular focus next 48 hours. HY Defaults peaked? = Risk-on

As we start a new trading week, I would view weekend developments as mostly positive both on COVID-19 and on fiscal stimulus. COVID-19 daily cases seem to have broken trend over the past two days, being flat/down compared to the intensifying gains seen in the prior 10 days. So, is this a merely statistical aberration (WI did not report over the weekend) or are we hitting that "peak velocity" of cases that typically spur action? I am not sure, but a break in trend is a good thing, nevertheless.



Source: Fundstrat and COVID-19 Tracking Project

But the far bigger story is it looks like fiscal stimulus is in the "short strokes" (golf analogy) and the House giving the White House 48 hours to agree to a deal. While this might sound like an impossible task, this is also giving us some finality.

- So for the next 48 hours, the only thing equity markets will focus on is fiscal stimulus













NEWS

Pelosi gives White House 48 hours to agree to COVID stimulus deal

By Mark Moore

October 18, 2020 | 5:25pm



Source: NY Post

But this package is way overdue. With benefits ending and the economy still not fully opened, millions of Americans need a financial bridge. As this USA Today story headlines, 6 million households missed their rent or mortgage payment. For anyone dependent on a friendly vote in November, it would be wise to get these Americans a needed lifeline.



MONEY

More than 6M households missed their rent or mortgage payment in September

Jessica Menton USA TODAY

Published 1:53 p.m. ET Oct. 17, 2020 | Updated 5:24 p.m. ET Oct. 17, 2020







More than 6 million households failed to make their rent or mortgage payments in September, according to the Mortgage Bankers Association's Research Institute for Housing America, a sign that the economic fallout from the coronavirus pandemic is weighing on jobless Americans as Congress stalls on relief measures.

Source: USA Today

Major risk-on signal --> HY Defaults likely peaked this cycle.

JPMorgan's Fixed Income team made a very interesting comment this week. Their strategists suggest that US High-yield defaults have peaked for this cycle.

WOW

This is a significant statement. High-yield is a close cousin of equities. And this economic depression has led to a surge in defaults in HY. But now, it looks like this cycle has peaked.

HY defaults peaked: Barring a double-dip in the economy, we expect that high yield defaults have already peaked for a number of reasons. First, default volume has been slowing. There were only about \$2.9bn in high yield defaults in September, and \$1.6bn in August. This compares with nearly \$19bn in March, \$37bn in April, and \$27bn in June. Second, the distressed universe of bonds/loans is only \$147bn, a fraction of the \$549bn we saw in March. Third, the ratio of upgrades to downgrades has been balanced, compared to a 1:12 ratio back in April. With defaults trending lower in high yield, we believe the fundamentals are solid for the sector going forward (see.

Source: JPMorgan Research

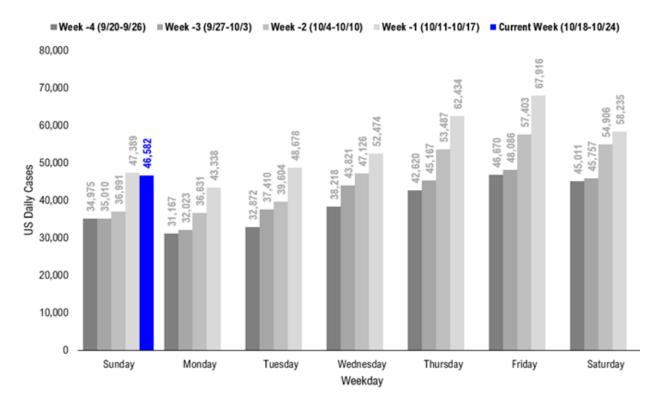
- If so, this is a major risk-on signal.
- Coupled with 3Q2020 signalizing EPS nadir is past
- = Expect a sustained post-election rally



POINT 1: Phew? Last 2 days, COVID-19 cases flat (vs 7D ago)

The latest COVID-19 daily cases came in at 46,582, down -807 vs 7D ago. The last 2 days have seen daily cases flat vs 7D ago, so this is a way better trend than the surges seen last week.

- But WI and MS did not report on Sunday and this is probably ~2,000 cases
- So, instead of being down, daily cases are probably flat



Source: COVID-19 Tracking Project and Fundstrat

As you can see, WI is doing some system maintenance and so daily cases were not reported.

