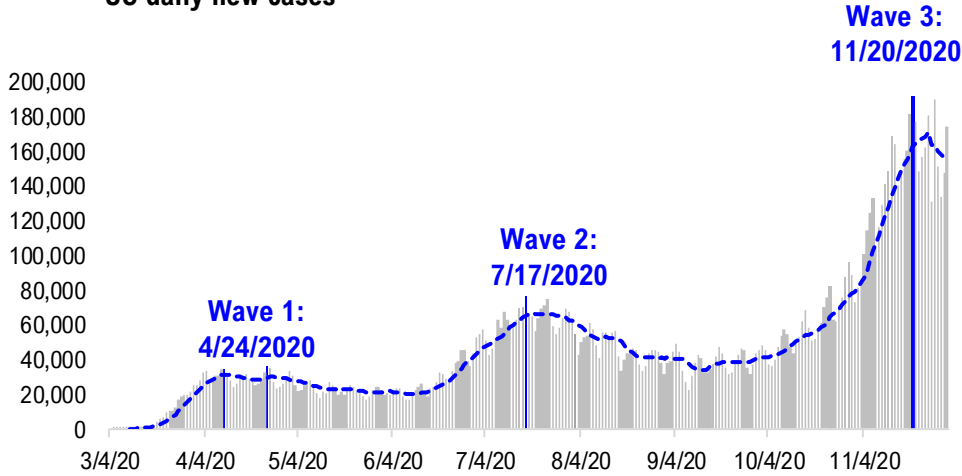


# FSInsight Daily COVID-19 Chartbook

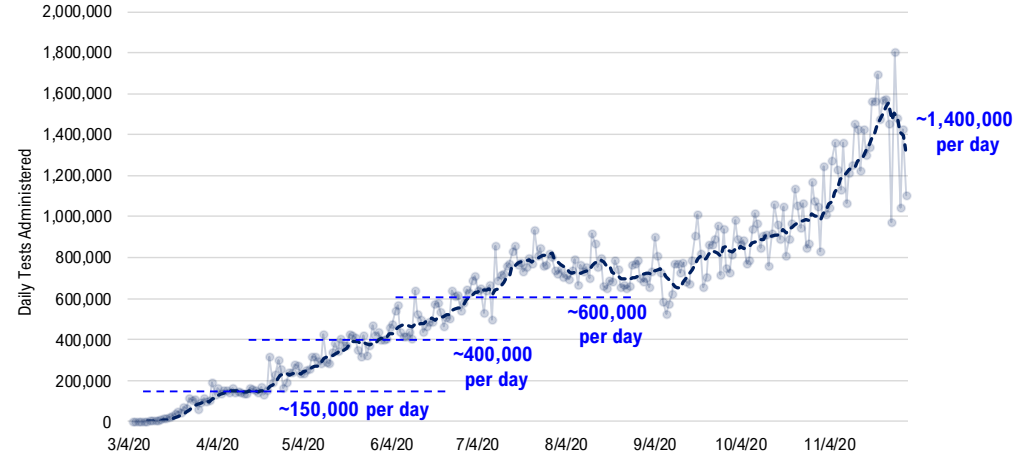


# #1: USA COVID-19 Situation at a Glance...

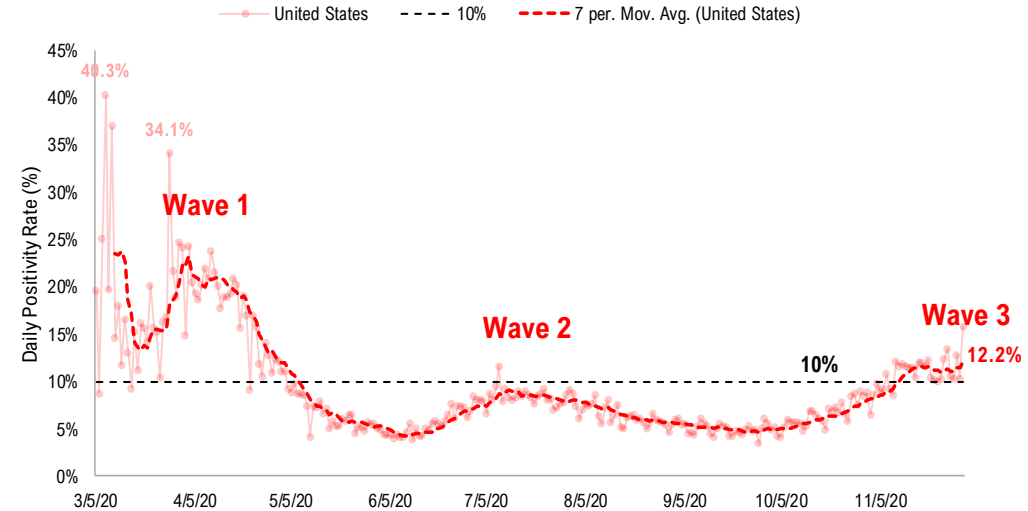
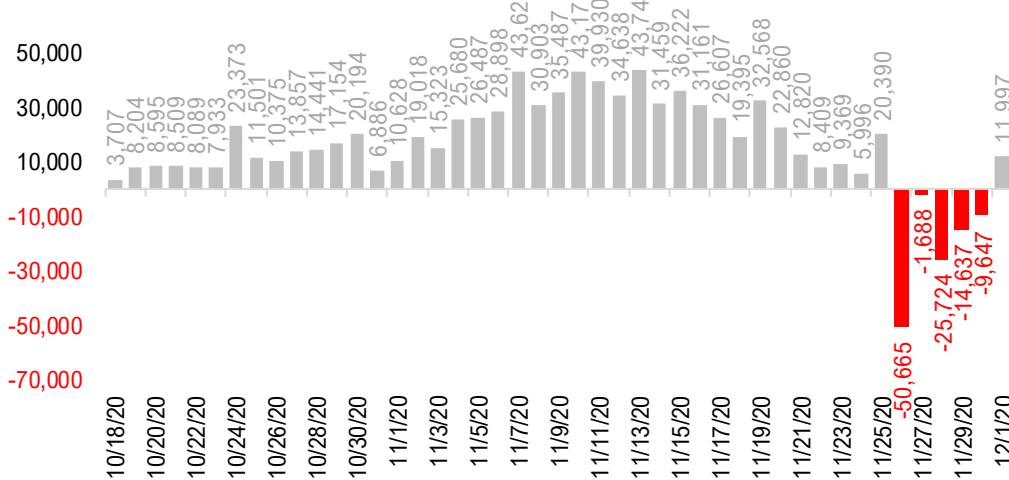
**US daily new cases**



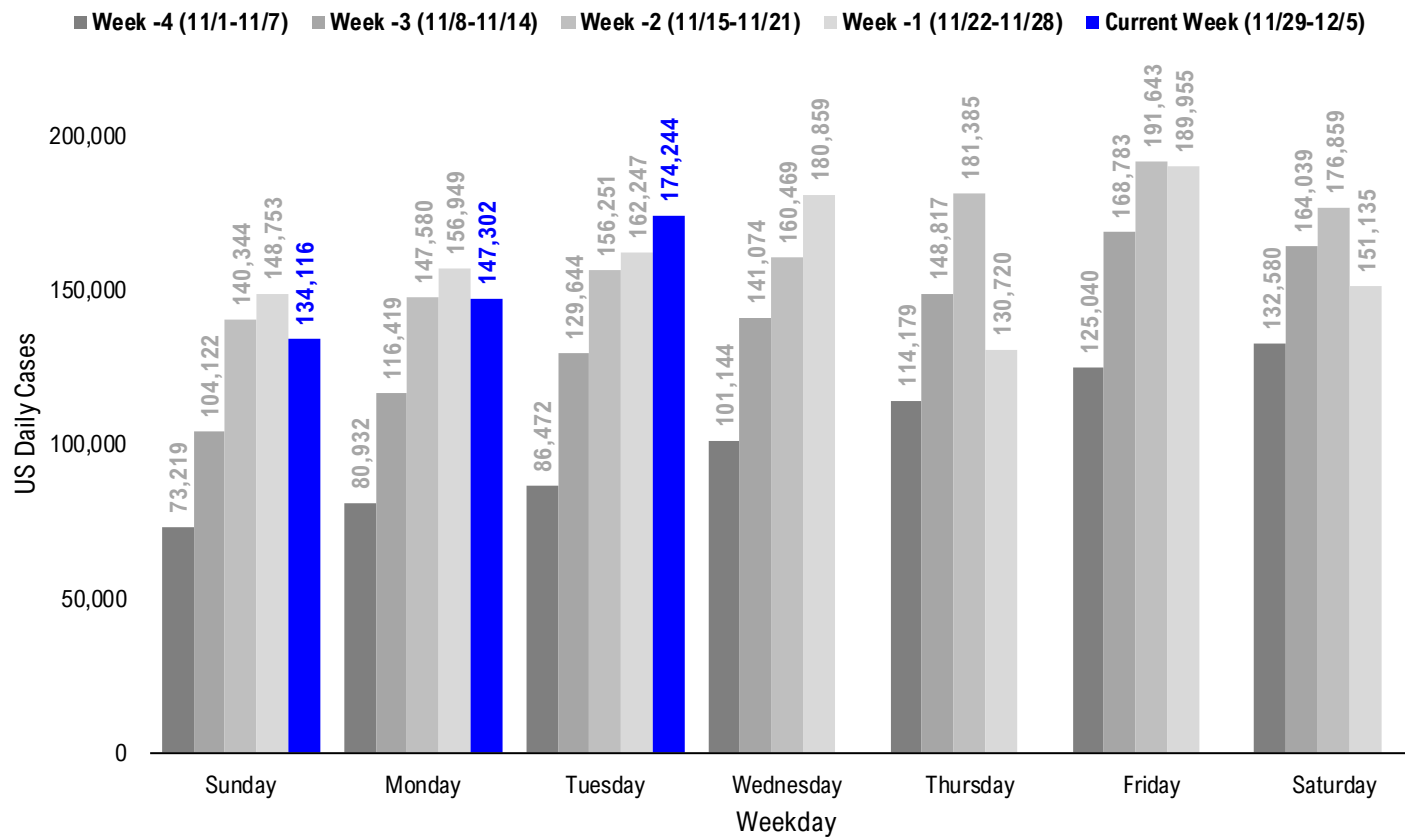
**USA total COVID-19 tests administered**



