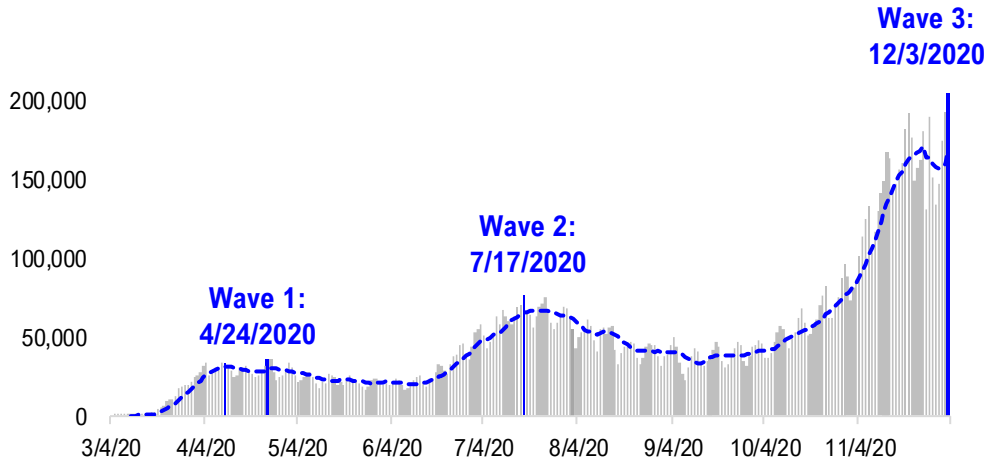


# FSInsight Daily COVID-19 Chartbook

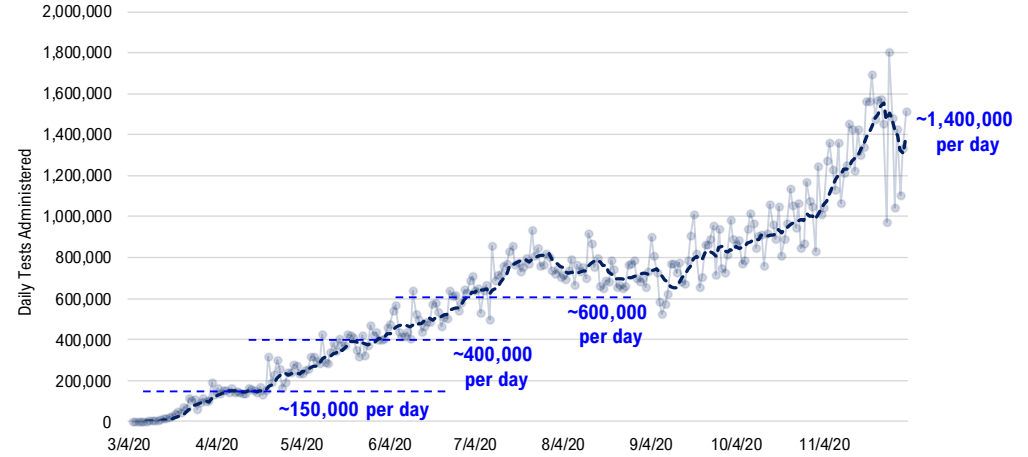


# #1: USA COVID-19 Situation at a Glance...

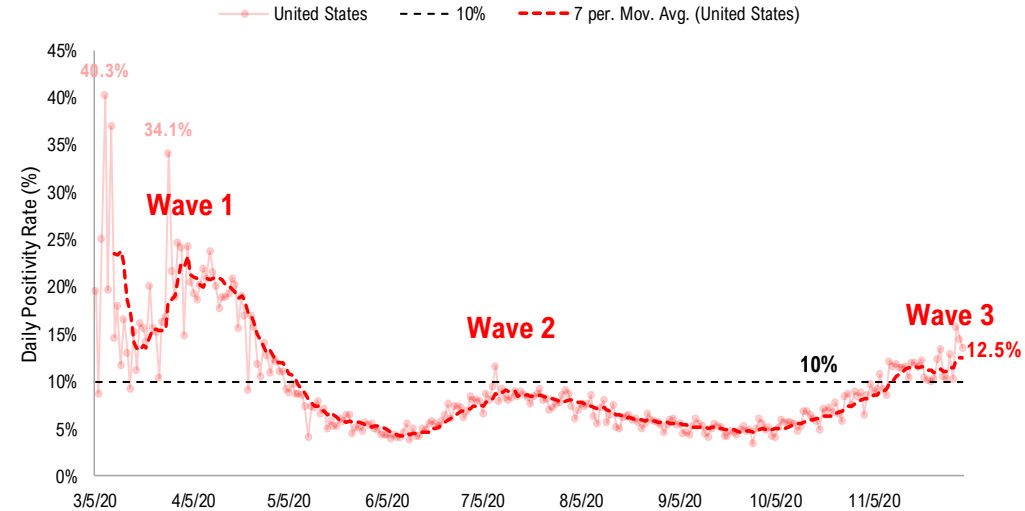
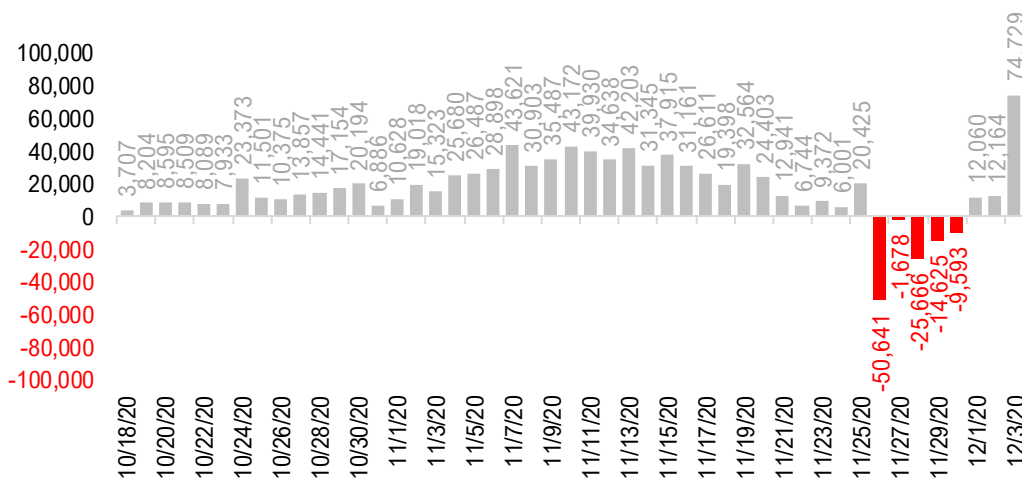
**US daily new cases**



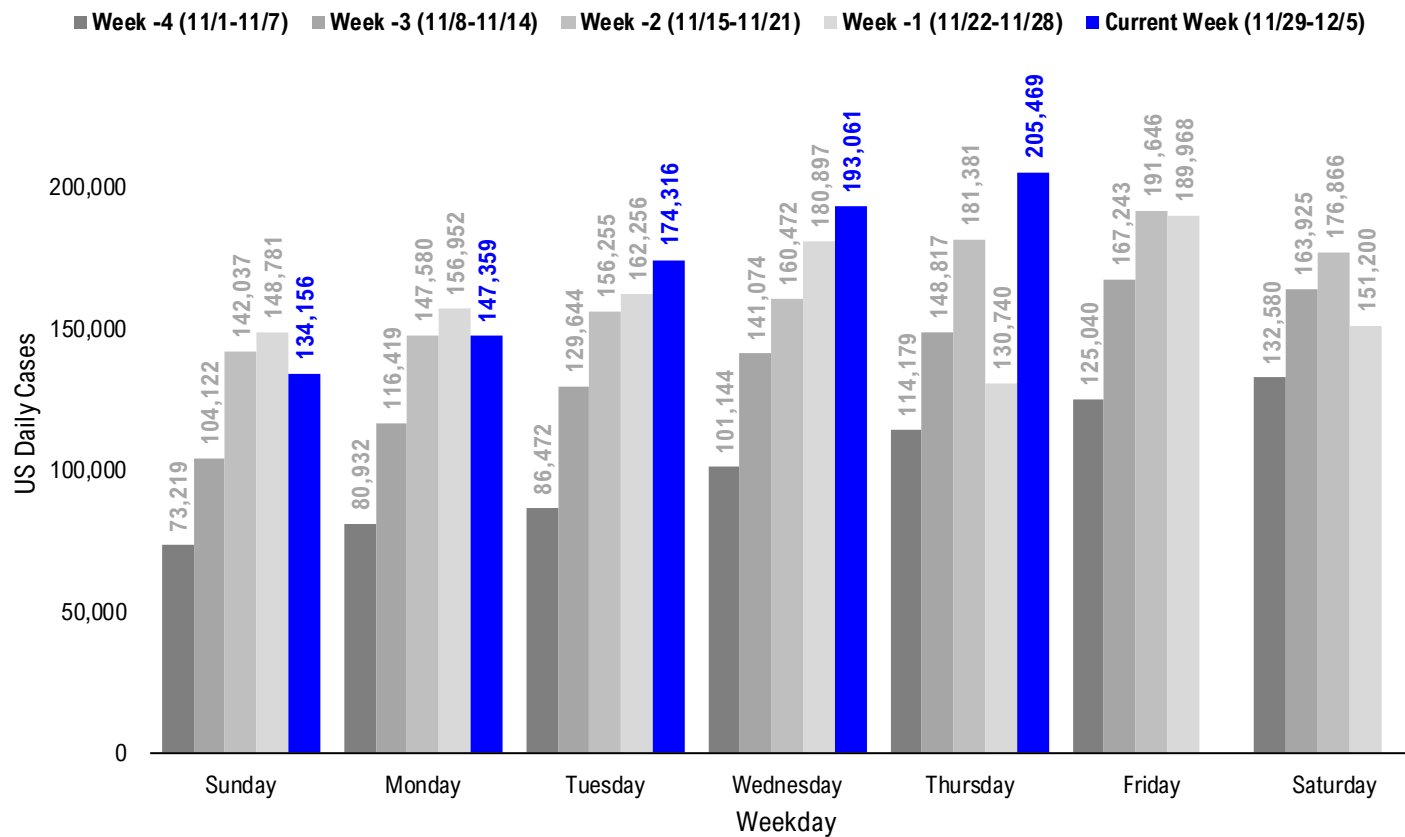
**USA total COVID-19 tests administered**



