Medicaid and CHIP Beneficiary Profile: Maternal and Infant Health

DECEMBER 2020

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About the Medicaid and CHIP Beneficiary Profile: Maternal and Infant Health

The Medicaid and CHIP Beneficiary Profile: Maternal and Infant Health provides an overview of the demographics, health status, health outcomes, risk factors, and health care utilization among reproductive age women, women with a recent live birth, and infants covered by Medicaid and CHIP.

This profile is not a comprehensive assessment of maternal and infant health within Medicaid and CHIP. All charts are based on published data tables or primary analysis of publicly available data, using the most recent and reliable data that were available. More information on specific data sources can be found in the Appendix. Indicators are presented by payer where possible; all-payer data are presented in cases where stratification by payer is not possible in publicly available data.

The profile covers the following domains:
- Characteristics
  - Reproductive Age Women
  - Live Births
- Outcomes
  - Maternal
  - Infant
  - Pregnancy-Related Deaths
  - Fetal and Infant Deaths
- Risk Factors for Poor Maternal and Infant Health
- Utilization of Maternity-Related Health Care
- Maternity-Related Health Care Provider Workforce

CHARACTERISTICS: REPRODUCTIVE AGE WOMEN

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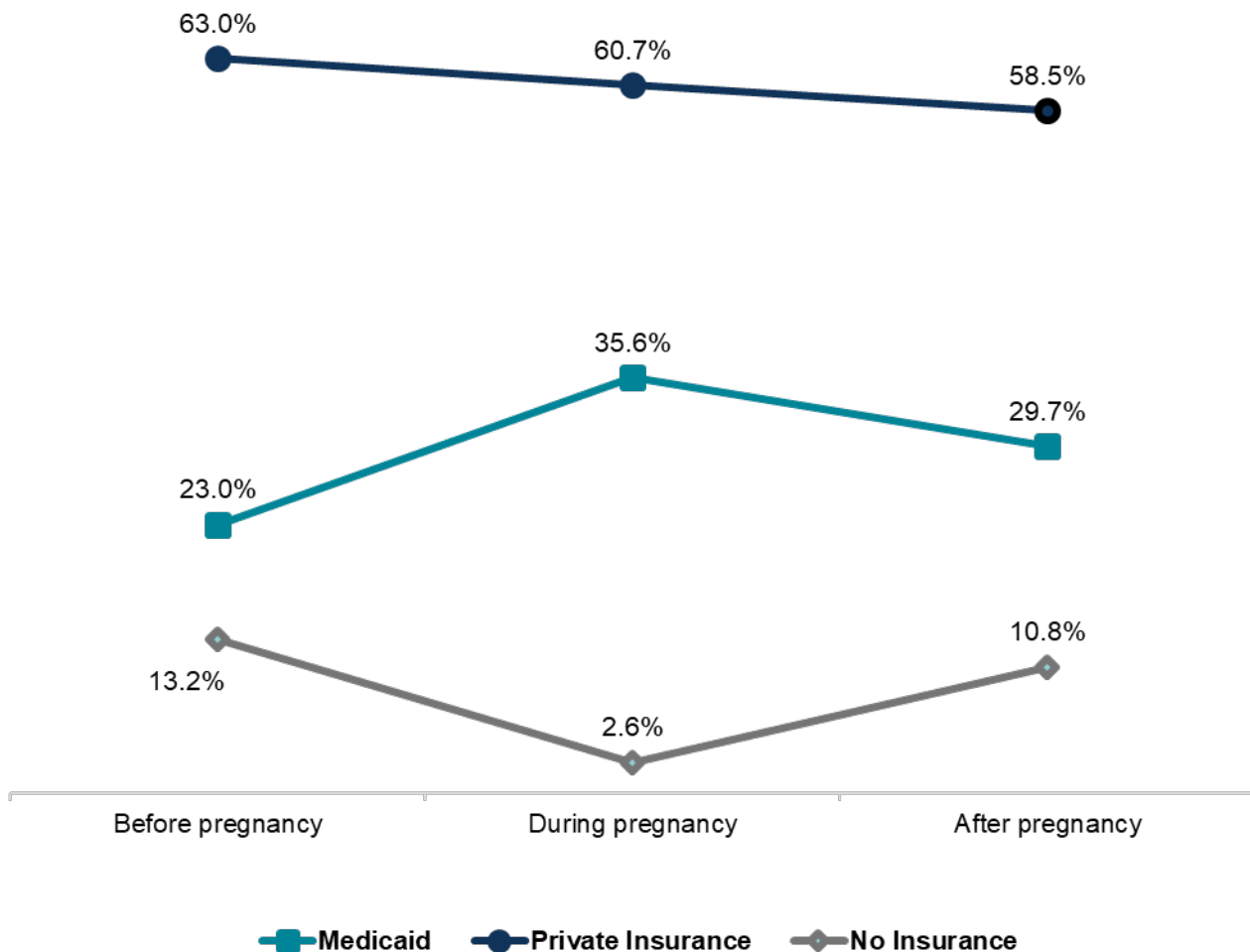
Characteristics: Reproductive Age Women

Fast facts: In 2017, 23.0% of women with a recent live birth reported health insurance coverage through Medicaid before pregnancy; Medicaid coverage rates increased to 35.6% during pregnancy.

This section of the profile provides information on health insurance coverage rates among women before, during, and after pregnancy, along with demographics and contraceptive use among reproductive age women. Reproductive age women are defined as either ages 15 to 44 or 15 to 49 depending on the data source.

The charts in this section include:

- Self-Reported Health Insurance Coverage Before, During, and After Pregnancy
- Percentage of Reproductive Age Women, by Race/Ethnicity: All Women and Women with Medicaid or CHIP
- Percentage of Reproductive Age Women, by Age Group: All Women and Women with Medicaid or CHIP
- Percentage of Reproductive Age Women, by Family Income Level: All Women and Women with Medicaid or CHIP
- Percentage of Reproductive Age Women Who Reported a Current Contraceptive Method, by Current Insurance Coverage
- Percentage of Reproductive Age Women Who Reported No Current Contraceptive Method, by Current Insurance Coverage

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Self-Reported Health Insurance Coverage Before, During, and After Pregnancy: 34 States, 2017

Line chart showing insurance coverage:

Private Insurance: Before pregnancy 63.0%, During pregnancy 60.7%, After pregnancy 58.5%

Medicaid: Before pregnancy 23.0%, During pregnancy 35.6%, After pregnancy 29.7%

No Insurance: Before pregnancy 13.2%, During pregnancy 2.6%, After pregnancy 10.8%

Legend: ■ Medicaid ● Private Insurance ◆ No Insurance

X-axis: Before pregnancy | During pregnancy | After pregnancy

Notes:
Data come from the 34 states plus New York City and Puerto Rico that participated in the Pregnancy Risk Assessment Monitoring System (PRAMS) in 2017 and met the 55% response rate threshold for inclusion. "Medicaid" includes Medicaid or a state-named governmental program. "Private insurance" includes private coverage only, both Medicaid and private, any other insurance in combination with private, and TRICARE or other military insurance. "No Insurance" includes no insurance or Indian Health Service only. Other state-specific government plans or programs such as CHIP are excluded from estimates.

Source:
Pregnancy Risk Assessment Monitoring System (PRAMS), Selected 2017 Maternal and Child Health Indicators.

Available at:
https://www.cdc.gov/prams/prams-data/mch-indicators/states/pdf/2018/All-PRAMS-Sites-2016-2017_508.pdf

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Percentage of Reproductive Age Women, by Race/Ethnicity: All Women and Women with Medicaid or CHIP, 2018
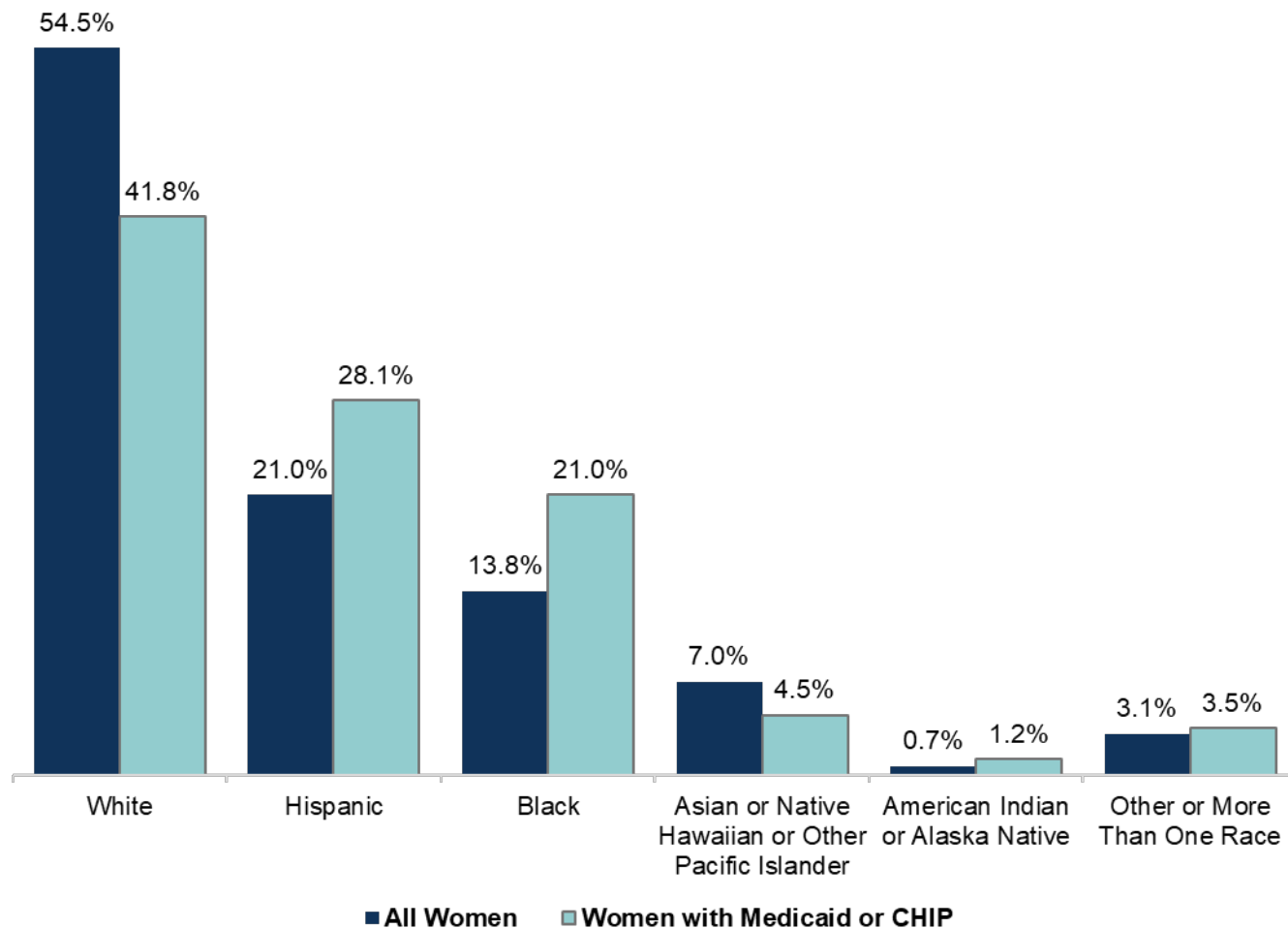
Notes:
Insurance status is self-reported. "Medicaid or CHIP" is defined as coverage through "Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability" at the time of the survey. Reproductive age women are defined as ages 15–44.

"White," "Black," "Asian or Native Hawaiian or Other Pacific Islander," "American Indian or Alaska Native," and "Other or More Than One Race" categories exclude Hispanic ethnicity. "Hispanic" includes Hispanic of any race.
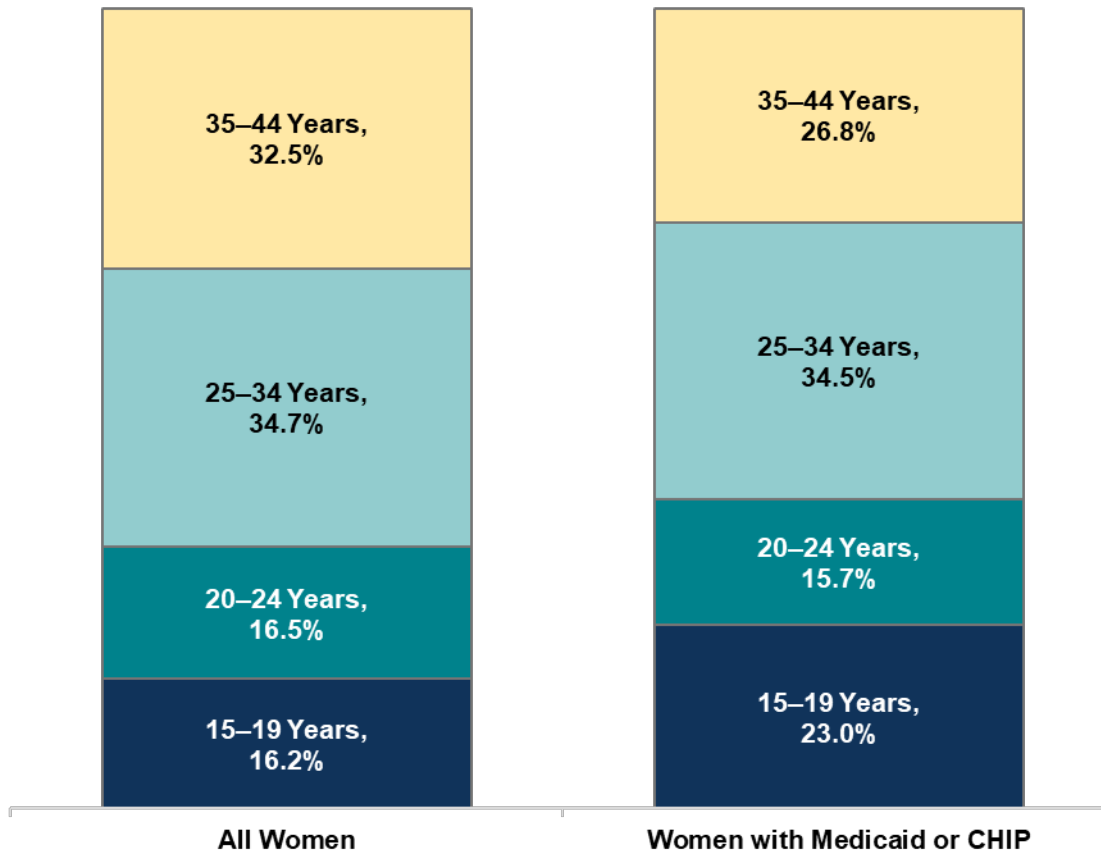
Source:
IPUMS USA, University of Minnesota. American Community Survey 2018 sample.

Available at:
www.ipums.org

Percentage of Reproductive Age Women, by Age Group: All Women and Women with Medicaid or CHIP, 2018

All Women
- 35–44 Years, 32.5%
- 25–34 Years, 34.7%
- 20–24 Years, 16.5%
- 15–19 Years, 16.2%

Women with Medicaid or CHIP
- 35–44 Years, 26.8%
- 25–34 Years, 34.5%
- 20–24 Years, 15.7%
- 15–19 Years, 23.0%

Notes:
Insurance status is self-reported. "Medicaid or CHIP" is defined as coverage through "Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability" at the time of the survey. Reproductive age women are defined as ages 15–44.

Source:
IPUMS USA, University of Minnesota. American Community Survey 2018 sample.

Available at:
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Percentage of Reproductive Age Women, by Family Income Level: All Women and Women with Medicaid or CHIP, 2018

All Women:
- >250% FPL, 56.7%
- 200–250% FPL, 8.8%
- 150–199% FPL, 9.4%
- 100–149% FPL, 8.9%
- 50–99% FPL, 7.9%
- 1–49% FPL, 8.2%

Women with Medicaid or CHIP:
- >250% FPL, 21.0%
- 200–250% FPL, 8.6%
- 150–199% FPL, 13.0%
- 100–149% FPL, 18.4%
- 50–99% FPL, 20.1%
- 1–49% FPL, 18.8%

Notes:
Insurance status is self-reported. "Medicaid or CHIP" is defined as coverage through "Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability" at the time of the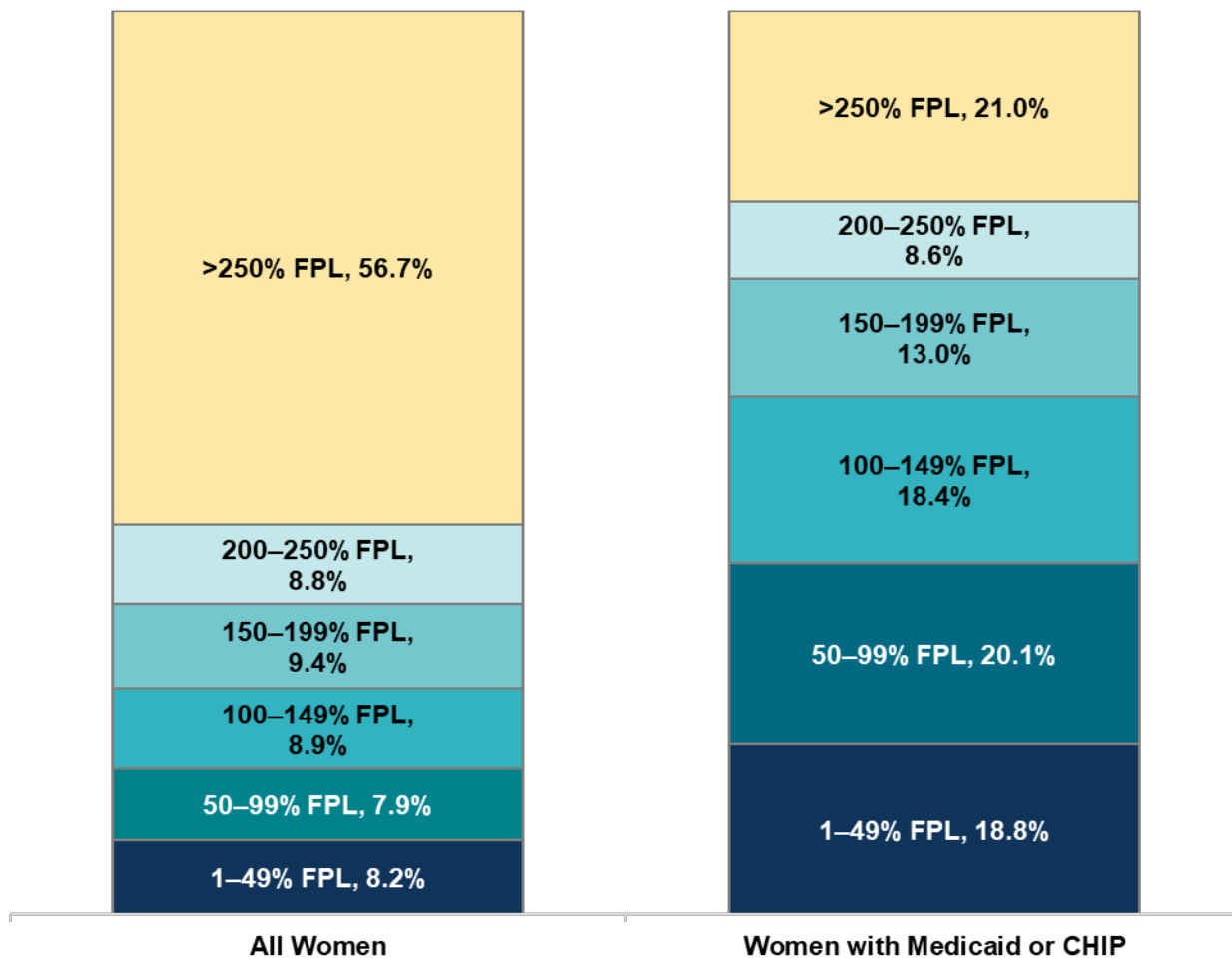 survey. Reproductive age women are defined as ages 15–44. Family income level is presented as a percentage of the federal poverty level (FPL) in 2018.

Source:
IPUMS USA, University of Minnesota. American Community Survey 2018 sample.

Available at:
www.ipums.org

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Percentage of Reproductive Age Women Who Reported a Current Contraceptive Method, by Current Insurance Coverage, 2015–2017

Percentage with a Most or Moderately Effective Contraceptive Method, or Any Other Current Contraceptive Method
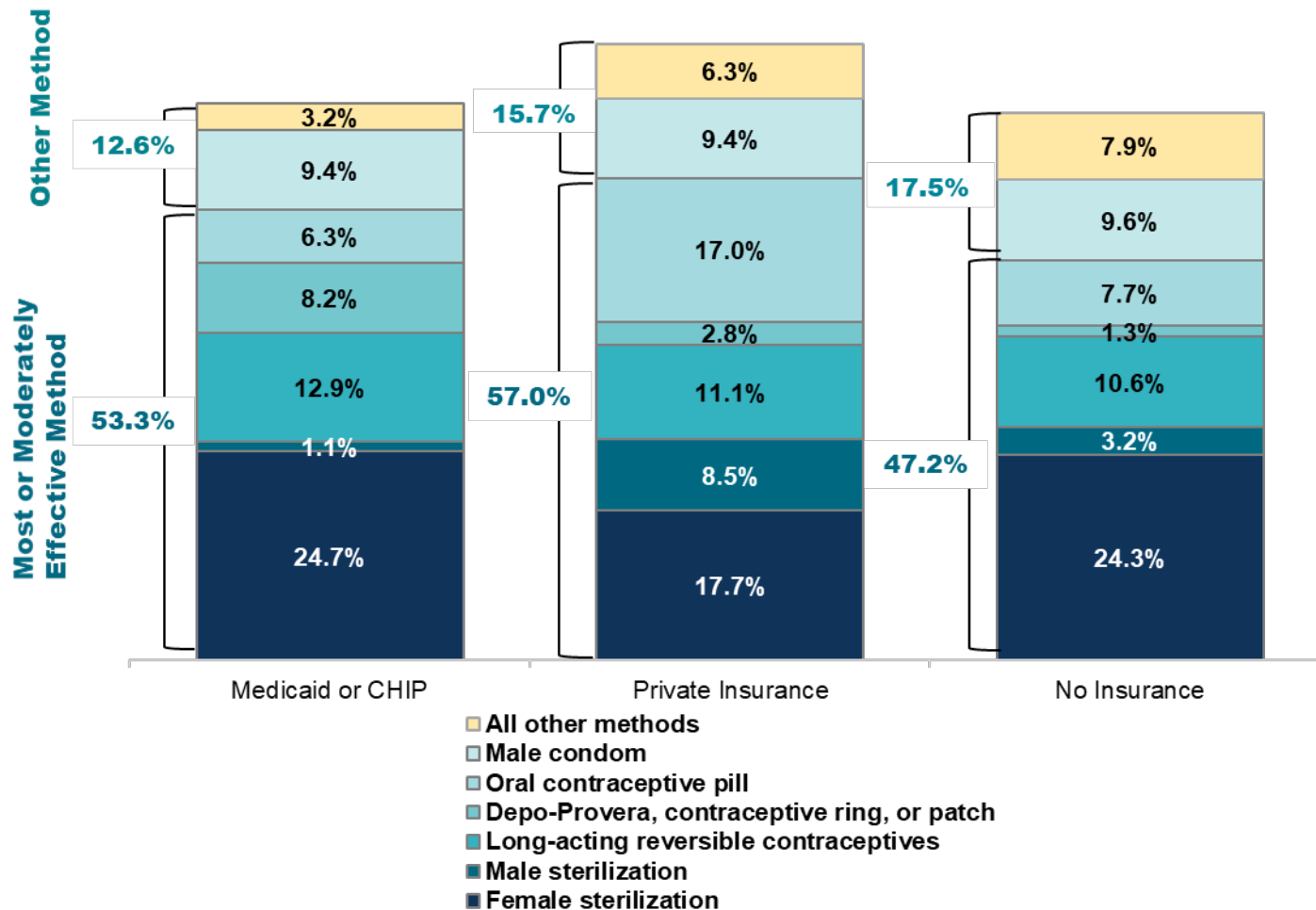
Notes:
Insurance status is self-reported. "Medicaid or CHIP" includes Medicaid or CHIP coverage only. "Private insurance" includes private coverage only, TRICARE or other military insurance, both Medicaid and private, and any other insurance in combination with private. "No insurance" includes not currently insured or Indian Health Services only. Reproductive age women are defined as ages 15–49. Women who are currently pregnant or seeking to become pregnant (7% of respondents) are excluded. "Most or Moderately Effective Methods" include female sterilization; male sterilization; long-acting reversible contraceptives; Depo-Provera, contraceptive ring, or patch; and oral contraceptive pill.

Source:
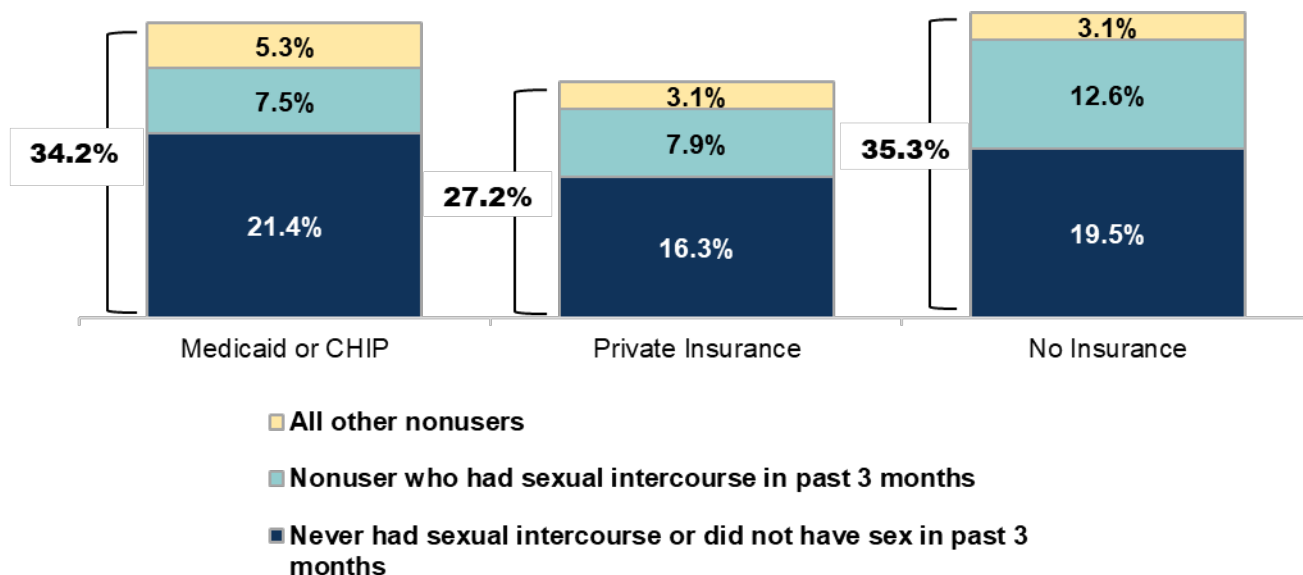National Survey of Family Growth (NSFG). 2015–2017 Public Use File.

Available at:
https://www.cdc.gov/nchs/nsfg/nsfg_2015_2017_puf.htm

Percentage of Reproductive Age Women Who Reported No Current Contraceptive Method, by Current Insurance Coverage, 2015–2017

Percentage with No Current Contraceptive Method

Medicaid or CHIP: 34.2%
- All other nonusers: 5.3%
- Nonuser who had sexual intercourse in past 3 months: 7.5%
- Never had sexual intercourse or did not have sex in past 3 months: 21.4%

Private Insurance: 27.2%
- All other nonusers: 3.1%
- Nonuser who had sexual intercourse in past 3 months: 7.9%
- Never had sexual intercourse or did not have sex in past 3 months: 16.3%

No Insurance: 35.3%
- All other nonusers: 3.1%
- Nonuser who had sexual intercourse in past 3 months: 12.6%
- Never had sexual intercourse or did not have sex in past 3 months: 19.5%

Legend:
- ☐ All other nonusers
- ☐ Nonuser who had sexual intercourse in past 3 months
- ■ Never had sexual intercourse or did not have sex in past 3 months

Notes:
Insurance status is self-reported. "Medicaid or CHIP" includes Medicaid or CHIP coverage only. "Private insurance" includes private coverage only, TRICARE or other military insurance, both Medicaid and private, and any other insurance in combination with private. "No insurance" includes not currently insured or Indian Health Services only. Reproductive age women are defined as ages 15–49. Women who are currently pregnant or seeking to become pregnant (7% of respondents) are excluded. "All other nonusers" includes respondents who say that they or their partner is sterile for unknown or non-contraceptive reasons.

Source:
National Survey of Family Growth (NSFG). 2015–2017 Public Use File.

Available at:
https://www.cdc.gov/nchs/nsfg/nsfg_2015_2017_puf.htm

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CHARACTERISTICS: LIVE BIRTHS

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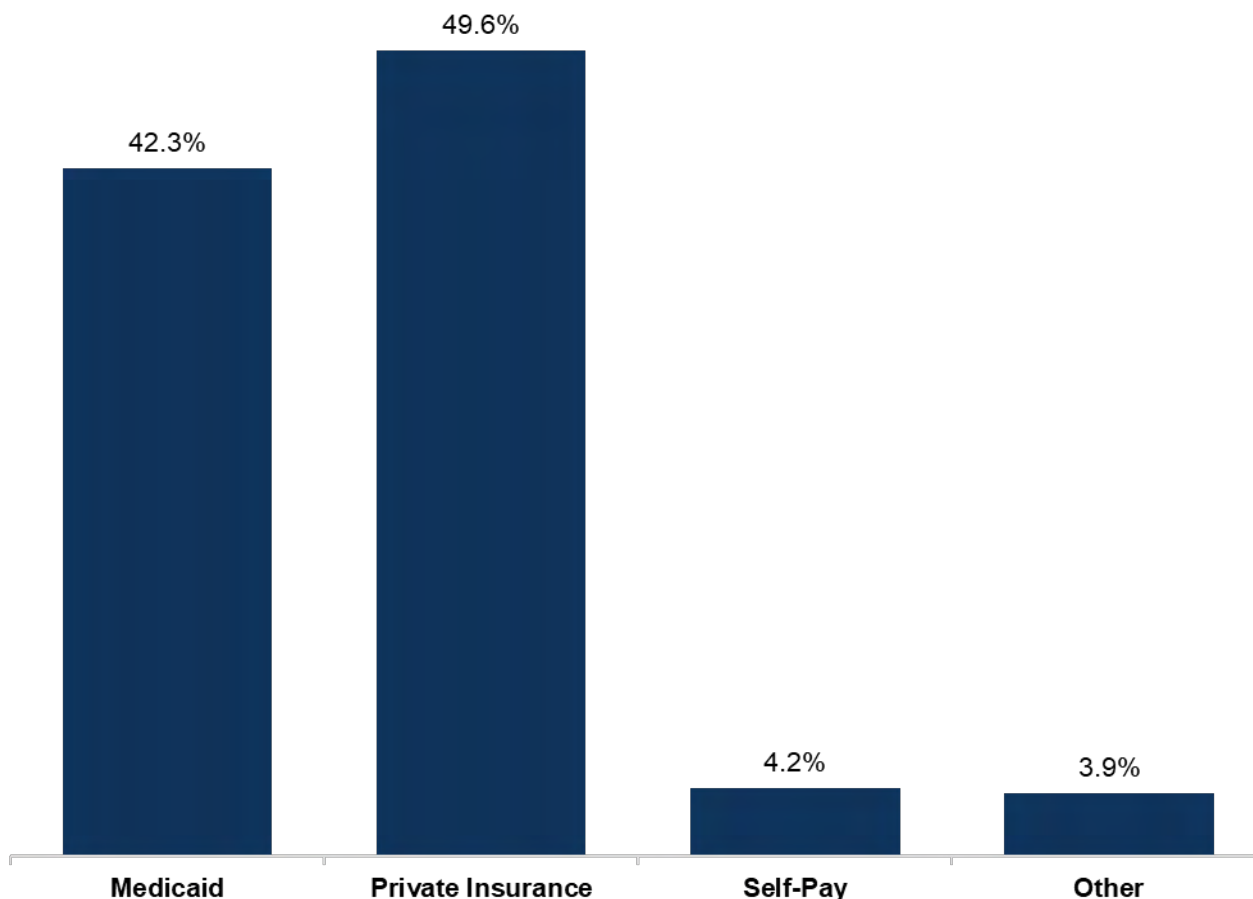# Characteristics: Live Births

Fast facts: Medicaid was the principal payer for the delivery of 42.3% of all U.S. live births in 2018. The maternal age distribution for Medicaid births was younger than the overall maternal age distribution of U.S. births, with 37.3% of Medicaid deliveries to women 24 years or younger.

