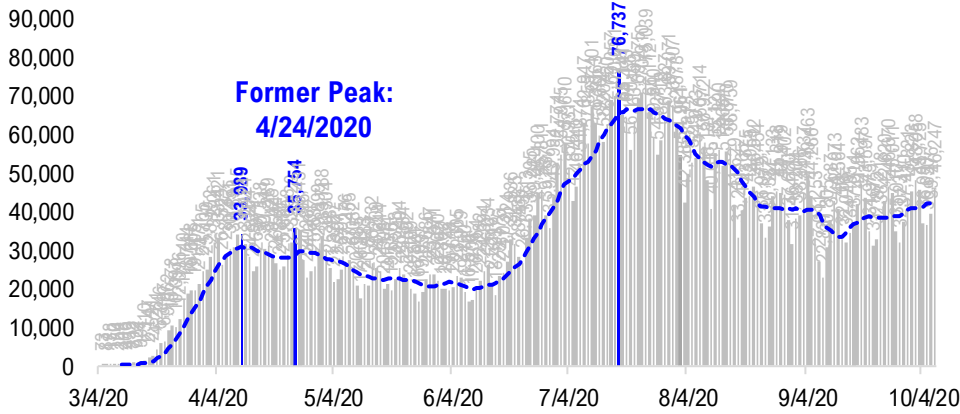


FSInsight Daily COVID-19 Chartbook

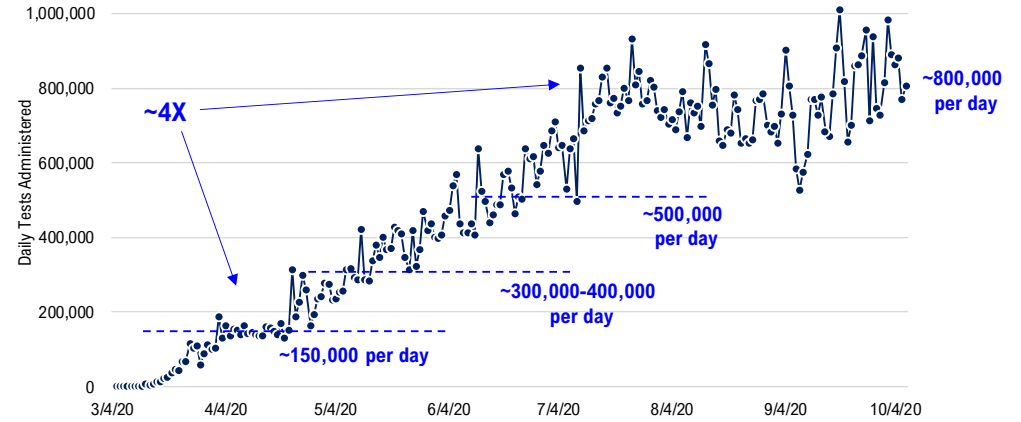


#1: USA COVID-19 Situation at a Glance...

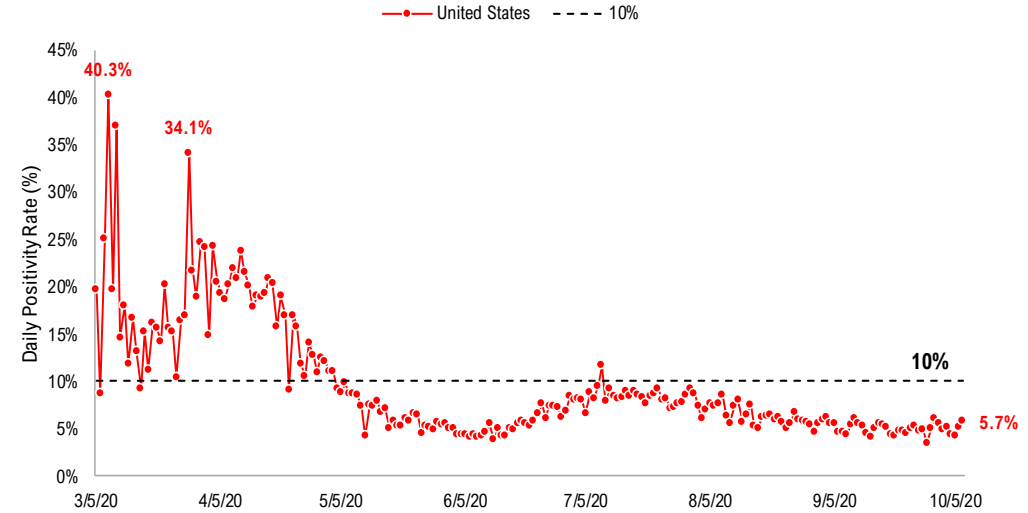
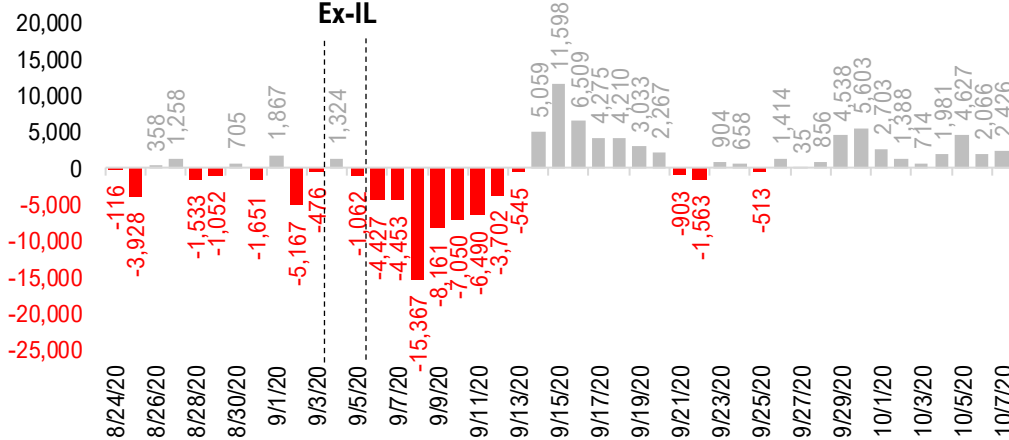
US daily new cases