**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				Since Peak		Hospitalization	
	% US Pop	% US GDP	7D 12/3	7D Delta	7D 12/3	7D Delta	# Days	% Decline in Daily Cases	7D Net Hospitalization	7D Net Hospitalization / 7D New Cases
United States	100%	100%	205,469	+74,729	582	+100	0	0%	10,573	0.9%

	Sorted Daily Cases		Daily Cases (3D avg) per 1mm residents				Since Peak		Hospitalization	
	% US Pop	% US GDP	7D 12/3	7D Delta	7D 12/3	7D Delta	# Days	% Decline in Daily Cases	7D Net Hospitalization	7D Net Hospitalization / 7D New Cases
United States	100%	100%	205,469	+74,729	582	+100	0	0%	10,573	0.9%

**States:**

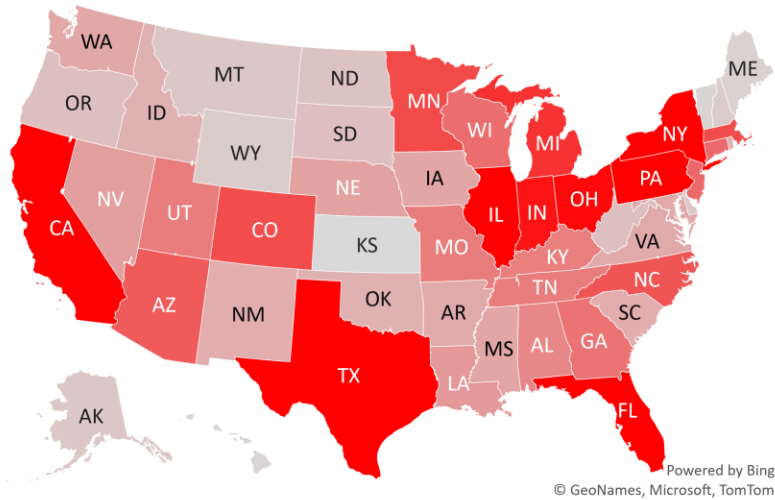
1 California	11.9%	14.6%	18,591	+3,951	435	+27	0	0%	2,505	2.4%
2 Texas	8.7%	8.8%	13,857	+1,434	503	+31	0	0%	445	0.7%
3 Pennsylvania	3.9%	3.8%	11,406	+2,981	661	+92	0	0%	984	1.9%
4 Illinois	3.8%	4.2%	10,959	-1,063	875	+10	20	-18%	-379	(0.6%)
5 Florida	6.5%	5.0%	10,870	+750	461	+41	143	-22%	563	1.0%
6 New York	5.9%	8.1%	9,855	+2,922	447	+138	237	-17%	1,007	1.9%
7 Ohio	3.5%	3.3%	8,921	+8,921	735	+181	4	-19%	601	0.9%
8 Indiana	2.0%	1.8%	8,460	+2,087	1013	+122	12	-2%	-22	(0.1%)
9 Michigan	3.0%	2.6%	7,146	+7,146	664	+311	15	-23%	112	0.2%
10 Minnesota	1.7%	1.8%	6,149	+6,149	878	+122	3	-37%	-42	(0.1%)
11 Colorado	1.7%	1.8%	6,037	-16	828	-5	12	-20%	179	0.6%
12 Massachusetts	2.1%	2.8%	5,995	+5,995	690	+402	0	0%	382	1.5%
13 North Carolina	3.2%	2.7%	5,637	+5,637	404	+172	4	-17%	290	0.9%
14 Arizona	2.2%	1.7%	5,442	+1,966	898	+348	0	0%	454	1.4%
15 New Jersey	2.7%	3.0%	4,793	+320	514	+34	0	0%	461	1.6%
16 Connecticut	1.1%	1.3%	4,751	+4,751	830	+605	0	0%	223	1.3%
17 Wisconsin	1.8%	1.6%	4,618	-477	714	-246	20	-44%	-138	(0.5%)
18 Georgia	3.2%	2.9%	4,373	+1,466	352	+111	131	-13%	444	2.3%
19 Missouri	1.8%	1.5%	3,998	-473	522	-150	19	-36%	9	0.0%
20 Tennessee	2.1%	1.8%	3,967	-437	672	+290	17	-25%	274	0.8%
21 Utah	1.0%	0.9%	3,945	+3,945	1087	+621	12	-12%	18	0.1%
22 Kentucky	1.3%	1.0%	3,836	+3,836	862	+422	0	0%	76	0.3%
23 Alabama	1.5%	1.1%	3,531	+892	737	+201	0	0%	393	2.1%
24 Louisiana	1.4%	1.3%	2,774	+2,774	839	+517	0	0%	248	1.3%
25 Nevada	0.9%	0.8%	2,536	-6	797	-129	7	-14%	205	1.4%
26 Nebraska	0.6%	0.6%	2,336	-58	1045	+8	14	-28%	-77	(0.6%)
27 Iowa	1.0%	0.9%	2,196	-495	587	-177	20	-54%	-145	(1.3%)
28 Mississippi	0.9%	0.6%	2,168	+422	646	+253	0	0%	121	1.0%

**States:**

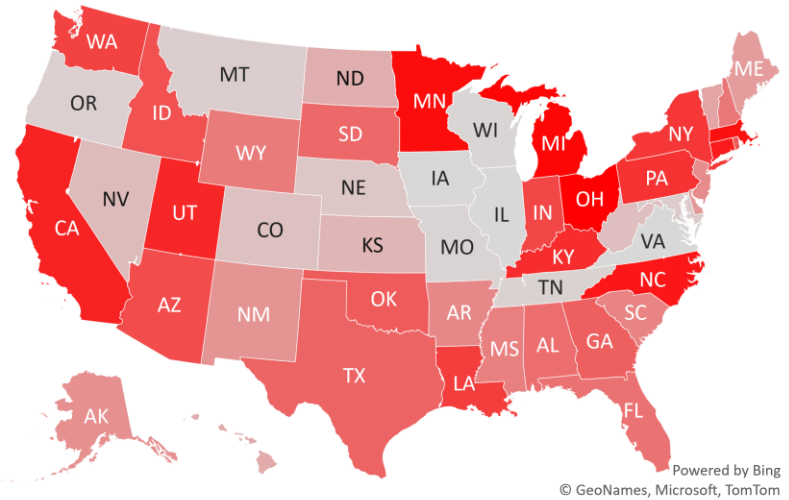
29 Washington	2.3%	2.7%	2,095	+2,095	325	+46	8	-41%	99	0.5%
30 Maryland	1.8%	2.0%	2,044	-275	388	+19	12	-14%	120	0.8%
31 Virginia	2.6%	2.6%	2,023	-577	260	-47	8	-22%	252	1.6%
32 Arkansas	0.9%	0.6%	2,017	+324	515	+14	12	-1%	69	0.8%
33 New Mexico	0.6%	0.5%	1,899	+205	917	+19	13	-40%	67	0.5%
34 South Carolina	1.6%	1.1%	1,891	+341	333	+45	124	-37%	106	0.9%
35 Idaho	0.5%	0.4%	1,721	+1,721	887	+251	8	-2%	58	0.6%
36 Rhode Island	0.3%	0.3%	1,717	+1,717	1258	+710	0	0%	52	0.6%
37 Oklahoma	1.2%	1.0%	1,707	+1,707	531	-14	4	-44%	81	0.4%
38 South Dakota	0.3%	0.3%	1,145	+1,145	1087	+222	19	-47%	-32	(0.4%)
39 Oregon	1.3%	1.2%	1,133	-370	305	+15	3	-16%	97	1.0%
40 West Virginia	0.5%	0.4%	1,120	-10	592	+22	12	-4%	91	1.3%
41 North Dakota	0.2%	0.3%	970	+6	811	-521	19	-66%	-5	(0.1%)
42 Montana	0.3%	0.2%	782	-335	912	-118	18	-29%	19	0.3%
43 Alaska	0.2%	0.3%	760	+207	897	+73	18	-0%	12	0.3%
44 Delaware	0.3%	0.4%	758	+174	617	+149	0	0%	82	2.1%
45 New Hampshire	0.4%	0.4%	593	+593	473	+293	0	0%	31	0.7%
46 Wyoming	0.2%	0.2%	571	+571	1021	+255	14	-40%	8	0.2%
47 Maine	0.4%	0.3%	346	+108	198	+19	0	0%	33	2.6%
48 Puerto Rico	1.0%	0.5%	340	-169	142	+45	11	-52%	31	0.7%
49 District of Columbi	0.2%	0.7%	322	+102	289	+78	5	-23%	39	2.7%
50 Vermont	0.2%	0.2%	178	+99	249	+146	0	0%	12	1.6%
51 Hawaii	0.4%	0.5%	142	+25	61	-6	96	-70%	-3	(0.5%)
52 U.S. Virgin Islands	0.0%	0.0%	26	+26	140	+87	104	-67%	0	0.0%
53 Guam	0.0%	0.0%	22	-21	181	-113	23	-83%	-7	(1.9%)
54 Northern Mariana	0.0%	0.0%	0	+0	0	+0	46	-100%	0	0.0%
55 Kansas	0.9%	0.8%	0	+0	528	-128	8	-65%	70	0.5%
56 American Samoa	0.0%	0.0%	0	+0	0	+0	0	0%	0	

