



OPQIC

OKLAHOMA PERINATAL **QUALITY**
IMPROVEMENT COLLABORATIVE

OPQIC

Creating a culture of excellence,
safety and equity in perinatal
care



Oklahoma Perinatal Quality Improvement Collaborative

We work to create a culture of excellence, safety
and equity in perinatal care in Oklahoma.

[PATIENT RESOURCES](#)[PROFESSIONAL RESOURCES](#)

The Landscape of Maternal and Infant Health in Oklahoma

42 birthing hospitals
(-1 on 10/1/25)

53% rural location
47% urban location

47,831 annual births in 2024 (preliminary)

~77% in urban hospitals
~23% in rural hospitals
Range in 2024 = 144 – 4402 births
~49% covered by Medicaid
3 tribal birthing hospitals
~~1 IHS birthing hospital~~
5 Birth Centers (>5 annual births)
7 Level III or IV NICUs

State Profile 2024 – Oklahoma

- **Oklahoma population: 4,095,393**
 - 61.9% NH White
 - 13.5% Hispanic
 - 8.1% NH American Indian/Alaska Native
 - 7.5% NH Black/African American
 - 2.9% NH Asian/PI
- **Females of childbearing age (15-44 years): 821,935 (19.9%)**
 - 57.4% NH White
 - 15.3% Hispanic
 - 9.0% NH American Indian/Alaska Native
 - 8.0% NH Black/African American
 - 3.5% NH Asian/PI
- **Female median age: 38.4 years**



State Profile 2024 – Oklahoma

	Medicaid Deliveries 2024	# Live births 2024 (OSDH)	% of live births paid for by Medicaid
Overall	23,692	47,947	49.4%
NH White	9,357	24,976 (52.1%)	37.5%
Hispanic	6,683	9,379 (19.6%)	71.3%
NH Am. Indian	2,327	4,039 (8.4%)	57.6%
NH AA/Black	2,132	3,360 (7.0%)	63.5%
NH Asian/PI	632	1,502 (3.1%)	42.1%

Source: Oklahoma State Department of Health, Center for Health Statistics, Health Care Information, OK2SHARE.
Did not include race/ethnicity of births/claims that are unknown, declined to answer or more than 1 race.

MATERNAL MORTALITY

Maternal and Child Health Data Portal

Our Goal

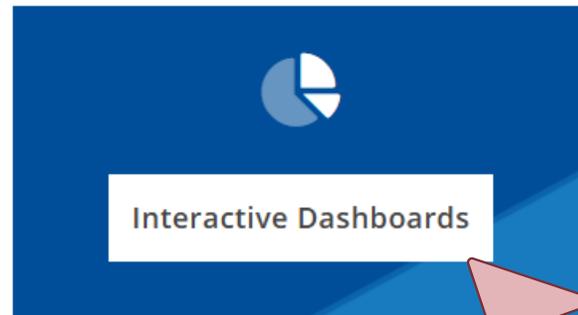
Provide a platform for quality health-related data to promote evidence-based programs, assist in policy development, and improve health outcomes for mothers and children.

About

The Data Portal provides quick access to maternal, infant, and children's health information. This includes reports, factsheets/infographics, interactive dashboards, and maps.

Data displayed on the portal comes from a variety of sources, including Oklahoma Vital Records, the Youth Risk Behavior Survey (YRBS), the Pregnancy Risk Assessment Monitoring System (PRAMS), The Oklahoma Toddler Survey (TOTS), and CDC WONDER. The quality of the data from each internal source is carefully reviewed, and standardizations are made when necessary. Aggregating data over multiple years ensures confidentiality.

Technical notes are provided under each reporting domain. Send any requests for additional information about portal indicators to Maternal and Child Health Assessment.



[Children & Family Health](#) > [Maternal and Child Health](#) > [MCH Data Portal](#) > **Interactive Dashboards**

Interactive Dashboards



- Live Births
- Infant Deaths
- Fetal Deaths

- Women's Health
- Maternal Health

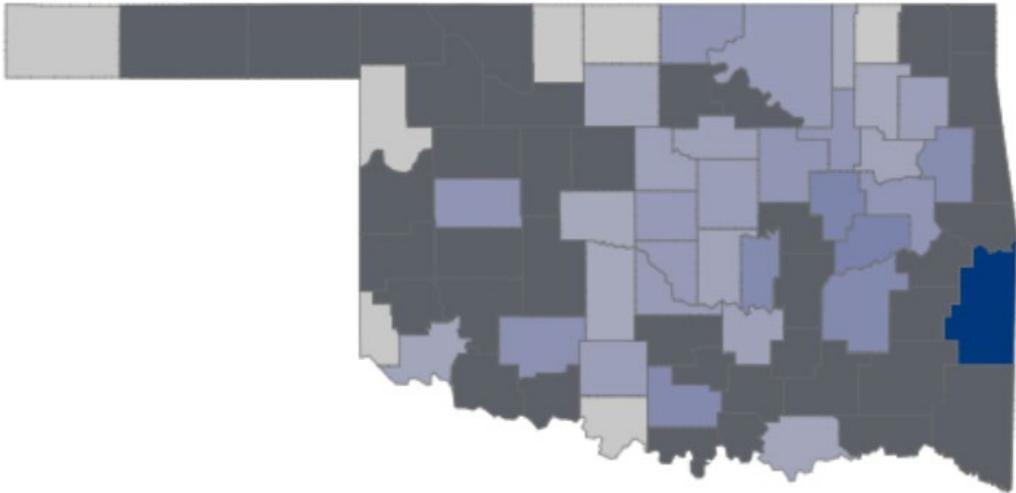
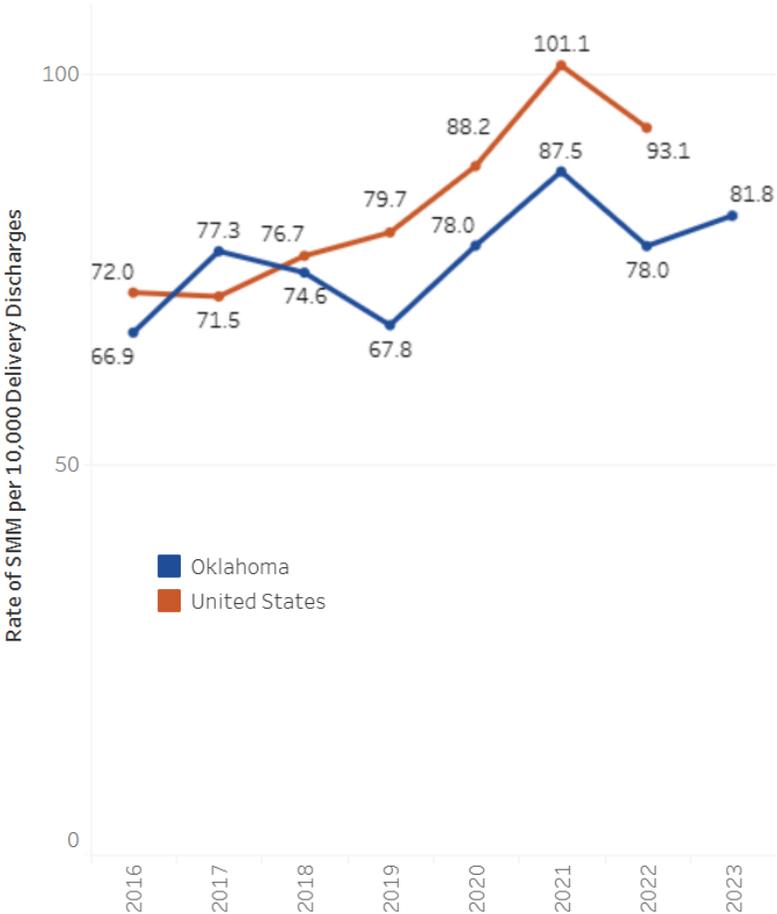


- Youth Risk Behavior Survey (YRBS)
- Teen Birth Statistics

Perinatal and Reproductive Health Dashboard

- Live Births
- Infant Deaths
- Fetal Deaths
- Technical Notes
- Severe Maternal Morbidity

Severe Maternal Morbidity (SMM)



Rate of SMM per 10,000 Delivery Discharges

0.0 270.3

<10 SMM Events



Oklahoma Maternal Health

Morbidity & Mortality

Annual Report 2024



<https://opqic.org/mmrcreport>



Definitions Related to Maternal Mortality

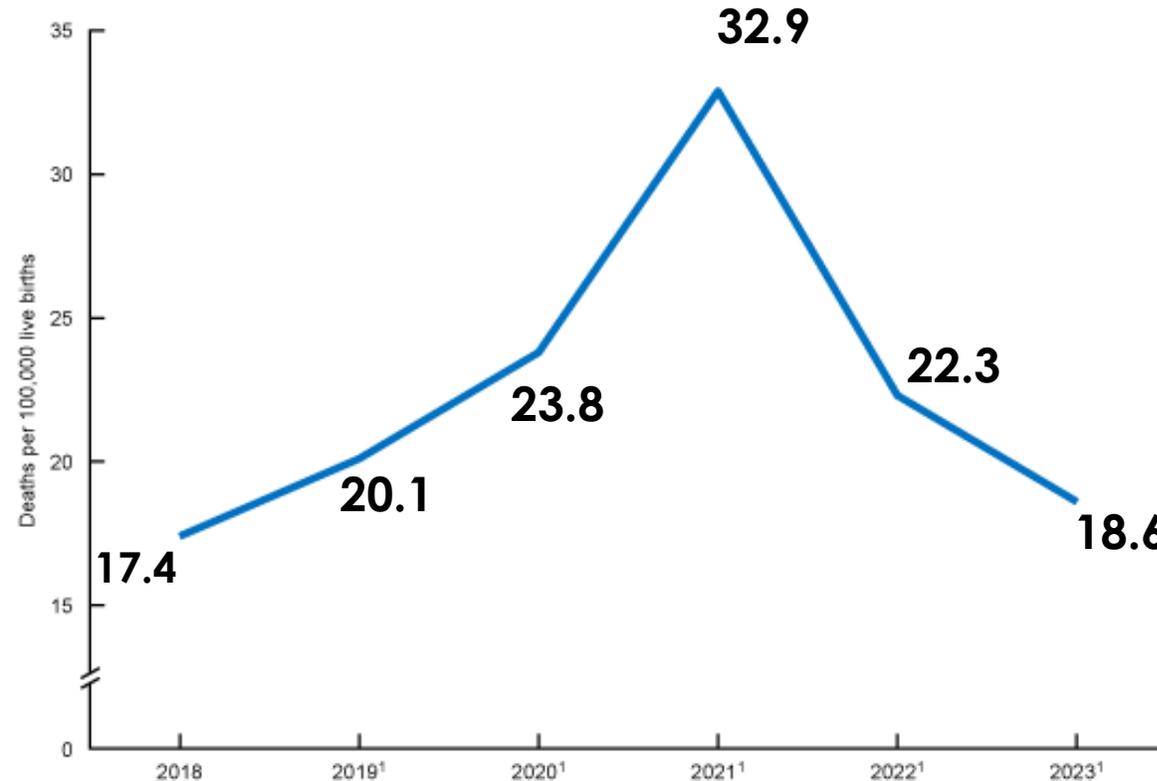
- **Maternal Mortality:** The death of a woman **while pregnant or within 42 days** of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes. (WHO Definition) Rate used in the U.S. and OK for reporting purposes-denominator of **100,000 live births**. (This definition used to compare U.S. to other countries.)
- **Pregnancy Related Deaths:** The death of a woman **while pregnant or within 1 year** of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes. Rate used in the U.S. and OK for reporting purposes-denominator of **100,000 live births**. (This definition most often is produced from state MMRCs.)
- **Pregnancy Associated Deaths:** The death is the death of any women, from any cause, while pregnant or within 1 year of termination of pregnancy, regardless of duration and the site of pregnancy. Rate used in the U.S. and OK for reporting purposes-denominator of **100,000 live births**. (Generally, a definition associated with timing only.)

Maternal Mortality - US

Historically, over 700 people die yearly in the US as a result of pregnancy or delivery complications.

In 2023, 669 women died of maternal causes in the United States.

Figure 1. Maternal mortality rate: United States, 2018–2023



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

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



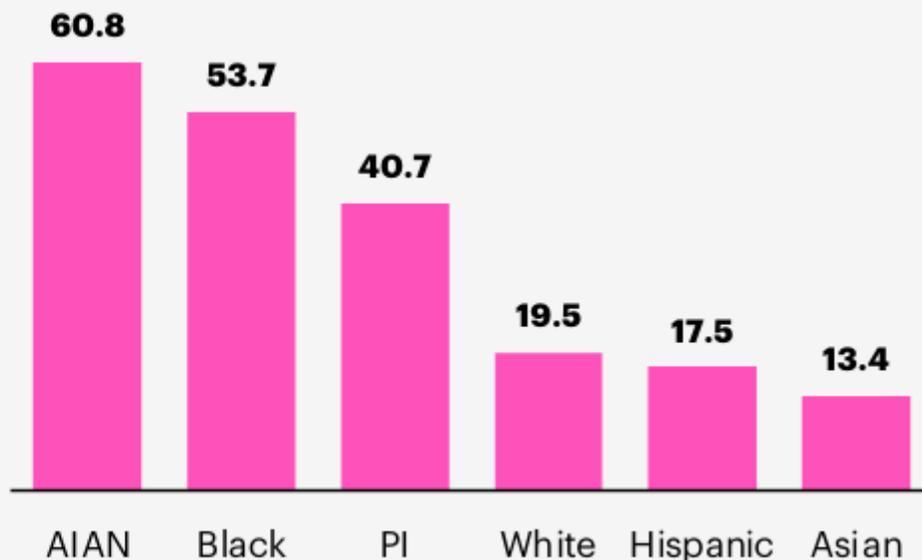
2025 March of Dimes Report Card Maternal health in the US

Maternal mortality has returned to pre-pandemic rates. Still, 669 maternal deaths occurred in 2023 and disparities by race/ethnicity persist

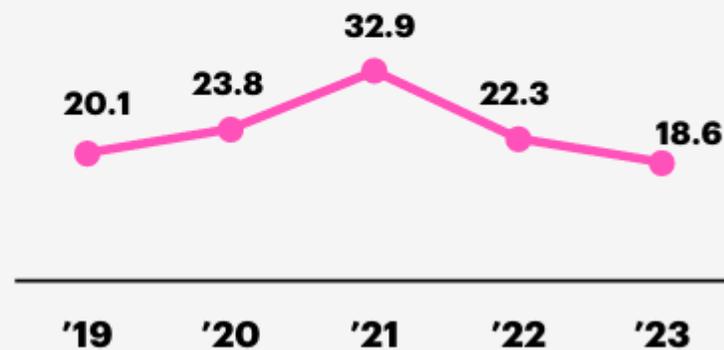
MATERNAL MORTALITY RATE
18.6

Death from complications of pregnancy or childbirth that occur during the pregnancy or within six weeks after the pregnancy ends.

