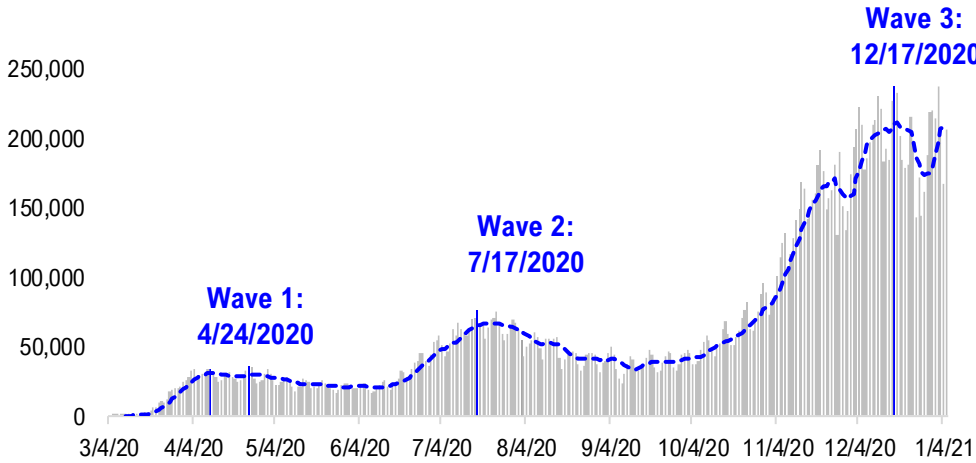


FSInsight Daily COVID-19 Chartbook

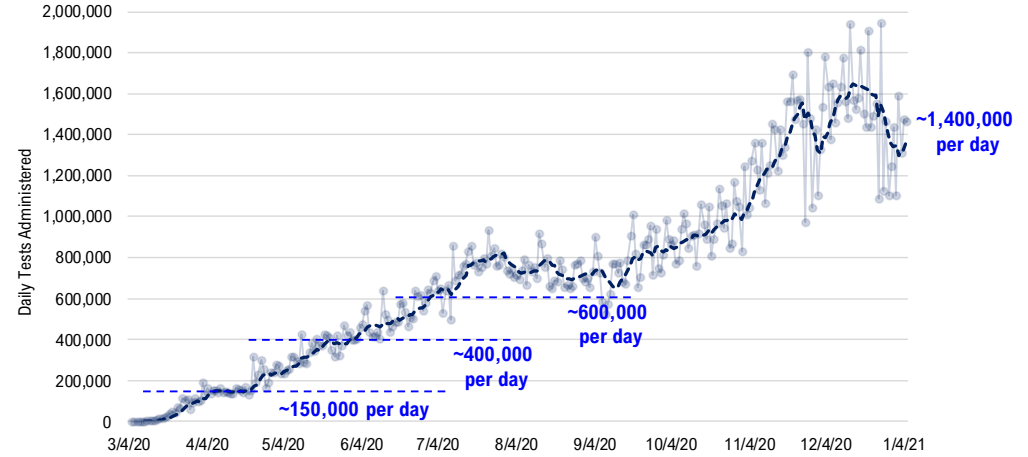


#1: USA COVID-19 Situation at a Glance...

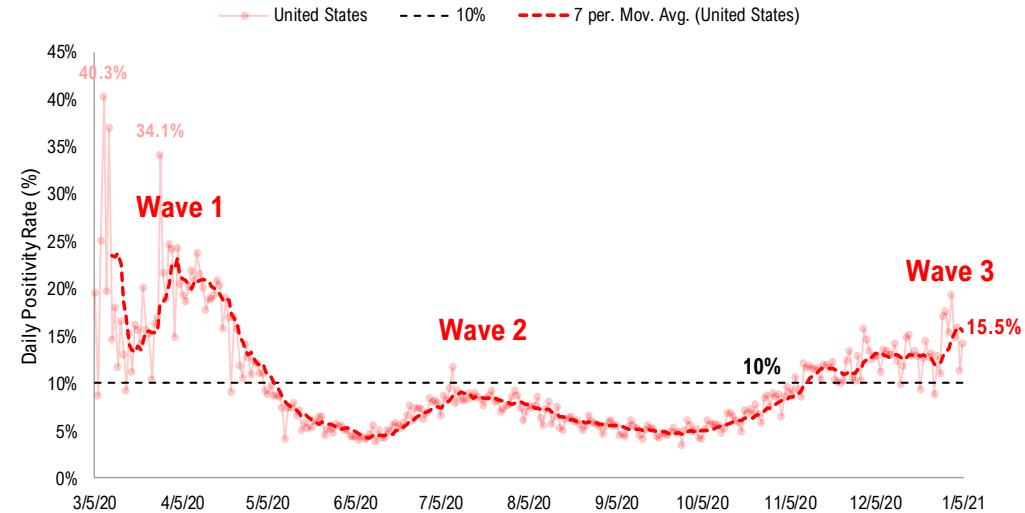
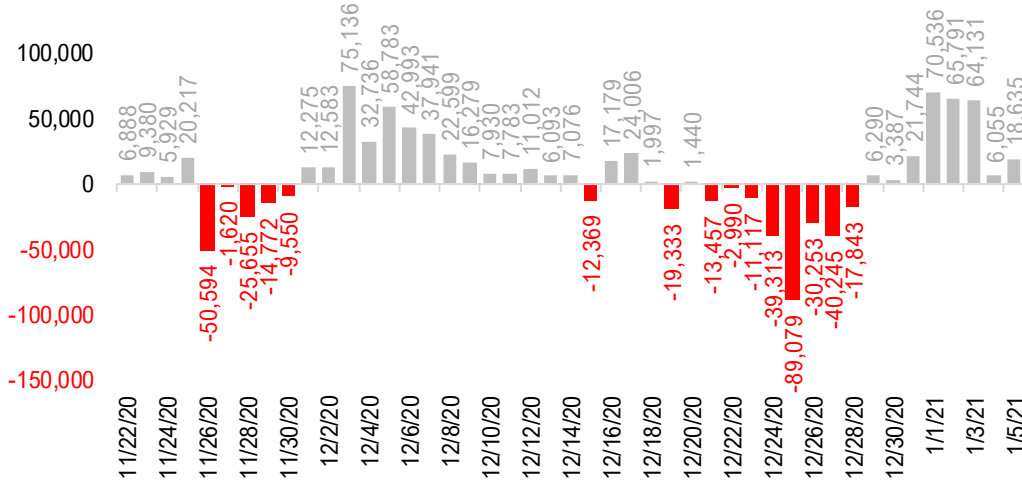
US daily new cases



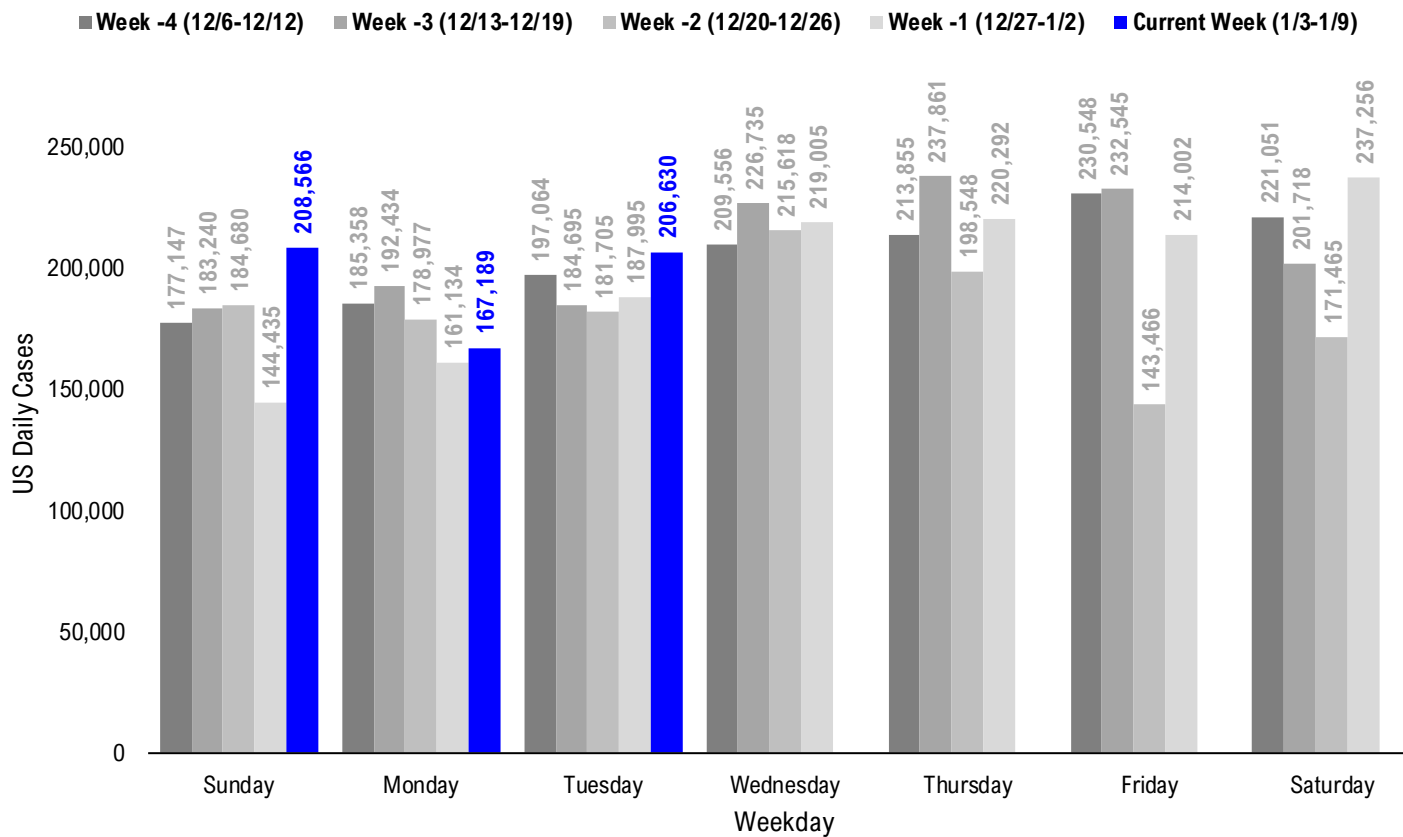
USA total COVID-19 tests administered



US daily new cases rolling 7D delta



#2: USA COVID-19 Daily Cases Weekday Seasonality (Past 4 Weeks) ...



