

COVID Tabulations: International Monthly COVID Death Rate Progression Among Hardest Hit Countries and Monthly New Cases and Deaths at a State-Level

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The Menges Group

Strategic Health Policy & Care Coordination Consulting

Introduction and Overview

- This edition compares the monthly progression of the COVID-19 death rate in the United States from March through August with the other countries that have been hardest-hit to date by the pandemic.
 - The United States' per capita death rate is *5 times higher* than the worldwide figure.
- We also tabulate new monthly COVID cases and deaths per 100,000 at a state level.
 - The United States reported the highest number of new cases per capita in July, with 574.5 new cases per 100,000. However, the US saw the highest number of new deaths per 100,000 population in April (17.5 new deaths per 100,000).
 - In August, 11 states reported their highest number of new cases per 100,000 population and 18 states reported their highest number of new deaths per 100,000 population.

USA Currently Has World's 9th Highest COVID Death Rate Per 100,000 Population

Table shows the ten hardest hit countries based on COVID death rate.

Country	Population	Population Per Square Mile	Rank Among These 10 Countries, Population per Square Mile	Cumulative COVID Deaths as of August 31	Cumulative Deaths Per 100,000 Population as of August 31	Rank, COVID Deaths per 100,000 Population
Peru	31,989,343	64	6	28,788	90.0	1
Belgium	11,421,614	969	1	9,895	86.6	2
United Kingdom	66,487,146	710	2	41,589	62.6	3
Spain	46,721,365	239	4	29,094	62.3	4
Chile	18,728,536	64	7	11,289	60.3	5
Italy	60,433,064	519	3	35,483	58.7	6
Brazil	209,482,186	63	8	121,381	57.9	7
Sweden	10,182,592	59	9	5,808	57.0	8
USA	327,162,105	9	10	183,597	56.1	9
Mexico	126,181,340	166	5	64,414	51.0	10
Worldwide	7,809,000,000	40		854,424	10.9	

The USA's current per capita COVID death rate is 5 times higher than the worldwide figure.

- All other countries on this Top 10 list have much higher population density than the USA.
- Our analyses have repeatedly found a strong correlation between population density and COVID death rates.
- We recognize that overall population per square mile is a crude population density measure (for example 40% of the US population reside in coastal counties that comprise only 10% of the country's land area). Nonetheless, the above density data suggest the USA has done a far poorer job of mitigating the pandemic than most other hard-hit countries.

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Monthly COVID Death Rates in 10 Hardest-Hit Countries

COVID Deaths Per 100,000 Population by Month

Country	March	April	May	June	July	August	Cumulative Deaths Per 100,000 Population as of August 31
Peru	0.2	8.1	21.9	24.9	17.8	17.1	90.0
Belgium	6.2	60.3	16.4	2.5	0.8	0.5	86.6
United Kingdom	3.7	36.4	16.2	4.4	1.2	0.6	62.6
Spain	17.5	35.0	5.5	2.6	0.2	1.4	62.3
Chile	0.0	1.1	4.2	24.4	20.3	10.2	60.3
Italy	20.5	25.7	9.0	2.2	0.6	0.6	58.7
Brazil	0.1	2.5	11.2	14.1	15.7	14.4	57.9
Sweden	3.3	25.0	17.3	8.5	2.5	0.5	57.0
USA	1.2	17.8	13.0	7.1	8.0	9.0	56.1
Mexico	0.0	1.4	6.4	13.7	15.0	14.6	51.0
Worldwide	0.5	2.5	1.9	1.8	2.1	2.2	10.9

- Several of the hardest hit countries have achieved dramatic reductions in COVID deaths during the past few months. The August death rate per 100,000 persons in Belgium, the United Kingdom, Spain, Italy, and Sweden were near or below 1.0.
- Conversely, the USA is in a group of countries (including Peru, Chile, Brazil and Mexico) that have continued to experience a very high rate of deaths each of the past three months.
- The USA is the only one of these ten hard-hit countries whose COVID death rate increased from June-July and then increased again from July-August.

