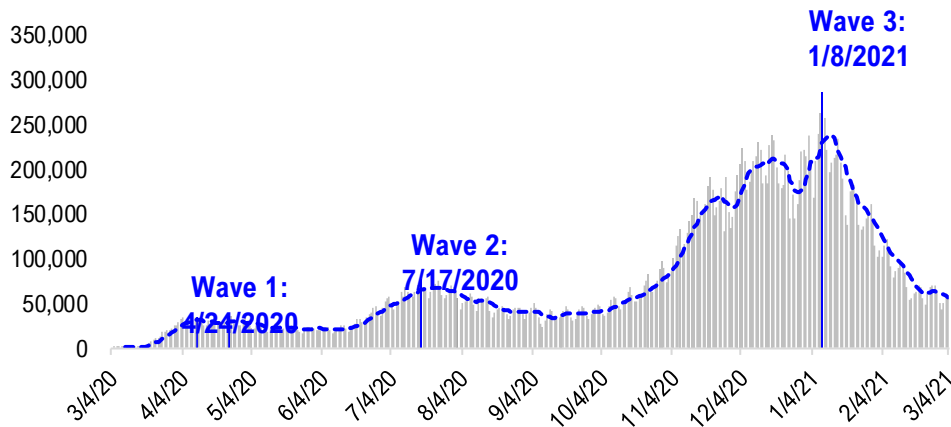


FSInsight Daily COVID-19 Chartbook

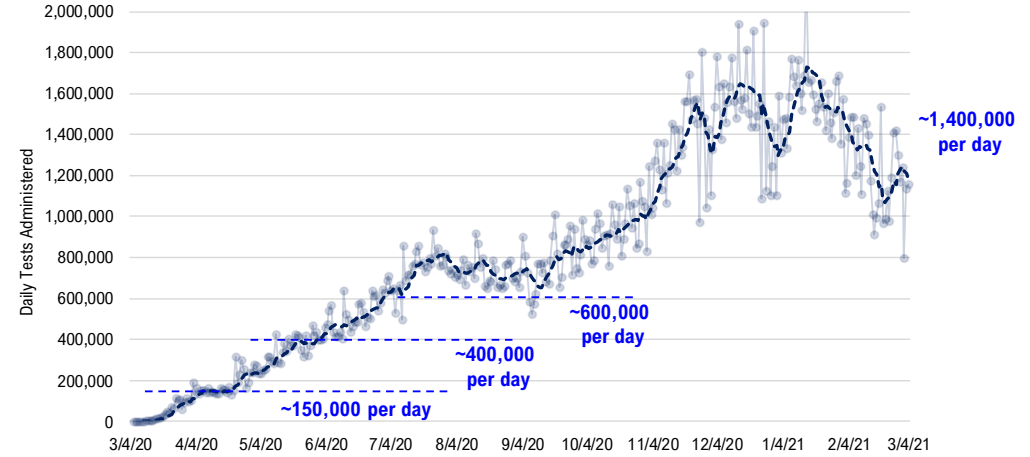


#1: USA COVID-19 Situation at a Glance...

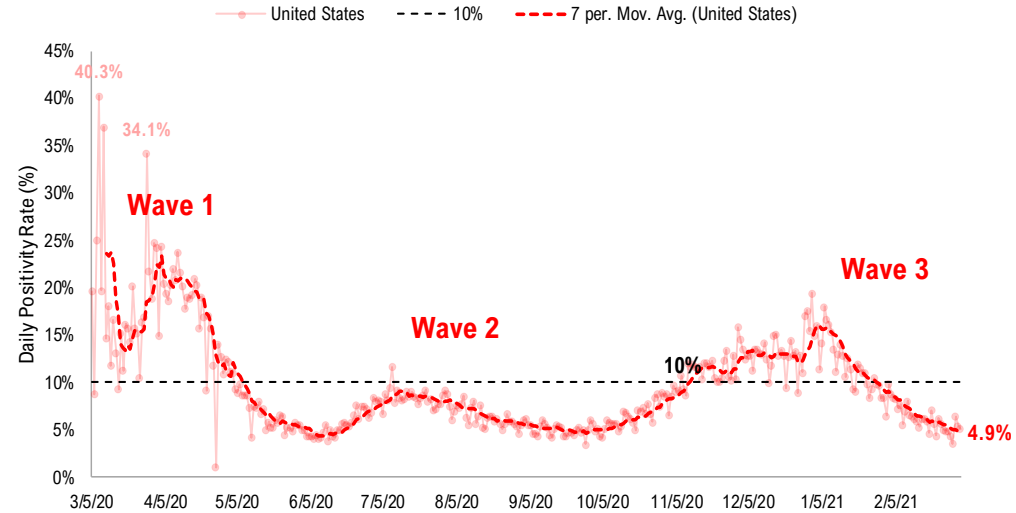
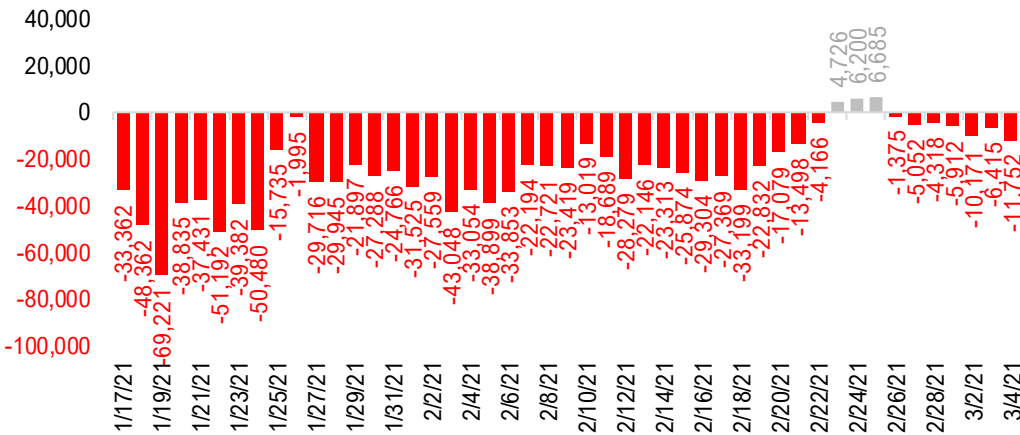
US daily new cases



USA total COVID-19 tests administered

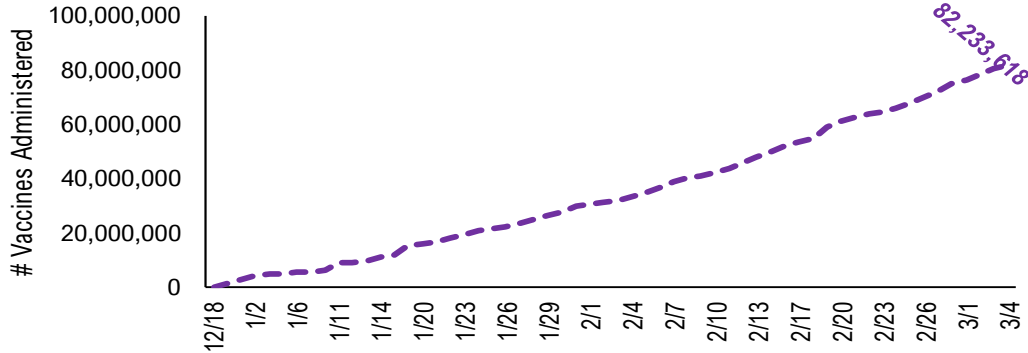


US daily new cases rolling 7D delta

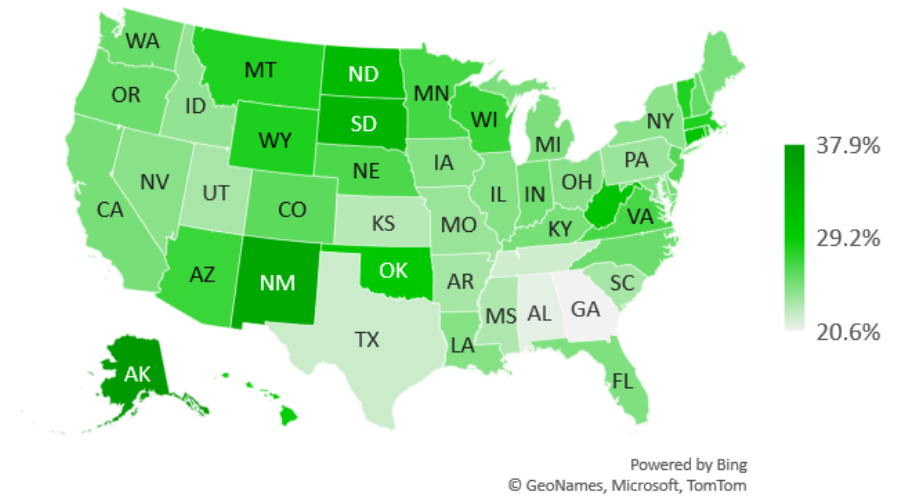


#2: USA COVID-19 Vaccination Progress at a Glance...