Maternal mortality rate (deaths per 100,000 live births) by race/ethnicity, 2019-2023



Maternal mortality rate, 2019-2023
Changes in maternal mortality rates were statistically significant for all years shown.



Maternal Mortality Rate

- Healthy People 2030 Goal = 15.7
 - ▶ 2021 - 2023 **Oklahoma** Maternal Mortality Rate* for maternal deaths within 42 days of termination of pregnancy is **29.0**
 - ▶ 2021 - 2023 **United States** Maternal Mortality Rate* for maternal deaths within 42 days of termination of pregnancy is **24.6**

*MMR = number of maternal deaths (while pregnant or within 42 days of end of pregnancy) excluding accidents and incidental causes, per 100,000 live births

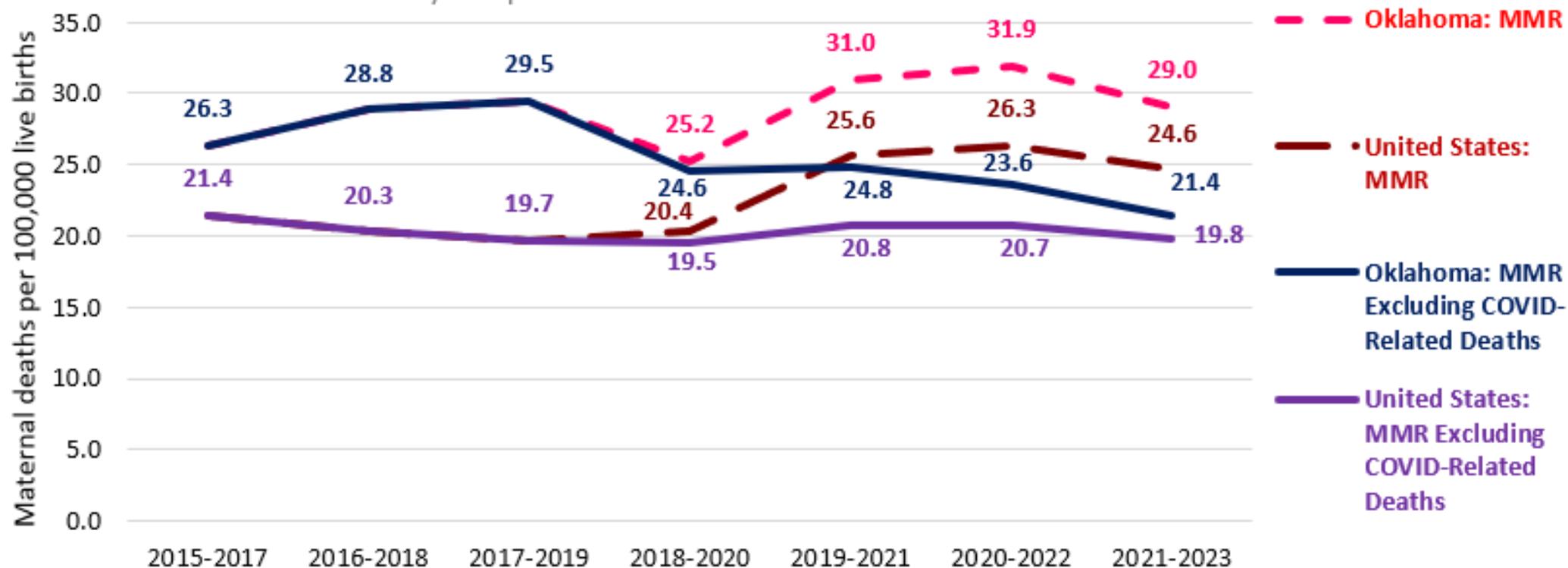
Source: Oklahoma Vital Statistics, 2021 - 2023; CDC Wonder, Mortality and Natality, 2021 - 2023

Three-year rolling maternal mortality rate (MMR) excluding and including COVID-related deaths, Oklahoma and United States 2015 - 2023

Source: Oklahoma Vital Statistics, 2015 - 2023; CDC Wonder, Mortality and Natality, 2015 - 2023

Definitions: Maternal death - underlying cause of death A34, O00-O95, O98-O99;

COVID-related death - any multiple cause of death U07.1



The measures below are important indicators for the health of pregnant and postpartum women in Oklahoma

25.4

PERCENT



LOW-RISK CESAREAN BIRTH

Percentage of Cesarean births for first-time moms, carrying a single baby, positioned head-first, and at least 37 weeks pregnant.

77.9

PER 10,000 HOSPITAL DELIVERIES



SEVERE MATERNAL MORBIDITY

Rate of unexpected outcomes of labor and delivery that result in significant short or long-term health consequences.

27.3

PER 100,000 BIRTHS



MATERNAL MORTALITY

Rate of death from complications of pregnancy or childbirth that occur during the pregnancy or within six weeks after the pregnancy ends.

Sources: National Center for Health Statistics, Natality data, 2024; National Center for Health Statistics, Mortality data, 2019-2023; HCUP Fast Stats. Healthcare Cost and Utilization Project (HCUP). December 2024. Agency for Healthcare Research and Quality, Rockville, MD. <https://datatools.ahrq.gov/hcup-fast-stats>.

	Preterm birth	Infant mortality	Low-risk Cesarean	Adequate PNC*	Severe maternal morbidity	Maternal mortality
Measure	11.0%	7.1	25.4%	78.9%	77.9	27.3
Rank	37th of 52	46th of 52	23rd of 52	21st of 52	12th of 47	31st of 48
Direction†	No change	Worsened	Improved	Improved	Improved	Improved
HP2030 Target	9.4% of live births	5.0 deaths per 1k births	23.6% of low-risk births	80.5% of live births	64.4 per 10K hospital deliveries	15.7 deaths per 100K births

Note: *Measure differs from inadequate PNC. Adequate is presented to align with Healthy People 2030 target. Rank determined for all states with available data with 1 being the best. †Denotes statistically significant change from prior year ($P < 0.05$). See [Technical Notes](#) for details.

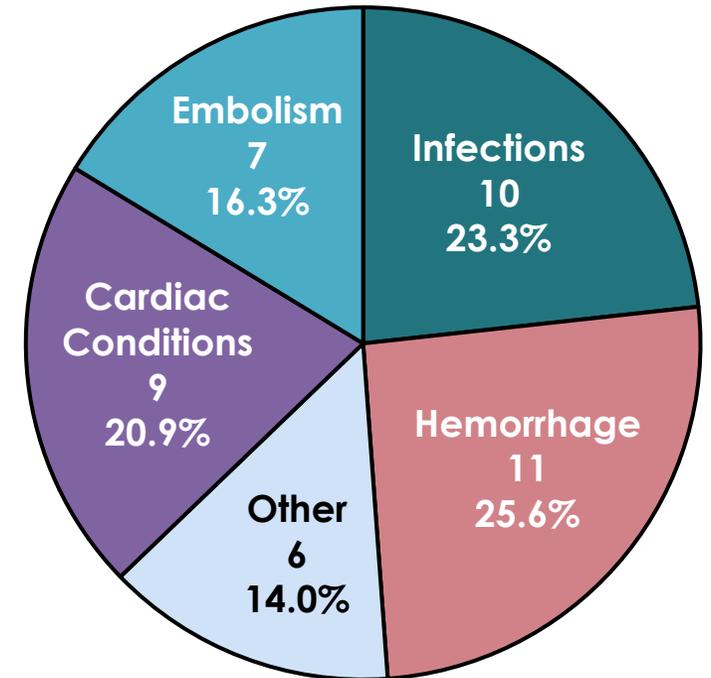
Maternal Mortality Review

- The MMRC has reviewed 100 deaths occurring from 2018 - 2022
- Age range: 15 - 43 years
- 29 (29.0%) were of advanced maternal age (>35 years)
- 58 cases had any Medicaid coverage (69.9%*)
- 43 deaths (43.0%) were pregnancy-related

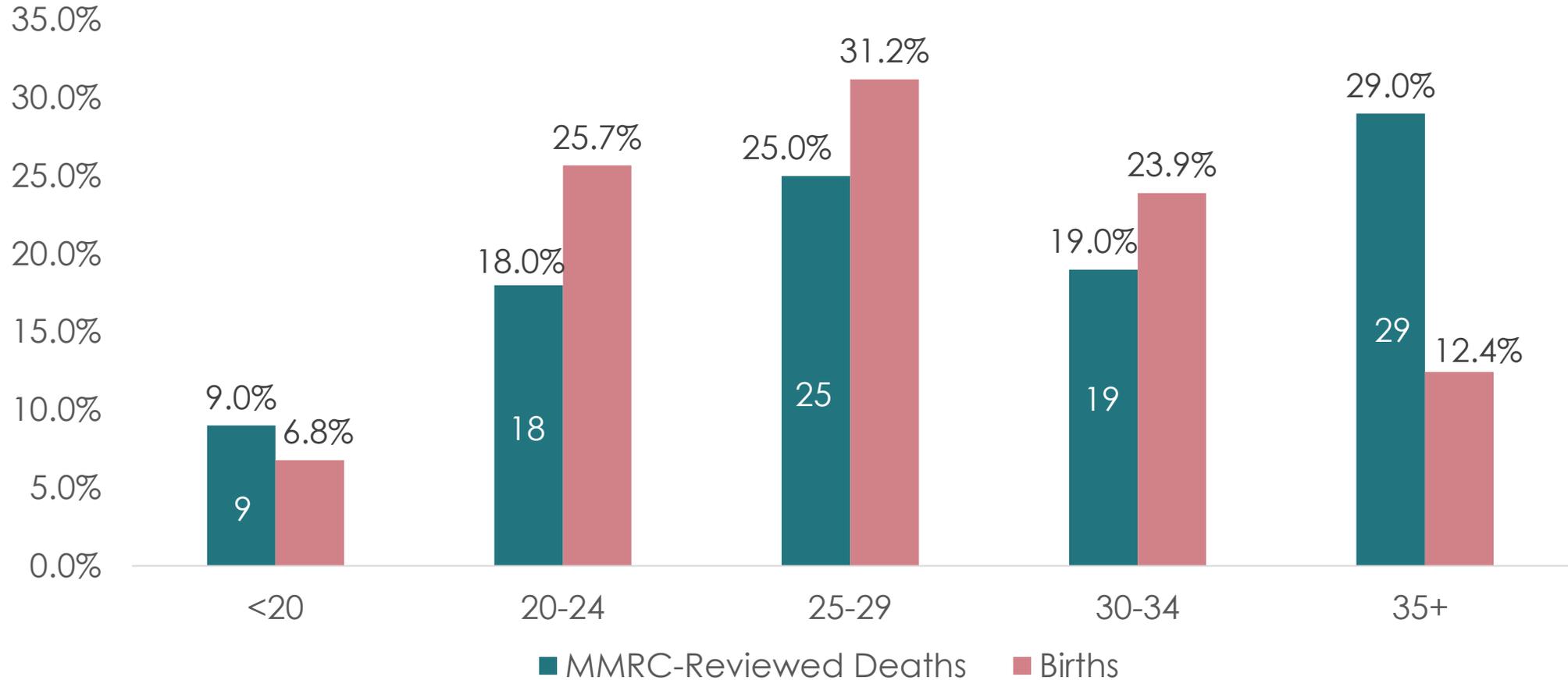
*Among deaths with known insurance status for health care before, during, or after pregnancy (N=83)

Source: Oklahoma Maternal Mortality Review Committee, deaths occurring from 2018 - 2022

Top causes among pregnancy-related deaths with an MMRC determination of cause of death (n=43)

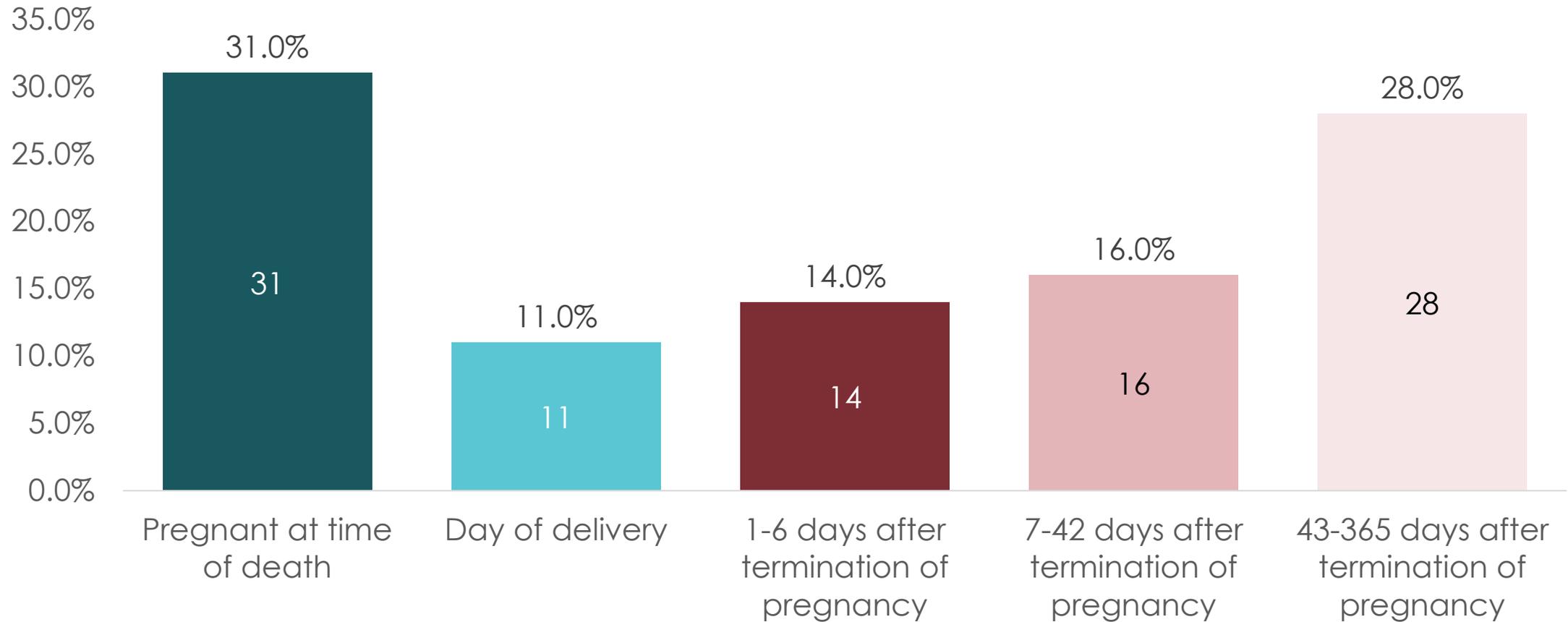


MMRC-Reviewed Deaths and Live Births by Age, 2018 - 2022



Source: Oklahoma Maternal Mortality Review Committee (Deaths), Oklahoma Vital Statistics (Births), occurring from 2018 - 2022