This section of the profile shows the distribution of all U.S. live births by payer and the demographics of all live births as compared with live births paid for by Medicaid.

The charts in this section include:

- Percentage of Live Births, by Delivery Payer
- Percentage of Live Births Paid for by Medicaid, by State
- Percentage of Live Births, by Maternal Race/Ethnicity: All Births and Births Paid by Medicaid
- Percentage of Live Births, by Maternal Age: All Births and Births Paid by Medicaid
- Percentage of Live Births, by Maternal Educational Attainment: All Births and Births Paid by Medicaid

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Percentage of Live Births, by Delivery Payer, 2018

Bar chart showing: Medicaid 42.3%, Private Insurance 49.6%, Self-Pay 4.2%, Other 3.9%

Notes:
There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries. "Other" includes other government and non-government payers. Births with payer not reported or unknown (<1% of births) are excluded.
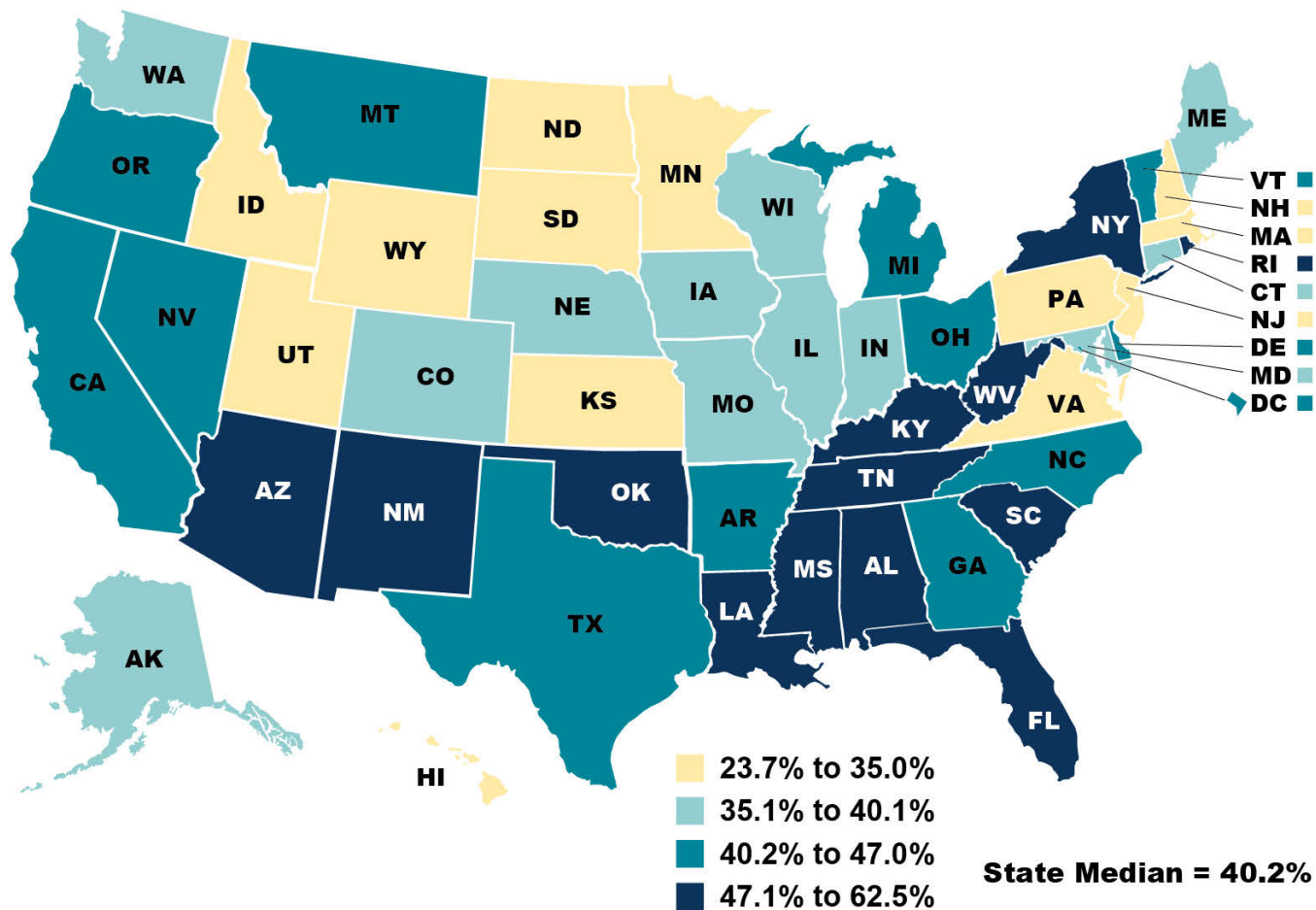
Source:
National Center for Health Statistics (NCHS). 2018 Natality Public Use File.

Available at:
https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm

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Percentage of Live Births Paid for by Medicaid, by State, 2018

Legend:
- 23.7% to 35.0%
- 35.1% to 40.1%
- 40.2% to 47.0%
- 47.1% to 62.5%

State Median = 40.2%

Notes:
Births where Medicaid is the principal payer for the delivery are shown. There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries.

Source:
National Center for Health Statistics (NCHS). 2018 Natality Public Use Data on CDC WONDER online database.

Available at:
https://wonder.cdc.gov/

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Percentage of Live Births, by Maternal Race/Ethnicity: All Births and Births Paid by Medicaid, 2018
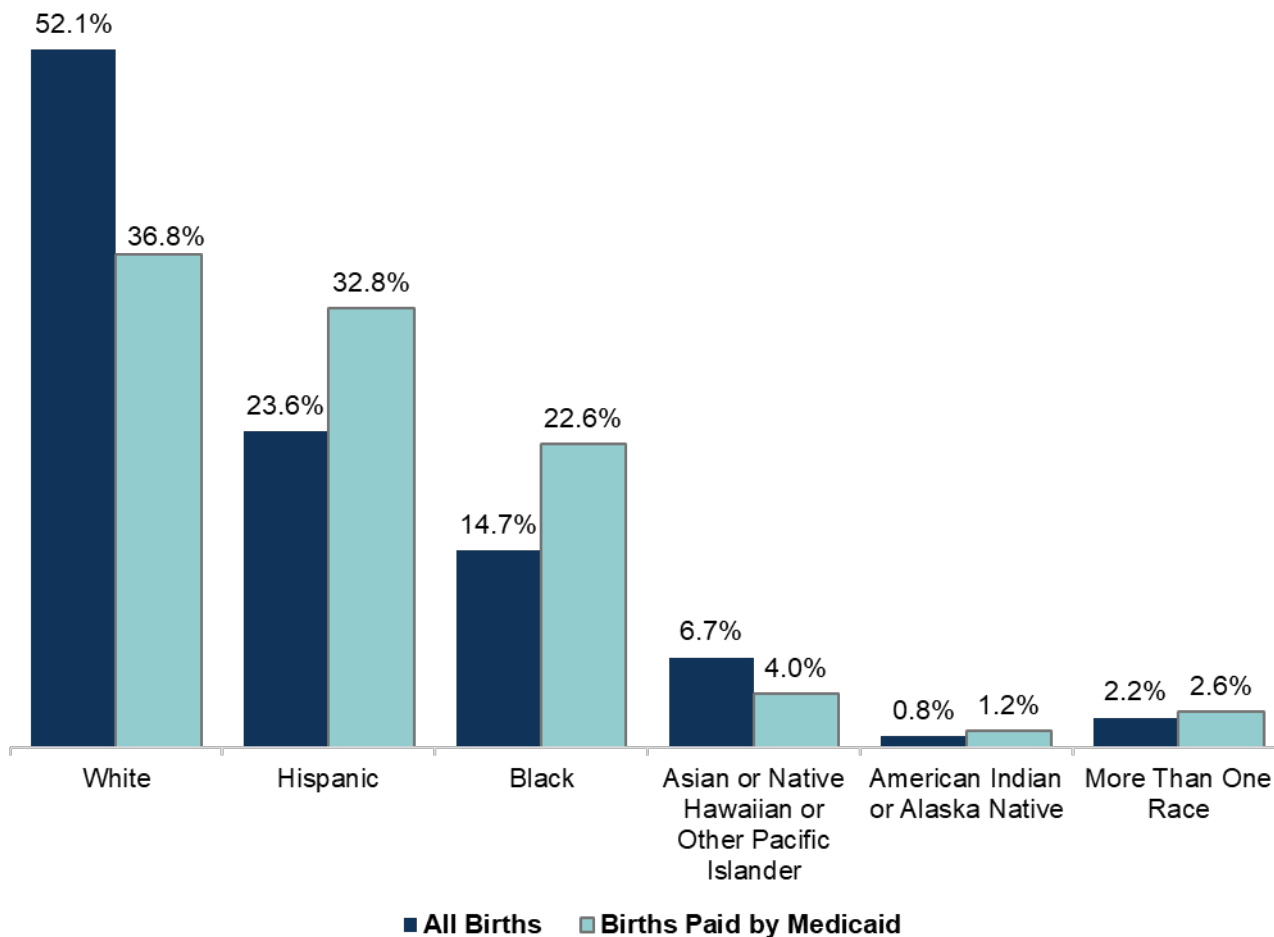
Notes:
There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries. Births with race/ethnicity unknown (<1% of births) are excluded.

"White," "Black," "Asian or Native Hawaiian or Other Pacific Islander," "American Indian or Alaska Native," and "Other or More Than One Race" categories exclude Hispanic ethnicity. "Hispanic" includes Hispanic of any race.
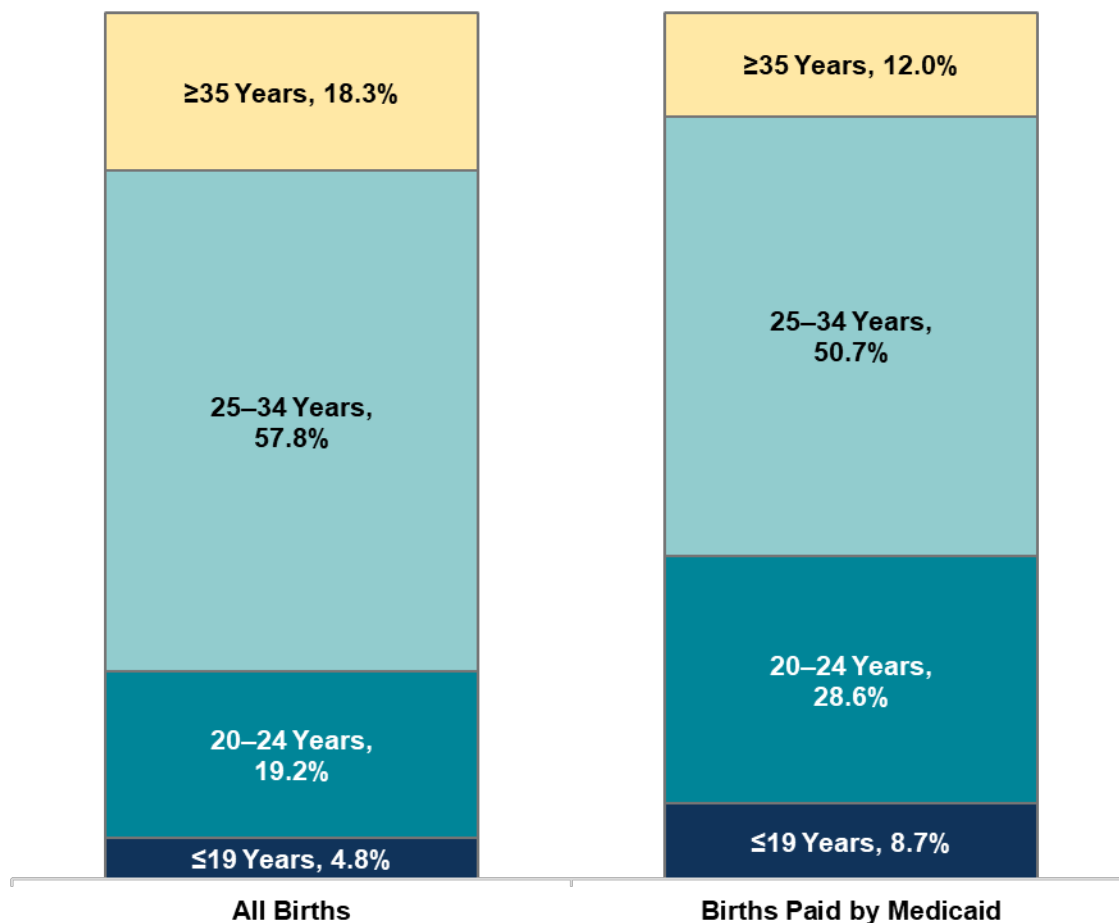
Source:
National Center for Health Statistics (NCHS). 2018 Natality Public Use File.

Available at:
https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm

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Percentage of Live Births, by Maternal Age: All Births and Births Paid by Medicaid, 2018

All Births

≥35 Years, 18.3%

25–34 Years, 57.8%

20–24 Years, 19.2%

≤19 Years, 4.8%

Births Paid by Medicaid

≥35 Years, 12.0%

25–34 Years, 50.7%

20–24 Years, 28.6%

≤19 Years, 8.7%

Notes:
There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries.
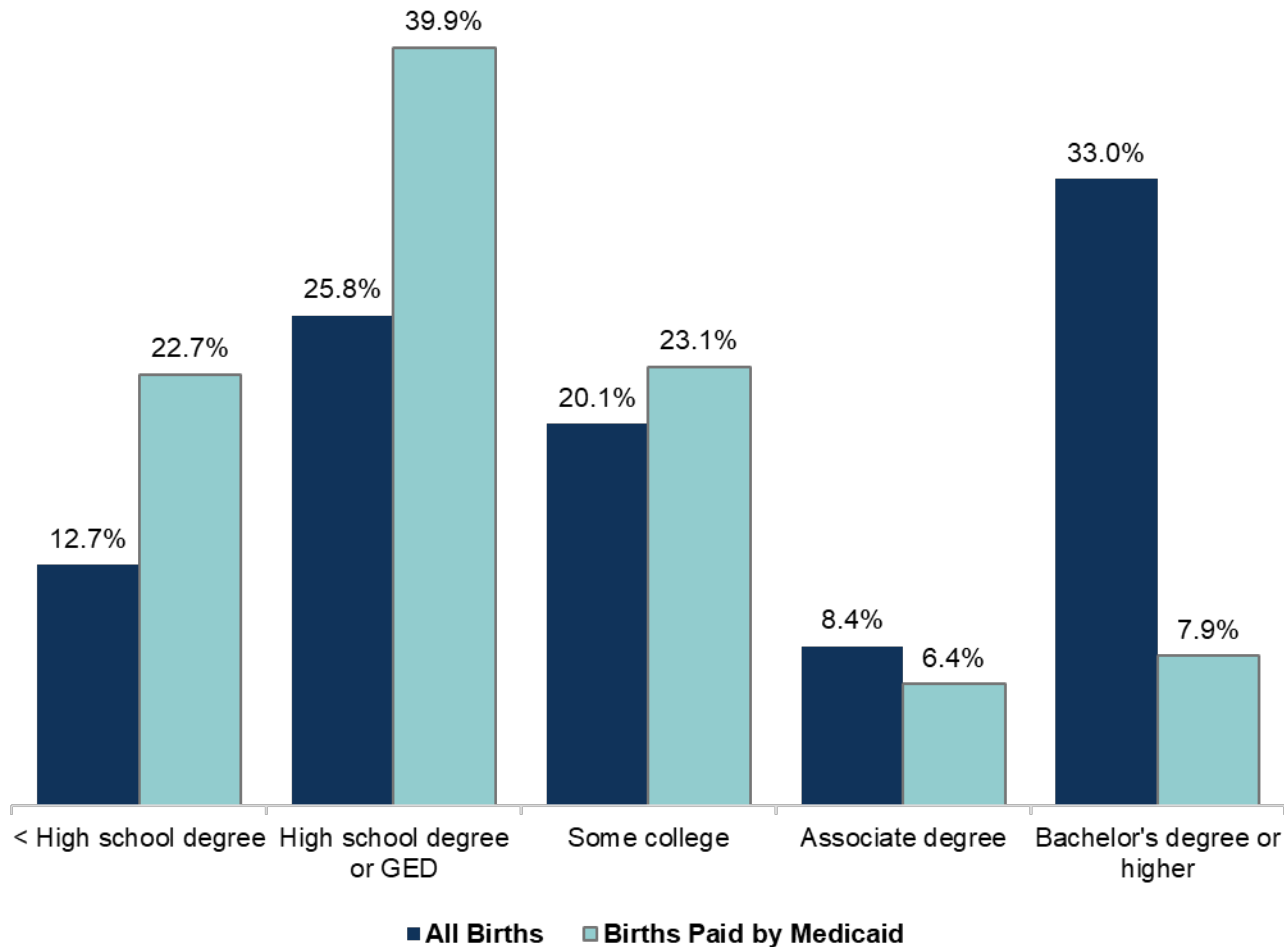
Source:
National Center for Health Statistics (NCHS). 2018 Natality Public Use File.

Available at:
https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm

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Percentage of Live Births, by Maternal Educational Attainment: All Births and Births Paid by Medicaid, 2018

Notes:
There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries. Educational attainment is the highest level of education completed at time of delivery. Births with educational attainment not reported or unknown (2%) are excluded.

Source:
National Center for Health Statistics (NCHS). 2018 Natality Public Use File.

Available at:
https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm

OUTCOMES: MATERNAL

Outcomes: Maternal

Fast facts: Severe maternal morbidity (SMM) is defined as unintended outcomes of labor and delivery that result in significant short- or long-term consequences to a woman's health.[1] In 2015, SMM rates were higher for women who were uninsured or whose delivery was paid by Medicaid compared with private insurance. SMM rates also varied by maternal race/ethnicity, age, and community income level.
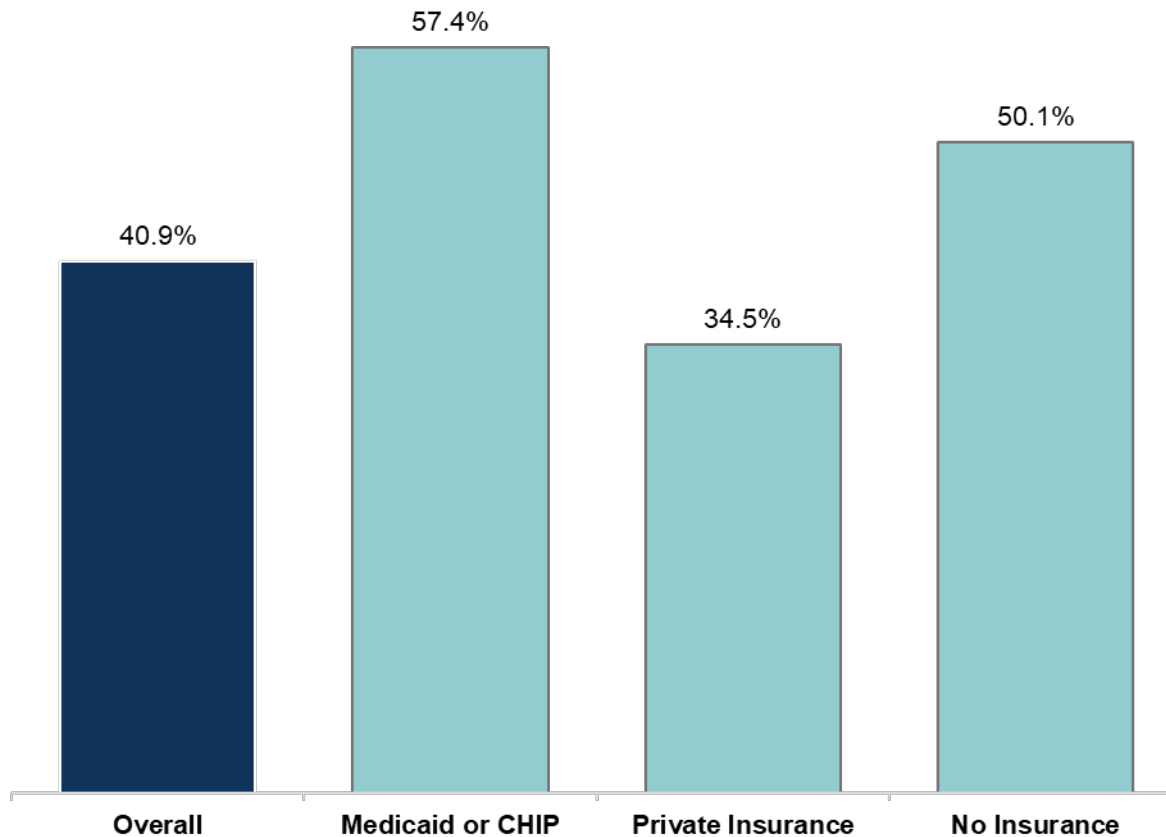
This section of the profile shows selected maternal outcomes during and after pregnancy.

The charts in this section include:

- Percentage of Reproductive Age Women Who Reported Ever Having an Unintended Pregnancy, by Current Insurance Coverage
- Deliveries with Preeclampsia or Eclampsia, by Delivery Payer and Diagnosis Type
- Percentage of Live Births with Gestational Diabetes Recorded in the Birth Certificate, by Delivery Payer
- Overall and Low-Risk Cesarean Section Rate per 100 Deliveries, by Delivery Payer
- Low-Risk Cesarean Section Rate per 100 Deliveries, by State: Births Paid by Medicaid
- Severe Maternal Morbidity Rate per 10,000 Delivery Hospitalizations, by Delivery Payer and Maternal Characteristics

1. American College of Obstetricians and Gynecologists and the Society for Maternal–Fetal Medicine, Kilpatrick SK, Ecker JL. Severe maternal morbidity: screening and review. Am J Obstet Gynecol 2016; 215(3):B17–B22.

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Percentage of Reproductive Age Women Who Reported Ever Having an Unintended Pregnancy, by Current Insurance Coverage, 2015–2017

Bar chart showing percentage of reproductive age women who reported ever having an unintended pregnancy:
- Overall: 40.9%
- Medicaid or CHIP: 57.4%
- Private Insurance: 34.5%
- No Insurance: 50.1%

Notes:
Insurance status is self-reported. "Medicaid or CHIP" includes Medicaid or CHIP coverage only. "Private insurance" includes private coverage only, TRICARE or other military insurance, both Medicaid and private, and any other insurance in combination with private. "No insurance" includes not currently insured or Indian Health Services only. Reproductive age women are defined as ages 15–49. A pregnancy is classified as unintended if the woman reported it was "too soon/mistimed" or "unwanted."

Source:
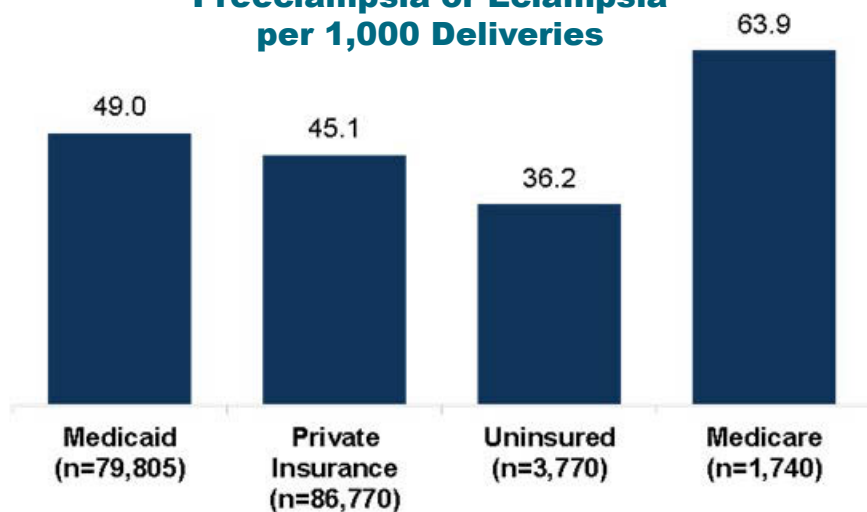National Survey of Family Growth (NSFG). 2015–2017 Public Use File.

Available at:
https://www.cdc.gov/nchs/nsfg/nsfg_2015_2017_puf.htm

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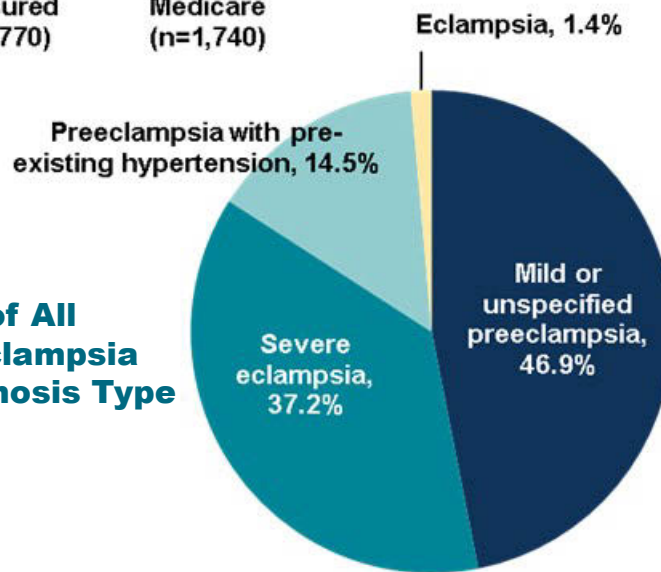Maternal & Infant Health Quality Improvement

Deliveries with Preeclampsia or Eclampsia, by Delivery Payer and Diagnosis Type, 2014

Number and Rate of Deliveries with Preeclampsia or Eclampsia per 1,000 Deliveries

Medicaid (n=79,805)	Private Insurance (n=86,770)	Uninsured (n=3,770)	Medicare (n=1,740)
49.0	45.1	36.2	63.9

Percentage of All Preeclampsia/Eclampsia Deliveries by Diagnosis Type

- Eclampsia, 1.4%
- Preeclampsia with pre-existing hypertension, 14.5%
- Severe eclampsia, 37.2%
- Mild or unspecified preeclampsia, 46.9%

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Percentage of Live Births with Gestational Diabetes Recorded in the Birth Certificate, by Delivery Payer, 2018

Bar chart showing percentage of live births with gestational diabetes by delivery payer:
- Medicaid: 6.5%
- Private Insurance: 7.0%
- Self-Pay: 5.0%
- Other: 6.0%
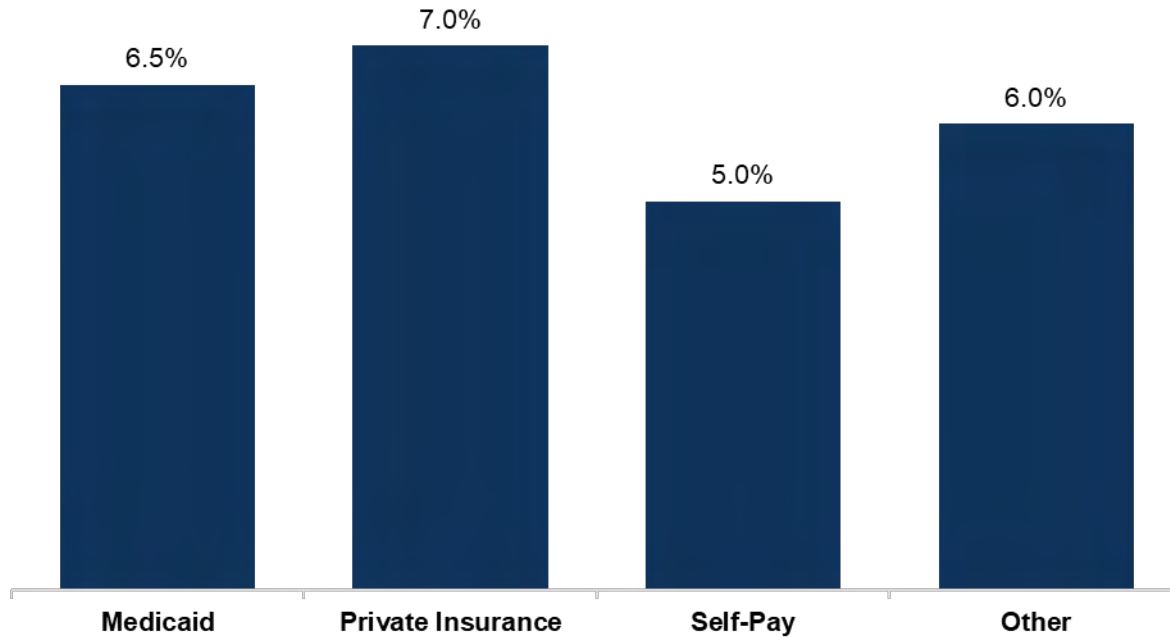
Notes:
There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries. "Other" includes other government and non-government payers. Births with gestational diabetes not reported or unknown (<1% of births) are excluded.

Source:
National Center for Health Statistics (NCHS). 2018 Natality Public Use File.

Available at:
https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm

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Total and Low-Risk Cesarean Delivery Rate per 100 Deliveries, by Delivery Payer, 2018

Overall C-section rate
- Medicaid: 31.7
- Private Insurance: 33.0
- Self-Pay: 24.3
- Other: 29.1

Low-risk C-section rate
- Medicaid: 24.9
- Private Insurance: 27.2
- Self-Pay: 21.0
- Other: 22.5

Legend: ■ Medicaid ■ Private Insurance ■ Self-Pay □ Other

Notes:
The total cesarean delivery rate is calculated across all deliveries. The low-risk cesarean delivery rate is calculated for singleton, term, cephalic deliveries to women having a first birth. Using this definition, 32% of all births in 2018 were low-risk. There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries. "Other" includes other government and non-government payers. Births with delivery method not reported or unknown (<1% of births) are excluded.
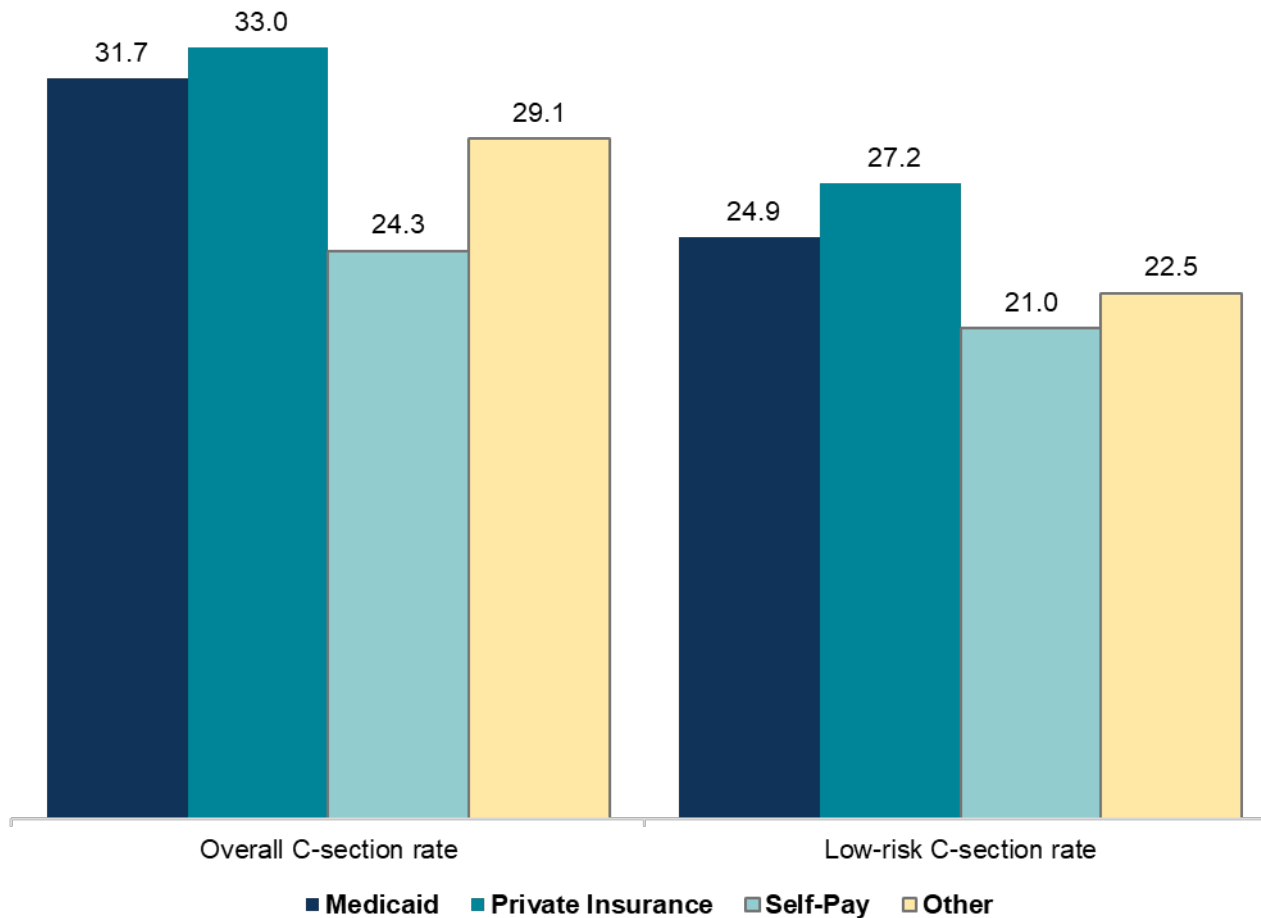
Source:
National Center for Health Statistics (NCHS). 2018 Natality Public Use File.

