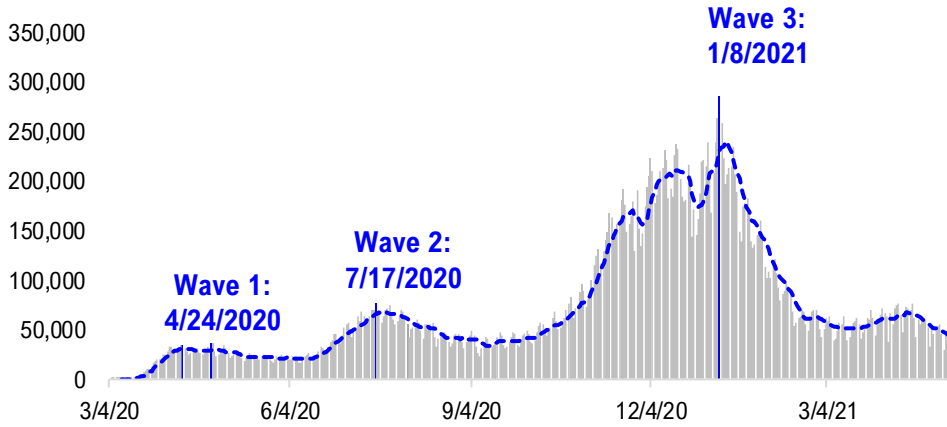


FSInsight Daily COVID-19 Chartbook

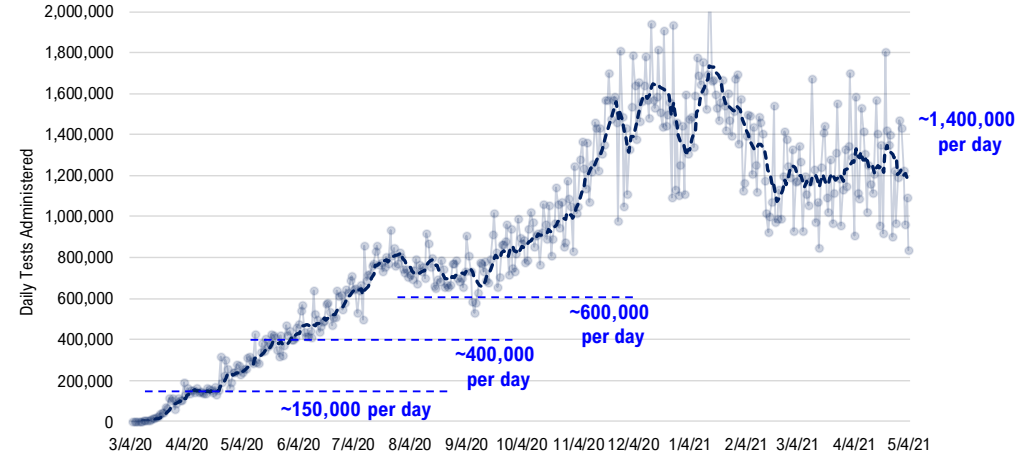


#1: USA COVID-19 Situation at a Glance...

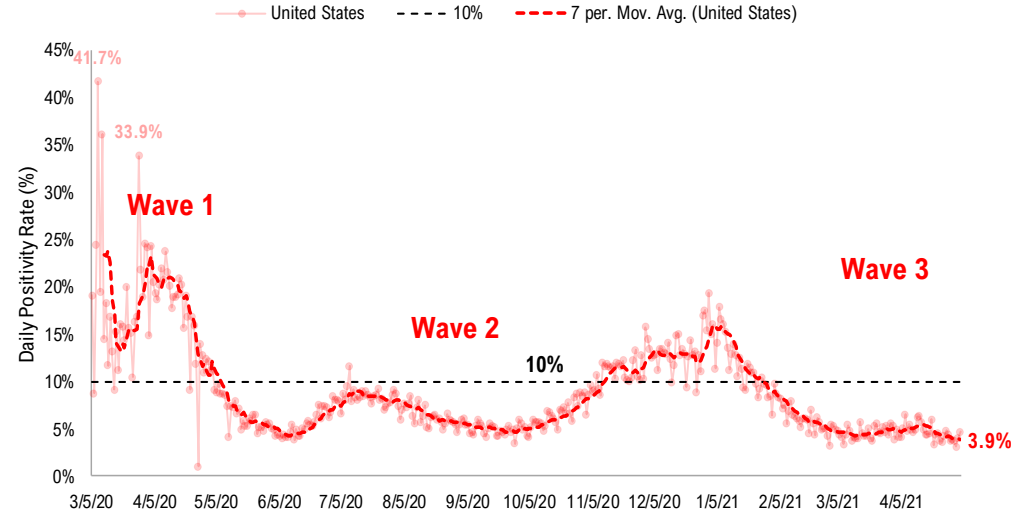
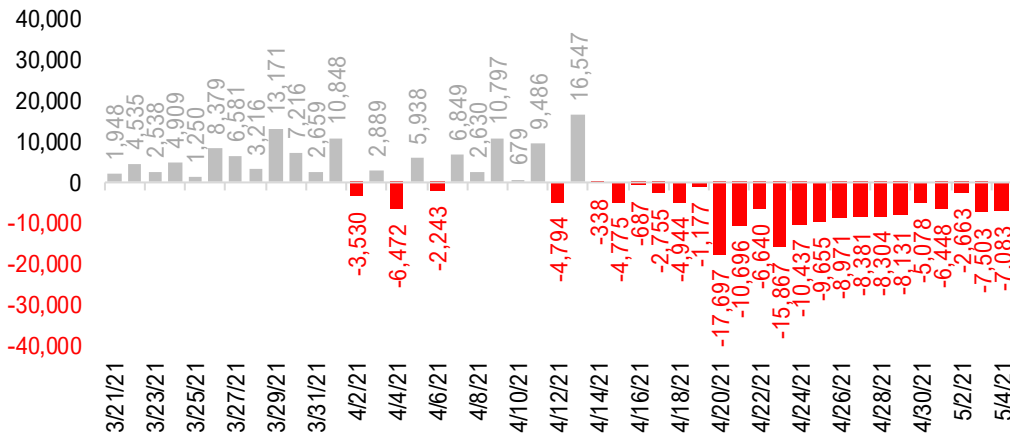
US daily new cases



USA total COVID-19 tests administered

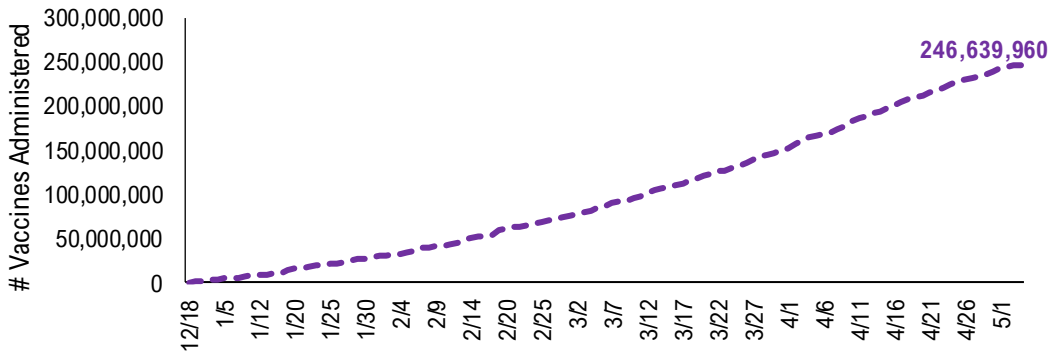


US daily new cases rolling 7D delta

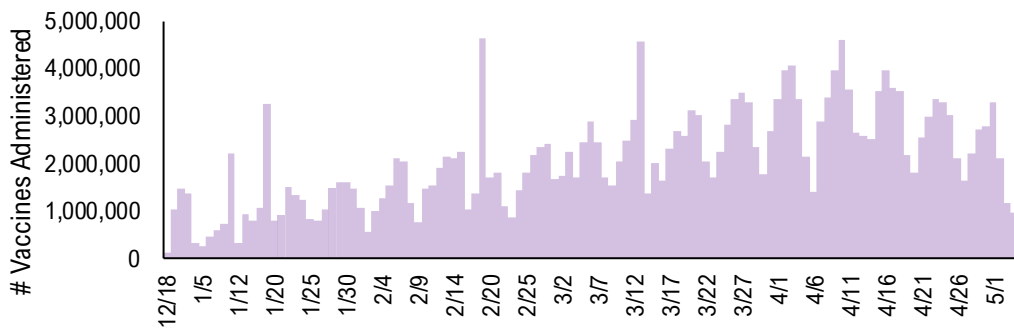


#2: USA COVID-19 Vaccination Progress at a Glance...