**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		7D Net		Hospitalization / 7D New Cases	
			12/1	Delta	12/1	Delta	# Days	% Decline in Daily Cases		
United States	100%	100%	174,244	+11,997	463	-12	10	-17%	10,494	0.9%

	Sorted Daily Cases		Daily Cases (3D avg) per 1mm residents				Hospitalization			
	% US Pop	% US GDP	7D		Since Peak		7D Net		Hospitalization / 7D New Cases	
			12/1	Delta	12/1	Delta	# Days	% Decline in Daily Cases		
United States	100%	100%	174,244	+11,997	463	-12	10	-17%	10,494	0.9%

### States:

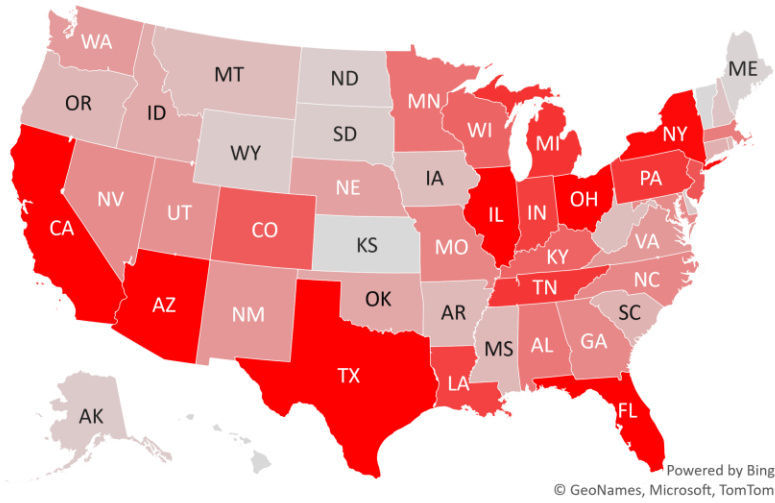
1 Texas	8.7%	8.8%	15,182	+1,184	364	+29	5	-23%	552	0.8%
2 Illinois	3.8%	4.2%	12,542	+3,073	682	-50	18	-36%	-299	(0.5%)
3 California	11.9%	14.6%	12,221	-3,108	353	+33	5	-13%	2,408	2.4%
4 Arizona	2.2%	1.7%	10,322	+5,778	658	+130	0	0%	510	1.7%
5 Ohio	3.5%	3.3%	9,030	+426	667	-149	2	-26%	777	1.3%
6 Florida	6.5%	5.0%	8,847	+292	355	+22	141	-40%	502	0.9%
7 New York	5.9%	8.1%	7,285	+2,404	357	+80	235	-34%	918	1.9%
8 Michigan	3.0%	2.6%	5,793	-497	541	-53	13	-38%	223	0.5%
9 Tennessee	2.1%	1.8%	5,693	+4,389	816	+330	15	-9%	264	0.8%
10 Pennsylvania	3.9%	3.8%	5,676	-993	403	-79	3	-35%	847	1.8%
11 Indiana	2.0%	1.8%	5,396	-229	761	-99	10	-27%	181	0.5%
12 Louisiana	1.4%	1.3%	5,326	+2,060	512	-41	11	-22%	228	1.7%
13 New Jersey	2.7%	3.0%	4,606	+331	437	-7	5	-9%	344	1.2%
14 Colorado	1.7%	1.8%	4,405	+255	696	+15	10	-33%	238	0.8%
15 Kentucky	1.3%	1.0%	4,127	+1,521	670	+153	10	-19%	119	0.6%
16 Wisconsin	1.8%	1.6%	4,078	-2,124	598	-135	18	-53%	-159	(0.6%)
17 Minnesota	1.7%	1.8%	3,549	-2,867	1081	-99	1	-23%	12	0.0%
18 Alabama	1.5%	1.1%	3,376	+591	538	+119	0	0%	357	2.2%
19 Massachusetts	2.1%	2.8%	3,253	+677	344	+2	2	-32%	237	1.3%
20 Missouri	1.8%	1.5%	2,929	-835	540	-76	17	-33%	-81	(0.3%)
21 North Carolina	3.2%	2.7%	2,883	-217	300	-19	2	-38%	309	1.2%
22 Georgia	3.2%	2.9%	2,796	+372	188	-7	129	-53%	336	2.1%
23 Maryland	1.8%	2.0%	2,765	+1,098	369	+66	10	-18%	242	1.5%
24 Nevada	0.9%	0.8%	2,698	-155	610	-185	5	-34%	190	1.2%
25 Utah	1.0%	0.9%	2,510	-191	637	-209	10	-49%	22	0.1%
26 New Mexico	0.6%	0.5%	2,324	+225	864	-218	11	-43%	38	0.3%
27 Virginia	2.6%	2.6%	2,228	-316	252	-57	6	-24%	261	1.6%
28 Washington	2.3%	2.7%	2,197	-1,285	288	-139	6	-48%	0	0.0%

### States:

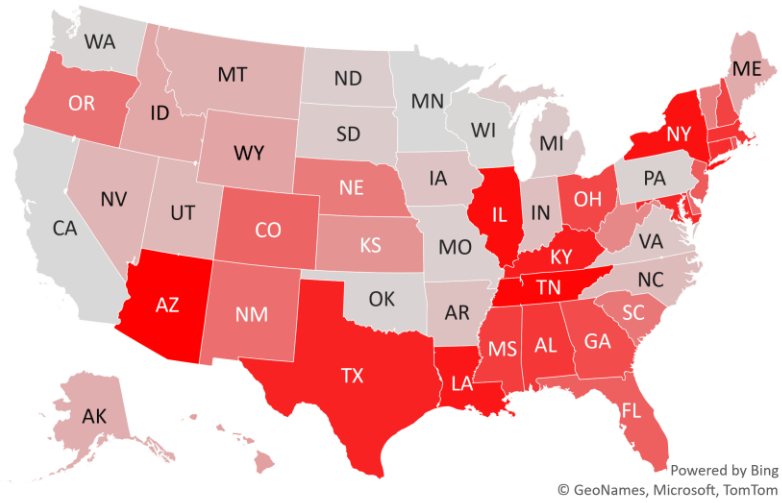
29 Nebraska	0.6%	0.6%	1,941	+81	748	+14	12	-49%	-64	(0.5%)
30 Oklahoma	1.2%	1.0%	1,737	-999	477	-339	2	-49%	152	0.8%
31 Idaho	0.5%	0.4%	1,607	-33	680	-47	6	-25%	38	0.4%
32 Connecticut	1.1%	1.3%	1,459	+919	577	+34	13	-26%	261	2.3%
33 South Carolina	1.6%	1.1%	1,320	+105	234	-36	122	-56%	107	1.0%
34 Oregon	1.3%	1.2%	1,223	+223	328	+38	1	-10%	91	1.0%
35 Rhode Island	0.3%	0.3%	1,183	+332	909	+274	2	-23%	87	1.3%
36 Arkansas	0.9%	0.6%	1,142	-279	345	-53	10	-34%	86	1.0%
37 Mississippi	0.9%	0.6%	1,141	+476	501	+261	10	-11%	117	1.2%
38 Montana	0.3%	0.2%	1,007	-116	736	-188	16	-43%	28	0.5%
39 Iowa	1.0%	0.9%	988	-308	392	-261	18	-69%	-179	(1.5%)
40 West Virginia	0.5%	0.4%	976	+7	553	+91	10	-10%	132	2.0%
41 New Hampshire	0.4%	0.4%	772	+432	432	+163	0	0%	39	1.2%
42 Delaware	0.3%	0.4%	689	+236	573	+113	3	-0%	61	1.7%
43 Puerto Rico	1.0%	0.5%	659	+366	163	-40	9	-45%	12	0.3%
44 Alaska	0.2%	0.3%	511	-73	743	+2	16	-17%	11	0.3%
45 Wyoming	0.2%	0.2%	500	-28	1081	-387	12	-37%	11	0.3%
46 South Dakota	0.3%	0.3%	448	-563	683	-313	17	-67%	-27	(0.4%)
47 North Dakota	0.2%	0.3%	403	-601	752	-499	17	-69%	-57	(1.1%)
48 Maine	0.4%	0.3%	219	-36	171	+3	5	-5%	34	2.9%
49 District of Columbi	0.2%	0.7%	133	+14	178	-34	3	-52%	26	2.0%
50 Vermont	0.2%	0.2%	63	+14	110	-7	10	-46%	10	2.1%
51 Hawaii	0.4%	0.5%	43	-18	43	-26	94	-79%	-13	(2.3%)
52 Guam	0.0%	0.0%	37	-16	215	-145	21	-80%	-3	(1.3%)
53 U.S. Virgin Islands	0.0%	0.0%	6	+3	37	-12	102	-91%	0	0.0%
54 Northern Mariana	0.0%	0.0%	0	+0	12	+6	44	-78%	0	0.0%
55 Kansas	0.9%	0.8%	0	+0	506	-355	6	-67%	-42	(0.3%)
56 American Samoa	0.0%	0.0%	0	+0	0	+0	0	0%	0	

