

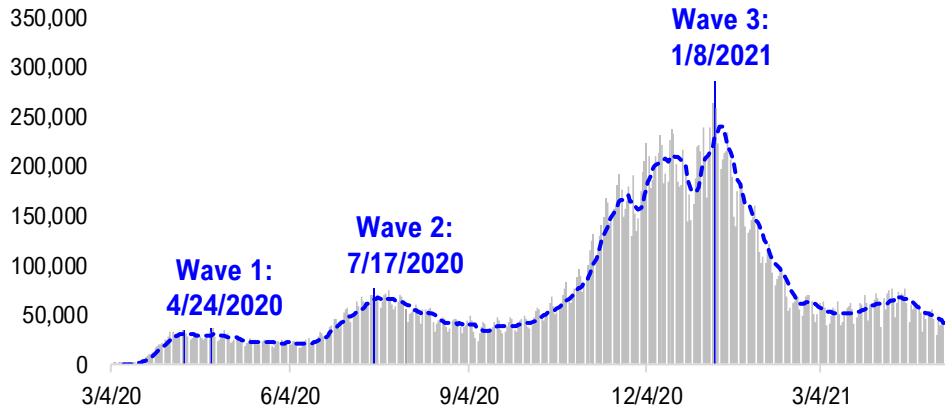
FSInsight Daily COVID-19 Chartbook



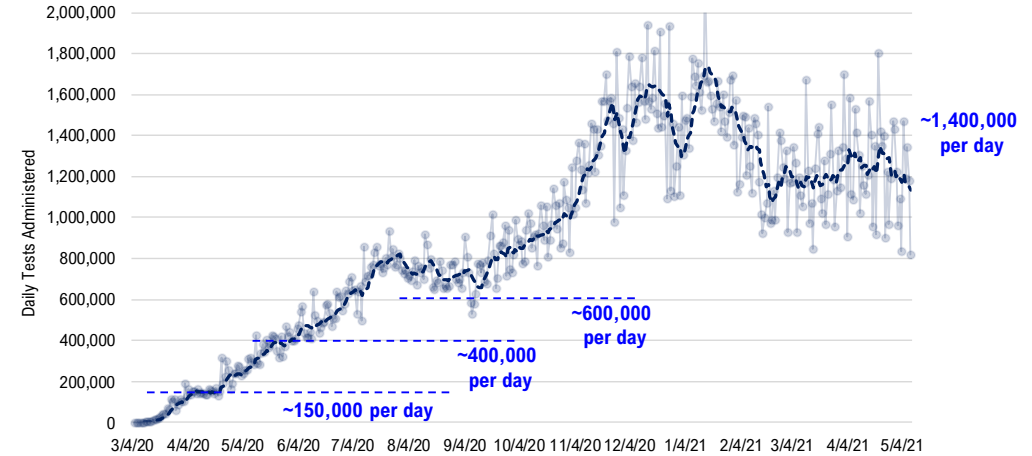
For Reg AC certification and other important disclosures see [Slide 19](#).

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

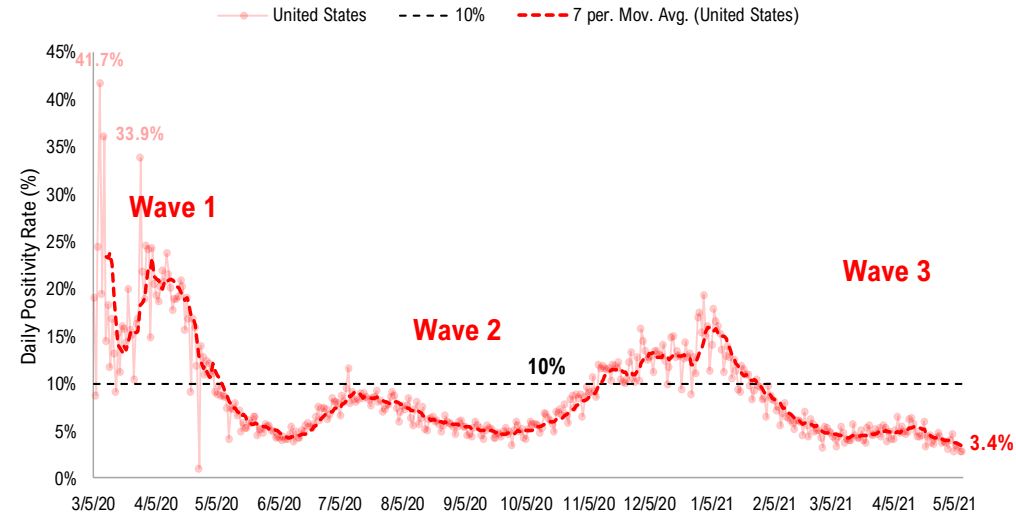
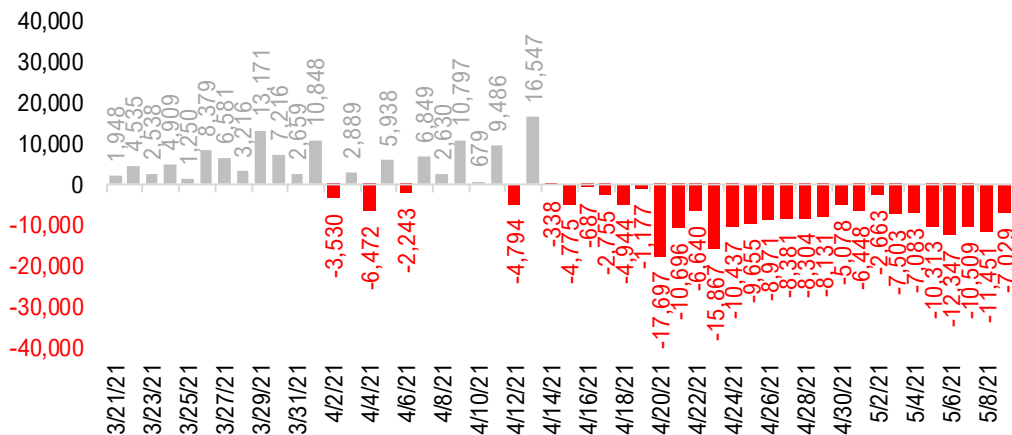
US daily new cases



USA total COVID-19 tests administered

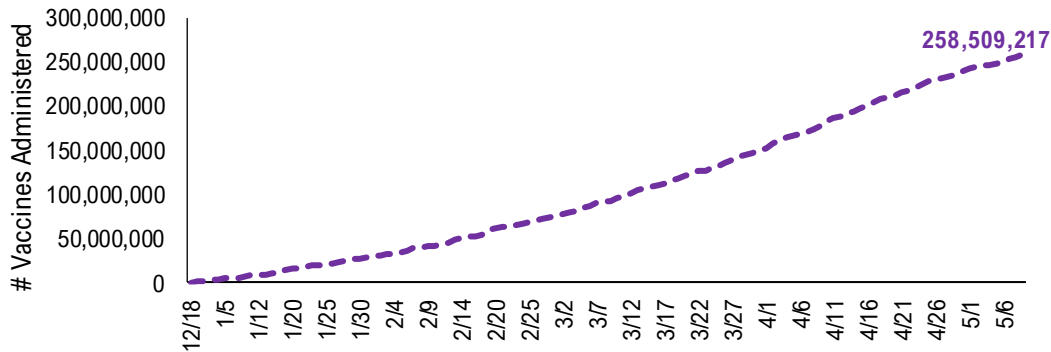


US daily new cases rolling 7D delta

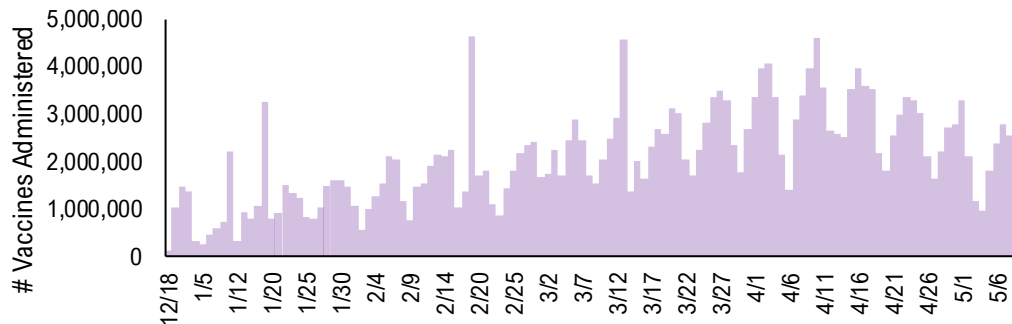


#2: USA COVID-19 Vaccination Progress at a Glance...

