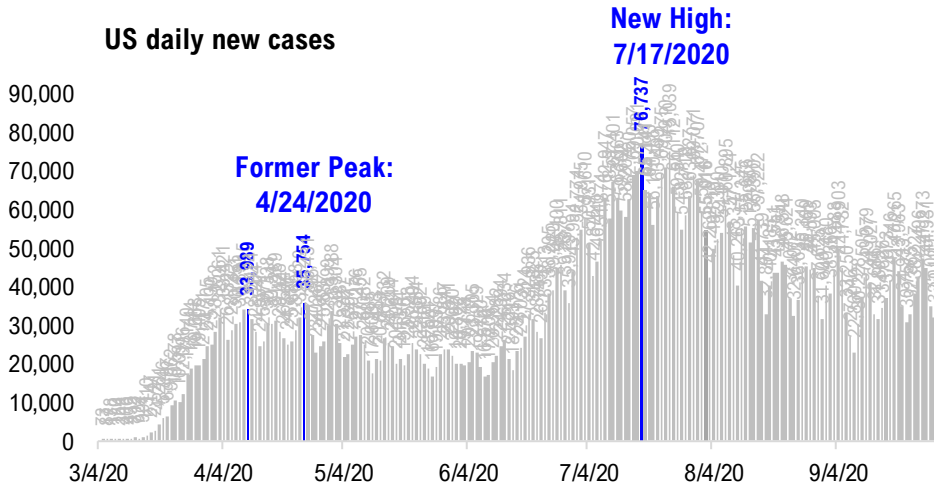


# FSInsight Daily COVID-19 Chartbook

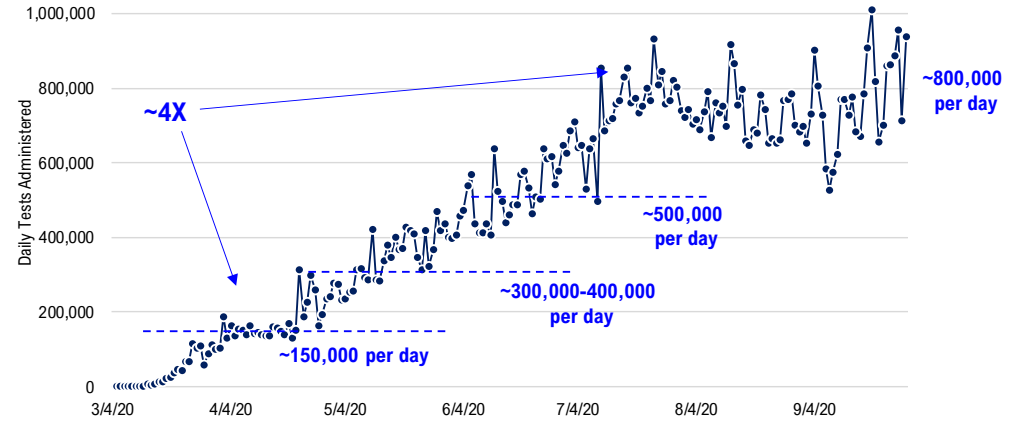


# #1: USA COVID-19 Situation at a Glance...

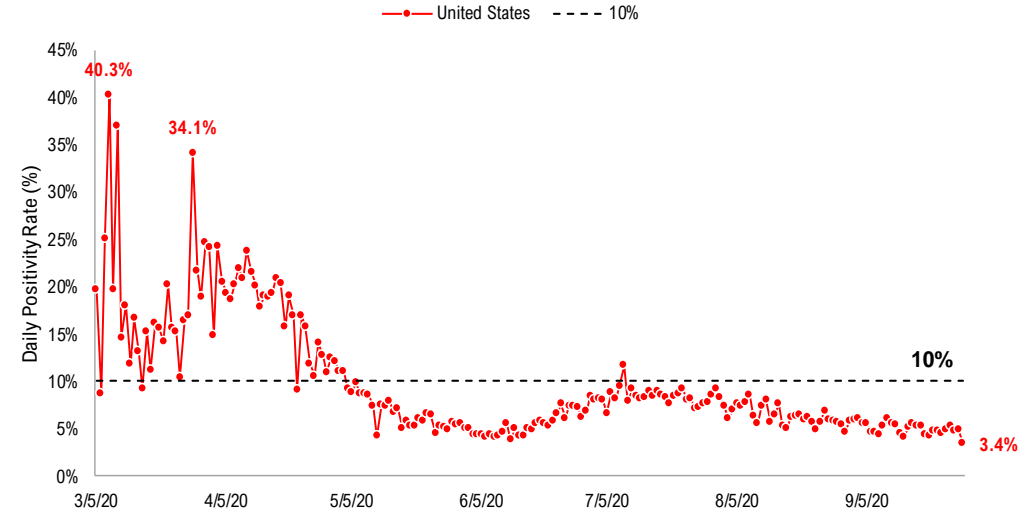
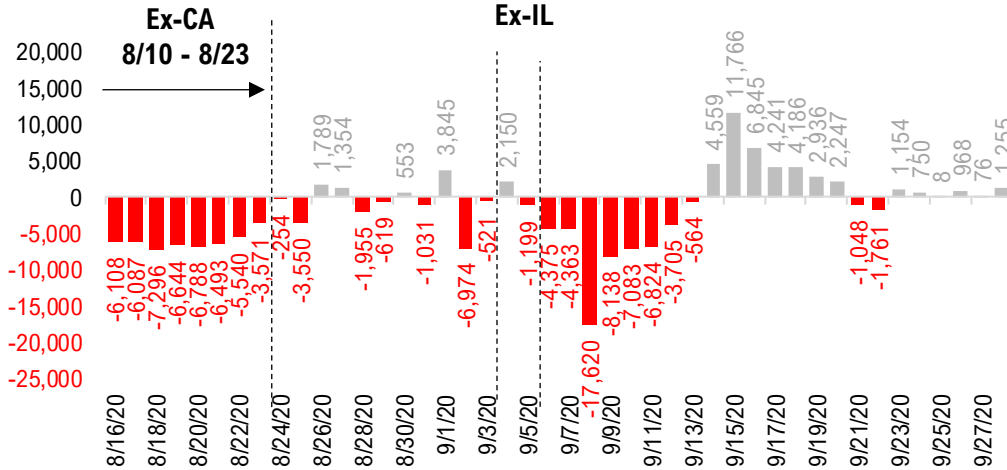
US daily new cases