State-Level Monthly New Cases and Deaths per 100,000 Population (Table 1 of 3, Alabama through Kansas)

State	Monthly New Cases per 100,000 Population						Monthly New Deaths per 100,000 Population					
	March	April	May	June	July	August	March	April	May	June	July	August
Alabama	20	124	222	410	1,013	782	0.3	5.3	7.3	6.5	12.8	12.3
Alaska	18	30	16	91	348	328	0.3	0.7	0.1	0.5	1.2	1.8
Arizona	18	87	169	817	1,301	381	0.3	4.1	8.1	10.2	28.2	18.4
Arkansas	19	90	132	448	720	620	0.3	1.8	2.4	4.5	6.1	11.4
California	22	106	159	301	684	532	0.5	4.7	5.5	4.7	7.9	9.6
Colorado	52	212	194	110	247	188	1.2	12.3	11.6	4.3	2.6	1.9
Connecticut	88	689	407	121	92	86	1.9	61.4	47.3	10.6	3.1	0.9
Delaware	33	453	489	203	340	271	1.0	14.6	22.0	14.7	7.8	2.1
District of Columbia	70	542	635	216	255	264	1.3	30.5	34.3	12.0	4.8	3.1
Florida	31	125	105	448	1,480	713	0.4	5.5	5.5	4.9	15.5	20.2
Georgia	39	201	185	304	886	781	1.2	9.4	8.5	7.0	8.6	17.3
Hawaii	16	27	2	18	84	449	0.1	1.1	0.1	0.1	0.5	3.1
Idaho	29	83	47	183	824	638	0.5	3.0	1.1	0.6	5.7	9.6
Illinois	47	370	534	190	284	450	0.8	17.8	24.2	13.5	4.5	4.4
Indiana	32	237	257	168	313	423	0.9	15.6	15.2	7.5	4.8	4.9
Iowa	16	211	395	302	494	650	0.2	4.9	11.9	5.7	4.9	7.9
Kansas	15	133	191	163	463	525	0.3	4.2	2.7	2.2	2.8	3.2

Yellow highlighting denotes the month during which each state had its highest number of new COVID cases and deaths per 100,000 population.



State-Level Monthly New Cases and Deaths per 100,000 Population (Table 2 of 3, Kentucky through North Carolina)

State	Monthly New Cases per 100,000 Population						Monthly New Deaths per 100,000 Population					
	March	April	May	June	July	August	March	April	May	June	July	August
Kentucky	13	92	117	134	337	445	0.4	5.0	4.5	3.3	3.7	4.7
Louisiana	113	491	258	391	1,252	688	5.2	35.8	19.1	9.2	15.7	21.5
Maine	23	59	92	69	49	46	0.4	3.6	2.7	1.2	1.3	0.7
Maryland	27	334	523	243	343	328	0.3	18.5	23.0	10.9	5.0	4.3
Massachusetts	96	806	504	173	127	158	1.3	50.4	47.6	17.5	8.1	6.5
Michigan	76	338	160	135	199	224	2.6	35.3	17.1	7.1	2.6	3.0
Minnesota	11	80	350	204	322	380	0.2	5.9	12.5	7.6	2.9	4.0
Mississippi	31	198	292	395	1,058	813	0.7	8.1	15.9	11.4	19.8	27.2
Missouri	22	101	93	144	464	568	0.2	5.3	7.2	4.1	4.1	5.2
Montana	19	24	6	42	282	324	0.5	1.0	0.1	0.5	3.6	4.1
Nebraska	10	214	505	263	363	417	0.2	3.4	5.6	5.2	3.1	3.3
Nevada	36	128	116	323	960	687	0.8	7.0	5.7	2.9	10.5	15.4
New Hampshire	27	131	184	83	59	51	0.2	5.1	12.7	9.3	3.2	1.3
New Jersey	210	1,125	471	147	113	115	3.0	78.4	50.3	37.6	8.8	1.4
New Mexico	15	148	204	213	403	227	0.2	5.6	11.1	6.7	6.9	6.5
New York	383	1,167	342	115	110	98	8.0	108.2	38.2	11.6	3.1	2.4
North Carolina	15	86	173	347	546	435	0.1	3.6	5.0	4.3	5.6	7.5

Yellow highlighting denotes the month during which each state had its highest number of new COVID cases and deaths per 100,000 population.

