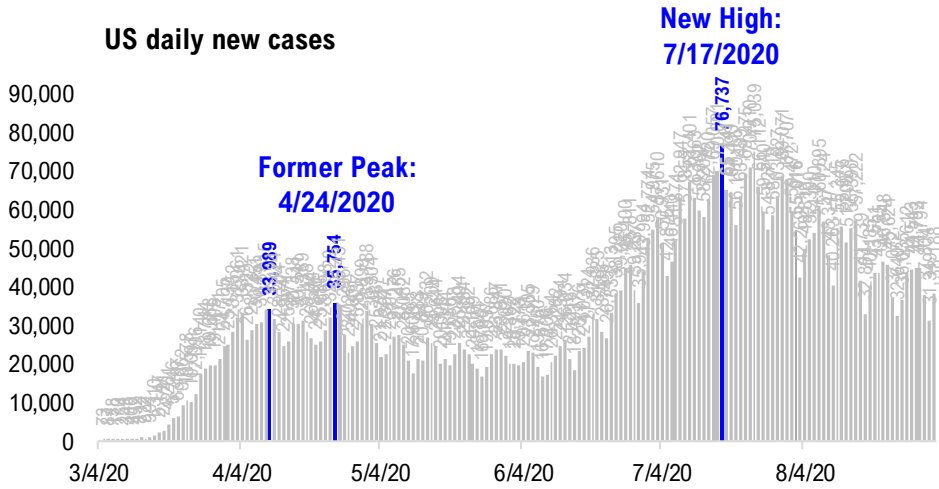


FSInsight Daily COVID-19 Chartbook

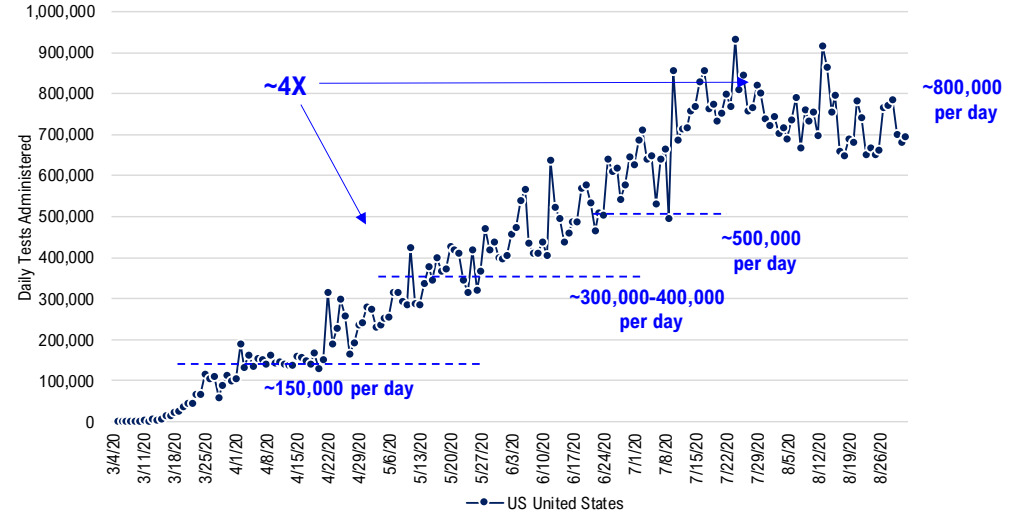


#1: USA COVID-19 Situation at a Glance...

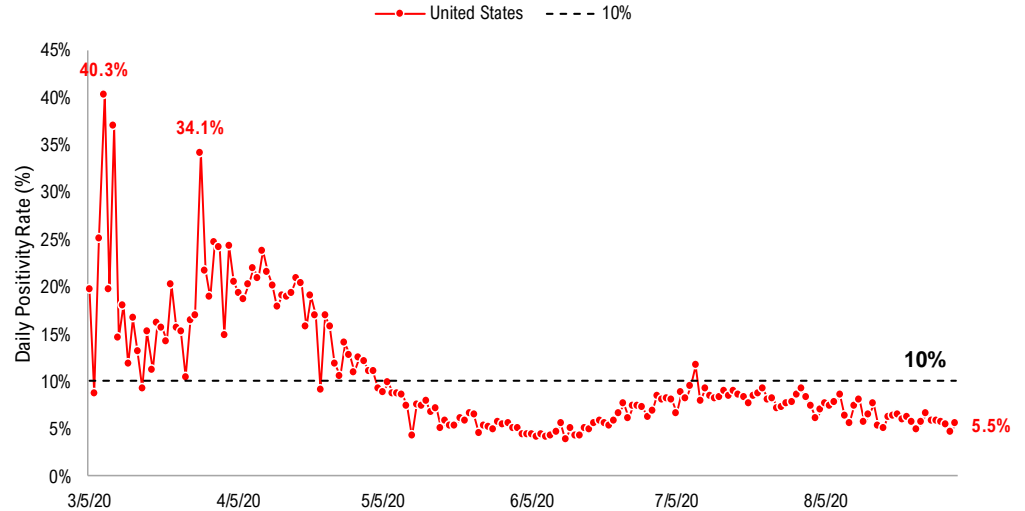
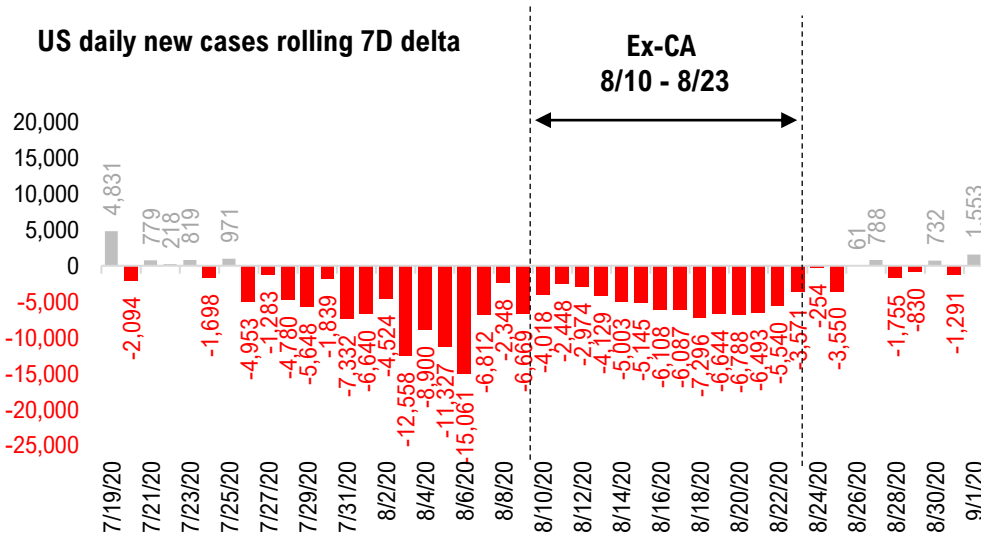
US daily new cases



