MARCH OF DIMES

2018 PREMATURE BIRTH REPORT CARD

Premature birth and its complications are the largest contributors to infant death in the U.S., and a major cause of long-term health problems in children who survive. March of Dimes aims to reduce preterm birth rates and increase equity, and monitors progress through Premature Birth Report Cards. Report Card grades are assigned by comparing the 2017 preterm birth rate in a state or locality to March of Dimes' goal of 8.1 percent by 2020. Report Cards provide county and race/ethnicity data to highlight the importance of addressing equity in areas and populations with elevated risk of prematurity. March of Dimes is working to expand solutions to help all mothers and babies have healthy, full-term births.

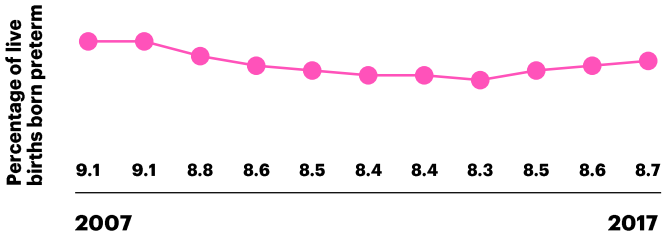
CALIFORNIA

GRADE

B

PRETERM BIRTH RATE

8.7%



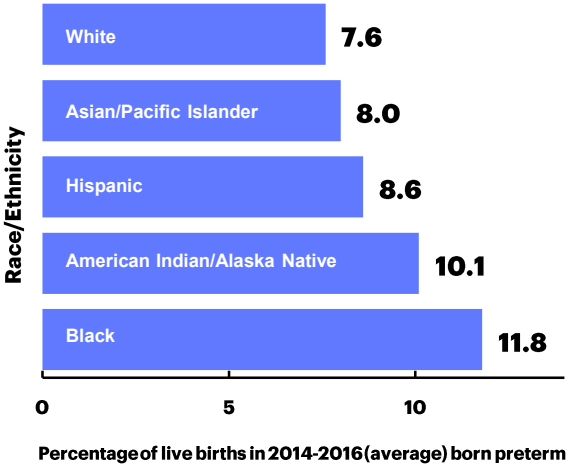
COUNTIES

Counties with the greatest number of births are graded based on their 2016 preterm birth rates.

COUNTY	GRADE	PRETERM BIRTH RATE	CHANGE FROM LAST YEAR	COUNTY	GRADE	PRETERM BIRTH RATE	CHANGE FROM LAST YEAR
Alameda	B	8.4%	Worsened	Sacramento	B	8.5%	Worsened
Contra Costa	B	9.1%	Worsened	San Bernardino	C	9.3%	Worsened
Fresno	B	9.2%	Improved	San Diego	B	8.5%	Worsened
Kern	C	9.5%	Worsened	San Francisco	B	8.3%	Worsened
Los Angeles	B	9.0%	Worsened	San Joaquin	B	8.9%	Improved
Orange	A	8.0%	Worsened	San Mateo	B	8.2%	Improved
Riverside	B	8.5%	Worsened	Santa Clara	A	8.1%	No Change
				Ventura	A	7.5%	Improved

RACE & ETHNICITY IN CALIFORNIA

The March of Dimes disparity ratio measures and tracks progress towards the elimination of racial/ethnic disparities in preterm birth. It is based on Healthy People 2020 methodology and compares the group with the lowest preterm birth rate to the average for all other groups. Progress is evaluated by comparing the current disparity ratio to a baseline disparity ratio. A lower disparity ratio is better, with a disparity ratio of 1 indicating no disparity.



In California, the preterm birth rate among black women is 44% higher than the rate among all other women.

DISPARITY RATIO:

1.26

CHANGE FROM BASELINE:

Worsened

MORE INFORMATION

MARCHOFDIMES.ORG/REPORTCARD

For details on data sources and calculations, see Technical Notes. For more information on how we are working to reduce premature birth, visit **www.marchofdimes.org**.

2018 PREMATURE BIRTH REPORT CARD
TECHNICAL NOTES

PRETERM BIRTH: DEFINITION AND SOURCE

Premature or preterm birth is birth 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. 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 rate shown at the top of the report card was calculated from the NCHS 2017 final natality data. Preterm birth rates in the trend graph are from the NCHS 2007-2017 final natality data. County preterm birth rates are from the NCHS 2016 final natality data. Preterm birth rates for bridged racial and ethnic categories were calculated from NCHS 2014-2016 final natality data. Preterm birth rates were calculated as the number of preterm births divided by the number of live births with known gestational age multiplied by 100.

GRADING METHODOLOGY

Grade ranges were established in 2015 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. The resulting scores were rounded to one decimal place and assigned a grade. See the table for details.

GRADE	PRETERM BIRTH RATE RANGE SCORING CRITERIA
A	Preterm birth rate less than or equal to 8.1 percent. Score less than or equal to 0.0.
B	Preterm birth rate of 8.2 percent to 9.2 percent. Score greater than 0.0, but less than or equal to 1.0.
C	Preterm birth rate of 9.3 percent to 10.3 percent. Score greater than 1.0, but less than or equal to 2.0.
D	Preterm birth rate of 10.4 percent to 11.4 percent. Score greater than 2.0, but less than or equal to 3.0.
F	Preterm birth rate greater than or equal to 11.5 percent. Score greater than 3.0.

PRETERM BIRTH BY COUNTY

Report cards for states and jurisdictions, except District of Columbia, display up to 6 counties with the greatest number of live births. Counties are not displayed if the number of preterm births is less than 20. Counties are ordered alphabetically. Grades were assigned based on criteria described above. Change from previous year was assessed by comparing the 2016 county preterm birth rate to the 2015 rate.

PRETERM BIRTH BY RACE/ETHNICITY OF THE MOTHER

Mother's race and Hispanic ethnicity are reported separately on birth certificates. 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. In order to provide stable rates, racial and ethnic groups are shown on the report card if the group had 20 or more preterm births in each year from 2010-2016. To calculate preterm birth rates on the report card, three years of data were aggregated (2014-2016). Preterm birth rates for not stated/unknown race are not shown on the report card.

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.[1] 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 2014-2016 preterm birth rates for all groups (excluding the comparison group) were averaged and divided by the 2014-2016 comparison group preterm birth rate. The comparison group is the racial/ethnic group with the lowest six-year aggregate preterm birth rate (2010-2015) among groups that had 20 or more preterm births in each year from 2010-2015. 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 New Hampshire, Maine, Puerto Rico, Vermont, and West Virginia. 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 2014-2016 disparity ratio to a baseline (2010-2012) disparity ratio. Change between time periods was assessed for statistical significance at the 0.05 level using the approach recommended by Healthy People 2020.[1] 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 2014-2016 highest preterm birth rate compared to the combined 2014-2016 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.

CALCULATIONS

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

[1]Talih M, Huang DT. Measuring progress toward target attainment and the elimination of health disparities in Healthy People 2020. Healthy People Statistical Notes, no 27. Hyattsville, MD: National Center for Health Statistics. 2016.

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MARCH OF DIMES

2018 PREMATURE BIRTH REPORT CARD

UNITED STATES

PREMATURITY IN THE UNITED STATES
- Preterm birth rates and grades
- Preterm birth rates in 100 largest cities
- Preterm birth by maternal race/ethnicity
- Technical notes

COMMUNITY PROFILES

STATE PREMATURE BIRTH REPORT CARDS

MARCH OF DIMES

2018 PREMATURE BIRTH REPORT CARD

Premature birth and its complications are the largest contributors to infant death in the U.S., and a major cause of long-term health problems in children who survive. March of Dimes aims to reduce preterm birth rates and increase equity, and monitors progress through Premature Birth Report Cards. Report Card grades are assigned by comparing the 2017 preterm birth rate in a state or locality to March of Dimes' goal of 8.1 percent by 2020. Report Cards provide county and race/ethnicity data to highlight the importance of addressing equity in areas and populations with elevated risk of prematurity. March of Dimes is working to expand solutions to help all mothers and babies have healthy, full-term births.

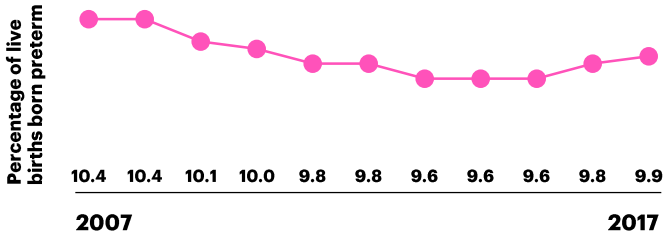
UNITED STATES

GRADE

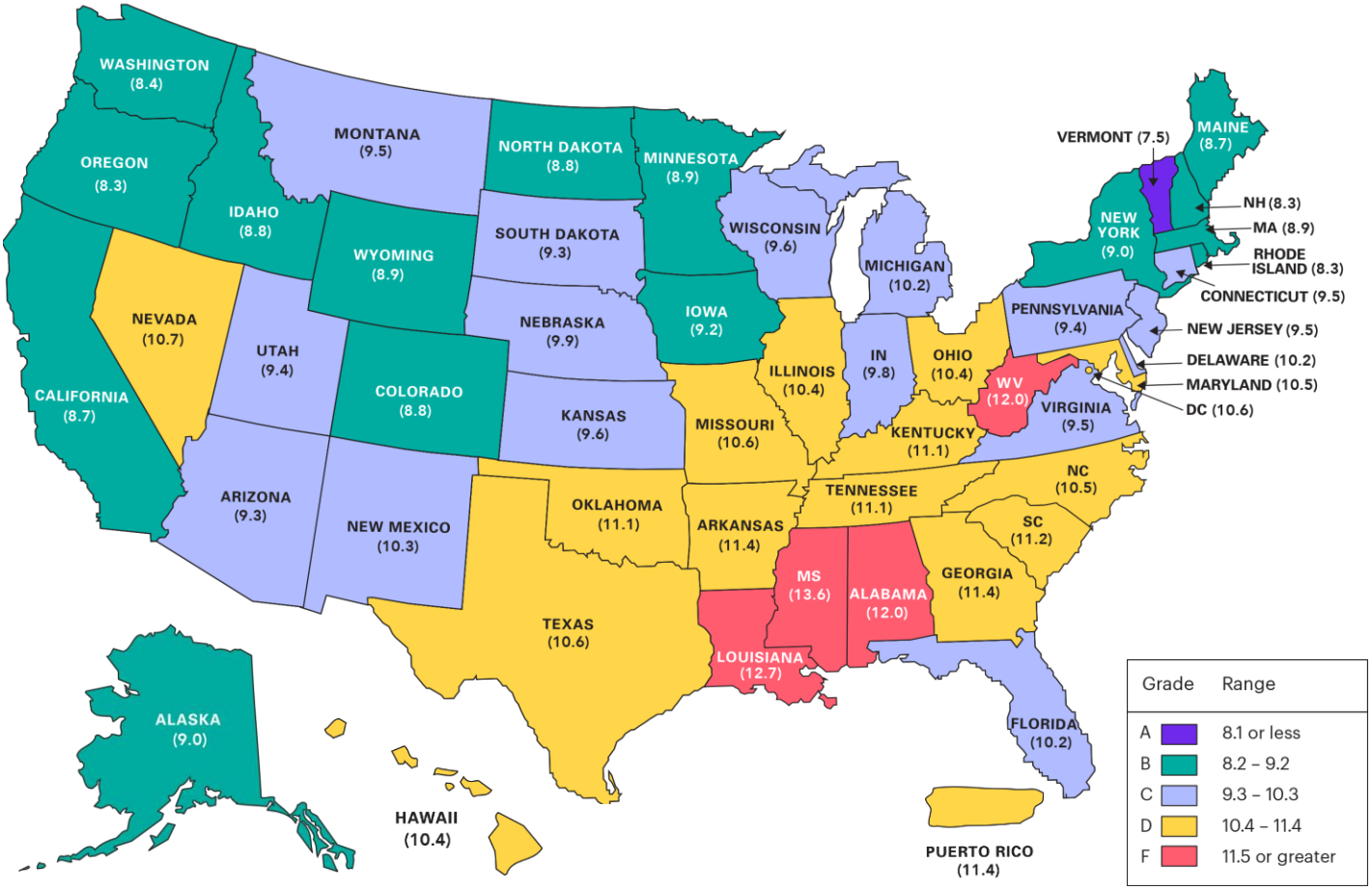
C

PRETERM BIRTH RATE

9.9%



PRETERM BIRTH RATES AND GRADES BY STATE



MORE INFORMATION

MARCHOFDIMES.ORG/REPORTCARD

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MARCH OF DIMES

2018 PREMATURE BIRTH REPORT CARD
PRETERM BIRTH RATES IN U.S. CITIES

The 100 cities in the United States with the greatest number of births are graded based on their 2016 preterm birth rates.