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

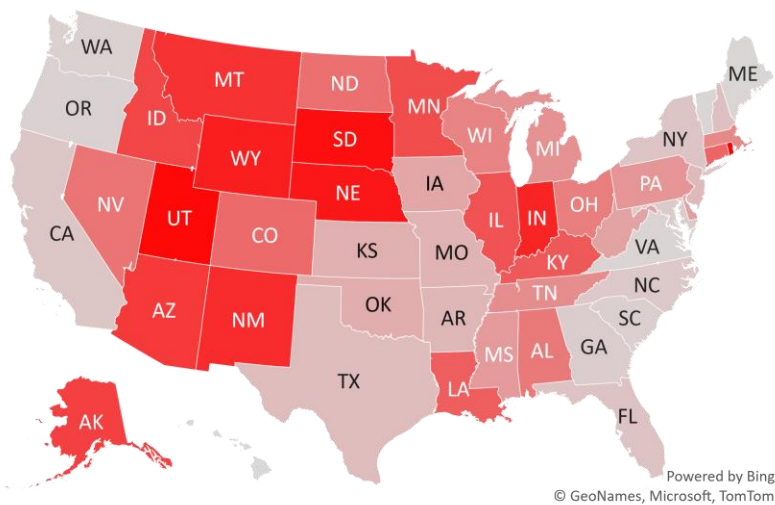
### Daily Case Increases



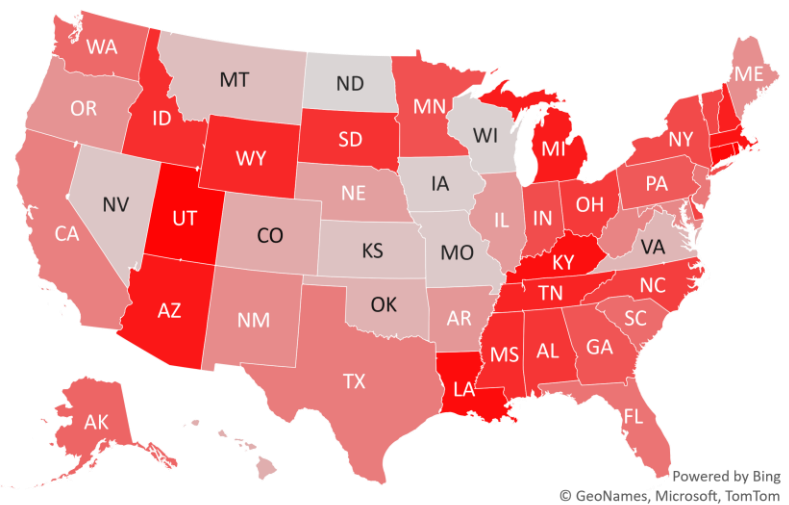
### 7D Delta in Daily New Cases



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



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



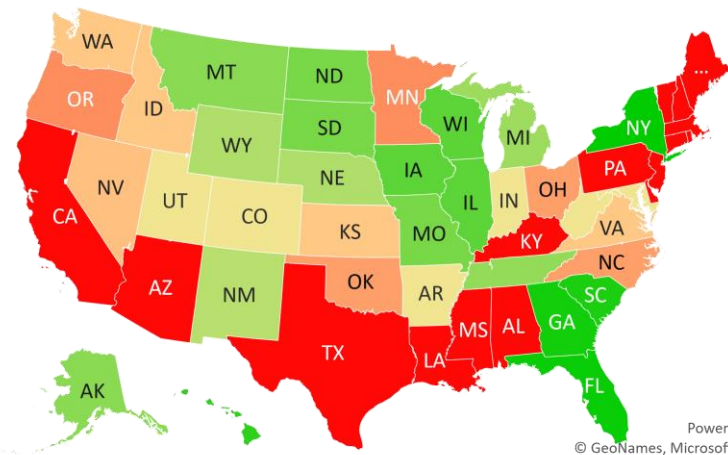
# #5: # of Days since Daily Case Peaked by States...

## # Days since Daily Cases (3D Avg) Peak (as of 12/3)

	Sorted			
	Peak Date	12/3/20	% off the Peak	% US Pop
United States	12/3/20	0	0%	100%
<b>States:</b>				
New York	4/10/20	237	-17%	5.9%
Florida	7/13/20	143	-22%	6.5%
Georgia	7/25/20	131	-13%	3.2%
South Carolina	8/1/20	124	-37%	1.6%
U.S. Virgin Islands	8/21/20	104	-67%	0.0%
Hawaii	8/29/20	96	-70%	0.4%
Northern Mariana Island	10/18/20	46	-100%	0.0%
Guam	11/10/20	23	-83%	0.0%
Wisconsin	11/13/20	20	-44%	1.8%
Illinois	11/13/20	20	-18%	3.8%
Iowa	11/13/20	20	-54%	1.0%
South Dakota	11/14/20	19	-47%	0.3%
North Dakota	11/14/20	19	-66%	0.2%
Missouri	11/14/20	19	-36%	1.8%
Montana	11/15/20	18	-29%	0.3%
Alaska	11/15/20	18	-0%	0.2%
Tennessee	11/16/20	17	-25%	2.1%
Michigan	11/18/20	15	-23%	3.0%
Wyoming	11/19/20	14	-40%	0.2%
Nebraska	11/19/20	14	-28%	0.6%
New Mexico	11/20/20	13	-40%	0.6%
West Virginia	11/21/20	12	-4%	0.5%
Utah	11/21/20	12	-12%	1.0%
Maryland	11/21/20	12	-14%	1.8%
Indiana	11/21/20	12	-2%	2.0%
Colorado	11/21/20	12	-20%	1.7%
Arkansas	11/21/20	12	-1%	0.9%
Puerto Rico	11/22/20	11	-52%	1.0%

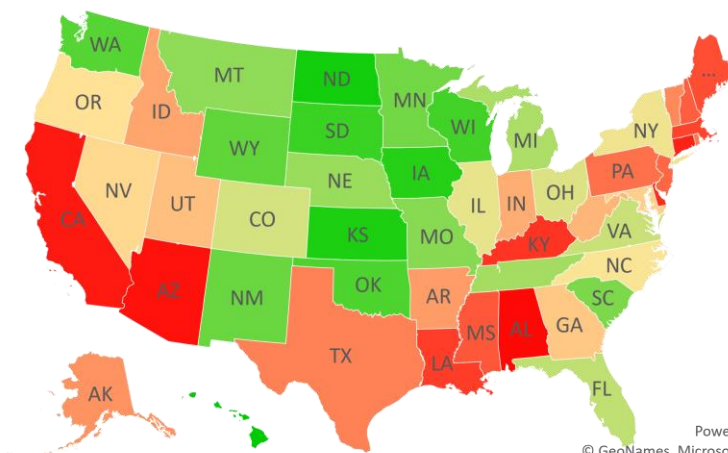
	Sorted			
	Peak Date	12/3/20	% off the Peak	% US Pop
United States	12/3/20	0	0%	100%
<b>States:</b>				
Washington	11/25/20	8	-41%	2.3%
Virginia	11/25/20	8	-22%	2.6%
Kansas	11/25/20	8	-65%	0.9%
Idaho	11/25/20	8	-2%	0.5%
Nevada	11/26/20	7	-14%	0.9%
District of Columbia	11/28/20	5	-23%	0.2%
Oklahoma	11/29/20	4	-44%	1.2%
Ohio	11/29/20	4	-19%	3.5%
North Carolina	11/29/20	4	-17%	3.2%
Oregon	11/30/20	3	-16%	1.3%
Minnesota	11/30/20	3	-37%	1.7%
Vermont	12/3/20	0	0%	0.2%
Texas	12/3/20	0	0%	8.7%
Rhode Island	12/3/20	0	0%	0.3%
Pennsylvania	12/3/20	0	0%	3.9%
New Jersey	12/3/20	0	0%	2.7%
New Hampshire	12/3/20	0	0%	0.4%
Mississippi	12/3/20	0	0%	0.9%
Maine	12/3/20	0	0%	0.4%
Massachusetts	12/3/20	0	0%	2.1%
Louisiana	12/3/20	0	0%	1.4%
Kentucky	12/3/20	0	0%	1.3%
Delaware	12/3/20	0	0%	0.3%
Connecticut	12/3/20	0	0%	1.1%
California	12/3/20	0	0%	11.9%
Arizona	12/3/20	0	0%	2.2%
Alabama	12/3/20	0	0%	1.5%

