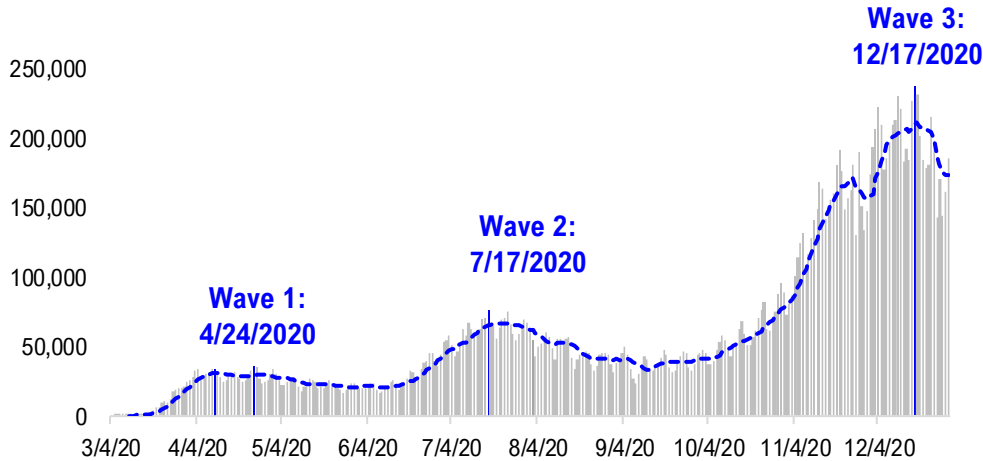


# FSInsight Daily COVID-19 Chartbook

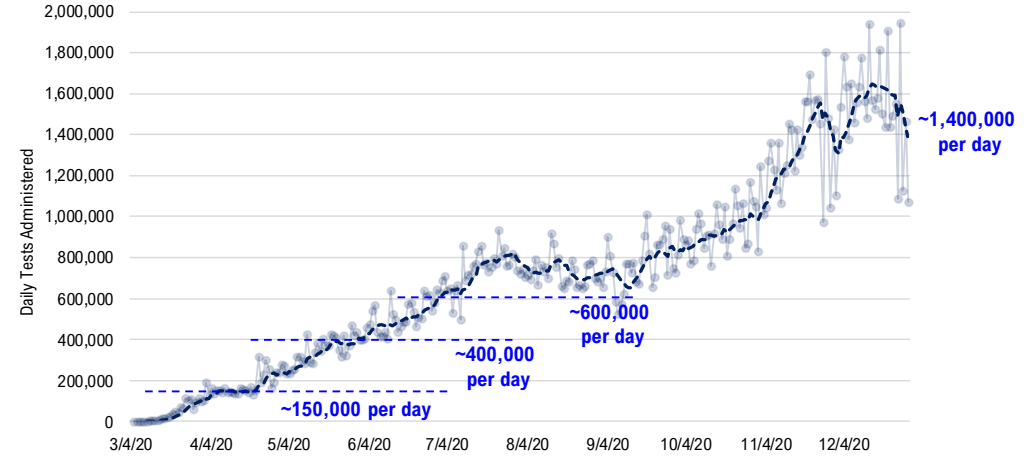


# #1: USA COVID-19 Situation at a Glance...

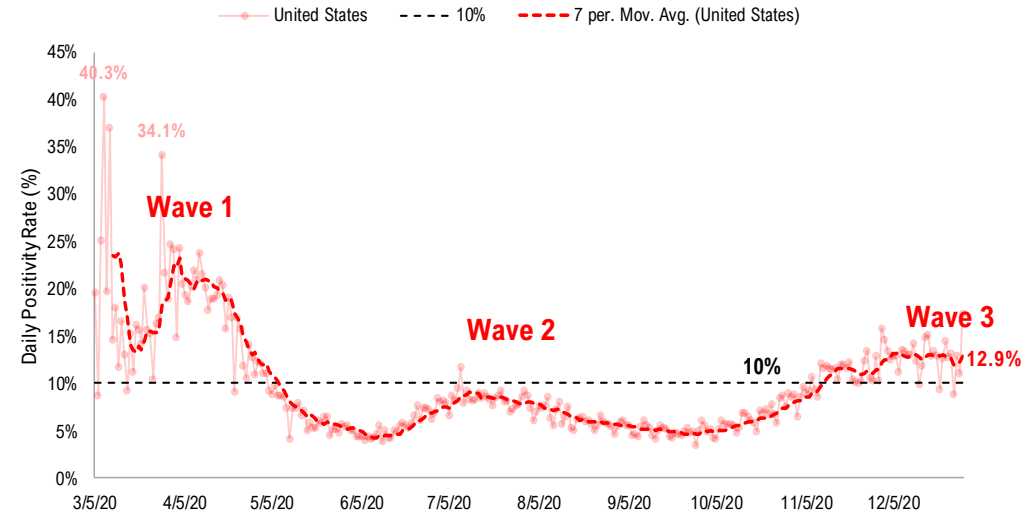
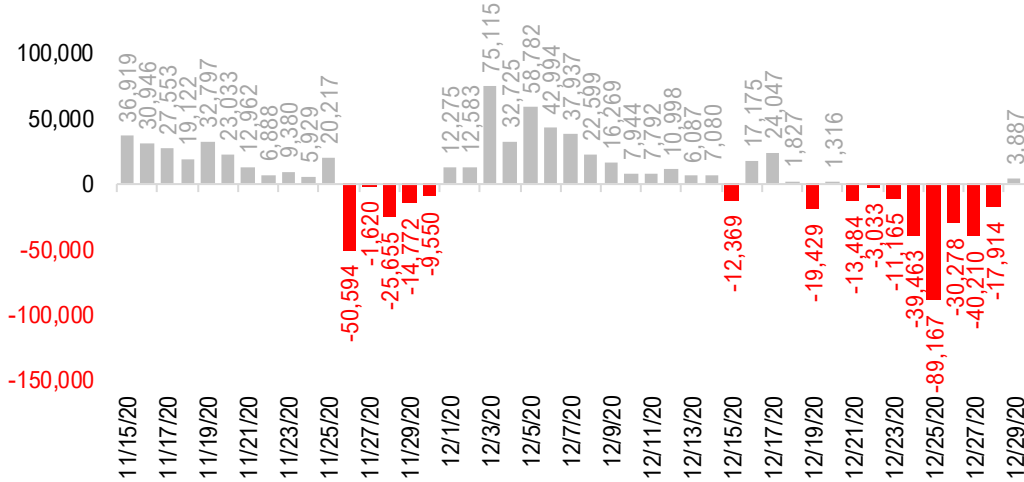
**US daily new cases**