FS^{INSIGHT} | www.fsinsight.com





WIDeptHealthServices @DHSWI · 5h

We're performing routine maintenance and updates on our data reporting system this weekend, so no daily snapshot. The upgrade will improve tools for contact tracing, automate data entry, enhance security, and strengthen the system to accommodate any case increases. #StopTheSpread



Source: Twitter

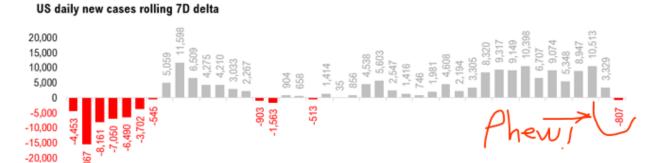
US daily cases 7D delta is up but not exponential...

Again, the daily change vs 7D ago, in our view, is the leading indicator as it is what influences the 7D moving average.

- As you can see below, the 7D delta in daily cases is flat last few days
- This is not an exponential surge, which is good
- It has not yet happened, but it could
- Next few weeks are key
- As we wrote last week, some states seem to be hitting the "upper limit" of daily case velocity
- Meaning, we could see cases slow within the next few weeks



-25,000



Source: COVID-19 Tracking and Fundstrat

6 states with largest 7D delta in daily cases

Illinois	4,245 vs 2,727 (-7D)	+1,518
Texas	3,048 vs 2,262	+786
North Carolina	2,303 vs 1,719	+584
Tennessee	2,605 vs 2,068	+537
New Jersey	1,275 vs 751	+524
Missouri	1,768 vs 1,381	+387
Total		+4.336

6 states with largest 7D delta in daily cases

Florida	0 E20 E E70 / 7D)	2.024
Florida	2,539 vs 5,570 (-7D)	-3,031
California	2,862 vs 3,803	-941
lowa	857 vs 1,075	-218
Nebraska	620 vs 743	-123
Oregon	216 vs 331	-115
Utah	1,097 vs 1,200	-103
Total		-4.531



Daily Case Increases (by State) (10/18)

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

Sorted

7D Ago Last 3-day Trend

MS did not report stats on Sunday.
WI did not report stats over the weekend due to system maintenance.

	Wi did not report stats over	ure weeker	io oue io	System !	manntena	100.
		10/11/20	10/16/20	10/17/20	10/18/20	vs 7D ago
	United States	47,389	67,916	58,235	46,582	
		,	,	55,255	,	-001
	States:					
1	Illinois	2,727	5,103	3,629	4.245	<higher< td=""></higher<>
2	Texas	2,262	5,682	4,581		<-higher
3	California	3,803	3,075	2,979	2,862	· ingile:
4	Tennessee	2,068	666	2,646	,	<higher< td=""></higher<>
5	Florida	5,570	3,449	4,044	2,539	
6	North Carolina	1,719	2,684	2,102		<higher< td=""></higher<>
7	Missouri	1,381	2.017	2,357		<higher< td=""></higher<>
8	Minnesota	1,440	2,290	1,694	1,722	Ĭ
9	Indiana	1,570	2,283	2,482	1,605	
10	Ohio	1,291	2,148	2,234	1,562	<higher< td=""></higher<>
11	New York	1,143	1,707	1,784		<higher< td=""></higher<>
12	New Jersey	751	810	934		<higher< td=""></higher<>
13	Pennsylvania	1,166	1,566	1,857	1,269	
14	Georgia	1,140	1,609	1,534	1,174	
15	Louisiana	1,168	863	0	1,125	
16	Utah	1,200	1,496	1,340	1,097	
17	Alabama	816	1,212	1,288	964	
18	Colorado	819	1,312	1,139	933	
19	Virginia	811	1,183	1,114	900	
20	Iowa	1,075	1,229	1,157	857	
21	Kentucky	847	1,311	1,291	810	
22	Oklahoma	766	1,472	1,195	796	
23	South Carolina	790	1,053	900	742	
24	Arizona	597	738	921	742	<higher< td=""></higher<>
25	Massachusetts	563	767	584	730	<higher< td=""></higher<>
26	North Dakota	637	864	744	717	
27	South Dakota	617	793	806	658	
28	Nebraska	743	961	1,286	620	
29	Nevada	380	716	967	609	<higher< td=""></higher<>
30	Montana	585	662	638	588	
31	Washington	475	709	777	530	
32	Maryland	562	781	798	530	
33	Arkansas	554	814	710	529	
34	Idaho	365	1,094	878		<higher< td=""></higher<>
35	New Mexico	261	812	573		<higher< td=""></higher<>
36	Puerto Rico	218	227	119		<higher< td=""></higher<>
37	West Virginia	215	498	221		<higher< td=""></higher<>
38	Alaska	255	226	211	220	
39	Oregon	331	410	381	216	
40	Wyoming	156	290	151		<higher< td=""></higher<>
41	Delaware	132	164	218	151	
42	Hawaii	103	89	95	83	
43	New Hampshire	51	88	111		<higher< td=""></higher<>
44	Guam	22	111	79		<higher< td=""></higher<>
45	District of Columbia	66	89	79	36	
46	Maine	27	29	48	26	
47	Vermont	10	12	11	11	a bist
48	U.S. Virgin Islands	2 676	2 2 2 2 4	0		<higher< td=""></higher<>
49	Wisconsin	2,676	3,861	0	0	
50 51	Rhode Island	170 294	253	751	0	
	Mississippi		1,116			
52	Northern Mariana Islands	0	2,015	1 701	0	
53	Michigan Kansas	0		1,791 0	0	
54 55	Connecticut	0	1,700 802	0	0	
56	American Samoa	0	002	0		
30	nindical called	U	U	U	U	