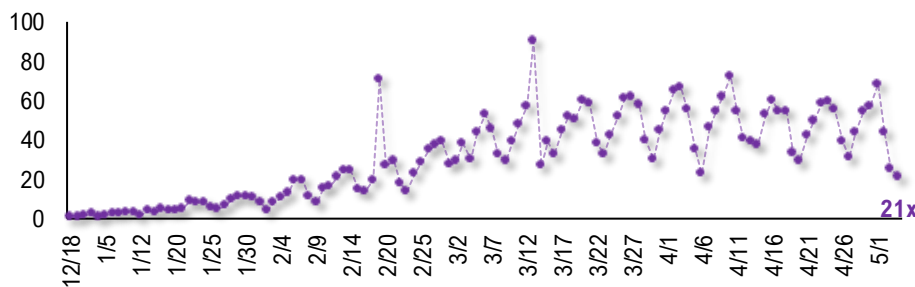
Cumulative Vaccines Administered



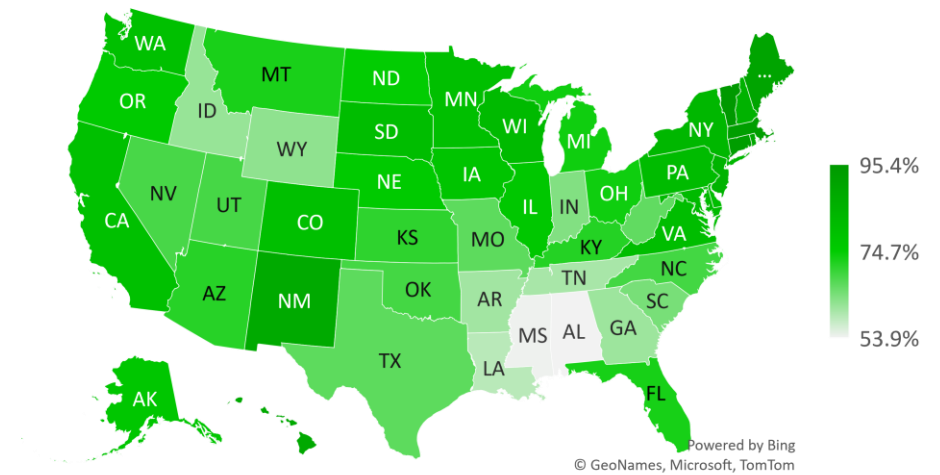
Daily Vaccines Administered



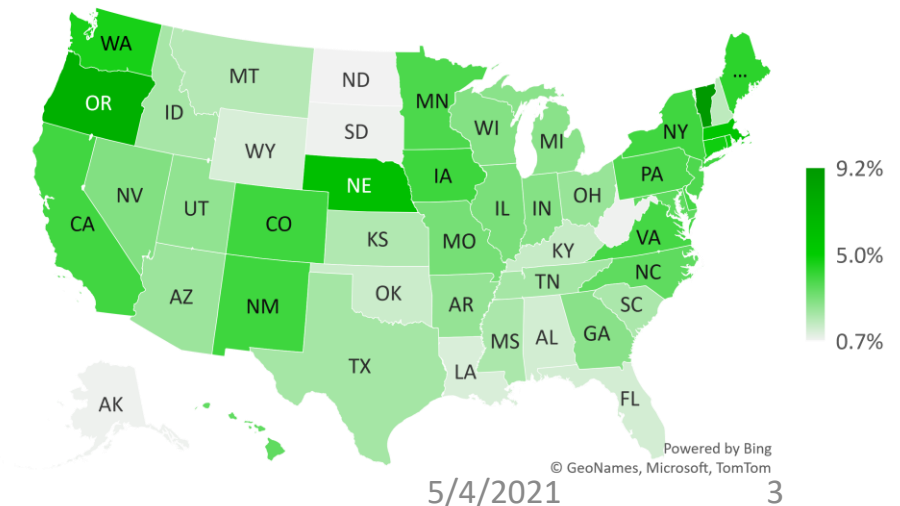
Daily Vaccinations / Daily Cases (7D Avg)



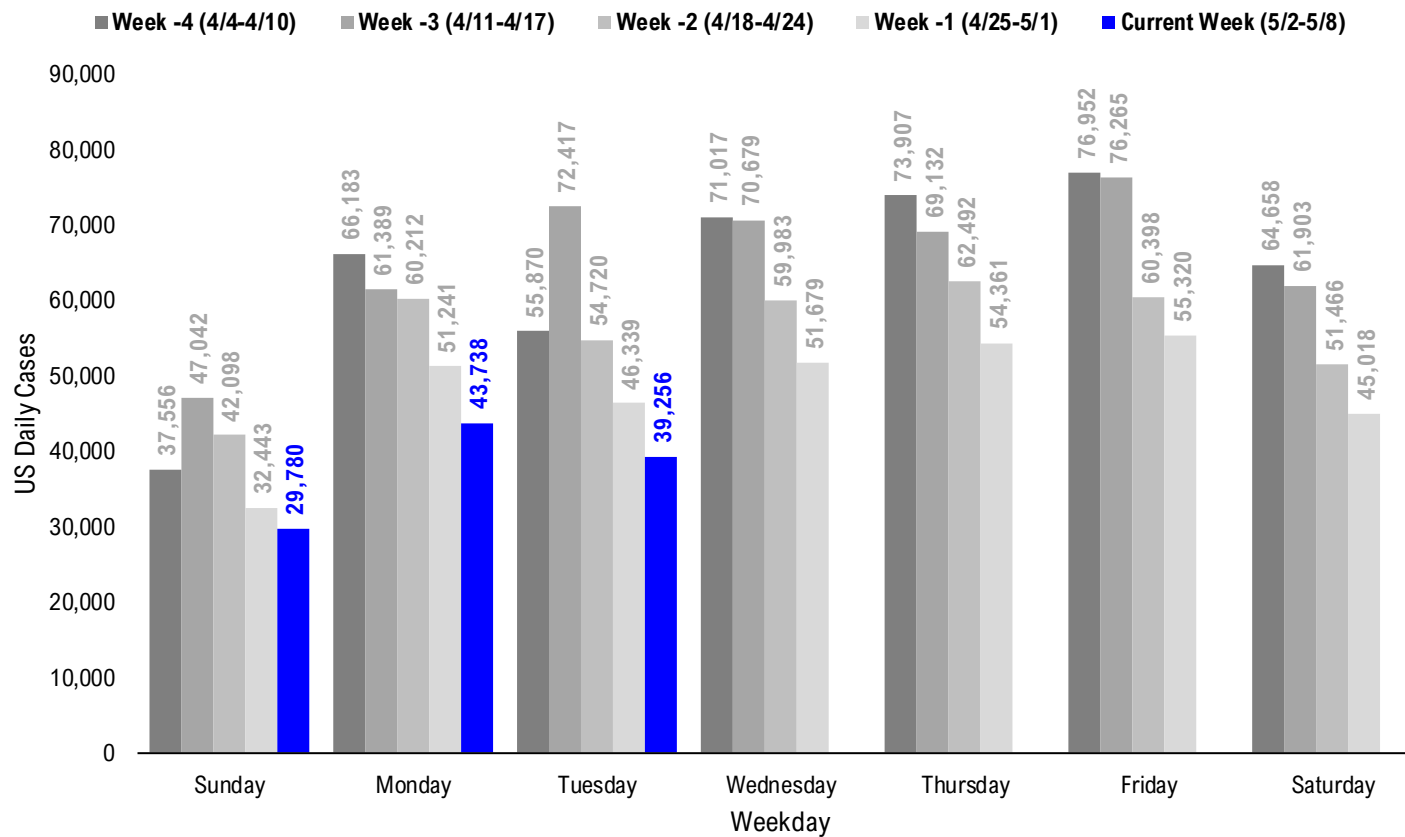
Cumulative Vaccines Administered as % State Population



Implied Weekly Vaccines Administered as % State Population



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



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

	Sorted Daily Cases		Daily Cases (3D avg) per 1mm residents				Hospitalization			
	% US Pop	% US GDP	Since Peak		# Days	% Decline in Daily Cases		7D Net Hospitalization	7D Net Hospitalization / 7D New Cases	
			5/4	7D Delta		5/4	7D Delta			
United States	100%	100%	39.256	-7.083	115	-18	115	-86%	-3.341	-1.0%

	Sorted Daily Cases		Daily Cases (3D avg) per 1mm residents				Hospitalization			
	% US Pop	% US GDP	Since Peak		# Days	% Decline in Daily Cases		7D Net Hospitalization	7D Net Hospitalization / 7D New Cases	
			5/4	7D Delta		5/4	7D Delta			
United States	100%	100%	39.256	-7.083	115	-18	115	-86%	-3.341	-1.0%

States:

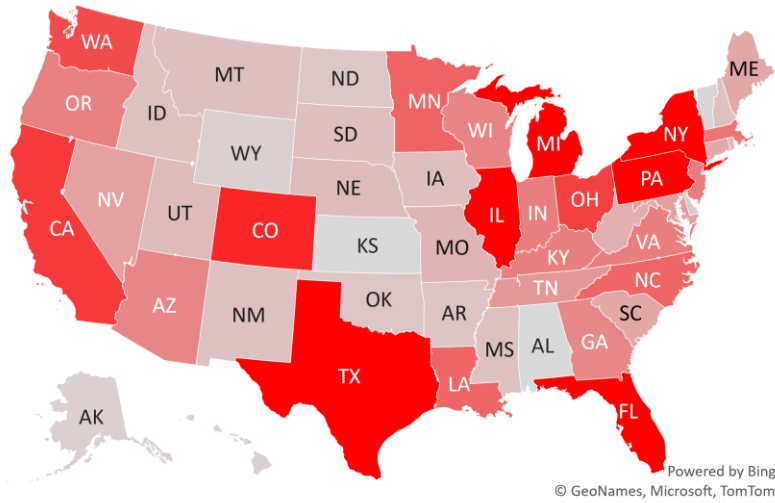
1 Florida	6.5%	5.0%	3,682	-1,589	164	-44	116	-81%	-264	(0.8%)
2 Texas	8.7%	8.8%	3,217	-76	61	-5	117	-92%	-176	(1.1%)
3 Pennsylvania	3.9%	3.8%	3,133	-200	196	-22	150	-79%	-276	(1.2%)
4 Michigan	3.0%	2.6%	2,527	-1,149	252	-88	20	-71%	-586	(2.6%)
5 Illinois	3.8%	4.2%	2,211	-345	161	-16	172	-85%	-106	(0.6%)
6 New York	5.9%	8.1%	2,173	-531	124	-45	115	-86%	-611	(2.8%)
7 Colorado	1.7%	1.8%	1,519	-496	199	-67	164	-81%	69	0.6%
8 California	11.9%	14.6%	1,349	-96	43	-2	114	-97%	-160	(1.3%)
9 Ohio	3.5%	3.3%	1,285	-275	93	-16	145	-91%	-80	(0.8%)
10 Washington	2.3%	2.7%	1,206	+282	146	+27	160	-74%	-7	(0.1%)
11 Minnesota	1.7%	1.8%	995	-83	225	-1	155	-84%	-66	(0.6%)
12 Louisiana	1.4%	1.3%	983	+550	126	+29	117	-89%	9	0.3%
13 North Carolina	3.2%	2.7%	981	-167	176	-24	115	-83%	-53	(0.5%)
14 Massachusetts	2.1%	2.8%	854	-111	112	-36	115	-90%	-112	(1.4%)
15 New Jersey	2.7%	3.0%	784	-1,090	100	-73	115	-85%	-413	(4.4%)
16 Kentucky	1.3%	1.0%	772	+58	108	+15	116	-91%	37	0.9%
17 Virginia	2.6%	2.6%	771	-334	84	-22	106	-91%	-148	(2.2%)
18 Indiana	2.0%	1.8%	771	-67	131	+14	150	-89%	12	0.2%
19 Oregon	1.3%	1.2%	734	+15	159	-8	149	-61%	17	0.3%
20 Wisconsin	1.8%	1.6%	721	-94	84	-6	172	-93%	-6	(0.1%)
21 Arizona	2.2%	1.7%	701	+19	78	-18	121	-95%	0	0.0%
22 Georgia	3.2%	2.9%	690	-97	61	-8	114	-93%	-54	(0.9%)
23 Tennessee	2.1%	1.8%	542	-645	124	-32	137	-92%	-1	(0.0%)
24 Maryland	1.8%	2.0%	501	-176	92	-26	114	-85%	-186	(3.4%)
25 Nevada	0.9%	0.8%	476	+71	138	+3	115	-86%	58	2.2%
26 Puerto Rico	1.0%	0.5%	465	-251	158	+14	136	-55%	-175	(5.6%)
27 South Carolina	1.6%	1.1%	427	-14	108	-4	114	-92%	-102	(1.9%)
28 Maine	0.4%	0.3%	417	-8	221	+19	109	-64%	7	0.3%

States:

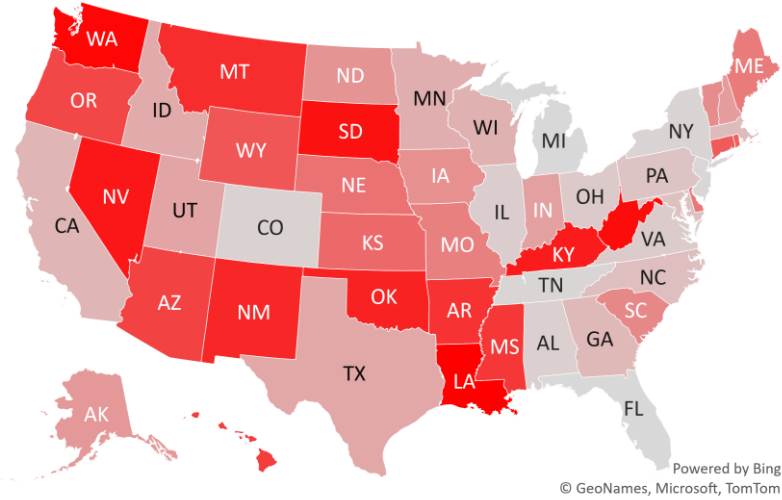
29 Connecticut	1.1%	1.3%	417	+10	162	-79	111	-88%	-101	(2.8%)
30 West Virginia	0.5%	0.4%	344	+167	196	+51	121	-82%	-10	(0.4%)
31 Missouri	1.8%	1.5%	312	-10	73	+32	171	-91%	12	0.3%
32 Rhode Island	0.3%	0.3%	260	+0	234	-48	150	-85%	-6	(0.4%)
33 Utah	1.0%	0.9%	259	-68	80	-9	116	-94%	6	0.2%
34 Nebraska	0.6%	0.6%	256	-2	77	-11	166	-95%	11	0.8%
35 South Dakota	0.3%	0.3%	229	+81	118	+27	171	-94%	0	0.0%
36 Iowa	1.0%	0.9%	227	-31	70	+19	172	-95%	11	0.6%
37 Montana	0.3%	0.2%	223	+47	103	+28	170	-92%	15	1.5%
38 Idaho	0.5%	0.4%	209	-80	108	-47	145	-91%	11	0.9%
39 New Hampshire	0.4%	0.4%	208	-60	135	-27	120	-83%	-1	(0.1%)
40 Mississippi	0.9%	0.6%	208	+36	79	-11	115	-92%	11	0.8%
41 New Mexico	0.6%	0.5%	204	+51	134	+11	165	-91%	8	0.5%
42 Arkansas	0.9%	0.6%	174	+39	35	+8	114	-96%	35	3.6%
43 Oklahoma	1.2%	1.0%	169	+54	62	-9	114	-95%	-13	(0.8%)
44 North Dakota	0.2%	0.3%	149	-40	119	-30	171	-95%	5	0.5%
45 Delaware	0.3%	0.4%	137	-7	200	-32	115	-79%	-24	(1.5%)
46 Alaska	0.2%	0.3%	84	-46	161	-98	150	-85%	20	2.4%
47 District of Columbia	0.2%	0.7%	83	-10	88	-31	114	-82%	-16	(3.1%)
48 Hawaii	0.4%	0.5%	78	+28	62	+6	248	-70%	8	1.2%
49 Wyoming	0.2%	0.2%	77	+12	130	+22	166	-92%	15	3.1%
50 Vermont	0.2%	0.2%	33	-25	85	-20	32	-75%	-2	(0.4%)
51 Guam	0.0%	0.0%	15	+15	80	+80	175	-93%	3	3.2%
52 U.S. Virgin Islands	0.0%	0.0%	14	+14	184	+184	37	-58%	0	0.0%
53 Northern Mariana	0.0%	0.0%	0	+0	0	+0	189	-100%	0	0.0%
54 Kansas	0.9%	0.8%	0	+0	59	+3	160	-96%	24	1.3%
55 American Samoa	0.0%	0.0%	0	+0	0	+0	0	0%	0	
56 Alabama	1.5%	1.1%	0	-359	32	-23	117	-97%	10	0.5%

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

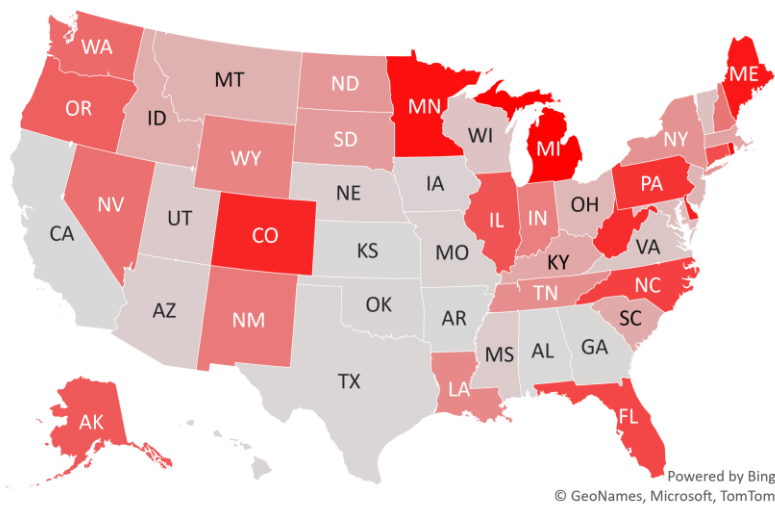
Daily Case Increases



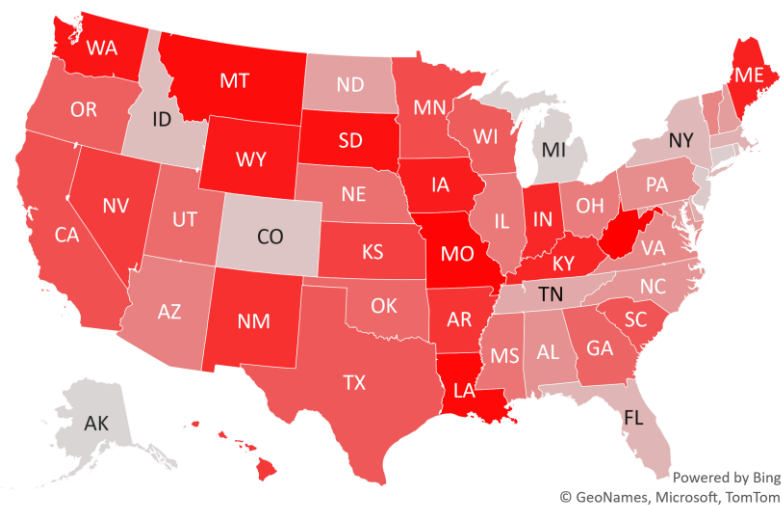
7D Delta in Daily New Cases



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



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



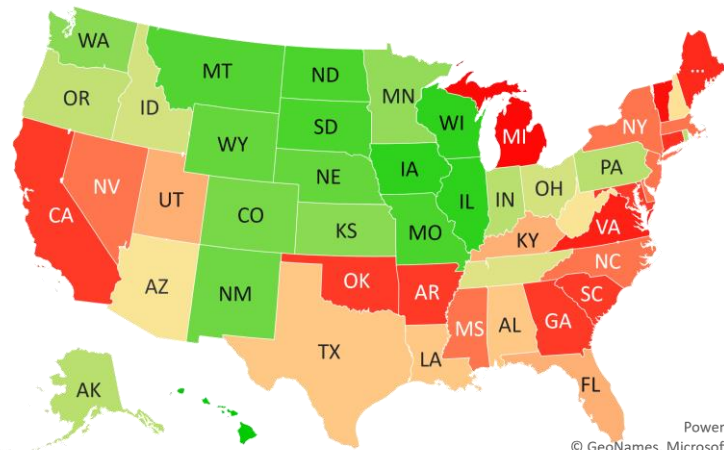
#6: # of Days since Daily Case Peaked by States...