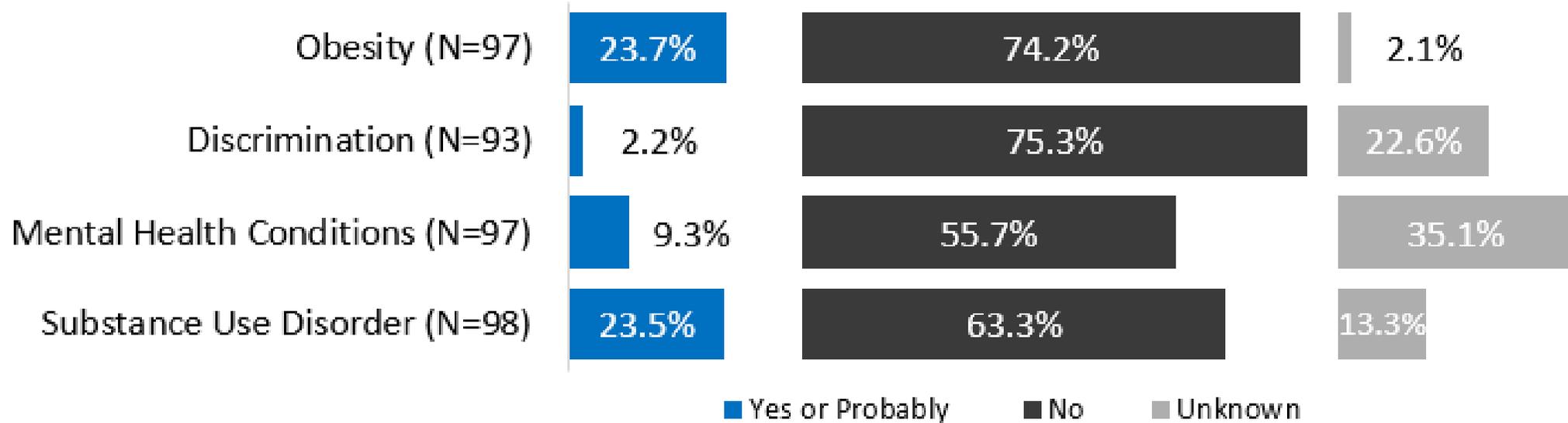
MMRC-Reviewed Deaths by Timing of Death



Source: Oklahoma Maternal Mortality Review Committee, deaths occurring from 2018 - 2022

Circumstances contributing[†] to pregnancy-associated deaths* in Oklahoma, 2018 - 2022

Source: Oklahoma Maternal Mortality Review Committee, 2018 - 2022

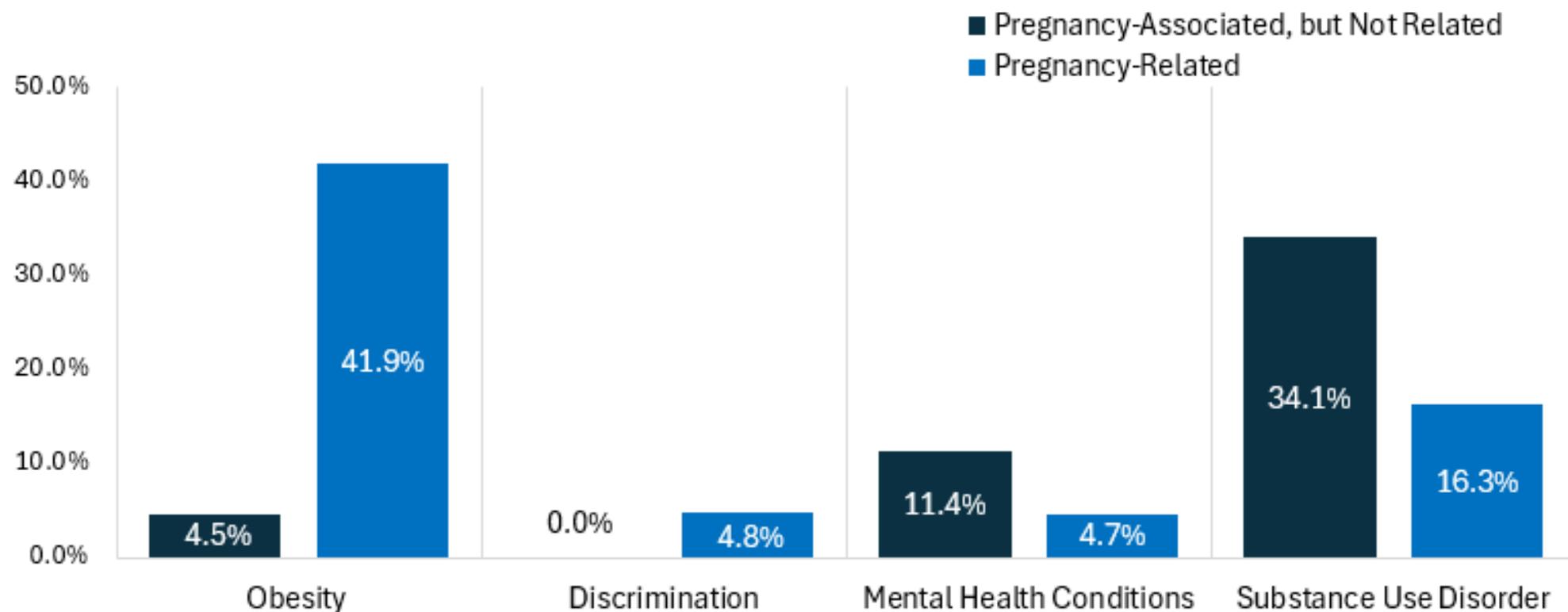


[†]Circumstances were considered contributing to the death if the MMRC determined "Yes" or "Probably" for "Did [circumstance] contribute to the death?"

*With a committee determination of circumstances surrounding death

Circumstances contributing⁺ to pregnancy-associated deaths* by relatedness, Oklahoma 2018 - 2022

Source: Oklahoma Maternal Mortality Review Committee, 2018 - 2022



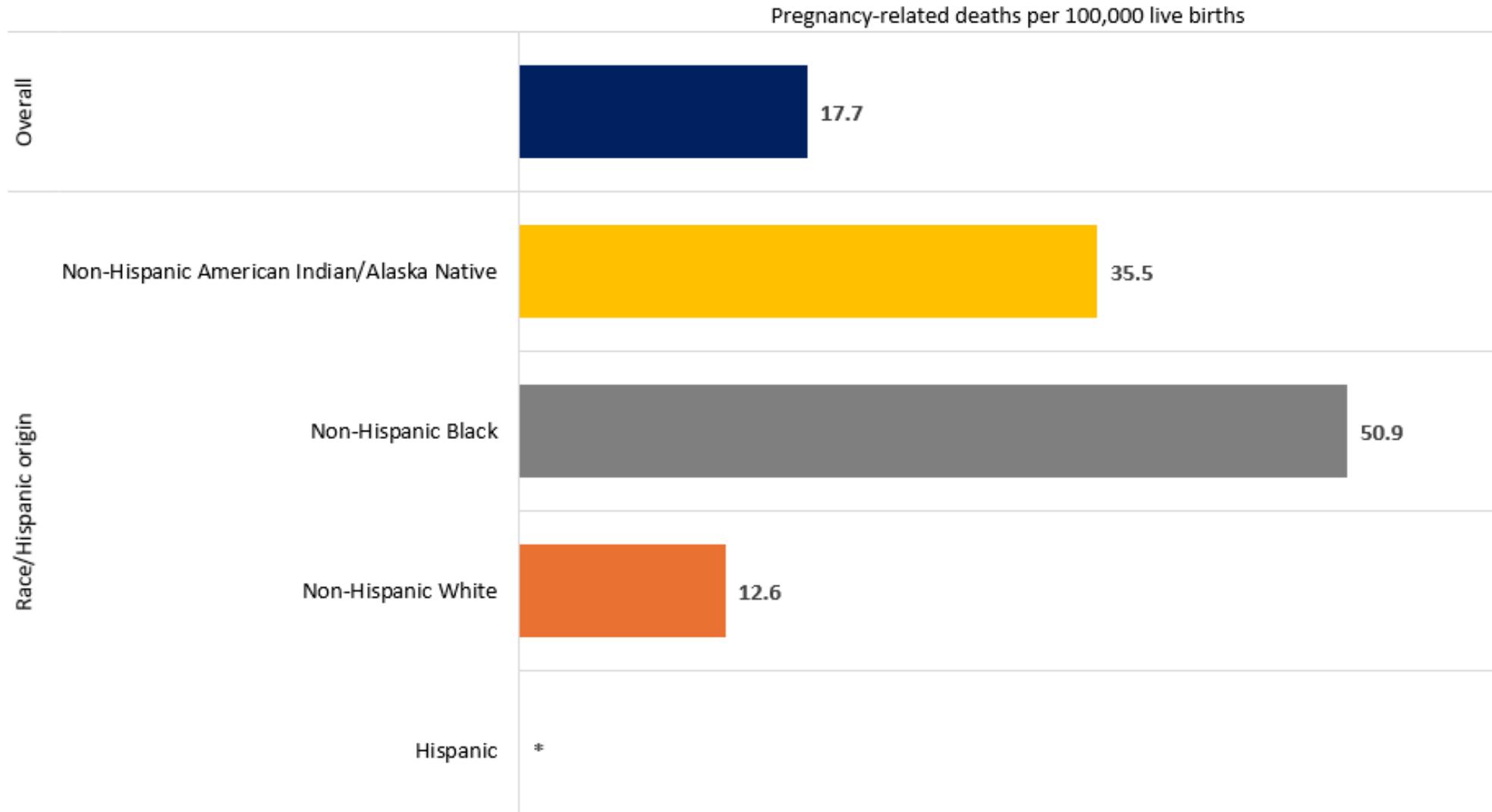
⁺Circumstances were considered contributing to the death if the MMRC determined "Yes" or "Probably" for "Did [circumstance] contribute to the death?"

*With a committee determination of circumstances surrounding death

Pregnancy-related mortality rate by race/Hispanic origin*, Oklahoma 2018 - 2022

Source: Oklahoma Maternal Mortality Review Committee, 2018 - 2022

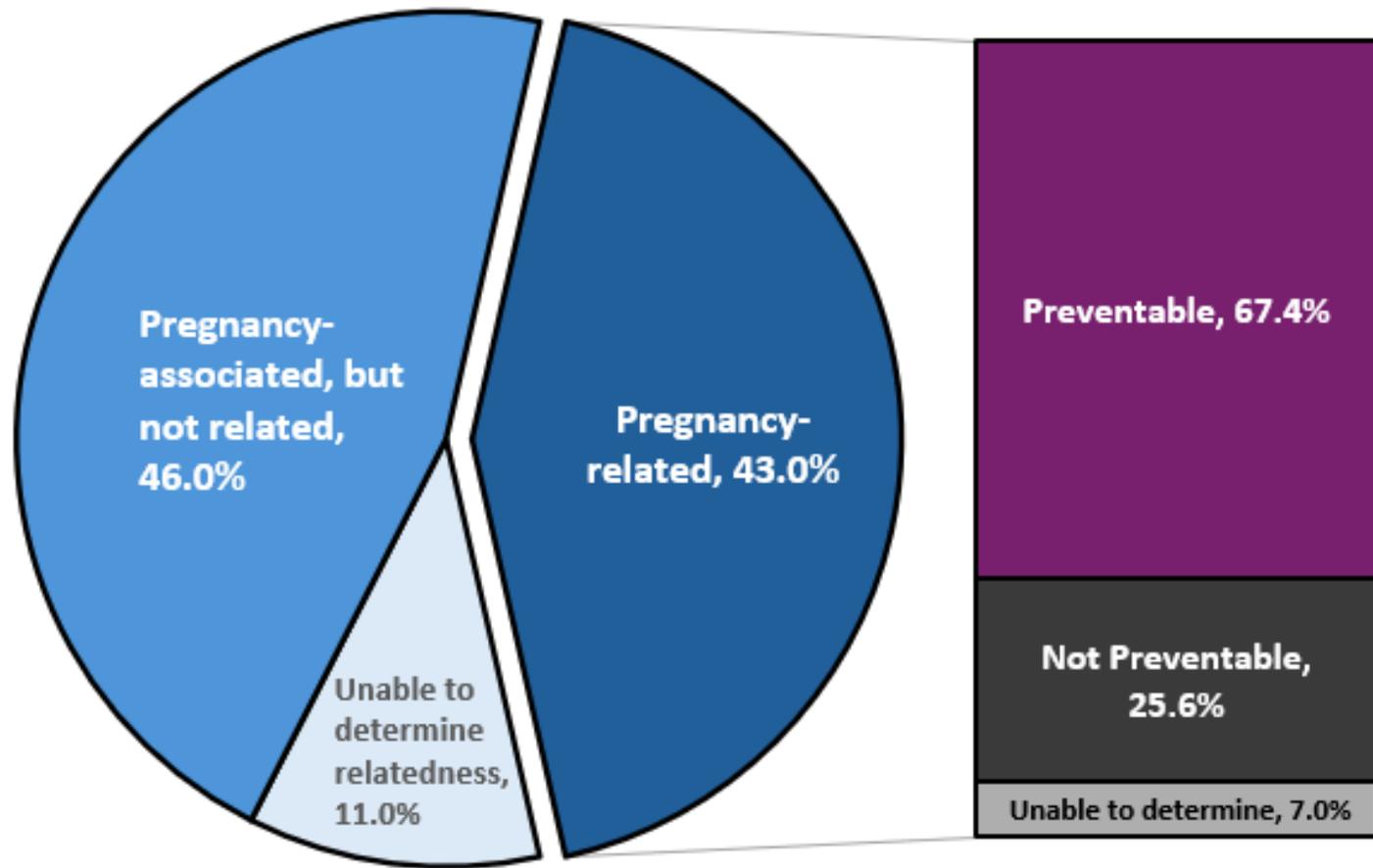
*PRMRs are not reported where the number of deaths is less than 8



