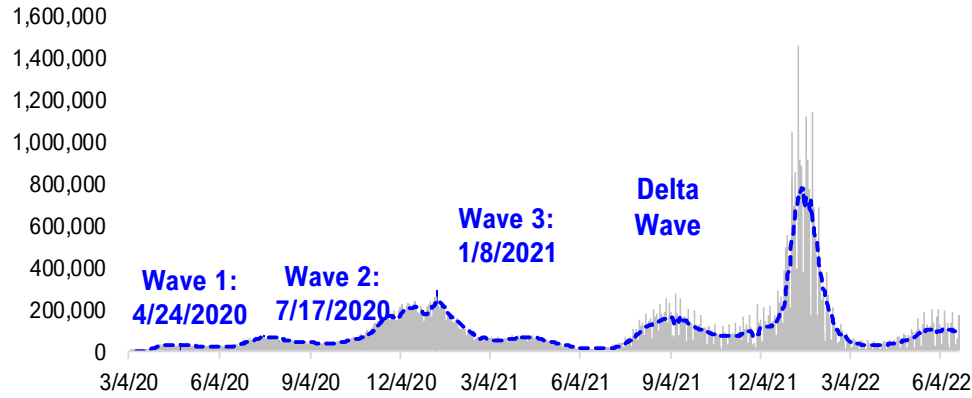


FSInsight Daily COVID-19 Chartbook

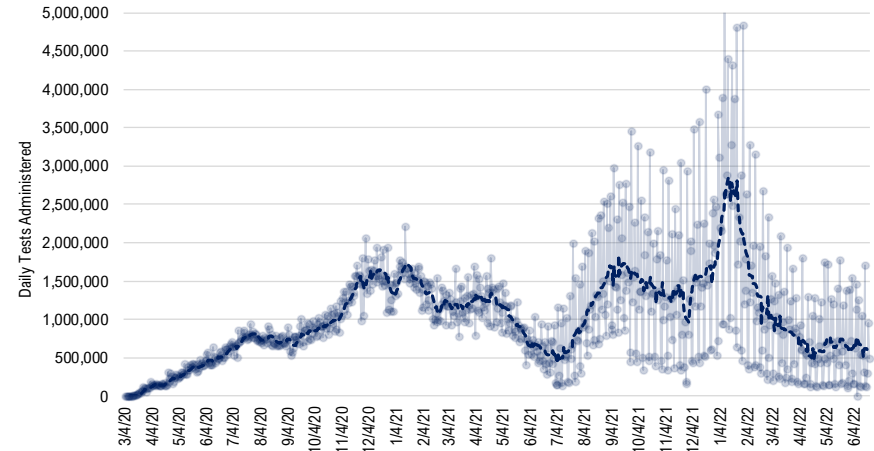


#1: USA COVID-19 Situation at a Glance...

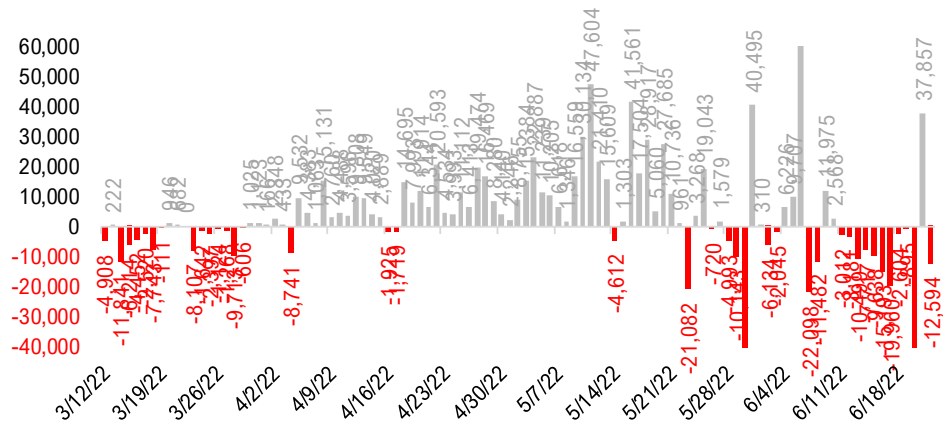
US daily new cases



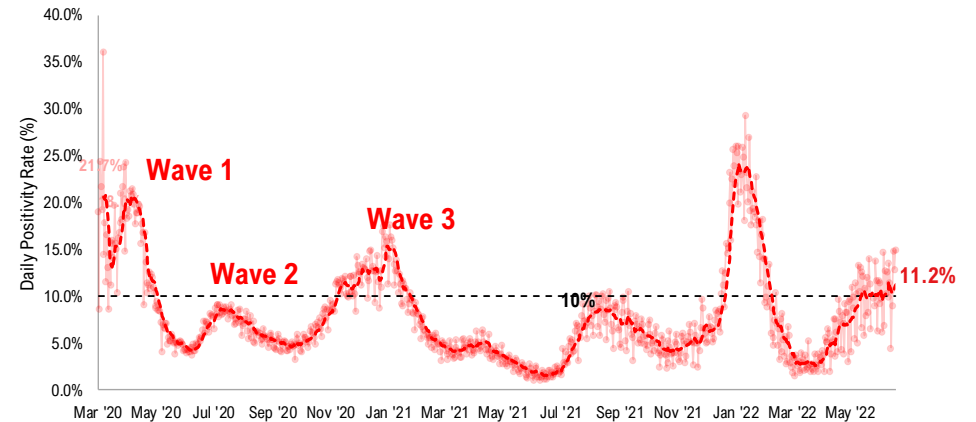
USA total COVID-19 tests administered



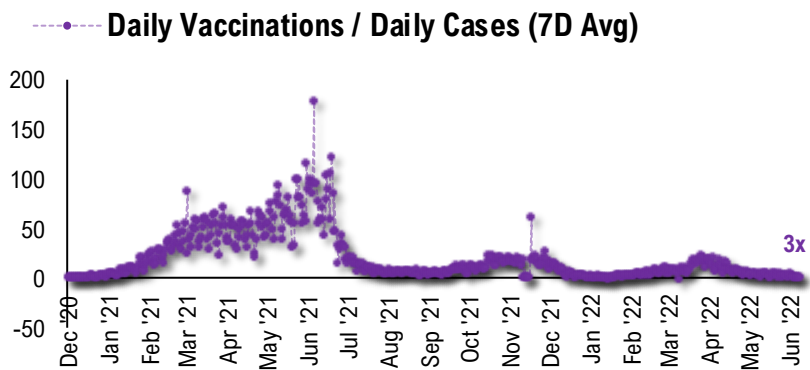
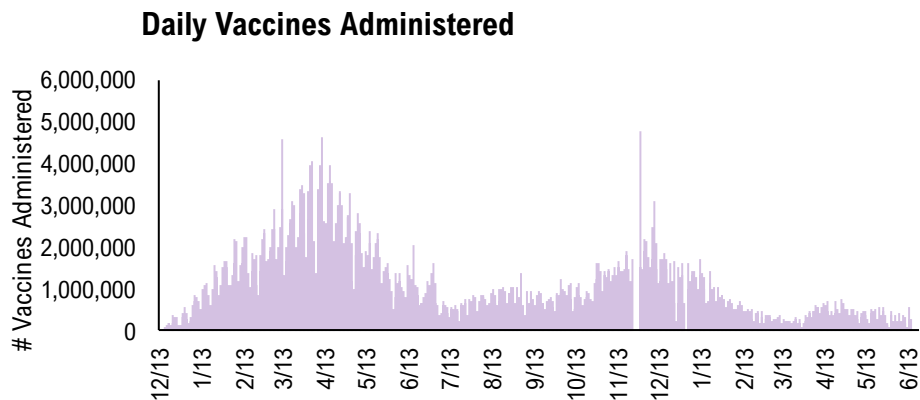
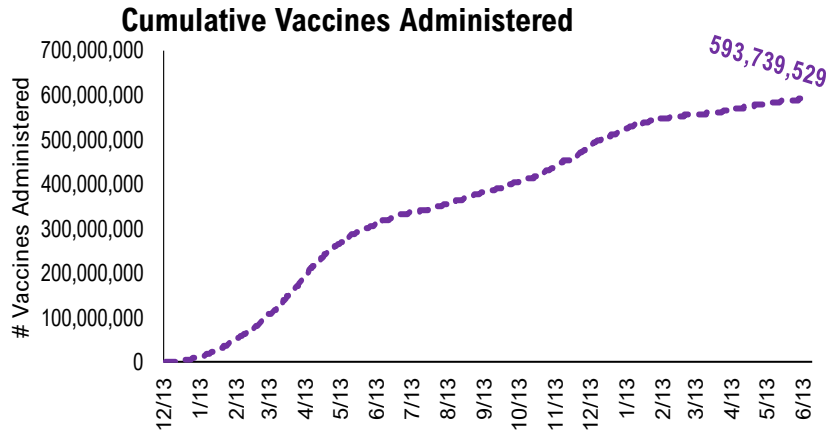
US daily new cases rolling 7D delta



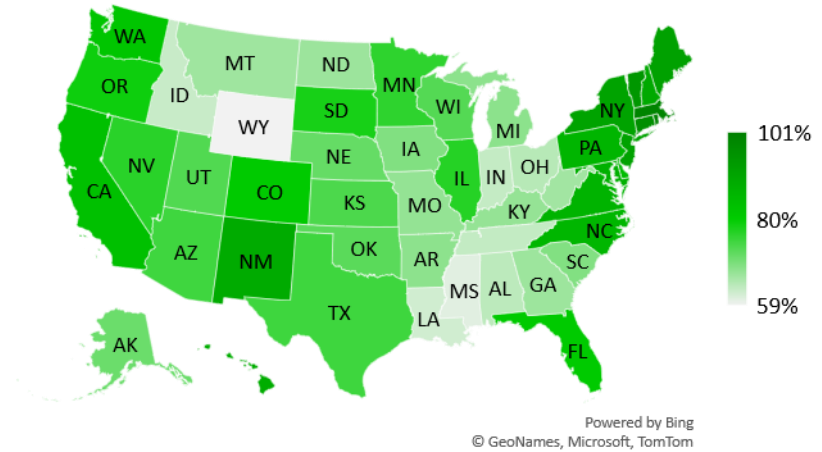
United States 10% 7 per. Mov. Avg. (United States)



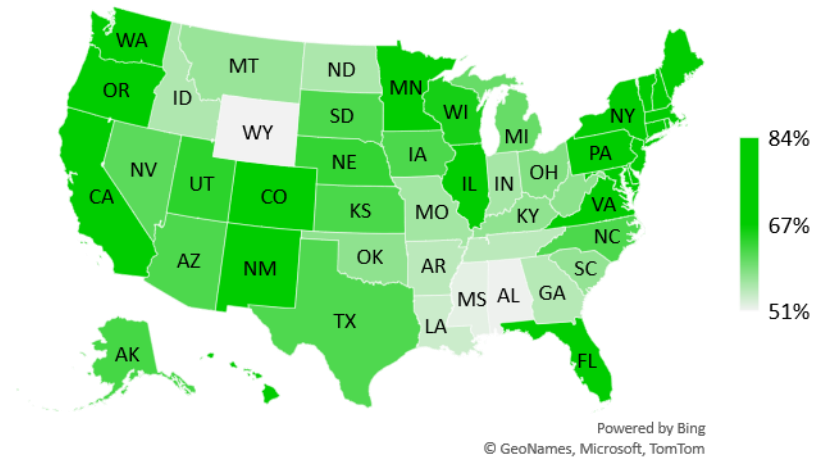
#2: USA COVID-19 Vaccination Progress at a Glance...