Source: COVID-19 Tracking and Fundstrat

FS^{INSIGHT} | www.fsinsight.com



POINT 2: Wave 3 not causing panic, because no state overwhelmed by hospitalizations or deaths...

Policymakers are not panicking in wave 3, because there is nothing to panic about (yet)... US COVID-19 cases are at a high level, and potentially rising (hopefully peaking by the end of the month). And this wave 3 of cases is somewhat different, because it is principally driven by new cases in the states which previously had low prevalence. We discuss in this section how hospitalizations and deaths are actually quite low overall, and not concentrated in any state -- this contrasts with wave 1 and wave 2.

Wave 1 (Feb-April 2020) --> NY tristate + MA + RI - hospitalizations and deaths concentrated in 5 states

Wave 2 (June-July 2020) --> FL, CA, AZ, TX, or F-CAT - hospitalizations and deaths concentrated in 4 states

Wave 3 (now) --> 22 states facing outbreak

- hospitalizations and deaths not concentrated in any particular state

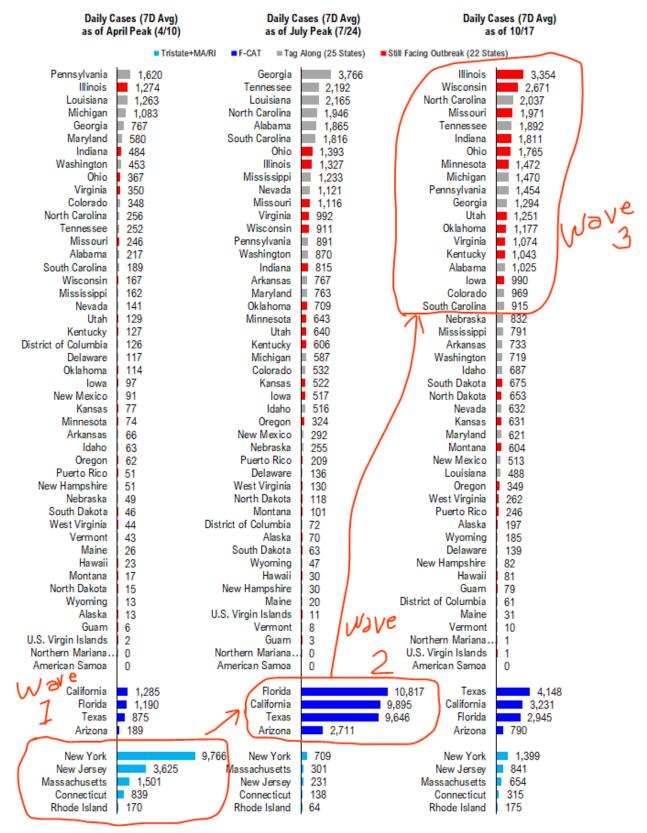
Daily cases were clearly concentrated in a handful of states in wave 1 and wave 2 but not wave 3

Look at the daily cases in wave 1 and wave 2, and we can see many states with >5,000 cases:

- Wave 1 --> NY
- Wave 2 --> FL, CA, TX
- Wave 3 --> none

So from a daily case perspective, no single state is standing out. And thus, at this time, no governor and mayor are panicking. But this does not mean they should not be alarmed. Daily cases are rising, and this suggests the R0 >1.0 and it could accelerate if Americans get too lax. And we know cases are rising throughout the US.