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

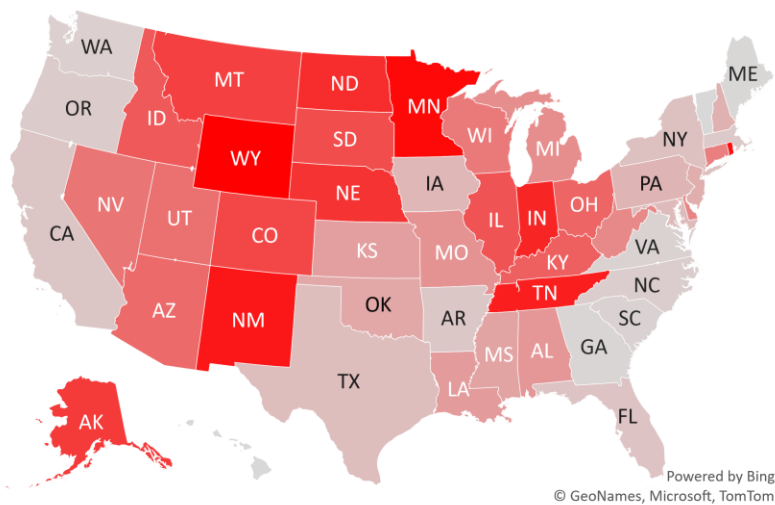
### Daily Case Increases



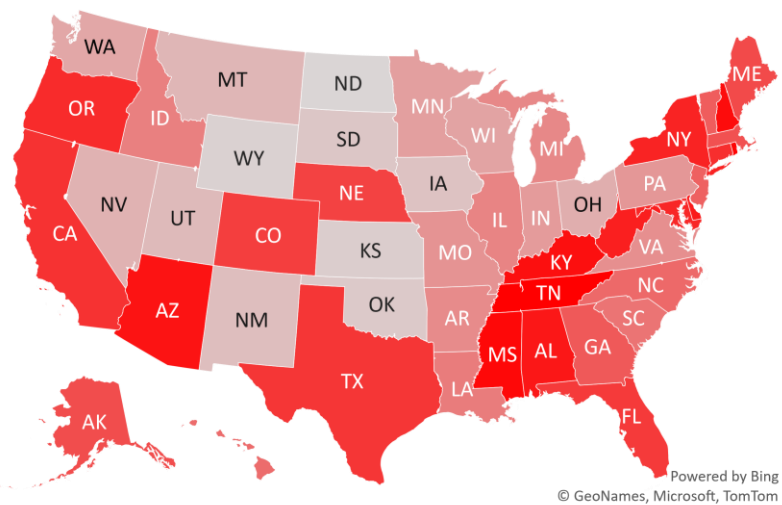
### 7D Delta in Daily New Cases



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



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



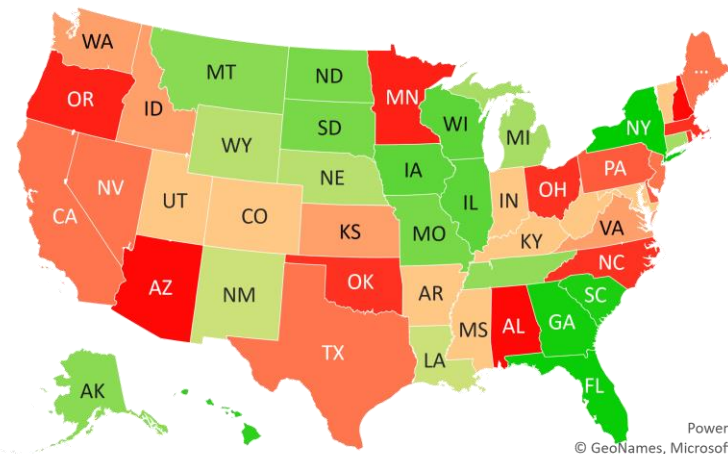
# #5: # of Days since Daily Case Peaked by States...

## # Days since Daily Cases (3D Avg) Peak (as of 12/1)

	Sorted			
	Peak Date	12/1/20	% off the Peak	% US Pop
United States	11/21/20	10	-17%	100%
<b>States:</b>				
New York	4/10/20	235	-34%	5.9%
Florida	7/13/20	141	-40%	6.5%
Georgia	7/25/20	129	-53%	3.2%
South Carolina	8/1/20	122	-56%	1.6%
U.S. Virgin Islands	8/21/20	102	-91%	0.0%
Hawaii	8/29/20	94	-79%	0.4%
Northern Mariana Island	10/18/20	44	-78%	0.0%
Guam	11/10/20	21	-80%	0.0%
Wisconsin	11/13/20	18	-53%	1.8%
Illinois	11/13/20	18	-36%	3.8%
Iowa	11/13/20	18	-69%	1.0%
South Dakota	11/14/20	17	-67%	0.3%
North Dakota	11/14/20	17	-69%	0.2%
Missouri	11/14/20	17	-33%	1.8%
Montana	11/15/20	16	-43%	0.3%
Alaska	11/15/20	16	-17%	0.2%
Tennessee	11/16/20	15	-9%	2.1%
Michigan	11/18/20	13	-38%	3.0%
Connecticut	11/18/20	13	-26%	1.1%
Wyoming	11/19/20	12	-37%	0.2%
Nebraska	11/19/20	12	-49%	0.6%
New Mexico	11/20/20	11	-43%	0.6%
Louisiana	11/20/20	11	-22%	1.4%
West Virginia	11/21/20	10	-10%	0.5%
Vermont	11/21/20	10	-46%	0.2%
Utah	11/21/20	10	-49%	1.0%
Mississippi	11/21/20	10	-11%	0.9%
Maryland	11/21/20	10	-18%	1.8%

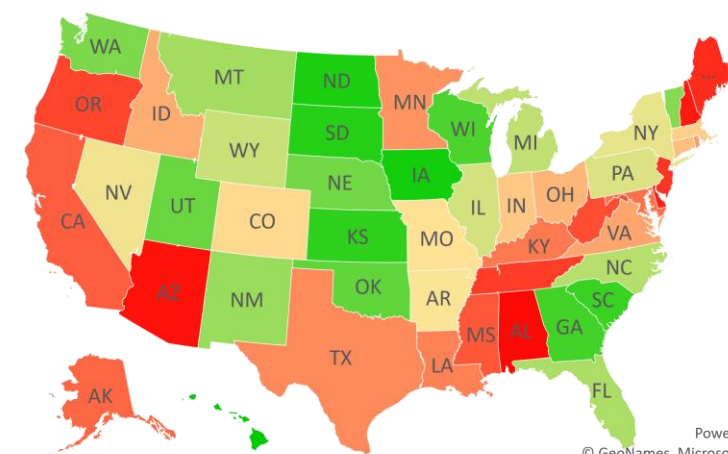
	Sorted			
	Peak Date	12/1/20	% off the Peak	% US Pop
United States	11/21/20	10	-17%	100%
<b>States:</b>				
Kentucky	11/21/20	10	-19%	1.3%
Indiana	11/21/20	10	-27%	2.0%
Colorado	11/21/20	10	-33%	1.7%
Arkansas	11/21/20	10	-34%	0.9%
Puerto Rico	11/22/20	9	-45%	1.0%
Washington	11/25/20	6	-48%	2.3%
Virginia	11/25/20	6	-24%	2.6%
Kansas	11/25/20	6	-67%	0.9%
Idaho	11/25/20	6	-25%	0.5%
Texas	11/26/20	5	-23%	8.7%
Nevada	11/26/20	5	-34%	0.9%
New Jersey	11/26/20	5	-9%	2.7%
Maine	11/26/20	5	-5%	0.4%
California	11/26/20	5	-13%	11.9%
Pennsylvania	11/28/20	3	-35%	3.9%
Delaware	11/28/20	3	-0%	0.3%
District of Columbia	11/28/20	3	-52%	0.2%
Rhode Island	11/29/20	2	-23%	0.3%
Oklahoma	11/29/20	2	-49%	1.2%
Ohio	11/29/20	2	-26%	3.5%
North Carolina	11/29/20	2	-38%	3.2%
Massachusetts	11/29/20	2	-32%	2.1%
Oregon	11/30/20	1	-10%	1.3%
Minnesota	11/30/20	1	-23%	1.7%
New Hampshire	12/1/20	0	0%	0.4%
Arizona	12/1/20	0	0%	2.2%
Alabama	12/1/20	0	0%	1.5%