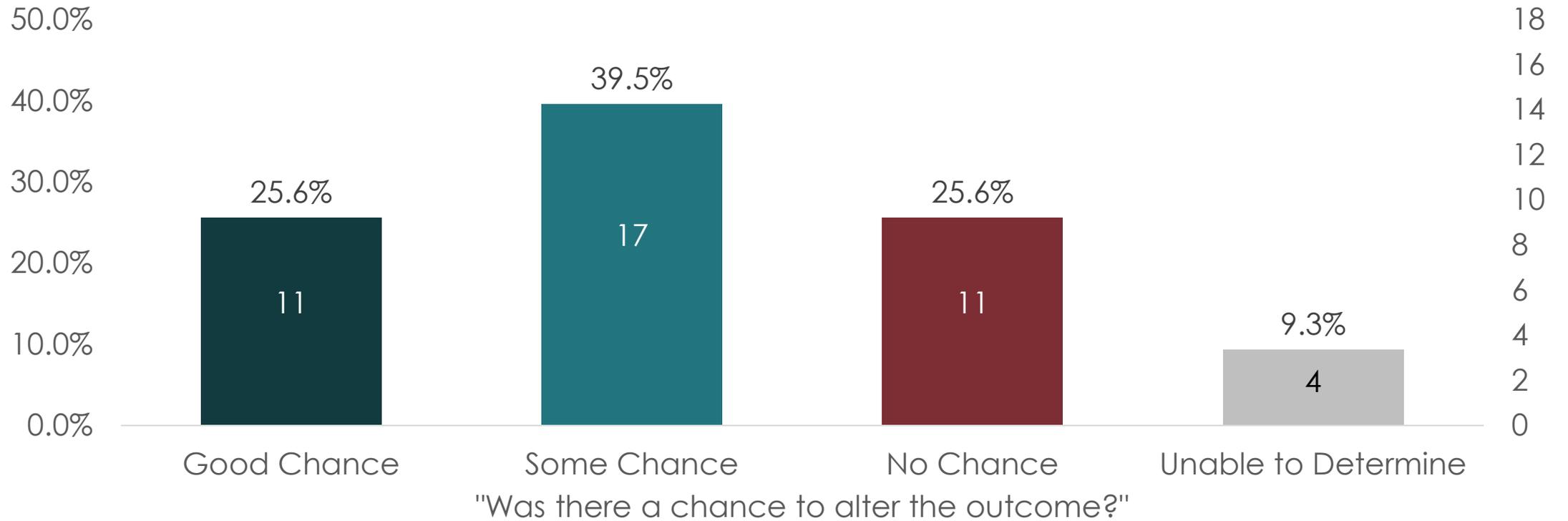
Relatedness of pregnancy-associated deaths and preventability of pregnancy-related deaths*, Oklahoma 2018 - 2022

*With a preventability determination

Source: Oklahoma Maternal Mortality Review Committee, 2018-2022



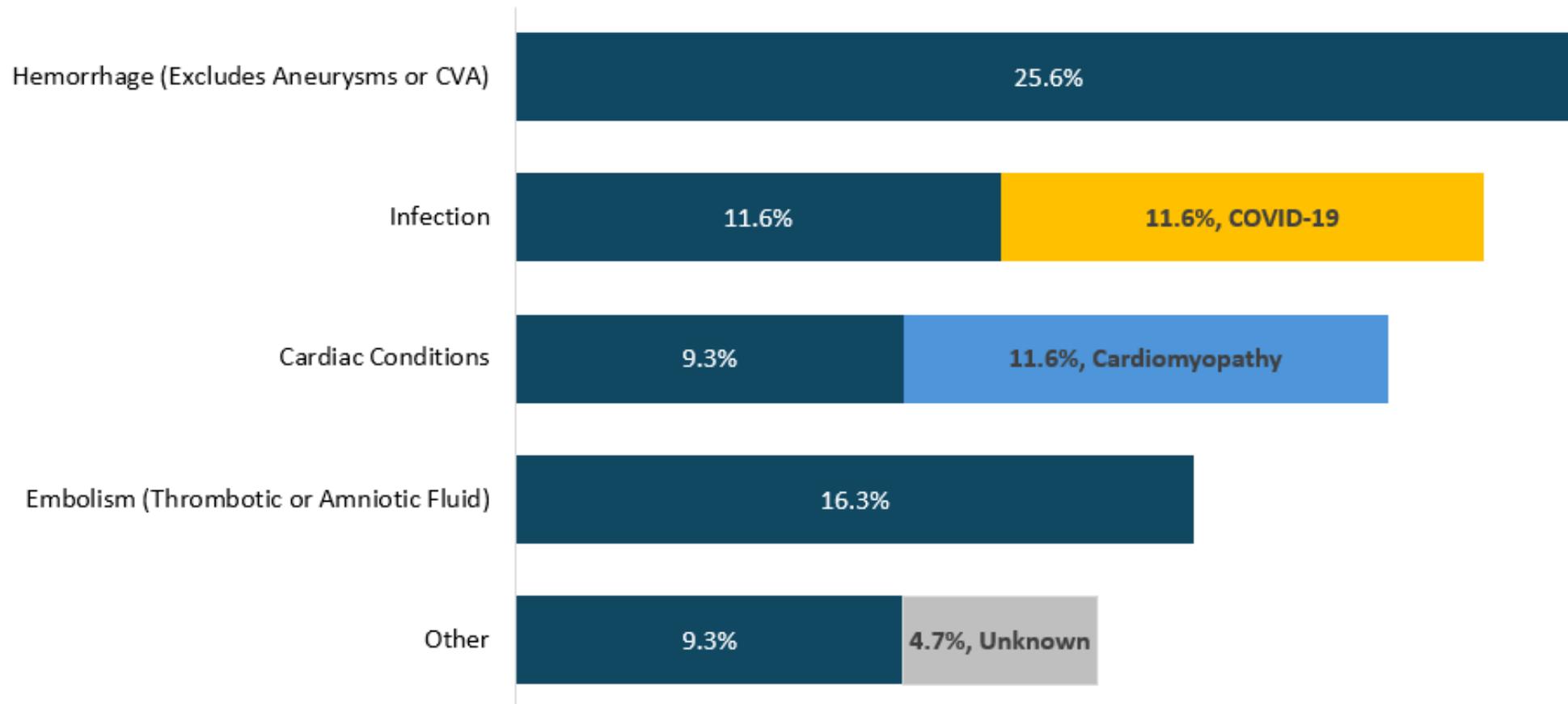
Pregnancy-Related Deaths* by Chance to Alter Outcome



Source: Oklahoma Maternal Mortality Review Committee, deaths occurring from 2018 - 2022

Top causes of pregnancy-related deaths, Oklahoma 2018 - 2022

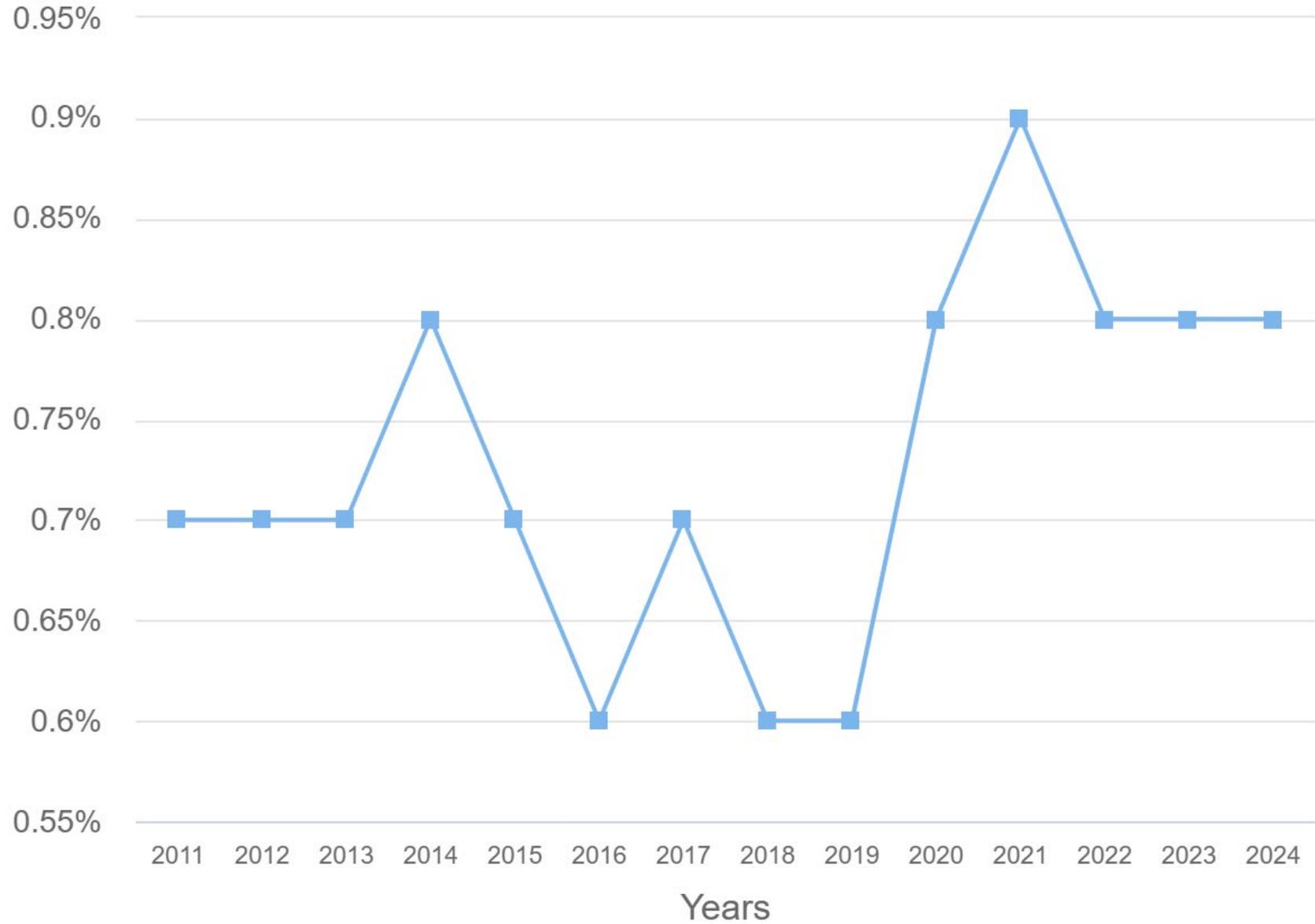
Source: Oklahoma Maternal Mortality Review Committee, 2018 - 2022



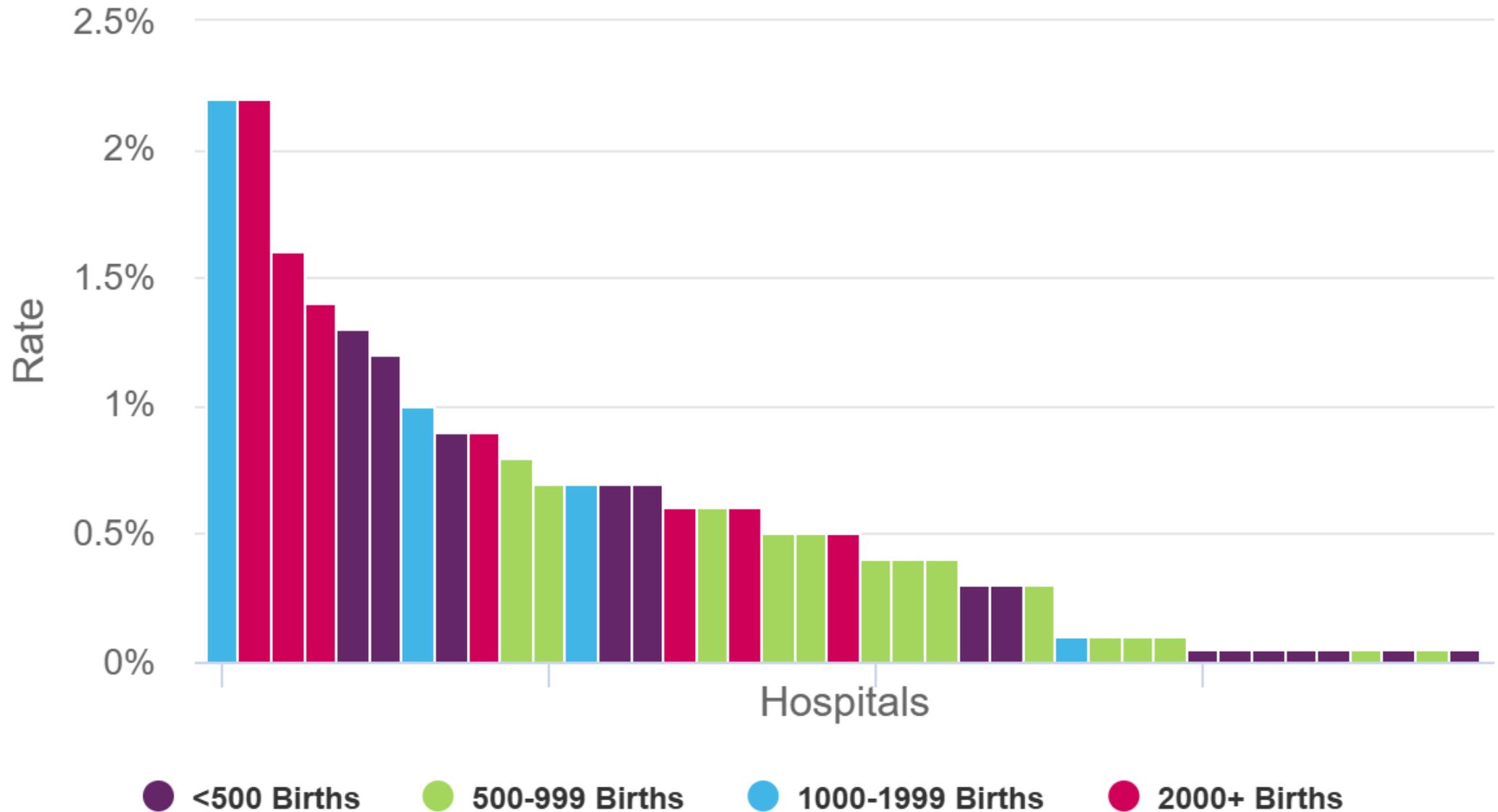
SEVERE MATERNAL MORBIDITY

Severe Maternal Morbidity (excluding transfusion codes alone)