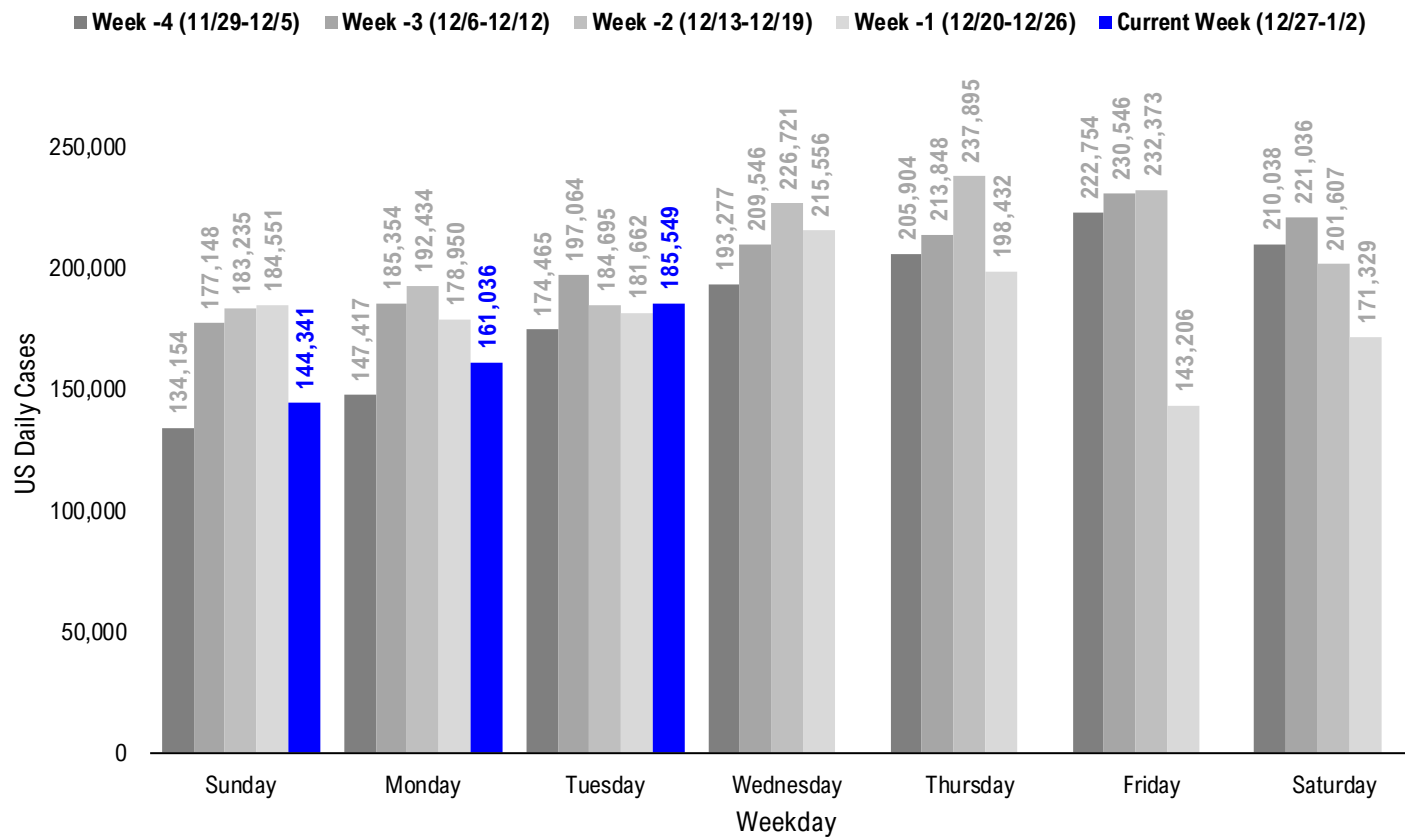
**USA total COVID-19 tests administered**



**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		7D	Since Peak	# Days	% Decline in Daily Cases	7D Net Hospitalization	7D Net Hospitalization / 7D New Cases
			12/29	Delta						
United States	100%	100%	185,549	+3,887	499	-55	11	-30%	6,829	0.6%

	Sorted Daily Cases		Daily Cases (3D avg) per 1mm residents				Hospitalization			
	% US Pop	% US GDP	7D		7D	Since Peak	# Days	% Decline in Daily Cases	7D Net Hospitalization	7D Net Hospitalization / 7D New Cases
			12/29	Delta						
United States	100%	100%	185,549	+3,887	499	-55	11	-30%	6,829	0.6%

### States:

1 California	11.9%	14.6%	31,245	-1,414	966	-21	11	-22%	2,279	0.9%
2 Texas	8.7%	8.8%	26,990	+10,383	528	+172	5	-5%	1,476	1.8%
3 Florida	6.5%	5.0%	12,075	+1,641	429	-34	169	-28%	646	0.9%
4 New York	5.9%	8.1%	11,438	+1,722	505	+14	4	-20%	1,153	1.5%
5 Pennsylvania	3.9%	3.8%	8,545	+583	448	-152	24	-52%	-129	(0.3%)
6 Ohio	3.5%	3.3%	7,526	-152	511	-134	19	-48%	-313	(0.7%)
7 Georgia	3.2%	2.9%	5,853	-350	375	-77	5	-38%	702	2.1%
8 Illinois	3.8%	4.2%	5,644	-595	365	-81	46	-66%	-258	(0.7%)
9 Tennessee	2.1%	1.8%	4,797	+356	571	-602	11	-62%	162	0.4%
10 Massachusetts	2.1%	2.8%	4,145	+345	555	-21	24	-33%	255	0.9%
11 Virginia	2.6%	2.6%	4,122	+531	419	-31	4	-21%	532	2.1%
12 Indiana	2.0%	1.8%	3,976	+319	409	-284	24	-66%	-113	(0.4%)
13 Louisiana	1.4%	1.3%	3,946	+241	573	-40	26	-32%	42	0.3%
14 Alabama	1.5%	1.1%	3,907	-1,072	567	-106	10	-41%	277	1.3%
15 New Jersey	2.7%	3.0%	3,657	-916	327	-158	23	-49%	30	0.1%
16 North Carolina	3.2%	2.7%	3,563	-1,692	329	-200	1	-61%	376	1.1%
17 Michigan	3.0%	2.6%	3,414	+332	222	-33	41	-74%	-250	(1.4%)
18 Kentucky	1.3%	1.0%	2,975	-72	442	-63	26	-49%	4	0.0%
19 Arizona	2.2%	1.7%	2,799	-3,071	649	-220	15	-45%	456	1.1%
20 Utah	1.0%	0.9%	2,736	+434	546	-90	38	-56%	-38	(0.3%)
21 Missouri	1.8%	1.5%	2,479	+356	296	-102	45	-64%	-163	(1.0%)
22 Wisconsin	1.8%	1.6%	2,384	-19	344	+20	46	-73%	-192	(1.4%)
23 South Carolina	1.6%	1.1%	2,260	-109	536	+48	2	-22%	368	1.7%
24 Mississippi	0.9%	0.6%	1,943	-248	561	-64	18	-32%	69	0.6%
25 Maryland	1.8%	2.0%	1,878	-446	310	-56	23	-42%	8	0.1%
26 Nevada	0.9%	0.8%	1,747	+657	484	-70	24	-48%	-67	(0.5%)
27 Colorado	1.7%	1.8%	1,740	-776	277	-125	38	-73%	-170	(1.1%)
28 Puerto Rico	1.0%	0.5%	1,601	+598	292	+96	10	-17%	-73	(1.4%)

### States:

29 Idaho	0.5%	0.4%	1,514	-203	511	-147	19	-55%	-65	(1.1%)
30 Arkansas	0.9%	0.6%	1,449	+339	330	-56	4	-52%	58	0.6%
31 West Virginia	0.5%	0.4%	1,337	-63	483	-172	10	-41%	22	0.3%
32 New Mexico	0.6%	0.5%	1,216	-51	421	-79	39	-72%	-4	(0.1%)
33 Oklahoma	1.2%	1.0%	1,194	-992	613	-209	9	-42%	168	0.9%
34 Rhode Island	0.3%	0.3%	1,187	+231	812	+188	24	-48%	-17	(0.3%)
35 New Hampshire	0.4%	0.4%	1,027	+407	678	+89	18	-3%	-2	(0.0%)
36 Minnesota	1.7%	1.8%	972	-728	270	-107	29	-81%	-94	(0.9%)
37 Nebraska	0.6%	0.6%	875	+154	291	-116	40	-80%	-48	(0.8%)
38 Connecticut	1.1%	1.3%	767	-816	862	+285	20	-28%	67	0.5%
39 Delaware	0.3%	0.4%	701	+134	587	+78	15	-35%	-6	(0.1%)
40 Iowa	1.0%	0.9%	697	+55	184	-36	46	-85%	-31	(0.6%)
41 Oregon	1.3%	1.2%	682	-636	229	-28	23	-44%	-32	(0.5%)
42 Maine	0.4%	0.3%	590	+132	338	+89	5	-30%	-4	(0.1%)
43 South Dakota	0.3%	0.3%	501	+66	450	+8	45	-78%	-38	(1.4%)
44 Montana	0.3%	0.2%	427	-196	310	-104	44	-76%	-35	(1.4%)
45 North Dakota	0.2%	0.3%	272	-60	208	-83	45	-91%	-20	(1.5%)
46 Wyoming	0.2%	0.2%	219	-42	448	-66	40	-74%	-42	(2.7%)
47 District of Columbi	0.2%	0.7%	193	+33	390	+126	24	-20%	-23	(1.4%)
48 Alaska	0.2%	0.3%	175	-263	269	-80	24	-76%	-38	(2.4%)
49 Vermont	0.2%	0.2%	82	+8	126	-15	25	-55%	-9	(1.5%)
50 Hawaii	0.4%	0.5%	75	+9	51	-44	122	-76%	40	5.8%
51 Guam	0.0%	0.0%	12	-15	48	-32	49	-96%	-4	(7.3%)
52 Washington	2.3%	2.7%	0	-1,169	82	-142	34	-85%	-7	(0.1%)
53 U.S. Virgin Islands	0.0%	0.0%	0	-13	0	-75	130	-100%	0	0.0%
54 Northern Mariana	0.0%	0.0%	0	+0	0	-6	63	-100%	0	0.0%
55 Kansas	0.9%	0.8%	0	+0	729	+252	34	-52%	-76	(0.7%)
56 American Samoa	0.0%	0.0%	0	+0	0	+0	0	0%	0	