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



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



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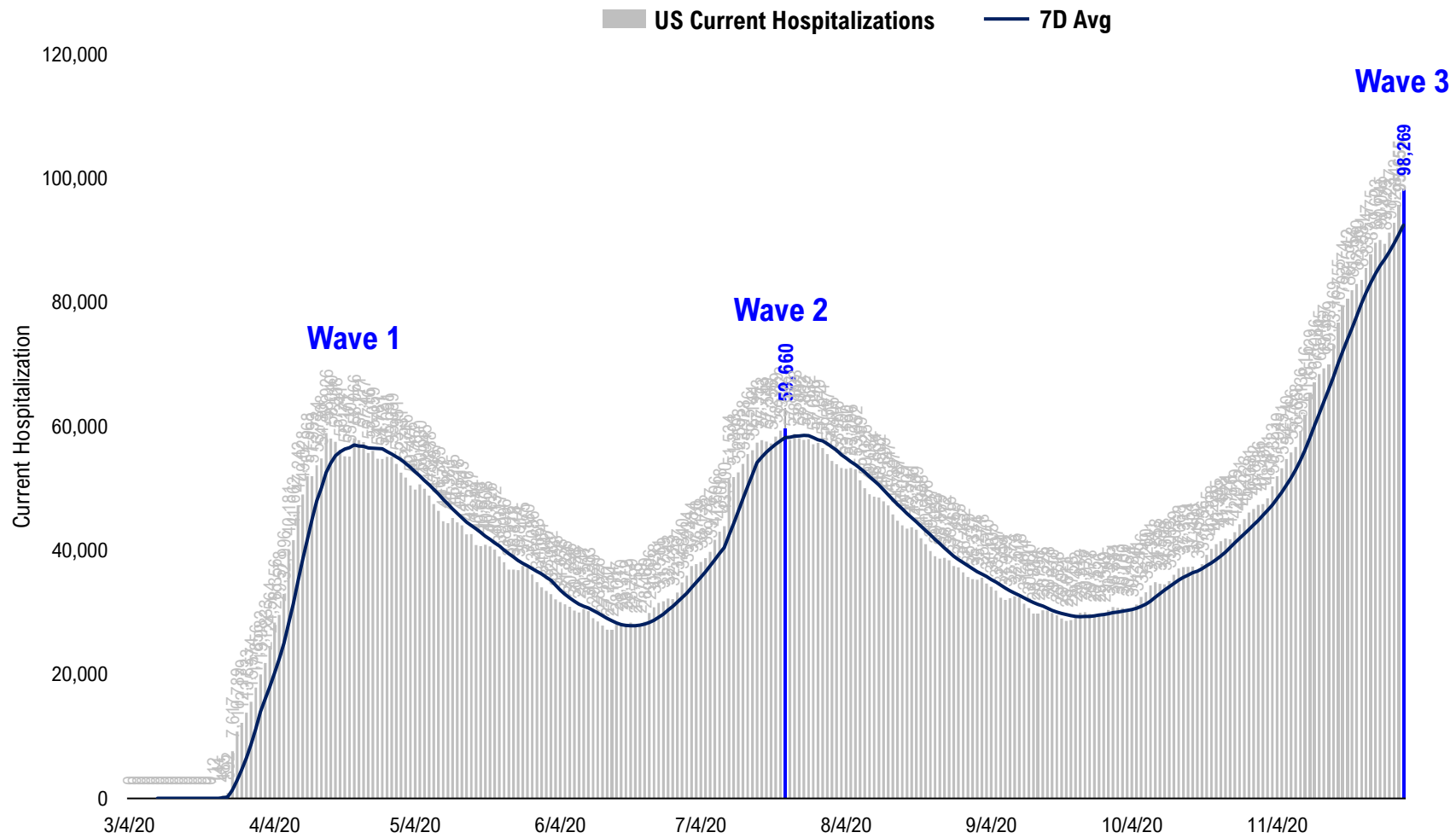
# #6: US New Cases by States... (sorted by today's new cases)

	Sorted				
	7D Ago	Last 3-day Trend			
	11/24/20	11/29/20	11/30/20	12/1/20	vs 7D ago
United States	162,247	134,116	147,302	174,244	+11,997
<b>States:</b>					
Texas	13,998	6,041	10,429	15,182	
Illinois	9,469	7,178	6,190	12,542	<--higher
California	15,329	15,614	14,034	12,221	
Arizona	4,544	3,221	822	10,322	<--higher
Ohio	8,604	7,729	6,631	9,030	
Florida	8,555	7,363	6,659	8,847	
New York	4,881	6,723	6,819	7,285	<--higher
Michigan	6,290	0	10,428	5,793	
Tennessee	1,304	3,052	7,975	5,693	<--higher
Pennsylvania	6,669	5,529	4,268	5,676	
Indiana	5,625	4,304	5,665	5,396	
Louisiana	3,266	1,641	171	5,326	<--higher
New Jersey	4,275	3,839	3,190	4,606	
Colorado	4,150	3,489	4,133	4,405	
Kentucky	2,606	2,743	2,116	4,127	<--higher
Wisconsin	6,202	3,831	2,534	4,078	
Minnesota	6,416	8,946	5,794	3,549	
Alabama	2,785	2,236	2,295	3,376	<--higher
Massachusetts	2,576	2,606	1,260	3,253	<--higher
Missouri	3,764	3,193	3,829	2,929	
North Carolina	3,100	3,820	2,734	2,883	
Georgia	2,424	1,665	1,532	2,796	
Maryland	1,667	1,999	1,923	2,765	<--higher
Nevada	2,853	1,298	1,642	2,698	
Utah	2,701	1,722	1,897	2,510	
New Mexico	2,099	1,435	1,678	2,324	
Virginia	2,544	2,325	1,893	2,228	
Washington	3,482	2,066	2,319	2,197	

	Sorted				
	7D Ago	Last 3-day Trend			
	11/24/20	11/29/20	11/30/20	12/1/20	vs 7D ago
United States	162,247	134,116	147,302	174,244	+11,997
<b>States:</b>					
Nebraska	1,860	1,257	1,143	1,941	
Oklahoma	2,736	1,721	2,200	1,737	
Idaho	1,640	824	1,214	1,607	
Connecticut	540	0	4,714	1,459	<--higher
South Carolina	1,215	1,080	1,213	1,320	
Oregon	1,000	1,614	1,311	1,223	<--higher
Rhode Island	851	1,055	651	1,183	<--higher
Arkansas	1,421	1,019	966	1,142	
Mississippi	665	1,845	1,485	1,141	<--higher
Montana	1,123	956	397	1,007	
Iowa	1,296	1,584	1,143	988	
West Virginia	969	1,152	845	976	
New Hampshire	340	478	514	772	<--higher
Delaware	453	581	403	689	<--higher
Puerto Rico	293	116	791	659	<--higher
Alaska	584	612	507	511	
Wyoming	528	561	816	500	
South Dakota	1,011	801	564	448	
North Dakota	1,004	723	594	403	
Maine	255	220	249	219	
District of Columbia	119	140	104	133	
Vermont	49	71	72	63	<--higher
Hawaii	61	56	85	43	
Guam	53	36	34	37	
U.S. Virgin Islands	3	6	0	6	<--higher
Northern Mariana Islands	0	0	2	0	
Kansas	0	0	4,425	0	
American Samoa	0	0	0	0	