Aggregate Collaborative Average

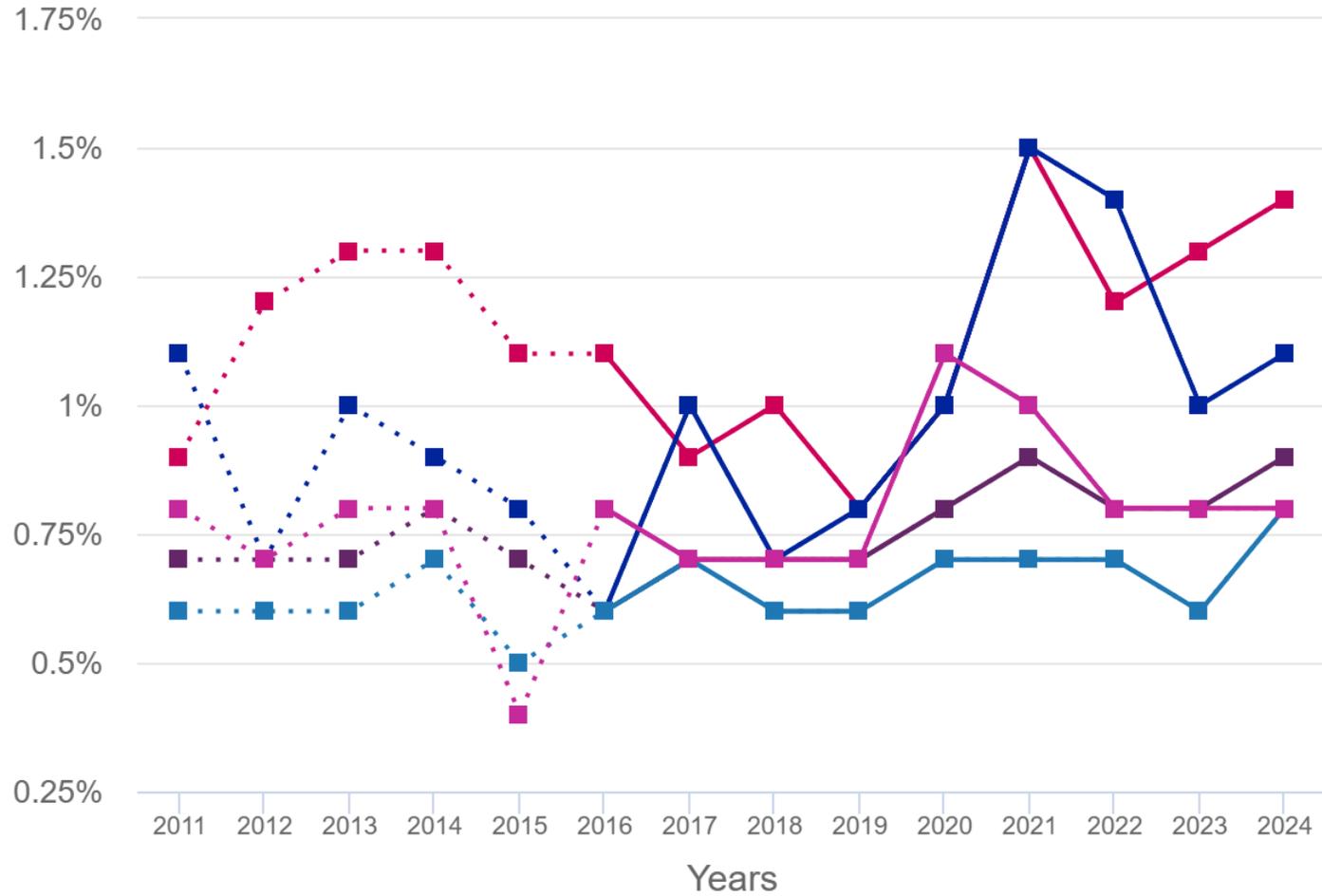


Severe Maternal Morbidity (excluding transfusion codes alone) (2024)



Severe Maternal Morbidity (excluding transfusion codes alone)

Aggregate Collaborative Average



- All *
 - Non-Hispanic Black *
 - Non-Hispanic American Indian and Alaska Native *
 - Non-Hispanic White *
 - Non-Hispanic Other *
- Show All/Hide All

INFANT MORTALITY



2025 March of Dimes Report Card Infant mortality in the US

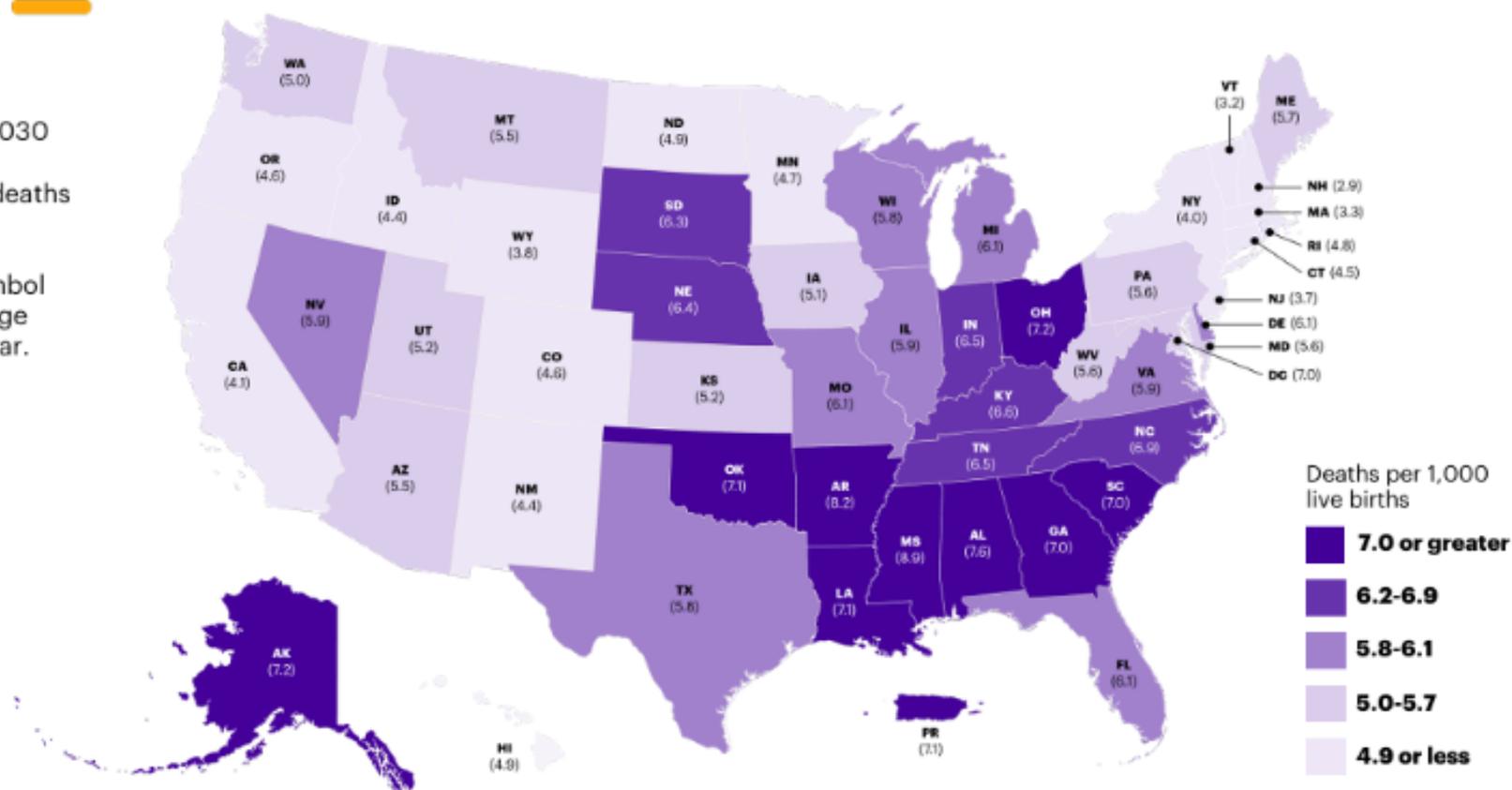
**INFANT
MORTALITY
RATE**
5.6 =

17 states met the Healthy People 2030 target for infant mortality of 5.0 deaths per 1,000 births.

Note: Yellow symbol denotes no change from previous year.

Over 20,000 babies died before their first birthday; the highest rates occurred in the South and Midwest regions

Infant mortality rate (deaths per 1,000 live births) by state, 2023



The infant mortality rate increased in the last decade; in 2023, 341 babies died before their first birthday