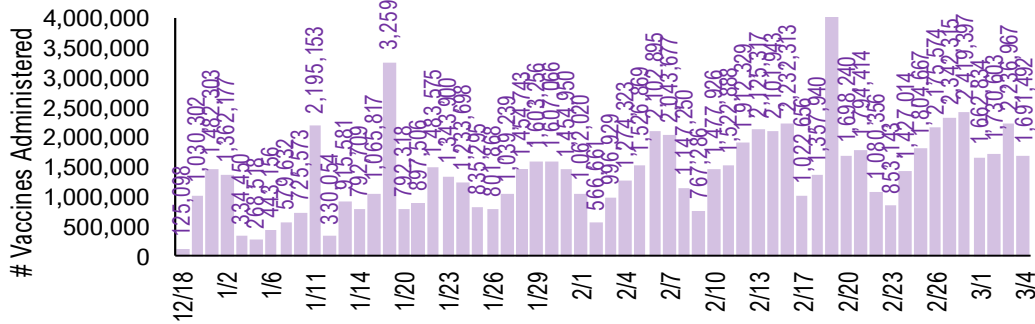
Cumulative Vaccines Administered



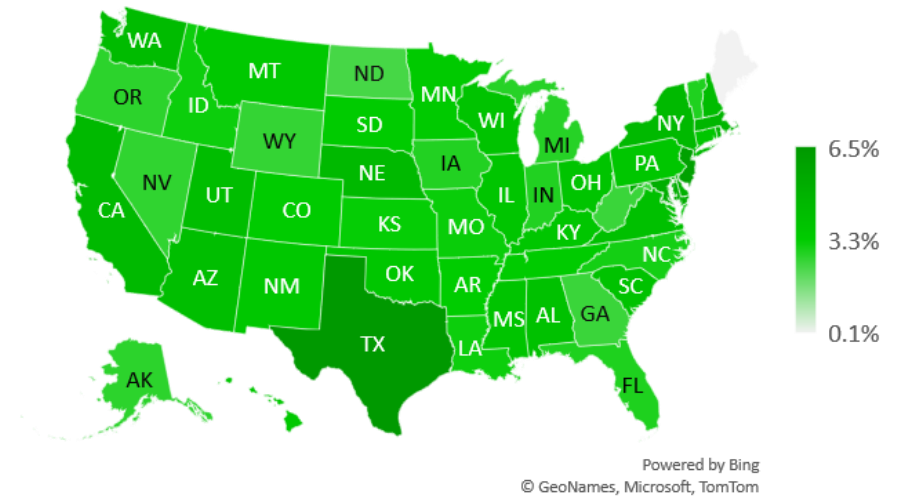
Cumulative Vaccines Administered as % State Population



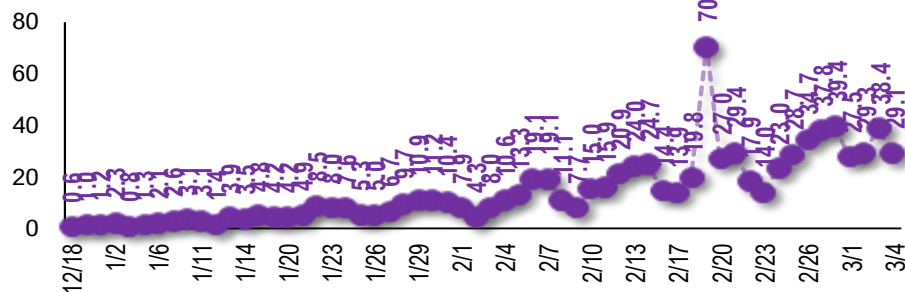
Daily Vaccines Administered



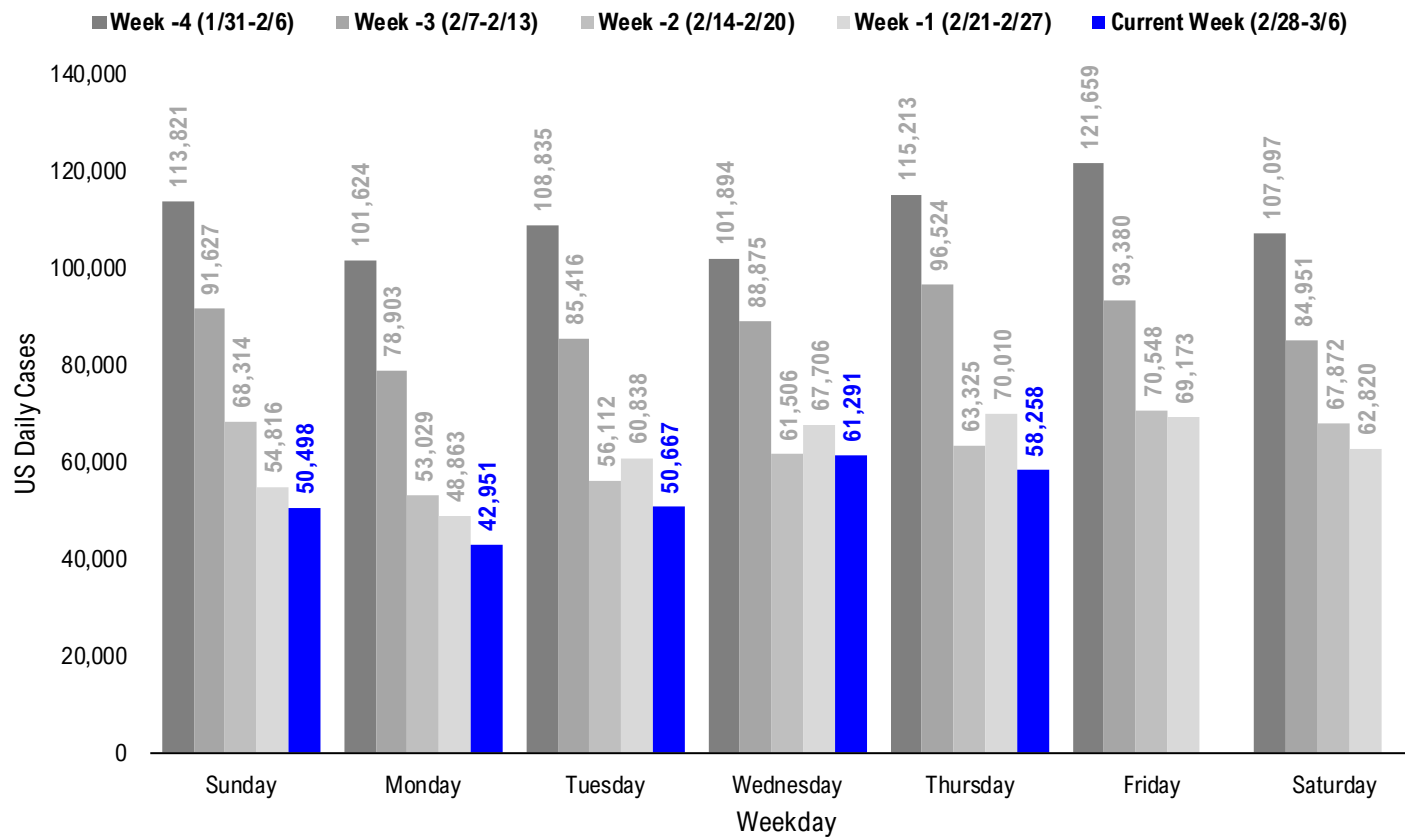
Implied Weekly Vaccines Administered as % State Population



Daily Vaccinations / Daily Cases (7D Avg)



#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	7D		Since Peak		% Decline in Daily Cases	7D Net Hospitalization		
			3/4	Delta	3/4	Delta		# Days	7D Net Hospitalization	7D Net Hospitalization / 7D New Cases
United States	100%	100%	58.258	-11,752	173	-29	54	-79%	-8,497	-2.1%

	Sorted Daily Cases		Daily Cases (3D avg) per 1mm residents				Hospitalization			
	% US Pop	% US GDP	7D		Since Peak		% Decline in Daily Cases	7D Net Hospitalization		
			3/4	Delta	3/4	Delta		# Days	7D Net Hospitalization	7D Net Hospitalization / 7D New Cases
United States	100%	100%	58.258	-11,752	173	-29	54	-79%	-8,497	-2.1%

States:

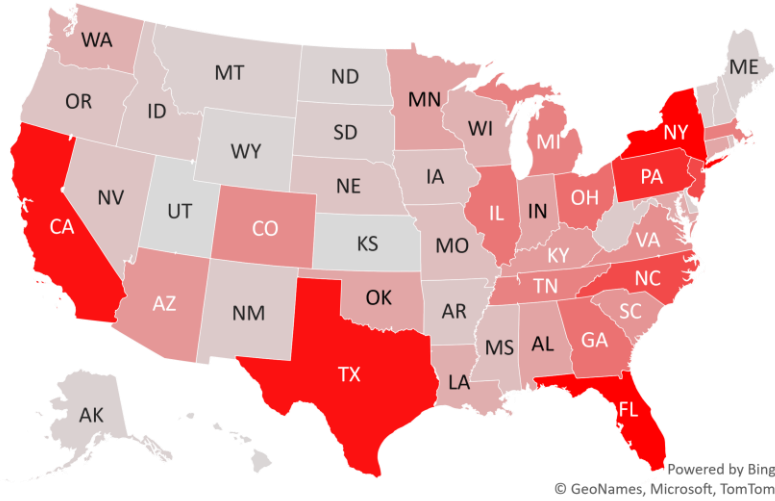
1 New York	5.9%	8.1%	7,593	-1,153	361	-8	54	-61%	-526	(1.0%)
2 Florida	6.5%	5.0%	6,118	-522	300	-1	55	-66%	-391	(1.0%)
3 California	11.9%	14.6%	3,504	-1,461	79	-36	53	-94%	-1,553	(5.5%)
4 Texas	8.7%	8.8%	3,493	-1,419	171	-30	56	-77%	-1,461	(4.8%)
5 Pennsylvania	3.9%	3.8%	3,028	+672	213	+5	89	-77%	-334	(1.8%)
6 New Jersey	2.7%	3.0%	2,539	-448	309	+7	54	-55%	-132	(0.7%)
7 North Carolina	3.2%	2.7%	2,502	-849	187	-74	54	-82%	-208	(1.4%)
8 Ohio	3.5%	3.3%	1,875	-534	160	-40	84	-84%	-253	(2.1%)
9 Georgia	3.2%	2.9%	1,796	-343	159	-45	53	-81%	-392	(3.2%)
10 Illinois	3.8%	4.2%	1,740	-144	143	-4	111	-87%	-263	(2.2%)
11 Massachusetts	2.1%	2.8%	1,567	-541	224	-40	54	-80%	-112	(1.0%)
12 Michigan	3.0%	2.6%	1,526	+138	138	+6	106	-84%	69	0.9%
13 Tennessee	2.1%	1.8%	1,514	-480	183	-53	76	-88%	-169	(2.0%)
14 Colorado	1.7%	1.8%	1,351	+232	184	-12	103	-82%	-57	(0.7%)
15 Virginia	2.6%	2.6%	1,300	-736	165	-58	45	-82%	-136	(1.3%)
16 South Carolina	1.6%	1.1%	1,193	-301	183	-69	53	-86%	-205	(2.3%)
17 Arizona	2.2%	1.7%	1,154	+215	151	-7	60	-91%	-313	(3.8%)
18 Kentucky	1.3%	1.0%	1,067	-376	247	-68	55	-78%	-198	(3.0%)
19 Minnesota	1.7%	1.8%	940	-46	127	-6	94	-91%	-36	(0.6%)
20 Indiana	2.0%	1.8%	935	-149	111	-27	89	-91%	-197	(3.7%)
21 Alabama	1.5%	1.1%	922	+32	293	+49	56	-72%	-178	(2.6%)
22 Oklahoma	1.2%	1.0%	895	-251	148	-46	53	-89%	-87	(1.9%)
23 Connecticut	1.1%	1.3%	878	-97	175	-182	50	-87%	-52	(1.0%)
24 Maryland	1.8%	2.0%	809	-167	114	-24	53	-81%	-96	(1.8%)
25 Louisiana	1.4%	1.3%	750	-29	151	-68	56	-87%	-125	(2.5%)
26 Washington	2.3%	2.7%	716	-272	86	-14	99	-85%	-73	(1.7%)
27 Wisconsin	1.8%	1.6%	677	-163	88	-35	111	-93%	-93	(2.5%)
28 Mississippi	0.9%	0.6%	479	-441	130	-87	54	-87%	-86	(2.6%)

