COVID Tabulations – State-Level Analyses of Recent COVID Testing, Cases, and Deaths; Proportion of Cases and Deaths Attributable to Nursing Home Residents

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Strategic Health Policy & Care Coordination Consulting

## Introduction and Overview

- This edition provides two state-level tables. The first conveys each state's rank in cases and deaths per 100,000 population, the percentage of the population that has been tested for COVID-19, and the percent change in new tests, cases, and deaths over the past two weeks.
- In the past week, the percentage increase in new cases has far surpassed the percentage increase in new tests. Nationally, we experienced a 6% increase in testing from June 17-24 versus the prior seven-day period, but a 34% increase in new confirmed cases.
  - This differential, which is dramatically wide in several states, suggests a highly troubling spread of the disease is occurring at the present time far beyond the dynamic that additional tests will uncover underlying cases without signifying additional disease spread.



## Introduction and Overview (continued)

- The second set of state tables provides statistics on the degree to which each state's COVID-attributed cases and deaths are attributable to nursing home residents through June 7.
  - Nationally, 26.2% of COVID deaths are attributable to nursing home residents, with this percentage varying widely by state.
  - 17.1% of COVID cases involving nursing home residents have resulted in death, versus 4.6% for non-nursing home residents.
- This edition also updates the county-level distribution of new cases over the past two weeks. This analysis further suggests substantial disease spread is currently occurring.
  - 70.6% of the population lives in a county where cases *increased* last week (June 17 − 24) compared to the previous week (June 10 − 17). This proportion was 54.0% just one week ago.



### Number of New Tests, Cases, and Deaths Each Week

- The number of COVID-19 cases in the United States increased by 34.2% this past week while the number of new tests increased by only 6.1%. Despite this increase in cases, new deaths decreased by 10.1%.
- This past week marks the nation's *highest* number of new confirmed cases in a one-week period but the 12<sup>th</sup> highest in new deaths.
- It is important to note that the number of new positive tests and new cases are not equal as one person may have been tested more than once.

		Percent	New	Percent	New	Percent		Percent
		Change vs.	Positive	Change vs.	Confirmed	Change vs.	New	Change vs.
Week	New Tests	<b>Prior Week</b>	Tests	<b>Prior Week</b>	Cases	Prior Week	Deaths	<b>Prior Week</b>
March 11 - March 18	86,843		12,200		7,748		120	
March 18 - March 25	366,445	322.0%	61,917	407.5%	59,714	670.7%	847	605.8%
March 25 - April 1	738,522	101.5%	148,196	139.3%	144,506	142.0%	3,561	320.4%
April 1 - April 8	1,053,110	42.6%	208,357	40.6%	214,415	48.4%	9,950	179.4%
April 8 - April 15	1,028,935	-2.3%	208,094	-0.1%	208,694	-2.7%	15,573	56.5%
April 15 - April 22	1,245,475	21.0%	199,111	-4.3%	196,845	-5.7%	15,525	-0.3%
April 22 - April 29	1,554,180	24.8%	203,526	2.2%	204,013	3.6%	14,842	-4.4%
April 29 - May 6	1,763,672	13.5%	187,421	-7.9%	188,884	-7.4%	13,677	-7.8%
May 6 - May 13	2,171,829	23.1%	163,381	-12.8%	165,376	-12.4%	9,921	-27.5%
May 13 - May 20	2,628,183	21.0%	159,287	-2.5%	160,720	-2.8%	9,502	-4.2%
May 20 - May 27	2,646,574	0.7%	147,458	-7.4%	148,202	-7.8%	7,079	-25.5%
May 27 - June 3	3,034,891	14.7%	152,088	3.1%	153,233	3.4%	6,878	-2.8%
June 3 - June 10	3,154,458	3.9%	140,875	-7.4%	149,255	-2.6%	6,001	-12.8%
June 10 - June 17	3,435,110	8.9%	157,872	12.1%	163,521	9.6%	4,685	-21.9%
June 17 - June 24	3,646,080	6.1%	216,383	37.1%	219,492	34.2%	4,210	-10.1%