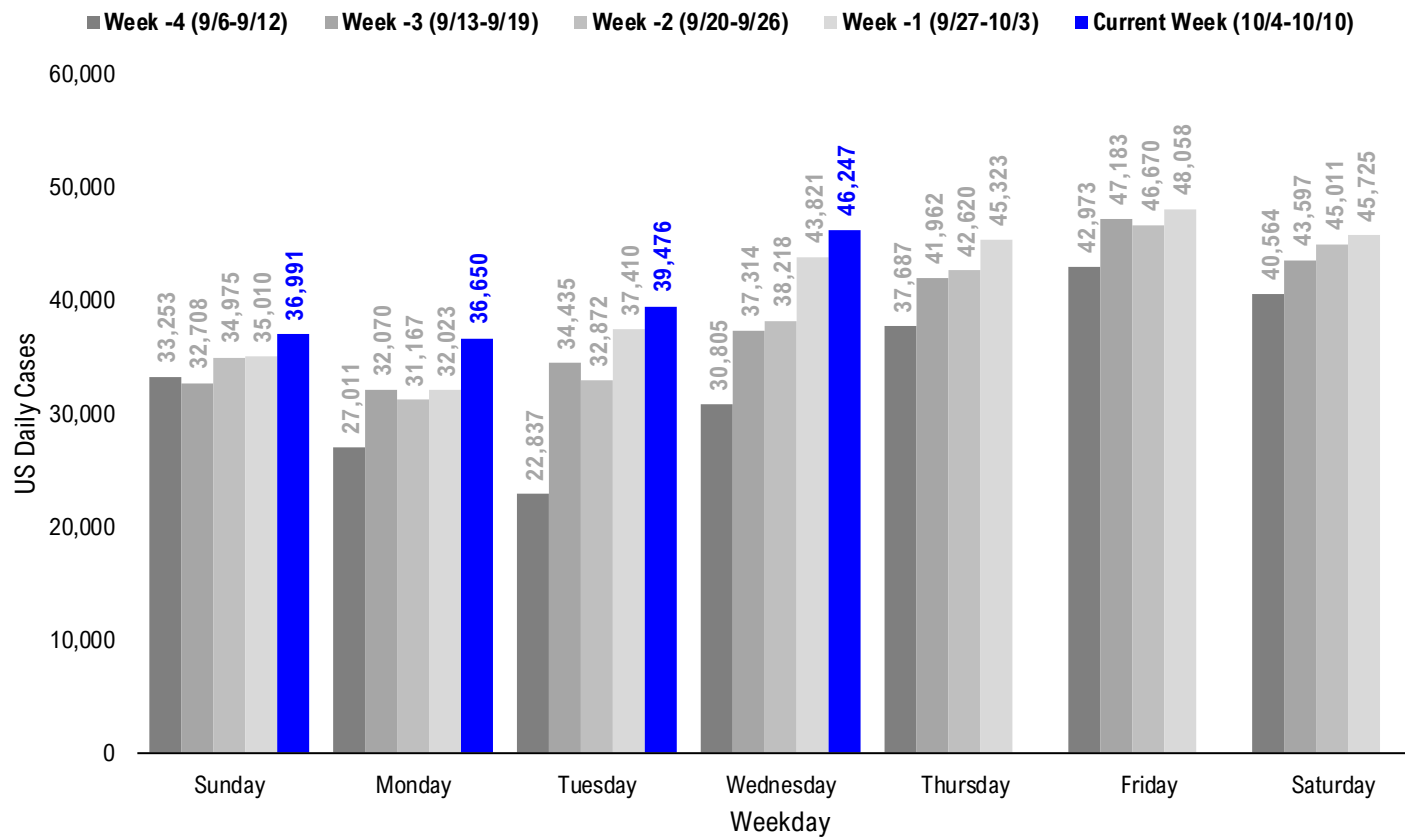
USA total COVID-19 tests administered



US daily new cases rolling 7D delta



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



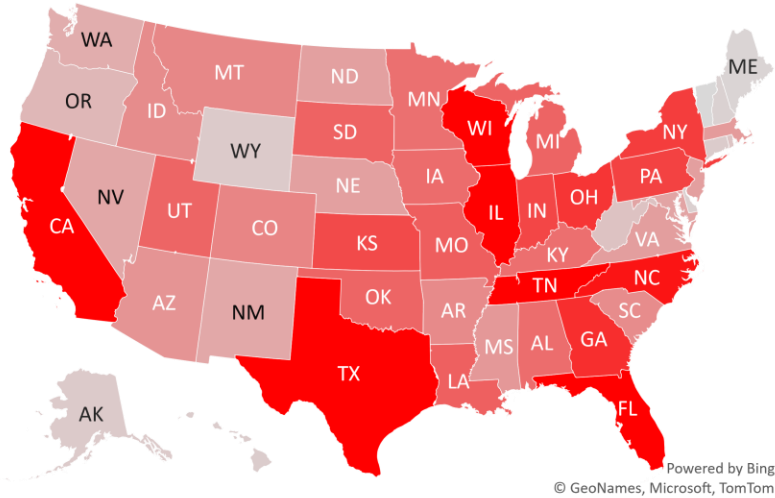
#3: USA State COVID-19 Situation at a Glance...

		Sorted Daily Cases			Daily Cases (3D avg) per 1mm residents		Since Peak		% Decline in Daily Cases	
		% US Pop	10/7/20	7D Delta	10/7/20	7D Delta	# Days	Cases		
United States		100%	46,247	+2,426	124	+9	82	-43%		
States:										
1	Texas	8.7%	3,776	-1,559	113	-8	82	-73%		
2	California	11.9%	2,764	-436	63	-7	75	-78%		
3	Illinois	3.8%	2,630	+357	160	+20	31	-38%		
4	Florida	6.5%	2,582	+634	97	+5	86	-84%		
5	Wisconsin	1.8%	2,319	+0	346	-22	4	-29%		
6	Tennessee	2.1%	2,080	+552	305	+151	71	-24%		
7	North Carolina	3.2%	1,711	+216	174	+71	81	-18%		
8	Georgia	3.2%	1,492	-228	101	-4	74	-75%		
9	Ohio	3.5%	1,424	+344	109	+18	68	-18%		
10	New York	5.9%	1,360	+360	63	+11	180	-88%		
11	Pennsylvania	3.9%	1,309	+156	79	+5	180	-44%		
12	Indiana	2.0%	1,281	+328	153	+25	4	-24%		
13	Kansas	0.9%	1,244	+124	325	-36	7	-10%		
14	Missouri	1.8%	1,068	-283	175	-49	69	-44%		
15	Louisiana	1.4%	1,052	+600	128	+40	78	-78%		
16	South Dakota	0.3%	1,030	+638	561	+241	4	-7%		
17	Michigan	3.0%	1,016	-38	111	+2	166	-9%		
18	Utah	1.0%	1,007	+101	294	+42	11	-22%		
19	Oklahoma	1.2%	1,006	+26	256	+14	71	-18%		
20	Iowa	1.0%	950	-170	189	-18	40	-51%		
21	Alabama	1.5%	941	-206	153	-9	74	-64%		
22	Kentucky	1.3%	921	-63	186	+11	4	-21%		
23	Minnesota	1.7%	911	+224	167	+25	10	-24%		
24	Colorado	1.7%	731	+220	107	+23	164	-15%		
25	Montana	0.3%	716	+369	445	+145	0	0%		
26	Arkansas	0.9%	684	+77	178	-29	74	-41%		
27	South Carolina	1.6%	674	-20	134	-3	67	-75%		
28	Idaho	0.5%	671	+57	334	+45	82	-12%		

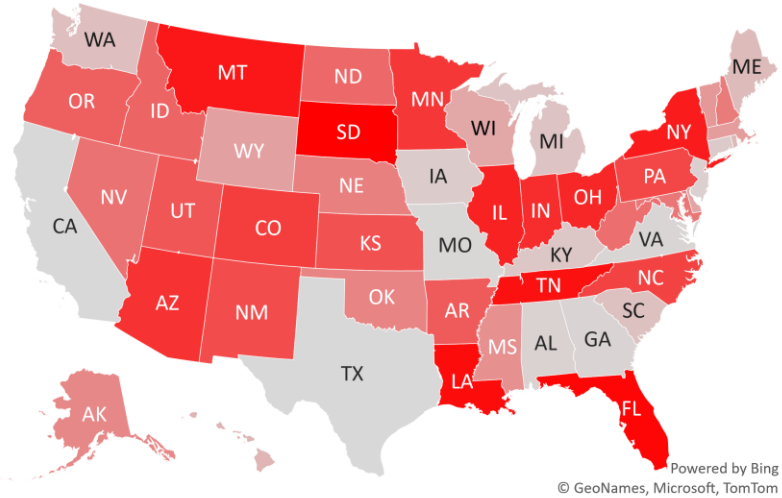
		Sorted Daily Cases			Daily Cases (3D avg) per 1mm residents		Since Peak		% Decline in Daily Cases	
		% US Pop	10/7/20	7D Delta	10/7/20	7D Delta	# Days	Cases		
United States		100%	46,247	+2,426	124	+9	82	-43%		
States:										
29	Arizona	2.2%	604	+281	82	+24	97	-86%		
30	Mississippi	0.9%	563	+11	196	+47	69	-62%		
31	Massachusetts	2.1%	535	+3	75	+3	165	-85%		
32	Virginia	2.6%	509	-246	71	-12	59	-57%		
33	New Jersey	2.7%	508	-204	62	-3	185	-86%		
34	Nebraska	0.6%	498	+32	233	-16	4	-30%		
35	North Dakota	0.2%	493	+48	572	+81	11	-7%		
36	Maryland	1.8%	460	+46	76	+3	139	-64%		
37	Nevada	0.9%	431	+46	135	-1	81	-69%		
38	New Mexico	0.6%	425	+147	142	+48	70	-18%		
39	Washington	2.3%	387	-17	54	+1	84	-60%		
40	Oregon	1.3%	294	+76	68	+14	67	-21%		
41	West Virginia	0.5%	203	+47	95	+2	25	-28%		
42	Rhode Island	0.3%	180	-12	128	+18	165	-68%		
43	Wyoming	0.2%	129	+2	227	+46	3	-6%		
44	Alaska	0.2%	126	+23	216	+59	2	-12%		
45	Connecticut	1.1%	123	-98	100	+10	168	-76%		
46	Hawaii	0.4%	110	-8	57	-12	39	-72%		
47	Delaware	0.3%	84	+2	105	-16	162	-69%		
48	New Hampshire	0.4%	69	+36	38	+15	158	-59%		
49	Guam	0.0%	54	+9	340	+70	41	-48%		
50	District of Columbia	0.2%	45	+19	84	+48	157	-74%		
51	Maine	0.4%	39	-15	21	-4	138	-59%		
52	Puerto Rico	1.0%	23	-184	65	-72	11	-64%		
53	Vermont	0.2%	6	+3	23	+18	185	-75%		
54	North Mariana Islands	0.0%	0	+0	12	+12	15	-71%		
55	American Samoa	#N/A	0	+0	0	+0	-	-		
56	U.S. Virgin Islands	0.0%	-1	-1	-19	-22	47	-104%		