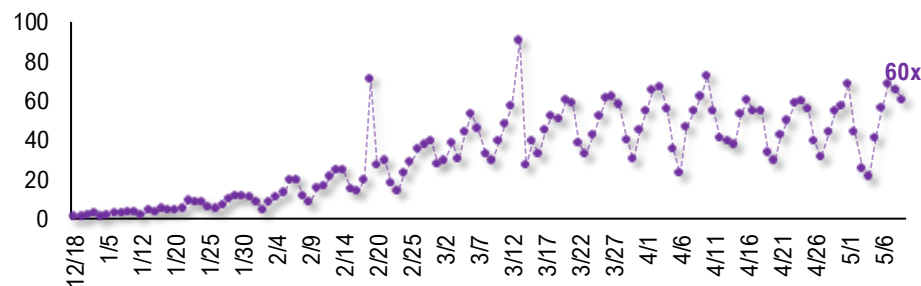
Cumulative Vaccines Administered



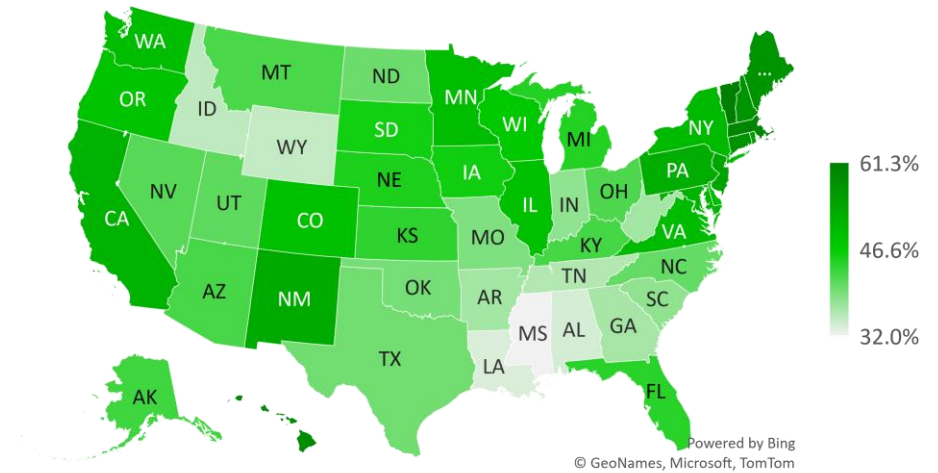
Daily Vaccines Administered



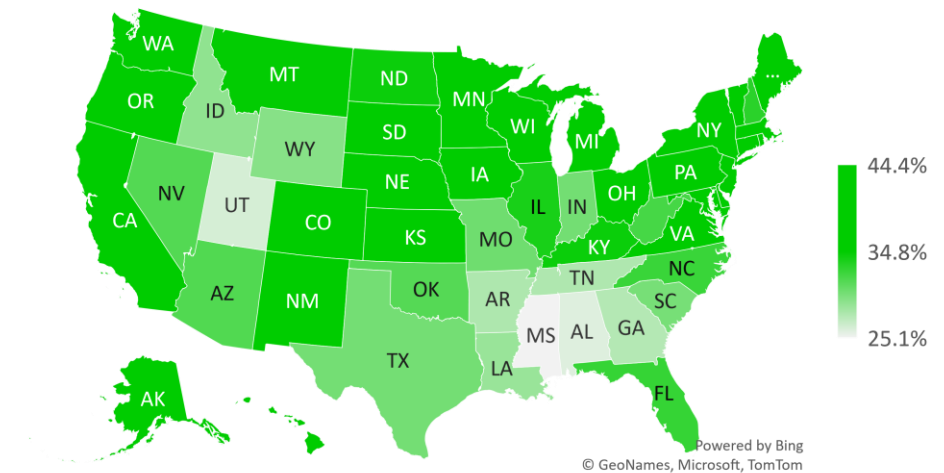
Daily Vaccinations / Daily Cases (7D Avg)



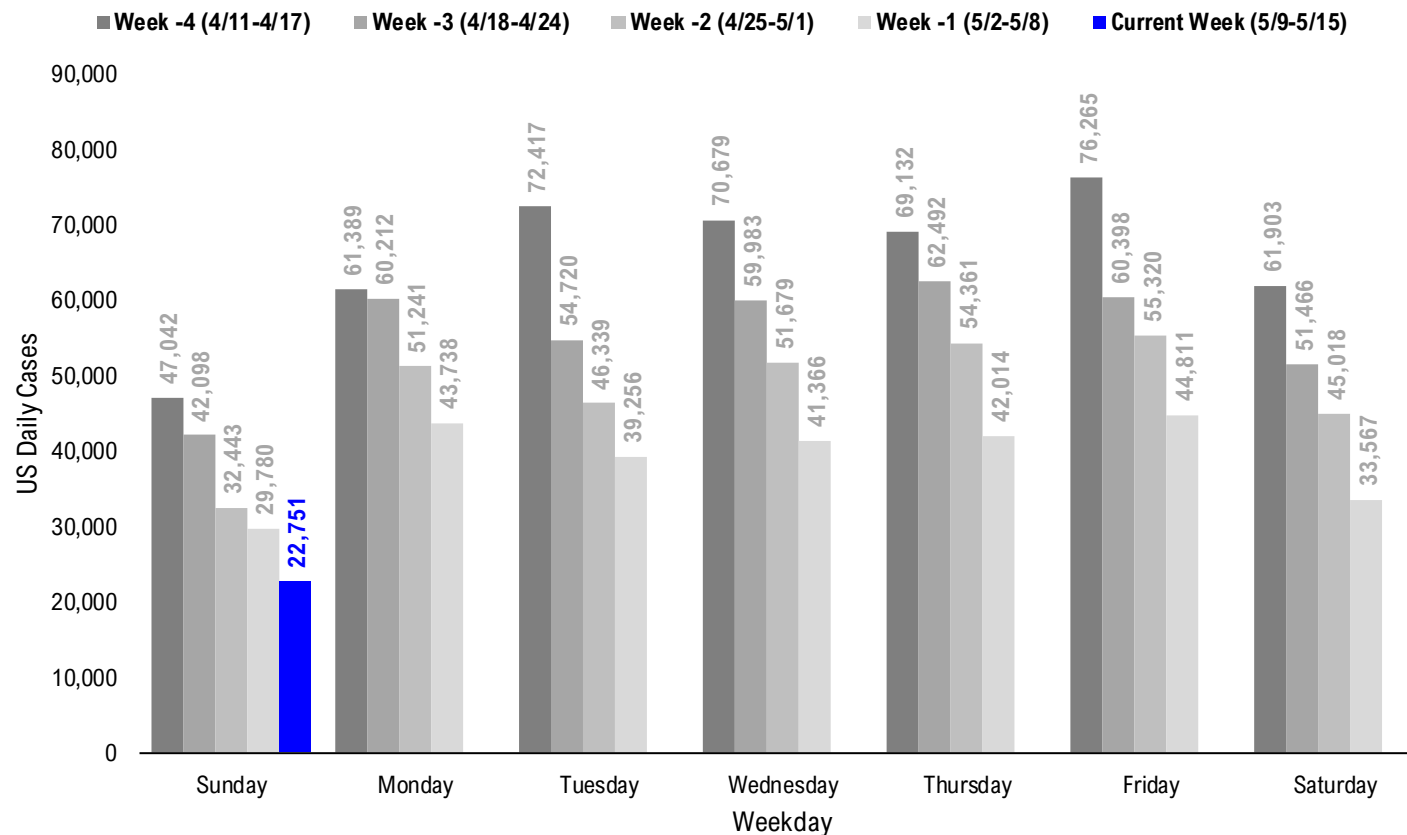
% State Population with at least One-Dose Vaccinated



% State Population Fully Vaccinated



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



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

	Sorted		Daily Cases (3D avg)				Hospitalization		
	Daily Cases		per 1mm residents				Since Peak		
	% US Pop	% US GDP	5/9	7D Delta	5/9	7D Delta	# Days	% Decline in Daily Cases	7D Net Hospitalization / 7D New Cases
United States	100%	100%	22,751	-7,029	103	-29	120	-87%	-3,374 -1.3%

	Sorted		Daily Cases (3D avg)				Hospitalization		
	Daily Cases		per 1mm residents				Since Peak		
	% US Pop	% US GDP	5/9	7D Delta	5/9	7D Delta	# Days	% Decline in Daily Cases	7D Net Hospitalization / 7D New Cases
United States	100%	100%	22,751	-7,029	103	-29	120	-87%	-3,374 -1.3%

States:

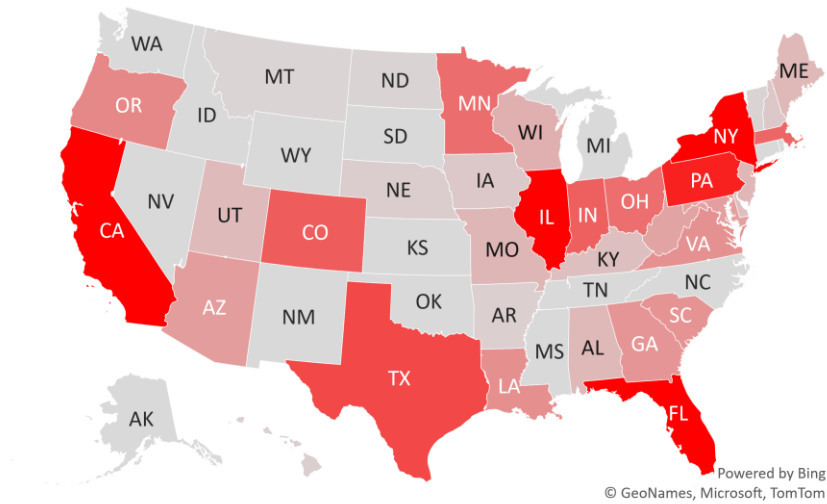
1	Florida	6.5%	5.0%	3,231	-610	177	-50	121	-80%	-386 (1.4%)
2	New York	5.9%	8.1%	2,269	-580	134	-45	120	-85%	-511 (3.0%)
3	California	11.9%	14.6%	1,853	-401	53	+0	119	-96%	-82 (0.7%)
4	Illinois	3.8%	4.2%	1,741	-119	179	-29	177	-83%	-46 (0.3%)
5	Pennsylvania	3.9%	3.8%	1,376	-1,277	182	-88	155	-81%	-298 (1.8%)
6	Texas	8.7%	8.8%	1,079	+160	52	-17	122	-93%	-195 (1.6%)
7	Colorado	1.7%	1.8%	927	-34	225	-39	169	-78%	54 0.6%
8	Indiana	2.0%	1.8%	905	-164	154	-29	155	-87%	61 0.9%
9	Massachusetts	2.1%	2.8%	858	-35	127	-44	120	-89%	-87 (1.4%)
10	Minnesota	1.7%	1.8%	803	-908	209	-104	160	-85%	-59 (0.7%)
11	Ohio	3.5%	3.3%	794	-191	99	-21	150	-90%	-37 (0.4%)
12	Oregon	1.3%	1.2%	601	-146	177	-21	154	-57%	-10 (0.2%)
13	Louisiana	1.4%	1.3%	554	+554	79	+30	122	-93%	11 0.3%
14	Virginia	2.6%	2.6%	539	-222	88	-28	111	-91%	-79 (1.5%)
15	South Carolina	1.6%	1.1%	521	-196	130	-46	119	-90%	-67 (1.6%)
16	Georgia	3.2%	2.9%	505	-157	66	-18	119	-92%	-78 (1.6%)
17	Arizona	2.2%	1.7%	448	+92	101	-3	126	-94%	-13 (0.3%)
18	Maryland	1.8%	2.0%	434	-215	102	-37	119	-83%	-138 (3.3%)
19	West Virginia	0.5%	0.4%	405	-15	198	-22	126	-81%	22 0.9%
20	Puerto Rico	1.0%	0.5%	349	-252	129	-47	141	-64%	-95 (3.9%)
21	Wisconsin	1.8%	1.6%	308	-97	86	-21	177	-93%	-11 (0.3%)
22	Missouri	1.8%	1.5%	260	-551	56	-51	176	-93%	-35 (1.4%)
23	New Jersey	2.7%	3.0%	253	-768	63	-85	120	-91%	-356 (5.7%)
24	Maine	0.4%	0.3%	244	+13	203	-21	114	-67%	10 0.5%
25	Alabama	1.5%	1.1%	244	-44	66	-7	122	-94%	39 1.6%
26	Utah	1.0%	0.9%	232	-47	102	-5	121	-92%	2 0.1%
27	Delaware	0.3%	0.4%	200	-88	197	-101	120	-79%	-61 (4.9%)
28	Kentucky	1.3%	1.0%	195	-173	102	-27	121	-91%	-20 (0.5%)

States:

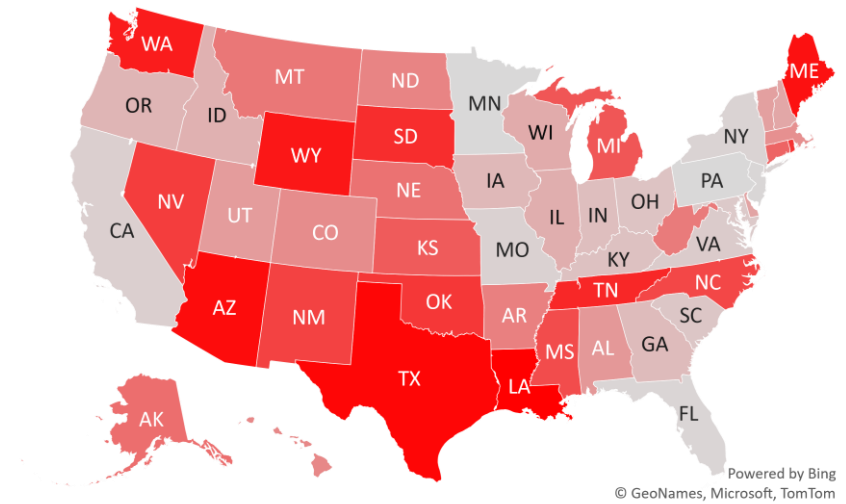
29	Iowa	1.0%	0.9%	125	-156	66	-24	177	-95%	-9 (0.5%)
30	New Hampshire	0.4%	0.4%	123	-91	120	-52	125	-85%	-5 (0.4%)
31	Nebraska	0.6%	0.6%	87	-8	86	-12	171	-94%	-16 (1.2%)
32	Hawaii	0.4%	0.5%	81	-31	67	-15	253	-68%	7 1.1%
33	Arkansas	0.9%	0.6%	72	-24	42	-6	119	-95%	-5 (0.5%)
34	North Dakota	0.2%	0.3%	43	-26	115	-64	176	-95%	-1 (0.1%)
35	Vermont	0.2%	0.2%	41	-53	101	-60	37	-71%	-5 (1.4%)
36	Montana	0.3%	0.2%	35	-10	105	-10	175	-92%	13 1.5%
37	District of Columbia	0.2%	0.7%	16	-39	47	-67	119	-90%	-8 (2.5%)
38	Wyoming	0.2%	0.2%	0	+0	55	+13	171	-97%	-5 (1.0%)
39	Washington	2.3%	2.7%	0	+0	108	-7	165	-80%	-65 (0.8%)
40	U.S. Virgin Islands	0.0%	0.0%	0	+0	0	+0	42	-100%	0 0.0%
41	Tennessee	2.1%	1.8%	0	+0	38	-9	142	-98%	-49 (0.9%)
42	South Dakota	0.3%	0.3%	0	+0	29	-20	176	-99%	-35 (5.1%)
43	Rhode Island	0.3%	0.3%	0	+0	61	-30	155	-96%	-30 (2.2%)
44	Oklahoma	1.2%	1.0%	0	+0	20	-12	119	-99%	-4 (0.3%)
45	Nevada	0.9%	0.8%	0	+0	54	-1	120	-94%	4 0.2%
46	New Mexico	0.6%	0.5%	0	+0	44	-1	170	-97%	0 0.0%
47	North Carolina	3.2%	2.7%	0	+0	61	-10	120	-94%	-95 (0.9%)
48	Mississippi	0.9%	0.6%	0	+0	27	-1	120	-97%	8 0.6%
49	Northern Mariana	0.0%	0.0%	0	+0	6	-18	194	-92%	0 0.0%
50	Michigan	3.0%	2.6%	0	+0	153	-76	25	-83%	-571 (3.1%)
51	Kansas	0.9%	0.8%	0	+0	53	-18	165	-96%	3 0.2%
52	Idaho	0.5%	0.4%	0	-120	35	-21	150	-97%	44 4.3%
53	Guam	0.0%	0.0%	0	+0	6	-101	180	-99%	-1 (1.7%)
54	Connecticut	1.1%	1.3%	0	+0	41	-33	116	-97%	-74 (2.1%)
55	American Samoa	0.0%	0.0%	0	+0	0	+0	0	0%	0
56	Alaska	0.2%	0.3%	0	+0	53	-12	155	-95%	-10 (1.4%)

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

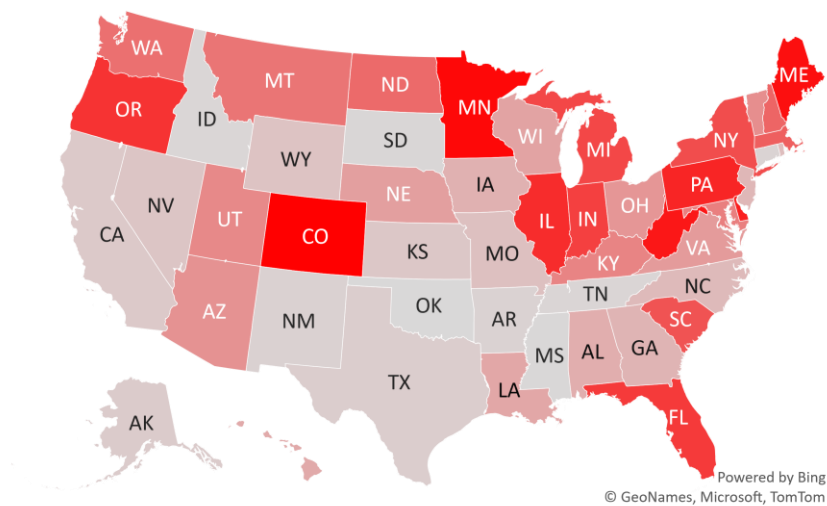
Daily Case Increases



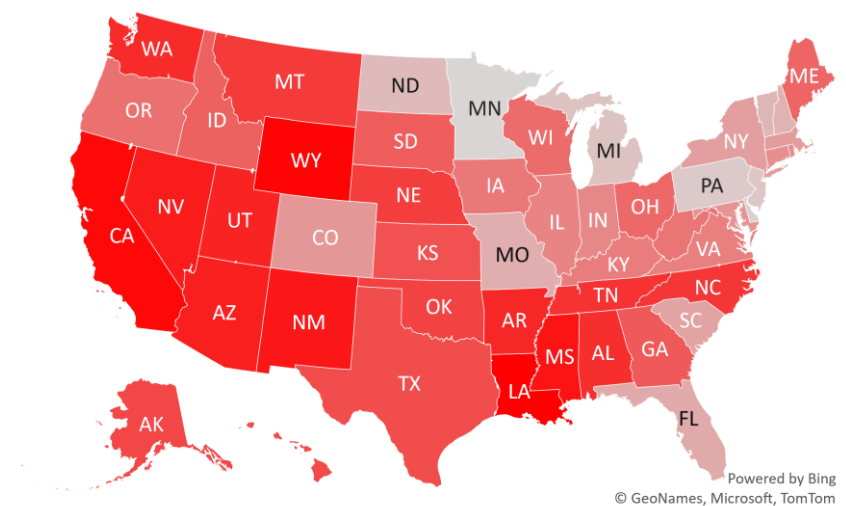
7D Delta in Daily New Cases



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



7D Delta in Daily Case Increases per 1mm Resident (3D Avg)