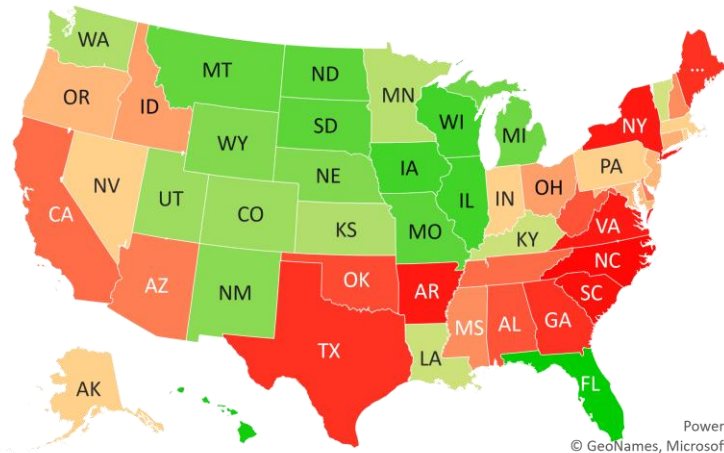
# #5: # of Days since Daily Case Peaked by States...

## # Days since Daily Cases (3D Avg) Peak (as of 12/29)

	Sorted			
	Peak Date	12/29/20	% off the Peak	% US Pop
United States	12/18/20	11	-30%	100%
<b>States:</b>				
Florida	7/13/20	169	-28%	6.5%
U.S. Virgin Islands	8/21/20	130	-100%	0.0%
Hawaii	8/29/20	122	-76%	0.4%
Northern Mariana Island	10/27/20	63	-100%	0.0%
Guam	11/10/20	49	-96%	0.0%
Wisconsin	11/13/20	46	-73%	1.8%
Illinois	11/13/20	46	-66%	3.8%
Iowa	11/13/20	46	-85%	1.0%
South Dakota	11/14/20	45	-78%	0.3%
North Dakota	11/14/20	45	-91%	0.2%
Missouri	11/14/20	45	-64%	1.8%
Montana	11/15/20	44	-76%	0.3%
Michigan	11/18/20	41	-74%	3.0%
Wyoming	11/19/20	40	-74%	0.2%
Nebraska	11/19/20	40	-80%	0.6%
New Mexico	11/20/20	39	-72%	0.6%
Utah	11/21/20	38	-56%	1.0%
Colorado	11/21/20	38	-73%	1.7%
Washington	11/25/20	34	-85%	2.3%
Kansas	11/25/20	34	-52%	0.9%
Minnesota	11/30/20	29	-81%	1.7%
Louisiana	12/3/20	26	-32%	1.4%
Kentucky	12/3/20	26	-49%	1.3%
Vermont	12/4/20	25	-55%	0.2%
Rhode Island	12/5/20	24	-48%	0.3%
Pennsylvania	12/5/20	24	-52%	3.9%
Nevada	12/5/20	24	-48%	0.9%
Massachusetts	12/5/20	24	-33%	2.1%

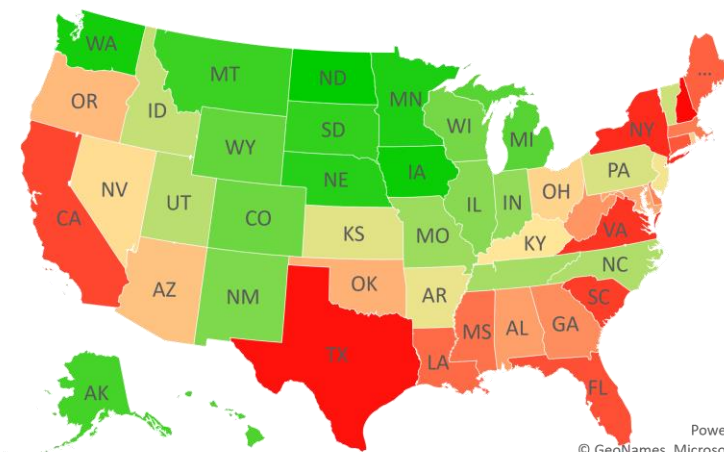
	Sorted			
	Peak Date	12/29/20	% off the Peak	% US Pop
United States	12/18/20	11	-30%	100%
<b>States:</b>				
Indiana	12/5/20	24	-66%	2.0%
District of Columbia	12/5/20	24	-20%	0.2%
Alaska	12/5/20	24	-76%	0.2%
Oregon	12/6/20	23	-44%	1.3%
New Jersey	12/6/20	23	-49%	2.7%
Maryland	12/6/20	23	-42%	1.8%
Connecticut	12/9/20	20	-28%	1.1%
Ohio	12/10/20	19	-48%	3.5%
Idaho	12/10/20	19	-55%	0.5%
New Hampshire	12/11/20	18	-3%	0.4%
Mississippi	12/11/20	18	-32%	0.9%
Delaware	12/14/20	15	-35%	0.3%
Arizona	12/14/20	15	-45%	2.2%
Tennessee	12/18/20	11	-62%	2.1%
California	12/18/20	11	-22%	11.9%
West Virginia	12/19/20	10	-41%	0.5%
Puerto Rico	12/19/20	10	-17%	1.0%
Alabama	12/19/20	10	-41%	1.5%
Oklahoma	12/20/20	9	-42%	1.2%
Texas	12/24/20	5	-5%	8.7%
Maine	12/24/20	5	-30%	0.4%
Georgia	12/24/20	5	-38%	3.2%
Virginia	12/25/20	4	-21%	2.6%
New York	12/25/20	4	-20%	5.9%
Arkansas	12/25/20	4	-52%	0.9%
South Carolina	12/27/20	2	-22%	1.6%
North Carolina	12/28/20	1	-61%	3.2%

## # 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

*Sorted*

7D Ago      Last 3-day Trend

The COVID stats for Washington state is not available as of 7:30 PM ET...

The COVID stats for Washington state is not available as of 7:30 PM ET...

