

COVID Tabulations: Growth in Testing and Cases, County Hotspots, and State-Level Testing, Case, and Death Dynamics

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The Menges Group

Strategic Health Policy & Care Coordination Consulting

Introduction and Overview

- This edition provides an overview of the progression of COVID-19 cases, deaths and administered tests over the last few weeks.
 - The three most recent weeks have seen sharp case growth of 20%, 39%, and 34% relative to the number of new confirmed cases during the prior week. Weekly testing has also been increasing, but at a much lower rate -- corresponding testing increases for the most recent three weeks are 4%, 19%, and 5%.
 - One encouraging finding is that new deaths during the most recent week were lower than during any of the 13 previous weeks.
- We also provide data on the top 20 county “hotspots” in terms of the increase in confirmed cases from July 1 – 8 as compared to the previous week.
 - 7 of the top 20 counties are in California; Florida and Texas each account for 4 of these counties.
- The state-by-state table demonstrates the progression of testing, cases, and deaths over these last two weeks and conveys each state’s ranking in tests, cases, and deaths per 100,000 population, as of July 8.
- 72.2% of the total US population lives in a county where the number of new COVID-19 cases has increased this past week (July 1 – July 8) as compared to the prior seven-day period.

Progression of Cases, Tests, and Deaths Across the Past Six Weeks

- Our tabulations are shown on the ensuing slide.
 - New case volume has jumped up dramatically in each of the past three weeks, with the most recent week's 20% increase coming on top of two weeks of even higher increases in confirmed cases. Cases are rising much more sharply than is testing.
 - The percentage of tests coming back with a positive result continues to increase with each passing week and is further evidence of our worsening disease spread.
- An encouraging statistic is that fewer COVID deaths occurred this past week than in any of the previous thirteen weeks. The previous five weeks are shown in the grey-shaded cells on the ensuing slide. While an upward trend in deaths is a strong possibility in the upcoming weeks (given the current increases in cases described above), it is encouraging that new deaths from July 1-8 were relatively low despite the large jump in new cases that occurred during each of the previous two weeks. It is possible that new cases are on average less deadly than during the earlier months of the pandemic (perhaps due to the newer cases afflicting a relatively large share of younger persons), and/or that we are gaining ground clinically in successfully treating the cases that emerge.

Progression of Cases, Tests, and Deaths Across the Past Six Weeks

Timeframe	New Cases	Percent Change in New Case Volume over Prior Week	New Tests	Percent Change in New Test Volume over Prior Week	New Deaths	Percent Change in New Death Volume over Prior Week	Percentage of Weekly Tests with Positive Result
May 27 - June 3	153,255		3,041,311		6,854		5.0%
June 3 - 10	151,611	-1%	3,171,227	4%	6,008	-12%	4.8%
June 10 - 17	163,816	8%	3,447,528	9%	4,683	-22%	4.8%
June 17 - 24	219,770	34%	3,636,525	5%	4,213	-10%	6.0%
June 24 - July 1	306,307	39%	4,326,304	19%	6,183	47%	7.1%
July 1 - July 8	368,238	20%	4,499,797	4%	4,141	-33%	8.2%

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20 Counties with Largest Increase in New Cases, July 1 – July 8 Versus June 24 – July 1

- These 20 counties collectively experienced a 40% increase in new cases July 1 – 8 versus the prior week.
- The number of new cases more than doubled this week in 12 of these hotspot counties versus the prior week.
- California accounts for 7 of the top 20 counties with the largest increase in new cases, Florida and Texas each account for 4 counties.
- Maricopa County in Arizona, which includes Phoenix, experienced the nation’s largest raw number of new cases during each of the past two weeks.

County	State	Cumulative Cases through July 8	Cumulative Cases per 100,000 Population, as of July 8	New Cases June 24 - July 1	New Cases July 1 - July 8	Change in Number of New Cases, July 1 - July 8 versus June 24 - July 1	Percent Change in Case Growth, July 1 - July 8 versus June 24 - July 1
Miami-Dade	Florida	53,973	1,987	10,182	16,013	5,831	57.3%
Orange	California	21,741	685	3,342	7,328	3,986	119.3%
Broward	Florida	23,781	1,218	3,938	7,626	3,688	93.7%
Dallas	Texas	29,160	1,106	3,747	7,278	3,531	94%
San Bernardino	California	16,586	761	2,339	3,840	1,501	64%
Los Angeles	California	123,004	1,225	16,017	17,497	1,480	9%
Duval	Florida	10,439	1,090	3,061	3,959	898	29%
Palm Beach	Florida	18,229	1,218	2,911	3,784	873	30%
Riverside	California	23,279	942	3,751	4,623	872	23%
Davidson	Tennessee	12,752	1,837	1,743	2,604	861	49%
Fulton	Georgia	9,358	880	1,225	2,081	856	70%
Jefferson	Texas	3,094	1,230	389	1,219	830	213%
Stanislaus	California	4,101	745	728	1,523	795	109%
Allegheny	Pennsylvania	4,209	346	586	1,339	753	128%
San Joaquin	California	5,817	763	1,172	1,903	731	62%
McLennan	Texas	2,283	890	595	1,215	620	104%
DeKalb	Georgia	7,362	970	801	1,403	602	75%
El Paso	Texas	8,035	957	1,315	1,911	596	45%
Fresno	California	7,281	729	1,397	1,992	595	43%
Maricopa	Arizona	70,128	1,563	17,273	17,862	589	3%