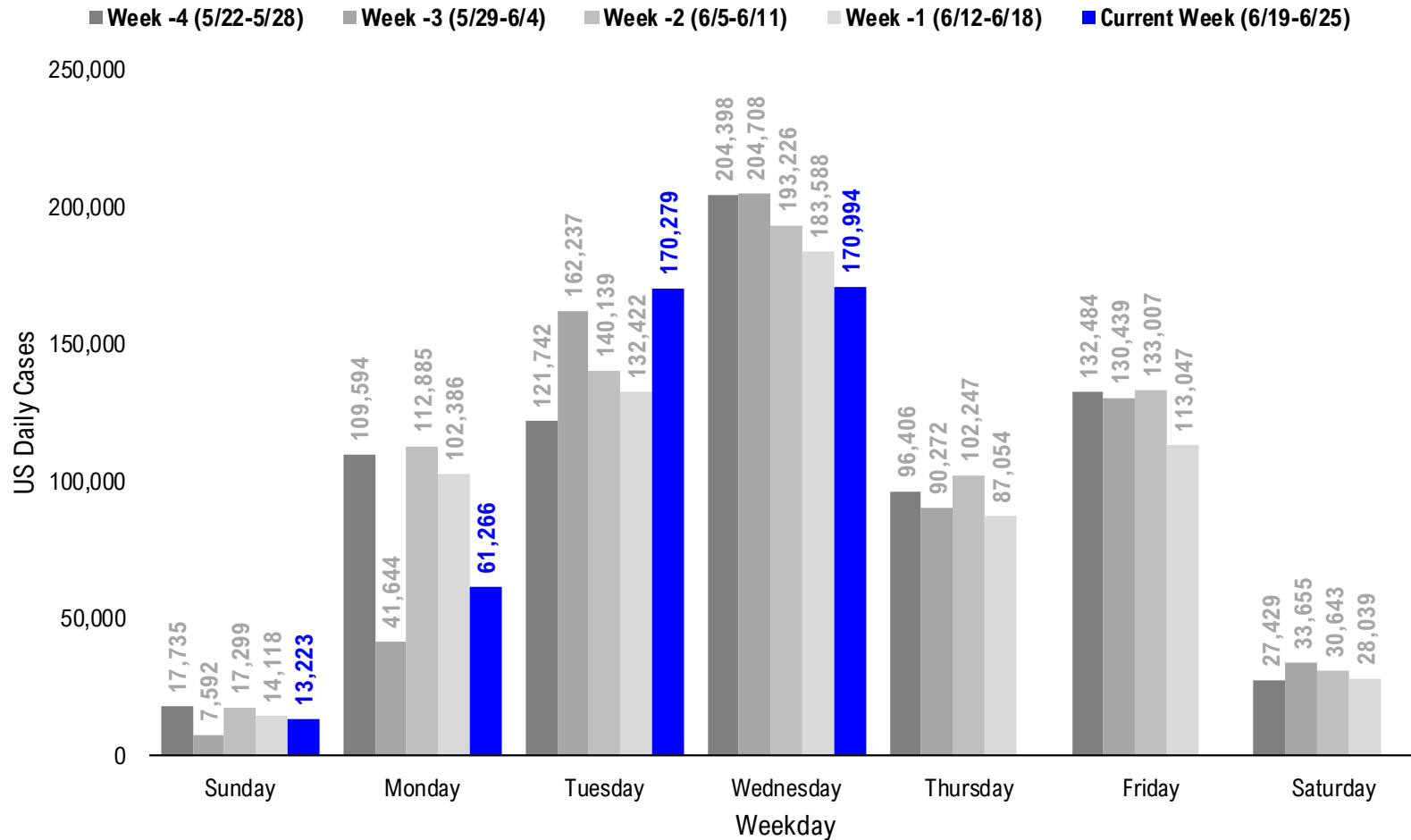
% State Population with at least One-Dose Vaccinated



% State Population Fully Vaccinated



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



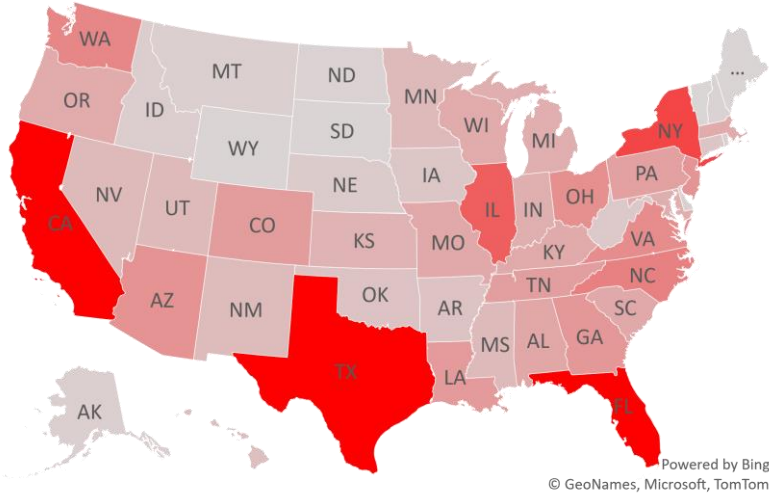
#4: USA State COVID-19 Situation at a Glance...

	Sorted Daily Cases										Sorted Daily Cases										
	% US Pop		% US GDP		Daily Cases (3D avg) per 1mm residents		Since Peak		Hospitalization		% US Pop		% US GDP		Daily Cases (3D avg) per 1mm residents		Since Peak		Hospitalization		
	6/22	7D Delta	6/22	7D Delta	# Days	% Decline in Daily Cases	7D Net Hospitalization	7D Net Hospitalization / 7D New Cases	6/22	7D Delta	6/22	7D Delta	# Days	% Decline in Daily Cases	7D Net Hospitalization	7D Net Hospitalization / 7D New Cases					
United States	100%	100%	170,994	-12,594	409	-16	161	-87%	619	0.1%	United States	100%	100%	170,994	-12,594	409	-16	161	-87%	619	0.1%
States:											States:										
1 North Carolina	3.2%	2.7%	19,098	-5,366	607	-171	153	-88%	26	0.1%	29 Iowa	1.0%	0.9%	1,082	+1,082	239	-11	153	-91%	-2	(0.1%)
2 Arizona	2.2%	1.7%	15,373	-961	704	-44	150	-78%	0	0.0%	30 South Dakota	0.3%	0.3%	971	-1	366	-0	153	-91%	13	1.3%
3 Georgia	3.2%	2.9%	14,006	+440	440	+14	167	-85%	123	0.9%	31 New Mexico	0.6%	0.5%	921	-206	632	-64	153	-88%	10	0.2%
4 Tennessee	2.1%	1.8%	12,738	+99	622	+5	145	-89%	-3	(0.0%)	32 District of Columbi	0.2%	0.7%	861	+669	407	+106	168	-93%	3	0.2%
5 Pennsylvania	3.9%	3.8%	12,326	-7,955	321	-207	165	-87%	-72	(0.6%)	33 Arkansas	0.9%	0.6%	812	-142	202	-22	152	-95%	-6	(0.1%)
6 Florida	6.5%	5.0%	12,095	-1,293	600	-3	161	-84%	204	0.3%	34 Connecticut	1.1%	1.3%	727	-86	258	-39	161	-94%	-39	(1.0%)
7 Washington	2.3%	2.7%	11,799	+6,793	516	+17	147	-89%	84	0.5%	35 Vermont	0.2%	0.2%	615	-131	329	-70	159	-94%	-1	(0.2%)
8 Texas	8.7%	8.8%	7,407	+1,110	340	+104	168	-90%	297	0.6%	36 West Virginia	0.5%	0.4%	612	+56	551	+110	151	-83%	-16	(0.4%)
9 Nevada	0.9%	0.8%	6,535	-1,954	707	-211	153	-80%	-8	(0.1%)	37 Nebraska	0.6%	0.6%	535	-46	267	+4	153	-94%	21	0.7%
10 Hawaii	0.4%	0.5%	5,482	-1,717	1291	-404	153	-66%	-22	(0.4%)	38 Puerto Rico	1.0%	0.5%	400	-260	118	-91	171	-92%	-35	(0.5%)
11 Illinois	3.8%	4.2%	4,609	-1,128	474	-6	168	-88%	-33	(0.1%)	39 Rhode Island	0.3%	0.3%	286	-94	369	-83	167	-96%	-16	(0.9%)
12 New York	5.9%	8.1%	4,211	-1,068	197	-25	165	-96%	-97	(0.3%)	40 Maine	0.4%	0.3%	249	-109	62	-144	126	-98%	-21	(2.1%)
13 Kansas	0.9%	0.8%	4,164	+4,164	476	+476	152	-93%	78	1.0%	41 New Hampshire	0.4%	0.4%	196	-26	195	-28	153	-96%	5	0.4%
14 Maryland	1.8%	2.0%	4,007	+2,863	297	-59	169	-92%	56	0.6%	42 Delaware	0.3%	0.4%	108	+108	353	-22	159	-91%	5	0.3%
15 Indiana	2.0%	1.8%	3,406	+3,166	302	+23	154	-91%	-15	(0.2%)	43 U.S. Virgin Islands	0.0%	0.0%	35	-9	305	-22	168	-94%	0	0.0%
16 Virginia	2.6%	2.6%	2,592	-112	442	-39	161	-88%	-24	(0.1%)	44 Utah	1.0%	0.9%	0	+0	0	+0	153	-100%	19	0.3%
17 Oregon	1.3%	1.2%	2,500	+981	535	-18	153	-85%	40	0.4%	45 South Carolina	1.6%	1.1%	0	+0	688	+18	153	-89%	-3	(0.0%)
18 Louisiana	1.4%	1.3%	2,364	+820	695	+308	161	-84%	45	0.3%	46 Oklahoma	1.2%	1.0%	0	+0	0	+0	156	-100%	6	0.1%
19 New Jersey	2.7%	3.0%	2,270	-237	204	-8	166	-94%	-65	(0.4%)	47 Ohio	3.5%	3.3%	0	+0	0	+0	157	-100%	14	0.1%
20 Colorado	1.7%	1.8%	2,144	+108	475	-80	161	-90%	-19	(0.1%)	48 North Dakota	0.2%	0.3%	0	+0	0	+0	153	-100%	9	0.7%
21 Alaska	0.2%	0.3%	2,127	+289	969	+132	152	-87%	6	0.3%	49 Montana	0.3%	0.2%	0	+0	0	+0	147	-100%	2	0.1%
22 Alabama	1.5%	1.1%	2,040	+415	487	+73	155	-89%	80	0.7%	50 Northern Mariana	0.0%	0.0%	0	+0	0	+0	603	-100%	0	
23 Massachusetts	2.1%	2.8%	1,896	+205	304	-78	161	-94%	-52	(0.5%)	51 Missouri	1.8%	1.5%	0	+0	0	+0	153	-100%	27	0.3%
24 Wisconsin	1.8%	1.6%	1,706	+18	388	+12	154	-93%	-27	(0.3%)	52 Michigan	3.0%	2.6%	0	-12,965	310	-123	152	-92%	-122	(1.3%)
25 Idaho	0.5%	0.4%	1,618	+724	302	+4	152	-86%	58	2.3%	53 Kentucky	1.3%	1.0%	0	+0	758	-249	153	-84%	17	0.2%
26 Minnesota	1.7%	1.8%	1,572	+216	183	-215	152	-95%	-44	(0.7%)	54 Guam	0.0%	0.0%	0	+0	0	+0	143	-100%	2	0.3%
27 Mississippi	0.9%	0.6%	1,319	+219	535	+136	153	-88%	17	0.2%	55 California	11.9%	14.6%	0	+0	549	+14	161	-88%	100	0.1%
28 Wyoming	0.2%	0.2%	1,180	-1,273	680	-733	153	-83%	-6	(0.5%)	56 American Samoa	0.0%	0.0%	0	+0	0	+0	0	0%	0	