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

	State Rank in		State Bank Deveent	State Dank in		State Bank Deveent	State Donk in		State Bank Deveant
	Percentage of	Dersont Change in New	State Rank, Percent	State Rank in	Dercent Change in Now	State Rank, Percent			State Rank, Percent
	Population	Percent Change in New	Change in New Tests,	-	Percent Change in New	Change in New Cases,	•	Percent Change in New	-
	Tested Through	Tests, June 17 - 24	June 17 - 24 Versus	-	Cases, June 17 - 24		-		Deaths, June 17 - 24
State	June 24	Versus June 10 - 17	June 10 - 17	June 24	Versus June 10 - 17	June 10 - 17	June 24	Versus June 10-17	Versus June 10 - 17
Alabama	33	27.5%	6	20	-10.7%	41	24	119.6%	4
Alaska	6	84.1%	2	49	11.9%	31	50	-100.0%	50
Arizona	41	24.8%	9	13	70.4%	6	22	41.4%	7
Arkansas	19	15.0%	17	24	16.4%	26	41	34.4%	9
California	18	30.1%	5	31	39.9%	17	29	7.5%	15
Colorado	49	11.8%	20	26	26.1%	23	15	-37.9%	41
Connecticut	10	-32.3%	45	6	-55.3%	51	3	-31.3%	37
Delaware	13	-21.7%	42	8	14.7%	28	10	507.7%	1
District of Columbia	8	18.4%	13	5	-9.4%	39	6	-25.0%	34
Florida	29	-11.7%	36	30	71.3%	5	28	21.2%	13
Georgia	35	16.7%	15	21	57.7%	8	18	-50.0%	45
Hawaii	50	3.2%	30	51	50.8%	15	51	0.0%	18
Idaho	51	42.9%	3	43	173.1%	1	45	-50.0%	45
Illinois	11	7.7%	26	9	1.8%	35	9	-22.3%	32
Indiana	37	18.8%	12	19	-18.8%	47	13	-14.2%	27
lowa	23	7.8%	25	12	21.1%	25	21	-56.4%	49
Kansas	44	6.5%	28	34	50.5%	16	38	133.3%	3
Kentucky	32	40.8%	4	40	14.7%	27	33	-34.2%	40
Louisiana	5	21.4%	11	7	-16.5%	44	7	-4.3%	20
Maine	39	10.9%	21	44	-9.0%	38	43	-50.0%	45

Yellow highlighting denotes a top ten state ranking in each category, and blue highlighting denotes a ranking in the bottom 10.

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

	State Rank in								
	Percentage of		State Rank, Percent	State Rank in		State Rank, Percent			State Rank, Percent
	Population	Percent Change in New	Change in New Tests,	Cases per	Percent Change in New	Change in New Cases,	•	Percent Change in New	-
	Tested Through	Tests, June 17 - 24	June 17 - 24 Versus	100,000 Through	Cases, June 17 - 24	June 17 - 24 Versus	100,000 Through		Deaths, June 17 - 24
State	June 24	Versus June 10 - 17	June 10 - 17	June 24	Versus June 10 - 17	June 10 - 17	June 24	Versus June 10-17	Versus June 10 - 17
Maryland	27	-13.4%	39	10	-31.4%	49	11	-26.3%	35
Massachusetts	9	5.1%	29	4	-26.8%	48	4	-26.9%	36
Michigan	16	1.2%	32	17	53.2%	11	8	-7.2%	23
Minnesota	17	21.4%	10	22	1.7%	36	17	-16.7%	29
Mississippi	21	-43.4%	49	14	29.0%	21	14	4.3%	17
Missouri	46	25.9%	7	41	56.3%	9	26	22.2%	12
Montana	34	-12.4%	37	50	97.1%	2	49	-50.0%	45
Nebraska	25	9.8%	22	11	-17.2%	45	30	-20.0%	31
Nevada	26	-38.5%	48	32	59.4%	7	27	-12.5%	26
New Hampshire	28	-12.9%	38	38	-37.2%	50	16	-41.4%	42
New Jersey	3	9.3%	23	2	-7.1%	37	2	-42.3%	43
New Mexico	4	2.1%	31	29	13.5%	30	20	-33.3%	38
New York	2	-0.5%	33	1	-9.9%	40	1	-24.9%	33
North Carolina	30	8.9%	24	28	3.2%	34	34	-4.9%	21
North Dakota	7	12.5%	19	36	-11.5%	42	35	300.0%	2
Ohio	42	16.3%	16	39	52.3%	14	19	-6.5%	22
Oklahoma	31	16.7%	14	42	83.1%	3	37	-11.1%	25
Oregon	48	7.5%	27	46	8.7%	32	47	-14.3%	28
Pennsylvania	45	14.9%	18	18	13.8%	29	12	-17.6%	30
Rhode Island	1	-18.9%	41	3	-14.0%	43	5	-43.8%	44

Yellow highlighting denotes a top ten state ranking in each category, and blue highlighting denotes a ranking in the bottom 10.

