



COVID-19 UPDATE: USA COVID-19 cases exceed 100,000. 10 US counties super-parabolic. El Paso 33% of TX cases, but 2% of TX population.

THIS MESSAGE IS BEING SENT SOLELY TO CLIENTS OF FS INSIGHT

STRATEGY: The new President of the United States is still...undecided

Today (Wednesday) is D+1 after the 2020 election day, and the outcome of the Presidential election is still undecided, with the key states still counting votes and even potential recounts in several states. An "undecided" and even "contested" outcome was widely anticipated, and many of our clients were positioned with this as the central case. In fact, this positioning also contributed to the fact that stocks did not panic on this outcome and the VIX actually collapsed.

The S&P 500 managed to post a strong rally, up 2.25% (gave up a much stronger rally). Was this rally justified, even with a contested election? In our view, if one believes more than one of the factors below, then the answer is yes:

- stocks fell 10% in the past month, discounting a contested election
- investors were cautiously positioned into election day (cash >\$4.5T)
- tech rallied due to Republicans holding Senate (tax cuts off table)
- mutual-fund/ October YE tax loss selling over coupled with seasonal weakness ending
- Santa Claus rally still in play
- Republicans holding Senate make fiscal stimulus prior to YE more likely (vs lame duck)
- Republicans holding Senate maintain a balance of power = good
- many of our clients were bracing for a "limit down" Tuesday overnight futures session, so markets priced in a scary night
- VIX collapse is suggesting the market sees more certainty in election outcome compared to official electoral college

Stimulus before year-end + Santa Claus rally + positioning = still upside for stocks...

OK. So you can see, there are multiple reasons that stocks were relieved. In fact, this goes back to a simpler observation -- less uncertainty, is incremental certainty = risk on. So we think the rally in stocks makes sense and we still see the potential for a 10% rally into YE, taking stocks to 3,600 or more. The headwind would be a protracted legal battle that morphs into a street level chaos and violence.

Turning back to COVID-19, the daily cases are now becoming parabolic. Total USA cases surged past 100,000 for the first time. For the foreseeable future, daily cases will keep rising. Here are some high level statistics to keep in mind:

- case growth (velocity) is highest in the 6 states at the heart of wave 3, WI, IL, ID, ND, SD, UT, or WIINSU and ND >1,600 cases/day

- at the county level, 9 US counties have >1,000 cases per day (per 1mm residents). El Paso tops list ~2,000 cases per 1mm residents/day and 4 of 9 are in TX with 5 of 9 in WIINSU
- hospitalizations rising but the rate is far, far below wave 2 (see scatter and coefficient in point #3)
- winter is bringing about conditions to worsen COVID-19 spread: (i) indoor time; (ii) less ventilation; (iii) less humidity and (iv) less sun, or vitamin D

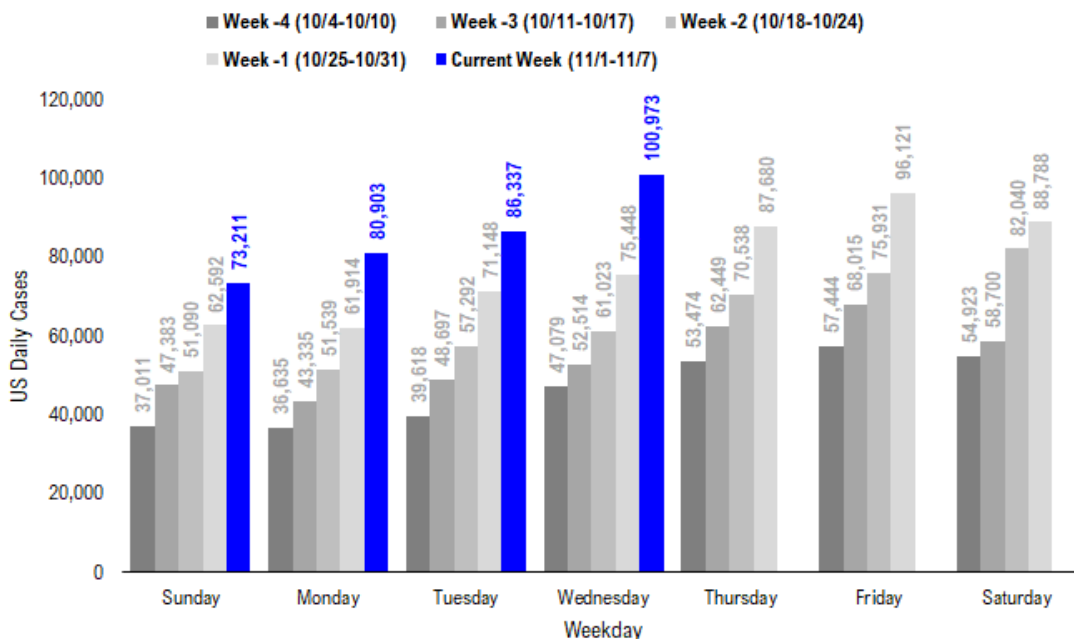
We hope everyone is taking the precautions to really limit one's risk of catching and spreading COVID-19. Therapeutics and vaccine development are making progress, so there remains a path to an end of this crisis. And as we wrote about several times recently, we see this crisis potential end date as mid-2021. So hopefully, we can avoid catching COVID-19 until then.