States:

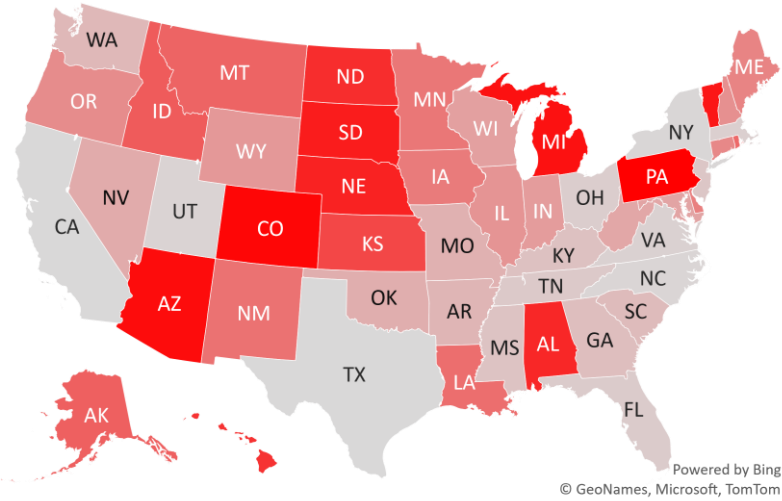
29 Missouri	1.8%	1.5%	467	-260	61	-33	110	-93%	-203	(2.7%)
30 Rhode Island	0.3%	0.3%	442	-25	358	-21	89	-77%	-15	(0.6%)
31 Iowa	1.0%	0.9%	400	-73	117	-20	111	-91%	-43	(1.7%)
32 Oregon	1.3%	1.2%	386	-106	70	-42	88	-83%	-26	(1.2%)
33 Nevada	0.9%	0.8%	385	-186	118	-43	54	-88%	-125	(5.1%)
34 Nebraska	0.6%	0.6%	365	+41	177	-6	105	-88%	-9	(0.5%)
35 Arkansas	0.9%	0.6%	306	-268	90	-70	53	-89%	-125	(6.5%)
36 Idaho	0.5%	0.4%	299	-7	210	+21	84	-82%	-4	(0.2%)
37 West Virginia	0.5%	0.4%	261	-170	117	-61	60	-89%	-89	(4.8%)
38 New Mexico	0.6%	0.5%	258	-41	137	-31	104	-91%	-68	(3.3%)
39 South Dakota	0.3%	0.3%	232	+76	224	-13	110	-89%	-13	(1.2%)
40 Delaware	0.3%	0.4%	218	-77	193	-51	54	-79%	-34	(1.8%)
41 Vermont	0.2%	0.2%	199	+127	215	+91	54	-36%	-3	(0.4%)
42 District of Columbia	0.2%	0.7%	196	+17	156	-17	53	-68%	-35	(3.9%)
43 New Hampshire	0.4%	0.4%	188	-122	145	-77	59	-82%	-5	(0.3%)
44 Montana	0.3%	0.2%	180	-23	165	-33	109	-87%	-2	(0.2%)
45 Alaska	0.2%	0.3%	140	-10	185	+12	89	-83%	-13	(1.5%)
46 Maine	0.4%	0.3%	136	-81	115	-14	48	-81%	2	0.2%
47 North Dakota	0.2%	0.3%	117	+27	145	+10	110	-94%	-3	(0.5%)
48 Puerto Rico	1.0%	0.5%	83	-2	24	-1	75	-93%	-13	(1.3%)
49 Wyoming	0.2%	0.2%	69	-145	123	-51	105	-93%	3	0.6%
50 Hawaii	0.4%	0.5%	59	+21	26	-6	187	-87%	-6	(1.8%)
51 U.S. Virgin Islands	0.0%	0.0%	9	-1	181	+44	195	-57%	0	0.0%
52 Guam	0.0%	0.0%	2	+1	20	+14	114	-98%	1	5.9%
53 Utah	1.0%	0.9%	0	-832	126	-119	55	-90%	-1	(0.0%)
54 Northern Mariana	0.0%	0.0%	0	+0	6	+6	128	-92%	0	0.0%
55 Kansas	0.9%	0.8%	0	+0	92	-36	99	-94%	-11	(0.5%)
56 American Samoa	0.0%	0.0%	0	+0	0	+0	0	0%	0	

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

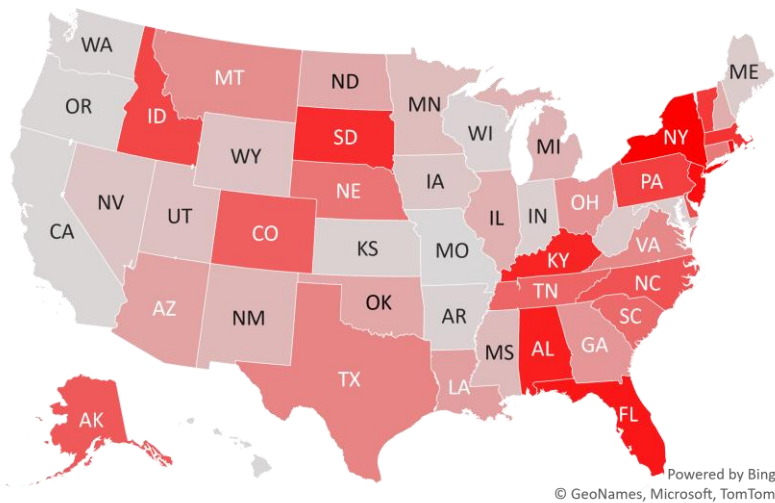
Daily Case Increases



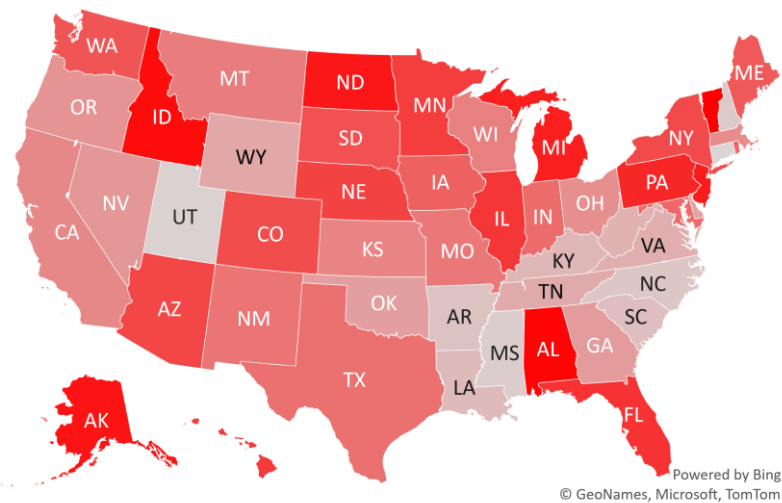
7D Delta in Daily New Cases



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



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



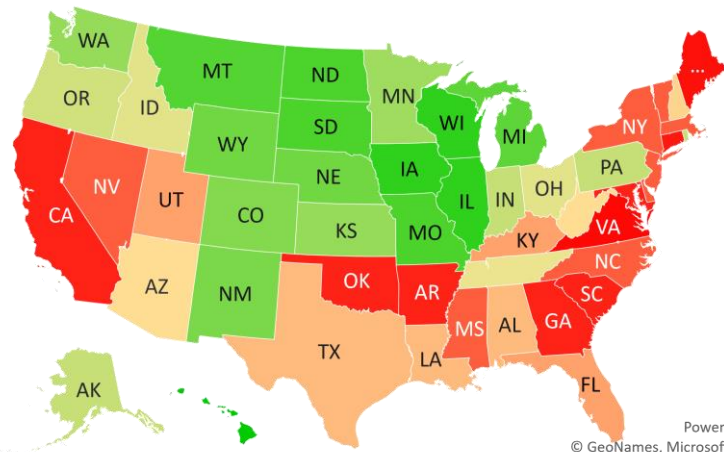
#6: # of Days since Daily Case Peaked by States...