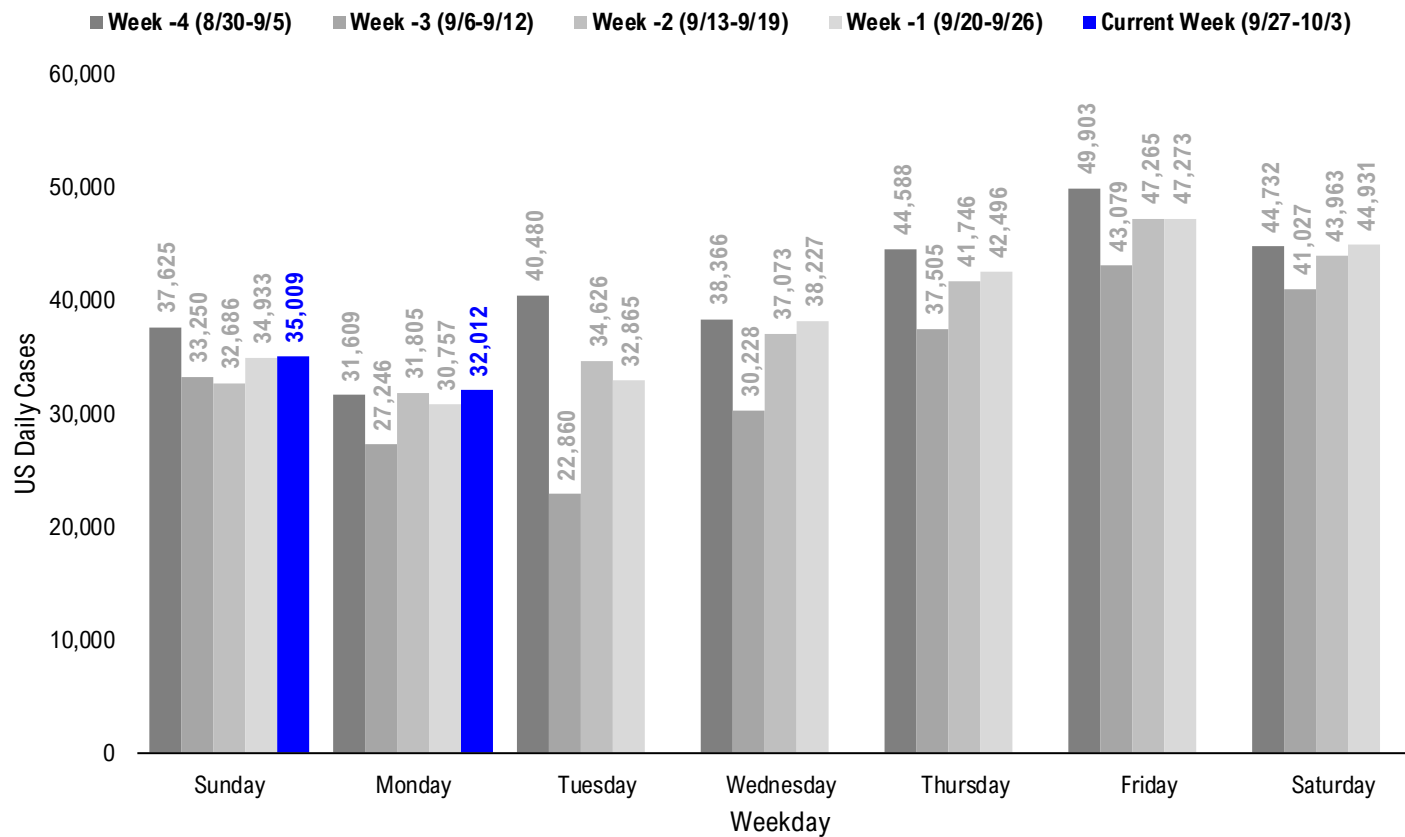
USA total COVID-19 tests administered



US daily new cases rolling 7D delta



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



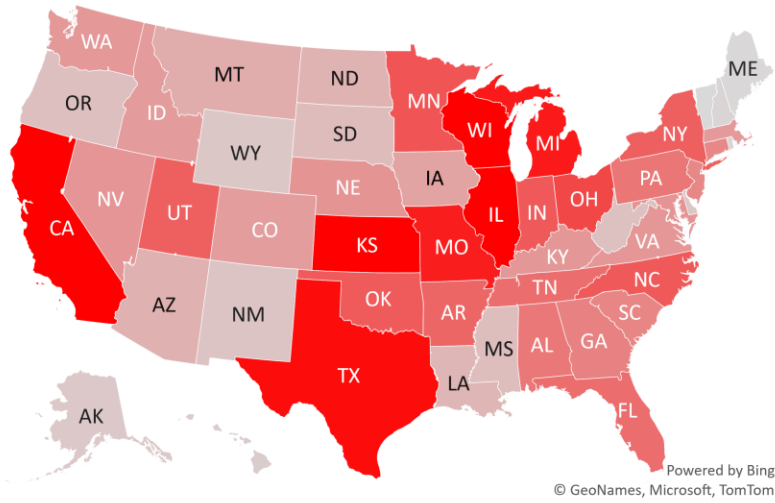
# #3: USA State COVID-19 Situation at a Glance...

		Sorted Daily Cases		Daily Cases (3D avg) per 1mm residents		Since Peak		% Decline in Daily Cases	
		% US Pop	9/28/20	7D Delta	9/28/20	7D Delta	# Days		% Decline in Daily Cases
United States		100%	32,012	+1,255	114	+2	73		-48%
<b>States:</b>									
1	California	11.9%	2,955	-339	95	-5	66	-68%	
2	Kansas	0.9%	2,037	+363	233	+42	33	-34%	
3	Wisconsin	1.8%	1,726	+455	387	+88	2	-12%	
4	Illinois	3.8%	1,709	+232	151	+9	22	-41%	
5	Texas	8.7%	1,397	-345	69	-17	73	-83%	
6	Michigan	3.0%	1,308	-228	74	+6	157	-40%	
7	Missouri	1.8%	1,280	-183	238	+11	60	-24%	
8	Ohio	3.5%	993	+137	83	+10	59	-38%	
9	Minnesota	1.7%	904	-21	204	+19	1	-7%	
10	Indiana	2.0%	872	+350	144	+28	15	-18%	
11	North Carolina	3.2%	868	+68	124	+18	72	-41%	
12	Oklahoma	1.2%	861	-240	225	-56	62	-28%	
13	New York	5.9%	834	+261	46	+5	171	-91%	
14	Utah	1.0%	827	+205	303	+30	2	-20%	
15	Arkansas	0.9%	786	+190	226	+11	65	-25%	
16	Florida	6.5%	738	-947	84	-37	77	-86%	
17	Tennessee	2.1%	737	-158	209	+18	62	-48%	
18	Pennsylvania	3.9%	676	+442	68	+13	171	-52%	
19	Alabama	1.5%	662	-156	158	-40	65	-63%	
20	Puerto Rico	1.0%	660	+418	155	+30	2	-14%	
21	Georgia	3.2%	596	-588	87	-58	65	-79%	
22	South Carolina	1.6%	568	+124	118	-4	78	-69%	
23	Connecticut	1.1%	560	+63	52	+6	159	-88%	
24	New Jersey	2.7%	559	+167	75	+26	176	-83%	
25	Maryland	1.8%	477	+65	84	+1	130	-60%	
26	Nebraska	0.6%	467	+181	230	+29	149	-14%	
27	Nevada	0.9%	463	+231	156	+54	72	-64%	
28	Virginia	2.6%	449	-178	84	-11	50	-49%	

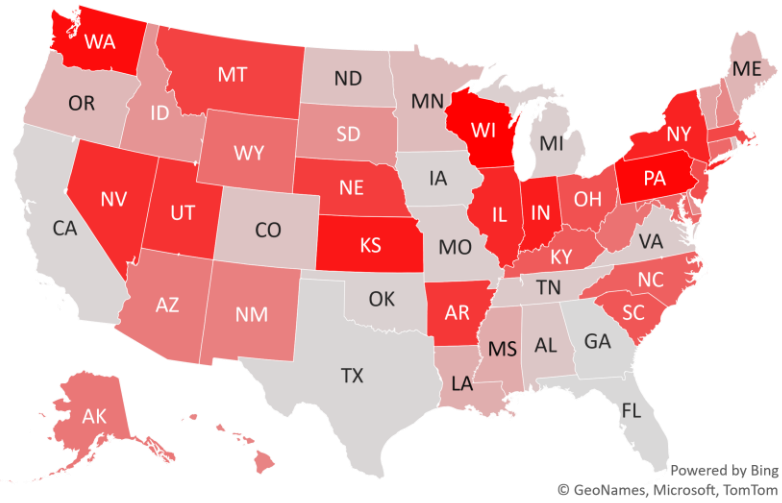
		Sorted Daily Cases		Daily Cases (3D avg) per 1mm residents		Since Peak		% Decline in Daily Cases	
		% US Pop	9/28/20	7D Delta	9/28/20	7D Delta	# Days		% Decline in Daily Cases
United States		100%	32,012	+1,255	114	+2	73		-48%
<b>States:</b>									
29	Kentucky	1.3%	448	+73	140	+6	2	-26%	
30	Washington	2.3%	439	+439	89	+47	75	-34%	
31	Massachusetts	2.1%	430	+174	77	+18	156	-85%	
32	Idaho	0.5%	422	+12	217	+42	73	-43%	
33	Colorado	1.7%	411	-131	91	-5	155	-28%	
34	Iowa	1.0%	366	-294	207	-18	31	-47%	
35	Montana	0.3%	306	+176	265	+91	2	-15%	
36	Arizona	2.2%	273	+40	52	-8	88	-91%	
37	North Dakota	0.2%	259	-27	480	+37	2	-22%	
38	Louisiana	1.4%	240	-3	83	-1	69	-85%	
39	South Dakota	0.3%	197	+24	446	+147	2	-21%	
40	Mississippi	0.9%	190	-2	114	-12	60	-78%	
41	Oregon	1.3%	174	-20	54	+2	58	-38%	
42	West Virginia	0.5%	164	+47	104	+13	16	-22%	
43	New Mexico	0.6%	141	+37	79	+26	61	-54%	
44	Delaware	0.3%	129	+28	104	+1	153	-70%	
45	Wyoming	0.2%	121	+48	192	+79	3	-17%	
46	Alaska	0.2%	116	+46	156	+43	57	-15%	
47	Hawaii	0.4%	90	+34	73	+16	30	-65%	
48	New Hampshire	0.4%	36	+31	30	+8	149	-67%	
49	Guam	0.0%	36	+6	209	+62	32	-68%	
50	Rhode Island	0.3%	26	-26	76	-22	156	-81%	
51	District of Columbia	0.2%	14	-9	48	-12	148	-85%	
52	Maine	0.4%	12	-15	16	-9	129	-69%	
53	Vermont	0.2%	3	-1	7	+1	176	-92%	
54	U.S. Virgin Islands	0.0%	0	+0	65	-19	38	-85%	
55	Northern Mariana Islands	0.0%	0	-1	6	-35	6	-86%	
56	American Samoa	0.0%	0	+0	0	+0	-	-	

