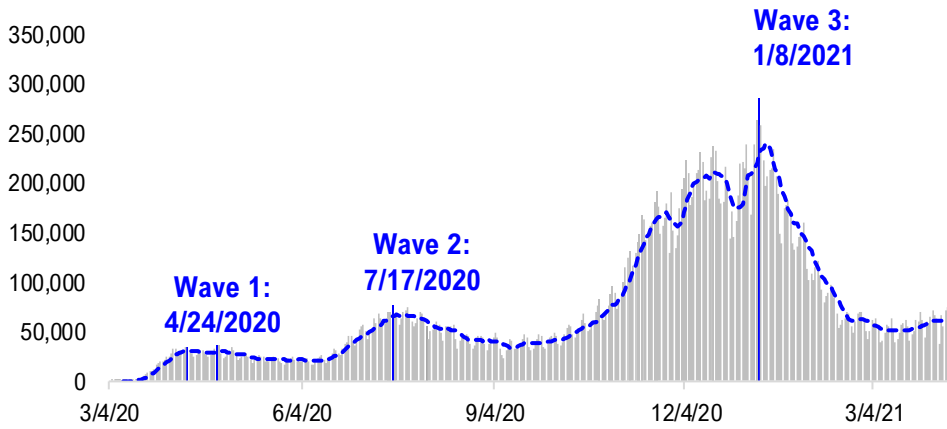


FSInsight Daily COVID-19 Chartbook

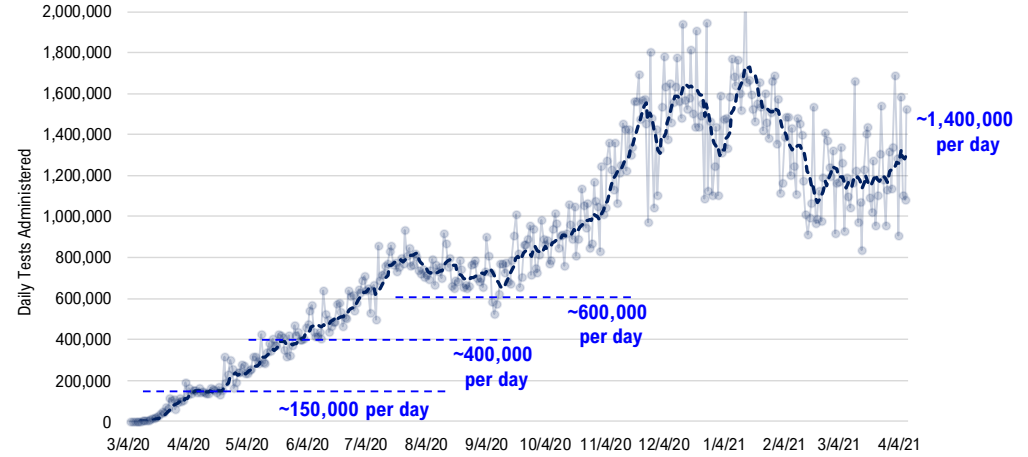


#1: USA COVID-19 Situation at a Glance...

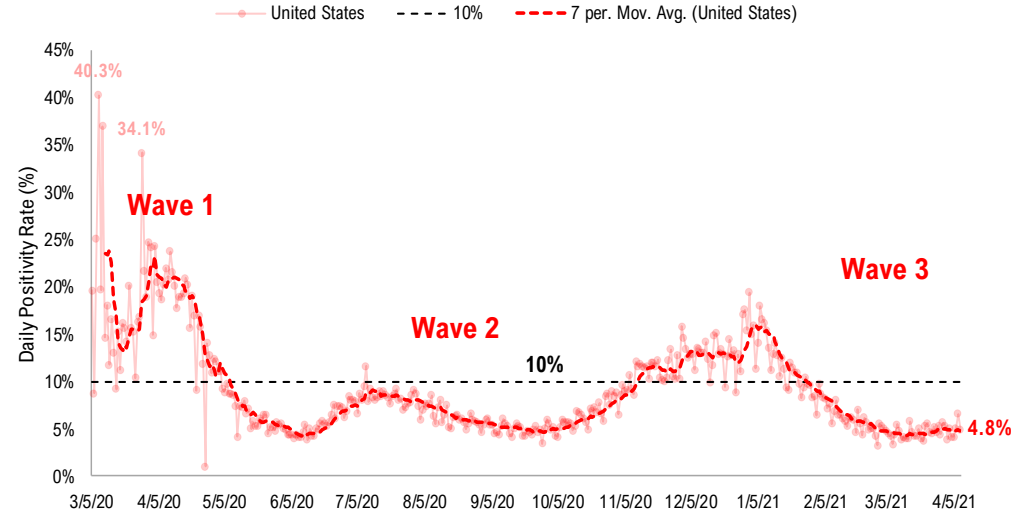
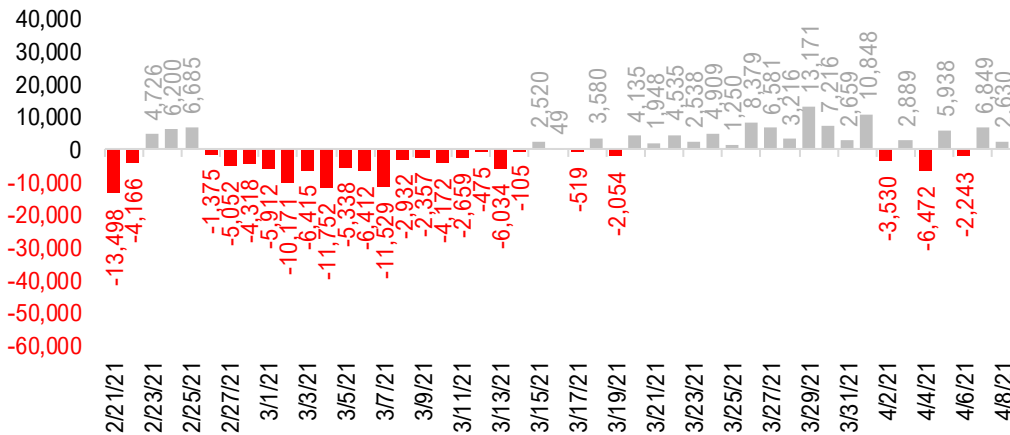
US daily new cases



USA total COVID-19 tests administered

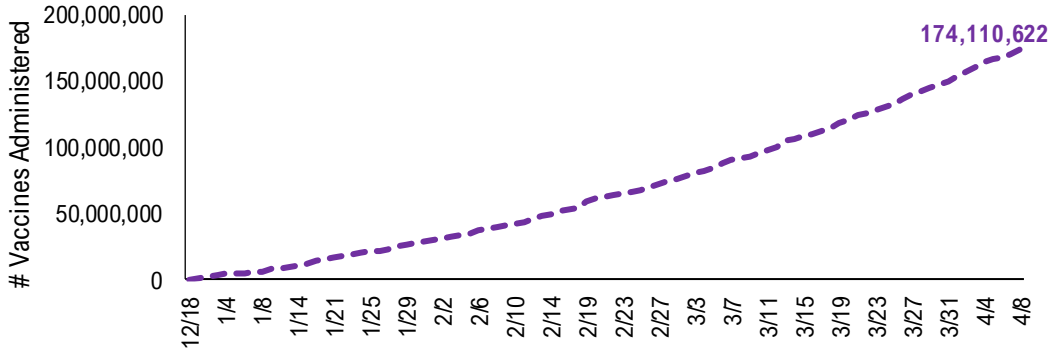


US daily new cases rolling 7D delta

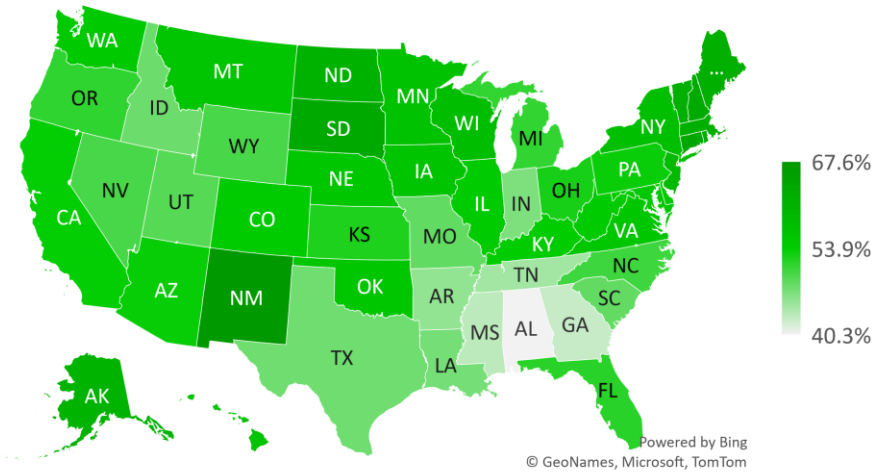


#2: USA COVID-19 Vaccination Progress at a Glance...