Available at:
https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm

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Low-Risk Cesarean Delivery Rate per 100 Deliveries, by State: Births Paid by Medicaid, 2018
[Lower rates are better for this measure]

Legend:
- 26.6% to 30.5%
- 24.2% to 26.5%
- 21.8% to 24.1%
- 14.9% to 21.7%

State Median = 24.1%
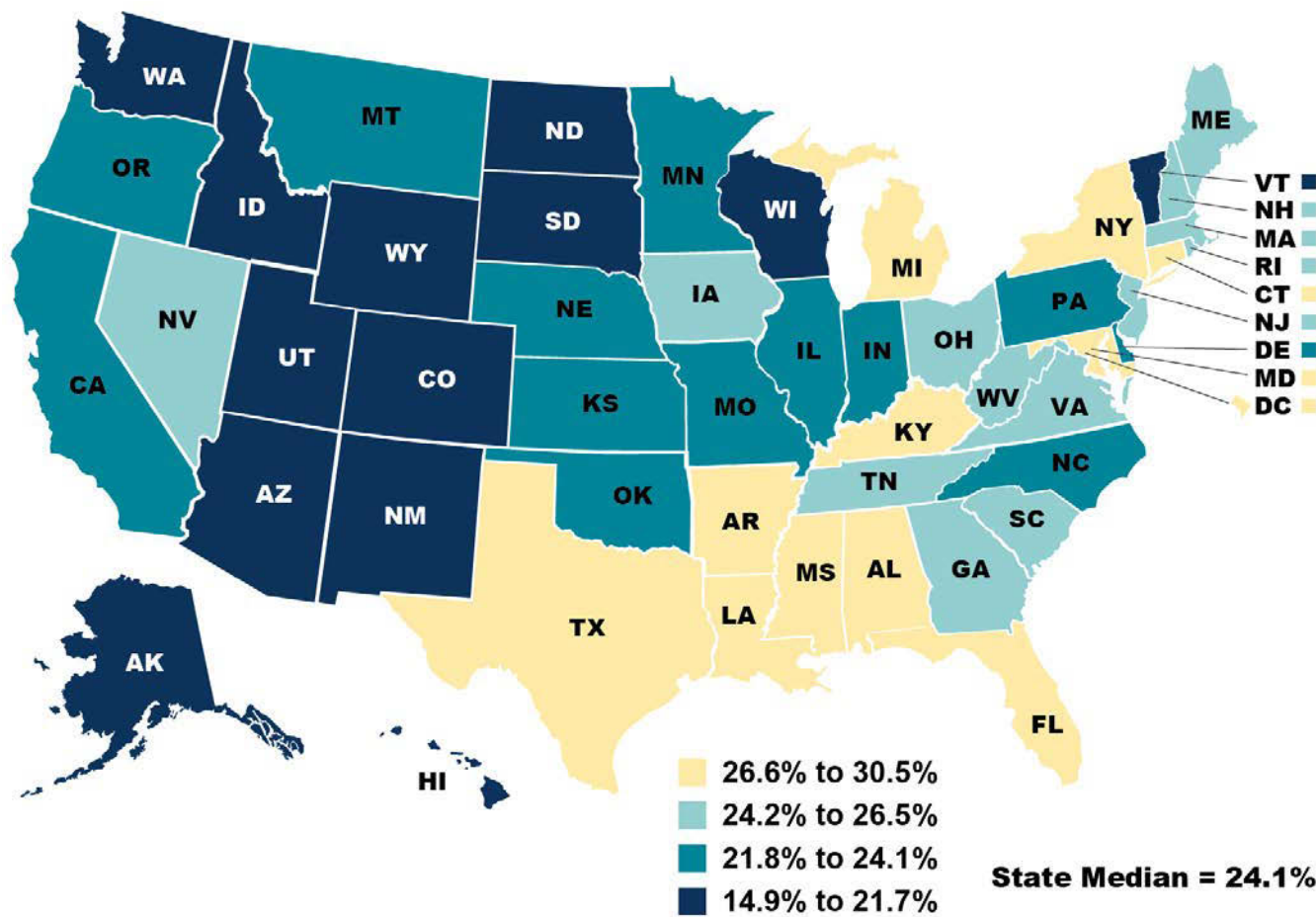
Lower rates are better for this measure

Notes:
The low-risk cesarean delivery rate is calculated for singleton, term, cephalic deliveries to women having a first birth. Using this definition, 32% of all births in 2018 were low-risk. There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries. Births with delivery method unknown (<1% of births) are excluded.

Source:
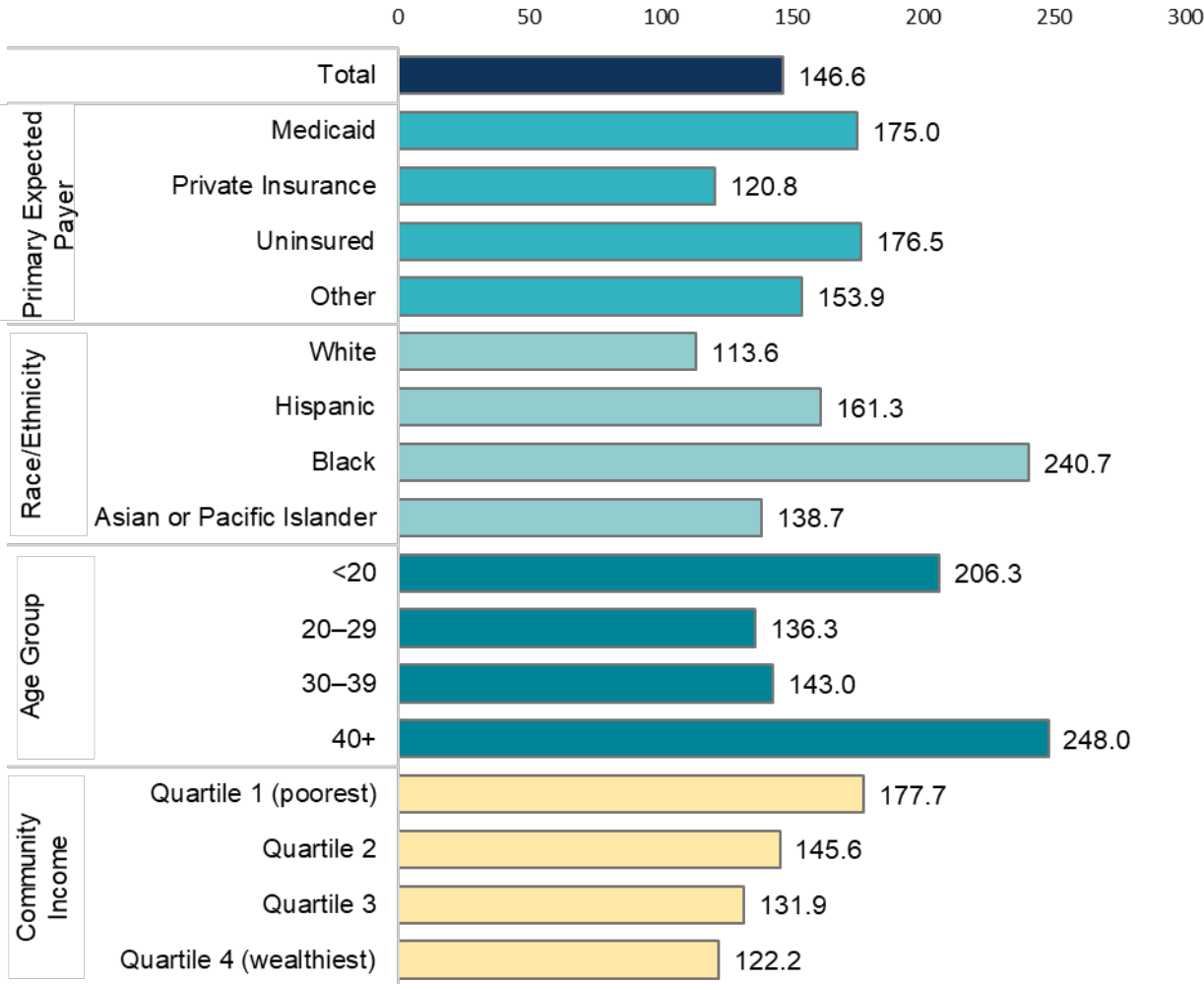National Center for Health Statistics (NCHS). 2018 Natality Public Use Data on CDC WONDER online database.

Available at:
https://wonder.cdc.gov/

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Severe Maternal Morbidity Rate per 10,000 Delivery Hospitalizations, by Delivery Payer and Maternal Characteristics, 2015

Primary Expected Payer
- Total: 146.6
- Medicaid: 175.0
- Private Insurance: 120.8
- Uninsured: 176.5
- Other: 153.9

Race/Ethnicity
- White: 113.6
- Hispanic: 161.3
- Black: 240.7
- Asian or Pacific Islander: 138.7

Age Group
- <20: 206.3
- 20–29: 136.3
- 30–39: 143.0
- 40+: 248.0

Community Income
- Quartile 1 (poorest): 177.7
- Quartile 2: 145.6
- Quartile 3: 131.9
- Quartile 4 (wealthiest): 122.2

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OUTCOMES: INFANT

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Outcomes: Infant

Fast facts: In 2018, 11.2% of all live births paid for by Medicaid were preterm (less than 37 weeks), 9.8% were low birthweight (less than 2,500 grams), and 1.6% were very low birthweight (less than 1,500 grams).

This section of the profile shows selected infant outcomes by payer, then by race/ethnicity and state, where data permit.

The charts in this section include:

- Low Birthweight and Preterm Births, by Delivery Payer
- Low Birthweight and Preterm Births, by Race/Ethnicity: Births Paid by Medicaid
- Percentage of Low Birthweight (<2,500 Grams) Births, by State: Births Paid by Medicaid
- Percentage of Preterm (<37 Weeks) Births, by State: Births Paid by Medicaid
- Rate of Congenital Anomalies Recorded in the Birth Certificate per 100,000 Live Births, by Delivery Payer
- Percentage of Infants with a Neonatal Intensive Care Unit (NICU) Admission Recorded on the Birth Certificate, by Delivery Payer
- Percentage of Children Ever Breastfed, by Child's Current Insurance Coverage and Race/Ethnicity
- Percentage of Children Who Received a Developmental Screening in the Past Year, by Child's Current Insurance Coverage and Race/Ethnicity

Low Birthweight and Preterm Births, by Delivery Payer, 2018

Percentage of Live Births That Were Low and Very Low Birthweight

	Medicaid	Private Insurance	Self-Pay	Other
Total	9.8%	7.1%	7.1%	8.0%
Low birthweight (1,500–2,499 grams)	8.2%	5.9%	5.8%	6.6%
Very low birthweight (227–1,499 grams)	1.6%	1.2%	1.3%	1.4%

Legend:
- Low birthweight (1,500–2,499 grams)
- Very low birthweight (227–1,499 grams)
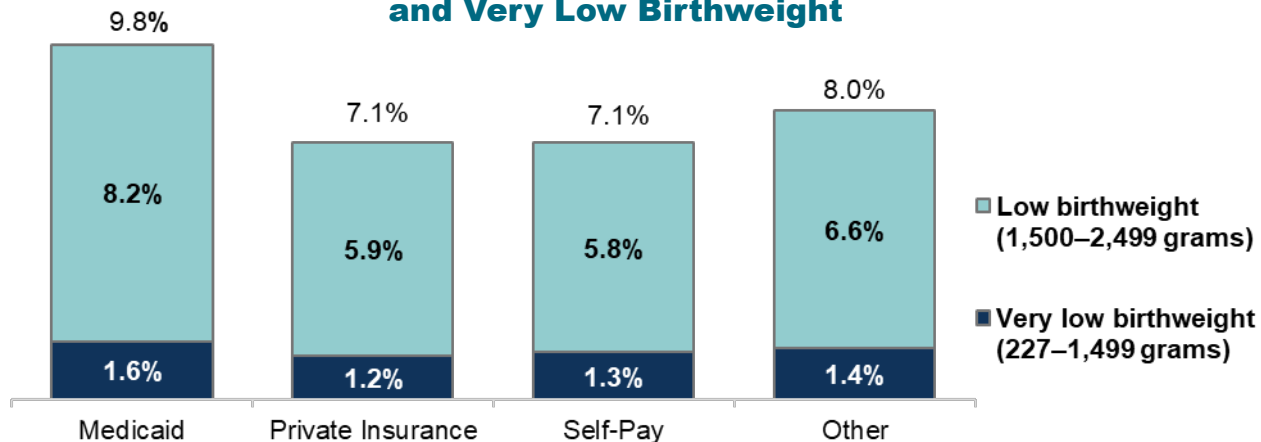
Percentage of Live Births That Were Preterm (<37 Weeks Gestation)
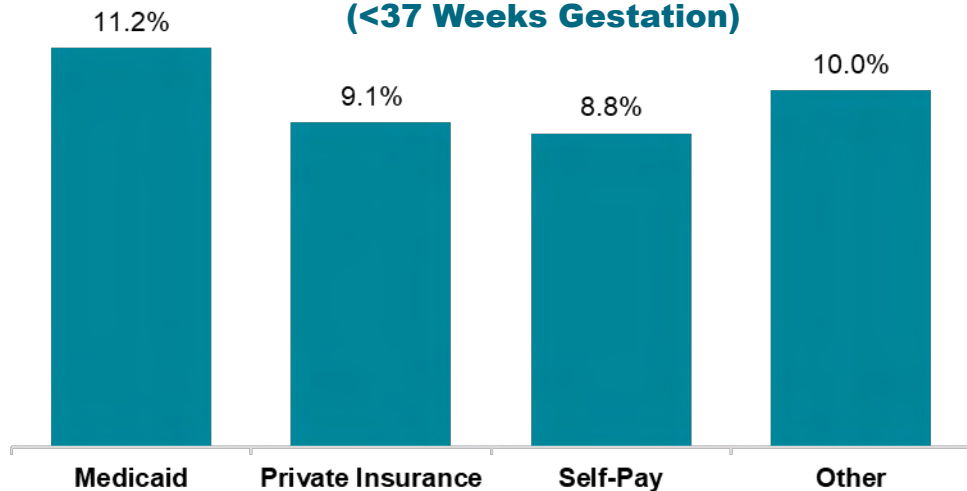
Medicaid	Private Insurance	Self-Pay	Other
11.2%	9.1%	8.8%	10.0%

Notes:
A low birthweight birth is defined as less than 2,500 grams. A preterm birth is defined as less than 37 weeks gestation based on the obstetric estimate. There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries. "Other" includes other government and non-government payers. Births with unknown birthweight (<1% of births) or gestational age (<1% of births) are excluded from the respective exhibits.

Source:
National Center for Health Statistics (NCHS). 2018 Natality Public Use File.

Available at:
https://www.cdc.gov/nchs/data_acces s/vitalstatsonline.htm

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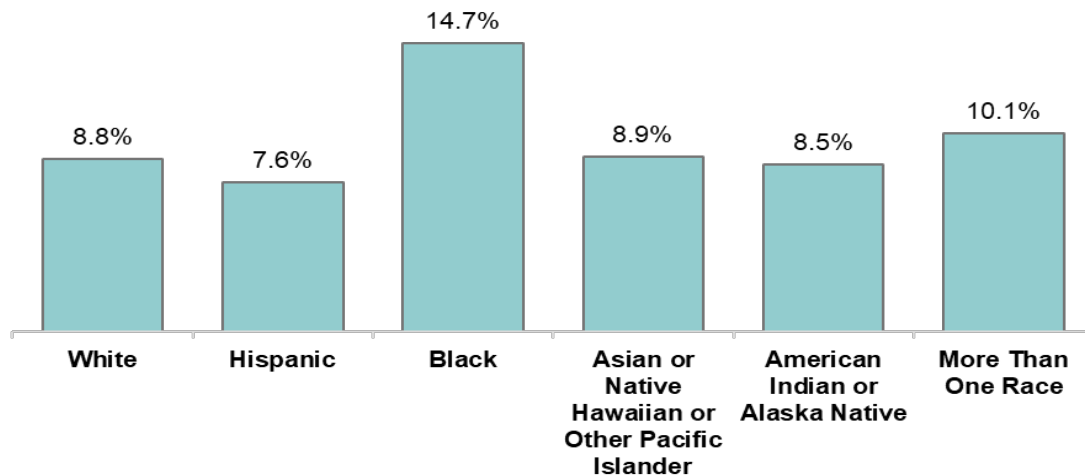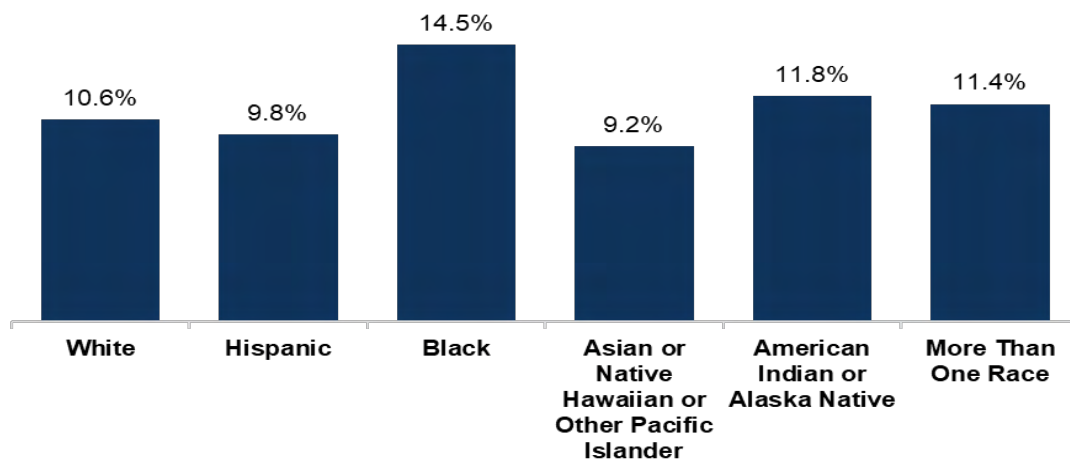Quality Improvement

Low Birthweight and Preterm Births, by Race/Ethnicity: Births Paid by Medicaid, 2018

Percentage of Live Births That Were Low Birthweight (Births Paid by Medicaid)

White	Hispanic	Black	Asian or Native Hawaiian or Other Pacific Islander	American Indian or Alaska Native	More Than One Race
8.8%	7.6%	14.7%	8.9%	8.5%	10.1%

Percentage of Live Births That Were Preterm (Births Paid by Medicaid)

White	Hispanic	Black	Asian or Native Hawaiian or Other Pacific Islander	American Indian or Alaska Native	More Than One Race
10.6%	9.8%	14.5%	9.2%	11.8%	11.4%

Notes:
A low birthweight birth is defined as less than 2,500 grams. A preterm birth is defined as less than 37 weeks gestation based on the obstetric estimate. There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries. "Other" includes other government and non-government payers. Births with unknown birthweight (<1% of births) or gestational age (<1% of births) are excluded from the respective exhibits.

"White," "Black," "Asian or Native Hawaiian or Other Pacific Islander," "American Indian or Alaska Native," and "More Than One Race" categories exclude Hispanic ethnicity. "Hispanic" includes Hispanic of any race.

Source:
National Center for Health Statistics (NCHS). 2018 Natality Public Use File.

Available at:
https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm

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Percentage of Low Birthweight (<2,500 Grams) Births, by State: Births Paid by Medicaid, 2018
[Lower rates are better for this measure]

Legend:
- 11.0% to 13.8%
- 9.8% to 10.9%
- 8.6% to 9.7%
- 7.0% to 8.5%

State Median = 9.7%

Lower rates are better for this measure
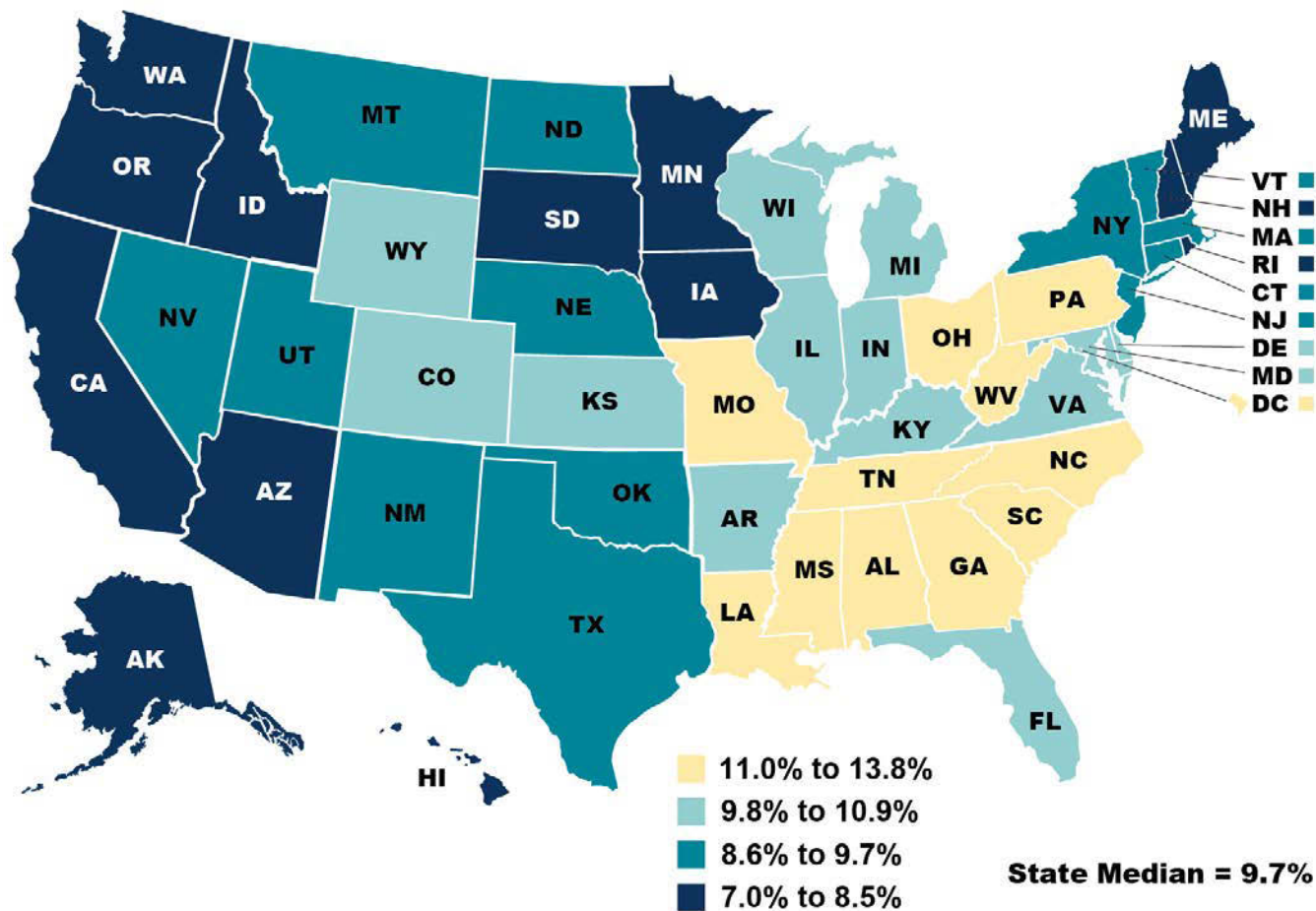
Notes:
A low birthweight birth is defined as less than 2,500 grams. There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries. Births with unknown birthweight (<1% of births) are excluded.

Source:
National Center for Health Statistics (NCHS). 2018 Natality Public Use Data on CDC WONDER online database.

Available at:
https://wonder.cdc.gov/

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Percentage of Preterm (<37 Weeks) Births, by State: Births Paid by Medicaid, 2018
[Lower rates are better for this measure]

Legend:
- 12.3% to 15.2%
- 11.4% to 12.2%
- 10.3% to 11.3%
- 8.7% to 10.2%

State Median = 11.3%
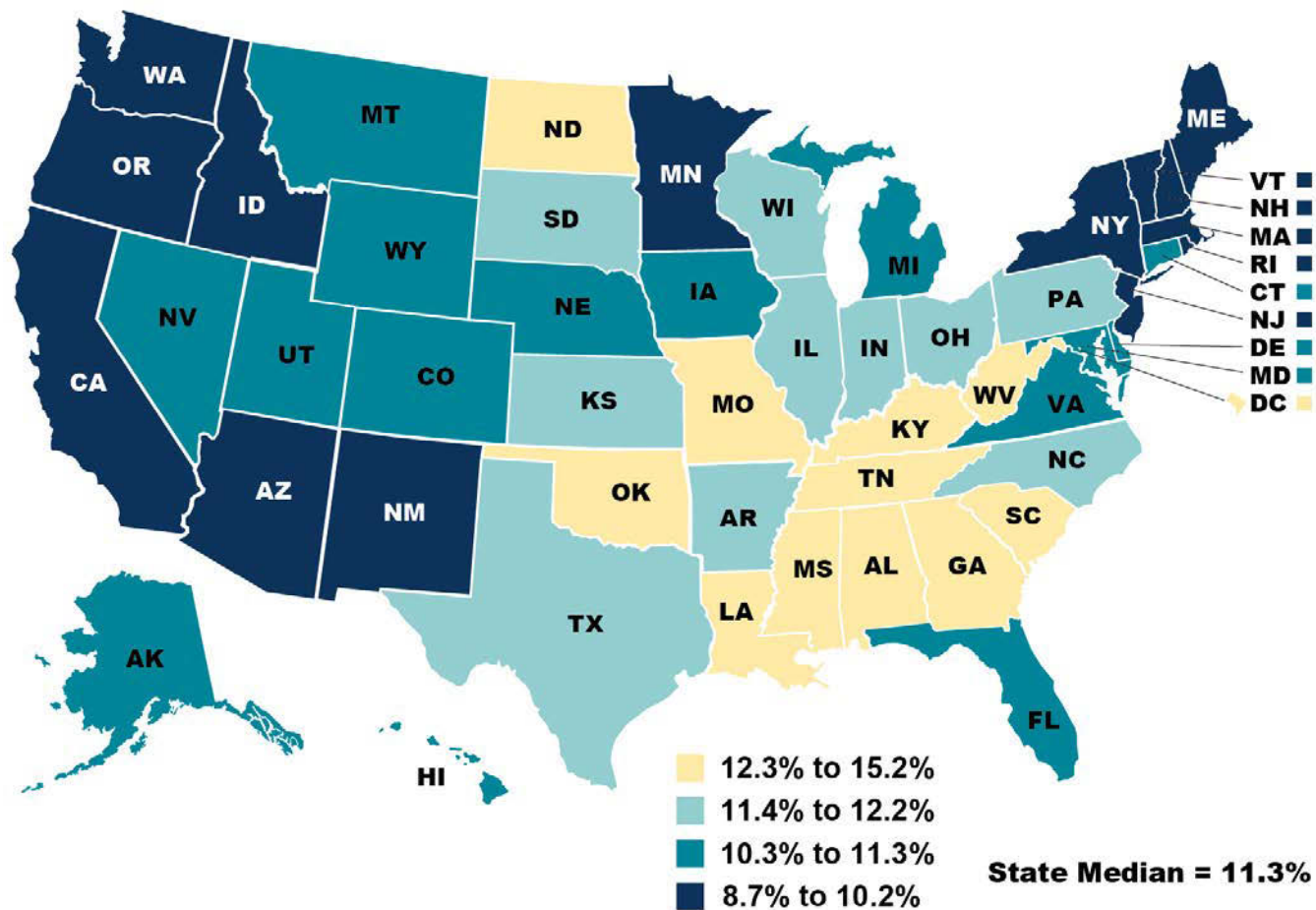
Lower rates are better for this measure

Notes:
A preterm birth is defined as less than 37 weeks gestation based on the obstetric estimate. There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries. Births with unknown gestational age (<1% of births) are excluded.