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

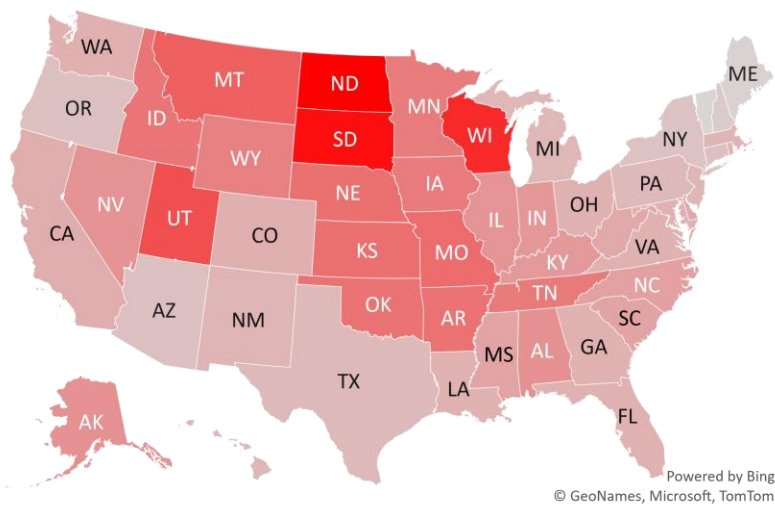
### Daily Case Increases



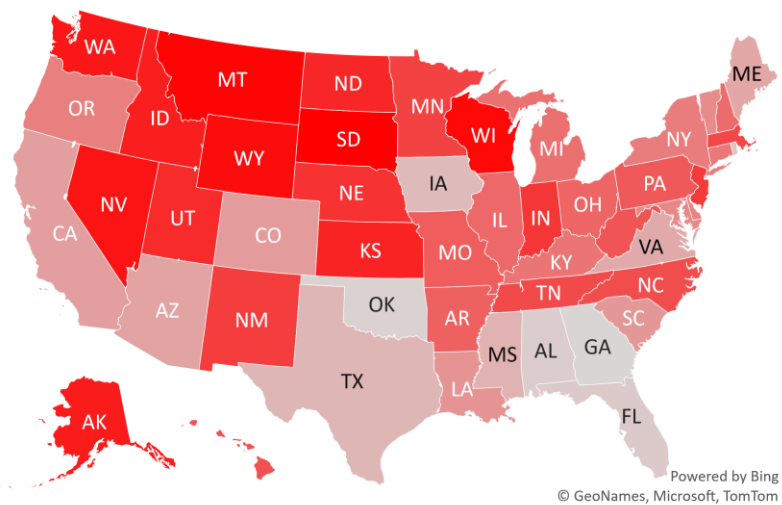
### 7D Delta in Daily New Cases



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



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





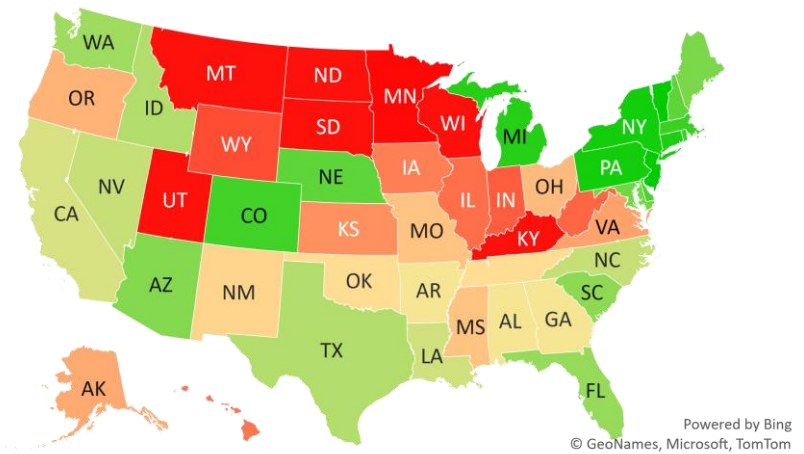
# #5: # of Days since Daily Case Peaked by States...

## # Days since Daily Cases (3D Avg) Peak (as of 9/28)

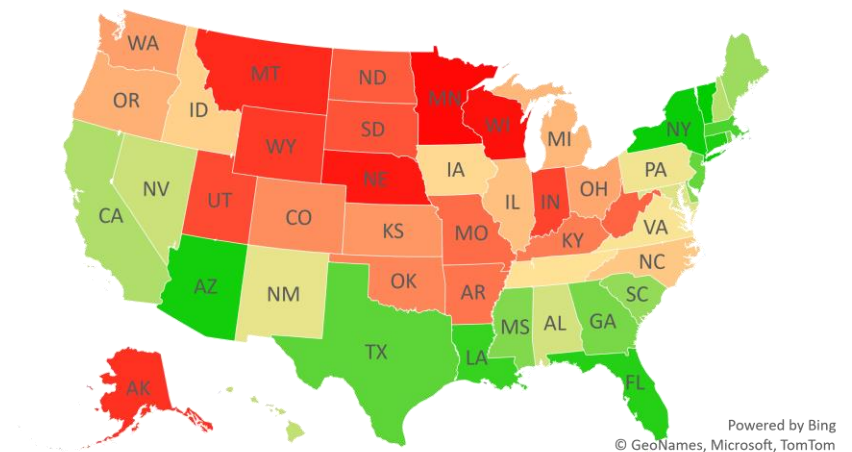
	Sorted			
	Peak Date	9/28/20	% off the Peak	% US Pop
United States	7/17/20	73	-48%	100%
<b>States:</b>				
Vermont	4/5/20	176	-92%	0.2%
New Jersey	4/5/20	176	-83%	2.7%
Pennsylvania	4/10/20	171	-52%	3.9%
New York	4/10/20	171	-91%	5.9%
Connecticut	4/22/20	159	-88%	1.1%
Michigan	4/24/20	157	-40%	3.0%
Rhode Island	4/25/20	156	-81%	0.3%
Massachusetts	4/25/20	156	-85%	2.1%
Colorado	4/26/20	155	-28%	1.7%
Delaware	4/28/20	153	-70%	0.3%
New Hampshire	5/2/20	149	-67%	0.4%
Nebraska	5/2/20	149	-14%	0.6%
District of Columbia	5/3/20	148	-85%	0.2%
Maryland	5/21/20	130	-60%	1.8%
Maine	5/22/20	129	-69%	0.4%
Arizona	7/2/20	88	-91%	2.2%
South Carolina	7/12/20	78	-69%	1.6%
Florida	7/13/20	77	-86%	6.5%
Washington	7/15/20	75	-34%	2.3%
Texas	7/17/20	73	-83%	8.7%
Idaho	7/17/20	73	-43%	0.5%
Nevada	7/18/20	72	-64%	0.9%
North Carolina	7/18/20	72	-41%	3.2%
Louisiana	7/21/20	69	-85%	1.4%
California	7/24/20	66	-68%	11.9%
Georgia	7/25/20	65	-79%	3.2%
Arkansas	7/25/20	65	-25%	0.9%
Alabama	7/25/20	65	-63%	1.5%