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

	State Rank in Percentage of Population	Percent Change in New	State Rank, Percent Change in New Tests,	Cases per		State Rank, Percent Change in New Cases,		Percent Change in New	
State	Tested Through June 24	Tests, June 17 - 24 Versus June 10 - 17	June 17 - 24 Versus June 10 - 17	June 24	Cases, June 17 - 24 Versus June 10 - 17	June 17 - 24 Versus June 10 - 17	100,000 Through June 24		Deaths, June 17 - 24 Versus June 10 - 17
South Carolina	40	124.8%	1	25	53.0%	12	31	57.1%	6
South Dakota	24	-26.7%	44	15	-17.3%	46	36	-33.3%	38
Tennessee	12	-36.3%	47	27	26.2%	22	40	-8.3%	24
Texas	43	25.0%	8	33	80.0%	4	42	5.5%	16
Utah	15	-10.0%	35	23	39.0%	18	46	69.2%	5
Vermont	14	-21.8%	43	45	54.3%	10	39	*	*
Virginia	36	-14.3%	40	16	3.9%	33	23	13.0%	14
Washington	38	-61.1%	50	37	34.3%	20	25	41.3%	8
West Virginia	22	-32.9%	46	48	38.3%	19	44	33.3%	
Wisconsin	20	-3.1%	34	35	23.1%	24	32	22.5%	11
Wyoming	47	6.1%	51	47	52.7%	13	48	0.0%	18
50 States + DC		6.1%			34.3%			-10.1%	
Territories									
American Samoa		0.0%			0.0%			0.0%	
Guam		100.9%			437.5%			0.0%	
Northern Mariana Islands		-92.6%			0.0%			0.0%	
Puerto Rico		21.2%			21.2%			-50.0%	
Virgin Islands		31.2%			400.0%			0.0%	
Territories Subtotal		21.8%			26.6%			-50.0%	
United States and Territories		6.1%			34.2%			-10.1%	

Yellow highlighting denotes a top ten state ranking in each category, and blue highlighting denotes a ranking in the bottom 10.



\*Vermont reported 0 new deaths June 10 - 17 and 1 new death June 17 - 24. The percent change from 0 to 1 is immeasurable, therefore Vermont was not given a ranking in this category.

#### State-Level Testing, Cases, and Deaths Findings

- Substantially increased testing has occurred during recent weeks, which will unavoidably result in increased counts of new cases. This dynamic alone does not indicate advanced spread of COVID-19, as the testing could simply result in better uncovering of underlying cases.
- However, our tabulations signal that large increases in actual new cases (advanced disease spread) is currently occurring.
  - Nationwide, new cases grew by 34.2% this past week whereas testing increased by just 6.1%.
  - This is highly concerning as it is the first week since early April where the weekly volume of new cases has increased much more sharply than the volume of new tests.



#### State-Level Testing and Case Growth Comparisons

- In many states, the rate of increase in new cases this past week dramatically exceeded the rate of increase in new tests.
- Idaho, Montana, Oklahoma, Texas, and Florida reported largest increase in new cases June 17 24 versus June 10 17 (173%, 97%, 83%, 80%, and 71% respectively).
  - Of these states, Montana and Florida each reported a *decrease* in testing by 12% during the past week.
- Idaho, Oklahoma, and Texas reported substantial increases in testing by 43%, 17%, 25%, and 25% respectively. However, these figures are dozens of percentage points lower than the rates of increase in confirmed cases shown in the first bullet above.