#3: USA State COVID-19 Situation at a Glance...

	Sorted Daily Cases		Daily Cases (3D avg) per 1mm residents				Hospitalization			
	% US Pop	% US GDP	7D		Since Peak		% Decline in Daily Cases		7D Net Hospitalization	
			1/5	Delta	1/5	Delta	# Days	%	7D Net Hospitalization	7D Net Hospitalization / 7D New Cases
United States	100%	100%	206.630	+18.635	591	+90	18	-16%	6.593	0.4%

	Sorted Daily Cases		Daily Cases (3D avg) per 1mm residents				Hospitalization			
	% US Pop	% US GDP	7D		Since Peak		% Decline in Daily Cases		7D Net Hospitalization	
			1/5	Delta	1/5	Delta	# Days	%	7D Net Hospitalization	7D Net Hospitalization / 7D New Cases
United States	100%	100%	206.630	+18.635	591	+90	18	-16%	6.593	0.4%

States:

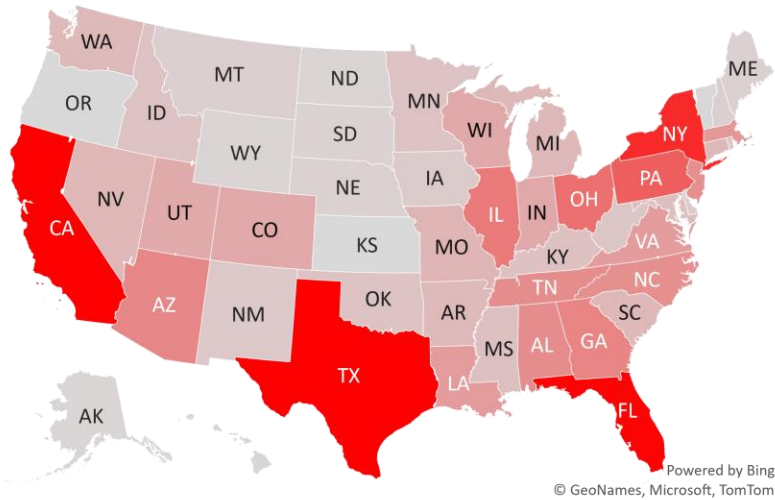
1 California	11.9%	14.6%	31,440	+195	898	-69	18	-28%	1,245	0.5%
2 Texas	8.7%	8.8%	26,543	-447	656	+128	5	-3%	1,533	1.5%
3 Florida	6.5%	5.0%	15,431	+3,356	579	+149	4	-28%	1,065	1.1%
4 New York	5.9%	8.1%	12,666	+1,228	604	+99	3	-27%	776	0.8%
5 Pennsylvania	3.9%	3.8%	8,818	+273	433	-15	31	-54%	-338	(0.7%)
6 Ohio	3.5%	3.3%	7,580	+54	580	+69	26	-41%	-70	(0.1%)
7 Illinois	3.8%	4.2%	6,839	+1,195	431	+66	53	-60%	-408	(0.9%)
8 Georgia	3.2%	2.9%	6,102	+249	477	+102	3	-36%	803	1.8%
9 Arizona	2.2%	1.7%	5,932	+3,133	1297	+648	2	-22%	314	0.5%
10 Alabama	1.5%	1.1%	5,498	+1,591	689	+122	17	-29%	276	1.0%
11 Tennessee	2.1%	1.8%	5,399	+602	660	+89	18	-56%	191	0.4%
12 New Jersey	2.7%	3.0%	5,319	+1,662	423	+95	30	-34%	-63	(0.2%)
13 North Carolina	3.2%	2.7%	5,285	+1,722	539	+210	8	-35%	404	0.8%
14 Massachusetts	2.1%	2.8%	4,634	+489	630	+75	5	-29%	169	0.5%
15 Louisiana	1.4%	1.3%	4,454	+508	819	+246	5	-23%	285	1.3%
16 Virginia	2.6%	2.6%	4,377	+255	514	+95	4	-9%	220	0.7%
17 Colorado	1.7%	1.8%	3,458	+1,718	447	+170	45	-57%	-200	(1.1%)
18 Wisconsin	1.8%	1.6%	3,403	+1,019	415	+72	53	-67%	41	0.2%
19 Indiana	2.0%	1.8%	3,395	-581	495	+86	31	-58%	-44	(0.1%)
20 Utah	1.0%	0.9%	3,318	+582	759	+213	45	-39%	30	0.2%
21 Missouri	1.8%	1.5%	2,632	+153	333	+37	52	-59%	117	0.6%
22 Nevada	0.9%	0.8%	2,423	+676	713	+229	31	-24%	-62	(0.4%)
23 Connecticut	1.1%	1.3%	2,332	+1,565	640	-222	27	-47%	-77	(0.5%)
24 South Carolina	1.6%	1.1%	2,326	-328	647	+73	2	-24%	390	1.5%
25 Michigan	3.0%	2.6%	2,291	-1,123	243	+21	48	-72%	-148	(0.7%)
26 Arkansas	0.9%	0.6%	2,275	+826	526	+196	4	-31%	162	1.2%
27 Washington	2.3%	2.7%	2,204	+152	500	+328	41	-10%	-83	(0.5%)
28 Maryland	1.8%	2.0%	1,956	+78	363	+53	30	-32%	46	0.2%

States:

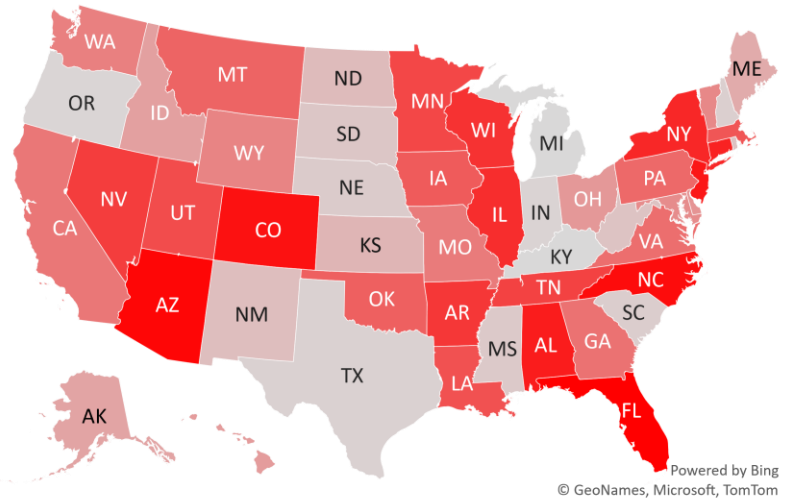
29 Mississippi	0.9%	0.6%	1,767	-176	579	+18	4	-38%	109	0.7%
30 Kentucky	1.3%	1.0%	1,693	-1,282	512	+70	1	-51%	125	0.6%
31 Minnesota	1.7%	1.8%	1,573	+601	439	+169	36	-69%	-124	(0.9%)
32 Idaho	0.5%	0.4%	1,538	+24	493	-17	26	-57%	-26	(0.4%)
33 Oklahoma	1.2%	1.0%	1,497	+303	1029	+416	1	-23%	-18	(0.1%)
34 West Virginia	0.5%	0.4%	1,276	-61	713	+230	2	-33%	45	0.4%
35 New Mexico	0.6%	0.5%	1,184	-32	496	+75	46	-67%	-66	(0.8%)
36 Rhode Island	0.3%	0.3%	1,144	-43	839	+26	31	-46%	-14	(0.2%)
37 Iowa	1.0%	0.9%	1,021	+324	273	+90	53	-78%	-38	(0.5%)
38 Delaware	0.3%	0.4%	767	+66	762	+175	22	-16%	4	0.1%
39 Montana	0.3%	0.2%	714	+287	447	+138	51	-65%	-6	(0.2%)
40 New Hampshire	0.4%	0.4%	664	-363	688	+11	1	-15%	10	0.2%
41 Maine	0.4%	0.3%	597	+7	327	-10	12	-32%	10	0.3%
42 Nebraska	0.6%	0.6%	585	-290	322	+31	47	-78%	-7	(0.1%)
43 Puerto Rico	1.0%	0.5%	501	-1,100	135	-157	17	-62%	-39	(1.2%)
44 South Dakota	0.3%	0.3%	433	-68	470	+20	52	-77%	-33	(1.1%)
45 Wyoming	0.2%	0.2%	322	+103	574	+126	47	-67%	-5	(0.3%)
46 District of Columbi	0.2%	0.7%	262	+69	310	-79	31	-36%	27	1.7%
47 North Dakota	0.2%	0.3%	254	-18	264	+56	52	-89%	-22	(1.3%)
48 Alaska	0.2%	0.3%	194	+19	339	+70	31	-69%	10	0.4%
49 Vermont	0.2%	0.2%	165	+83	186	+60	32	-33%	10	1.2%
50 Hawaii	0.4%	0.5%	123	+48	85	+34	129	-59%	7	0.7%
51 U.S. Virgin Islands	0.0%	0.0%	13	+13	59	+59	137	-86%	0	0.0%
52 Guam	0.0%	0.0%	13	+1	62	+14	56	-94%	-9	(1.1%)
53 Oregon	1.3%	1.2%	0	-682	166	-63	30	-60%	-39	(0.5%)
54 Northern Mariana	0.0%	0.0%	0	+0	0	+0	70	-100%	0	
55 Kansas	0.9%	0.8%	0	+0	409	-320	41	-73%	108	0.7%
56 American Samoa	0.0%	0.0%	0	+0		+0	0	0%	0	

