



COVID-19 UPDATE: If markets pricing in "worst is yet to come," 62% retrace, or S&P 500 3,224.50 is key level. US schools and colleges have surprisingly low confirmed infection rate.

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STRATEGY: Is "worst is yet to come" or are markets trying to price "second wave"?

For the past three weeks, equities faltered as a renewed set of concerns has undermined the generally positive narrative around equities, and more importantly, is building a heightened sense of dread heading into critical election day (11/3).

Collectively, the set of rising worries results in a sense that the "worst is yet to come:"

- Europe having more lockdowns
- FDA sets a higher threshold for approval of COVID-19 vaccine, dimming hopes of "now"
- Back to school + flu season adding to fear of a massive new wave of deaths
- 2020 election is very close and as a result, cannot look beyond 11/3 -- the next 40 days is all that matters
- markets way overbought heading into September

If it is pricing in "worst is yet to come" then we can look at the 62% retrace as key, or S&P 500 3,224.50

So it is understandable if one is worried that the worst is yet to come. But as we know, one cannot tell the market what to do. And equities may simply be pricing in "the worst is yet to come."

- and if the latter is true, we can think of some levels where stocks will make a stand.
- a 62% retrace of the rally since June would be a convenient place to "price in the worst is yet to come"
- that level is 3,224.50

We are within a stone's throw of that level. I would view this level as one of the more important levels to watch.

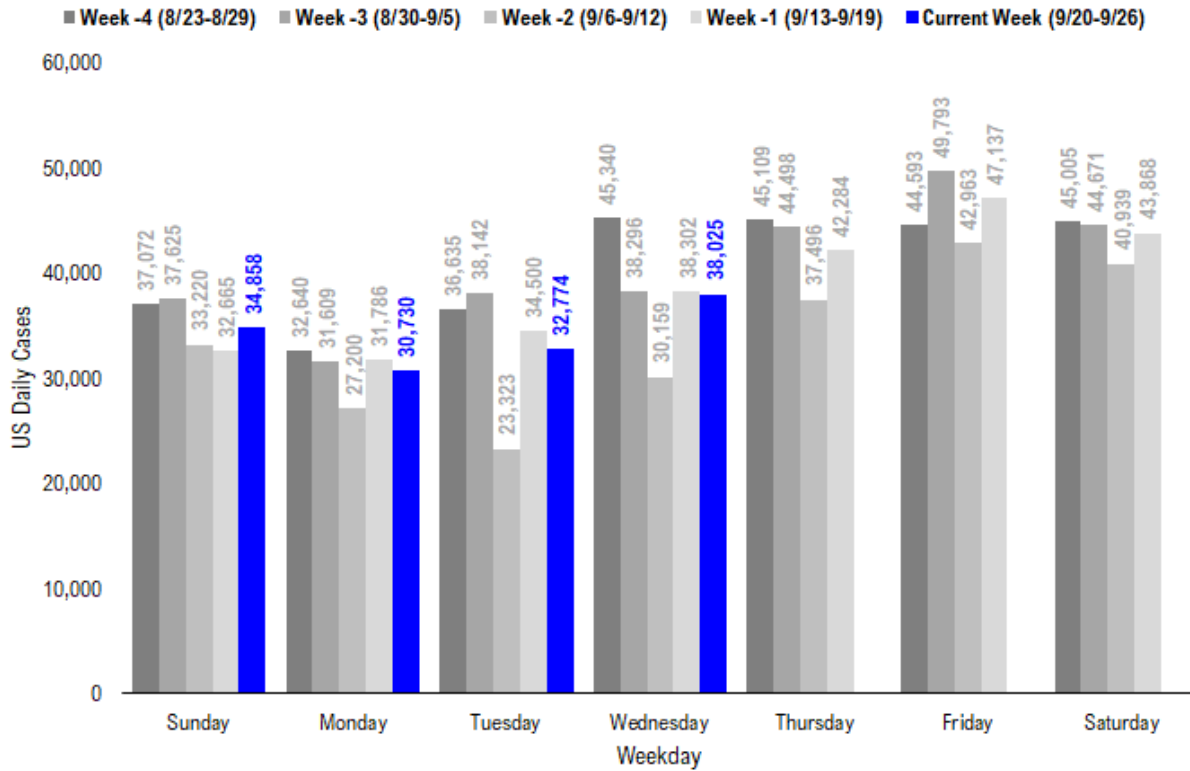
- US COVID-19 trends are very good, daily cases, deaths, hospitalizations
- US schools and colleges are 21 days into the school year, and a mere 0.075% of US students are infected --> shockingly low
- We see markets able to rally post-election day, with either a Trump or Biden outcome, but less so if it is contested.



POINT 1: Daily cases continue downtrend, 38,025 down -277 vs 7D ago

As we commented over the last few days, the downtrend in US cases is resuming as US cases came in at 38,025 which is down -277 vs 7D ago. As shown below, the decline in US cases is still drifting to the downside.