In point #2, we also see some signs of the speed "governor" kicking in as daily cases velocity in some WIINSU counties might actually be slowing. This is too early to call, but it is a sign that COVID-19 could be reaching some natural breakpoint among some wave 3 states. That would be a timeline way faster than suggested by the IHME models (mid-Feb).

POINT 1: Wow. Daily cases 100,973, +25,525 vs 7D ago -- 7D delta still rising

The latest COVID-19 daily cases came in at 100,973, up +25,525 vs 7D ago. This is the first time daily cases exceeded 100,000 and daily cases are actually set to rise further:

- the spread of cases across the US is widening
- the fastest spread remains in the wave 3 states, in particular, WI, IL, ID, ND, SD, UT, or WIINSU.
- but other states are seeing higher cases
- we all should be cognizant that cooler weather is making spread faster, perhaps due to weaker immune systems or "indoor" time

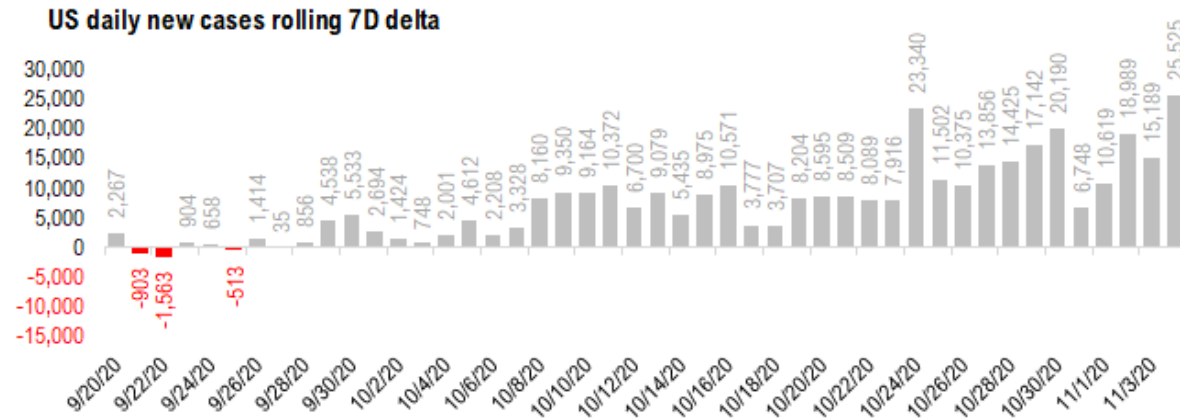


Source: COVID-19 Tracking Project and Fundstrat

7D delta rose to 25,525... the highest level since wave 3

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

- Daily cases are rising vs 7D ago,
- last week, it looked semi-parabolic
- the 7D rise in the most recent day is a big jump



Source: COVID-19 Tracking and Fundstrat

6 states with largest 7D delta in daily cases

Texas	9,049 vs 5,175 (-7D)	+3,874
Wisconsin	5,935 vs 3,815	+2,120
Minnesota	3,827 vs 1,908	+1,919
Ohio	4,071 vs 2,607	+1,464
Colorado	2,928 vs 1,475	+1,453
Illinois	7,538 vs 6,110	+1,428
Total		+12,258

6 states with largest 7D delta in daily cases

South Dakota	937 vs 1,270 (-7D)	-333
Mississippi	766 vs 1,000	-234
Arizona	815 vs 1,043	-228
Kentucky	1,630 vs 1,857	-227
Virginia	1,157 vs 1,345	-188
Louisiana	371 vs 503	-132
Total		-1,342

Source: COVID-19 Tracking and Fundstrat

Daily Case Increases (by State) (11/04)

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

	<i>Sorted</i>				
	7D Ago		Last 3-day Trend		
	10/28/20	11/2/20	11/3/20	11/4/20	vs 7D ago
United States	75,448	80,903	86,337	100,973	+25,525
States:					
1 Texas	5,175	3,982	7,215	9,049	<-higher
2 Illinois	6,110	6,222	6,516	7,538	<-higher
3 Wisconsin	3,815	3,433	5,771	5,935	<-higher
4 California	4,515	4,094	4,044	5,338	
5 Florida	4,115	4,651	4,637	4,423	
6 Michigan	3,271	6,709	3,106	4,101	<-higher
7 Ohio	2,607	2,909	4,229	4,071	<-higher
8 Minnesota	1,908	2,948	3,476	3,827	<-higher
9 Indiana	2,548	3,077	2,881	3,698	<-higher
10 Tennessee	2,446	3,161	1,770	3,445	<-higher
11 Kansas	1,869	4,046	0	2,988	<-higher
12 Colorado	1,475	2,237	2,562	2,928	<-higher
13 Pennsylvania	2,228	2,060	2,875	2,795	<-higher
14 Missouri	1,915	2,651	2,238	2,599	<-higher
15 New Jersey	1,666	1,368	1,828	2,432	<-higher
16 North Carolina	2,253	1,336	2,349	2,425	
17 Iowa	1,781	1,405	1,092	2,276	<-higher
18 New York	2,031	1,633	2,321	2,126	
19 Utah	1,575	1,196	1,669	2,110	<-higher
20 Georgia	1,653	939	1,668	1,863	
21 Alabama	1,269	907	1,037	1,848	<-higher
22 Massachusetts	1,181	842	1,036	1,714	<-higher
23 Kentucky	1,857	1,028	1,709	1,630	
24 Washington	716	1,039	657	1,469	<-higher
25 Nebraska	877	934	954	1,440	<-higher
26 Idaho	862	757	1,179	1,290	<-higher
27 Oklahoma	743	1,084	1,331	1,246	<-higher
28 Virginia	1,345	1,026	1,261	1,157	
29 North Dakota	777	972	1,172	1,114	<-higher
30 Nevada	571	635	911	1,068	<-higher
31 New Mexico	657	872	1,136	1,011	<-higher
32 Maryland	684	850	771	1,000	<-higher
33 South Dakota	1,270	526	1,004	937	
34 Arkansas	690	464	520	914	<-higher
35 Arizona	1,043	666	1,679	815	
36 Montana	620	757	907	796	<-higher
37 Mississippi	1,000	365	644	766	
38 South Carolina	780	861	908	715	
39 Oregon	420	549	482	589	<-higher
40 Rhode Island	499	232	423	579	
41 Connecticut	490	2,651	985	530	
42 Wyoming	340	444	452	425	<-higher
43 Alaska	355	350	388	404	
44 West Virginia	358	352	358	394	
45 Louisiana	503	270	1,150	371	
46 Hawaii	62	78	87	155	<-higher
47 Maine	76	84	127	151	<-higher
48 New Hampshire	110	106	128	115	
49 Delaware	143	185	115	108	
50 Guam	48	3	119	91	<-higher
51 District of Columbia	67	69	86	77	
52 Puerto Rico	66	864	345	57	
53 Vermont	11	22	22	27	<-higher
54 U.S. Virgin Islands	2	2	7	3	<-higher
55 Northern Mariana Islands	0	0	0	0	
56 American Samoa	0	0	0	0	

