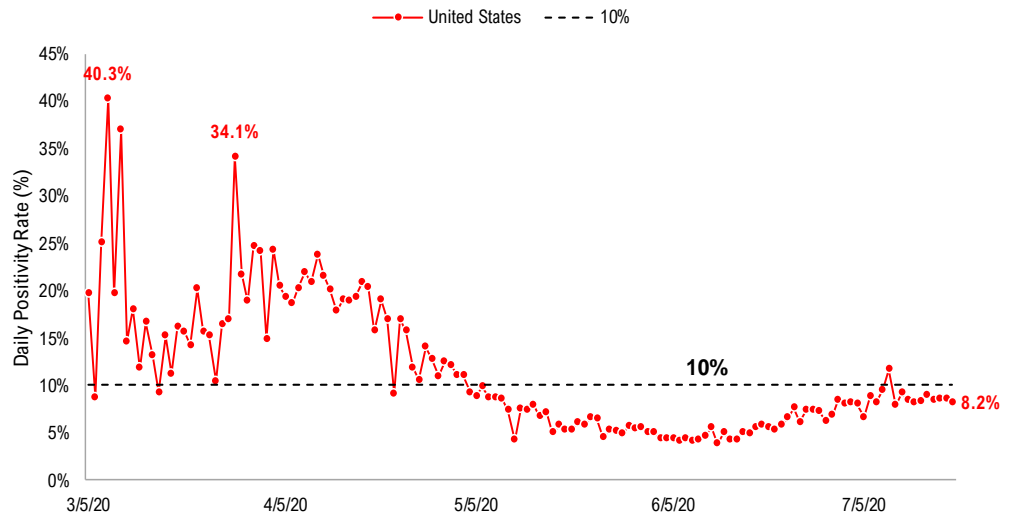
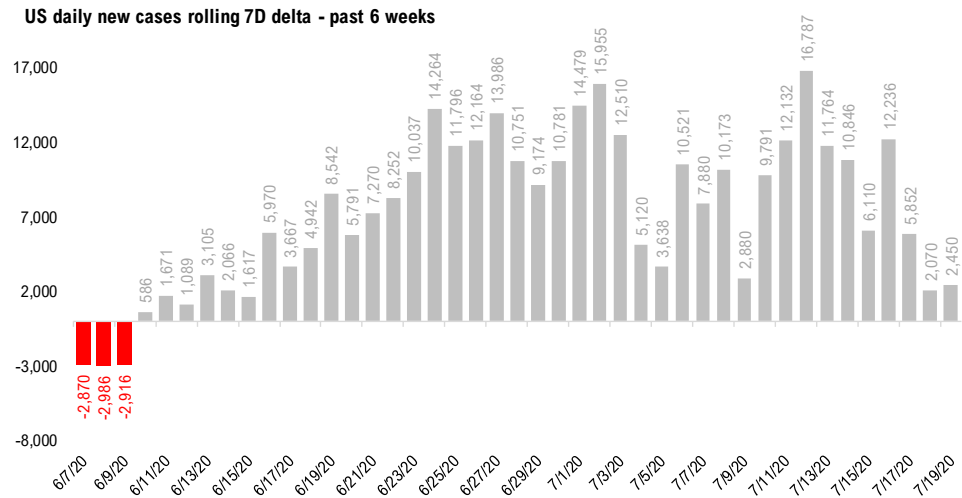
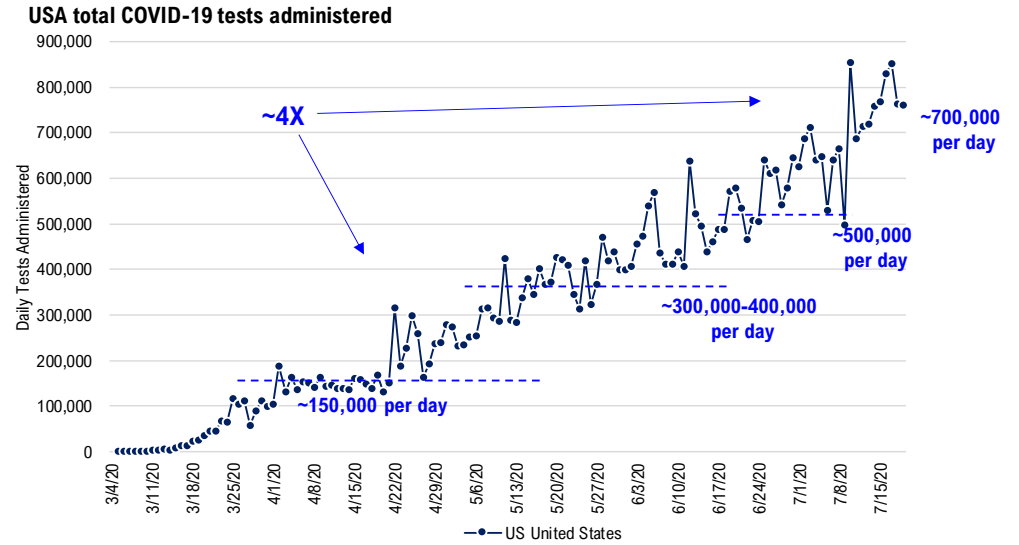
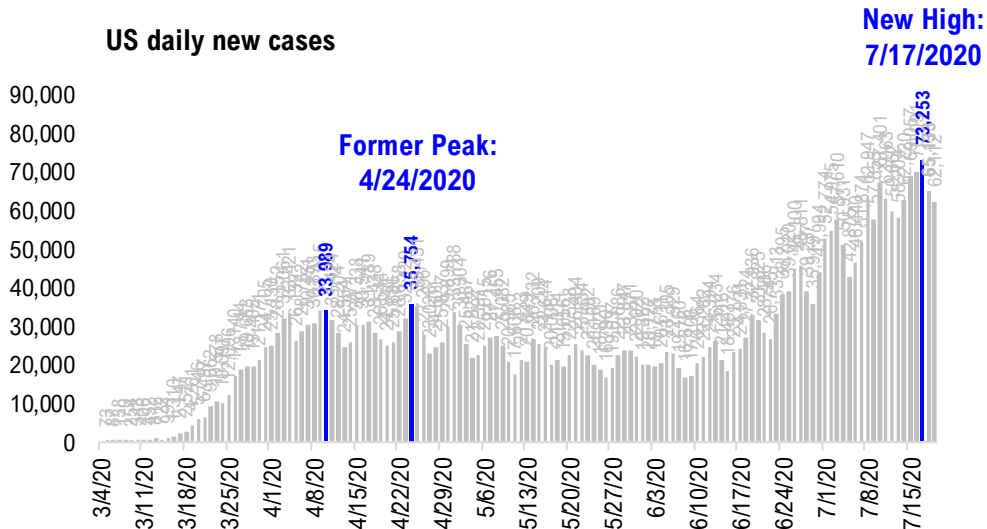