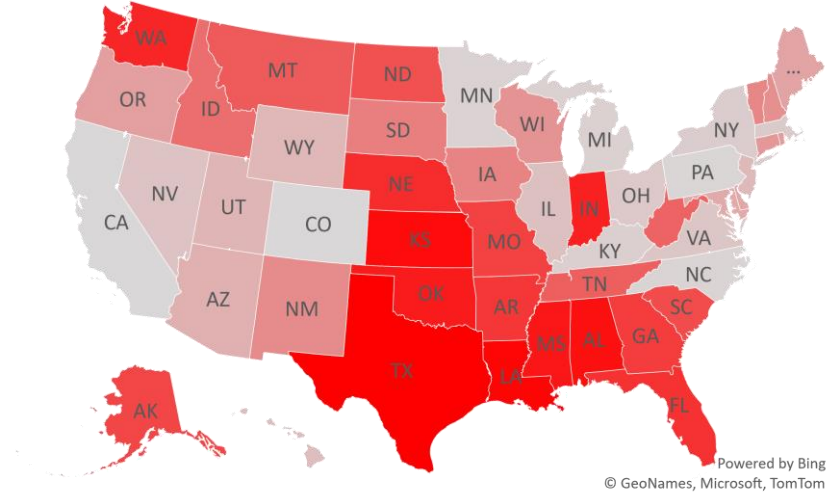
#5: USA COVID-19 Heat Map...



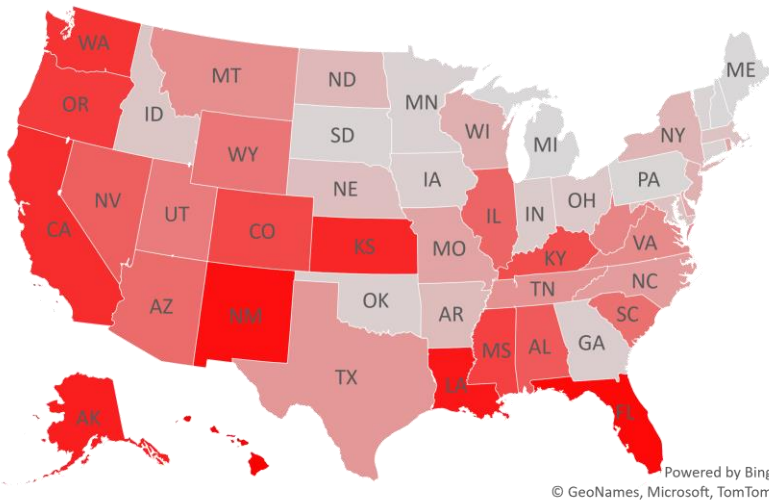
Daily New Cases (7D Avg)



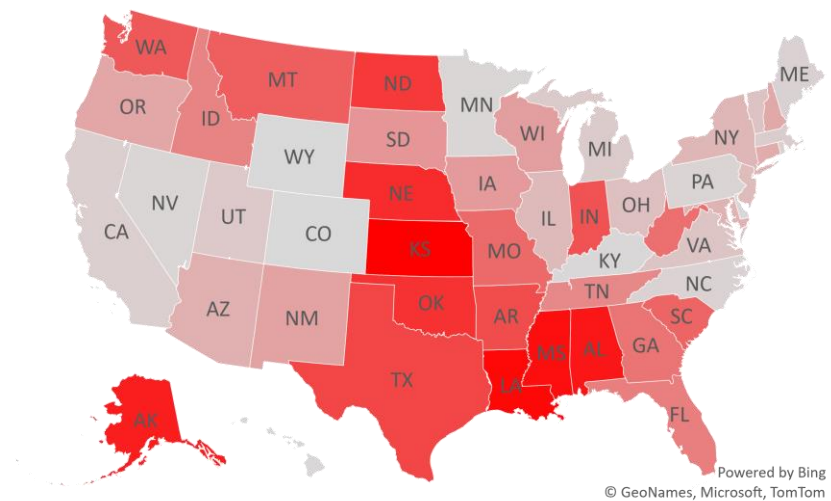
7D Delta in Daily New Cases (7D Avg)



Daily New Cases per 1mm Resident (7D Avg)



7D Delta in Daily New Cases per 1mm Resident (7D Avg)



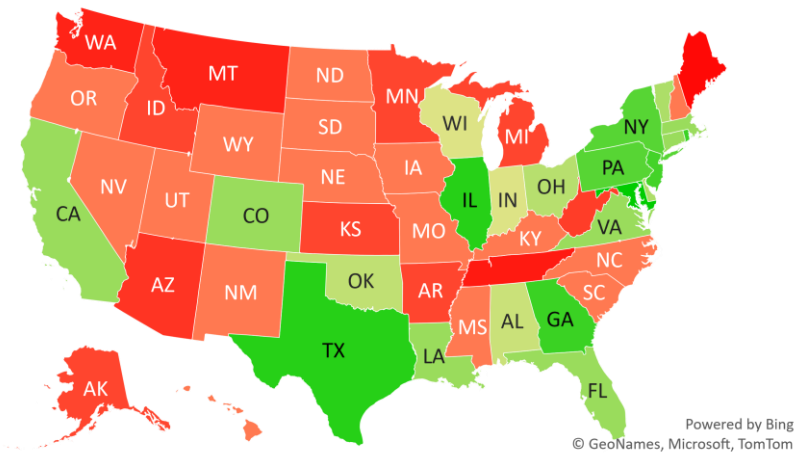
#6: # of Days since Daily Case Peaked by States...

Days since Daily Cases (3D Avg) Peak (as of 6/22)

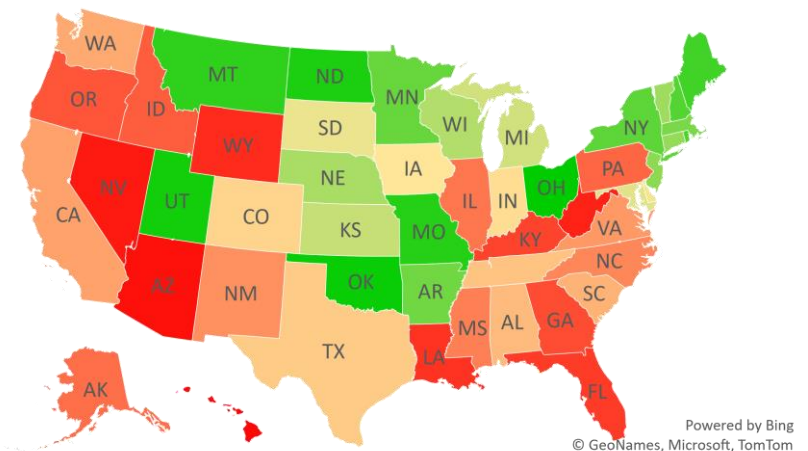
	Peak Date	6/22/22	% off the Peak	% US Pop
United States	1/12/22	161	-87%	100%
Sorted				
States:				
Northern Mariana Island	10/27/20	603	-100%	0.0%
Puerto Rico	1/2/22	171	-92%	1.0%
Maryland	1/4/22	169	-92%	1.8%
U.S. Virgin Islands	1/5/22	168	-94%	0.0%
Texas	1/5/22	168	-90%	8.7%
Illinois	1/5/22	168	-88%	3.8%
District of Columbia	1/5/22	168	-93%	0.2%
Rhode Island	1/6/22	167	-96%	0.3%
Georgia	1/6/22	167	-85%	3.2%
New Jersey	1/7/22	166	-94%	2.7%
Pennsylvania	1/8/22	165	-87%	3.9%
New York	1/8/22	165	-96%	5.9%
Virginia	1/12/22	161	-88%	2.6%
Massachusetts	1/12/22	161	-94%	2.1%
Louisiana	1/12/22	161	-84%	1.4%
Florida	1/12/22	161	-84%	6.5%
Connecticut	1/12/22	161	-94%	1.1%
Colorado	1/12/22	161	-90%	1.7%
California	1/12/22	161	-88%	11.9%
Vermont	1/14/22	159	-94%	0.2%
Delaware	1/14/22	159	-91%	0.3%
Ohio	1/16/22	157	-100%	3.5%
Oklahoma	1/17/22	156	-100%	1.2%
Alabama	1/18/22	155	-89%	1.5%
Wisconsin	1/19/22	154	-93%	1.8%
Indiana	1/19/22	154	-91%	2.0%
Wyoming	1/20/22	153	-83%	0.2%
Utah	1/20/22	153	-100%	1.0%