INFANT
MORTALITY
RATE

7.1

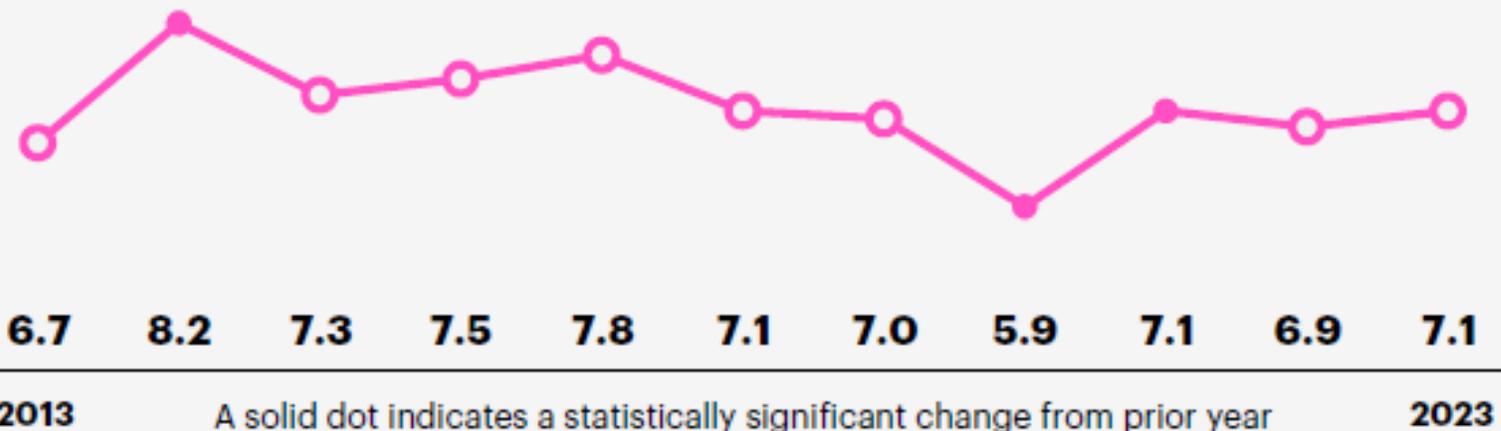
US RATE

5.6

OK RANK

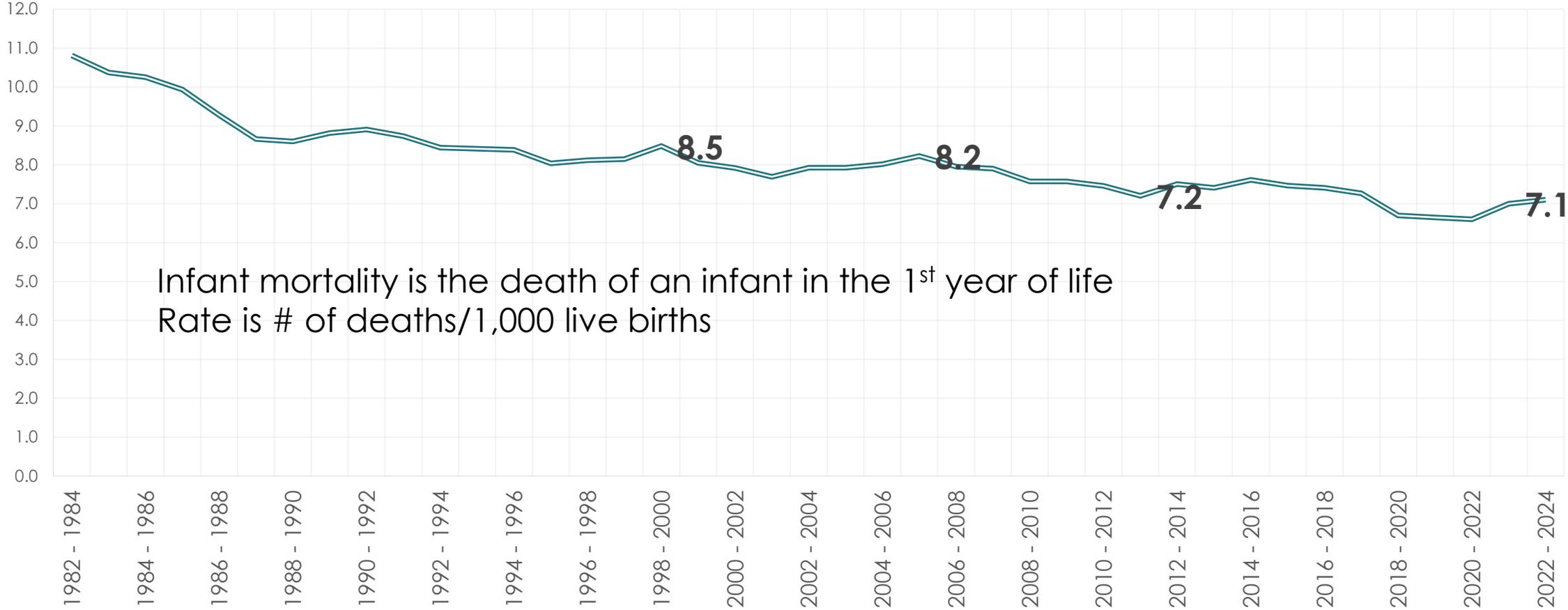
46

Rate per 1,000 live births



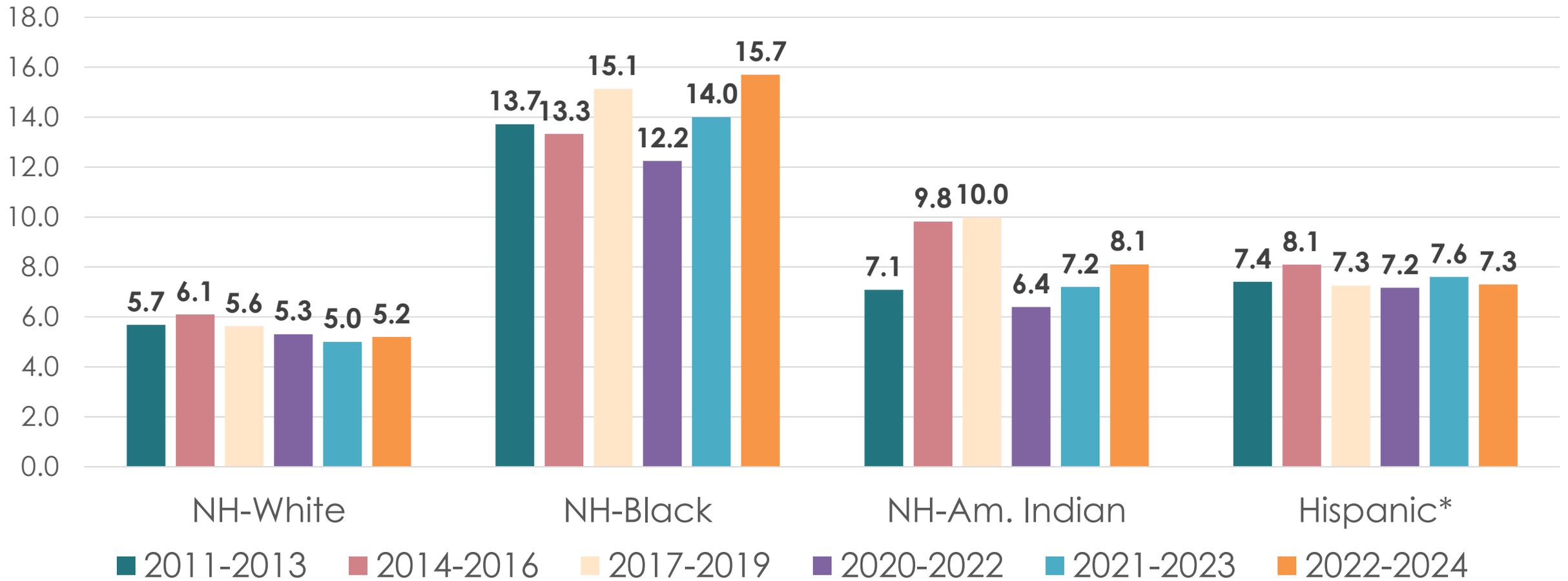
Note: The change in 2023 was not a statistically significant increase compared to 2022.

Oklahoma, 1981-2024



*Source: Oklahoma Vital Statistics, 1981-2024

Infant Mortality Rates by Race and Hispanic Origin Oklahoma, 2011-2024



Source: Oklahoma Vital Statistics, 2010-2024 *Hispanics may be of any race

Top 3 Rankable Causes* of Infant Death

Oklahoma, 2022-2024

	NH White	NH Black	NH AI	Hispanic
Rank 1	ANOM	LBW	ANOM	LBW
Rank 2	LBW	SIDS	SIDS	ANOM
Rank 3	SIDS	ANOM	LBW	MAT

LBW = Disorders of newborn related to short gestation and low birth weight (P07)

ANOM = Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)

SIDS = Sudden infant death syndrome (R95)

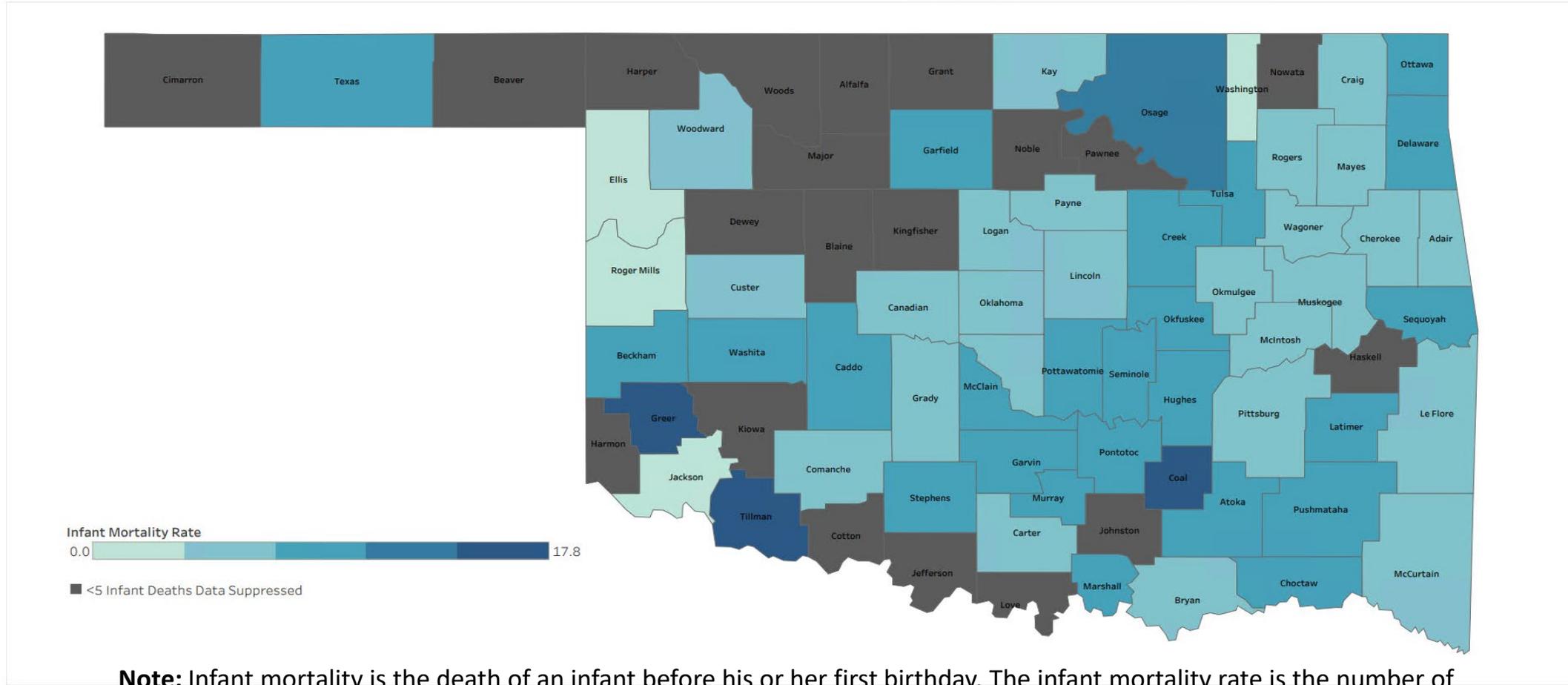
INJ = Unintentional injuries (V01-X59)

MAT = Newborn affected by maternal complications of pregnancy (P01)

*Based on International Classification of Diseases, 10th Revision Source: Oklahoma vital statistics 2022-2024

Infant Mortality Rate by County Oklahoma, 2020-2024

Infant Mortality Rate (Infant Deaths per 1,000 Live Births) by County, Oklahoma 2020-2024



Note: Infant mortality is the death of an infant before his or her first birthday. The infant mortality rate is the number of infant deaths for every 1,000 live births.

Data Source: Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2019-2024

Preparing for a Lifetime

It's *everyone's* responsibility.

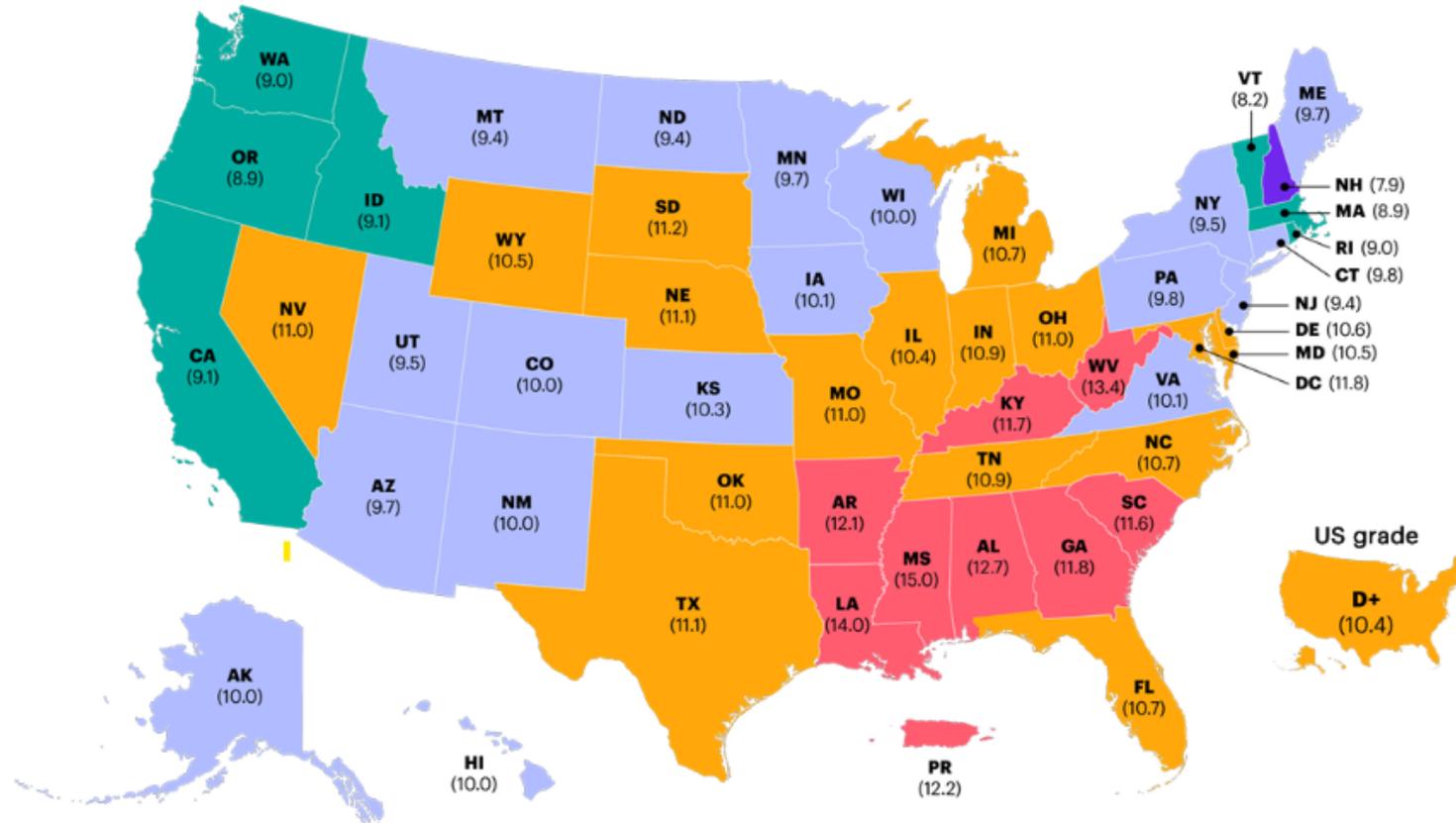


PRETERM BIRTH PREVENTION



The preterm birth grade was **D+** in 2024; half of all US states received a **D** or an **F**

Preterm birth rate (born before 37 weeks gestation) and grade by state, 2024



11 states met the Healthy People 2030 target for preterm birth of 9.4% of all live births.