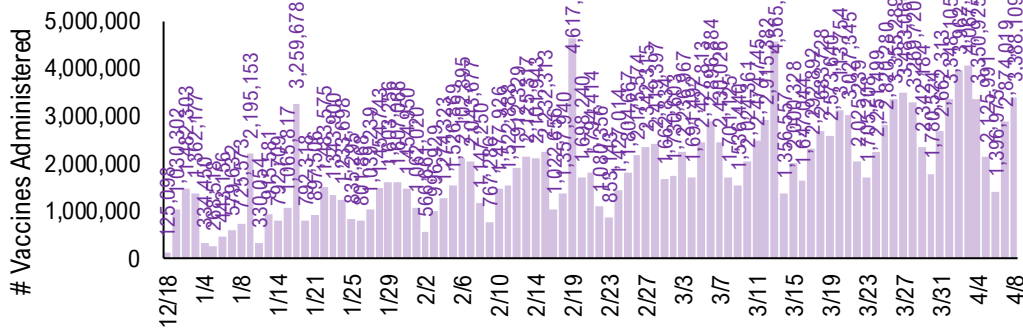
Cumulative Vaccines Administered



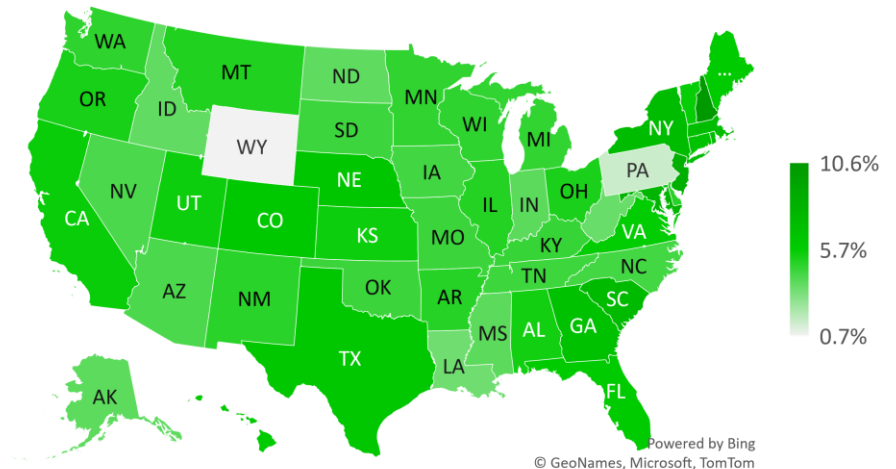
Cumulative Vaccines Administered as % State Population



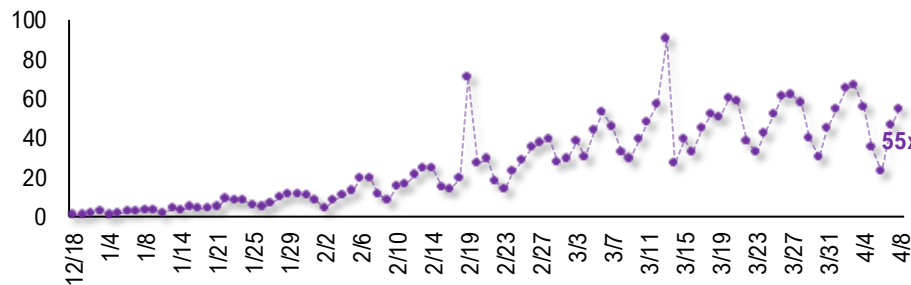
Daily Vaccines Administered



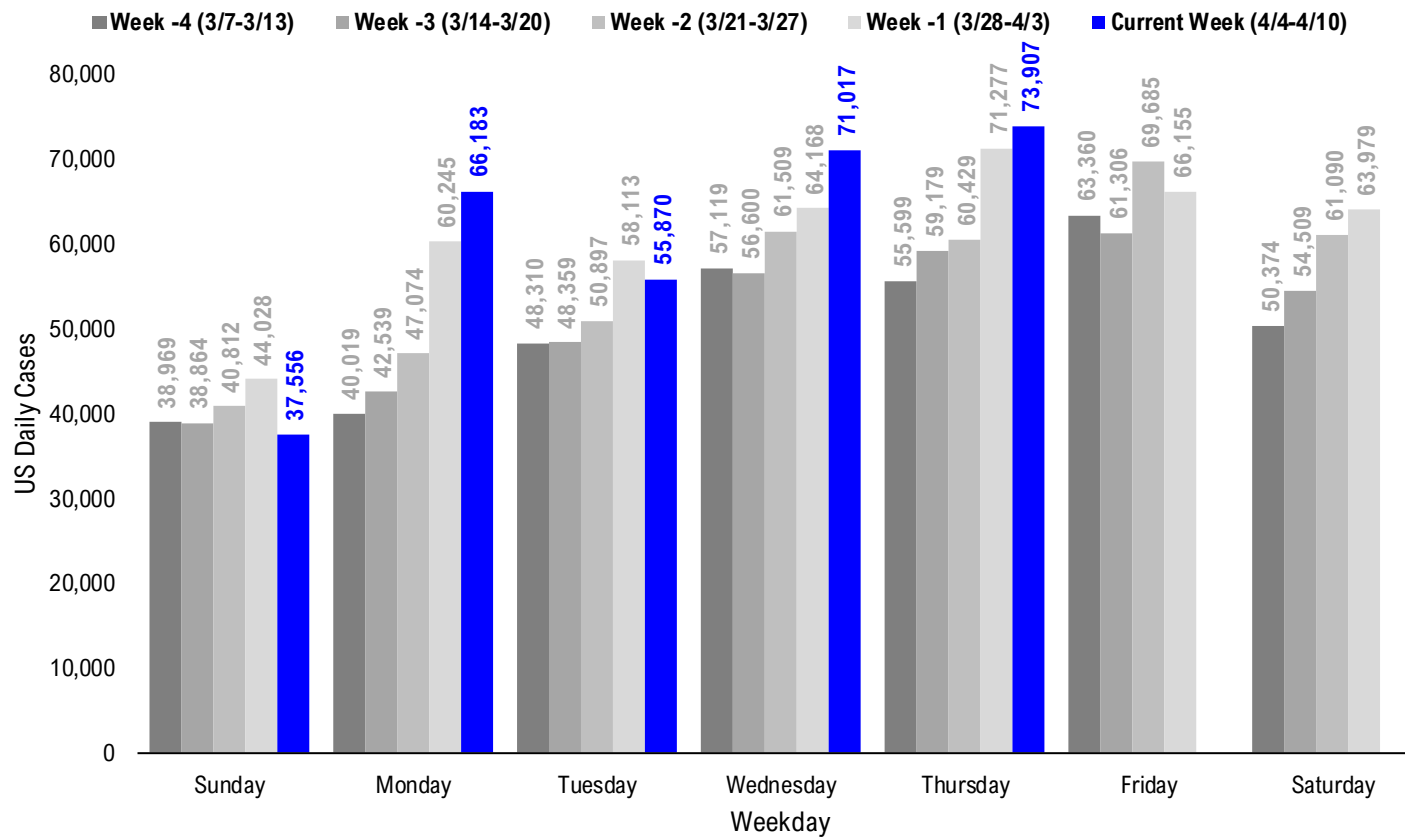
Implied Weekly Vaccines Administered as % State Population



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				Since Peak		Hospitalization		
	% US Pop	% US GDP	4/8	7D Delta	4/8	7D Delta	# Days	% Decline in Daily Cases	7D Net Hospitalization	7D Net Hospitalization / 7D New Cases	
	United States	100%	100%	73.907	+2.630	204	+7	89	-75%	2.679	0.6%

	Sorted Daily Cases		Daily Cases (3D avg) per 1mm residents				Since Peak		Hospitalization		
	% US Pop	% US GDP	4/8	7D Delta	4/8	7D Delta	# Days	% Decline in Daily Cases	7D Net Hospitalization	7D Net Hospitalization / 7D New Cases	
	United States	100%	100%	73.907	+2.630	204	+7	89	-75%	2.679	0.6%

States:

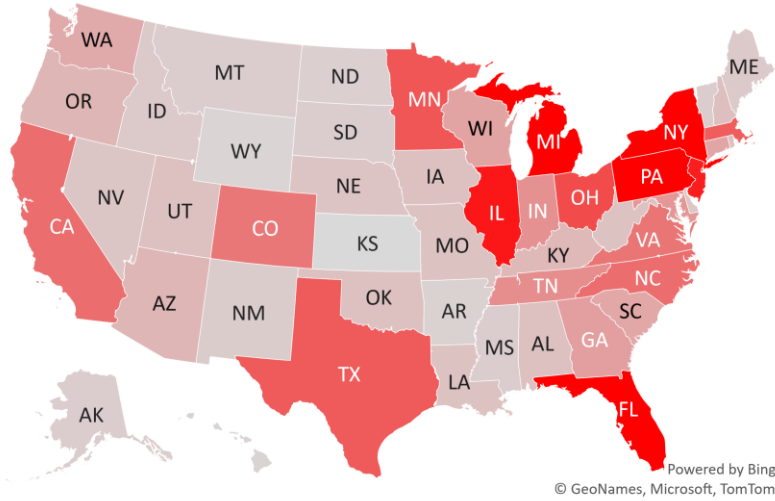
1 New York	5.9%	8.1%	8,379	-509	366	-41	89	-60%	-182	(0.4%)
2 Florida	6.5%	5.0%	7,939	+1,149	301	+35	90	-66%	182	0.5%
3 Michigan	3.0%	2.6%	7,819	+1,783	694	+109	141	-20%	1,001	2.2%
4 Pennsylvania	3.9%	3.8%	4,746	+853	355	+4	124	-62%	324	1.1%
5 Illinois	3.8%	4.2%	3,739	+213	275	+51	146	-74%	387	1.8%
6 New Jersey	2.7%	3.0%	3,616	-1,030	388	-41	89	-44%	86	0.4%
7 Ohio	3.5%	3.3%	2,742	+267	190	-7	119	-81%	154	1.1%
8 Minnesota	1.7%	1.8%	2,524	+386	445	+146	129	-68%	130	1.0%
9 Texas	8.7%	8.8%	2,445	+36	105	+6	91	-86%	-98	(0.6%)
10 Massachusetts	2.1%	2.8%	2,393	-366	326	-27	89	-71%	35	0.2%
11 California	11.9%	14.6%	2,093	-141	48	-4	88	-96%	-271	(1.5%)
12 North Carolina	3.2%	2.7%	2,087	+60	138	-31	89	-86%	19	0.2%
13 Virginia	2.6%	2.6%	1,928	+103	192	+24	80	-79%	65	0.6%
14 Colorado	1.7%	1.8%	1,886	+282	293	+43	138	-72%	67	0.6%
15 Tennessee	2.1%	1.8%	1,460	-312	192	+1	111	-87%	53	0.7%
16 Indiana	2.0%	1.8%	1,384	+168	159	+11	124	-87%	118	1.7%
17 Maryland	1.8%	2.0%	1,297	-287	200	-12	88	-66%	203	2.3%
18 Georgia	3.2%	2.9%	1,120	+242	96	+6	88	-89%	6	0.1%
19 Wisconsin	1.8%	1.6%	1,046	+529	152	+57	146	-88%	45	0.9%
20 Connecticut	1.1%	1.3%	1,012	-568	292	-85	85	-79%	23	0.3%
21 South Carolina	1.6%	1.1%	966	-85	203	+33	88	-85%	-2	(0.0%)
22 Washington	2.3%	2.7%	908	+0	111	+1	134	-80%	44	0.7%
23 Arizona	2.2%	1.7%	670	+289	91	+13	95	-94%	-63	(1.3%)
24 Oregon	1.3%	1.2%	667	+155	132	+24	123	-68%	13	0.4%
25 Kentucky	1.3%	1.0%	627	-339	147	-40	90	-87%	-34	(0.9%)
26 Rhode Island	0.3%	0.3%	509	-10	428	-21	124	-72%	23	0.9%
27 New Hampshire	0.4%	0.4%	506	+143	323	+29	94	-60%	21	0.7%
28 Iowa	1.0%	0.9%	486	-138	144	-3	146	-89%	25	0.9%

States:

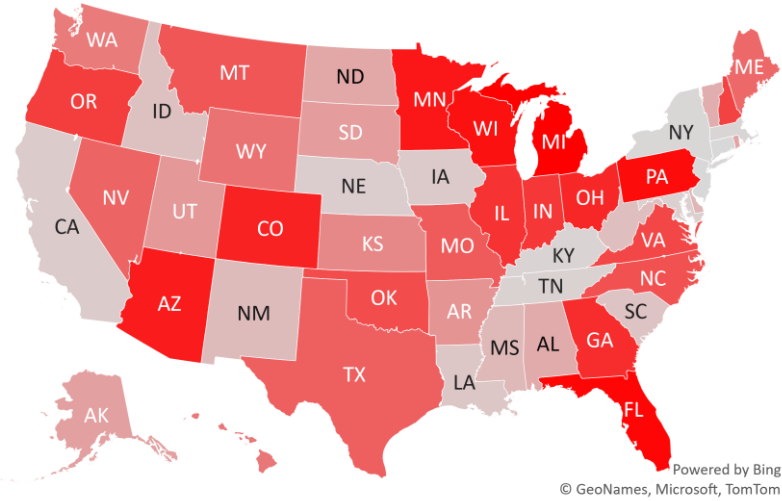
29 Utah	1.0%	0.9%	483	-4	145	+2	90	-89%	2	0.1%
30 Oklahoma	1.2%	1.0%	483	+70	199	+122	88	-85%	-3	(0.1%)
31 Alabama	1.5%	1.1%	464	-14	68	-17	91	-93%	-17	(0.8%)
32 Missouri	1.8%	1.5%	448	+41	66	+4	145	-92%	118	4.6%
33 West Virginia	0.5%	0.4%	446	-49	202	-29	95	-81%	43	1.7%
34 Louisiana	1.4%	1.3%	442	-107	97	-14	91	-91%	-46	(1.8%)
35 Nebraska	0.6%	0.6%	403	-147	212	-19	140	-85%	41	1.2%
36 Nevada	0.9%	0.8%	386	+36	104	+13	89	-89%	68	3.1%
37 Delaware	0.3%	0.4%	362	-24	283	+14	89	-70%	3	0.1%
38 Maine	0.4%	0.3%	318	+34	250	+62	83	-59%	4	0.2%
39 Idaho	0.5%	0.4%	310	-51	187	-24	119	-84%	-13	(0.7%)
40 New Mexico	0.6%	0.5%	258	-35	104	-10	139	-93%	-9	(0.7%)
41 Mississippi	0.9%	0.6%	240	-31	78	-3	89	-92%	0	0.0%
42 Puerto Rico	1.0%	0.5%	232	-21	40	-31	110	-89%	111	5.3%
43 Vermont	0.2%	0.2%	227	-21	215	-64	6	-38%	-2	(0.2%)
44 Montana	0.3%	0.2%	224	+51	190	+14	144	-85%	-10	(1.0%)
45 Alaska	0.2%	0.3%	223	-8	236	-226	124	-79%	6	0.5%
46 South Dakota	0.3%	0.3%	222	-8	256	+10	145	-88%	2	0.2%
47 North Dakota	0.2%	0.3%	197	-11	284	-4	145	-88%	12	1.1%
48 District of Columbia	0.2%	0.7%	170	+27	182	-10	88	-63%	5	0.6%
49 Arkansas	0.9%	0.6%	151	-3	38	-5	88	-95%	-27	(3.9%)
50 Hawaii	0.4%	0.5%	122	+9	61	-6	222	-71%	11	1.6%
51 Wyoming	0.2%	0.2%	102	+23	157	+43	140	-91%	-2	(0.5%)
52 U.S. Virgin Islands	0.0%	0.0%	0	+0	0	+0	11	-100%	0	0.0%
53 Northern Mariana	0.0%	0.0%	0	+0	6	+6	163	-92%	0	0.0%
54 Kansas	0.9%	0.8%	0	+0	62	+3	134	-96%	8	0.6%
55 Guam	0.0%	0.0%	0	+0	0	+0	149	-100%	0	0.0%
56 American Samoa	0.0%	0.0%	0	+0	0	+0	0	0%	0	0.0%

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

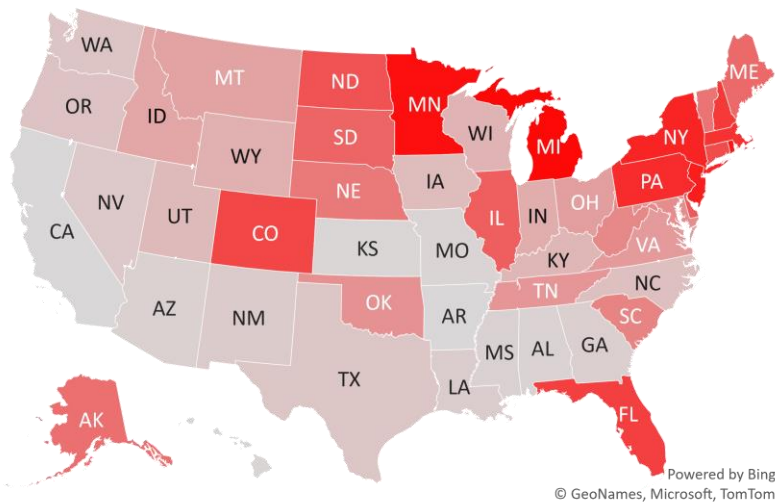
Daily Case Increases



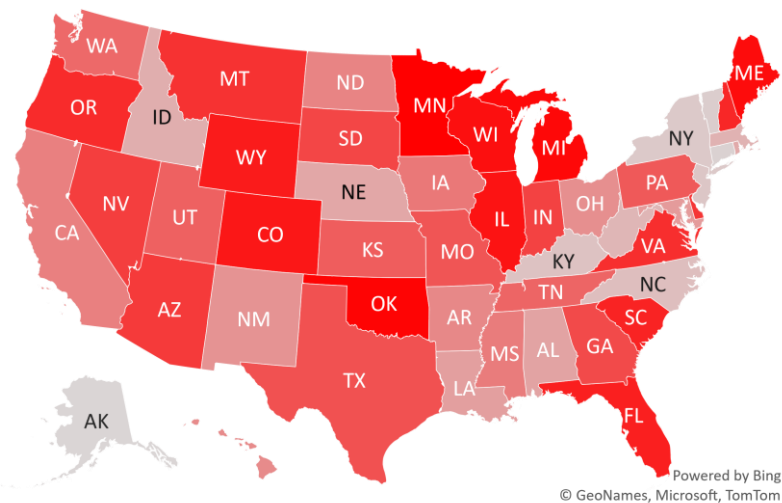
7D Delta in Daily New Cases



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



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



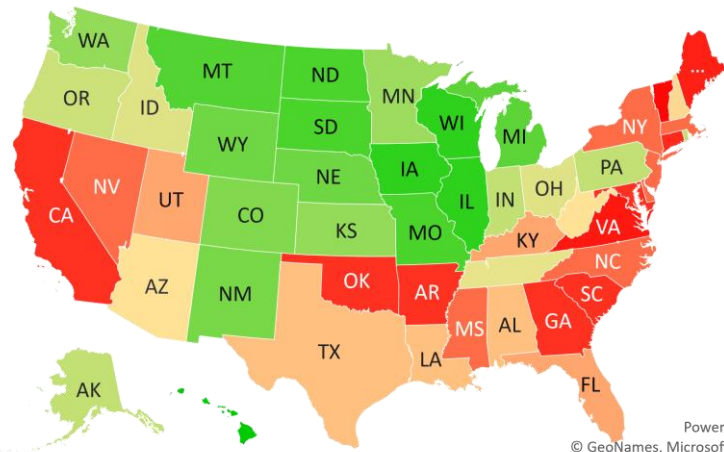
#6: # of Days since Daily Case Peaked by States...