Source: COVID-19 Tracking and Fundstrat

POINT 2: Wave 3: COVID-19 be peaking in WIINSU but moving to other states...

Wave 3 is gathering momentum, both measured from daily cases and from hospitalizations. This wave is also gaining strength due to the winter and the associated higher risks:

- winter is "indoor" season = more exposure to viral load and less ventilation
- winter sees lower humidity = sinus systems more vulnerable
- winter reduces radiant sun = less vitamin D

These are possible reasons for fueling an accelerated spread of COVID-19. But see the top 15 states (based on daily cases) below. As you can see, the breadth of states seeing higher cases is up.

- And 3 of the 4 wave 2 states, FL, CA, TX, (of F-CAT) are in the top 10
- Texas saw a massive jump, mainly due to El Paso (see below)
- But cases are spreading fastest in wave 3 states WI, IL, IN, ND, SD, UT, or WIINSU

Daily Case Increases (by State) (11/04)

		<i>Sorted</i>				
		7D Ago		Last 3-day Trend		
		10/28/20	11/2/20	11/3/20	11/4/20	vs 7D ago
United States		75,448	80,903	86,337	100,973	+25,525
<i>United States (vs 7D)</i>		<i>70,165</i>	<i>76,800</i>	<i>82,216</i>		<i>+13,247</i>
States:						
1	Texas F-CAT	5,175	3,982	7,215	9,049	<--higher
2	Illinois	6,110	6,222	6,516	7,538	<--higher
3	Wisconsin	3,815	3,433	5,771	5,935	<--higher
4	California F-CAT	4,515	4,094	4,044	5,338	
5	Florida F-CAT	4,115	4,651	4,637	4,423	
6	Michigan	3,271	6,709	3,106	4,101	<--higher
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11	Kansas	1,869	4,046	0	2,988	<--higher
12	Colorado	1,475	2,237	2,562	2,928	<--higher
13	Pennsylvania	2,228	2,060	2,875	2,795	<--higher
14	Missouri	1,915	2,651	2,238	2,599	<--higher
15	New Jersey Tristate	1,666	1,368	1,828	2,432	<--higher

Source: COVID-19 Tracking and Fundstrat

El Paso, TX is seeing a massive wave...

El Paso is seeing a massive wave of cases and accounts for 33% of total Texas cases. The city has 680,000 residents and is 2.3% of TX total of 29 million residents.

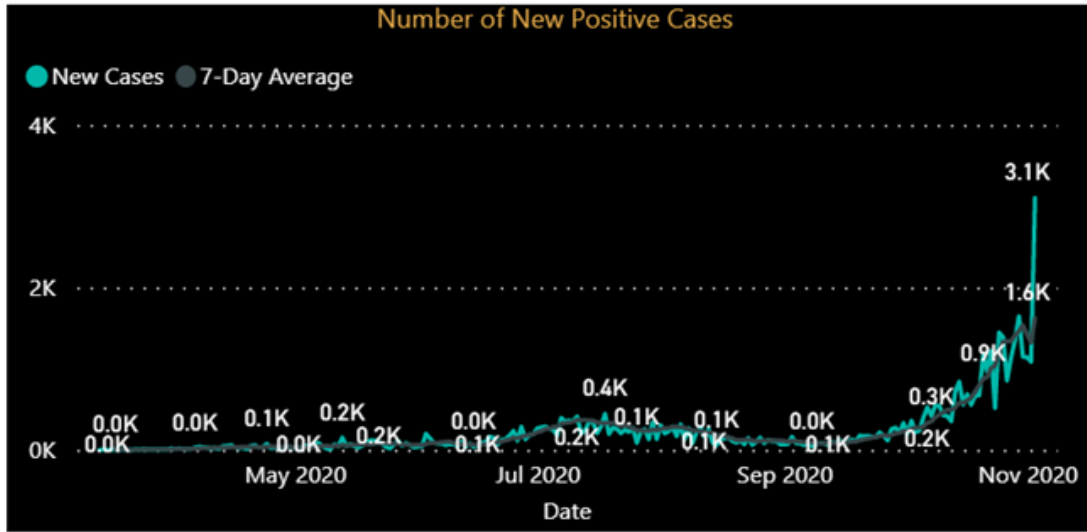
- the surge in cases is 10X the level of Texas overall
- Texas has more cases than any other state
- massive outbreak