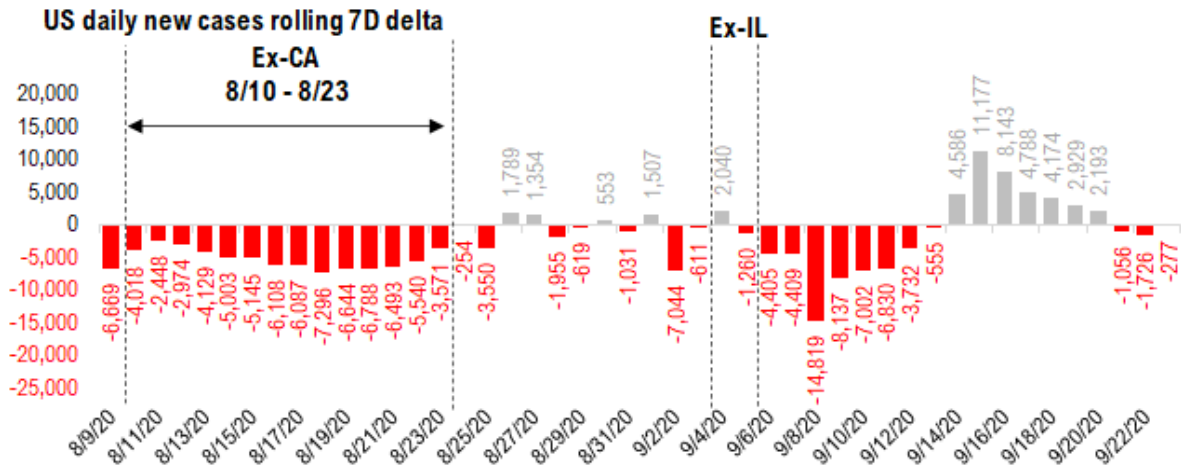
- there is quite a bit of daily seasonality, so it is not entirely obvious if one only looks at daily cases and compares it to the prior day



Source: COVID-19 Tracking Project

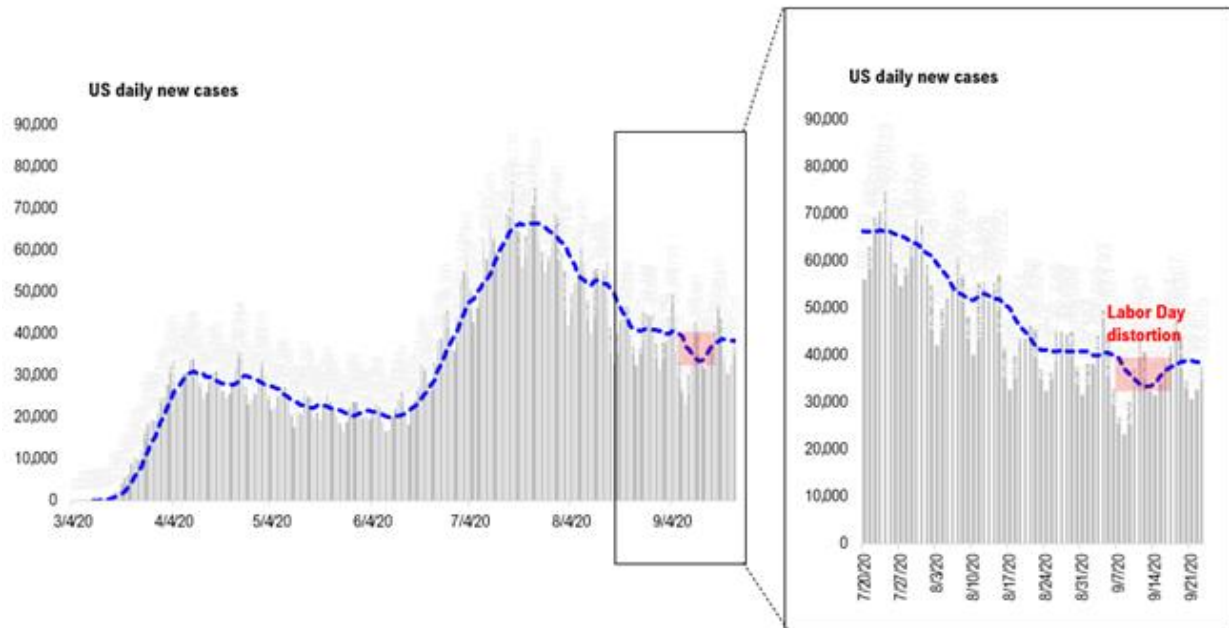
This week gives us a clearer picture...

Again, the daily change vs 7D ago, in our view, is the leading indicator as it is what influences the 7D moving average. The 7D delta turned down in the past three days, reversing the previous 7 days of gains. This is much clearer in the visual below. The 7D delta peaked last week and turned negative this week and is accelerating to the downside.