	Peak Date	6/22/22	% off the Peak	% US Pop
United States	1/12/22	161	-87%	100%
Sorted				
States:				
South Dakota	1/20/22	153	-91%	0.3%
South Carolina	1/20/22	153	-89%	1.6%
Oregon	1/20/22	153	-85%	1.3%
Nevada	1/20/22	153	-80%	0.9%
New Mexico	1/20/22	153	-88%	0.6%
New Hampshire	1/20/22	153	-96%	0.4%
Nebraska	1/20/22	153	-94%	0.6%
North Dakota	1/20/22	153	-100%	0.2%
North Carolina	1/20/22	153	-88%	3.2%
Mississippi	1/20/22	153	-88%	0.9%
Missouri	1/20/22	153	-100%	1.8%
Kentucky	1/20/22	153	-84%	1.3%
Iowa	1/20/22	153	-91%	1.0%
Hawaii	1/20/22	153	-66%	0.4%
Minnesota	1/21/22	152	-95%	1.7%
Michigan	1/21/22	152	-92%	3.0%
Kansas	1/21/22	152	-93%	0.9%
Idaho	1/21/22	152	-86%	0.5%
Arkansas	1/21/22	152	-95%	0.9%
Alaska	1/21/22	152	-87%	0.2%
West Virginia	1/22/22	151	-83%	0.5%
Arizona	1/23/22	150	-78%	2.2%
Washington	1/26/22	147	-89%	2.3%
Montana	1/26/22	147	-100%	0.3%
Tennessee	1/28/22	145	-89%	2.1%
Guam	1/30/22	143	-100%	0.0%
Maine	2/16/22	126	-98%	0.4%

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



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



#7: 7-Day New Cases by States... (sorted new cases in past 7D)

Sorted

Weekly Total Cases in Past 4 Weeks

	Week -3	Week -2	Week -1	6/22/22	vs 7D Ago
United States	672,500	717,915	698,411	643,902	-54,509
States:					
California	102,164	103,240	110,437	95,629	-14,808
Florida	67,056	77,557	73,663	74,264	+601
Texas	37,177	46,845	48,265	53,300	+5,035
New York	44,842	43,135	35,105	32,422	-2,683
Illinois	32,403	35,779	28,720	26,866	-1,854
North Carolina	27,795	26,785	24,464	19,098	-5,366
Washington	17,510	21,975	17,033	17,968	+935
Virginia	20,106	20,640	18,756	16,783	-1,973
Ohio	19,546	17,530	18,247	16,169	-2,078
Arizona	13,042	14,677	16,334	15,373	-961
New Jersey	22,614	20,784	16,282	14,876	-1,406
Georgia	11,403	14,641	13,566	14,006	+440
Louisiana	8,471	9,226	9,131	13,619	+4,488
Colorado	12,542	17,592	27,208	13,112	-14,096
Tennessee	10,460	11,279	12,639	12,738	+99
Pennsylvania	24,862	22,564	20,281	12,326	-7,955
Alabama	5,421	7,023	8,495	10,698	+2,203
Missouri	8,149	8,882	10,327	10,651	+324
South Carolina	9,205	9,456	10,348	10,621	+273
Kentucky	7,140	9,761	13,497	10,166	-3,331
Massachusetts	17,534	16,514	12,519	9,937	-2,582
Oregon	10,076	10,414	10,428	9,925	-503
Wisconsin	11,570	13,308	10,076	9,885	-191
Michigan	16,262	15,583	12,965	9,275	-3,690
Maryland	15,319	12,121	9,765	8,943	-822
Indiana	7,763	9,539	7,999	8,937	+938
Kansas	3,114	3,211	4,706	8,113	+3,407
Mississippi	3,088	4,462	5,200	6,890	+1,690

Sorted

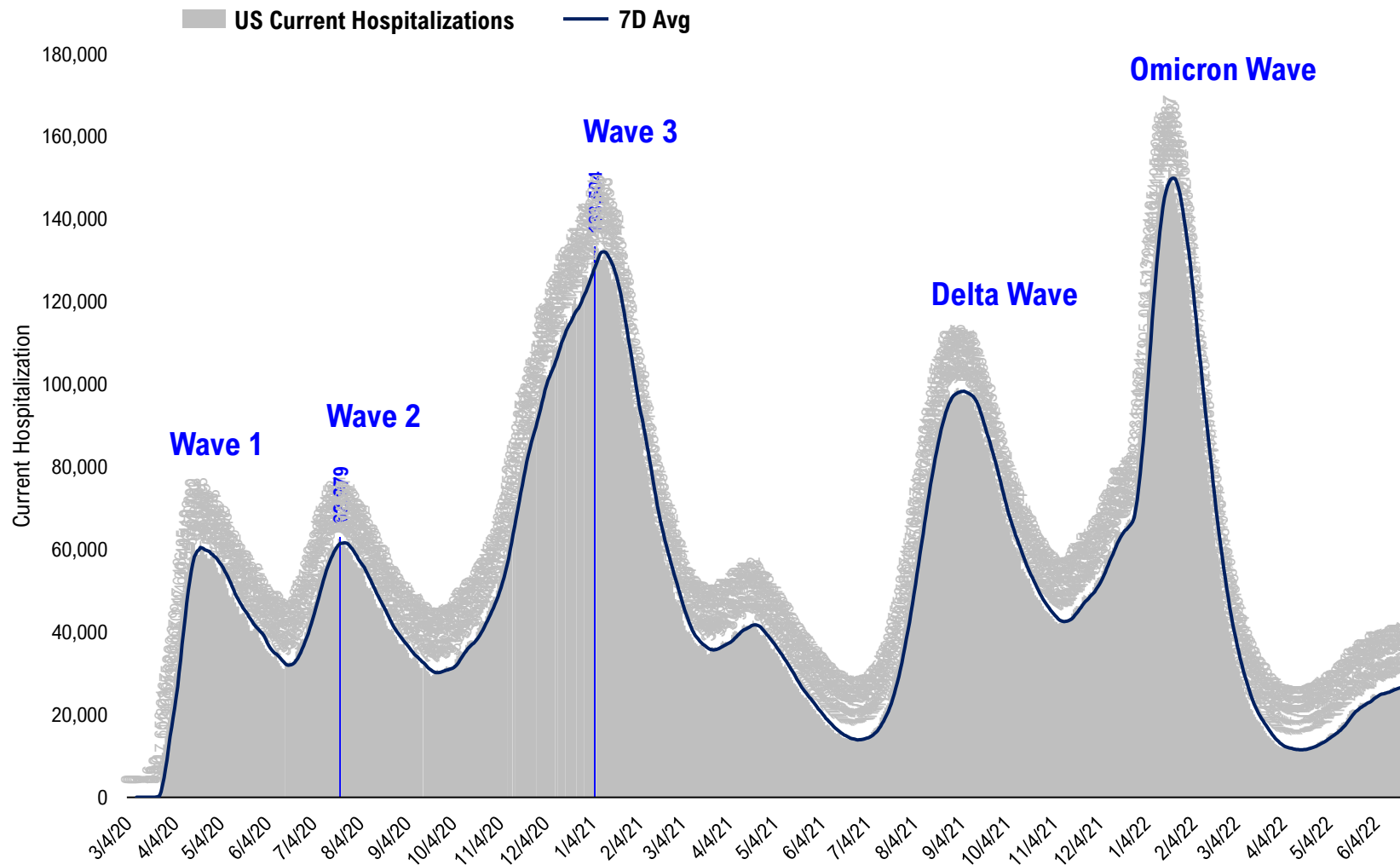
Weekly Total Cases in Past 4 Weeks

	Week -3	Week -2	Week -1	6/22/22	vs 7D Ago
United States	672,500	717,915	698,411	643,902	-54,509
States:					
Nevada	6,693	6,113	8,489	6,535	-1,954
Minnesota	8,392	14,359	10,577	6,533	-4,044
Utah	5,611	5,728	7,502	6,522	-980
Puerto Rico	7,432	7,666	7,310	6,480	-830
New Mexico	4,331	6,175	6,500	6,346	-154
Hawaii	8,124	8,033	7,199	5,482	-1,717
Oklahoma	2,443	3,053	3,883	4,911	+1,028
Arkansas	2,153	3,983	4,418	4,890	+472
Connecticut	6,442	4,795	4,546	4,094	-452
Iowa	3,854	4,283	3,987	3,919	-68
West Virginia	3,982	4,343	3,536	3,617	+81
Nebraska	2,222	2,887	2,387	3,023	+636
Idaho	1,748	2,492	2,449	2,499	+50
Alaska	1,759	2,241	1,838	2,127	+289
Montana	1,305	1,496	1,972	2,089	+117
Rhode Island	3,514	2,914	2,293	1,832	-461
Delaware	3,049	2,106	2,470	1,670	-800
District of Columbia	2,033	1,675	1,458	1,590	+132
North Dakota	933	1,198	1,068	1,252	+184
New Hampshire	2,507	1,981	1,416	1,251	-165
Wyoming	611	1,235	2,453	1,180	-1,273
Maine	2,408	1,803	1,691	1,023	-668
South Dakota	653	969	972	971	-1
Guam	280	356	611	673	+62
Vermont	2,822	993	746	615	-131
U.S. Virgin Islands	565	515	184	188	+4
Northern Mariana Islands	0	0	0	0	+0
American Samoa	0	0	0	0	+0

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

#8: US Daily Hospitalizations...