Days since Daily Cases (3D Avg) Peak (as of 5/4)

	Sorted			
	Peak Date	5/4/21	% off the Peak	% US Pop
United States	1/9/21	115	-86%	100%
States:				
Hawaii	8/29/20	248	-70%	0.4%
Northern Mariana Island	10/27/20	189	-100%	0.0%
Guam	11/10/20	175	-93%	0.0%
Wisconsin	11/13/20	172	-93%	1.8%
Illinois	11/13/20	172	-85%	3.8%
Iowa	11/13/20	172	-95%	1.0%
South Dakota	11/14/20	171	-94%	0.3%
North Dakota	11/14/20	171	-95%	0.2%
Missouri	11/14/20	171	-91%	1.8%
Montana	11/15/20	170	-92%	0.3%
Wyoming	11/19/20	166	-92%	0.2%
Nebraska	11/19/20	166	-95%	0.6%
New Mexico	11/20/20	165	-91%	0.6%
Colorado	11/21/20	164	-81%	1.7%
Washington	11/25/20	160	-74%	2.3%
Kansas	11/25/20	160	-96%	0.9%
Minnesota	11/30/20	155	-84%	1.7%
Rhode Island	12/5/20	150	-85%	0.3%
Pennsylvania	12/5/20	150	-79%	3.9%
Indiana	12/5/20	150	-89%	2.0%
Alaska	12/5/20	150	-85%	0.2%
Oregon	12/6/20	149	-61%	1.3%
Ohio	12/10/20	145	-91%	3.5%
Idaho	12/10/20	145	-91%	0.5%
Tennessee	12/18/20	137	-92%	2.1%
Puerto Rico	12/19/20	136	-55%	1.0%
West Virginia	1/3/21	121	-82%	0.5%
Arizona	1/3/21	121	-95%	2.2%

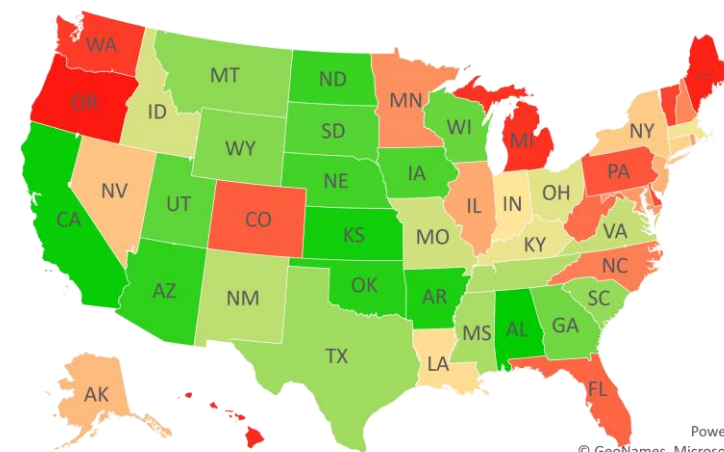
	Sorted			
	Peak Date	5/4/21	% off the Peak	% US Pop
United States	1/9/21	115	-86%	100%
States:				
New Hampshire	1/4/21	120	-83%	0.4%
Texas	1/7/21	117	-92%	8.7%
Louisiana	1/7/21	117	-89%	1.4%
Alabama	1/7/21	117	-97%	1.5%
Utah	1/8/21	116	-94%	1.0%
Kentucky	1/8/21	116	-91%	1.3%
Florida	1/8/21	116	-81%	6.5%
New York	1/9/21	115	-86%	5.9%
Nevada	1/9/21	115	-86%	0.9%
New Jersey	1/9/21	115	-85%	2.7%
North Carolina	1/9/21	115	-83%	3.2%
Mississippi	1/9/21	115	-92%	0.9%
Massachusetts	1/9/21	115	-90%	2.1%
Delaware	1/9/21	115	-79%	0.3%
South Carolina	1/10/21	114	-92%	1.6%
Oklahoma	1/10/21	114	-95%	1.2%
Maryland	1/10/21	114	-85%	1.8%
Georgia	1/10/21	114	-93%	3.2%
District of Columbia	1/10/21	114	-82%	0.2%
California	1/10/21	114	-97%	11.9%
Arkansas	1/10/21	114	-96%	0.9%
Connecticut	1/13/21	111	-88%	1.1%
Maine	1/15/21	109	-64%	0.4%
Virginia	1/18/21	106	-91%	2.6%
U.S. Virgin Islands	3/28/21	37	-58%	0.0%
Vermont	4/2/21	32	-75%	0.2%
Michigan	4/14/21	20	-71%	3.0%

Days since Daily Case Peak: Longer = Good



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Daily Cases % off the Peak: Larger Decline = Good



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

Sorted

7D Ago Last 3-day Trend

AL stats were not updated on Monday due to system upgrade and maintenance...

	4/27/21	5/2/21	5/3/21	5/4/21	vs 7D ago
United States	46,339	29,780	43,738	39,256	-7,083
States:					
Florida	5,271	3,841	3,075	3,682	
Texas	3,293	919	1,203	3,217	
Pennsylvania	3,333	2,653	1,728	3,133	
Michigan	3,676	0	5,035	2,527	
Illinois	2,556	1,860	2,049	2,211	
New York	2,704	2,849	2,200	2,173	
Colorado	2,015	961	956	1,519	
California	1,445	2,254	1,512	1,349	
Ohio	1,560	985	995	1,285	
Washington	924	0	2,137	1,206	<--higher
Minnesota	1,078	1,711	1,105	995	
Louisiana	433	0	769	983	<--higher
North Carolina	1,148	0	4,567	981	
Massachusetts	965	893	563	854	
New Jersey	1,874	1,021	864	784	
Kentucky	714	368	310	772	
Virginia	1,105	761	611	771	
Indiana	838	1,069	797	771	
Oregon	719	747	533	734	
Wisconsin	815	405	349	721	
Arizona	682	356	652	701	
Georgia	787	662	576	690	
Tennessee	1,187	0	2,006	542	
Maryland	677	649	520	501	
Nevada	405	0	801	476	
Puerto Rico	716	601	444	465	
South Carolina	441	717	521	427	
Maine	425	231	245	417	

Sorted

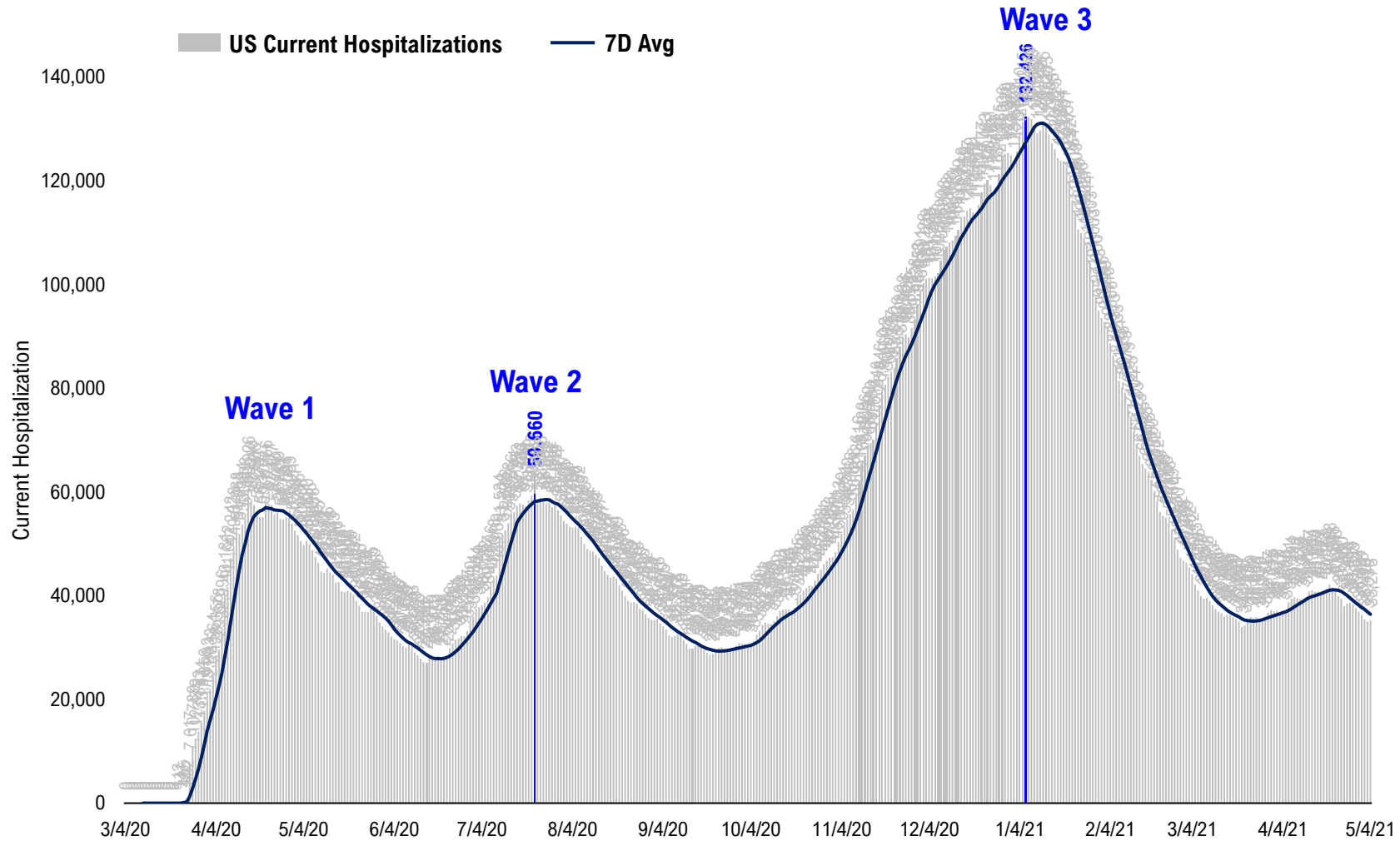
7D Ago Last 3-day Trend

AL stats were not updated on Monday due to system upgrade and maintenance...

