

Excess US Deaths in 2020 and 2021 by State, Age, and Race/ Ethnicity Group

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The Menges Group

Strategic Health Policy & Care Coordination Consulting

State and Cohort Estimates of Excess Deaths

- In this edition, we estimate excess deaths (deaths that were above the pre-COVID annual averages) – this time at the **state level** – from April 2020 through December 2021.
- We also compare 2020 and 2021 deaths with prior years by age, race/ethnicity, and cause of death, finding that **young adults, seniors, and minority groups** were disproportionately affected by the pandemic.

Excess Death Rates Vary Widely by State, Although Regional Patterns Often Exist

- We estimated excess deaths in each state, taking the difference of average monthly deaths during the pandemic versus the pre-pandemic monthly average.
- **States in the South and Southwest have experienced the largest percentage increases in deaths.**
 - Arizona, Mississippi, New Mexico, Tennessee, and Alabama experienced the largest per capita excess deaths in 2020-2021, each with more than four additional deaths per 1,000 persons.
- **After experiencing a particularly deadly first wave in the spring of 2020, New England states have collectively experienced the lowest number of excess deaths per capita.**
 - 5 of the 11 states with the *least* number of excess deaths per capita are in New England (Rhode Island, Massachusetts, New Hampshire, Vermont, Maine).
 - Hawaii has experienced the least excess deaths with 1.02 additional deaths per 1,000 persons.

States with Most Excess Deaths per Capita

State/Jurisdiction	Excess Deaths, State Rank	Average Monthly Deaths, 2017-2019	Average Monthly Deaths, 2020-2021	Estimated Excess Deaths, 2020-2021	COVID-Attributed Deaths	COVID Deaths as Percent of Excess Deaths	Excess Deaths per 100,000 Persons
Arizona	1	4,978	6,608	34,222	22,934	67.0%	478.5
Mississippi	2	2,636	3,297	13,877	10,985	79.2%	468.6
New Mexico	3	1,534	1,961	8,957	6,307	70.4%	423.0
Tennessee	4	6,212	7,601	29,156	21,329	73.2%	421.9
Alabama	5	4,399	5,408	21,191	16,338	77.1%	421.8
Arkansas	6	2,658	3,231	12,038	9,290	77.2%	399.7
Louisiana	7	3,829	4,681	17,879	13,871	77.6%	383.9
Nevada	8	2,152	2,707	11,660	9,072	77.8%	375.6
Florida	9	17,284	21,072	79,542	60,334	75.9%	369.3
Wyoming	10	380	479	2,083	1,431	68.7%	361.1
Georgia	11	7,079	8,908	38,402	27,536	71.7%	358.5
South Carolina	12	4,098	4,963	18,152	14,822	81.7%	354.6
Montana	13	850	1,030	3,787	3,071	81.1%	349.3
Texas	14	16,958	21,743	100,490	81,566	81.2%	344.8
Kentucky	15	4,021	4,757	15,467	12,955	83.8%	343.3
Oklahoma	16	3,294	3,939	13,535	12,768	94.3%	341.9

Data Used to Perform Our Tabulations: Centers for Disease Control and Prevention

2020-2021 estimated excess deaths are using the 21-month period from April 2020- December 2021 when pandemic was in effect