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

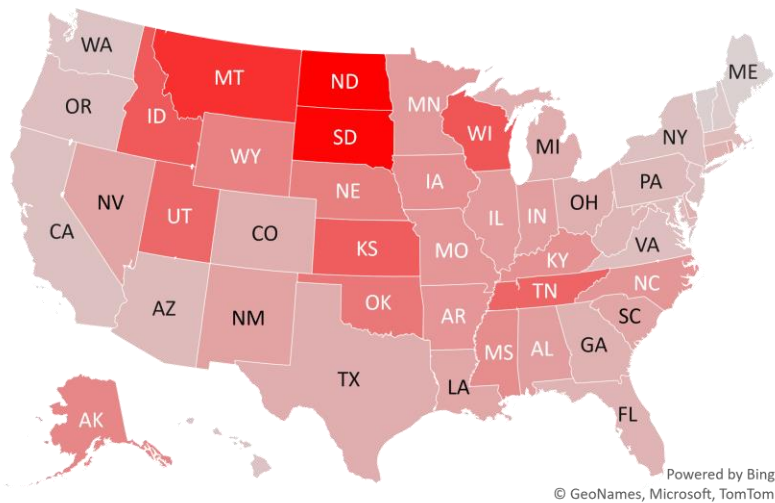
Daily Case Increases



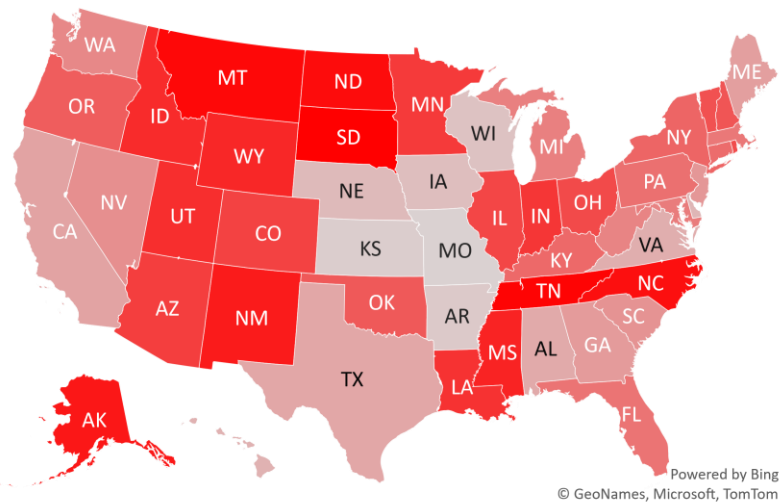
7D Delta in Daily New Cases



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



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



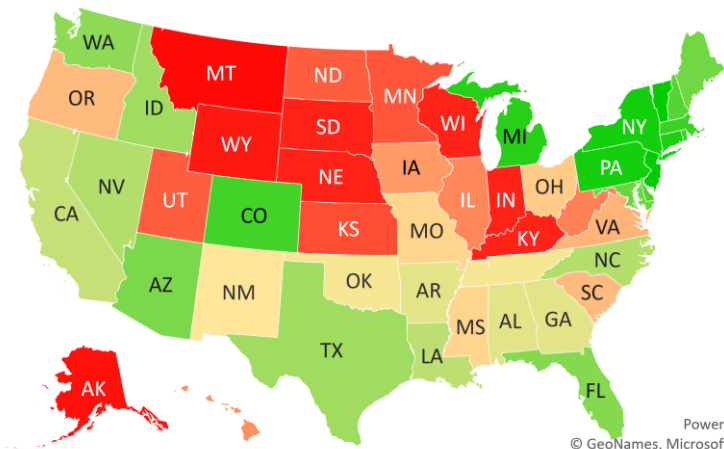
#5: # of Days since Daily Case Peaked by States...

Days since Daily Cases (3D Avg) Peak (as of 10/7)

	Sorted			
	Peak Date	10/7/20	% off the Peak	% US Pop
United States	7/17/20	82	-43%	100%
States:				
Vermont	4/5/20	185	-75%	0.2%
New Jersey	4/5/20	185	-86%	2.7%
Pennsylvania	4/10/20	180	-44%	3.9%
New York	4/10/20	180	-88%	5.9%
Connecticut	4/22/20	168	-76%	1.1%
Michigan	4/24/20	166	-9%	3.0%
Rhode Island	4/25/20	165	-68%	0.3%
Massachusetts	4/25/20	165	-85%	2.1%
Colorado	4/26/20	164	-15%	1.7%
Delaware	4/28/20	162	-69%	0.3%
New Hampshire	5/2/20	158	-59%	0.4%
District of Columbia	5/3/20	157	-74%	0.2%
Maryland	5/21/20	139	-64%	1.8%
Maine	5/22/20	138	-59%	0.4%
Arizona	7/2/20	97	-86%	2.2%
Florida	7/13/20	86	-84%	6.5%
Washington	7/15/20	84	-60%	2.3%
Texas	7/17/20	82	-73%	8.7%
Idaho	7/17/20	82	-12%	0.5%
Nevada	7/18/20	81	-69%	0.9%
North Carolina	7/18/20	81	-18%	3.2%
Louisiana	7/21/20	78	-78%	1.4%
California	7/24/20	75	-78%	11.9%
Georgia	7/25/20	74	-75%	3.2%
Arkansas	7/25/20	74	-41%	0.9%
Alabama	7/25/20	74	-64%	1.5%
Tennessee	7/28/20	71	-24%	2.1%
Oklahoma	7/28/20	71	-18%	1.2%

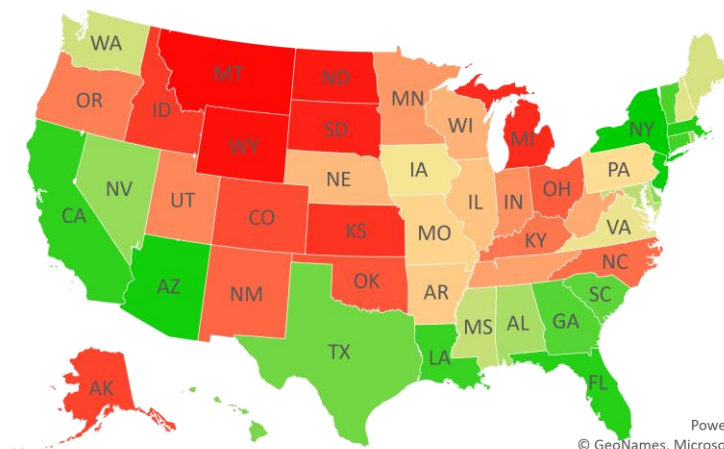
	Sorted			
	Peak Date	10/7/20	% off the Peak	% US Pop
United States	7/17/20	82	-43%	100%
States:				
New Mexico	7/29/20	70	-18%	0.6%
Mississippi	7/30/20	69	-62%	0.9%
Missouri	7/30/20	69	-44%	1.8%
Ohio	7/31/20	68	-18%	3.5%
South Carolina	8/1/20	67	-75%	1.6%
Oregon	8/1/20	67	-21%	1.3%
Virginia	8/9/20	59	-57%	2.6%
U.S. Virgin Islands	8/21/20	47	-104%	0.0%
Guam	8/27/20	41	-48%	0.0%
Iowa	8/28/20	40	-51%	1.0%
Hawaii	8/29/20	39	-72%	0.4%
Illinois	9/6/20	31	-38%	3.8%
West Virginia	9/12/20	25	-28%	0.5%
Northern Mariana Island	9/22/20	15	-71%	0.0%
Utah	9/26/20	11	-22%	1.0%
Puerto Rico	9/26/20	11	-64%	1.0%
North Dakota	9/26/20	11	-7%	0.2%
Minnesota	9/27/20	10	-24%	1.7%
Kansas	9/30/20	7	-10%	0.9%
Wisconsin	10/3/20	4	-29%	1.8%
South Dakota	10/3/20	4	-7%	0.3%
Nebraska	10/3/20	4	-30%	0.6%
Kentucky	10/3/20	4	-21%	1.3%
Indiana	10/3/20	4	-24%	2.0%
Wyoming	10/4/20	3	-6%	0.2%
Alaska	10/5/20	2	-12%	0.2%
Montana	10/7/20	0	0%	0.3%