	4/27/21	5/2/21	5/3/21	5/4/21	vs 7D ago
United States	46,339	29,780	43,738	39,256	-7,083
States:					
Connecticut	407	0	1,312	417	
West Virginia	177	420	289	344	<--higher
Missouri	322	811	225	312	
Rhode Island	260	0	483	260	
Utah	327	279	228	259	
Nebraska	258	95	98	256	
South Dakota	148	0	85	229	<--higher
Iowa	258	281	150	227	
Montana	176	45	62	223	<--higher
Idaho	289	120	248	209	
New Hampshire	268	214	129	208	
Mississippi	172	0	500	208	<--higher
New Mexico	153	0	639	204	<--higher
Arkansas	135	96	44	174	<--higher
Oklahoma	115	0	567	169	<--higher
North Dakota	189	69	55	149	
Delaware	144	288	158	137	
Alaska	130	0	269	84	
District of Columbia	93	55	48	83	
Hawaii	50	112	74	78	<--higher
Wyoming	65	0	148	77	
Vermont	58	94	32	33	
Guam	0	0	25	15	
U.S. Virgin Islands	0	0	45	14	
Northern Mariana Islands	0	0	0	0	
Kansas	0	0	515	0	
American Samoa	0	0	0	0	
Alabama	359	288	187	0	

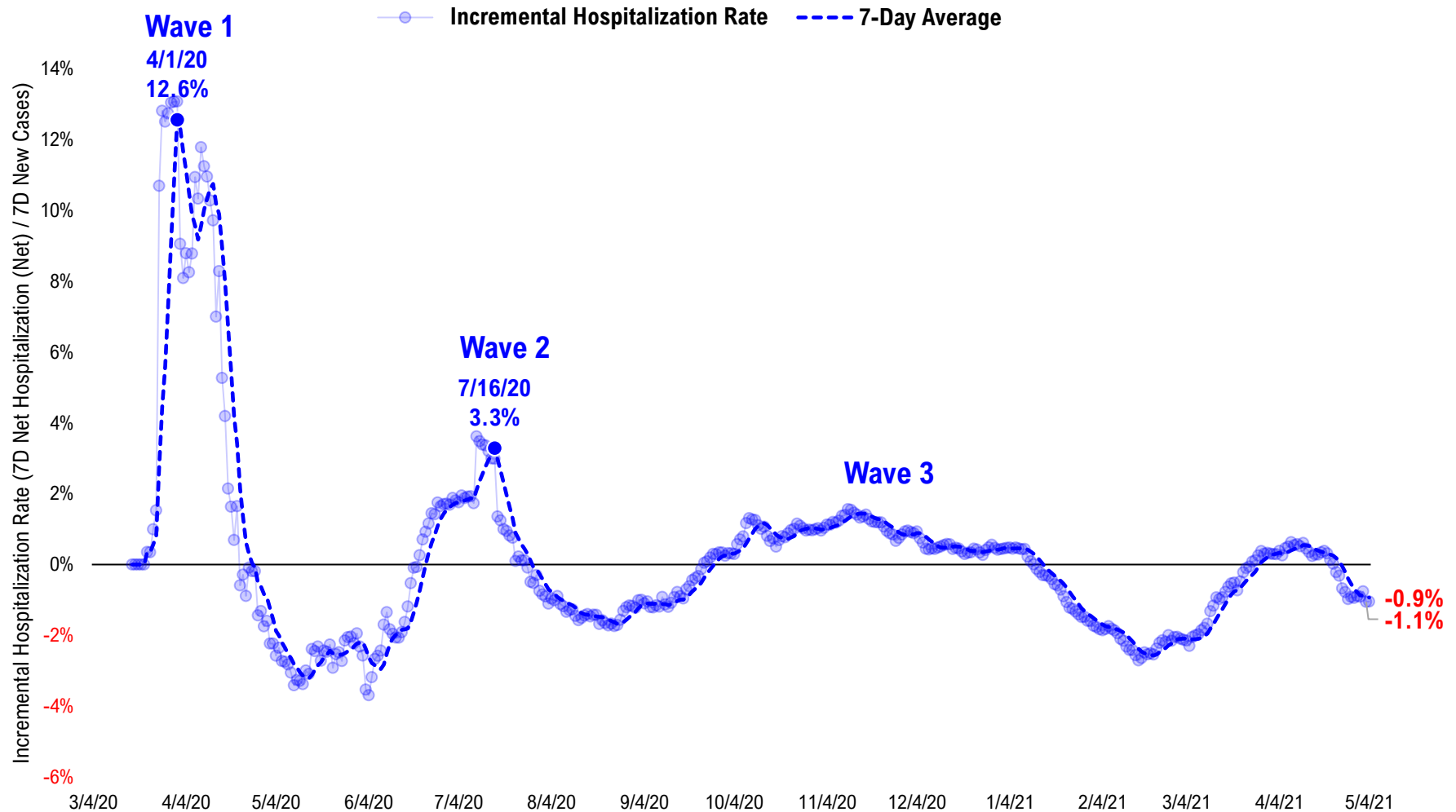
#8: US Daily Hospitalizations...

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



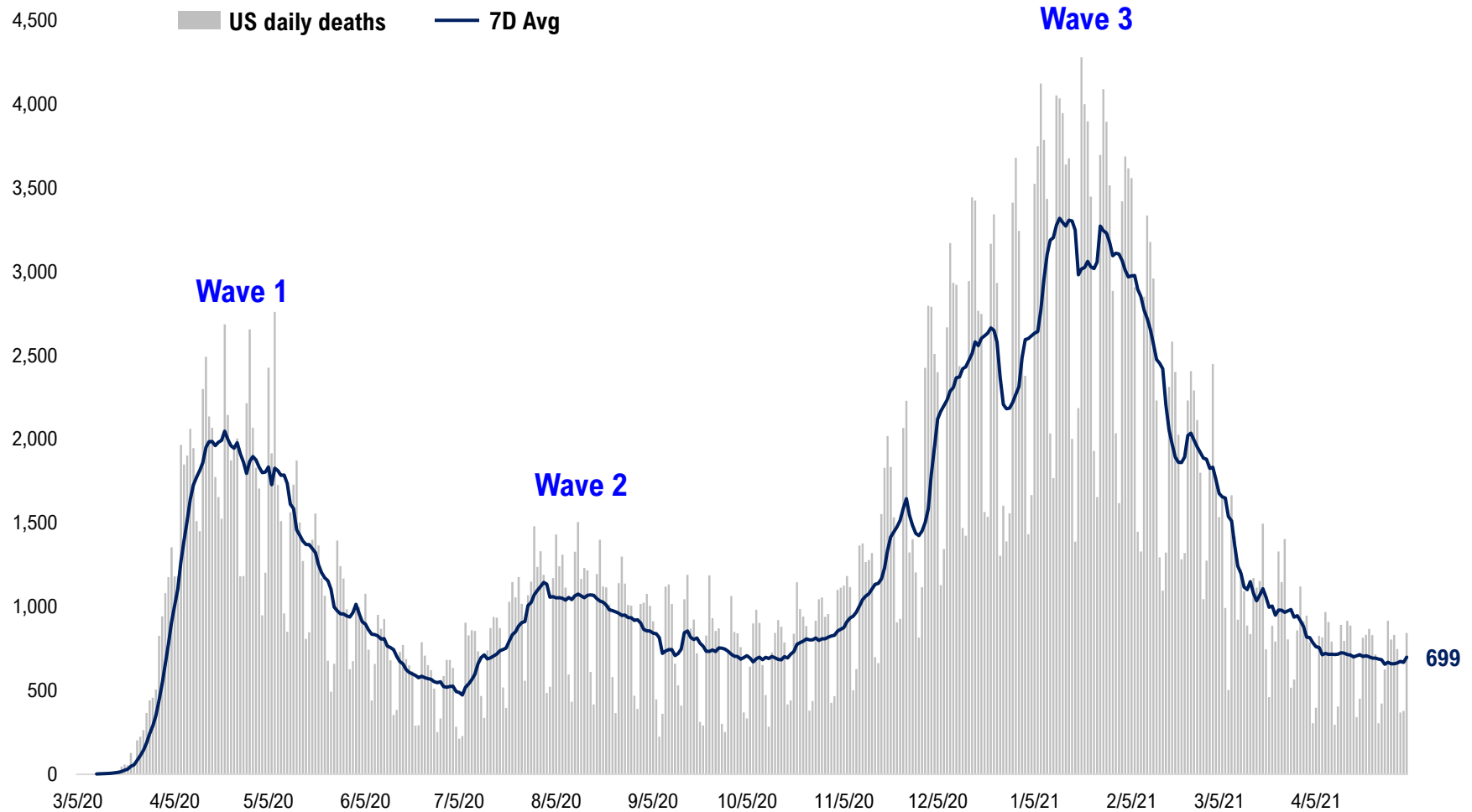
#9: Incremental Hospitalization Rate...