#4: USA COVID-19 Heat Map...

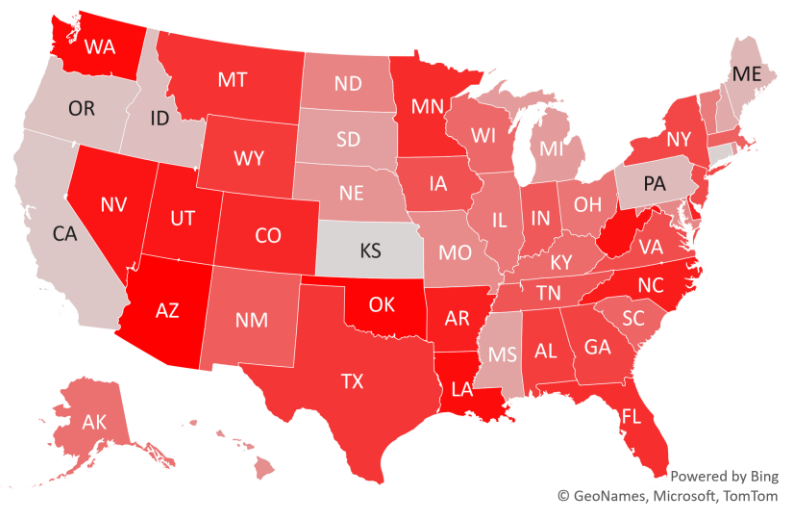
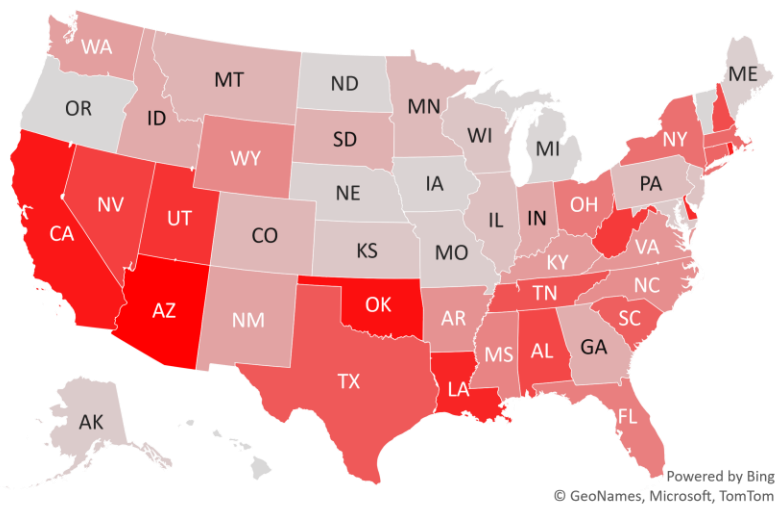
Daily Case Increases



7D Delta in Daily New Cases



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



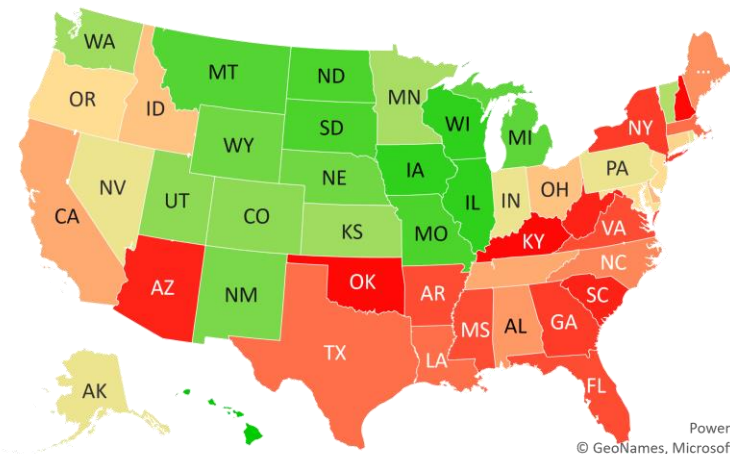
#5: # of Days since Daily Case Peaked by States...

Days since Daily Cases (3D Avg) Peak (as of 1/5)

Sorted				
	Peak Date	1/5/21	% off the Peak	% US Pop
United States	12/18/20	18	-16%	100%
States:				
U.S. Virgin Islands	8/21/20	137	-86%	0.0%
Hawaii	8/29/20	129	-59%	0.4%
Northern Mariana Island	10/27/20	70	-100%	0.0%
Guam	11/10/20	56	-94%	0.0%
Wisconsin	11/13/20	53	-67%	1.8%
Illinois	11/13/20	53	-60%	3.8%
Iowa	11/13/20	53	-78%	1.0%
South Dakota	11/14/20	52	-77%	0.3%
North Dakota	11/14/20	52	-89%	0.2%
Missouri	11/14/20	52	-59%	1.8%
Montana	11/15/20	51	-65%	0.3%
Michigan	11/18/20	48	-72%	3.0%
Wyoming	11/19/20	47	-67%	0.2%
Nebraska	11/19/20	47	-78%	0.6%
New Mexico	11/20/20	46	-67%	0.6%
Utah	11/21/20	45	-39%	1.0%
Colorado	11/21/20	45	-57%	1.7%
Washington	11/25/20	41	-10%	2.3%
Kansas	11/25/20	41	-73%	0.9%
Minnesota	11/30/20	36	-69%	1.7%
Vermont	12/4/20	32	-33%	0.2%
Rhode Island	12/5/20	31	-46%	0.3%
Pennsylvania	12/5/20	31	-54%	3.9%
Nevada	12/5/20	31	-24%	0.9%
Indiana	12/5/20	31	-58%	2.0%
District of Columbia	12/5/20	31	-36%	0.2%
Alaska	12/5/20	31	-69%	0.2%
Oregon	12/6/20	30	-60%	1.3%

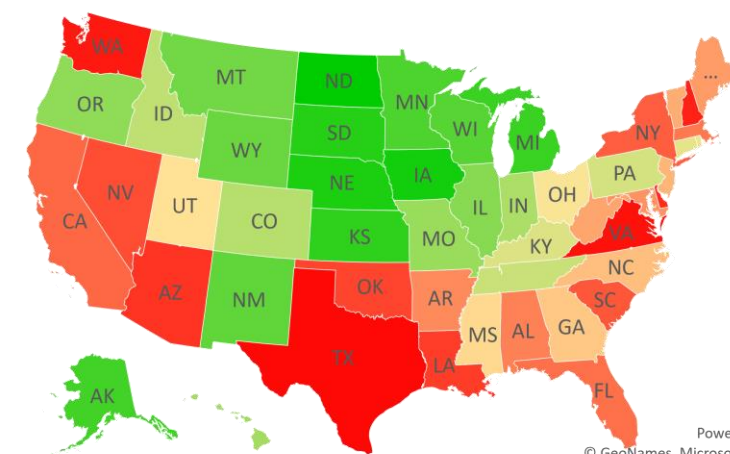
Sorted				
	Peak Date	1/5/21	% off the Peak	% US Pop
United States	12/18/20	18	-16%	100%
States:				
New Jersey	12/6/20	30	-34%	2.7%
Maryland	12/6/20	30	-32%	1.8%
Connecticut	12/9/20	27	-47%	1.1%
Ohio	12/10/20	26	-41%	3.5%
Idaho	12/10/20	26	-57%	0.5%
Delaware	12/14/20	22	-16%	0.3%
Tennessee	12/18/20	18	-56%	2.1%
California	12/18/20	18	-28%	11.9%
Puerto Rico	12/19/20	17	-62%	1.0%
Alabama	12/19/20	17	-29%	1.5%
Maine	12/24/20	12	-32%	0.4%
North Carolina	12/28/20	8	-35%	3.2%
Texas	12/31/20	5	-3%	8.7%
Massachusetts	12/31/20	5	-29%	2.1%
Louisiana	12/31/20	5	-23%	1.4%
Virginia	1/1/21	4	-9%	2.6%
Mississippi	1/1/21	4	-38%	0.9%
Florida	1/1/21	4	-28%	6.5%
Arkansas	1/1/21	4	-31%	0.9%
New York	1/2/21	3	-27%	5.9%
Georgia	1/2/21	3	-36%	3.2%
West Virginia	1/3/21	2	-33%	0.5%
South Carolina	1/3/21	2	-24%	1.6%
Oklahoma	1/4/21	1	-23%	1.2%
New Hampshire	1/4/21	1	-15%	0.4%
Kentucky	1/4/21	1	-51%	1.3%

Days since Daily Case Peak: **Longer = Good**



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Daily Cases % off the Peak: **Larger Decline = Good**



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#6: US New Cases by States... (sorted by today's new cases)

Sorted

7D Ago Last 3-day Trend

Today's COVID stats for Oregon is not available as of 8 PM ET...