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



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



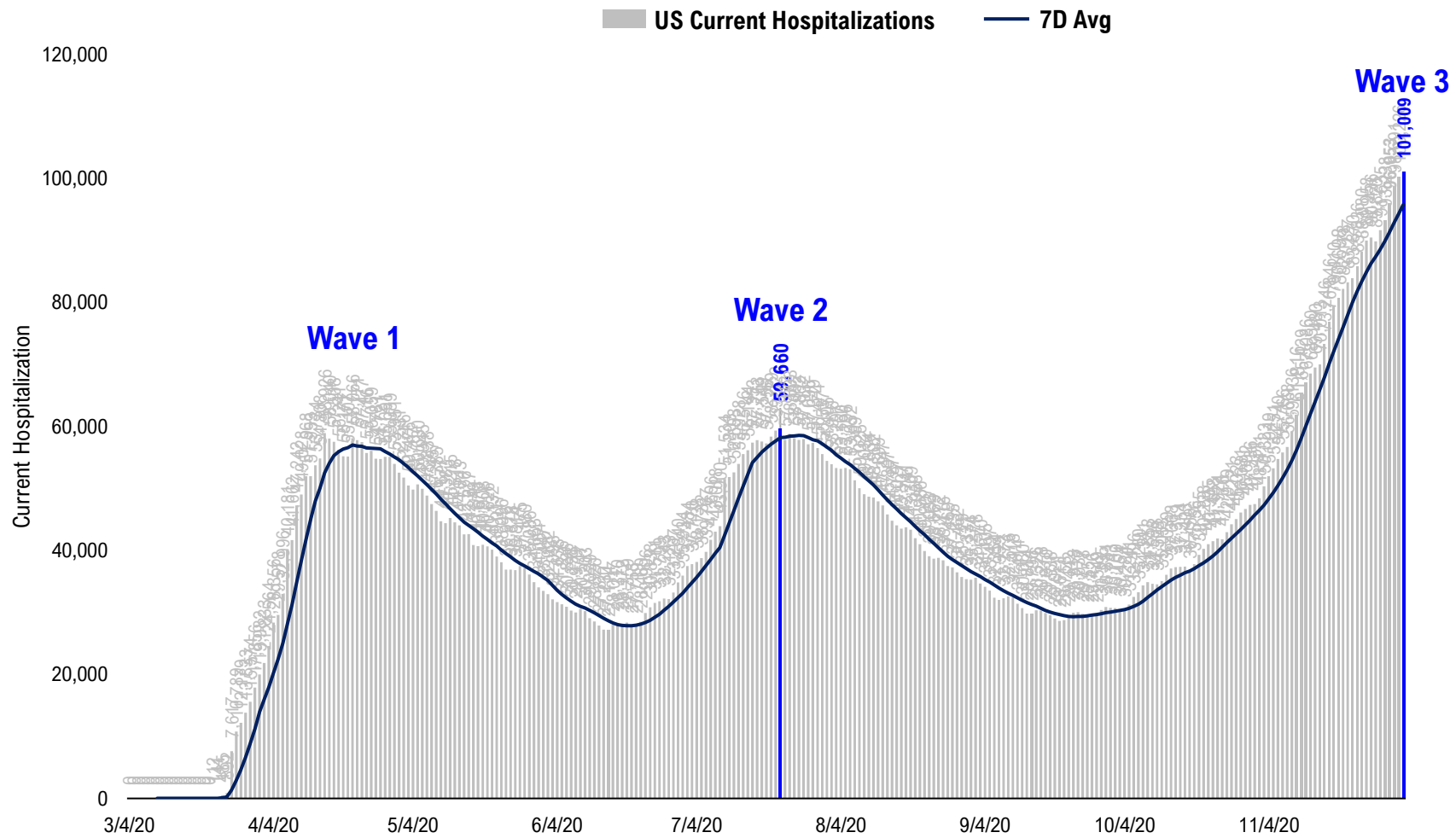
Powered by Bing  
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# #6: US New Cases by States... (sorted by today's new cases)

	Sorted						Sorted				
	7D Ago	Last 3-day Trend					7D Ago	Last 3-day Trend			
	11/26/20	12/1/20	12/2/20	12/3/20	vs 7D ago		11/26/20	12/1/20	12/2/20	12/3/20	vs 7D ago
United States	130,740	174,316	193,061	205,469	+74,729	United States	130,740	174,316	193,061	205,469	+74,729
<b>States:</b>						<b>States:</b>					
California	14,640	12,221	20,759	18,591	<--higher	Washington	0	2,197	3,126	2,095	
Texas	12,423	15,182	14,758	13,857		Maryland	2,319	2,765	2,220	2,044	
Pennsylvania	8,425	5,676	8,291	11,406	<--higher	Virginia	2,600	2,228	2,417	2,023	
Illinois	12,022	12,542	9,757	10,959		Arkansas	1,693	1,142	1,507	2,017	
Florida	10,120	8,847	9,994	10,870		New Mexico	1,694	2,324	1,544	1,899	
New York	6,933	7,285	8,973	9,855	<--higher	South Carolina	1,550	1,394	1,861	1,891	<--higher
Ohio	0	9,030	7,835	8,921		Idaho	0	1,607	1,429	1,721	
Indiana	6,373	5,396	6,597	8,460	<--higher	Rhode Island	0	1,183	1,099	1,717	
Michigan	0	5,793	6,955	7,146		Oklahoma	0	1,737	2,859	1,707	
Minnesota	0	3,549	5,165	6,149		South Dakota	0	448	1,291	1,145	
Colorado	6,053	4,405	3,862	6,037		Oregon	1,503	1,223	1,506	1,133	
Massachusetts	0	3,253	5,027	5,995		West Virginia	1,130	976	1,087	1,120	
North Carolina	0	2,883	4,199	5,637		North Dakota	964	403	480	970	
Arizona	3,476	10,322	3,840	5,442	<--higher	Montana	1,117	1,007	1,135	782	
New Jersey	4,473	4,606	4,296	4,793		Alaska	553	511	697	760	<--higher
Connecticut	0	1,459	2,672	4,751		Delaware	584	689	355	758	<--higher
Wisconsin	5,095	4,078	3,777	4,618		New Hampshire	0	772	566	593	
Georgia	2,907	2,796	4,051	4,373	<--higher	Wyoming	0	500	702	571	
Missouri	4,471	2,929	2,679	3,998		Maine	238	219	232	346	<--higher
Tennessee	4,404	5,693	4,099	3,967		Puerto Rico	509	659	362	340	
Utah	0	2,510	4,004	3,945		District of Columbia	220	133	157	322	<--higher
Kentucky	0	4,127	3,597	3,836		Vermont	79	63	225	178	<--higher
Alabama	2,639	3,376	3,928	3,531	<--higher	Hawaii	117	41	78	142	<--higher
Louisiana	0	5,326	3,604	2,774		U.S. Virgin Islands	0	6	13	26	
Nevada	2,542	2,698	2,129	2,536		Guam	43	37	31	22	
Nebraska	2,394	1,941	1,787	2,336		Northern Mariana Islands	0	0	0	0	
Iowa	2,691	988	2,375	2,196		Kansas	0	0	4,615	0	
Mississippi	1,746	1,141	2,457	2,168	<--higher	American Samoa	0	0	0	0	

