

PRETERM BIRTH RATE

Preterm birth is a birth with less than 37 weeks gestation based on the obstetric estimate of gestational age. Data used in this report card came from the National Center for Health Statistics (NCHS) natality files, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program.¹ This national data source was used so that data are comparable for each state and jurisdiction-specific report card. Data provided on the report card may differ from data obtained directly from state or local health departments and vital statistics agencies due to timing of data submission and handling of missing data. The preterm birth rates shown at the top of report card was calculated from the NCHS 2021 final natality data for all U.S. States and Washington D.C. Preterm birth rates in the trend graph are from the NCHS 2011-2021 final natality data. County and city preterm birth rates are from the NCHS 2021 final natality data for U.S. states and Washington D.C. Preterm birth rates for bridged racial and ethnic categories were calculated from NCHS 2019-2021 final natality data. All provided measures for Puerto Rico are calculated from the NCHS 2021 Territory final natality data, unless otherwise noted. Preterm birth rates were calculated as the number of premature births divided by the number of live births with known gestational age multiplied by 100. Joinpoint Trend Analysis Software² was utilized to assess significant trends in preterm birth.

INFANT MORTALITY RATE

Infant mortality rates were calculated using the NCHS 2020 period linked infant birth and infant death data. Infant mortality rates were calculated as the number of infant deaths divided by the number of live births multiplied by 1,000. Infant mortality rate in the trend graph are from the NCHS 2010-2020 period linked infant birth and infant death files. Joinpoint Trend Analysis Software² was utilized to assess significant trends in infant mortality.

PRETERM BIRTH GRADING METHODOLOGY

Expanded grade ranges were introduced in 2019. Grade ranges remain based on standard deviations of final 2014 state and District of Columbia preterm birth rates away from the March of Dimes goal of 8.1 percent by 2020. Grades were determined using the following scoring formula: (preterm birth rate of each jurisdiction – 8.1 percent) / standard deviation of final 2014 state and District of Columbia preterm birth rates. Each score within a grade was divided into thirds to create +/- intervals. The resulting scores were rounded to one decimal place and assigned a grade. See the table for details.

PRETERM BIRTH BY RACE/ETHNICITY OF THE MOTHER

Mother’s race and Hispanic ethnicity are reported separately on the birth certificate. Rates for Hispanic women include all bridged racial categories (White, Black, American Indian/Alaska Native and Asian/Pacific Islander). Rates for non-Hispanic women are classified according to race. The Asian/Pacific Islander category includes Native Hawaiian. To provide stable rates, racial and ethnic groups are shown on the report card if the group had 10 or more preterm births in each year from 2019-2021. To calculate preterm birth rates on the report card, three year data aggregates were used (2019-2021) for all states and D.C and for Puerto Rico (2018-2020). Preterm birth rates for not stated/unknown race are not shown on the report card.

PRETERM BIRTH BY CITY

Report cards for states and jurisdictions, except District of Columbia, display the city with the greatest number of live births. Cities are not displayed for Delaware, Maine, Vermont, West Virginia and Wyoming due to limited availability of data. Grades were assigned based on the grading criteria described above. Change from previous year was calculated by comparing the 2021 city preterm birth rate to the 2020 rate.

GRADE	PRETERM BIRTH RATE RANGE SCORING CRITERIA
A	Preterm birth rate less than or equal to 7.7%.
A-	Preterm birth rate of 7.8 to 8.1%.
B+	Preterm birth rate of 8.2 to 8.5%.
B	Preterm birth rate of 8.6 to 8.9%.
B-	Preterm birth rate of 9.0 to 9.2%.
C+	Preterm birth rate of 9.3 to 9.6%.
C	Preterm birth rate of 9.7 to 10.0%.
C-	Preterm birth rate of 10.1 to 10.3%.
D+	Preterm birth rate of 10.4 to 10.7%.
D	Preterm birth rate of 10.8 to 11.1%.
D-	Preterm birth rate of 11.2 to 11.4%.
F	Preterm birth rate greater than or equal to 11.5%.