Days since Daily Cases (3D Avg) Peak (as of 4/8)

	Peak Date	4/8/21	% off the Peak	% US Pop
United States	1/9/21	89	-75%	100%
Sorted				
States:				
Hawaii	8/29/20	222	-71%	0.4%
Northern Mariana Island	10/27/20	163	-92%	0.0%
Guam	11/10/20	149	-100%	0.0%
Wisconsin	11/13/20	146	-88%	1.8%
Illinois	11/13/20	146	-74%	3.8%
Iowa	11/13/20	146	-89%	1.0%
South Dakota	11/14/20	145	-88%	0.3%
North Dakota	11/14/20	145	-88%	0.2%
Missouri	11/14/20	145	-92%	1.8%
Montana	11/15/20	144	-85%	0.3%
Michigan	11/18/20	141	-20%	3.0%
Wyoming	11/19/20	140	-91%	0.2%
Nebraska	11/19/20	140	-85%	0.6%
New Mexico	11/20/20	139	-93%	0.6%
Colorado	11/21/20	138	-72%	1.7%
Washington	11/25/20	134	-80%	2.3%
Kansas	11/25/20	134	-96%	0.9%
Minnesota	11/30/20	129	-68%	1.7%
Rhode Island	12/5/20	124	-72%	0.3%
Pennsylvania	12/5/20	124	-62%	3.9%
Indiana	12/5/20	124	-87%	2.0%
Alaska	12/5/20	124	-79%	0.2%
Oregon	12/6/20	123	-68%	1.3%
Ohio	12/10/20	119	-81%	3.5%
Idaho	12/10/20	119	-84%	0.5%
Tennessee	12/18/20	111	-87%	2.1%
Puerto Rico	12/19/20	110	-89%	1.0%
West Virginia	1/3/21	95	-81%	0.5%

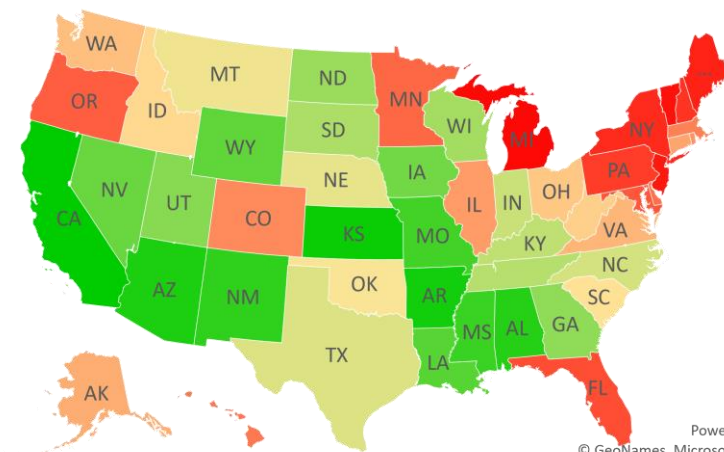
	Peak Date	4/8/21	% off the Peak	% US Pop
United States	1/9/21	89	-75%	100%
Sorted				
States:				
Arizona	1/3/21	95	-94%	2.2%
New Hampshire	1/4/21	94	-60%	0.4%
Texas	1/7/21	91	-86%	8.7%
Louisiana	1/7/21	91	-91%	1.4%
Alabama	1/7/21	91	-93%	1.5%
Utah	1/8/21	90	-89%	1.0%
Kentucky	1/8/21	90	-87%	1.3%
Florida	1/8/21	90	-66%	6.5%
New York	1/9/21	89	-60%	5.9%
Nevada	1/9/21	89	-89%	0.9%
New Jersey	1/9/21	89	-44%	2.7%
North Carolina	1/9/21	89	-86%	3.2%
Mississippi	1/9/21	89	-92%	0.9%
Massachusetts	1/9/21	89	-71%	2.1%
Delaware	1/9/21	89	-70%	0.3%
South Carolina	1/10/21	88	-85%	1.6%
Oklahoma	1/10/21	88	-85%	1.2%
Maryland	1/10/21	88	-66%	1.8%
Georgia	1/10/21	88	-89%	3.2%
District of Columbia	1/10/21	88	-63%	0.2%
California	1/10/21	88	-96%	11.9%
Arkansas	1/10/21	88	-95%	0.9%
Connecticut	1/13/21	85	-79%	1.1%
Maine	1/15/21	83	-59%	0.4%
Virginia	1/18/21	80	-79%	2.6%
U.S. Virgin Islands	3/28/21	11	-100%	0.0%
Vermont	4/2/21	6	-38%	0.2%

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



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



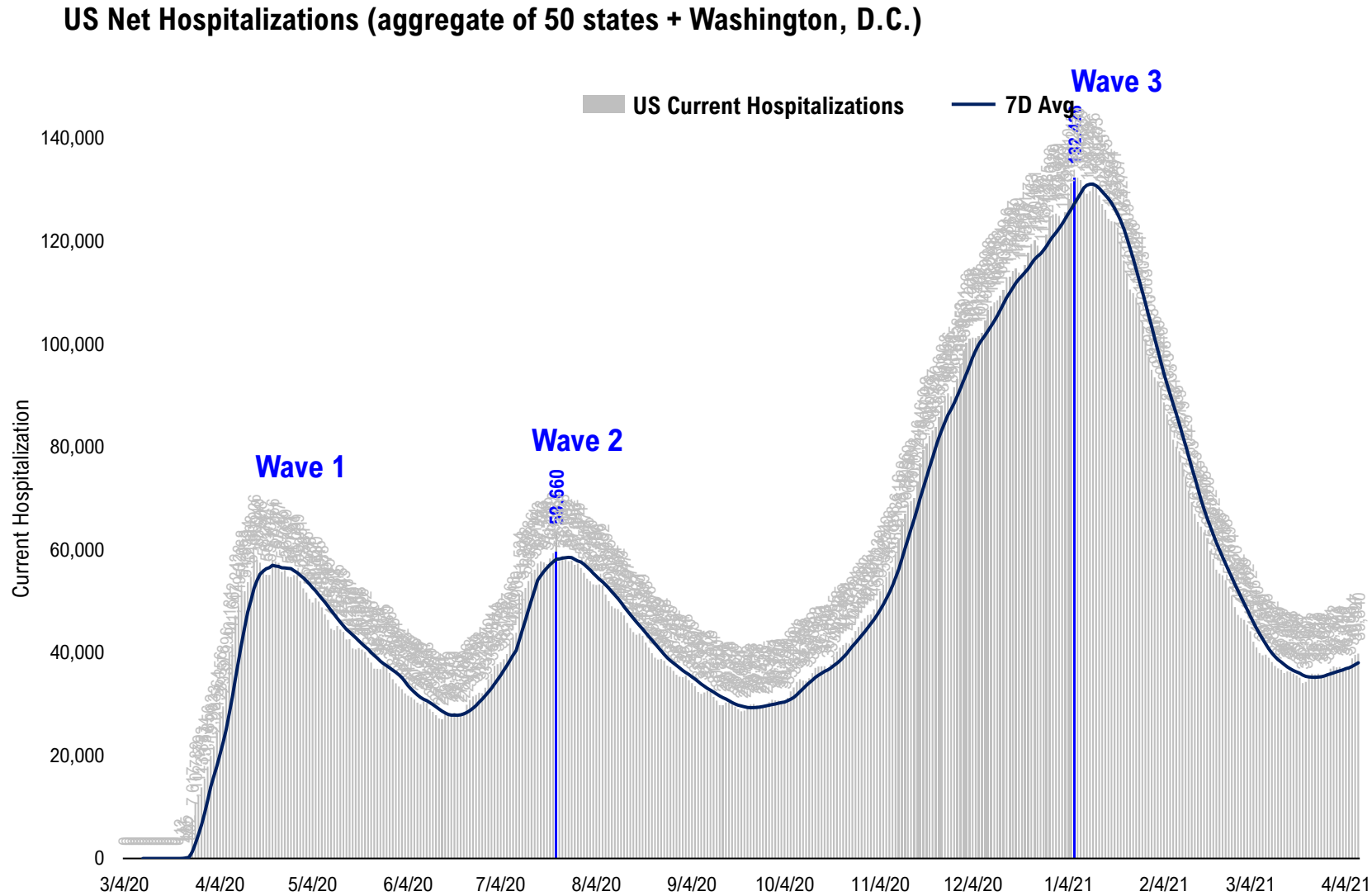
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#7: US New Cases by States... (sorted by today's new cases)