	12/29/20	1/3/21	1/4/21	1/5/21	vs 7D ago
United States	187,995	208,566	167,189	206,630	+18,635
States:					
California	31,245	45,352	29,633	31,440	
Texas	26,990	14,535	15,976	26,543	
Florida	12,075	10,603	11,256	15,431	<--higher
New York	11,438	11,368	11,209	12,666	
Pennsylvania	8,545	4,579	3,226	8,818	
Ohio	7,526	6,808	5,942	7,580	
Illinois	5,644	4,469	5,059	6,839	<--higher
Georgia	5,853	5,077	4,030	6,102	
Arizona	2,799	17,234	5,158	5,932	<--higher
Alabama	3,907	2,476	2,161	5,498	<--higher
Tennessee	4,797	4,165	3,953	5,399	
New Jersey	3,657	3,670	2,275	5,319	<--higher
North Carolina	3,563	6,487	5,187	5,285	<--higher
Massachusetts	4,145	3,481	4,906	4,634	
Louisiana	3,946	5,780	1,190	4,454	
Virginia	4,122	5,010	3,771	4,377	
Colorado	1,740	2,078	2,185	3,458	<--higher
Wisconsin	2,384	2,446	1,407	3,403	<--higher
Indiana	3,976	2,981	3,617	3,395	
Utah	2,736	1,819	2,160	3,318	<--higher
Missouri	2,479	2,305	1,196	2,632	
Nevada	1,747	2,747	1,414	2,423	<--higher
Connecticut	767	0	4,516	2,332	<--higher
South Carolina	2,654	4,114	3,558	2,326	
Michigan	3,414	0	4,992	2,291	
Arkansas	1,449	1,643	846	2,275	<--higher
Washington	2,052	8,216	995	2,204	
Maryland	1,878	2,148	2,483	1,956	

Sorted

7D Ago Last 3-day Trend

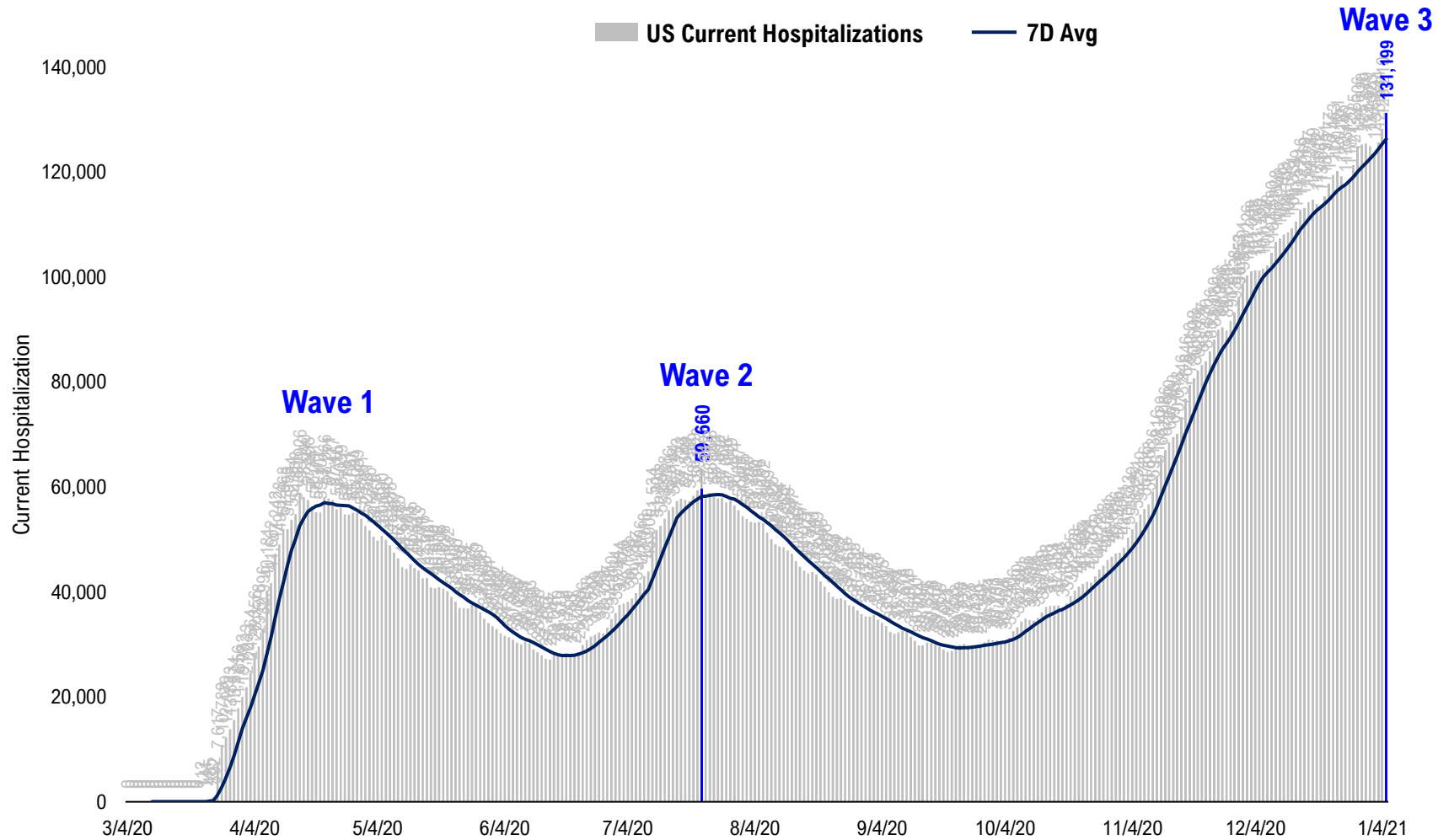
Today's COVID stats for Oregon is not available as of 8 PM ET...

	12/29/20	1/3/21	1/4/21	1/5/21	vs 7D ago
United States	187,995	208,566	167,189	206,630	+18,635
States:					
Mississippi	1,943	1,784	1,616	1,767	
Kentucky	2,975	2,855	2,317	1,693	
Minnesota	972	2,712	3,144	1,573	<--higher
Idaho	1,514	308	798	1,538	
Oklahoma	1,194	8,017	2,699	1,497	<--higher
West Virginia	1,337	1,731	828	1,276	
New Mexico	1,216	1,015	921	1,184	
Rhode Island	1,187	888	633	1,144	
Iowa	697	865	701	1,021	<--higher
Delaware	701	611	849	767	
Montana	427	437	283	714	<--higher
New Hampshire	1,027	1,266	878	664	
Maine	590	347	376	597	
Nebraska	875	546	738	585	
Puerto Rico	1,601	237	558	501	
South Dakota	501	703	111	433	
Wyoming	219	302	372	322	<--higher
District of Columbia	193	255	140	262	<--higher
North Dakota	272	150	199	254	
Alaska	175	290	260	194	
Vermont	82	104	80	165	<--higher
Hawaii	75	149	89	123	<--higher
U.S. Virgin Islands	0	5	1	13	
Guam	12	1	17	13	
Oregon	682	1,397	708	0	
Northern Mariana Islands	0	0	0	0	
Kansas	0	0	3,572	0	
American Samoa	0	0	0	0	

<--higher - if the state has 20% more daily cases than 7D ago...
Source: Fundstrat, COVID-19 Tracking Project, State Department of Health