THE 2022 MARCH OF DIMES REPORT CARD: STARK AND UNACCEPTABLE DISPARITIES PERSIST ALONGSIDE A TROUBLING RISE IN PRETERM BIRTH RATES

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PRETERM BIRTH DISPARITY MEASURES

The March of Dimes disparity ratio is based on Healthy People 2020 methodology and provides a measure of the differences, or disparities, in preterm birth rates across racial/ethnic groups within a geographic area.² The disparity ratio compares the racial/ethnic group with the lowest preterm birth rate (comparison group) to the average of the preterm birth rate for all other groups.

To calculate the disparity ratio, the 2019-2021 preterm birth rates for all groups (excluding the comparison group) were averaged and divided by the 2019-2021 comparison group preterm birth rate. The comparison group is the racial/ethnic group with the lowest six-year aggregate preterm birth rate (2012-2017) among groups that had 20 or more preterm births in each year from 2012-2017. A disparity ratio was calculated for U.S. states, the District of Columbia, and the total U.S. A disparity ratio was not calculated for Maine, Vermont, West Virginia, Wyoming and Puerto Rico. A lower disparity ratio is better, with a disparity ratio of 1 indicating no disparity.

Progress toward eliminating racial and ethnic disparities was evaluated by comparing the 2019-2021 disparity ratio to a baseline (2012-2014) disparity ratio. Change between time periods was assessed for statistical significance at the 0.05 level using the approach recommended by Healthy People 2020.³ If the disparity ratio significantly improved because the average preterm birth rate for all other groups got better, we displayed "Improved" on the report card. If the disparity ratio significantly worsened because the lowest group got better or the average of all other groups got worse, we displayed "Worsened" on the report card. If the disparity ratio did not significantly change, we displayed "No Improvement" on the report card.

The report card also provides the percent difference between the racial/ethnic group with the 2019-2021 highest preterm birth rate compared to the combined 2019-2021 preterm birth rate among women in all other racial/ethnic groups. This percent difference was calculated using only the racial/ethnic groups displayed on the state or jurisdiction-specific report card. This difference was calculated for each U.S. state with adequate numbers and the District of Columbia.

MATERNAL VULNERABILITY INDEX

March of Dimes recognizes the importance of certain risk factors that are associated with maternal and infant health outcomes. March of Dimes, in partnership with Surgo Ventures, is offering the opportunity to examine determinants of maternal health at the county level using the Maternal Vulnerability Index (MVI)⁴. The MVI is the first county-level, national-scale, open-source tool to identify where and why mothers in the United States are vulnerable to poor pregnancy outcomes and pregnancy-related deaths. The MVI includes not only widely known clinical risk factors, but also key social, contextual, and environmental factors that are also essential influencers of outcomes.

Differences in counties are measured using numerous factors broken into six themes: reproductive healthcare, physical health, mental health and substance abuse, general healthcare, socioeconomic determinants and physical environment. The MVI assigns a score of 0-100 to each geography, where a higher score indicates greater vulnerability to adverse maternal outcomes. Learn more about the MVI methodology by visiting Surgo Ventures website. ([Surgo Ventures - The US Maternal Vulnerability Index \(MVI\)](#)).

MATERNAL HEALTH INDICATORS

LOW-RISK CESAREAN BIRTH RATES

A low-risk Cesarean birth occurs when a woman undergoes the surgical procedure if the baby is a single infant, is positioned head-first, the mother is full-term (at least 37 weeks), and has not given birth prior.⁵ This is also referred to as a NTSV Cesarean birth. NTSV abbreviated to mean Nulliparous (or first-time mother), Term, Singleton, Vertex (head-first position).

Low-risk Cesarean birth rates were calculated using the NCHS 2021 final natality data for the US states and Washington D.C. and the 2021 final territorial natality data for Puerto Rico.¹ Low-risk Cesarean birth rates were calculated as the number of Cesarean births that occurred to first-time mothers of a single infant, positioned headfirst with a gestational age of at least 37 weeks (NTSV) divided by the number of first-time mothers of a single infant, positioned headfirst with a gestational age of at least 37 weeks (NTSV) multiplied by 100.

