

Medicaid's Role in Financing Maternity Care

Medicaid plays a key role in providing maternity-related services for pregnant women, paying for slightly less than half of all births nationally in 2018. Medicaid covered a greater share of births in rural areas and among minority women. Given its disproportionate role in covering these births, Medicaid could play a key role in addressing concerns about rising pregnancy-related mortality and morbidity and significant racial and ethnic disparities in maternal outcomes (CDC 2019, Petersen et al. 2019a, 2019b).¹

This fact sheet begins by describing Medicaid's role in financing births in comparison to other payers and across states. It then presents data on the characteristics of women whose births are paid for by Medicaid, including demographic and health characteristics, location of birth, attendant, access to prenatal care, and outcomes.²

Medicaid's Role in Covering Births

Medicaid paid for 43 percent of all births in 2018, while private coverage paid for just under half (49.1 percent). Fewer births were uninsured (4.1 percent) or paid by another payer (3.8 percent).³ Medicaid paid for a greater share of births in rural areas, among young women (under age 19), and women with lower levels of educational attainment. Medicaid also paid for a greater share of Hispanic, African American, and American Indian and Alaska Native women's births (Table A-1).

The share of births covered by Medicaid varies across states, ranging from about 25 percent in North Dakota to about 63 percent in Louisiana and Mississippi. Medicaid paid for more than half of births in six states: Arizona, Louisiana, Mississippi, New Mexico, Oklahoma, and Tennessee (Table A-2).

Characteristics of Mothers with Medicaid Coverage and Their Births

Most mothers whose births were covered by Medicaid (79.3 percent) were between the ages of 20 and 34; more than half of Medicaid-covered births (55.0 percent) were among white, non-Hispanic women (Table A-3).⁴ While, as noted above, Medicaid paid for a larger share of births in rural areas than other payers, the majority (84.3 percent) of Medicaid-financed births occurred in urban areas. In comparing mothers with Medicaid coverage in rural and urban areas, a greater percentage of rural mothers were younger than 20. A greater proportion of mothers in rural areas were also white, non-Hispanic; conversely, a greater proportion of women living in urban areas whose birth was paid for by Medicaid were Hispanic and black, non-Hispanic (Table A-4).

Potential complicating health conditions



Two-thirds of mothers covered by Medicaid had a prior birth; 6 percent of them had a prior preterm birth and 25 percent had a prior cesarean section delivery. In addition, more than half of women whose births were paid for by Medicaid were either overweight or obese and almost 15 percent smoked cigarettes prior to pregnancy. Greater shares of women in Medicaid were overweight or obese or reported cigarette smoking compared to privately insured or uninsured women. Just 1 percent of women covered by Medicaid had pre-pregnancy diabetes and 2 percent had pre-pregnancy hypertension (Table A-3). The share of women with potential complicating health conditions was similar across rural and urban areas for those covered by Medicaid. An exception was cigarette smoking, which was more prevalent in rural areas (Table A-4).

Location of birth and attendant

Almost all births financed by Medicaid occurred in a hospital setting. This did not vary considerably by state, with most states having less than 1 percent of Medicaid births occurring outside a hospital. Alaska is the outlier with slightly more than 4 percent of births occurred in freestanding birth centers. While more than 90 percent of Medicaid-financed births were attended by a doctor, there was wide variation across states. In 23 states, more than 10 percent of births were attended by a certified nurse midwife, with approximately 30 percent of births attended by a certified nurse midwife in Alaska and New Mexico (Table A-5).⁵ Place of birth and attendant did not differ when looking at women in rural and urban areas who had Medicaid coverage (Table A-4).

Nationally, birth location did not vary between women covered by Medicaid and those with private insurance, with 99 percent of privately insured births occurring in a hospital and 90 percent of privately insured births attended by a doctor. Women who were uninsured had a smaller share of births occurring in a hospital (81.2 percent) and a greater share of births occurring at home (13.9 percent). Larger shares of women with uninsured births were attended by certified nurse midwives (11.8 percent) or other midwives (10.3 percent).

Access to prenatal care

Over two-thirds of women whose births were financed by Medicaid (68.3 percent) started prenatal care during the first trimester and more than three-quarters (76.3 percent) received nine or more prenatal care visits over the course of their pregnancy.⁶ However, there was considerable state variation; just over half of women in the District of Columbia began prenatal care in the first trimester and 55 percent received at least nine prenatal care visits. In contrast, in Vermont, 85 percent of women began their prenatal care in the first trimester and almost 90 percent of women received at least nine prenatal care visits (Table A-6). Women living in rural and urban areas with Medicaid coverage did not differ on these access measures (Table A-4).