Source: COVID-19 Tracking and Fundstrat

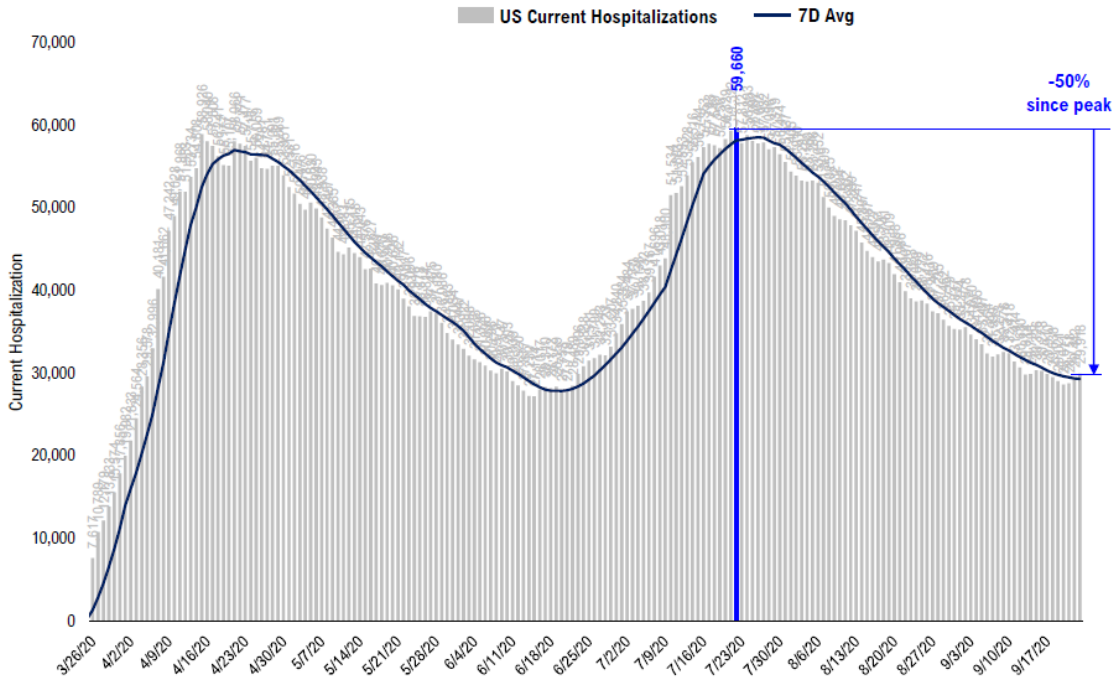
It is common for COVID-19 daily cases to be down on a 7D moving average and as shown below, this 7D looks to be a "v" in it. This, we believe, stems from the under-reporting during the week of Labor Day and then the subsequent "true-up" in the following week.



Source: COVID-19 Tracking and Fundstrat

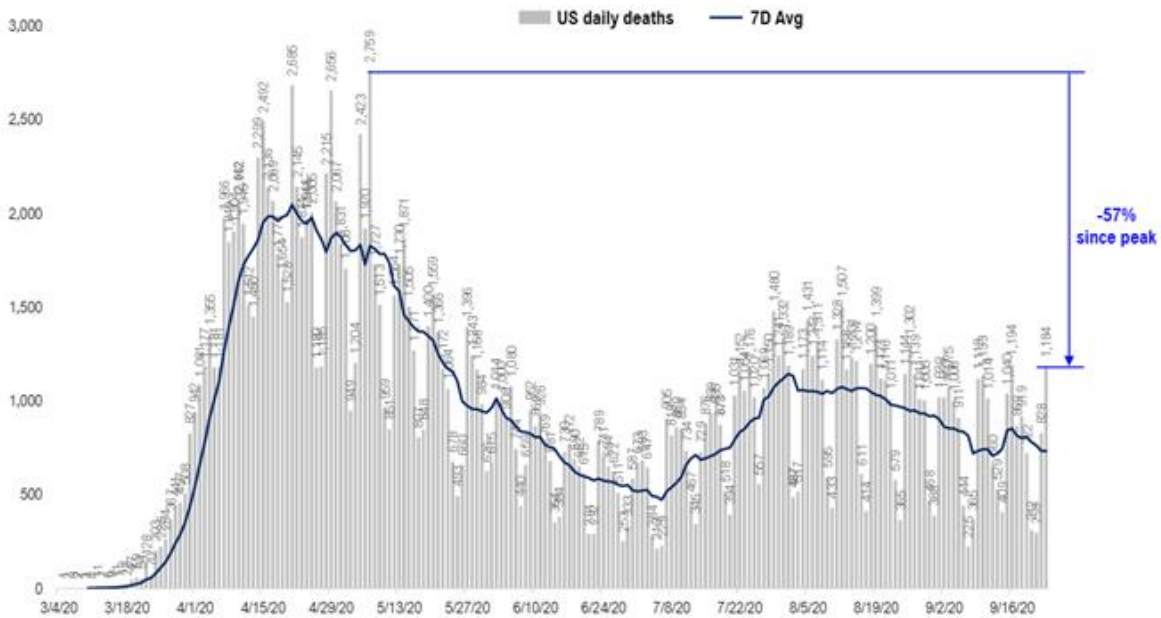
These same trends are true for hospitalizations and for daily deaths. Both are declining steadily and in a sustained downtrend.

US Net Hospitalizations (aggregate of 50 states + Washington, D.C.)