CITY	RATE	GRADE	CITY	RATE	GRADE	CITY	RATE	GRADE
Albuquerque, NM	10.7	D	Fresno, CA	9.4	C	Norfolk, VA	11.8	F
Anaheim, CA	8.4	B	Glendale, AZ	9.1	B	Oakland, CA	8.3	B
Anchorage, AK	9.2	B	Grand Rapids, MI	10.4	D	Oklahoma City, OK	10.9	D
Arlington, TX	10.2	C	Greensboro, NC	10.4	D	Omaha, NE	10.5	D
Atlanta, GA	11.4	D	Hempstead, NY	9.4	C	Orlando, FL	10.3	C
Aurora, CO	9.9	C	Honolulu, HI	10.6	D	Philadelphia, PA	10.3	C
Austin, TX	9.3	C	Houston, TX	11.1	D	Phoenix, AZ	10.0	C
Bakersfield, CA	9.7	C	Indianapolis, IN	11.5	F	Portland, OR	8.0	A
Baltimore, MD	13.4	F	Irvine, CA	5.5	A	Raleigh, NC	9.2	B
Baton Rouge, LA	13.2	F	Irving, TX	7.6	A	Ramapo, NY	6.0	A
Birmingham, AL	12.8	F	Islip, NY	10.4	D	Reno, NV	9.3	C
Boston, MA	9.5	C	Jacksonville, FL	11.4	D	Riverside, CA	8.9	B
Brookhaven, NY	8.9	B	Jersey City, NJ	11.1	D	Sacramento, CA	8.5	B
Brownsville, TX	11.2	D	Kansas City, MO	10.8	D	Salt Lake City, UT	9.2	B
Buffalo, NY	11.6	F	Knoxville, TN	10.4	D	San Antonio, TX	11.9	F
Charlotte, NC	10.1	C	Laredo, TX	10.9	D	San Bernardino, CA	10.2	C
Chicago, IL	10.7	D	Las Vegas, NV	10.5	D	San Diego, CA	8.3	B
Chula Vista, CA	9.1	B	Lexington-Fayette, KY	11.2	D	San Francisco, CA	8.3	B
Cincinnati, OH	11.4	D	Lincoln, NE	10.2	C	San Jose, CA	8.3	B
Cleveland, OH	14.4	F	Long Beach, CA	8.7	B	Santa Ana, CA	9.2	B
Colorado Springs, CO	10.1	C	Los Angeles, CA	9.5	C	Seattle, WA	7.5	A
Columbus, OH	11.2	D	Louisville, KY	10.9	D	Spokane, WA	9.8	C
Corpus Christi, TX	9.4	C	Lubbock, TX	11.3	D	St. Louis, MO	12.6	F
Dallas, TX	8.3	B	Memphis, TN	14.1	F	St. Paul, MN	8.3	B
Denver, CO	8.8	B	Mesa, AZ	8.5	B	Stockton, CA	9.3	C
Des Moines, IA	10.3	C	Miami, FL	10.7	D	Tacoma, WA	8.6	B
Detroit, MI	14.5	F	Milwaukee, WI	11.9	F	Tampa, FL	10.5	D
Durham, NC	8.9	B	Minneapolis, MN	9.3	C	Toledo, OH	10.9	D
El Paso, TX	10.1	C	Modesto, CA	9.0	B	Tucson, AZ	8.1	A
Fayetteville, NC	12.7	F	Nashville-Davidson, TN	10.5	D	Tulsa, OK	11.5	F
Fontana, CA	9.2	B	New Orleans, LA	12.5	F	Vancouver, WA	7.8	A
Fort Wayne, IN	9.3	C	New York, NY	8.8	B	Virginia Beach, VA	9.7	C
Fort Worth, TX	9.7	C	Newark, NJ	12.9	F	Washington, DC	10.7	D
						Wichita, KS	9.7	C

MORE INFORMATION

MARCHOFDIMES.ORG/REPORTCARD

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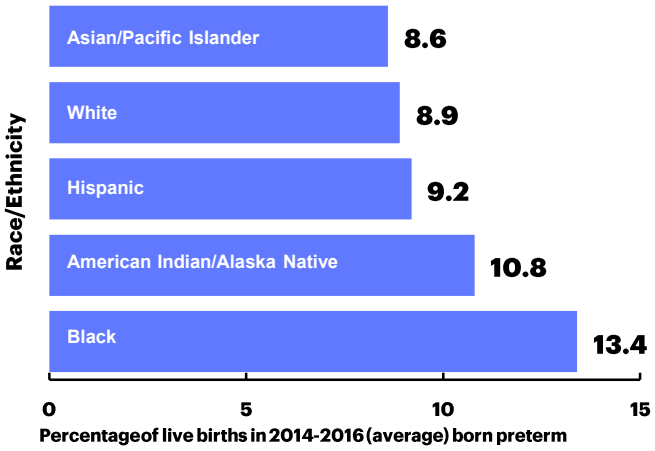
2018 PREMATURE BIRTH REPORT CARD
RACE & ETHNICITY IN THE U.S.

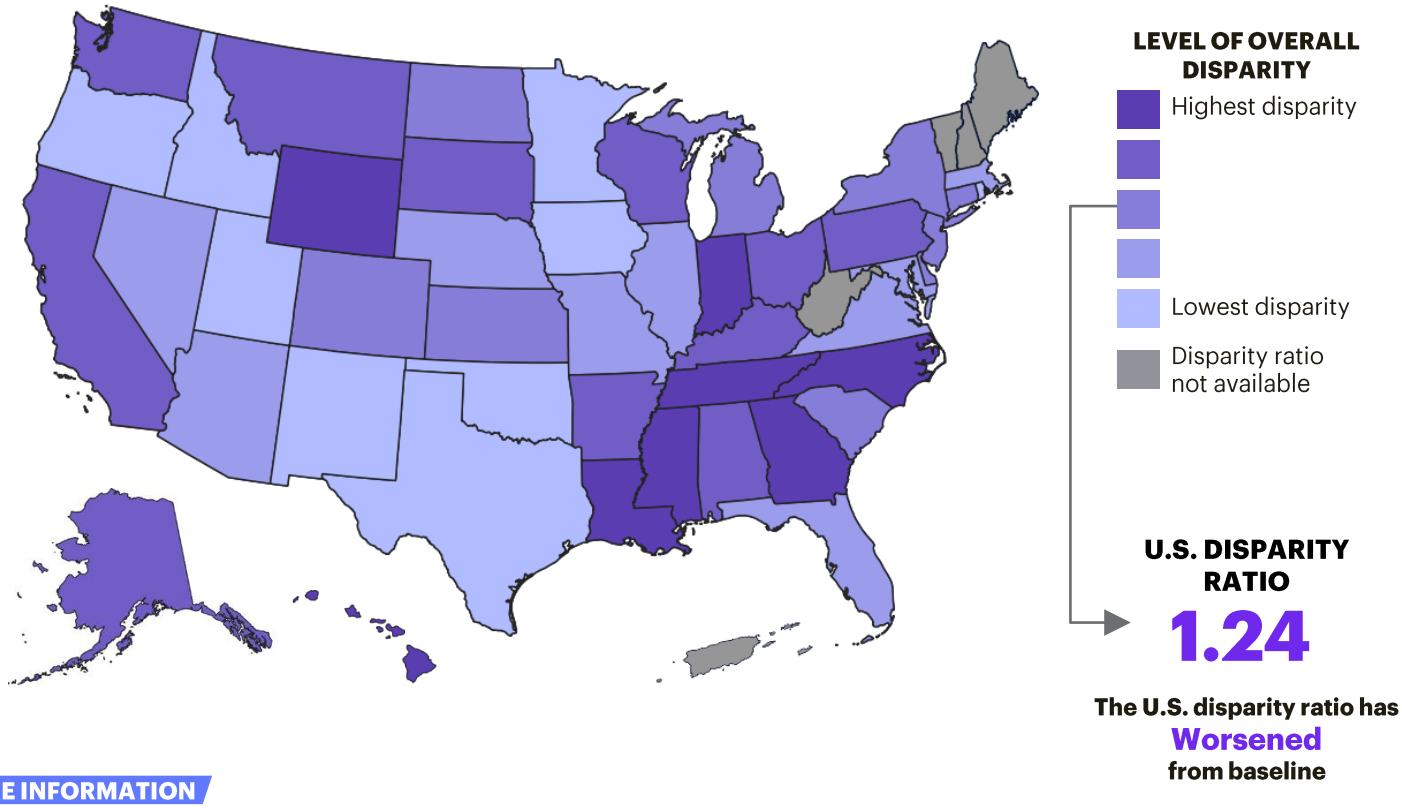
Aggregate 2014-2016 preterm birth rates are shown for each of the five bridged racial and ethnic groups. The racial/ethnic group with the highest rate is compared to the combined rate for all other racial/ethnic groups.



In United States, the preterm birth rate among black women is 49% higher than the rate among all other women.

RACE & ETHNICITY DISPARITY BY STATE

The March of Dimes disparity ratio measures and tracks progress towards the elimination of racial/ethnic disparities in preterm birth. It is based on Healthy People 2020 methodology and compares the group with the lowest preterm birth rate to the average for all other groups. Progress is evaluated by comparing the current disparity ratio to a baseline disparity ratio. A lower disparity ratio is better, with a disparity ratio of 1 indicating no disparity.



MORE INFORMATION

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MARCH OF DIMES

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COMMUNITY PROFILE

RHODE ISLAND

STATEWIDE EFFORTS LEAD TO 23% DROP IN PRETERM BIRTH RATE IN RHODE ISLAND

Over the past ten years, Rhode Island has been on a steady march to reduce its preterm birth rate from 10.8 percent in 2007 to 8.3 percent in 2017.[1] Rhode Island is the smallest state in the United States. It has 1 million residents, making it the 43rd most populated state. While its small size may be advantageous when organizing and implementing public health solutions, its success in reducing the preterm birth rate should not be diminished. Lessons learned in Rhode Island are assessable for potential implementation in other locations.

While Rhode Island can boast some serious progress in reducing the preterm birth rate since 2007, its leaders are the first to say they still have work to do to address the stubborn racial and ethnic disparities in premature birth as well as factors beyond the health care system that contribute to these disparities. This awareness and commitment to achieving more equitable outcomes underlies state-level decision-making in Rhode Island.

Successful strategies stem from strong, cooperative leadership emanating from the Rhode Island Task Force on Premature Births. This group of state leaders, initially brought together by the Rhode Island Department of Health (RIDOH) and March of Dimes, takes on the challenge of identifying and addressing system-level opportunities for stronger integration of services and improved processes to ensure that all mothers receive the care, education, support and services they need, where and when they need them most.

CHALLENGES IN RHODE ISLAND

Even with a declining state preterm birth rate, health experts in Rhode Island identify several challenges to continued success:

Poverty. "What's the key issue for preterm birth in Rhode Island? Social determinants of health, including poverty," says Maureen G. Phipps, MD, MPH, Chief of Obstetrics and Gynecology, Women & Infants Hospital and Care New England Health System and founding Co-Chair of the Rhode Island Task Force on Premature Births. Social determinants of health are the conditions in which people live, learn, work, play and pray that affect their health risks and outcomes. Dr. Phipps and other health leaders recognize that poverty is a key determinant at the core of many critical health issues facing women in the state.

Institutional racism. Rhode Island health leaders now see the impact of institutionalized racism on societal systems and dynamics, ultimately leading to disparities in poor birth outcomes. This recognition leads state leaders to deliberately focus on eliminating inequities through raising awareness about implicit bias and discrimination; identifying and breaking down systems and policies that contribute to these inequities; and investing in interventions that help accelerate improvements for all. "Moving forward, we need to narrow our focus even more on preterm birth disparities, including those based on race, ethnicity, city or town of residence and insurance status," says Nicole Alexander-Scott, MD, MPH, Director of the Rhode Island Department of Health.[2]

Delivery of reproductive health care. With almost half of all pregnancies being unplanned, opportunities exist to improve how, where and when reproductive health care is delivered in Rhode Island.[3] Many mothers may be unaware that optimal birth spacing (at least 18 months from the birth of one child to the beginning of the next pregnancy) may reduce their risk of having a premature birth. One Task Force work group has been charged with analyzing this issue to make recommendations on integration of person-centered pregnancy intention screening and related care as well as education into routine care across the state.