Greater shares of women with private coverage received prenatal care. Specifically, 87 percent began prenatal care in their first trimester and 88 percent received nine or more prenatal visits. In contrast, just over half of women who were uninsured (55.1 percent) began prenatal care in the first trimester and 66 percent received nine or more prenatal care visits. These findings align with prior MACPAC findings that, in general, women whose births were paid for by Medicaid were less likely to both receive prenatal care in the



first trimester and receive adequate prenatal care compared to privately insured women. However, when compared to uninsured women, women with Medicaid were more likely to receive adequate prenatal care (MACPAC 2018).

Birth outcomes

Almost one-third of women covered by Medicaid delivered their infants via cesarean section, ranging from about 20 percent in Alaska to about 37 percent in Mississippi. Eleven percent of infants born to Medicaid-covered mothers were preterm (delivered prior to 37 weeks) and about 10 percent were low birthweight (less than 2,500 grams). The rate of preterm births was highest in Mississippi (14.4 percent) and lowest in Vermont (8.7 percent). The rate of low-birthweight infants was highest in the District of Columbia (13.1 percent) and lowest in Alaska, California, and Utah (6.7 percent) (Table A-6).

About one-third of privately insured women and 25 percent of uninsured women delivered via cesarean section; approximately 9 percent of privately insured and uninsured women had a preterm birth and 7 percent had a low-birthweight baby. MACPAC's prior work found no differences in maternal or birth outcomes when comparing privately insured women with those covered by Medicaid; however, when compared to uninsured women, women with Medicaid were more likely to have cesarean sections and low-birthweight babies (MACPAC 2018).

Endnotes

¹ According to the Centers for Disease Control and Prevention (CDC), the reasons for the overall increase in pregnancy-related mortality are unclear. Due to the use of computerized data linkages by states, changes in the way causes of death are coded, and the addition of a pregnancy checkbox to the death certificate, the identification of pregnancy-related deaths has improved. However, noted errors in reported pregnancy status on death certificates may be leading to overestimation of the number of pregnancy-related deaths. It is not clear whether the actual risk of a woman dying from pregnancy-related causes has increased, and in recent years the pregnancy-related mortality ratios (the estimate of the number of pregnancy-related deaths for every 100,000 live births) have been relatively stable. Currently available data do not report the number of women covered by Medicaid who die from pregnancy-related causes (CDC 2019).

² For this analysis, MACPAC worked with our survey data contractor, the State Health Access Data Assistance Center at the University of Minnesota, using Centers for Disease Control and Prevention (CDC) natality data. The CDC natality data are derived from birth certificates and essentially report a complete count of live births occurring within the United States to U.S. residents. In other MACPAC work using survey data, we conduct statistical testing to account for sampling error. Although the data used in this fact sheet are not subject to sampling error, CDC documentation notes that these data may be affected by other errors, such as mistakes in recording the mother's residence or age.

³ Those reporting self-pay are coded as uninsured.

⁴ While the reporting here focuses on Medicaid-financed births, the appendix tables also include data for other payers for comparison.



⁵ This does not include births attended by other midwives.

⁶ Adequate prenatal care is defined as the initiation of prenatal care in the first trimester and nine or more visits (Kessner et al. 1973).

References

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Appendix: Medicaid’s Role in Financing Maternity Care

TABLE A-1. Number and Share of Births, by Payer and Maternal Characteristics, 2018

Characteristic	Total	Medicaid	Private	Uninsured	Other
Total births	3,832,168	43.0%	49.1%	4.1%	3.8%
Residence					
Rural	516,779	50.0%	41.1%	4.9%	4.0%
Urban	3,315,389	41.9%	50.3%	4.0%	3.8%
Maternal age					
0–19	194,988	77.5%	15.2%	3.6%	3.8%
20–34	2,962,002	44.1%	48.0%	4.0%	4.0%
35 or older	675,178	28.2%	63.9%	4.8%	3.1%
Maternal Hispanic ethnicity					
Hispanic or Latino	894,418	60.2%	28.5%	6.7%	4.7%
Not Hispanic or Latino	2,906,389	37.8%	55.3%	3.3%	3.6%
Maternal race					
American Indian or Alaska Native, non-Hispanic	29,699	67.3%	19.5%	1.8%	11.4%
White, non-Hispanic	1,979,495	30.5%	63.1%	3.0%	3.4%
Black, non-Hispanic	557,571	65.9%	27.7%	3.0%	3.4%
Asian, non-Hispanic	248,410	25.0%	65.2%	6.8%	2.9%
Native Hawaiian or Pacific Islander, non-Hispanic	9,315	56.2%	28.6%	6.3%	8.9%
More than one race, non-Hispanic	81,899	49.3%	43.0%	2.1%	5.6%
Maternal years of education					
8th grade or less	123,476	66.7%	7.3%	21.2%	4.8%
Some high school	378,566	79.1%	10.8%	6.0%	4.1%
High school diploma or GED certificate	967,101	65.8%	26.8%	3.6%	3.8%
Some college or associate’s degree	1,090,106	44.4%	48.5%	2.6%	4.6%
College or graduate degree	1,224,980	10.2%	83.4%	3.5%	2.9%