GRADE AND PRETERM BIRTH RATE



The preterm birth rate in Oklahoma was **11.0%** in 2024, the same as in 2023

PRETERM BIRTH GRADE

D

US RATE



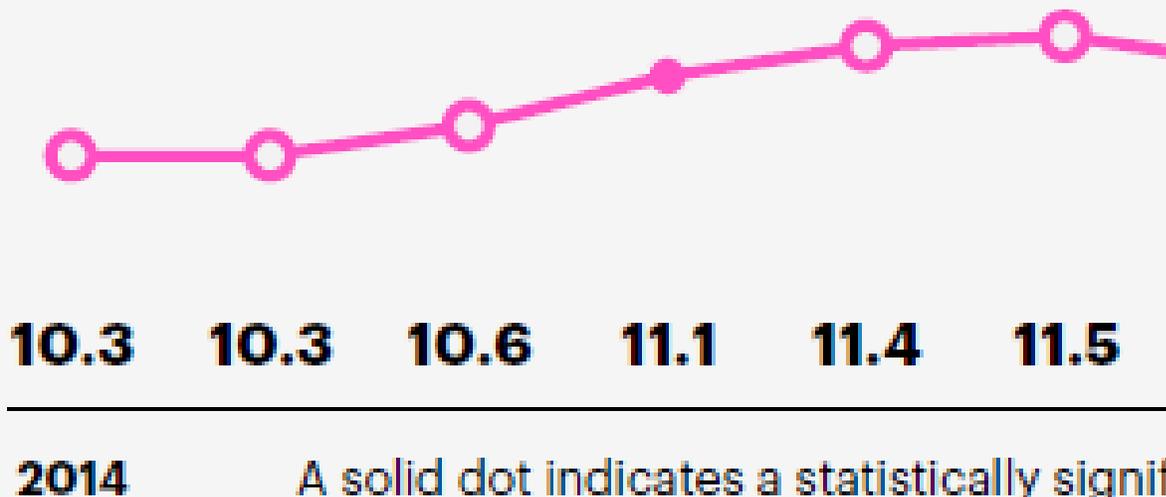
OK RATE



OK RANK



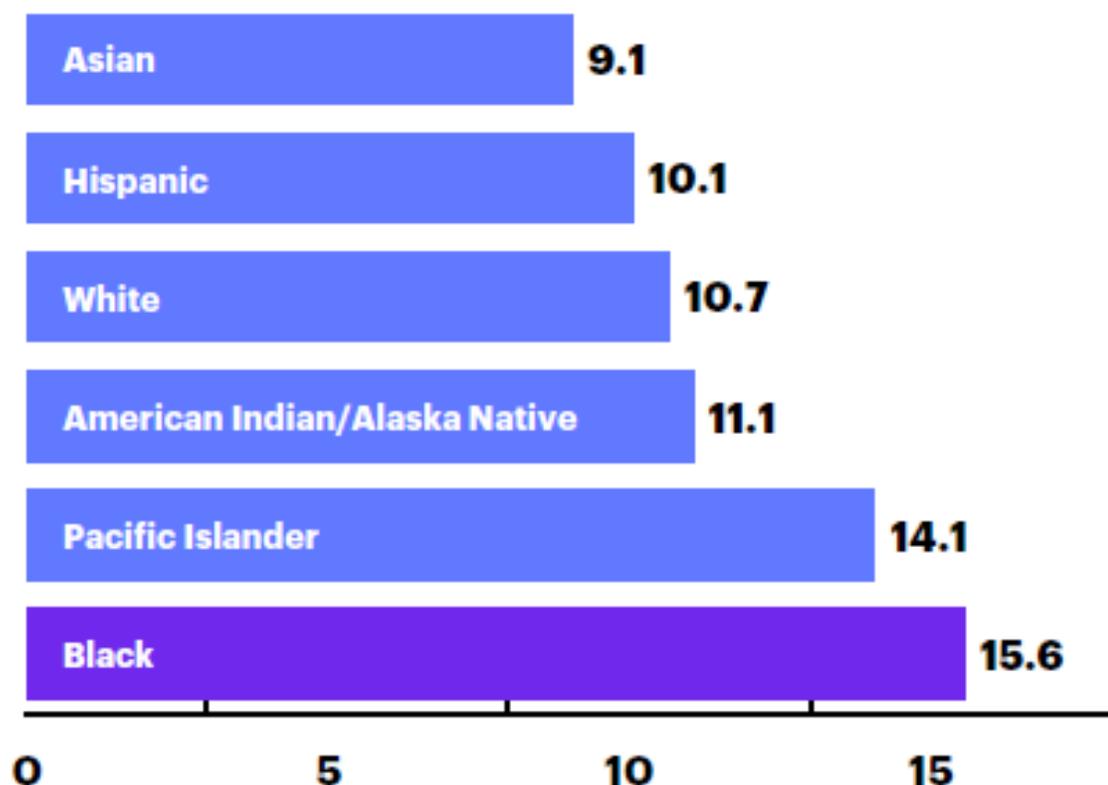
Percentage of live births born preterm



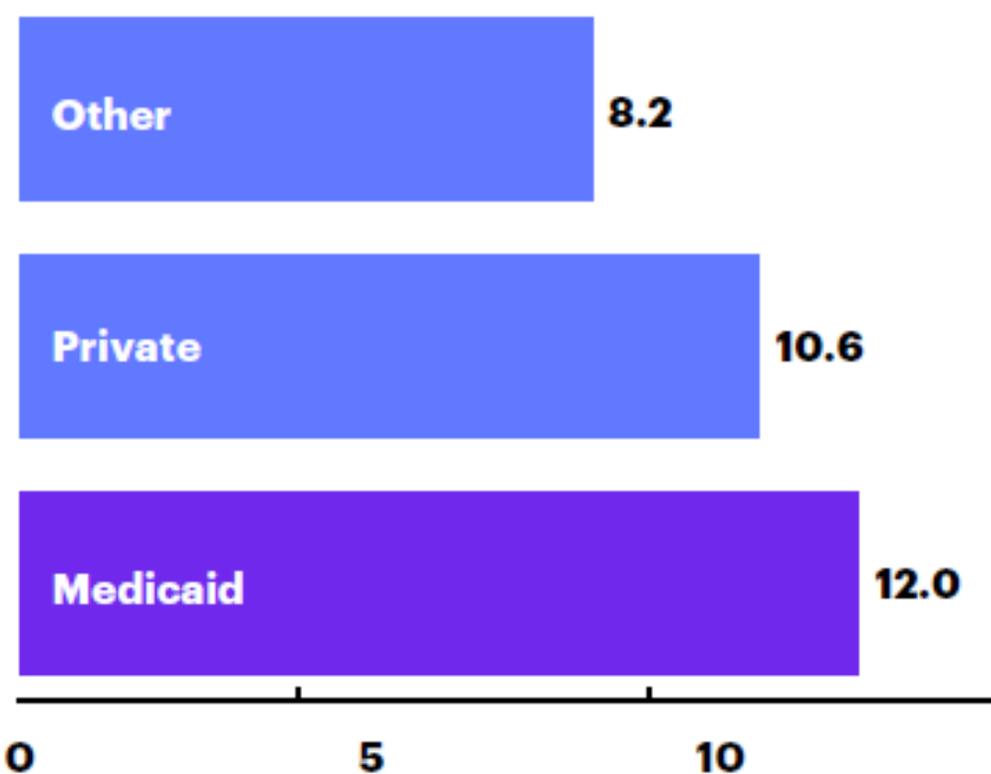
Note: The change in 2024 was not a statistically significant ($P < 0.05$) increase or decrease compared to the previous year. A statistically significant difference is unlikely to be due to chance and likely reflects a meaningful change, though it may not always be clinically significant.

The data below illustrates differences in preterm birth rates by race/ethnicity and insurance type, which may reflect broader social and economic factors

Preterm birth rate by maternal race/ethnicity, 2022-2024



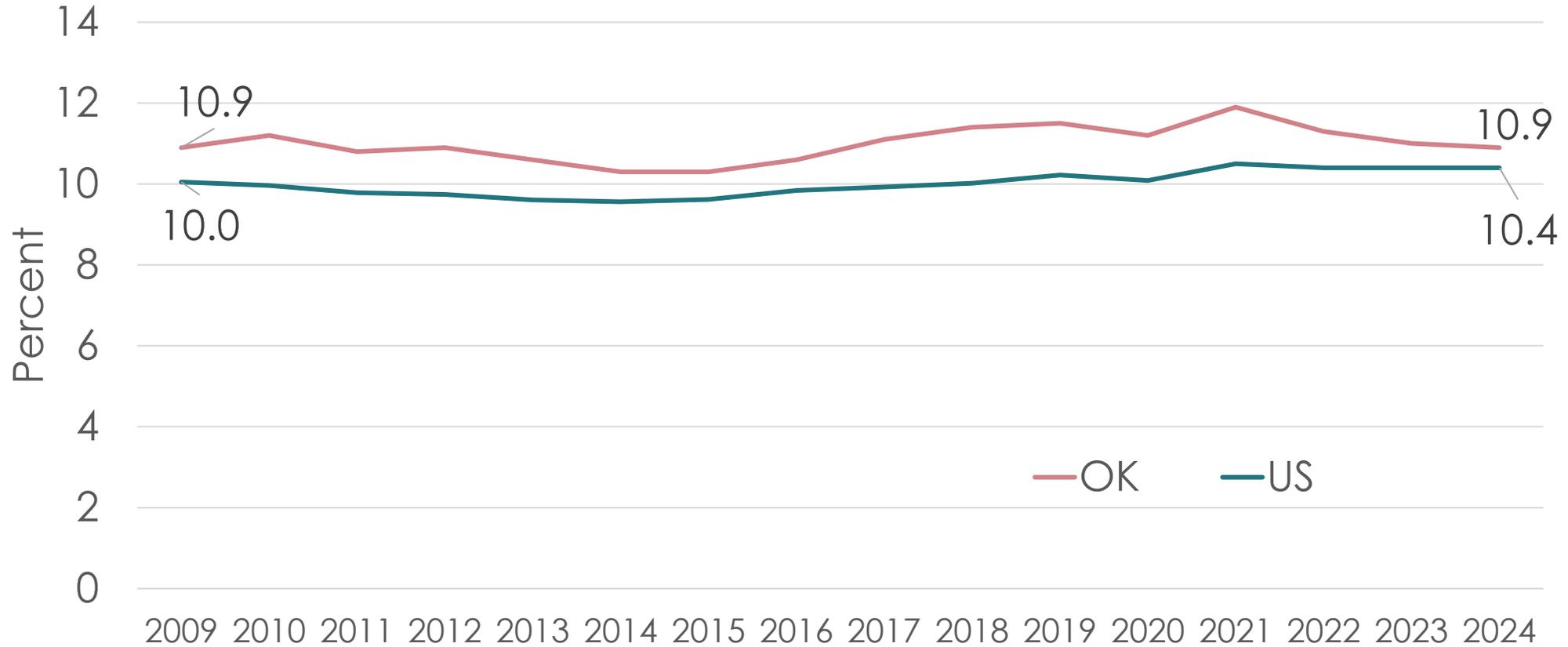
Preterm birth rate by insurance type, 2022-2024



Note: These data can serve as a starting point for discussions about addressing disparities caused by community factors and experiences. Preterm birth rates for "other" insurance types: self pay: 6.9%; Tricare: 8.9%; Indian Health Service: 7.5%; and all other types: 10.2%.

Source: National Center for Health Statistics, Natality data, 2014-2024.

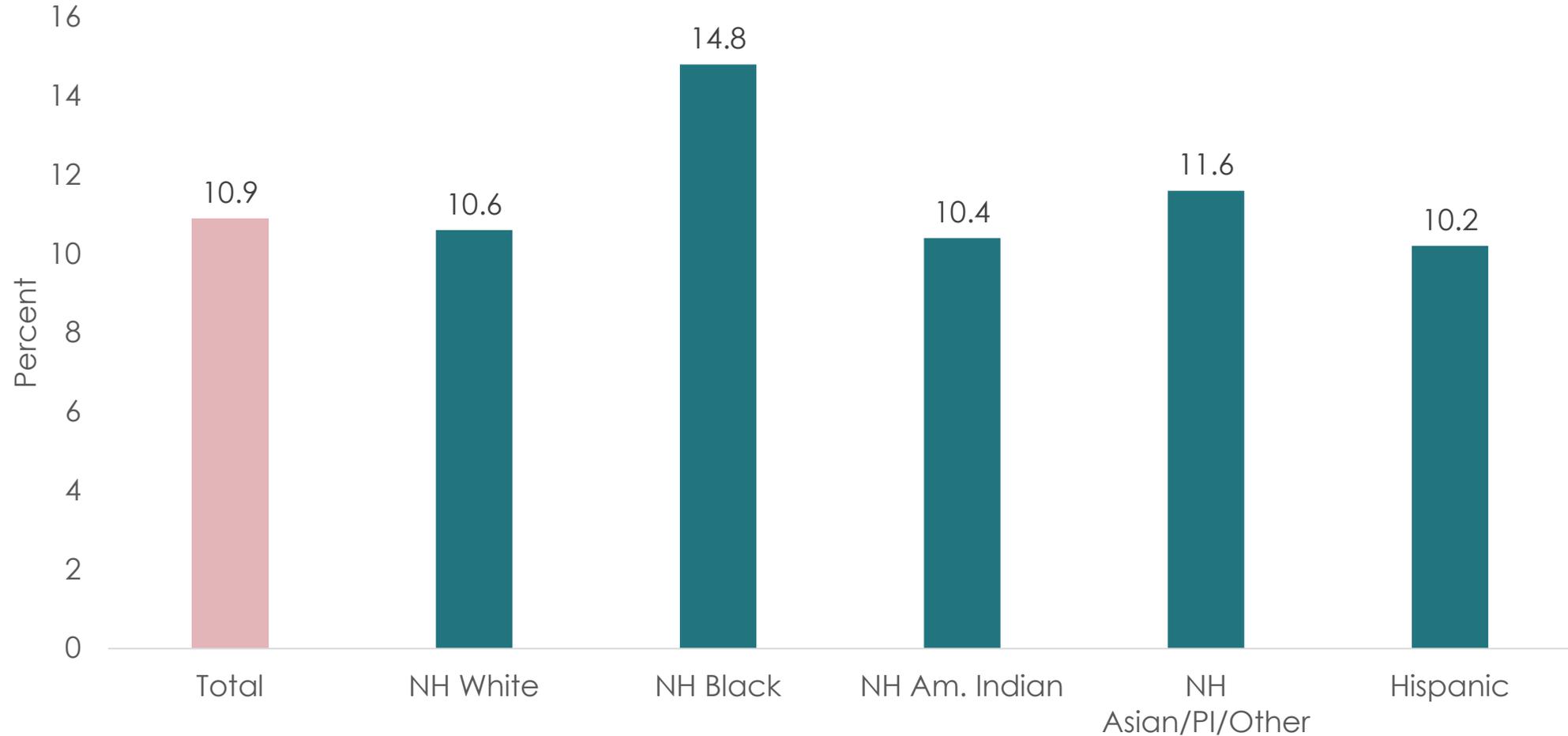
Percent of Births Delivered Preterm U.S. and Oklahoma, 2009-2024



Preterm birth = Delivery < 37 completed weeks gestation, based on obstetric estimate

Sources: Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital Statistics System, Natality on CDC WONDER Online Database; MCH Standardized Birth File, 2010-2024

Percentage of Births Delivered Prior to 37 Weeks Gestation by Race/Hispanic Origin Oklahoma, 2024