Source:
National Center for Health Statistics (NCHS). 2018 Natality Public Use Data on CDC WONDER online database.
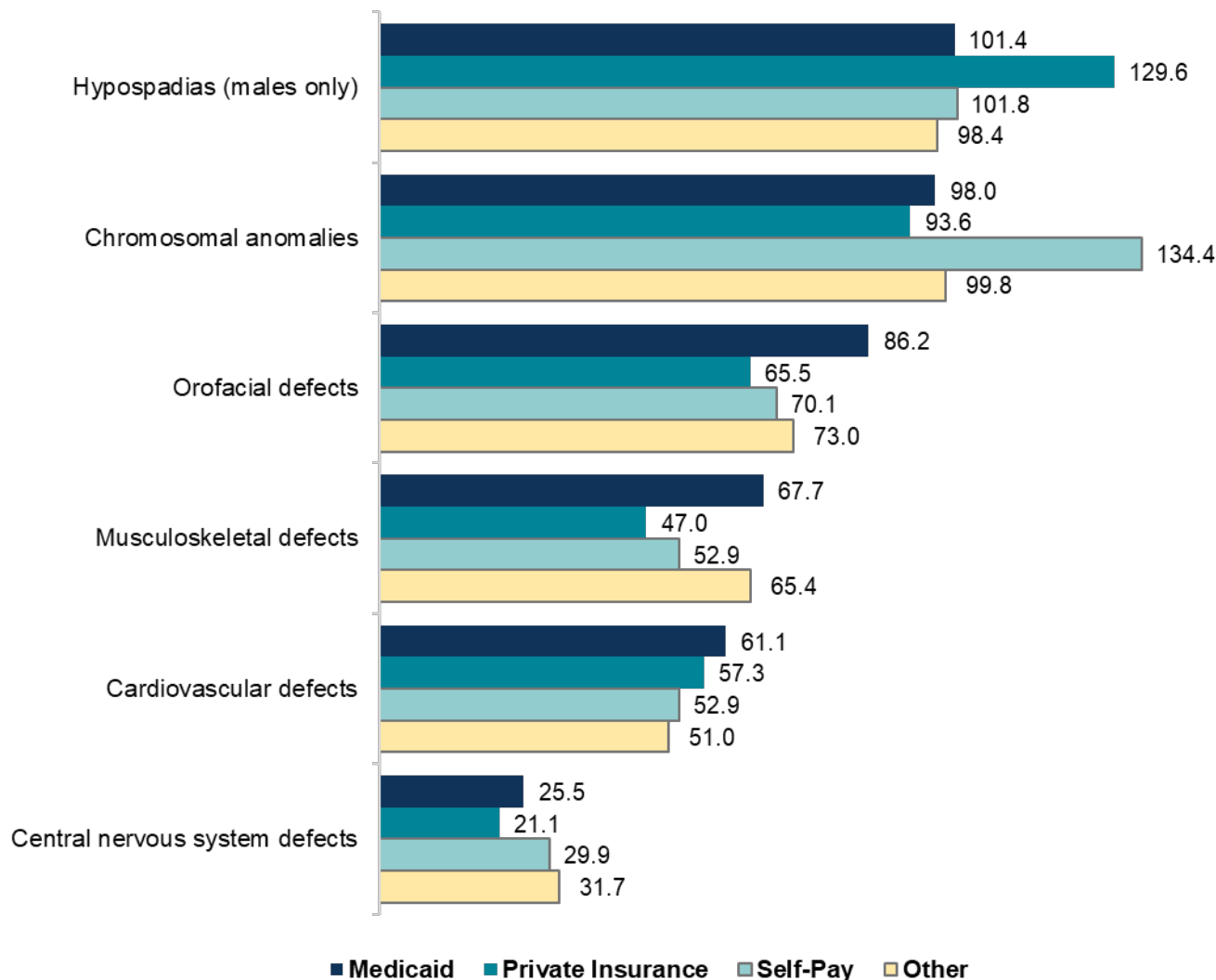
Available at:
https://wonder.cdc.gov/

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Rate of Congenital Anomalies Recorded in the Birth Certificate per 100,000 Live Births, by Delivery Payer, 2018

Hypospadias (males only)
- Medicaid: 101.4
- Private Insurance: 129.6
- Self-Pay: 101.8
- Other: 98.4

Chromosomal anomalies
- Medicaid: 98.0
- Private Insurance: 93.6
- Self-Pay: 134.4
- Other: 99.8

Orofacial defects
- Medicaid: 86.2
- Private Insurance: 65.5
- Self-Pay: 70.1
- Other: 73.0

Musculoskeletal defects
- Medicaid: 67.7
- Private Insurance: 47.0
- Self-Pay: 52.9
- Other: 65.4

Cardiovascular defects
- Medicaid: 61.1
- Private Insurance: 57.3
- Self-Pay: 52.9
- Other: 51.0

Central nervous system defects
- Medicaid: 25.5
- Private Insurance: 21.1
- Self-Pay: 29.9
- Other: 31.7

Legend: ■ Medicaid ■ Private Insurance □ Self-Pay □ Other

Notes:
The 2003 revision of the birth certificate attempted to improve reporting of congenital anomalies by including only those diagnosable within 24 hours of birth using widely available diagnostic techniques. "Chromosomal anomalies" include Down syndrome and suspected chromosomal disorder. "Orofacial defects" include cleft palate alone and cleft lip with or without cleft palate. "Musculoskeletal defects" include limb reduction defect, gastroschisis, omphalocele, and congenital diaphragmatic hernia. "Cardiovascular defects" include cyanotic congenital heart disease. "Central nervous system defects" include anencephaly and meningomyelocele/spina bifida. There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries. "Other" includes other government and non-government payers. Births with all congenital anomaly variables not reported or unknown (<1% of births) are excluded.

Source:
National Center for Health Statistics (NCHS). 2018 Natality Public Use File.

Available at:
https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm

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Percentage of Infants with a Neonatal Intensive Care Unit (NICU) Admission Recorded on the Birth Certificate, by Delivery Payer, 2018

Bar chart showing:
- Medicaid: 10.2%
- Private Insurance: 8.5%
- Self-Pay: 7.6%
- Other: 9.0%

Notes:
There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries. "Other" includes other government and non-government payers. Births with NICU status not reported or unknown (<1% of births) are excluded.
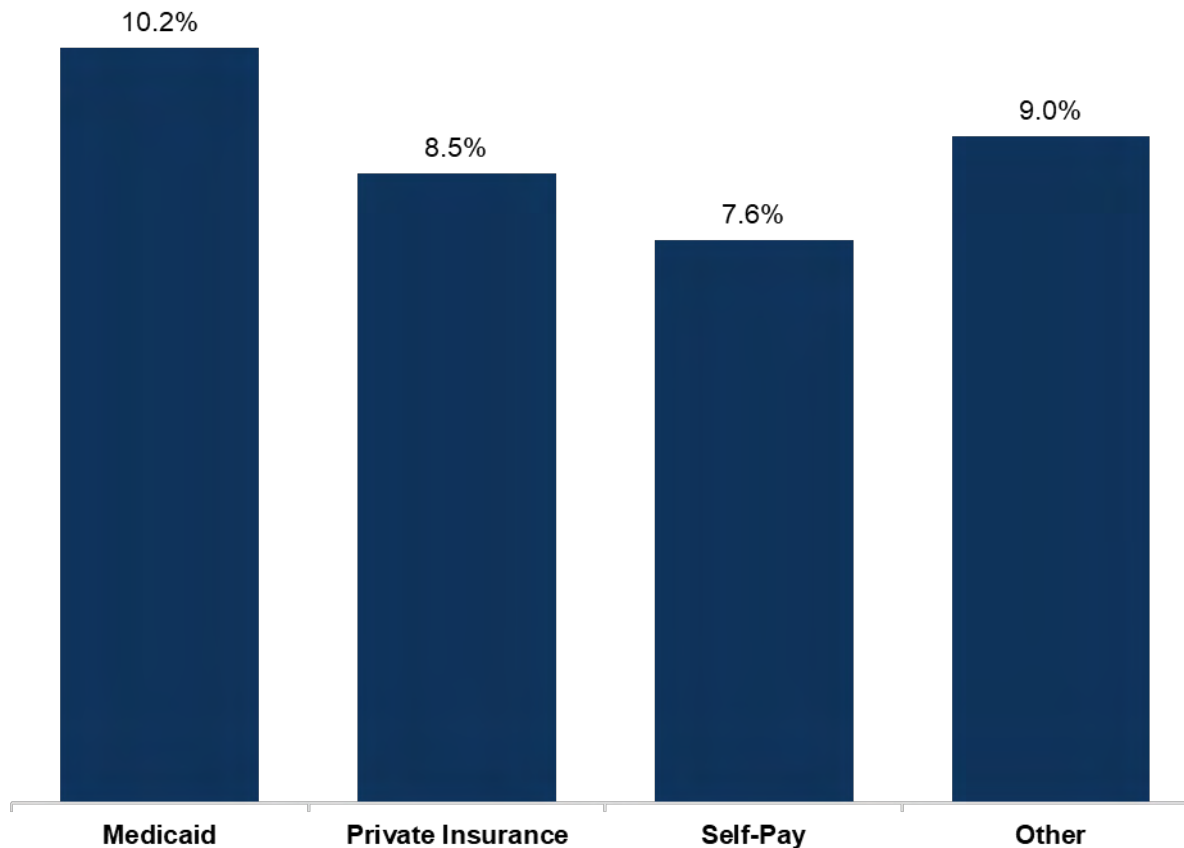
Source:
National Center for Health Statistics (NCHS). 2018 Natality Public Use File.
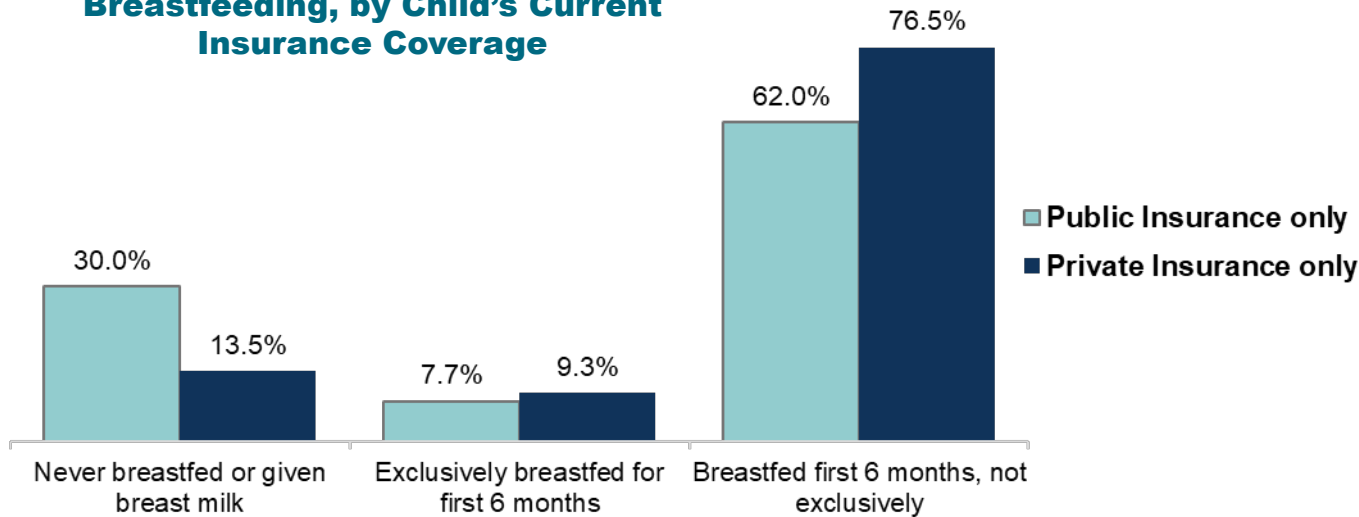
Available at:
https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm

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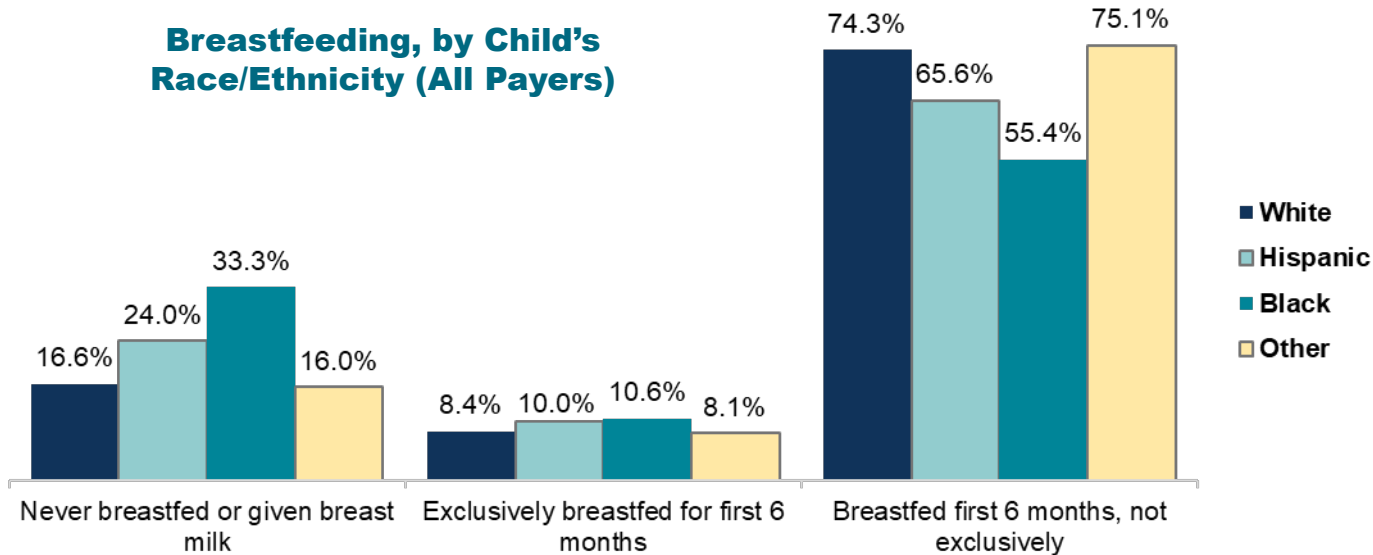Maternal & Infant Health Quality Improvement

Percentage of Children Ever Breastfed, by Child's Current Insurance Coverage and Race/Ethnicity, 2017–2018

Breastfeeding, by Child's Current Insurance Coverage

- Public Insurance only
- Private Insurance only

Never breastfed or given breast milk
- 30.0%
- 13.5%

Exclusively breastfed for first 6 months
- 7.7%
- 9.3%

Breastfed first 6 months, not exclusively
- 62.0%
- 76.5%

Breastfeeding, by Child's Race/Ethnicity (All Payers)

- White
- Hispanic
- Black
- Other

Never breastfed or given breast milk
- 16.6%
- 24.0%
- 33.3%
- 16.0%

Exclusively breastfed for first 6 months
- 8.4%
- 10.0%
- 10.6%
- 8.1%

Breastfed first 6 months, not exclusively
- 74.3%
- 65.6%
- 55.4%
- 75.1%

Notes:
Breastfeeding and insurance status are based on parent-report. This question is asked for children ages 6 months to 5 years. "Public Insurance" is defined as "Medicaid, Medical Assistance, or any kind of government assistance plan for those with low incomes or a disability." "Private Insurance" includes insurance through a current or former employer or union, insurance purchased directly from an insurance company, TRICARE or other military health care, coverage through the Affordable Care Act, or other private insurance. Percentages do not sum to 100% as totals include children with unknown breastfeeding exclusivity (<1% of each group).

White, Black, and Other categories exclude Hispanic ethnicity. Hispanic includes Hispanic of any race.

Source:
Child and Adolescent Health Measurement Initiative. 2017–2018 National Survey of Children's Health (NSCH) data query.
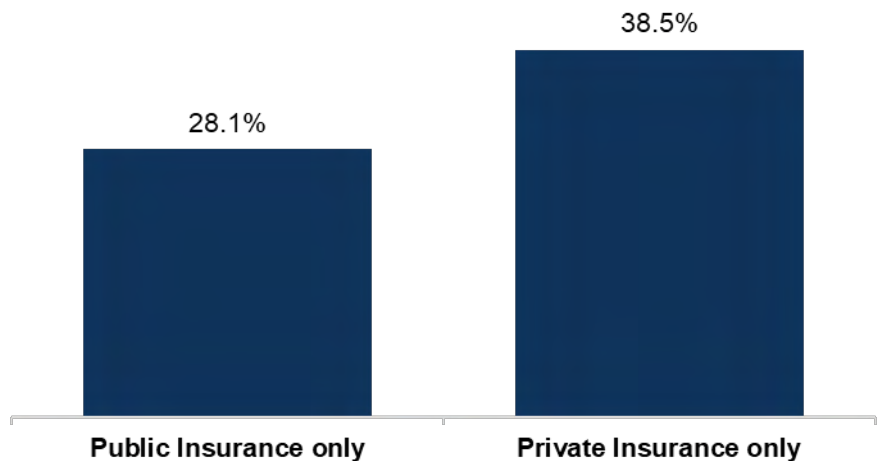
Available at:
https://www.childhealthdata.org/

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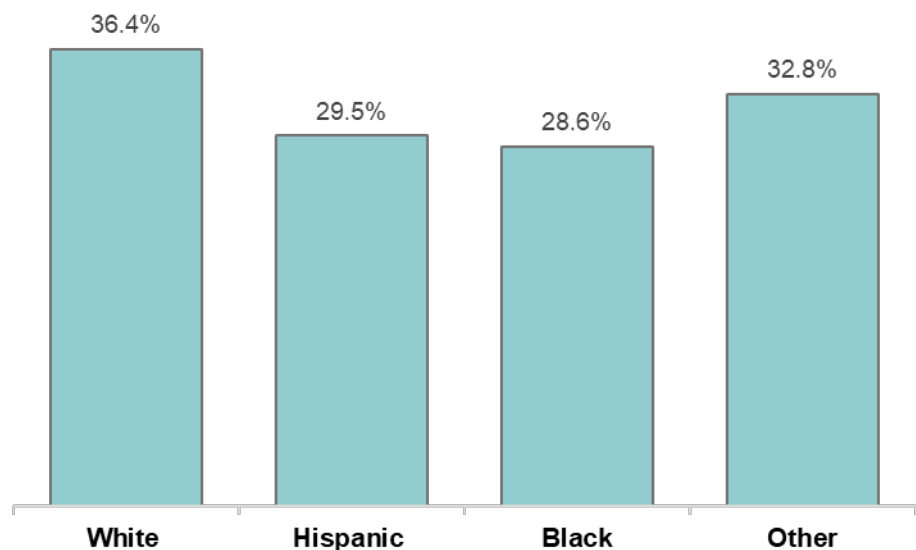**Medicaid & CHIP**
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Percentage of Children Who Received a Developmental Screening in the Past Year, by Child's Current Insurance Coverage and Race/Ethnicity, 2017–2018

Developmental Screening, by Child's Current Insurance Coverage

- Public Insurance only: 28.1%
- Private Insurance only: 38.5%

Developmental Screening, by Child's Race/Ethnicity (All Payers)

- White: 36.4%
- Hispanic: 29.5%
- Black: 28.6%
- Other: 32.8%

Notes:
Insurance status is based on parent-report. Respondents with children ages 9–35 months were asked whether the child received a developmental screening using a parent-completed screening tool. "Public Insurance" is defined as "Medicaid, Medical Assistance, or any kind of government assistance plan for those with low incomes or a disability." "Private Insurance" includes insurance through a current or former employer or union, insurance purchased directly from an insurance company, TRICARE or other military health care, coverage through the Affordable Care Act, or other private insurance. This measure has ≥ 2% missing cases.

"White," "Black," and "Other" categories exclude Hispanic ethnicity. "Hispanic" includes Hispanic of any race.

Source:
Child and Adolescent Health Measurement Initiative. 2017–2018 National Survey of Children's Health (NSCH) data query.

Available at:
https://www.childhealthdata.org/

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OUTCOMES: PREGNANCY-RELATED DEATHS
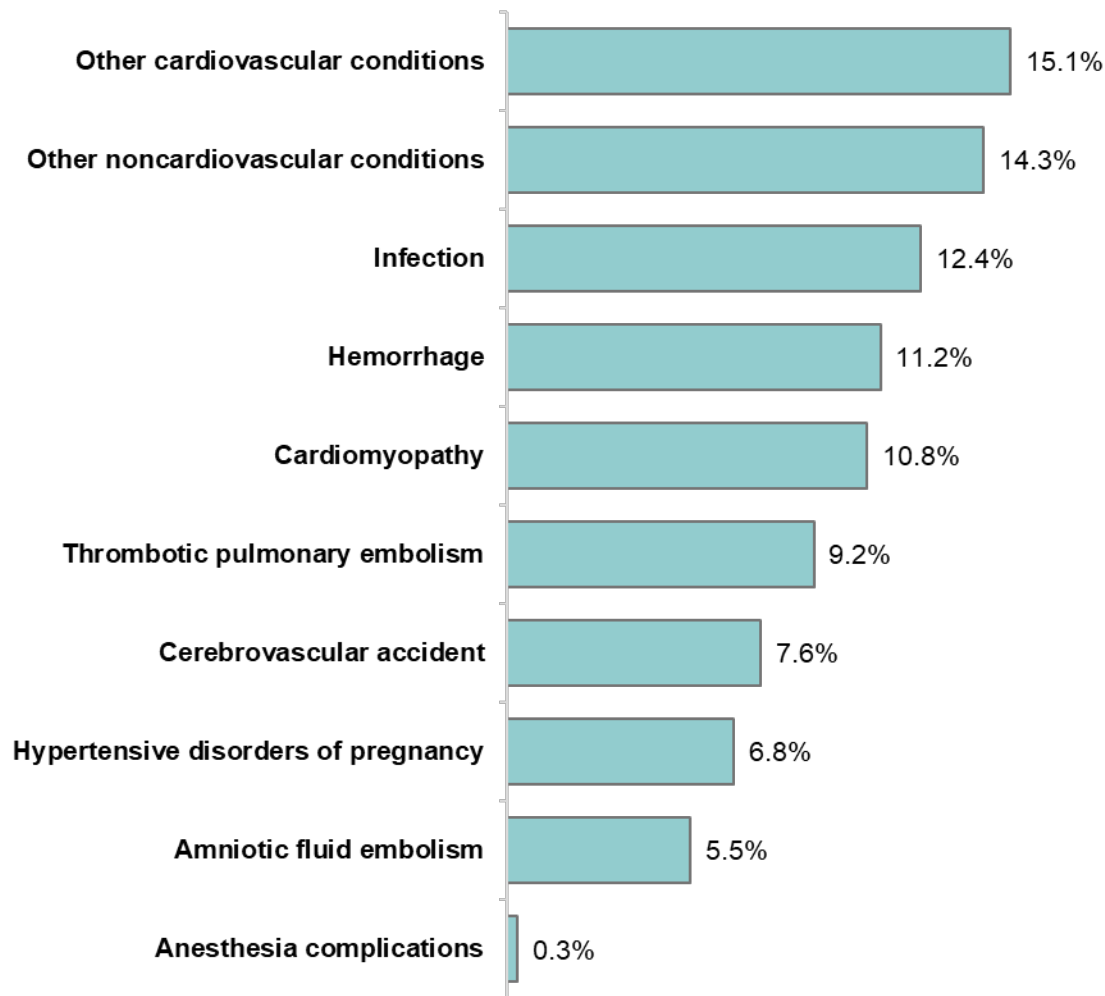
Outcomes: Pregnancy-Related Deaths

Fast facts: In 2011–15, there were 17.2 pregnancy-related deaths per 100,000 live births in the U.S. For Black women, there were 42.8 pregnancy-related deaths per 100,000 live births. Nearly half of all deaths occur during pregnancy or on the day of delivery.

This section of the profile shows selected indicators around pregnancy-related deaths.

The charts in this section include:

- Percentage of Pregnancy-Related Deaths, by Cause: All Payers
- Pregnancy-Related Deaths per 100,000 Live Births, by Maternal Characteristics: All Payers
- Percentage of Pregnancy-Related Deaths, by Timing of Death: All Payers

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Percentage of Pregnancy-Related Deaths, by Cause: All Payers, 2011–2015

Cause	Percentage
Other cardiovascular conditions	15.1%
Other noncardiovascular conditions	14.3%
Infection	12.4%
Hemorrhage	11.2%
Cardiomyopathy	10.8%
Thrombotic pulmonary embolism	9.2%
Cerebrovascular accident	7.6%
Hypertensive disorders of pregnancy	6.8%
Amniotic fluid embolism	5.5%
Anesthesia complications	0.3%

Notes:
A pregnancy-related death is defined as a death from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes. The cause of death was unknown for 6.7% of all pregnancy-related deaths.
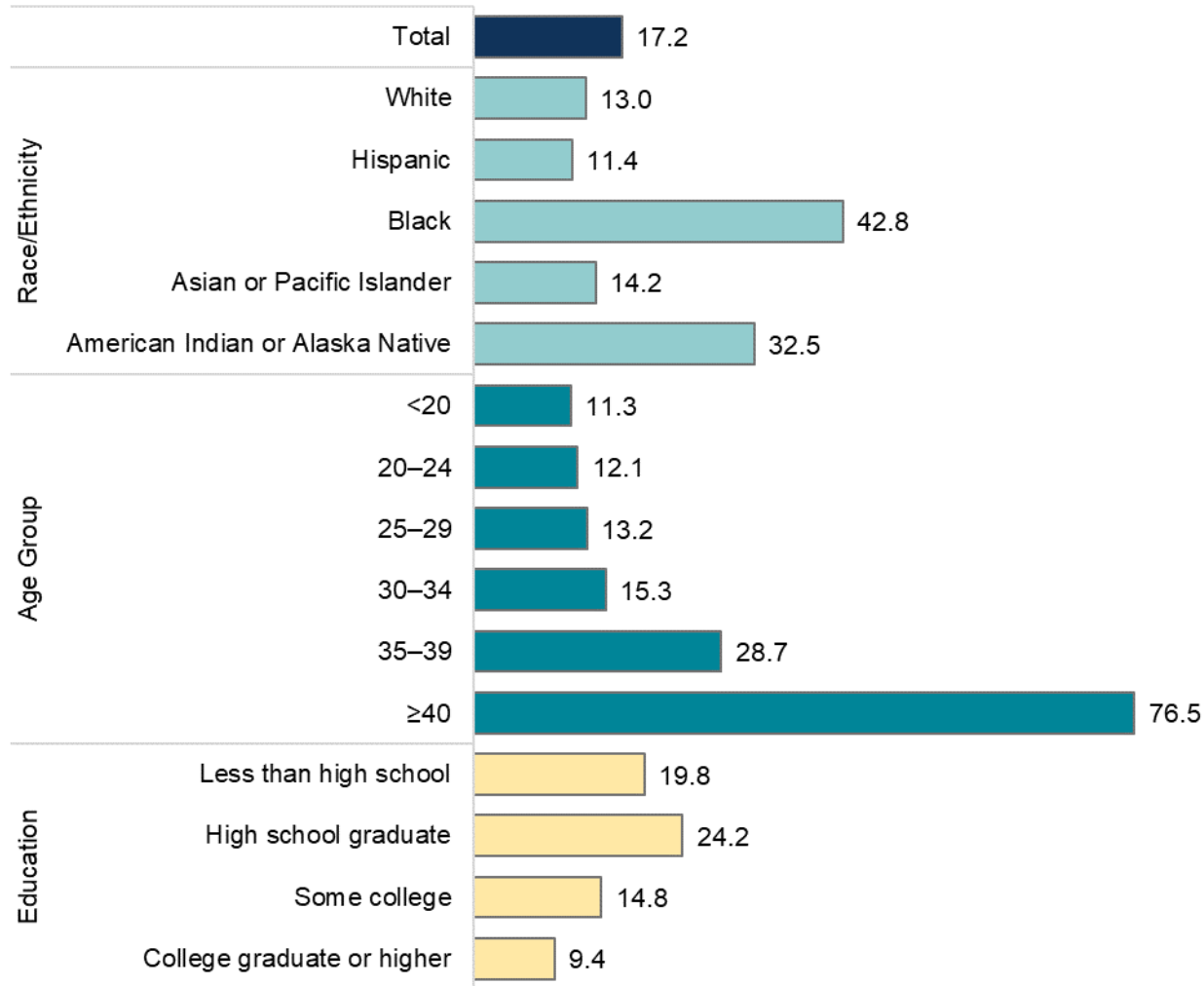
Source:
Pregnancy Mortality Surveillance System (PMSS). Causes of Pregnancy-Related Death in the United States, 2011–2015.

Available at:
https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pregnancy-mortality-surveillance-system.htm

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Pregnancy-Related Deaths per 100,000 Live Births, by Maternal Characteristics: All Payers, 2011–2015

Race/Ethnicity

Category	Rate
Total	17.2
White	13.0
Hispanic	11.4
Black	42.8
Asian or Pacific Islander	14.2
American Indian or Alaska Native	32.5

Age Group

Category	Rate
<20	11.3
20–24	12.1
25–29	13.2
30–34	15.3
35–39	28.7
≥40	76.5

Education

Category	Rate
Less than high school	19.8
High school graduate	24.2
Some college	14.8
College graduate or higher	9.4

Notes:
Data come from the Pregnancy Mortality Surveillance System (PMSS). A pregnancy-related death is defined as a death from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes.

Race/ethnicity categories are shown as defined by study authors. "White," "Black," "Asian or Pacific Islander," categories exclude Hispanic ethnicity. "Hispanic" includes Hispanic of any race.
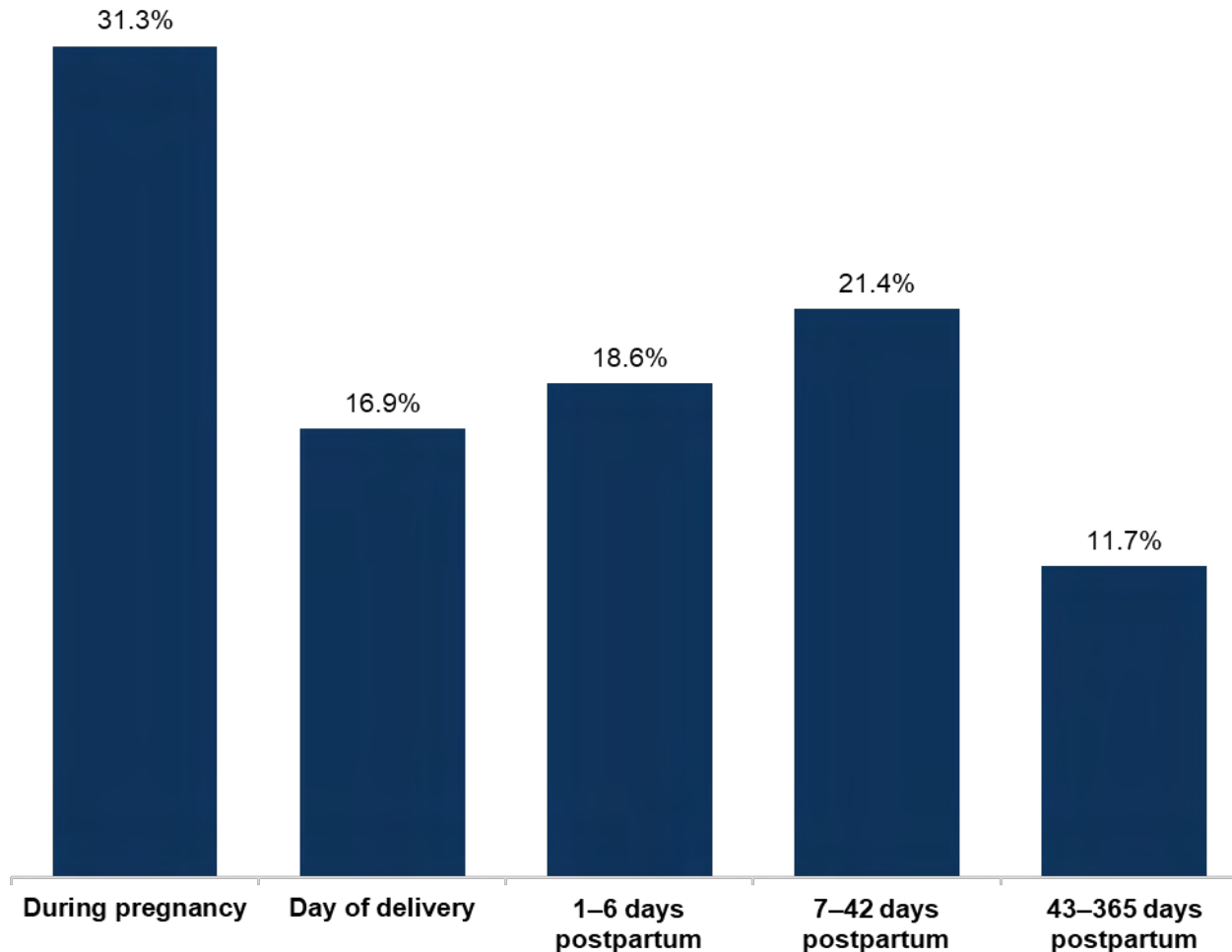
Source:
Petersen EE, Davis NL, Goodman D, et al. Vital Signs: Pregnancy-Related Deaths, United States, 2011–2015, and Strategies for Prevention, 13 States, 2013–2017. MMWR Morb Mortal Wkly Rep 2019; 68:423–429.

Available at:
http://dx.doi.org/10.15585/mmwr.mm6818e1

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Percentage of Pregnancy-Related Deaths, by Timing of Death: All Payers, 2011–2015

Notes:
Data come from the Pregnancy Mortality Surveillance System (PMSS). A pregnancy-related death is defined as a death from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes. Deaths in which timing of death was unknown (12% of deaths) are excluded.

Source:
Petersen EE, Davis NL, Goodman D, et al. Vital Signs: Pregnancy-Related Deaths, United States, 2011–2015, and Strategies for Prevention, 13 States, 2013–2017. MMWR Morb Mortal Wkly Rep 2019; 68:423–429.