The image is a screenshot of a news article from KFOX14. The top navigation bar is dark blue with the KFOX14 logo, a weather icon showing a cloud and moon with '71°', and a 'WATCH' button. The main headline is 'El Paso breaks record with 3,100 new COVID-19 cases, 1,041 hospitalizations' in bold black text. Below the headline, it says 'by Staff' and 'Wednesday, November 4th 2020'. There is a small 'AA' icon on the right. The main image shows an outdoor COVID-19 testing site with blue pop-up tents, orange traffic cones, and a white SUV. Below the image is a caption: 'Up to 1,000 COVID-19 tests available at EPCC Velle Verde campus. One of two mega testing sites around the area. (credit: KFOX14/CBS4)'. The source 'Source: KFOX14' is listed at the bottom of the screenshot.

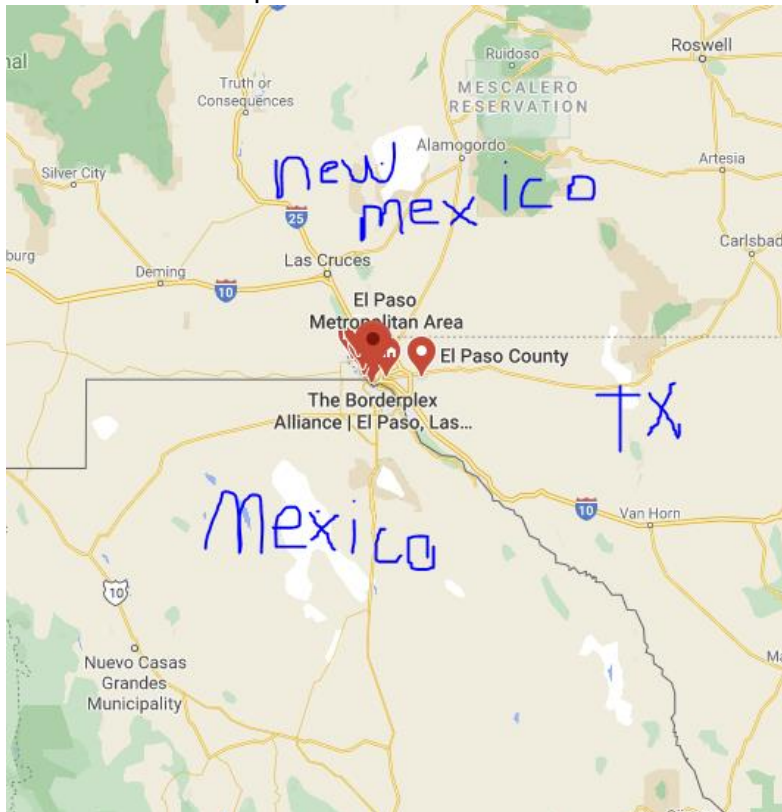
Source: KFOX14

As shown below, this is a massive, massive surge. This surge in cases looks very similar to the parabolic rise seen in European cities like London, Paris, etc.



Source: El Paso Dept of Health

El Paso is at the intersection of the US-Mexico border and this could be contributing to the surge. Healthcare quality is generally better in the US than Mexico, so we could be seeing another wave of imported cases.



Source: Google

These are the 9 other counties in the US with a surge in daily cases looking like El Paso, TX.

- 4 of the 9 are in Texas, including Lubbock
- the rest are in WIINSU

So, WIINSU remains the hotspot, especially if we look at the top 20 counties. But when WIINSU peaks, we can use this to model what might happen elsewhere.