# #7: US Daily Hospitalizations...

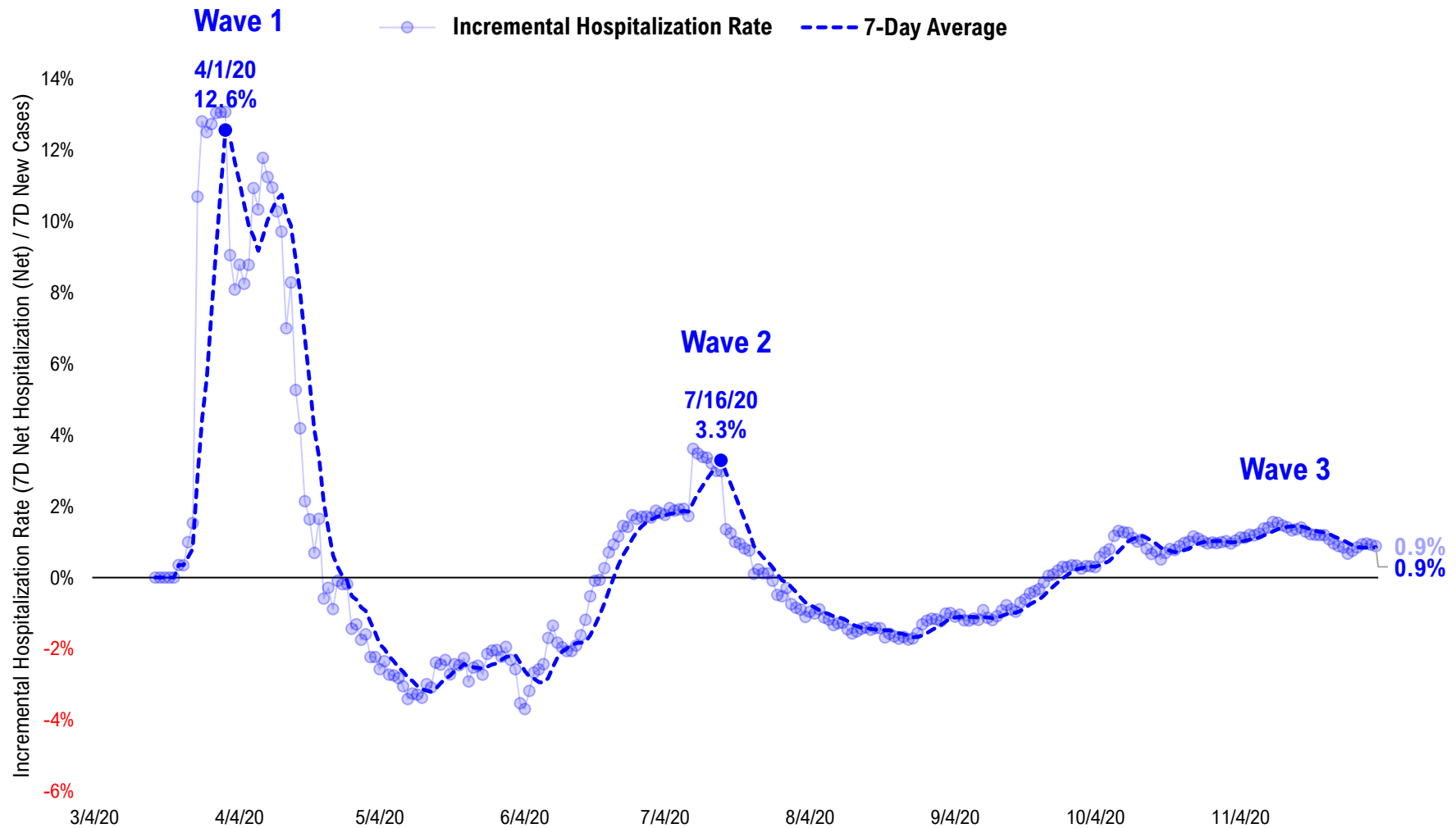
### US Net Hospitalizations (aggregate of 50 states + Washington, D.C.)



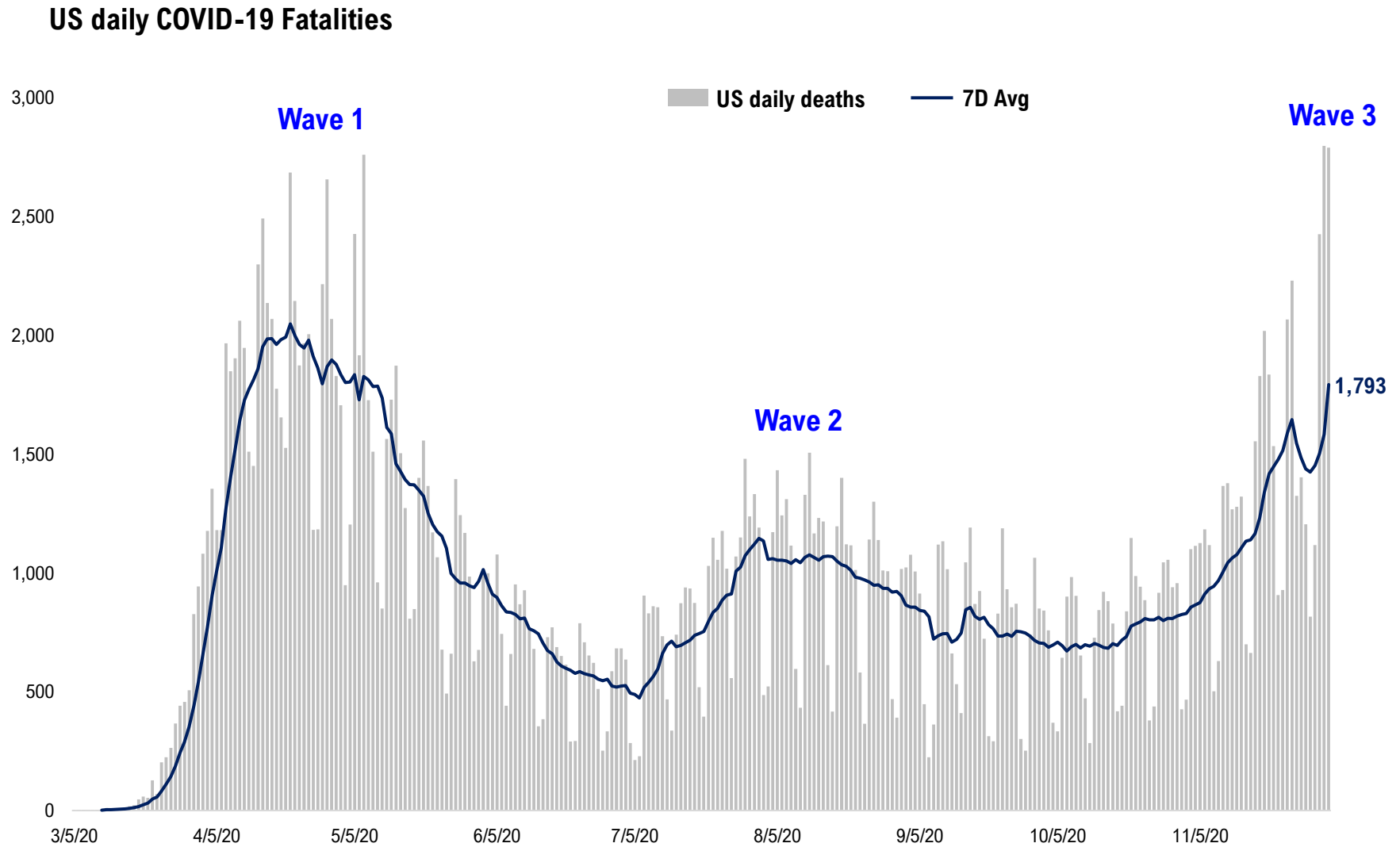


# #8: Incremental Hospitalization Rate...

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

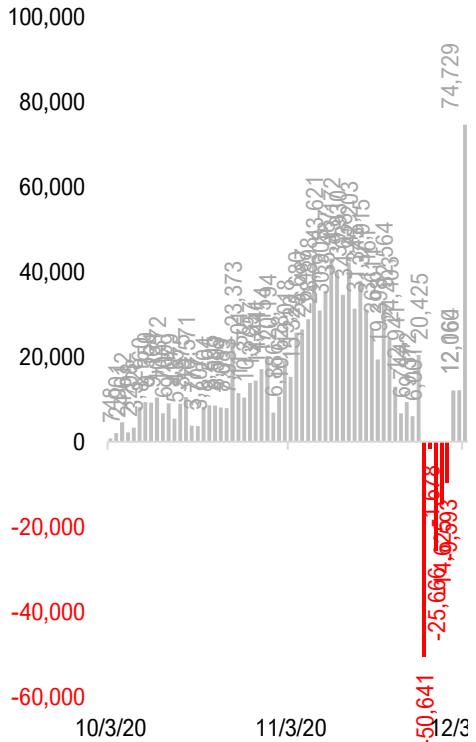


# #9: US Daily New Fatalities...

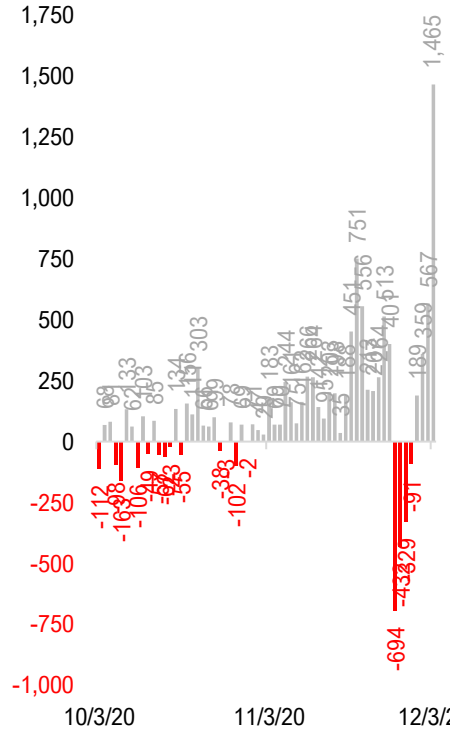


# #10: Rolling 7-Day Change in the Key Metrics... (Past 8 Weeks)

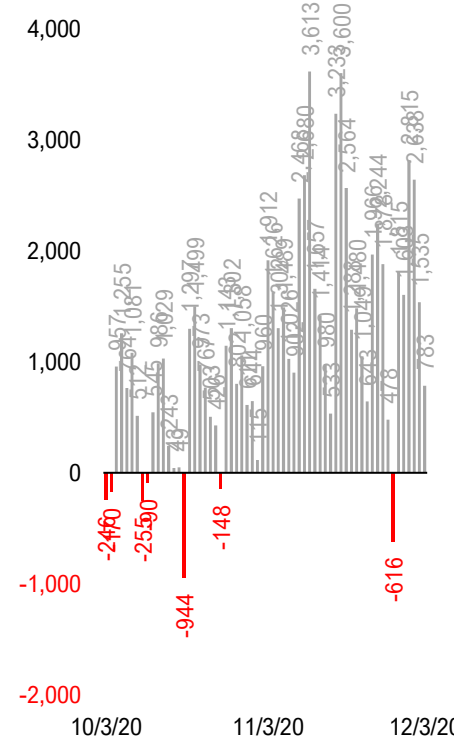
Daily New Cases  
(8/10-8/23 ex-CA; 9/4-9/5 ex-IL)