# #7: US Daily Hospitalizations...

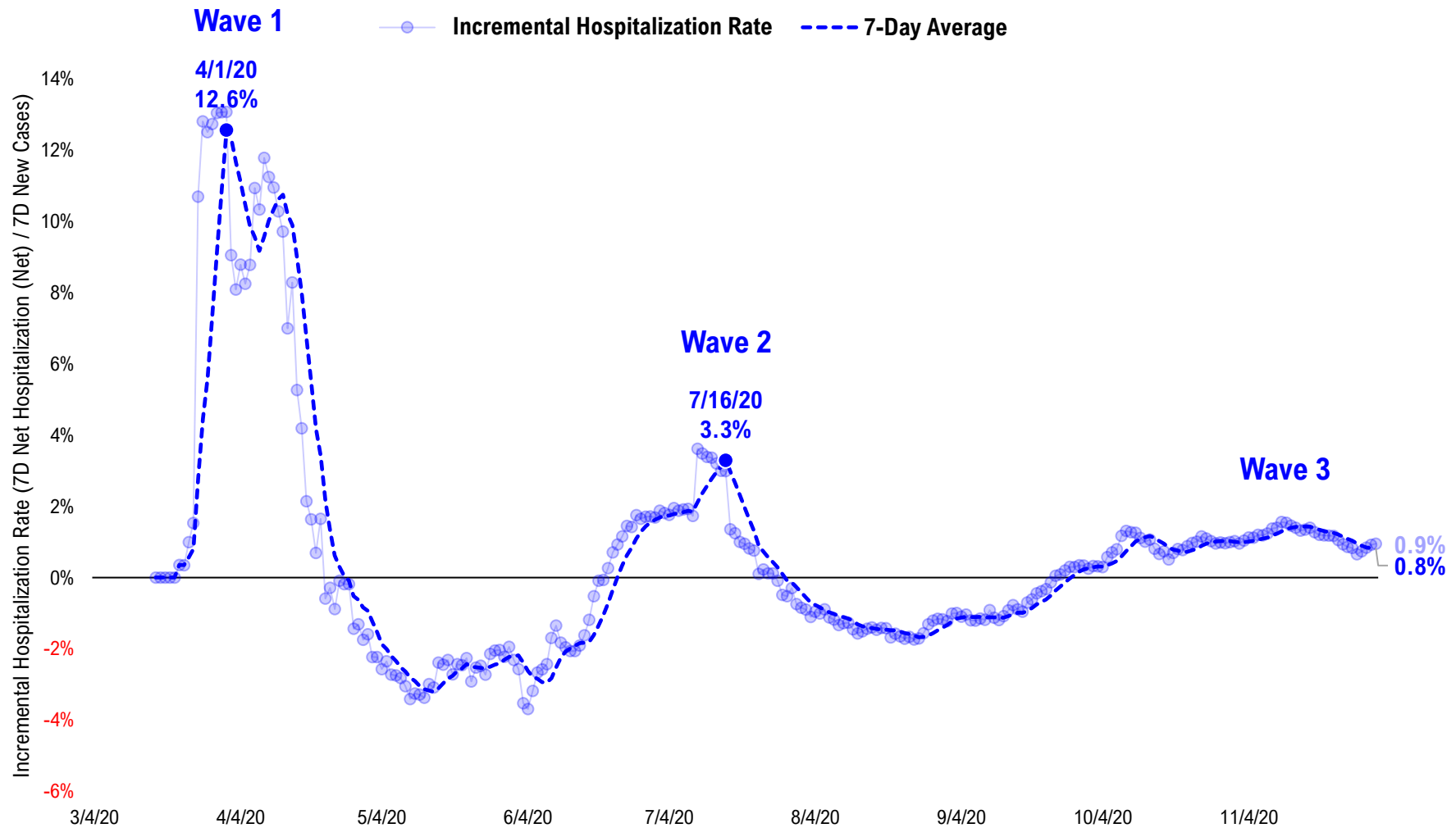
### US Net Hospitalizations (aggregate of 50 states + Washington, D.C.)





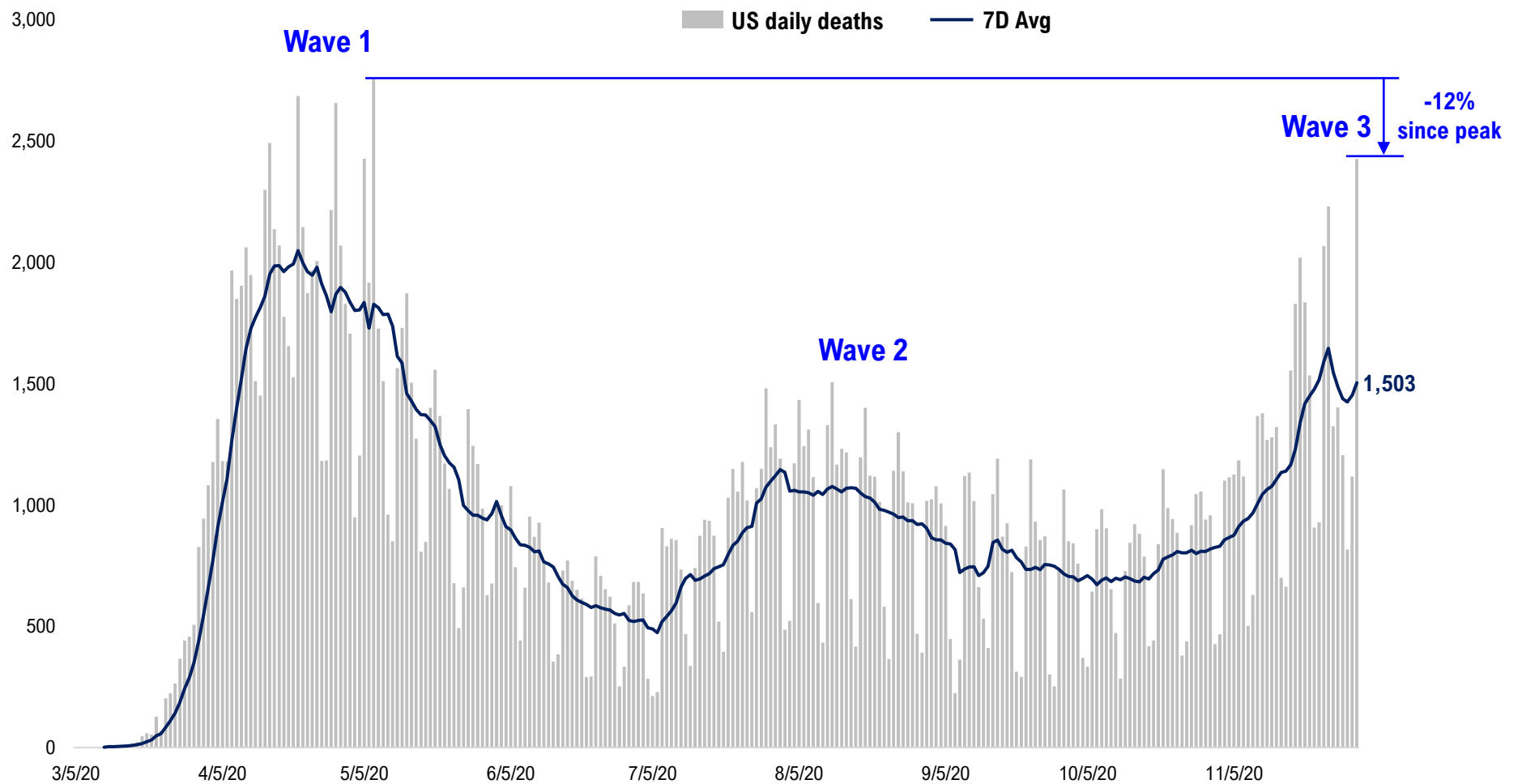
# #8: Incremental Hospitalization Rate...

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



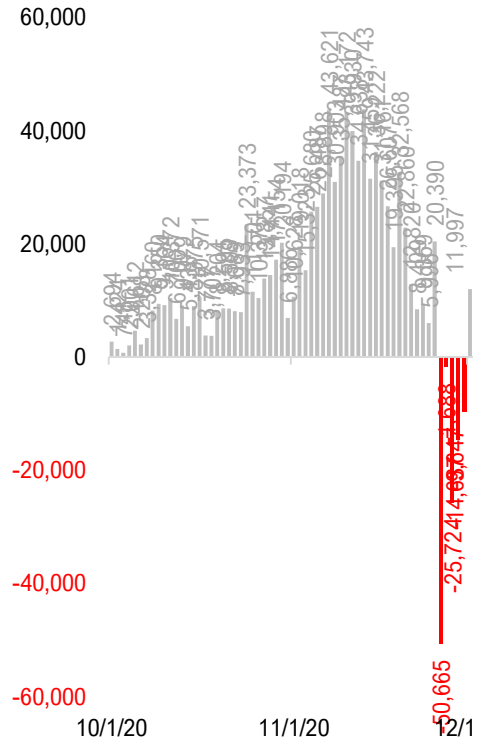
# #9: US Daily New Fatalities...