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



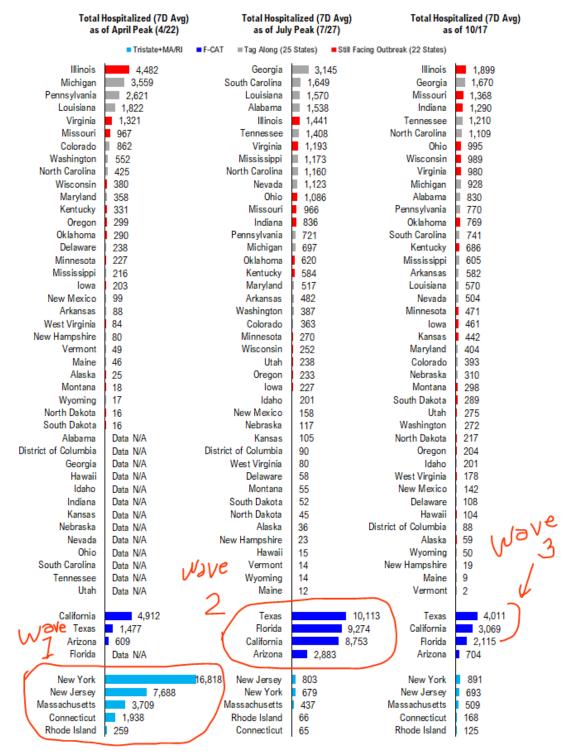
Hospitalizations and Deaths are muted compared to wave 1 and wave 2...

The bigger contrast is regarding hospitalizations. In wave 1 and wave 2, there were many states with extremely high levels of hospitalization usage and daily deaths. It was this horrific toll that caused many Americans to take action. In NYC, for instance, hospitals were even forced to use refrigerated trucks to store bodies. So, this is what made wave 1 and even wave 2 visibly deadly. Take a look at hospitalizations below:

- Wave 1, Hospitalization levels were incredibly high in NY, NJ and MA
- Wave 2, Hospitalization levels were very high in FL, CA, TX and even AZ
- Wave 3, no state is matching these incredibly high levels

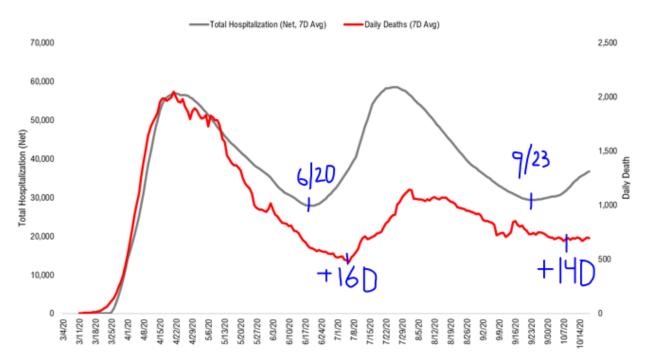
This is also not a forecast for the future. The level of hospitalizations could rise in the coming weeks. Moreover, these figures cited are based upon total levels of hospitalization. But in aggregate, this is the level that matters.





Deaths lag hospitalizations by 14-16 days as the chart below highlights. So, if hospitalizations are ticking up, we should now be looking for daily deaths to start rising. This is not happening currently, but it could in the coming weeks.



