

Maternal Mortality Rates in the United States, 2022

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This report presents maternal mortality rates for 2022 based on data from the National Vital Statistics System. A maternal death is defined by the World Health Organization as “the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes” (1). Maternal mortality rates—the number of maternal deaths per 100,000 live births—are shown in this report by age group and race and Hispanic origin.

This report updates a previous one that showed maternal mortality rates for 2018–2021 (2). In 2022, 817 women died of maternal causes in the United States, compared with 1,205 in 2021, 861 in 2020, 754 in 2019, and 658 in 2018 (2). The maternal mortality rate for 2022 decreased to 22.3 deaths per 100,000 live births, compared with a rate of 32.9 in 2021 (Figure 1 and Table).

In 2022, maternal mortality rates decreased significantly for Black non-Hispanic (subsequently, Black), White non-Hispanic (subsequently, White), and Hispanic women (Figure 2 and Table). The observed decrease for Asian non-Hispanic women (subsequently, Asian) was not statistically significant. In 2022, the maternal mortality rate for Black women was 49.5 deaths per 100,000 live births and was significantly higher than rates for White (19.0), Hispanic (16.9), and Asian (13.2) women.

Rates decreased significantly for each age group from 2021 to 2022 (Figure 3 and Table). Rates in 2022 were 14.4 deaths per 100,000 live births for women younger than 25, 21.1 for those ages 25–39, and 87.1 for those age 40 and older. The rate for women age 40 and older was six times higher than the rate for women younger than age 25. Differences in the rates between age groups were statistically significant.

Data source and methods

Data are from the National Vital Statistics System mortality file (3). Consistent with previous reports, the number of maternal deaths does not include all deaths occurring to pregnant or recently pregnant women, but only those deaths with the underlying cause of death assigned to *International Statistical Classification of Diseases, 10th Revision* codes A34, O00–O95, and O98–O99. Maternal mortality rates are per 100,000 live births, based on data from the



National Vital Statistics System natality file. Maternal mortality rates fluctuate from year to year because of the relatively small number of these events, and possibly because of issues with the accuracy of reporting of maternal deaths on death certificates (4). Efforts to improve data quality are ongoing, and these data will continue to be evaluated for possible errors. Data are shown for only the four largest race and Hispanic-origin groups for which statistically reliable rates can be calculated, and numbers and rates are suppressed for those groups for which statistically reliable rates cannot be calculated (5). Additional details and data on provisional maternal mortality rates are available (6,7).