## US daily COVID-19 Fatalities

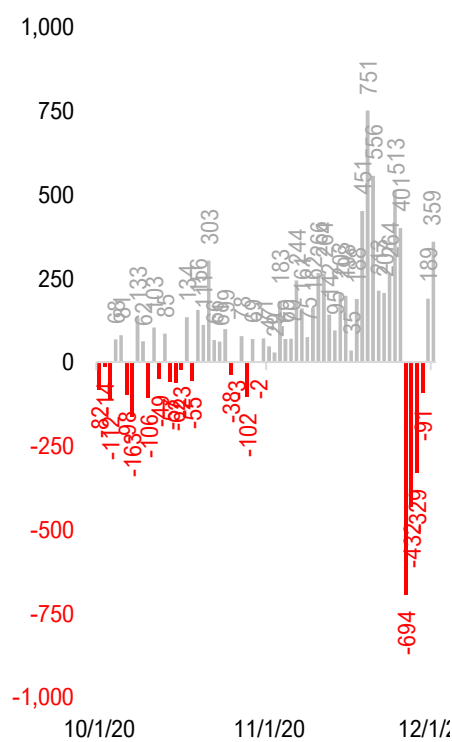


# #10: Rolling 7-Day Change in the Key Metrics... (Past 8 Weeks)

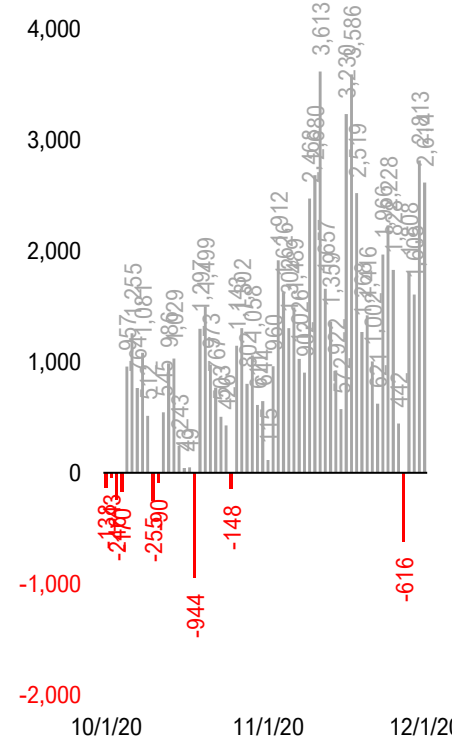
**Daily New Cases**  
(8/10-8/23 ex-CA; 9/4-9/5 ex-IL)