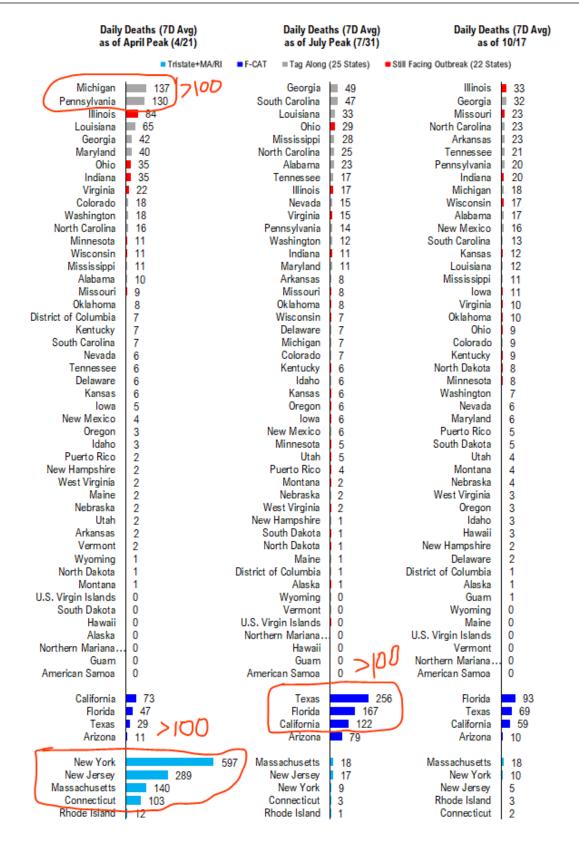


Currently, no single US state has >100 daily deaths, unlike wave 1 and wave 2
But similar to the chart on hospitalizations, there are not any concentrated areas of mortality. Since deaths generally follow hospitalizations, the fact that hospitalizations have not surged, means daily deaths should not be surging.

- Wave 1, 6 states reported >100 daily deaths per day
- This was fueled by COVID-19 sweeping through nursing homes
- Wave 2, 3 states reported >100 daily deaths
- So, daily deaths were significantly more contained in wave 2
- Wave 3, no state has >100 daily deaths

The takeaway, in our view, is that this is a different surge in cases. This could morph and turn into a greater level of hospitalization and death rates. But this has not yet happened.





FS^{INSIGHT} | www.fsinsight.com | Page 13



POINT 3: Is Sturgis Rally behind 'wave 3'?

The Washington Post had a great article about the possible post-COVID-19 impact of the Sturgis Motorcycle rally, held in Sturgis, SD (<u>WP article here</u>). They have some good anecdotes to suggest that this event is probably responsible for the surge in cases in the Mountains region of the US. But the timing of this rally, August 7th-16th, also coincided with back to school. So, it is difficult to know exactly how much of this is Sturgis, particularly as little contact tracing has been conducted. Much of the data is from a non-profit, newdata.org, and we have a few exhibits from their study.

- This event is controversial, because it drew participants from across the nation and this was a purely social event
- While BLM and other protests drew similarly large crowds, scientists and policymakers view this event with a different lens, because of the social nature of this event.



Health

How the Sturgis Motorcycle Rally may have spread coronavirus across the Upper Midwest

Within weeks of the gathering that drew nearly half a million bikers, the Dakotas, along with Wyoming, Minnesota and Montana, were leading the nation in new coronavirus infections per capita.

"When it comes to infectious diseases, it's often the case that the weakest link in the chain is a risk to everybody," said Josh Michaud, an epidemiologist and associate director for global health policy for the nonprofit Kaiser Family Foundation. "Holding a half-million-person rally in the midst of a pandemic is emblematic of a nation as a whole that maybe isn't taking [the novel coronavirus] as seriously as we should."

Source: Washington Post



Sturgis is a small town of 7,000 in the Mountains region of the US.



Source: Google

And the Sturgis rally has been taking place for more than 82 years and is the state's largest annual event. But this event is a legend for motorcycle enthusiasts, and even I know two people who have mentioned friends/relatives that attended this event. So, while I had never heard of it before, it is clearly legendary.



THE RICH HISTORY OF THE STURGIS MOTORCYCLE RALLY

Starting from humble beginnings, the Sturgis Motorcycle Rally has evolved in the last 82 years from just a handful of enthusiasts to thousands of bikers.

Once known as the Black Hills Motor Classic, the Rally is now the largest annual event in South Dakota. The name "Sturgis" is recognized world-wide, synonymous with motorcycles, rock 'n roll and wild parties.

https://www.blackhillsbadlands.com/blog/rich-history-sturgis-motorcycle-rally





https://www.blackhillsbadlands.com/blog/rich-history-sturgis-motorcycle-rally

The town itself is about 7,000 residents and this event draws >400,000 visitors annually. And according to the WP article, the boost to the town revenues is about \$2 million, so it is a significant event. 2020 attendance is similar to 2019, so COVID-19 did not keep many attendees away.