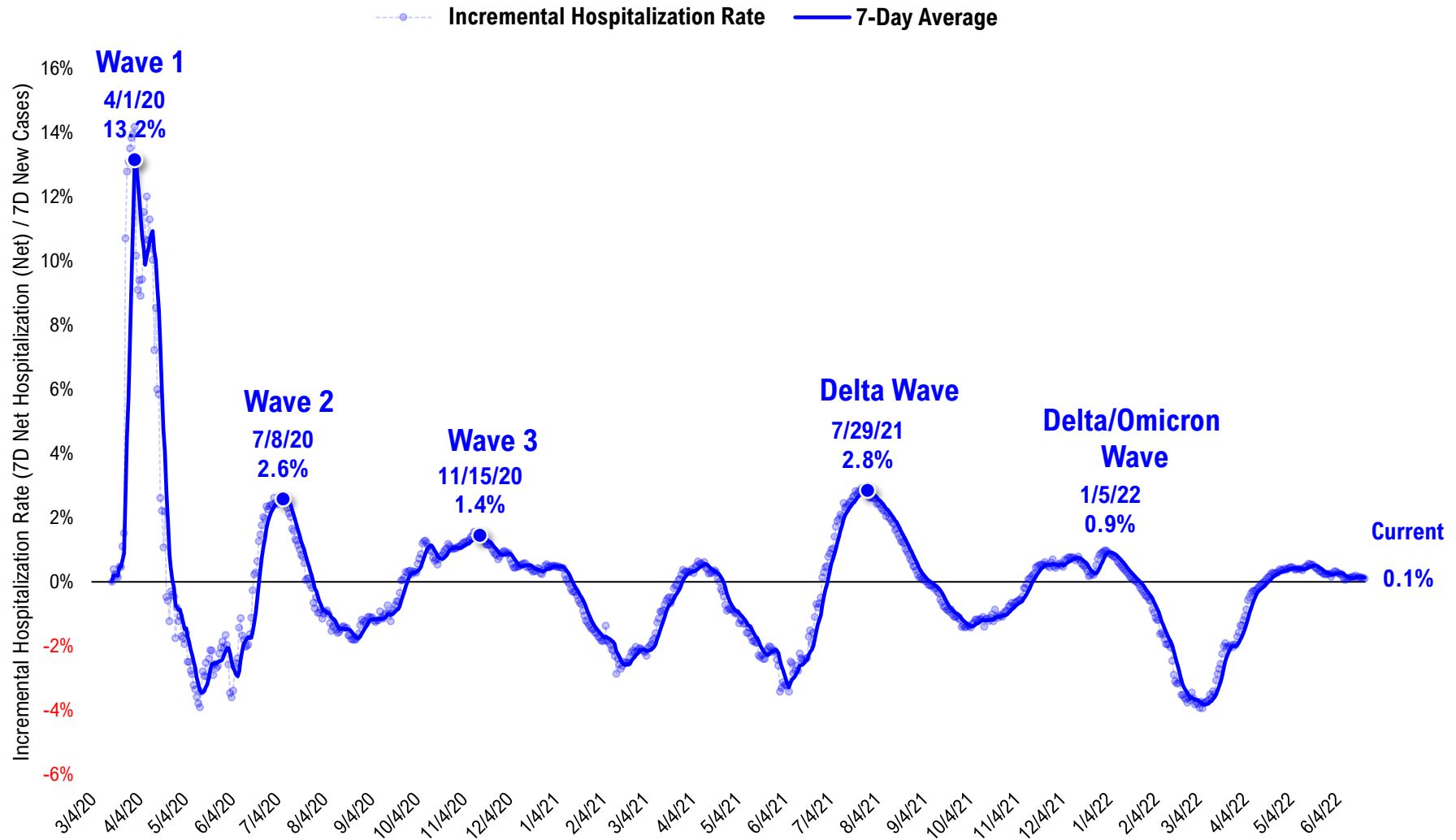
US Net Hospitalizations (aggregate of 50 states + Washington, D.C.)



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

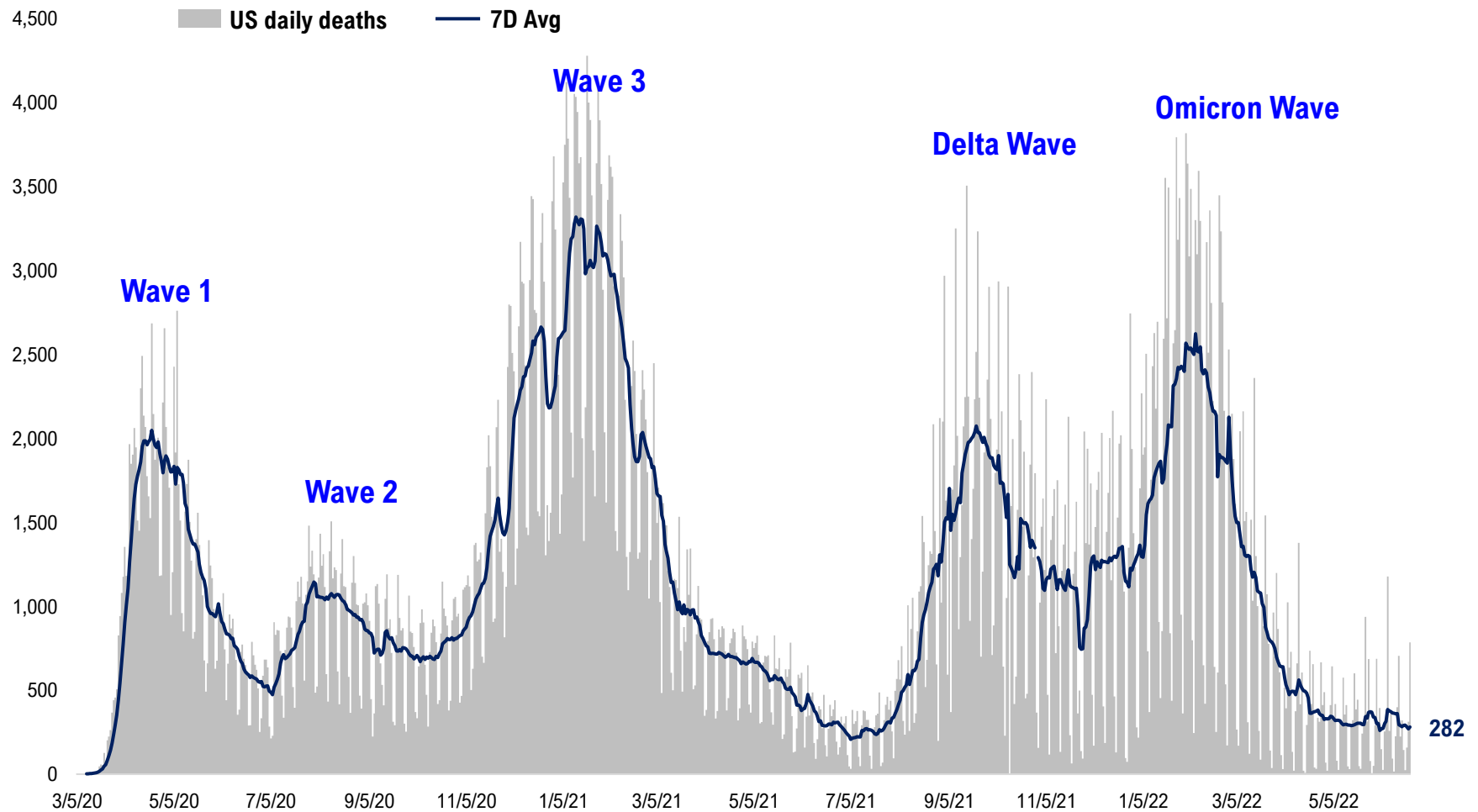
#9: Incremental Hospitalization Rate...

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

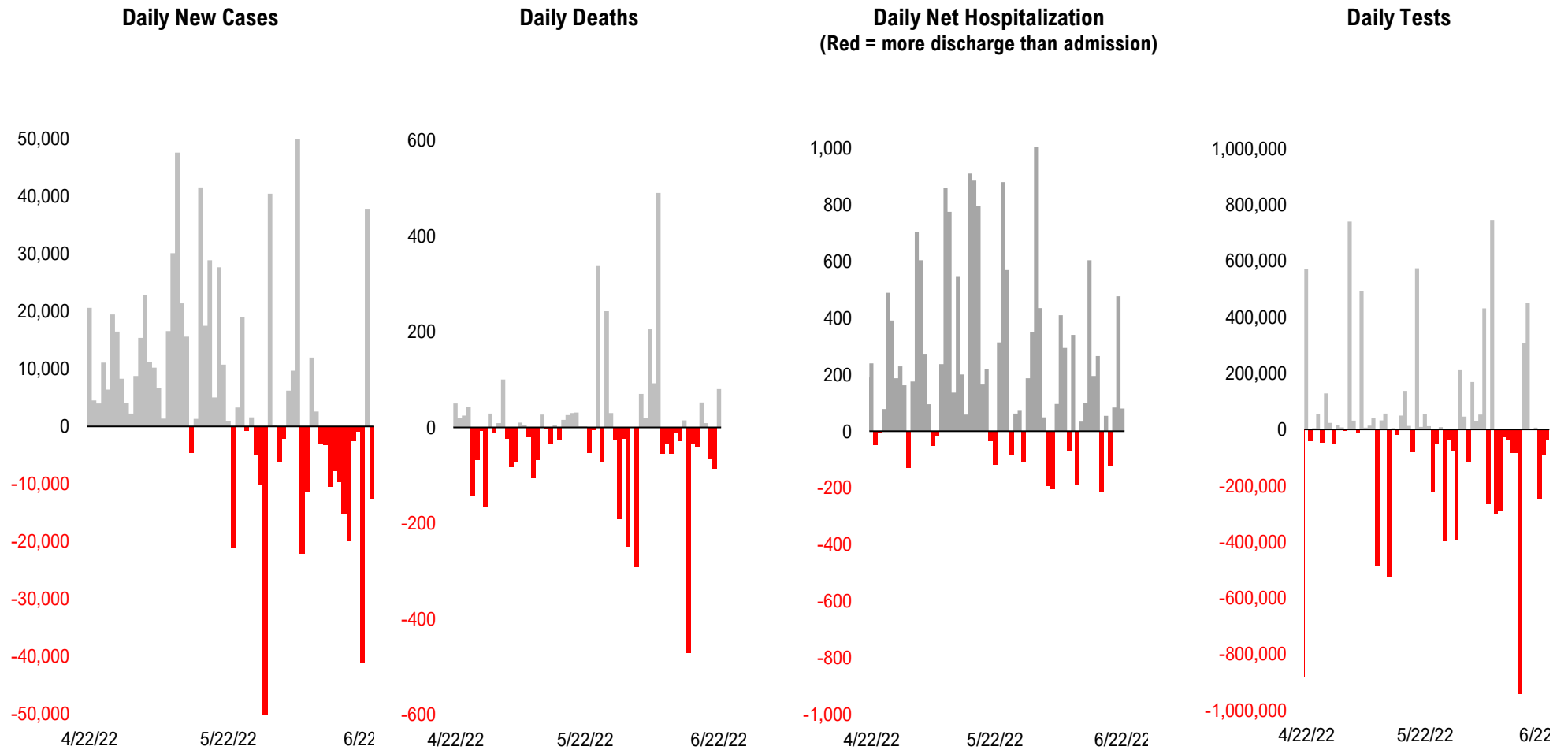


#10: US Daily New Fatalities...