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



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



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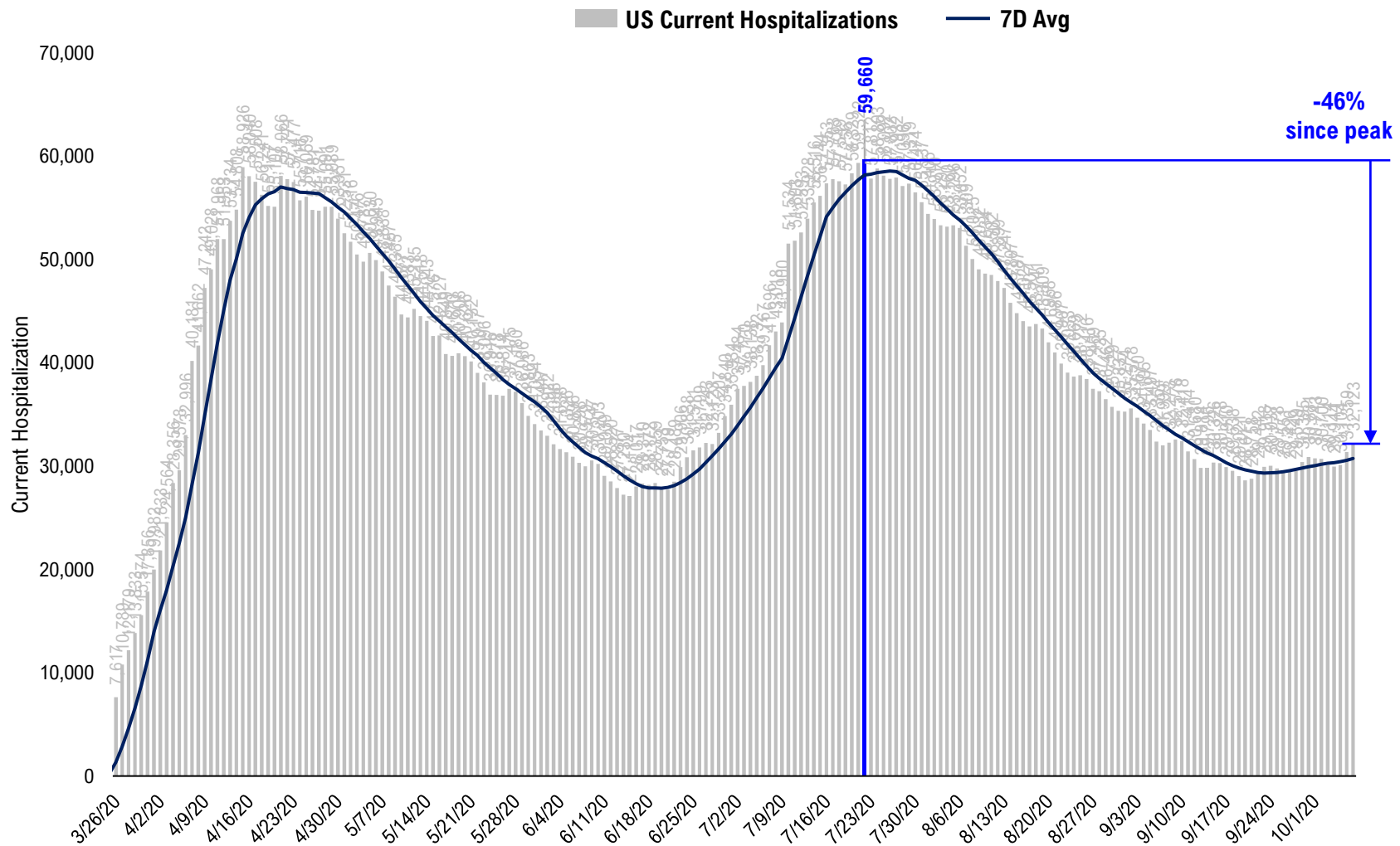
#6: US New Cases by States... (sorted by today's new cases)

	Sorted						Sorted				
	7D Ago	Last 3-day Trend					7D Ago	Last 3-day Trend			
	9/30/20	10/5/20	10/6/20	10/7/20	vs 7D ago		9/30/20	10/5/20	10/6/20	10/7/20	vs 7D ago
United States	43,821	36,650	39,476	46,247	+2,426	United States	43,821	36,650	39,476	46,247	+2,426
States:						States:					
Texas	5,335	2,192	3,872	3,776		Arizona	323	316	864	604	<--higher
California	3,200	3,055	1,677	2,764		Mississippi	552	215	975	563	
Illinois	2,273	1,853	1,617	2,630		Massachusetts	532	515	495	535	
Florida	1,948	1,415	2,251	2,582	<--higher	Virginia	755	687	625	509	
Wisconsin	2,319	1,696	2,020	2,319		New Jersey	712	511	629	508	
Tennessee	1,528	2,489	1,676	2,080	<--higher	Nebraska	466	404	452	498	
North Carolina	1,495	2,258	1,504	1,711		North Dakota	445	312	502	493	
Georgia	1,720	789	936	1,492		Maryland	414	501	413	460	
Ohio	1,080	1,057	1,335	1,424	<--higher	Nevada	385	337	479	431	
New York	1,000	933	1,393	1,360	<--higher	New Mexico	278	155	315	425	<--higher
Pennsylvania	1,153	672	1,036	1,309		Washington	404	455	402	387	
Indiana	953	830	970	1,281	<--higher	Oregon	218	279	291	294	<--higher
Kansas	1,120	1,597	0	1,244		West Virginia	156	114	194	203	<--higher
Missouri	1,351	987	1,165	1,068		Rhode Island	192	50	177	180	
Louisiana	452	230	506	1,052	<--higher	Wyoming	127	125	141	129	
South Dakota	392	180	278	1,030	<--higher	Alaska	103	208	139	126	<--higher
Michigan	1,054	1,407	903	1,016		Connecticut	221	823	121	123	
Utah	906	1,105	716	1,007		Hawaii	118	52	81	110	
Oklahoma	980	665	1,364	1,006		Delaware	82	120	103	84	
Iowa	1,120	364	474	950		New Hampshire	33	35	51	69	<--higher
Alabama	1,147	544	764	941		Guam	45	54	61	54	
Kentucky	984	541	1,036	921		District of Columbia	26	28	105	45	<--higher
Minnesota	687	973	941	911	<--higher	Maine	54	26	20	39	
Colorado	511	461	654	731	<--higher	Puerto Rico	207	363	238	23	
Montana	347	212	500	716	<--higher	Vermont	3	33	4	6	<--higher
Arkansas	607	392	532	684		Northern Mariana Islands	0	2	0	0	
South Carolina	694	575	824	674		American Samoa	0	0	0	0	
Idaho	614	458	660	671		U.S. Virgin Islands	0	0	-5	-1	

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

#7: US Daily Hospitalizations...