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

Sorted				
	Peak Date	3/4/21	% off the Peak	% US Pop
United States	1/9/21	54	-79%	100%
States:				
U.S. Virgin Islands	8/21/20	195	-57%	0.0%
Hawaii	8/29/20	187	-87%	0.4%
Northern Mariana Island	10/27/20	128	-92%	0.0%
Guam	11/10/20	114	-98%	0.0%
Wisconsin	11/13/20	111	-93%	1.8%
Illinois	11/13/20	111	-87%	3.8%
Iowa	11/13/20	111	-91%	1.0%
South Dakota	11/14/20	110	-89%	0.3%
North Dakota	11/14/20	110	-94%	0.2%
Missouri	11/14/20	110	-93%	1.8%
Montana	11/15/20	109	-87%	0.3%
Michigan	11/18/20	106	-84%	3.0%
Wyoming	11/19/20	105	-93%	0.2%
Nebraska	11/19/20	105	-88%	0.6%
New Mexico	11/20/20	104	-91%	0.6%
Colorado	11/21/20	103	-82%	1.7%
Washington	11/25/20	99	-85%	2.3%
Kansas	11/25/20	99	-94%	0.9%
Minnesota	11/30/20	94	-91%	1.7%
Rhode Island	12/5/20	89	-77%	0.3%
Pennsylvania	12/5/20	89	-77%	3.9%
Indiana	12/5/20	89	-91%	2.0%
Alaska	12/5/20	89	-83%	0.2%
Oregon	12/6/20	88	-83%	1.3%
Ohio	12/10/20	84	-84%	3.5%
Idaho	12/10/20	84	-82%	0.5%
Tennessee	12/18/20	76	-88%	2.1%
Puerto Rico	12/19/20	75	-93%	1.0%

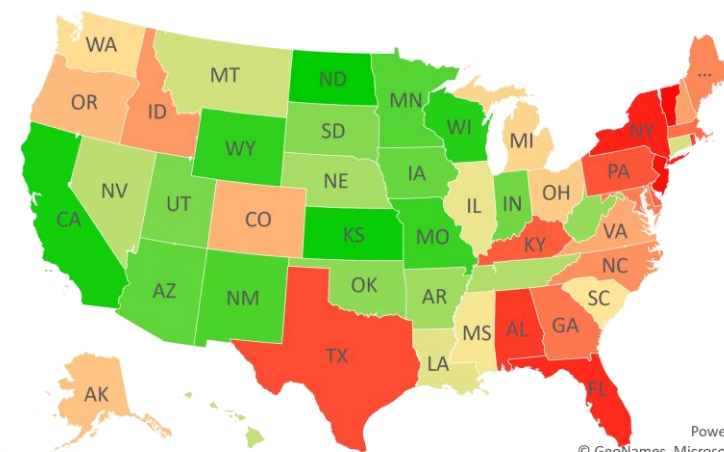
Sorted				
	Peak Date	3/4/21	% off the Peak	% US Pop
United States	1/9/21	54	-79%	100%
States:				
West Virginia	1/3/21	60	-89%	0.5%
Arizona	1/3/21	60	-91%	2.2%
New Hampshire	1/4/21	59	-82%	0.4%
Texas	1/7/21	56	-77%	8.7%
Louisiana	1/7/21	56	-87%	1.4%
Alabama	1/7/21	56	-72%	1.5%
Utah	1/8/21	55	-90%	1.0%
Kentucky	1/8/21	55	-78%	1.3%
Florida	1/8/21	55	-66%	6.5%
Vermont	1/9/21	54	-36%	0.2%
New York	1/9/21	54	-61%	5.9%
Nevada	1/9/21	54	-88%	0.9%
New Jersey	1/9/21	54	-55%	2.7%
North Carolina	1/9/21	54	-82%	3.2%
Mississippi	1/9/21	54	-87%	0.9%
Massachusetts	1/9/21	54	-80%	2.1%
Delaware	1/9/21	54	-79%	0.3%
South Carolina	1/10/21	53	-86%	1.6%
Oklahoma	1/10/21	53	-89%	1.2%
Maryland	1/10/21	53	-81%	1.8%
Georgia	1/10/21	53	-81%	3.2%
District of Columbia	1/10/21	53	-68%	0.2%
California	1/10/21	53	-94%	11.9%
Arkansas	1/10/21	53	-89%	0.9%
Connecticut	1/13/21	50	-87%	1.1%
Maine	1/15/21	48	-81%	0.4%
Virginia	1/18/21	45	-82%	2.6%

Days since Daily Case Peak: Longer = Good



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Daily Cases % off the Peak: Larger Decline = Good



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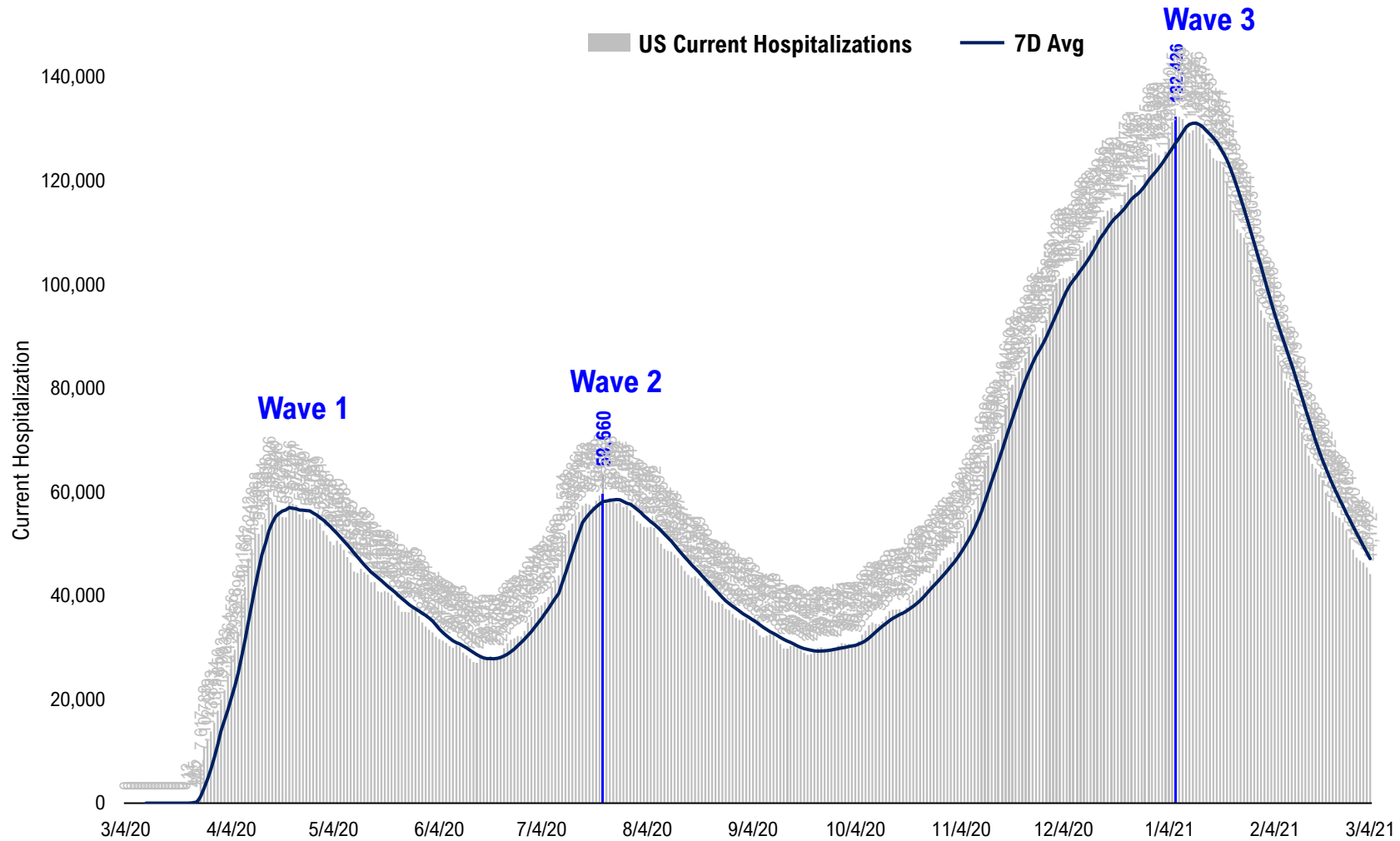
#7: US New Cases by States... (sorted by today's new cases)

	Sorted				
	7D Ago	Last 3-day Trend			
	2/25/21	3/2/21	3/3/21	3/4/21	vs 7D ago
United States	70,010	50,667	61,291	58,258	-11,752
States:					
New York	8,746	5,800	7,704	7,593	
Florida	6,640	7,179	6,014	6,118	
California	4,965	2,533	3,352	3,504	
Texas	4,912	6,613	4,781	3,493	
Pennsylvania	2,356	2,564	2,577	3,028	
New Jersey	2,987	2,737	2,947	2,539	
North Carolina	3,351	1,239	2,145	2,502	
Ohio	2,409	1,709	2,022	1,875	
Georgia	2,139	1,752	1,526	1,796	
Illinois	1,884	1,577	2,104	1,740	
Massachusetts	2,108	1,164	1,899	1,567	
Michigan	1,388	1,067	1,536	1,526	
Tennessee	1,994	644	1,598	1,514	
Colorado	1,119	776	1,055	1,351	<--higher
Virginia	2,036	1,385	1,549	1,300	
South Carolina	1,494	691	943	1,193	
Arizona	939	849	1,284	1,154	<--higher
Kentucky	1,443	1,075	1,172	1,067	
Minnesota	986	425	779	940	
Indiana	1,084	537	761	935	
Alabama	890	652	2,733	922	
Oklahoma	1,146	111	747	895	
Connecticut	975	502	494	878	
Maryland	976	468	786	809	
Louisiana	779	770	582	750	
Washington	988	606	636	716	
Wisconsin	840	324	539	677	
Mississippi	920	301	380	479	