Notes: Percentages are calculated based on number of births. Total number of births may be inconsistent across breakdowns due to missing values or suppression. Urban and rural categories are based on the mother’s legal county of residence as recorded on the birth certificate and are defined using the 2013 National Center for Health Statistics Urban-Rural Scheme for Counties. Urban includes counties classified as large central metro, large fringe metro, medium metro, and small metro. Rural includes counties classified as micropolitan and non-core.

Source: MACPAC, 2019, analysis of U.S. Centers for Disease Control and Prevention WONDER online database, Natality information—live births, <https://wonder.cdc.gov/natality.html>.

TABLE A-2. Number of Births, by Payer, by State, 2018

State	Total	Medicaid		Private insurance		Uninsured		Other	
	Number	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	3,832,168	1,647,833	43.0%	1,881,528	49.1%	156,604	4.1%	146,203	3.8%
Alabama	58,908	29,120	49.4%	26,348	44.7%	1,272	2.2%	2,168	3.7%
Alaska	10,267	4,026	39.2%	3,877	37.8%	325	3.2%	2,039	19.9%
Arizona	81,696	43,517	53.3%	33,241	40.7%	2,713	3.3%	2,225	2.7%
Arkansas	37,003	16,921	45.7%	18,036	48.7%	1,072	2.9%	974	2.6%
California	471,142	202,943	43.1%	229,115	48.6%	19,000	4.0%	20,084	4.3%
Colorado	64,186	25,261	39.4%	33,088	51.6%	1,642	2.6%	4,195	6.5%
Connecticut	35,144	13,058	37.2%	19,499	55.5%	1,836	5.2%	751	2.1%
Delaware	10,841	4,855	44.8%	5,403	49.8%	215	2.0%	368	3.4%
District of Columbia	9,540	4,155	43.6%	4,608	48.3%	77	0.8%	700	7.3%
Florida	222,687	109,078	49.0%	93,061	41.8%	13,701	6.2%	6,847	3.1%
Georgia	129,008	59,425	46.1%	50,350	39.0%	8,633	6.7%	10,600	8.2%
Hawaii	17,491	5,490	31.4%	7,382	42.2%	573	3.3%	4,046	23.1%
Idaho	22,156	8,196	37.0%	11,890	53.7%	1,269	5.7%	801	3.6%
Illinois	148,709	60,852	40.9%	84,181	56.6%	2,280	1.5%	1,396	0.9%
Indiana	81,993	33,693	41.1%	42,903	52.3%	3,764	4.6%	1,633	2.0%
Iowa	38,410	15,381	40.0%	21,429	55.8%	1,230	3.2%	370	1.0%
Kansas	36,398	11,466	31.5%	20,435	56.1%	2,487	6.8%	2,010	5.5%
Kentucky	54,331	26,158	48.2%	24,024	44.2%	1,914	3.5%	2,235	4.1%
Louisiana	61,016	38,340	62.8%	20,648	33.8%	504	0.8%	1,524	2.5%
Maine	12,260	4,804	39.2%	6,703	54.7%	478	3.9%	275	2.2%
Maryland	71,263	28,631	40.2%	38,102	53.5%	2,232	3.1%	2,298	3.2%
Massachusetts	70,598	19,652	27.8%	47,788	67.7%	542	0.8%	2,616	3.7%
Michigan	111,097	46,989	42.3%	61,988	55.8%	1,586	1.4%	534	0.5%
Minnesota	68,454	21,871	32.0%	43,378	63.4%	1,607	2.4%	1,598	2.3%
Mississippi	37,307	23,339	62.6%	12,358	33.1%	1,149	3.1%	461	1.2%
Missouri	72,008	27,919	38.8%	40,071	55.7%	2,508	3.5%	1,510	2.1%
Montana	11,774	4,864	41.3%	5,616	47.7%	617	5.2%	677	5.8%
Nebraska	25,501	8,822	34.6%	14,905	58.5%	980	3.8%	794	3.1%
Nevada	35,508	16,834	47.4%	15,589	43.9%	1,746	4.9%	1,339	3.8%
New Hampshire	12,029	3,091	25.7%	8,316	69.1%	202	1.7%	420	3.5%
New Jersey	101,221	31,194	30.8%	60,977	60.2%	7,966	7.9%	1,084	1.1%
New Mexico	23,737	13,350	56.2%	6,781	28.6%	1,546	6.5%	2,060	8.7%
New York	228,873	110,653	48.4%	107,662	47.0%	2,784	1.2%	7,774	3.4%