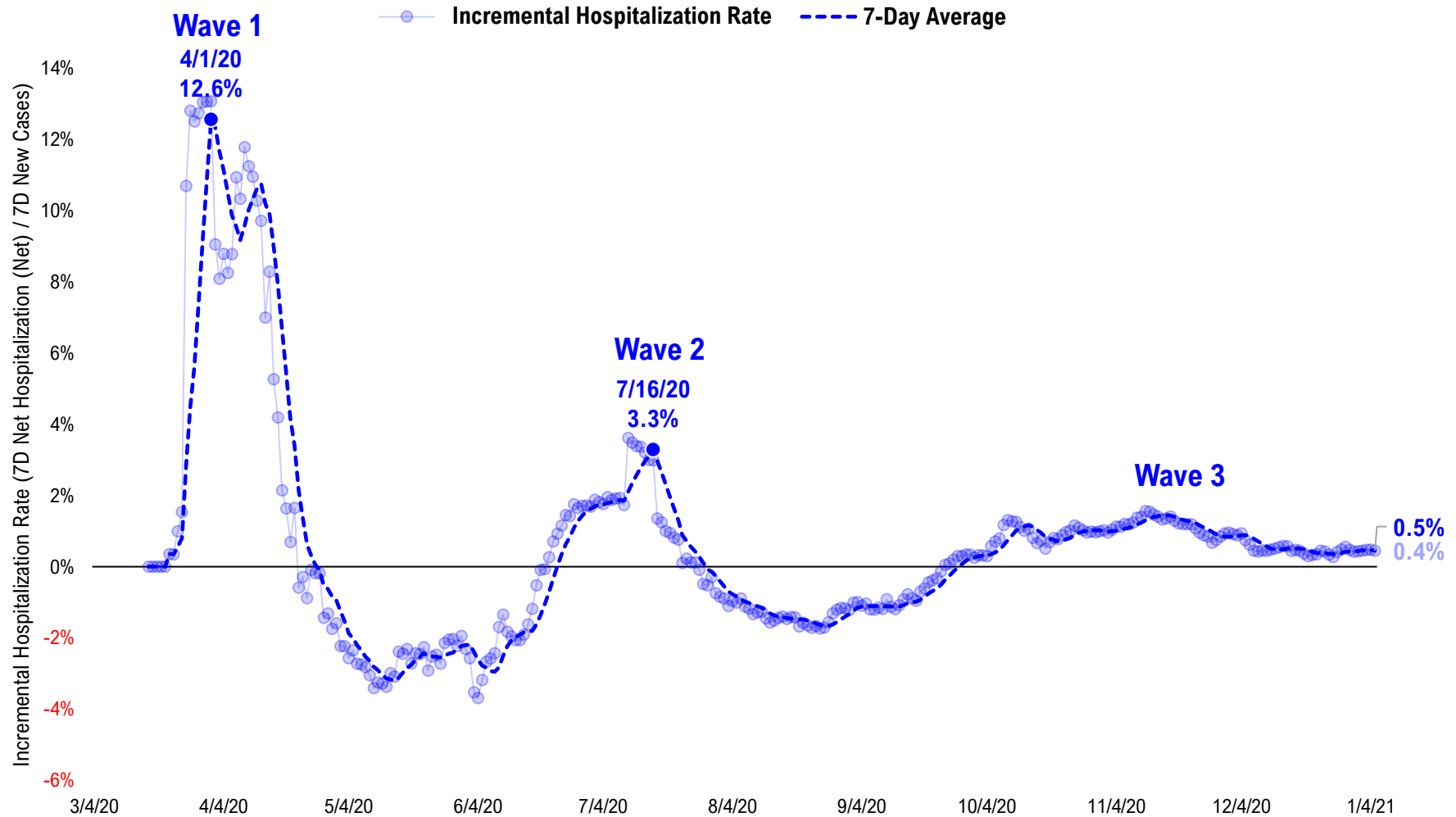
#7: US Daily Hospitalizations...

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



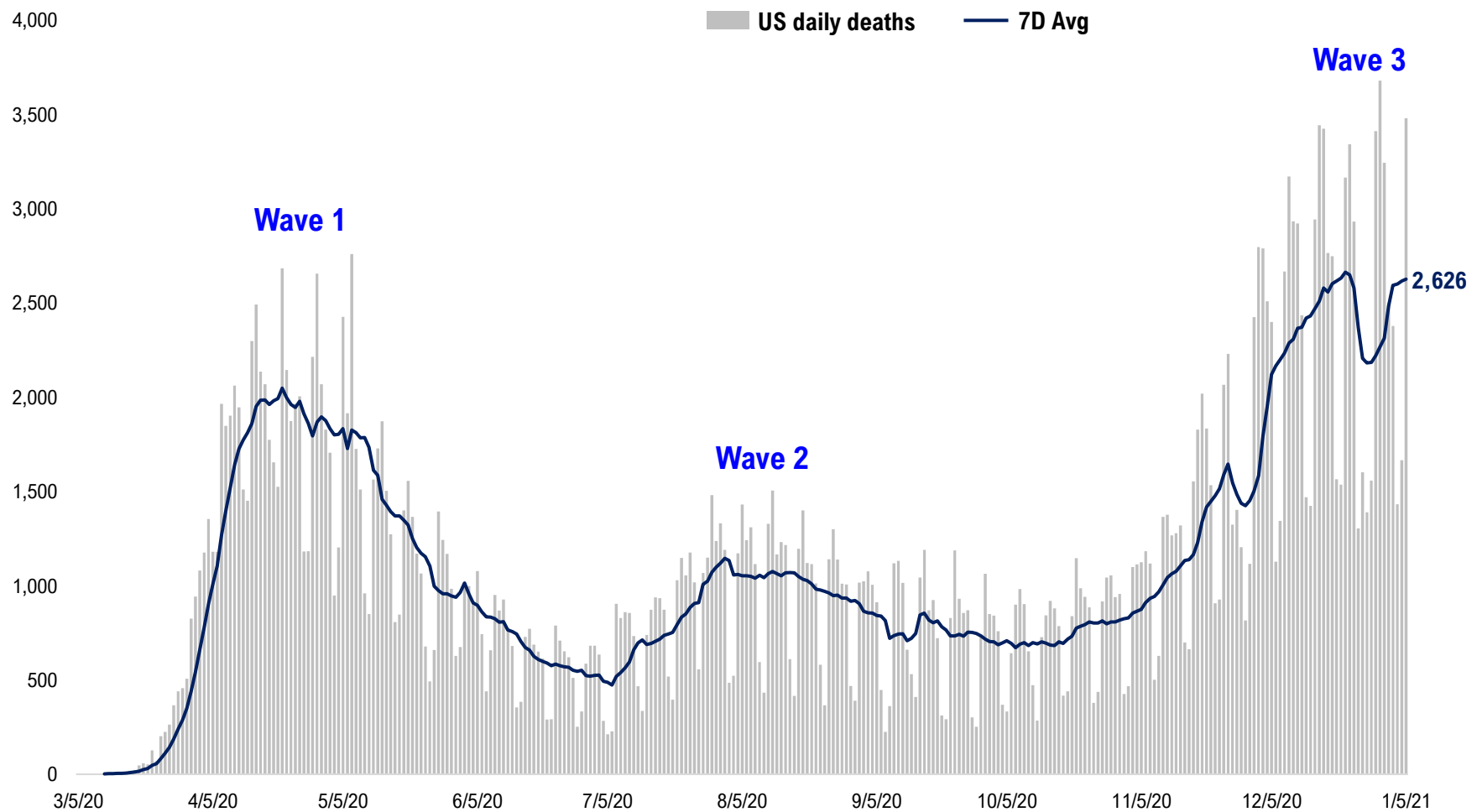
#8: Incremental Hospitalization Rate...

Incremental Hospitalization Rate: 7D Net Hospitalizations / 7D Total New Cases
(aggregate of 50 states + Washington, D.C.)



#9: US Daily New Fatalities...

