

COVID Tabulations: Death and Case Progression Among the 25 Most Populous U.S. Counties

5 Slide Series, Volume 93-b

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The Menges Group

Strategic Health Policy & Care Coordination Consulting

Introduction and Overview

- This edition of our 5 Slide Series tabulates COVID cases and deaths in the 25 most populous U.S. counties (which collectively are home to 21% of the country's residents).
 - Within the 25 counties, the seven counties with highest COVID deaths per 100,000 population are concentrated the Northeastern and Midwestern regions of the U.S.
 - 13 of these 25 large counties experienced their deadliest month to date in January 2021.
- 11.7 million new COVID vaccines were administered in the U.S. last week (February 4 – 10), representing a 63% increase from the prior week (January 27 – February 3). Approximately 9.8% of the U.S. population has now received at least the first dose of the vaccine.

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Cumulative COVID Cases and Deaths in the Top 12 Most Populous U.S. Counties, as of February 10

County	Total Population	Cases per 100,000 Population	Rank, Cases per 100,000 Population	Deaths per 100,000 Population	Deaths per 100,000 Population
Los Angeles, CA	10,039,107	11,513	3	184.3	9
Cook, IL	5,150,233	8,983	11	186.4	7
Harris, TX	4,713,325	7,007	17	97.7	20
Maricopa, AZ	4,485,414	11,007	6	184.0	10
San Diego, CA	3,338,330	7,457	14	87.0	22
Orange, CA	3,175,692	8,011	12	108.7	18
Miami-Dade, FL	2,716,940	14,279	1	186.3	8
Dallas, TX	2,635,516	10,275	7	116.6	16
Kings, NY	2,559,903	6,267	19	338.1	2
Riverside, CA	2,470,546	11,502	4	139.8	13
Clark, NV	2,266,715	9,715	8	155.5	11
Queens, NY	2,253,858	7,202	15	371.5	1

- Of the 25 most populous counties, Queens, NY and Kings, NY have experienced the highest death rates over the course of the pandemic, experiencing 371.5 and 338.1 deaths per 100,000 population, respectively.
- The seven counties with highest COVID deaths per 100,000 population are in the Northeastern and Midwestern regions of the U.S. These are regions that were hit hardest in the early days of the pandemic.

Cumulative COVID Cases and Deaths in the 13th to 25th Most Populous U.S. Counties, as of February 10

County	Total Population	Cases per 100,000 Population	Rank, Cases per 100,000 Population	Deaths per 100,000 Population	Deaths per 100,000 Population
King, WA	2,252,782	3,587	25	57.6	25
San Bernardino, CA	2,180,085	12,829	2	100.2	19
Tarrant, TX	2,102,515	11,048	5	120.3	15
Bexar, TX	2,003,554	9,256	10	129.3	14
Broward, FL	1,952,778	9,291	9	112.8	17
Santa Clara, CA	1,927,852	5,500	22	82.7	23
Wayne, MI	1,749,343	5,648	21	231.7	3
Alameda, CA	1,671,329	4,621	24	63.6	24
Manhattan, NY	1,628,706	4,696	23	226.7	4
Middlesex, MA	1,611,699	6,584	18	202.0	5
Philadelphia, PA	1,584,064	7,166	16	188.6	6
Sacramento, CA	1,552,058	5,759	20	87.1	21
Palm Beach, FL	1,496,770	7,507	13	153.3	12

- Conversely, COVID cases per 100,000 population appear to be related to region in an inverse way. All the top 10 cases per 100,000 population counts occurred in counties within the Western or Southern regions of the U.S. These regions experienced a rise in cases during the second half of the pandemic (as of Feb 10, 2021).

COVID Deaths in the Top 12 Most Populous U.S. Counties by Month

County	New COVID Deaths Per Month											
	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 1-10, 2021
Los Angeles, CA	54	1,057	1,251	1,007	1,252	1,163	792	495	584	2,690	6,425	1,730
Cook, IL	61	1,546	2,035	923	321	172	167	244	1,200	1,616	1,089	227
Harris, TX	6	108	118	146	880	934	407	210	200	393	855	350
Maricopa, AZ	8	137	287	339	1,283	907	434	211	376	1,143	2,337	792
San Diego, CA	9	131	172	53	196	121	101	108	106	537	1,085	285
Orange, CA	7	38	102	193	278	362	288	215	94	298	1,187	389
Miami-Dade, FL	7	345	348	291	620	826	843	367	188	353	686	188
Dallas, TX	13	91	125	144	300	274	186	134	272	468	812	253
Kings, NY	261	4,934	1,539	369	144	43	39	71	107	224	664	259
Riverside, CA	13	136	190	118	238	324	207	93	123	543	1,106	363
Clark, NV	23	179	144	70	271	439	265	124	252	612	897	249
Queens, NY	376	4,642	1,233	806	118	47	31	42	60	203	575	239