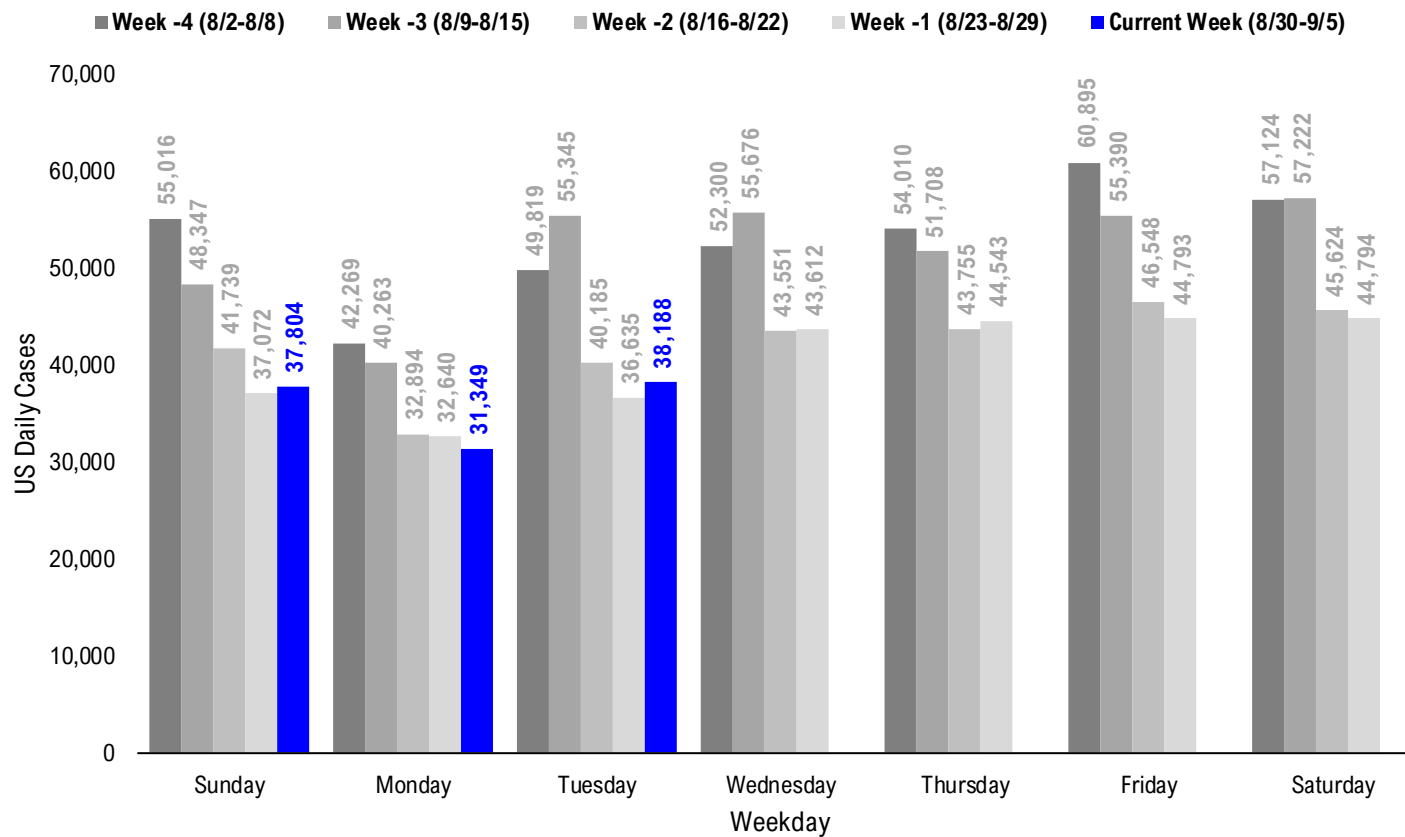
USA total COVID-19 tests administered



US daily new cases rolling 7D delta



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



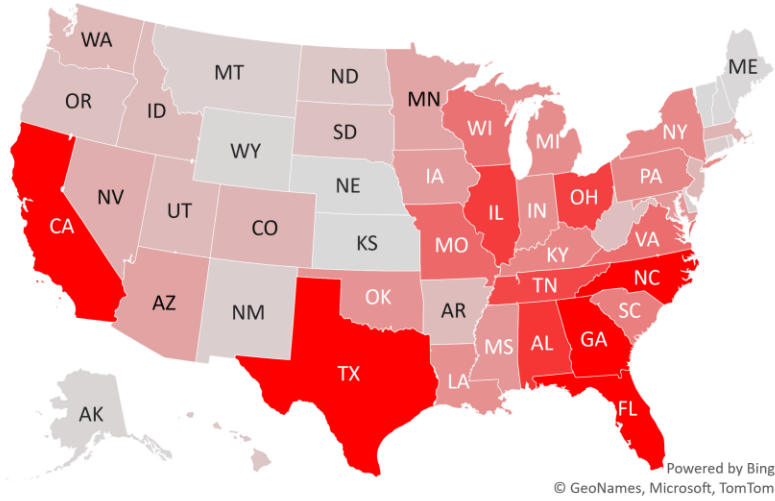
#3: USA State COVID-19 Situation at a Glance...

	% US Pop	Sorted Daily Cases		Daily Cases (3D avg) per 1mm residents		Since Peak		% Decline in Daily Cases
		9/1/20	7D Delta	9/1/20	7D Delta	# Days	Cases	
United States	100%	38,188	+1,553	109	+1	46	-50%	
United States (ex-CA)	88%	34,012	+2,321	106	+4	46	-53%	
States:								
1 Texas	8.7%	4,116	-1,975	118	-24	46	-72%	
2 Florida	6.5%	3,773	+1,100	128	+5	50	-78%	
3 California	11.9%	3,712	-768	118	-19	39	-60%	
4 Georgia	3.2%	2,226	+125	155	-37	38	-62%	
5 North Carolina	3.2%	2,111	+766	138	+8	45	-35%	
6 Alabama	1.5%	1,558	+1,026	253	+69	38	-41%	
7 Illinois	3.8%	1,492	-188	136	-1	110	-42%	
8 Ohio	3.5%	1,453	+609	93	+27	32	-30%	
9 Tennessee	2.1%	1,396	+583	198	+35	35	-51%	
10 Missouri	1.8%	1,058	+366	194	+64	33	-38%	
11 Virginia	2.6%	1,021	+16	110	+9	23	-33%	
12 Wisconsin	1.8%	981	+343	102	+17	38	-41%	
13 South Carolina	1.6%	854	-83	168	+26	51	-56%	
14 Kentucky	1.3%	789	+120	120	+8	18	-36%	
15 Pennsylvania	3.9%	770	+209	51	+9	144	-64%	
16 New York	5.9%	754	+125	36	+9	144	-93%	
17 Michigan	3.0%	718	-61	57	-24	130	-54%	
18 Indiana	2.0%	695	-134	122	+16	23	-26%	
19 Louisiana	1.4%	689	+139	189	+17	42	-67%	
20 Oklahoma	1.2%	666	+16	172	+40	35	-45%	
21 Mississippi	0.9%	634	-167	174	-43	33	-66%	
22 Maryland	1.8%	614	+237	87	+3	103	-58%	
23 Iowa	1.0%	591	-70	229	+65	4	-41%	
24 Arizona	2.2%	507	-351	48	-15	61	-92%	
25 Minnesota	1.7%	491	+82	124	+15	3	-31%	
26 Nevada	0.9%	405	+2	127	-19	45	-71%	
27 Massachusetts	2.1%	355	-43	41	-10	129	-92%	
28 Colorado	1.7%	351	-108	42	-11	128	-66%	

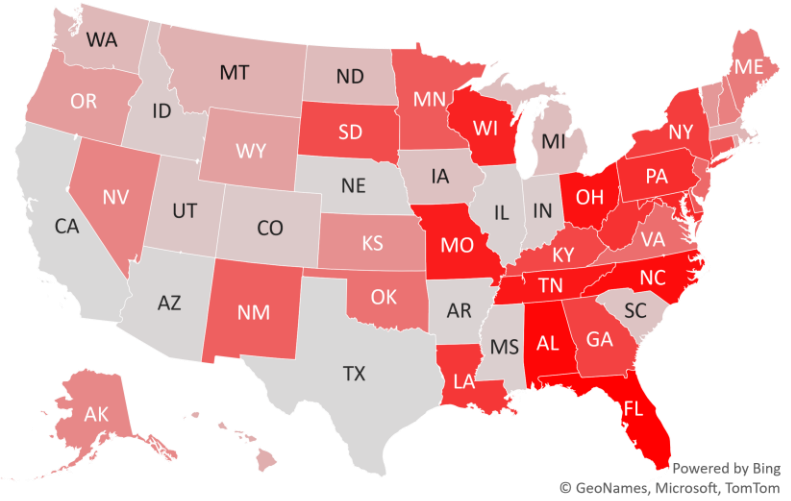
	% US Pop	Sorted Daily Cases		Daily Cases (3D avg) per 1mm residents		Since Peak		% Decline in Daily Cases
		9/1/20	7D Delta	9/1/20	7D Delta	# Days	Cases	
United States	100%	38,188	+1,553	109	+1	46	-50%	
United States (ex-CA)	88%	34,012	+2,321	106	+4	46	-53%	
States:								
29 New Jersey	2.7%	330	+28	36	+7	149	-92%	
30 Washington	2.3%	315	-44	58	-11	48	-57%	
31 Utah	1.0%	296	-107	104	+5	45	-59%	
32 Idaho	0.5%	280	-125	129	-23	46	-66%	
33 Arkansas	0.9%	273	-207	124	-6	38	-59%	
34 West Virginia	0.5%	257	+174	100	+61	0	0%	
35 South Dakota	0.3%	240	+106	304	+144	2	-28%	
36 Oregon	1.3%	233	-3	52	-2	31	-40%	
37 North Dakota	0.2%	184	-45	226	+10	3	-49%	
38 Hawaii	0.4%	181	-33	121	-28	3	-42%	
39 Connecticut	1.1%	127	+98	48	-1	132	-89%	
40 Puerto Rico	1.0%	108	+38	62	-12	14	-54%	
41 New Mexico	0.6%	108	+42	45	+8	34	-74%	
42 Delaware	0.3%	106	+86	103	+57	126	-70%	
43 Montana	0.3%	93	-42	80	+3	32	-47%	
44 District of Columbia	0.2%	57	+12	59	-12	121	-82%	
45 Rhode Island	0.3%	53	-17	46	-16	129	-89%	
46 Guam	0.0%	52	-25	201	-235	5	-69%	
47 Alaska	0.2%	35	+2	53	-23	30	-71%	
48 Wyoming	0.2%	24	-7	47	-5	125	-53%	
49 New Hampshire	0.4%	22	+6	13	-2	122	-86%	
50 Maine	0.4%	22	+10	15	+2	102	-71%	
51 Vermont	0.2%	6	-1	16	+5	149	-83%	
52 U.S. Virgin Islands	0.0%	5	-9	65	-53	11	-85%	
53 Northern Mariana Islands	0.0%	1	+1	6	+6	151	-83%	
54 Nebraska	0.6%	0	-301	92	-6	122	-65%	
55 Kansas	0.9%	0	+0	179	+2	6	-49%	
56 American Samoa	0.0%	0	+0	0	+0	-	-	