	Sorted				
	7D Ago	Last 3-day Trend			
	2/25/21	3/2/21	3/3/21	3/4/21	vs 7D ago
United States	70,010	50,667	61,291	58,258	-11,752
States:					
Missouri	727	266	387	467	
Rhode Island	467	261	436	442	
Iowa	473	230	482	400	
Oregon	492	250	250	386	
Nevada	571	309	395	385	
Nebraska	324	400	262	365	
Arkansas	574	225	284	306	
Idaho	306	374	452	299	
West Virginia	431	136	232	261	
New Mexico	299	245	356	258	
South Dakota	156	182	181	232	<--higher
Delaware	295	113	232	218	
Vermont	72	88	115	199	<--higher
District of Columbia	179	83	51	196	
New Hampshire	310	215	187	188	
Montana	203	155	193	180	
Alaska	150	89	177	140	
Maine	217	182	147	136	
North Dakota	90	105	110	117	<--higher
Puerto Rico	85	126	22	83	
Wyoming	214	56	89	69	
Hawaii	38	35	17	59	<--higher
U.S. Virgin Islands	10	0	49	9	
Guam	1	5	3	2	<--higher
Utah	832	487	729	0	
Northern Mariana Islands	0	0	1	0	
Kansas	0	0	807	0	
American Samoa	0	0	0	0	

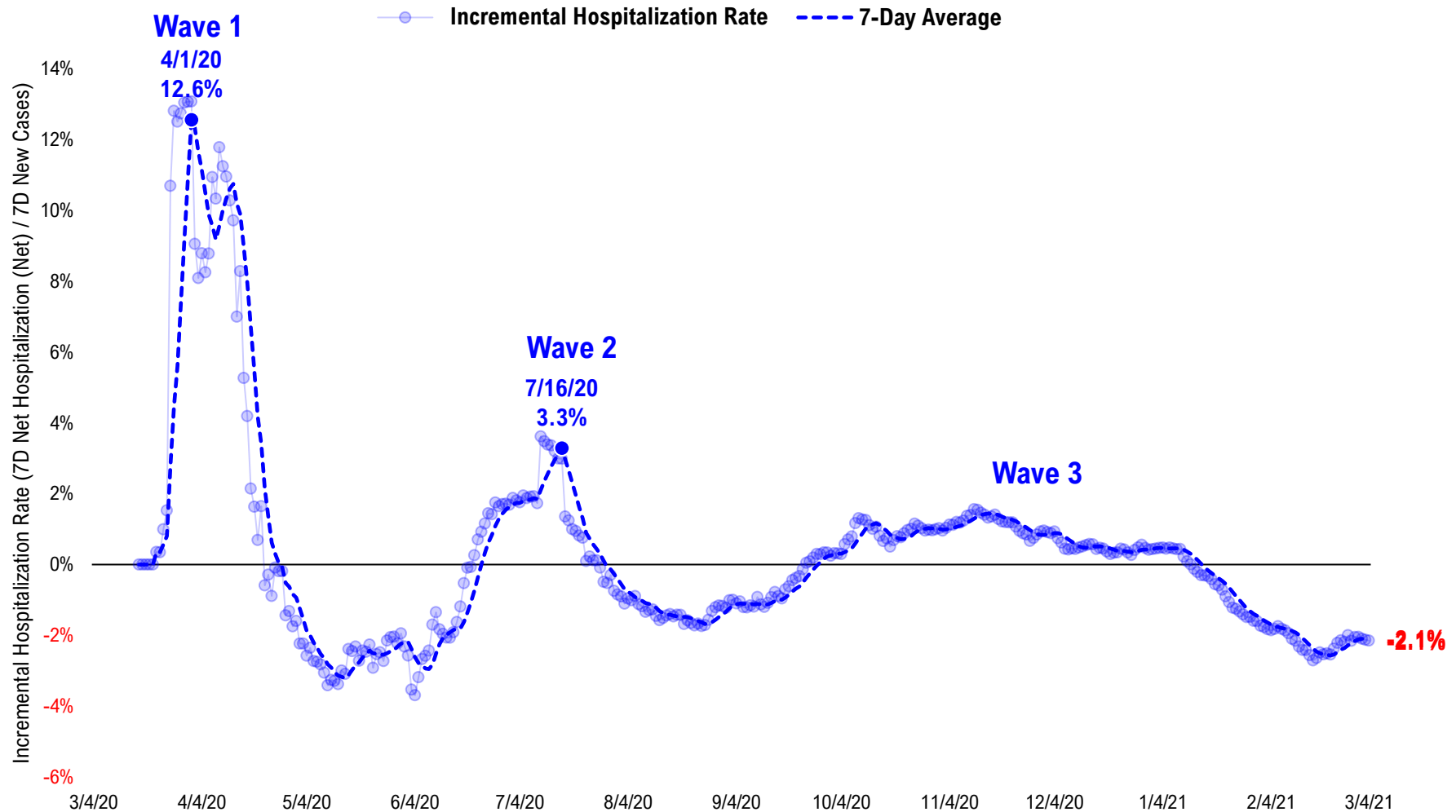
#8: US Daily Hospitalizations...

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



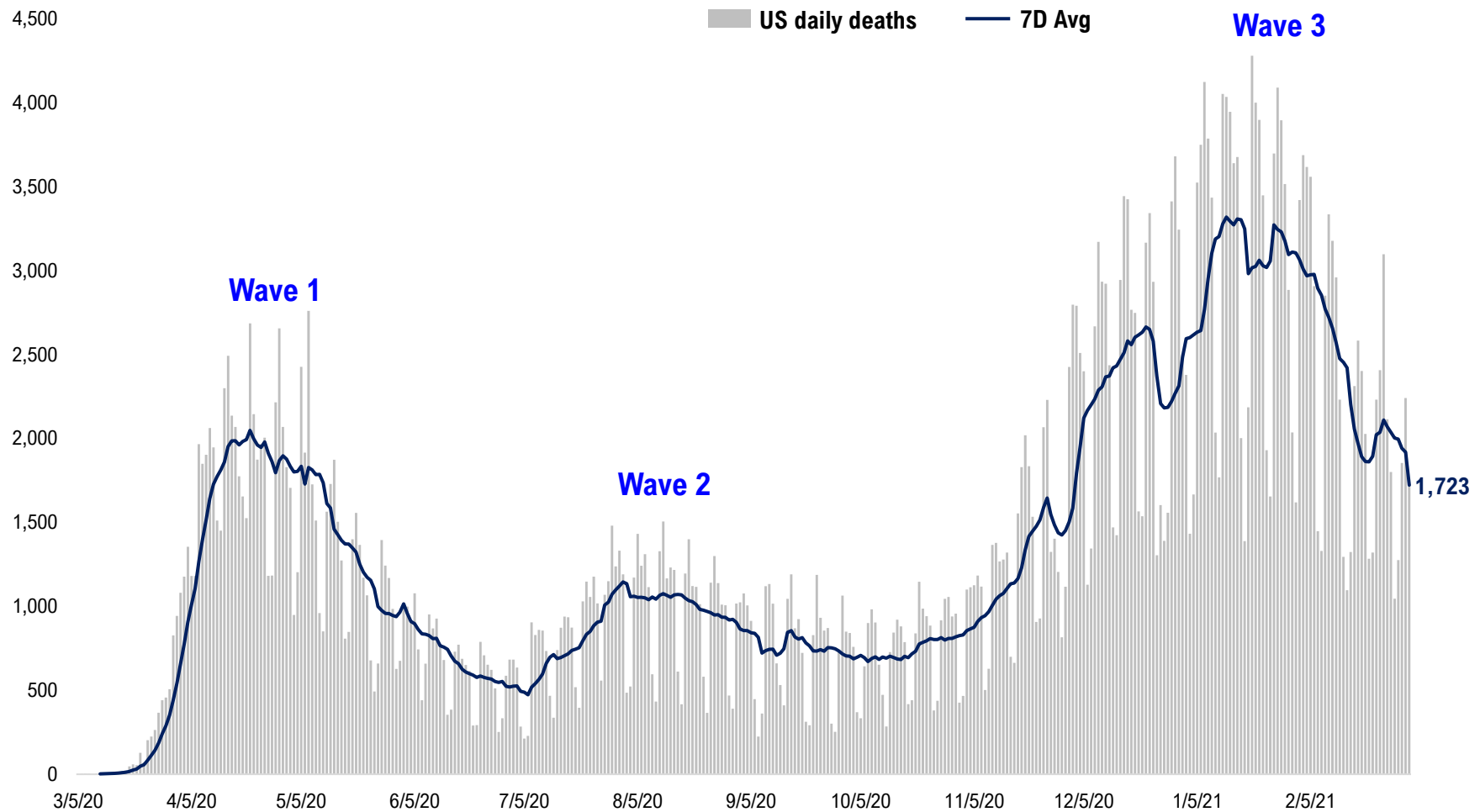
#9: Incremental Hospitalization Rate...