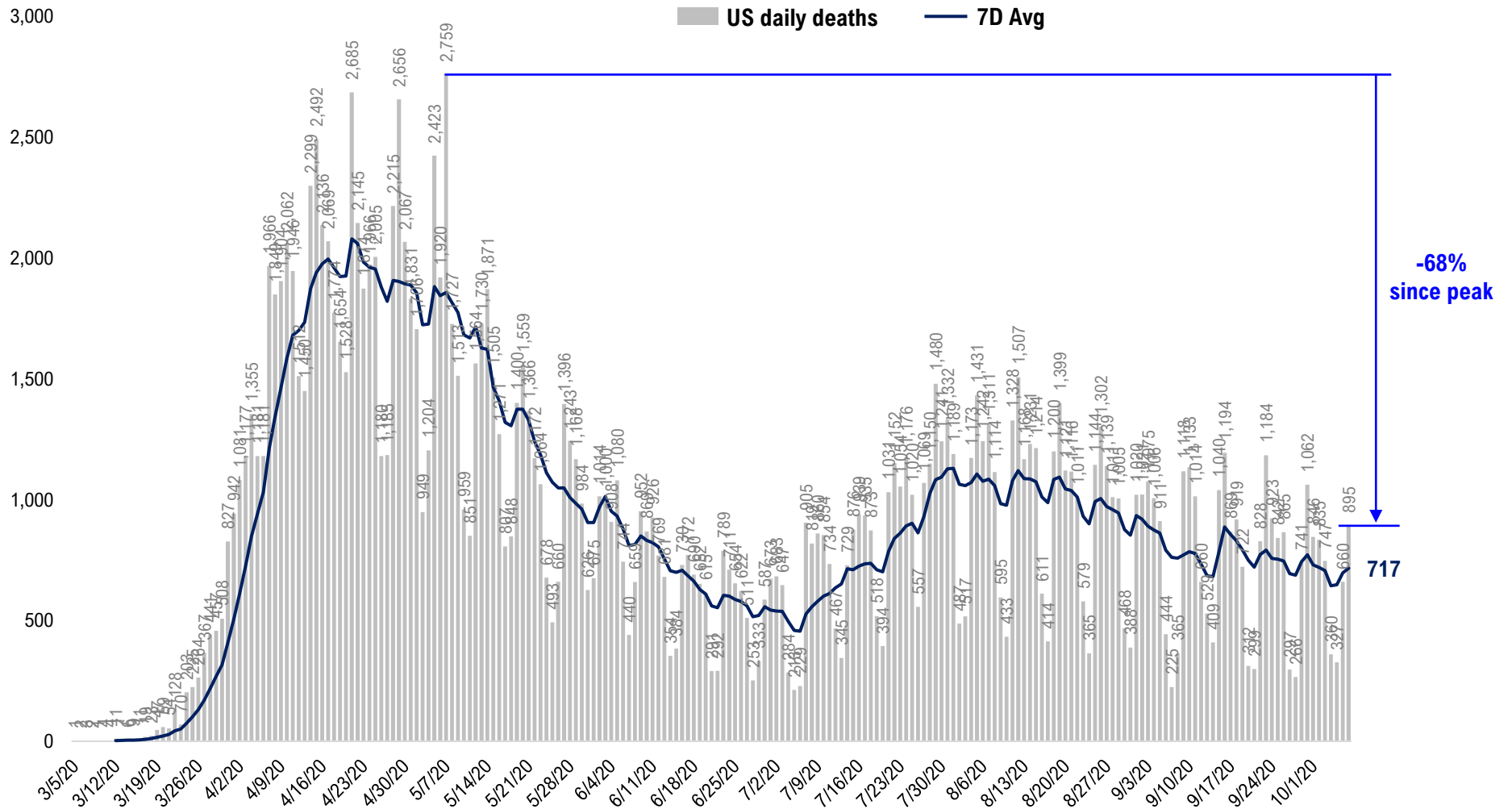
US Net Hospitalizations (aggregate of 50 states + Washington, D.C.)



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

#8: US Daily New Fatalities...

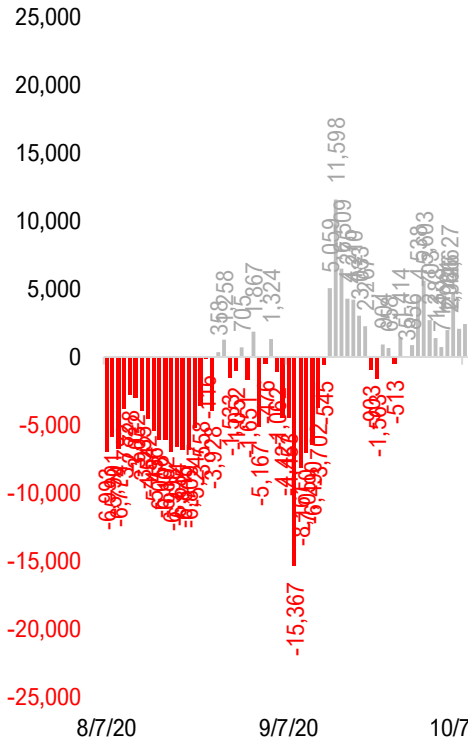
US daily COVID-19 Fatalities



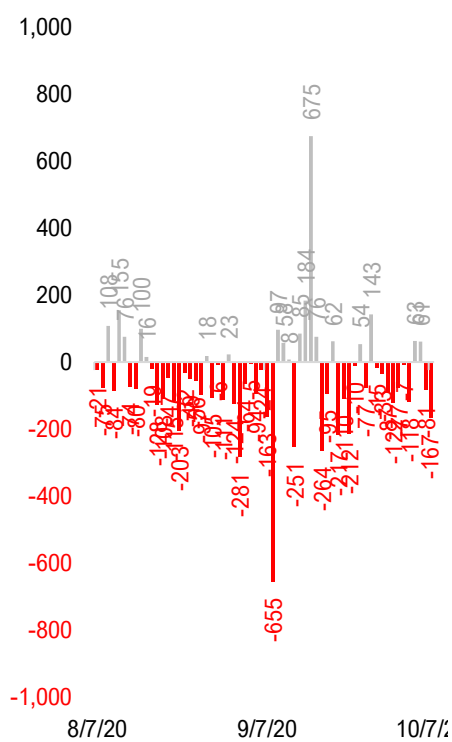
Source: Fundstrat, COVID-19 Tracking Project, State Department of Health

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

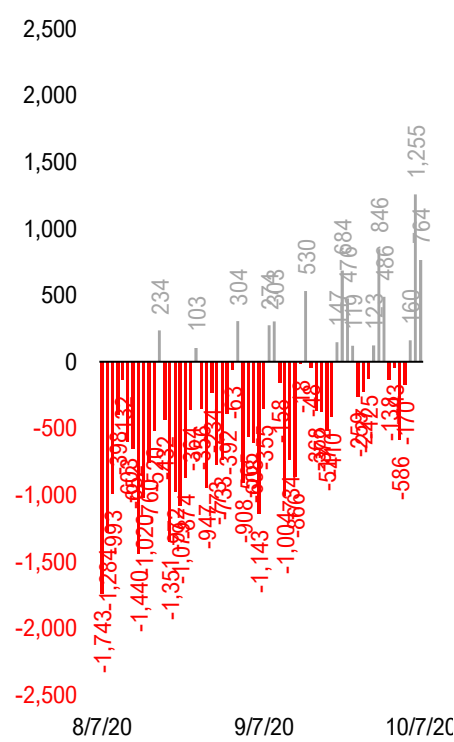
Daily New Cases
(8/10-8/23 ex-CA; 9/4-9/5 ex-IL)



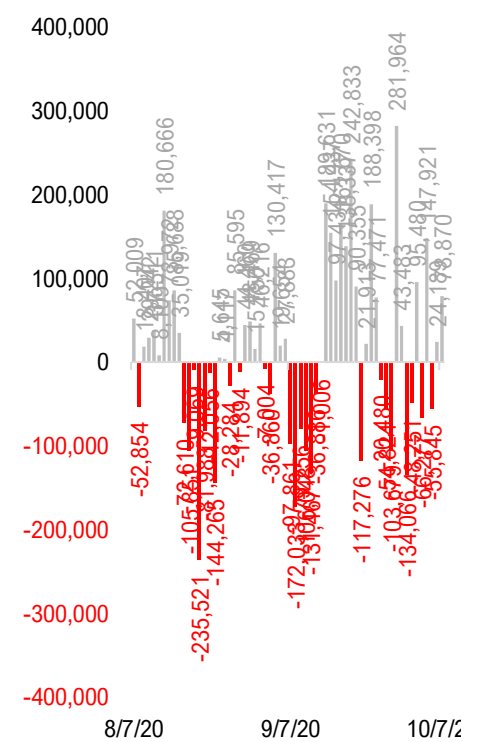
Daily Deaths



Daily Net Hospitalization
(Red = more discharge than admission)