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

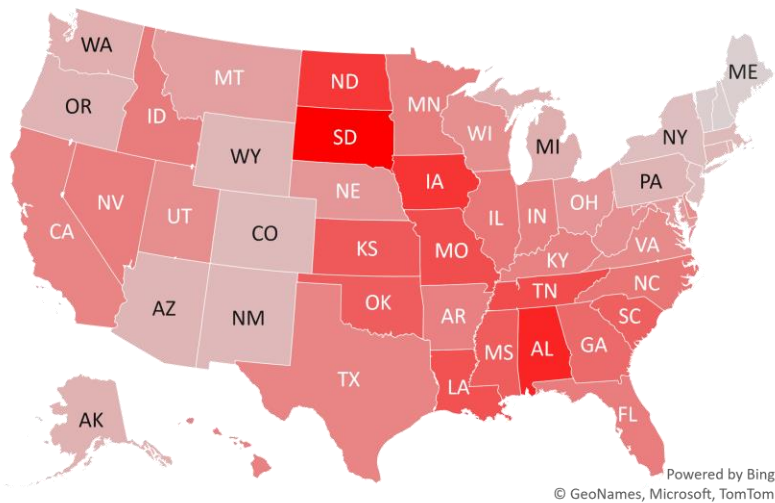
Daily Case Increases



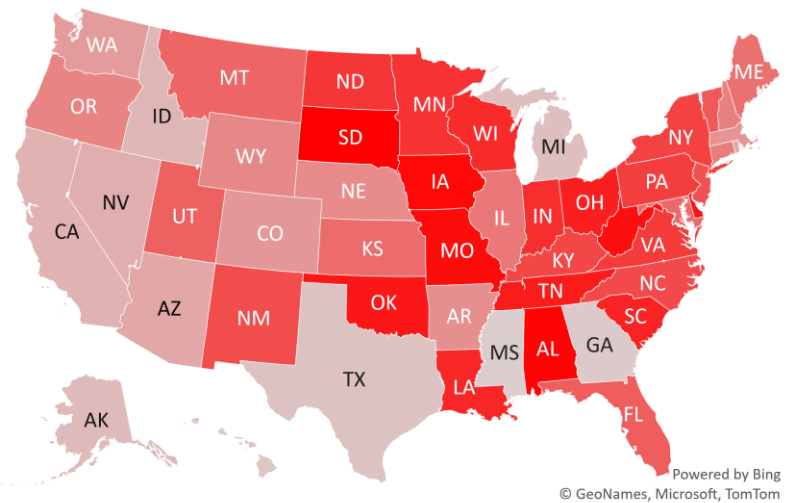
7D Delta in Daily New Cases



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



7D Delta in Daily New Cases per 1mm (3D Avg)



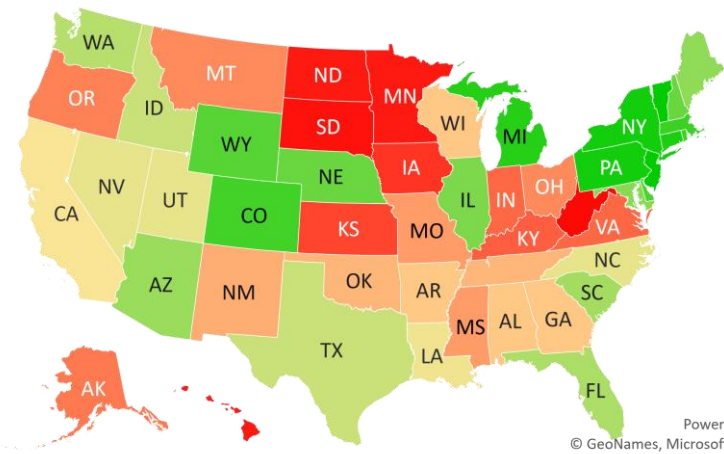
#5: # of Days since Daily Case Peaked by States...

Days since Daily Cases (3D Avg) Peak (as of 9/1)

	Sorted			
	Peak Date	9/1/20	% off the Peak	% US Pop
United States	7/17/20	46	-50%	100%
United States (Ex-CA)	7/17/20	46	-53%	88%
States:				
Northern Mariana Island	4/3/20	151	-83%	0.0%
Vermont	4/5/20	149	-83%	0.2%
New Jersey	4/5/20	149	-92%	2.7%
Pennsylvania	4/10/20	144	-64%	3.9%
New York	4/10/20	144	-93%	5.9%
Connecticut	4/22/20	132	-89%	1.1%
Michigan	4/24/20	130	-54%	3.0%
Rhode Island	4/25/20	129	-89%	0.3%
Massachusetts	4/25/20	129	-92%	2.1%
Colorado	4/26/20	128	-66%	1.7%
Delaware	4/28/20	126	-70%	0.3%
Wyoming	4/29/20	125	-53%	0.2%
New Hampshire	5/2/20	122	-86%	0.4%
Nebraska	5/2/20	122	-65%	0.6%
District of Columbia	5/3/20	121	-82%	0.2%
Illinois	5/14/20	110	-42%	3.8%
Maryland	5/21/20	103	-58%	1.8%
Maine	5/22/20	102	-71%	0.4%
Arizona	7/2/20	61	-92%	2.2%
South Carolina	7/12/20	51	-56%	1.6%
Florida	7/13/20	50	-78%	6.5%
Washington	7/15/20	48	-57%	2.3%
Texas	7/17/20	46	-72%	8.7%
Idaho	7/17/20	46	-66%	0.5%
Utah	7/18/20	45	-59%	1.0%
Nevada	7/18/20	45	-71%	0.9%
North Carolina	7/18/20	45	-35%	3.2%
Louisiana	7/21/20	42	-67%	1.4%

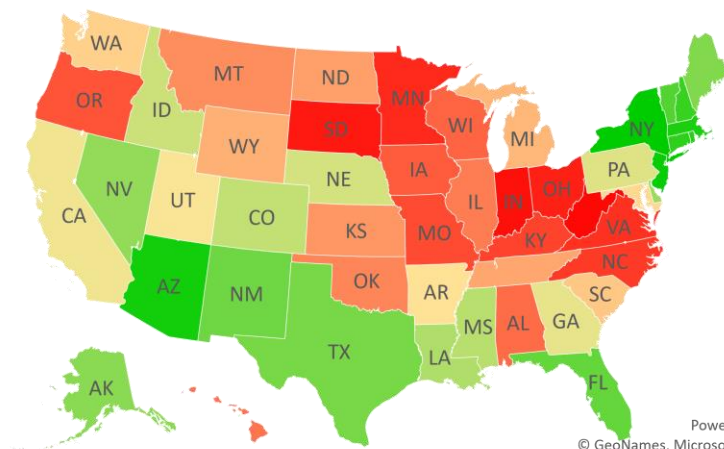
	Sorted			
	Peak Date	9/1/20	% off the Peak	% US Pop
United States	7/17/20	46	-50%	100%
United States (Ex-CA)	7/17/20	46	-53%	88%
States:				
California	7/24/20	39	-60%	11.9%
Wisconsin	7/25/20	38	-41%	1.8%
Georgia	7/25/20	38	-62%	3.2%
Arkansas	7/25/20	38	-59%	0.9%
Alabama	7/25/20	38	-41%	1.5%
Tennessee	7/28/20	35	-51%	2.1%
Oklahoma	7/28/20	35	-45%	1.2%
New Mexico	7/29/20	34	-74%	0.6%
Mississippi	7/30/20	33	-66%	0.9%
Missouri	7/30/20	33	-38%	1.8%
Ohio	7/31/20	32	-30%	3.5%
Montana	7/31/20	32	-47%	0.3%
Oregon	8/1/20	31	-40%	1.3%
Alaska	8/2/20	30	-71%	0.2%
Virginia	8/9/20	23	-33%	2.6%
Indiana	8/9/20	23	-26%	2.0%
Kentucky	8/14/20	18	-36%	1.3%
Puerto Rico	8/18/20	14	-54%	1.0%
U.S. Virgin Islands	8/21/20	11	-85%	0.0%
Kansas	8/26/20	6	-49%	0.9%
Guam	8/27/20	5	-69%	0.0%
Iowa	8/28/20	4	-41%	1.0%
North Dakota	8/29/20	3	-49%	0.2%
Minnesota	8/29/20	3	-31%	1.7%
Hawaii	8/29/20	3	-42%	0.4%
South Dakota	8/30/20	2	-28%	0.3%
West Virginia	9/1/20	0	0%	0.5%