WHAT'S WORKING IN RHODE ISLAND: SUCCESSFUL STRATEGIES

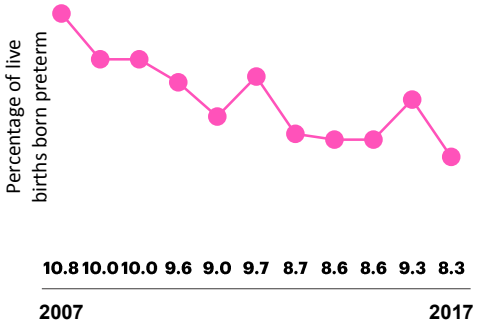
Successes in Rhode Island are the result of *how* health leaders implemented changes as well as *what* they changed or expanded. Securing buy-in and support from top state health leadership has been crucial and has led to intense collaboration among providers and stakeholders. Successful initiatives include:

Rhode Island Task Force on Premature Births. Anchored by RIDOH, Women and Infants Hospital and March of Dimes, the Task Force is a diverse coalition of community-based organizations, government agencies and health care providers. Launched 12 years ago, the Task Force adopted shared measures of success to reduce the rate of preterm birth in the state. By collectively analyzing existing practices, the Task Force emphasizes learning from patient and provider experiences. Annual data-driven plans have led to evidence-informed strategies that take social determinants into consideration. Over the years, the Task Force has looked for ways to collaboratively improve maternal/child care in Rhode Island's health system. For example, insurance companies simplified their policies and processes; state agencies provided free curbside transportation for clients; providers completed professional education to better serve pregnant women and new mothers; and new evidence-based strategies were implemented and supported across key communities in the state (e.g. Nurse Family Partnership). Specific areas of Task Force focus include:

- **Access to 17P.** After completing a statewide provider survey, the Task Force identified several opportunities to address barriers to access to 17P, a medication that can help reduce the risk of subsequent premature birth for certain women. Working closely with physicians, hospitals, community health centers, managed care organizations, insurers, and pharmacies, the Task Force analyzed the current pre-authorization and ordering process to access this medication. It then developed a toolkit to provide guidance from the state's four largest health insurers on ordering 17P in a timely fashion; the toolkit is being disseminated to provider practices statewide.
- **Preconception and interconception care.** Perinatal health research emphasizes the importance of integrating pre-/interconception care within the continuum of women's health care. This care includes family planning guidance; nutrition education; infectious, chronic disease and immunization screening; review of medication use; and behavioral health assessment. Best practice guidelines encourage providers to base a woman's care on previous pregnancy outcomes, genetic history, mental health and history of intimate partner violence. Additionally, RIDOH trains providers to integrate pregnancy intention screening and patient-centered contraceptive counseling into routine care.

Statewide programs. The work spearheaded by the Task Force provides a steady focus on improving the health of all moms and babies across the state. Its activities are further amplified and supported by state and local leaders, as well as by partner-led activities that aim to improve the health and wellbeing of the population at large. A significant state change that impacts health services provided to pregnant and parenting women is Medicaid expansion. Almost all women in Rhode Island currently have

PRETERM BIRTH IN RHODE ISLAND, 2007-2017



Source: National Center for Health Statistics, final natality data

RHODE ISLAND BY THE NUMBERS

- Women ages 15-44 in Rhode Island: 18.1% Hispanic, 68.2 % white, 7.8 % black, 5.4 % Asian/Pacific Islander, and <1% American Indian/Alaska Native.[4]
- Nearly 13% of the population live below the federal poverty level.[5]
- About 1 in 20 women ages 15-44 (5.1%) were uninsured in Rhode Island, compared to 11.7% nationwide in 2016.[6]
- In Rhode Island, 48.9% of births in 2016 were covered by Medicaid.[7]
- The preterm birth rate among non-Hispanic black women was 12.2% in 2016, 42% higher than the rate of 8.6% among non-Hispanic white women.[8]

SUCCESSFUL STRATEGIES (continued)

access to prenatal care. Additionally, an awareness campaign resulted in mothers using a free, curbside transportation service (a previously unknown benefit to most) to get to medical care they need. Extensive statewide education efforts focus on teen health; reducing tobacco use (access to Quitlines); increasing use of contraception to reduce unintended pregnancies; and preventing and treating substance use disorders.

Community programs. In 2015, RIDOH initiated the Health Equity Zones (HEZ) Initiative, developing ten Health Equity Zones throughout Rhode Island to implement community-driven work plans over a three- or four-year period. Innovative approaches implemented by HEZ programs aim to reduce the burden of chronic diseases, improve birth outcomes and ameliorate the social and environmental conditions of communities across the state. Local communities choose certain initiatives based on local need. The structure of HEZ programs emphasizes coordination between state agencies and community-based organizations, keeping the residents' experiences front and center. As part of this effort, RIDOH's Family Home Visiting Program coordinates closely with the HEZ projects and activities. As a result of this coordination, providers are now able to more readily refer high-risk patients to appropriate health care specialists and community resources.

LESSONS LEARNED

- Intense collaboration and shared responsibility by leaders, diverse stakeholders and providers are critical for success. Sarah Coutu, Maternal Child Health Program Coordinator, UnitedHealthcare® Community Plan, Rhode Island says it best: "We all leave our egos and titles at the door. When we work together, we don't represent our various segments or silos. We represent the mothers and babies of Rhode Island."
- Using evidence-based strategies, such as increasing access to effective medications to reduce the risk of premature birth among eligible mothers and safely reducing early elective deliveries, can help further reduce the incidence of premature birth in the state.
- Programs and services need to be integrated in the continuum of women's health care and be inclusive of efforts that seek to mitigate societal stress factors.
- Education programs and materials for patients and providers should be disseminated effectively through diverse channels.
- Health leaders can use community data to identify what works and how service providers can best replicate positive results. Every initiative should set goals and track progress.

MARCH OF DIMES IN THE COMMUNITY

In support of continued success in Rhode Island to reduce the incidence of premature birth and associated health outcomes, March of Dimes commits to:

- Continue support of and collaboration with the Rhode Island Task Force on Premature Births.
- Co-organize and support the annual March of Dimes Prematurity Summit. The Summit provides a welcome opportunity for the Task Force and RIDOH to report on progress and activities; brings visibility to the issue of premature birth; and educates clinical and community-based providers on promising interventions.
- Convene stakeholders across sectors to collaborate on system-wide improvement opportunities
- Educate women and providers about current research and best practices to prevent premature birth.
- Support the NICU Family Support® program at Women and Infants Hospital
- Advocate to advance maternal/child health issues, including access to care and tobacco- and opioid-related interventions.

References

1. National Center for Health Statistics
2. https://www.ri.gov/press/view/30274
3. Rhode Island Department of Health, Pregnancy Risk Assessment Monitoring System 2012-2015
4. U.S. Census Bureau
5. U.S. Census Bureau
6. US Census Bureau
7. National Center for Health Statistics
8. National Center for Health Statistics

For information on how communities were chosen, please contact perinataldatacenter@marchofdimes.org.

MARCH OF DIMES

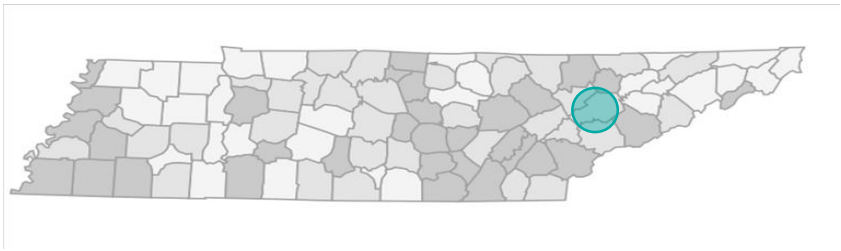
COMMUNITY PROFILE

KNOX COUNTY, TENNESSEE

PRETERM BIRTH RATE IN KNOX COUNTY IMPROVES MORE THAN 20% SINCE 2007

Knox County, Tennessee has demonstrated an ability to turn the corner on certain metrics associated with premature birth. Local health leaders in Knox County face many stubborn problems that affect the health of pregnant women, young mothers and their babies, including chronic substance abuse, high tobacco use and mental health challenges. Complicating these issues is a poverty rate in Knox County of 15 percent and 24 percent in Knoxville, the county's largest city.[1] The median household income for these areas is significantly below the national average. Despite these obstacles, and rising preterm birth rates across the United States in recent years, the preterm birth rate in Knox has fallen to 9.8 percent in 2016 from 12.5 percent in 2007, an improvement of more than 20 percent over the past decade.[2]

Strong, local, collaborative efforts by hospitals, county and state public health departments and March of Dimes have driven change within the health care system in Knox County. These changes have led to improvements in birth outcomes. For example, the county's Power to Quit Knox program has produced positive results, including a reduction in the number of pregnant women who smoke. Another local initiative, Healthy Babies Are Worth the Wait, has helped reduce the high rate of early elective deliveries (EEDs) locally and statewide. And implementation of March of Dimes Supportive Pregnancy Care (SPC) in Knox County has the potential to reduce the risk of premature birth for program participants.



CHALLENGES IN KNOX COUNTY

A core problem facing health leaders in Knox County is that many public decision makers are not aware of problems related to premature birth and neonatal care. "There was no urgency related to this issue," says Dr. Mark Gaylord, Director of Neonatology at the University of Tennessee Medical Center.

When leaders examined the data for Knox County, they found that 16 percent of pregnant women smoke and that a significant proportion of births were EEDs. In addition, similar to the rest of the country, they found that preterm birth rates among black women were higher than for other women — 13.5 percent compared to 9.4 percent.[5]

For many women, health- and societal-related factors that can affect premature birth are evident **before** pregnancy. For example, in 2015, one third of those living in Knox were experiencing some form of housing stress (for example, lack of complete plumbing or kitchen facilities).[6] By the time a woman gets pregnant, these issues may have already critically impacted her health and her baby's health.

KNOX COUNTY BY THE NUMBERS

- Women ages 15-44: 4.5% Hispanic, 81.9% white, 10.3% black, 3% Asian/Pacific Islander, and <1% American Indian/Alaska Native.[7]
- 14.8% of the total population has a household income below the federal poverty level, compared to 15.8% in Tennessee.[8]
- 9.7% of women ages 18 to 64 were uninsured, compared to 11.6% in Tennessee.[9]
- Black women have a preterm birth rate of 13.4%, compared to 9.2% of births to Hispanic women and 8.9% of births to white women.[10]
- 79.2% of women in Knox County began prenatal care in their first trimester compared to 74.2% of women in Tennessee.[11]

WHAT'S WORKING IN KNOX: SUCCESSFUL STRATEGIES

Strong and creative leadership in Knox County has produced effective, local programs that offer providers, community organizations and the public needed information, services and education to address premature birth. Successful initiatives include:

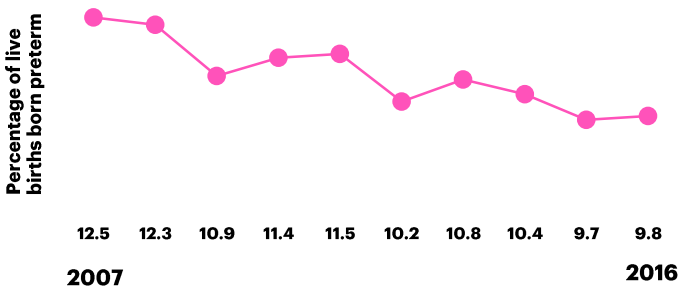
StrongBabyKnox. Developed by the Knox County Health Department, this online program is an easy-to-follow resource for pregnant women and new mothers. It includes information on prenatal care, smoking cessation, healthy eating, breastfeeding, safe sleep and immunizations. The program was promoted via digital ads as well as billboards and posters in community organizations and churches.