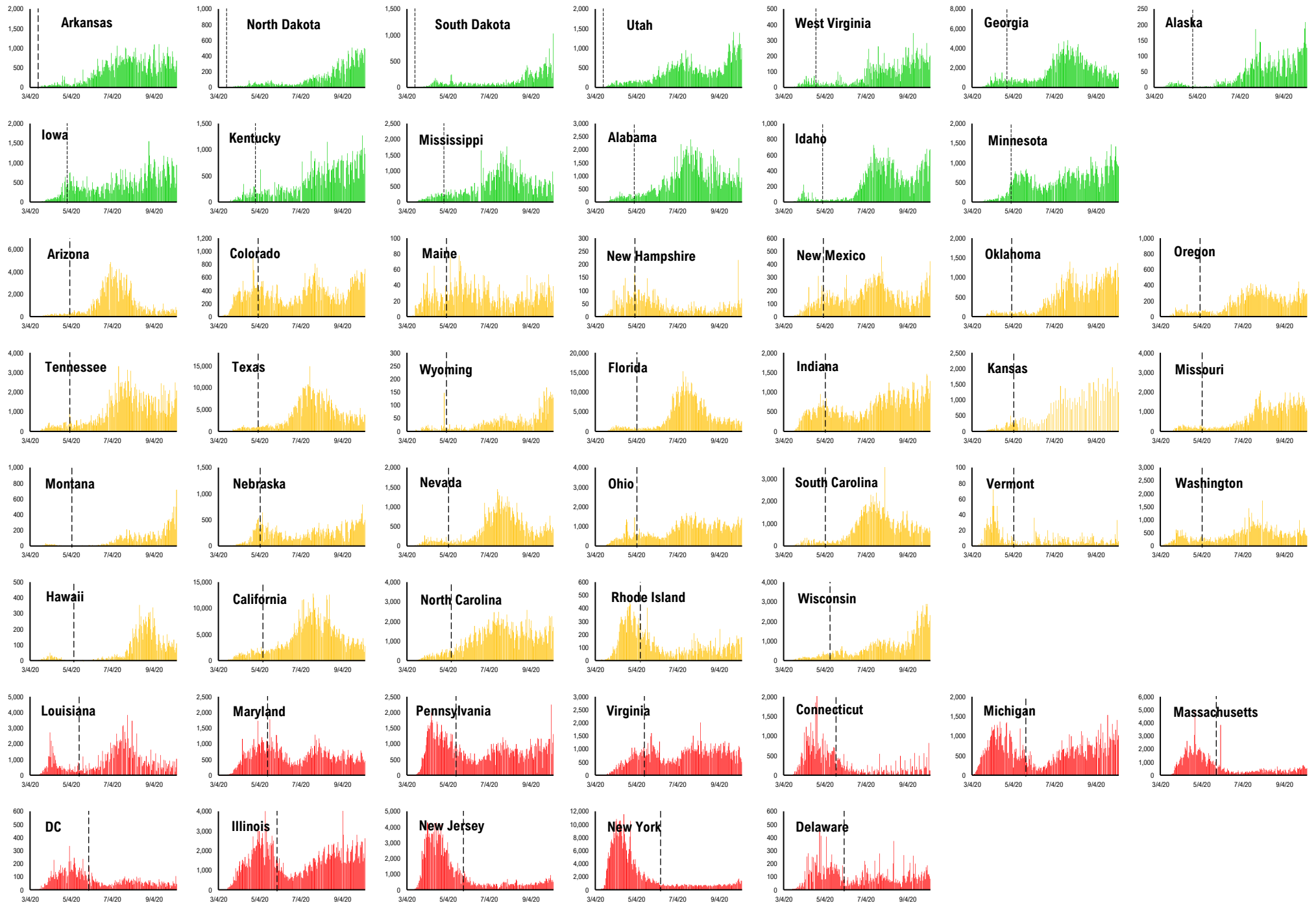
Daily Tests



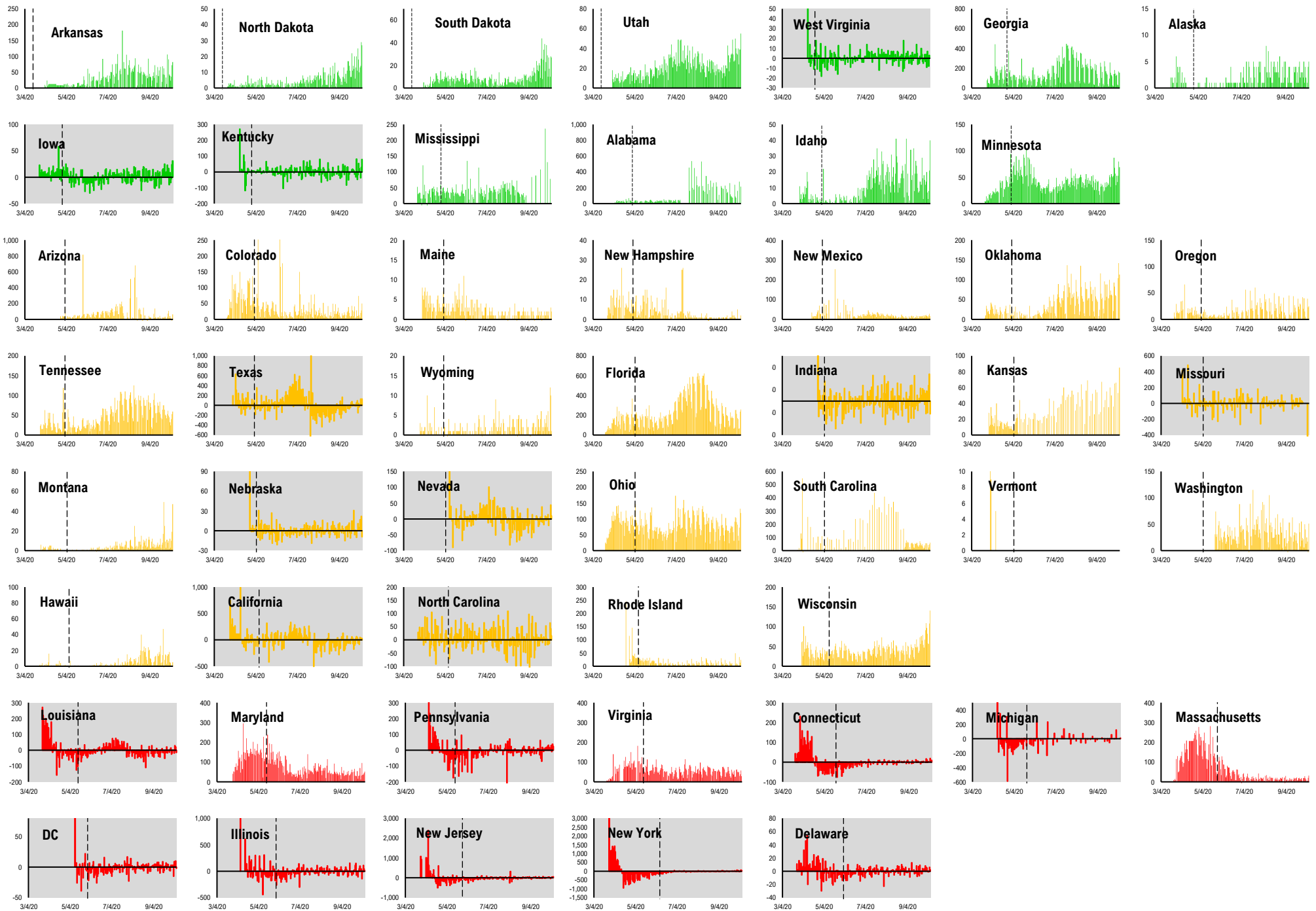
* Ignored California between 8/10 and 8/23, due to its data glitch caused 300,000-case backlog