Days since Daily Case Peak: Greener = More Days



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Daily Cases % off the Peak: Greener = Larger Decline



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

Sorted

	7D Ago	Last 3-day Trend			
	8/25/20	8/30/20	8/31/20	9/1/20	
United States	36,635	37,804	31,349	38,188	+6,839
United States (ex-CA)	32,155	31,734	27,173	34,476	+7,303
States:					
Texas	6,091	3,759	2,374	4,116	
Florida	2,673	2,583	1,885	3,773	<--higher
California	4,480	6,070	4,176	3,712	
Georgia	2,101	1,215	1,498	2,226	<--higher
North Carolina	1,345	1,051	1,186	2,111	<--higher
Alabama	532	1,346	823	1,558	
Illinois	1,680	1,992	1,668	1,492	
Ohio	844	922	895	1,453	
Tennessee	813	835	1,818	1,396	
Missouri	692	1,465	1,042	1,058	
Virginia	1,005	938	847	1,021	
Wisconsin	638	537	266	981	<--higher
South Carolina	937	1,075	668	854	
Kentucky	669	455	364	789	<--higher
Pennsylvania	561	670	521	770	
New York	629	698	656	754	
Michigan	779	539	451	718	<--higher
Indiana	829	879	883	695	
Louisiana	550	1,624	326	689	
Oklahoma	650	667	713	666	
Mississippi	801	647	274	634	
Maryland	377	497	458	614	<--higher
Iowa	661	971	608	591	
Arizona	858	374	174	507	<--higher
Minnesota	409	932	675	491	
Nevada	403	447	320	405	
Massachusetts	398	199	304	355	
Colorado	459	182	201	351	<--higher

Sorted

	7D Ago	Last 3-day Trend			
	8/25/20	8/30/20	8/31/20	9/1/20	
United States	36,635	37,804	31,349	38,188	+6,839
United States (ex-CA)	32,155	31,734	27,173	34,476	+7,303
States:					
New Jersey	302	291	349	330	
Washington	359	578	441	315	
Utah	403	448	253	296	
Idaho	405	190	221	280	<--higher
Arkansas	480	478	368	273	
West Virginia	83	143	140	257	<--higher
South Dakota	134	380	187	240	
Oregon	236	258	162	233	
North Dakota	229	218	114	184	
Hawaii	214	200	133	181	
Connecticut	29	0	384	127	
Puerto Rico	70	243	247	108	
New Mexico	66	105	69	108	
Delaware	20	109	86	106	
Montana	135	88	77	93	
District of Columbia	45	34	33	57	<--higher
Rhode Island	70	46	46	53	
Guam	77	0	48	52	
Alaska	33	44	37	35	
Wyoming	31	36	22	24	
New Hampshire	16	8	21	22	
Maine	12	23	14	22	
Vermont	7	11	13	6	
U.S. Virgin Islands	14	11	5	5	
Northern Mariana Islands	0	0	0	1	
Nebraska	301	293	241	0	
Kansas	0	0	1,564	0	
American Samoa	0	0	0	0	

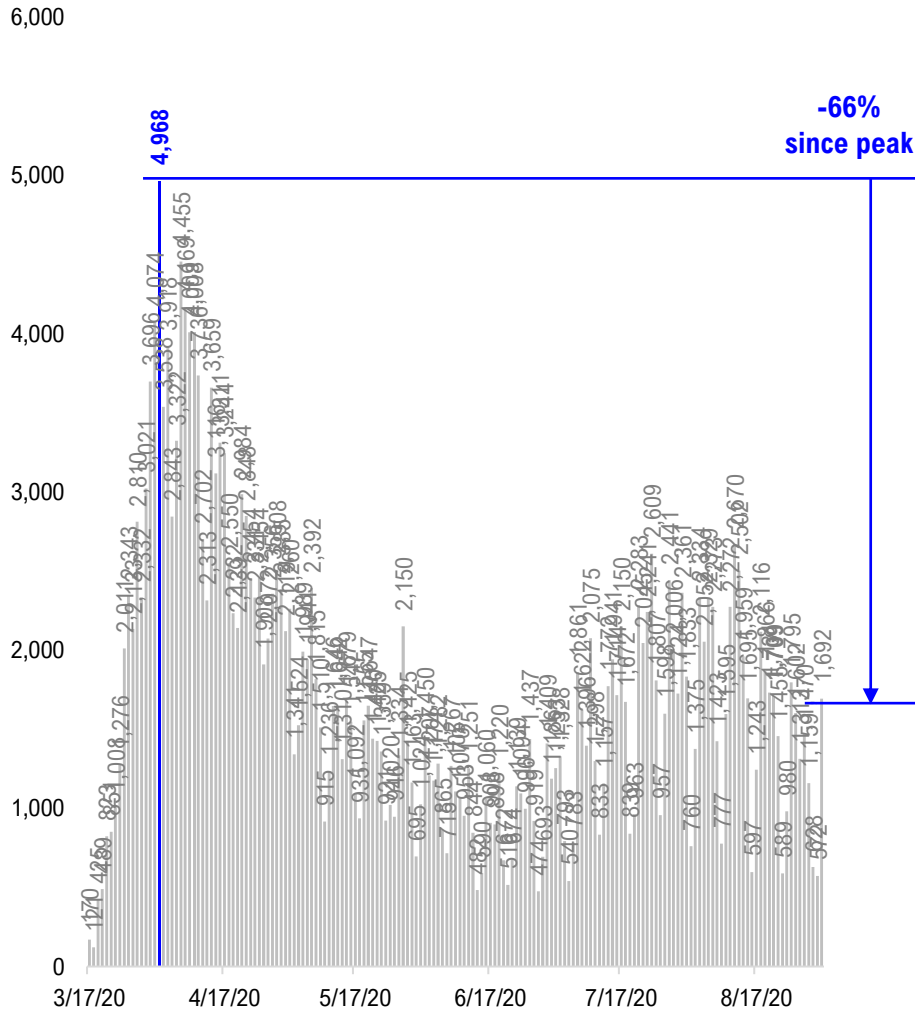
Nebraska stats are not available as of Monday 7PM ET...

Nebraska stats are not available as of Monday 7PM ET...

#7: US Daily Hospitalizations...(aggregated by data type)

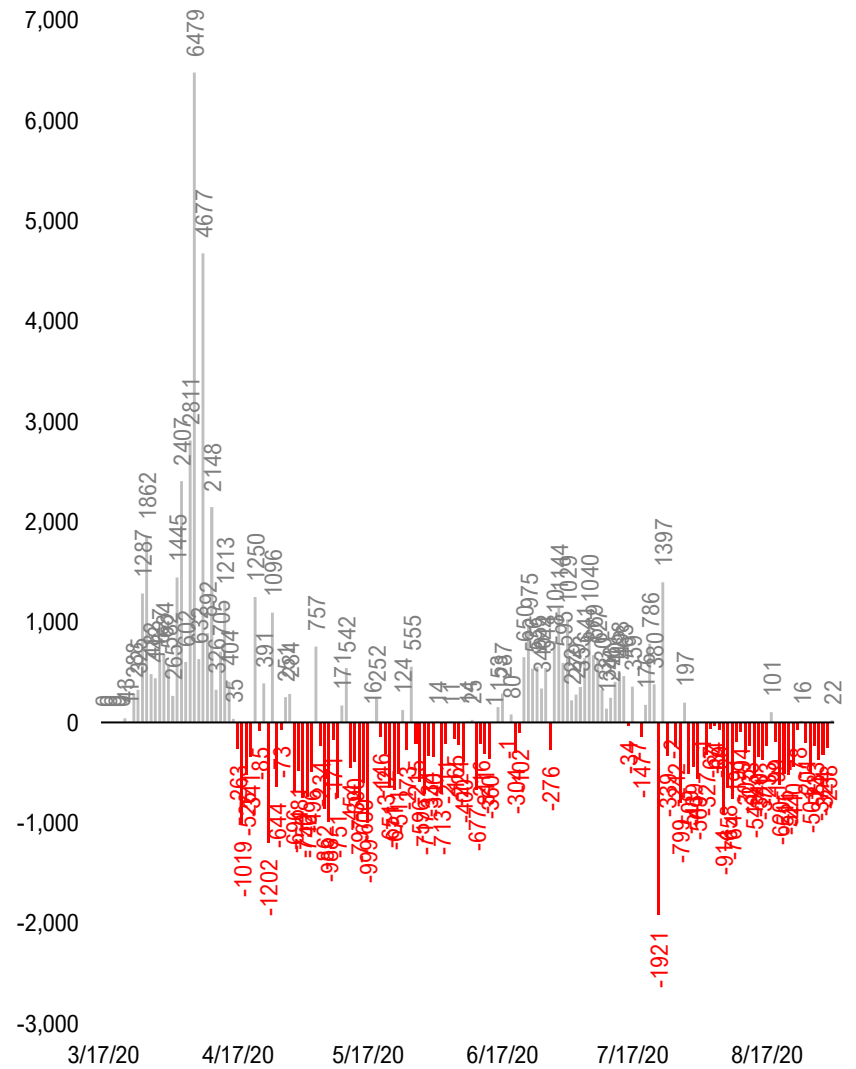
US Gross Hospitalizations

(Composite of 33 states that report "gross hospitalizations")