Source: COVID-19 Tracking and Fundstrat

US daily COVID-19 Fatalities



Source: COVID-19 Tracking and Fundstrat

6 states with largest 7D delta in daily cases

Missouri	1,580 vs 1,191 (-7D)	+389
Wisconsin	1,762 vs 1,408	+354
Nevada	509 vs 208	+301
Washington	645 vs 347	+298
Kansas	1,267 vs 971	+296
Arkansas	874 vs 606	+268
Total		+1,906

6 states with largest 7D delta in daily cases

South Carolina	666 vs 1,903 (-7D)	-1,237
Georgia	1,457 vs 2,223	-766
Texas	2,977 vs 3,409	-432
Alabama	569 vs 927	-358
Tennessee	1,561 vs 1,856	-295
Virginia	580 vs 845	-265
Total		-3,353

Daily Case Increases (by State) (09/23)

% 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			
WA data represent the new cases over the past 3 days...						
		9/16/20	9/21/20	9/22/20	9/23/20	vs 7D ago
United States		38,302	30,730	32,774	38,025	-277
States:						
1	California	2,950	3,294	2,630	3,146	
2	Texas	3,409	1,742	3,964	2,977	
3	Florida	2,355	1,685	2,470	2,590	
4	Illinois	1,941	1,477	1,531	1,848	
5	Wisconsin	1,408	1,271	1,672	1,762	<-higher
6	Missouri	1,191	1,463	1,059	1,580	<-higher
7	Tennessee	1,856	895	739	1,561	
8	Georgia	2,223	1,184	882	1,457	
9	Kansas	971	1,674	0	1,267	<-higher
10	Oklahoma	970	1,101	1,164	1,089	
11	Iowa	803	660	548	1,036	<-higher
12	North Carolina	1,137	800	1,168	952	
13	Ohio	1,033	856	685	903	
14	Pennsylvania	776	234	834	898	
15	Utah	747	622	650	877	
16	Arkansas	606	596	486	874	<-higher
17	Kentucky	764	375	814	786	
18	Indiana	580	522	599	711	<-higher
19	Michigan	680	1,536	504	705	
20	Minnesota	462	925	480	678	<-higher
21	South Carolina	1,903	417	769	666	
22	New York	652	573	754	665	
23	Washington	347	0	0	645	
24	Colorado	587	542	654	616	
25	Virginia	845	627	872	580	
26	Alabama	927	818	804	569	
27	Mississippi	711	192	465	552	
28	Massachusetts	306	256	173	543	<-higher
29	Nevada	208	232	262	509	<-higher
30	North Dakota	269	286	264	473	<-higher
31	South Dakota	297	173	320	445	<-higher
32	Arizona	695	233	595	438	
33	Louisiana	508	243	752	431	
34	New Jersey	388	392	426	408	
35	Nebraska	328	286	305	397	<-higher
36	Idaho	283	410	446	396	<-higher
37	Maryland	643	412	344	385	
38	Montana	187	130	271	212	
39	New Mexico	118	104	107	197	<-higher
40	Oregon	188	194	318	190	
41	Hawaii	101	56	62	168	<-higher
42	Connecticut	135	497	136	155	
43	Wyoming	128	73	72	153	
44	Rhode Island	108	52	112	133	<-higher
45	West Virginia	220	117	213	120	
46	Delaware	97	101	94	69	
47	Alaska	49	70	44	54	
48	Guam	47	30	43	45	
49	Puerto Rico	46	242	88	40	
50	District of Columbia	56	23	43	29	
51	Maine	23	27	40	25	
52	New Hampshire	32	5	38	17	
53	U.S. Virgin Islands	7	0	7	2	
54	Vermont	1	4	2	1	
55	Northern Mariana Islands	0	1	0	0	
56	American Samoa	0	0	0	0	

Source: COVID-19 Tracking and Fundstrat

**POINT 2: Nearly 1-month into schools, COVID-19 spread surprisingly contained...
Proportionate math would say schools/colleges collectively should be reporting 3,000-4,000 daily cases...**

It has been about a month since students returned to schools, both primary (K-12) and colleges. There have been cases reported at colleges and schools. But since COVID-19 is spreading across the US, and about 1 in 500 people is infectious in the US (we did the math a few weeks ago), this means that there should be cases expected at K-12 and at colleges:

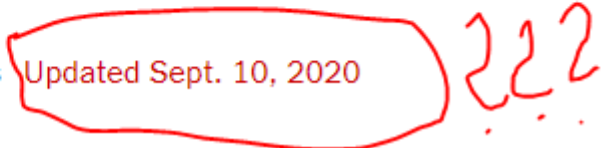
- K-12 about 57 million
- Colleges/universities total enrollment 20 million
- Total 77 million

So about 20% of the US population is in schools right now, so about 20% of daily cases should be coming from schools/colleges. As shown above, this should be about 8,000 cases per day. Based on what we gather from NY Times data and other sources, this figure is not nearly that high.

The NY Times has a great database of cases for reported colleges and universities. Unfortunately, they have not updated this data since 9/10/2020, or nearly two weeks. We are not sure why the NY Times has not updated this data since they were quite active earlier.