COVID Testing, Cases, and Deaths – Rates and Recent Trends, Table 1 of 3: Alabama through Maine

State	Tests per 100,000 Population, as of July 8	State Ranking in Tests per 100,000 Population, as of July 8	Percent Change in New Tests, July 1 - July 8 versus June 24 - July 1	Cases per 100,000 Population, as of July 8	State Ranking in Cases per 100,000 Population, as of July 8	Percent Change in New Cases, July 1 - July 8 versus June 24 - July 1	Deaths per 100,000 Population, as of July 8	State Ranking in Deaths per 100,000 Population, as of July 8	Percent Change in New Deaths, July 1 - July 8 versus June 24 - July 1
Alabama	9,551	33	-1.5%	958	16	16.0%	21.6	24	6.2%
Alaska	18,236	4	3.8%	201	49	20.2%	2.1	50	50.0%
Arizona	8,807	37	-8.9%	1,494	7	2.6%	27.1	17	-4.6%
Arkansas	11,706	18	-10.6%	837	20	5.9%	10.1	39	-24.3%
California	12,645	14	12.2%	750	27	28.9%	17.0	30	22.7%
Colorado	6,339	49	2.5%	611	35	16.0%	29.6	15	-66.7%
Connecticut	15,074	9	-21.0%	1,321	8	-18.7%	121.8	3	-48.6%
Delaware	13,251	13	33.9%	1,280	9	53.3%	52.9	12	50.0%
District of Columbia	16,194	6	-10.1%	1,508	6	16.9%	79.9	6	-8.3%
Florida	10,803	23	8.9%	1,042	14	29.6%	18.1	26	26.0%
Georgia	9,422	35	30.0%	909	18	27.4%	27.0	18	-24.0%
Hawaii	6,151	51	-5.6%	76	51	89.8%	1.3	51	0.0%
Idaho	6,230	50	53.7%	504	39	51.8%	5.5	45	500.0%
Illinois	14,550	10	-0.3%	1,192	10	0.0%	57.7	9	-10.9%
Indiana	7,960	41	-20.2%	747	29	11.8%	40.6	13	13.9%
Iowa	10,978	21	-8.2%	1,037	15	13.9%	23.4	22	-4.3%
Kansas	7,156	45	17.9%	611	34	31.2%	10.0	40	-38.9%
Kentucky	10,115	27	80.8%	407	43	31.3%	14.2	32	2.8%
Louisiana	18,623	2	9.7%	1,511	5	29.6%	71.8	7	17.4%
Maine	8,402	39	30.3%	257	45	-40.1%	8.2	43	150.0%

Green highlighting denotes the states with a 15% or larger decrease relative to the prior week on the measure shown. Purple highlighting denotes states with a 15% or larger increase.



COVID Testing, Cases, and Deaths – Rates and Recent Trends, Table 2 of 3: Maryland through Rhode Island

State	Tests per 100,000 Population, as of July 8	State Ranking in Tests per 100,000 Population, as of July 8	Percent Change in New Tests, July 1 - July 8 versus June 24 - July 1	Cases per 100,000 Population, as of July 8	State Ranking in Cases per 100,000 Population, as of July 8	Percent Change in New Cases, July 1 - July 8 versus June 24 - July 1	Deaths per 100,000 Population, as of July 8	State Ranking in Deaths per 100,000 Population, as of July 8	Percent Change in New Deaths, July 1 - July 8 versus June 24 - July 1
Maryland	9,976	30	16.0%	1,182	11	15.0%	54.2	10	-27.8%
Massachusetts	13,290	12	-9.2%	1,605	4	-4.8%	119.6	4	12.5%
Michigan	12,016	17	18.0%	748	28	31.7%	62.7	8	-23.8%
Minnesota	12,288	15	-13.3%	703	31	-2.7%	27.0	19	-18.0%
Mississippi	10,575	24	-34.6%	1,105	12	11.4%	39.9	14	49.3%
Missouri	7,207	44	-16.1%	425	42	24.6%	17.6	28	-20.5%
Montana	9,957	31	-28.3%	128	50	42.0%	2.2	49	0.0%
Nebraska	10,083	28	-25.2%	1,056	13	0.6%	15.0	31	-52.6%
Nevada	10,508	25	24.8%	791	23	11.4%	18.1	27	144.4%
New Hampshire	9,451	34	2.5%	438	41	-26.5%	28.4	16	-50.0%
New Jersey	17,764	5	-5.8%	1,981	2	-43.3%	173.6	1	-83.4%
New Mexico	18,373	3	-2.5%	668	32	35.4%	25.1	21	35.0%
New York	22,631	1	2.6%	2,034	1	4.3%	166.9	2	-79.5%
North Carolina	10,456	26	2.3%	741	30	3.5%	14.0	34	-13.8%
North Dakota	15,201	8	0.9%	522	36	38.2%	11.7	35	-100.0%
Ohio	7,830	42	10.7%	515	38	19.8%	25.6	20	-5.0%
Oklahoma	9,978	29	1.0%	452	40	45.3%	10.3	37	5.9%
Oregon	6,550	47	12.1%	257	46	27.0%	5.4	46	13.3%
Pennsylvania	6,769	46	5.1%	756	26	21.1%	53.6	11	17.6%
Rhode Island	15,412	7	-19.6%	1,624	3	42.1%	91.7	5	-65.9%