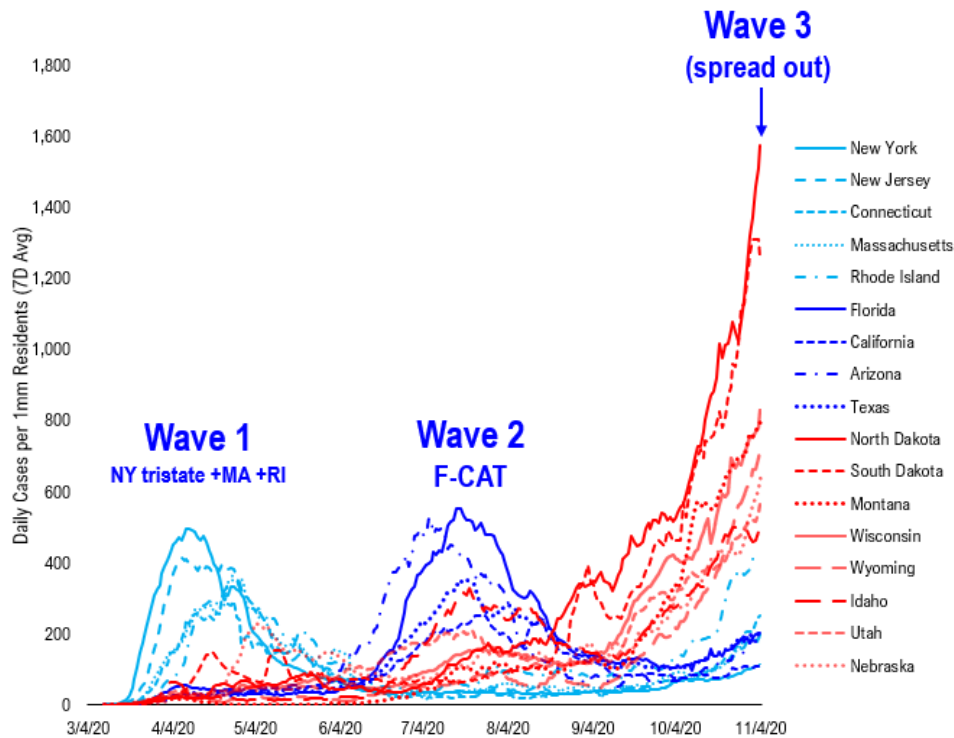
County	State	Population	Pop per Sq Miles	% US Population	# Cases	#Cases per 1mm Pop	1 Case per x residents	Daily Cases (3D Avg)	Daily Cases per 1mm (3D Avg)	
1	El Paso	Texas	839,238	828	0.3%	52,817	62,934	16	1,311	1,562
2	Fond du Lac	Wisconsin	103,403	143	0.0%	5,469	52,890	19	158	1,531
3	Potter	Texas	117,415	129	0.0%	8,766	74,658	13	176	1,502
4	Lubbock	Texas	310,569	345	0.1%	20,328	65,454	15	387	1,246
5	Eau Claire	Wisconsin	104,646	164	0.0%	4,225	40,374	25	127	1,210
6	Minnehaha	South Dakota	193,134	239	0.1%	12,985	67,233	15	220	1,139
7	Sheboygan	Wisconsin	115,340	225	0.0%	5,546	48,084	21	129	1,121
8	Cass	North Dakota	181,923	103	0.1%	10,343	56,854	18	198	1,090
9	Randall	Texas	137,713	151	0.0%	5,906	42,886	23	141	1,024

Source: Johns Hopkins and Fundstrat

WIINSU is where the cases are spreading the fastest...

The speed of case growth, measured as daily cases per 1mm, has been in the 6 states we have previously mentioned. This is visually apparent looking below.

- in fact, the velocity of case growth in ND and SD is well past NY tristate during its worst days
- part of this is the increase in testing (more detection)
- part of this is policymakers there have not quite panicked