	Sorted						Sorted				
	7D Ago	Last 3-day Trend					7D Ago	Last 3-day Trend			
	4/1/21	4/6/21	4/7/21	4/8/21	vs 7D ago		4/1/21	4/6/21	4/7/21	4/8/21	vs 7D ago
United States	71,277	55,870	71,017	73,907	+2,630	United States	71,277	55,870	71,017	73,907	+2,630
States:						States:					
New York	8,888	5,748	7,213	8,379		Utah	487	300	612	483	
Florida	6,790	5,556	5,885	7,939		Oklahoma	413	120	1,764	483	
Michigan	6,036	4,964	8,015	7,819	<--higher	Alabama	478	196	338	464	
Pennsylvania	3,893	4,255	4,643	4,746	<--higher	Missouri	407	309	458	448	
Illinois	3,526	2,931	3,790	3,739		West Virginia	495	277	364	446	
New Jersey	4,646	3,222	3,493	3,616		Louisiana	549	198	719	442	
Ohio	2,475	1,871	2,064	2,742		Nebraska	550	299	528	403	
Minnesota	2,138	3,012	1,996	2,524		Nevada	350	295	277	386	
Texas	2,409	3,365	3,285	2,445		Delaware	386	229	236	362	
Massachusetts	2,759	1,803	2,550	2,393		Maine	284	290	402	318	
California	2,234	1,367	2,229	2,093		Idaho	361	346	349	310	
North Carolina	2,027	870	1,380	2,087		New Mexico	293	178	216	258	
Virginia	1,825	1,434	1,550	1,928		Mississippi	271	183	270	240	
Colorado	1,604	1,266	1,913	1,886		Puerto Rico	253	87	67	232	
Tennessee	1,772	986	1,497	1,460		Vermont	248	106	69	227	
Indiana	1,216	615	1,212	1,384		Montana	173	191	193	224	<--higher
Maryland	1,584	867	1,471	1,297		Alaska	231	79	215	223	
Georgia	878	967	961	1,120	<--higher	South Dakota	230	163	295	222	
Wisconsin	517	886	727	1,046	<--higher	North Dakota	208	260	193	197	
Connecticut	1,580	1,074	1,038	1,012		District of Columbia	143	122	94	170	
South Carolina	1,051	1,334	828	966		Arkansas	154	71	126	151	
Washington	908	516	1,103	908		Hawaii	113	59	76	122	
Arizona	381	570	750	670	<--higher	Wyoming	79	90	81	102	<--higher
Oregon	512	530	470	667	<--higher	U.S. Virgin Islands	0	0	0	0	
Kentucky	966	330	1,019	627		Northern Mariana Islands	0	0	1	0	
Rhode Island	519	376	476	509		Kansas	0	0	540	0	
New Hampshire	363	385	425	506	<--higher	Guam	0	0	0	0	
Iowa	624	322	551	486		American Samoa	0	0	0	0	

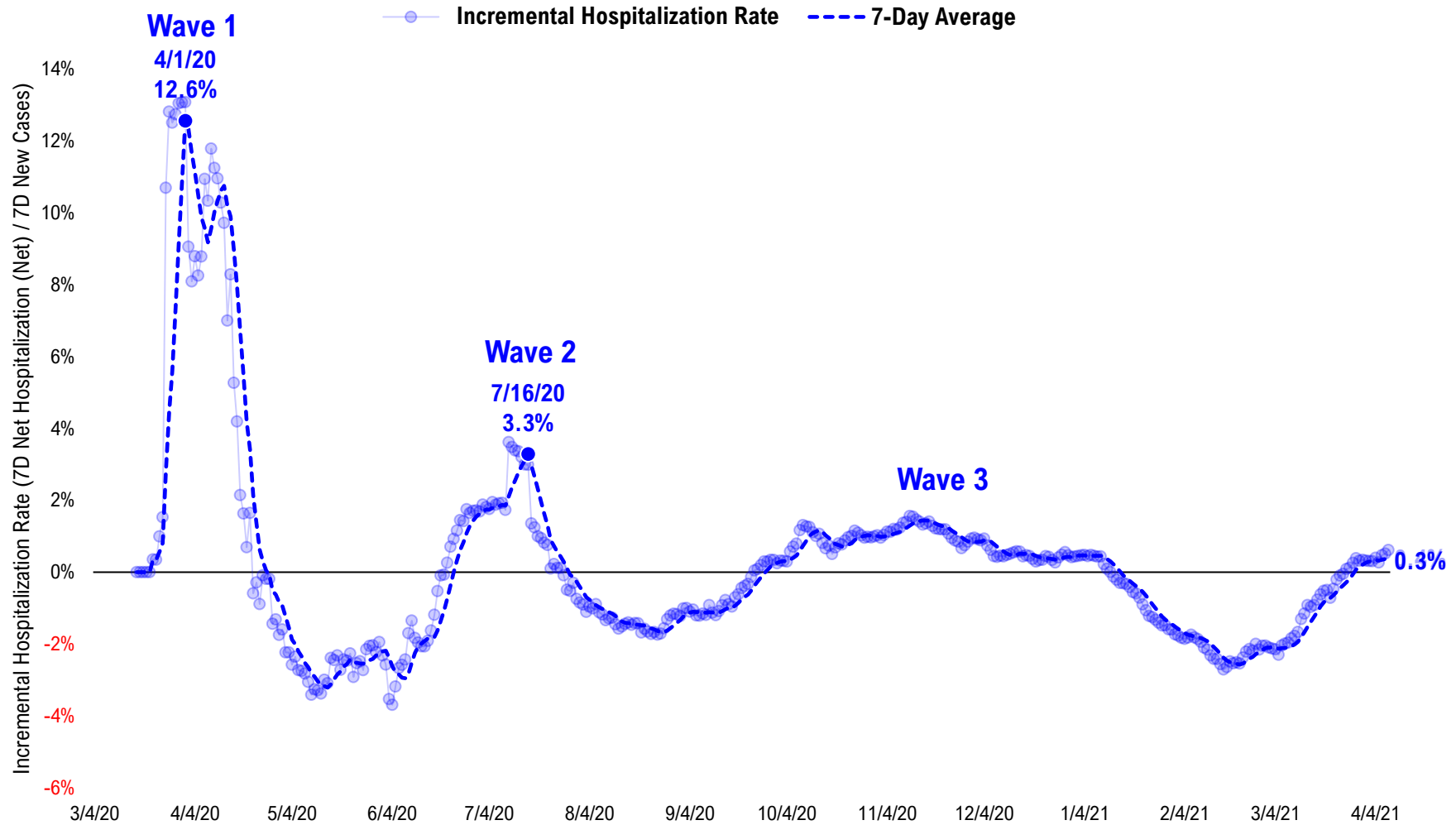
<--higher – if the state has 20% more daily cases than 7D ago...
Source: Fundstrat, COVID-19 Tracking Project, State Department of Health

#8: US Daily Hospitalizations...



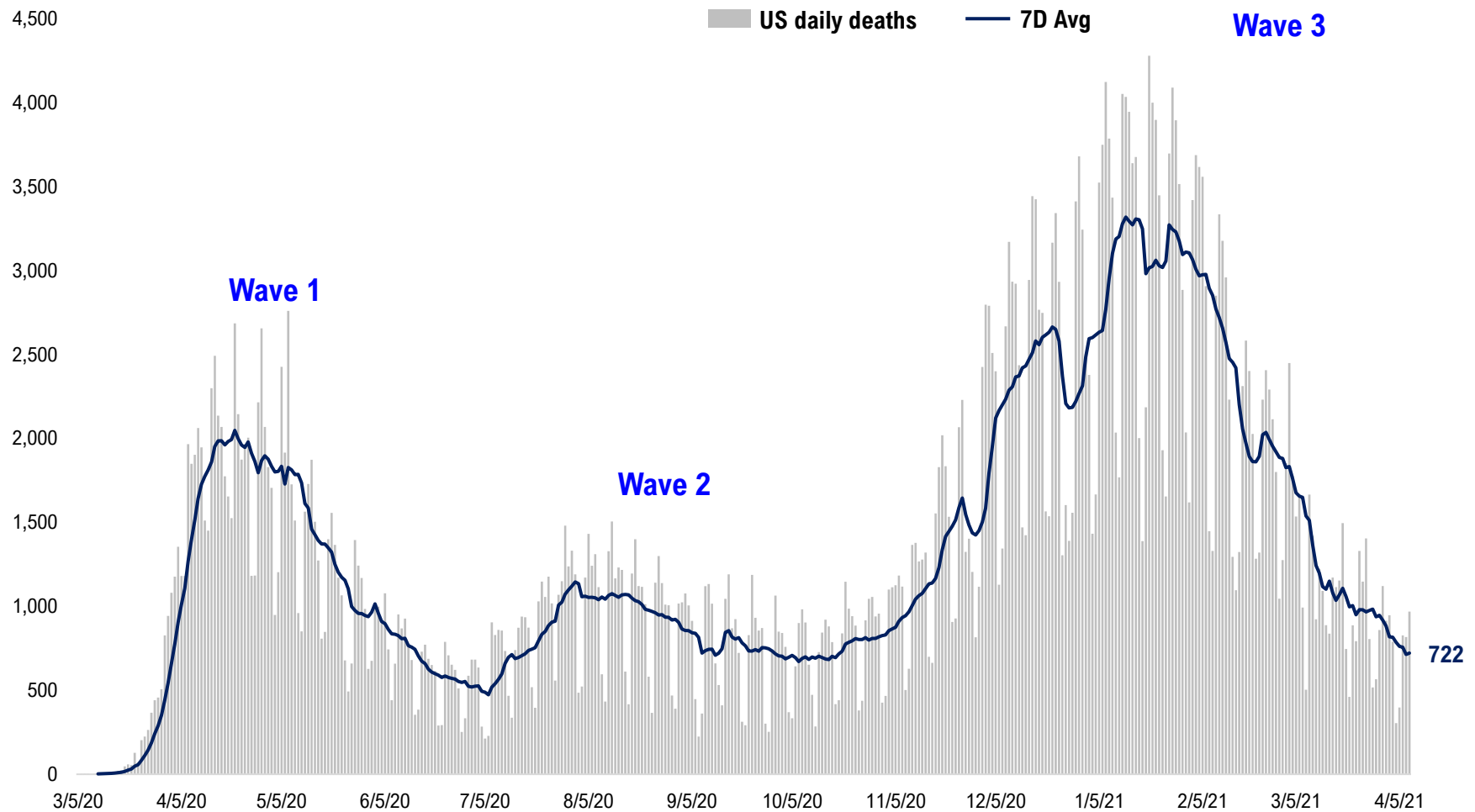
#9: Incremental Hospitalization Rate...