TABLE A-2. (continued)

State	Total	Medicaid		Private insurance		Uninsured		Other	
	Number	Number	Percent	Number	Percent	Number	Percent	Number	Percent
North Carolina	120,010	51,686	43.1%	54,138	45.1%	8,327	6.9%	5,859	4.9%
North Dakota	10,602	2,677	25.3%	5,940	56.0%	283	2.7%	1,702	16.1%
Ohio	135,913	57,120	42.0%	68,586	50.5%	6,407	4.7%	3,800	2.8%
Oklahoma	50,095	25,959	51.8%	20,066	40.1%	1,038	2.1%	3,032	6.1%
Oregon	43,518	19,639	45.1%	22,409	51.5%	886	2.0%	584	1.3%
Pennsylvania	133,209	45,537	34.2%	78,578	59.0%	6,146	4.6%	2,948	2.2%
Rhode Island	10,627	5,146	48.4%	5,216	49.1%	71	0.7%	194	1.8%
South Carolina	56,874	28,253	49.7%	24,518	43.1%	1,626	2.9%	2,477	4.4%
South Dakota	12,080	3,871	32.0%	7,162	59.3%	360	3.0%	687	5.7%
Tennessee	76,755	39,045	50.9%	33,041	43.1%	1,521	2.0%	3,148	4.1%
Texas	381,322	180,969	47.5%	151,035	39.6%	27,959	7.3%	21,359	5.6%
Utah	47,016	12,222	26.0%	30,281	64.4%	2,506	5.3%	2,007	4.3%
Vermont	5,644	2,421	42.9%	2,951	52.3%	91	1.6%	181	3.2%
Virginia	100,237	30,247	30.2%	62,394	62.3%	5,238	5.2%	2,358	2.4%
Washington	86,174	34,135	39.6%	45,417	52.7%	962	1.1%	5,660	6.6%
West Virginia	18,557	9,261	49.9%	8,757	47.2%	365	2.0%	174	0.9%
Wisconsin	64,104	23,500	36.7%	37,472	58.5%	1,832	2.9%	1,300	2.0%
Wyoming	6,875	2,197	32.0%	3,815	55.5%	536	7.8%	327	4.8%

Notes: Percent columns are calculated based on number of births. State is mother's legal state of residence recorded on the birth certificate.

Source: MACPAC, 2019, analysis of U.S. Centers for Disease Control and Prevention WONDER online database, Natality information— live births, <https://wonder.cdc.gov/natality.html>.

TABLE A-3. Demographic and Health Characteristics of Pregnant Women, by Insurance Status, 2018

Characteristic	Total		Health insurance status							
	Number	Percent	Medicaid		Private insurance		Uninsured		Other	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	3,832,168	100.0%	1,647,833	100.0%	1,881,528	100.0%	156,604	100.0%	146,203	100.0%
Residence										
Rural	516,779	13.5%	258,306	15.7%	212,622	11.3%	25,347	16.2%	20,504	14.0%
Urban	3,315,389	86.5%	1,389,527	84.3%	1,668,906	88.7%	131,257	83.8%	125,699	86.0%
Maternal age										
0–19	194,988	5.1%	151,033	9.2%	29,686	1.6%	6,929	4.4%	7,340	5.0%
20–34	2,962,002	77.3%	1,306,363	79.3%	1,420,537	75.5%	117,134	74.8%	117,968	80.7%
35 or older	675,178	17.6%	190,437	11.6%	431,305	22.9%	32,541	20.8%	20,895	14.3%
Maternal Hispanic ethnicity										
Hispanic or Latino	894,418	23.5%	538,171	32.9%	254,760	13.7%	59,498	38.3%	41,989	28.9%
Not Hispanic or Latino	2,906,389	76.5%	1,098,855	67.1%	1,608,528	86.3%	95,699	61.7%	103,307	71.1%
Maternal Non-Hispanic race										
American Indian or Alaska Native, non-Hispanic	29,699	1.0%	19,973	1.8%	5,787	0.4%	541	0.6%	3,398	3.3%
White, non-Hispanic	1,979,495	68.1%	603,766	55.0%	1,248,310	77.6%	59,187	61.9%	68,232	66.1%
Black, non-Hispanic	557,571	19.2%	367,279	33.4%	154,483	9.6%	16,868	17.6%	18,941	18.3%
Asian, non-Hispanic	248,410	8.6%	62,221	5.7%	162,069	10.1%	16,819	17.6%	7,301	7.1%
Native Hawaiian or Pacific Islander, non-Hispanic	9,315	0.3%	5,232	0.5%	2,667	0.2%	586	0.6%	830	0.8%
More than one race, non-Hispanic	81,899	2.8%	40,384	3.7%	35,212	2.2%	1,698	1.8%	4,605	4.5%
Maternal years of education										
0–8 years	123,476	3.3%	82,305	5.1%	9,023	0.5%	26,163	17.0%	5,985	4.1%
9–11 years	378,566	10.0%	299,428	18.4%	40,892	2.2%	22,537	14.6%	15,709	10.9%
12 years	967,101	25.6%	635,933	39.1%	259,518	14.0%	34,559	22.5%	37,091	25.6%