FS Insight Daily COVID-19 Chartbook



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



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

Sorted
Last 3-day trend growth rates

AR, KY, ID and NE Sunday stats are not available as of Sunday 6PM...
KS, CT and RI do not provide update over the weekend...

	7/17/20	7/18/20	7/19/20	
United States	73,253	65,133	62,112	-3,021
States:				
1 Florida	11,466	10,328	12,478	
2 California	9,986	9,199	9,329	
3 Texas	11,432	10,158	7,300	
4 Georgia	3,908	4,689	3,251	
5 Louisiana	2,179	0	3,116	<--higher
6 South Carolina	1,977	1,552	2,374	<--higher
7 Arizona	3,910	2,742	2,359	
8 North Carolina	2,051	2,481	1,820	
9 Tennessee	2,279	2,517	1,779	
10 Alabama	2,003	2,143	1,777	
11 Nevada	1,380	1,182	1,288	
12 Ohio	1,679	1,542	1,110	
13 Virginia	1,002	940	1,057	
14 Illinois	1,427	1,276	965	
15 Washington	1,267	754	959	
16 Maryland	707	835	925	
17 Indiana	733	841	917	
18 Missouri	866	960	846	
19 Wisconsin	880	978	830	
20 Iowa	590	185	816	<--higher
21 Mississippi	1,032	1,017	792	
22 Pennsylvania	1,032	763	786	
23 Utah	727	760	785	
24 Minnesota	666	457	734	
25 New York	776	754	502	
26 Michigan	660	678	483	
27 Oregon	293	353	436	<--higher
28 Colorado	618	444	354	

Sorted
Last 3-day trend growth rates

AR, KY, ID and NE Sunday stats are not available as of Sunday 6PM...
KS, CT and RI do not provide update over the weekend...

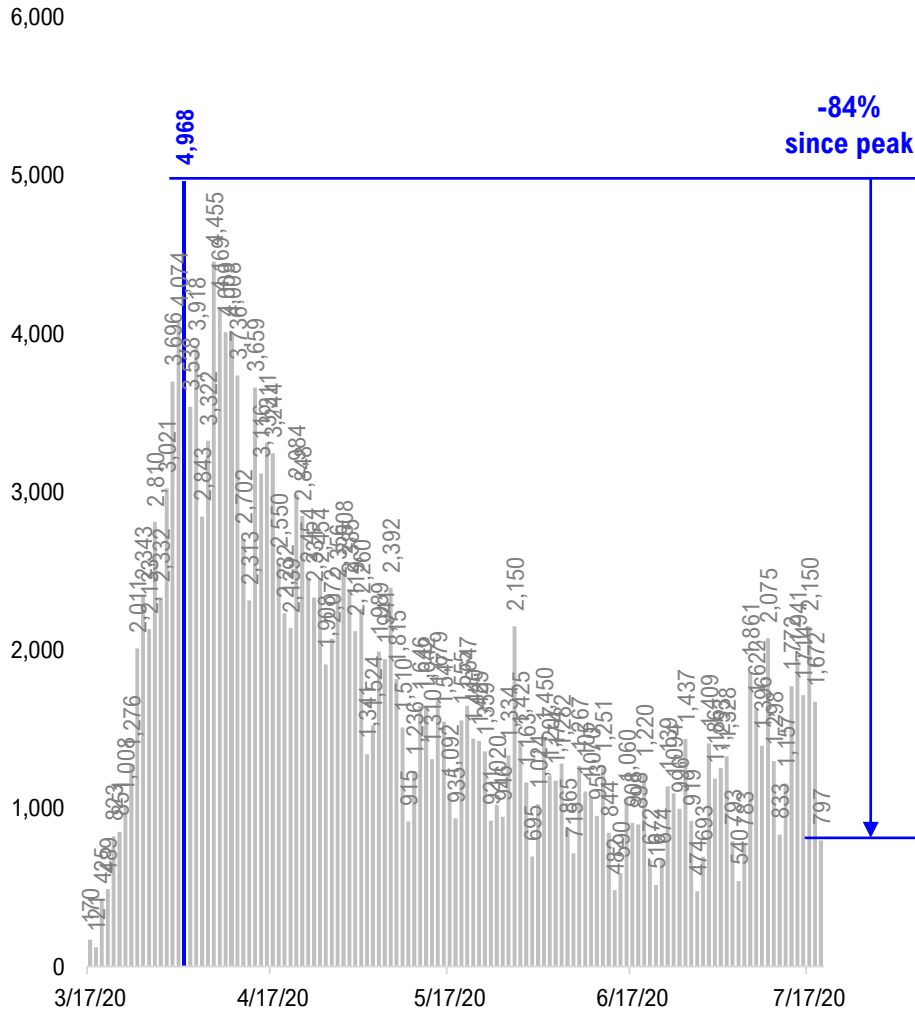
	7/17/20	7/18/20	7/19/20	
United States	73,253	65,133	62,112	-3,021
States:				
29 Puerto Rico	153	189	330	<--higher
30 Massachusetts	298	359	296	
31 New Mexico	318	280	235	
32 Oklahoma	699	916	209	
33 West Virginia	126	111	148	
34 New Jersey	50	88	144	<--higher
35 North Dakota	124	115	112	
36 Delaware	223	92	90	
37 Alaska	40	62	79	<--higher
38 District of Columbia	39	79	67	
39 Montana	135	105	62	
40 South Dakota	95	73	44	
41 Maine	38	10	41	
42 Hawaii	23	19	28	<--higher
43 Wyoming	43	39	18	
44 New Hampshire	26	23	15	
45 U.S. Virgin Islands	14	20	14	
46 Vermont	9	4	12	<--higher
47 Rhode Island	82	0	0	
48 Nebraska	227	120	0	
49 Northern Mariana Islands	1	0	0	
50 Kentucky	522	579	0	
51 Kansas	1,032	0	0	
52 Idaho	619	550	0	
53 Guam	0	1	0	
54 Connecticut	143	0	0	
55 American Samoa	0	0	0	
56 Arkansas	648	771	0	