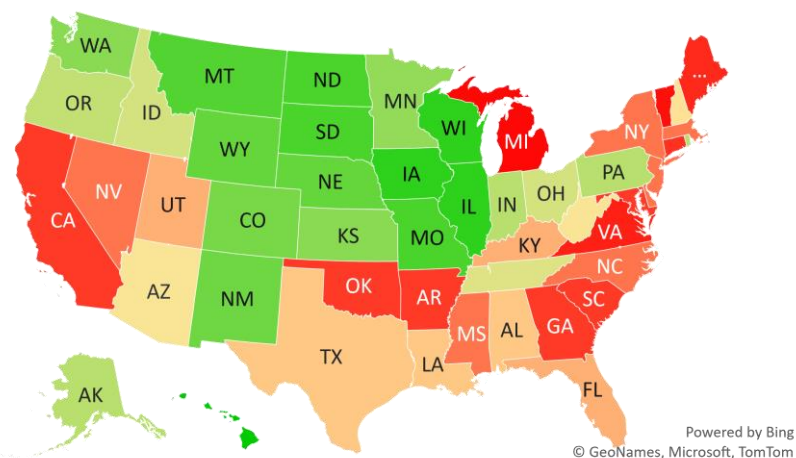
#6: # of Days since Daily Case Peaked by States...

Days since Daily Cases (3D Avg) Peak (as of 5/9)

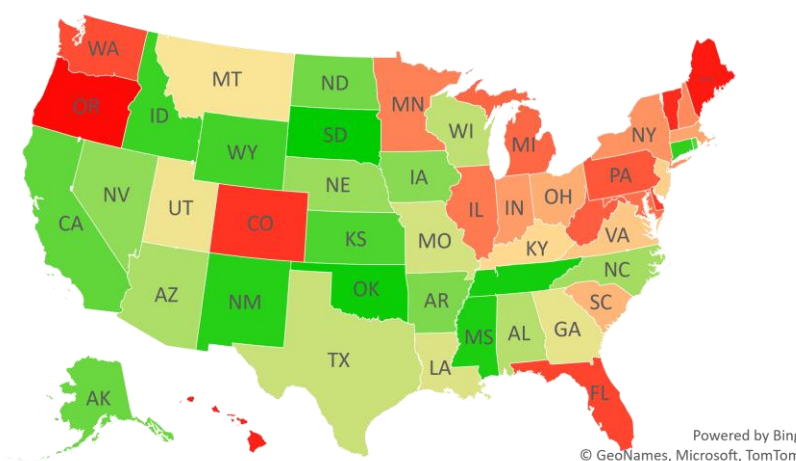
Sorted				
	Peak Date	5/9/21	% off the Peak	% US Pop
United States	1/9/21	120	-87%	100%
States:				
Hawaii	8/29/20	253	-68%	0.4%
Northern Mariana Island	10/27/20	194	-92%	0.0%
Guam	11/10/20	180	-99%	0.0%
Wisconsin	11/13/20	177	-93%	1.8%
Illinois	11/13/20	177	-83%	3.8%
Iowa	11/13/20	177	-95%	1.0%
South Dakota	11/14/20	176	-99%	0.3%
North Dakota	11/14/20	176	-95%	0.2%
Missouri	11/14/20	176	-93%	1.8%
Montana	11/15/20	175	-92%	0.3%
Wyoming	11/19/20	171	-97%	0.2%
Nebraska	11/19/20	171	-94%	0.6%
New Mexico	11/20/20	170	-97%	0.6%
Colorado	11/21/20	169	-78%	1.7%
Washington	11/25/20	165	-80%	2.3%
Kansas	11/25/20	165	-96%	0.9%
Minnesota	11/30/20	160	-85%	1.7%
Rhode Island	12/5/20	155	-96%	0.3%
Pennsylvania	12/5/20	155	-81%	3.9%
Indiana	12/5/20	155	-87%	2.0%
Alaska	12/5/20	155	-95%	0.2%
Oregon	12/6/20	154	-57%	1.3%
Ohio	12/10/20	150	-90%	3.5%
Idaho	12/10/20	150	-97%	0.5%
Tennessee	12/18/20	142	-98%	2.1%
Puerto Rico	12/19/20	141	-64%	1.0%
West Virginia	1/3/21	126	-81%	0.5%
Arizona	1/3/21	126	-94%	2.2%

Sorted				
	Peak Date	5/9/21	% off the Peak	% US Pop
United States	1/9/21	120	-87%	100%
States:				
New Hampshire	1/4/21	125	-85%	0.4%
Texas	1/7/21	122	-93%	8.7%
Louisiana	1/7/21	122	-93%	1.4%
Alabama	1/7/21	122	-94%	1.5%
Utah	1/8/21	121	-92%	1.0%
Kentucky	1/8/21	121	-91%	1.3%
Florida	1/8/21	121	-80%	6.5%
New York	1/9/21	120	-85%	5.9%
Nevada	1/9/21	120	-94%	0.9%
New Jersey	1/9/21	120	-91%	2.7%
North Carolina	1/9/21	120	-94%	3.2%
Mississippi	1/9/21	120	-97%	0.9%
Massachusetts	1/9/21	120	-89%	2.1%
Delaware	1/9/21	120	-79%	0.3%
South Carolina	1/10/21	119	-90%	1.6%
Oklahoma	1/10/21	119	-99%	1.2%
Maryland	1/10/21	119	-83%	1.8%
Georgia	1/10/21	119	-92%	3.2%
District of Columbia	1/10/21	119	-90%	0.2%
California	1/10/21	119	-96%	11.9%
Arkansas	1/10/21	119	-95%	0.9%
Connecticut	1/13/21	116	-97%	1.1%
Maine	1/15/21	114	-67%	0.4%
Virginia	1/18/21	111	-91%	2.6%
U.S. Virgin Islands	3/28/21	42	-100%	0.0%
Vermont	4/2/21	37	-71%	0.2%
Michigan	4/14/21	25	-83%	3.0%

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



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

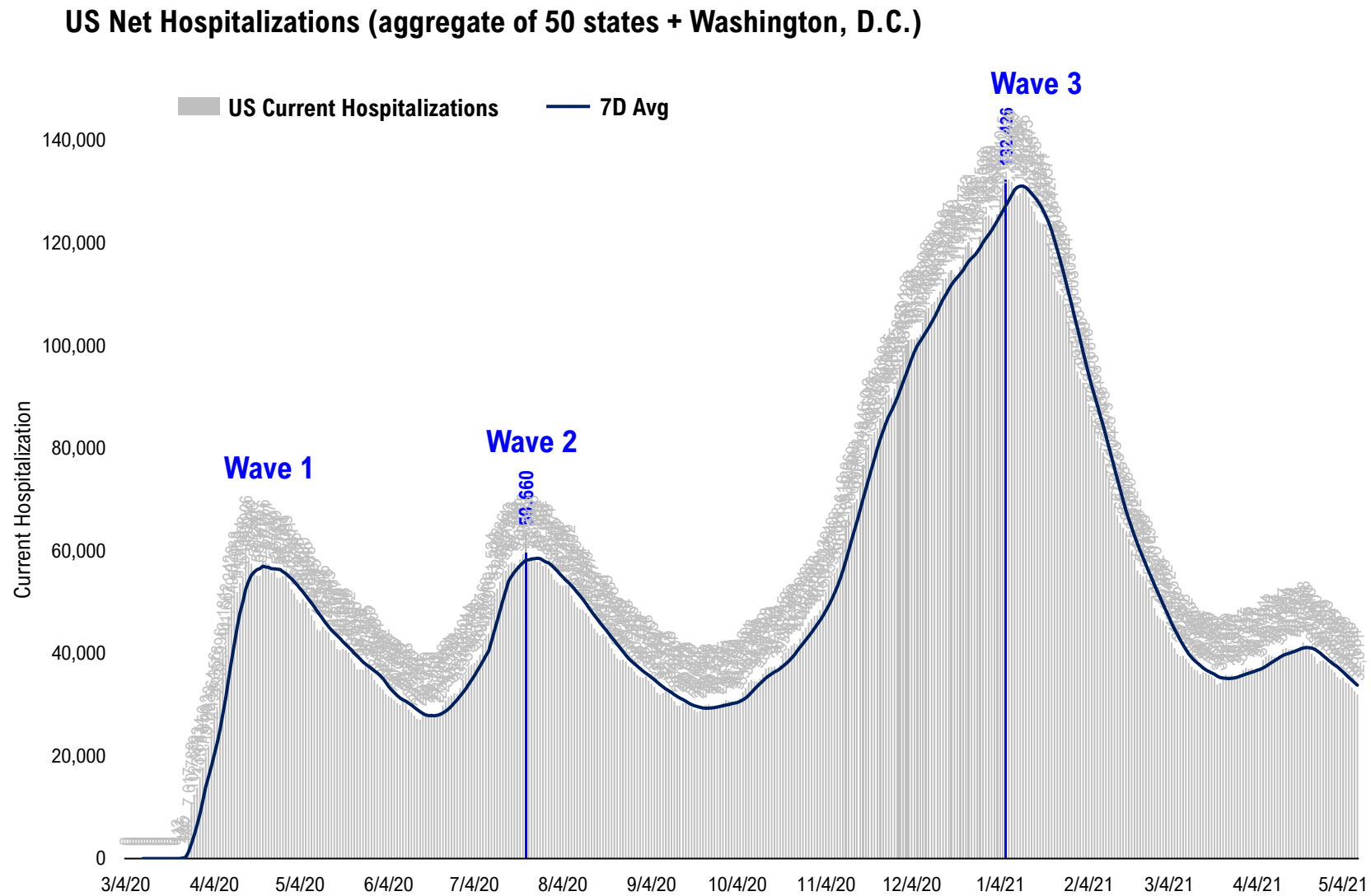


#7: US New Cases by States... (sorted by today's new cases)