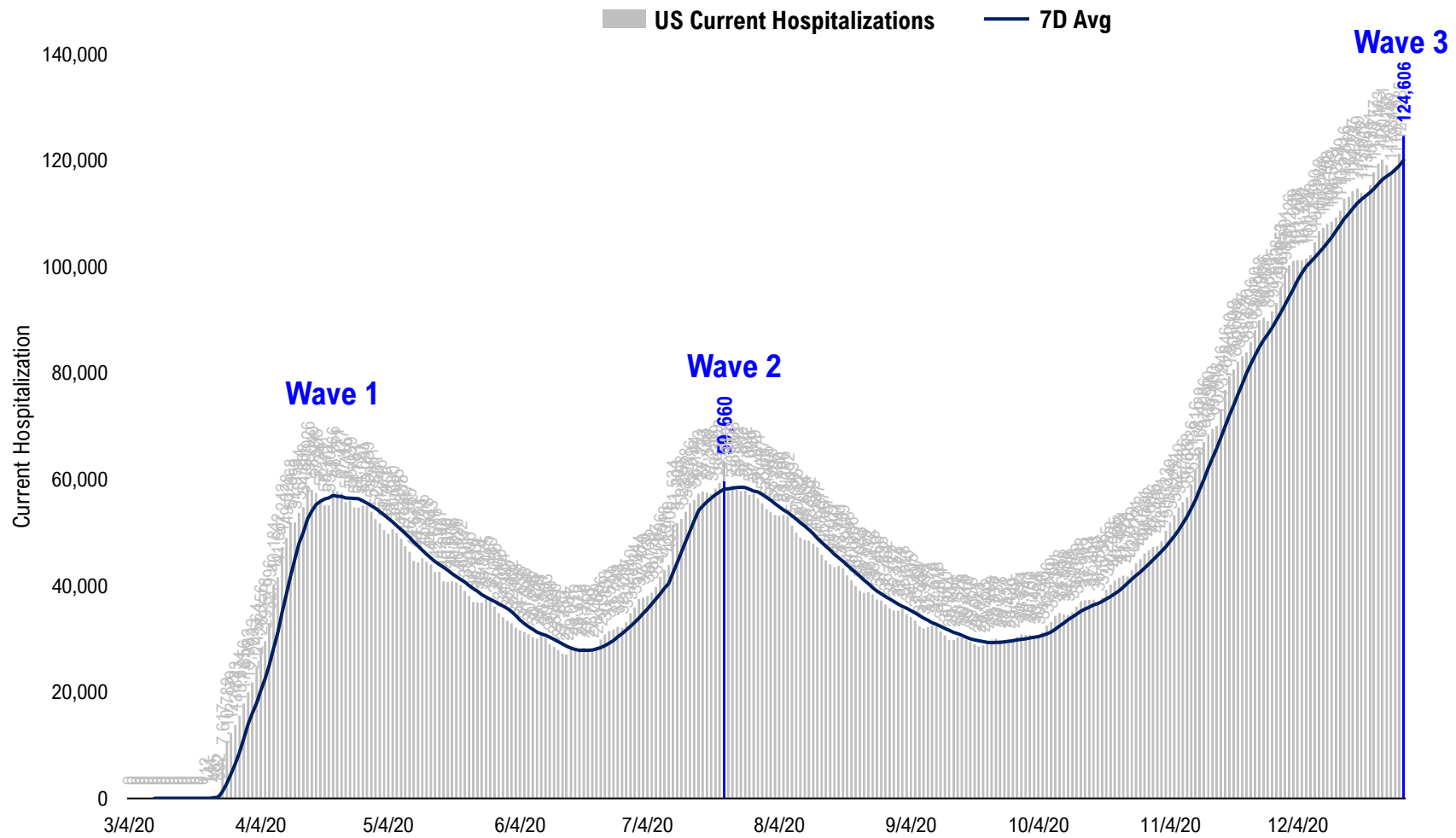
	12/22/20	12/27/20	12/28/20	12/29/20	vs 7D ago
United States	181,662	144,341	161,036	185,549	+3,887
<b>States:</b>					
California	32,659	50,141	33,170	31,245	
Texas	16,607	6,105	12,841	26,990	<--higher
Florida	10,434	7,391	8,198	12,075	
New York	9,716	7,623	10,407	11,438	
Pennsylvania	7,962	4,884	3,779	8,545	
Ohio	7,678	5,857	4,519	7,526	
Georgia	6,203	2,949	3,152	5,853	
Illinois	6,239	3,767	4,453	5,644	
Tennessee	4,441	3,188	3,712	4,797	
Massachusetts	3,800	3,134	4,198	4,145	
Virginia	3,591	3,999	2,599	4,122	
Indiana	3,657	1,820	2,465	3,976	
Louisiana	3,705	3,227	823	3,946	
Alabama	4,979	2,170	2,269	3,907	
New Jersey	4,573	2,320	2,744	3,657	
North Carolina	5,255	2,898	3,888	3,563	
Michigan	3,082	0	3,239	3,414	
Kentucky	3,047	1,500	1,454	2,975	
Arizona	5,870	1,296	10,086	2,799	
Utah	2,302	796	1,716	2,736	
Missouri	2,123	1,451	1,522	2,479	
Wisconsin	2,403	2,287	1,335	2,384	
South Carolina	2,369	4,399	1,627	2,260	
Mississippi	2,191	1,365	1,701	1,943	
Maryland	2,324	1,758	1,985	1,878	
Nevada	1,090	1,856	868	1,747	<--higher
Colorado	2,516	1,399	1,650	1,740	
Puerto Rico	1,003	804	396	1,601	<--higher

	12/22/20	12/27/20	12/28/20	12/29/20	vs 7D ago
United States	181,662	144,341	161,036	185,549	+3,887
<b>States:</b>					
Idaho	1,717	428	795	1,514	
Arkansas	1,110	649	889	1,449	<--higher
West Virginia	1,400	533	726	1,337	
New Mexico	1,267	742	691	1,216	
Oklahoma	2,186	2,631	3,448	1,194	
Rhode Island	956	733	661	1,187	<--higher
New Hampshire	620	876	861	1,027	<--higher
Minnesota	1,700	2,516	1,077	972	
Nebraska	721	175	637	875	<--higher
Connecticut	1,583	0	8,457	767	
Delaware	567	584	431	701	<--higher
Iowa	642	478	562	697	
Oregon	1,318	1,399	820	682	
Maine	458	333	439	590	<--higher
South Dakota	435	427	267	501	
Montana	623	347	219	427	
North Dakota	332	111	93	272	
Wyoming	261	54	504	219	
District of Columbia	160	492	140	193	<--higher
Alaska	438	290	126	175	
Vermont	74	63	91	82	
Hawaii	66	95	45	75	
Guam	27	1	11	12	
Washington	1,169	0	1,877	0	
U.S. Virgin Islands	13	0	0	0	
Northern Mariana Islands	0	0	0	0	
Kansas	0	0	6,373	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...