<--higher – if the state has 20% or more daily cases than prior two days...
Source: Fundstrat, COVID-19 Tracking Project, State Department of Health

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

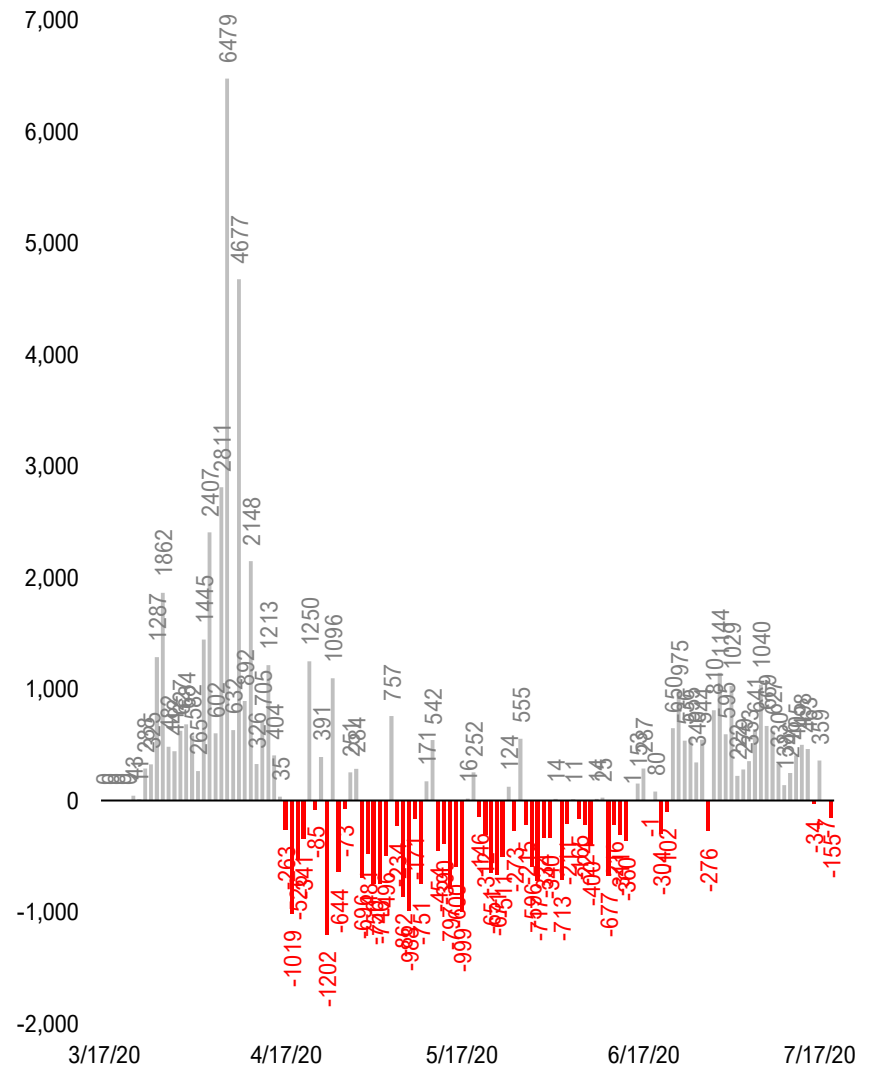
US Gross Hospitalizations