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

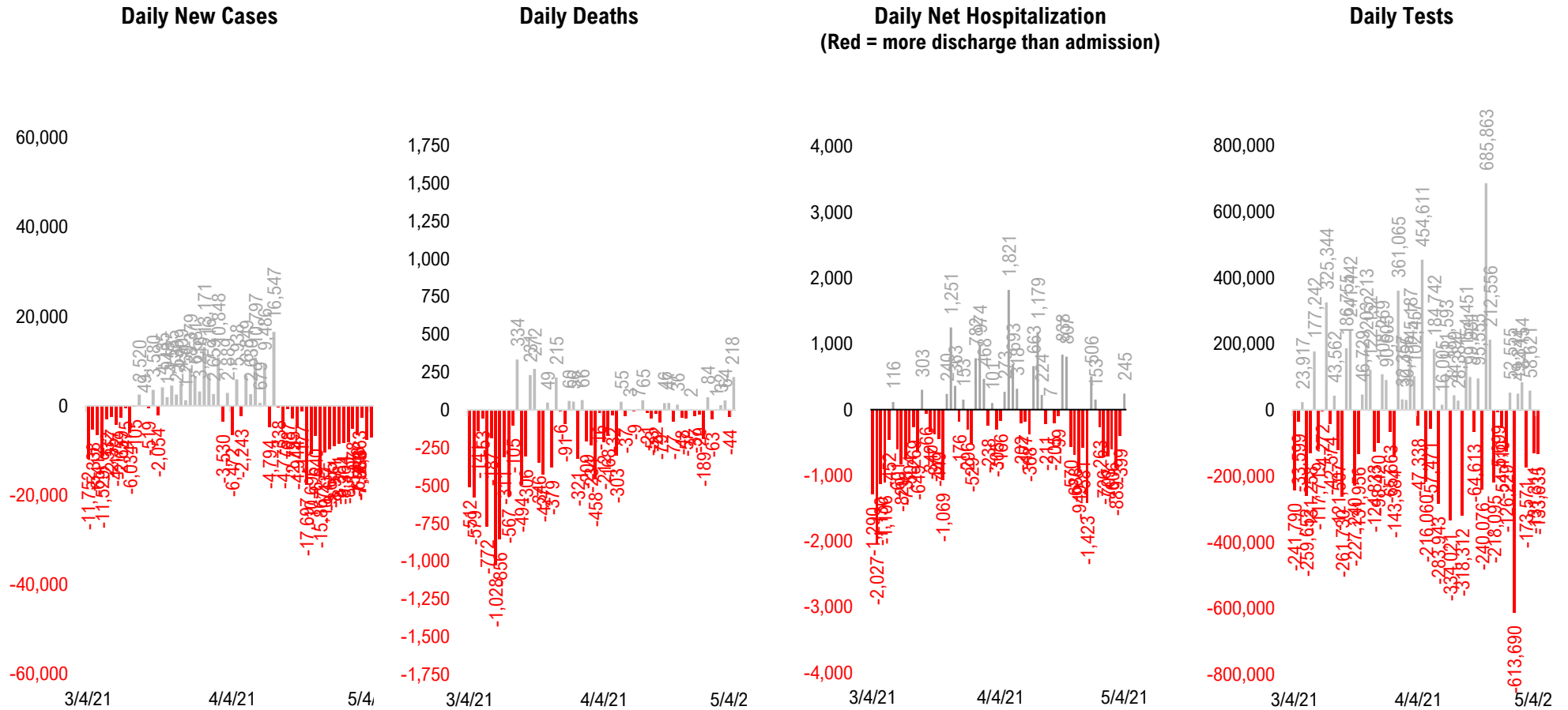


#10: US Daily New Fatalities...

US daily COVID-19 Fatalities

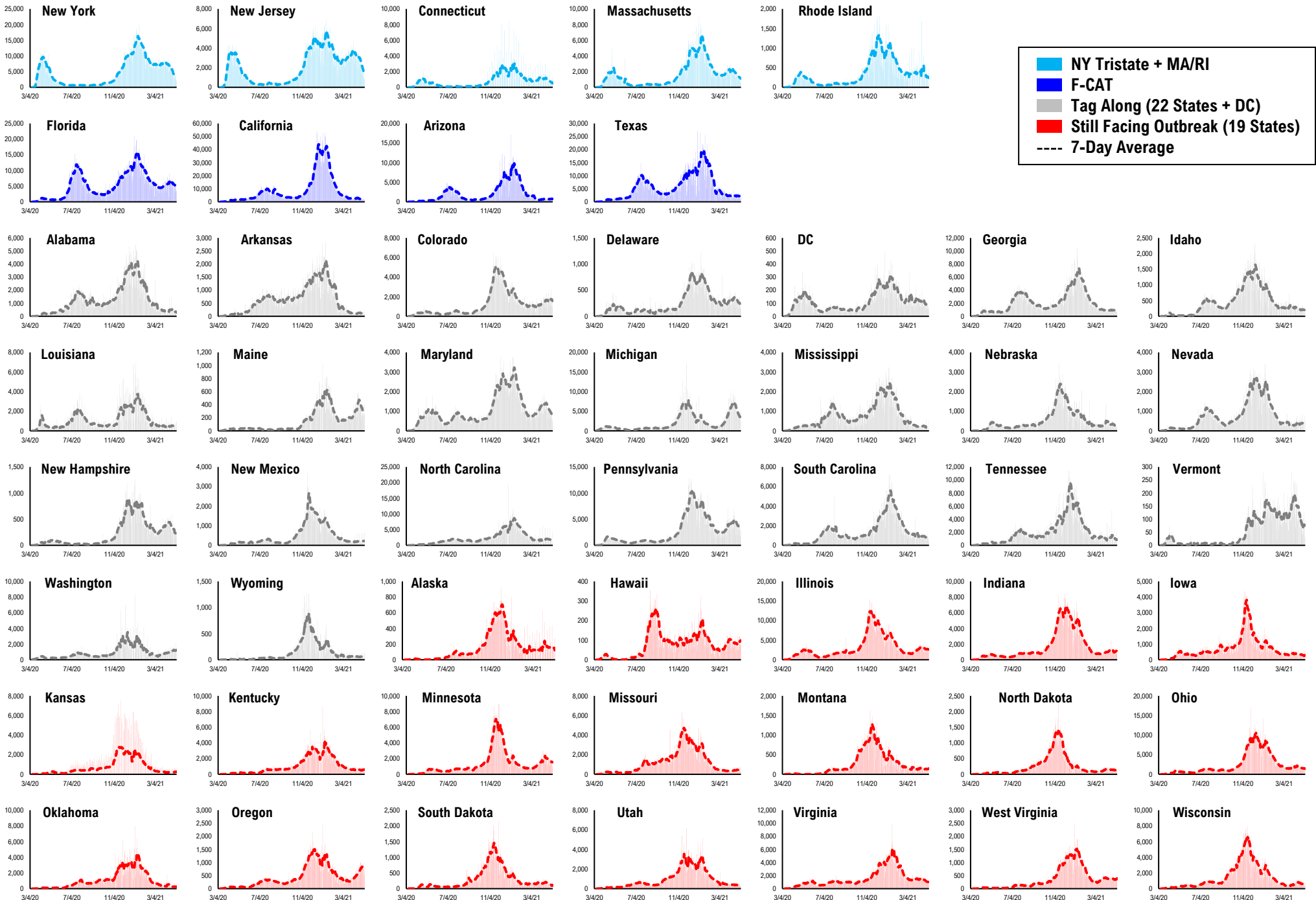


#11: Rolling 7-Day Change in the Key Metrics... (Past 8 Weeks)