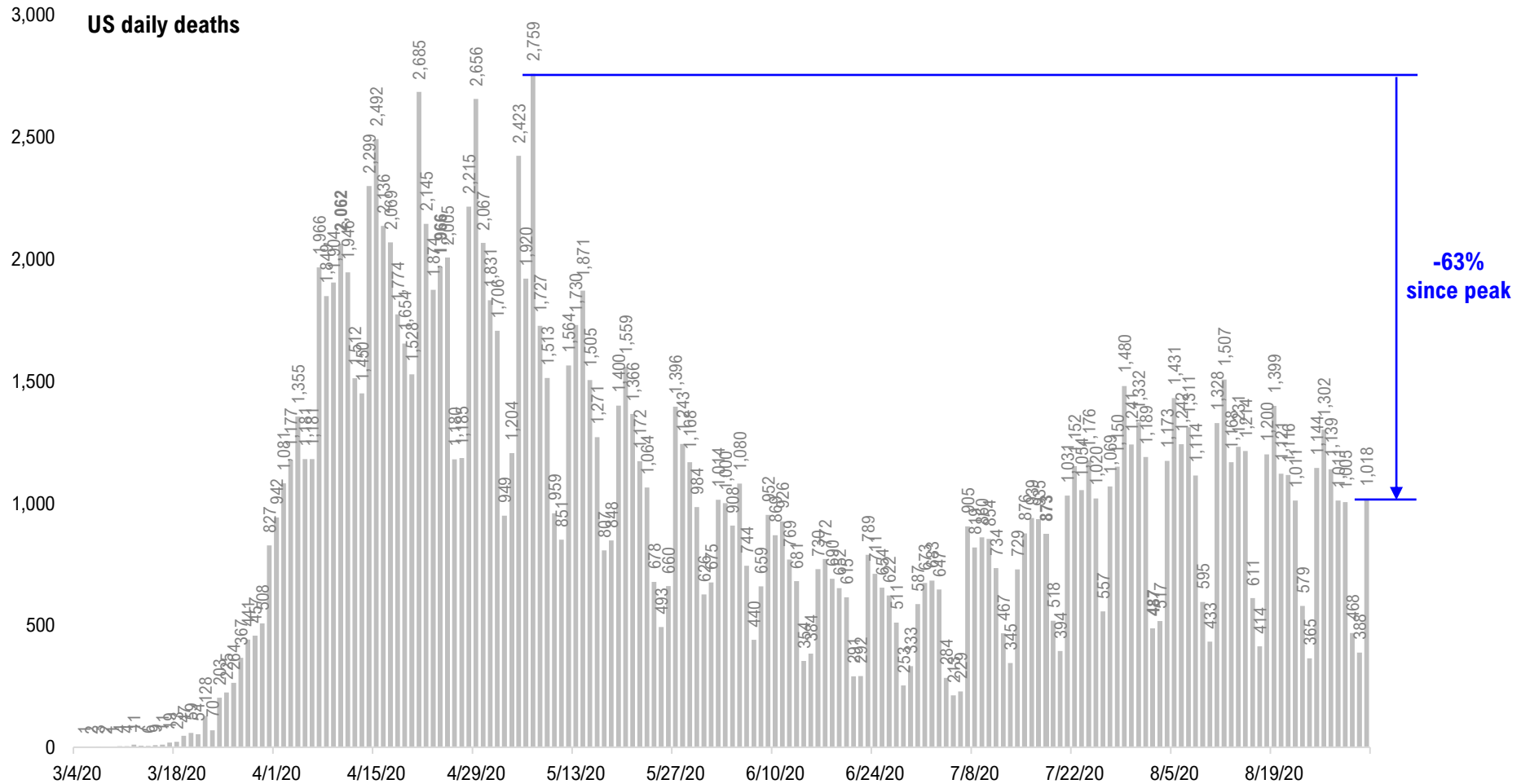
US Net Hospitalizations

(Composite of 18 states that report "net/current hospitalizations")



#8: US Daily New Fatalities...

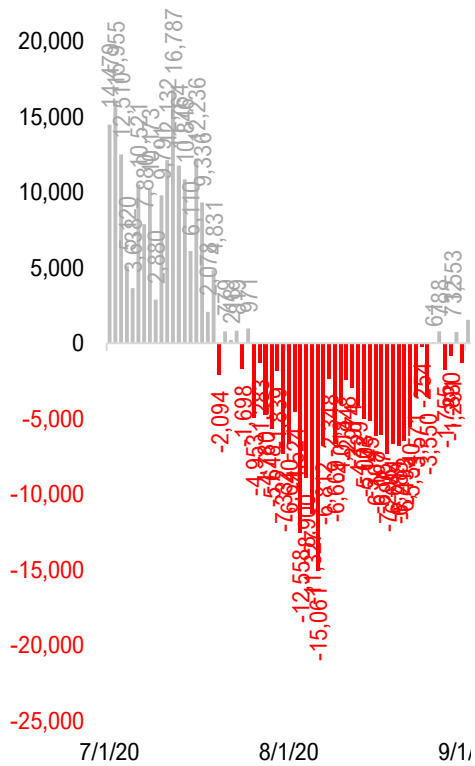
US daily COVID-19 Fatalities



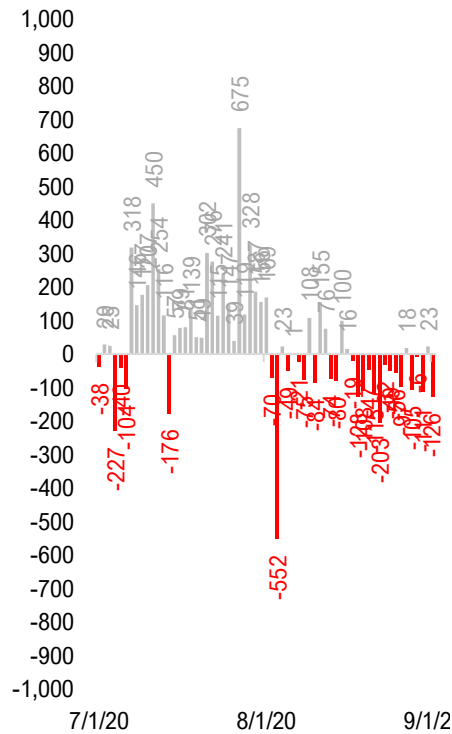
Source: Fundstrat, COVID-19 Tracking Project, State Department of Health

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

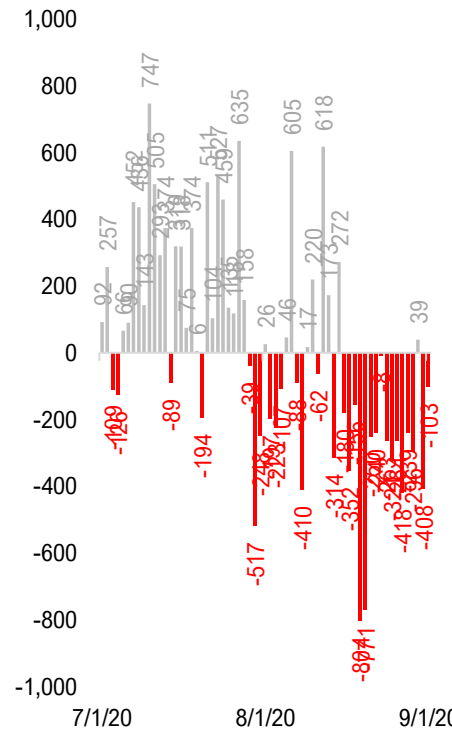
Daily New Cases (8/10-8/23 ex-CA)



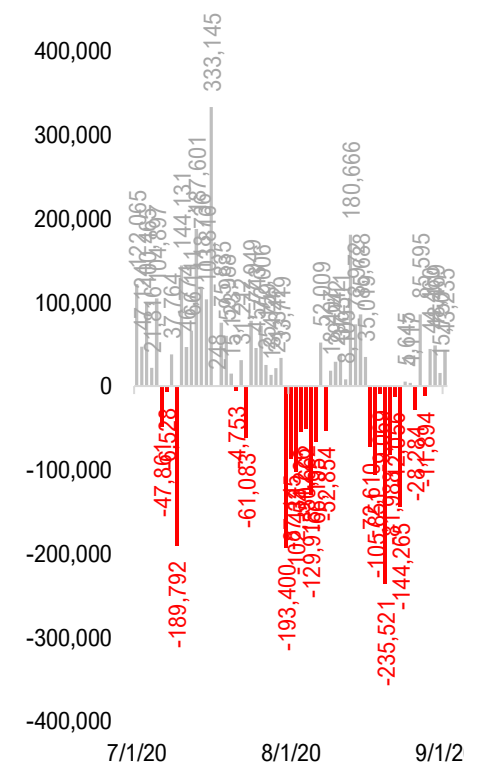
Daily Deaths



Daily New Gross hospitalization (aggregate of 33 states)