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

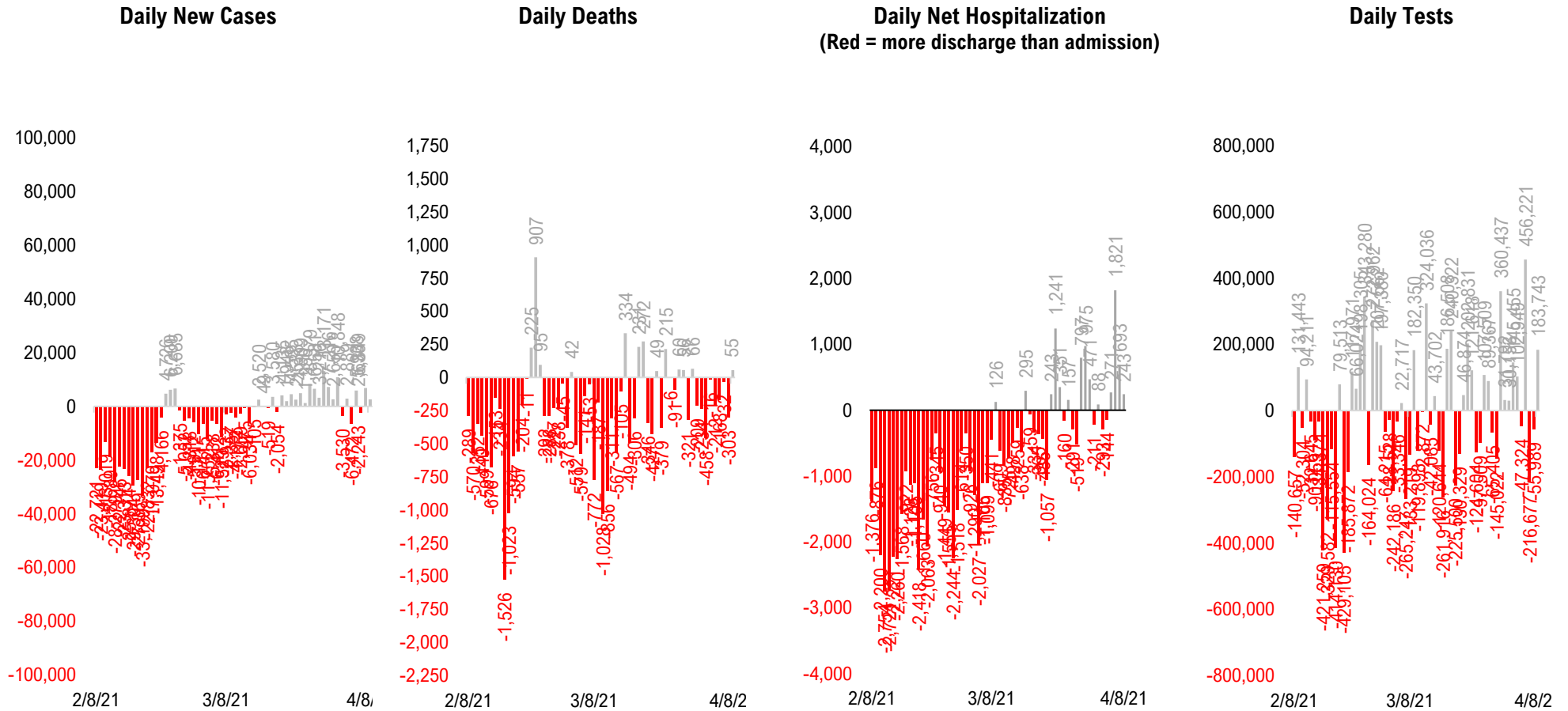


#10: US Daily New Fatalities...

US daily COVID-19 Fatalities

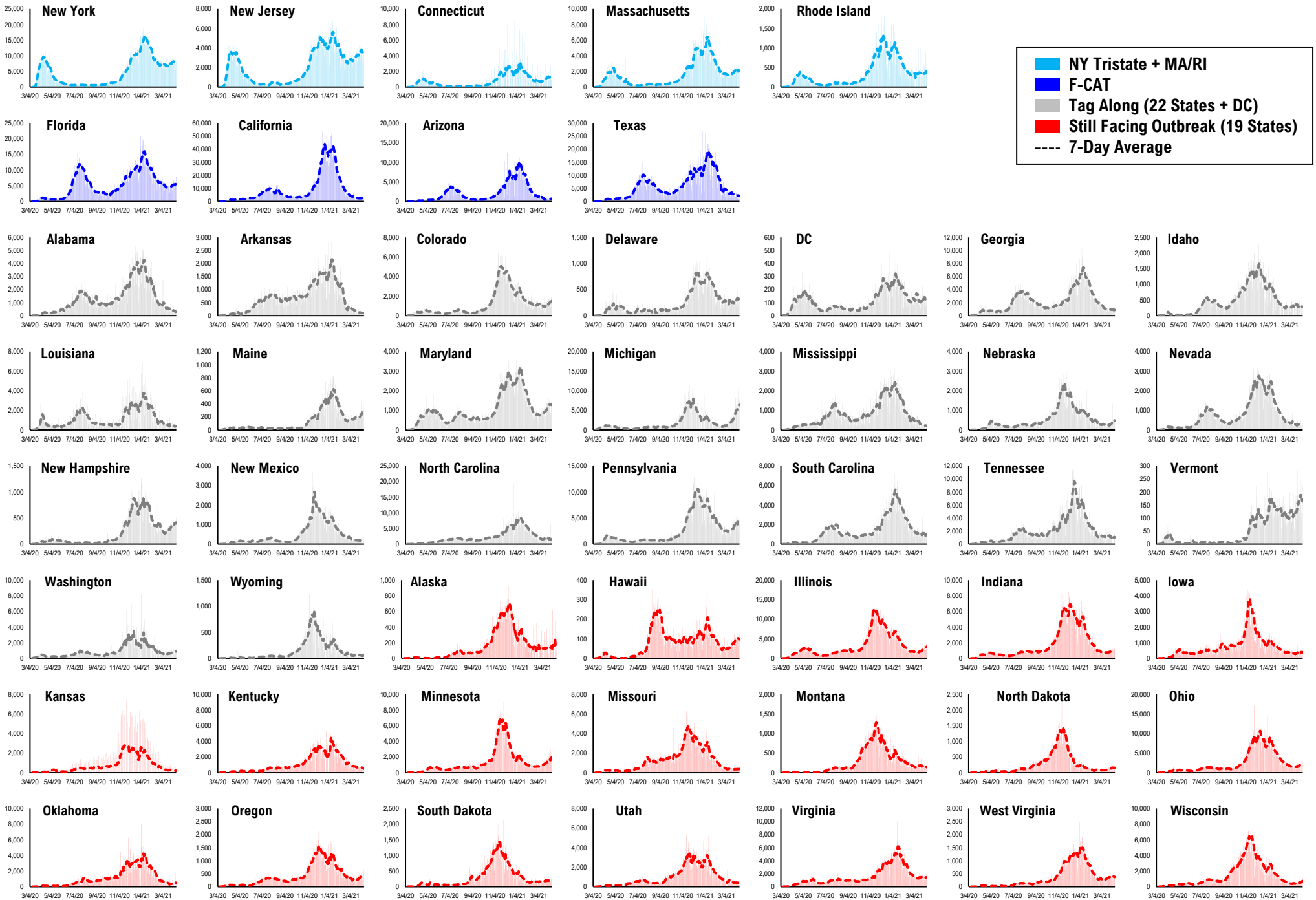


#11: Rolling 7-Day Change in the Key Metrics... (Past 8 Weeks)