TABLE A-3. (continued)

Characteristic	Total		Health insurance status							
			Medicaid		Private insurance		Uninsured		Other	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
12–15 years	1,090,106	28.8%	483,466	29.7%	528,264	28.4%	28,381	18.4%	49,995	34.5%
≥ 16 years	1,224,980	32.4%	125,397	7.7%	1,021,231	54.9%	42,308	27.5%	36,044	24.9%
History of prior births										
Prior births	2,374,261	62.1%	1,105,856	67.3%	1,071,167	57.0%	107,547	68.9%	89,691	61.5%
Preterm	125,541	5.3%	69,093	6.3%	47,852	4.5%	4,085	3.8%	4,511	5.0%
Cesarean	592,192	25.0%	274,795	24.9%	274,988	25.7%	21,279	19.8%	21,130	23.6%
Health conditions										
Overweight or obese	1,993,077	53.3%	928,075	58.0%	920,772	49.9%	67,719	45.1%	76,511	53.6%
Pre-pregnancy diabetes	35,121	0.9%	17,748	1.1%	14,987	0.8%	1,011	0.7%	1,375	0.9%
Gestational diabetes	243,514	6.4%	102,398	6.2%	125,135	6.7%	7,623	4.9%	8,358	5.7%
Pre-pregnancy hypertension	72,586	1.9%	34,299	2.1%	33,769	1.8%	1,544	1.0%	2,974	2.0%
Gestational hypertension	247,054	6.5%	104,840	6.4%	127,441	6.8%	6,044	3.9%	8,729	6.0%
Cigarette smoking before pregnancy	341,701	9.0%	239,845	14.7%	84,517	4.5%	7,129	4.6%	10,210	7.0%
Cigarette smoking during pregnancy	262,678	6.9%	196,838	12.0%	52,498	2.8%	5,944	3.8%	7,398	5.1%

Notes: Percent columns are calculated based on number of births. Total number of births may not be consistent across breaks due to missing values or suppression. Urban and rural categories are based on the mother's legal county of residence as recorded on the birth certificate and are defined using the 2013 National Center for Health Statistics Urban-Rural Scheme for Counties. Urban includes counties classified as large central metro, large fringe metro, medium metro, and small metro. Rural includes counties classified as micropolitan and non-core. Preterm birth is delivery prior to 37 weeks.

Source: MACPAC, 2019, analysis of U.S. Centers for Disease Control and Prevention WONDER online database, Natality information— live births, <https://wonder.cdc.gov/natality.html>.

TABLE A-4. Demographic and Health Characteristics, by Urban and Rural Status and Payer, 2018

Characteristic	Urban				Rural			
	Medicaid	Private	Uninsured	Other	Medicaid	Private	Uninsured	Other
Maternal age								
0–19	8.7%	1.4%	4.4%	4.8%	11.8%	2.7%	4.6%	6.2%
20–34	79.1%	74.5%	74.2%	80.4%	80.5%	83.3%	77.7%	82.6%
35 or older	12.3%	24.1%	21.4%	14.8%	7.8%	14.1%	17.6%	11.3%
Maternal Hispanic ethnicity								
Hispanic or Latino	36.2%	14.6%	40.7%	31.3%	15.4%	6.7%	26.2%	14.4%
Maternal race								
American Indian or Alaska Native, non-Hispanic	1.0%	0.3%	0.4%	1.7%	5.0%	1.0%	1.4%	10.9%
White, non-Hispanic	50.2%	75.6%	54.8%	64.4%	74.3%	92.0%	91.2%	74.0%
Black, non-Hispanic	37.6%	10.4%	20.9%	20.2%	16.6%	3.8%	4.1%	8.9%
Asian, non-Hispanic	6.8%	11.3%	21.4%	8.1%	0.9%	1.5%	1.6%	2.1%
Native Hawaiian or Pacific Islander, non-Hispanic	0.5%	0.2%	0.6%	0.9%	0.3%	0.1%	0.6%	0.3%
More than one race, non-Hispanic	3.9%	2.3%	1.9%	4.6%	3.0%	1.6%	1.2%	3.7%
Maternal years of education								
0–8 years	5.4%	0.5%	13.0%	3.9%	3.3%	0.8%	37.4%	5.6%
9–11 years	18.3%	2.1%	14.9%	10.9%	18.9%	3.1%	13.4%	10.4%
12 years	38.4%	13.2%	22.6%	25.2%	42.7%	19.7%	21.5%	28.1%
12–15 years	29.6%	27.2%	18.8%	34.3%	30.5%	37.8%	16.6%	35.7%
≥ 16 years	8.3%	57.0%	30.7%	25.7%	4.7%	38.6%	11.0%	20.2%