Tracking Covid at U.S. Colleges and Universities

By The New York Times Updated Sept. 10, 2020



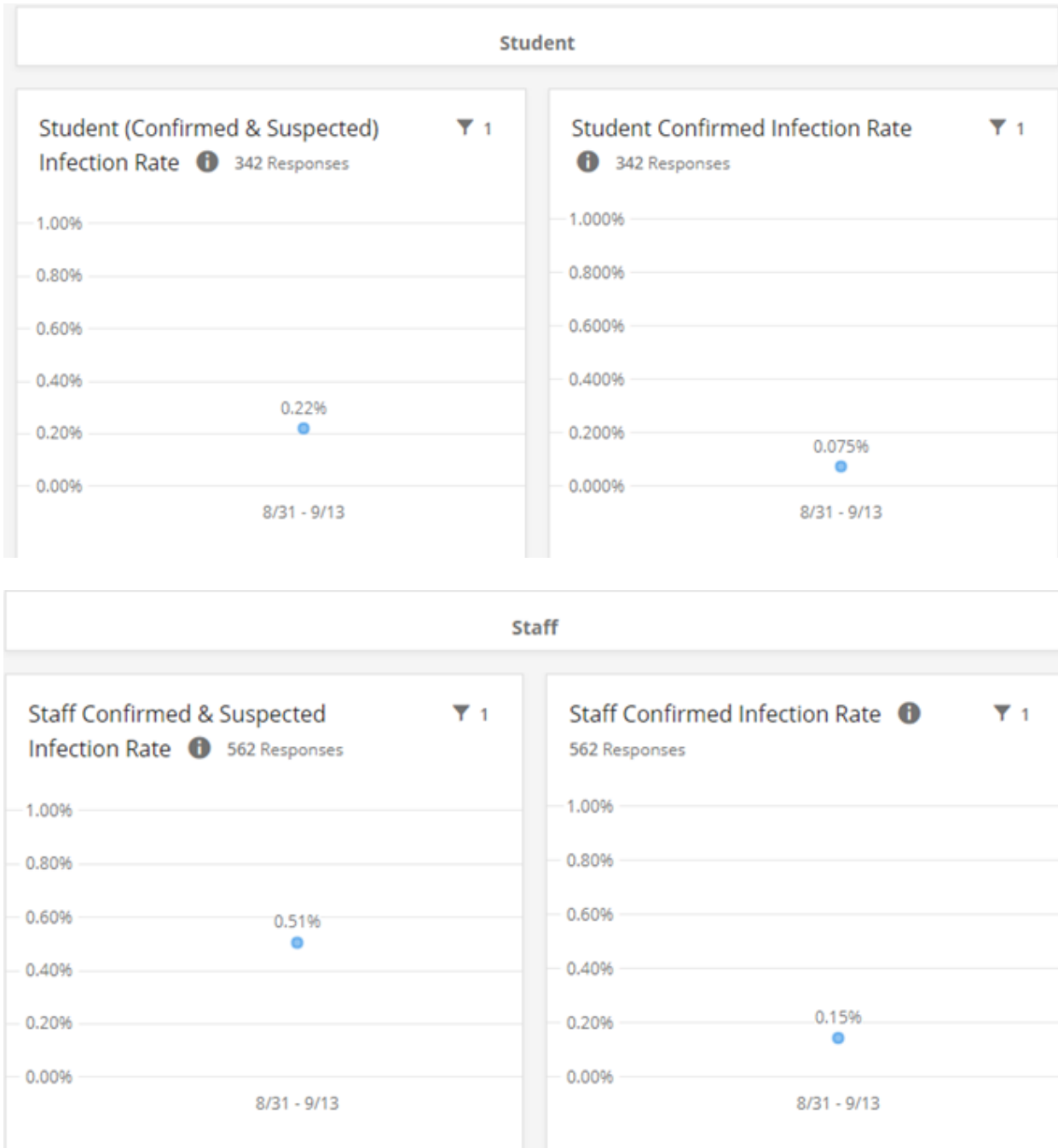
Source: NY Times

Brown University researchers launch National COVID-19 School Response Dashboard...

Researchers at Brown University have launched a national database for tracking primary school cases. This has the results from 562 schools and hopefully this will grow over time to be most inclusive. There are already some useful insights.

First, the confirmed infection rate for students and staff is very small.

- just 0.075% of students confirmed infection rate
- just 0.15% of teachers



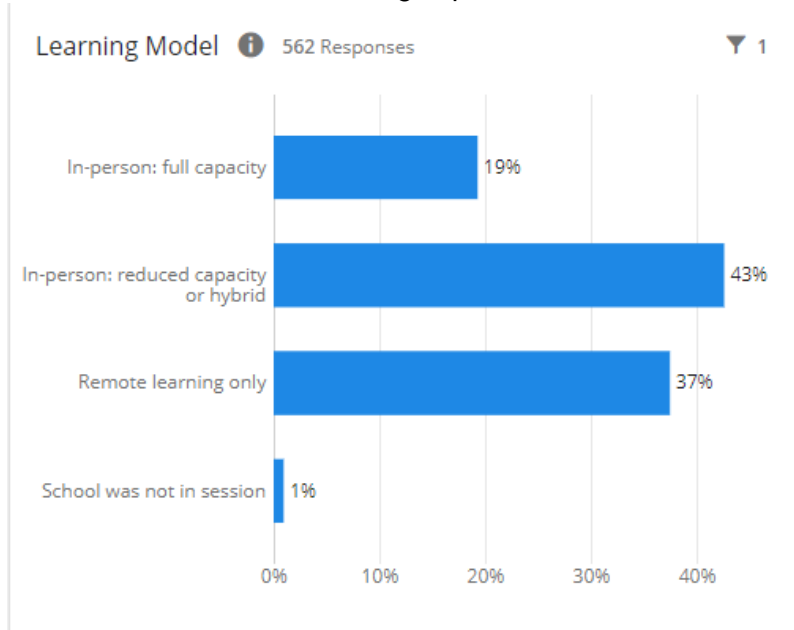
Source: Brown University

https://statsig.co1.qualtrics.com/public-dashboard/v0/dashboard/5f62eae4451ae001535c839#/dashboard/5f62eae4451ae001535c839?pageId=Page_1ac6a6bc-92b6-423e-9f7a-259a18648318