Available at:
http://dx.doi.org/10.15585/mmwr.mm6818e1

Chart data:
- During pregnancy: 31.3%
- Day of delivery: 16.9%
- 1–6 days postpartum: 18.6%
- 7–42 days postpartum: 21.4%
- 43–365 days postpartum: 11.7%

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OUTCOMES:
FETAL AND INFANT DEATHS

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Outcomes: Fetal and Infant Deaths

Fast facts: In 2017, the infant mortality rate for deliveries paid for by Medicaid was 7.4 deaths per 1,000 live births. The two most common causes of infant death, both overall and for Medicaid births, were "congenital malformations" and "short gestation and low birthweight."
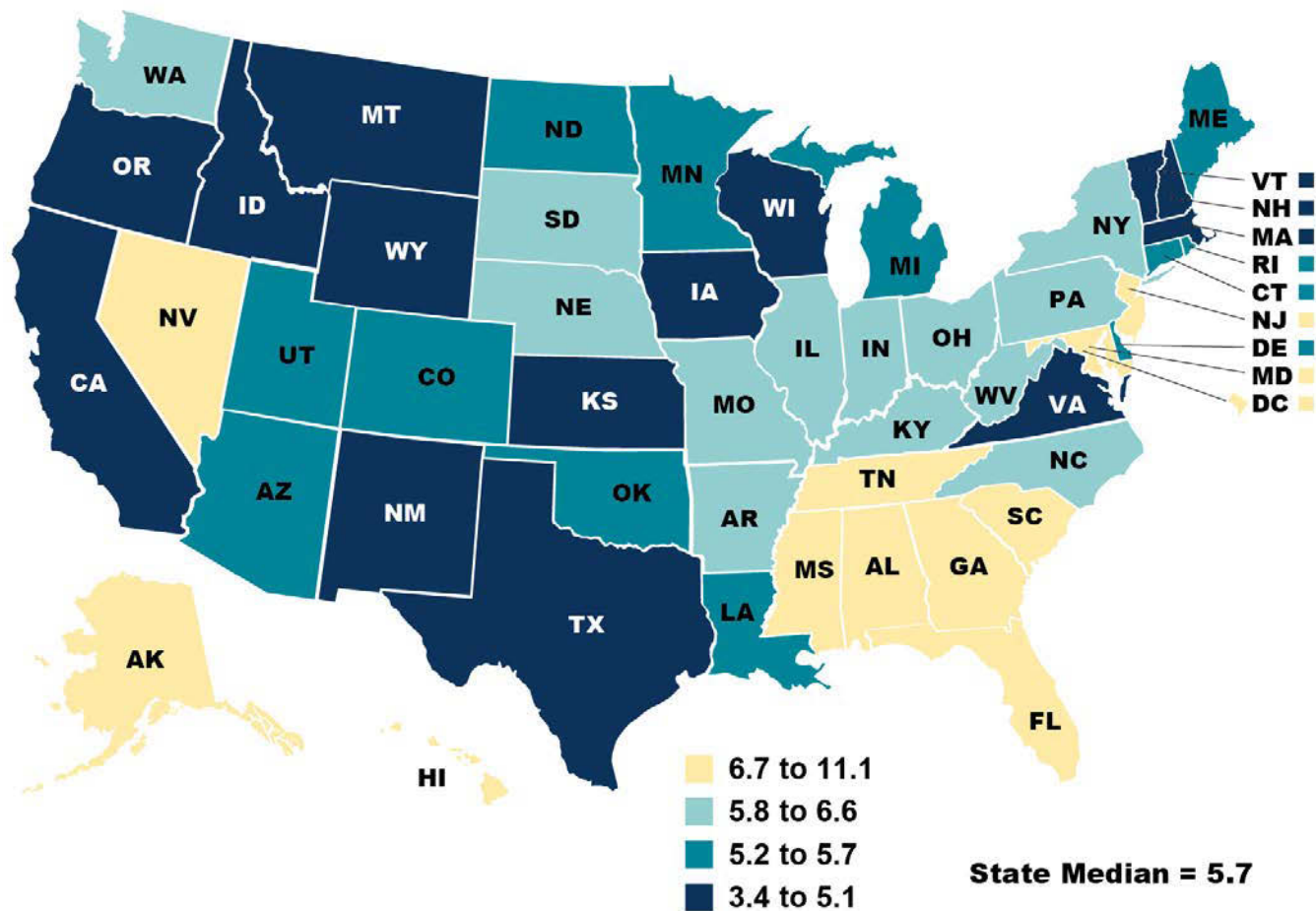
This section of the profile shows selected indicators around fetal and infant deaths, first by state and then by payer.

The charts in this section include:

- Fetal Death Rate per 1,000 Live Births and Fetal Deaths, by State: All Payers
- Infant Mortality Rate per 1,000 Live Births, by State: All Payers
- Percentage of Reproductive Age Women Who Report Ever Experiencing a Stillbirth, by Current Insurance Coverage
- Infant Mortality Rate per 1,000 Live Births, by Delivery Payer and Race/Ethnicity
- Percentage of All Infants Deaths, by Timing of Death and Delivery Payer
- Cause-Specific Infant Mortality Rate per 100,000 Live Births, by Delivery Payer
- Sudden Unexpected Infant Deaths, by Delivery Payer
- Sudden Unexpected Infant Deaths, by Race/Ethnicity and Cause: Births Paid by Medicaid

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Fetal Death Rate per 1,000 Live Births and Fetal Deaths, by State: All Payers, 2017
[Lower rates are better for this measure]

VT ■
NH ■
MA ■
RI ■
CT ■
NJ ■
DE ■
MD ■
DC ■

■	6.7 to 11.1
■	5.8 to 6.6
■	5.2 to 5.7
■	3.4 to 5.1

State Median = 5.7

Lower rates are better for this measure

Notes:
The fetal death rate is defined as the number of fetal deaths at 20 completed weeks of gestation or more per 1,000 live births and fetal deaths at 20 completed weeks of gestation or more.

Source:
National Center for Health Statistics (NCHS). 2017 Fetal Death Data on CDC WONDER online database.

Available at:
https://wonder.cdc.gov/

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Infant Mortality Rate per 1,000 Live Births, by State: All Payers, 2017
[Lower rates are better for this measure]

Legend:
- 7.0 to 8.7
- 6.0 to 6.9
- 5.2 to 5.9
- 3.7 to 5.1

State Median = 5.9
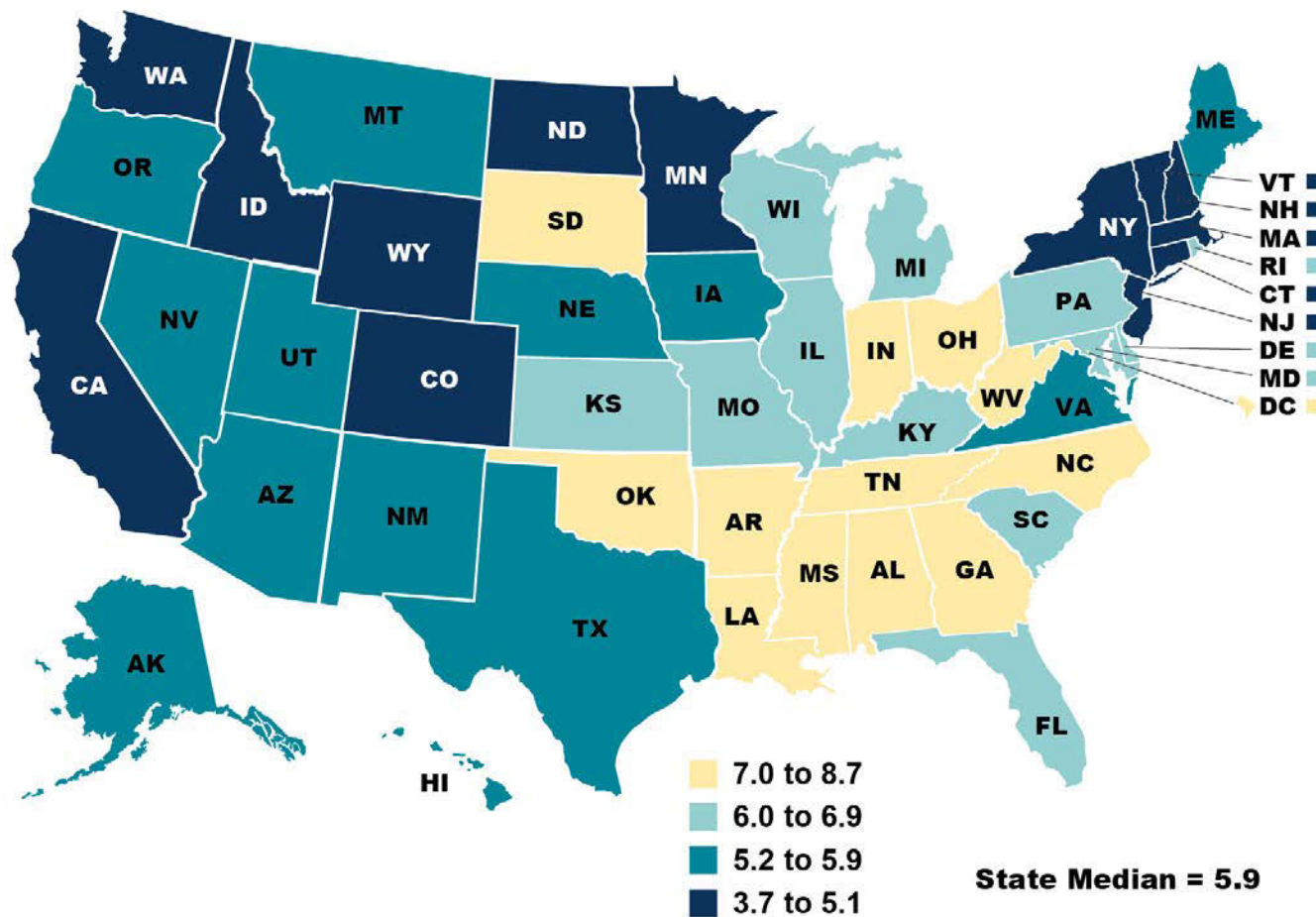
Lower rates are better for this measure

Notes:
The numerator for the 2017 period linked file is infant deaths occurring in 2017 linked to their corresponding birth certificates, whether the birth occurred in 2016 or 2017. The denominator is all births occurring in 2017. The number of infant deaths is weighted to equal the sum of the linked plus unlinked infant deaths.

Source:
National Center for Health Statistics (NCHS). 2017 Linked Birth/Infant Death Records on CDC WONDER online database.

Available at:
https://wonder.cdc.gov/

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Percentage of Reproductive Age Women Who Report Ever Experiencing a Stillbirth, by Current Insurance Coverage, 2015–2017
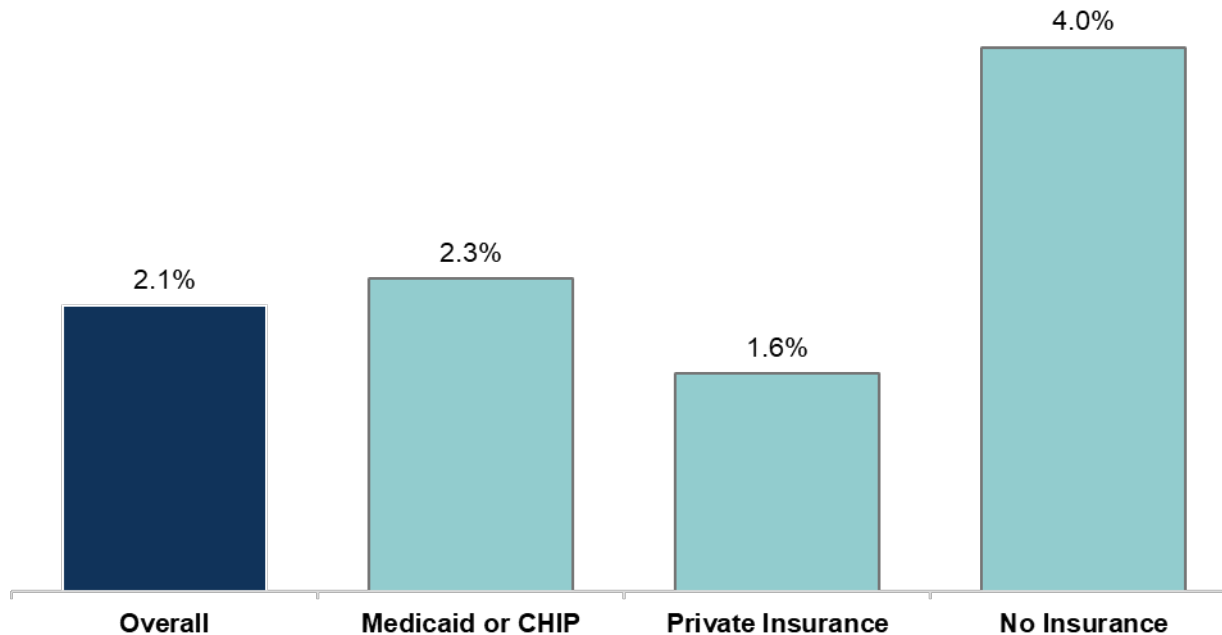
Notes:
A stillbirth is defined as a pregnancy loss at 20 weeks or more, but before birth. Insurance status is self-reported. "Medicaid or CHIP" includes Medicaid or CHIP coverage only. "Private insurance" includes private coverage only, TRICARE or other military insurance, both Medicaid and private, and any other insurance in combination with private. "No insurance" includes not currently insured or Indian Health Services only. Reproductive age women are defined as ages 15–49.

Source:
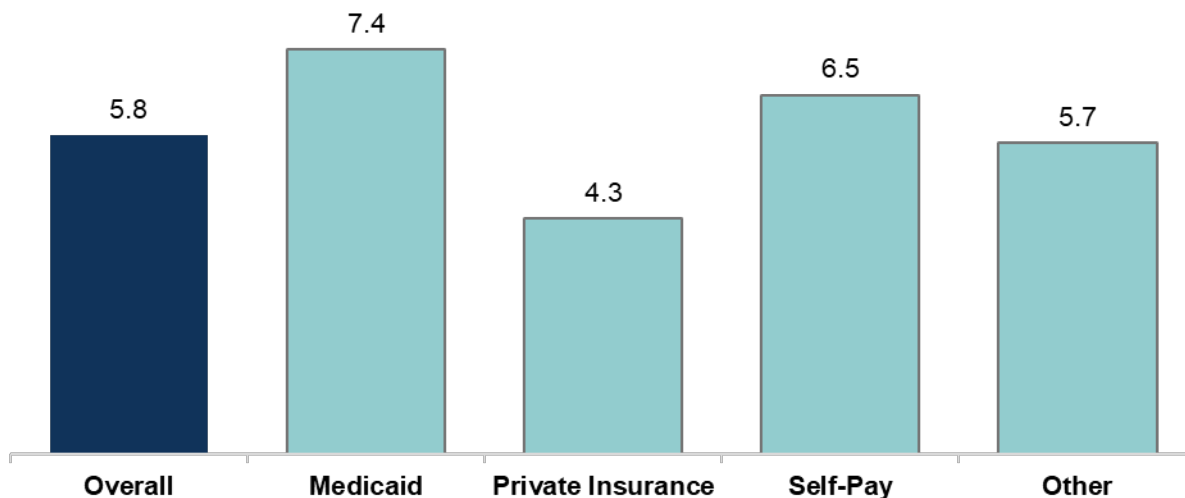National Survey of Family Growth (NSFG). 2015–2017 Public Use File.

Available at:
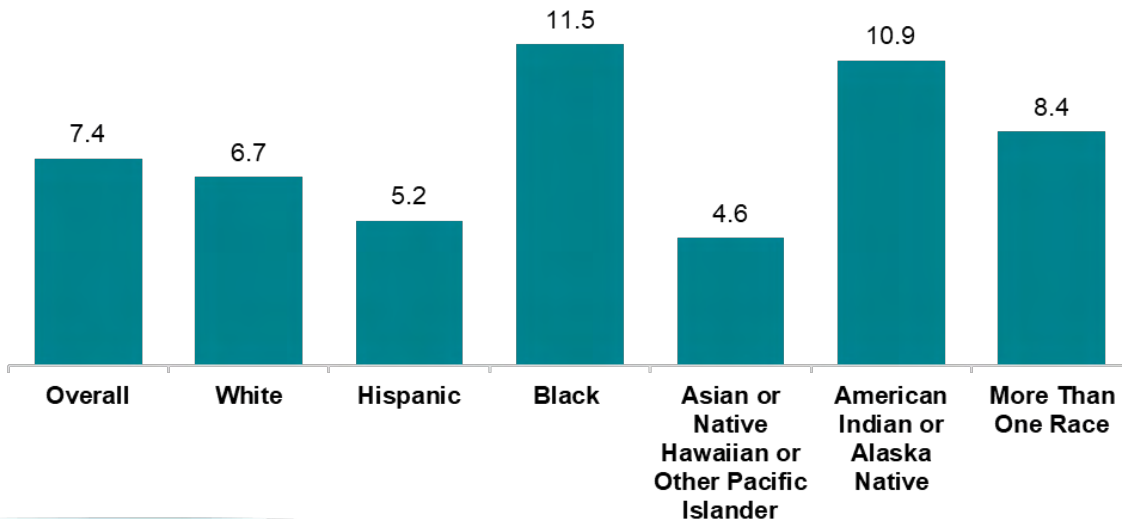https://www.cdc.gov/nchs/nsfg/nsfg_2015_2017_puf.htm

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Infant Mortality Rate per 1,000 Live Births, by Delivery Payer and Race/Ethnicity, 2017

Infant Mortality Rates, by Delivery Payer

Payer	Rate
Overall	5.8
Medicaid	7.4
Private Insurance	4.3
Self-Pay	6.5
Other	5.7

Infant Mortality Rates, by Race/Ethnicity (Births Paid by Medicaid)

Race/Ethnicity	Rate
Overall	7.4
White	6.7
Hispanic	5.2
Black	11.5
Asian or Native Hawaiian or Other Pacific Islander	4.6
American Indian or Alaska Native	10.9
More Than One Race	8.4

Notes:
The numerator for the 2017 period linked file is infant deaths occurring in 2017 linked to their corresponding birth certificates, whether the birth occurred in 2016 or 2017. The denominator is all births occurring in 2017. The number of infant deaths is weighted to equal the sum of the linked plus unlinked infant deaths. Births with payer not reported or unknown (<2% of births) are included when calculating the overall rate. There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries. "Other" includes other government and non-government payers.

"White," "Black," "Asian or Native Hawaiian or Other Pacific Islander," "American Indian or Alaska Native," and "More Than One Race" categories exclude Hispanic ethnicity. "Hispanic" includes Hispanic of any race.
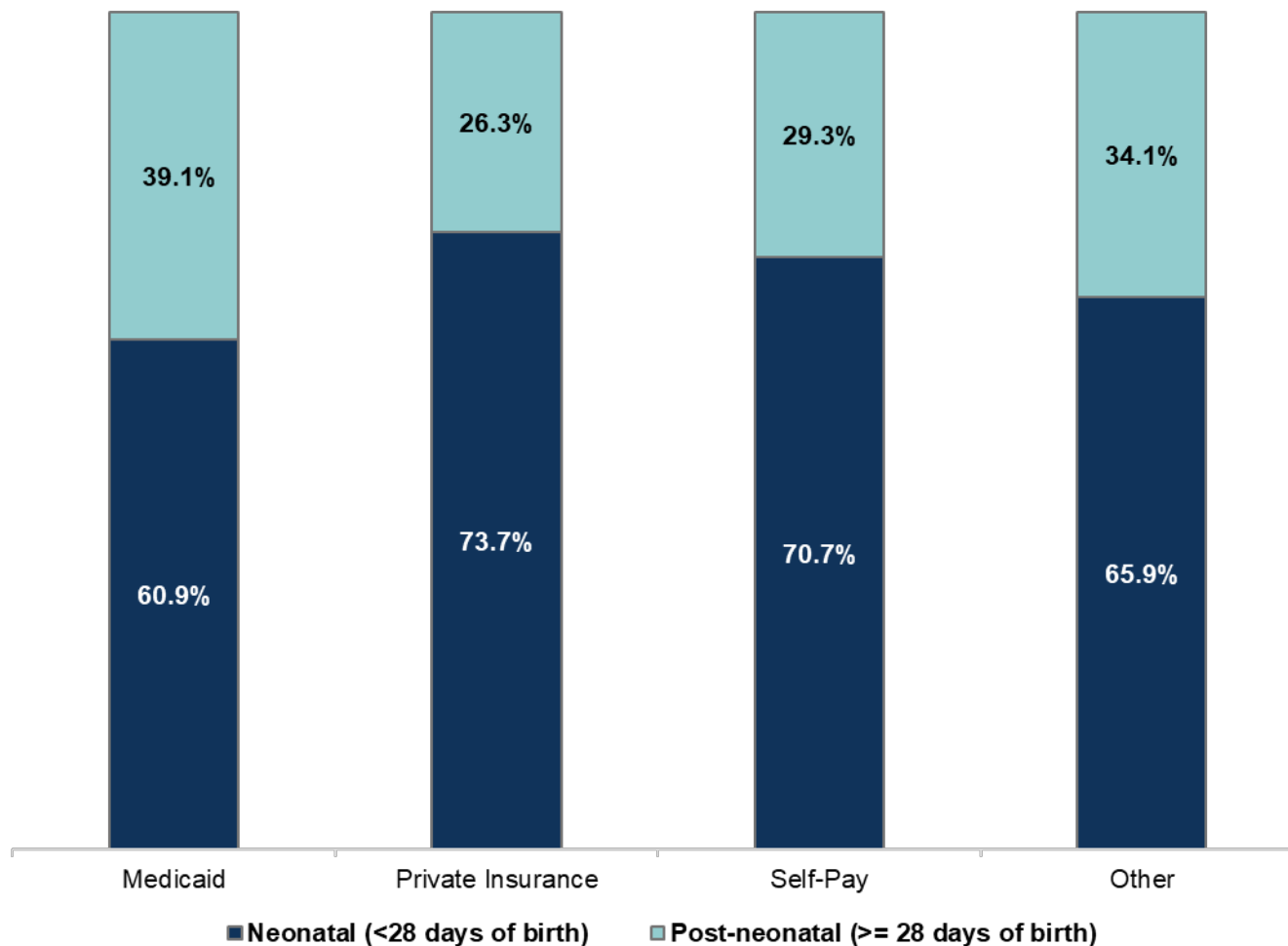
Source:
National Center for Health Statistics (NCHS). 2017 Period Linked Birth/Infant Death Public Use File.

Available at:
https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm

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Percentage of All Infants Deaths, by Timing of Death and Delivery Payer, 2017

Notes:
The numerator for the 2017 period linked file is infant deaths occurring in 2017 linked to their corresponding birth certificates, whether the birth occurred in 2016 or 2017. The denominator is all births occurring in 2017. The number of infant deaths is weighted to equal the sum of the linked plus unlinked infant deaths. There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries. "Other" includes other government and non-government payers.
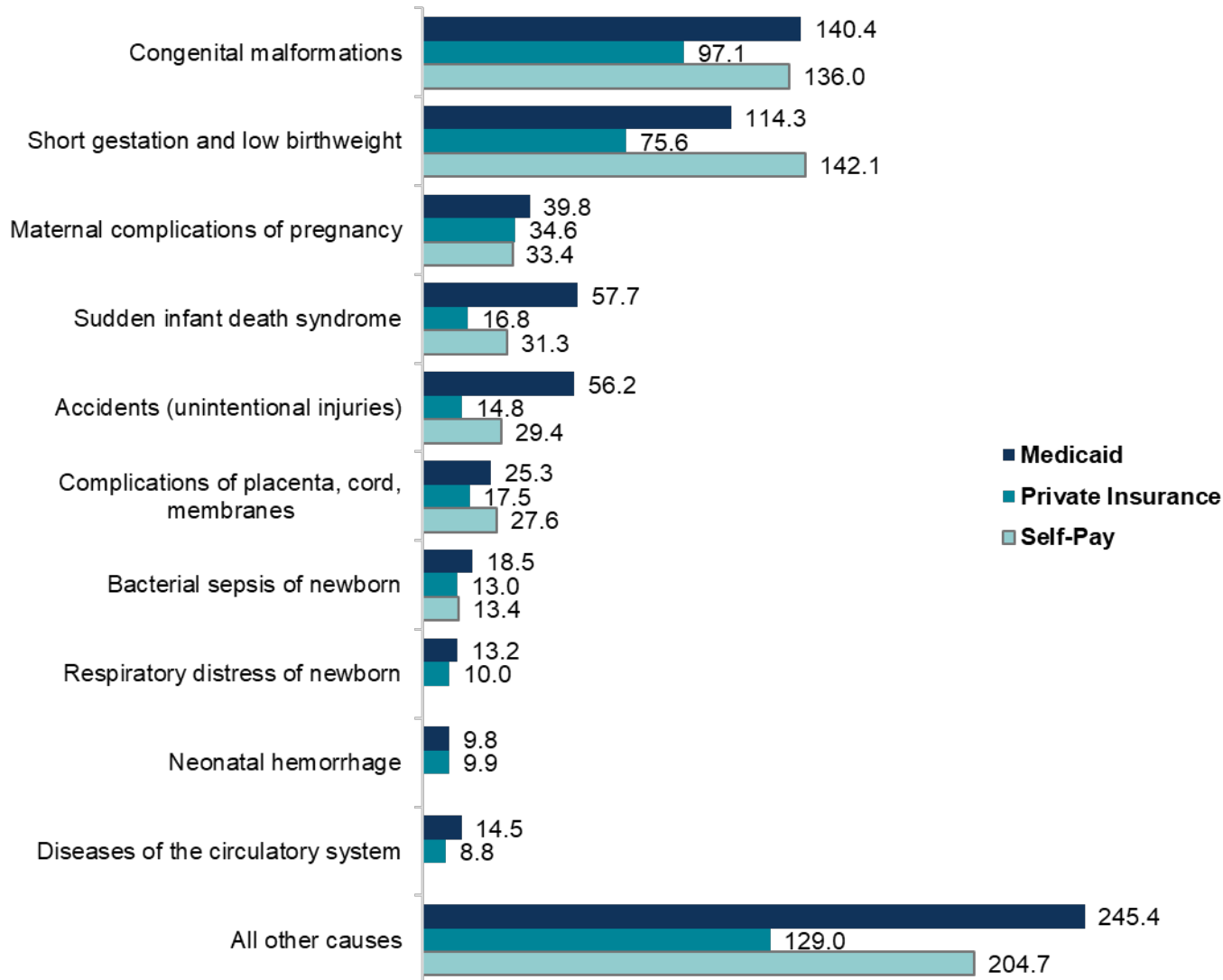
Source:
National Center for Health Statistics (NCHS). 2017 Period Linked Birth/Infant Death Public Use File.

Available at:
https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm

Cause-Specific Infant Mortality Rate per 100,000 Live Births, by Delivery Payer, 2017

Bar chart with three series: Medicaid, Private Insurance, Self-Pay

Congenital malformations
- Medicaid: 140.4
- Private Insurance: 97.1
- Self-Pay: 136.0

Short gestation and low birthweight
- Medicaid: 114.3
- Private Insurance: 75.6
- Self-Pay: 142.1

Maternal complications of pregnancy
- Medicaid: 39.8
- Private Insurance: 34.6
- Self-Pay: 33.4

Sudden infant death syndrome
- Medicaid: 57.7
- Private Insurance: 16.8
- Self-Pay: 31.3

Accidents (unintentional injuries)
- Medicaid: 56.2
- Private Insurance: 14.8
- Self-Pay: 29.4

Complications of placenta, cord, membranes
- Medicaid: 25.3
- Private Insurance: 17.5
- Self-Pay: 27.6

Bacterial sepsis of newborn
- Medicaid: 18.5
- Private Insurance: 13.0
- Self-Pay: 13.4

Respiratory distress of newborn
- Medicaid: 13.2
- Private Insurance: 10.0

Neonatal hemorrhage
- Medicaid: 9.8
- Private Insurance: 9.9

Diseases of the circulatory system
- Medicaid: 14.5
- Private Insurance: 8.8

All other causes
- Medicaid: 245.4
- Private Insurance: 129.0
- Self-Pay: 204.7

Notes:
The top 10 U.S. causes of infant death as reported by the National Center for Health Statistics (NCHS) are shown. "Short gestation and low birthweight" includes ICD-10 codes (P07) related to either prematurity or low birthweight. The numerator for the 2017 period linked file is infant deaths occurring in 2017 linked to their corresponding birth certificates, whether the birth occurred in 2016 or 2017. The denominator is all births occurring in 2017. The number of infant deaths is weighted to equal the sum of the linked plus unlinked infant deaths. There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries. Cause-specific mortality rates that do not meet standards of reliability and precision (<20 deaths in the numerator) are not shown.

Source:
National Center for Health Statistics (NCHS). 2017 Period Linked Birth/Infant Death Public Use File.

Available at:
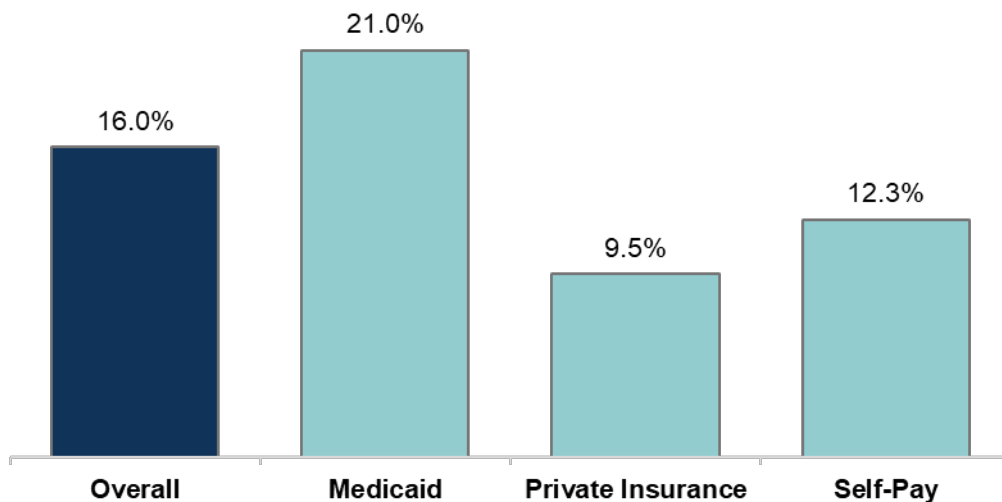https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm

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Sudden Unexpected Infant Deaths (SUID), by Delivery Payer, 2017

SUID Mortality Rates per 100,000 Live Births, by Delivery Payer

Delivery Payer	Rate
Overall	92.8
Medicaid	154.4
Private Insurance	40.5
Self-Pay	80.0
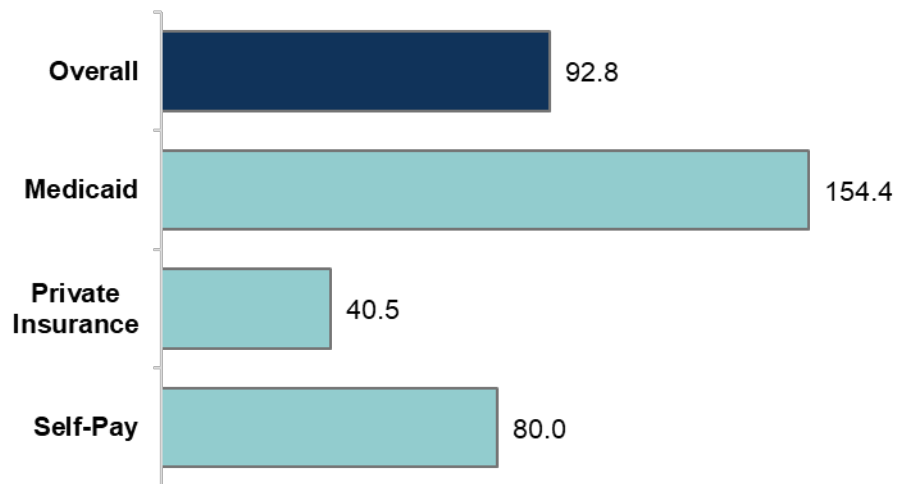
Percentage All Infant Deaths Due to SUID, by Delivery Payer

Delivery Payer	Percentage
Overall	16.0%
Medicaid	21.0%
Private Insurance	9.5%
Self-Pay	12.3%

Notes:
Sudden Unexpected Infant Death includes the following ICD-10 codes: Sudden Infant Death Syndrome (R95), accidental strangulation and suffocation in bed (W75), and unknown cause (R99).The numerator for the 2017 period linked file is infant deaths occurring in 2017 linked to their corresponding birth certificates, whether the birth occurred in 2016 or 2017. The denominator is all births occurring in 2017. The number of infant deaths is weighted to equal the sum of the linked plus unlinked infant deaths. There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries.