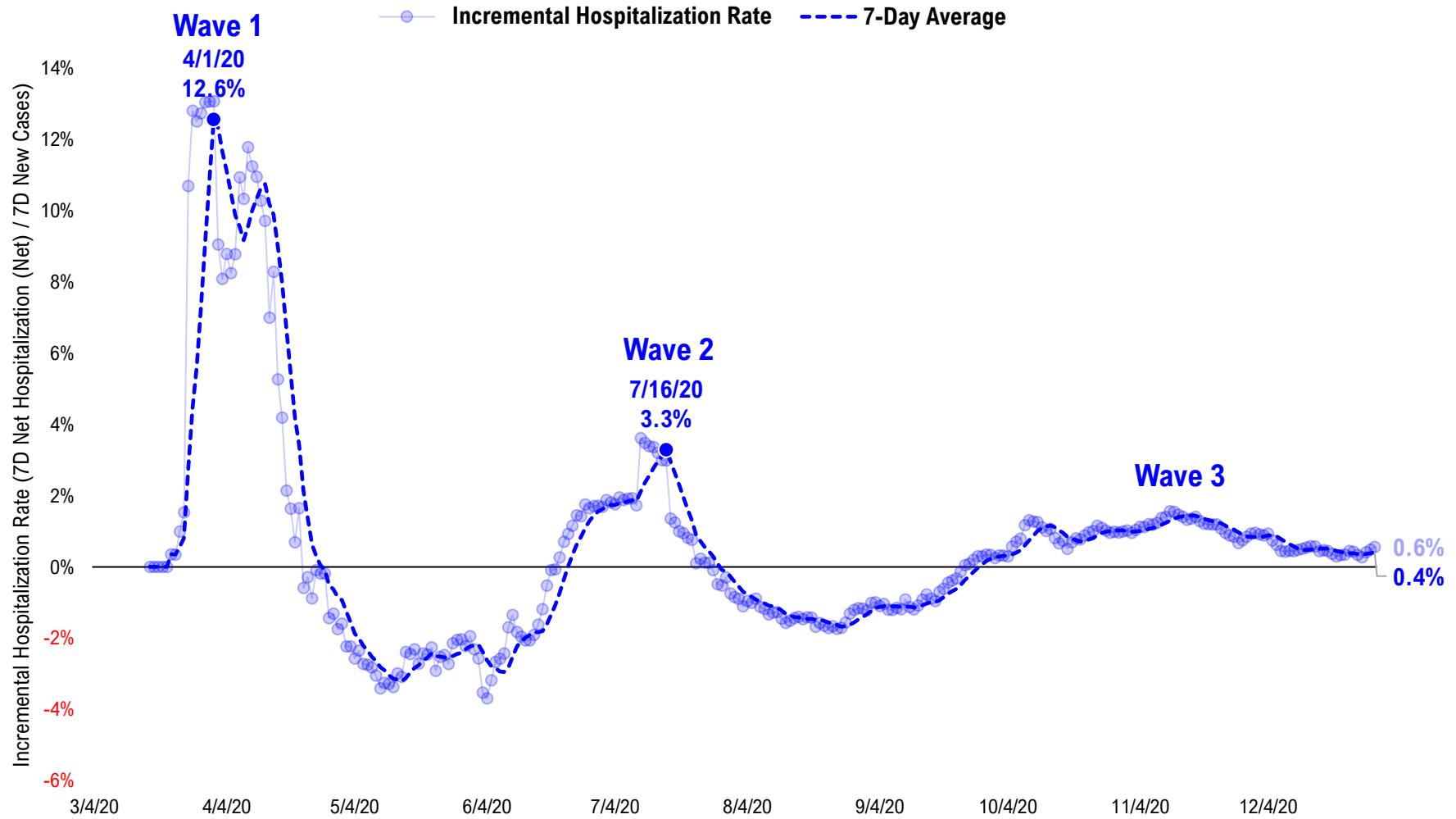
### US Net Hospitalizations (aggregate of 50 states + Washington, D.C.)





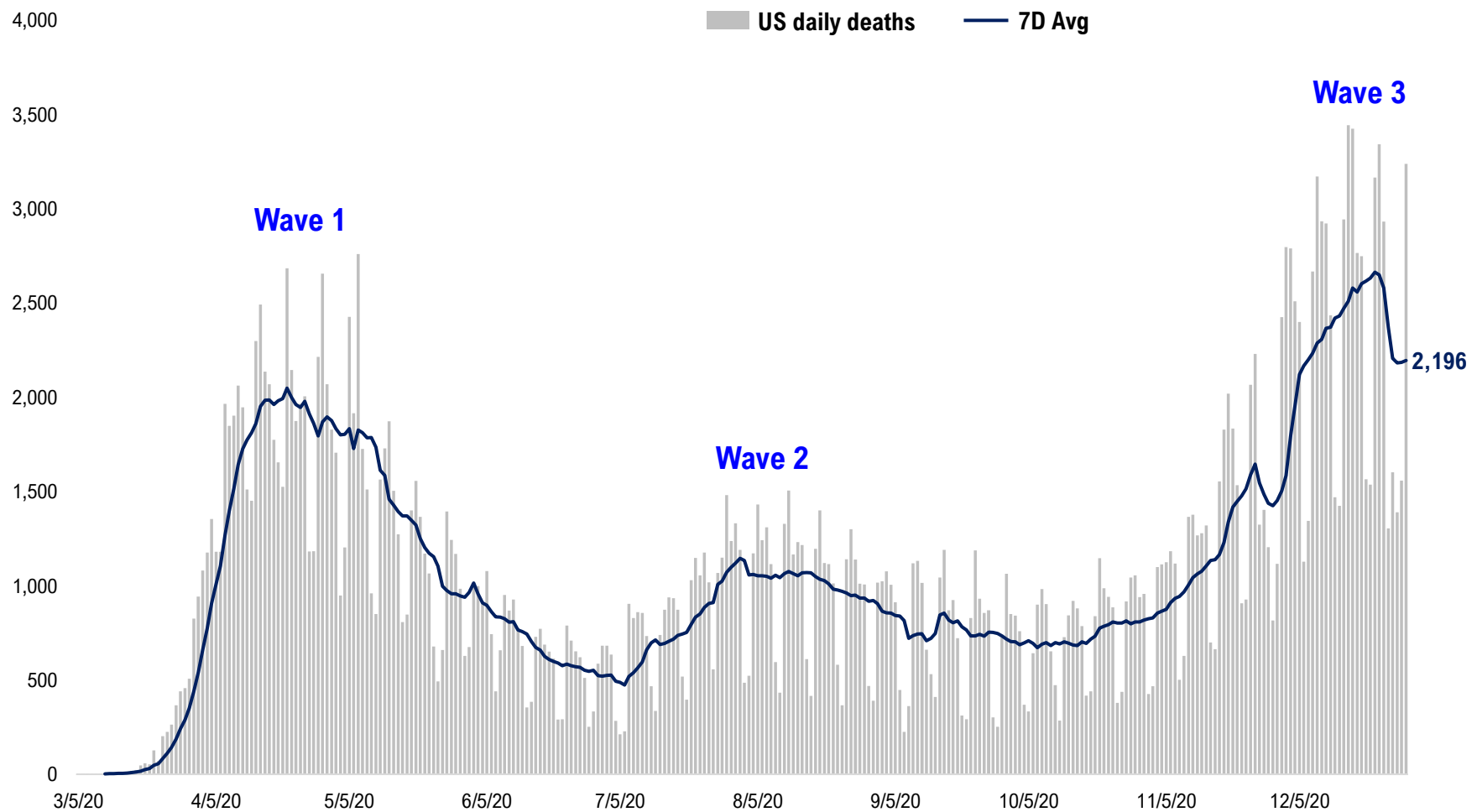
# #8: Incremental Hospitalization Rate...

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



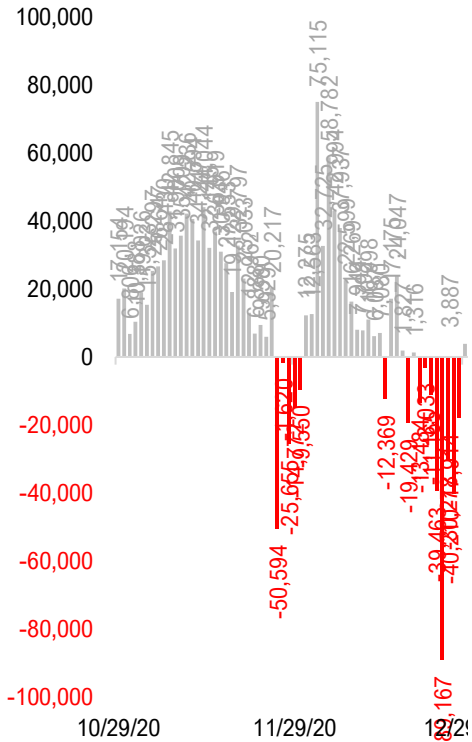
# #9: US Daily New Fatalities...