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



US Net Hospitalizations

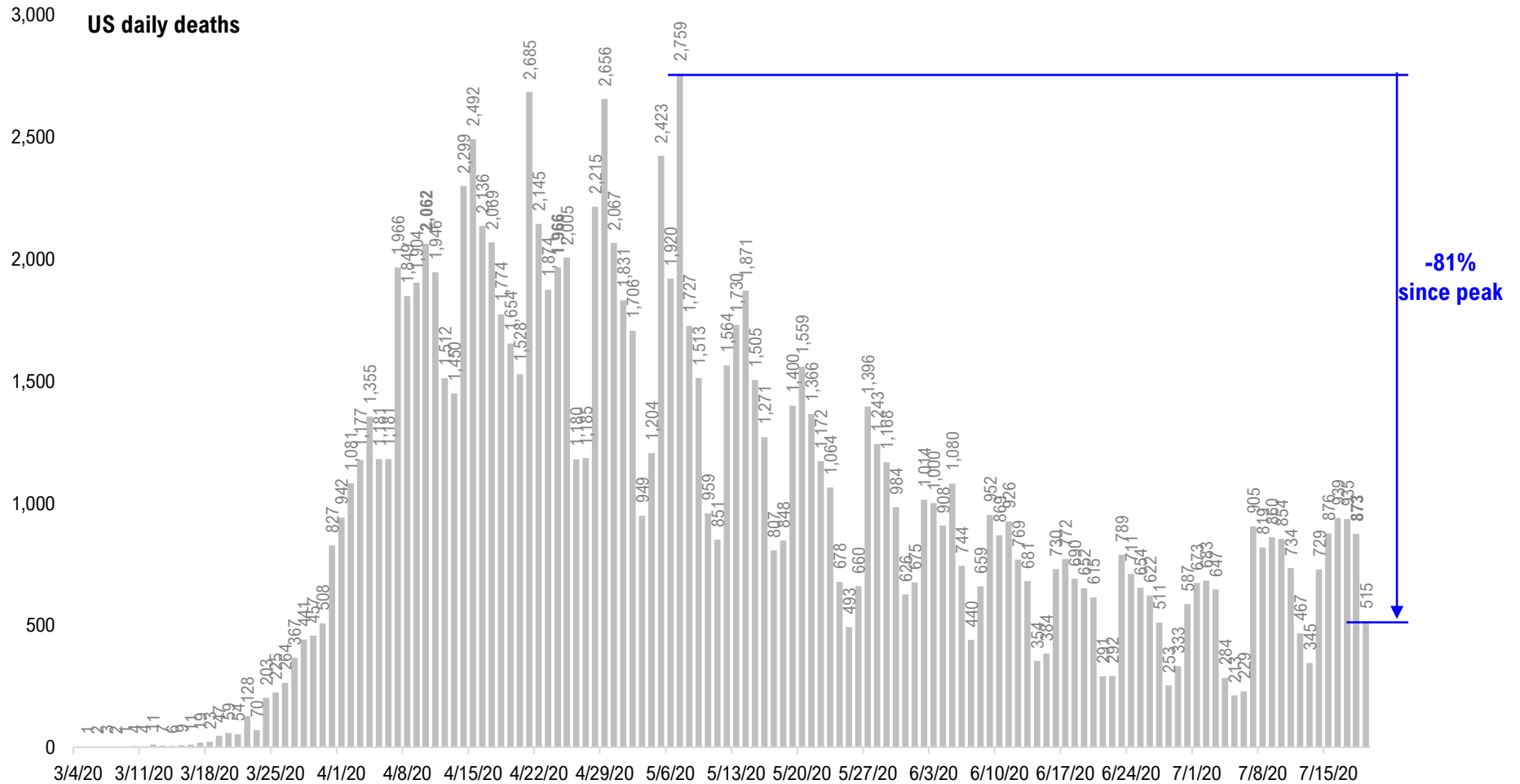
(Composite of 18 states that report "net/current hospitalizations")



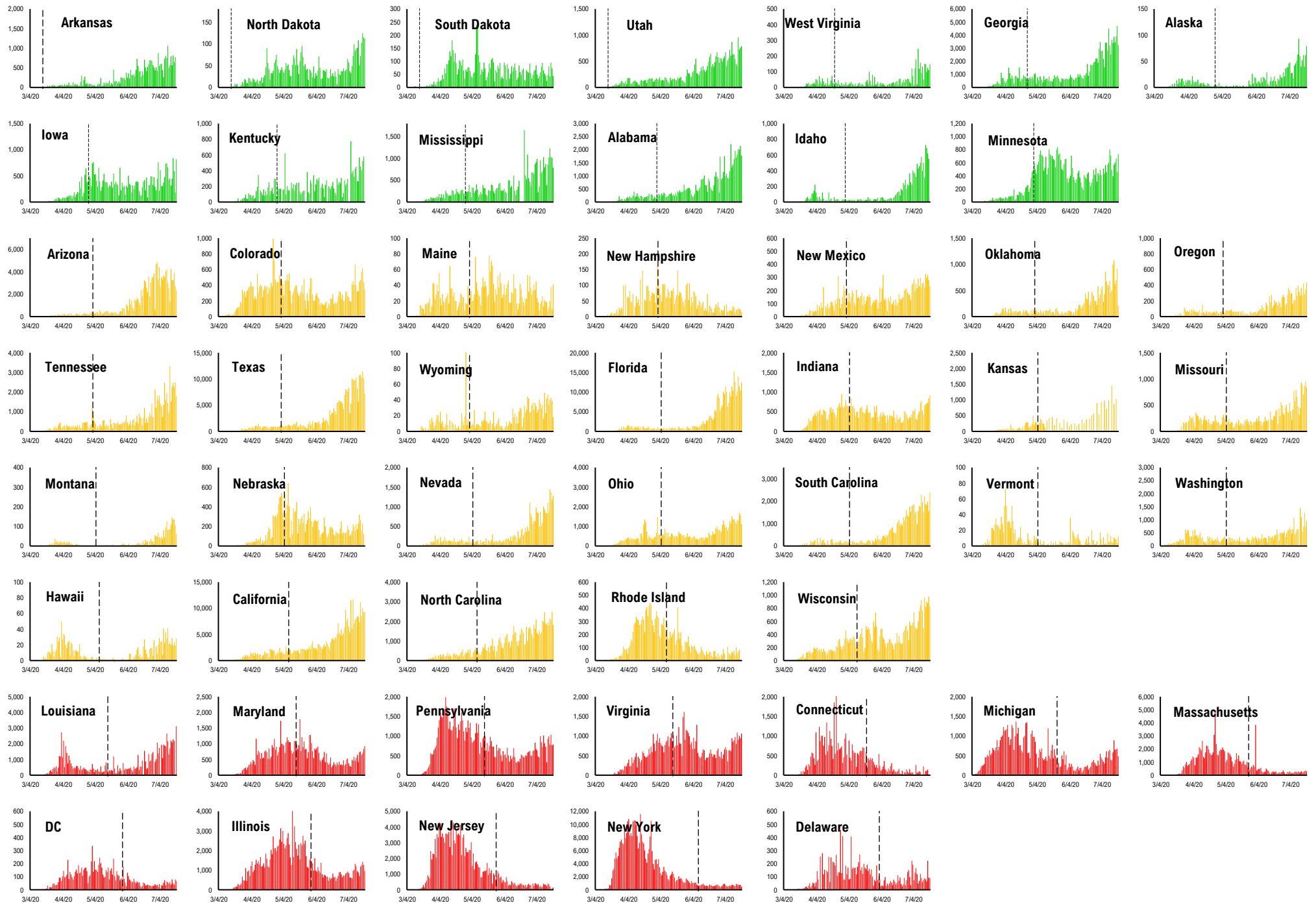
Source: Fundstrat, COVID-19 Tracking Project, State Department of Health