Green highlighting denotes the states with a 15% or larger decrease relative to the prior week on the measure shown. Purple highlighting denotes states with a 15% or larger increase.



COVID Testing, Cases, and Deaths – Rates and Recent Trends, Table 3 of 3: South Carolina through Wyoming (including US Territories and National Totals)

State	Tests per 100,000 Population, as of July 8	State Ranking in Tests per 100,000 Population, as of July 8	Percent Change in New Tests, July 1 - July 8 versus June 24 - July 1	Cases per 100,000 Population, as of July 8	State Ranking in Cases per 100,000 Population, as of July 8	Percent Change in New Cases, July 1 - July 8 versus June 24 - July 1	Deaths per 100,000 Population, as of July 8	State Ranking in Deaths per 100,000 Population, as of July 8	Percent Change in New Deaths, July 1 - July 8 versus June 24 - July 1
South Carolina	8,815	36	-10.7%	950	17	9.7%	17.2	29	42.2%
South Dakota	9,747	32	-9.9%	819	21	2.2%	11.1	36	-44.4%
Tennessee	13,925	11	33.6%	802	22	37.9%	9.9	41	40.7%
Texas	7,790	43	15.5%	790	24	24.8%	10.1	38	84.5%
Utah	12,033	16	9.8%	840	19	2.7%	6.3	44	180.0%
Vermont	11,500	19	-15.0%	201	48	76.9%	9.0	42	0.0%
Virginia	8,646	38	-3.3%	789	25	13.1%	22.3	23	-4.8%
Washington	8,346	40	11.4%	521	37	14.1%	18.3	25	19.6%
West Virginia	10,820	22	26.1%	207	47	108.0%	5.3	47	100.0%
Wisconsin	11,122	20	-5.4%	627	33	15.4%	14.0	33	-4.0%
Wyoming	6,534	48	16.0%	301	44	-2.6%	3.6	48	0.0%
50 States + DC	11,333		5.9%	930		20.1%	40.4		-33.1%
Territories									
American Samoa	1,479		-77.0%	-		0.0%	-		0.0%
Guam	9,583		-14.2%	758		-10.0%	3.6		0.0%
Northern Mariana Islands	18,703		0.0%	54		0.0%	3.5		0.0%
Puerto Rico	6,643		-98.5%	288		68.5%	5.2		50.0%
Virgin Islands	3,249		45.4%	138		350.0%	5.7		0.0%
Territories Subtotal	6,804		-92.0%	298		68.9%	5.1		50.0%
United States and Territories	11,270		4.0%	922		20.2%	40.0		-33.0%

Green highlighting denotes the jurisdictions with a 15% or larger decrease relative to the prior week on the measure shown. Purple highlighting denotes jurisdictions with a 15% or larger increase.



State-Level Findings

- New cases increased this week versus the previous week in 43 states.
- In 41 states, the rate of increase in new cases was higher than the rate of increase in new tests from July 1 – July 8.
- New deaths increased in 24 states, decreased in 24 states (and Washington DC), and remained steady in 3 states.
- Since the first confirmed COVID-19 case in the US through July 8, the top-ranked state on each of the following metrics are:
 - Tests per 100,000 population: New York (22,631)
 - Cases per 100,000 population: New York (2,034)
 - Deaths per 100,000 population: New Jersey (174)

Distribution of US Counties by New Confirmed Cases, July 1 - July 8 Compared to June 24 - July 1

- 72.2% of the US population lives in a county where the number of new cases **increased** July 1-8 versus the prior week.
- These 1,794 counties account for 66.3% of nationwide cumulative cases and 57.0% of all US cumulative deaths as of July 8.

	Counties with No Confirmed Cases Through July 8	Counties with Fewer New Cases July 1 - 8 than June 24 - July 1	Counties with More New Cases July 1 - 8 than June 24 - July 1	Counties with the Same Number of New Cases July 1 - 8 and June 24 - July 1
Number of Counties	101	987	1,794	318
% of All Counties	3.2%	30.8%	56.1%	9.9%
% Total US Population	0.1%	26.4%	72.2%	1.3%
% Cumulative Cases as of July 8	0.0%	33.3%	66.3%	0.4%
% Cumulative Deaths as of July 8	0.0%	42.7%	57.0%	0.3%

5 Slide Series Overview

Our 5 Slide Series is a monthly publication whereby we briefly discuss/address a selected topic outside the confines of our client engagements. The Menges Group has a variety of datasets that we use to support our 5 Slide Series and client projects.

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