# Nursing Home State Table 1 of 3: Alabama through Kansas

State	Confirmed and Probable COVID Cases Through June 7	Confirmed and Probable COVID Cases Through June 7, Nursing Home Residents		COVID Deaths Through June 7	COVID Deaths Through June 7, Nursing Home Residents	Nursing Home	Deaths as a Percentage of Confirmed and	Deaths as a Percentage of Confirmed and Probable COVID Cases, Non-Nursing Home Residents
Alabama	20,500	2,391	11.7%	692	277	40.0%	11.6%	2.3%
Alaska	588	119	20.2%	8	-	0.0%	0.0%	1.7%
Arizona	26,924	1,071	4.0%	1,048	160	15.3%	14.9%	3.4%
Arkansas	9,426	1,263	13.4%	154	57	37.0%	4.5%	1.2%
California	131,997	15,899	12.0%	4,653	1,649	35.4%	10.4%	2.6%
Colorado	27,987	1,825	6.5%	1,527	371	24.3%	20.3%	4.4%
Connecticut	43,968	7,802	17.7%	4,071	1,505	37.0%	19.3%	7.1%
Delaware	9,942	1,169	11.8%	398	214	53.8%	18.3%	2.1%
District of Columbia	9,332	493	5.3%	489	59	12.1%	12.0%	4.9%
Florida	63,930	4,083	6.4%	2,699	632	23.4%	15.5%	3.5%
Georgia	49,371	6,409	13.0%	2,148	565	26.3%	8.8%	3.7%
Hawaii	663	122	18.4%	17	1	5.9%	0.8%	3.0%
Idaho	3,153	431	13.7%	83	37	44.6%	8.6%	1.7%
Illinois	128,070	10,970	8.6%	5,939	1,917	32.3%	17.5%	3.4%
Indiana	38,328	3,699	9.7%	2,303	782	34.0%	21.1%	4.4%
lowa	21,794	1,908	8.8%	606	191	31.5%	10.0%	2.1%
Kansas	10,549	614	5.8%	234	65	27.8%	10.6%	1.7%

Yellow highlighting denotes the top 10 in each category.



# Nursing Home State Table 2 of 3: Kentucky through North Carolina

State	Confirmed and Probable COVID Cases Through June 7	Confirmed and Probable COVID Cases Through June 7, Nursing Home Residents	Confirmed and Probable COVID Cases Attributed to Nursing	COVID Deaths Through June 7	COVID Deaths Through June 7, Nursing Home Residents	Attributed to Nursing Home	Deaths as a Percentage of Confirmed and	Probable COVID Cases, Non-Nursing Home
Kentucky	11,393	1,934	17.0%	481	262	54.5%	13.5%	2.3%
Louisiana	42,927	3,604	8.4%	2,936	758	25.8%	21.0%	5.5%
Maine	2,570	386	15.0%	99	30	30.3%	7.8%	3.2%
Maryland	58,593	4,669	8.0%	2,749	795	28.9%	17.0%	3.6%
Massachusetts	103,436	12,760	12.3%	7,316	2,837	38.8%	22.2%	4.9%
Michigan	64,615	5,252	8.1%	5,898	1,512	25.6%	28.8%	7.4%
Minnesota	27,897	2,444	8.8%	1,197	422	35.3%	17.3%	3.0%
Mississippi	17,270	1,989	11.5%	817	434	53.1%	21.8%	2.5%
Missouri	14,985	2,505	16.7%	823	302	36.7%	12.1%	4.2%
Montana	545	70	12.8%	18	2	11.1%	2.9%	3.4%
Nebraska	15,634	956	6.1%	196	84	42.9%	8.8%	0.8%
Nevada	9,673	1,087	11.2%	438	97	22.1%	8.9%	4.0%
New Hampshire	5,043	1,489	29.5%	286	166	58.0%	11.1%	3.4%
New Jersey	164,164	12,979	7.9%	12,176	2,892	23.8%	22.3%	6.1%
New Mexico	8,941	272	3.0%	396	56	14.1%	20.6%	3.9%
New York	374,970	15,774	4.2%	30,598	3,848	12.6%	24.4%	7.4%
North Carolina	35,663	3,141	8.8%	1,024	314	30.7%	10.0%	2.2%

Yellow highlighting denotes the top 10 in each category.