Source:
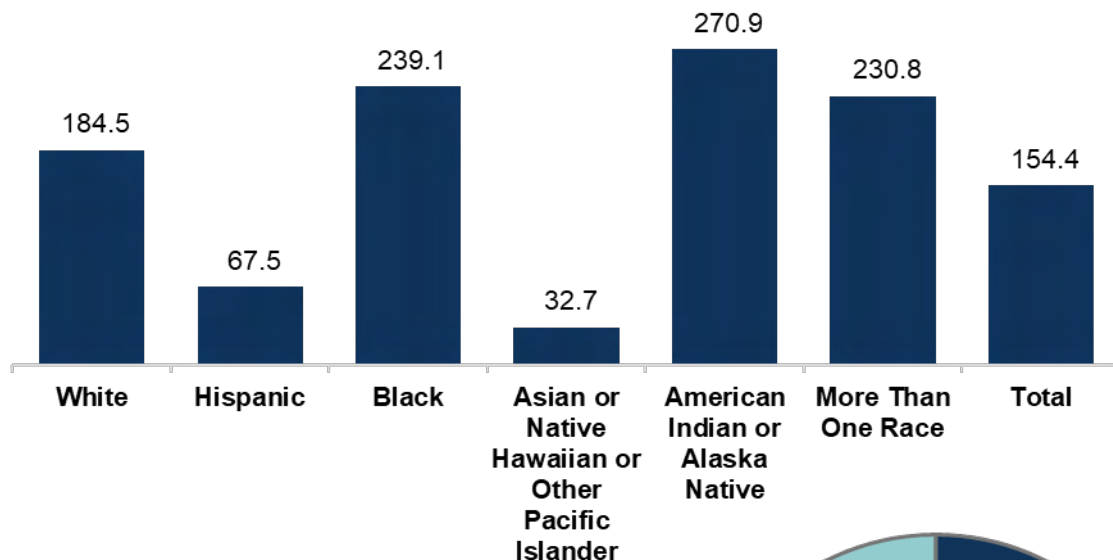National Center for Health Statistics (NCHS). 2017 Period Linked Birth/Infant Death Public Use File.

Available at:
https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm

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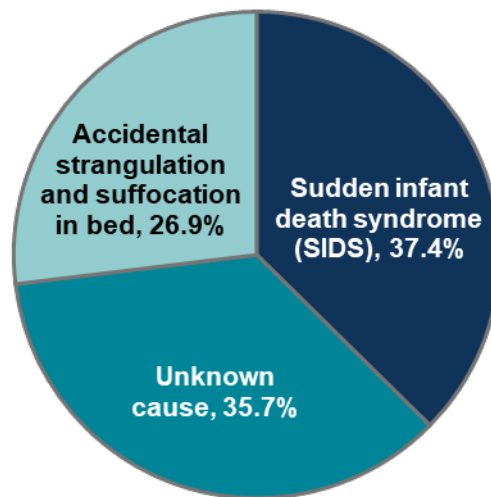Quality Improvement

Sudden Unexpected Infant Deaths (SUID), by Race/Ethnicity and Cause: Births Paid by Medicaid, 2017

SUID Mortality Rates per 100,000 Live Births, by Race and Ethnicity (Births Paid by Medicaid)

Bar chart values:
- White: 184.5
- Hispanic: 67.5
- Black: 239.1
- Asian or Native Hawaiian or Other Pacific Islander: 32.7
- American Indian or Alaska Native: 270.9
- More Than One Race: 230.8
- Total: 154.4

Percentage of SUID Deaths, by Cause (Births Paid by Medicaid)

Pie chart:
- Sudden infant death syndrome (SIDS), 37.4%
- Unknown cause, 35.7%
- Accidental strangulation and suffocation in bed, 26.9%

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RISK FACTORS FOR POOR MATERNAL AND INFANT OUTCOMES

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Risk Factors for Poor Maternal and Infant Outcomes

Fast fact: In 2018, 11.6% of live births paid by Medicaid were to women who smoked during pregnancy, as compared with 2.5% of births paid by private insurance and 3.8% of self-pay births.

This section of the profile shows the prevalence of selected risk factors for poor maternal and/or infant outcomes. Indicators are presented by payer where possible.

The charts in this section include:
- Percentage of Singleton, Not First-Time Live Births, by Length of Interpregnancy Interval and Delivery Payer
- Percentage of Live Births That Were Multiple Births, by Delivery Payer
- Percentage of Reproductive Age Women Who Reported Ever Having a Preterm Birth (<37 Weeks), by Current Insurance Coverage
- Percentage of Live Births with Pre-existing Hypertension or Diabetes Recorded in the Birth Certificate, by Delivery Payer
- Percentage of Live Births, by Pre-Pregnancy Body Mass Index and Delivery Payer

Risk Factors for Poor Maternal and Infant Outcomes (continued)

This section of the profile shows the prevalence of selected risk factors for poor maternal and/or infant outcomes. Indicators are presented by payer where possible.

The charts in this section include:

- Rates of High Blood Pressure, Diabetes, or Obesity Among Reproductive Age Women, by Current Insurance Coverage
- Percentage of Live Births With Smoking During Pregnancy Recorded in the Birth Certificate, by Delivery Payer
- Rates of Smoking and Alcohol Use Among Reproductive Age Women, by Current Insurance Coverage
- Percentage of Women with Self-Reported Postpartum Depressive Symptoms, by Insurance at Delivery and Maternal Characteristics
- Percentage of Women Asked About Depression During a Postpartum Visit, by Insurance at Delivery and Maternal Characteristics
- Percentage of Women with a Recent Live Birth Who Reported Safe Sleep Positioning, by Insurance at Delivery and Maternal Characteristics

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Percentage of Singleton, Not First-Time Live Births, by Length of Interpregnancy Interval and Delivery Payer, 2018
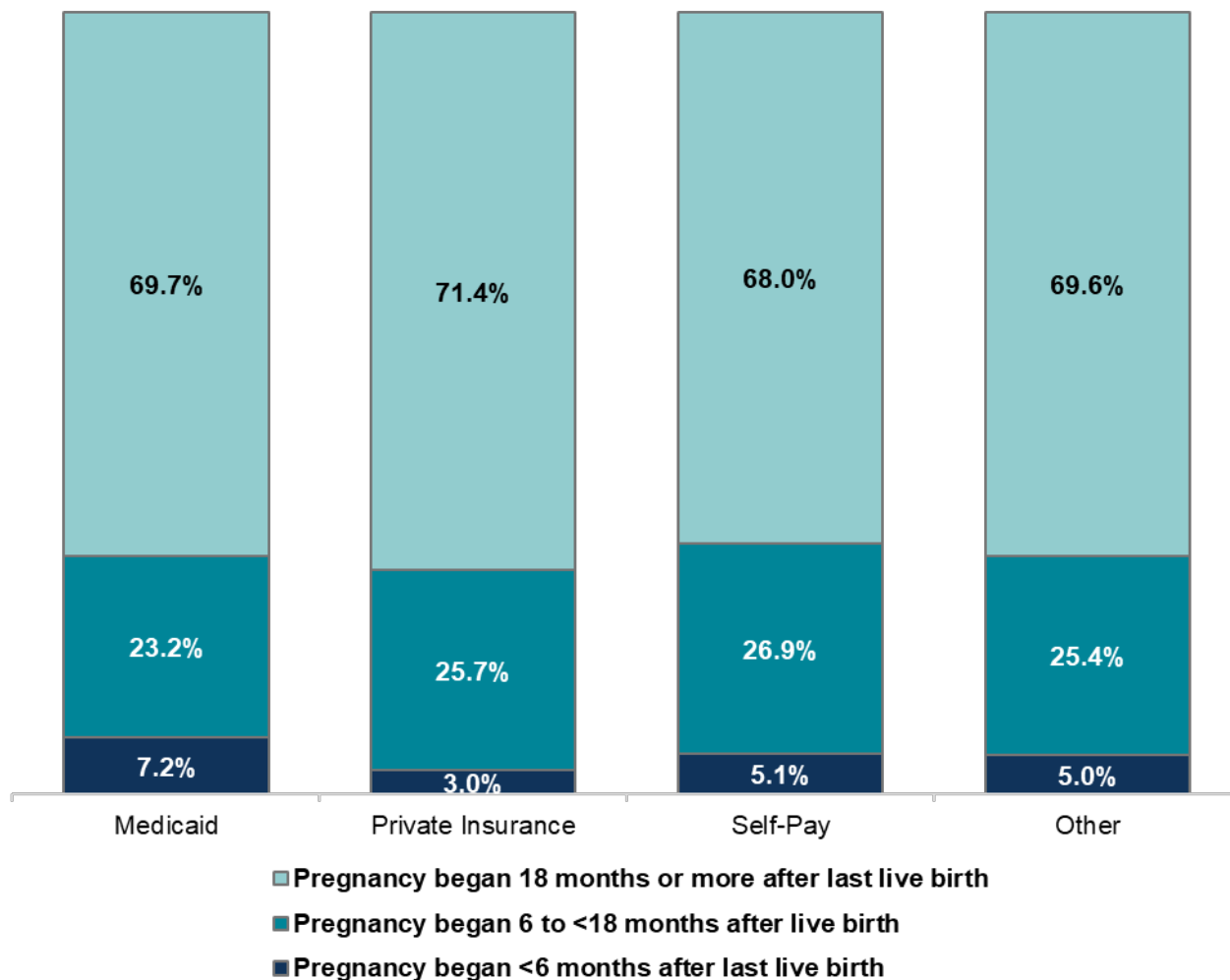
Notes:
Interpregnancy interval is defined as the number of months between the previous live birth and the conception of the live birth occurring in 2018. An interpregnancy interval of at least 18 months is recommended. Interpregnancy interval is calculated only for singleton births that are not first births (59% of all births). There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries. "Other" includes other government and non-government payers. Births with unknown interpregnancy interval (<6% of these births) are excluded.
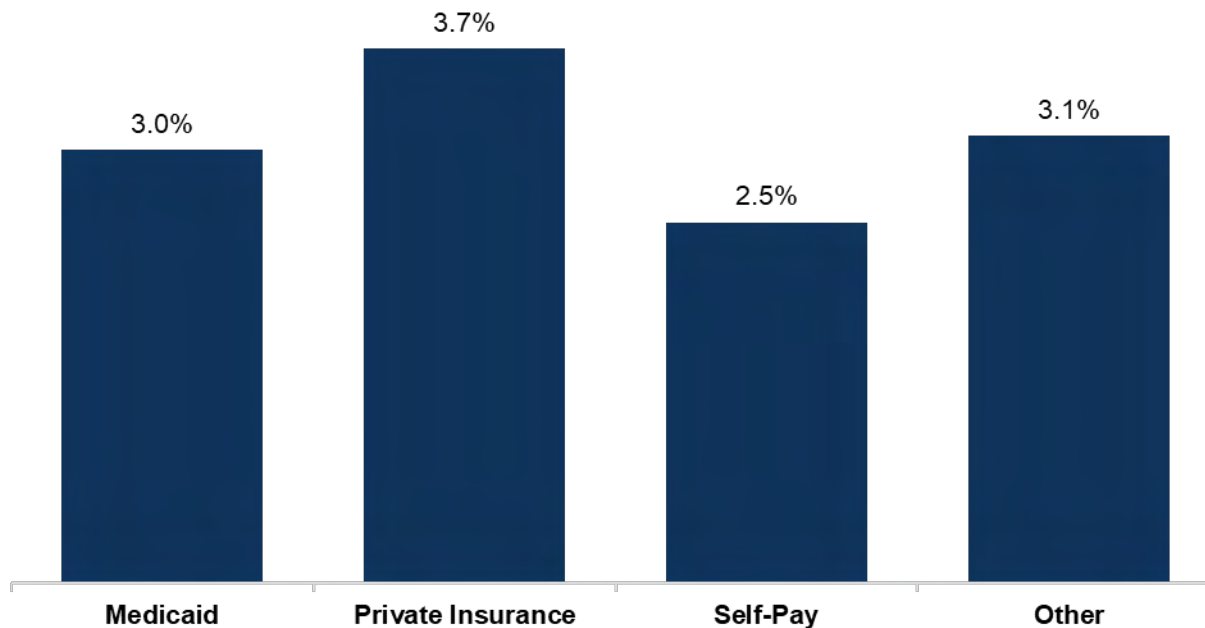
Source:
National Center for Health Statistics (NCHS). 2018 Natality Public Use File.

Available at:
https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm

Percentage of Live Births That Were Multiple Births, by Delivery Payer, 2018

Notes:
There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries. "Other" includes other government and non-government payers.
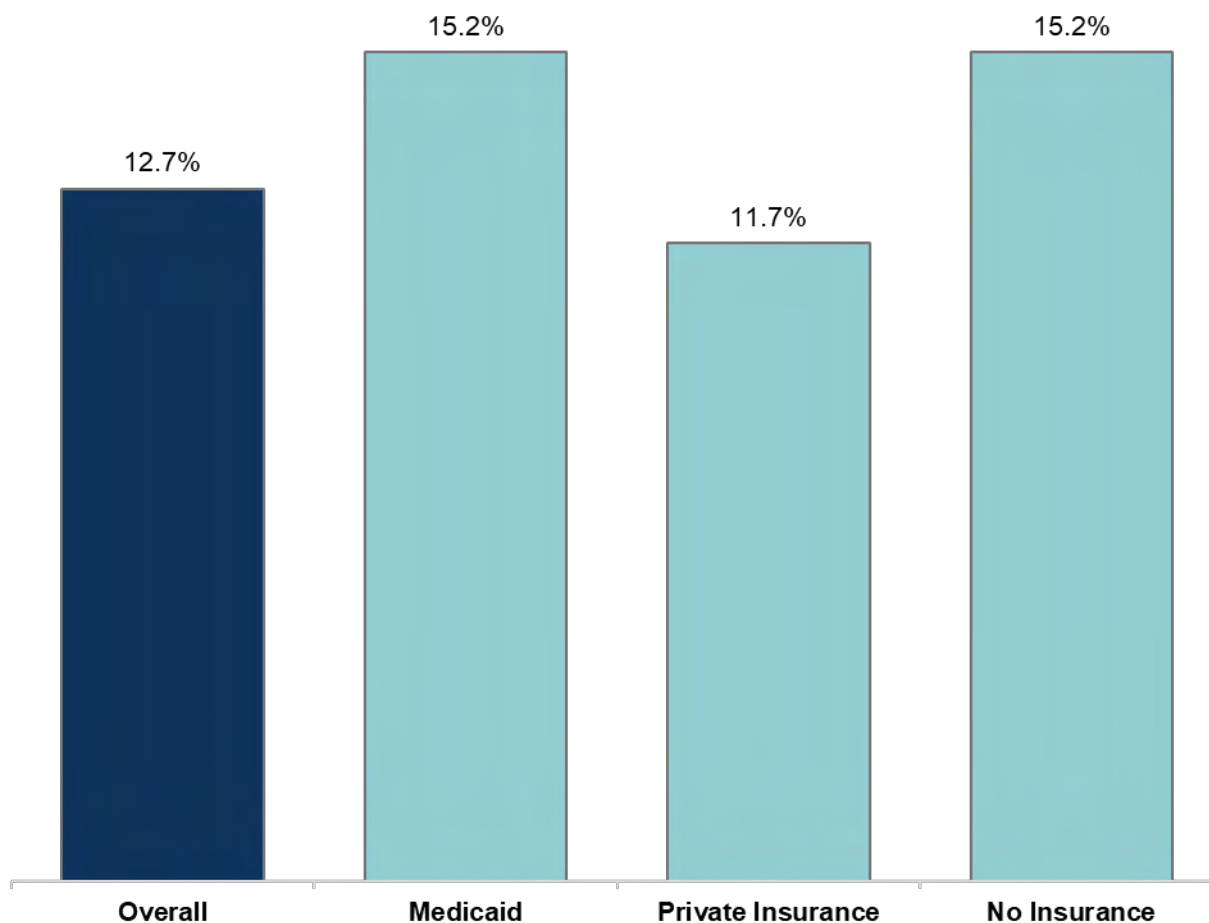
Source:
National Center for Health Statistics (NCHS). 2018 Natality Public Use File.

Available at:
https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm

Percentage of Reproductive Age Women Who Reported Ever Having a Preterm Birth (<37 Weeks), by Current Insurance Coverage, 2015–2017

Notes:
Insurance status is self-reported. "Medicaid or CHIP" includes Medicaid or CHIP coverage only. "Private insurance" includes private coverage only, TRICARE or other military insurance, both Medicaid and private, and any other insurance in combination with private. "No insurance" includes not currently insured or Indian Health Services only. Reproductive age women are defined as ages 15–49.

Source:
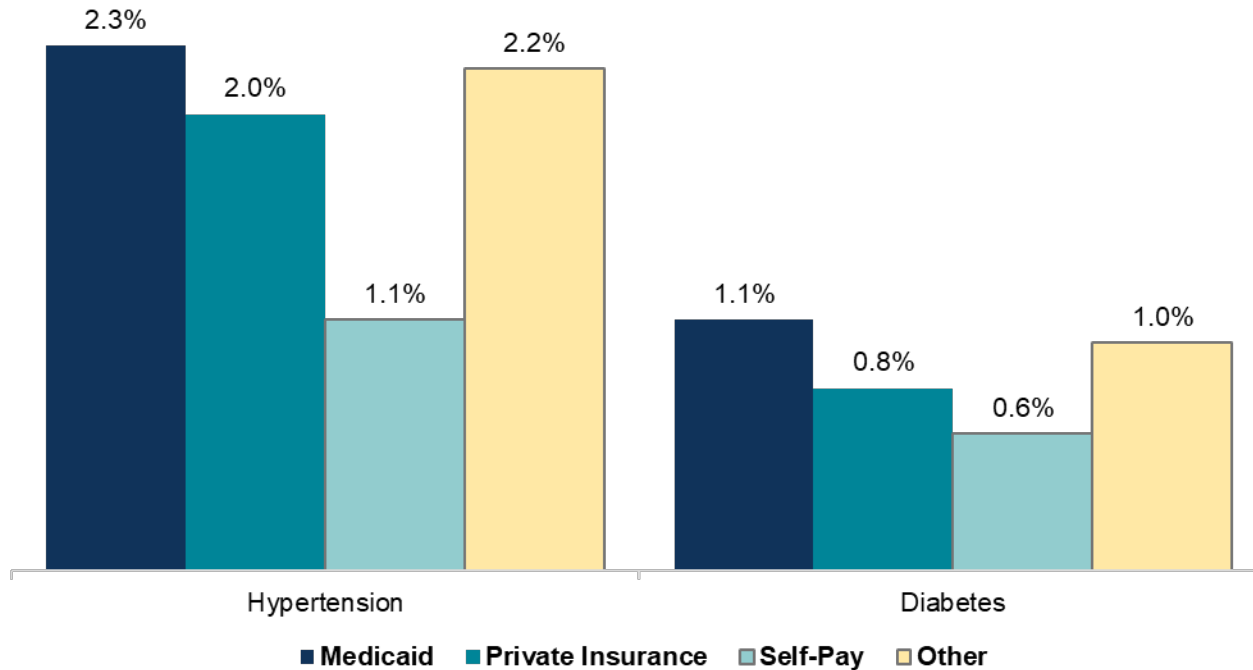National Survey of Family Growth (NSFG). 2015–2017 Public Use File.

Available at:
https://www.cdc.gov/nchs/nsfg/nsfg_2015_2017_puf.htm

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Percentage of Live Births with Pre-existing Hypertension or Diabetes Recorded in the Birth Certificate, by Delivery Payer, 2018

Hypertension
- Medicaid: 2.3%
- Private Insurance: 2.0%
- Self-Pay: 1.1%
- Other: 2.2%

Diabetes
- Medicaid: 1.1%
- Private Insurance: 0.8%
- Self-Pay: 0.6%
- Other: 1.0%

Legend: ■ Medicaid ■ Private Insurance ■ Self-Pay ■ Other

Notes:
There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries. "Other" includes other government and non-government payers. Births with pre-existing hypertension or diabetes not reported or unknown (<1% of births) are excluded.

Source:
National Center for Health Statistics (NCHS). 2018 Natality Public Use File.

Available at:
https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm

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Percentage of Live Births, by Pre-Pregnancy Body Mass Index and Delivery Payer, 2018

Medicaid
Overweight: 26.6%
Obese: 32.7%

Private Insurance
Overweight: 26.4%
Obese: 25.0%

Self-Pay
Overweight: 27.1%
Obese: 19.8%

Other
Overweight: 28.8%
Obese: 26.1%

■ Overweight □ Obese

Notes:
Body mass index (BMI) was calculated using height and pre-pregnancy weight from the birth certificate. Overweight is defined as a BMI of 25.0 to 29.9. Obese is defined as a BMI of 30 or higher. The National Center for Health Statistics recommends hospitals obtain these data from the mother's worksheet rather than the medical record. There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries. "Other" includes other government and non-government payers. Births with maternal BMI not reported or unknown (<3% of births) are excluded.
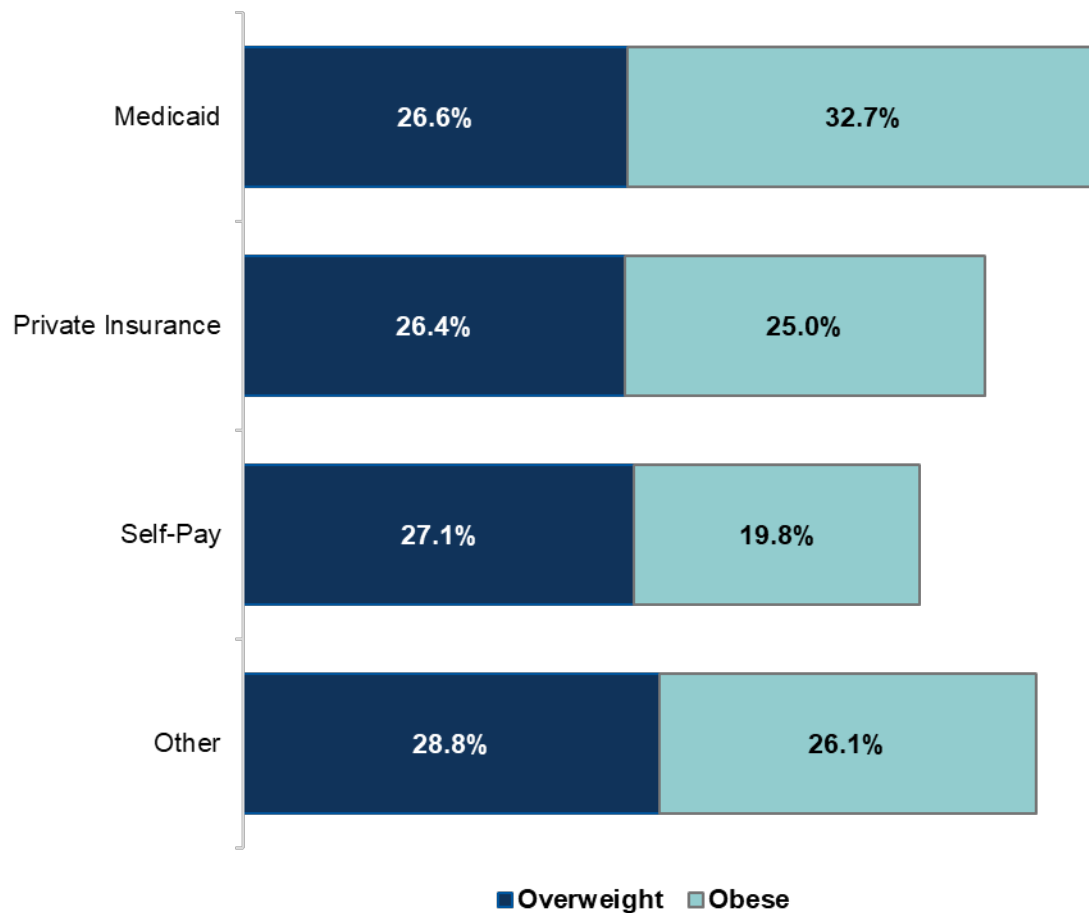
Source:
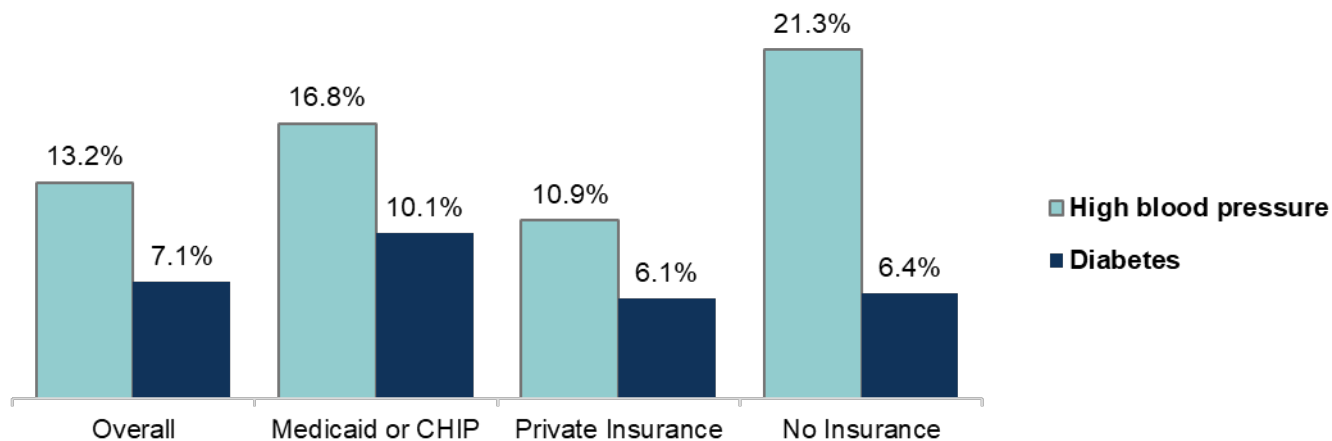National Center for Health Statistics (NCHS). 2018 Natality Public Use File.

Available at:
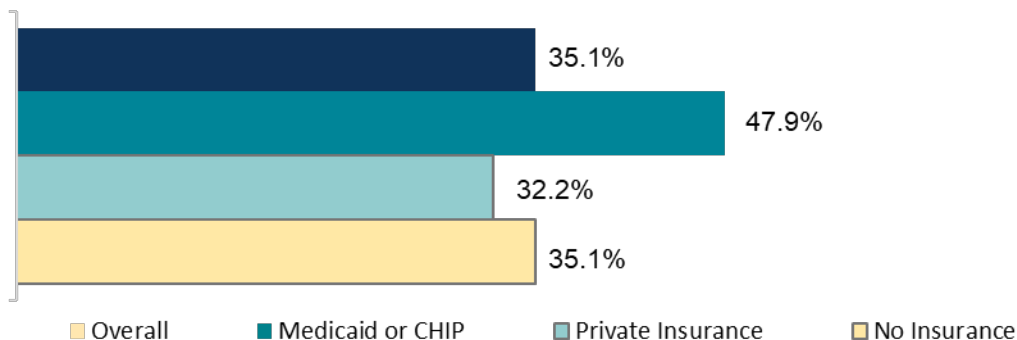https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm

Rates of High Blood Pressure, Diabetes, or Obesity Among Reproductive Age Women, by Current Insurance Coverage, 2015–2017

Percentage of Reproductive Age Women Who Reported High Blood Pressure in the Last Year, or Ever Being Diagnosed With Diabetes

- High blood pressure
- Diabetes

	High blood pressure	Diabetes
Overall	13.2%	7.1%
Medicaid or CHIP	16.8%	10.1%
Private Insurance	10.9%	6.1%
No Insurance	21.3%	6.4%

Percentage of Reproductive Age Women Who Reported Current Obesity

	Obesity
No Insurance	35.1%
Private Insurance	32.2%
Medicaid or CHIP	47.9%
Overall	35.1%

- Overall
- Medicaid or CHIP
- Private Insurance
- No Insurance

Notes:
Only respondents who report having their blood pressure checked in the last year were asked whether it was high. Each respondent is asked her current height and weight, and the survey computes a body mass index (BMI). Obese is defined as a BMI of 30 or higher. Insurance status is self-reported. "Medicaid or CHIP" includes Medicaid or CHIP coverage only. "Private insurance" includes private coverage only, TRICARE or other military insurance, both Medicaid and private, and any other insurance in combination with private. "No insurance" includes not currently insured or Indian Health Services only. Reproductive age women are defined as ages 15–49.

Source:
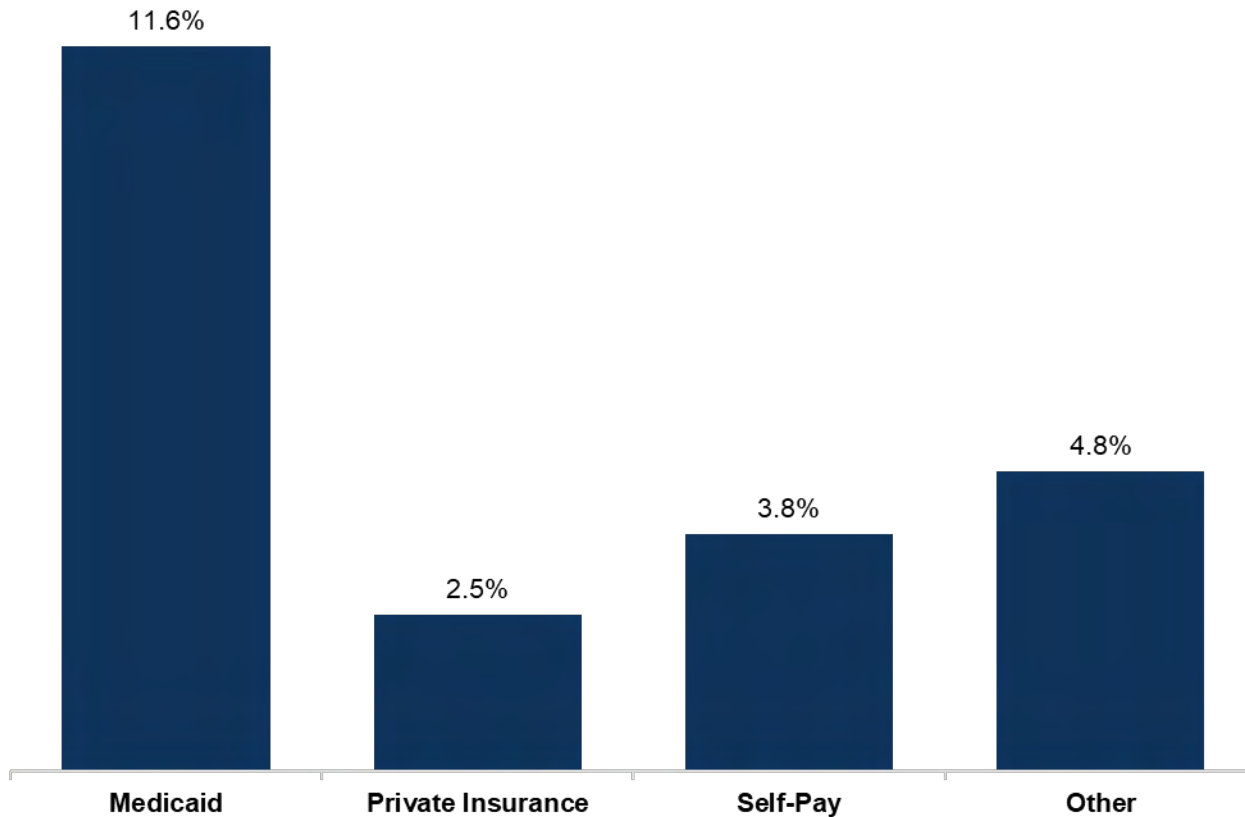National Survey of Family Growth (NSFG). 2015–2017 Public Use File.

Available at:
https://www.cdc.gov/nchs/nsfg/nsfg_2015_2017_puf.htm

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Percentage of Live Births With Smoking During Pregnancy Recorded in the Birth Certificate, by Delivery Payer, 2018

Bar chart showing percentage of live births with smoking during pregnancy by delivery payer:
- Medicaid: 11.6%
- Private Insurance: 2.5%
- Self-Pay: 3.8%
- Other: 4.8%

Notes:
There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries. "Other" includes other government and non-government payers. Births with smoking status not reported or unknown (<1% of births) are excluded.