INADEQUATE PRENATAL CARE

Adequacy of prenatal care is measured using the Adequacy of Prenatal Care Utilization Index, which classifies prenatal care received into 1 of 4 categories (inadequate, intermediate, adequate and adequate plus) by combining information about the timing of prenatal care, the number of visits and the infant's gestational age.⁶ Inadequate prenatal care is defined as a woman who received care beginning in the fifth month or later or less than 50% of the appropriate number of visits for the infant's gestational age. Inadequate prenatal care will be calculated using the NCHS 2021 final natality data.¹

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STATE LEVEL MATERNAL HEALTH POLICIES

MEDICAID EXPANSION

Medicaid expansion allows more people to be eligible for Medicaid coverage—it expands the cut-off for eligibility. Medicaid expansion status is provided from the Kaiser Family Foundation as adopted or not adopted.⁷ Medicaid expansion has reduced the rates of uninsured. Increased access and utilization of health care are significantly associated with Medicaid expansion.⁸

MEDICAID EXTENSION

The adoption of this policy allows women to qualify for pregnancy-related Medicaid coverage for more than the standard 60 days after pregnancy for up one year.⁹ Extending this coverage typically requires both state legislation and an appropriation in addition to a Section 1115 waiver in order to receive federal match.¹⁰ Medicaid extension status is provided by the American College of Obstetricians and Gynecologists as adopted, waiver pending or planning or planning is occurring (ready to implement Section 1115 waiver or SPA option pending approval from CMS), or the state does not have the indicated organization/policy.⁹

MATERNAL MORTALITY REVIEW COMMITTEE (MMRC)

These committees investigate deaths related to pregnancy to determine underlying causes of death and respond to improve conditions and practices. The committees can be made up of representatives from public health, nursing, maternal-fetal medicine, obstetrics and gynecology, midwifery, patient advocacy groups and community-based organizations.¹¹ The measure is provided by the Guttmacher Institute¹² and the Louisiana, Wisconsin and Vermont Departments of Health¹³ and is categorized as: state has the indicated organization/policy, state has an MMRC but does not review deaths up to a year after pregnancy ends or state does not have the indicated organization/policy.

PERINATAL QUALITY COLLABORATIVE (PQC)

The PQC involves partnerships with families, key state agencies and organizations to identify and initiate programs or procedures that increase the quality of care in clinical settings. PQC's work focus on collaborative learning among healthcare providers and the PQC.¹⁴ Data is provided by the National Institute for Children's Health Quality (NICHQ) and the measure is reported as: state has the indicated organization/policy or the state has the indicated organization/policy in progress.¹⁵

DOULA POLICY ON MEDICAID COVERAGE

Doulas are non-clinical professionals that emotionally and physically support women during the perinatal period, including birth and postpartum.¹⁶ Doula policy status show states that have enacted bills relating to Medicaid coverage of doula care, or not. The measure is reported as: state has the indicated organization/policy, state is in progress for having the indicated organization/policy or the state does not have the indicated organization/policy. Data is provided by the National Health Law Program under the Doula Medicaid Project.¹⁷

MIDWIFERY STATE LAWS

Midwives are health care professionals that may be part of the birth care team or stand alone in providing prenatal, delivery and postpartum care. Certified Nurse-Midwives (CNM) hold national certification and state licensure to practice in all 50 states. Measures depict states where Medicaid reimbursement rates for certified nurse-midwives are at or above 90% or below 90%. The measure is reported as: state has the indicated organization/policy or the state does not have the indicated organization/policy. Data is retrieved from the American College of Nurse-Midwives.¹⁸

SUPPLEMENTAL REPORT CARD

HEALTHY PEOPLE 2030

National data-driven objectives from Healthy People 2030¹⁹ were set by the U.S. Department of Health and Human Services with the goal of improving health and well being over the next decade. Several HP 2030 objectives are specific to the prevention of pregnancy complications and improvements to women's health before, during and after pregnancy. Progress towards the following objectives are shown on the supplemental report card:

Preterm births: see definition on page 1

Infant mortality: see definition on page 1

Low-risk Cesarean births: see definition on page 2

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SUPPLEMENTAL REPORT CARD (CONT.)