	Sorted				
	7D Ago	Last 3-day Trend			
	5/2/21	5/7/21	5/8/21	5/9/21	vs 7D ago
United States	29,780	44,811	33,567	22,751	-7,029
States:					
Florida	3,841	4,165	3,977	3,231	
New York	2,849	2,370	3,195	2,269	
California	2,254	2,471	1,945	1,853	
Illinois	1,860	3,321	1,729	1,741	
Pennsylvania	2,653	2,986	2,610	1,376	
Texas	919	1,962	1,445	1,079	
Colorado	961	1,402	1,566	927	
Indiana	1,069	1,164	1,047	905	
Massachusetts	893	976	795	858	
Minnesota	1,711	1,450	1,282	803	
Ohio	985	1,397	1,297	794	
Oregon	747	824	818	601	
Louisiana	0	554	0	554	
Virginia	761	938	779	539	
South Carolina	717	867	623	521	
Georgia	662	865	721	505	
Arizona	356	820	939	448	<--higher
Maryland	649	768	656	434	
West Virginia	420	339	321	405	
Puerto Rico	601	481	402	349	
Wisconsin	405	662	525	308	
Missouri	811	414	364	260	
New Jersey	1,021	920	495	253	
Maine	231	288	287	244	
Alabama	288	314	419	244	
Utah	279	386	360	232	
Delaware	288	203	173	200	
Kentucky	368	633	542	195	

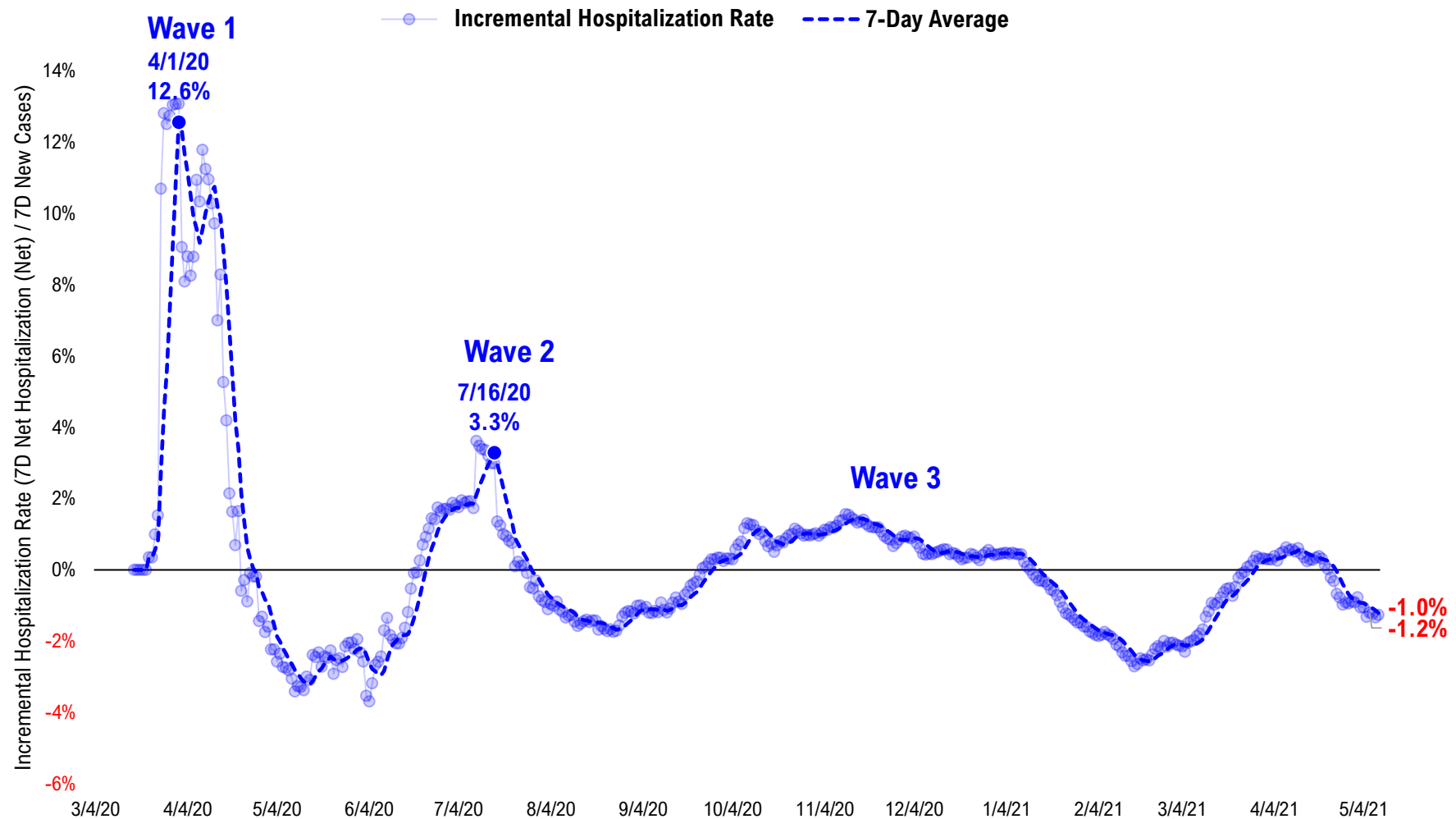
	Sorted				
	7D Ago	Last 3-day Trend			
	5/2/21	5/7/21	5/8/21	5/9/21	vs 7D ago
United States	29,780	44,811	33,567	22,751	-7,029
States:					
Iowa	281	277	226	125	
New Hampshire	214	203	164	123	
Nebraska	95	220	194	87	
Hawaii	112	114	90	81	
Arkansas	96	157	147	72	
North Dakota	69	123	98	43	
Vermont	94	97	52	41	
Montana	45	149	152	35	
District of Columbia	55	56	28	16	
Wyoming	0	96	0	0	
Washington	0	1,190	1,279	0	
U.S. Virgin Islands	0	0	0	0	
Tennessee	0	769	0	0	
South Dakota	0	76	0	0	
Rhode Island	0	193	0	0	
Oklahoma	0	234	0	0	
Nevada	0	498	0	0	
New Mexico	0	279	0	0	
North Carolina	0	1,932	0	0	
Mississippi	0	240	0	0	
Northern Mariana Islands	0	1	0	0	
Michigan	0	2,758	1,825	0	
Kansas	0	467	0	0	
Idaho	120	187	0	0	
Guam	0	3	0	0	
Connecticut	0	436	0	0	
American Samoa	0	0	0	0	
Alaska	0	116	0	0	

#8: US Daily Hospitalizations...



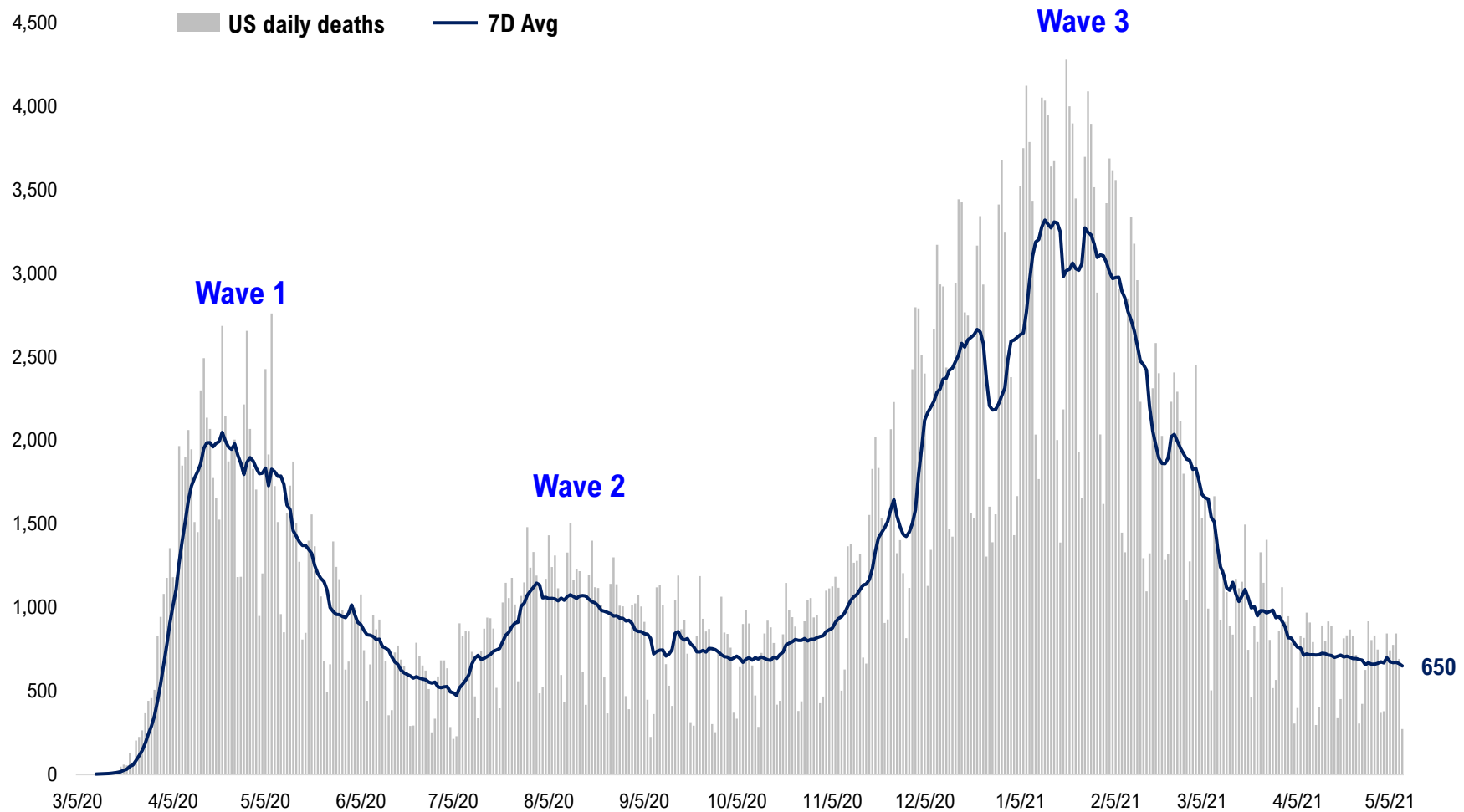
#9: Incremental Hospitalization Rate...