As for the learning model:

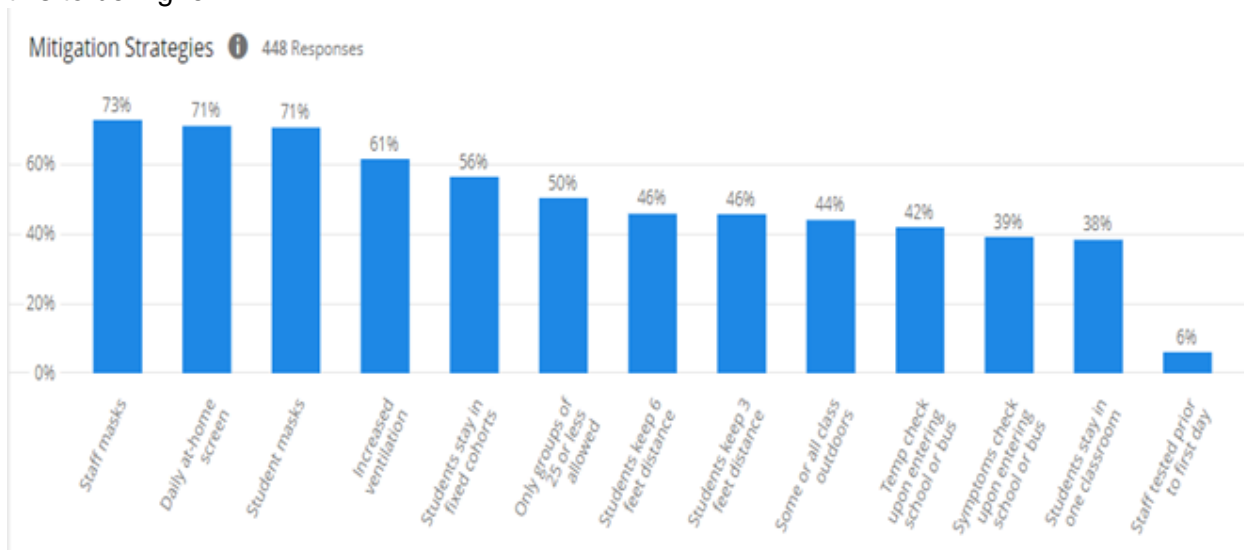
- "full capacity" is 19%
- hybrid is 43%
- remote 37%

So 66% of schools are meeting in person, in one form or another.



Source: Brown University

And as for mitigation, I was surprised to see only 73% have staff masks. I would have expected this to be higher.



Source: Brown University

https://statsiq.co1.qualtrics.com/public-dashboard/v0/dashboard/5f62eaae4451ae001535c839#/dashboard/5f62eaae4451ae001535c839?pagelD=Page_1ac6a6bc-92b6-423e-9f7a-259a18648318

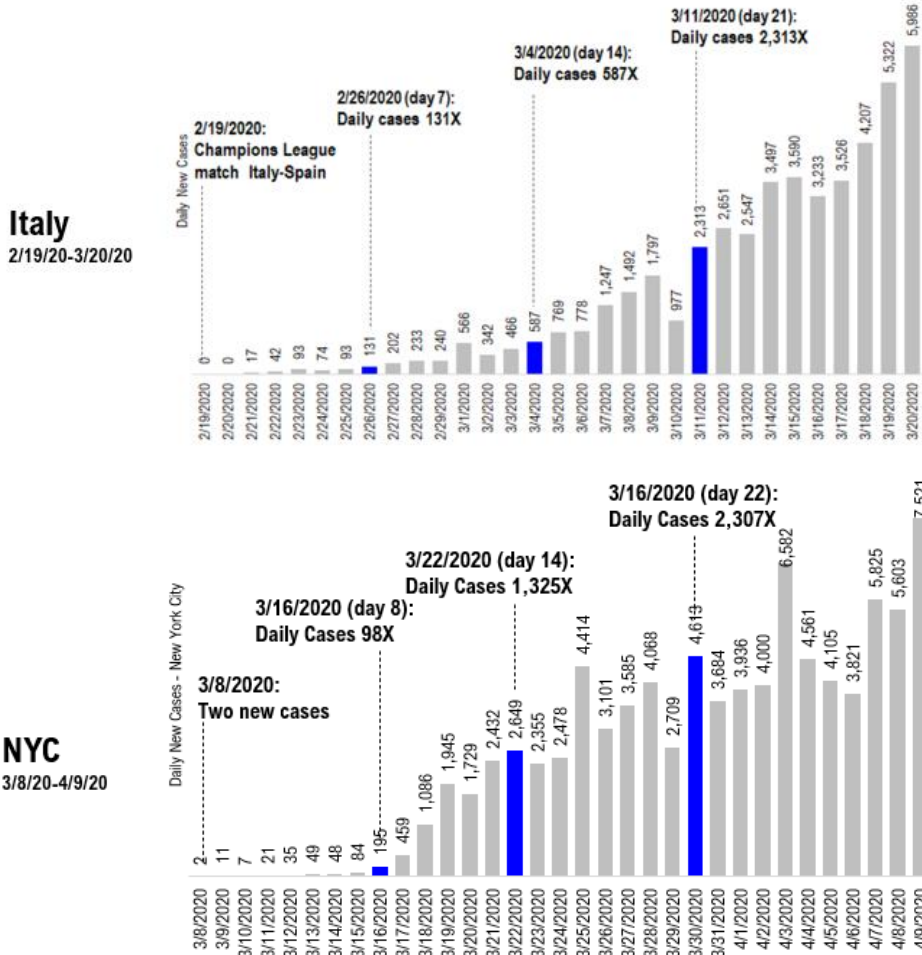
Recall how cases exploded in NYC and in Italy in the first 21 days... so US schools shockingly low level of cases...