Tennessee Healthy Babies are Worth the Wait. Based on a March of Dimes quality improvement initiative, this program encourages providers and health care systems to implement policies and procedures to reduce the incidence of non-medically indicated EEDs between 37 and 39 weeks. The program educates the public about the importance of full-term deliveries via a website, billboards, radio and TV. Hospitals that achieved a sustained EED rate of <5 percent are recognized for success. "We changed the culture," said Jackie Moreland, RN and Clinical Quality Specialist, Tennessee Center for Patient Safety. The Knox County Health Department set a goal to reduce EEDs from 16 percent to <5 percent. When the rate hit 7 percent, the Tennessee Hospital Association's Board of Directors adopted the program statewide. March of Dimes, the Tennessee Hospital Association, the Tennessee Department of Health and the Tennessee Initiative for Perinatal Quality Care collaborate on statewide efforts. Each year since 2013, the program has helped the state achieve an EED rate <2 percent.[12]

Power to Quit Knox County. This smoking cessation program implemented 190 group and individual counselling sessions with gift card incentives and referrals to the Tennessee QUITLINE. The self-reported quit rate for pregnant women at delivery is 30 percent, and 33 percent of pregnant women reported quitting by the first postpartum visit.[13]

Addiction clinics. These clinics are a major partner in the Knox County health care network. At opioid addiction recovery centers, Knox County Health Department provides birth control and family planning services and women's health classes. Paige Huggler from the Regional Perinatal Program at the University of Tennessee Medical Center in Knoxville states, "We facilitate helping pregnant women with opioid use disorder by getting them into programs that will wean them down and potentially off of opiates by the time of delivery – but they need ongoing behavioral health management during this process (and after, especially if they are fully detoxed). We now have fully detoxed more than 600 patients."

PRETERM BIRTH RATE: KNOX COUNTY 2007-2016



Source: National Center for Health Statistics, final natality data

Provider education. The University of Tennessee Medical Center and other providers, in collaboration with state and local health departments, have ramped up their professional education programs, especially around the use of 17P to help reduce the risk of subsequent premature birth for certain at-risk women. The number of OB outpatient high-risk consultations, OB education hours and neonatal education hours have more than tripled from 2013 to 2017.[14]

Supportive Pregnancy Care. Knox County is one of several sites in the state implementing the March of Dimes SPC model of group prenatal care. With funding and partnership from the Tennessee Department of Health and UnitedHealth Group, the program launched in six sites in November 2016. Group prenatal care is an evidence-based intervention that has been shown to reduce the risk of premature birth for African-American women by 41 percent.[15] In group care, pregnant women with similar due dates meet together for prenatal care and education with their obstetric provider. At sessions, women learn how to take and record their own vital signs; receive a private physical assessment with their provider; become part of a support network for each other; and gain knowledge and skills related to pregnancy, birth and infant care. SPC is available at UT Knoxville; Cherokee Health Center in Knox County is implementing the program at two locations that serve all patients with or without insurance. The Center provides wrap-around medical care that includes mental health and addiction services and other specialized health programs. "If we've made progress, it's because we have integrated medical and other critical services in a 'safety net program' for pregnant women and young mothers," says Dr. Michael Caudle, an OB/GYN at Cherokee.

LESSONS LEARNED

- Partnership between statewide organizations, like the Tennessee Department of Health, county and local organizations and March of Dimes is critical to maximize resources and impact.
- Locally developed programs with strong leadership, comprehensive dissemination tactics and sustained funding can lead to improvements in prevention efforts, prenatal care and outcomes.
- Peer support programs encourage ongoing participation and accountability.
- Collaboration among health and social service providers leads to better results by helping meet critical needs of women.
- Specialized clinics, like opioid treatment facilities, are important in reaching women at high risk and can improve health in pregnancy and childbirth.
- Regional perinatal programs that offer provider/patient consults and provider training help the community reach its perinatal goals.

MARCH OF DIMES IN THE COMMUNITY

In support of continued success in Knox County, Tennessee, to reduce the incidence of premature birth and associated health outcomes, March of Dimes commits to:

- Work collaboratively with agencies in Knox County to improve outcomes for moms and babies
- Provide assistance for March of Dimes Supportive Pregnancy Care programs being implemented with local partners
- Collaborate with providers and payers to ensure that all eligible women who have had a premature birth have access to progesterone therapy to prevent a subsequent early delivery
- Provide nationally produced, easy-to-use provider and consumer resources and education tools on topics that address prematurity prevention, including the impact of smoking during pregnancy and educating women on the warning signs of preterm labor
- Offer professional education opportunities for providers to enhance care and prevent premature birth on topics such as best practices in smoking cessation and treating opioid addiction
- Advocate for state laws that include tobacco prevention program funding; opioid prevention and treatment measures; and perinatal centers that provide education and treatment of high risks moms and babies

References:
1. U.S. Census Bureau, 2010
2. National Center for Health Statistics
3. U.S. Census Bureau, 2010
4. Tennessee Department of Health, *Reducing Pregnancy Smoking and Associated Low Birth Weight Births*, Tobacco Settlement Program 2014-2016
5. National Center for Health Statistics
6. Centers for Disease Control and Prevention. (2015). *Housing stress.*
7. National Center for Health Statistics
8. U.S. Census Bureau
9. U.S. Census Bureau
10. National Center for Health Statistics
11. National Center for Health Statistics
12. Association of State and Territorial Health Officials. (2013). *Tennessee Healthy Babies are Worth the Wait.*
13. Tennessee Department of Health, Reducing Pregnancy Smoking and Associated Low Birth Weight Births, Tobacco Settlement Program 2014-2016
14. Kettrey, HH et al; *Piloting the March of Dimes Supportive Pregnancy Care Model in Tennessee: Addressing Providers Perceived Barriers to Group Prenatal Care Implementation*. Early results presented at CityMatch 2018.
15. Ickovics JRet al. (2007). Group prenatal care and perinatal outcomes: A randomized controlled trial. *Obstetrics and Gynecology, 110*(2 Pt 1), 330-339.

For information on how communities were chosen, please contact perinataldatacenter@marchofdimes.org.

MARCH OF DIMES

COMMUNITY PROFILE

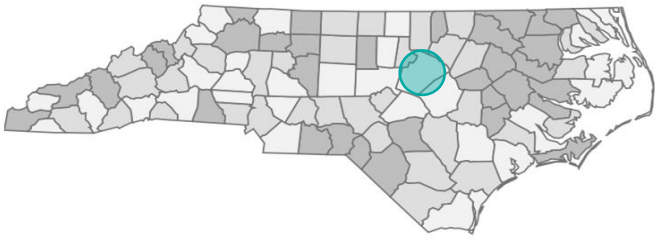
RALEIGH, NORTH CAROLINA

RALEIGH DRIVES IMPROVEMENT IN PRETERM BIRTH: CITY'S GRADE MOVES FROM "D" TO "B"

Premature birth is the number one cause of infant mortality in North Carolina. Health leaders cite several issues that affect health care and prenatal care in their state. Economic inequalities, the education gap, racism and stress contribute to racial/ethnic disparities. The infant mortality rate for black infants in North Carolina is more than twice the rate for white babies. Medical conditions, such as obesity, diabetes and cardiovascular disease, as well as tobacco and opioid addiction, impede the ability to combat high prematurity and mortality rates.

In the midst of this reality, the city of Raleigh and the larger Wake County have demonstrated an ability to turn the corner on certain metrics associated with premature birth. Raleigh is the state capital and the second largest city in North Carolina. It is part of Wake County whose population is just over 1 million people. Of Raleigh's 404,000 residents, 57 percent are white, 29 percent are black and 11 percent are Hispanic.[1]

Various state and local programs help women in Raleigh have healthy pregnancies and healthy babies. For example, the state's Pregnancy Medical Home program provides medical support for high-risk women; most maternity care providers across North Carolina participate in the program. Through the North Carolina Preconception Health Campaign, local leadership has implemented effective state programs to address prematurity and postpartum issues. In Raleigh, Community Care of North Carolina screens and provides care for the pregnant Medicaid population. And ongoing group prenatal medical visits offer trained help and peer support for at-risk pregnant women. The results of these efforts are promising. In Raleigh, preterm birth rates declined from 10.6 percent in 2007 to 9.2 percent in 2016.[2]



CHALLENGES IN RALEIGH

Racial/Ethnic disparities. While the preterm birth rate in Raleigh has declined, racial disparities are a serious problem. Black babies are almost twice as likely to be born early as whites.[3] Whitney Tucker, research director at NC Child notes that the challenge largely comes down to improving the health of black children and black families. The state infant mortality rate for white children is 6 deaths for every 1,000 live births. But the black infant mortality rate in North Carolina is 12.4 deaths, above the national average of 11.3 deaths for every 1,000 live births. "It's really a black-white disparity or a black and everyone else disparity," Tucker says. "It's not just whether or not we move the needle but whether we close the gap."

Access to care, smoking and opioid use. A community needs assessment by hospitals and other health care agencies in 2013 stated that the top health challenges in Wake County were poverty and unemployment, health care access and utilization, and mental health and substance use. These issues can have a negative impact on pregnant and postpartum women. For example, access to health services and limited public transportation in Wake County can be barriers for low-income pregnant women who need quality care. Tobacco use during pregnancy is associated with infertility, miscarriage and premature birth.[4] Alarmingly, 10 percent of North Carolina's pregnant women smoke.[5] Women who use opioids are likely to use tobacco as well: nearly 95 percent of women with opioid use disorder continue to smoke cigarettes during pregnancy.[6] Risks from opioid exposure also include premature birth and low birthweight, in addition to neonatal abstinence syndrome (NAS).[7]

WHAT'S WORKING IN RALEIGH: SUCCESSFUL STRATEGIES

Strong planning at the state and local levels is part of the good news in the Raleigh area. Local leaders report a total buy-in from local health care providers and community organizations that have taken ownership for improving outcomes for moms and babies through various state-funded initiatives. Successful initiatives include:

Health education for women. The March of Dimes North Carolina Preconception Health Campaign provides health education to all women of childbearing age with the message that health now matters for future families.

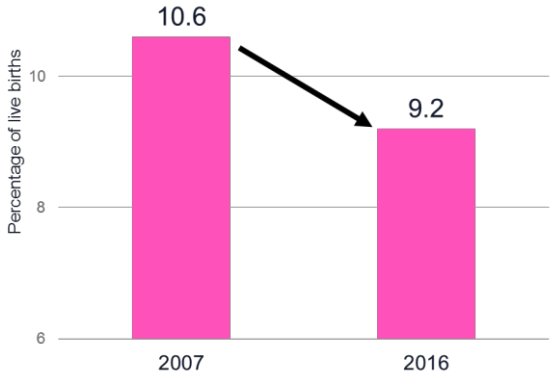
Addressing health equity. The North Carolina Department of Public Health is taking a proactive stance to reverse the results of long-term racism. Ensuring health equity for all requires changing policies, systems and practices to address health inequities and reduce longstanding disparities. The North Carolina Health Equity Impact Assessment (HEIA), developed by NC Child in partnership with the NC Division of Public Health Women's Health Branch and the NC Office of Minority Health and Health Disparities, is a tool that enables decision makers to intentionally focus and align strategies to reduce disparities and promote health equity.[8]

Access to and quality of care. To improve access to quality care and to coordinate services, Community Care of North Carolina partnered with state Medicaid to develop the Pregnancy Medical Home (PMH) program in 2011. As part of the program, if a woman is screened and determined high risk, she is assigned a medical professional to educate and support her. She can now qualify for 17P treatment, a progesterone shot that can help prevent premature birth in certain women. Most maternity care providers across North Carolina (1,600 individual providers from more than 350 practices) participate in PMH. Each Community Care Network, such as Community Care of Wake and Johnston Counties, provides an OB team with one or more physician champions and at least one nurse coordinator to recruit, educate and support PMH practices. The Raleigh area now has a lower percentage of women who do not receive prenatal care than does the state as a whole.[9]

Early elective deliveries. Elective delivery before 39 weeks of pregnancy carries significant risks for a baby with no known benefits to the mother.[10] The Perinatal Quality Collaborative of North Carolina is working to reduce the incidence of early elective deliveries across the state. In conjunction with March of Dimes, the Collaborative educates women and their partners about the importance of avoiding early elective deliveries by caesarean birth or labor induction. Partly as a result of these efforts, the rate for early elective births statewide has dropped to 3 percent.[10]

Smoking cessation. The statewide You Quit, Two Quit (YQ2Q) campaign funds tobacco cessation services and quitlines for women. YQ2Q offers free, on-site training and technical assistance to clinics that serve women of reproductive age. With March of Dimes support and advocacy, the program provides 98 percent of women ready to quit with a brief, evidence-based counseling intervention.

PRETERM BIRTH RATE: RALEIGH 2007 & 2016



Source: National Center for Health Statistics, final natality data.