TABLE A-4. (continued)

Characteristic	Urban				Rural			
	Medicaid	Private	Uninsured	Other	Medicaid	Private	Uninsured	Other
History of prior births								
Prior births	67.3%	56.5%	67.6%	61.0%	67.1%	61.0%	76.1%	64.8%
Preterm	6.2%	4.4%	3.8%	5.0%	6.6%	4.8%	3.8%	5.3%
Cesarean	25.0%	25.8%	20.8%	23.8%	24.4%	24.7%	15.2%	22.2%
Health conditions								
Overweight or obese	57.6%	49.0%	44.2%	53.2%	59.9%	57.3%	49.2%	56.1%
Pre-pregnancy diabetes	1.1%	0.8%	0.7%	0.9%	1.2%	1.0%	0.6%	1.2%
Gestational diabetes	6.3%	6.7%	5.1%	5.7%	5.9%	6.6%	3.9%	5.8%
Pre-pregnancy hypertension	2.1%	1.7%	1.0%	2.0%	2.3%	2.2%	0.9%	2.2%
Gestational hypertension	6.3%	6.6%	3.9%	5.9%	6.7%	8.0%	3.5%	6.6%
Cigarette smoking before pregnancy	12.2%	3.9%	3.9%	5.9%	27.8%	9.2%	8.3%	14.0%
Cigarette smoking during pregnancy	9.9%	2.3%	3.2%	4.2%	23.6%	6.4%	7.2%	10.8%
Access to prenatal care								
Prenatal care began in first trimester	68.0%	87.3%	56.7%	76.4%	69.9%	86.0%	47.1%	73.7%
Nine or more prenatal care visits	76.2%	88.3%	67.9%	78.6%	76.7%	88.8%	56.2%	77.5%
Place of birth								
Hospital	99.4%	99.0%	84.3%	98.7%	99.4%	99.2%	65.4%	96.6%
Freestanding birth center	0.2%	0.5%	3.4%	0.4%	0.2%	0.3%	7.5%	0.2%
Home birth	0.3%	0.4%	11.9%	0.9%	0.4%	0.4%	24.2%	3.0%
Attendant at birth								
Doctor	90.4%	89.9%	77.5%	83.7%	90.7%	90.8%	58.6%	82.1%
Certified nurse midwife	8.6%	9.3%	11.1%	12.5%	8.2%	8.3%	15.8%	13.4%

TABLE A-4. (continued)

Characteristic	Urban				Rural			
	Medicaid	Private	Uninsured	Other	Medicaid	Private	Uninsured	Other
Other midwife	0.3%	0.4%	8.8%	0.5%	0.3%	0.4%	17.9%	2.2%
Maternal and birth outcome								
Cesarean	31.5%	33.2%	25.9%	29.3%	32.5%	32.8%	18.6%	29.4%
Preterm birth	11.0%	9.1%	8.7%	9.6%	11.3%	9.3%	8.1%	10.4%
Low-birthweight infant	9.7%	7.2%	7.1%	7.8%	9.9%	6.8%	6.5%	8.1%

Notes: Percent columns are calculated based on number of births. Total number of births may not be consistent across breakdowns due to missing values or suppression. Urban and rural categories are based on the mother's legal county of residence as recorded on the birth certificate and are defined using the 2013 National Center on Health Statistics Urban-Rural Scheme for Counties. Urban includes counties classified as large central metro, large fringe metro, medium metro, and small metro. Rural includes counties classified as micropolitan and noncore. Preterm birth is delivery prior to 37 weeks. Low birthweight is less than 2,500 grams.

Source: MACPAC, 2019, analysis of U.S. Centers for Disease Control and Prevention WONDER online database, Natality information— live births, <https://wonder.cdc.gov/natality.html>.