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



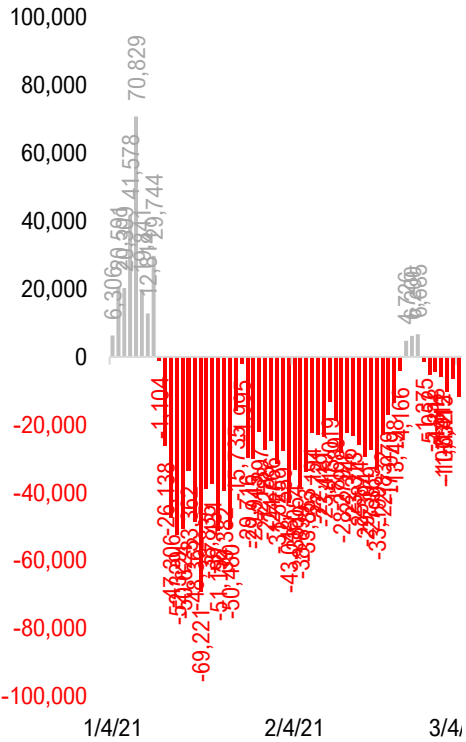
#10: US Daily New Fatalities...

US daily COVID-19 Fatalities

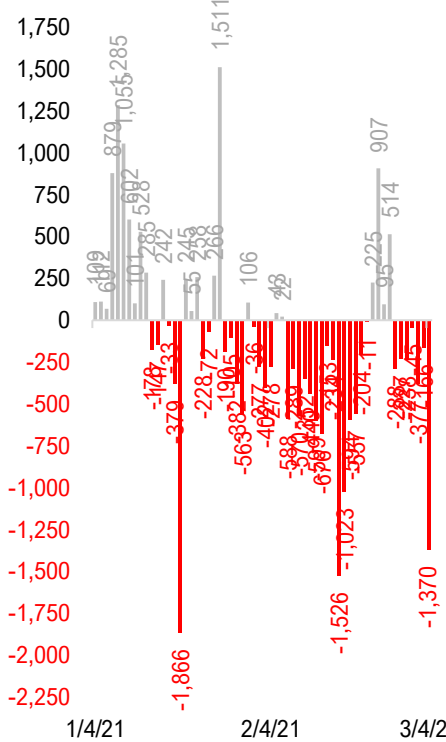


#11: Rolling 7-Day Change in the Key Metrics... (Past 8 Weeks)

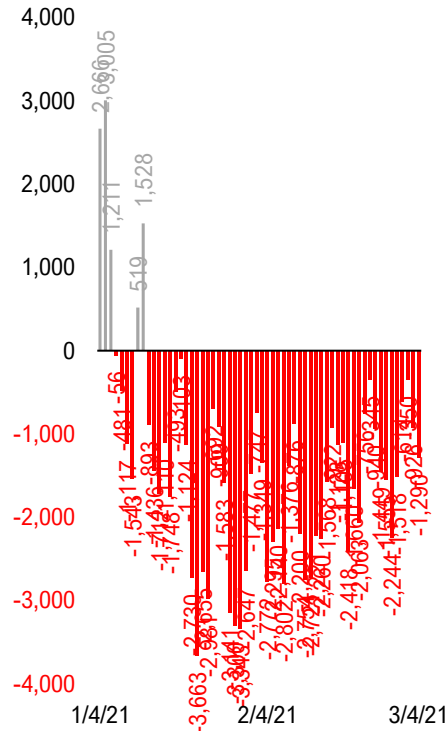
Daily New Cases
(8/10-8/23 ex-CA; 9/4-9/5 ex-IL)



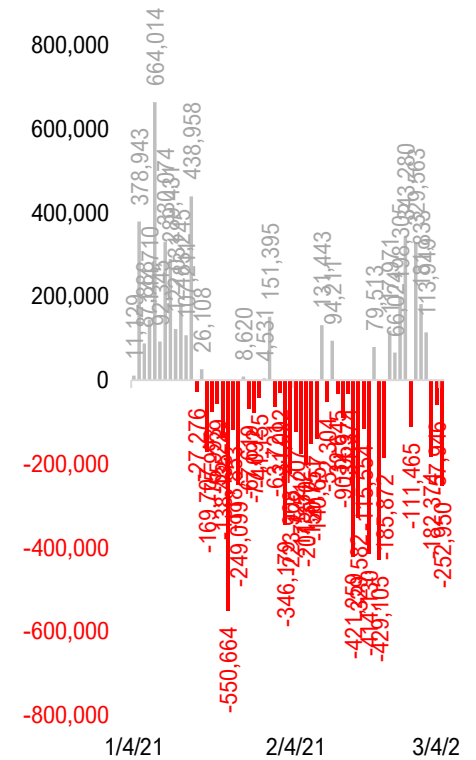
Daily Deaths



Daily Net Hospitalization
(Red = more discharge than admission)