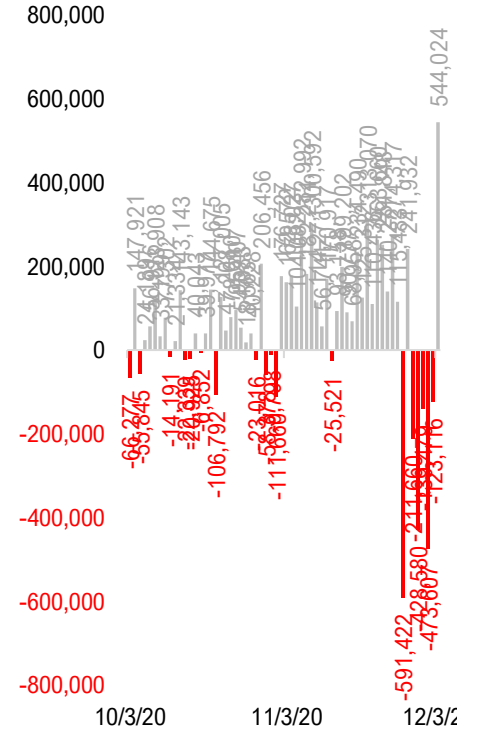
Daily Deaths



Daily Net Hospitalization  
(Red = more discharge than admission)



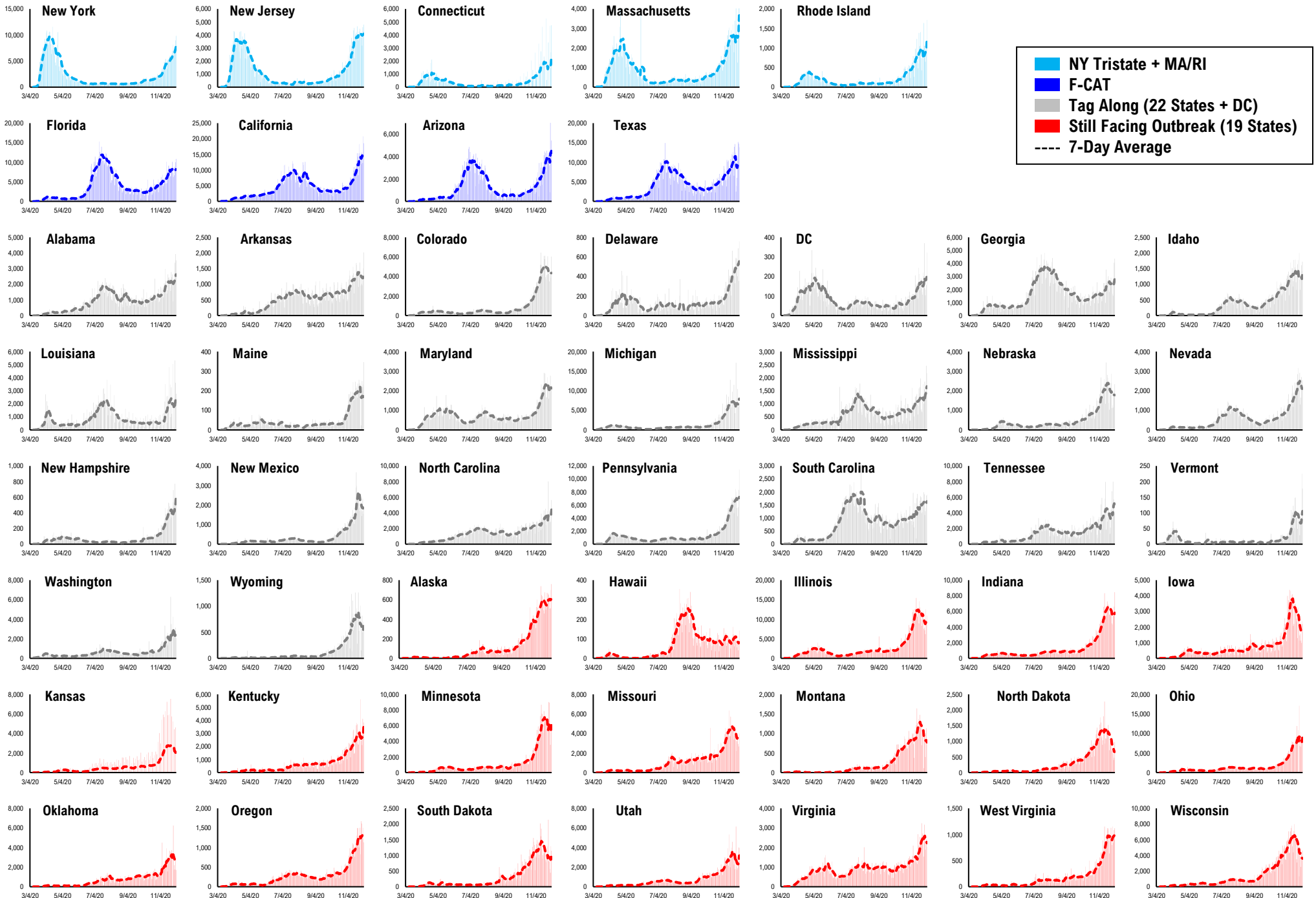
Daily Tests



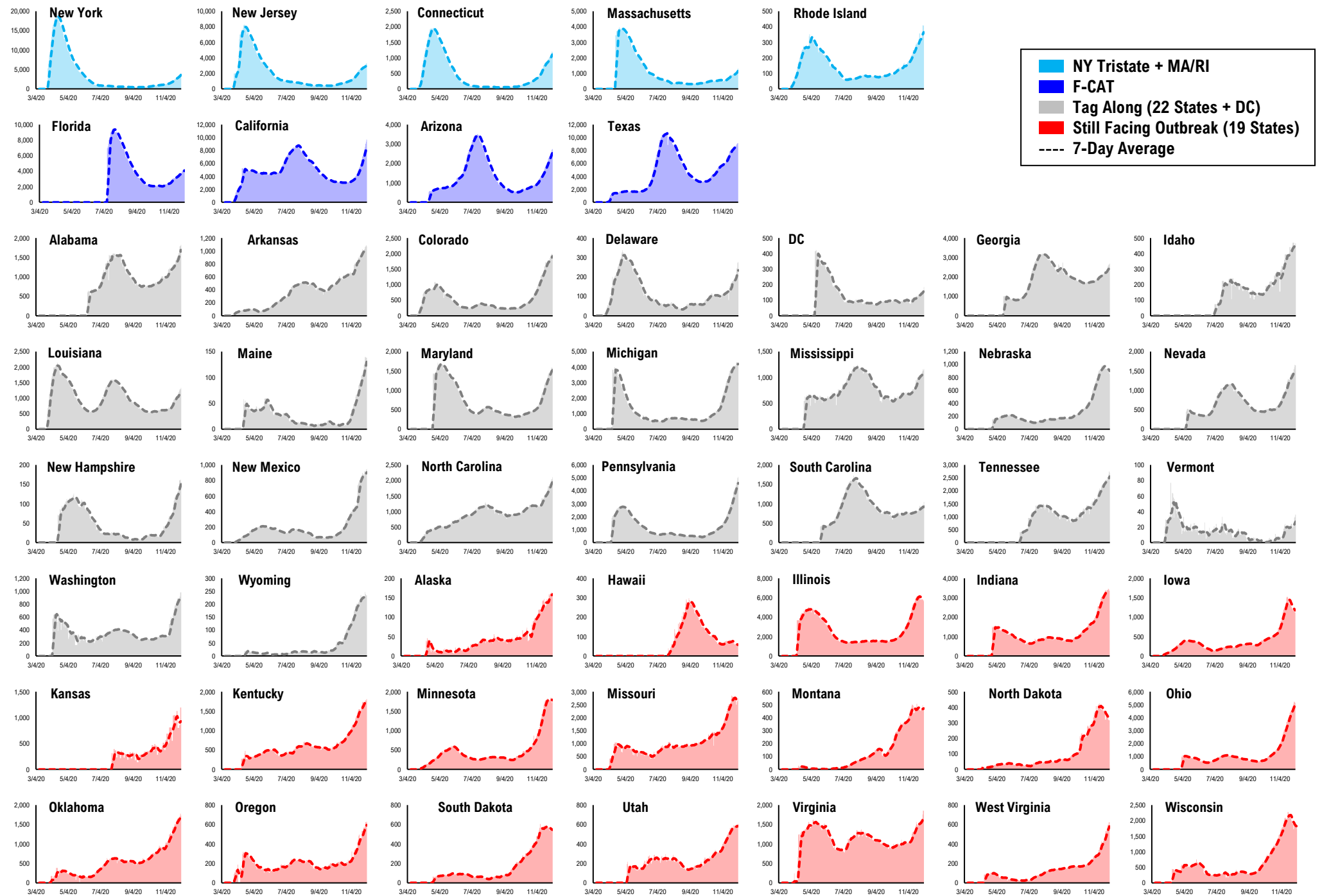
\* Ignored California between 8/10 and 8/23, due to its data glitch caused 300,000-case backlog