US daily COVID-19 Fatalities

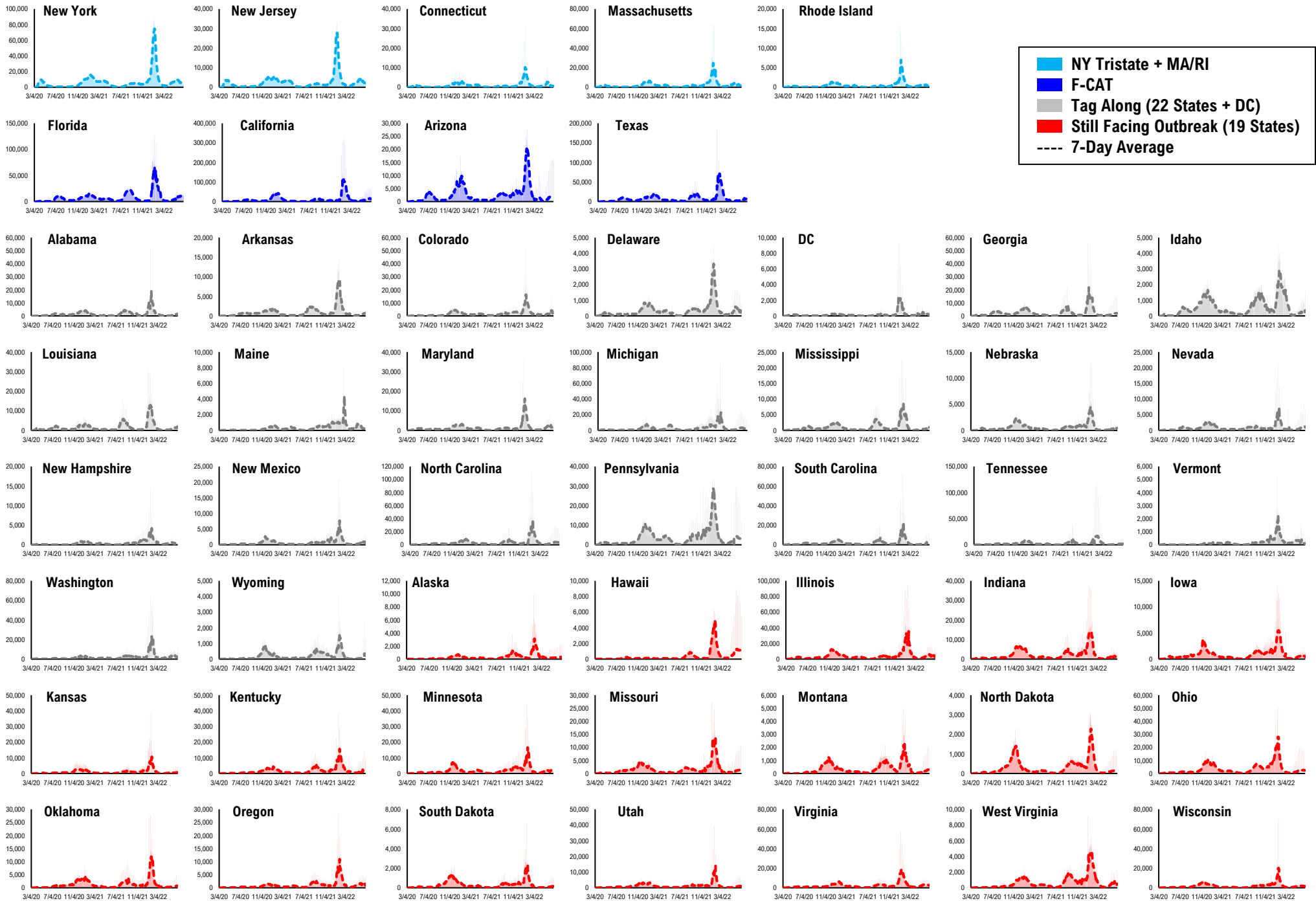


#11: Rolling 7-Day Change in the Key Metrics... (Past 8 Weeks)

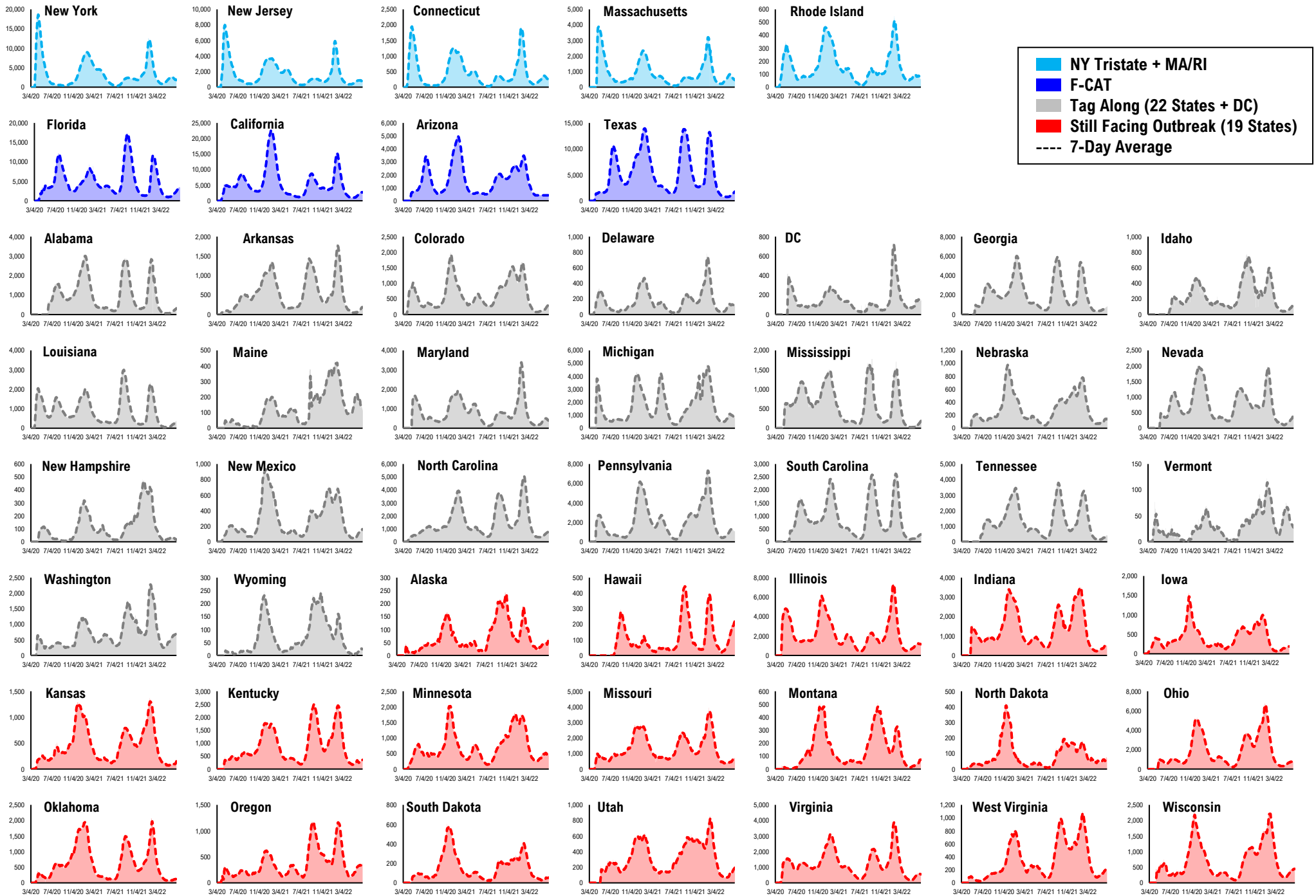


* Ignored California between 8/10 and 8/23, due to its data glitch caused 300,000-case backlog
Source: Fundstrat, COVID-19 Tracking Project, State Department of Health