	Sorted			
	Peak Date	9/28/20	% off the Peak	% US Pop
United States	7/17/20	73	-48%	100%
<b>States:</b>				
Tennessee	7/28/20	62	-48%	2.1%
Oklahoma	7/28/20	62	-28%	1.2%
New Mexico	7/29/20	61	-54%	0.6%
Mississippi	7/30/20	60	-78%	0.9%
Missouri	7/30/20	60	-24%	1.8%
Ohio	7/31/20	59	-38%	3.5%
Oregon	8/1/20	58	-38%	1.3%
Alaska	8/2/20	57	-15%	0.2%
Virginia	8/9/20	50	-49%	2.6%
U.S. Virgin Islands	8/21/20	38	-85%	0.0%
Kansas	8/26/20	33	-34%	0.9%
Guam	8/27/20	32	-68%	0.0%
Iowa	8/28/20	31	-47%	1.0%
Hawaii	8/29/20	30	-65%	0.4%
Illinois	9/6/20	22	-41%	3.8%
West Virginia	9/12/20	16	-22%	0.5%
Indiana	9/13/20	15	-18%	2.0%
Northern Mariana Island	9/22/20	6	-86%	0.0%
Wyoming	9/25/20	3	-17%	0.2%
Wisconsin	9/26/20	2	-12%	1.8%
Utah	9/26/20	2	-20%	1.0%
South Dakota	9/26/20	2	-21%	0.3%
Puerto Rico	9/26/20	2	-14%	1.0%
North Dakota	9/26/20	2	-22%	0.2%
Montana	9/26/20	2	-15%	0.3%
Kentucky	9/26/20	2	-26%	1.3%
Minnesota	9/27/20	1	-7%	1.7%

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



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



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

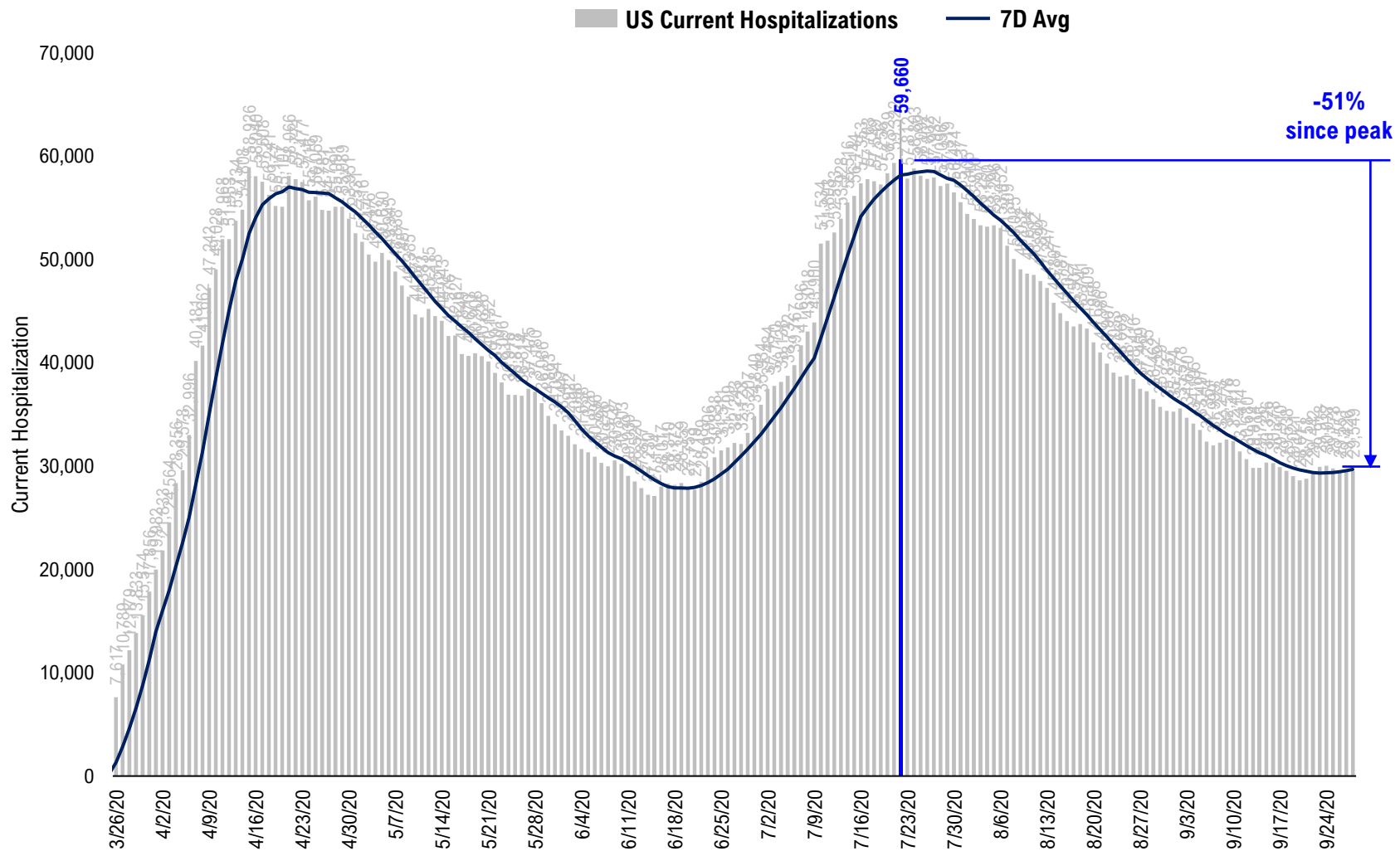
	Sorted				
	7D Ago	Last 3-day Trend			
	9/21/20	9/26/20	9/27/20	9/28/20	vs 7D ago
United States	30,757	44,931	35,009	32,012	+1,255
<b>States:</b>					
California	3,294	4,197	4,071	2,955	
Kansas	1,674	0	0	2,037	<--higher
Wisconsin	1,271	2,817	2,217	1,726	<--higher
Illinois	1,477	2,441	1,604	1,709	
Texas	1,742	3,283	1,292	1,397	
Michigan	1,536	901	0	1,308	
Missouri	1,463	1,716	1,392	1,280	
Ohio	856	1,115	800	993	
Minnesota	925	1,470	1,075	904	
Indiana	522	1,142	901	872	<--higher
North Carolina	800	1,759	1,290	868	
Oklahoma	1,101	990	823	861	
New York	573	1,005	866	834	<--higher
Utah	622	1,017	1,068	827	<--higher
Arkansas	596	788	475	786	<--higher
Florida	1,685	2,795	1,882	738	
Tennessee	895	1,437	2,104	737	
Pennsylvania	234	1,029	918	676	<--higher
Alabama	818	933	730	662	
Puerto Rico	242	296	533	660	<--higher
Georgia	1,184	1,359	812	596	
South Carolina	444	674	585	568	<--higher
Connecticut	497	0	0	560	
New Jersey	392	750	698	559	<--higher
Maryland	412	613	431	477	
Nebraska	286	431	434	467	<--higher
Nevada	232	602	373	463	<--higher
Virginia	627	975	736	449	

	Sorted				
	7D Ago	Last 3-day Trend			
	9/21/20	9/26/20	9/27/20	9/28/20	vs 7D ago
United States	30,757	44,931	35,009	32,012	+1,255
<b>States:</b>					
Kentucky	375	970	455	448	
Washington	0	988	604	439	
Massachusetts	256	569	592	430	<--higher
Idaho	410	539	205	422	
Colorado	542	584	569	411	
Iowa	660	899	692	366	
Montana	130	343	200	306	<--higher
Arizona	233	459	411	273	
North Dakota	286	495	344	259	
Louisiana	243	0	923	240	
South Dakota	173	579	408	197	
Mississippi	192	645	182	190	
Oregon	194	267	239	174	
West Virginia	117	205	190	164	<--higher
New Mexico	104	205	152	141	<--higher
Delaware	101	71	104	129	<--higher
Wyoming	73	45	168	121	<--higher
Alaska	70	113	114	116	<--higher
Hawaii	56	127	95	90	<--higher
New Hampshire	5	36	51	36	<--higher
Guam	30	68	0	36	
Rhode Island	52	103	114	26	
District of Columbia	23	52	35	14	
Maine	27	25	28	12	
Vermont	4	9	2	3	
U.S. Virgin Islands	0	0	21	0	
Northern Mariana Islands	1	0	1	0	
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