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

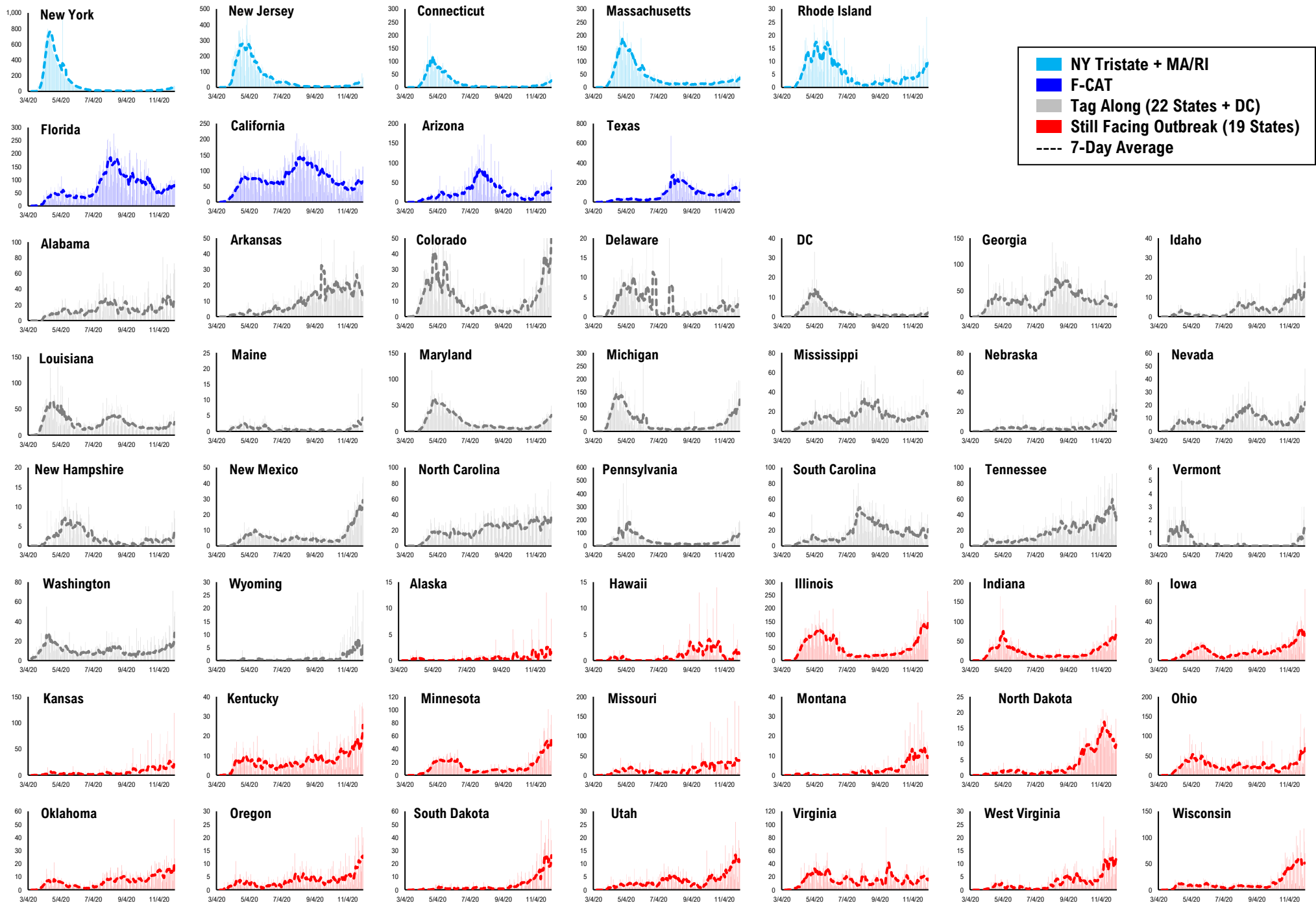
# #11: Daily New Cases by States...



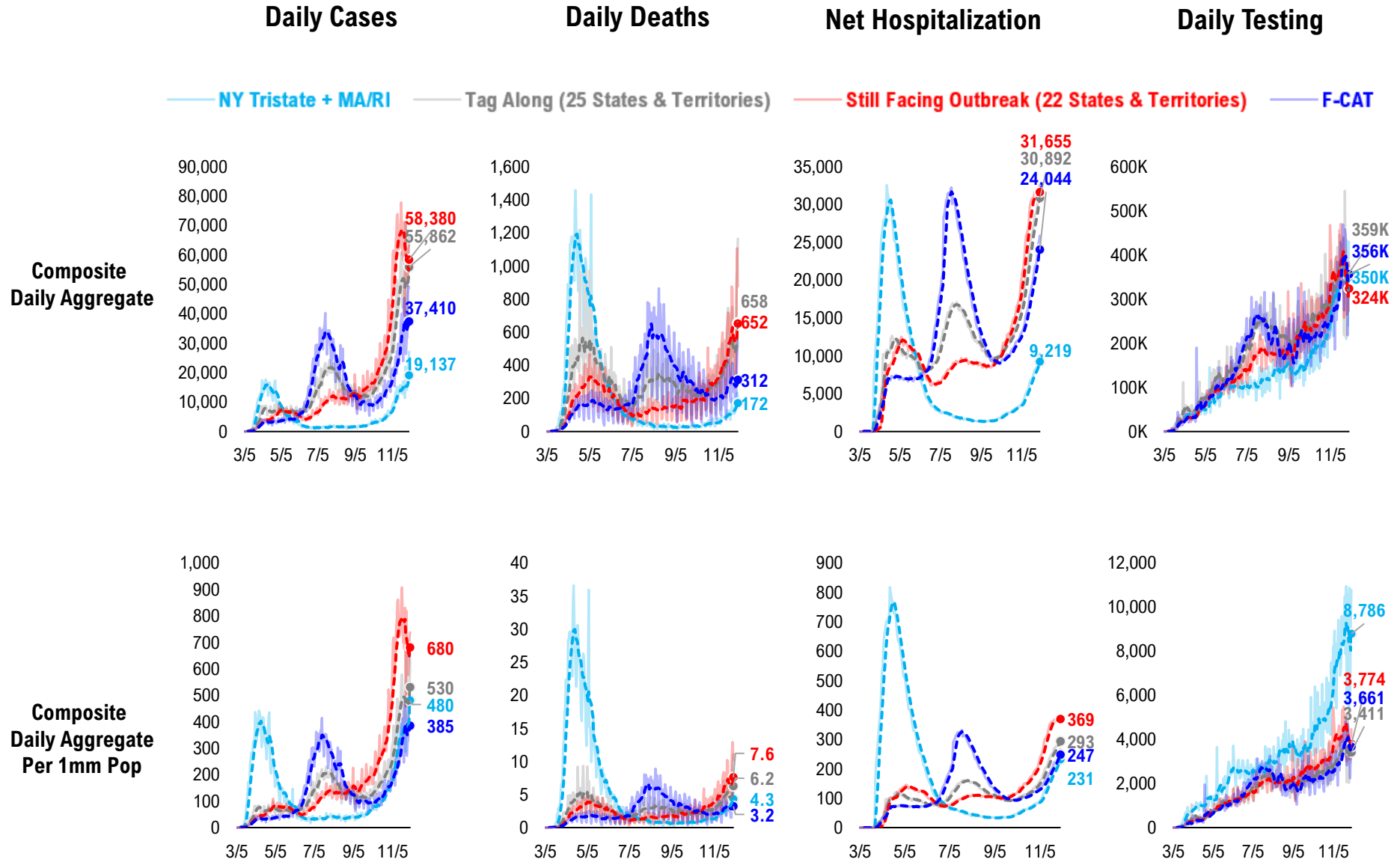
# #12: Current Hospitalizations by States...