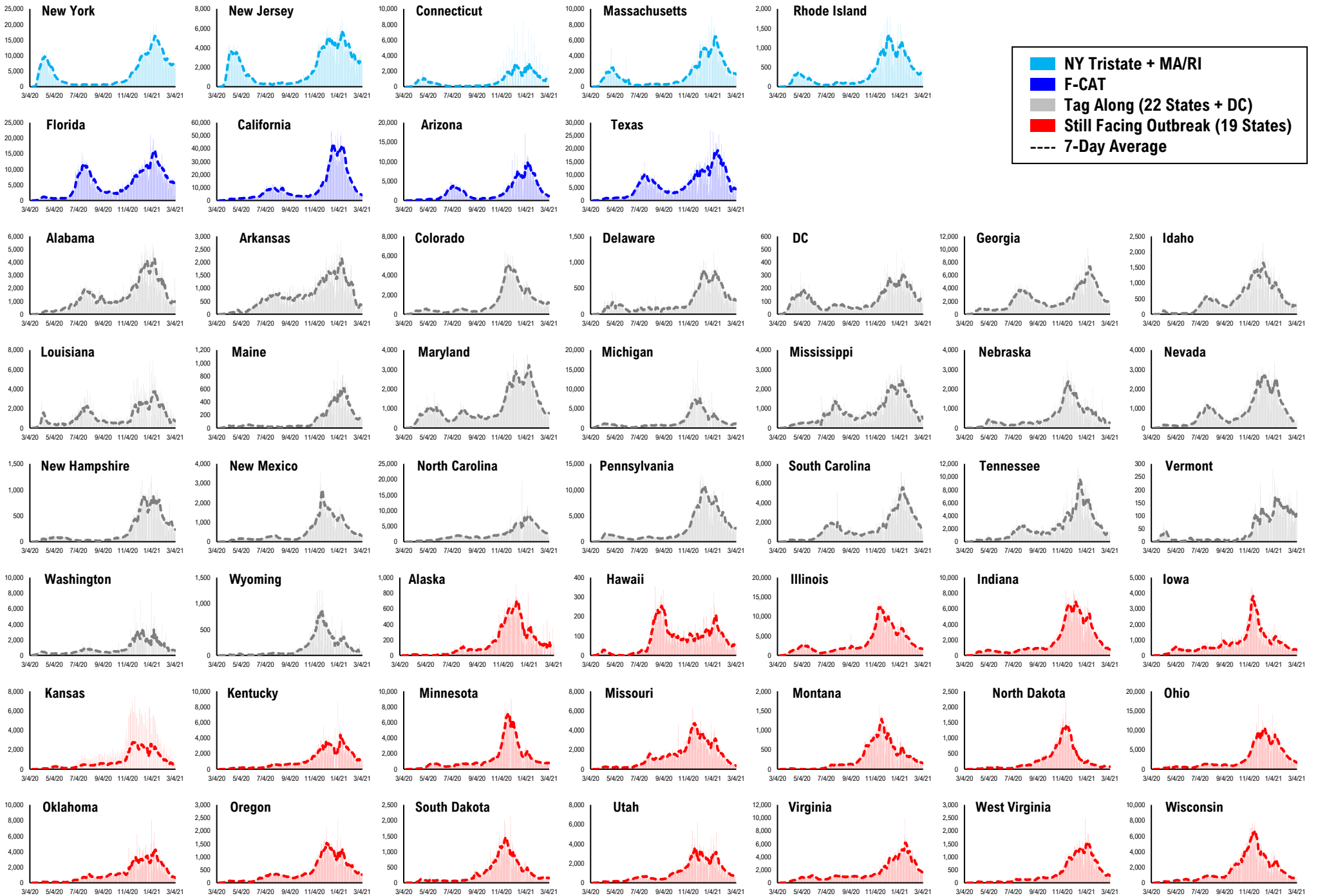
Daily Tests



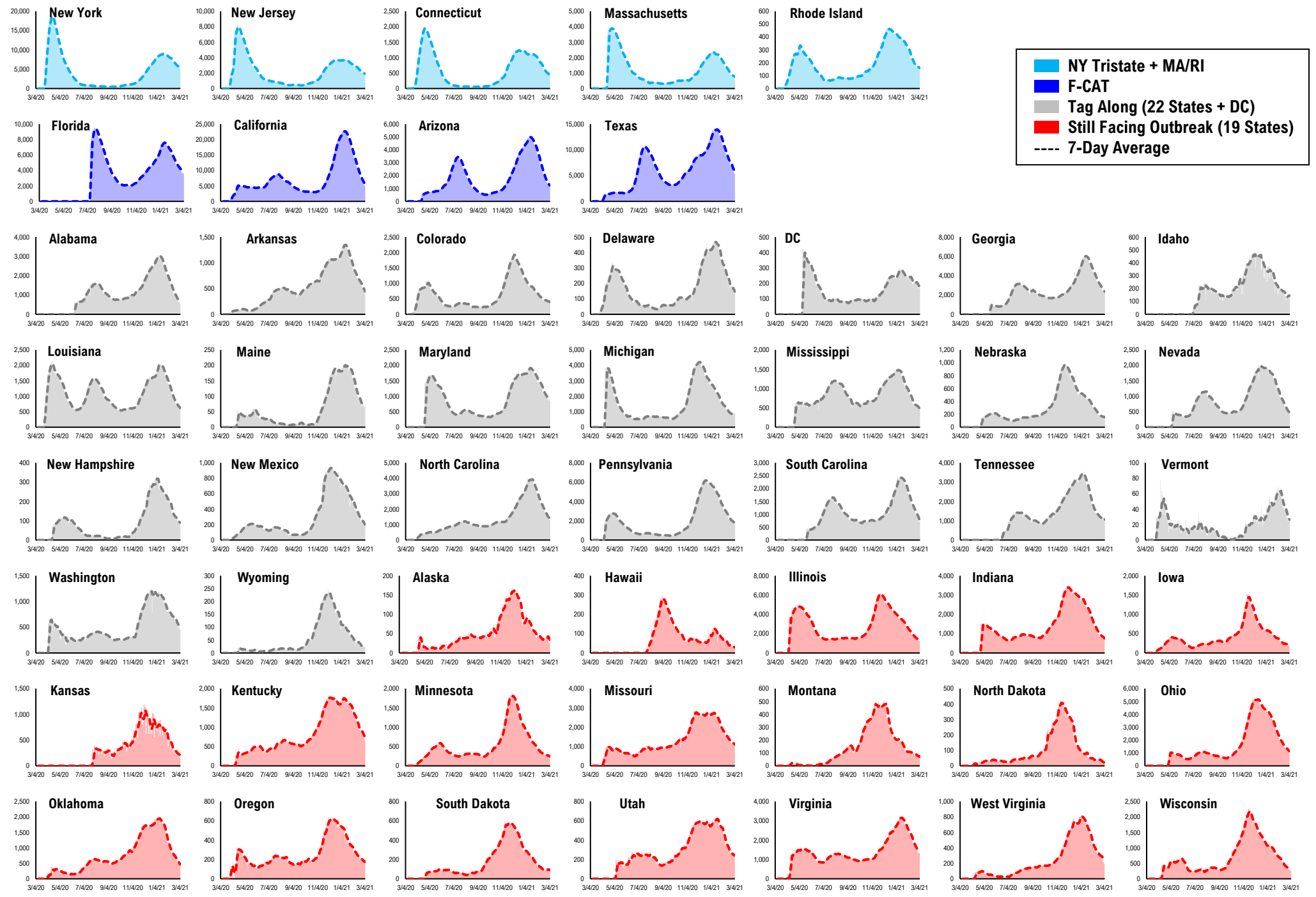
* Ignored California between 8/10 and 8/23, due to its data glitch caused 300,000-case backlog

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

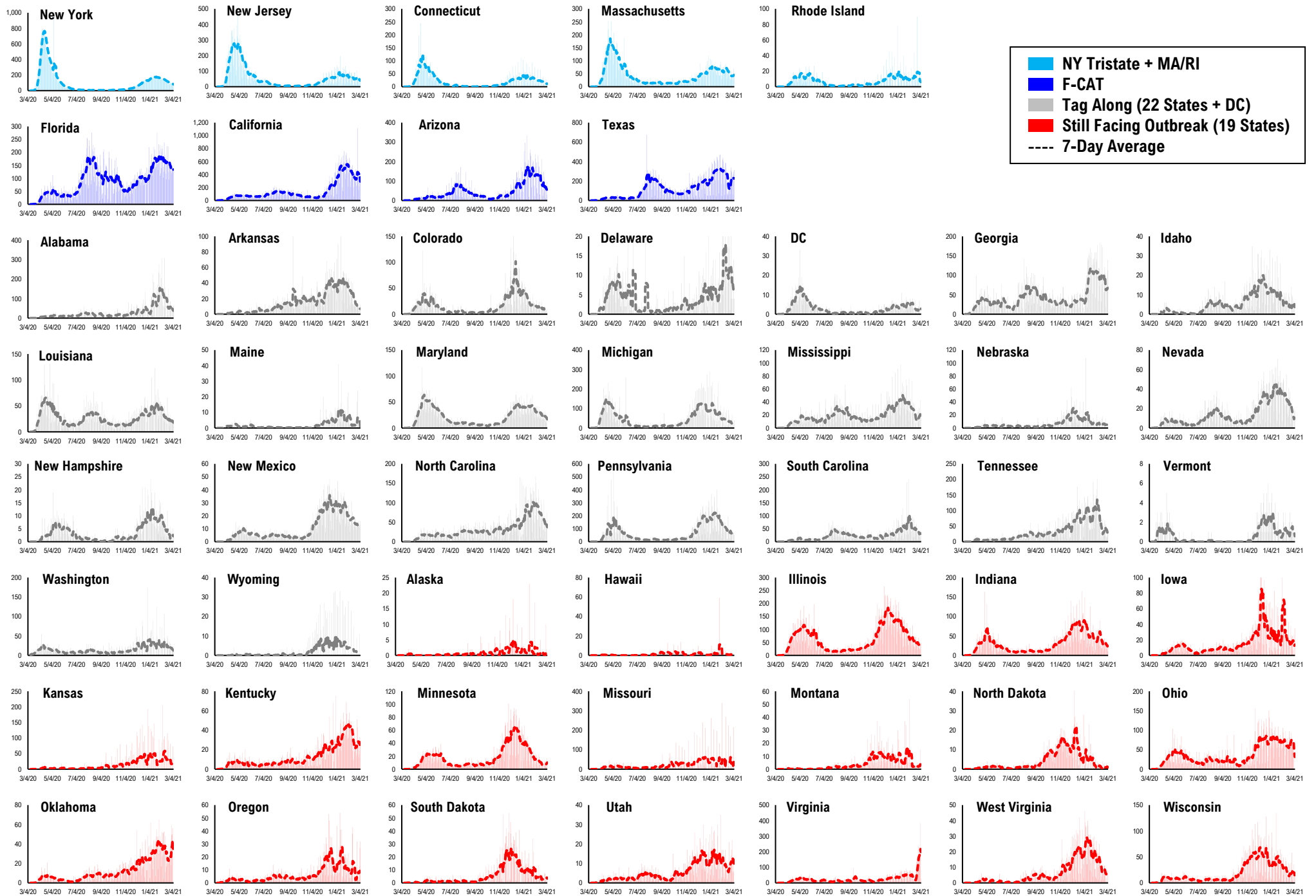
#12: Daily New Cases by States...



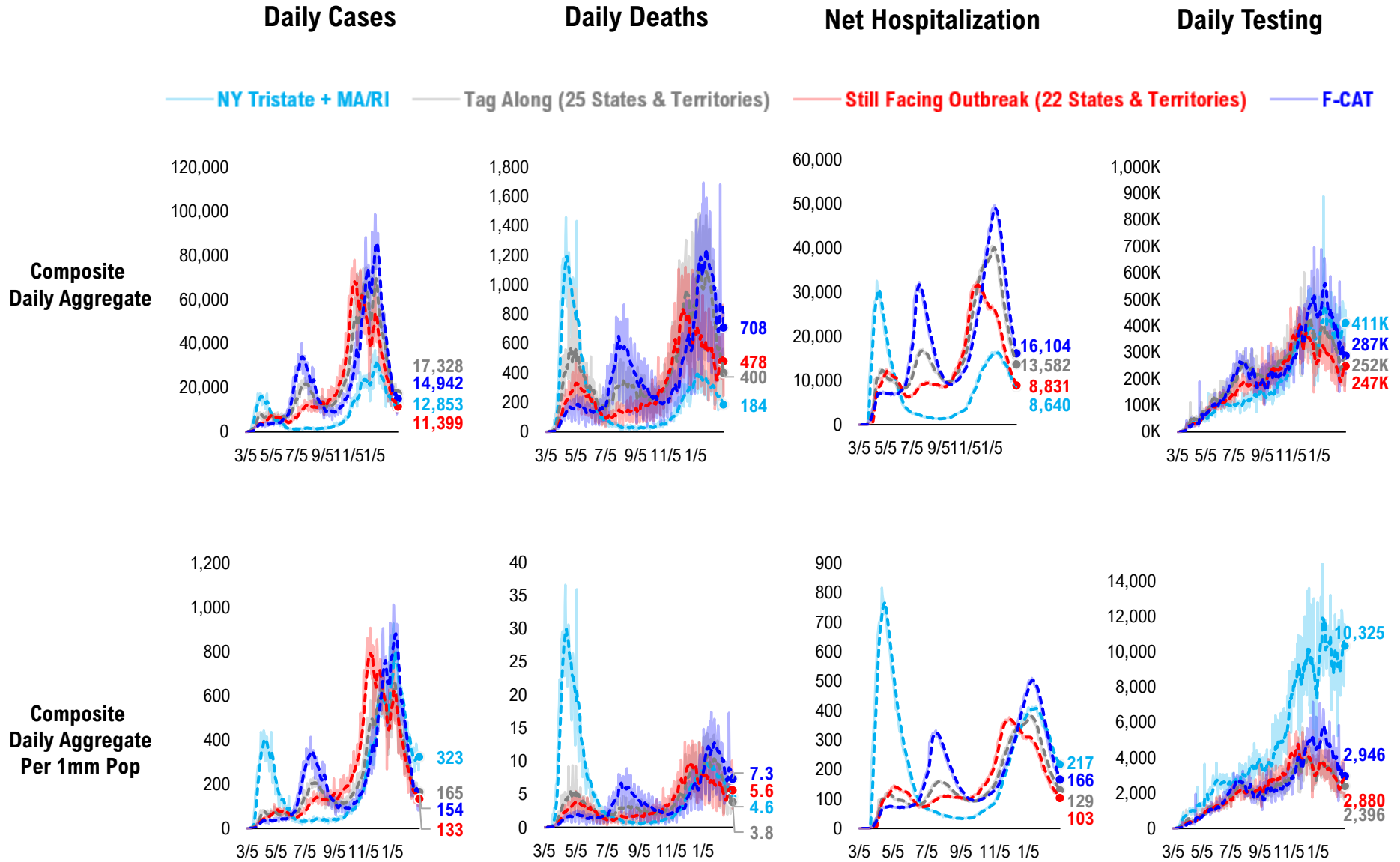
#13: Current Hospitalizations by States...