States in the Middle of Pack with Excess Deaths per Capita

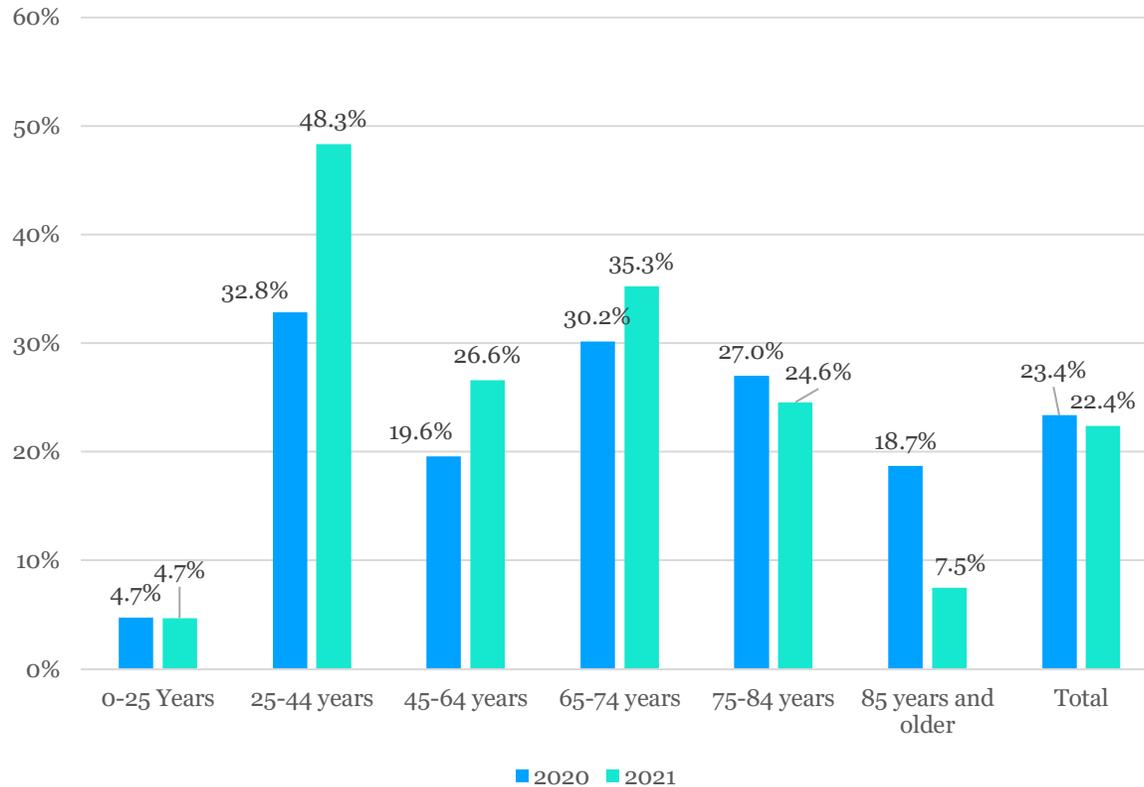
State/Jurisdiction	Excess Deaths, State Rank	Average Monthly Deaths, 2017-2019	Average Monthly Deaths, 2020-2021	Estimated Excess Deaths, 2020-2021	COVID-Attributed Deaths	COVID Deaths as Percent of Excess Deaths	Excess Deaths per 100,000 Persons
Delaware	17	772	932	3,351	2,349	70.1%	338.5
Michigan	18	8,076	9,652	33,101	26,914	81.3%	328.5
West Virginia	19	1,894	2,171	5,817	4,840	83.2%	324.3
Indiana	20	5,505	6,541	21,753	19,345	88.9%	320.6
Missouri	21	5,387	6,325	19,707	16,760	85.0%	320.2
Ohio	22	10,310	12,058	36,717	34,574	94.2%	311.2
Idaho	23	1,175	1,446	5,685	4,301	75.7%	309.1
New York	24	12,878	15,821	61,800	61,616	99.7%	305.9
North Dakota	25	596	703	2,255	2,480	110.0%	289.4
South Dakota	26	683	804	2,539	2,641	104.0%	286.3
New Jersey	27	6,177	7,432	26,361	27,394	103.9%	283.8
Virginia	28	5,695	6,815	23,521	15,446	65.7%	272.5
Kansas	29	2,198	2,577	7,966	7,158	89.9%	271.1
Colorado	30	3,268	4,003	15,429	10,996	71.3%	267.2
Pennsylvania	31	11,308	12,904	33,522	38,171	113.9%	257.8
California	32	22,441	27,093	97,699	80,918	82.8%	247.1
Connecticut	33	2,629	3,050	8,847	9,418	106.4%	245.4
Illinois	34	8,846	10,340	31,386	27,900	88.9%	245.2

States with Least Excess Deaths per Capita

State/Jurisdiction	Excess Deaths, State Rank	Average Monthly Deaths, 2017-2019	Average Monthly Deaths, 2020-2021	Estimated Excess Deaths, 2020-2021	COVID-Attributed Deaths	COVID Deaths as Percent of Excess Deaths	Excess Deaths per 100,000 Persons
Alaska	35	364	449	1,786	1,069	59.8%	243.5
Wisconsin	36	4,434	5,105	14,088	12,057	85.6%	239.0
District of Columbia	37	511	588	1,605	1,645	102.5%	232.8
Oregon	38	3,055	3,522	9,802	5,674	57.9%	231.3
Iowa	39	2,523	2,881	7,517	8,161	108.6%	229.8
Maryland	40	4,166	4,833	14,013	12,542	89.5%	226.8
Maine	41	1,217	1,360	3,010	1,836	61.0%	220.9
Minnesota	42	3,723	4,280	11,682	10,786	92.3%	204.7
Utah	43	1,582	1,890	6,479	4,224	65.2%	202.1
Vermont	44	477	539	1,294	446	34.5%	201.2
Nebraska	45	1,425	1,605	3,791	4,122	108.7%	193.3
Washington	46	4,767	5,458	14,517	9,724	67.0%	188.4
North Carolina	47	7,909	8,833	19,422	24,227	124.7%	186.0
New Hampshire	48	1,030	1,138	2,255	1,975	87.6%	163.7
Massachusetts	49	4,968	5,511	11,419	15,521	135.9%	162.4
Rhode Island	50	872	948	1,604	2,961	184.6%	146.2
Hawaii	51	964	1,035	1,484	1,081	72.8%	102.0