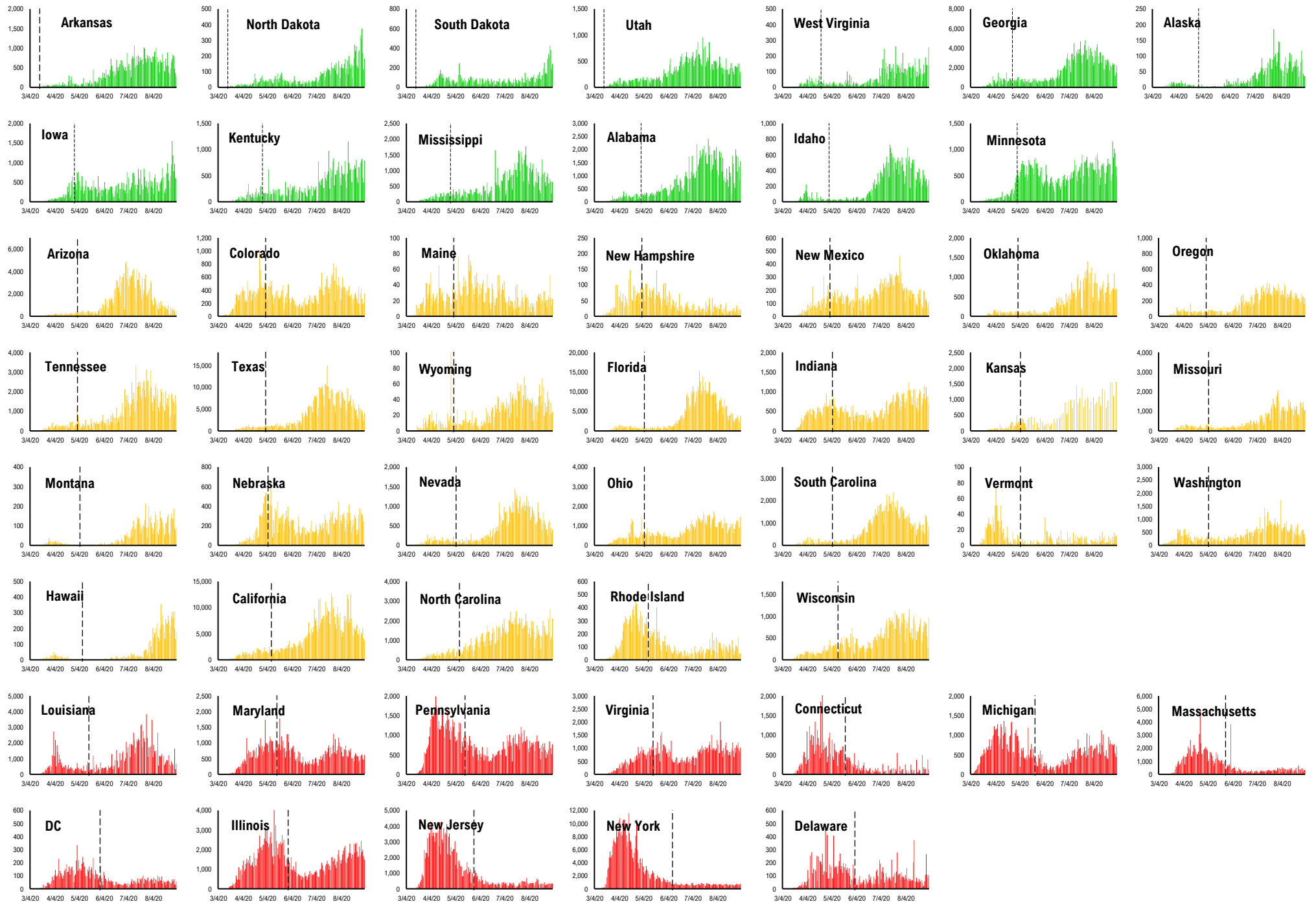


Daily Tests

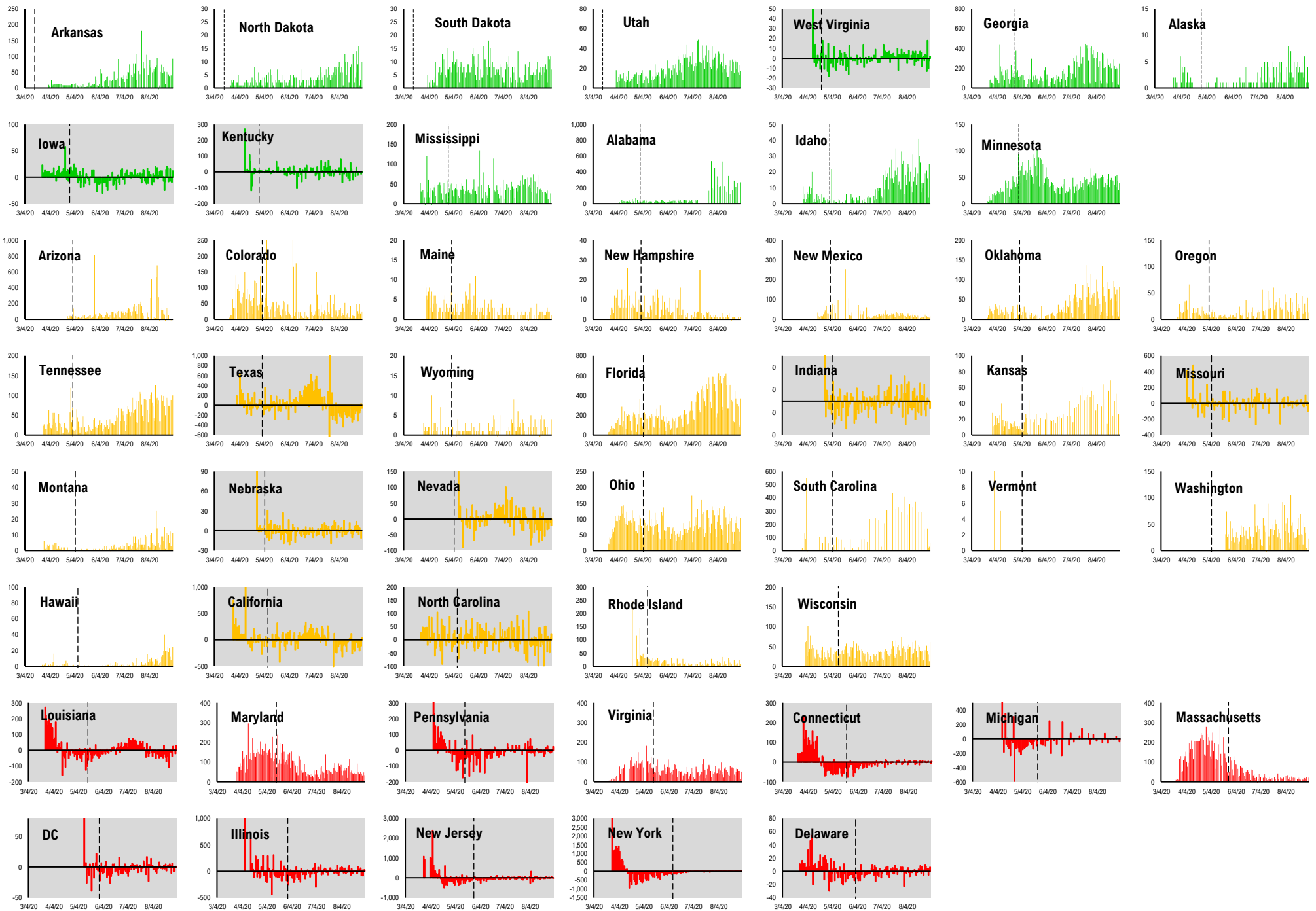


* Ignored California between 8/10 and 8/23, due to its data glitch caused 300,000-case backlog
Source: Fundstrat, COVID-19 Tracking Project, State Department of Health