Yellow shading denotes highest month

COVID Deaths in the 13th – 25th Most Populous U.S. Counties by Month

County	New COVID Deaths Per Month											
	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 1-10, 2021
King, WA	152	296	121	43	56	74	38	54	66	152	192	53
San Bernardino, CA	6	87	111	49	156	307	239	123	51	316	394	345
Tarrant, TX	1	67	97	63	153	229	111	114	191	468	666	369
Bexar, TX	9	39	26	36	468	508	227	99	86	228	622	243
Broward, FL	12	173	128	70	326	475	212	127	141	183	245	110
Santa Clara, CA	31	81	30	15	35	53	78	84	70	233	705	180
Wayne, MI	120	1,664	679	259	82	81	101	76	162	402	358	70
Alameda, CA	7	56	40	32	47	75	155	52	48	145	323	83
Manhattan, NY	129	2,093	691	175	58	24	8	20	31	109	248	107
Middlesex, MA	18	827	770	236	127	92	84	127	144	304	397	130
Philadelphia, PA	14	593	709	290	84	77	59	66	134	447	435	80
Sacramento, CA	7	36	14	11	65	160	127	80	81	276	382	113
Palm Beach, FL	14	172	151	173	305	304	250	219	106	201	271	128



Yellow shading denotes highest month

January was a Deadly Month for Large Counties in Western and Southern States

- Over half of the 25 most populous counties (13 counties) experienced their highest COVID death counts in January 2021.
- All large counties that experienced their worst COVID death counts in January 2021 are located in either the Western or Southern regions of the U.S.
- Most large counties in the Northeastern region of the U.S. experienced their highest death rates in either April or May 2020.

Trends in Vaccinations for Alabama through Kansas, as of February 10, 2021

State	Population	Total Doses Administered, as of Feb 3	Total Doses Administered, as of Feb 10	Total Doses Administered Jan 28 - Feb 3	Total Doses Administered Feb 4 -Feb 10	Percent Increase in Doses Administered Feb 4- Feb 10 vs. Jan 28 - Feb 3	Percent of Population with One or More Doses, as of Feb 10	Ranking, Percent of Population with One or More Doses, as of Feb 10
Alabama	4,903,185	388,339	543,237	109,346	154,898	41.7%	8.8%	47
Alaska	731,545	125,765	162,273	19,907	36,508	83.4%	15.9%	1
Arizona	7,278,717	656,040	941,575	168,891	285,535	69.1%	10.3%	21
Arkansas	3,017,804	322,447	430,803	69,623	108,356	55.6%	10.5%	16
California	39,512,223	3,671,316	5,134,864	924,440	1,463,548	58.3%	10.4%	18
Colorado	5,758,736	617,125	815,108	121,419	197,983	63.1%	9.9%	28
Connecticut	3,565,287	465,008	600,249	83,848	135,241	61.3%	12.3%	4
Delaware	973,764	107,544	133,370	25,255	25,826	2.3%	10.9%	11
District of Columbia	705,749	85,065	111,720	14,226	26,655	87.4%	11.3%	7
Florida	21,477,737	2,133,168	2,957,730	425,917	824,562	93.6%	9.9%	29
Georgia	10,617,423	975,038	1,273,015	210,827	297,977	41.3%	9.1%	43
Hawaii	1,415,872	143,686	200,618	39,742	56,932	43.3%	10.6%	13
Idaho	1,787,065	132,384	214,063	29,584	81,679	176.1%	8.9%	45
Illinois	12,671,821	1,108,571	1,604,830	285,246	496,259	74.0%	9.8%	30
Indiana	6,732,219	637,745	832,031	85,601	194,286	127.0%	9.5%	41
Iowa	3,155,070	266,777	387,370	54,280	120,593	122.2%	9.0%	44
Kansas	2,913,314	241,156	332,923	50,855	91,767	80.4%	8.5%	50

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Yellow shading denotes the top 10 states in each column

Trends in Vaccinations for Kentucky through North Carolina, as of February 10, 2021