RALEIGH BY THE NUMBERS

- Women ages 15-44 in Wake County: 10.9% Hispanic, 57.3% white, 23.3% black, 8.2% Asian/Pacific Islander, and <1% American Indian/Alaska Native.[11]
- Nearly 11% of the population in Wake County live below the federal poverty level.[12]
- About 1 in 10 women ages 18-64 (9.8%) were uninsured in Wake County, compared to 14.9% overall in North Carolina.[13]
- In Raleigh, 30.5% of births in 2016 were covered by Medicaid.[14]
- The preterm birth rate among non-Hispanic black women in Raleigh was 12.7% in 2016, 49% higher than the rate of 7.7 percent among non-Hispanic white women.[15]

LESSONS LEARNED

- Programs to improve the health of moms and babies and decrease the incidence of premature birth need state-secured funding for sustainability.
- Health and community leaders can raise awareness and urgency around premature birth with robust planning and sustained, visible commitment to improving outcomes.
- Statewide programs should be customizable to accommodate the needs of local stakeholders.
- Pregnant women can benefit from long-term maternal health counseling programs facilitated by trained providers.
- Providers need education on evidence-based solutions to reduce premature birth and improve postpartum health, including timely screenings and services.

MARCH OF DIMES IN THE COMMUNITY

In support of continued success in Raleigh and Wake County, North Carolina to reduce the incidence of premature birth and associated health outcomes, March of Dimes commits to:

- Educate legislators and help secure state funds
- Promote a focus on preconception health as a strategy to improve preterm birth
- Serve in collaborative leadership roles to promote health equity
- Engage community organizations, colleges/universities, and other non-traditional partners to raise awareness of preterm birth as a public health issue; engage stakeholders regularly
- Provide professional education to healthcare providers serving women of childbearing age; support advancement of key strategies such as tobacco cessation and eliminating early elective deliveries

References:

1. U.S. Census Bureau
2. National Center for Health Statistics
3. National Center for Health Statistics
4. Center for Disease Control and Prevention, Tobacco Use and Pregnancy
5. National Center for Health Statistics
6. Center for Disease Control and Prevention, Tobacco Use and Pregnancy
7. Ram, A et al, Cigarette Smoking Reduction in Pregnant Women with Opioid Use Disorder, Journal of Addiction Medicine. 2016 Feb: 10(1).
8. https://www.ncchild.org/promoting-health-equity/
9. NC State Center for Health Statistics
10. https://www.marchofdimes.org/mission/39-weeks-quality-improvement.aspx
11. Berrien, K et al, The Perinatal Quality Collaborative of North Carolina's 39 Weeks Project, NC Medical Journal. 2014 May-June 75(3).
12. U.S. Census Bureau
13. U.S. Census Bureau
14. U.S. Census Bureau
15. National Center for Health Statistics

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MARCH OF DIMES

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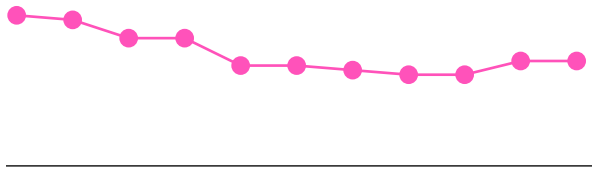

For details on data sources and calculations, see Technical Notes. For more information on how we are working to reduce premature birth, visit **www.marchofdimes.org**.

MARCH OF DIMES

2018 PREMATURE BIRTH REPORT CARD

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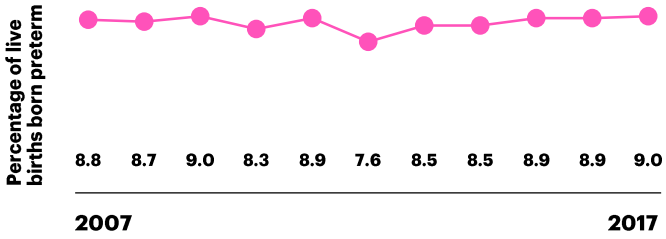
ALASKA

GRADE

B

PRETERM BIRTH RATE

9.0%



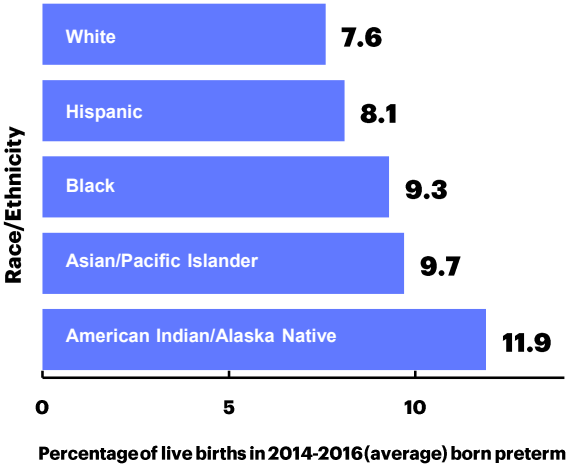
BOROUGHS

Boroughs with the greatest number of births are graded based on their 2016 preterm birth rates.

BOROUGH	GRADE	PRETERM BIRTH RATE	CHANGE FROM LAST YEAR
Anchorage	B	9.2%	No change
Bethel (Census Area)	D	10.8%	Improved
Fairbanks North Star	B	9.2%	Worsened
Juneau	A	7.3%	Worsened
Kenai Peninsula	A	7.9%	Worsened
Matanuska-Susitna	A	7.7%	Improved

RACE & ETHNICITY IN ALASKA

The March of Dimes disparity ratio measures and tracks progress towards the elimination of racial/ethnic disparities in preterm birth. It is based on Healthy People 2020 methodology and compares the group with the lowest preterm birth rate to the average for all other groups. Progress is evaluated by comparing the current disparity ratio to a baseline disparity ratio. A lower disparity ratio is better, with a disparity ratio of 1 indicating no disparity.



In Alaska, the preterm birth rate among American Indian/Alaska Native women is 49% higher than the rate among all other women.

DISPARITY RATIO:

1.29

CHANGE FROM BASELINE:

No Improvement

MORE INFORMATION

MARCHOFDIMES.ORG/REPORTCARD

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MARCH OF DIMES

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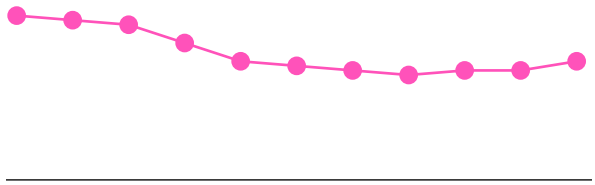

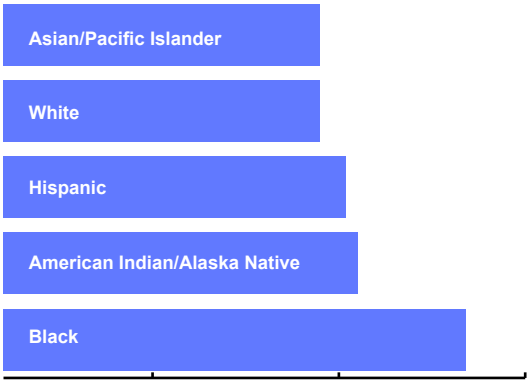

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MARCH OF DIMES

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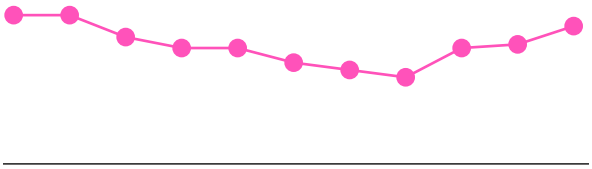

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MARCH OF DIMES

2018 PREMATURE BIRTH REPORT CARD

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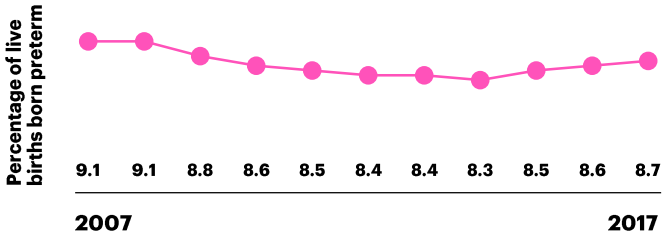
CALIFORNIA

GRADE

B

PRETERM BIRTH RATE

8.7%



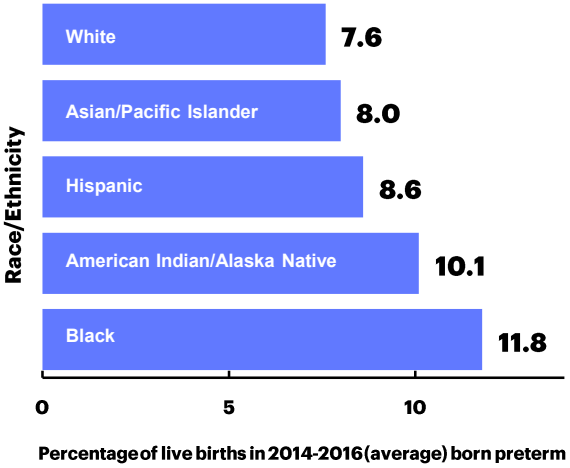
COUNTIES

Counties with the greatest number of births are graded based on their 2016 preterm birth rates.

COUNTY	GRADE	PRETERM BIRTH RATE	CHANGE FROM LAST YEAR	COUNTY	GRADE	PRETERM BIRTH RATE	CHANGE FROM LAST YEAR
Alameda	B	8.4%	Worsened	Sacramento	B	8.5%	Worsened
Contra Costa	B	9.1%	Worsened	San Bernardino	C	9.3%	Worsened
Fresno	B	9.2%	Improved	San Diego	B	8.5%	Worsened
Kern	C	9.5%	Worsened	San Francisco	B	8.3%	Worsened
Los Angeles	B	9.0%	Worsened	San Joaquin	B	8.9%	Improved
Orange	A	8.0%	Worsened	San Mateo	B	8.2%	Improved
Riverside	B	8.5%	Worsened	Santa Clara	A	8.1%	No Change
				Ventura	A	7.5%	Improved

RACE & ETHNICITY IN CALIFORNIA

The March of Dimes disparity ratio measures and tracks progress towards the elimination of racial/ethnic disparities in preterm birth. It is based on Healthy People 2020 methodology and compares the group with the lowest preterm birth rate to the average for all other groups. Progress is evaluated by comparing the current disparity ratio to a baseline disparity ratio. A lower disparity ratio is better, with a disparity ratio of 1 indicating no disparity.



In California, the preterm birth rate among black women is 44% higher than the rate among all other women.

DISPARITY RATIO:

1.26

CHANGE FROM BASELINE:

Worsened

MORE INFORMATION

MARCHOFDIMES.ORG/REPORTCARD

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MARCH OF DIMES

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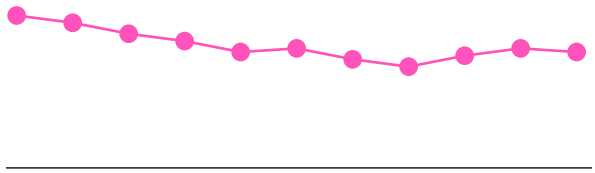

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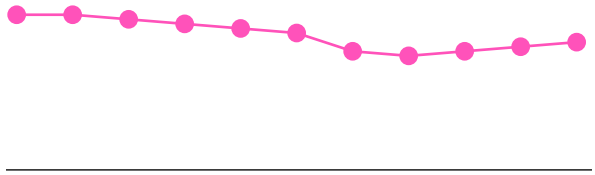

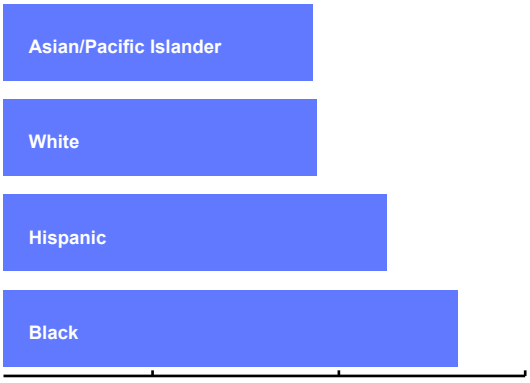

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MARCH OF DIMES

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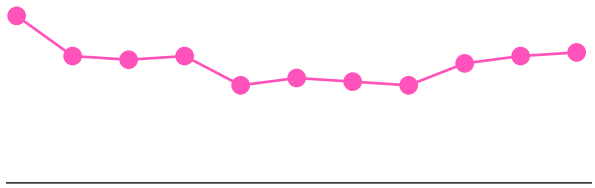