Excess Deaths by Age Group

Total Deaths by Age Group, Change from 2015-2019 Group Average



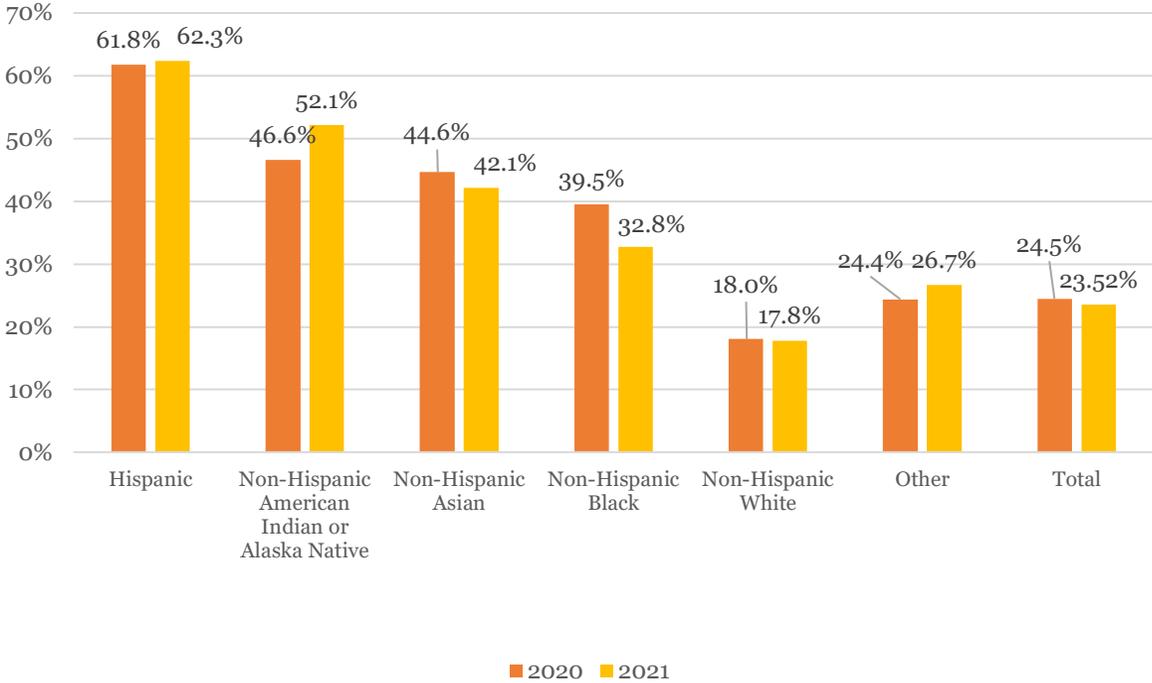
Data Used to Perform Our Tabulations: Centers for Disease Control and Prevention

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- The 25–44 age bracket experienced the sharpest percentage increase in all-cause observed deaths in 2020 (+32.8%) and 2021 (+48.3%) compared to its 2015-2019 historical average, followed by the 65-74 and 75-84 age brackets.
- Compared to 2015-2019 averages, the 25-44, 65-74, and the 75-84 age brackets composed a larger share of total observed deaths in 2020-2021, with the 65-74 age cohort increasing its share of total deaths the most (+1.5 percentage points).
- Deaths increased in *every* age cohort in both 2020 and 2021 relative to average annual levels during 2015-2019.