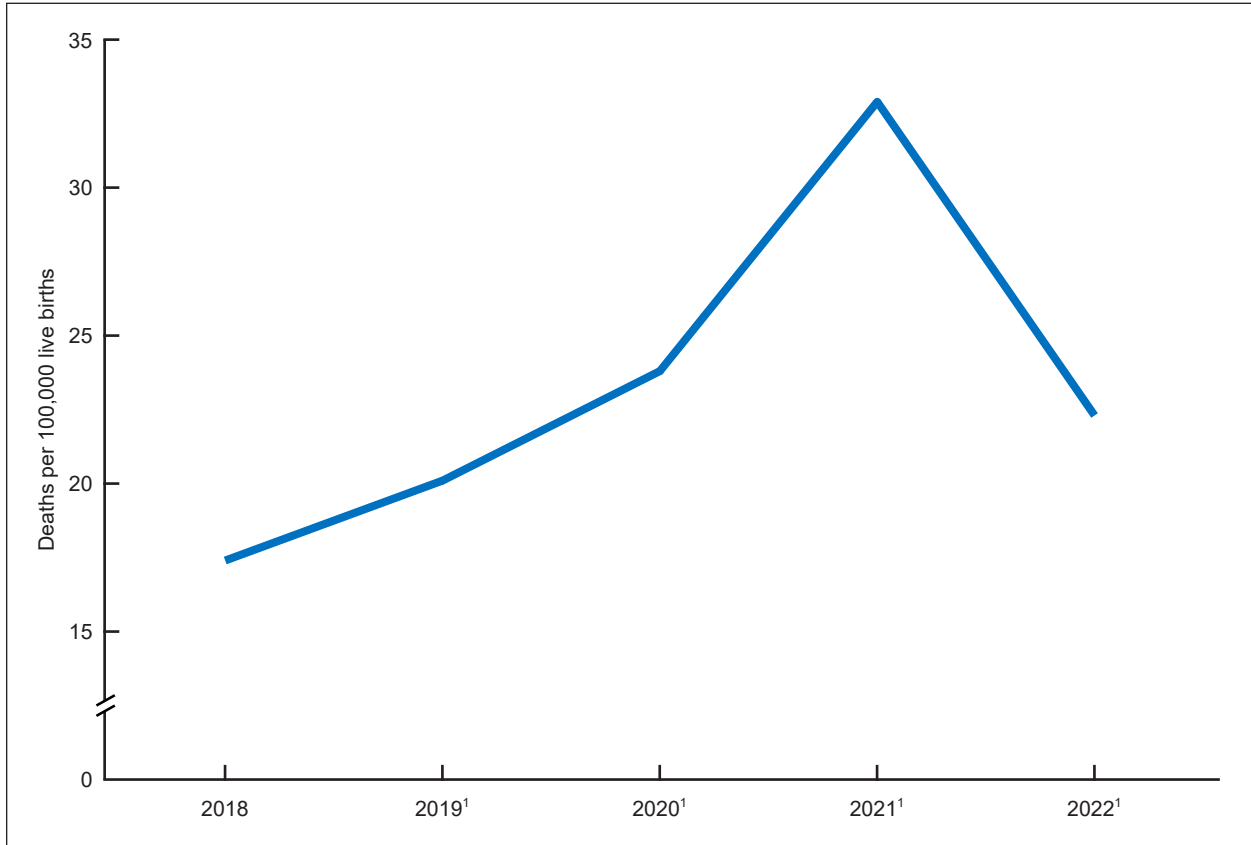
References

1. World Health Organization. International statistical classification of diseases and related health problems, 10th revision. 2008 ed. 2009.
2. Hoyert DL. Maternal mortality rates in the United States, 2021. NCHS Health E-Stats. 2023. DOI: <https://dx.doi.org/10.15620/cdc:124678>.
3. Kochanek KD, Murphy SL, Xu JQ, Arias E. Mortality in the United States, 2022. NCHS Data Brief, no 492. Hyattsville, MD: National Center for Health Statistics. 2024. DOI: <https://dx.doi.org/10.15620/cdc:135850>.
4. Hoyert DL, Miniño AM. Maternal mortality in the United States: Changes in coding, publication, and data release, 2018. National Vital Statistics Reports; vol 69 no 2. Hyattsville, MD: National Center for Health Statistics. 2020.
5. Kochanek KD, Murphy SL, Xu JQ, Arias E. Deaths: Final data for 2020. National Vital Statistics Reports; vol 72 no 10. Hyattsville, MD: National Center for Health Statistics. 2023. DOI: <https://dx.doi.org/10.15620/cdc:131355>.
6. National Center for Health Statistics. Maternal mortality. Available from: <https://www.cdc.gov/nchs/maternal-mortality/index.htm>.
7. National Center for Health Statistics. Provisional maternal mortality rates. Available from: <https://www.cdc.gov/nchs/nvss/vsrr/provisional-maternal-deaths-rates.htm>.

Suggested citation

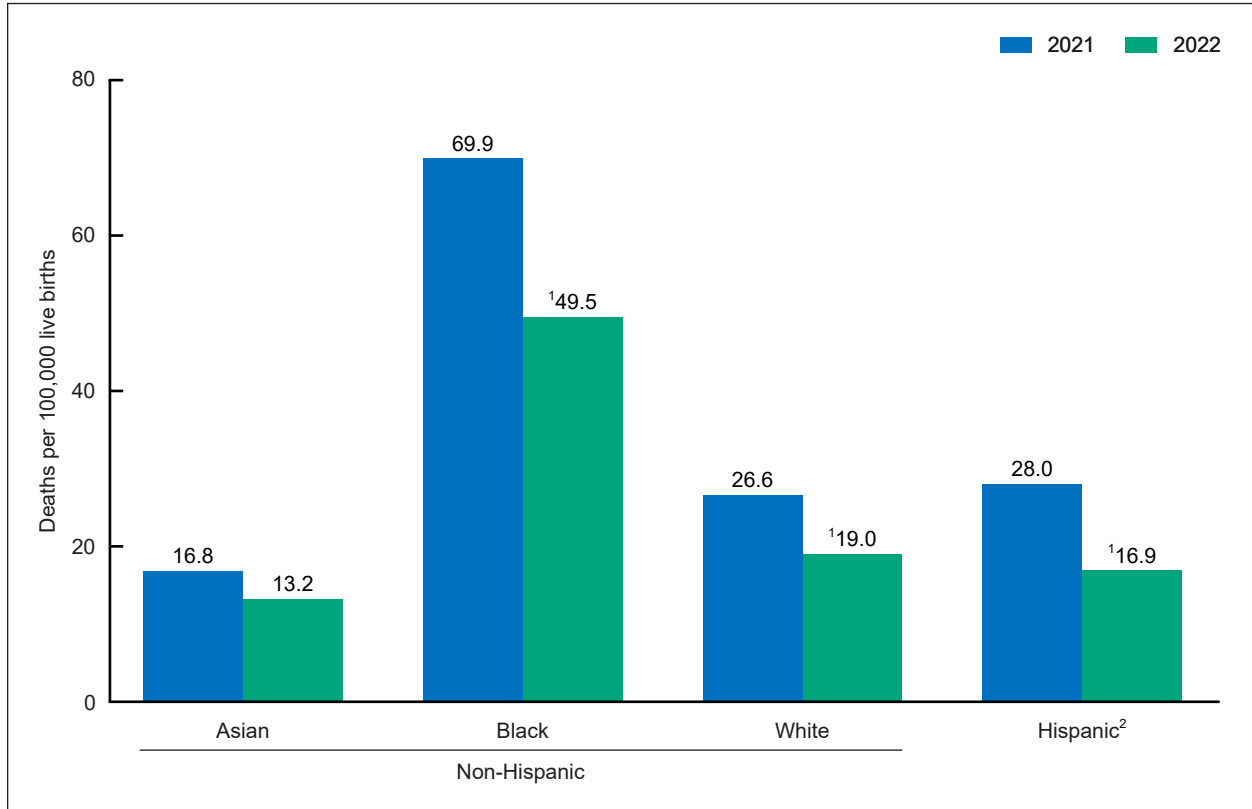
Hoyert DL. Maternal mortality rates in the United States, 2022. NCHS Health E-Stats. 2024. DOI: <https://dx.doi.org/10.15620/cdc/152992>.