# #13: Daily New Deaths by States...

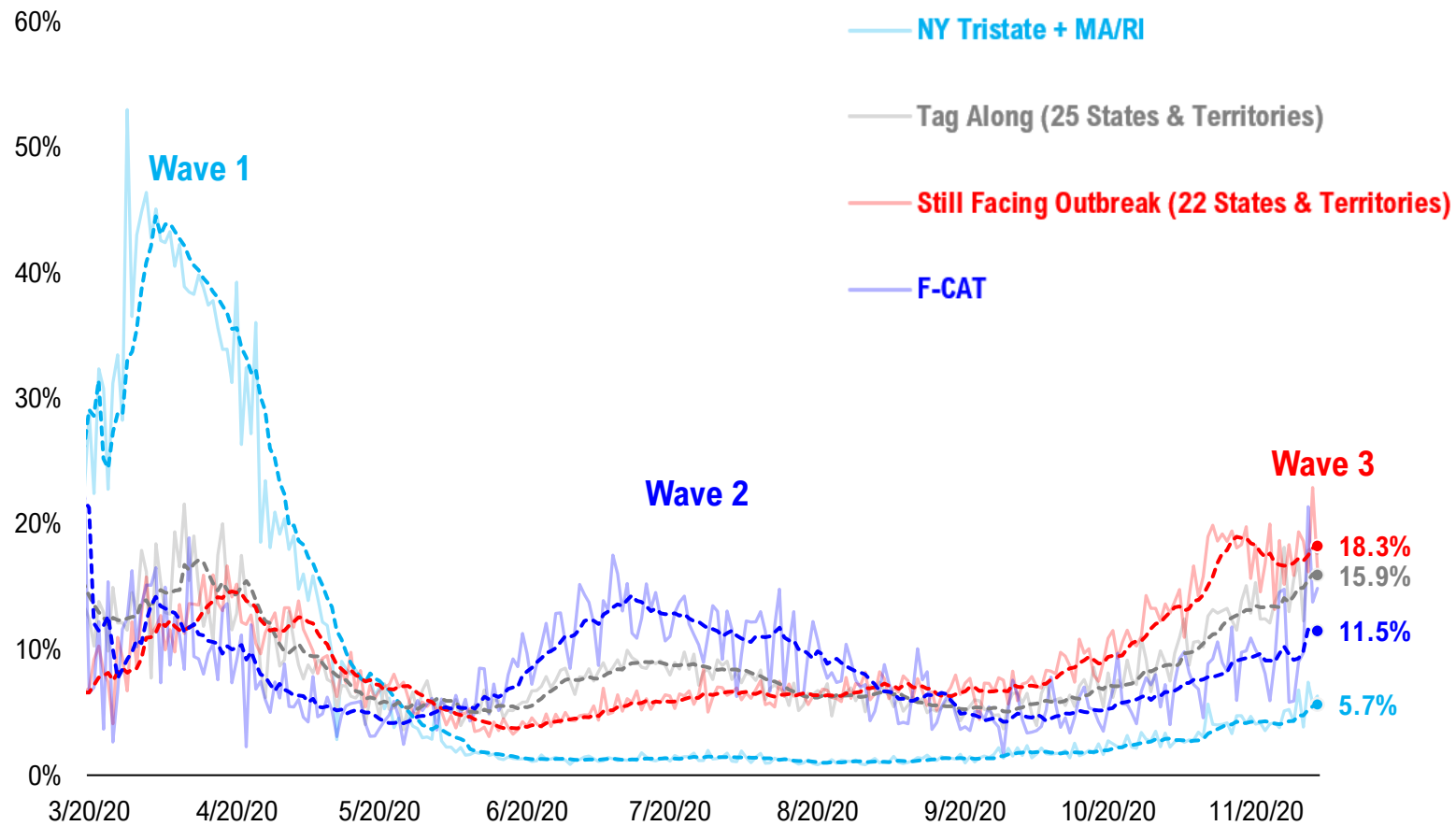


# #14: State COVID-19 situation by Tier...



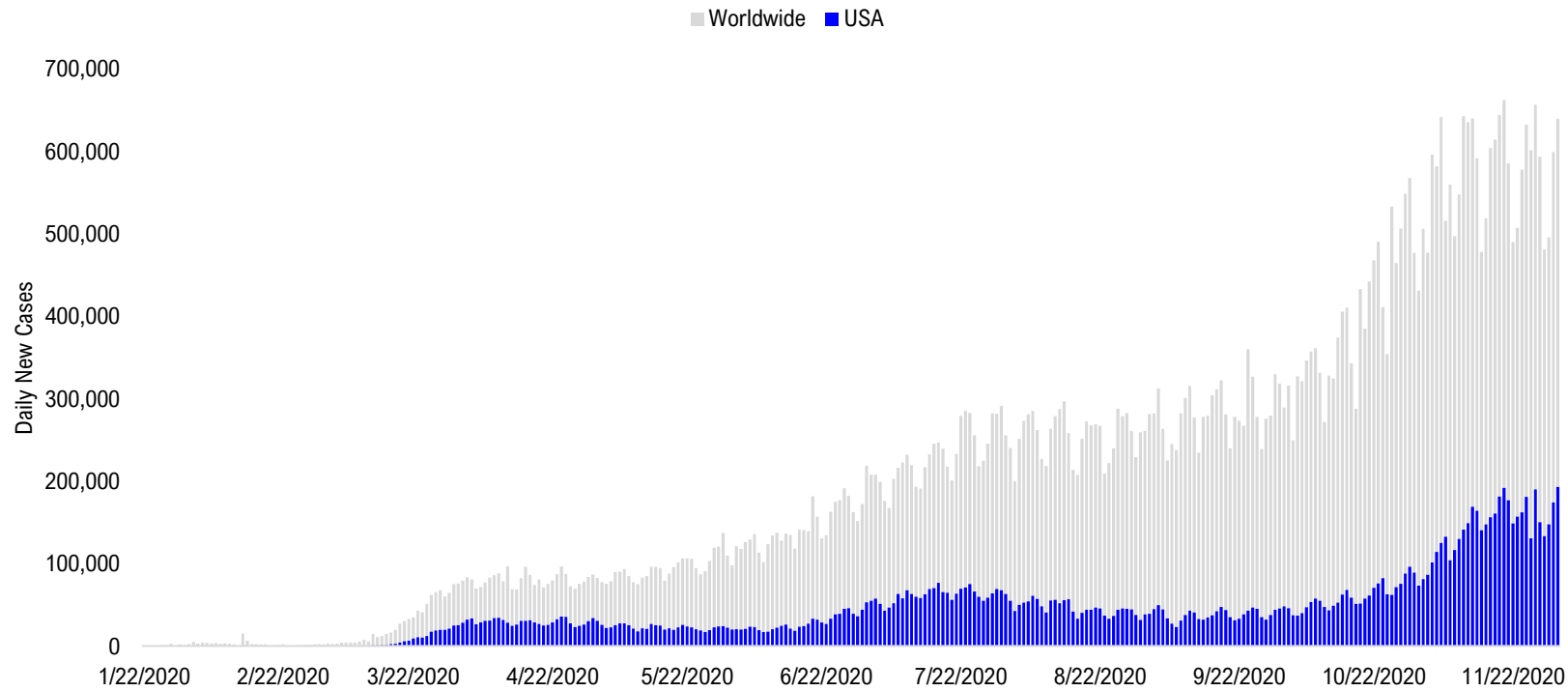
# #15: State COVID-19 Daily Positivity Rate by Tier...

## Composite Daily Positivity Rate





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



Jul 17	Jul 31	Aug 14	Aug 28	Sep 11	Sep 25	Oct 9	Oct 23	Nov 6	Nov 20	Dec 2
Latin America 72,602	Latin America 97,308	Latin America 100,636	Latin America 88,255	Pakistan + India + Bangladesh 98,888	Pakistan + India + Bangladesh 88,225	Europe 112,040	Europe 223,901	Europe 326,485	Europe 279,377	Europe 230,592
US + Canada 72,365	US + Canada 67,272	Pakistan + India + Bangladesh 68,924	Pakistan + India + Bangladesh 82,644	Latin America 80,841	Latin America 76,712	Pakistan + India + Bangladesh 76,149	US + Canada 71,893	US + Canada 117,107	US + Canada 182,596	US + Canada 178,170
Pakistan + India + Bangladesh 39,450	Pakistan + India + Bangladesh 58,625	US + Canada 54,914	US + Canada 45,273	Europe 47,433	Europe 67,915	Latin America 69,822	Latin America 69,390	Latin America 59,345	Latin America 68,233	Latin America 74,015
Africa 19,290	Europe 20,929	Europe 28,225	Europe 35,965	US + Canada 37,795	US + Canada 43,790	US + Canada 54,955	Pakistan + India + Bangladesh 56,907	Pakistan + India + Bangladesh 52,404	Pakistan + India + Bangladesh 50,856	Pakistan + India + Bangladesh 39,692
Europe 17,320	Africa 17,999	Asia ex- India+Pakistan 11,706	Asia ex- India+Pakistan 10,223	Asia ex- India+Pakistan 10,997	Asia ex- India+Pakistan 11,003	Asia ex- India+Pakistan 13,934	Asia ex- India+Pakistan 15,237	Africa 13,656	Asia ex- India+Pakistan 15,310	Asia ex- India+Pakistan 15,178
Asia ex- India+Pakistan 7,321	Asia ex- India+Pakistan 10,630	Africa 10,680	Africa 8,468	Africa 8,309	Africa 8,247	Africa 9,966	Africa 10,615	Asia ex- India+Pakistan 13,638	Africa 14,917	Africa 12,564

# Disclosures

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