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

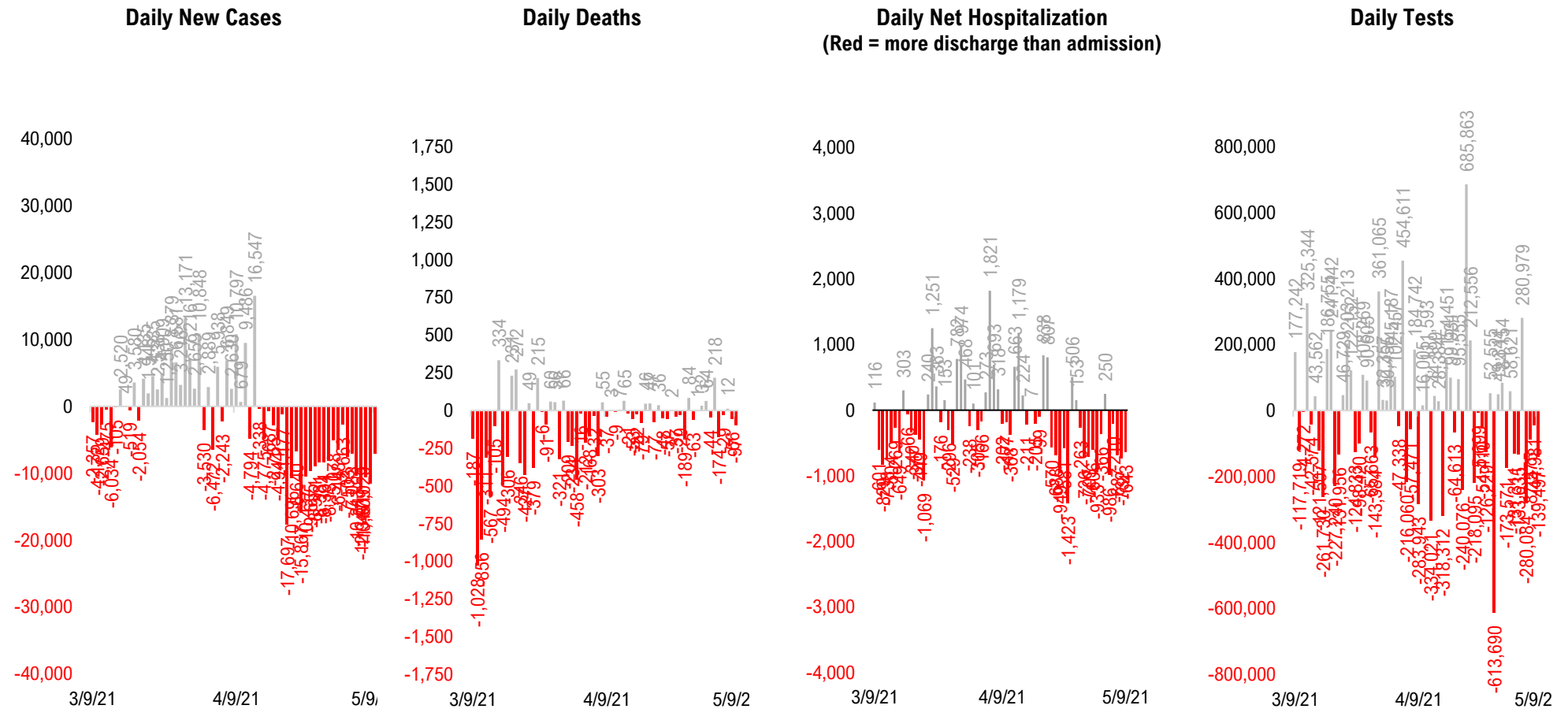


#10: US Daily New Fatalities...

US daily COVID-19 Fatalities

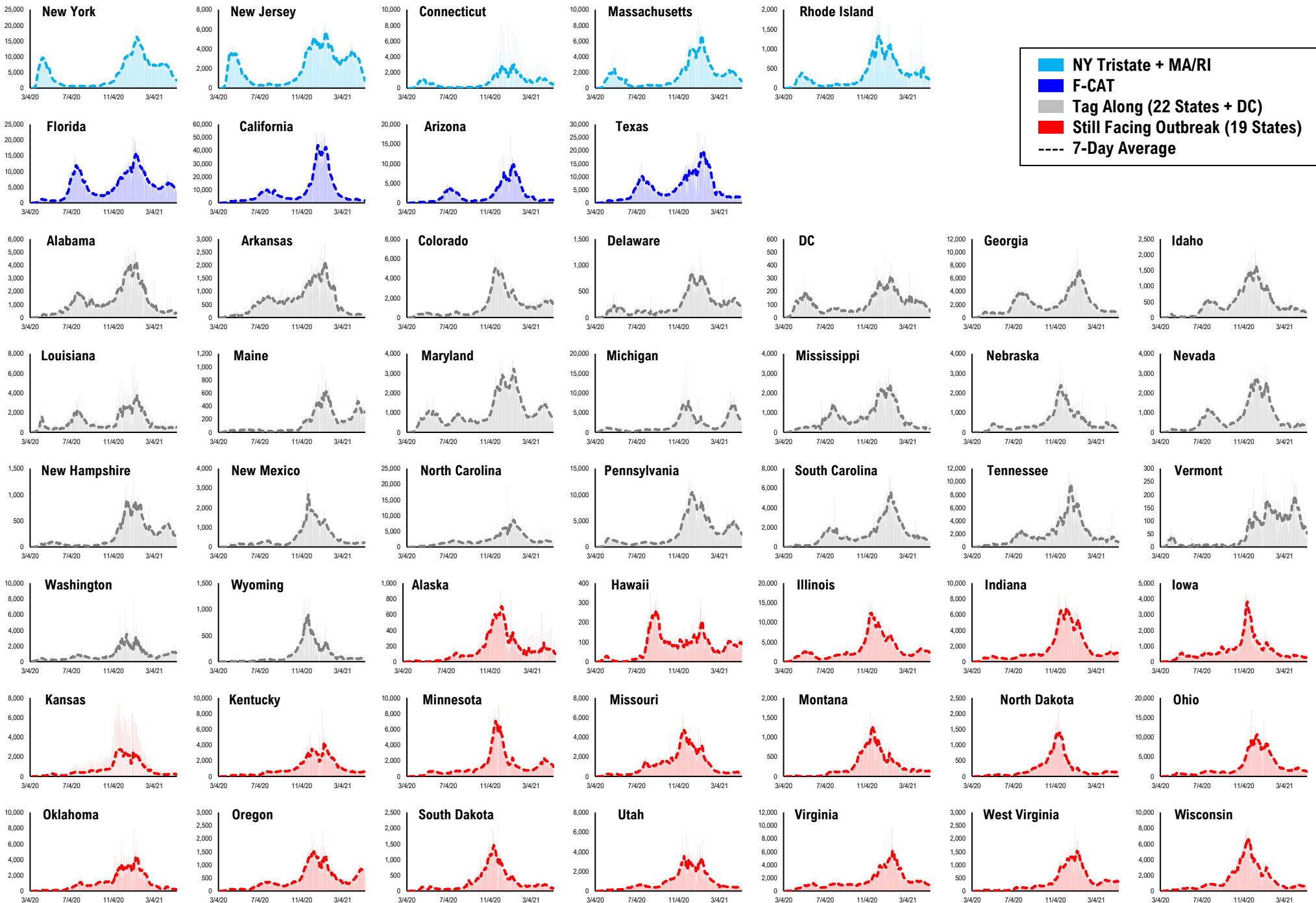
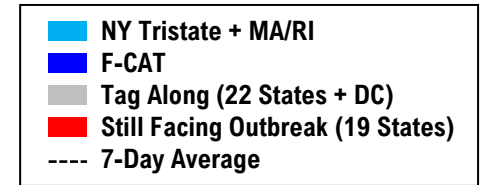


#11: Rolling 7-Day Change in the Key Metrics... (Past 8 Weeks)