Figure 1. Maternal mortality rate: United States, 2018–2022



¹Statistically significant change from previous year ($p < 0.05$).
SOURCE: National Center for Health Statistics, National Vital Statistics System, mortality data files.

Figure 2. Maternal mortality rate, by race and Hispanic origin: United States, 2021 and 2022



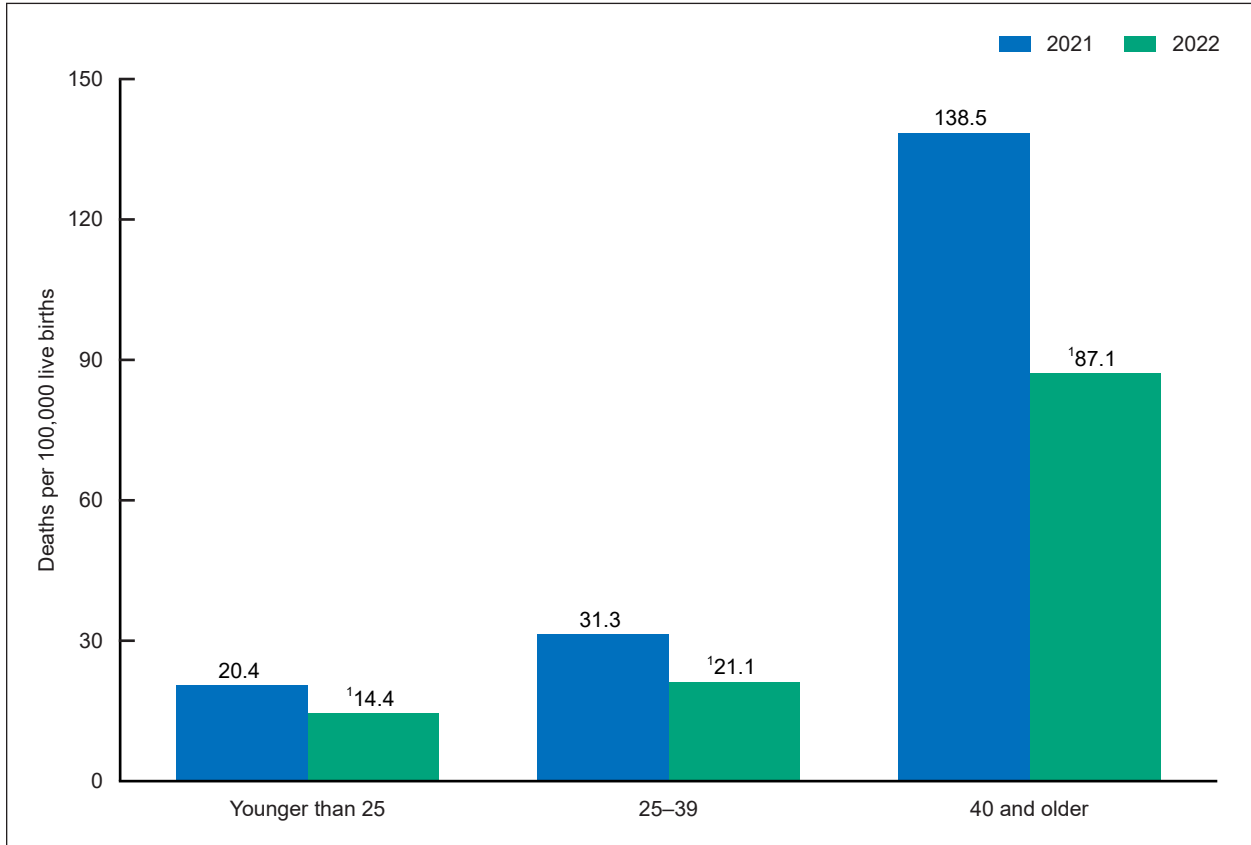
¹Statistically significant decrease from previous year ($p < 0.05$).