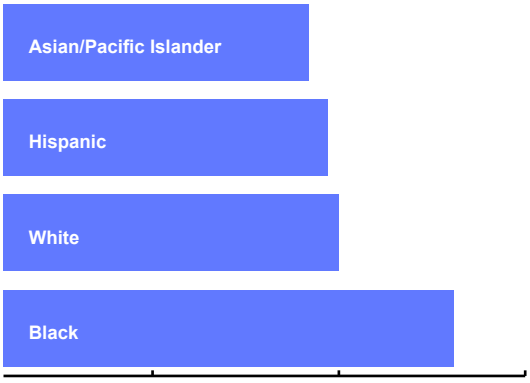

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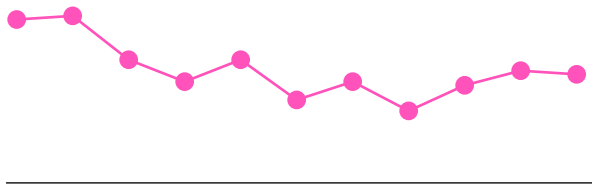

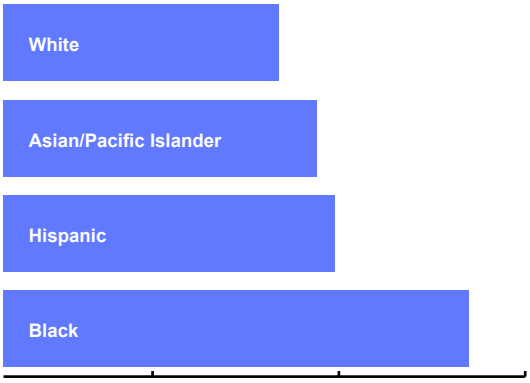

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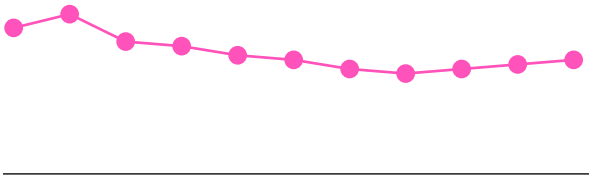

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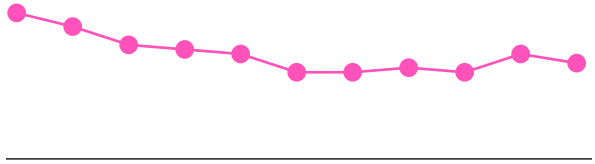

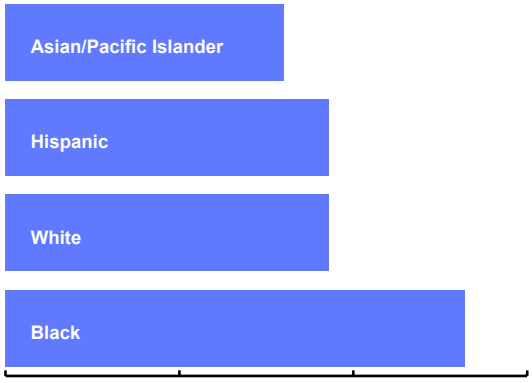

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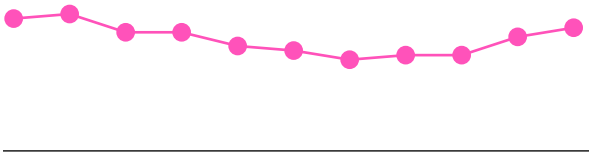

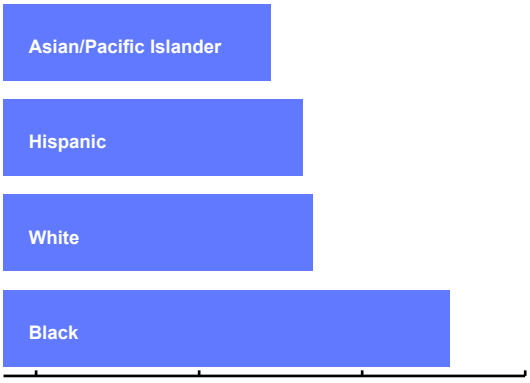

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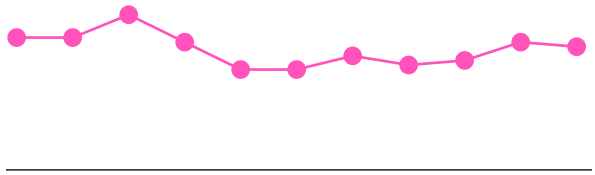

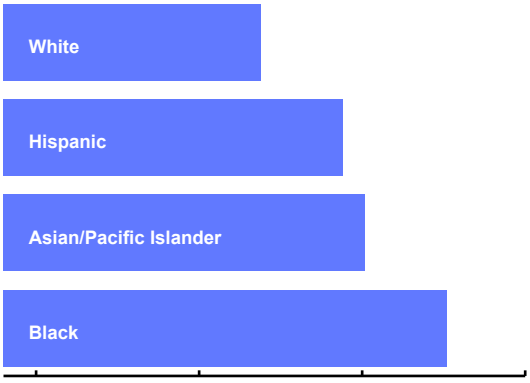

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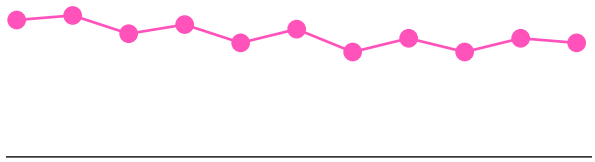

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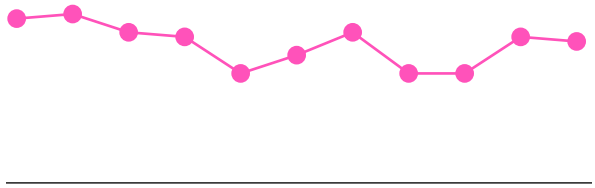

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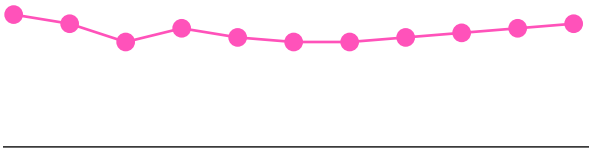

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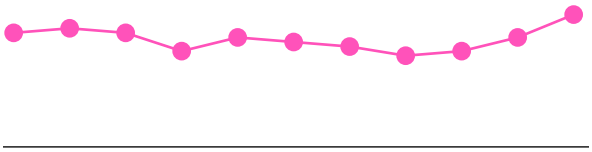

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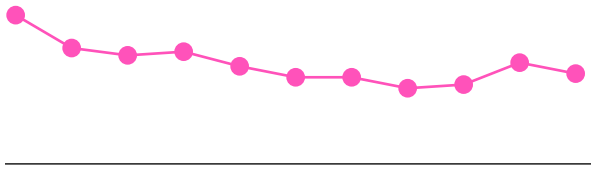

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MARCH OF DIMES

2018 PREMATURE BIRTH REPORT CARD

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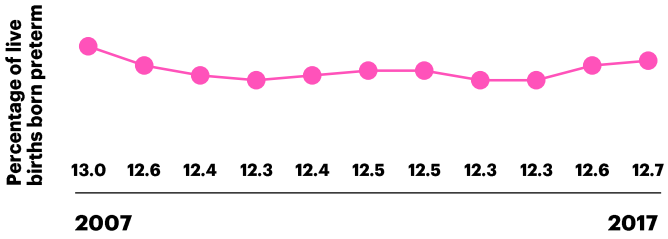
LOUISIANA

GRADE

F

PRETERM BIRTH RATE

12.7%



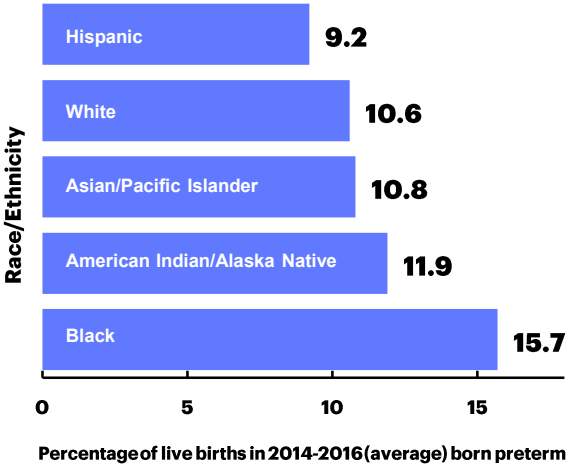
PARISHES

Parishes with the greatest number of births are graded based on their 2016 preterm birth rates.

PARISH	GRADE	PRETERM BIRTH RATE	CHANGE FROM LAST YEAR
Caddo	F	17.9%	Worsened
East Baton Rouge	F	13.0%	Worsened
Jefferson	D	11.1%	Worsened
Lafayette	D	10.9%	Improved
Orleans	F	12.5%	Worsened
St. Tammany	D	10.7%	Worsened

RACE & ETHNICITY IN LOUISIANA

The March of Dimes disparity ratio measures and tracks progress towards the elimination of racial/ethnic disparities in preterm birth. It is based on Healthy People 2020 methodology and compares the group with the lowest preterm birth rate to the average for all other groups. Progress is evaluated by comparing the current disparity ratio to a baseline disparity ratio. A lower disparity ratio is better, with a disparity ratio of 1 indicating no disparity.



In Louisiana, the preterm birth rate among black women is 51% higher than the rate among all other women.

DISPARITY RATIO:

1.34

CHANGE FROM BASELINE:

No Improvement

MORE INFORMATION

MARCHOFDIMES.ORG/REPORTCARD

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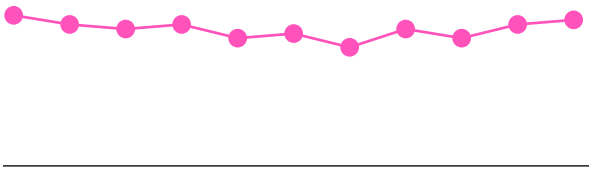

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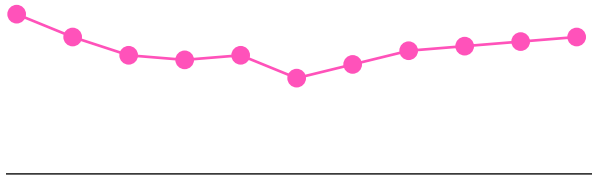

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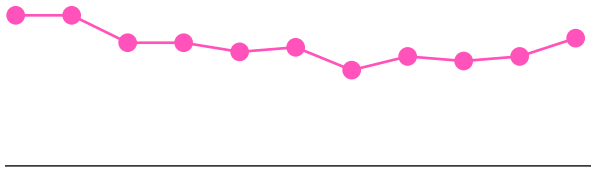

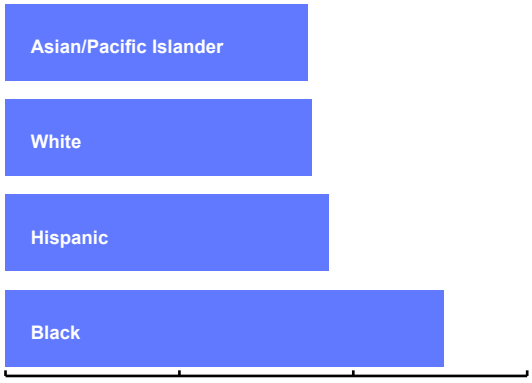

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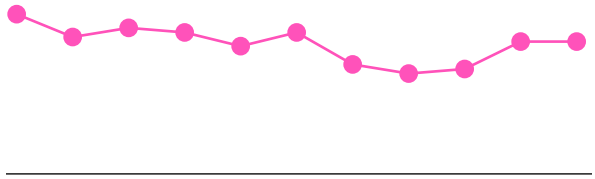

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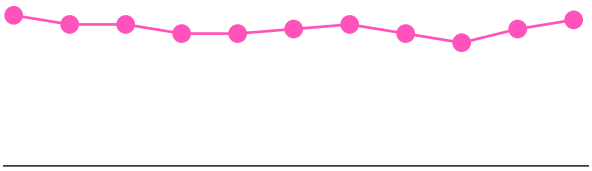