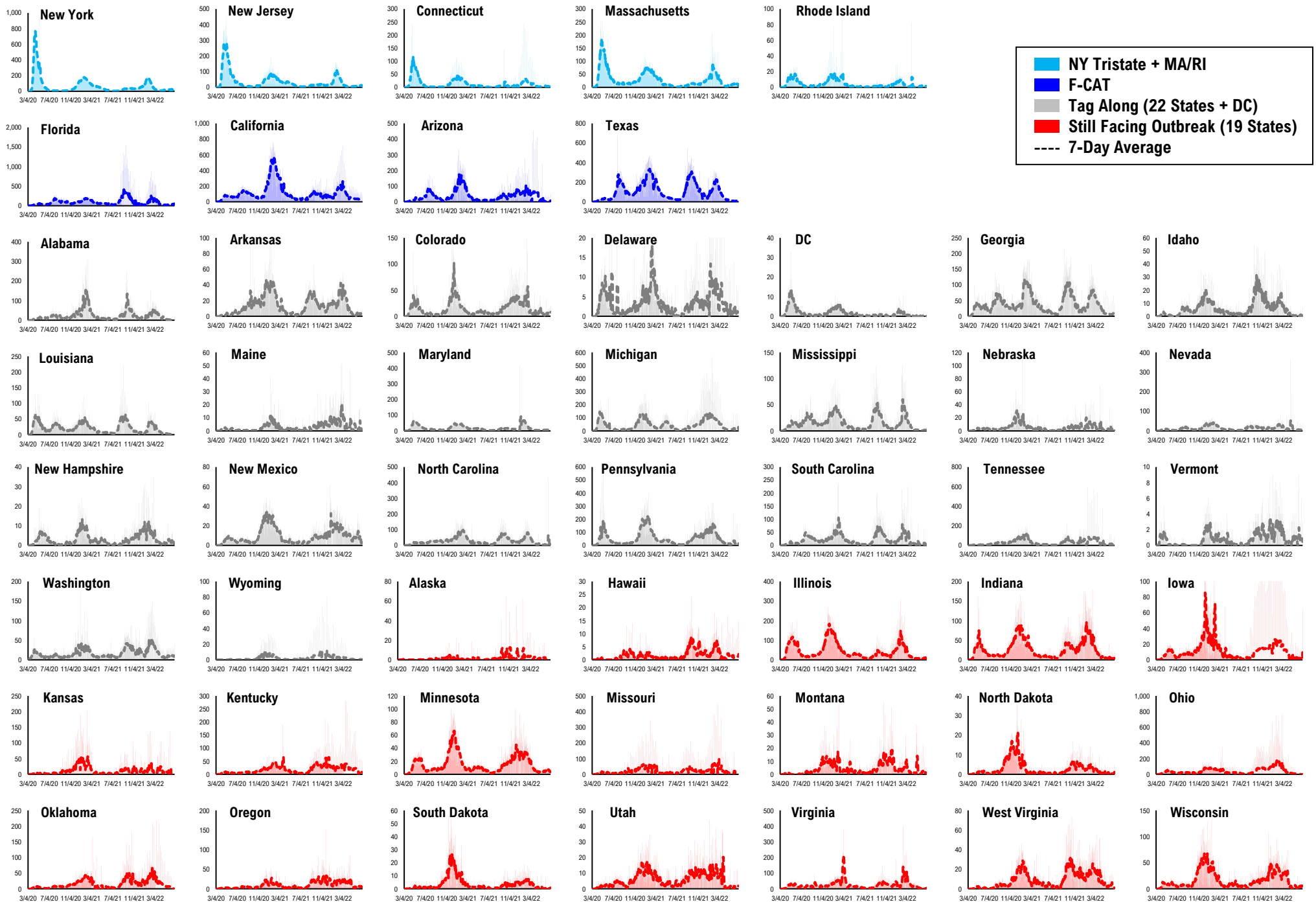
#12: Daily New Cases by States...



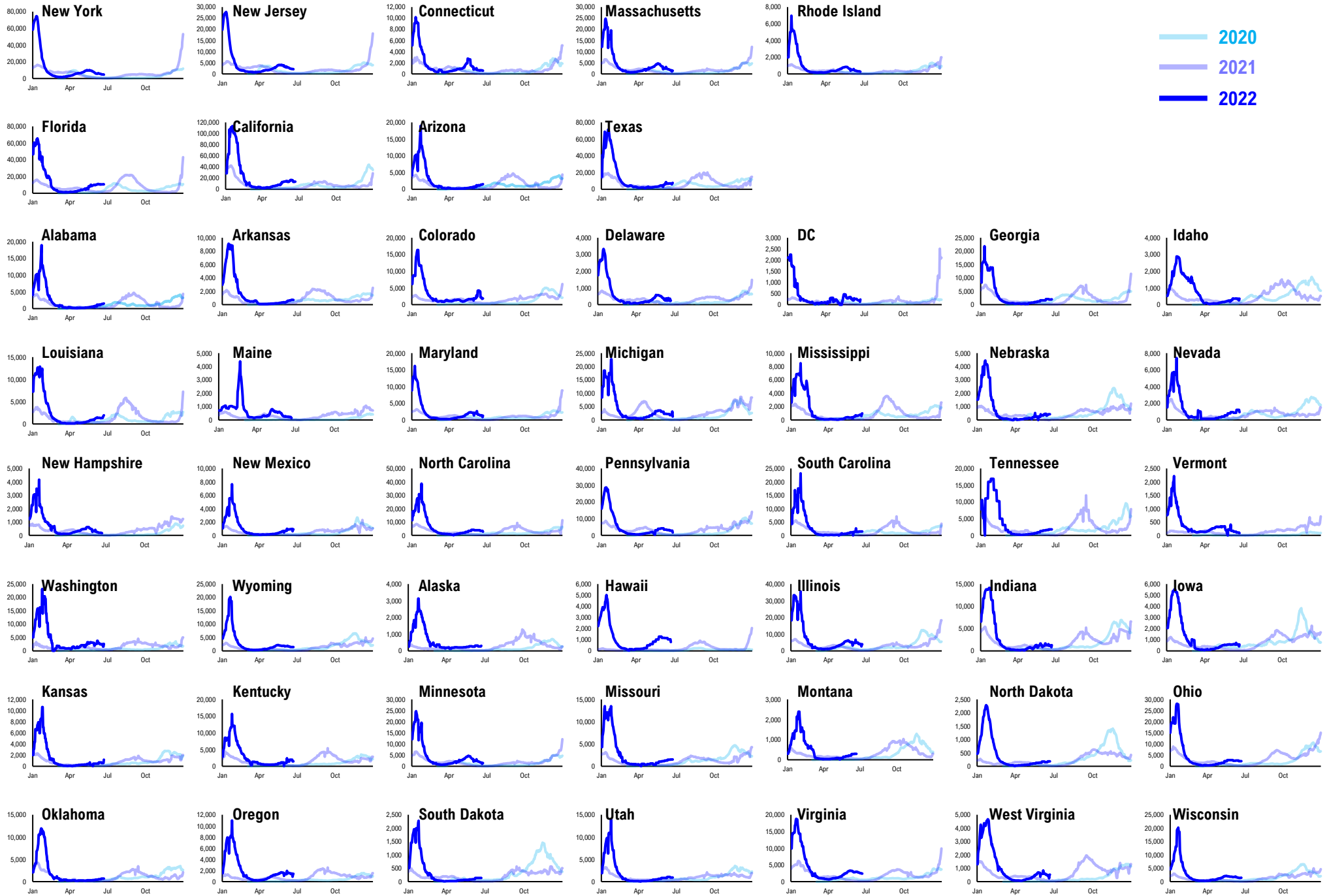
#13: Current Hospitalizations by States...



#14: Daily New Deaths by States...



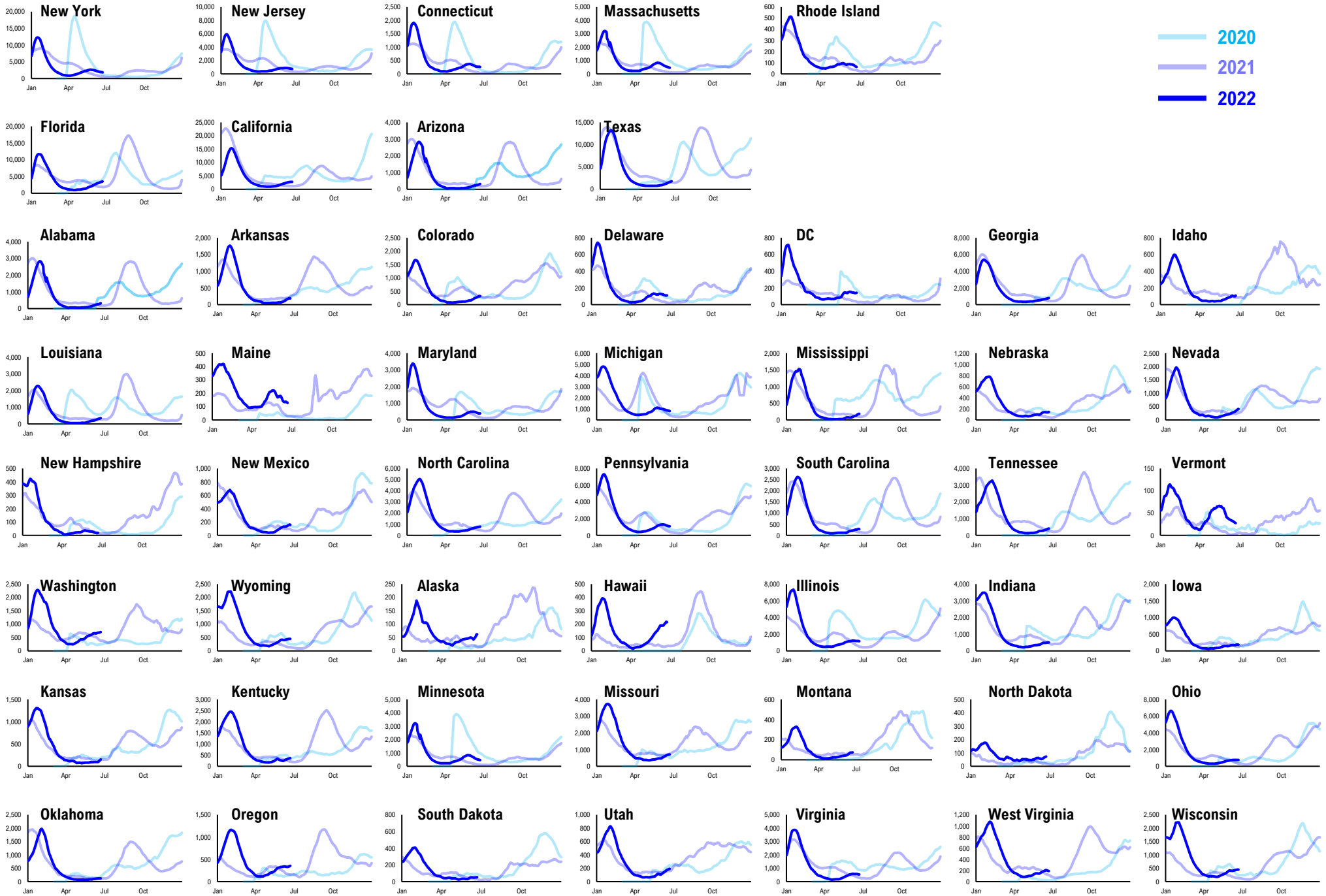
#15: Case Seasonality by States...