#4: US Daily New Fatalities...

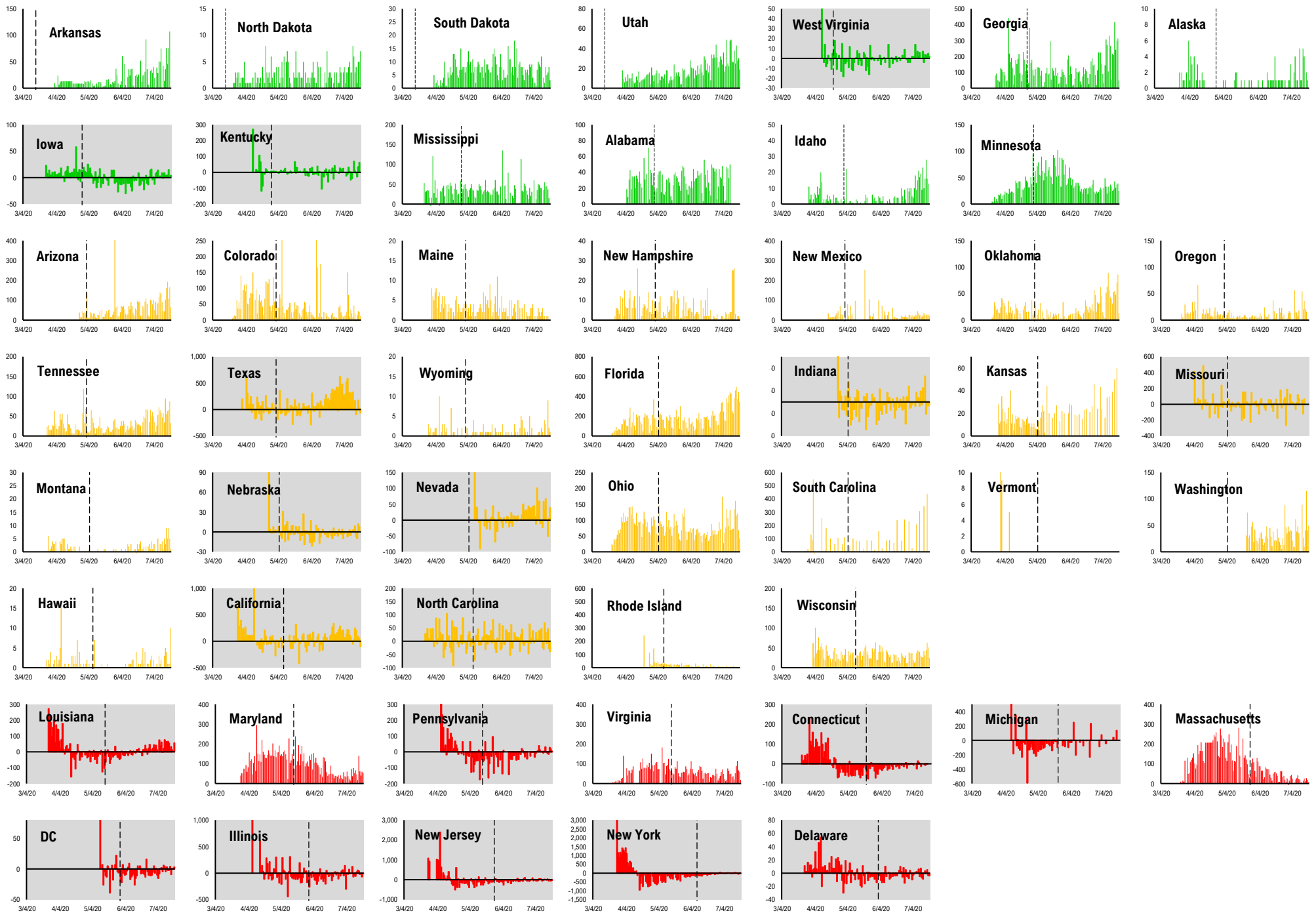
US daily COVID-19 Fatalities



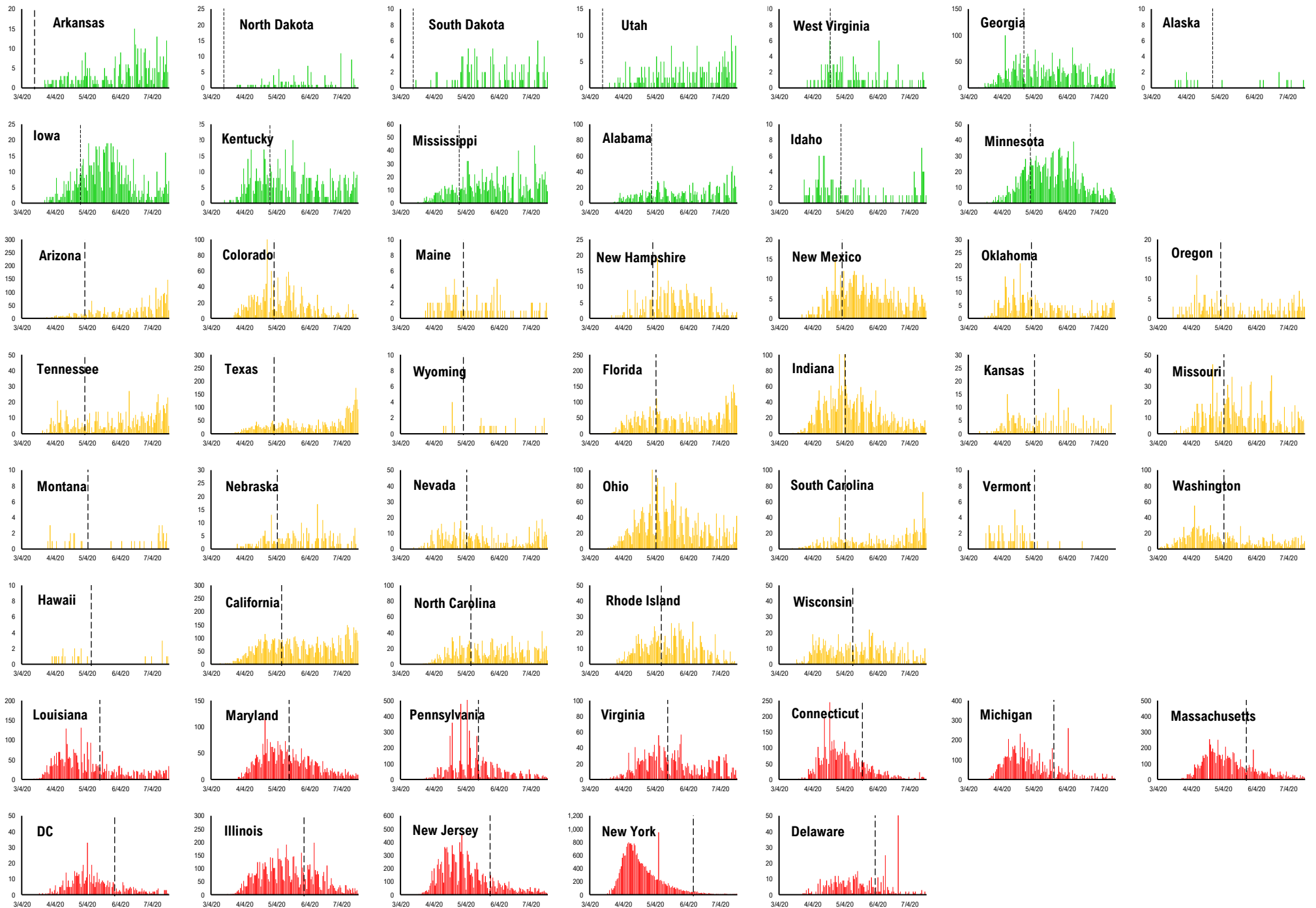
#5: Daily New Cases by States... (sorted by "open" date)



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