Why do we think these figures are low?

This is 21 days into the school year (assuming 9/1 start). And look at how daily cases spread in Italy and NYC in the first 21 days.

- Italy --> daily cases 2,313X greater than the first day
- NYC --> daily cases 2,307X greater than the first day

Wow. What an odd coincidence. And tireless Ken triple checked this.



Source: Fundstrat, NYC.gov, Johns Hopkins

So, US schools and colleges are meeting in class and after 21 days, we should be seeing an epidemic among the 80 million citizens.

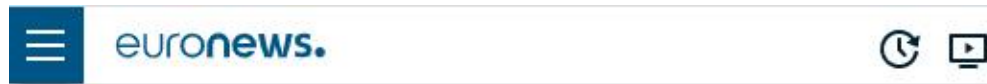
- But cases remain muted.

I would consider this a huge success.

The future is uncertain, so it could change.

POINT 3: European policy makers over-reacting? Europe overtakes Latam...

France is following the UK in announcing new lockdown measures, to contain a spread in cases.



FRANCE

Coronavirus: France unveils new measures to tackle flare up in cases and hospitalisations COMMENTS

By Alice Tidey • 23/09/2020 - 21:19



French Health Minister Olivier Veran speaks during a press conference in Paris, Wednesday Sept. 23, 2020. - Copyright Eliot Blondet/Pool via AP

France's Health Minister unveiled new restrictive measures on Wednesday to curb the spread of COVID-19 with the virus actively now circulating in over two-thirds of the country.

The toughest measures will for now only concern the coastal city of Marseille and the island of Guadeloupe with bars and restaurants ordered to shut from Saturday, Oliver Véran announced during a press conference.

Source: Euronews

Europe has overtaken Latin America is now the #2 region in the world for daily cases. The rest of the World is actually reporting a decline in cases as shown below.

7/17/2020	7/31/2020	8/14/2020	8/28/2020	9/11/2020	9/22/2020
Latin America 72,602	Latin America 97,308	Latin America 100,636	Latin America 88,255	Pakistan + India + Bangladesh 98,888	Pakistan + India + Bangladesh 81,227
US + Canada 72,365	US + Canada 67,272	Pakistan + India + Bangladesh 68,924	Pakistan + India + Bangladesh 82,644	Latin America 83,501	Europe 59,292
Pakistan + India + Bangladesh 39,450	Pakistan + India + Bangladesh 58,625	US + Canada 54,663	US + Canada 45,494	Europe 47,368	Latin America 54,451
Africa 19,290	Europe 20,854	Europe 28,282	Europe 35,826	US + Canada 37,512	US + Canada 34,204
Europe 17,320	Africa 17,999	Africa 10,680	Asia ex- India+Pakistan 9,999	Asia ex- India+Pakistan 10,612	Asia ex- India+Pakistan 10,037
Asia ex- India+Pakistan 7,321	Asia ex- India+Pakistan 10,630	Asia ex- India+Pakistan 10,512	Africa 8,468	Africa 8,309	Africa 7,131

Source: Johns Hopkins

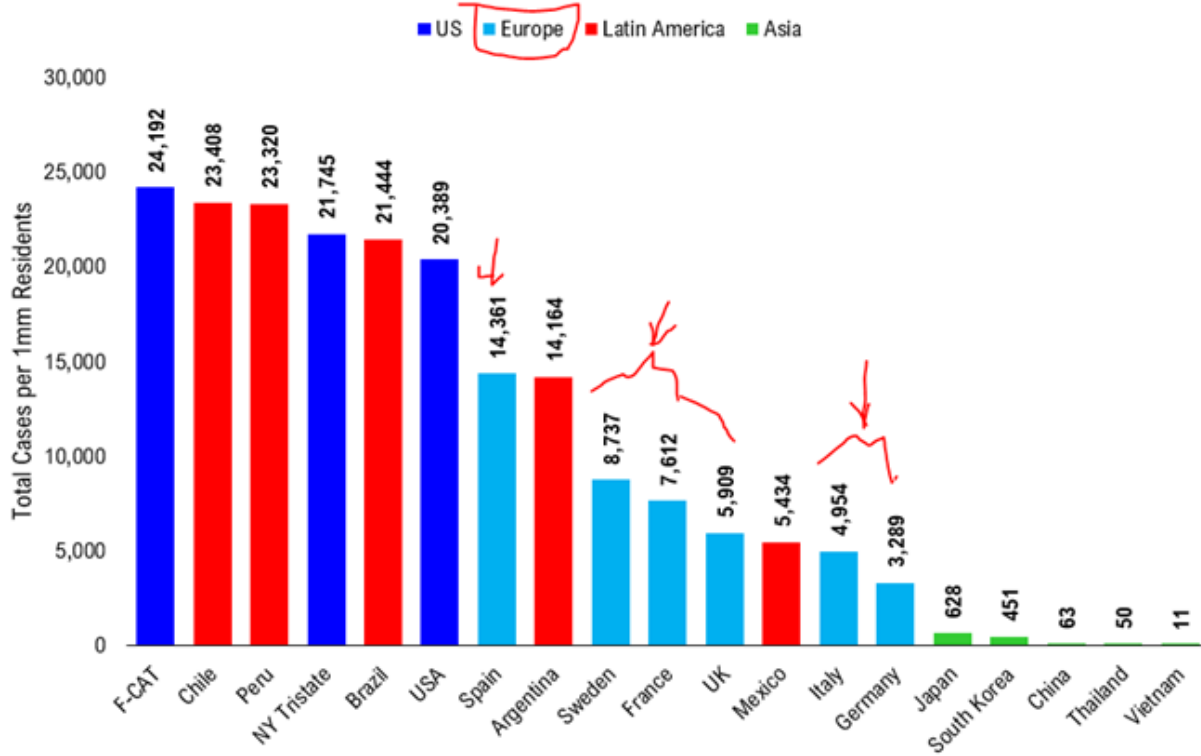
Of the reported cases, the top of the list are Spain and France along with Russia and UK (we add Russia here).