TABLE A-5. Place of Birth and Birth Attendant among Medicaid Births, by State, 2018

State or territory	Place of birth			Birth attendant		
	Hospital	Freestanding birth center	Home	Doctor	Certified nurse midwife	Other midwife
United States	99.36%	0.21%	0.34%	90.43%	8.57%	0.31%
Alabama	99.68%	--	0.24%	98.46%	0.79%	--
Alaska	93.69%	4.40%	1.59%	63.49%	30.73%	5.37%
Arizona	99.59%	0.17%	0.13%	92.31%	7.42%	0.03%
Arkansas	99.76%	--	0.15%	99.29%	0.07%	--
California	99.57%	0.15%	0.19%	93.51%	5.92%	0.06%
Colorado	99.14%	0.33%	0.47%	77.74%	21.48%	--
Connecticut	99.34%	0.18%	0.38%	89.46%	10.33%	--
Delaware	98.91%	0.62%	0.35%	89.43%	9.74%	--
District of Columbia	99.30%	--	0.31%	91.69%	7.92%	--
Florida	98.59%	0.62%	0.67%	85.96%	12.32%	1.01%
Georgia	99.63%	0.09%	0.28%	85.41%	12.59%	0.20%
Hawaii	98.58%	--	0.77%	89.65%	9.86%	--
Idaho	97.93%	0.94%	1.06%	87.53%	10.47%	1.56%
Illinois	99.68%	--	0.22%	90.18%	9.11%	0.12%
Indiana	99.82%	--	0.18%	92.20%	6.66%	0.59%
Iowa	99.68%	--	0.26%	89.55%	10.16%	--
Kansas	99.40%	0.39%	0.17%	94.04%	5.69%	--
Kentucky	99.61%	0.04%	0.23%	91.81%	7.75%	0.14%
Louisiana	99.63%	0.10%	0.21%	96.33%	3.36%	0.12%
Maine	99.40%	--	0.52%	79.70%	20.05%	--
Maryland	99.33%	0.17%	0.36%	86.61%	12.57%	0.06%
Massachusetts	99.45%	0.13%	0.32%	79.17%	19.13%	1.33%
Michigan	99.62%	--	0.31%	90.21%	8.98%	0.35%
Minnesota	99.04%	0.27%	0.61%	86.24%	13.02%	0.12%
Mississippi	99.74%	--	0.21%	97.08%	2.29%	--
Missouri	99.34%	0.28%	0.26%	95.68%	3.82%	--
Montana	99.05%	0.43%	0.51%	87.00%	12.01%	--
Nebraska	99.78%	--	0.17%	92.85%	6.63%	--
Nevada	99.58%	--	0.35%	93.33%	4.32%	0.37%
New Hampshire	97.90%	0.94%	1.13%	75.06%	22.97%	1.49%
New Jersey	99.55%	--	0.29%	89.71%	9.10%	--
New Mexico	98.28%	0.52%	1.05%	68.21%	30.08%	1.07%
New York	99.22%	0.08%	0.53%	87.09%	12.33%	--

TABLE A-5. (continued)

State or territory	Place of birth			Birth attendant		
	Hospital	Freestanding birth center	Home	Doctor	Certified nurse midwife	Other midwife
North Carolina	99.28%	0.44%	0.26%	87.18%	12.40%	0.11%
North Dakota	99.51%	--	--	92.79%	7.10%	--
Ohio	99.70%	--	0.22%	90.97%	8.51%	0.19%
Oklahoma	99.73%	--	0.18%	96.53%	2.83%	--
Oregon	98.44%	0.66%	0.85%	78.24%	20.27%	0.50%
Pennsylvania	99.32%	0.27%	0.31%	87.92%	11.52%	--
Rhode Island	99.59%	--	0.39%	86.98%	12.97%	--
South Carolina	99.38%	0.34%	0.26%	94.67%	4.44%	0.43%
South Dakota	99.59%	--	0.41%	90.49%	8.40%	--
Tennessee	99.70%	0.12%	0.17%	93.00%	5.47%	0.92%
Texas	99.70%	0.20%	0.09%	96.42%	2.75%	0.29%
Utah	99.68%	0.10%	0.17%	88.96%	10.53%	--
Vermont	97.48%	--	2.44%	73.32%	23.92%	2.02%
Virginia	99.43%	0.07%	0.48%	92.11%	7.30%	0.39%
Washington	97.05%	1.27%	1.59%	84.14%	7.49%	2.27%
West Virginia	99.47%	--	0.31%	88.40%	11.19%	0.11%
Wisconsin	99.31%	0.21%	0.47%	88.92%	11.00%	--
Wyoming	98.95%	--	1.00%	94.90%	3.92%	0.77%

Notes: Universe is births paid for by Medicaid. Percent columns are calculated based on number of births. Total number of births may not be consistent across breakdowns due to missing values and/or suppression. Home births include both those intended and unintended. State is mother's legal state of residence recorded on the birth certificate.

-- Dash indicates data suppressed by CDC WONDER because the number of births was less than 10.

Source: MACPAC, 2019, analysis of U.S. Centers for Disease Control and Prevention WONDER online database, Natality information— live births, <https://wonder.cdc.gov/natality.html>.