## US daily COVID-19 Fatalities

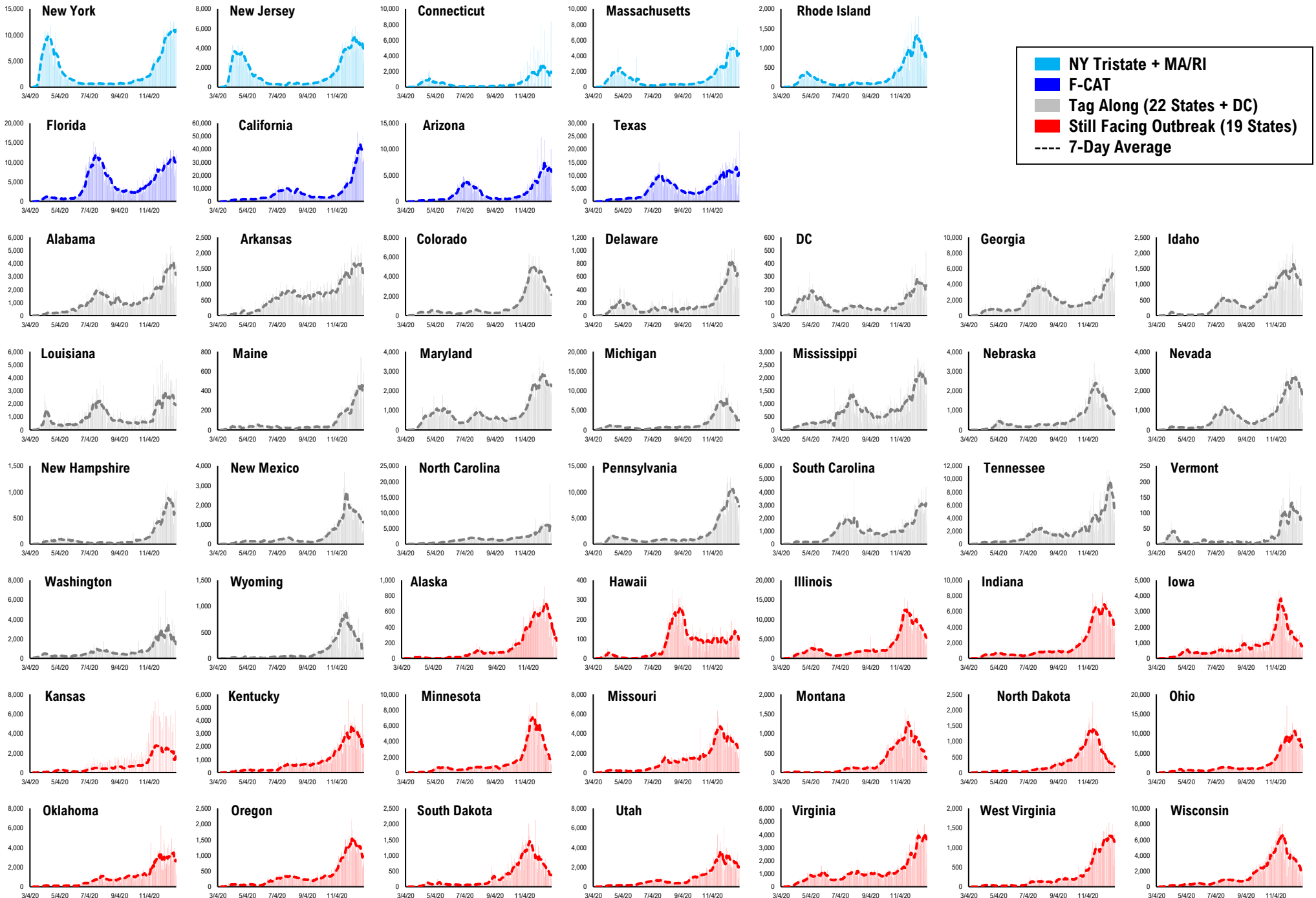


# #10: Rolling 7-Day Change in the Key Metrics... (Past 8 Weeks)

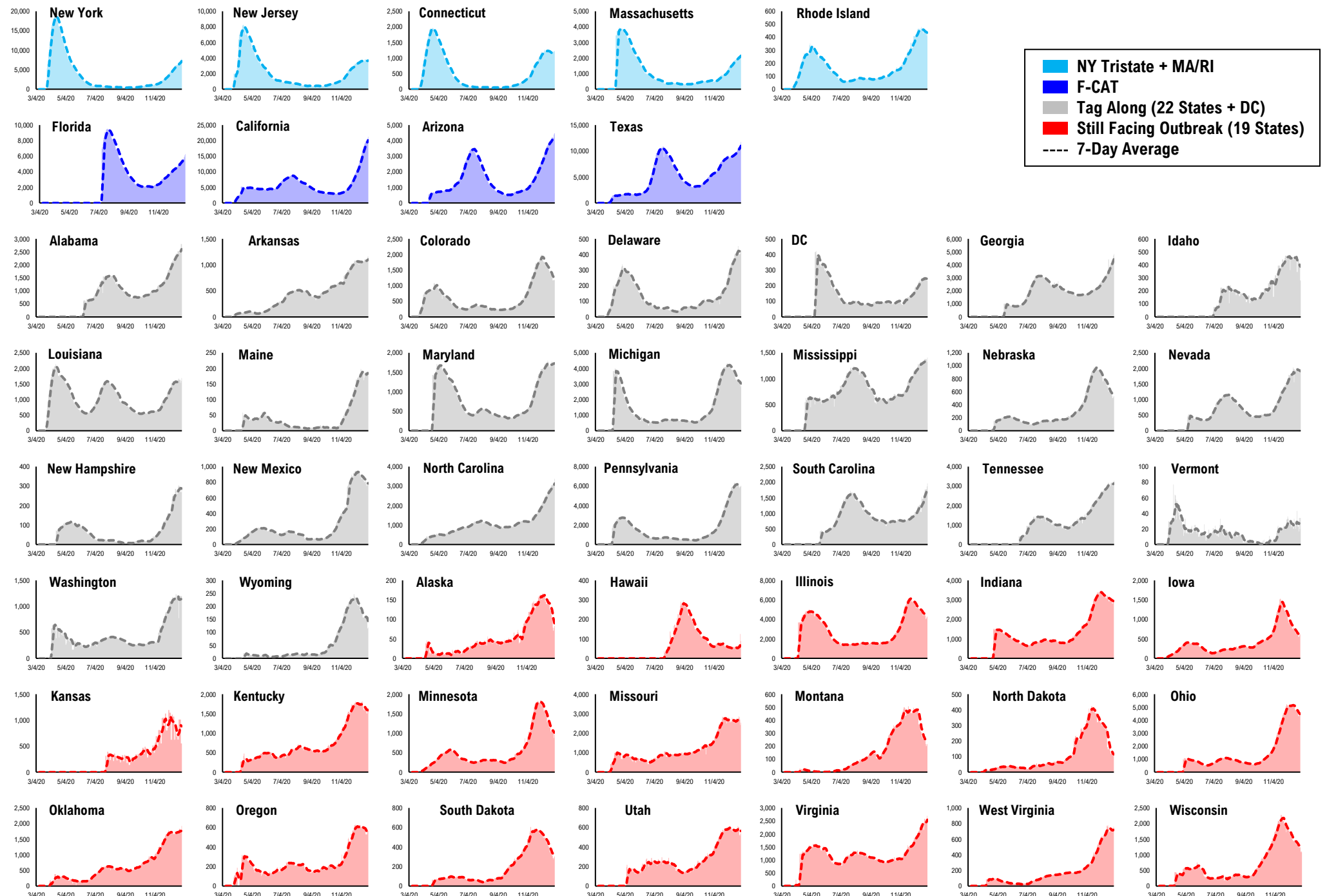
**Daily New Cases**  
(8/10-8/23 ex-CA; 9/4-9/5 ex-IL)