Total Deaths by Race/Ethnicity Group

Total Deaths by Race/Ethnicity Group, Change from 2015-2019 Group Average

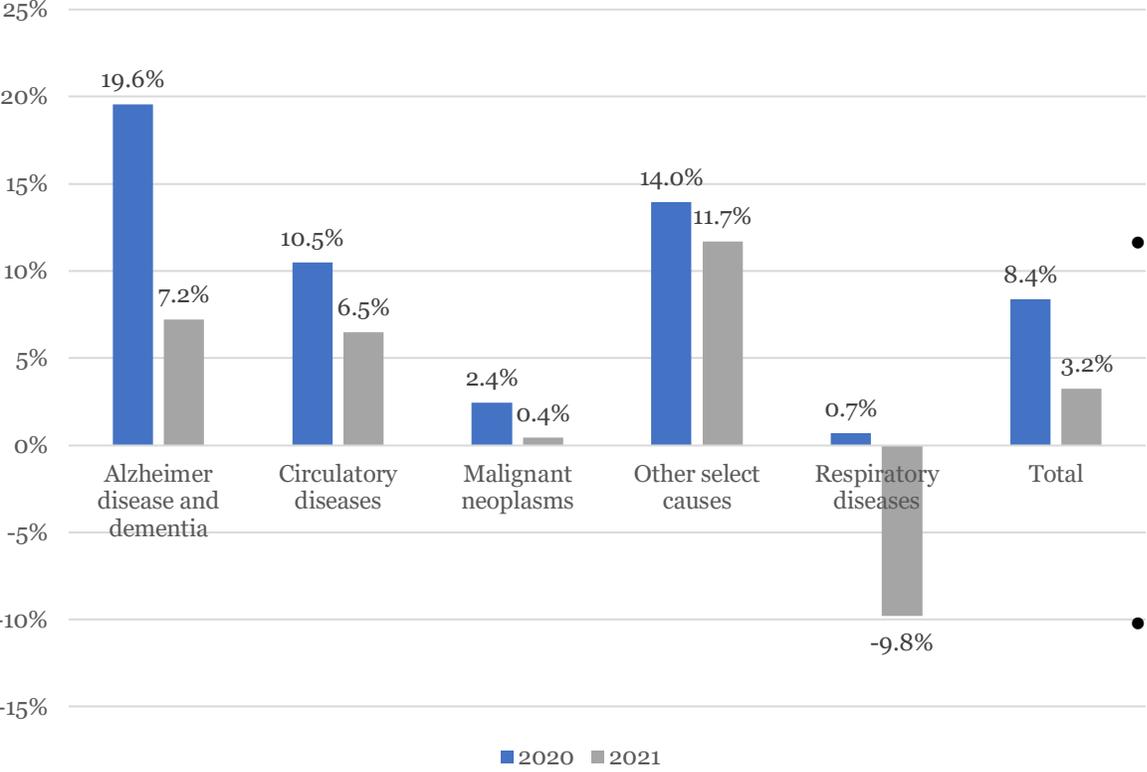


- Hispanics experienced the sharpest percentage increase in all-cause observed deaths in 2020 (+61.8%) and 2021 (+62.3%) compared to their 2015-2019 historical average, followed by American Indians/Alaska Natives (+46.6% and 52.1%) and Asians (44.6% and 42.1%).
- Compared to 2015-2019 averages, Hispanic, AI/AN, Asian, and Black populations all increased their share of total observed deaths across 2020-2021, while White population’s share of all deaths fell 3.8 percentage points. The Hispanic population share of all US deaths rose the most, by 2.1 percentage points.

Data Used to Perform Our Tabulations: Centers for Disease Control and Prevention

Total Deaths by Cause

Total Deaths by Cause, Change from 2015-2019 Group Average



- Deaths from Alzheimer’s disease/dementia (+19.6% in 2020 and 7.2% in 2021) increased the most during the pandemic, followed by deaths from circulatory disease (+10.5% and 6.5%).
- As a share of all deaths, deaths from Alzheimer’s disease/dementia increased by 1.2 and 0.5 percentage points in 2020 and 2021, respectively. Deaths from cancer fell 1.5 and 0.8 percentage points over the period, in 2020 and 2021, respectively.
- Deaths non-attributable to Covid fell from 2020 to 2021.

Data Used to Perform Our Tabulations: Centers for Disease Control and Prevention



Data Sources and Methodology Notes

- We use all-cause observed deaths data from the Centers for Disease Control and Prevention (CDC). These data are provisional, meaning recent death counts are likely incomplete, and the degree of completeness varies considerably by jurisdiction and time.
- Data can be incomplete because of the time lag between when the death occurred and when the death certificate is completed, submitted to the National Center for Health Statistics (NCHS), and reported. This delay can range from 1 week to 8 weeks or more, depending on the jurisdiction and cause of death.
- More recent death figures are adjusted to account for incomplete data, based on completeness of provisional data in prior years.

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, 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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