TABLE A-6. Prenatal Care and Birth Outcomes among Medicaid Births, by State, 2018

State or territory	Prenatal care began in first trimester	Nine or more prenatal care visits	Cesarean section	Preterm birth	Low-birthweight baby
United States	68.3%	76.3%	31.7%	11.0%	9.7%
Alabama	60.9%	72.6%	33.9%	12.9%	11.3%
Alaska	66.5%	63.2%	19.7%	10.3%	6.7%
Arizona	65.3%	73.1%	25.6%	9.9%	7.7%
Arkansas	59.5%	71.2%	33.4%	12.0%	9.4%
California	78.5%	83.6%	31.4%	9.3%	6.7%
Colorado	69.7%	69.7%	24.8%	9.5%	9.0%
Connecticut	78.3%	81.5%	34.0%	10.8%	8.5%
Delaware	68.7%	71.7%	31.9%	11.7%	10.6%
District of Columbia	52.4%	55.1%	30.9%	13.8%	13.1%
Florida	65.4%	73.1%	36.1%	11.5%	9.7%
Georgia	66.7%	75.9%	33.8%	12.8%	10.8%
Hawaii	65.5%	66.2%	24.9%	10.7%	7.1%
Idaho	73.3%	80.7%	24.1%	10.0%	7.3%
Illinois	66.3%	74.1%	29.5%	11.6%	9.3%
Indiana	60.8%	74.2%	29.8%	11.0%	9.0%
Iowa	72.2%	82.7%	30.6%	10.5%	7.4%
Kansas	74.5%	79.0%	30.5%	11.3%	8.3%
Kentucky	73.6%	80.1%	35.2%	12.5%	9.9%
Louisiana	70.6%	77.6%	36.9%	13.8%	11.8%
Maine	79.1%	87.3%	30.4%	9.5%	7.7%
Maryland	61.6%	68.2%	33.0%	11.6%	9.3%
Massachusetts	71.6%	79.7%	31.0%	9.6%	7.5%
Michigan	71.4%	80.1%	31.8%	11.5%	9.8%
Minnesota	71.5%	74.6%	26.4%	9.8%	7.2%
Mississippi	72.7%	80.8%	37.2%	14.4%	12.8%
Missouri	64.2%	73.1%	29.7%	12.0%	9.9%
Montana	67.6%	73.0%	28.3%	11.4%	9.1%
Nebraska	63.0%	72.7%	29.9%	11.1%	8.0%
Nevada	67.1%	77.5%	34.4%	11.9%	9.8%
New Hampshire	75.0%	81.5%	28.8%	9.3%	7.7%
New Jersey	61.8%	70.4%	33.7%	10.1%	7.5%
New Mexico	66.6%	69.8%	23.0%	10.3%	9.0%
New York	72.4%	76.5%	32.1%	9.0%	7.9%
North Carolina	65.3%	78.5%	28.9%	11.7%	10.5%

TABLE A-6. (continued)

State or territory	Prenatal care began in first trimester	Nine or more prenatal care visits	Cesarean section	Preterm birth	Low-birthweight baby
North Dakota	61.1%	62.1%	30.9%	10.3%	7.5%
Ohio	67.1%	74.2%	30.8%	12.3%	10.3%
Oklahoma	67.9%	75.4%	32.1%	12.0%	8.8%
Oregon	72.7%	81.1%	27.9%	9.4%	7.1%
Pennsylvania	68.6%	75.1%	30.6%	11.5%	9.8%
Rhode Island	78.3%	91.5%	30.3%	9.4%	7.8%
South Carolina	65.2%	77.4%	33.0%	12.8%	10.9%
South Dakota	61.1%	61.0%	25.5%	10.6%	6.8%
Tennessee	68.4%	75.7%	32.0%	12.5%	10.3%
Texas	59.7%	72.7%	34.2%	11.1%	8.3%
Utah	72.2%	78.7%	24.0%	10.2%	6.7%
Vermont	84.8%	89.4%	26.6%	8.7%	7.7%
Virginia	64.3%	79.9%	32.5%	11.2%	9.2%
Washington	69.7%	74.9%	26.9%	9.5%	6.9%
West Virginia	70.7%	75.7%	35.1%	13.4%	10.7%
Wisconsin	73.0%	78.9%	26.5%	11.3%	9.0%
Wyoming	66.1%	71.2%	25.8%	9.3%	8.1%

Notes: Universe is births paid for by Medicaid. Percent columns are calculated based on number of births. Total number of births may not be consistent across breakdowns due to missing values or suppression. State is mother's legal state of residence recorded on the birth certificate.

Source: MACPAC, 2019, analysis of U.S. Centers for Disease Control and Prevention WONDER online database, Natality information— live births, <https://wonder.cdc.gov/natality.html>.