²Hispanic people may be of any race.

NOTE: Race groups are single race.

SOURCE: National Center for Health Statistics, National Vital Statistics System, mortality data files.

Figure 3. Maternal mortality rate, by age group: United States, 2021 and 2022



¹Statistically significant decrease from previous year ($p < 0.05$).
SOURCE: National Center for Health Statistics, National Vital Statistics System, mortality data files.

Table. Number of live births and maternal deaths, and maternal mortality rates, by race and Hispanic origin and age: United States, 2018–2022

Race and Hispanic origin and age	2018			2019			2020			2021			2022		
	Number of live births	Number of deaths	Maternal mortality rate ¹	Number of live births	Number of deaths	Maternal mortality rate ¹	Number of live births	Number of deaths	Maternal mortality rate ¹	Number of live births	Number of deaths	Maternal mortality rate ¹	Number of live births	Number of deaths	Maternal mortality rate ¹
Total ²	3,791,712	658	17.4	3,747,540	754	20.1	3,613,647	861	23.8	3,664,292	1,205	32.9	3,667,758	817	22.3
Younger than 25	907,782	96	10.6	877,803	111	12.6	825,403	114	13.8	797,334	163	20.4	784,299	113	14.4
25–39	2,756,974	458	16.6	2,739,976	544	19.9	2,658,445	607	22.8	2,731,223	854	31.3	2,738,802	578	21.1
40 and older	126,956	104	81.9	129,761	98	75.5	129,799	140	107.9	135,735	188	138.5	144,657	126	87.1
Asian, non-Hispanic ³	240,798	32	13.3	238,769	33	13.8	219,068	27	12.3	213,813	36	16.8	218,994	29	13.2
Younger than 25	16,338	*	*	15,071	*	*	12,993	*	*	11,149	*	*	11,002	*	*
25–39	211,331	25	11.8	210,177	28	13.3	193,139	20	10.4	189,405	24	12.7	193,025	21	10.9
40 and older	13,129	*	*	13,521	*	*	12,936	*	*	13,259	*	*	14,967	*	*
Black, non-Hispanic ³	552,029	206	37.3	548,075	241	44.0	529,811	293	55.3	517,889	362	69.9	511,439	253	49.5
Younger than 25	176,243	27	15.3	169,853	32	18.8	159,541	46	28.8	149,435	62	41.5	140,498	44	31.3
25–39	358,276	137	38.2	360,206	179	49.7	351,648	198	56.3	349,170	242	69.3	349,740	172	49.2
40 and older	17,510	42	239.9	18,016	30	166.5	18,622	49	263.1	19,284	58	300.8	21,201	37	174.5
White, non-Hispanic ³	1,956,413	291	14.9	1,915,912	343	17.9	1,843,432	352	19.1	1,887,656	503	26.6	1,840,739	350	19.0
Younger than 25	391,829	41	10.5	374,129	49	13.1	348,666	40	11.5	336,792	57	16.9	324,604	35	10.8
25–39	1,504,888	207	13.8	1,480,595	248	16.8	1,433,839	253	17.6	1,486,249	364	24.5	1,449,365	259	17.9
40 and older	59,696	43	72.0	61,188	46	75.2	60,927	59	96.8	64,615	82	126.9	66,770	56	83.9
Hispanic ⁴	886,210	105	11.8	886,467	112	12.6	866,713	158	18.2	885,916	248	28.0	937,421	158	16.9
Younger than 25	275,553	21	7.6	270,948	23	8.5	258,635	20	7.7	255,806	36	14.1	264,310	25	9.5
25–39	579,553	72	12.4	584,109	71	12.2	576,690	111	19.2	597,703	184	30.8	637,735	108	16.9
40 and older	31,104	*	*	31,410	*	*	31,388	27	86.0	32,407	28	86.4	35,376	25	70.7

* Estimate does not meet National Center for Health Statistics standards of reliability.

¹Deaths per 100,000 live births.

²Total includes deaths for race and Hispanic-origin groups not shown separately, including women of multiple races and origin not stated.

³Race groups are single race.

⁴Hispanic people may be of any race.

NOTES: Maternal causes are those assigned to codes A34, O00–O95, and O98–O99 of the *International Classification of Diseases, 10th Revision, 1992*. Maternal deaths occur while pregnant or within 42 days of being pregnant.

SOURCE: National Center for Health Statistics, National Vital Statistics System, mortality and natality data files.