	Country	Population	Total Cases	#Cases		New Cases (3D Avg)
				per 1mm Residents	New Cases	
1	Spain	46,754,778	682,267	14,592	10,799	14,076
2	France	65,273,511	507,150	7,770	10,299	13,179
3	Russia	145,934,462	1,111,157	7,614	6,109	6,081
4	United Kingdom	67,886,011	406,058	5,981	4,936	4,404
5	Ukraine	43,733,762	185,890	4,250	2,990	2,947
6	Netherlands	17,134,872	102,844	6,002	2,353	2,194
7	Turkey	84,339,067	306,302	3,632	1,692	1,651
8	Czechia	10,708,981	53,158	4,964	2,394	1,617
9	Germany	83,783,942	277,412	3,311	1,852	1,493
10	Belgium	11,589,623	105,226	9,079	1,834	1,493
11	Italy	60,461,826	300,897	4,977	1,391	1,443
12	Romania	19,237,691	114,648	5,960	1,059	1,033
13	Hungary	9,660,351	19,499	2,018	633	860
14	Poland	37,846,611	80,699	2,132	711	790
15	Austria	9,006,398	39,303	4,364	645	610
16	Portugal	10,196,709	69,663	6,832	463	546
17	Switzerland	8,654,622	50,664	5,854	286	460
18	Denmark	5,792,202	24,261	4,189	487	460
19	Montenegro	628,066	9,138	14,549	296	413
20	Sweden	10,099,265	89,436	8,856	1,199	400
21	Moldova	4,033,963	47,446	11,762	650	370
22	Greece	10,423,054	15,928	1,528	333	317
23	Ireland	4,937,786	33,444	6,773	323	302
24	Belarus	9,449,323	76,104	8,054	206	214
25	Georgia	3,989,167	3,913	981	218	202
26	Bosnia and Herzegovir	3,280,819	25,737	7,845	216	173
27	Armenia	2,963,243	47,667	16,086	115	171
28	Albania	2,877,797	12,666	4,401	131	147
29	Croatia	4,105,267	15,136	3,687	144	137
30	Slovakia	5,459,642	6,931	1,269	175	128
31	Azerbaijan	10,139,177	39,378	3,884	98	112
32	North Macedonia	2,083,374	16,867	8,096	87	103
33	Bulgaria	6,948,445	19,123	2,752	109	101
34	Luxembourg	625,978	8,016	12,806	100	99
35	Norway	5,421,241	13,153	2,426	148	98
36	Finland	5,540,720	9,195	1,660	149	91
37	Slovenia	2,078,938	4,558	2,192	88	83
38	Lithuania	2,722,289	3,859	1,418	45	65
39	Serbia	8,737,371	32,999	3,777	61	53
40	Andorra	77,265	1,681	21,756	0	39
41	Malta	441,543	2,814	6,373	38	38
42	Iceland	341,243	2,419	7,089	42	37
43	Estonia	1,326,535	2,976	2,243	35	34
44	Latvia	1,886,198	1,560	827	34	15
45	Cyprus	1,207,359	1,618	1,340	15	9
46	Monaco	39,242	197	5,020	2	2
47	Liechtenstein	38,128	115	3,016	1	1
48	Kosovo	1,845,000	12,683	6,874	0	0
49	San Marino	33,931	723	21,308	0	0
50	Holy See	801	12	14,981	0	0
	Average	17,035,552	99,892	6,383	1,120	1,186
	Median	5,500,181	21,880	4,998	211	188
	Total	851,777,589	4,994,590	5,864	55,991	59,292

Source: Johns Hopkins

Europe has among the lowest cases per 1mm residents, so there is a greater vulnerability to those areas. And perhaps the policy decision is:

- Does France want to get to 24,000 cases per 1mm, or a 3X in total cases?
- Let's hope lockdowns work



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

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