# #7: US Daily Hospitalizations...

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

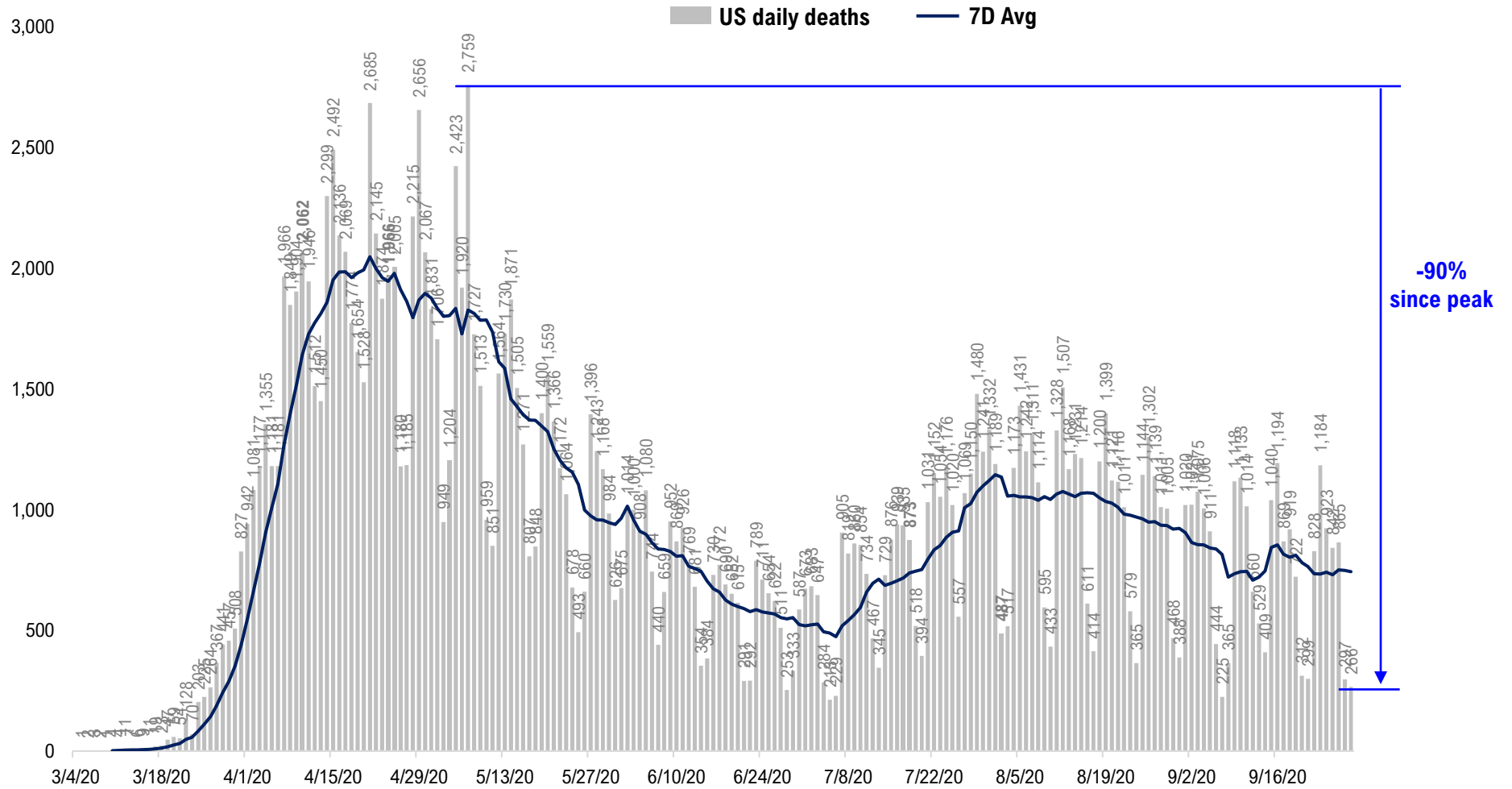


Source: Fundstrat, COVID-19 Tracking Project, State Department of Health



# #8: US Daily New Fatalities...

## US daily COVID-19 Fatalities



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

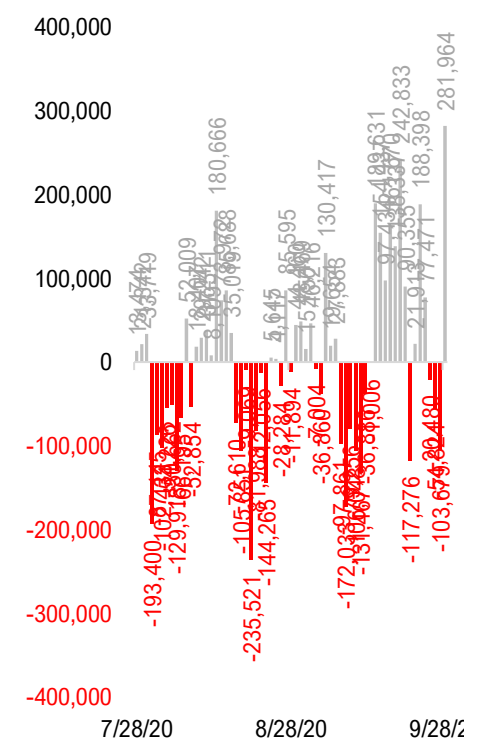
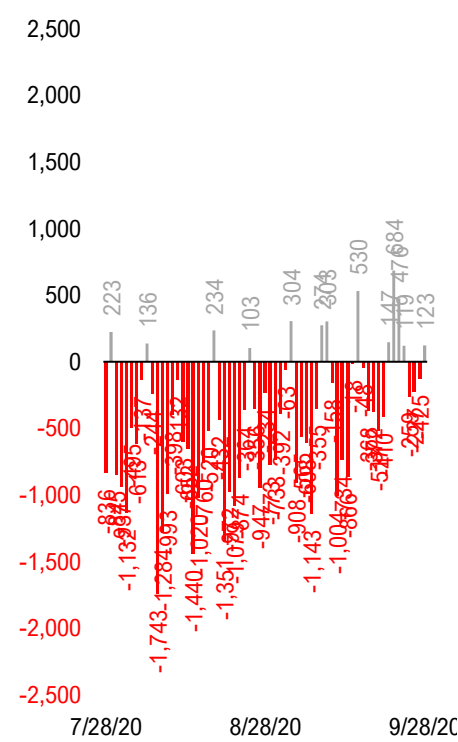
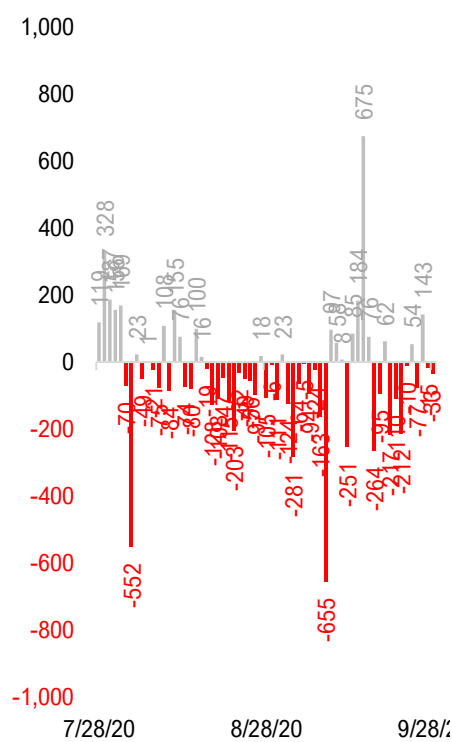
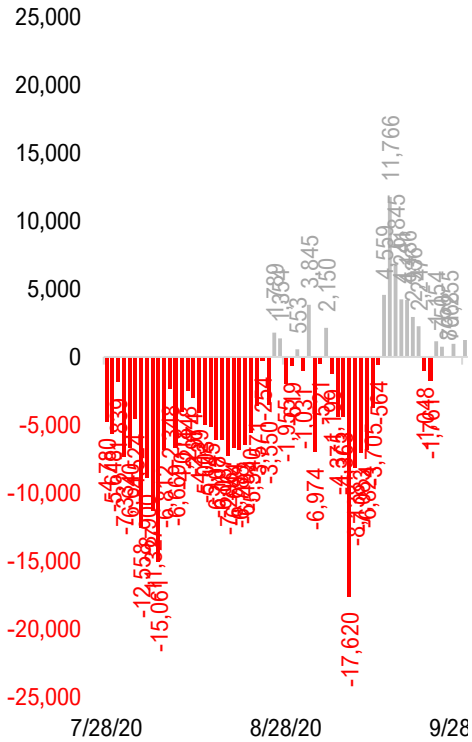
# #9: Rolling 7-Day Change in the Key Metrics... (Past 8 Weeks)