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

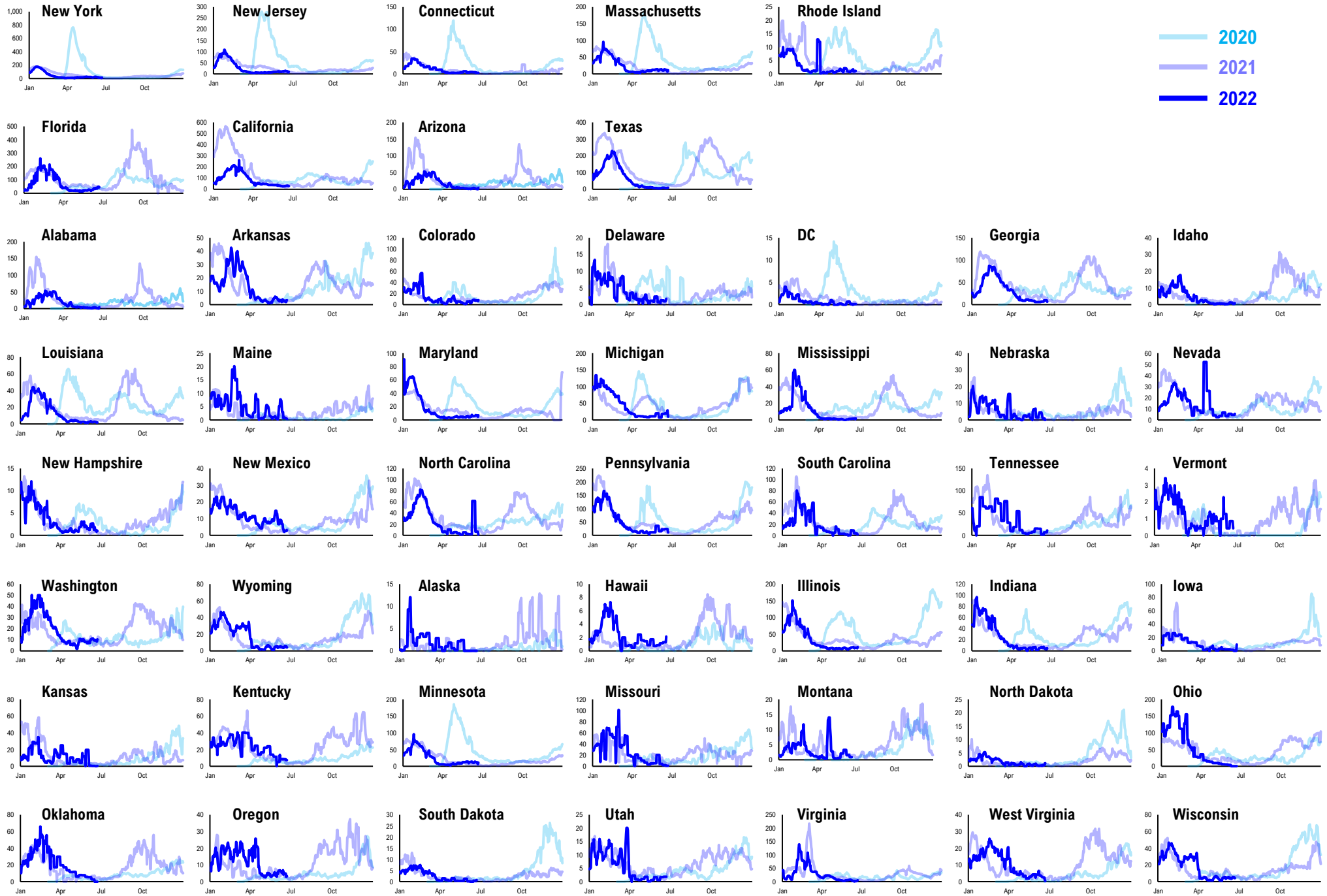
* Florida and Nebraska stopped publishing COVID stats on 6/4/2021 and 6/30/2021, respectively. Hence, we switched to use CDC surveillance data update is subject to a two-day lag.

#16: Hospitalization Seasonality by States...



Source: Fundstrat, COVID-19 Tracking Project, State Department of Health
 * Florida and Nebraska stopped publishing COVID stats on 6/4/2021 and 6/30/2021, respectively. Hence, we switched to use CDC surveillance data update is subject to a two-day lag.

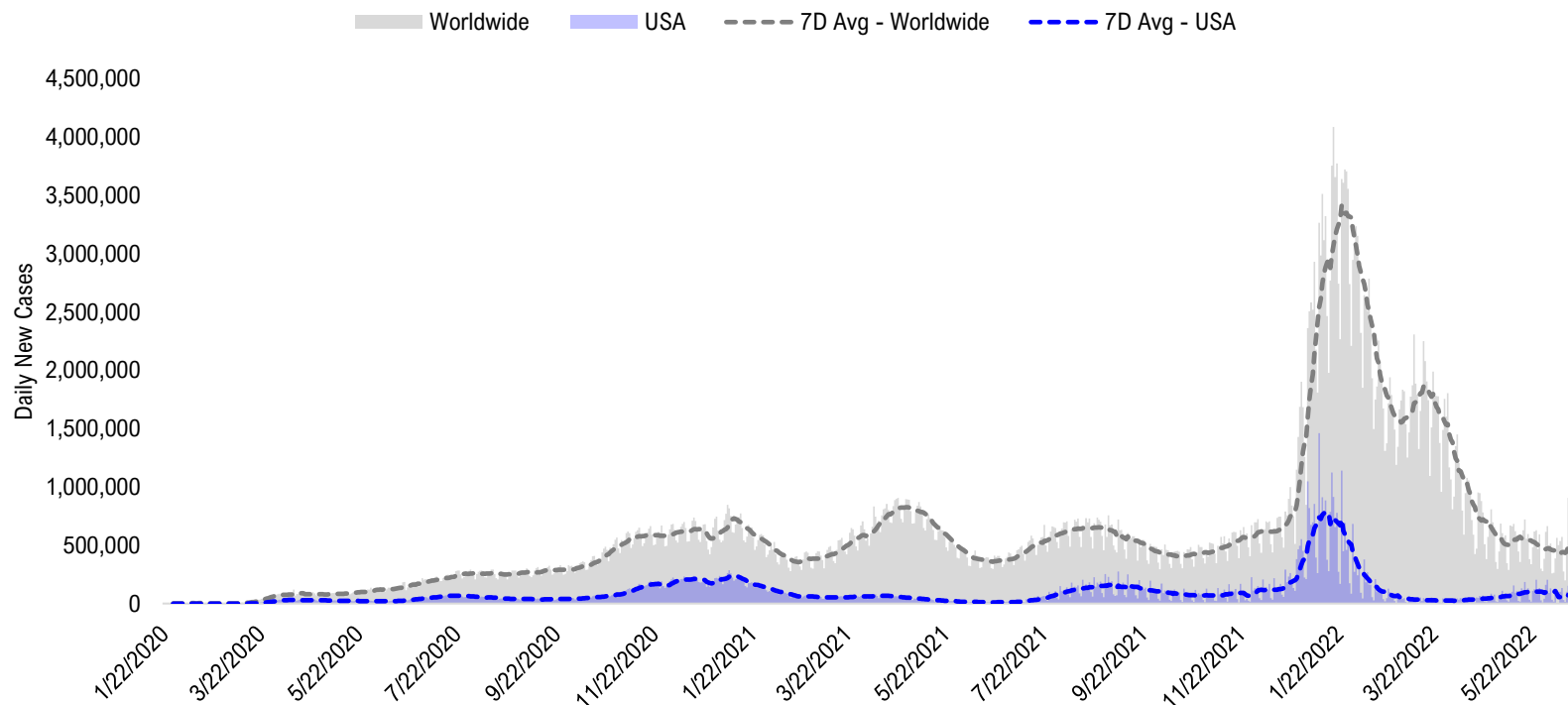
#17: Mortality Seasonality by States...



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

* Florida and Nebraska stopped publishing COVID stats on 6/4/2021 and 6/30/2021, respectively. Hence, we switched to use CDC surveillance data update is subject to a two-day lag.

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



Feb 4	Feb 18	Mar 4	Mar 18	Apr 1	Apr 15	Apr 29	May 13	May 27	Jun 10	Jun 22
Europe 1,603,486	Europe 1,089,487	Europe 704,994	Asia ex-India+Pakistan 863,433	Europe 717,645	Europe 429,662	Europe 307,371	Europe 216,501	Asia ex-India+Pakistan 145,953	Europe 153,030	Europe 243,676
Latin America 380,178	Asia ex-India+Pakistan 323,497	Asia ex-India+Pakistan 642,501	Europe 779,135	Asia ex-India+Pakistan 558,377	Asia ex-India+Pakistan 305,240	Asia ex-India+Pakistan 158,474	Asia ex-India+Pakistan 140,533	Europe 144,494	Asia ex-India+Pakistan 105,065	Asia ex-India+Pakistan 88,338
US + Canada 319,296	Latin America 219,843	Latin America 95,710	Latin America 72,892	Latin America 40,289	US + Canada 48,513	US + Canada 60,769	US + Canada 88,361	US + Canada 104,752	Latin America 71,261	Latin America 73,539
Asia ex-India+Pakistan 193,427	US + Canada 112,603	US + Canada 51,076	US + Canada 32,948	US + Canada 33,933	Latin America 26,617	Latin America 23,319	Latin America 31,522	Latin America 46,796	US + Canada 59,432	US + Canada 69,272
Pakistan + India + Bangladesh 192,750	Pakistan + India + Bangladesh 37,628	Pakistan + India + Bangladesh 8,970	Africa 5,485	Africa 9,551	Africa 3,010	Africa 5,014	Africa 8,661	Africa 5,971	Pakistan + India + Bangladesh 5,970	Pakistan + India + Bangladesh 13,280
Africa 24,960	Africa 15,085	Africa 7,421	Pakistan + India + Bangladesh 3,292	Pakistan + India + Bangladesh 1,583	Pakistan + India + Bangladesh 1,091	Pakistan + India + Bangladesh 3,041	Pakistan + India + Bangladesh 3,110	Pakistan + India + Bangladesh 2,398	Africa 4,480	Africa 6,198

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Thomas J. Lee, the research analyst denoted by an “AC” on the cover of this report, hereby certifies that all of the views expressed in this report accurately reflect his personal views, which have not been influenced by considerations of the firm’s business or client relationships.

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