Source:
National Center for Health Statistics (NCHS). 2018 Natality Public Use File.

Available at:
https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm

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Medicaid & CHIP
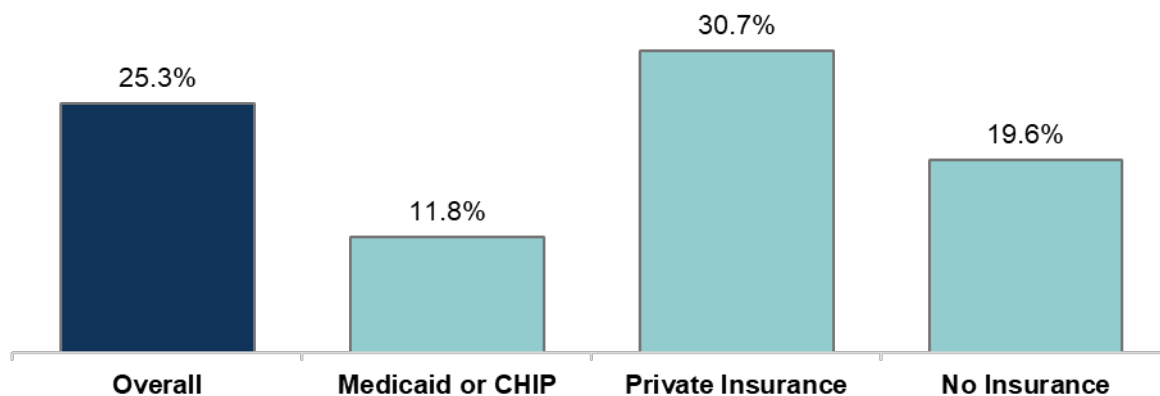Maternal & Infant Health
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Rates of Smoking and Alcohol Use Among Reproductive Age Women, by Current Insurance Coverage, 2015–2017

Percentage of Reproductive Age Women Who Reported Smoking at Least Once Every Day

- Overall: 18.8%
- Medicaid or CHIP: 31.7%
- Private Insurance: 12.8%
- No Insurance: 28.5%
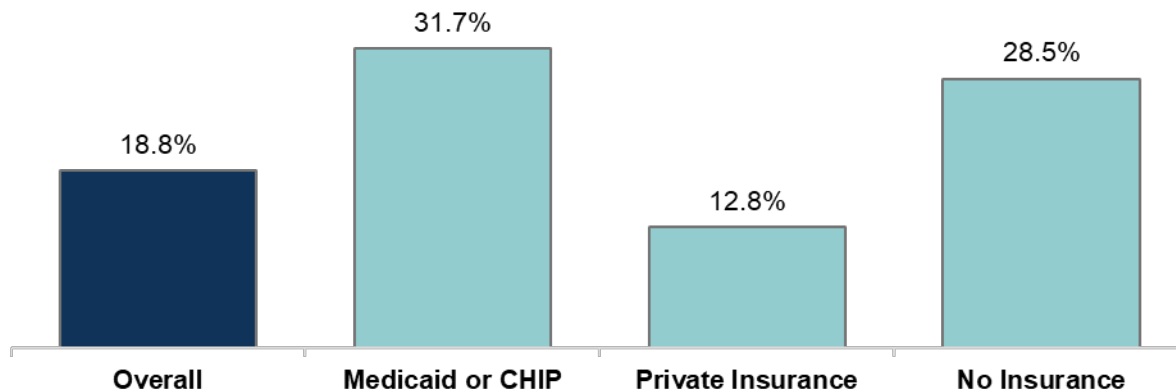
Percentage of Reproductive Age Women Who Reported Drinking Alcohol at Least Once a Week

- Overall: 25.3%
- Medicaid or CHIP: 11.8%
- Private Insurance: 30.7%
- No Insurance: 19.6%

Notes:
Insurance status is self-reported. "Medicaid or CHIP" includes Medicaid or CHIP coverage only. "Private insurance" includes private coverage only, TRICARE or other military insurance, both Medicaid and private, and any other insurance in combination with private. "No insurance" includes not currently insured or Indian Health Services only. Reproductive age women are defined as ages 15–49.

Source:
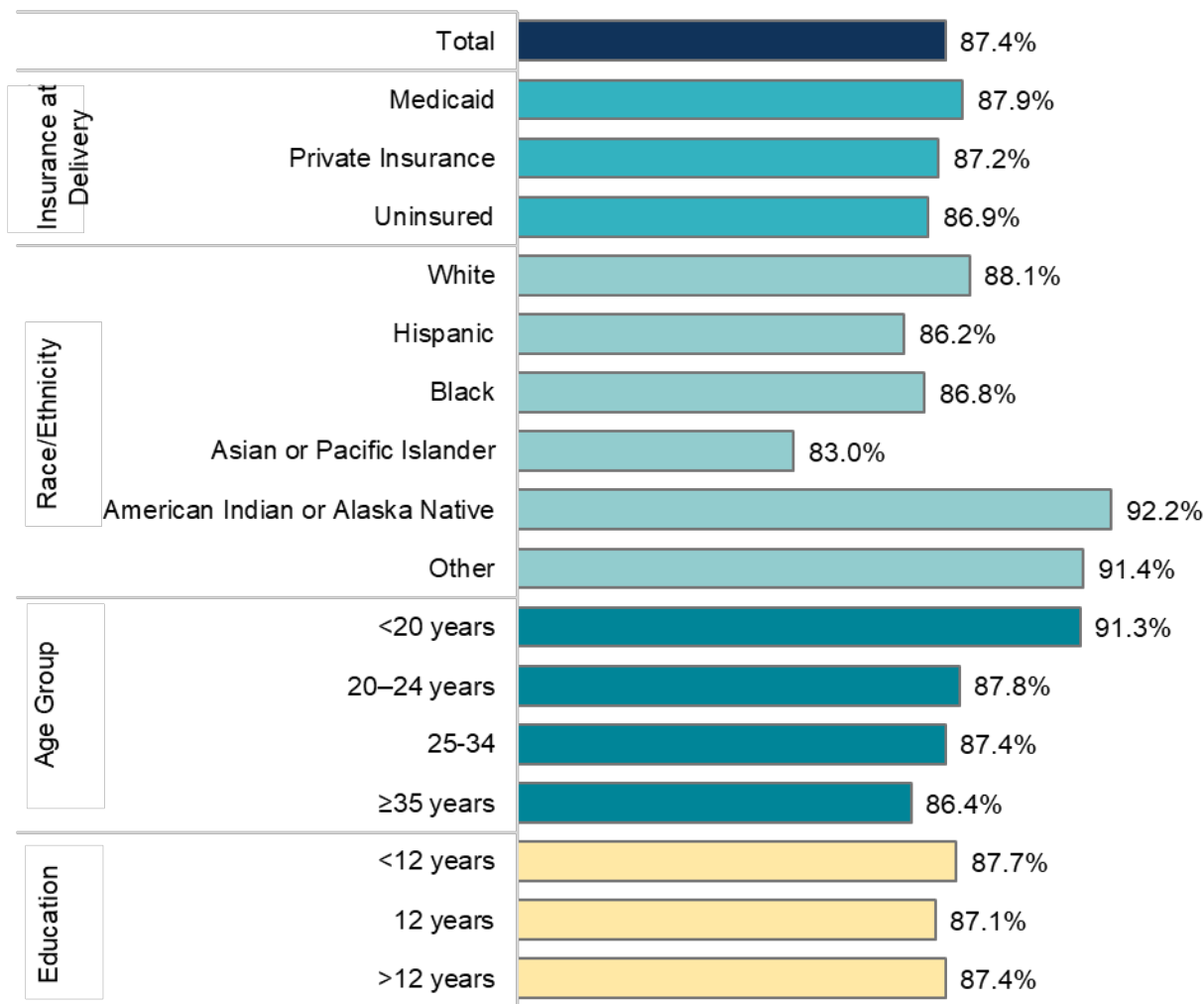National Survey of Family Growth (NSFG). 2015–2017 Public Use File.

Available at:
https://www.cdc.gov/nchs/nsfg/nsfg_2015_2017_puf.htm

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Percentage of Women Asked About Depression During a Postpartum Visit, by Insurance at Delivery and Maternal Characteristics: 31 States, 2018

Category	Group	Percentage
	Total	87.4%
Insurance at Delivery	Medicaid	87.9%
	Private Insurance	87.2%
	Uninsured	86.9%
Race/Ethnicity	White	88.1%
	Hispanic	86.2%
	Black	86.8%
	Asian or Pacific Islander	83.0%
	American Indian or Alaska Native	92.2%
	Other	91.4%
Age Group	<20 years	91.3%
	20–24 years	87.8%
	25-34	87.4%
	≥35 years	86.4%
Education	<12 years	87.7%
	12 years	87.1%
	>12 years	87.4%

Notes:
Data come from the 31 states plus New York City and Puerto Rico that participated in the Pregnancy Risk Assessment Monitoring System (PRAMS) in 2018 and met the 55% response rate threshold for inclusion. The denominator for this indicator is limited to women who reported attending a postpartum visit (90.1% of respondents). Insurance coverage at delivery is self-reported. The numerator consists of women who responded "yes" to the question, "During your postpartum checkup, did a doctor, nurse, or other health care worker ask if you were feeling down or depressed."

Race/ethnicity categories are shown as defined by study authors. "White," "Black," "Asian or Pacific Islander," "American Indian or Alaska Native," and "Other" categories exclude Hispanic ethnicity. "Hispanic" includes Hispanic of any race.
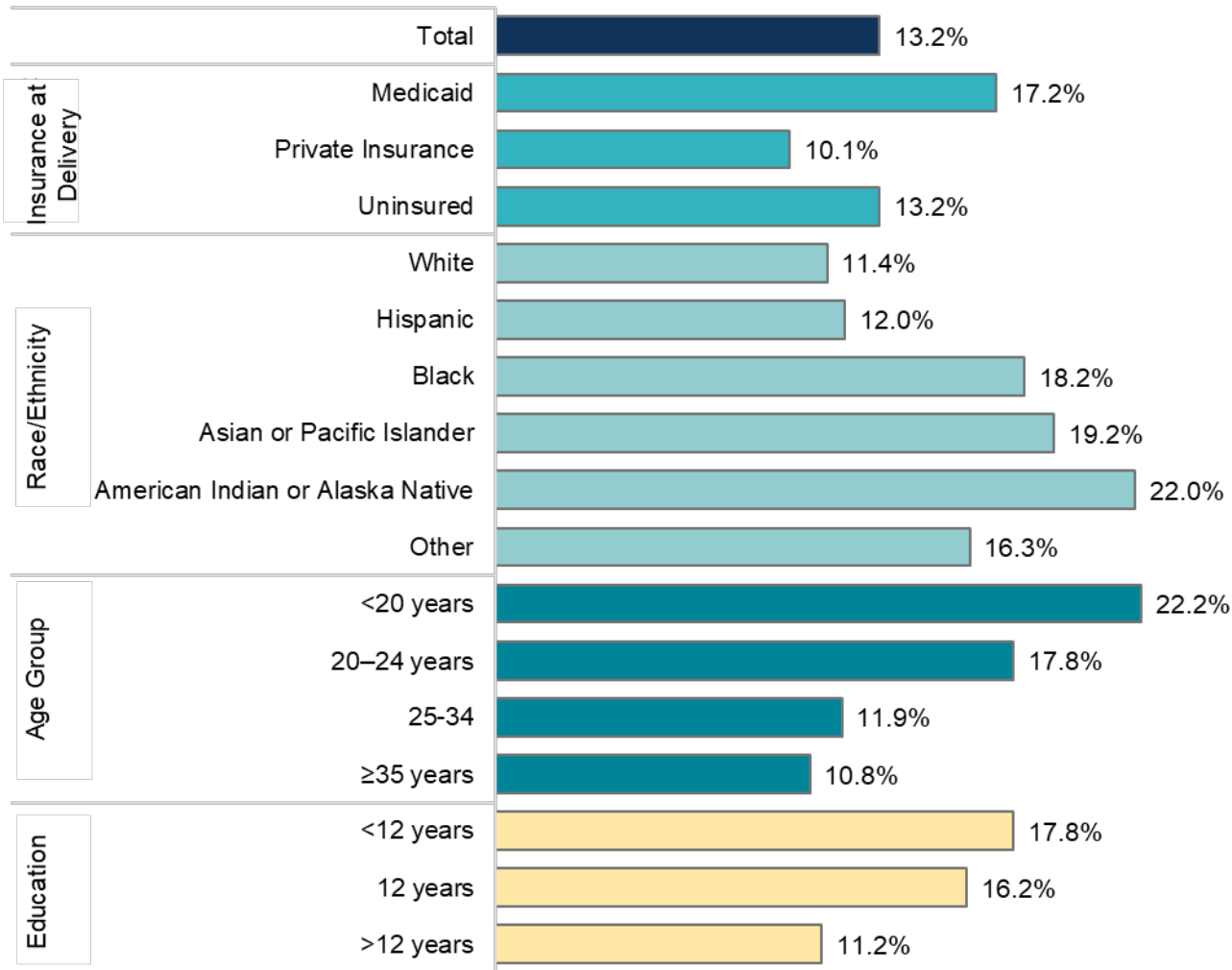
Source:
Bauman BL, Ko JY, Cox S, et al. Vital Signs: Postpartum Depressive Symptoms and Provider Discussions About Perinatal Depression — United States, 2018. *MMWR Morb Mortal Wkly Rep.* 2020;69:575–581.

Available at:
http://dx.doi.org/10.15585/mmwr.mm6919a2

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Percentage of Women with Self-Reported Postpartum Depressive Symptoms, by Insurance at Delivery and Maternal Characteristics: 31 States, 2018

Insurance at Delivery
- Total: 13.2%
- Medicaid: 17.2%
- Private Insurance: 10.1%
- Uninsured: 13.2%

Race/Ethnicity
- White: 11.4%
- Hispanic: 12.0%
- Black: 18.2%
- Asian or Pacific Islander: 19.2%
- American Indian or Alaska Native: 22.0%
- Other: 16.3%

Age Group
- <20 years: 22.2%
- 20–24 years: 17.8%
- 25-34: 11.9%
- ≥35 years: 10.8%

Education
- <12 years: 17.8%
- 12 years: 16.2%
- >12 years: 11.2%

Notes:
Data come from the 31 states plus New York City and Puerto Rico that participated in the Pregnancy Risk Assessment Monitoring System (PRAMS) in 2018 and met the 55% response rate threshold for inclusion. Women who responded "always" or "often" to either of two questions about postpartum depression adapted from a validated screening tool were classified as having postpartum depressive symptoms. Insurance coverage at delivery is self-reported.

Race/ethnicity categories are shown as defined by study authors. "White," "Black," "Asian or Pacific Islander," "American Indian or Alaska Native," and "Other" categories exclude Hispanic ethnicity. "Hispanic" includes Hispanic of any race.
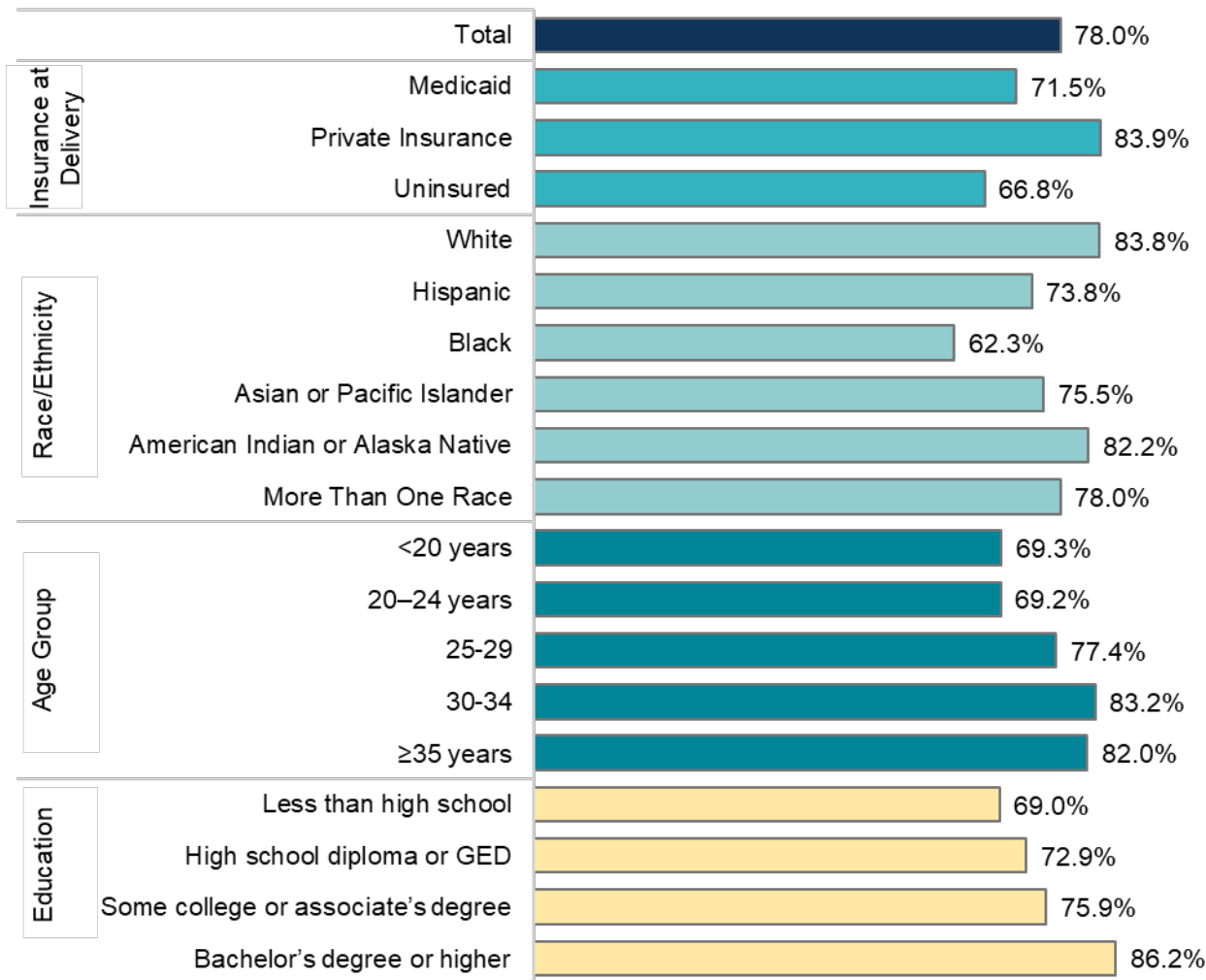
Source:
Bauman BL, Ko JY, Cox S, Denise V. D'Angelo DV, Warner L, Folger S, et al. Vital Signs: Postpartum Depressive Symptoms and Provider Discussions About Perinatal Depression — United States, 2018. *MMWR Morb Mortal Wkly Rep.* 2020;69:575–581.

Available at:
http://dx.doi.org/10.15585/mmwr.mm6919a2

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Percentage of Women with a Recent Live Birth Who Reported Safe Sleep Positioning, by Insurance at Delivery and Maternal Characteristics: 29 States, 2016

	Category	Percentage
	Total	78.0%
Insurance at Delivery	Medicaid	71.5%
	Private Insurance	83.9%
	Uninsured	66.8%
Race/Ethnicity	White	83.8%
	Hispanic	73.8%
	Black	62.3%
	Asian or Pacific Islander	75.5%
	American Indian or Alaska Native	82.2%
	More Than One Race	78.0%
Age Group	<20 years	69.3%
	20–24 years	69.2%
	25-29	77.4%
	30-34	83.2%
	≥35 years	82.0%
Education	Less than high school	69.0%
	High school diploma or GED	72.9%
	Some college or associate's degree	75.9%
	Bachelor's degree or higher	86.2%

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UTILIZATION OF MATERNITY-RELATED HEALTH CARE
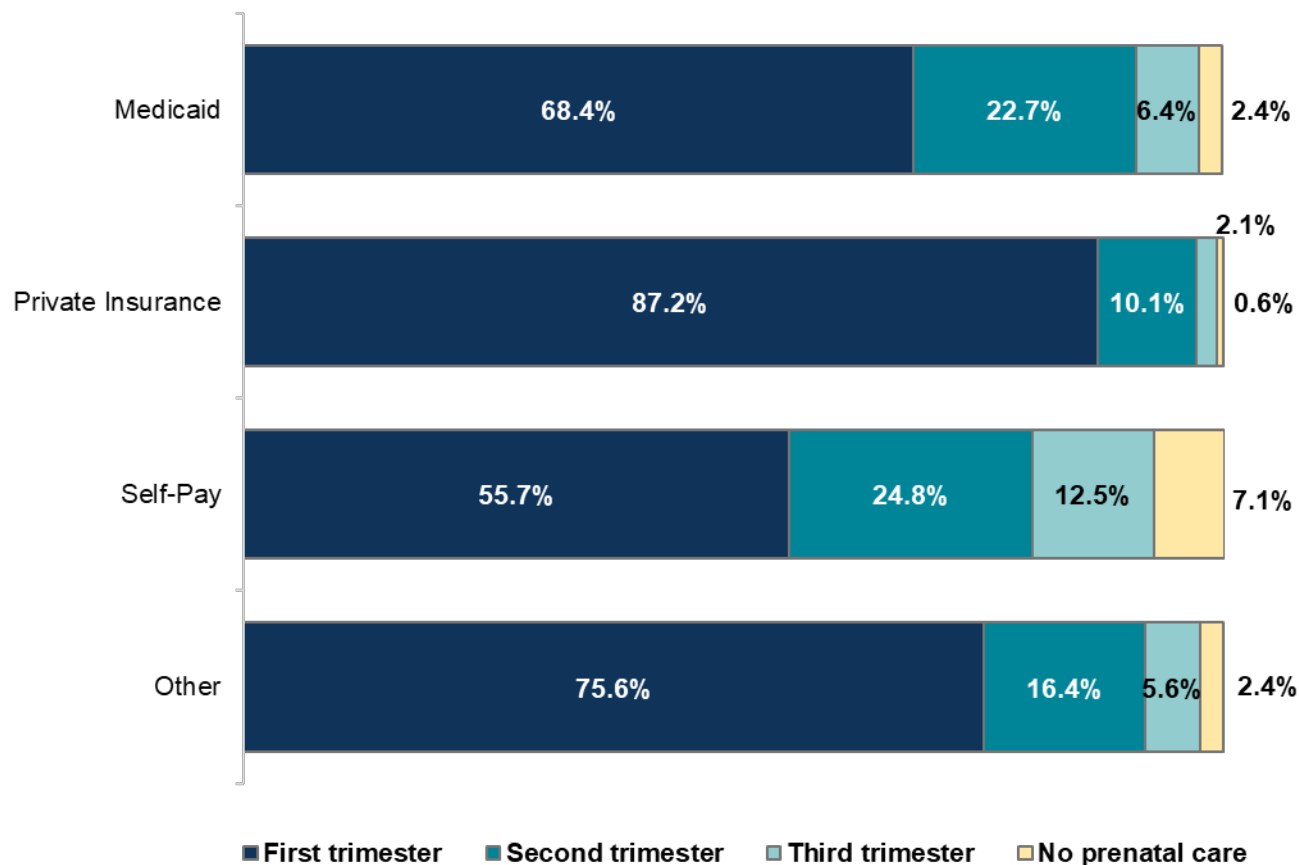
Utilization of Maternity-Related Health Care

Fast facts: In 2018, 2.4% of live births paid by Medicaid were to women who received no prenatal care and 6.4% were to women who initiated prenatal care in the third trimester. The comparable percentages were 0.6% and 2.1% for births paid by private insurance and 7.1% and 12.5% for self-pay births.

This section of the profile shows selected indicators related to women's access to and use of maternity-related health care before, during, and after delivery. Indicators are presented by payer where possible.

The charts in this section include:

- Percentage of Live Births, by Timing of Prenatal Care Initiation and Delivery Payer
- Total Number of Inpatient Stays (in Thousands) Paid by Medicaid, by Principal Diagnosis
- Total Inpatient Costs (in Millions of Dollars) Paid by Medicaid, by Principal Diagnosis
- Percentage of Opioid-Related Inpatient Stays Among Women That Co-Occur with Pregnancy/Childbirth, by Delivery Payer
- Percentage of Deliveries That Had a Postpartum Visit Between 21 and 56 Days After Delivery, by Type of Health Plan

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Percentage of Live Births, by Timing of Prenatal Care Initiation and Delivery Payer, 2018

Medicaid: First trimester 68.4%, Second trimester 22.7%, Third trimester 6.4%, No prenatal care 2.4%

Private Insurance: First trimester 87.2%, Second trimester 10.1%, Third trimester 2.1%, No prenatal care 0.6%

Self-Pay: First trimester 55.7%, Second trimester 24.8%, Third trimester 12.5%, No prenatal care 7.1%

Other: First trimester 75.6%, Second trimester 16.4%, Third trimester 5.6%, No prenatal care 2.4%

Legend: ■ First trimester ■ Second trimester ■ Third trimester □ No prenatal care

Notes:
There is not a separate option for CHIP on the U.S. standard birth certificate. "Medicaid" may include CHIP beneficiaries. "Other" includes other government and non-government payers. Births with month of prenatal care initiation not reported or unknown (<3% of births) are excluded.
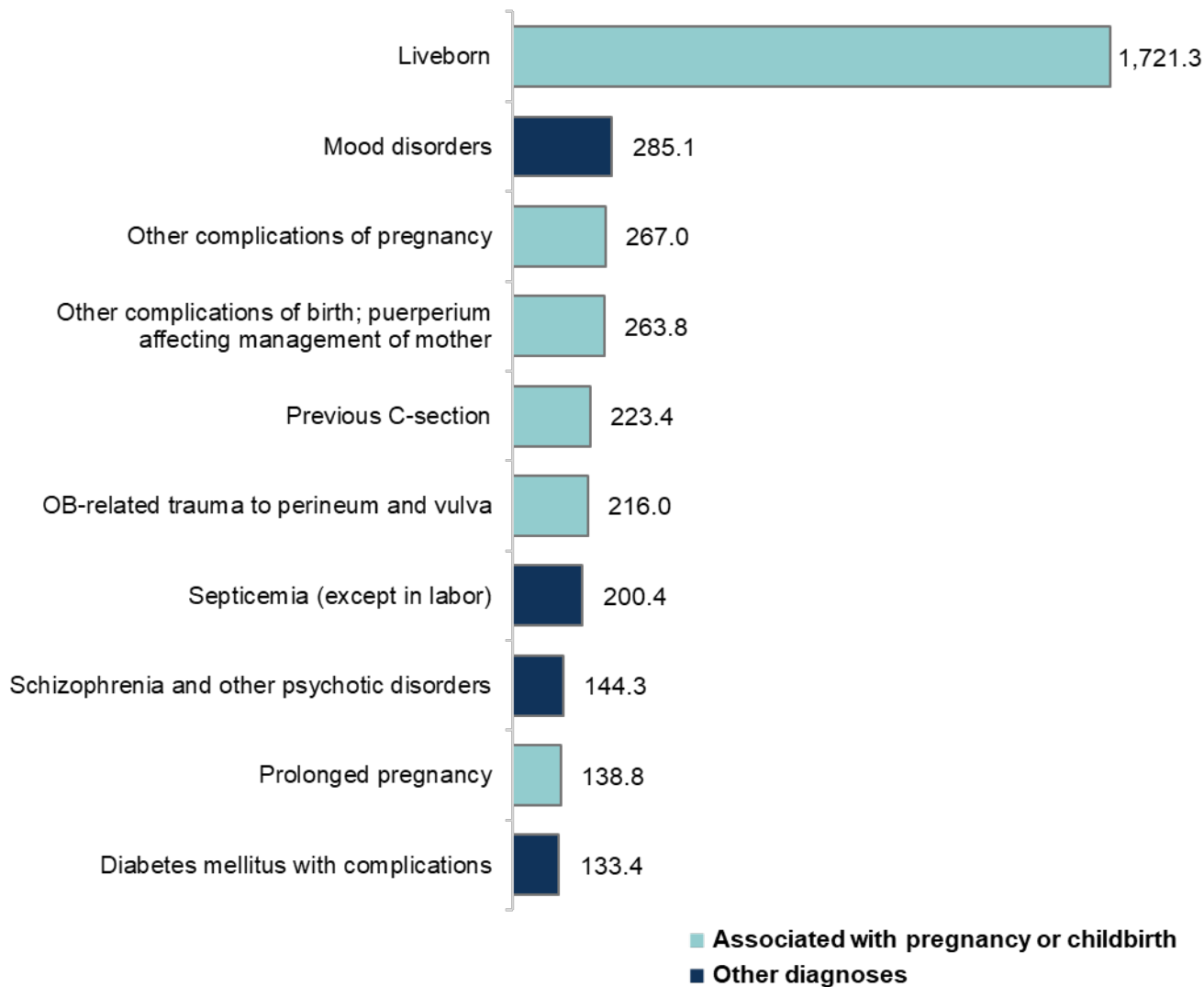
Source:
National Center for Health Statistics (NCHS). 2018 Natality Public Use File.

Available at:
https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm

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Total Number of Inpatient Stays (in Thousands) Paid by Medicaid, by Principal Diagnosis, 2014

Diagnosis	Number (thousands)
Liveborn	1,721.3
Mood disorders	285.1
Other complications of pregnancy	267.0
Other complications of birth; puerperium affecting management of mother	263.8
Previous C-section	223.4
OB-related trauma to perineum and vulva	216.0
Septicemia (except in labor)	200.4
Schizophrenia and other psychotic disorders	144.3
Prolonged pregnancy	138.8
Diabetes mellitus with complications	133.4

■ Associated with pregnancy or childbirth
■ Other diagnoses

Notes:
The data presented here are weighted estimates from the Healthcare Cost and Utilization Project (HCUP) 2014 National Inpatient Sample (NIS). The principal diagnosis is the condition chiefly responsible for the patient's admission to the hospital. The top 10 most common diagnoses for Medicaid inpatient stays are shown.
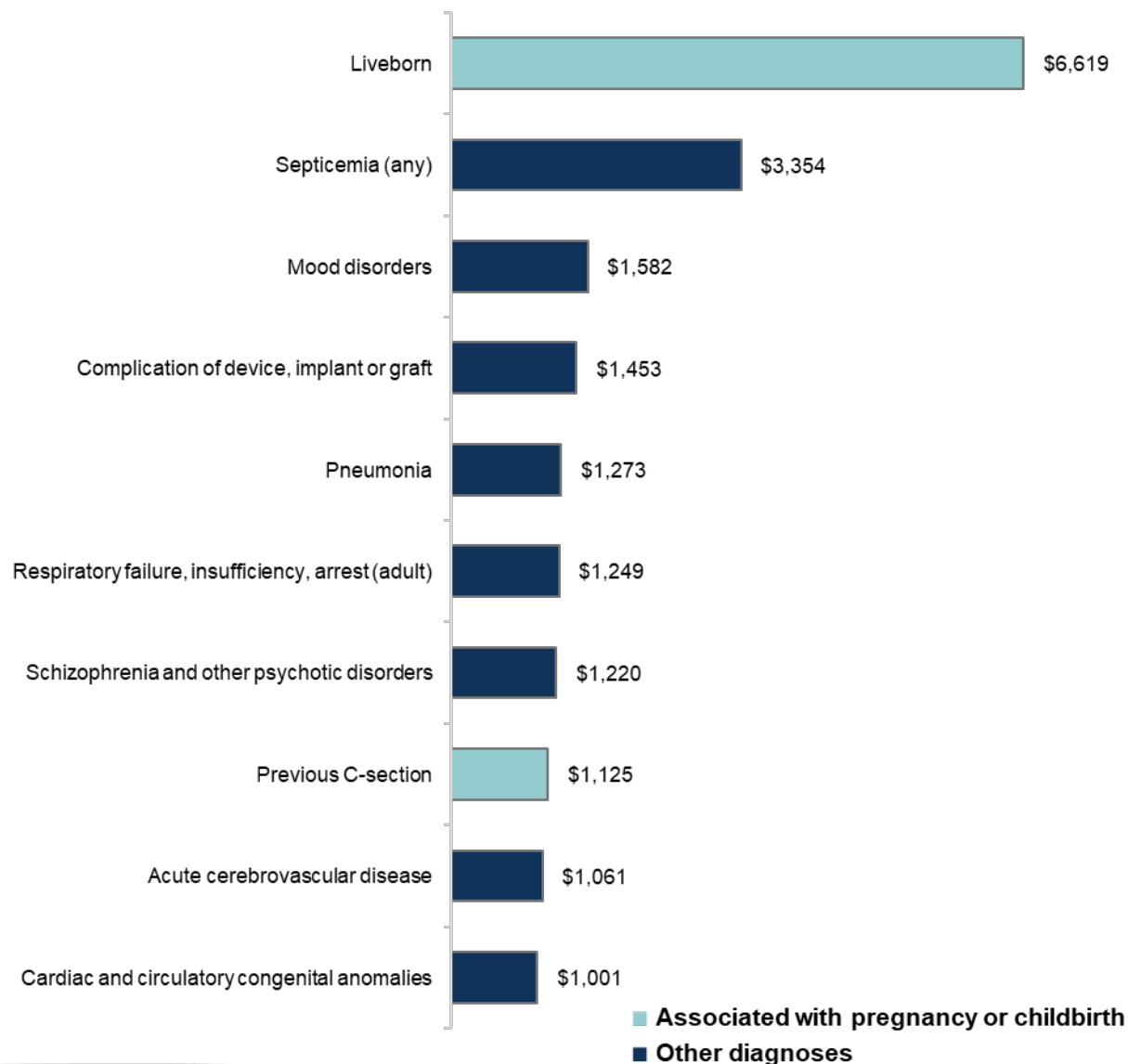
Source:
HCUP Fast Stats, Most Common Diagnoses for Inpatient Stays (2014 data).