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

**Daily Deaths**

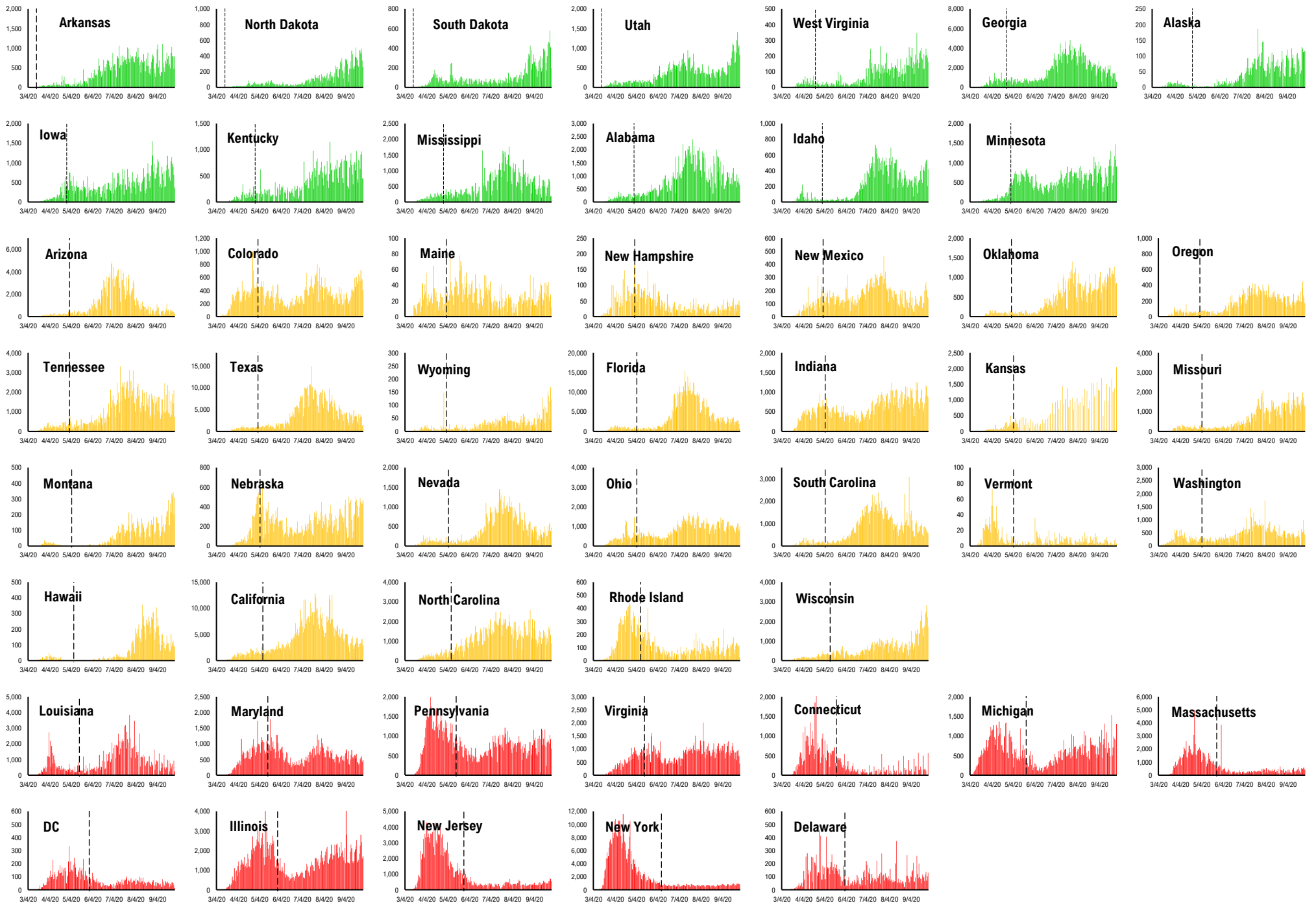
**Daily Net Hospitalization**  
(Red = more discharge than admission)

**Daily Tests**

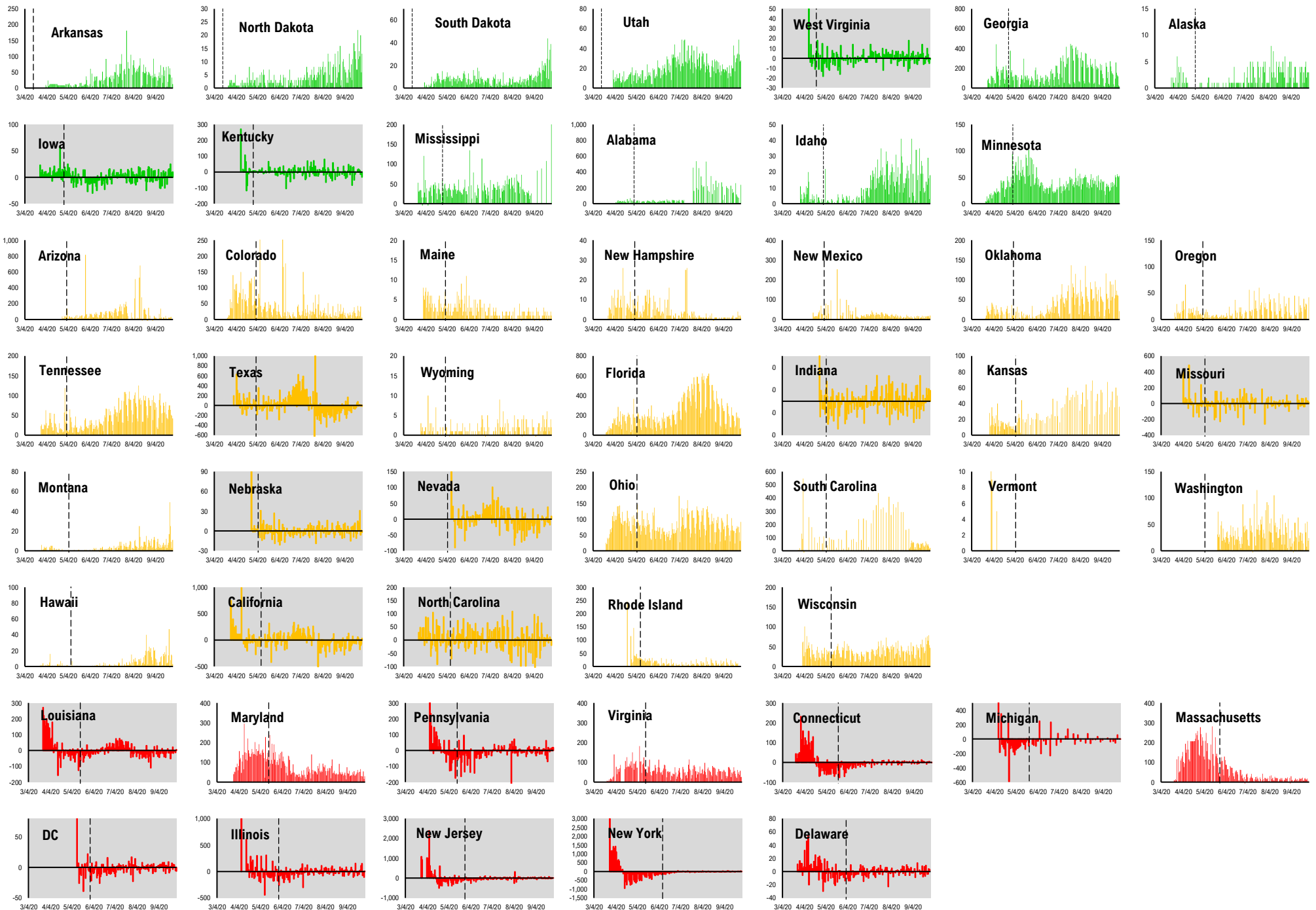


\* Ignored California between 8/10 and 8/23, due to its data glitch caused 300,000-case backlog  
Source: Fundstrat, COVID-19 Tracking Project, State Department of Health