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

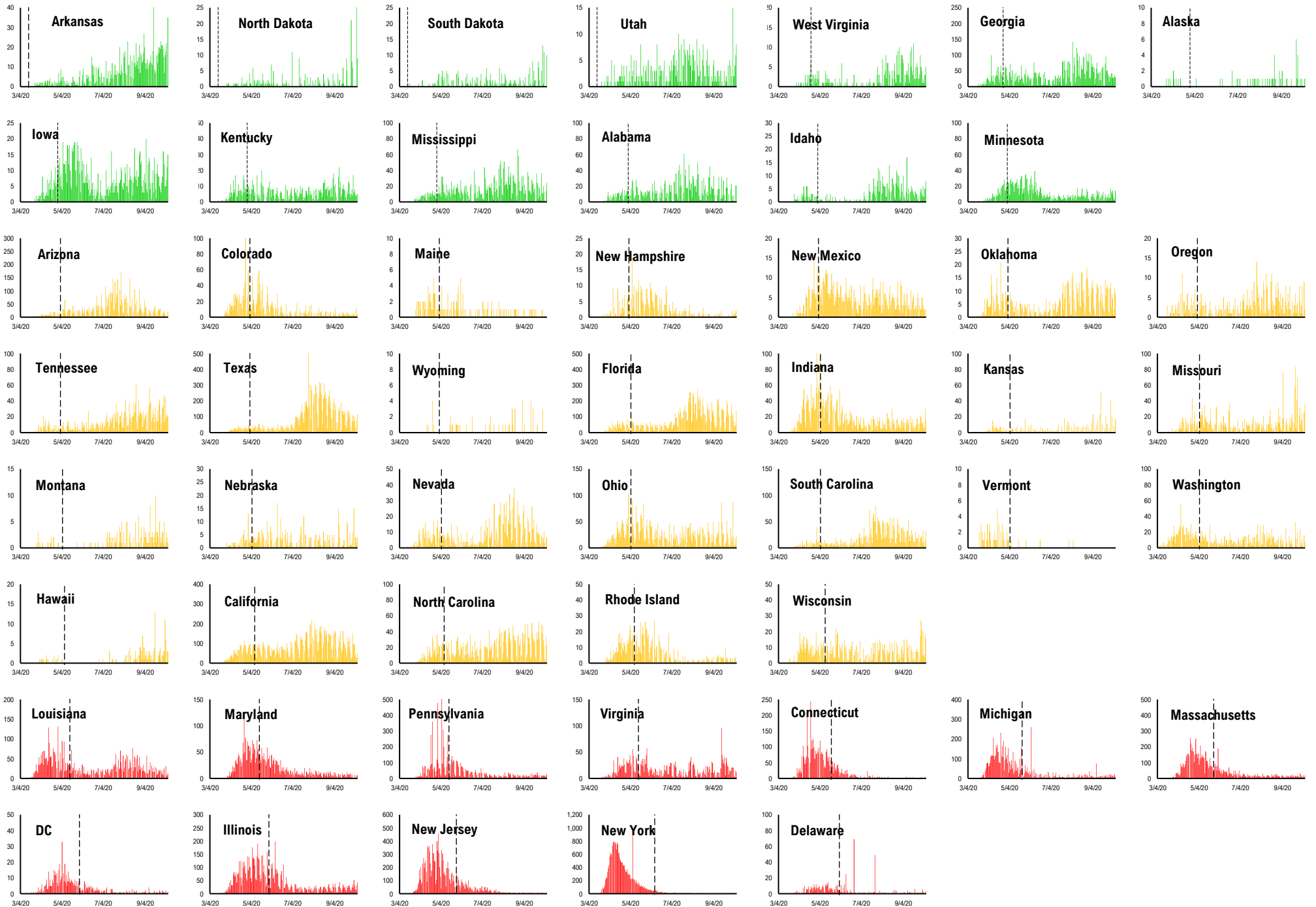
#10: Daily New Cases by States... (sorted by "open" date)



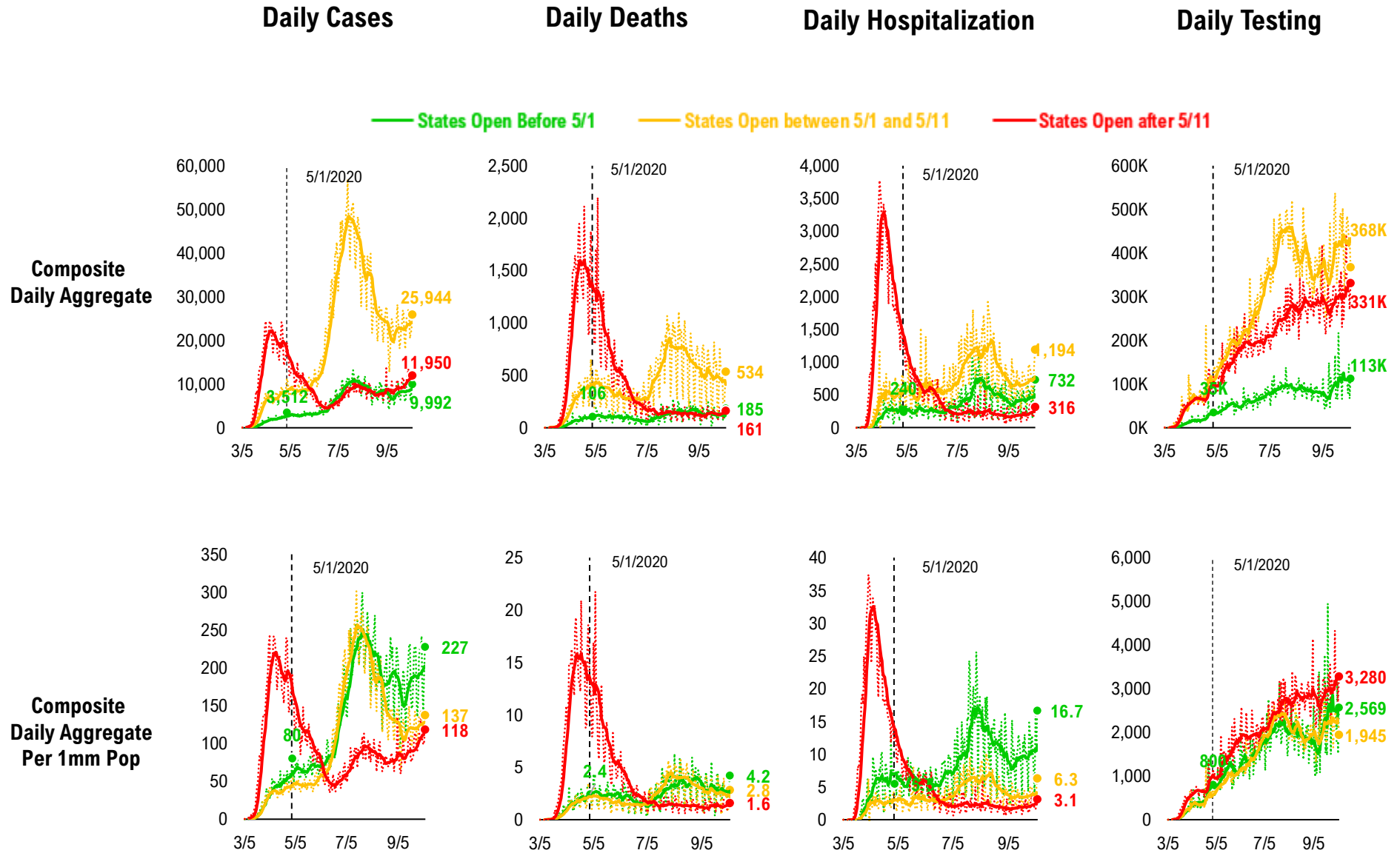
#11: Daily Hospitalizations by States... (sorted by "open" date)