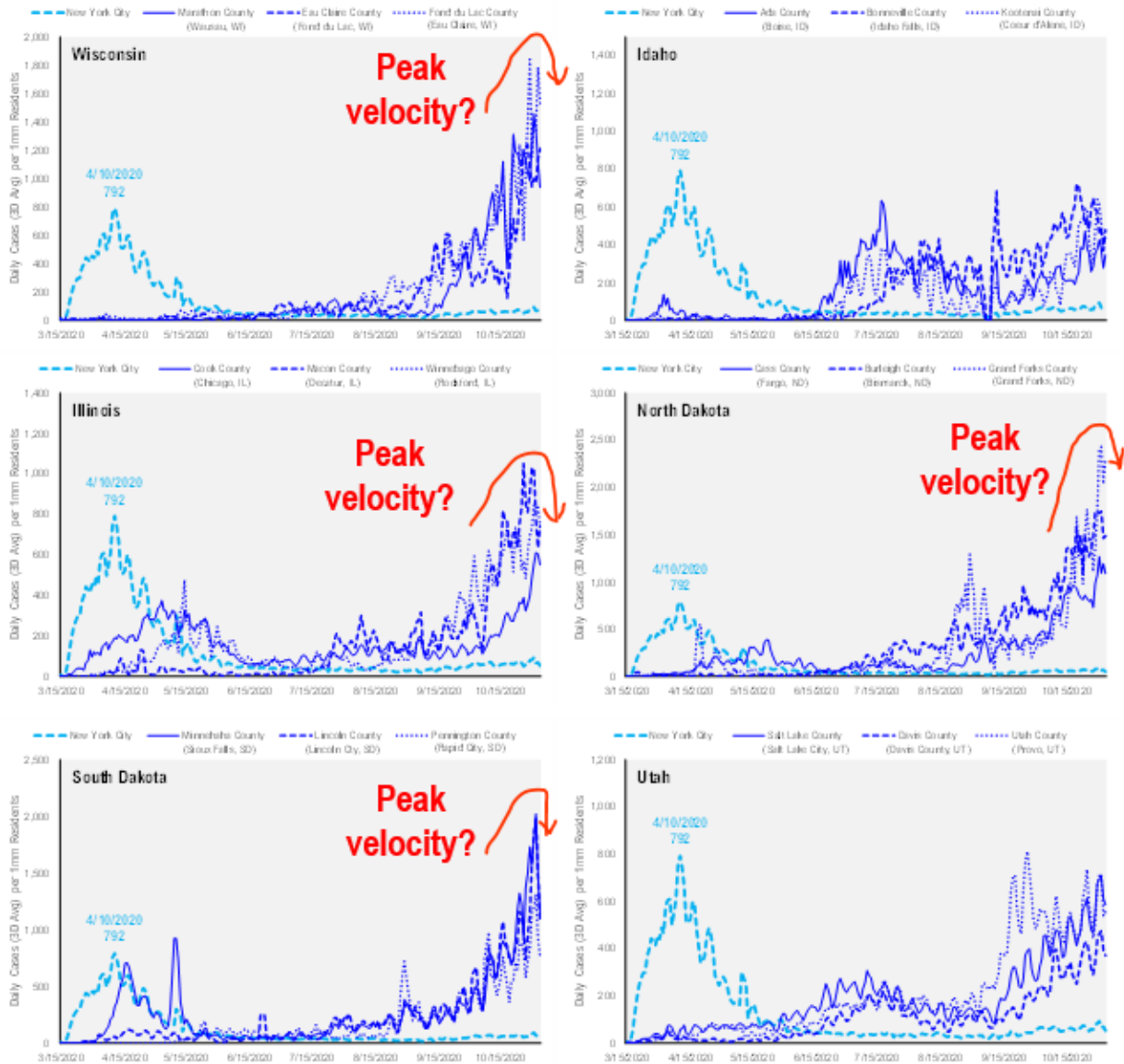
Source: COVID-19 Tracking and Fundstrat

But if we squint, we might be seeing signs of slowing in WIINSU states...

But if we were to look at county-level data, it does seem that the velocity of cases is actually slowing in these WIINSU states. As highlighted below:

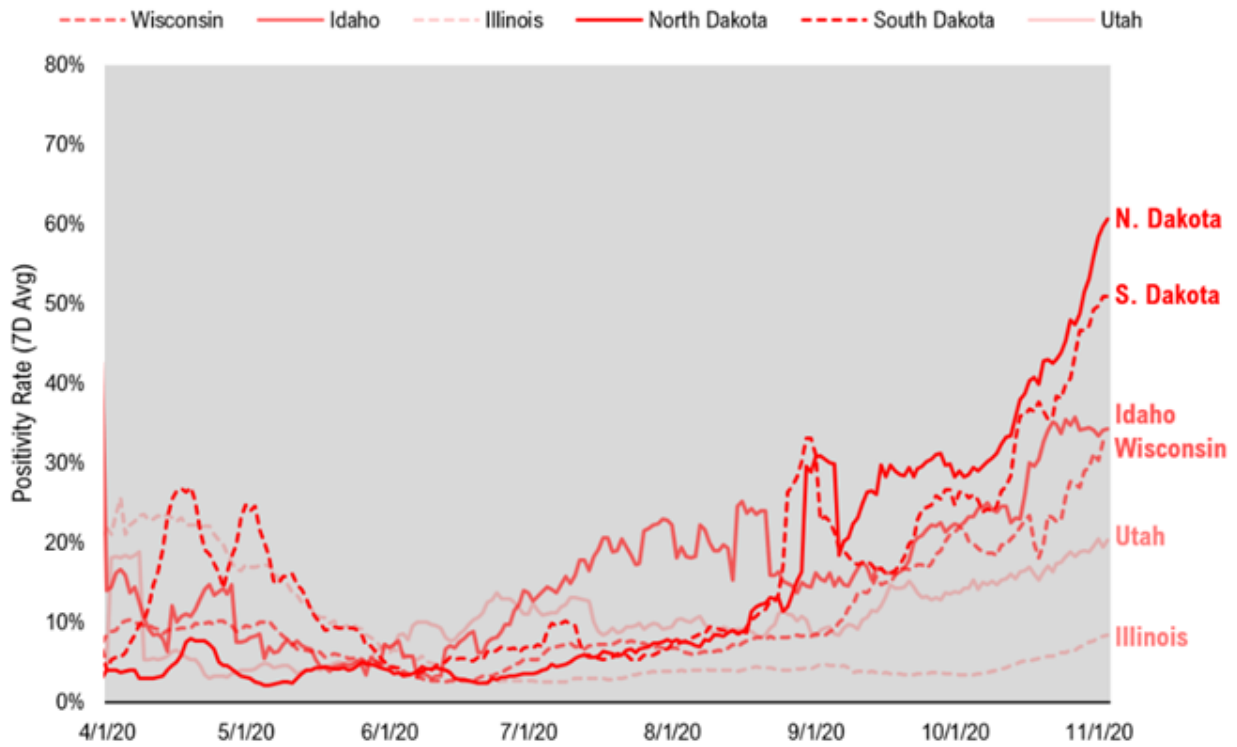
- Instead of making new highs, we are seeing daily cases per 1mm slowing
- This is true for WI, IL, ND, SD

So, we are reaching that point of peak velocity in WIINSU, potentially.



Source: Johns Hopkins and Fundstrat

But testing remains inadequate in the WIINSU states. As shown below, the positivity rate is >60% for ND and 50% for SD. These are pretty insane levels of positivity. And as shown below, these are rising.