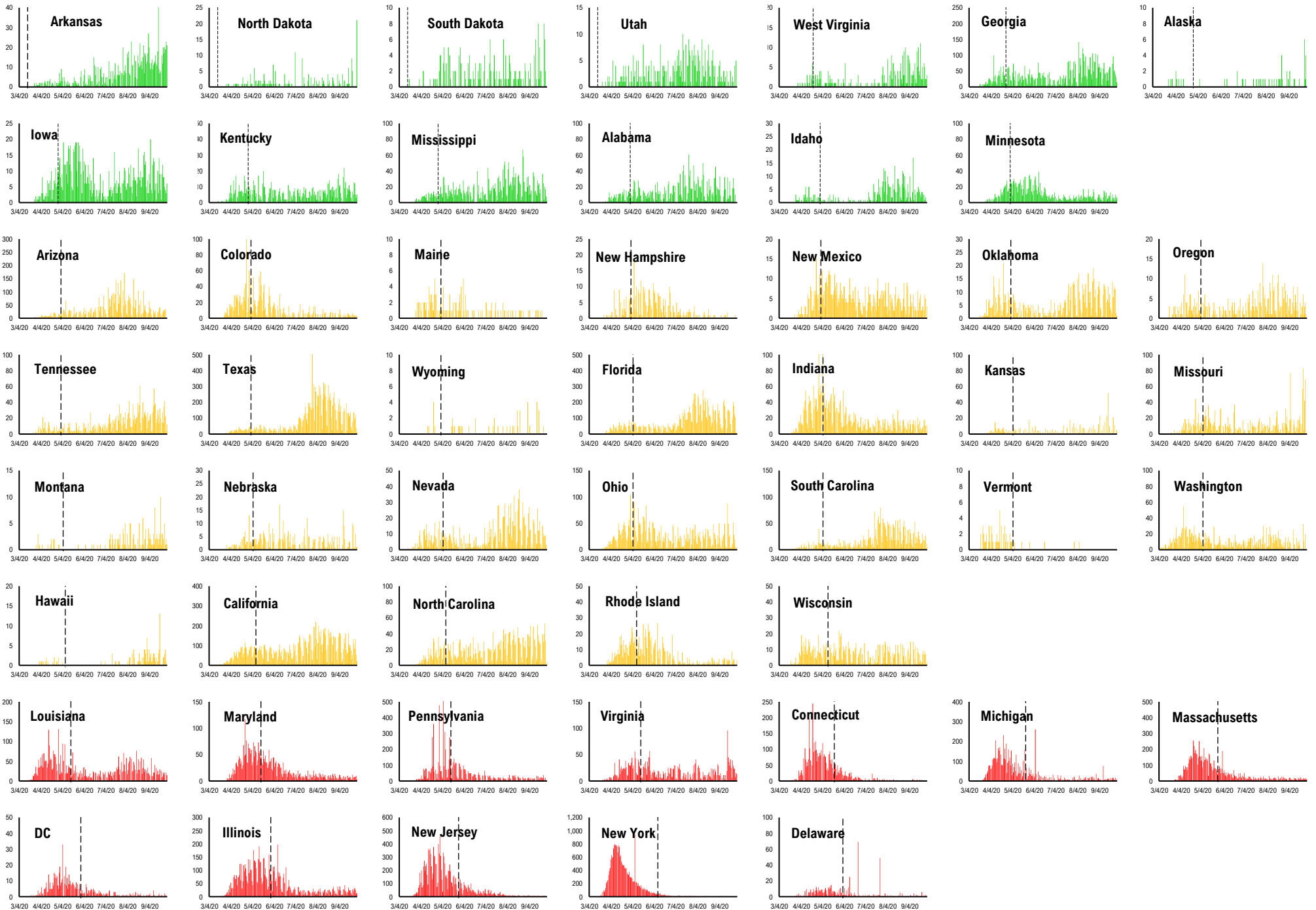
# #10: Daily New Cases by States... (sorted by "open" date)



# #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...

Daily Cases

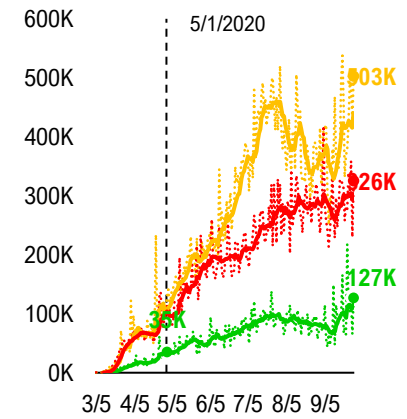
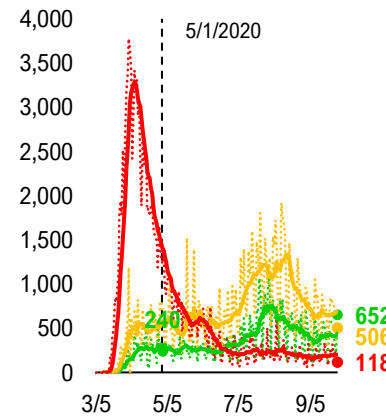
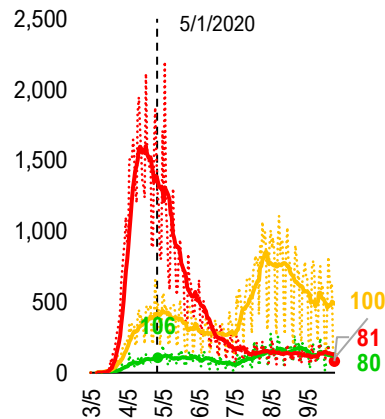
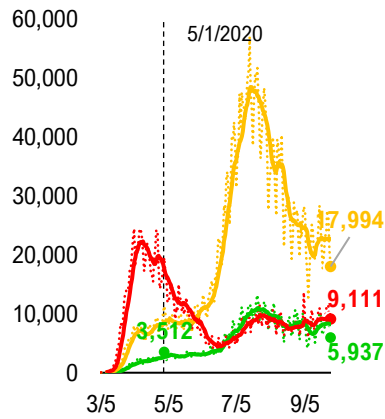
Daily Deaths

Daily Hospitalization

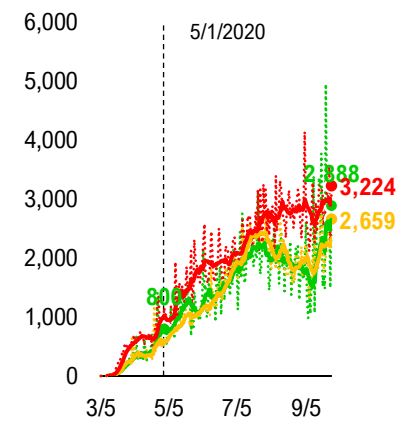
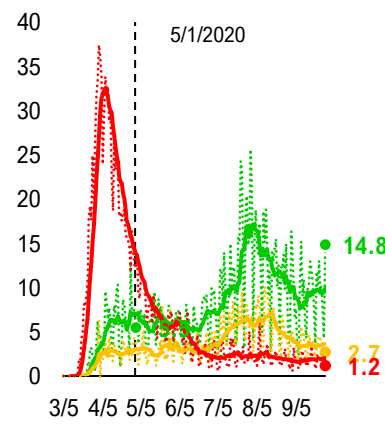
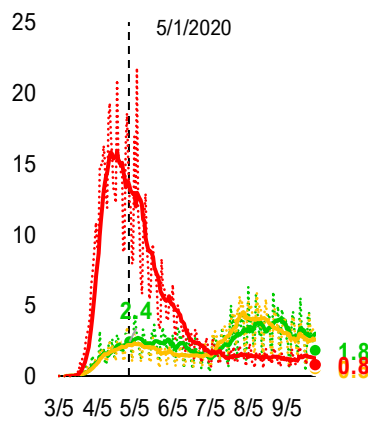
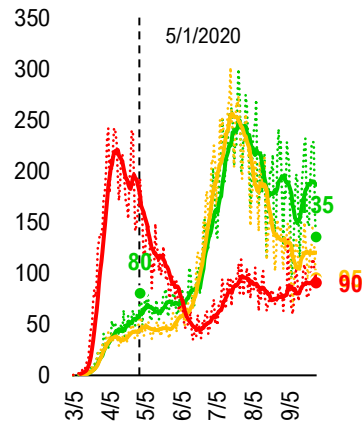
Daily Testing