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State-Level Monthly New Cases and Deaths per 100,000 Population (Table 3 of 3, North Dakota through Wyoming, Including the United States)

State	Monthly New Cases per 100,000 Population						Monthly New Deaths per 100,000 Population					
	March	April	May	June	July	August	March	April	May	June	July	August
North Dakota	17	123	199	132	379	702	0.4	2.1	5.9	3.1	2.5	5.2
Ohio	19	135	150	139	337	274	0.5	7.9	10.1	6.1	5.4	5.6
Oklahoma	14	77	73	183	574	563	0.6	5.0	2.8	1.3	3.9	6.5
Oregon	16	43	41	106	233	195	0.4	2.0	1.2	1.4	2.7	3.4
Pennsylvania	39	338	219	117	200	172	0.6	19.6	23.2	8.9	4.4	3.8
Rhode Island	46	768	595	178	209	276	0.8	24.4	42.7	21.9	5.4	3.9
South Carolina	21	97	112	477	1,022	582	0.4	4.3	4.9	4.8	18.9	19.6
South Dakota	12	265	287	200	226	536	0.1	1.8	5.1	3.3	4.4	4.2
Tennessee	30	124	180	293	883	716	0.2	2.7	2.3	3.5	6.6	10.0
Texas	12	88	124	351	953	680	0.2	2.7	2.9	2.8	16.5	19.3
Utah	28	118	161	391	558	371	0.2	1.3	2.1	1.8	4.2	3.2
Vermont	47	92	18	36	33	34	2.1	5.6	1.1	0.2	0.2	0.2
Virginia	15	171	337	213	318	360	0.1	6.3	9.6	4.5	4.8	4.8
Washington	69	125	105	154	318	249	3.0	7.8	4.0	2.7	4.2	4.6
West Virginia	9	54	49	50	209	201	0.1	2.4	1.7	1.0	1.3	5.5
Wisconsin	23	97	201	224	434	407	0.4	5.0	4.8	3.4	2.6	3.2
Wyoming	21	76	59	101	214	193	-	1.2	1.6	0.7	1.0	1.9
United States	56	264	217	256	574	438	1.2	17.5	12.8	7.0	7.9	8.9

Yellow highlighting denotes the month during which each state had its highest number of new COVID cases and deaths per 100,000 population.



Monthly Rankings, New Cases and Deaths per 100,000 Population (Table 1 of 3, Alabama through Kansas)

State	Monthly Ranking, New Cases per 100,000 Population						Monthly Ranking, New Deaths per 100,000 Population					
	March	April	May	June	July	August	March	April	May	June	July	August
Alabama	31	29	18	5	6	2	34	26	24	20	7	9
Alaska	35	49	49	45	24	31	35	51	49	48	48	46
Arizona	36	40	29	1	2	26	32	35	23	11	1	6
Arkansas	33	38	34	4	12	12	36	46	41	28	16	10
California	28	32	32	14	13	17	23	32	29	26	12	12
Colorado	9	16	23	42	36	43	10	14	18	30	42	44
Connecticut	5	5	9	39	47	48	7	3	3	10	37	49
Delaware	16	8	7	23	26	35	12	13	10	4	13	43
District of Columbia	7	6	1	19	35	36	9	7	6	6	24	39
Florida	19	26	40	3	1	5	28	24	30	24	6	3
Georgia	14	18	25	12	9	3	11	15	22	18	10	7
Hawaii	39	50	51	51	48	20	49	49	51	51	50	40
Idaho	21	42	46	27	11	11	20	39	48	47	17	13
Illinois	10	9	3	25	33	19	14	11	7	5	26	27
Indiana	17	14	17	30	32	23	13	12	14	16	23	23
Iowa	40	17	10	13	17	10	39	31	17	22	22	14
Kansas	42	23	24	31	19	18	31	34	40	40	40	37

Purple highlighting denotes a state that ranked top 10 in new cases or deaths per 100,000 population within each month.



