

Change in fetal mortality rate by state, 2019–2020 and 2020–2021

- From 2020 to 2021, changes in the fetal mortality rate were not significant for 47 states and the District of Columbia (D.C.). The rate increased 13% in Pennsylvania (from 5.09 to 5.75) and 29% in Utah (from 5.12 to 6.59) and decreased 14% in Indiana (from 6.02 to 5.15) (Table 2 and Figure 3).
- Changes in the fetal mortality rate were also not significant in 47 states and D.C. in 2020 compared with 2019. The fetal mortality rate declined in 2 states (Pennsylvania and North Carolina) and increased in 1 state (California).

Summary

This report found that total, early, and late fetal mortality rates did not change significantly from 2020 to 2021, the second year of the COVID-19 pandemic; a similar lack of change in these measures was seen for 2019–2020. The only significant change between 2020 and 2021 in fetal mortality was for non-Hispanic Black women, for whom the fetal mortality rate declined 5%; this rate is down a total of 6% from 2019. Rates were essentially unchanged for non-Hispanic White and Hispanic women between 2020 and 2021, also similar to patterns observed for 2019–2020.

Fetal mortality rates were not significantly different for nearly all reporting areas (47 states and D.C.) from 2020 to 2021; a similar lack of change for most states was seen for 2019–2020. However, state-specific fetal mortality rates are subject to more variation than the national rate due to small numbers, and 1-year differences may be difficult to detect in small states.

Except for the decline for non-Hispanic Black women, fetal mortality rates were unchanged overall and for other groups studied for 2020–2021, the second year of the COVID-19 pandemic,

following a pattern similar to that seen for 2019–2020, the first year of the pandemic.

A study based on a large U.S. hospital-based administrative database, and another based on a systematic review and meta-analysis of observational studies, have found an association between COVID-19 in pregnancy and fetal death (2,3). Another recent study found a small shift in the distribution of cause of fetal death that may be associated with COVID-19 (6). Although this report did not find an overall increase in fetal mortality in the United States between 2020 and 2021, it is important to note that maternal COVID-19 status is not routinely collected on reports of fetal death unless entered as a cause of death and, therefore, its impact cannot be directly examined here.

References

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Table 1. Number of fetal deaths and fetal mortality rates, by selected characteristics: United States, final 2019 and 2020 and provisional 2021 data

Selected characteristics	Number of fetal deaths			Fetal mortality rate ¹			Percent change	
	2019	2020	2021	2019	2020	2021	2019–2020	2020–2021
Total ²	21,478	20,854	20,948	5.70	5.74	5.68	1	–1
Early ^{3,4}	11,216	10,764	10,764	2.98	2.97	2.93	0	–1
Late ^{4,5}	10,262	10,090	10,184	2.73	2.78	2.77	2	0
Race and Hispanic origin ^{2,6} :								
Non-Hispanic, single race White	9,067	8,753	9,125	4.71	4.73	4.81	0	2
Non-Hispanic, single race Black	5,766	5,536	5,125	10.41	10.34	9.80	–1	*–5
Hispanic ⁷	4,264	4,231	4,263	4.79	4.86	4.79	1	–1

* Significant change ($p < 0.05$).

¹Number of fetal deaths in specified group per 1,000 live births and fetal deaths.

²Fetal deaths with stated or presumed period of gestation of 20 weeks or more.

³Fetal deaths at 20–27 weeks of gestation.

⁴Not-stated gestational age is proportionally distributed.

⁵Fetal deaths at 28 weeks of gestation or more.

⁶Race and Hispanic origin are reported separately on reports of fetal death; persons of Hispanic origin may be of any race. In this table, non-Hispanic women are classified by race. Race categories are consistent with 1997 Office of Management and Budget standards. Single race is defined as only one race reported on the fetal death report.

⁷Includes all persons of Hispanic origin of any race.

SOURCE: National Center for Health Statistics, National Vital Statistics System.