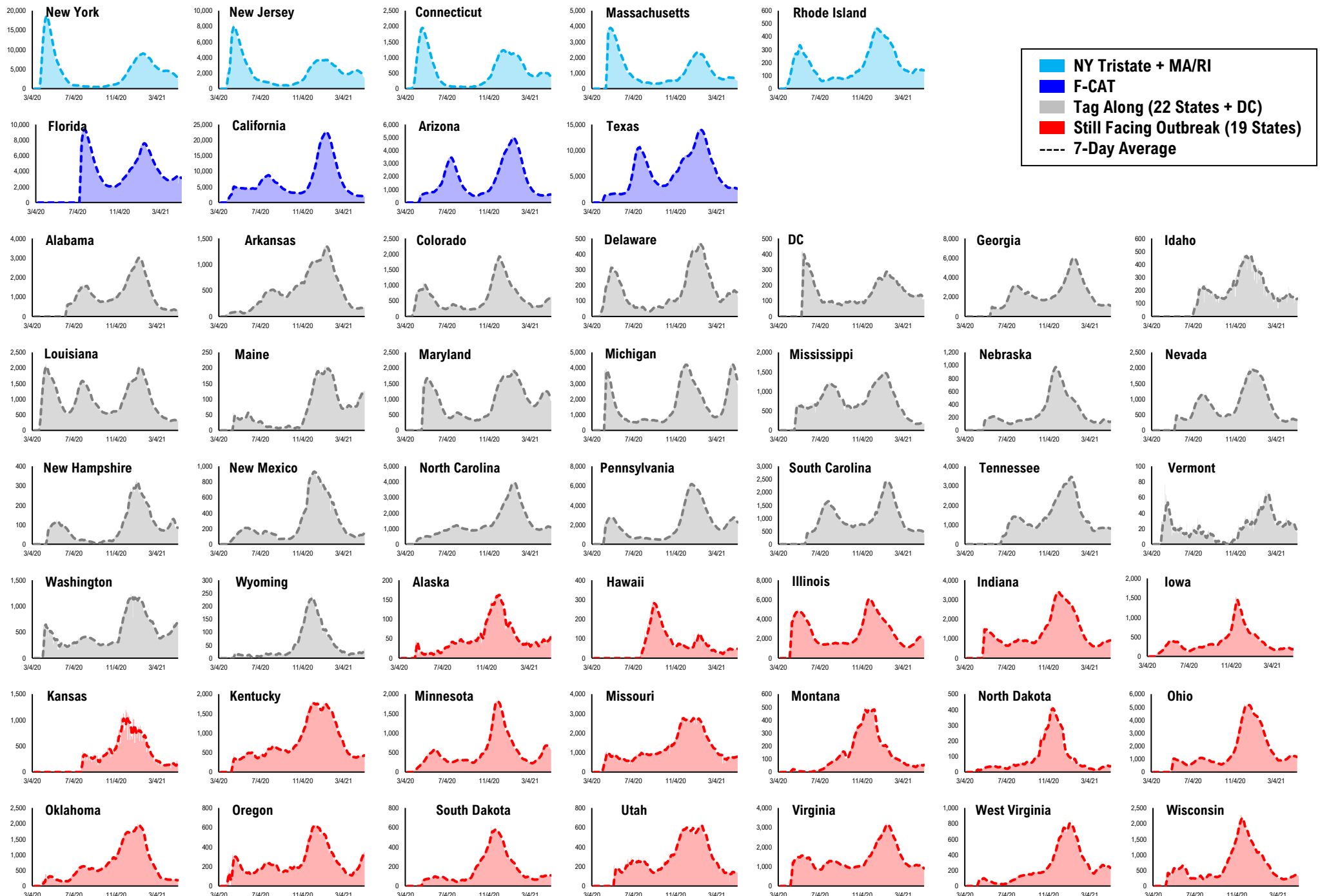


* Ignored California between 8/10 and 8/23, due to its data glitch caused 300,000-case backlog
Source: Fundstrat, COVID-19 Tracking Project, State Department of Health

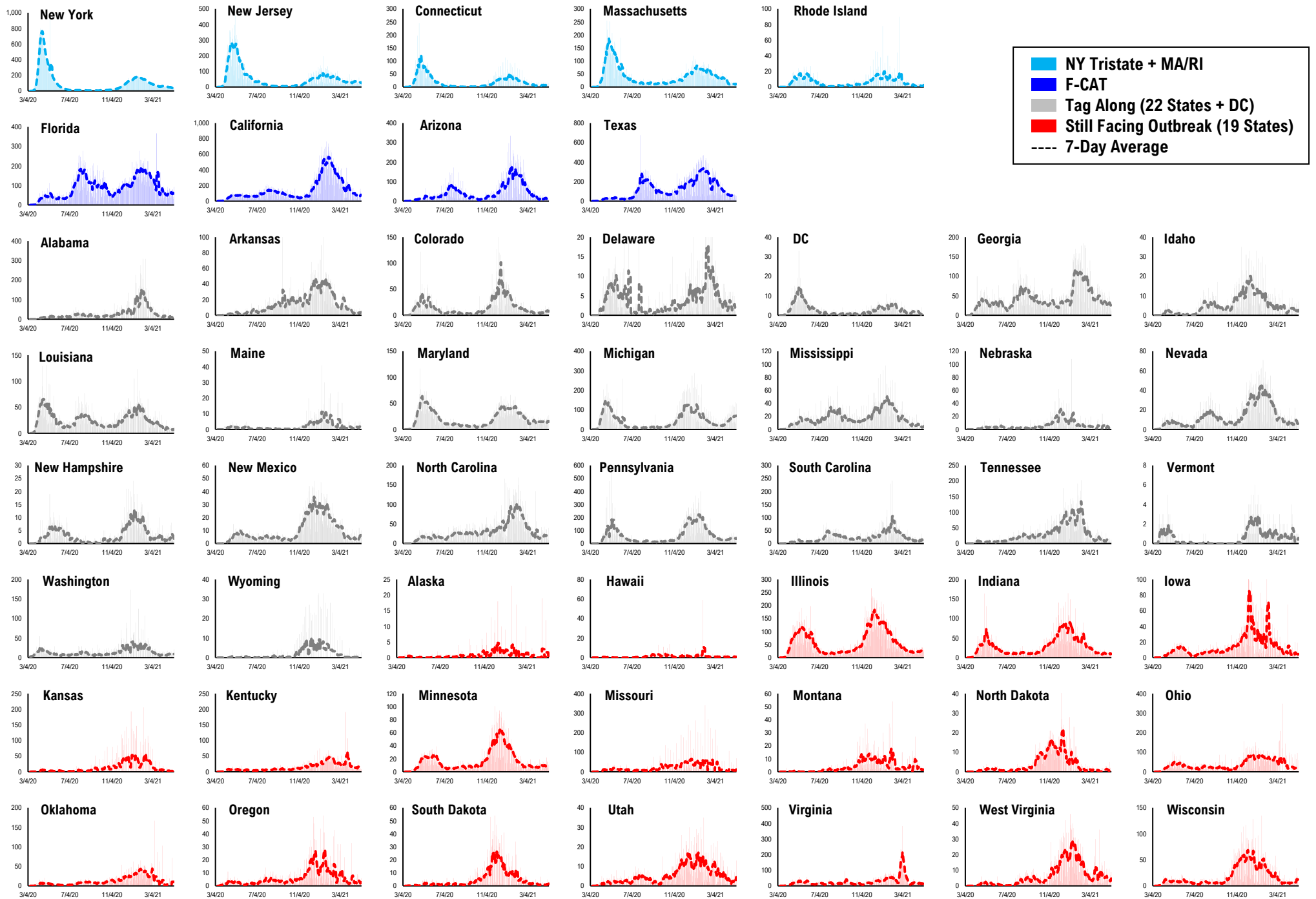
#12: Daily New Cases by States...



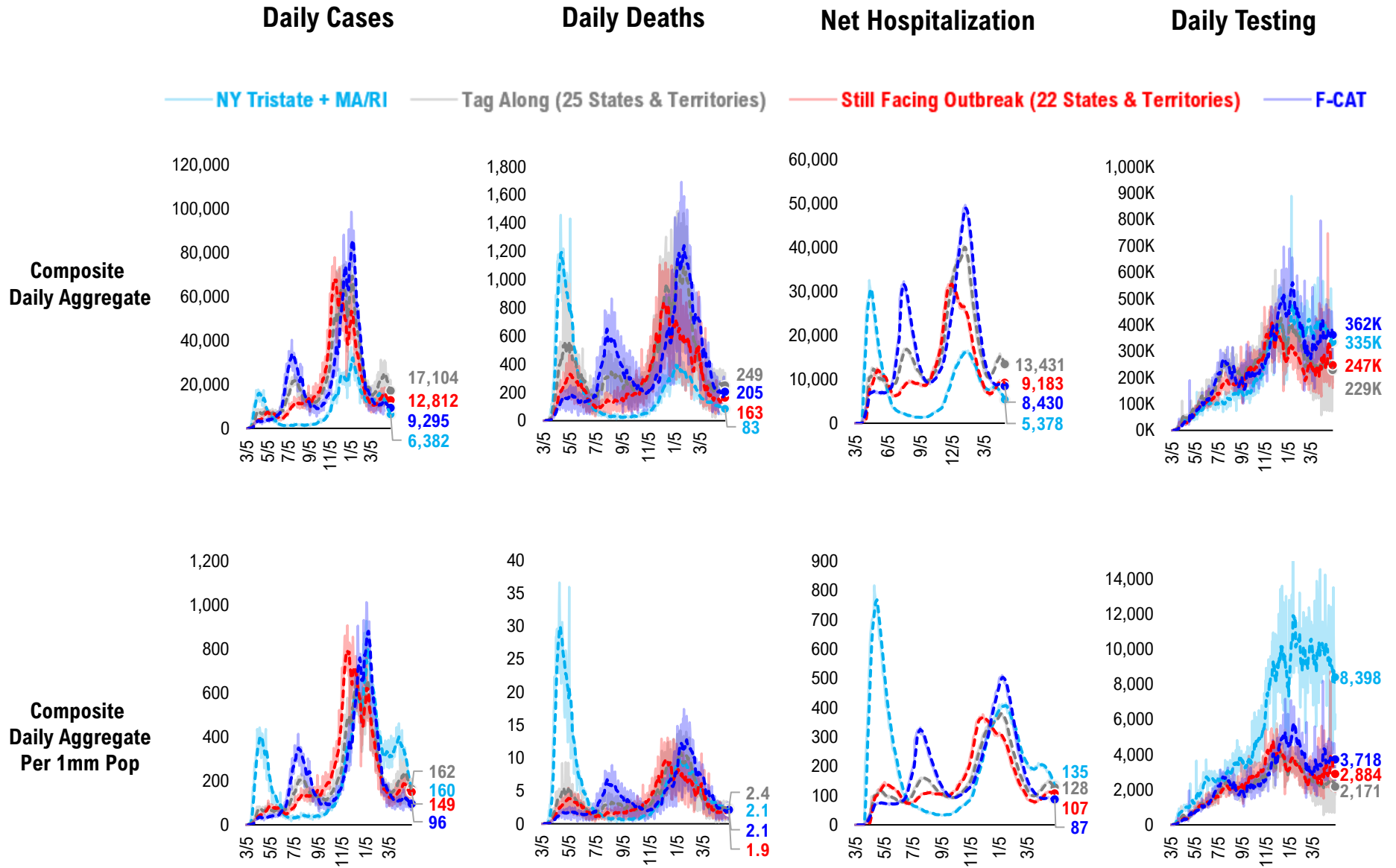
#13: Current Hospitalizations by States...