Source: COVID-19 Tracking and Fundstrat

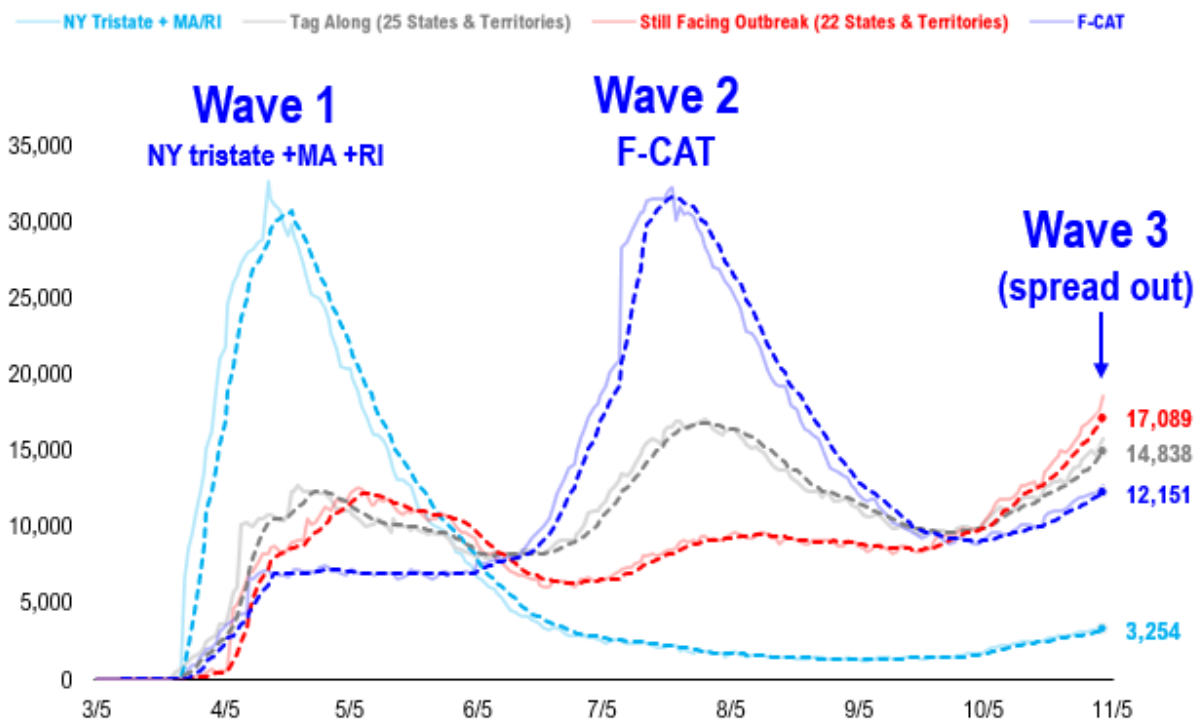
POINT 3: Hospitalizations matter more than cases. Hospitalizations rising but still lower than wave 2

As alarming as the case surge is, we do not want to be over-reacting either. COVID-19 is a terrible disease and very deadly if infecting the wrong cohort. So the key metric to watch is hospitalizations, which is a leading indicator for deaths.

- Hospitalizations are rising, particularly in wave 3 states (see below)
- but the level in any geographic area is far lower than in wave 1 and wave 2

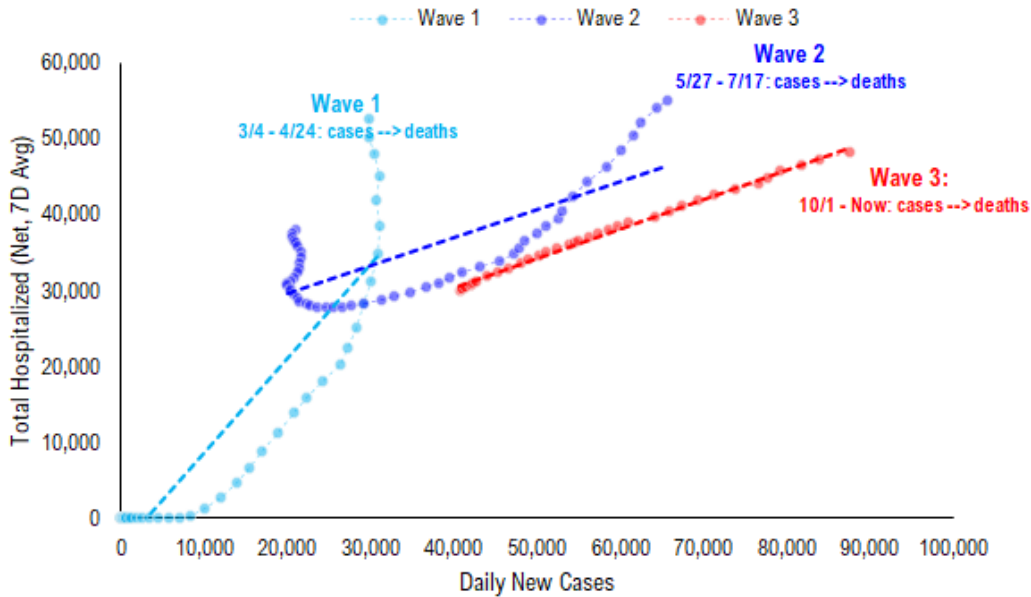
Wave 1 and wave 2 saw total hospitalizations peak at around 30,000 in total. But the 22 states of wave 3, with a far greater number of cases, is seeing 17,000 so far.