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

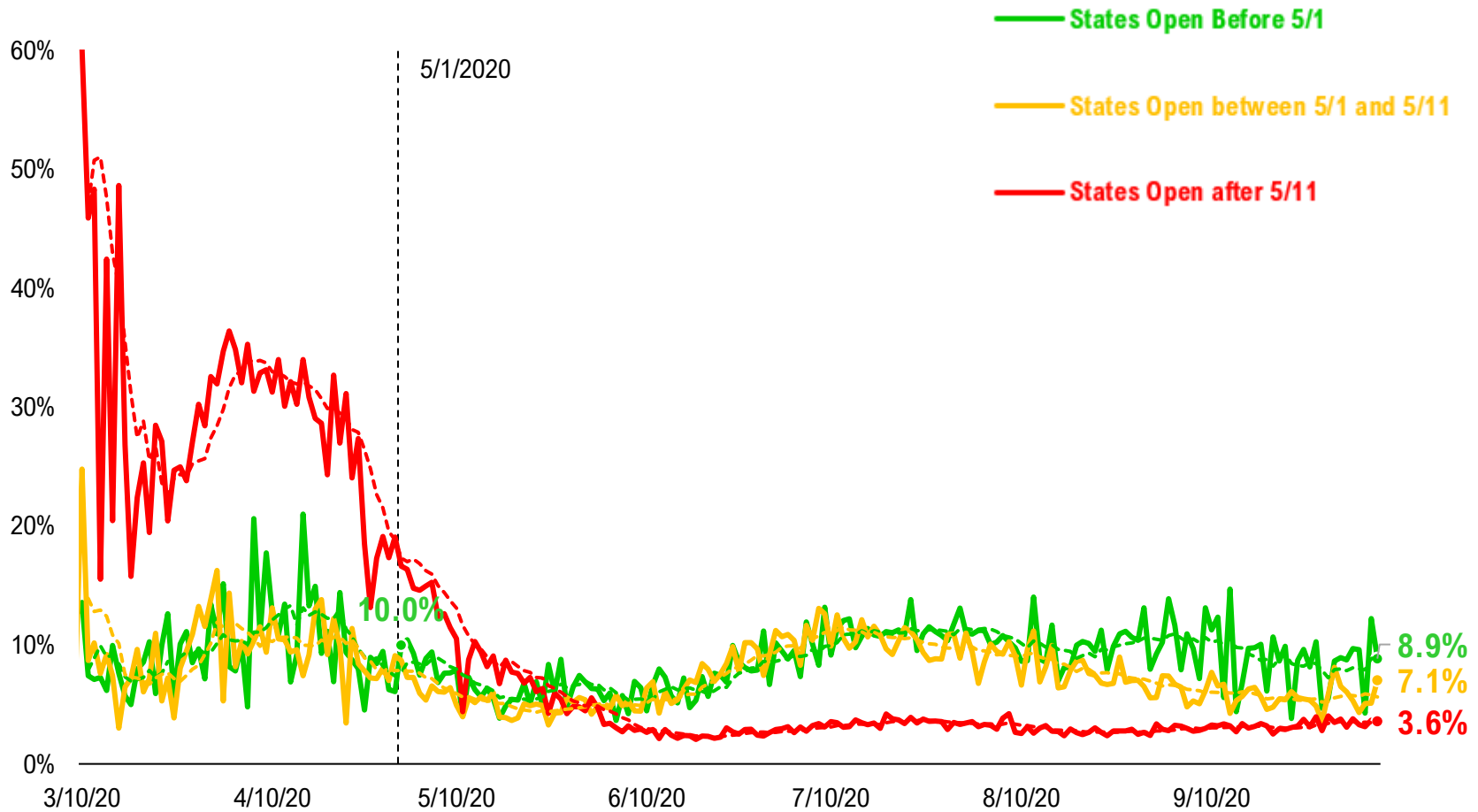


#13: State COVID-19 situation by Reopen Date...

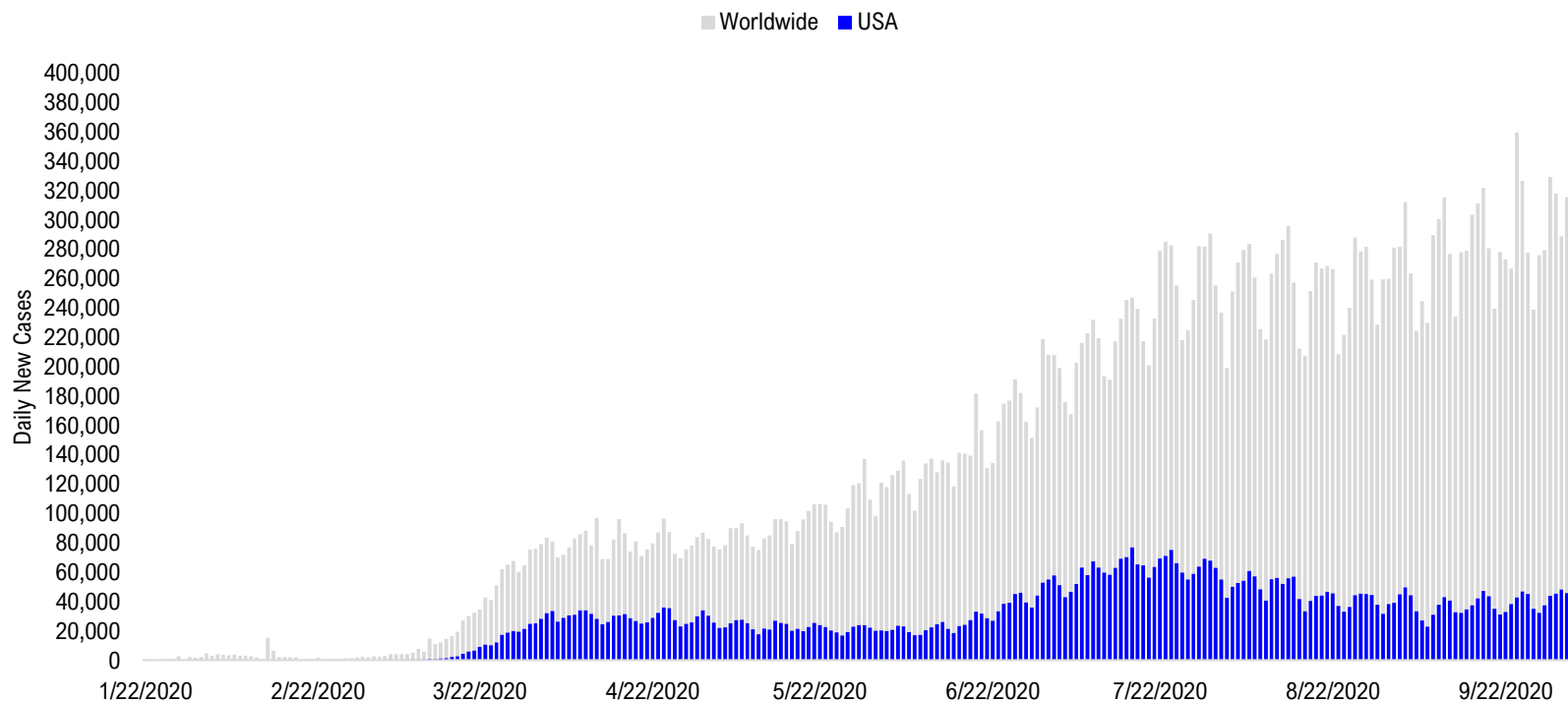


#14: State COVID-19 Daily Positivity Rate by Reopen Date...

Composite Daily Positivity Rate



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



5/22/2020	6/5/2020	6/19/2020	7/3/2020	7/17/2020	7/31/2020	8/14/2020	8/28/2020	9/11/2020	9/25/2020	10/6/2020
Latin America 33,875	Latin America 47,182	Latin America 58,570	Latin America 72,231	Latin America 72,602	Latin America 97,308	Latin America 100,636	Latin America 88,255	Pakistan + India + Bangladesh 98,888	Pakistan + India + Bangladesh 88,225	Europe 88,821
US + Canada 25,073	US + Canada 21,894	US + Canada 28,473	US + Canada 55,408	US + Canada 72,365	US + Canada 67,272	Pakistan + India + Bangladesh 68,924	Pakistan + India + Bangladesh 82,644	Latin America 83,501	Latin America 76,712	Pakistan + India + Bangladesh 71,186
Europe 19,494	Europe 17,839	Pakistan + India + Bangladesh 22,981	Pakistan + India + Bangladesh 27,389	Pakistan + India + Bangladesh 39,450	Pakistan + India + Bangladesh 58,625	US + Canada 54,914	US + Canada 45,255	Europe 47,368	Europe 67,858	Latin America 61,833
Pakistan + India + Bangladesh 9,981	Pakistan + India + Bangladesh 16,820	Europe 18,534	Europe 15,950	Africa 19,290	Europe 20,854	Europe 28,282	Europe 35,826	US + Canada 37,795	US + Canada 43,790	US + Canada 39,826
Africa 4,166	Africa 6,467	Africa 8,930	Africa 14,218	Europe 17,320	Africa 17,999	Africa 10,680	Asia ex- India+Pakistan 9,999	Asia ex- India+Pakistan 10,612	Asia ex- India+Pakistan 10,726	Asia ex- India+Pakistan 11,637
Asia ex- India+Pakistan 2,225	Asia ex- India+Pakistan 2,565	Asia ex- India+Pakistan 3,314	Asia ex- India+Pakistan 12,006	Asia ex- India+Pakistan 7,321	Asia ex- India+Pakistan 10,630	Asia ex- India+Pakistan 10,512	Africa 8,468	Africa 8,309	Africa 8,247	Africa 6,460

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