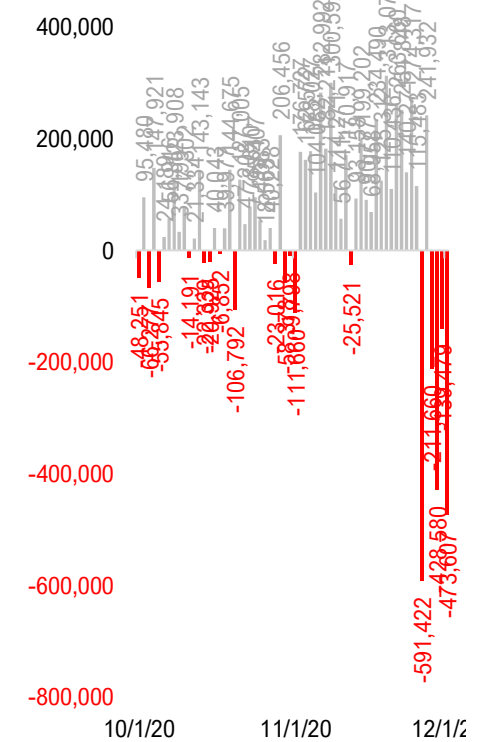
**Daily Deaths**



**Daily Net Hospitalization**  
(Red = more discharge than admission)

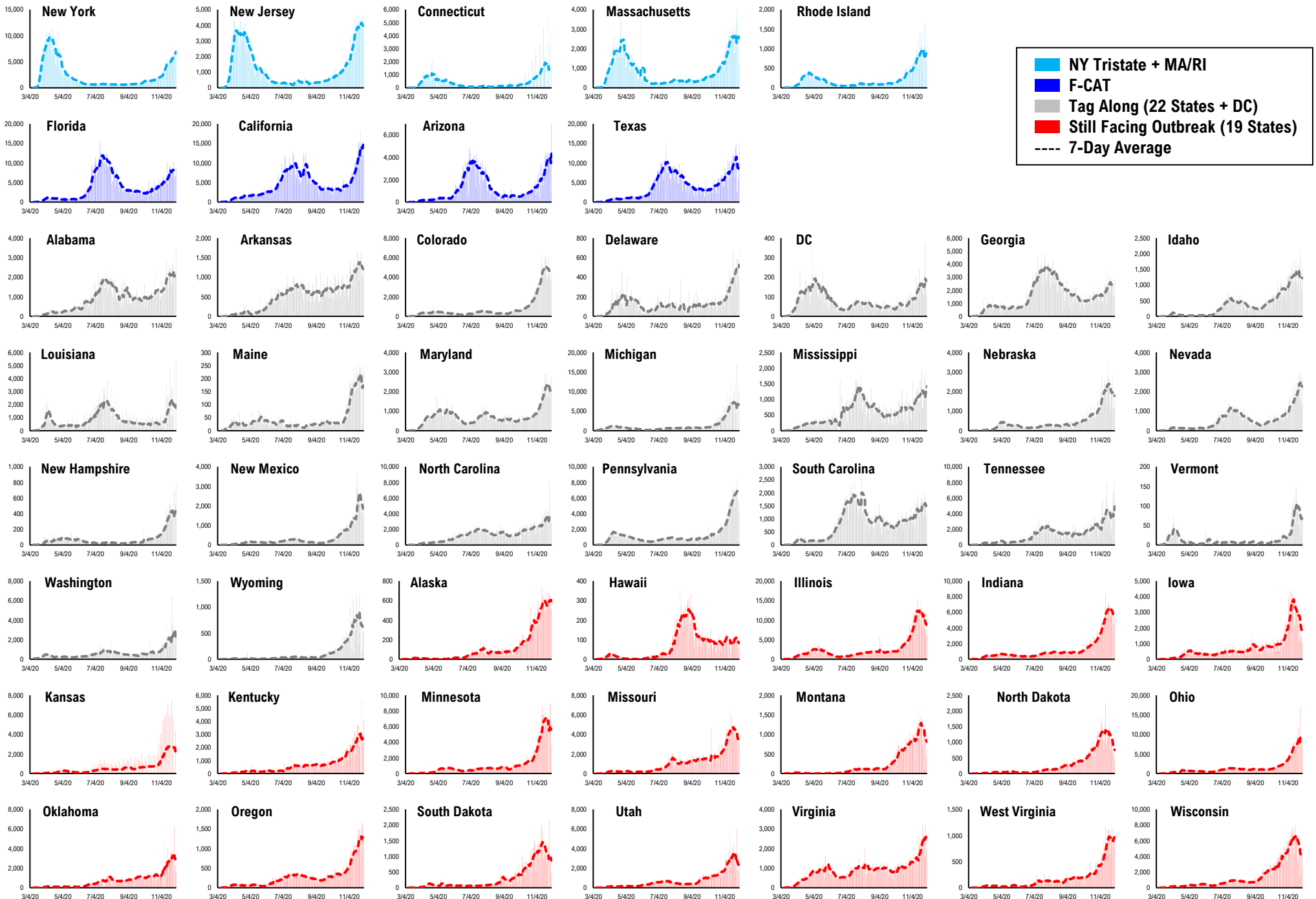


**Daily Tests**

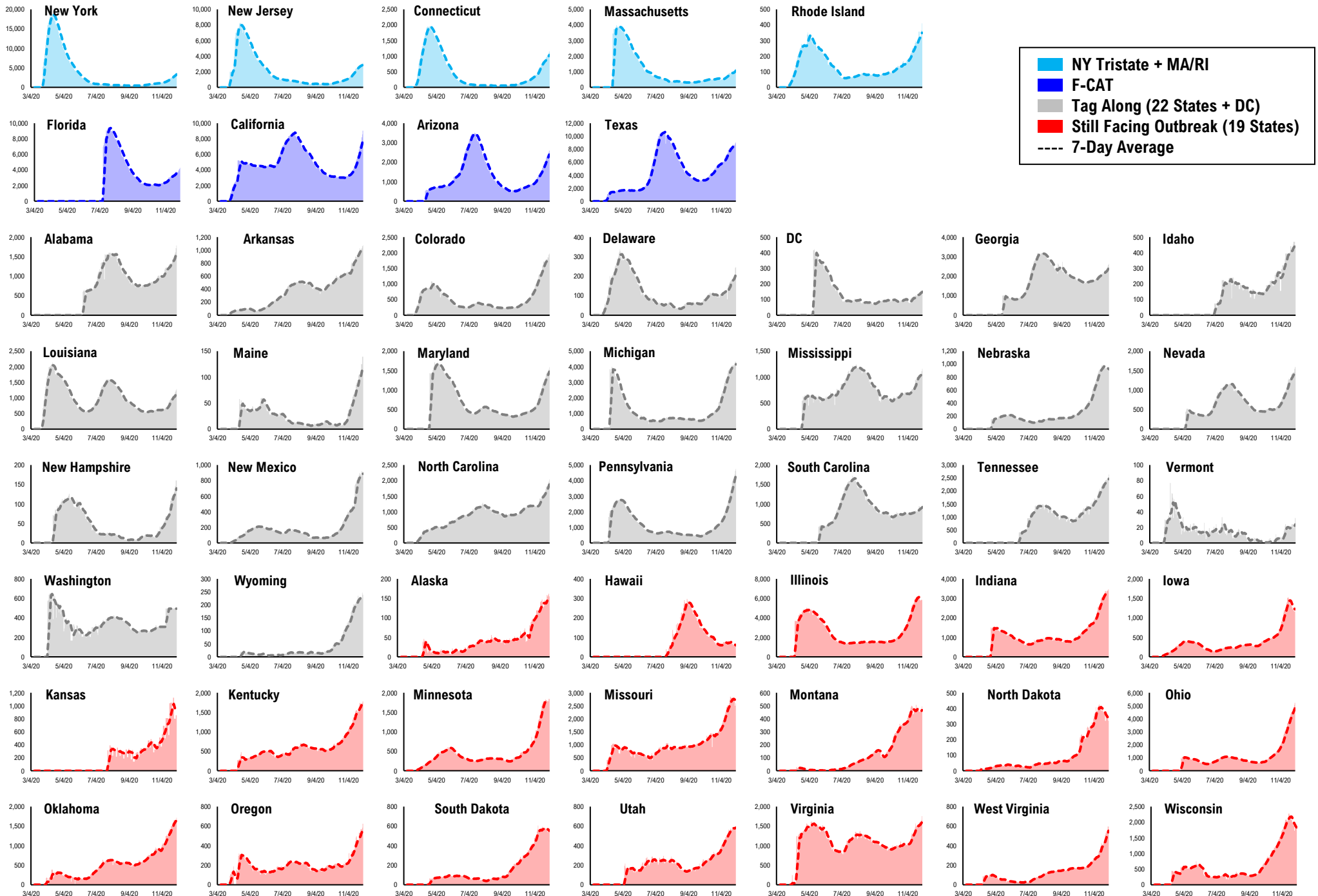


\* Ignored California between 8/10 and 8/23, due to its data glitch caused 300,000-case backlog  
Source: Fundstrat, COVID-19 Tracking Project, State Department of Health

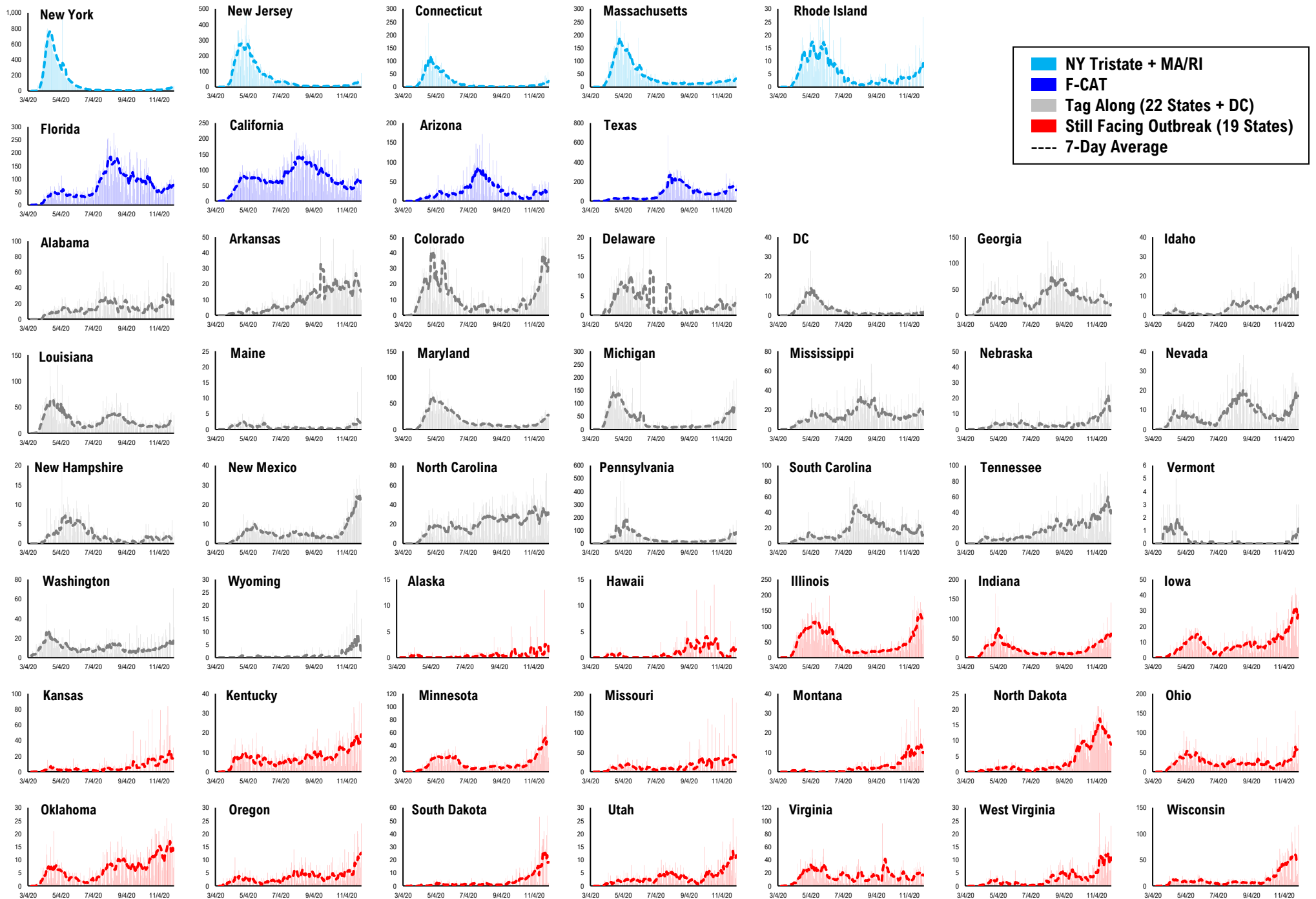
# #11: Daily New Cases by States...



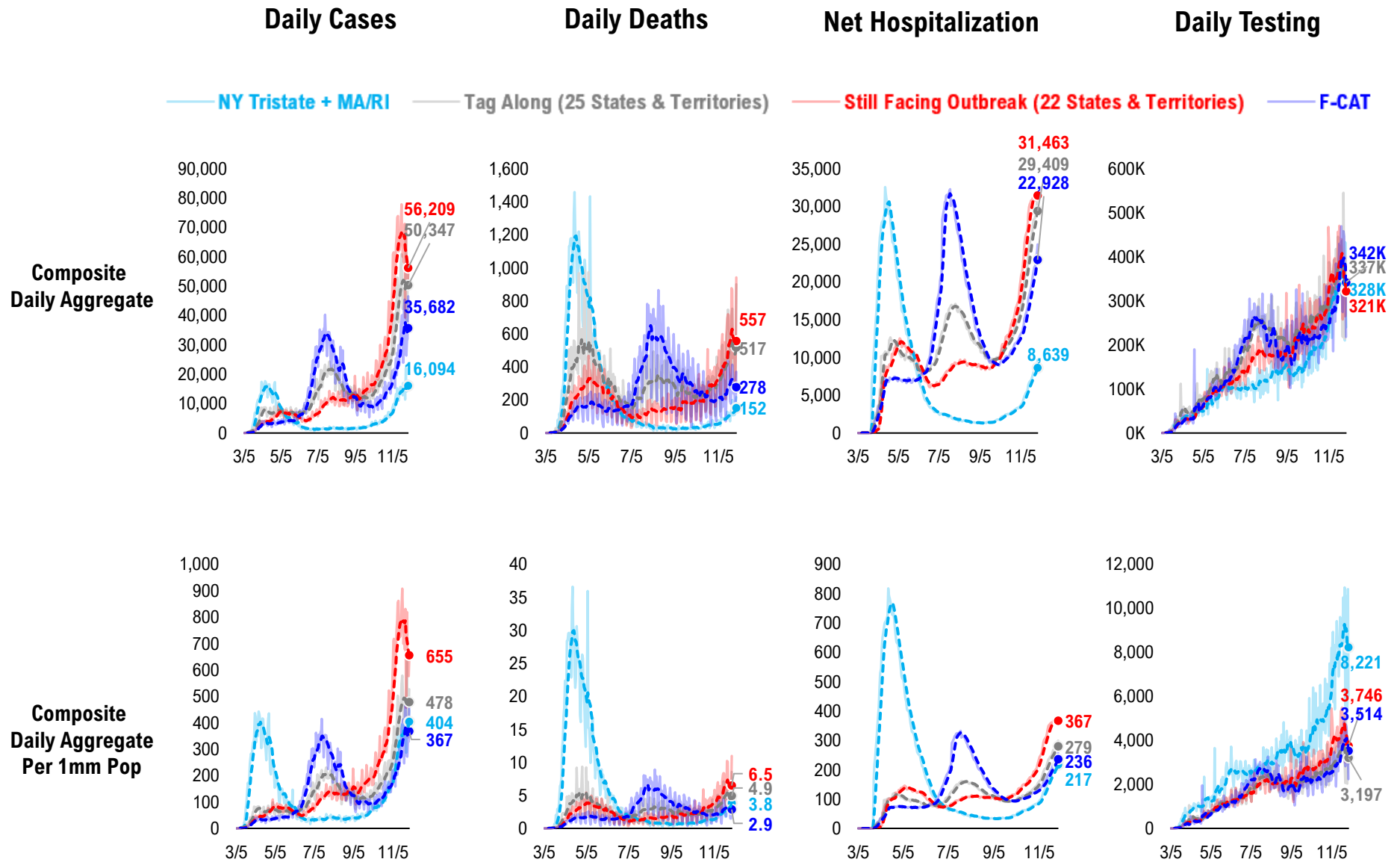
# #12: Current Hospitalizations by States...