Current Hospitalizations



Source: COVID-19 Tracking Project

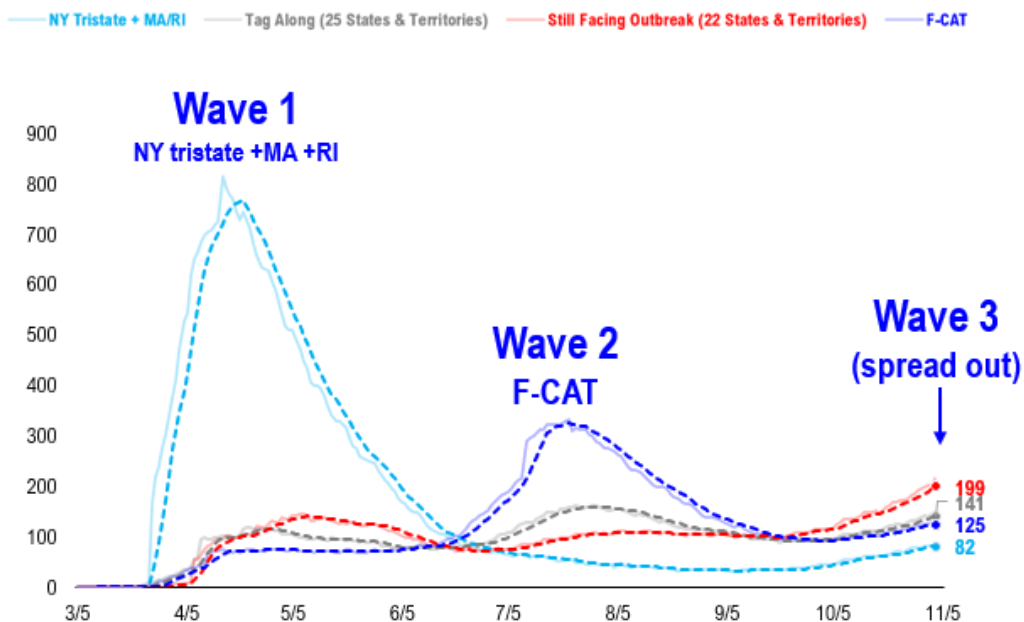
We can also see this by looking at the ratio of cases vs hospitalizations. The rate that Americans are getting hospitalized remains much lower than in the wave 2. This is apparent by looking at the slope of the cases.



Source: COVID-19 Tracking Project

This is also more visible when looking at hospitalizations per 1mm residents. And this shows the considerably milder level of hospitalizations in wave 3.

Current Hospitalizations per 1mm Residents

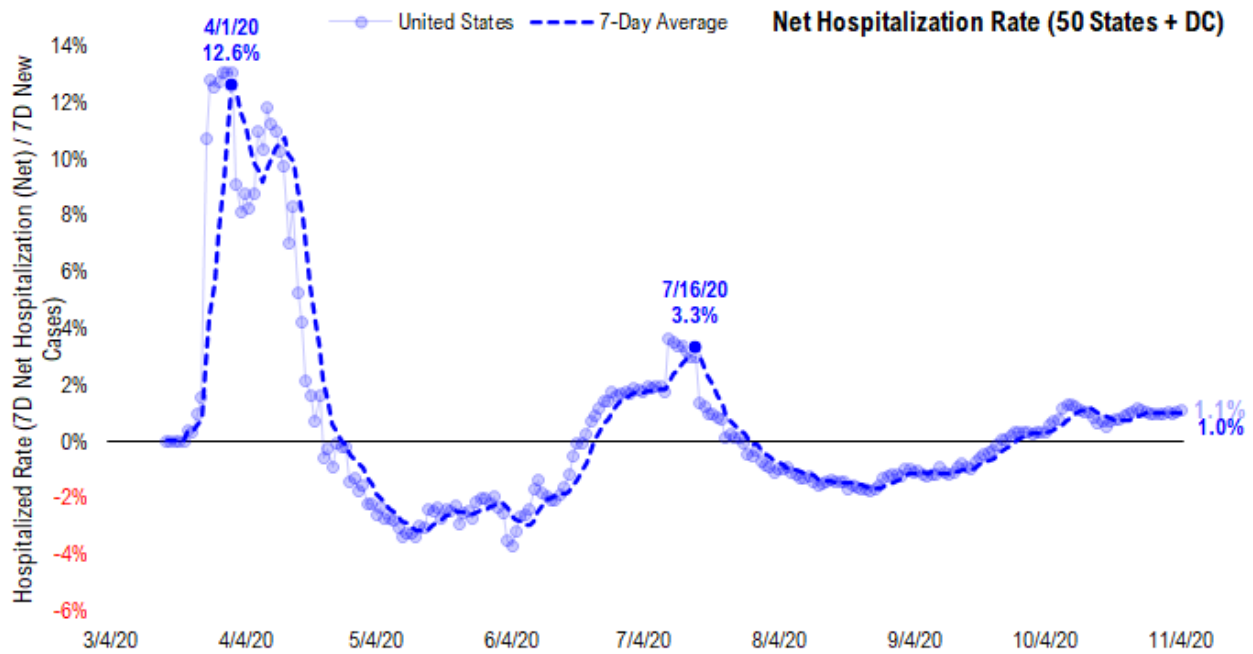


Source: COVID-19 Tracking Project

While COVID-19 cases are soaring and hospitalizations are rising, the rate of incremental hospitalizations is still shockingly low. That is, we are at all-time high in cases, yet, only about 1% of incremental cases are being hospitalized.

- this figure has stayed flat as a pancake at 1%
- this was >3.3% in wave 2
- and was >13% in wave 1

So COVID-19, while seeing a massive rise in cases, is not creating incremental healthcare severity that we saw in the prior waves.



Source: COVID-19 Tracking and Fundstrat

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