PERINATAL MOOD DISORDERS AND POSTPARTUM DEPRESSION

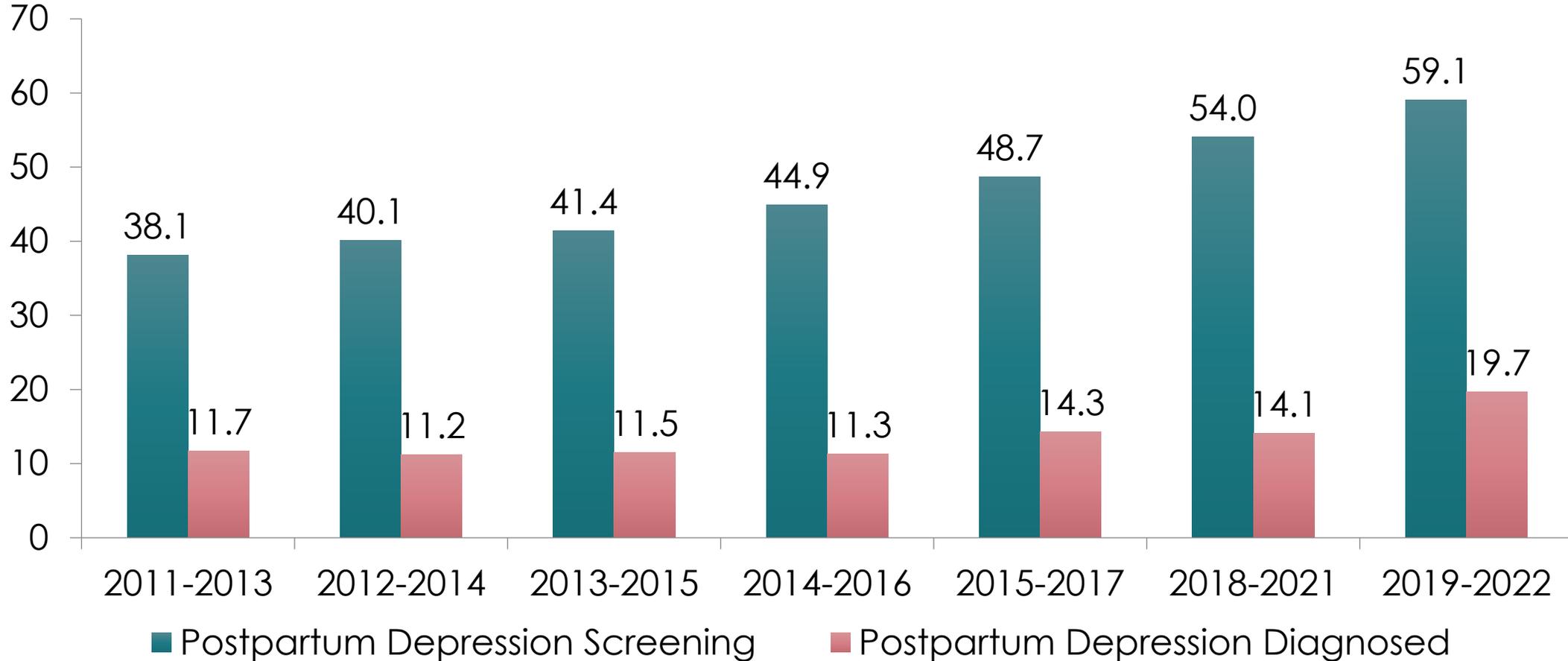
Prepare for
a lifetime,
ask for help
when you
need it.



Preparing
for a
Lifetime
It's Everyone's Responsibility



Percent of mothers who were screened and diagnosed with postpartum depression Oklahoma 2011 - 2022



Source: Oklahoma Toddler Survey (TOTS), 2011-2022. Oklahoma TOTS survey did not meet response rate threshold in 2020 hence the 2020 data is excluded

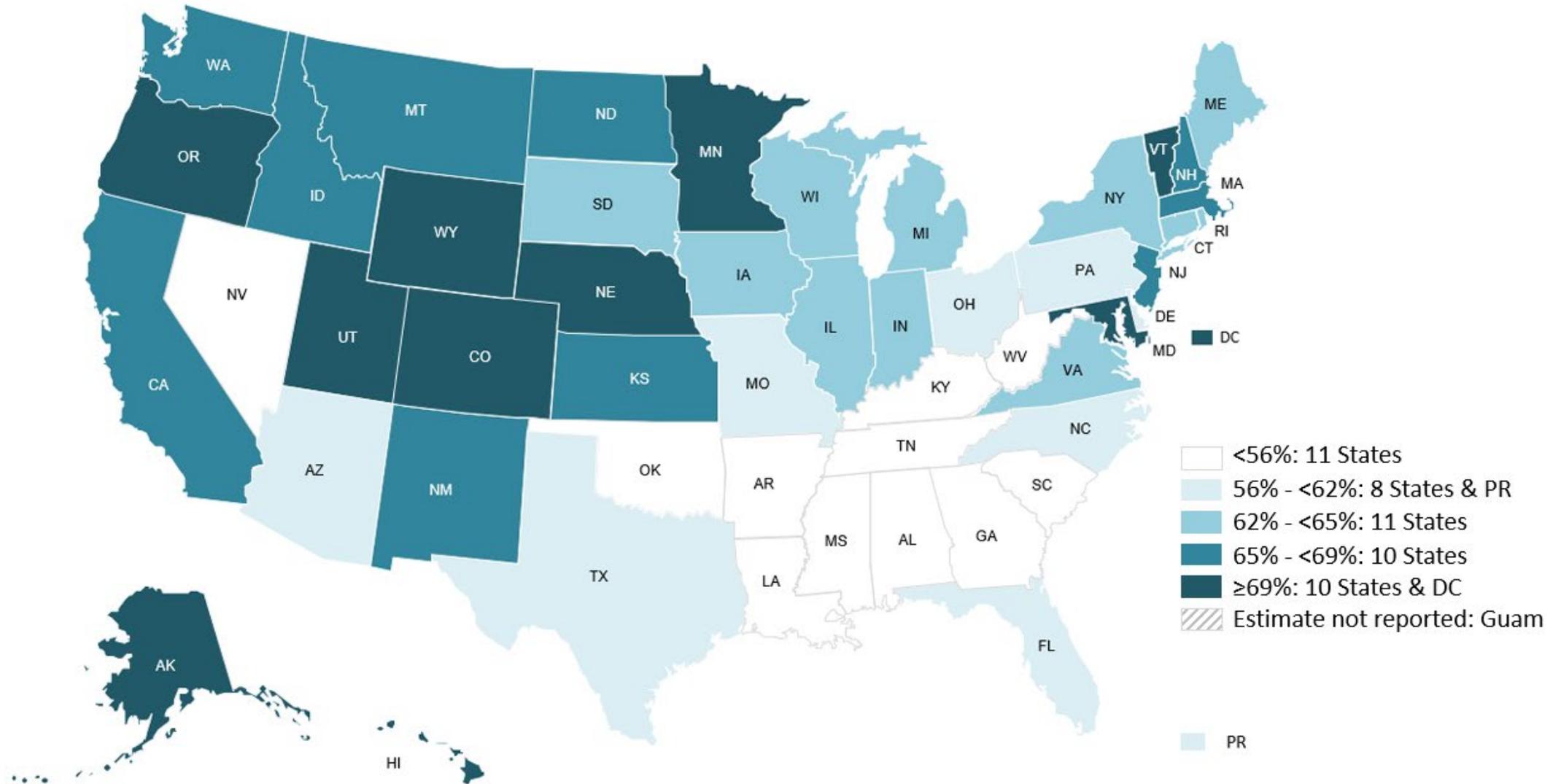
BREASTFEEDING



Oklahoma Breastfeeding Rates Babies Born in 2022 (CDC 2025)

2025 (CDC)	National	Oklahoma	Ranking (out of 50)
Ever breastfed	85.7%	81.6%	40th
Any Bfdg at 6 months	62.1%	55.1%	42nd
Any Bfdg at 12 months	40.8%	35.7%	41st
EBF at 3 months	47.6%	45.6%	32nd
EBF at 6 months	27.9%	28%	28th

Percent of Infants EBF through 6 months Born in 2022, CDC 2025



Infant Safe Sleep

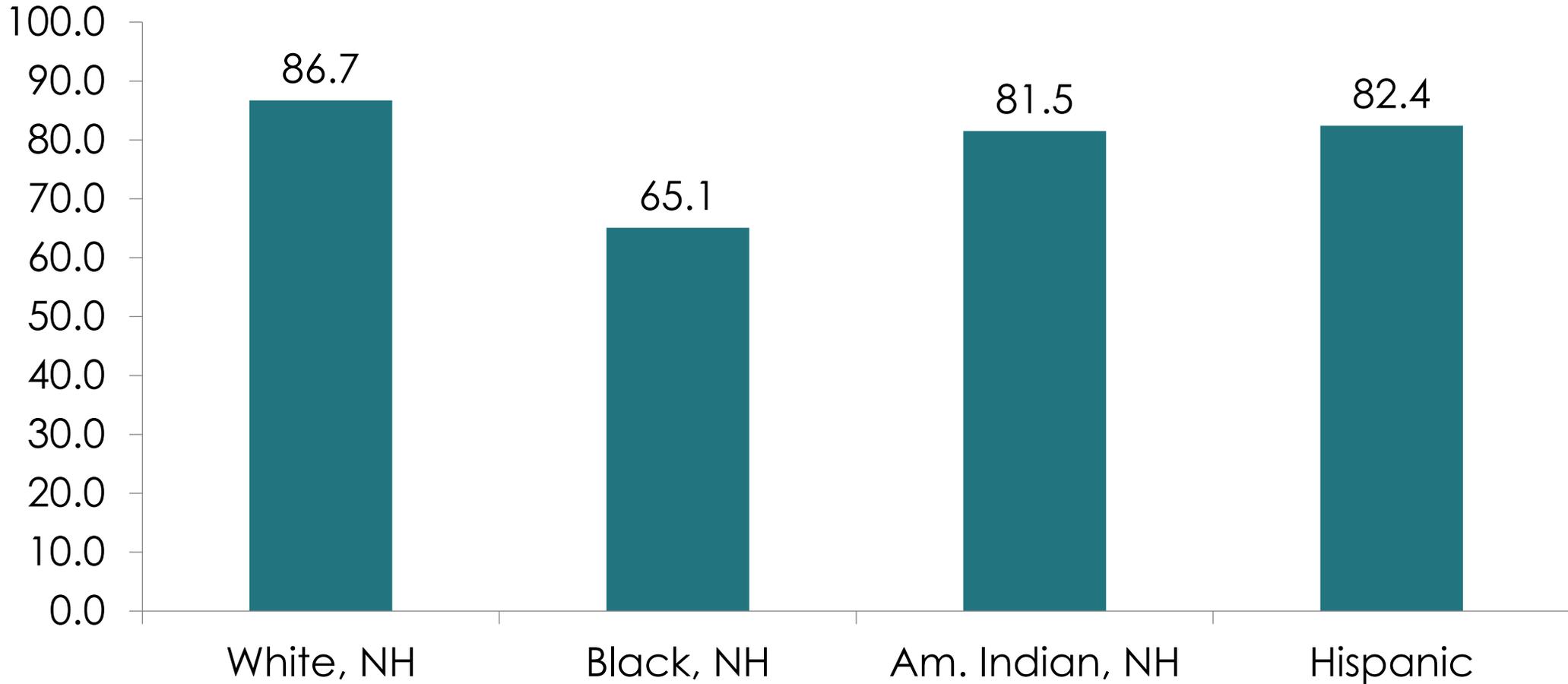


Prepare for a lifetime,
**practice
safe sleep.**



OKLAHOMA
State Department
of Health

Percent of infants most often laid on back to sleep, by race/Hispanic origin: Oklahoma, 2021



NH = non-Hispanic

Source: Pregnancy Risk Assessment Monitoring System (PRAMS)

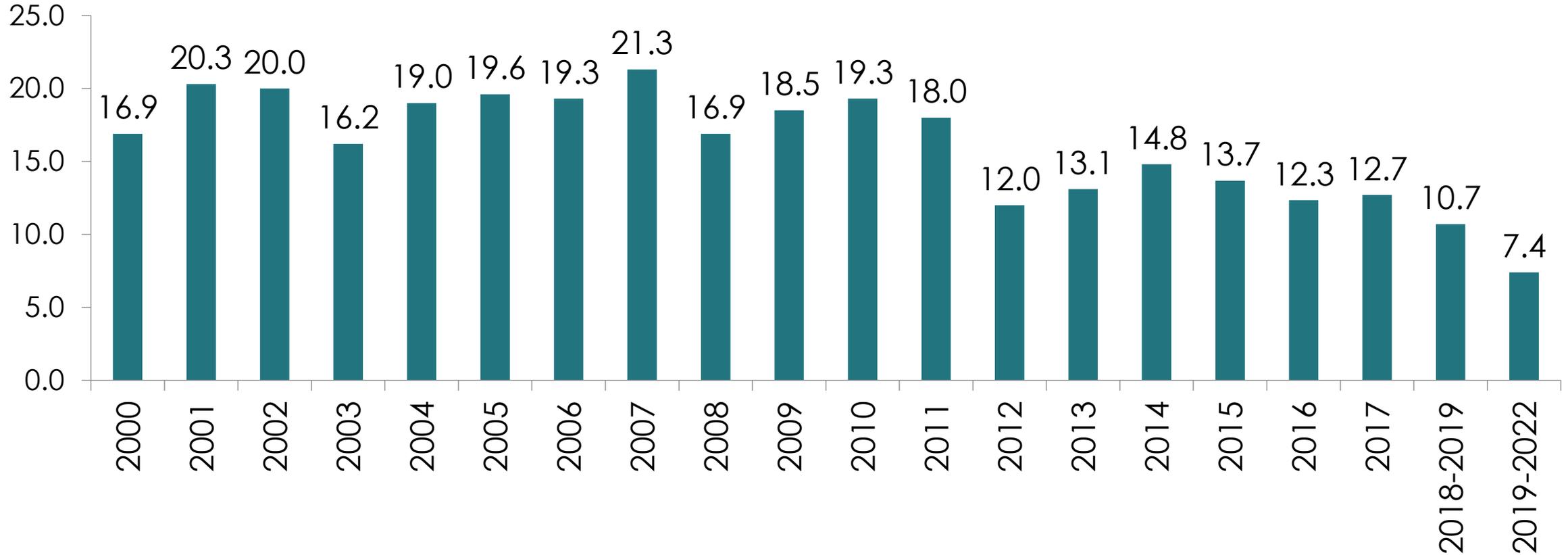
Prepare for
PREGNANCY



- Live a healthy lifestyle.
- Take Folic Acid.
- Quit smoking.
- Reduce stress.

TOBACCO CESSATION

Percent of women smoking in the last trimester of pregnancy: Oklahoma 2000-2022



PRAMS 2020 did not meet response rate threshold for weighting, hence single year prevalence cannot be reported

Source: Pregnancy Risk Assessment Monitoring System (PRAMS)

**WE APPRECIATE YOUR PARTNERSHIP TO IMPROVE
OUTCOMES FOR OKLAHOMA'S MOTHERS AND INFANTS**

THANK YOU!



Thank you!

info@opqic.org