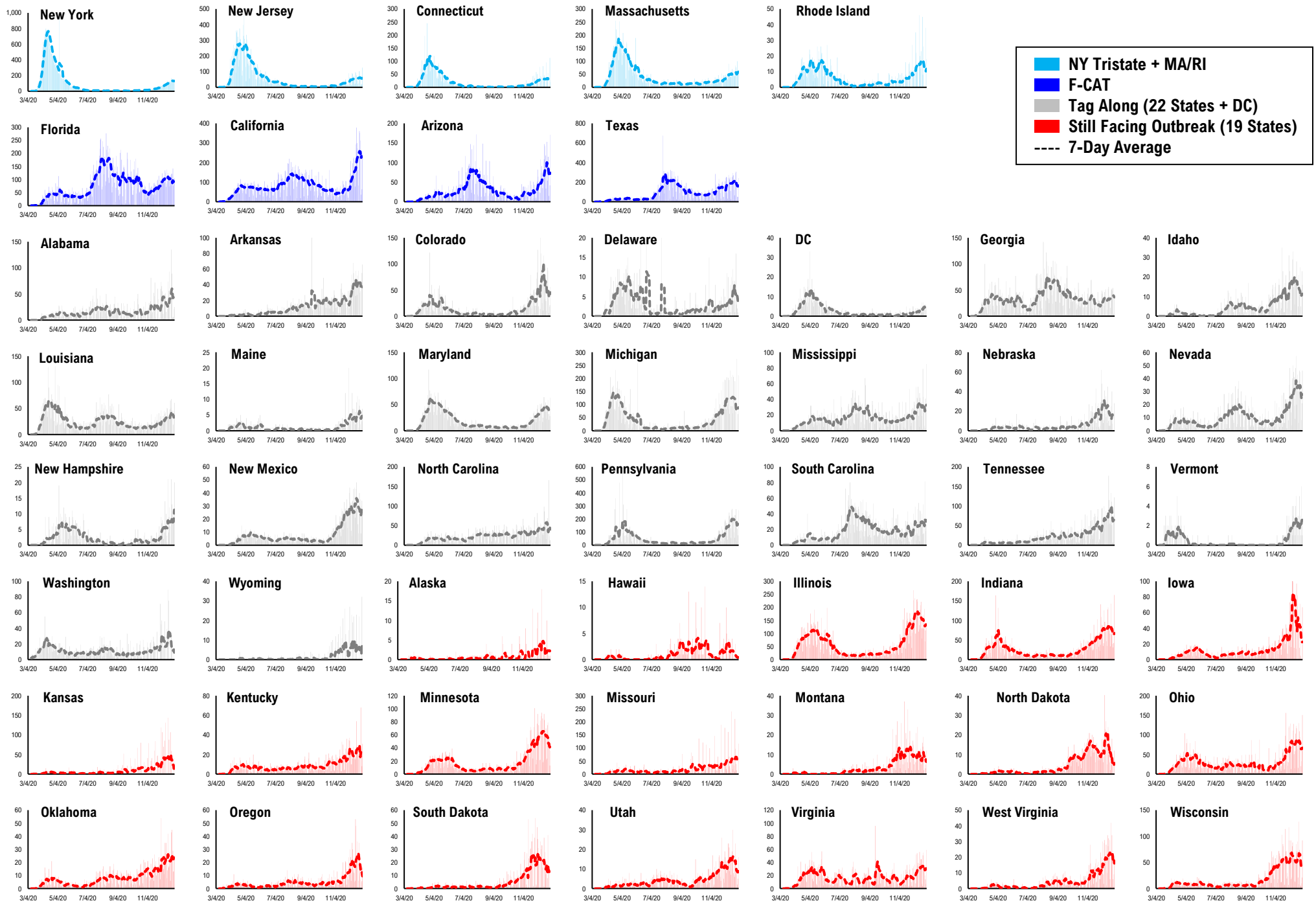
# #11: Daily New Cases by States...



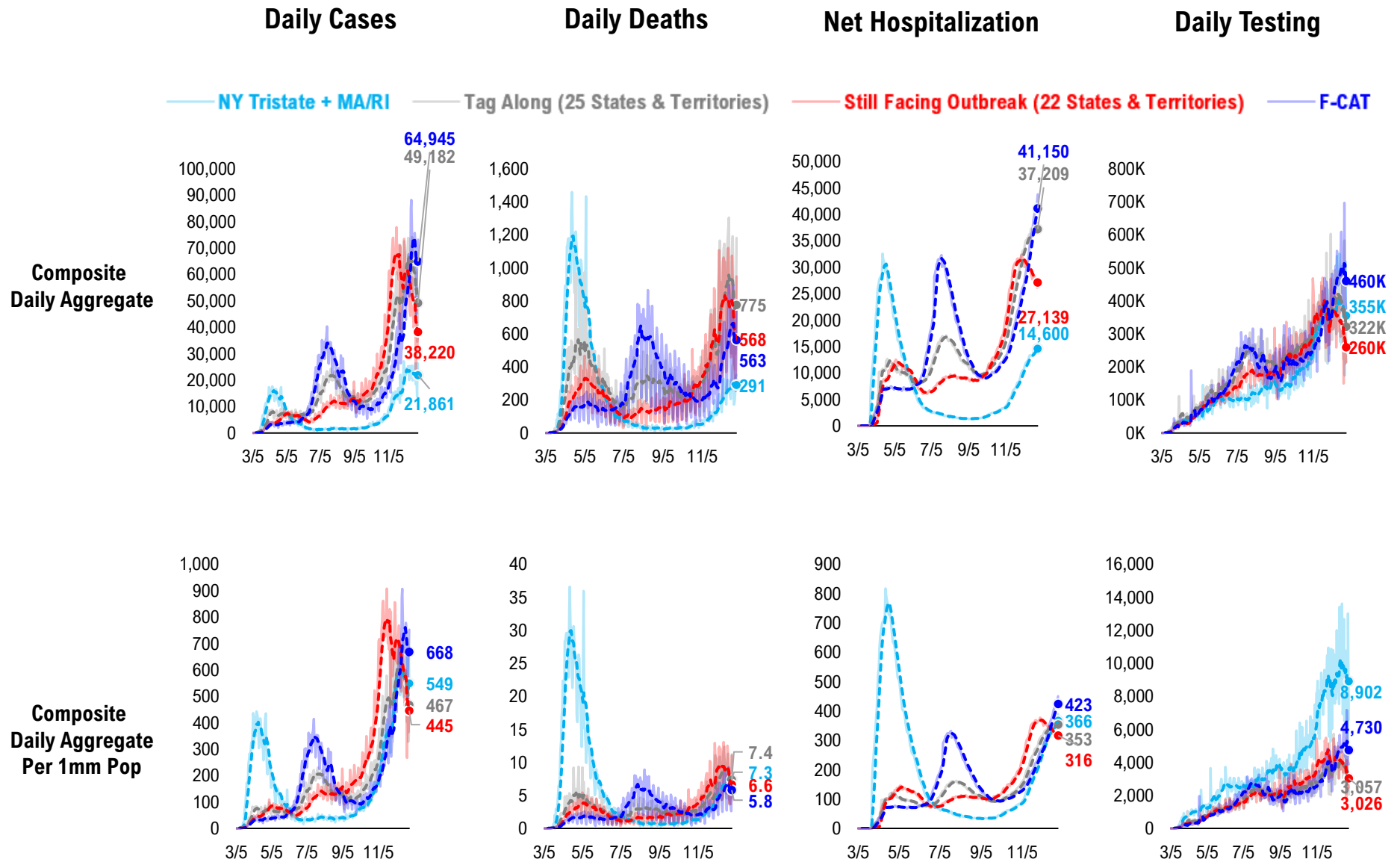
# #12: Current Hospitalizations by States...