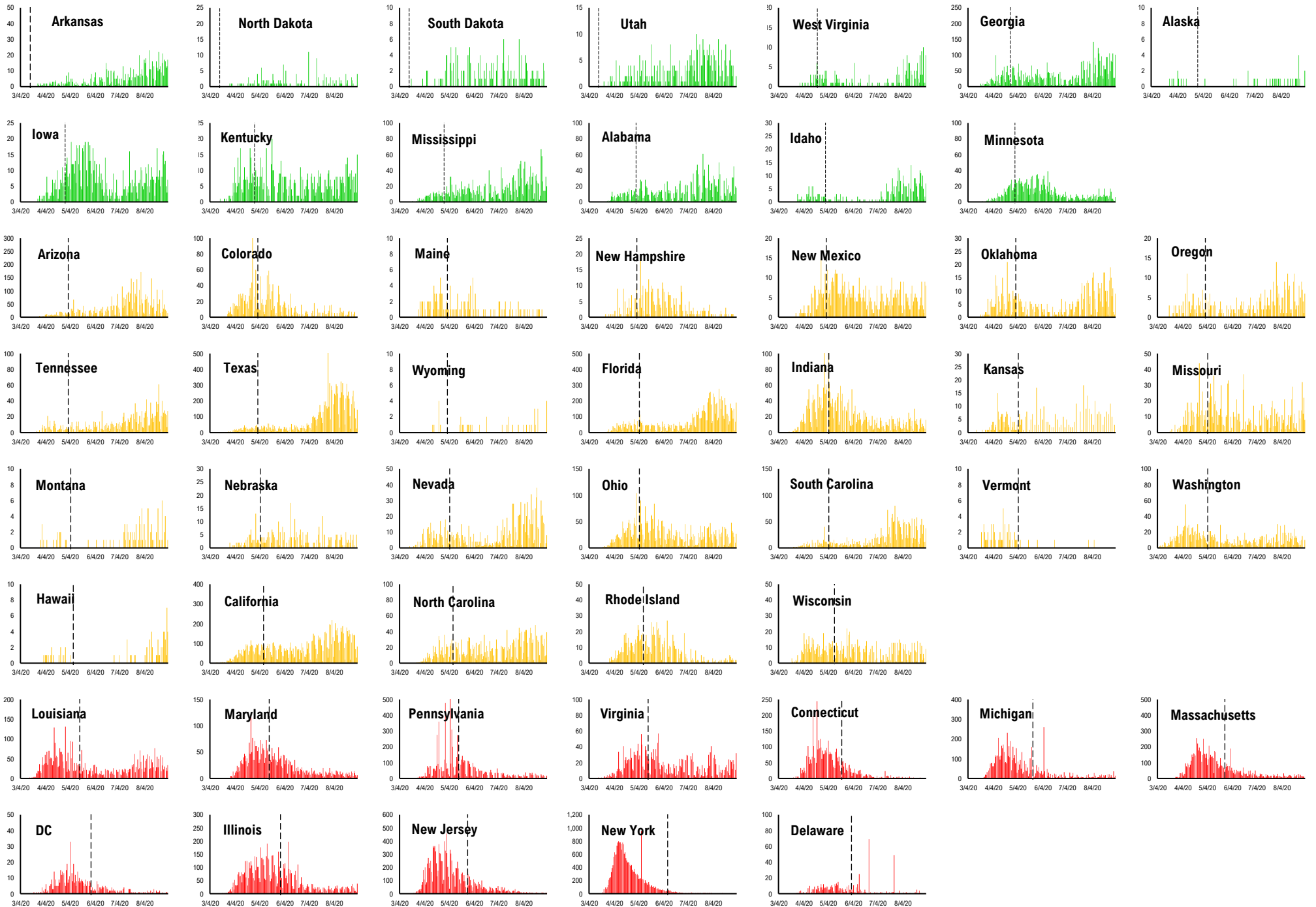
#10: Daily New Cases by States... (sorted by "open" date)



#11: Daily Hospitalizations by States... (sorted by "open" date)



#12: Daily New Deaths by States... (sorted by "open" date)



#13: State COVID-19 situation by Reopen Date...

Daily Cases

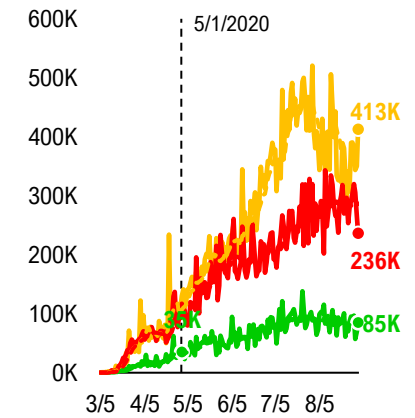
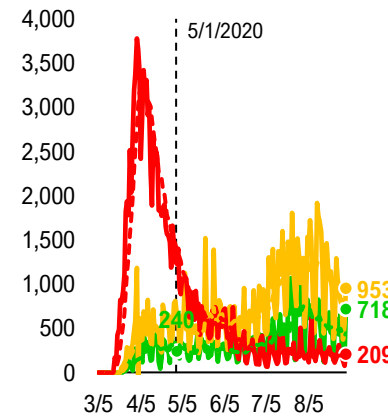
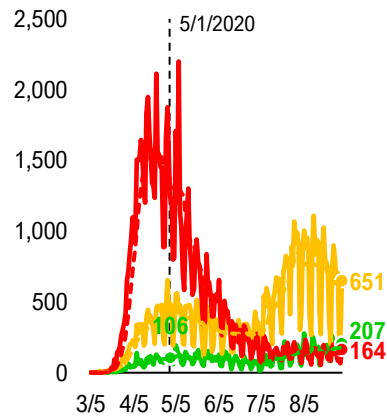
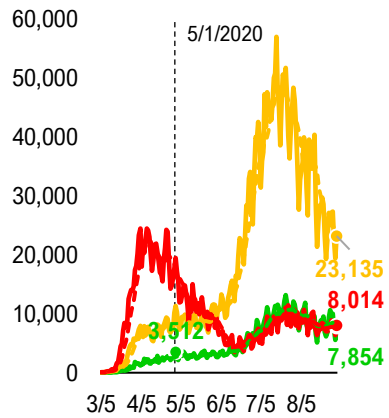
Daily Deaths

Daily Hospitalization

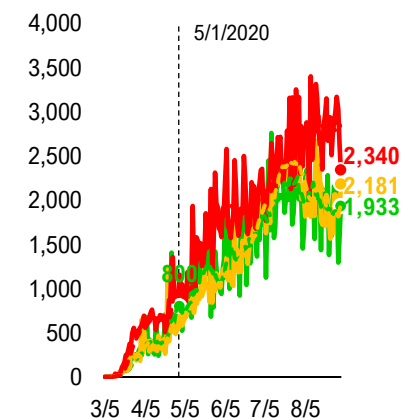
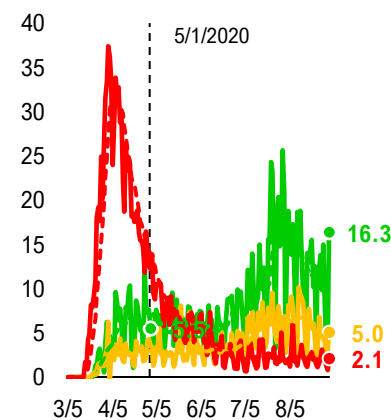
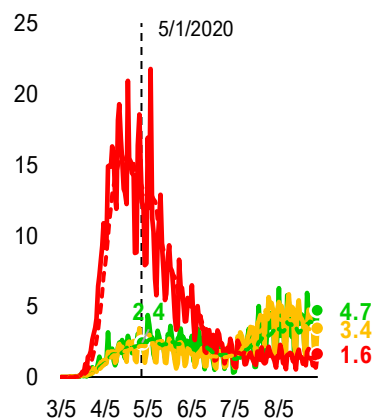
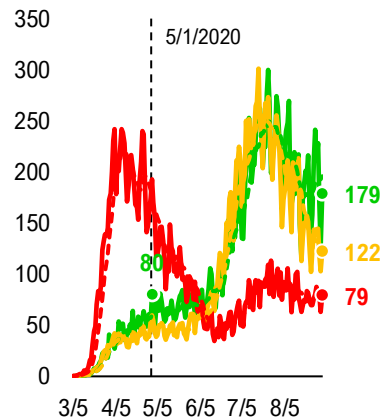
Daily Testing

— States Open Before 5/1 — States Open between 5/1 and 5/11 — States Open after 5/11