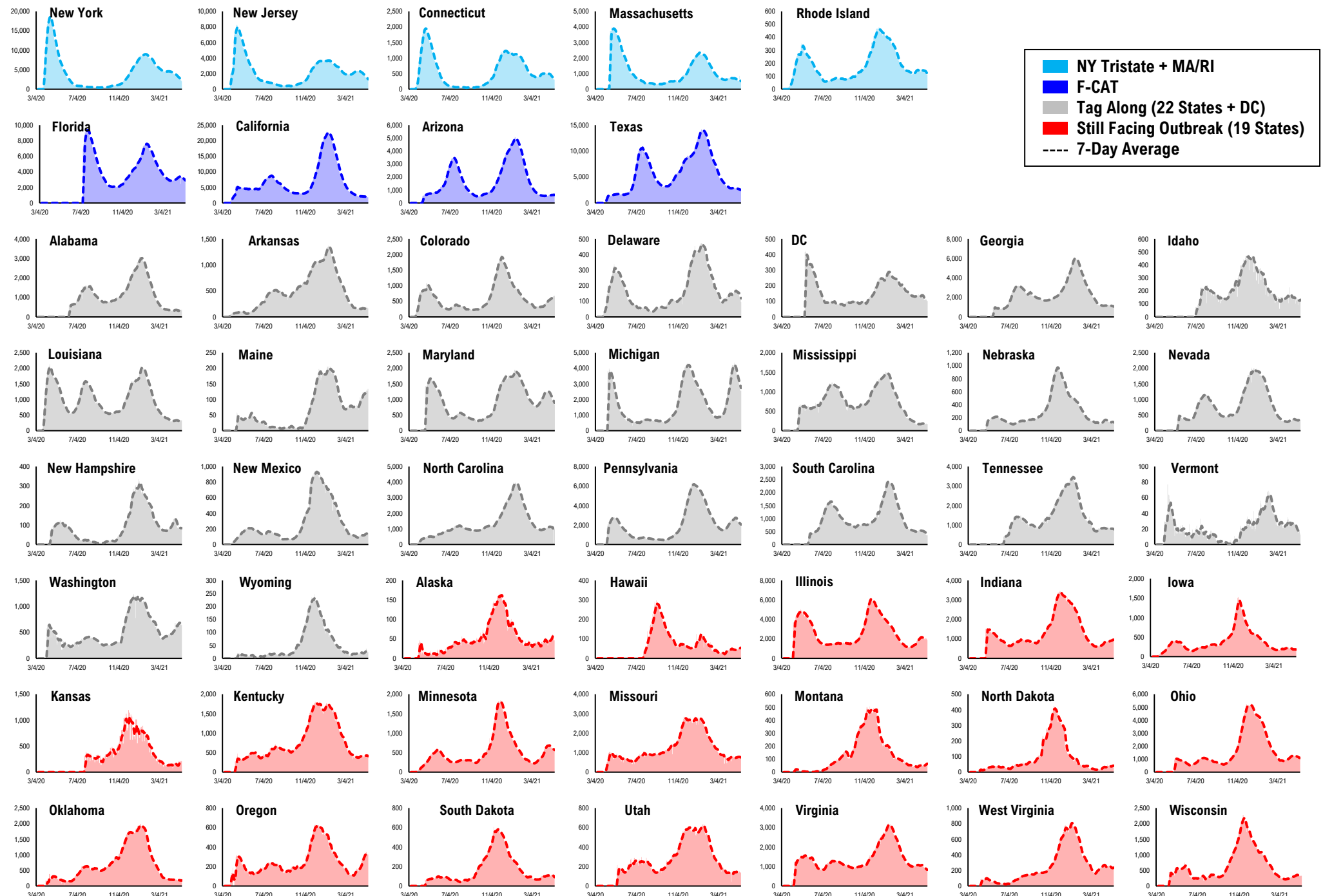


* Ignored California between 8/10 and 8/23, due to its data glitch caused 300,000-case backlog
Source: Fundstrat, COVID-19 Tracking Project, State Department of Health

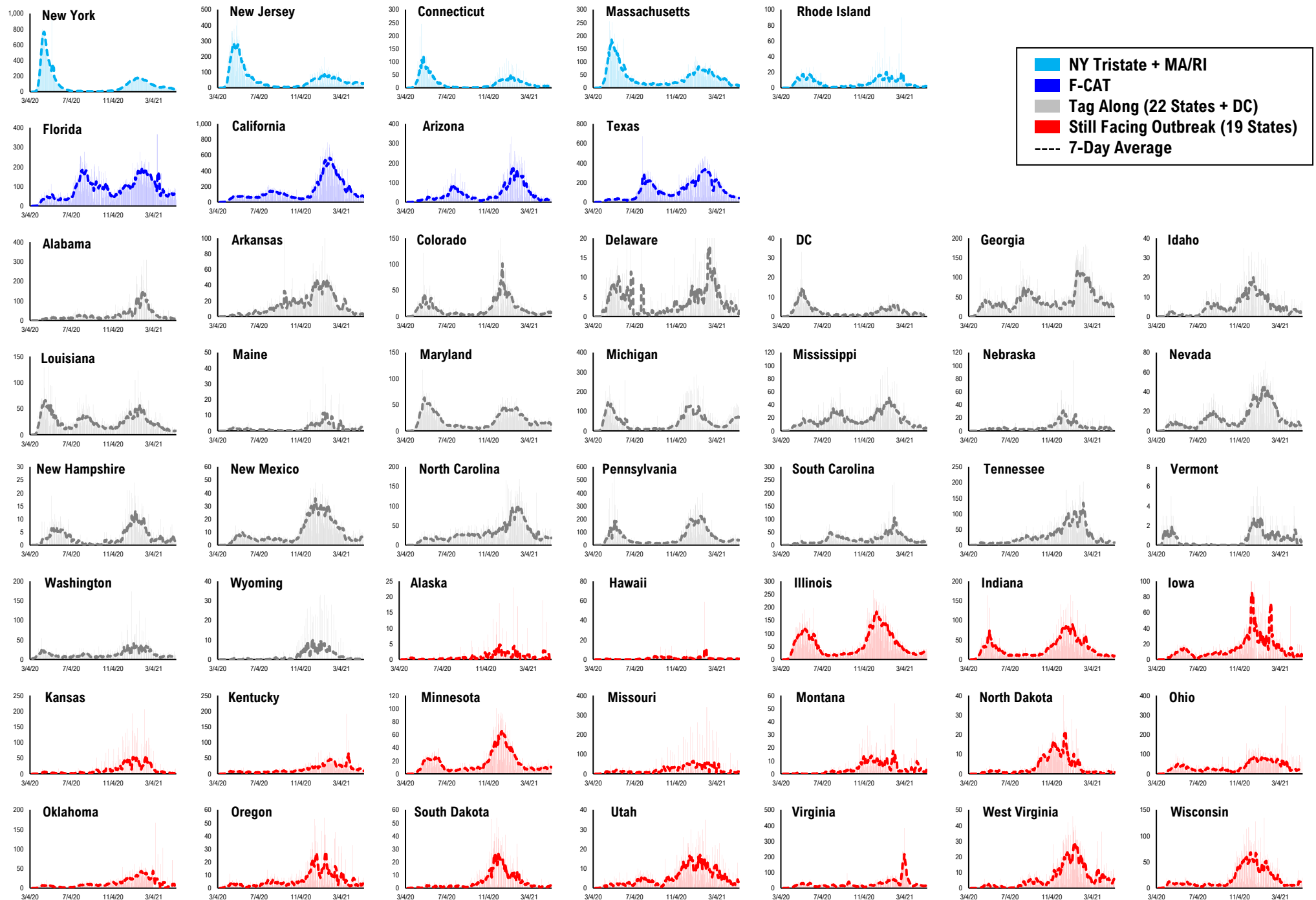
#12: Daily New Cases by States...



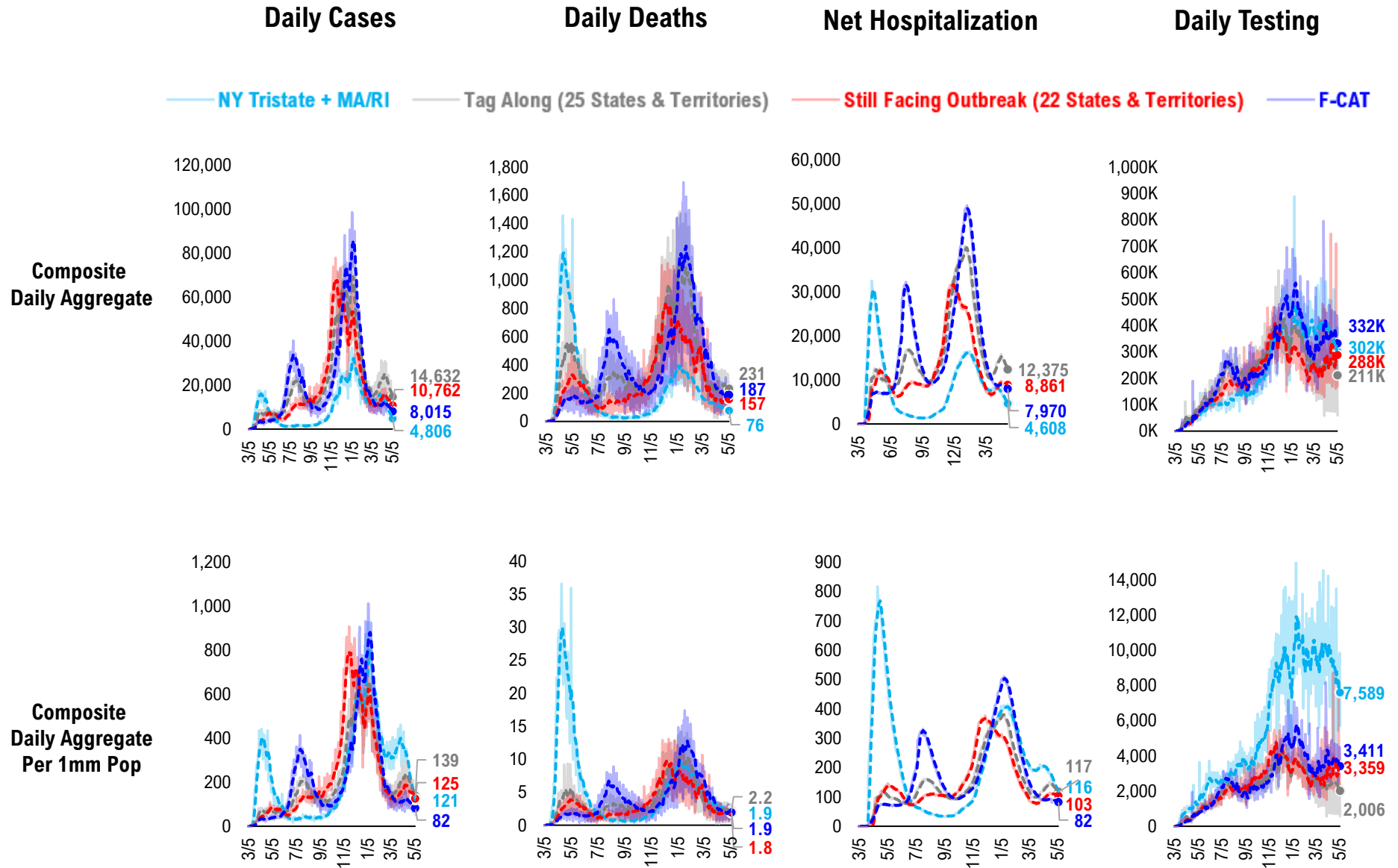
#13: Current Hospitalizations by States...