Monthly Rankings, New Cases and Deaths per 100,000 Population (Table 2 of 3, Kentucky through North Carolina)

State	Monthly Ranking, New Cases per 100,000 Population						Monthly Ranking, New Deaths per 100,000 Population					
	March	April	May	June	July	August	March	April	May	June	July	August
Kentucky	46	36	36	37	27	21	27	30	35	34	33	25
Louisiana	3	7	16	7	3	7	2	5	11	13	5	2
Maine	26	46	42	47	50	50	30	37	39	44	46	50
Maryland	23	12	4	17	25	30	33	10	9	9	21	28
Massachusetts	4	3	6	29	44	45	8	4	2	3	11	17
Michigan	6	11	31	36	43	39	5	6	12	17	44	41
Minnesota	49	43	11	22	29	27	41	21	16	15	39	31
Mississippi	18	19	14	6	4	1	17	16	13	8	2	1
Missouri	27	33	41	34	18	14	37	25	25	31	31	22
Montana	34	51	50	49	34	32	22	50	50	49	34	30
Nebraska	50	15	5	16	23	24	42	38	28	23	38	35
Nevada	15	25	37	11	7	8	15	19	27	37	8	8
New Hampshire	24	24	26	46	49	49	40	27	15	12	35	48
New Jersey	2	2	8	33	45	46	3	2	1	1	9	47
New Mexico	41	21	20	21	21	38	38	22	19	19	14	18
New York	1	1	12	41	46	47	1	1	5	7	36	42
North Carolina	44	41	28	10	16	22	48	36	32	29	18	15

Purple highlighting denotes a state that ranked top 10 in new cases or deaths per 100,000 population within each month.



Monthly Rankings, New Cases and Deaths per 100,000 Population (Table 3 of 3, North Dakota through Wyoming)

State	Monthly Ranking, New Cases per 100,000 Population						Monthly Ranking, New Deaths per 100,000 Population					
	March	April	May	June	July	August	March	April	May	June	July	August
North Dakota	37	30	22	38	22	6	29	43	26	36	45	21
Ohio	32	22	33	35	28	34	21	17	20	21	20	19
Oklahoma	45	44	43	26	14	15	18	28	38	43	32	16
Oregon	38	48	47	43	37	41	26	44	46	42	41	34
Pennsylvania	13	10	19	40	42	44	19	9	8	14	27	33
Rhode Island	12	4	2	28	41	33	16	8	4	2	19	32
South Carolina	29	34	38	2	5	13	25	33	33	25	3	4
South Dakota	48	13	15	24	38	16	47	45	31	35	28	29
Tennessee	20	28	27	15	10	4	44	40	42	32	15	11
Texas	47	39	35	9	8	9	43	41	37	38	4	5
Utah	22	31	30	8	15	28	45	47	43	41	29	38
Vermont	11	37	48	50	51	51	6	23	47	50	51	51
Virginia	43	20	13	20	31	29	46	20	21	27	25	24
Washington	8	27	39	32	30	37	4	18	36	39	30	26
West Virginia	51	47	45	48	40	40	50	42	44	45	47	20
Wisconsin	25	35	21	18	20	25	24	29	34	33	43	36
Wyoming	30	45	44	44	39	42	51	48	45	46	49	45

Purple highlighting denotes a state that ranked top 10 in new cases or deaths per 100,000 population within each month.



State-Level Findings

- 36 states reported their largest number of monthly new cases per 100,000 population in July or August (25 and 11 states, respectively). The United States also reported its peak in new cases in July, with 574.5 new COVID cases per 100,000.
 - The remaining 14 states and Washington DC reported their highest number of new cases per 100,000 in April or May. No states reported their peak in March or June.
- 21 states reported their highest new COVID-attributed deaths per 100,000 population in July or August (3 and 18 states, respectively).
 - The remaining 29 states and Washington DC reported their highest number of new deaths in April or May. No states reported their peak (to date) during March or June.
- 21 states have remained out of the monthly Top 10 for either new cases or deaths per 100,000 population throughout the course of the pandemic.

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. Since March, we have produced new editions each week tracking the COVID pandemic. The Menges Group has developed a variety of datasets that we use to support our 5 Slide Series and client projects.

To be added to our list to receive these as they are published (or to be removed), please email us at pcall@themengesgroup.com. If you have questions about the content or data sources we have available, please email us at jmenges@themengesgroup.com or call 571-312-2360.

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