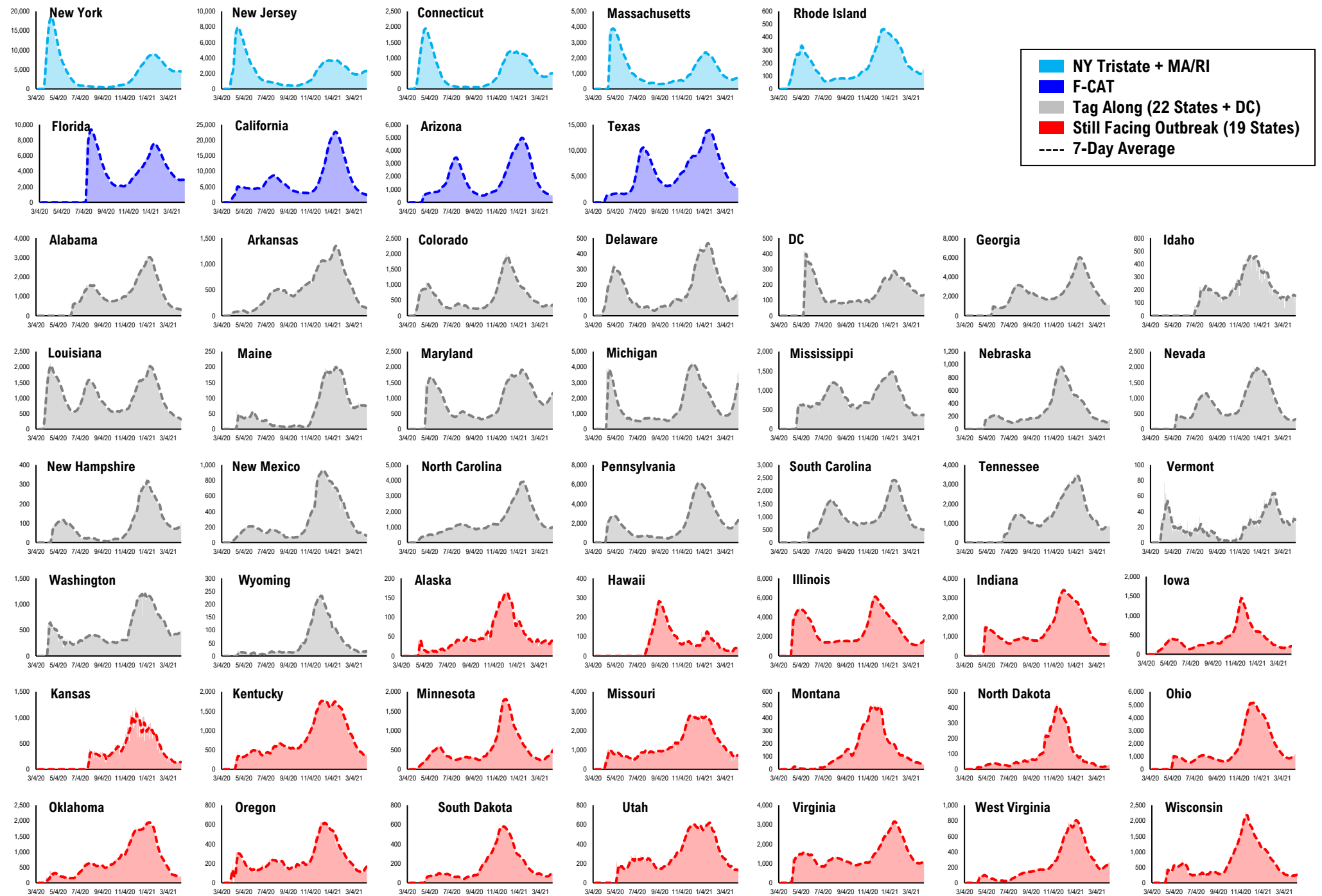


* Ignored California between 8/10 and 8/23, due to its data glitch caused 300,000-case backlog
Source: Fundstrat, COVID-19 Tracking Project, State Department of Health

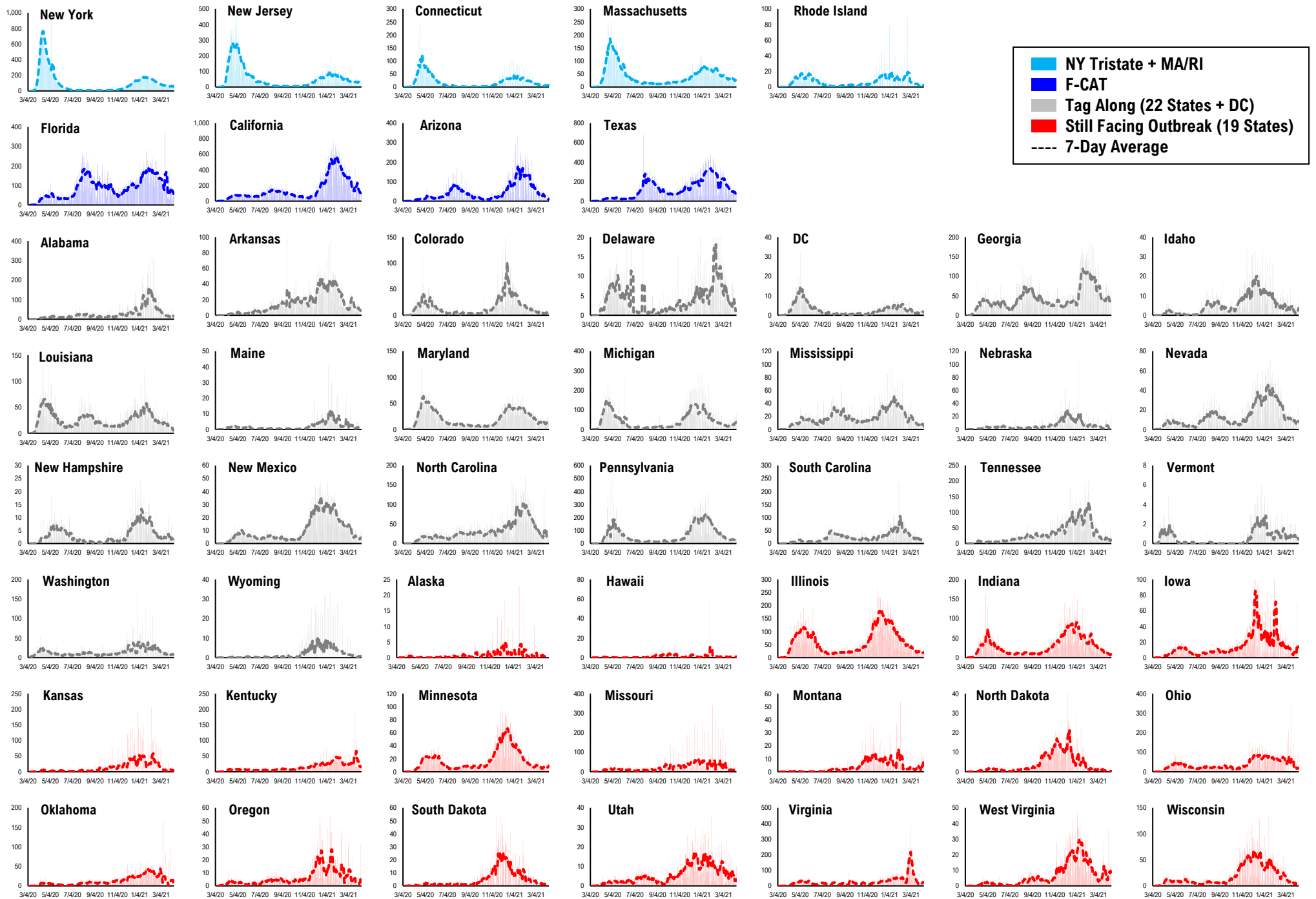
#12: Daily New Cases by States...



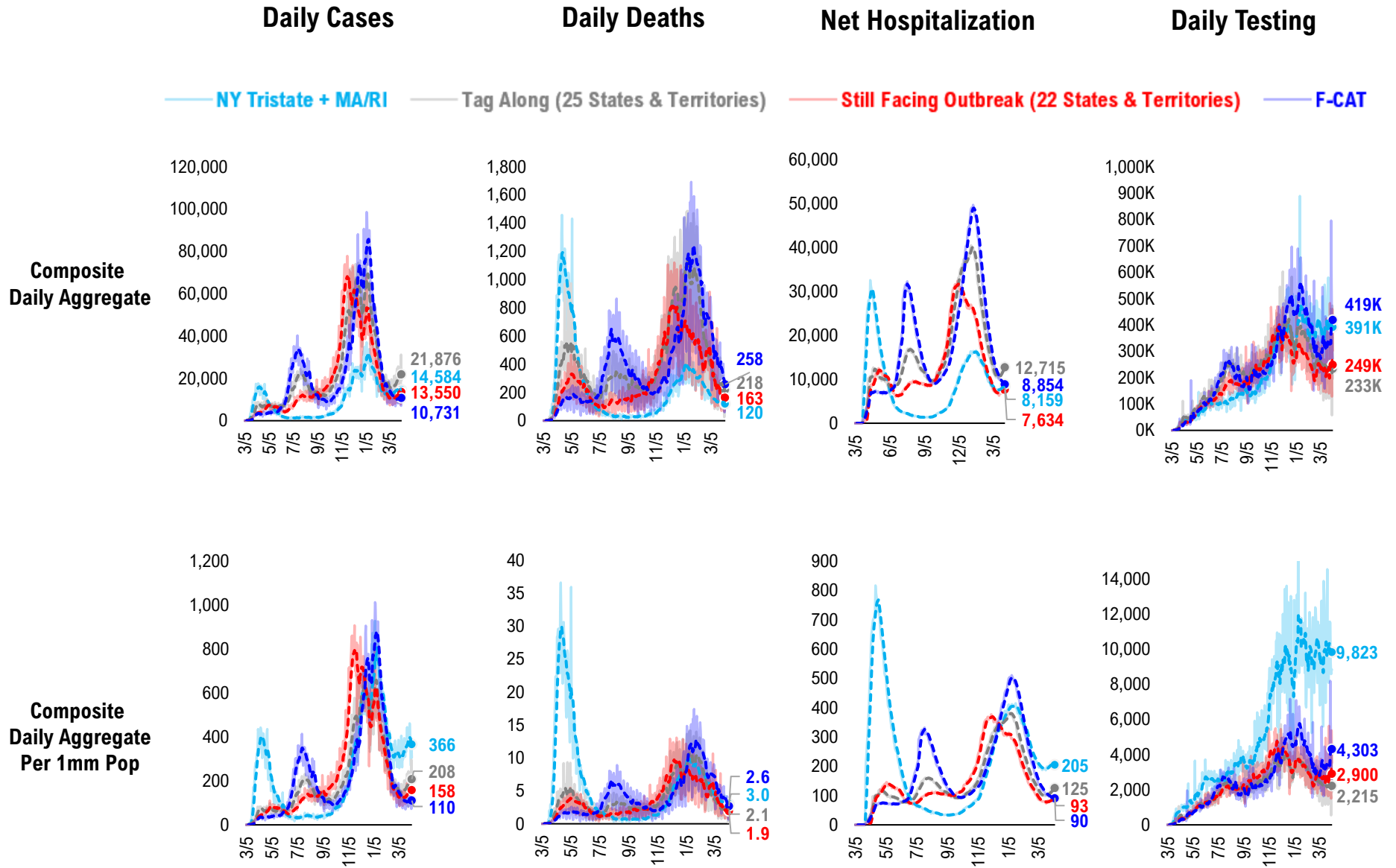
#13: Current Hospitalizations by States...