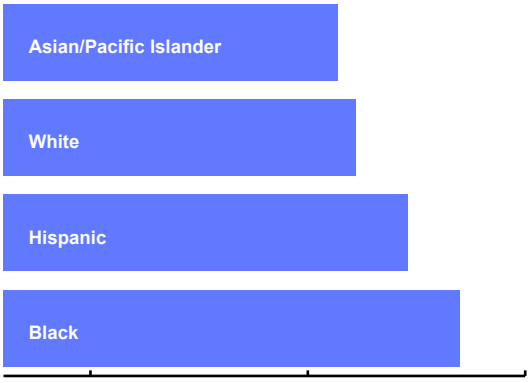

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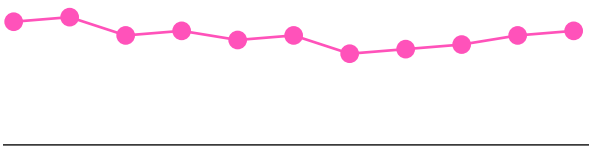

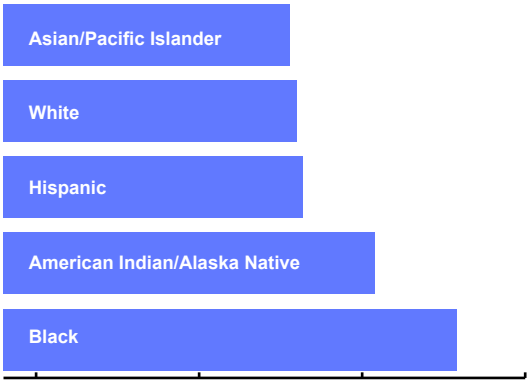

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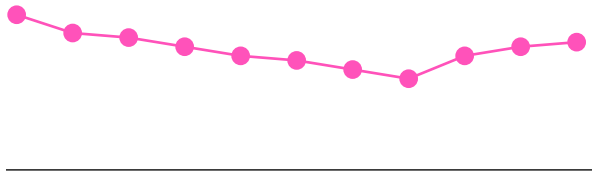

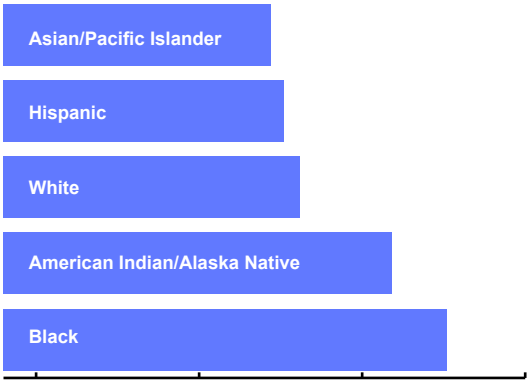

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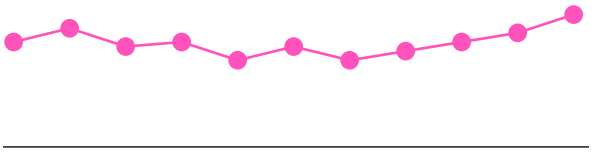

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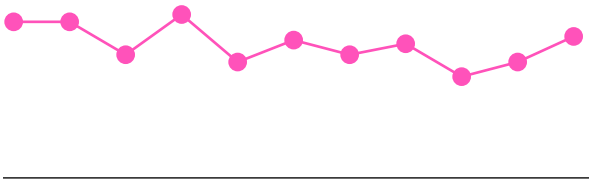

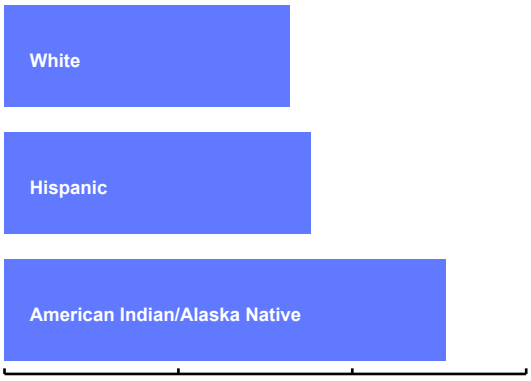

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MARCH OF DIMES

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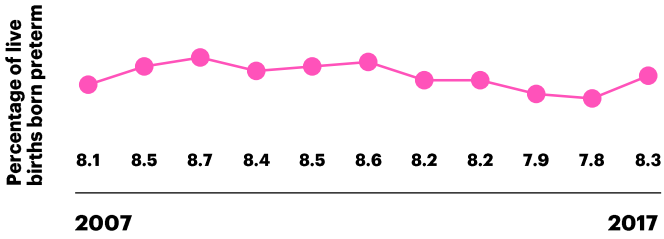
NEW HAMPSHIRE

GRADE

B

PRETERM BIRTH RATE

8.3%



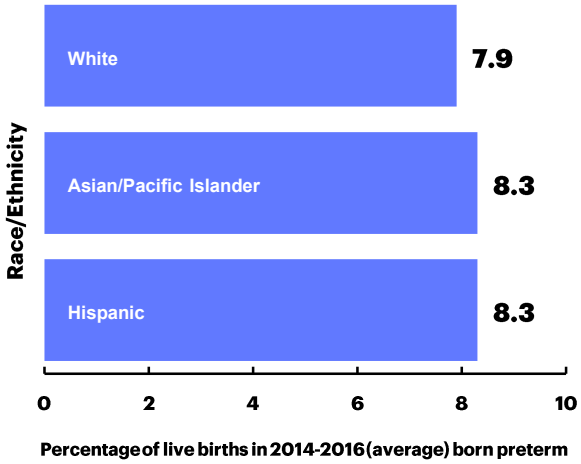
COUNTIES

Counties with the greatest number of births are graded based on their 2016 preterm birth rates.

COUNTY	GRADE	PRETERM BIRTH RATE	CHANGE FROM LAST YEAR
Cheshire	B	8.5%	Worsened
Grafton	A	6.3%	Improved
Hillsborough	A	8.0%	Worsened
Merrimack	A	7.1%	Improved
Rockingham	A	7.4%	No change
Strafford	B	8.6%	Worsened

RACE & ETHNICITY IN NEW HAMPSHIRE

The March of Dimes disparity ratio measures and tracks progress towards the elimination of racial/ethnic disparities in preterm birth. It is based on Healthy People 2020 methodology and compares the group with the lowest preterm birth rate to the average for all other groups. Progress is evaluated by comparing the current disparity ratio to a baseline disparity ratio. A lower disparity ratio is better, with a disparity ratio of 1 indicating no disparity.



In New Hampshire, the preterm birth rate among Asian/Pacific Islander and Hispanic women is 5% higher than the rate among all other women.

MORE INFORMATION

MARCHOFDIMES.ORG/REPORTCARD

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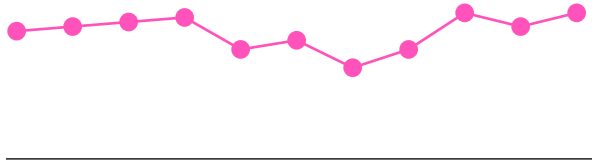

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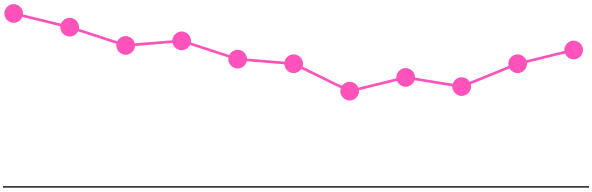

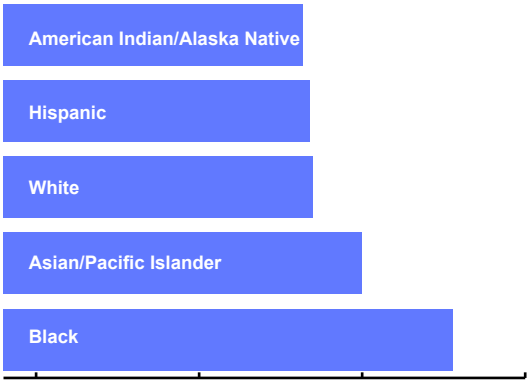

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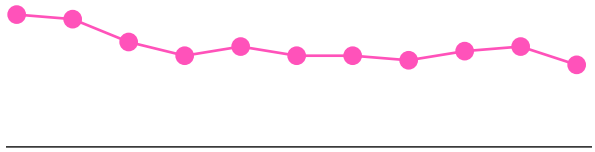

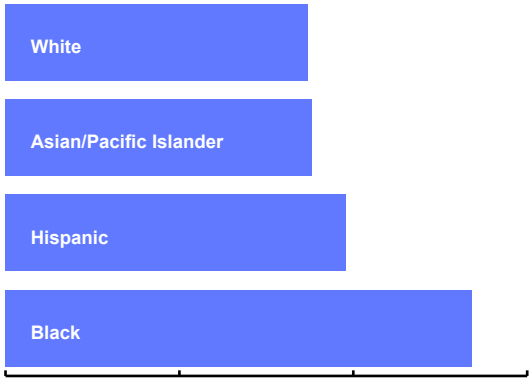

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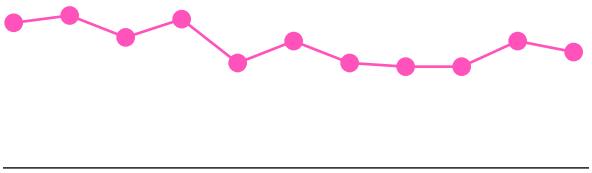

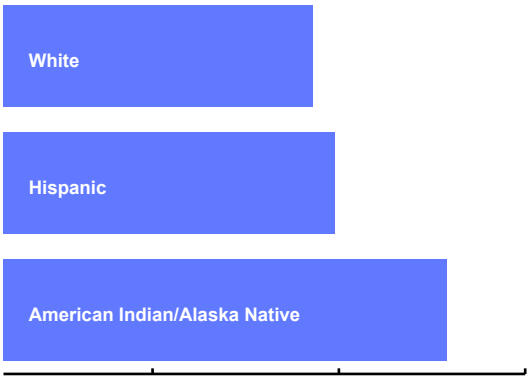

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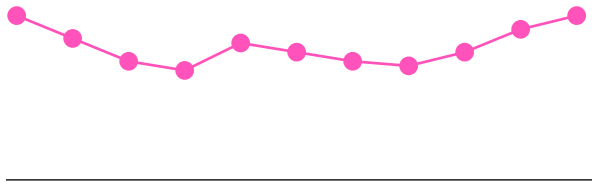

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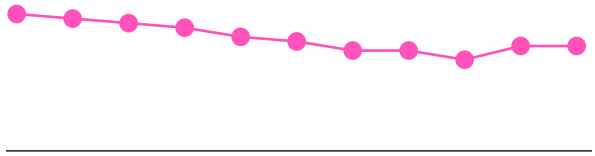

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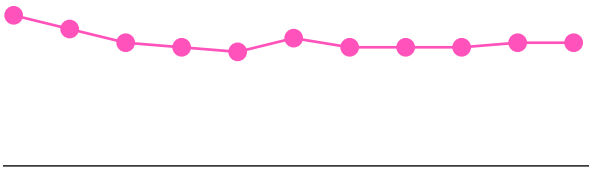

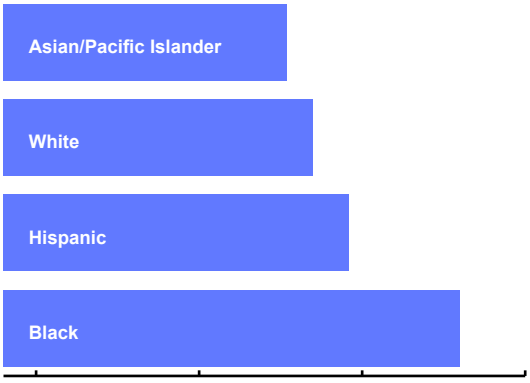

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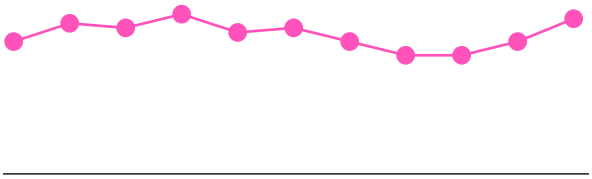