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Table 2. Number of fetal deaths and fetal mortality rate, by state of residence: United States, final 2019 and 2020 and provisional 2021 data

Area	Number of fetal deaths			Fetal mortality rate ¹			Percent change	
	2019	2020	2021	2019	2020	2021	2019–2020	2020–2021
Alabama	526	489	509	8.89	8.41	8.69	-5	3
Alaska	55	54	57	5.57	5.67	6.05	2	7
Arizona	497	459	485	6.22	5.93	6.19	-5	4
Arkansas	306	318	301	8.30	8.94	8.30	8	-7
California	2,171	2,196	2,242	4.84	5.20	5.30	*7	2
Colorado	350	327	315	5.54	5.29	4.98	-5	-6
Connecticut ²	133	149	131	3.87	4.43	3.66	14	-17
Delaware	59	57	52	5.56	5.46	4.94	-2	-10
District of Columbia	86	70	66	9.38	7.83	7.56	-17	-3
Florida	1,538	1,458	1,593	6.94	6.91	7.31	0	6
Georgia	976	1,007	1,017	7.66	8.16	8.13	7	0
Hawaii	85	103	110	5.03	6.48	6.99	29	8
Idaho	112	117	112	5.05	5.40	4.97	7	-8
Illinois	829	754	790	5.88	5.62	5.94	-4	6
Indiana	489	476	414	6.01	6.02	5.15	0	*-14
Iowa	196	166	165	5.18	4.58	4.46	-12	-3
Kansas	196	168	195	5.51	4.86	5.59	-12	15
Kentucky	306	327	329	5.73	6.29	6.26	10	0
Louisiana	290	322	289	4.90	5.59	5.01	14	-10
Maine	65	74	66	5.49	6.37	5.47	16	-14
Maryland	462	466	437	6.54	6.75	6.36	3	-6
Massachusetts	298	278	290	4.29	4.17	4.18	-3	0
Michigan	652	612	593	6.01	5.85	5.62	-3	-4
Minnesota	359	343	351	5.41	5.38	5.42	-1	1
Mississippi	348	380	353	9.41	10.60	9.94	13	-6
Missouri	402	431	390	5.54	6.18	5.58	12	-10
Montana	54	44	39	4.85	4.06	3.46	-16	-15
Nebraska	125	104	98	5.02	4.26	3.97	-15	-7
Nevada	230	260	282	6.52	7.67	8.30	18	8
New Hampshire	55	54	65	4.62	4.56	5.12	-1	12
New Jersey	694	658	617	6.92	6.67	6.04	-4	-9
New Mexico	69	77	70	3.00	3.50	3.26	17	-7
New York (including New York City)	1,331	1,338	1,289	5.97	6.35	6.08	6	-4
North Carolina	784	680	646	6.56	5.79	5.33	*-12	-8
North Dakota	66	61	52	6.27	6.03	5.12	-4	-15
Ohio	850	746	759	6.28	5.74	5.81	-9	1
Oklahoma	282	302	268	5.71	6.30	5.51	10	-13
Oregon	189	205	187	4.49	5.12	4.55	14	-11
Pennsylvania	802	668	767	5.94	5.09	5.75	*-14	*13
Rhode Island	49	63	55	4.79	6.20	5.23	29	-16
South Carolina	345	310	322	6.01	5.53	5.60	-8	1
South Dakota	69	67	76	5.99	6.08	6.64	2	9
Tennessee	498	520	537	6.15	6.56	6.53	7	0
Texas	1,504	1,492	1,424	3.97	4.04	3.80	2	-6
Utah	246	235	310	5.23	5.12	6.59	-2	*29
Vermont	20	27	27	3.72	5.23	4.99	41	-5
Virginia	485	466	492	4.95	4.89	5.11	-1	4
Washington	484	448	451	5.67	5.36	5.35	-5	0
West Virginia	79	80	88	4.34	4.60	5.09	6	11
Wisconsin	342	317	322	5.38	5.20	5.18	-3	0
Wyoming	40	31	53	6.06	5.03	8.43	-17	68

* Significant change ($p < 0.05$).

¹Number of fetal deaths per 1,000 live births and fetal deaths.

²Fetal deaths were underreported in 2019 and may be underreported in 2020.

SOURCE: National Center for Health Statistics, National Vital Statistics System.

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Suggested citation

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