#14: Daily New Deaths by States...

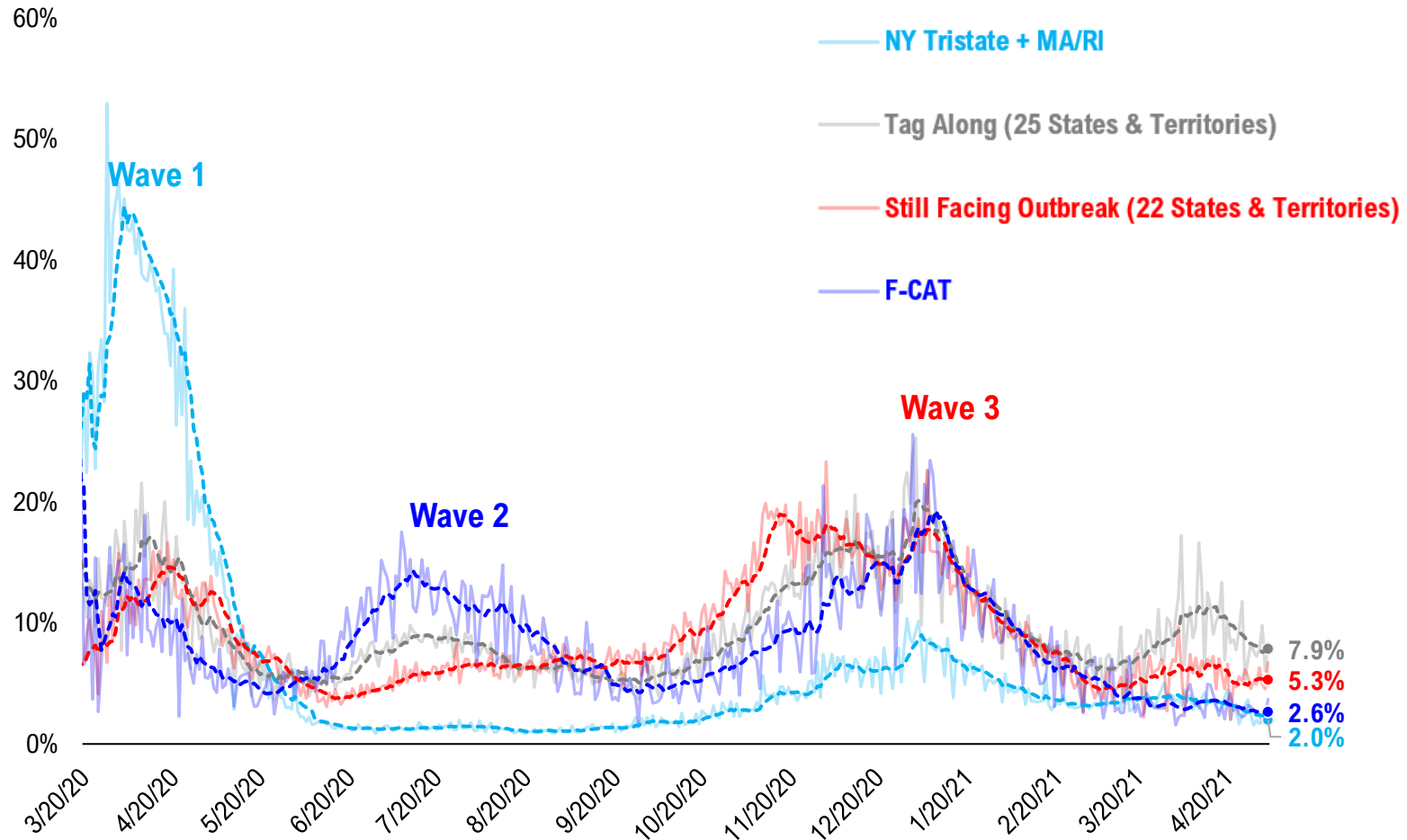


#15: State COVID-19 situation by Tier...

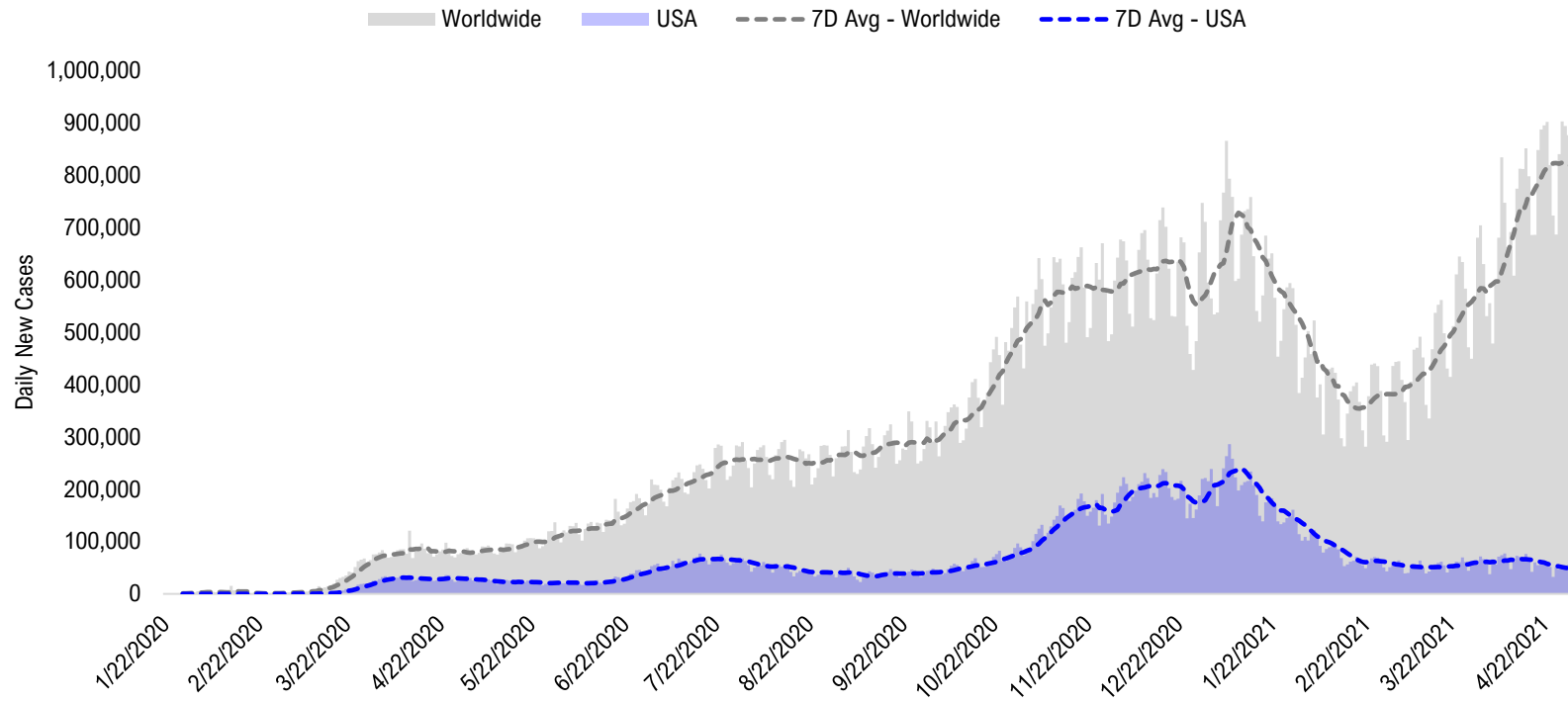


#16: State COVID-19 Daily Positivity Rate by Tier...

Composite Daily Positivity Rate



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



Dec 18	Jan 1	Jan 15	Jan 29	Feb 12	Feb 26	Mar 12	Mar 26	Apr 9	Apr 23	May 3
Europe 248,691	Europe 227,213	Europe 243,930	Europe 195,208	Europe 145,047	Europe 150,232	Europe 172,950	Europe 233,545	Europe 226,762	Pakistan + India + Bangladesh 307,379	Pakistan + India + Bangladesh 384,898
US + Canada 218,055	US + Canada 195,207	US + Canada 228,560	US + Canada 151,931	US + Canada 94,843	Latin America 90,697	Latin America 106,657	Latin America 121,448	Latin America 128,319	Europe 219,193	Europe 158,829
Latin America 85,354	Latin America 78,723	Latin America 118,406	Latin America 110,698	Latin America 87,199	US + Canada 65,753	US + Canada 54,551	US + Canada 59,138	Pakistan + India + Bangladesh 127,964	Latin America 134,173	Latin America 126,750
Pakistan + India + Bangladesh 29,698	Africa 23,274	Africa 31,292	Asia ex- India+Pakistan 26,451	Asia ex- India+Pakistan 19,467	Asia ex- India+Pakistan 16,429	Pakistan + India + Bangladesh 23,076	Pakistan + India + Bangladesh 57,373	US + Canada 71,402	US + Canada 65,809	US + Canada 54,571
Africa 17,772	Pakistan + India + Bangladesh 19,958	Asia ex- India+Pakistan 25,115	Africa 20,287	Pakistan + India + Bangladesh 12,778	Pakistan + India + Bangladesh 16,328	Asia ex- India+Pakistan 14,243	Asia ex- India+Pakistan 19,058	Asia ex- India+Pakistan 24,103	Asia ex- India+Pakistan 31,729	Asia ex- India+Pakistan 37,477
Asia ex- India+Pakistan 17,001	Asia ex- India+Pakistan 18,156	Pakistan + India + Bangladesh 21,782	Pakistan + India + Bangladesh 15,623	Africa 12,288	Africa 9,945	Africa 10,142	Africa 11,175	Africa 11,159	Africa 11,154	Africa 9,327

Disclosures

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