State	Population	Total Doses Administered, as of Feb 3	Total Doses Administered, as of Feb 10	Total Doses Administered Jan 28 - Feb 3	Total Doses Administered Feb 4 -Feb 10	Percent Increase in Doses Administered Feb 4- Feb 10 vs. Jan 28 - Feb 3	Percent of Population with One or More Doses, as of Feb 10	Ranking, Percent of Population with One or More Doses, as of Feb 10
Kentucky	4,467,673	435,400	608,198	93,200	172,798	85.4%	10.2%	25
Louisiana	4,648,794	488,960	639,019	113,065	150,059	32.7%	9.6%	32
Maine	1,344,212	145,786	193,246	30,595	47,460	55.1%	10.5%	15
Maryland	6,045,680	546,409	745,478	134,203	199,069	48.3%	9.3%	42
Massachusetts	6,892,503	625,477	924,612	135,145	299,135	121.3%	10.4%	19
Michigan	9,986,857	1,042,268	1,412,047	227,852	369,779	62.3%	10.0%	27
Minnesota	5,639,632	552,701	754,262	149,061	201,561	35.2%	10.2%	24
Mississippi	2,976,149	250,905	365,400	49,658	114,495	130.6%	9.6%	34
Missouri	6,137,428	482,112	694,992	99,560	212,880	113.8%	8.5%	49
Montana	1,068,778	110,374	149,339	24,161	38,965	61.3%	10.2%	23
Nebraska	1,934,408	188,285	247,879	38,266	59,594	55.7%	8.9%	46
Nevada	3,080,156	279,471	379,077	84,529	99,606	17.8%	9.7%	31
New Hampshire	1,359,711	138,271	184,103	27,820	45,832	64.7%	9.6%	33
New Jersey	8,882,190	851,721	1,196,677	203,506	344,956	69.5%	10.3%	22
New Mexico	2,096,829	284,830	369,864	60,138	85,034	41.4%	12.6%	3
New York State	19,453,561	2,003,170	2,620,734	372,666	617,564	65.7%	9.6%	35
North Carolina	10,488,084	1,026,683	1,382,652	176,882	355,969	101.2%	10.0%	26

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Yellow shading denotes the top 10 states in each column

Trends in Vaccinations for North Dakota through Wyoming, as of February 10, 2021

State	Population	Total Doses Administered, as of Feb 3	Total Doses Administered, as of Feb 10	Total Doses Administered Jan 28 - Feb 3	Total Doses Administered Feb 4 -Feb 10	Percent Increase in Doses Administered Feb 4- Feb 10 vs. Jan 28 - Feb 3	Percent of Population with One or More Doses, as of Feb 10	Ranking, Percent of Population with One or More Doses, as of Feb 10
North Dakota	762,062	103,572	133,616	23,521	30,044	27.7%	11.9%	5
Ohio	11,689,100	1,085,391	1,459,174	295,522	373,783	26.5%	9.5%	38
Oklahoma	3,956,971	462,440	628,361	99,187	165,921	67.3%	11.4%	6
Oregon	4,217,737	454,269	589,035	113,886	134,766	18.3%	10.3%	20
Pennsylvania	12,801,989	1,158,091	1,594,474	301,720	436,383	44.6%	9.5%	37
Rhode Island	1,059,361	101,474	127,931	21,336	26,457	24.0%	8.5%	51
South Carolina	5,148,714	479,202	628,496	119,253	149,294	25.2%	9.5%	40
South Dakota	884,659	110,967	141,733	19,191	30,766	60.3%	11.1%	9
Tennessee	6,829,174	657,819	866,352	147,769	208,533	41.1%	8.7%	48
Texas	28,995,881	2,652,896	3,708,460	545,891	1,055,564	93.4%	9.5%	39
Utah	3,205,958	324,636	510,267	84,829	185,631	118.8%	9.6%	36
Vermont	623,989	74,718	96,908	15,847	22,190	40.0%	10.7%	12
Virginia	8,535,519	922,940	1,223,199	254,539	300,259	18.0%	11.1%	8
Washington	7,614,893	765,954	1,040,044	194,819	274,090	40.7%	10.5%	17
West Virginia	1,792,147	268,065	340,780	43,461	72,715	67.3%	12.6%	2
Wisconsin	5,822,434	548,172	826,275	186,255	278,103	49.3%	11.0%	10
Wyoming	578,759	60,775	79,515	17,350	18,740	8.0%	10.6%	14
United States	332,149,276	31,761,378	43,537,978	7,223,690	11,776,600	63.0%	9.8%	

Source: <https://covid.cdc.gov/covid-data-tracker/#vaccinations>



Yellow shading denotes the top 10 states in each column

Vaccinations Have Trended Upwards Sharply

- As of February 10, 9.8% of the US population has received at least one dose of the COVID vaccination.
- Nationally, the US reported a 63% *increase* in vaccine distribution February 4 – 10 versus January 27 – February 3. From February 4 – 10, 11.7 million new vaccines were administered, a substantial improvement from the 7 million new vaccines administered during the previous week.
- As of February 10, all states have administered one or more doses of the vaccine to at least 8.5% of their population. Out front, Alaska has administered at least one dose to almost 16% of the state's population.
- All 50 states plus the District of Columbia increased their vaccination rate compared to last week's rate. Encouragingly, 30 states saw their weekly vaccination rate increase by more than 50%.

5 Slide Series Overview

Our 5 Slide Series is typically a monthly publication whereby we briefly discuss/address a selected topic outside the confines of our client engagements. Since March, we have produced dozens of editions 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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