FS^{INSIGHT} | www.fsinsight.com | Page 16



Year ≑	SDDOT traffic count \$	Official attendance \$
1990	528,676	400,000
1999	539,475	325,000
2000	604,441	633,000
2001	530,667	410,000
2002	561,752	450,000
2003	605,140	502,000
2004	547,370	514,951
2005	524,656	525,250
2006	449,527	456,968
2007	461,507	507,234
2008	405,475	414,917
2009	394,009	442,163
2010	459,968	466,769
2011	415,367	416,727
2013	516,378 ^[8]	
2015	<u>c</u> . 1,000,000 ^[9]	739,000 ^[1]
2016	<u>c</u> _360,000 ^[10]	448,000 ^[11] – 463,412 ^[12]
2017	376,033 ^{[10][13]} -469,100 ^[8]	480,000 ^[11]
2018	505,969 ^[8]	
2019	499,654 ^[14]	490,000 ^[15]
2020	462,000 ^[16]	

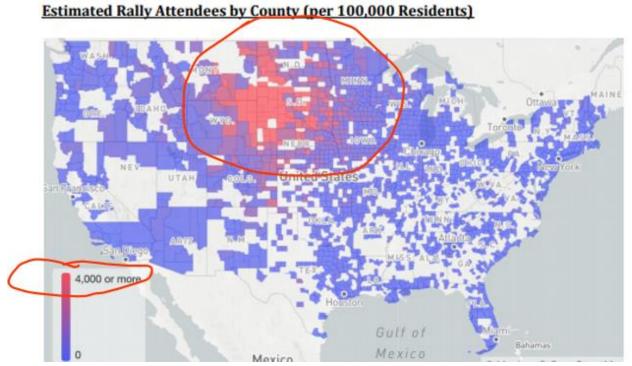
Source: DOT and Wikipedia

This event runs over a few days and does involve many social gatherings. And while most of the events are outdoors, because this is a highly social event, there is a lot of alcohol and people in close proximity for extended periods of time. So, I would not be surprised if there were cases from this event. And as we know from multiple studies, the rapid spread of COVID-19 takes place due to super spreaders, who tend to be symptomatic people spreading it to many. The latest breakout at the White House is an example of that.

The top chart is the estimated locality of the Sturgis attendees, based on "residents per capita" - in other words, measuring the density of the attendees. And as highlighted on that chart, the bulk of attendees are from 6 states:



- South Dakota
- North Dakota
- Montana
- Nebraska
- Wyoming
- Minnesota



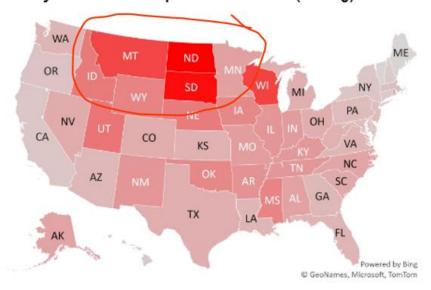
Source: newdata.org

Below is a chart made by our data science team, plotting a heatmap of states, based upon "daily case increase per 1mm residents" and the redder the state, the greater the increase. As you can see, the surge in US cases is coming from these same clusters of states. But what makes this somewhat curious is:

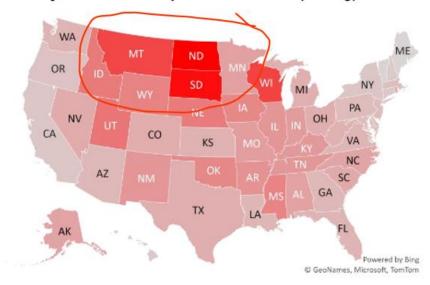
- the Sturgis rally was 8/7-8/16, or 8 weeks ago
- this surge of cases really starting surging in the last two weeks
- so it was a 6 week lag between the event and this surge



Daily Case Increases per 1mm Resident (3D Avg)



Daily Case Increases per 1mm Resident (3D Avg)



Source: COVID-19 Tracking Project and Fundstrat



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.