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



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

Daily Cases

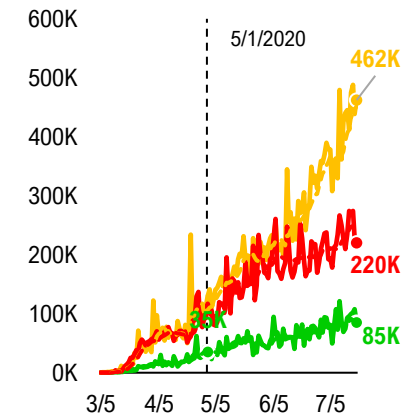
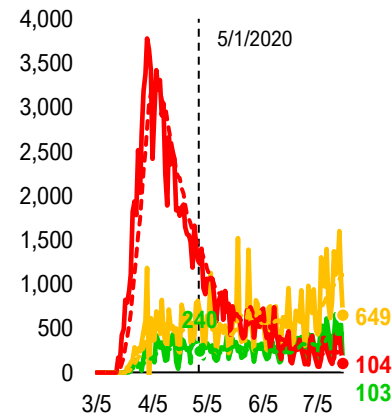
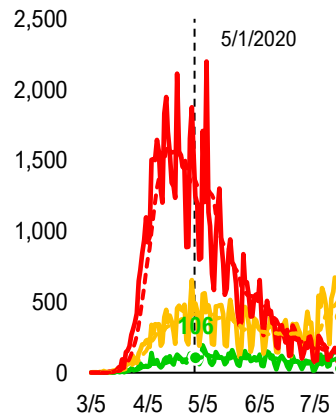
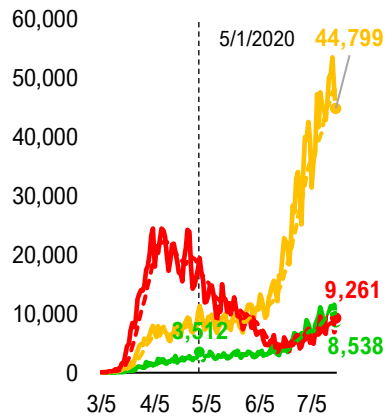
Daily Deaths