#14: Daily New Deaths by States...

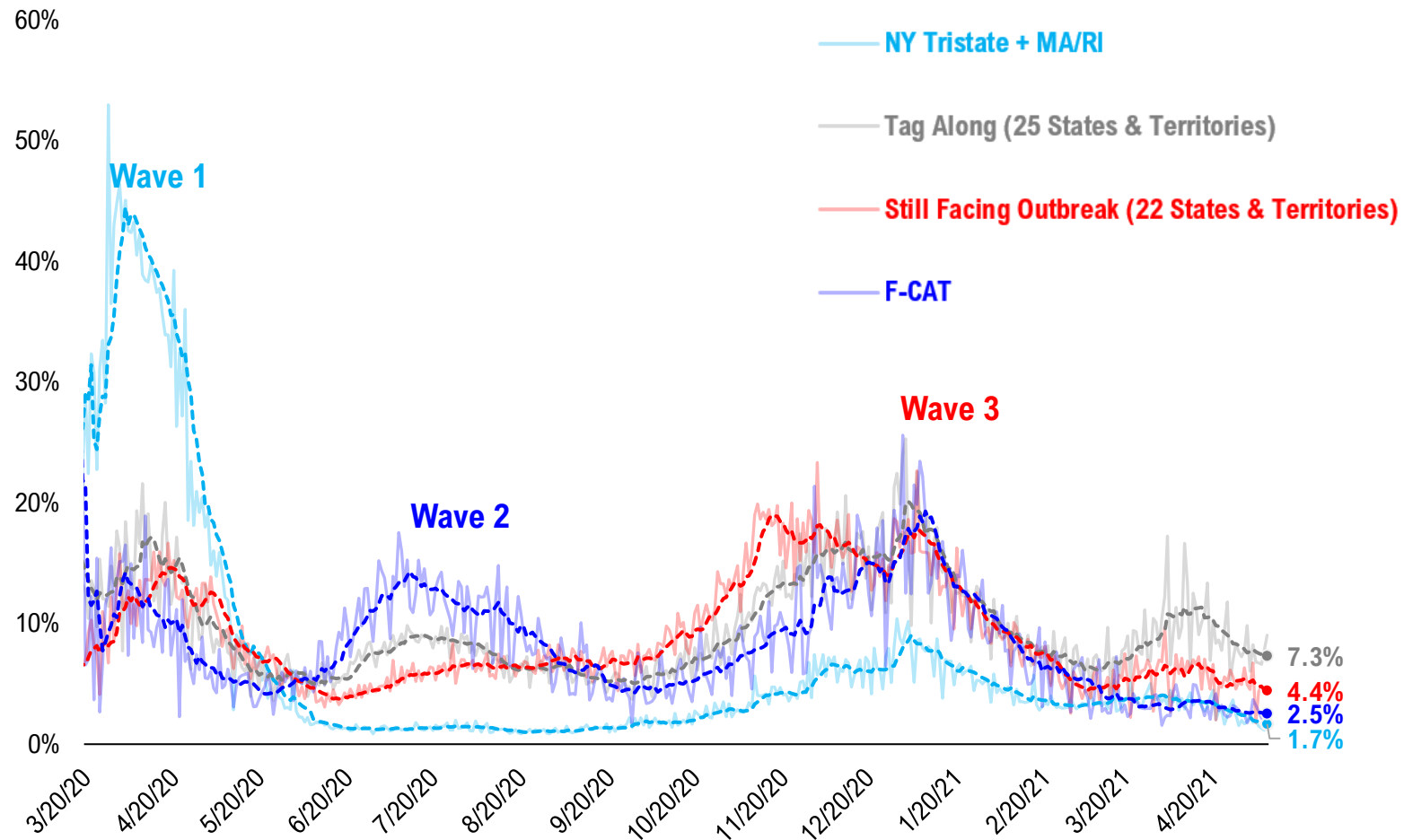


#15: State COVID-19 situation by Tier...

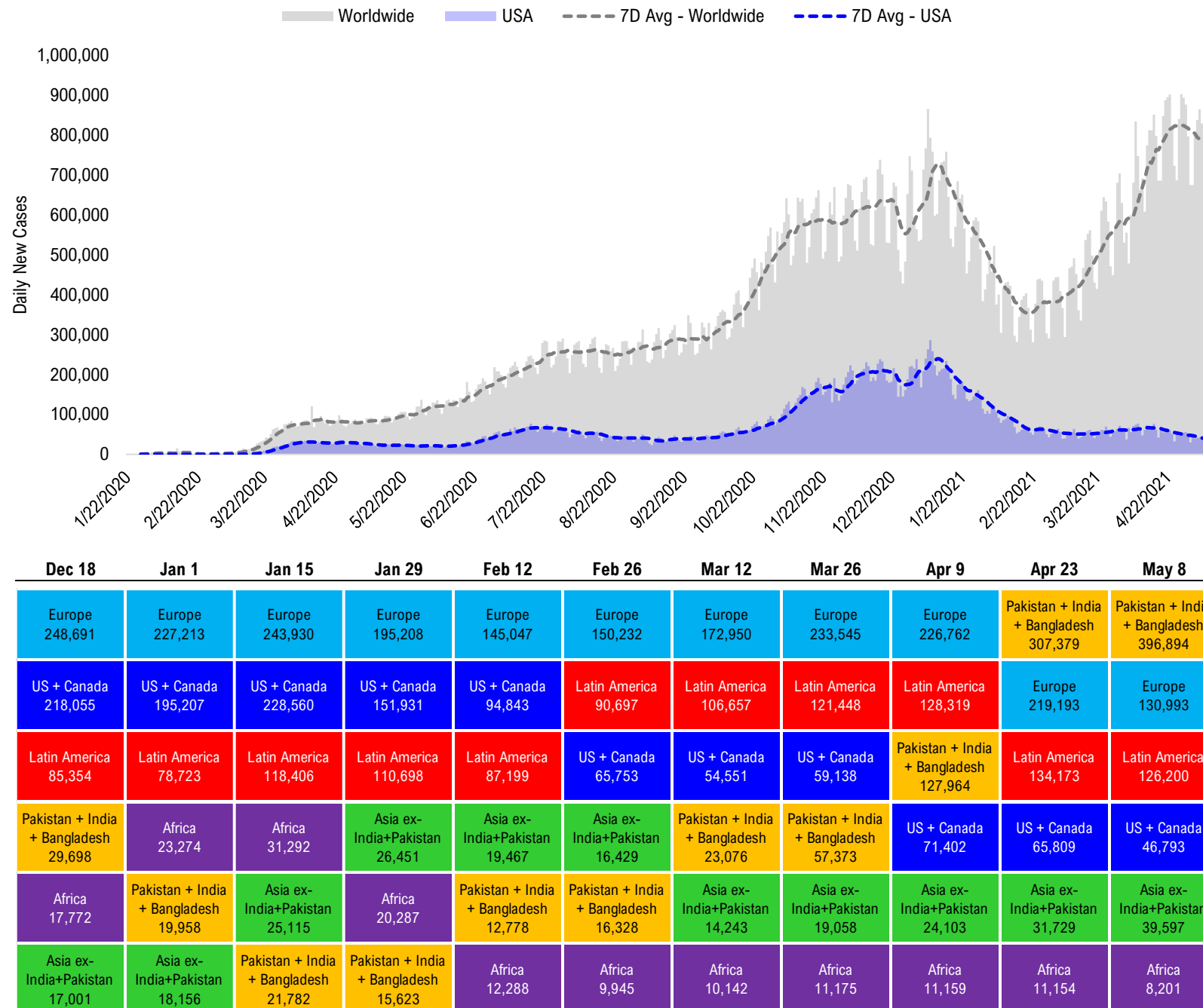


#16: State COVID-19 Daily Positivity Rate by Tier...

Composite Daily Positivity Rate



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



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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