US daily COVID-19 Fatalities



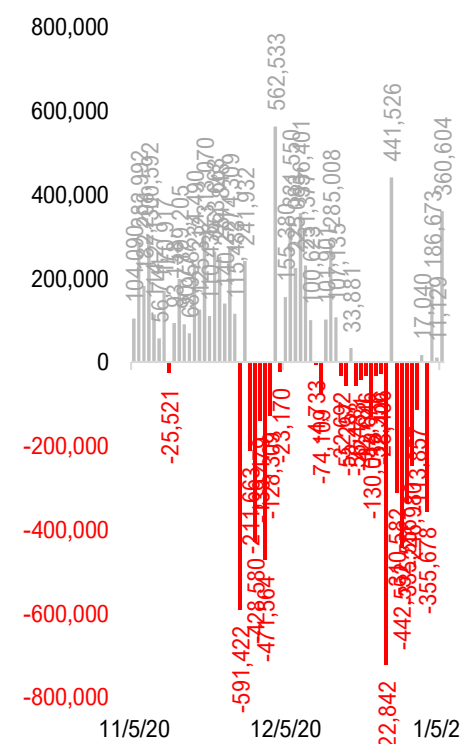
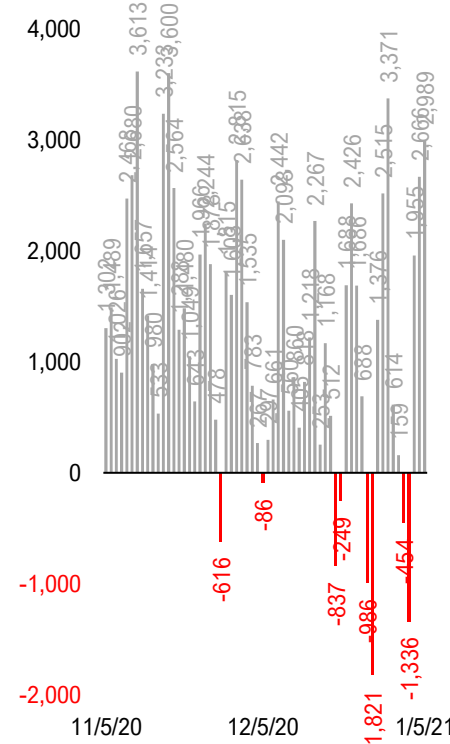
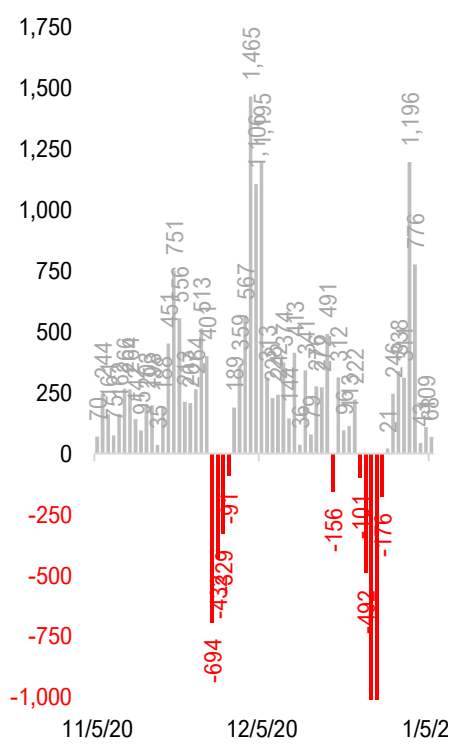
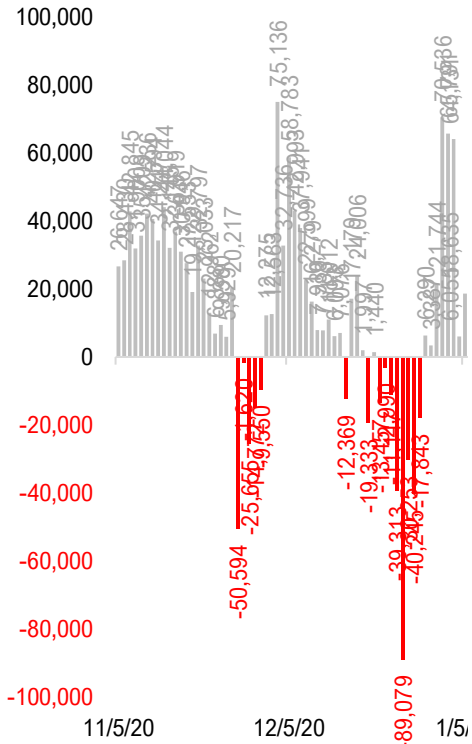
#10: Rolling 7-Day Change in the Key Metrics... (Past 8 Weeks)

Daily New Cases
(8/10-8/23 ex-CA; 9/4-9/5 ex-IL)

Daily Deaths

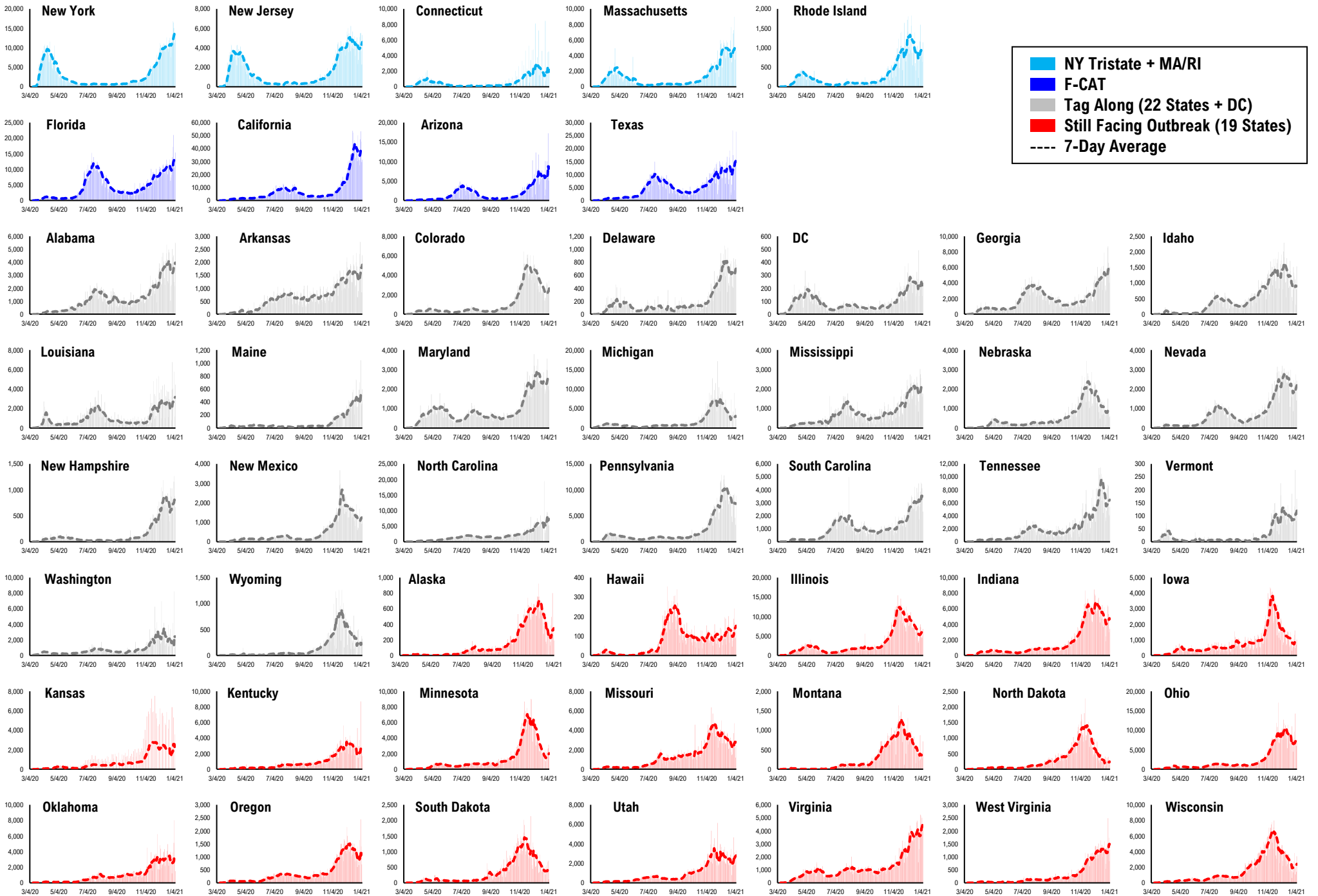
Daily Net Hospitalization
(Red = more discharge than admission)

Daily Tests

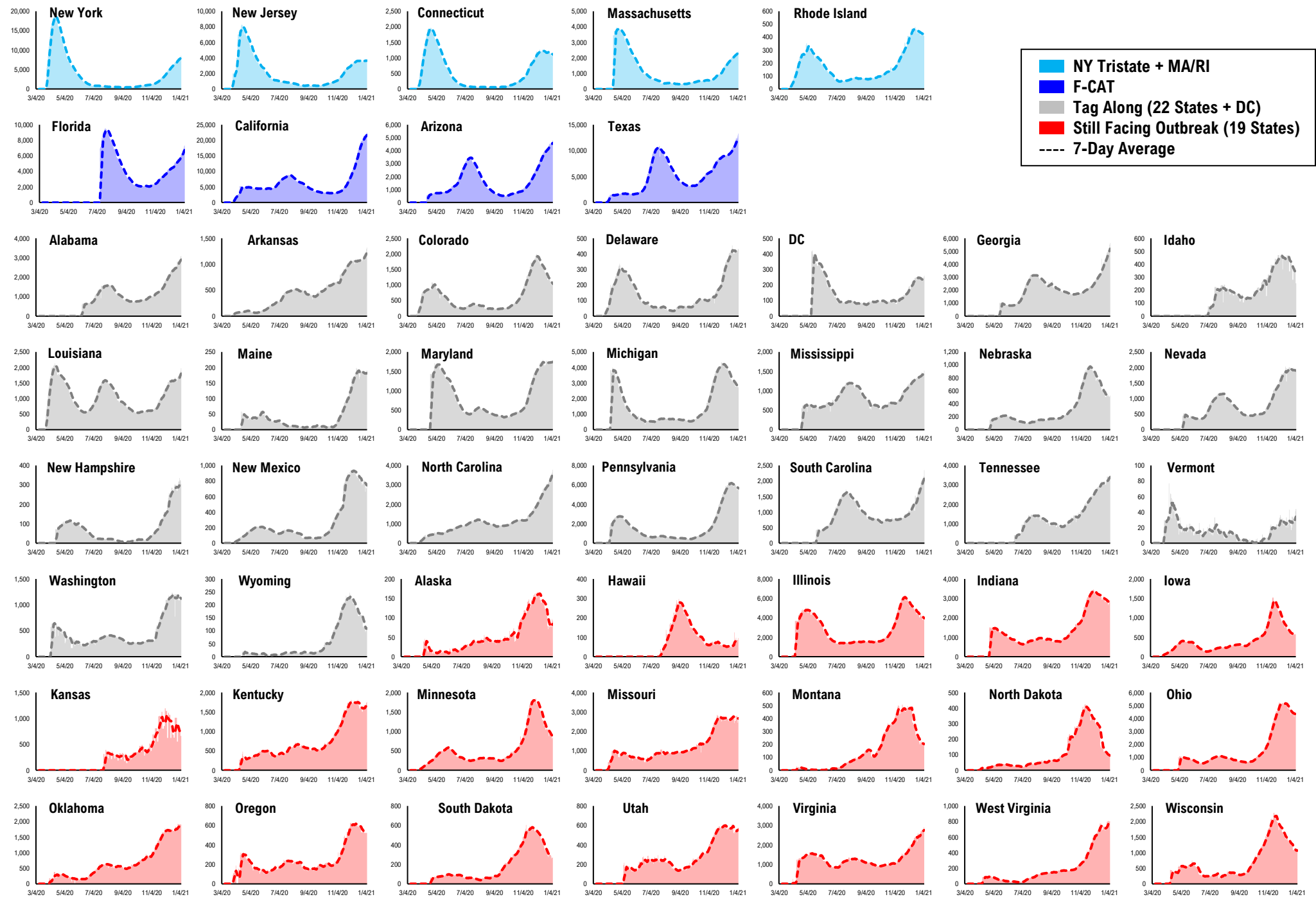


* Ignored California between 8/10 and 8/23, due to its data glitch caused 300,000-case backlog
Source: Fundstrat, COVID-19 Tracking Project, State Department of Health