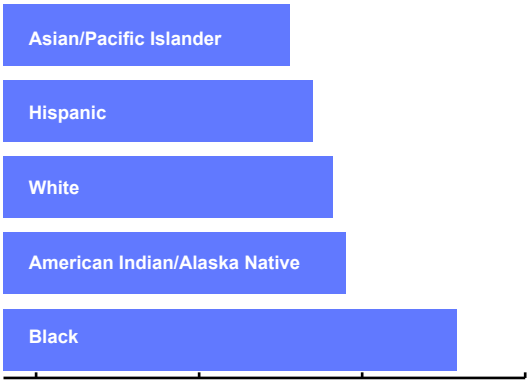

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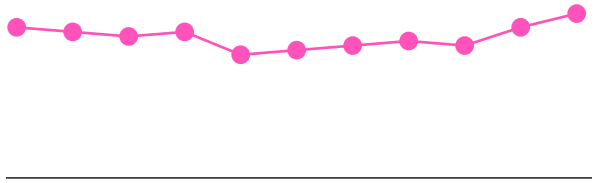

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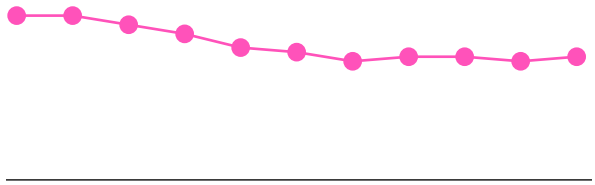

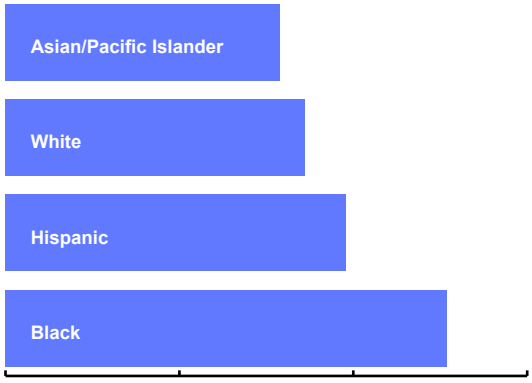

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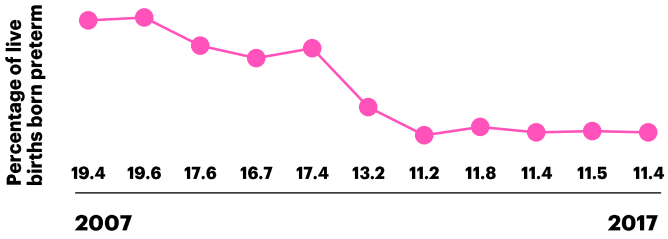
PUERTO RICO

GRADE

D

PRETERM BIRTH RATE

11.4%



MUNICIPALITIES

Municipalities with the greatest number of births are graded based on their 2016 preterm birth rates.

MUNICIPALITY	GRADE	PRETERM BIRTH RATE	CHANGE FROM LAST YEAR
Bayamón	F	11.9%	Worsened
Caguas	F	12.8%	Worsened
Carolina	C	9.8%	Improved
Ponce	F	11.9%	Worsened
San Juan	C	10.3%	Improved

MORE INFORMATION

MARCHOFDIMES.ORG/REPORTCARD

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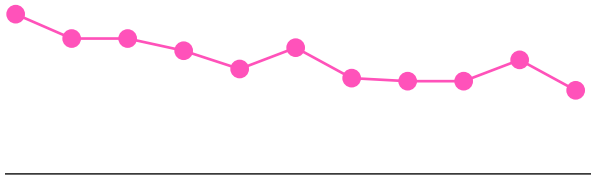

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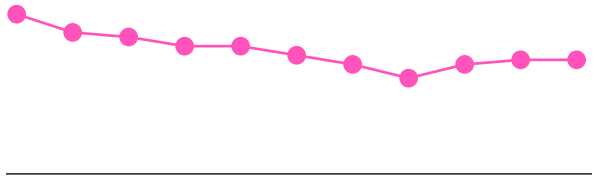

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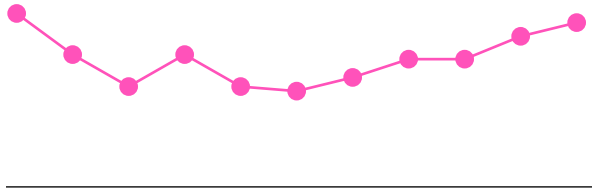

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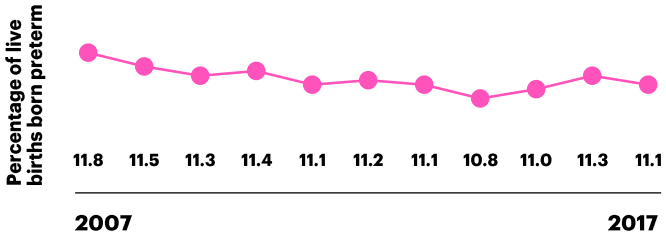
TENNESSEE

GRADE

D

PRETERM BIRTH RATE

11.1%



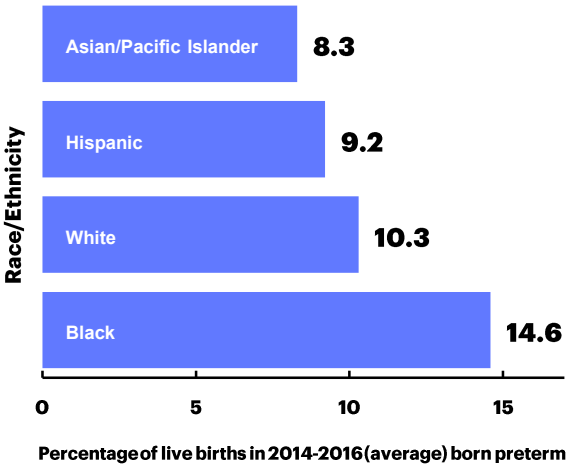
COUNTIES

Counties with the greatest number of births are graded based on their 2016 preterm birth rates.

COUNTY	GRADE	PRETERM BIRTH RATE		CHANGE BETWEEN 2007 AND 2016
		2016	2015	
Davidson	D	10.5%	10.4%	No change
Hamilton	F	12.1%	13.0%	Improved
Knox	C	9.8%	9.7%	Improved
Montgomery	C	9.6%	9.0%	No change
Rutherford	F	12.2%	10.5%	No change
Shelby	F	13.3%	12.6%	No change

RACE & ETHNICITY IN TENNESSEE

The March of Dimes disparity ratio measures and tracks progress towards the elimination of racial/ethnic disparities in preterm birth. It is based on Healthy People 2020 methodology and compares the group with the lowest preterm birth rate to the average for all other groups. Progress is evaluated by comparing the current disparity ratio to a baseline disparity ratio. A lower disparity ratio is better, with a disparity ratio of 1 indicating no disparity.



In Tennessee, the preterm birth rate among black women is 45% higher than the rate among all other women.

DISPARITY RATIO:

1.37

CHANGE FROM BASELINE:

No Improvement

MORE INFORMATION

MARCHOFDIMES.ORG/REPORTCARD

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MARCH OF DIMES

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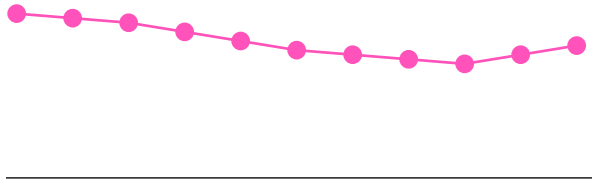

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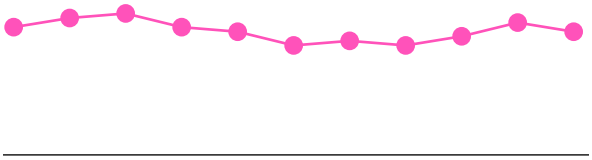

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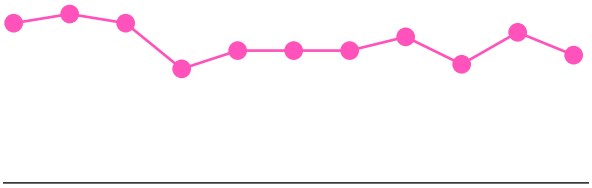

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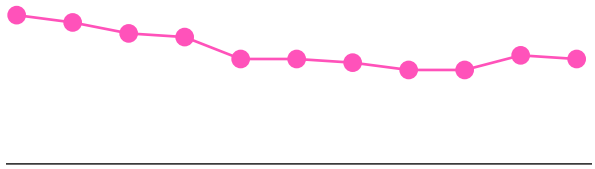

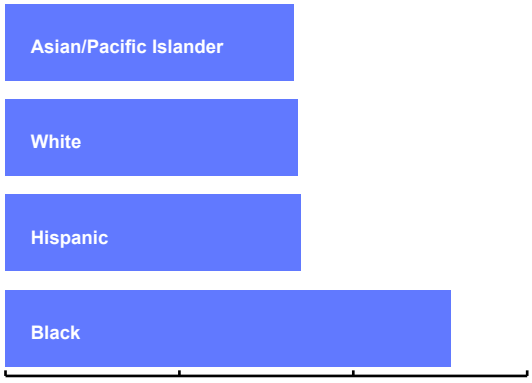

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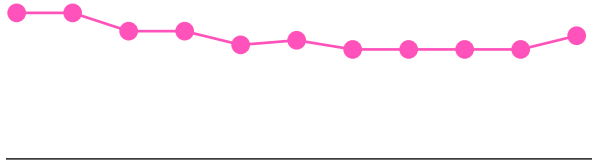

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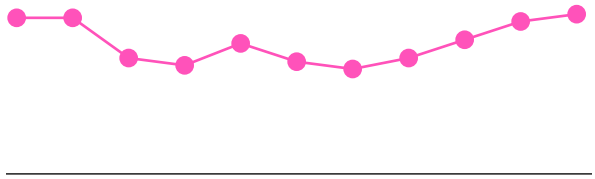

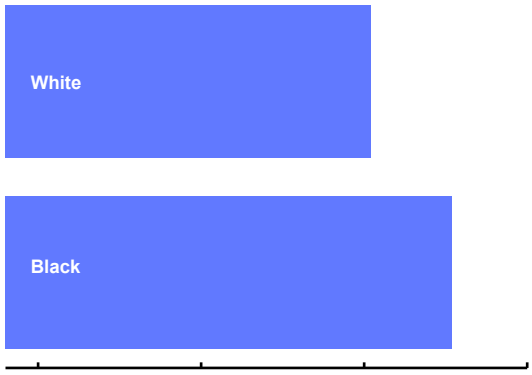

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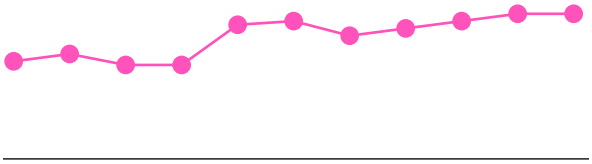

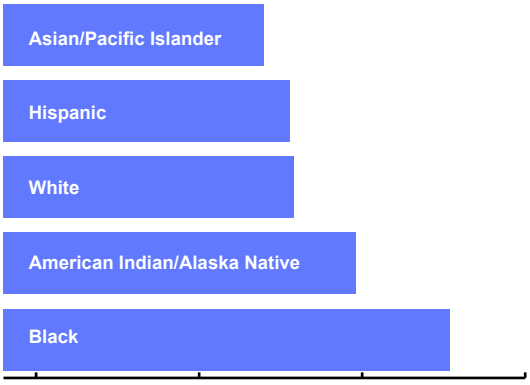

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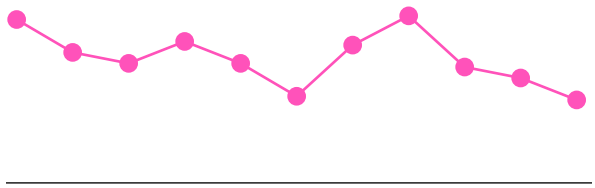

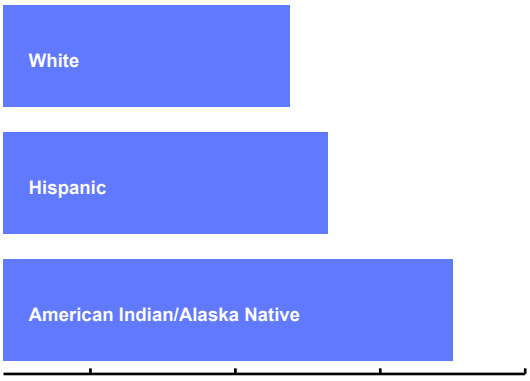

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