#14: Daily New Deaths by States...

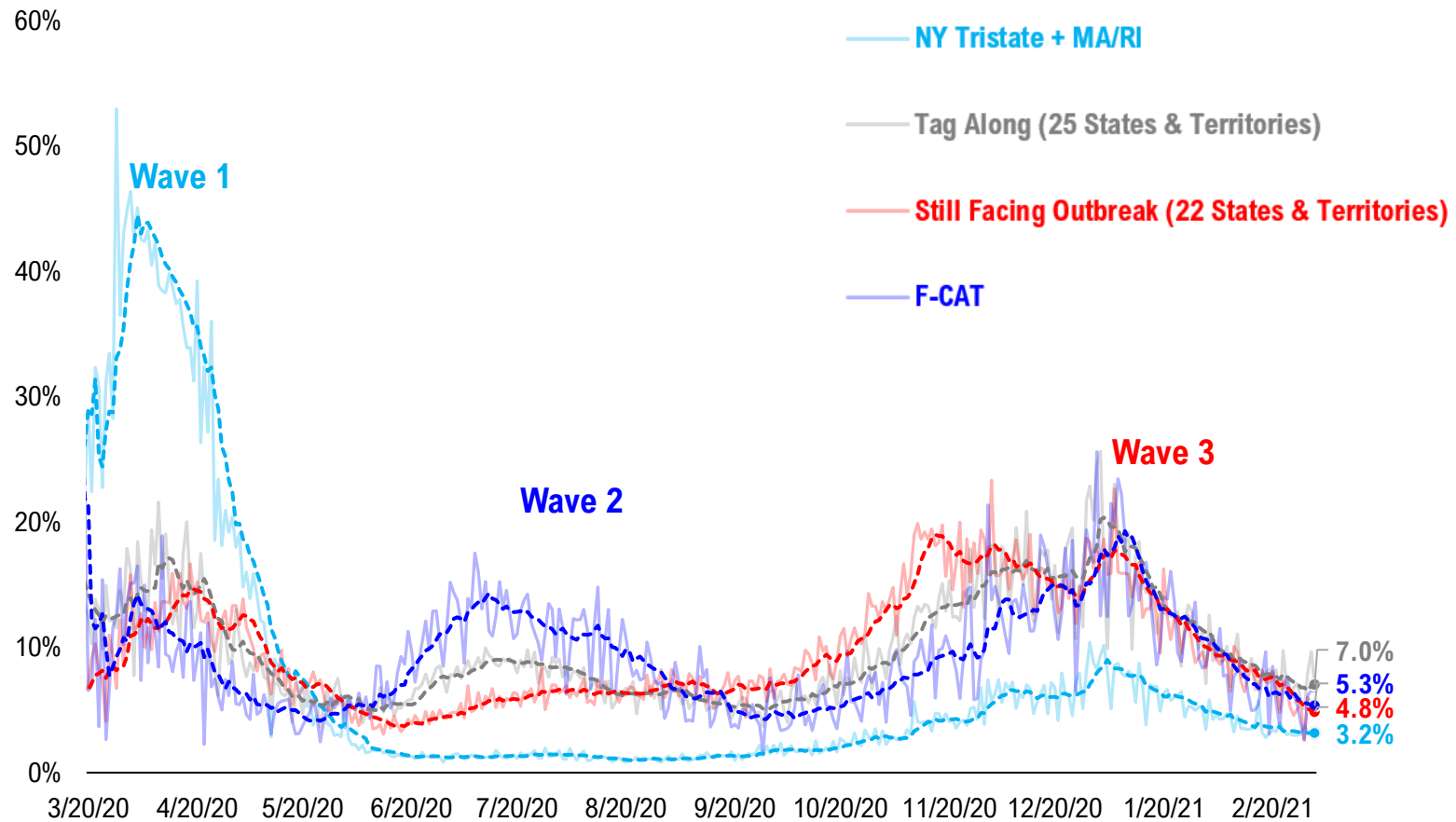


#15: State COVID-19 situation by Tier...

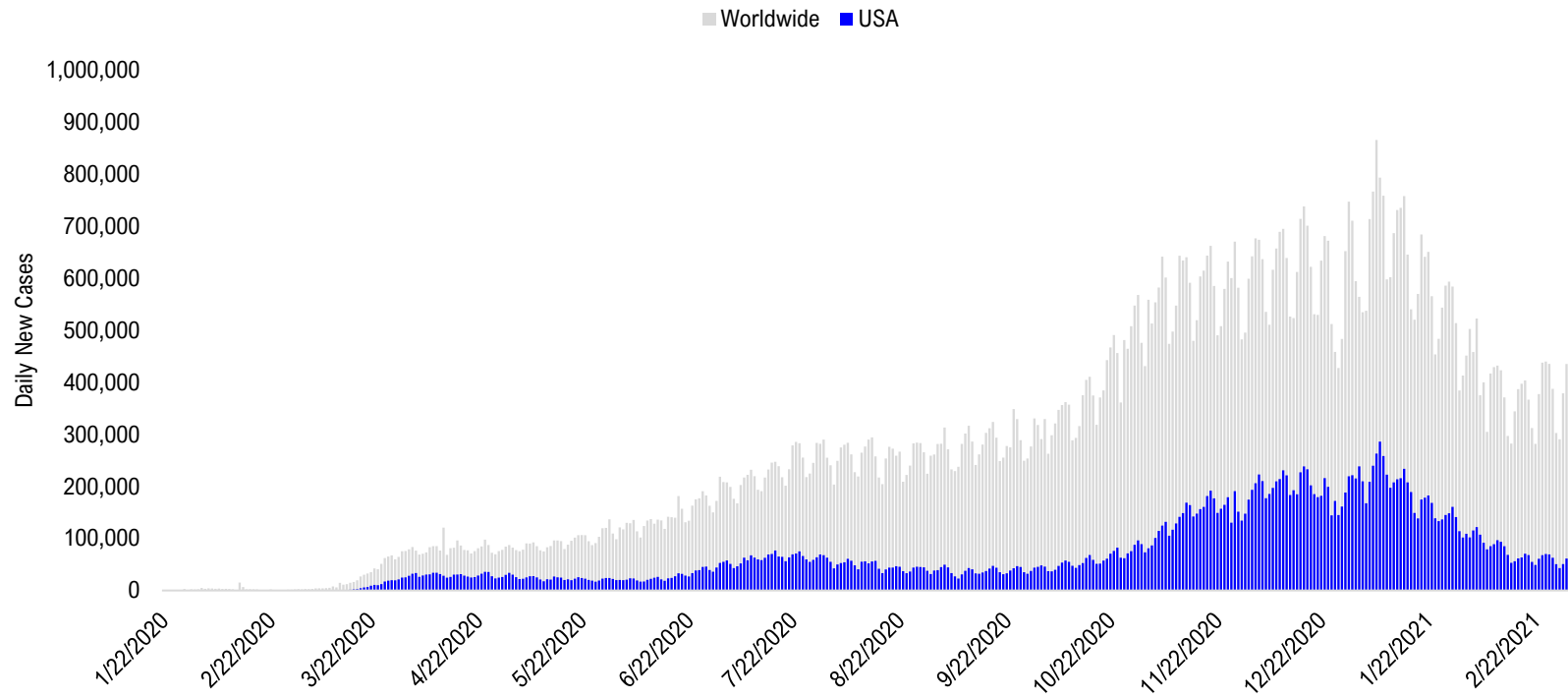


#16: State COVID-19 Daily Positivity Rate by Tier...

Composite Daily Positivity Rate



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



Oct 16	Oct 30	Nov 13	Nov 27	Dec 11	Dec 25	Jan 8	Jan 22	Feb 5	Feb 19	Mar 3
Europe 156,734	Europe 288,225	Europe 301,978	Europe 274,576	Europe 268,935	Europe 249,312	Europe 303,170	Europe 242,053	Europe 189,715	Europe 160,641	Europe 151,859
Latin America 67,981	US + Canada 89,511	US + Canada 157,595	US + Canada 172,207	US + Canada 224,719	US + Canada 191,456	US + Canada 271,367	US + Canada 184,321	US + Canada 116,717	Latin America 94,965	Latin America 88,845
Pakistan + India + Bangladesh 66,697	Latin America 65,614	Latin America 74,232	Latin America 79,197	Latin America 92,545	Latin America 89,576	Latin America 132,508	Latin America 134,579	Latin America 108,267	US + Canada 68,148	US + Canada 54,678
US + Canada 63,472	Pakistan + India + Bangladesh 51,456	Pakistan + India + Bangladesh 49,697	Pakistan + India + Bangladesh 48,359	Pakistan + India + Bangladesh 35,248	Pakistan + India + Bangladesh 26,828	Africa 35,216	Asia ex- India+Pakistan 27,748	Asia ex- India+Pakistan 23,452	Asia ex- India+Pakistan 18,400	Pakistan + India + Bangladesh 16,822
Asia ex- India+Pakistan 13,790	Asia ex- India+Pakistan 12,846	Africa 14,813	Asia ex- India+Pakistan 16,287	Africa 19,182	Africa 26,119	Asia ex- India+Pakistan 24,781	Africa 27,183	Africa 15,791	Pakistan + India + Bangladesh 15,055	Asia ex- India+Pakistan 13,091
Africa 10,431	Africa 12,181	Asia ex- India+Pakistan 14,319	Africa 14,870	Asia ex- India+Pakistan 17,917	Asia ex- India+Pakistan 18,682	Pakistan + India + Bangladesh 16,059	Pakistan + India + Bangladesh 17,313	Pakistan + India + Bangladesh 14,158	Africa 12,348	Africa 9,137

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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.

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