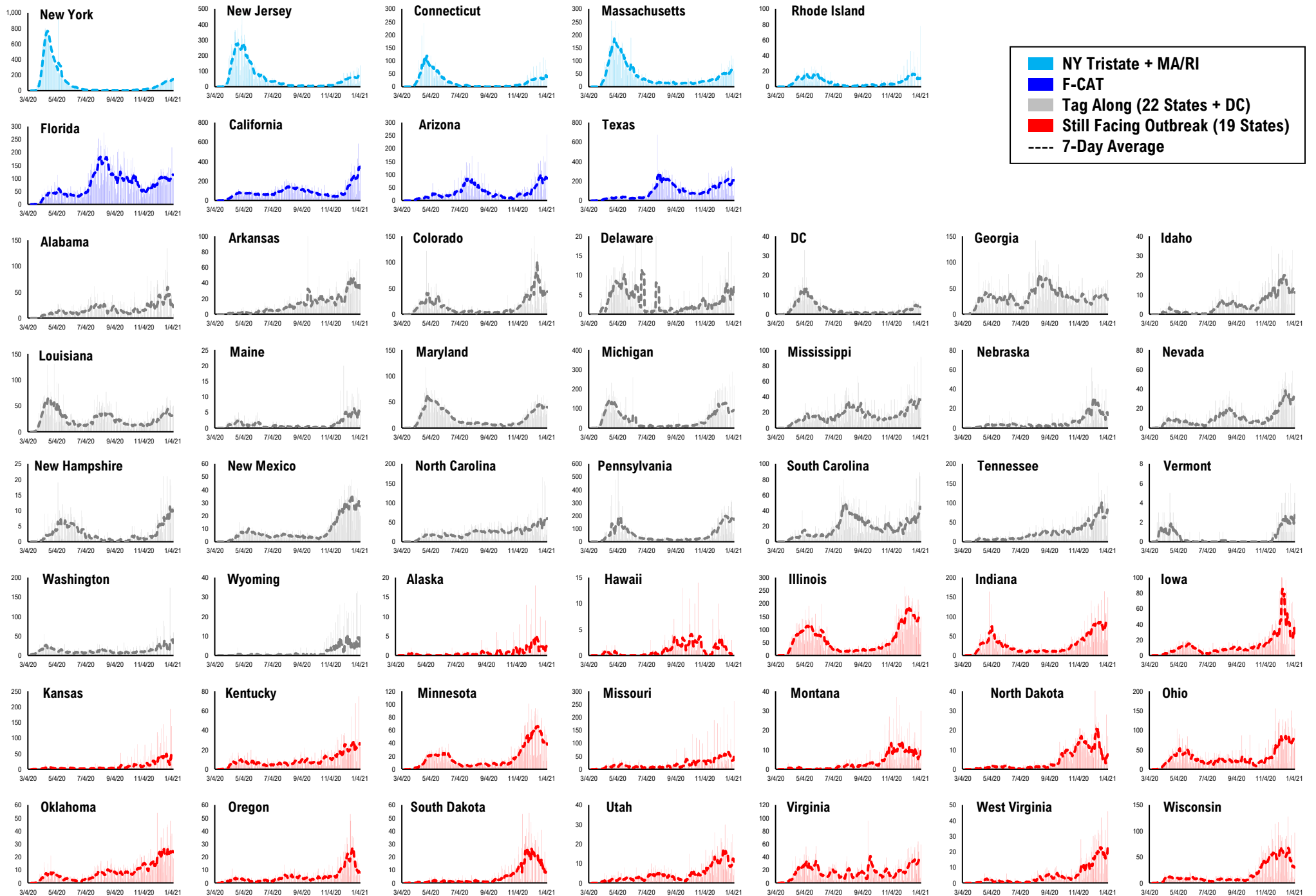
#11: Daily New Cases by States...



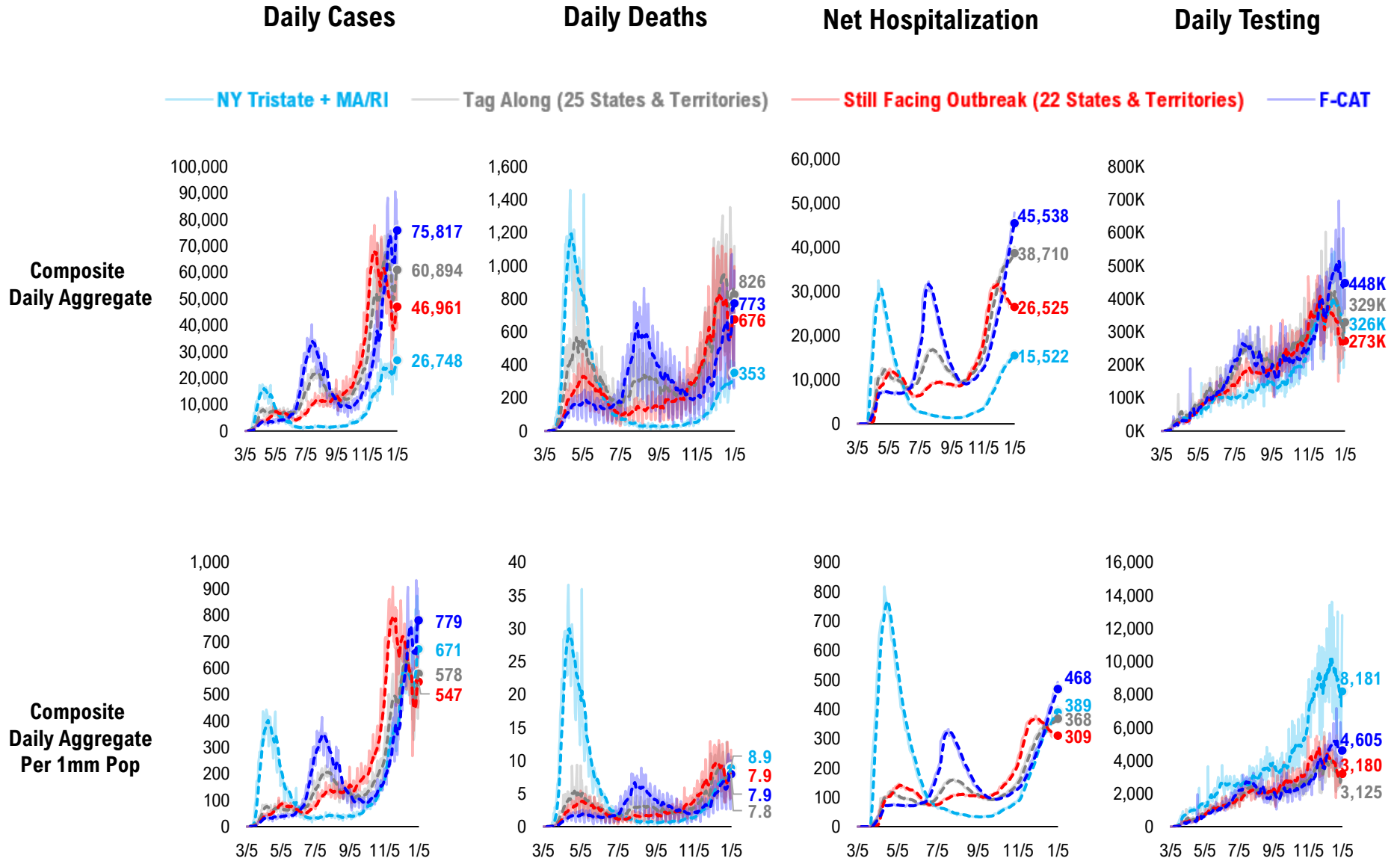
#12: Current Hospitalizations by States...



#13: Daily New Deaths by States...