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

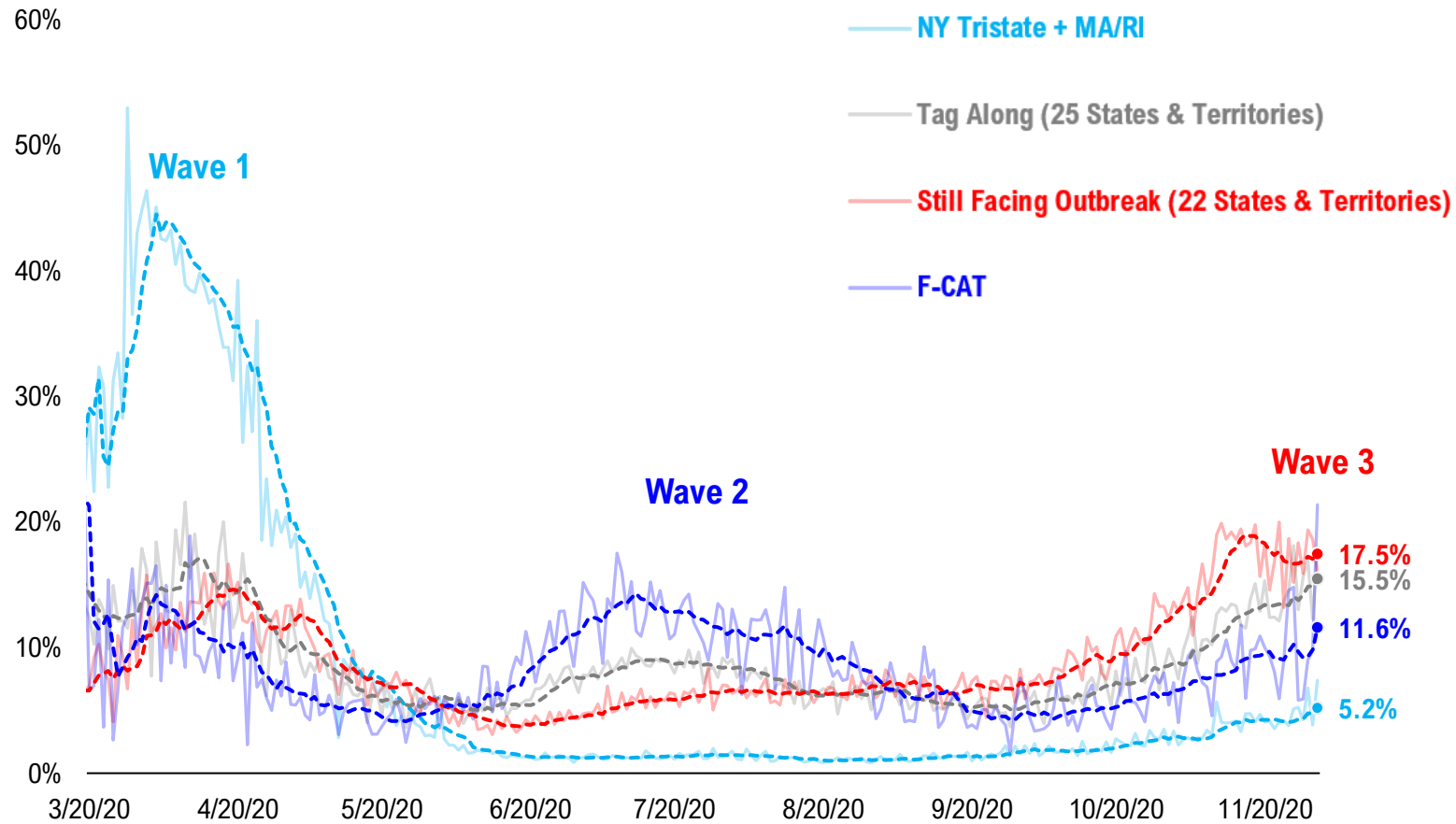


# #14: State COVID-19 situation by Tier...



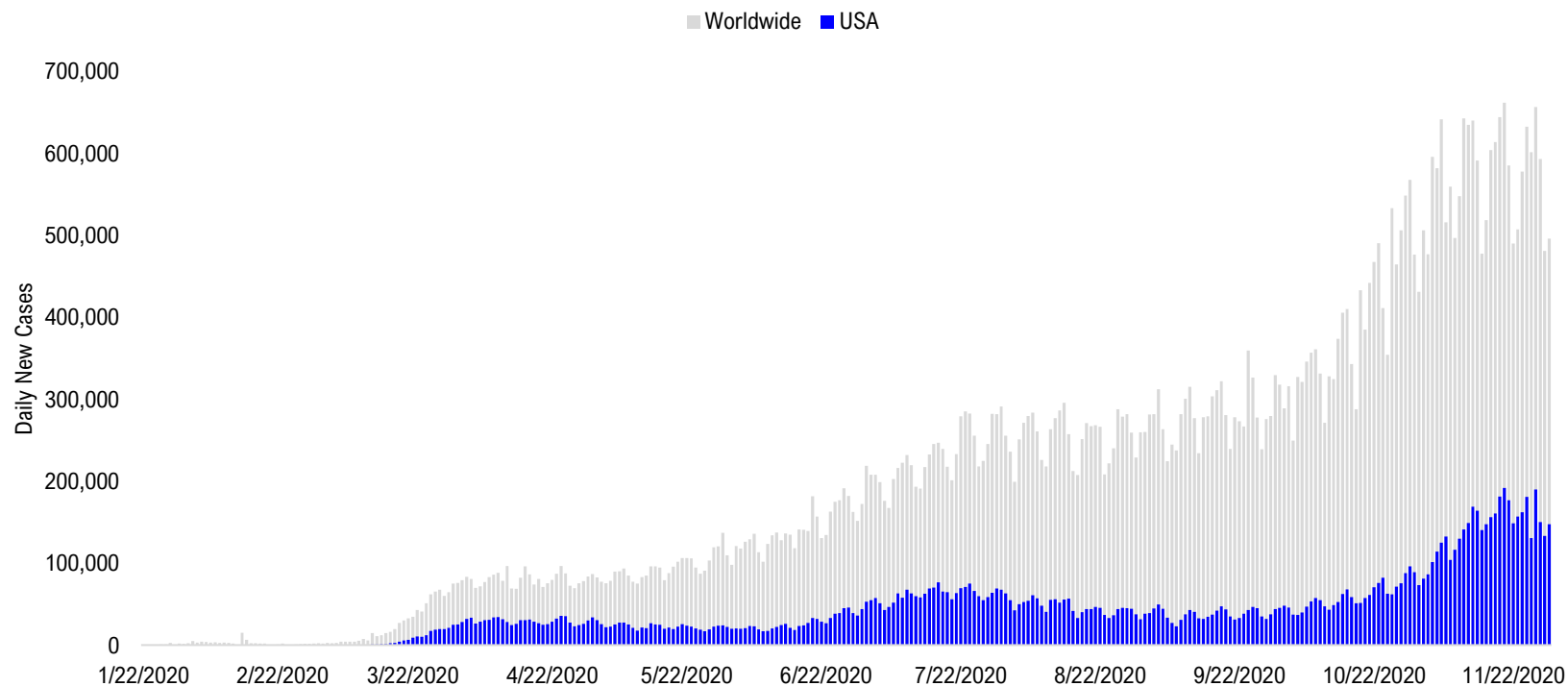
# #15: State COVID-19 Daily Positivity Rate by Tier...

## Composite Daily Positivity Rate





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



Jul 17	Jul 31	Aug 14	Aug 28	Sep 11	Sep 25	Oct 9	Oct 23	Nov 6	Nov 20	Nov 30
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 208,690
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 149,853
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 68,413
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 42,016
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 10,726	Asia ex- India+Pakistan 13,687	Asia ex- India+Pakistan 15,049	Africa 13,656	Asia ex- India+Pakistan 15,100	Asia ex- India+Pakistan 16,118
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 8,247	Africa 9,966	Africa 10,615	Asia ex- India+Pakistan 13,462	Africa 14,917	Africa 12,374

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