Daily Hospitalization

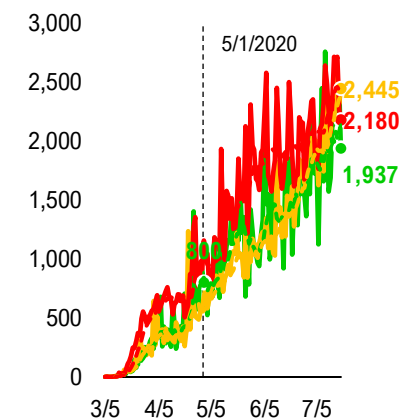
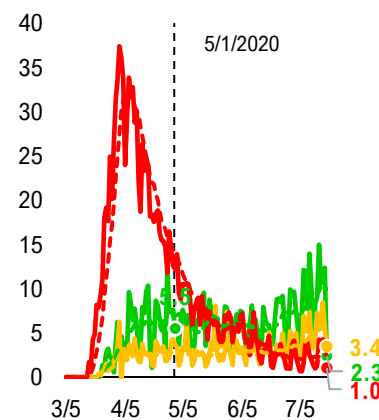
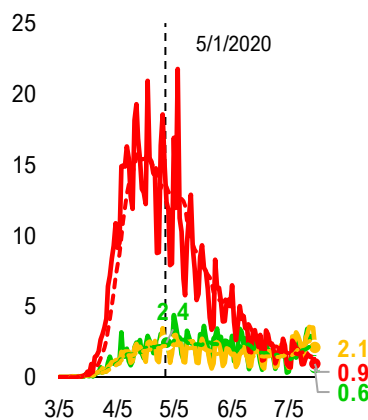
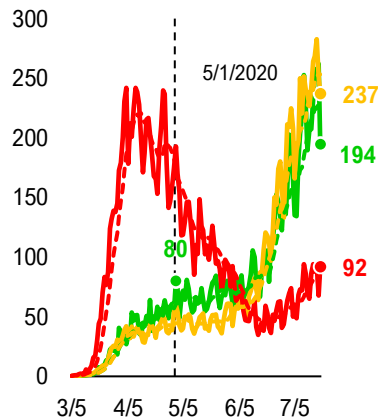
Daily Testing