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

Composite Daily Aggregate

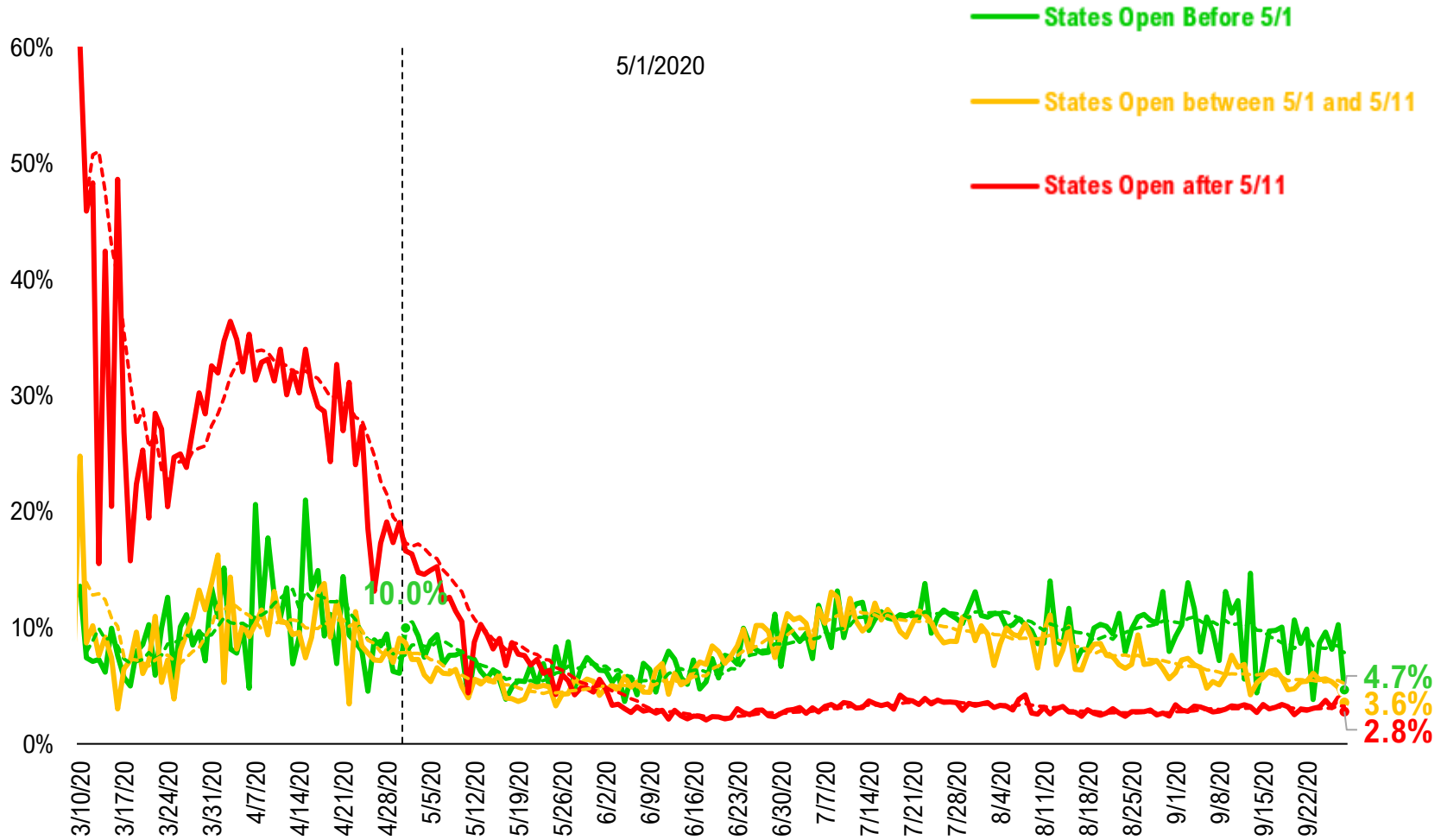


Composite Daily Aggregate Per 1mm Pop

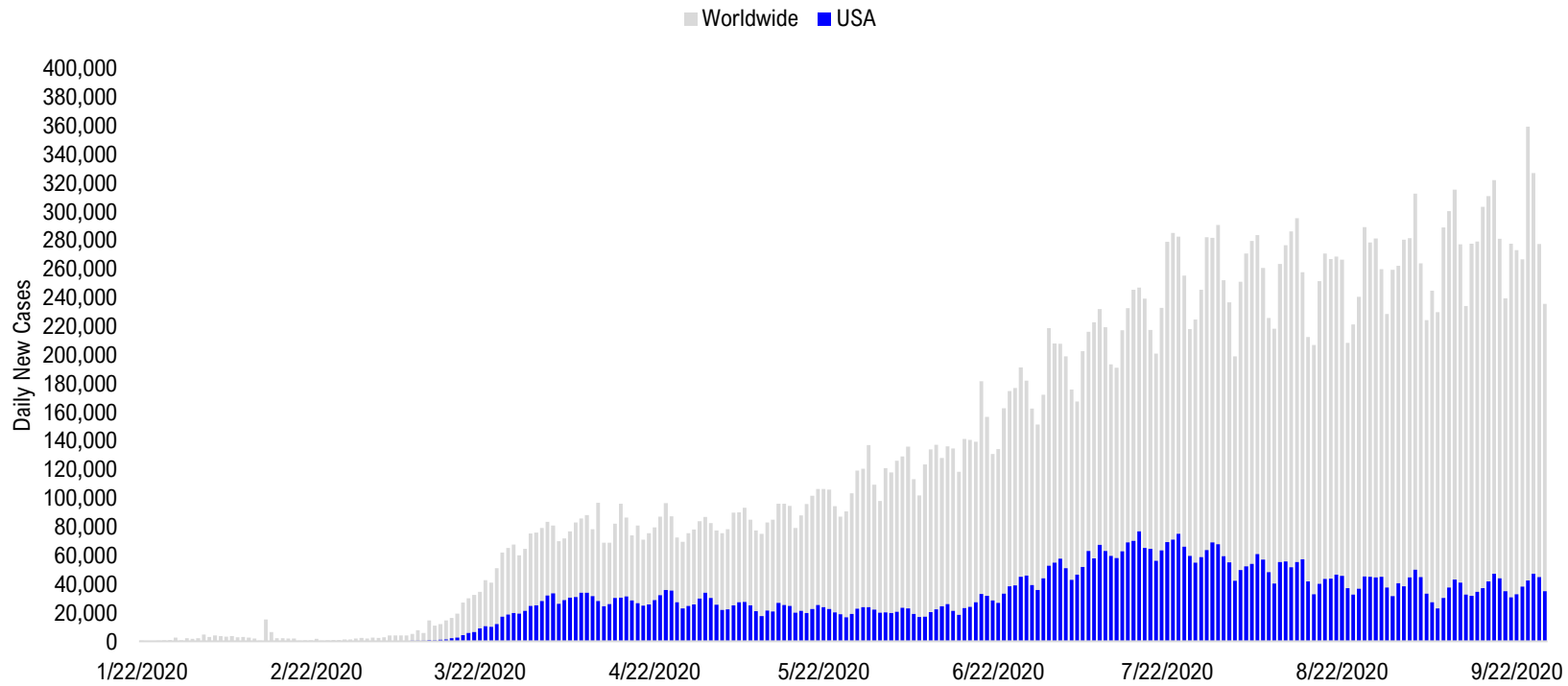


# #14: State COVID-19 Daily Positivity Rate by Reopen Date...

## Composite Daily Positivity Rate



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



5/15/2020	5/29/2020	6/12/2020	6/26/2020	7/10/2020	7/24/2020	8/7/2020	8/21/2020	9/4/2020	9/18/2020	9/27/2020
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	Latin America 88,295	Pakistan + India + Bangladesh 98,115	Pakistan + India + Bangladesh 87,241
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	Pakistan + India + Bangladesh 87,400	Latin America 76,730	Latin America 62,960
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 44,859	Europe 57,871	Europe 48,569
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 40,013	US + Canada 43,079	US + Canada 43,780
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 8,720	Asia ex- India+Pakistan 10,763	Asia ex- India+Pakistan 10,568
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 8,318	Africa 7,997	Africa 7,581

# Disclosures

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