Composite Daily Aggregate

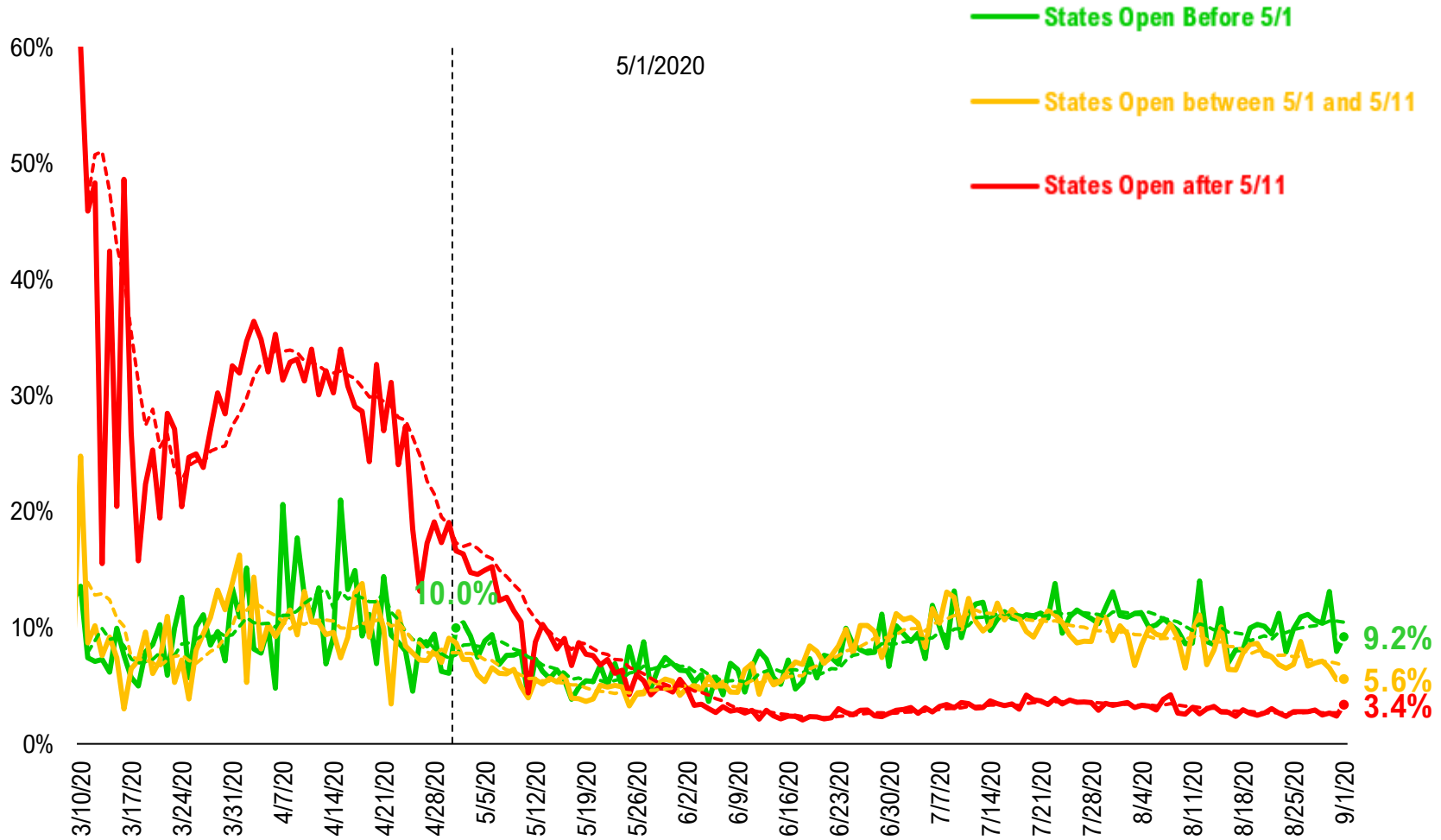


Composite Daily Aggregate Per 1mm Pop

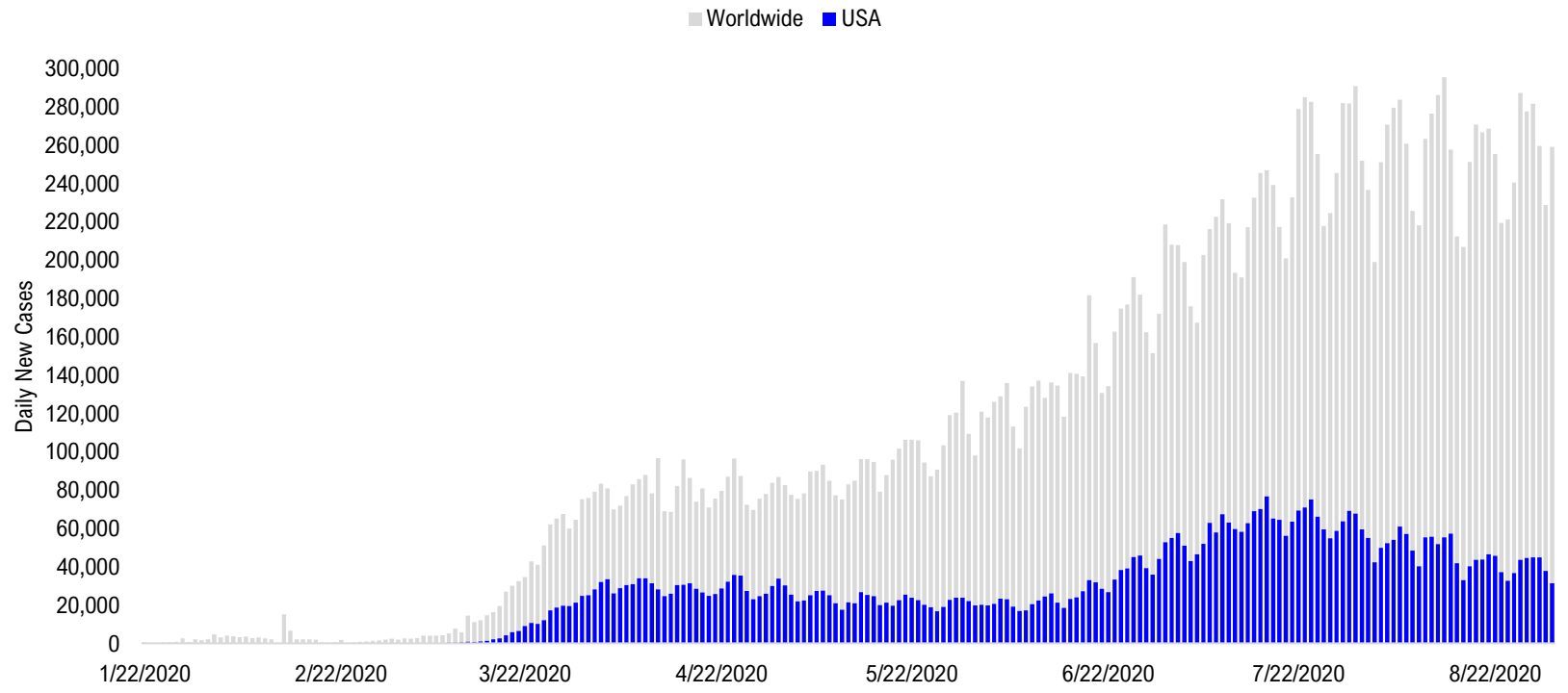


#14: State COVID-19 Daily Positivity Rate by Reopen Date...

Composite Daily Positivity Rate



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



4/17/2020	5/1/2020	5/15/2020	5/29/2020	6/12/2020	6/26/2020	7/10/2020	7/24/2020	8/7/2020	8/21/2020	8/31/2020
Europe 40,652	US + Canada 31,572	US + Canada 25,443	Latin America 42,759	Latin America 51,123	Latin America 68,227	Latin America 73,176	Latin America 97,008	Latin America 97,310	Latin America 85,471	Pakistan + India + Bangladesh 78,064
US + Canada 32,649	Europe 25,405	Latin America 25,394	US + Canada 22,796	US + Canada 22,798	US + Canada 41,092	US + Canada 63,055	US + Canada 72,289	Pakistan + India + Bangladesh 63,674	Pakistan + India + Bangladesh 72,740	Latin America 72,896
Latin America 6,026	Latin America 13,595	Europe 22,177	Europe 19,130	Pakistan + India + Bangladesh 18,309	Pakistan + India + Bangladesh 24,668	Pakistan + India + Bangladesh 32,386	Pakistan + India + Bangladesh 52,184	US + Canada 56,150	US + Canada 45,030	US + Canada 38,508
Asia ex- India+Pakistan 2,264	Pakistan + India + Bangladesh 3,762	Pakistan + India + Bangladesh 6,133	Pakistan + India + Bangladesh 12,032	Europe 18,149	Europe 17,889	Africa 17,127	Africa 20,063	Europe 23,878	Europe 32,513	Europe 31,267
Pakistan + India + Bangladesh 1,649	Asia ex- India+Pakistan 2,022	Africa 2,942	Africa 5,307	Africa 7,322	Africa 11,684	Europe 16,204	Europe 18,765	Africa 14,390	Africa 10,566	Asia ex- India+Pakistan 9,549
Africa 1,176	Africa 1,926	Asia ex- India+Pakistan 2,033	Asia ex- India+Pakistan 2,762	Asia ex- India+Pakistan 3,064	Asia ex- India+Pakistan 3,866	Asia ex- India+Pakistan 7,373	Asia ex- India+Pakistan 8,636	Asia ex- India+Pakistan 10,424	Asia ex- India+Pakistan 10,047	Africa 7,901

Disclosures

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