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

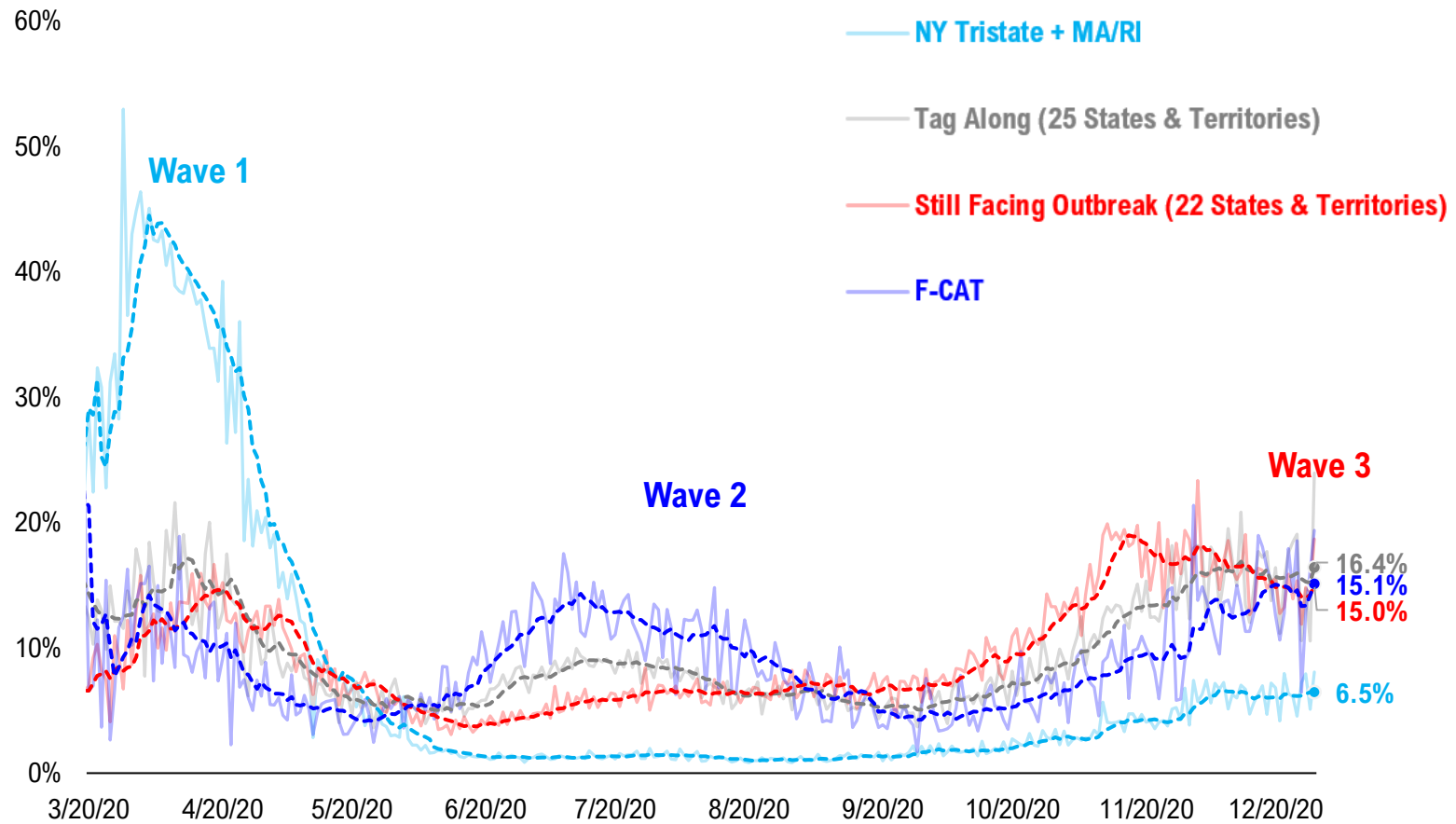


# #14: State COVID-19 situation by Tier...



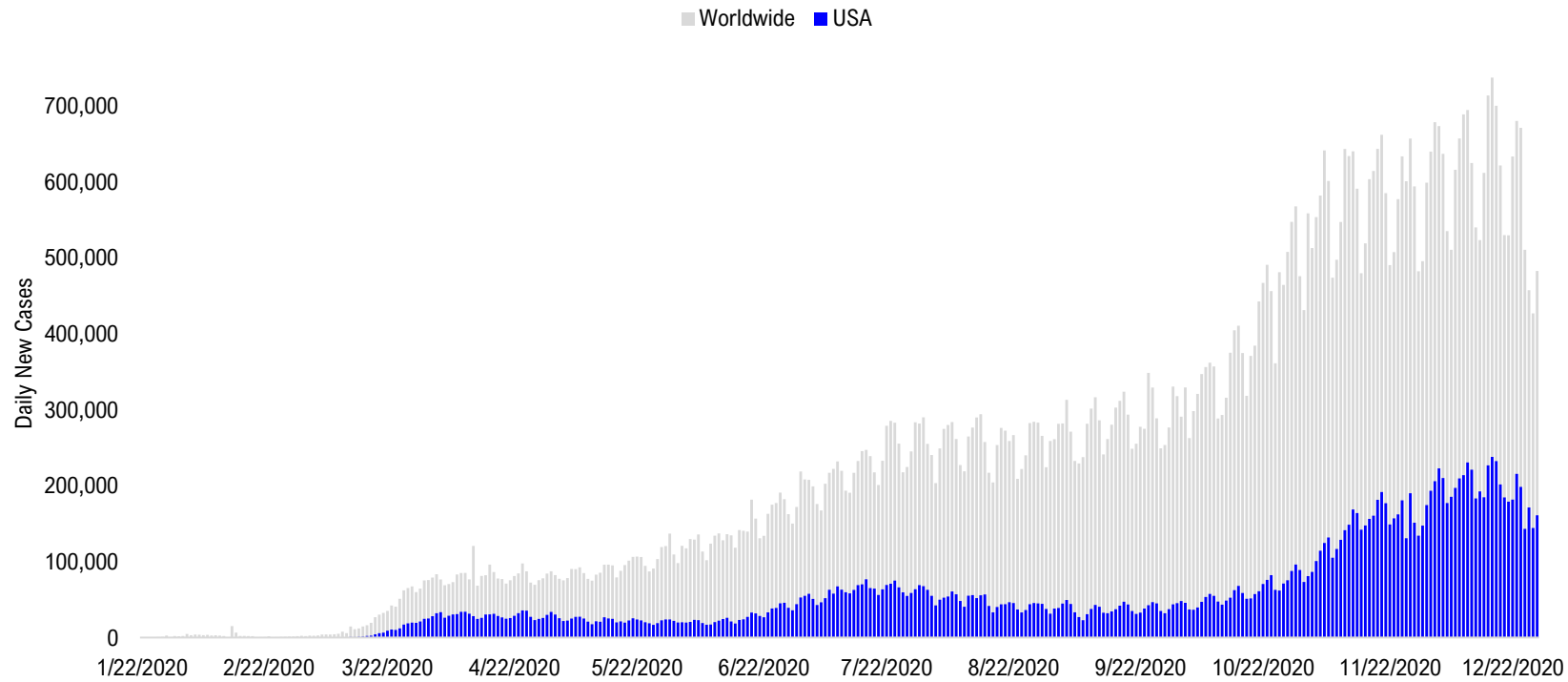
# #15: State COVID-19 Daily Positivity Rate by Tier...

## Composite Daily Positivity Rate





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



Aug 14	Aug 28	Sep 11	Sep 25	Oct 9	Oct 23	Nov 6	Nov 20	Dec 4	Dec 18	Dec 28
Latin America 100,636	Latin America 88,255	Pakistan + India + Bangladesh 98,888	Pakistan + India + Bangladesh 88,225	Europe 112,289	Europe 223,797	Europe 312,557	Europe 279,289	Europe 258,860	Europe 282,804	Europe 166,856
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 116,877	US + Canada 182,603	US + Canada 213,691	US + Canada 239,069	US + Canada 165,392
US + Canada 54,914	US + Canada 45,273	Europe 47,339	Europe 67,906	Latin America 69,822	Latin America 69,390	Latin America 59,345	Latin America 68,233	Latin America 88,693	Latin America 108,000	Latin America 50,297
Europe 27,525	Europe 35,993	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 41,815	Pakistan + India + Bangladesh 28,277	Pakistan + India + Bangladesh 21,201
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 17,499	Africa 20,166	Africa 18,163
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 16,543	Asia ex- India+Pakistan 17,898	Asia ex- India+Pakistan 16,377

# Disclosures

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Positive (+): The analyst expects the performance of his industry/sector coverage universe over the next 6-18 months to be attractive vs. the relevant broad market benchmark, being the S&P 500 for North America.

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.

Negative (-): The analyst expects his or her industry coverage universe over the next 6-18 months to underperform vs. the relevant broad market benchmark, being the S&P 500 for North America.

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