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

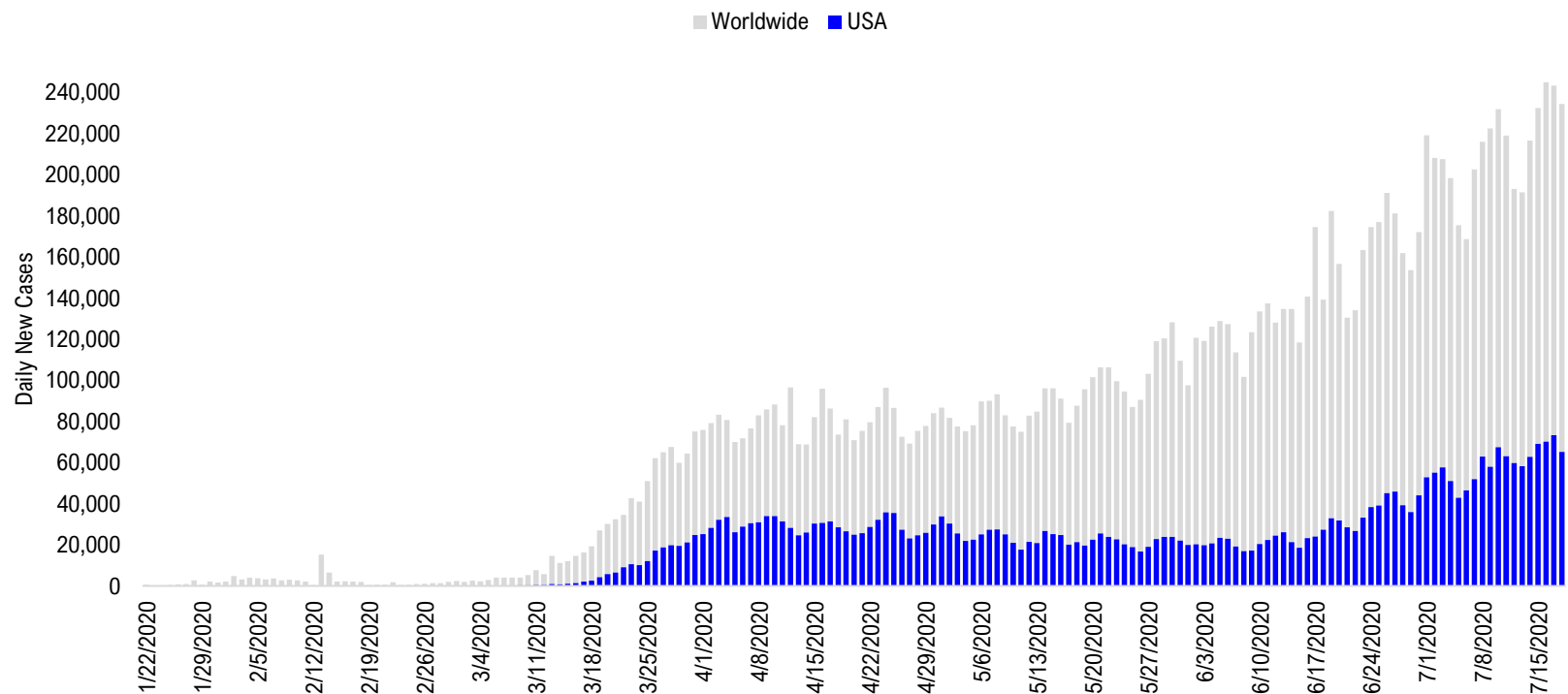
Composite Daily Aggregate



Composite Daily Aggregate Per 1mm Pop



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



2/28/2020	3/13/2020	3/27/2020	4/10/2020	4/24/2020	5/8/2020	5/22/2020	6/5/2020	6/19/2020	7/3/2020	7/18/2020
Asia ex-India+Pakistan 872	Europe 6,972	Europe 35,654	Europe 38,592	US + Canada 34,019	US + Canada 28,068	Latin America 33,875	Latin America 47,182	Latin America 69,996	Latin America 72,231	Latin America 70,139
Europe 243	US + Canada 595	US + Canada 16,624	US + Canada 34,328	Europe 30,678	Europe 27,422	US + Canada 25,073	US + Canada 21,894	US + Canada 28,473	US + Canada 55,408	US + Canada 69,886
US + Canada 1	Asia ex-India+Pakistan 320	Latin America 1,416	Latin America 5,790	Latin America 11,820	Latin America 18,868	Europe 19,514	Europe 18,225	Pakistan + India + Bangladesh 22,981	Pakistan + India + Bangladesh 27,389	Pakistan + India + Bangladesh 40,994
Latin America 1	Latin America 93	Asia ex-India+Pakistan 978	Asia ex-India+Pakistan 1,638	Pakistan + India + Bangladesh 2,801	Pakistan + India + Bangladesh 5,721	Pakistan + India + Bangladesh 9,981	Pakistan + India + Bangladesh 16,820	Europe 18,631	Europe 16,225	Africa 19,644
Pakistan + India + Bangladesh 1	Africa 24	Africa 545	Pakistan + India + Bangladesh 1,098	Asia ex-India+Pakistan 2,369	Africa 2,945	Africa 4,166	Africa 6,467	Africa 8,930	Africa 14,218	Europe 16,807
Africa 0	Pakistan + India + Bangladesh 13	Pakistan + India + Bangladesh 264	Africa 760	Africa 1,520	Asia ex-India+Pakistan 1,906	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 10,681

Disclosures

This research is for the clients of FS Insight only. For important disclosures and rating histories regarding sectors or companies that are the subject of this report, please contact your sales representative or FS Insight at 150 East 52nd Street, New York, NY, 10022 USA.

Analyst Certification (Reg AC)

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.

Neither I, nor a member of my household is an officer, director, or advisory board member of the issuer(s) or has another significant affiliation with the issuer(s) that is/are the subject of this research report. There is a possibility that we will from time to time have long or short positions in, and buy or sell, the securities or derivatives, if any, referred to in this research

Conflicts of Interest

This research contains the views, opinions and recommendations of FS Insight . As of the time of writing and publication of this presentation, FS Insight does not know of, or have reason to know of any material conflicts of interest at the time of the publication of this presentation. The Company has no contractual relationship, nor have we received any compensation from any of the companies listed in this research report.

Analyst Industry/Sector Views

Positive (+): The analyst expects the performance of his industry/sector coverage universe over the next 6-18 months to be attractive vs. the relevant broad market benchmark, being the S&P 500 for North America.

Neutral (N): The analyst expects the performance of his or her industry/sector coverage universe over the next 6-18 months to be in line with the relevant broad market benchmark, being the S&P 500 for North America.

Negative (-): The analyst expects his or her industry coverage universe over the next 6-18 months to underperform vs. the relevant broad market benchmark, being the S&P 500 for North America.

General Disclosures

FS Insight is an independent research company and is not a registered investment advisor and is not acting as a broker dealer under any federal or state securities laws. FS Insight is a member of IRC Securities’ Research Prime Services Platform. IRC Securities is a FINRA registered broker-dealer that is focused on supporting the independent research industry. Certain personnel of FS Insight (i.e. Research Analysts) are registered representatives of IRC Securities, a FINRA member firm registered as a broker-dealer with the Securities and Exchange Commission and certain state securities regulators. As registered representatives and independent contractors of IRC Securities, such personnel may receive commissions paid to or shared with IRC Securities for transactions placed by FS Insight clients directly with IRC Securities or with securities firms that may share commissions with IRC Securities in accordance with applicable SEC and FINRA requirements. IRC Securities does not distribute the research of FS Insight , which is available to select institutional clients that have engaged FS Insight .

As registered representatives of IRC Securities our analysts must follow IRC Securities’ Written Supervisory Procedures. Notable compliance policies include (1) prohibition of insider trading or the facilitation thereof, (2) maintaining client confidentiality, (3) archival of electronic communications, and (4) appropriate use of electronic communications, amongst other compliance related policies.

FS Insight does not have the same conflicts that traditional sell-side research organizations have because FS Insight (1) does not conduct any investment banking activities, (2) does not manage any investment funds, and (3) our clients are only institutional investors.

This research is for the clients of FS Insight only. Additional information is available upon request. Information has been obtained from sources believed to be reliable but FS Insight does not warrant its completeness or accuracy except with respect to any disclosures relative to FS Insight and the analyst’s involvement (if any) with any of the subject companies of the research. All pricing is as of the market close for the securities discussed, unless otherwise stated. Opinions and estimates constitute our judgment as of the date of this material and are subject to change without notice. Past performance is not indicative of future results. This material is not intended as an offer or solicitation for the purchase or sale of any financial instrument. The opinions and recommendations herein do not take into account individual client circumstances, risk tolerance, objectives, or needs and are not intended as recommendations of particular securities, financial instruments or strategies. The recipient of this report must make its own independent decision regarding any securities or financial instruments mentioned herein. Except in circumstances where FS Insight expressly agrees otherwise in writing, FS Insight is not acting as a municipal advisor and the opinions or views contained herein are not intended to be, and do not constitute, advice, including within the meaning of Section 15B of the Securities Exchange Act of 1934. All research reports are disseminated and available to all clients simultaneously through electronic publication to our internal client website, FS Insight .com. Not all research content is redistributed to our clients or made available to third-party aggregators or the media. Please contact your sales representative if you would like to receive any of our research publications.

Copyright 2020 FS Insight LLC. All rights reserved. No part of this material may be reprinted, sold or redistributed without the prior written consent of FS Insight LLC.