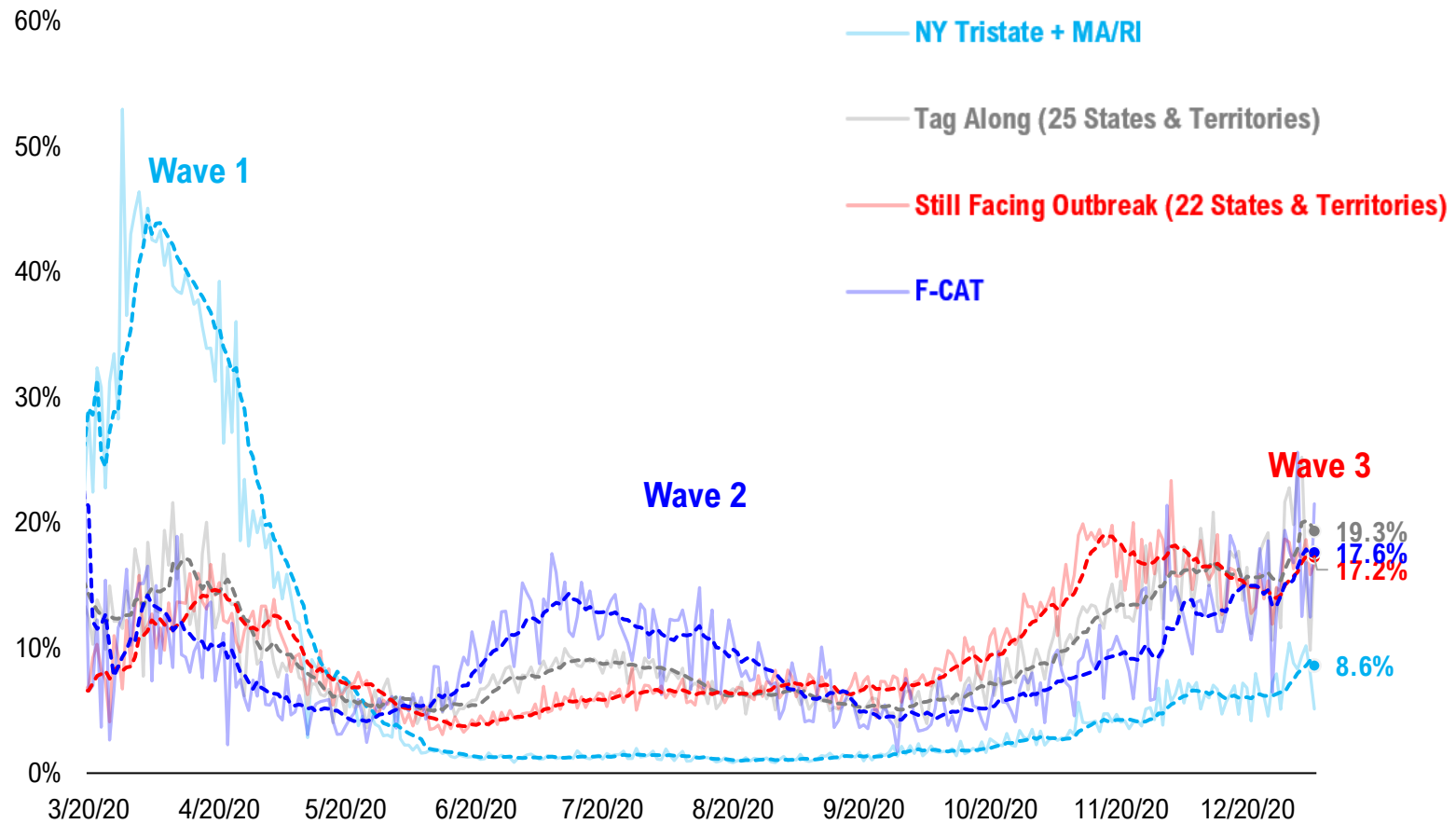


#14: State COVID-19 situation by Tier...

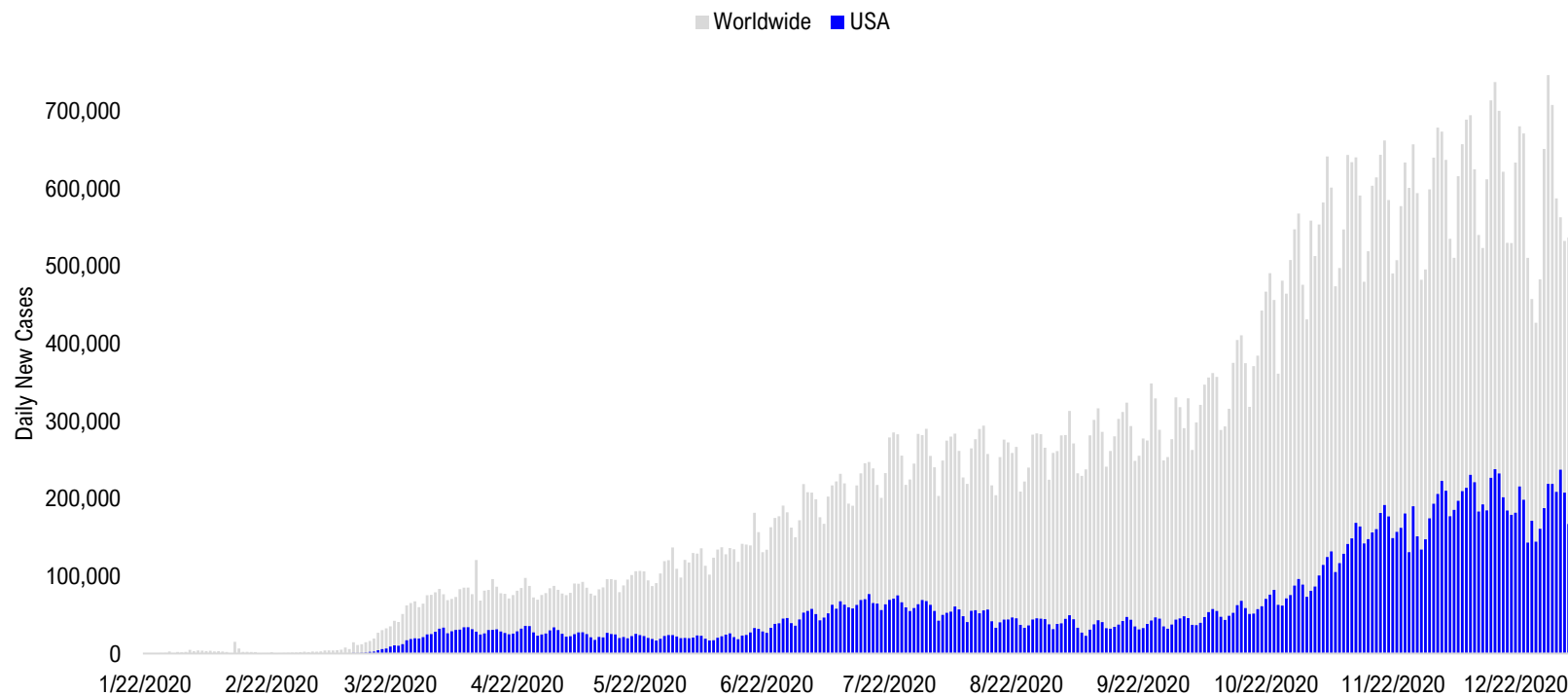


#15: State COVID-19 Daily Positivity Rate by Tier...

Composite Daily Positivity Rate



#16: Global COVID-19 Situation at a Glance...



Aug 21	Sep 4	Sep 18	Oct 2	Oct 16	Oct 30	Nov 13	Nov 27	Dec 11	Dec 25	Jan 4
Latin America 85,471	Latin America 88,295	Pakistan + India + Bangladesh 98,115	Pakistan + India + Bangladesh 84,614	Europe 156,735	Europe 288,231	Europe 301,976	Europe 274,571	Europe 268,913	Europe 249,233	US + Canada 214,234
Pakistan + India + Bangladesh 72,740	Pakistan + India + Bangladesh 87,400	Latin America 76,730	Europe 77,882	Latin America 67,985	US + Canada 89,511	US + Canada 157,595	US + Canada 172,701	US + Canada 224,580	US + Canada 190,814	Europe 189,796
US + Canada 45,159	US + Canada 44,962	Europe 57,979	Latin America 61,017	Pakistan + India + Bangladesh 66,697	Latin America 65,611	Latin America 74,234	Latin America 75,171	Latin America 92,555	Latin America 89,562	Latin America 52,935
Europe 31,851	Europe 40,040	US + Canada 43,204	US + Canada 47,741	US + Canada 63,472	Pakistan + India + Bangladesh 51,456	Pakistan + India + Bangladesh 49,697	Pakistan + India + Bangladesh 48,359	Pakistan + India + Bangladesh 35,248	Pakistan + India + Bangladesh 26,828	Pakistan + India + Bangladesh 26,226
Asia ex- India+Pakistan 10,921	Asia ex- India+Pakistan 9,069	Asia ex- India+Pakistan 11,067	Asia ex- India+Pakistan 11,658	Asia ex- India+Pakistan 13,788	Asia ex- India+Pakistan 12,846	Africa 14,829	Asia ex- India+Pakistan 16,287	Africa 19,264	Africa 25,863	Africa 22,013
Africa 10,566	Africa 8,318	Africa 7,997	Africa 8,146	Africa 10,428	Africa 12,181	Asia ex- India+Pakistan 14,319	Africa 14,762	Asia ex- India+Pakistan 17,917	Asia ex- India+Pakistan 18,697	Asia ex- India+Pakistan 16,937

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Neutral (N): The analyst expects the performance of his or her industry/sector coverage universe over the next 6-18 months to be in line with the relevant broad market benchmark, being the S&P 500 for North America.

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