# Nursing Home State Table 3 of 3: North Dakota through Wyoming and US Totals

		Confirmed and	Percentage of all			Percentage of All		Deaths as a Percentage
	Confirmed and	Probable COVID	Confirmed and		COVID Deaths	COVID Deaths	Deaths as a Percentage	of Confirmed and
	Probable COVID	Cases Through	Probable COVID Cases		Through June 7,	Attributed to	of Confirmed and	Probable COVID Cases,
	Cases Through	June 7, Nursing	Attributed to Nursing	COVID Deaths	Nursing Home	Nursing Home	Probable COVID Cases,	Non-Nursing Home
State	June 7	Home Residents	Home Residents	Through June 7	Residents	Residents	<b>Nursing Home Residents</b>	Residents
North Dakota	2,864	250	8.7%	75	38	50.7%	15.2%	1.4%
Ohio	38,476	5,505	14.3%	2,377	1,068	44.9%	19.4%	4.0%
Oklahoma	7,151	850	11.9%	348	88	25.3%	10.4%	4.1%
Oregon	4,809	437	9.1%	164	27	16.5%	6.2%	3.1%
Pennsylvania	80,001	13,762	17.2%	5,997	2,642	44.1%	19.2%	5.1%
Rhode Island	15,441	1,536	9.9%	772	355	46.0%	23.1%	3.0%
South Carolina	14,286	1,954	13.7%	546	221	40.5%	11.3%	2.6%
South Dakota	5,438	238	4.4%	65	24	36.9%	10.1%	0.8%
Tennessee	26,811	952	3.6%	414	88	21.3%	9.2%	1.3%
Texas	75,948	4,860	6.4%	1,846	407	22.0%	8.4%	2.0%
Utah	12,084	689	5.7%	121	12	9.9%	1.7%	1.0%
Vermont	1,063	335	31.5%	55	31	56.4%	9.3%	3.3%
Virginia	50,681	3,006	5.9%	1,472	357	24.3%	11.9%	2.3%
Washington	25,064	1,440	5.7%	1,163	200	17.2%	13.9%	4.1%
West Virginia	2,144	402	18.8%	84	41	48.8%	10.2%	2.5%
Wisconsin	20,950	1,486	7.1%	648	119	18.4%	8.0%	2.7%
Wyoming	947	41	4.3%	17	3	17.6%	7.3%	1.5%
United States	1,938,999	169,322	8.7%	110,681	29,014	26.2%	17.1%	4.6%

Yellow highlighting denotes the top 10 in each category.

## State-Level Nursing Home Findings

- Nearly 170,000 of the 1,938,999 confirmed and probable cases of COVID-19 in the United States as of June 7 took place in nursing homes.
  - 8.7% of all cases and 26.2% of all deaths in the United States were attributable to nursing home residents.
- 17.1% of all cases in nursing homes resulted in death, as compared to 4.6% of the cases among non-nursing home residents.
  - While our data source did not allow for age-adjusting this differential, the nursing home residents were no doubt far older on average than the non-nursing home residents who have contracted COVID.
  - Michigan, New York, and Rhode Island reported the highest percentage of deaths among nursing home residents who contracted COVID, with 28.8%, 24.4%, and 23.1% of all cases resulting in death, respectively.
  - Outside nursing homes, New York, Michigan, and Connecticut each reported that more than 7% of COVID cases resulted in death (7.4%, 7.4%, and 7.1% respectively).



#### Distribution of US Counties by New Confirmed Cases, June 17 – 24 Compared to June 10 – 17

- 70.6% of the US population lives in a county where the number of new cases has *increased* this past week (June 17 – 24) compared to the prior week.
  - This is more than 16 percentage points higher than the same category last week, and 25 percentage points higher than three weeks ago.
  - These counties now represent 55.7% of all cumulative COVID-19 cases and 43.1% of all cumulative COVID-19 deaths in the United States.

	Counties with No Confirmed Cases Through June 24	Counties with Fewer New Cases June 17 - 24 than June 10 - 17	New Cases June 17 - 24 than	June 17 - 24 and
Number of Counties	151	912	1,656	481
% of All Counties	4.7%	28.5%	51.8%	15.0%
% Total US Population	0.2%	26.8%	70.6%	2.5%
% Cumulative Cases as of June 24	0.0%	43.5%	55.7%	0.8%
% Cumulative Deaths as of June 24	0.0%	56.2%	43.1%	0.7%



## 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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