Available at:
http://www.hcup-us.ahrq.gov/faststats/NationalDiagnosesServlet

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Total Inpatient Costs (in Millions of Dollars) Paid by Medicaid, by Principal Diagnosis, 2013

Principal Diagnosis	Cost (Millions)
Liveborn	$6,619
Septicemia (any)	$3,354
Mood disorders	$1,582
Complication of device, implant or graft	$1,453
Pneumonia	$1,273
Respiratory failure, insufficiency, arrest (adult)	$1,249
Schizophrenia and other psychotic disorders	$1,220
Previous C-section	$1,125
Acute cerebrovascular disease	$1,061
Cardiac and circulatory congenital anomalies	$1,001

■ Associated with pregnancy or childbirth
■ Other diagnoses

Notes:
The data presented here are weighted estimates from the Healthcare Cost and Utilization Project (HCUP) 2013 National Inpatient Sample (NIS). The principal diagnosis is the condition chiefly responsible for the patient's admission to the hospital. The top 10 most expensive conditions for Medicaid inpatient stays are shown.
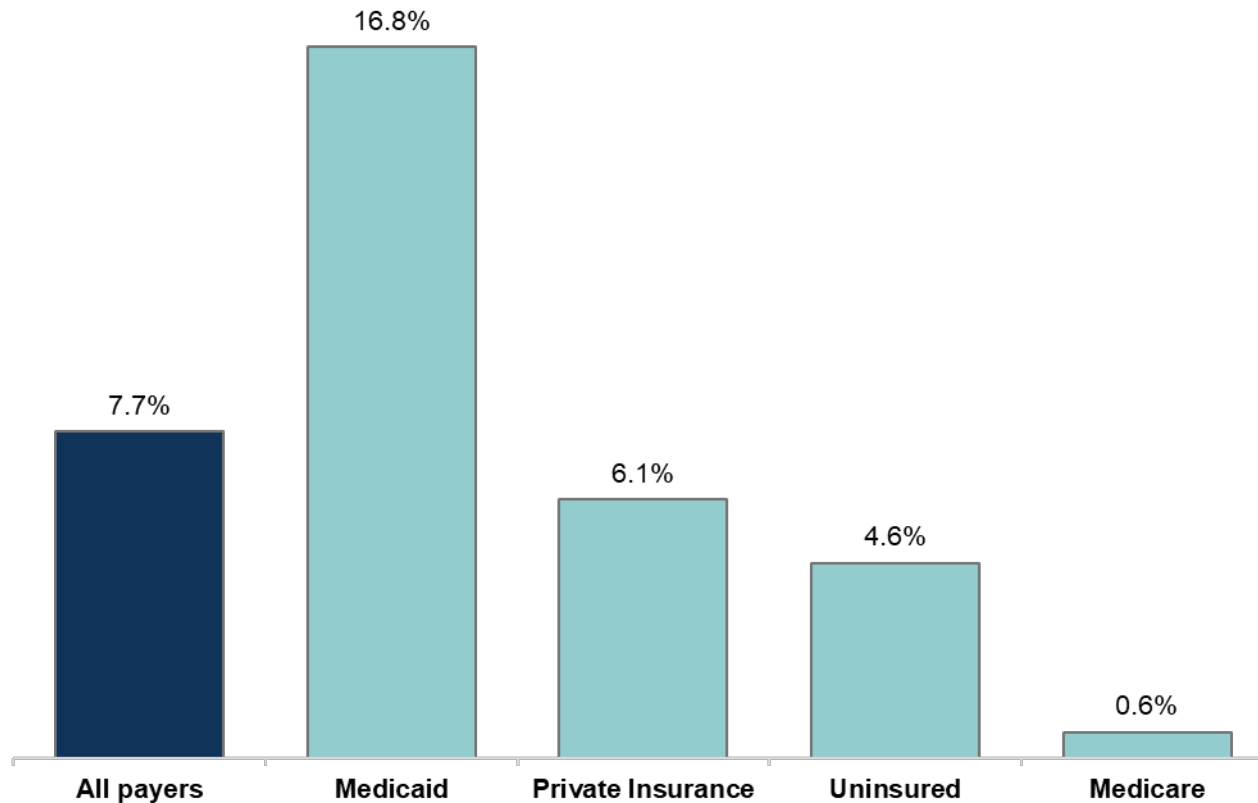
Source:
Torio C (AHRQ), Moore B (Truven Health Analytics). National Inpatient Hospital Costs: The Most Expensive Conditions by Payer, 2013. HCUP Statistical Brief #204. May 2016. Agency for Healthcare Research and Quality, Rockville, MD.

Available at:
http://www.hcup-us.ahrq.gov/reports/statbriefs/sb204-Most-Expensive-Hospital-Conditions.pdf

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Percentage of Opioid-Related Inpatient Stays Among Women That Co-Occur with Pregnancy/Childbirth, by Delivery Payer, 2016

Notes:
Estimates are based on data from the Healthcare Cost and Utilization Project (HCUP) 2016 National Inpatient Sample (NIS). Opioid-related stays for all women ages 15 and up are included.

Source:
Weiss AJ (IBM Watson Health), McDermott KW (IBM Watson Health), Heslin KC (AHRQ). Opioid-Related Hospital Stays Among Women, 2016. HCUP Statistical Brief #247. January 2019. Agency for Healthcare Research and Quality, Rockville, MD.

Available at:
www.hcup-us.ahrq.gov/reports/statbriefs/sb247-Opioid-Hospital-Stays-Women.pdf.

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Percentage of Deliveries That Had a Postpartum Visit Between 21 and 56 Days After Delivery, by Type of Health Plan, 2018

Bar chart:
- Medicaid HMO: 63.6%
- Commercial HMO: 76.5%
- Commercial PPO: 69.0%
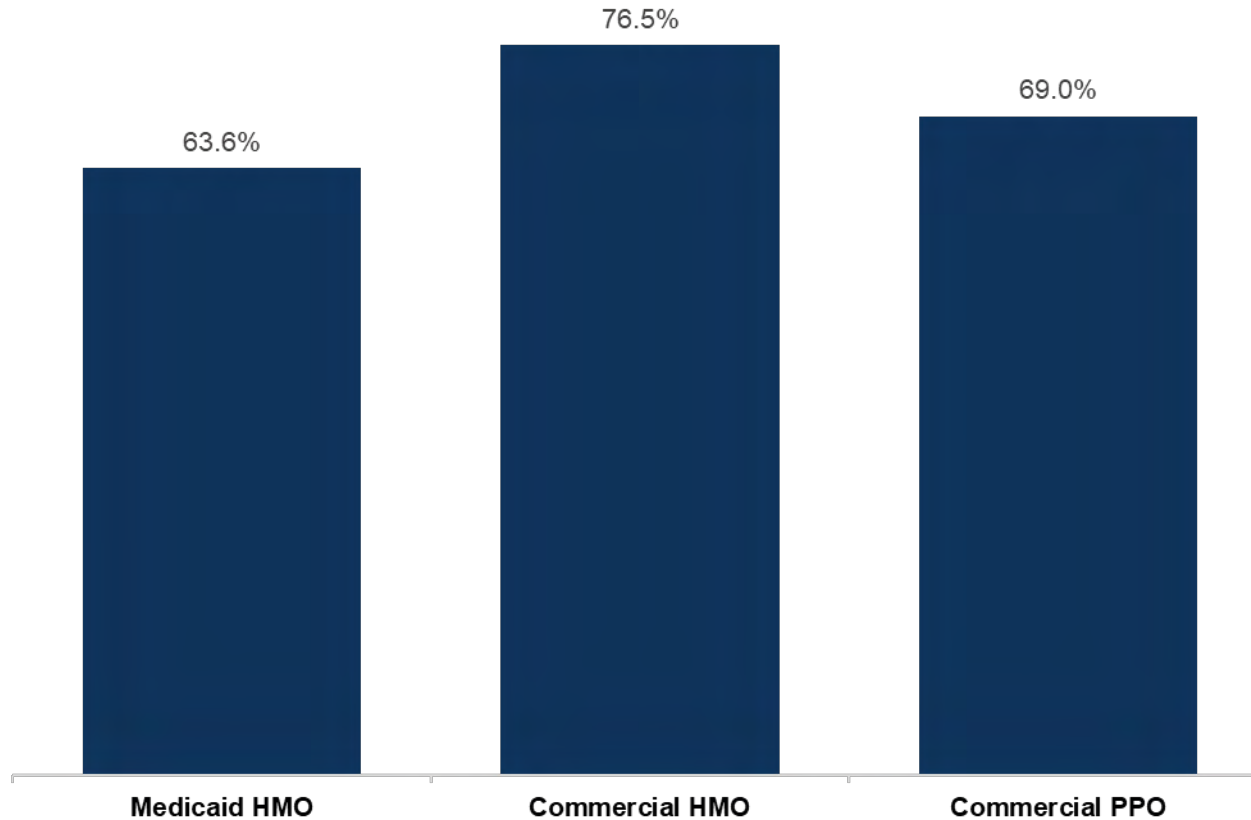
Notes:
Data are from health plans participating in the Healthcare Effectiveness Data and Information Set (HEDIS). 191 million people are enrolled in plans that report HEDIS results. To be included in the numerator for this measure, the postpartum visit must have occurred 21–56 days after delivery.

Source:
National Committee for Quality Assurance (NCQA). HEDIS Measures and Technical Resources, Prenatal and Postpartum Care (2018 data).

Available at:
https://www.ncqa.org/hedis/measures/prenatal-and-postpartum-care-ppc/

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MATERNITY-RELATED HEALTH CARE PROVIDER WORKFORCE

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# Maternity-Related Health Care Provider Workforce

Fast facts: The states that have the highest combined numbers of general obstetrics and gynecology physicians and advanced practice midwives per 100,000 reproductive age women are mostly concentrated in the northeast, with the addition of New Mexico, Hawaii, Oregon, and Alaska.

This section of the profile shows selected indicators related to the maternity-related health care provider workforce by state.

The charts in this section include:

- Number of General Obstetrics and Gynecology Physicians per 100,000 Reproductive Age Women, by State
- Number of Advanced Practice Midwives per 100,000 Reproductive Age Women, by State
- Number of General Obstetrics and Gynecology Physicians and Advanced Practice Midwives per 100,000 Reproductive Age Women, by State

Number of General Obstetrics and Gynecology Physicians per 100,000 Reproductive Age Women, by State, 2017
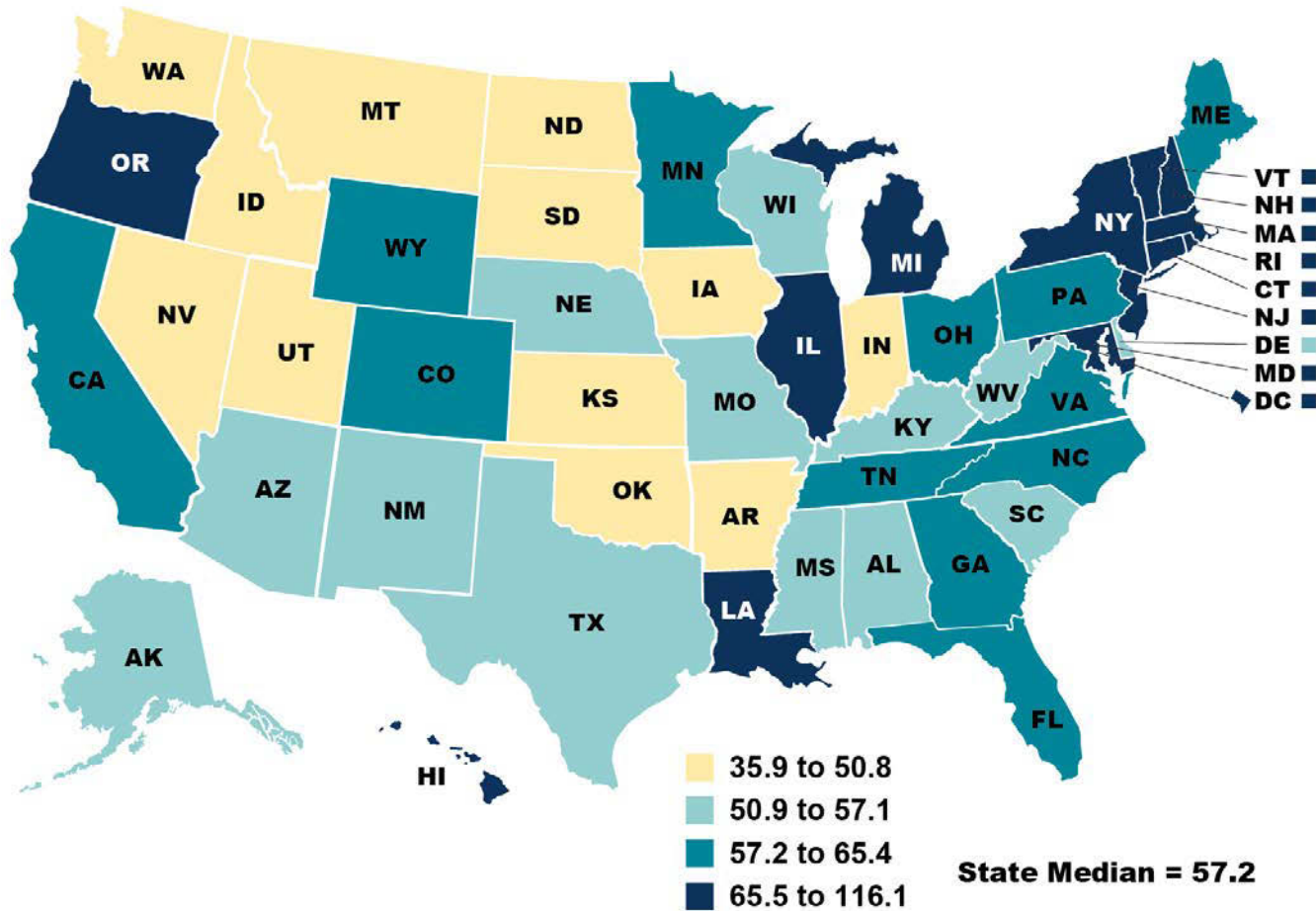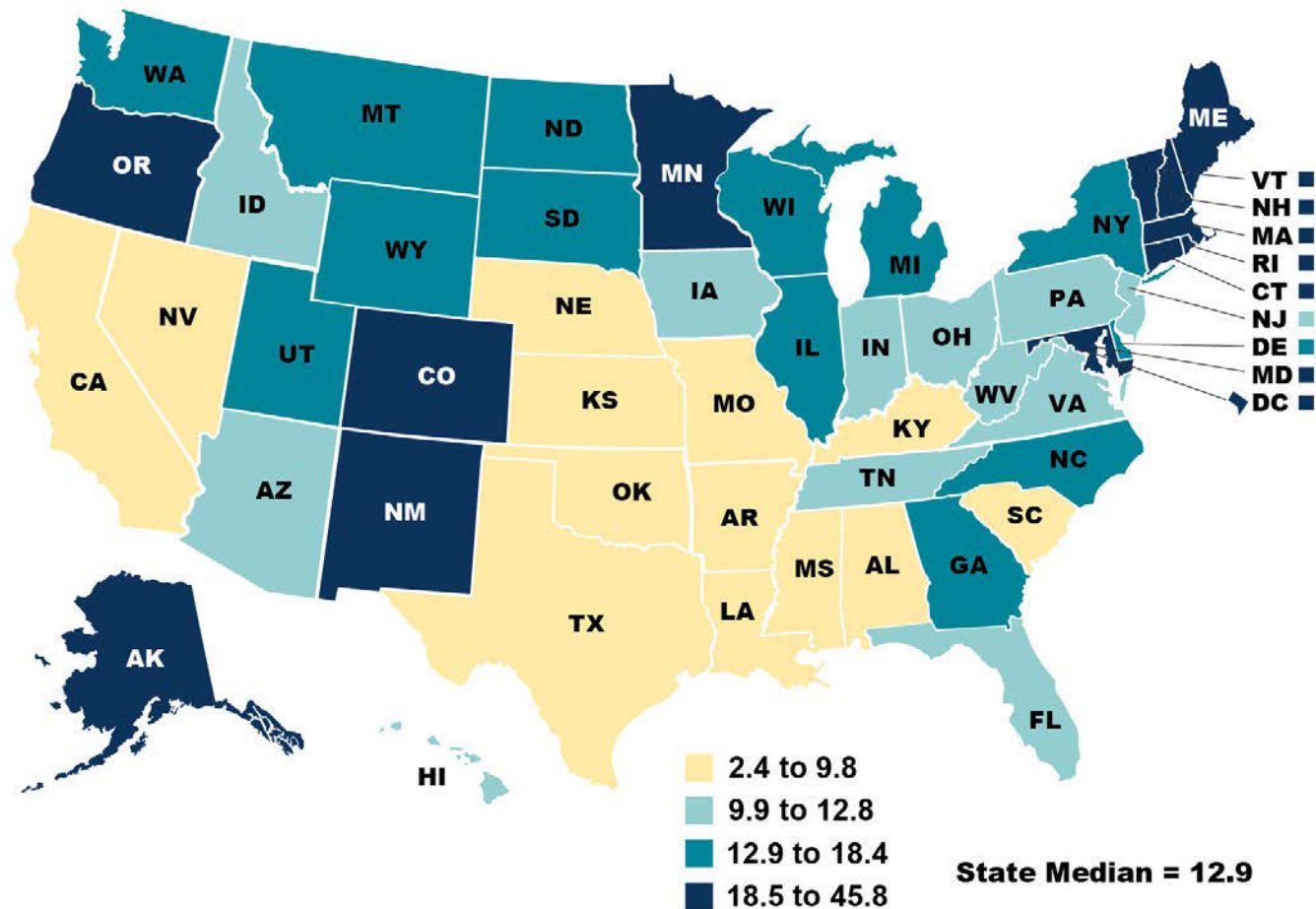

Notes:
Provider data come from the Area Health Resources Files (AHRF) and are derived from the American Medical Association Physician Masterfiles. Totals exclude physicians employed full-time by the federal government. Population data come from the American Community Survey (ACS). Reproductive age women are defined as ages 15–44.
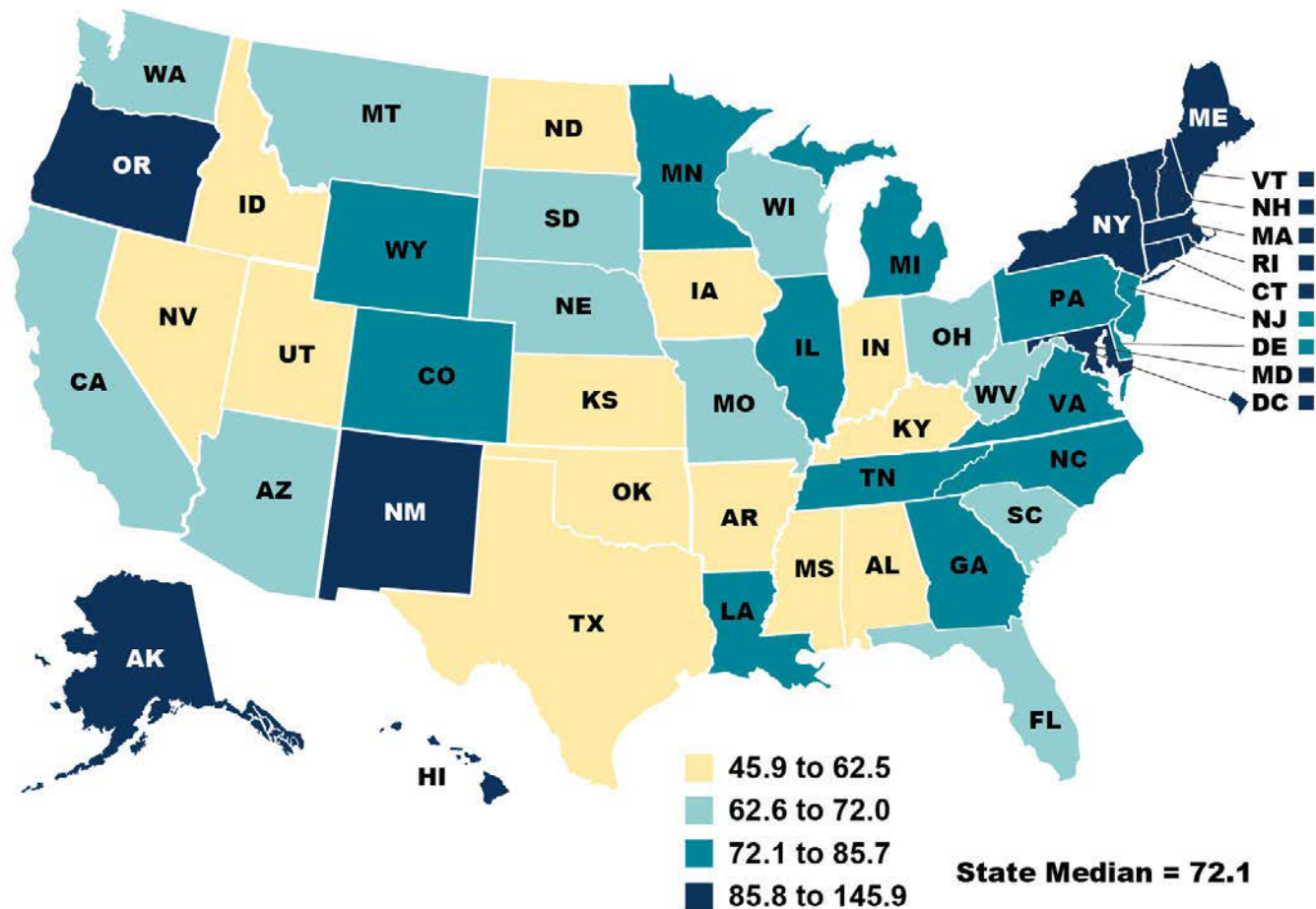
Sources:
1. AHRF 2018–2019. U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Workforce, Rockville, MD (2017 data).
2. IPUMS USA, University of Minnesota. ACS 2017 sample.

Available at:
1. https://data.hrsa.gov/data/download
2. www.ipums.org

Legend:
- 35.9 to 50.8
- 50.9 to 57.1
- 57.2 to 65.4
- 65.5 to 116.1

State Median = 57.2

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Number of Advanced Practice Midwives per 100,000 Reproductive Age Women, by State, 2018

Legend:
- 2.4 to 9.8
- 9.9 to 12.8
- 12.9 to 18.4
- 18.5 to 45.8

State Median = 12.9

Notes:
Provider data come from the Area Health Resources Files (AHRF) and are derived from CMS's National Provider Identification (NPI) File. The NPI is a unique identifier developed by CMS. Population data come from the American Community Survey (ACS). Reproductive age women are defined as ages 15–44.

Sources:
1. AHRF 2018–2019. U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Workforce, Rockville, MD (2018 data).
2. IPUMS USA, University of Minnesota. ACS 2018 sample.

Available at:
1. https://data.hrsa.gov/data/download
2. www.ipums.org

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Number of General Obstetrics and Gynecology Physicians and Advanced Practice Midwives per 100,000 Reproductive Age Women, by State, 2017–2018

45.9 to 62.5
62.6 to 72.0
72.1 to 85.7
85.8 to 145.9

State Median = 72.1

Notes:
Provider data come from the Area Health Resources Files (AHRF). Obstetrics and gynecology data are derived from the American Medical Association 2017 Physician Masterfiles. Totals exclude physicians employed full-time by the federal government. Midwifery data are derived from CMS's 2018 National Provider Identification (NPI) File. The NPI is a unique identifier developed by CMS. Population data come from the 2017 American Community Survey (ACS).

Sources:
1. AHRF 2018–2019. U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Workforce, Rockville, MD (2017 & 2018 data).
2. IPUMS USA, University of Minnesota. ACS 2017 sample.

Available at:
1. https://data.hrsa.gov/data/download
2. www.ipums.org

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APPENDIX: DATA SOURCES

Data Sources (in Order of First Appearance)

Source	Pages	Link(s)	Comments
Pregnancy Risk Assessment Monitoring System (PRAMS)	6, 63–65	https://www.cdc.gov/prams/index.htm	PRAMS is a state-level, representative survey of women who have had a live birth within the reporting year. As of 2018, 47 states, D.C., New York City, Puerto Rico, and the Great Plains Tribal Chairman's Health Board participated in PRAMS, covering ~83% of all U.S. births. The PRAMS research data set excludes any state that has not met the response rate threshold for that year (currently 55%). CDC approval is required to gain access to the research data set. All PRAMS data included in this profile come from data tables and briefs publicly available through the CDC.
IPUMS	7–9, 75–77	https://www.ipums.org	IPUMS USA collects and harmonizes U.S. census microdata. Data include decennial censuses and American Community Surveys (ACS) from 2000 to the present. Data included in this profile were generated using the IPUMS online data analysis system with either the 2017 or 2018 ACS sample. The ACS is a 1-in-100 national random, weighted sample of the U.S. population. The data include persons in households and in group quarters (institutions, military barracks, university dorms, etc.)
National Survey of Family Growth (NSFG)	10, 11, 21, 46, 57, 60, 62	https://www.cdc.gov/nchs/nsfg/nsfg_2015_2017_puf.htm	NSFG is a nationally representative survey of reproductive age women in the civilian, noninstitutionalized, household population of the U.S. The age range for participants increased from 15–44 to 15–49 beginning in 2015. The NSFG data included in this profile come from primary analyses of the 2015–2017 public use data files.
National Center for Health Statistics (NCHS) - Natality Public Use File	14–18, 23–25, 29–34, 55, 56, 58, 59, 61, 68	https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm https://wonder.cdc.gov/	The NCHS natality public use file contains records for all live births registered within the 52 U.S. reporting areas (50 states, New York City, and D.C.), during the reporting year. The 2018 state-level natality data included in this profile were generated using the CDC WONDER online data analysis system. All other natality data come from primary analyses of the raw 2018 public use file. Geographic identifiers are not available in the raw file.
Healthcare Cost and Utilization Project (HCUP) - National Inpatient Sample (NIS)	22, 69–71	https://www.hcup-us.ahrq.gov/	The NIS is a 20% sample of discharges from all community hospitals participating in HCUP in that data year. It is sampled from the HCUP State Inpatient Databases (see next page). Community hospitals are defined as short-term, non-federal, general, and other hospitals, excluding hospital units of other institutions (e.g., prisons). Community hospitals that are also long-term care facilities are excluded. Analytic data files must be purchased from HCUP. All NIS data included in this profile come from HCUP Fast Stats (an online table generating tool) or from statistical briefs publicly available through the Agency for Healthcare Research and Quality (AHRQ).

Data Sources (Continued, in Order of First Appearance)

Source	Pages	Link(s)	Comments
Healthcare Cost and Utilization Project (HCUP) - State Inpatient Databases (SID)	26	https://www.hcup-us.ahrq.gov/	The SID are state-specific files that contain all inpatient discharge records from community hospitals in a given state, regardless of payer (see previous page for definition of community hospital). Together, the SID encompass more than 95% of all U.S. hospital discharges. Some states make their files available for purchase through HCUP. All SID data included in this profile come from statistical briefs publicly available through AHRQ.
National Survey of Children's Health (NSCH)	35, 36	https://www.childhealthdata.org/	NSCH is a nationally representative survey of all noninstitutionalized children ages 0 to 17 years in the U.S. (50 states and DC) who live in housing units. The NSCH data included in this profile were generated using the NSCH Interactive Data Query with the 2017-2018 sample. The full citation for the NSCH exhibits included in this profile is: Child and Adolescent Health Measurement Initiative. 2017-2018 National Survey of Children's Health (NSCH) data query. Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration's Maternal and Child Health Bureau (HRSA MCHB). Retrieved from www.childhealthdata.org. CAHMI: www.cahmi.org
Pregnancy Mortality Surveillance System (PMSS)	39–41	https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pregnancy-mortality-surveillance-system.htm	PMSS contains records for all women who died during pregnancy or within 1 year of pregnancy within the 52 U.S. reporting areas (50 states, New York City, and D.C.), whose deaths were determined to be pregnancy-related based on CDC epidemiologists' review of death certificates. Pregnancy mortality data are considered highly confidential and analytic files are not provided. All PMSS data included in this profile come from data tables and briefs publicly available through the CDC.
National Center for Health Statistics (NCHS) - Fetal Death Data	44	https://wonder.cdc.gov/	The NCHS fetal death data contain records for all fetal deaths registered within 52 U.S. reporting areas (50 states, New York City, and D.C.), during the reporting year. The majority of states require reporting fetal deaths of 20 weeks of gestation or more, or 350 grams delivery weight, or some combination of the two. To maximize the comparability of data, the 2017 data included in this profile are based on fetal deaths occurring at gestations of 20 weeks or more and were generated using the CDC WONDER online data analysis system. Payer type is not available for fetal death data.

Data Sources (Continued, in Order of First Appearance)

Source	Pages	Link(s)	Comments
National Center for Health Statistics (NCHS) - Linked Birth/Infant Death Data	45, 47–51	hthttps://www.cdc.gov/nchs/data_access/vitalstatsonline.htm; https://wonder.cdc.gov/	The NCHS linked birth/infant death data contain records for all infant deaths up to 1 year of age registered within 52 U.S. reporting areas (50 states, New York City, and D.C.). The 2017 state-level infant mortality data included in this profile were generated using the CDC WONDER online data analysis system. All other data come from primary analyses of the raw 2017 public use period linked file. The numerator for the 2017 period linked file is infant deaths occurring in 2017 linked to their corresponding birth certificates, whether the birth occurred in 2016 or 2017. The denominator is all births occurring in 2017. Geographic identifiers are not available in the raw file, while payer type is not available in CDC WONDER.
National Committee for Quality Assurance (NCQA)	72	https://www.ncqa.org/hedis/measures/prenatal-and-postpartum-care-ppc/	The aggregate NCQA data around postpartum care included in this profile are publicly available and are derived from Medicaid and commercial health plans participating in the Healthcare Effectiveness Data and Information Set (HEDIS). 191 million people are enrolled in plans that report HEDIS results.
Area Health Resources Files (AHRF)	75–77	https://data.hrsa.gov/data/download	AHRF includes county, state, and national-level files in eight broad areas: Health Care Professions, Health Facilities, Population Characteristics, Economics, Health Professions Training, Hospital Utilization, Hospital Expenditures, and Environment. Data are obtained from more than 60 sources, including administrative and survey sources. The underlying data sources for the indicators included in this profile are CMS's 2018 National Provider Identifier file and the American Medical Association's 2017 Physician Masterfiles.