#14: Daily New Deaths by States...

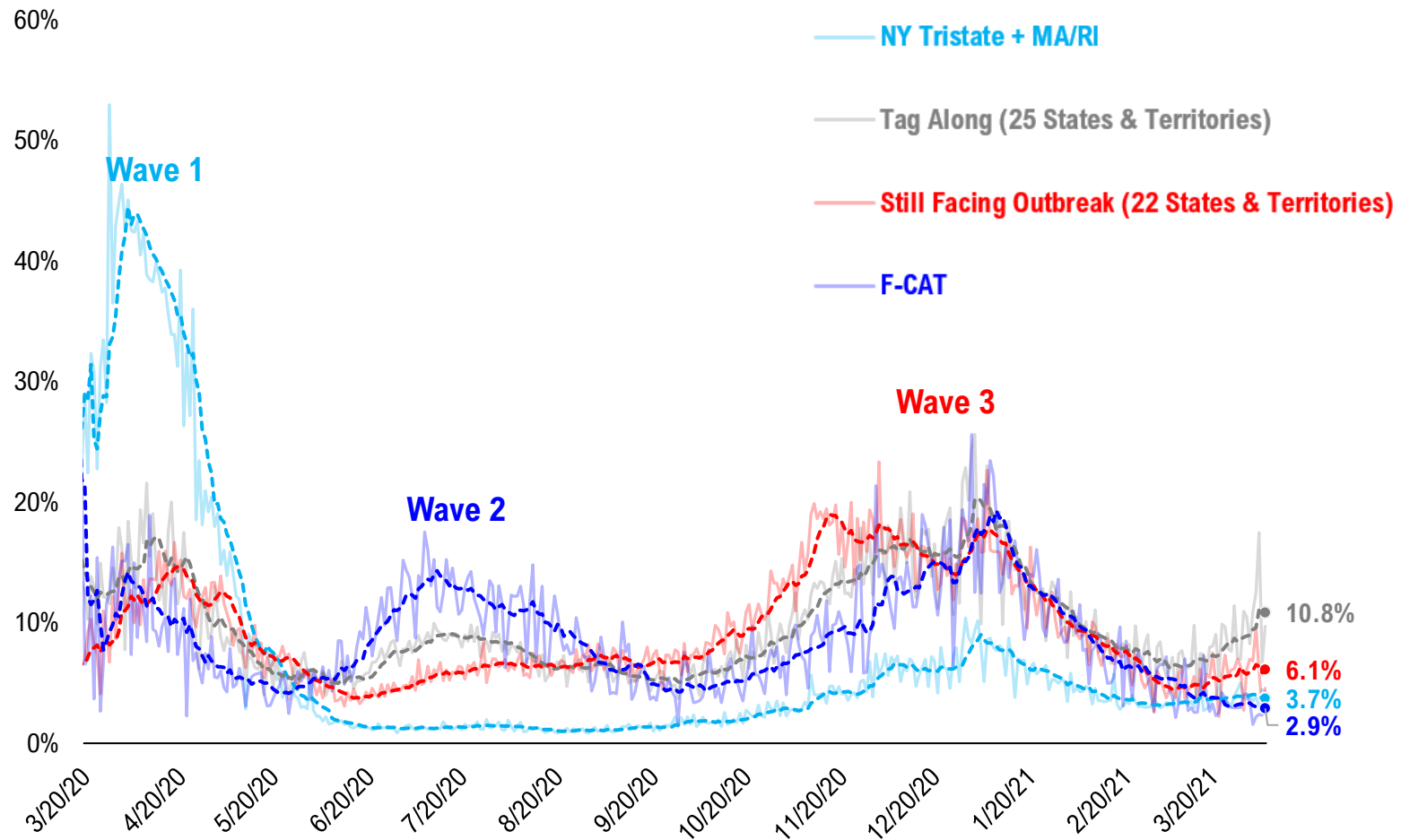


#15: State COVID-19 situation by Tier...

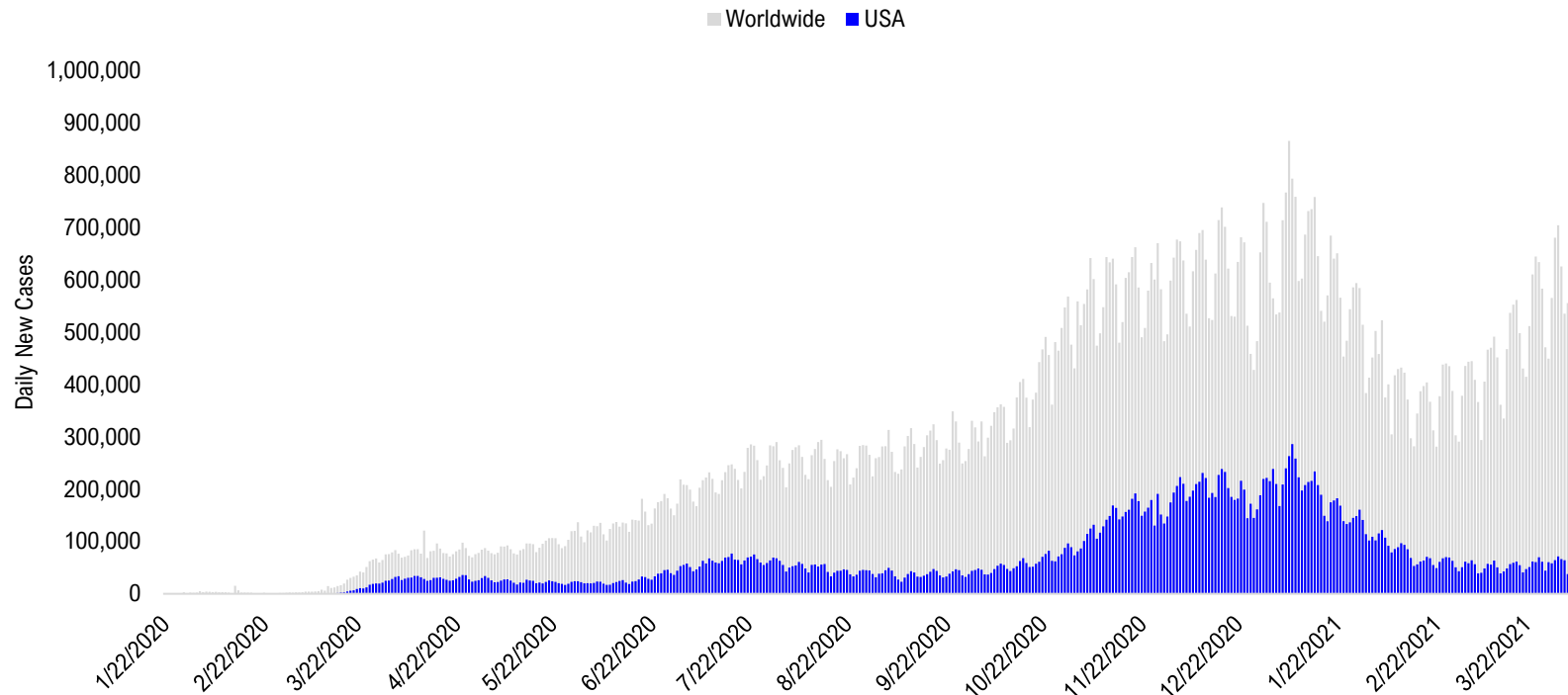


#16: State COVID-19 Daily Positivity Rate by Tier...

Composite Daily Positivity Rate



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



Nov 20	Dec 4	Dec 18	Jan 1	Jan 15	Jan 29	Feb 12	Feb 26	Mar 12	Mar 26	Apr 7
Europe 261,193	Europe 234,613	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 223,241
US + Canada 168,126	US + Canada 181,863	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 118,104
Latin America 59,427	Latin America 77,676	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 112,497
Pakistan + India + Bangladesh 44,091	Pakistan + India + Bangladesh 41,888	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 68,353
Asia ex- India+Pakistan 14,176	Asia ex- India+Pakistan 16,452	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 14,244	Asia ex- India+Pakistan 19,058	Asia ex- India+Pakistan 23,637
Africa 13,534	Africa 13,958	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 12,007

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