UNHEALTHY WEIGHT BEFORE PREGNANCY

Body mass index (BMI) is a measure of body fat based on height and weight that applies to adult men and women. BMI was calculated using NCHS 2021 final natality data for the US states and Washington D.C. and the 2020 final territorial natality data for Puerto Rico.¹ The percent of women with an unhealthy weight before pregnancy was calculated as the number of women with a BMI that is categorized as either underweight (BMI <18.5), overweight (BMI 25 to 29.9), or obese (30 or higher) divided by the number of women who had a live birth multiplied by 100. Note that the HP 2030 objective is “healthy weight before pregnancy”; unhealthy weight was used to better align with the other measures.

PRETERM BIRTH BY COUNTY

Supplemental report cards for states and jurisdictions, except District of Columbia, display the counties with the greatest number of live births. Grades were assigned based on the grading criteria described on page 1. Change from previous year was calculated by comparing the 2021 county preterm birth rate to the 2020 rate. For Puerto Rico, change from previous year was calculated by comparing 2020 municipality preterm birth rates to the 2019 rates.

LIVE BIRTHS AND PRETERM BIRTH BY RACE AND ETHNICITY OF THE MOTHER- EXPANDED

Mother’s race and Hispanic ethnicity are reported separately on the birth certificate. Rates for Hispanic women include all expanded racial categories included on the birth certificate (White, Black, American Indian/Alaska Native, Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, Other Asian, Hawaiian, Guamanian, Samoan, and other Pacific Islander) and are broken down based on the expanded Hispanic origin categories which include Mexican, Puerto Rican, Cuban, Dominican, Central or South American and Other Hispanic. Rates for non-Hispanic women are classified according to expanded race. For live births, any expanded race and Hispanic origin categories that accounted for less than 1% of live births in each state, were collapsed into the corresponding “other” category (other Hispanic, other Asian, other Pacific Islander). To provide stable preterm birth rates, racial and ethnic groups are shown on the report card if the group had 50 or more preterm births from 2019-2021. To calculate preterm birth rates on the report card, three years of data were aggregated (2019-2021). Number of live births and preterm birth rates for not stated/unknown race are not shown on the supplemental report card.

MARCH OF DIMES STATE IMPACT REPORT

ADVOCATES WHO RAISED THEIR VOICE

Through the March of Dimes, anyone who wants to join in the fight for the health of all birthing people, babies and their families can support our Office of Government Affairs by becoming an advocate. Advocates advance our efforts through supporting our work to influence legislation, policy and regulation at the federal and state level. The data are captured by the Office of Government Affairs are recorded in a database built into Capital Canary, a third-party software product. The numbers in these report show advocates who have signed up through August 31, 2022.

IMPLICIT BIAS TRAINING SEATS CONTRACTED

Through online and live training courses, March of Dimes provides peer-reviewed, clinically relevant Implicit Bias Training to eliminate maternal and infant health care inequities. The metric “Implicit Bias Trainings Seats Contracted” is captured internally and is the measure of how many seats are contracted to be received by partners that state. The reported numbers are based on contracts completed between January 1, 2022 and August 31, 2022.

PEOPLE SUPPORTED THROUGH OUR NICU INITIATIVES

Our NICU Initiatives educate and support families through evidence-based programs and a variety of both online and in person resources. The number of families served is captured and reported directly from on-site staff members at our partner sites via a monthly survey of their on-going work. The reported numbers are based on surveys reported between January 1, 2022 and August 31, 2022.

PIECES OF STATE LEGISLATION SUPPORTED

March of Dimes Office of Government Affairs advocates for policy initiatives at a state level on a host of issues important to pregnant women, infants, children and families. The number collected represents the amount of Bills worked on at a state level by a March of Dimes Staff member and is reported directly by the staff member in a quarterly reporting survey. The reported numbers are based on surveys reported between January 1, 2022 and August 31, 2022.

CALCULATIONS

All natality calculations were conducted by March of Dimes Perinatal Data Center.

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