

Louisiana PRAMS

Surveillance Report 2019

Pregnancy Risk Assessment Monitoring System

KEY FINDINGS



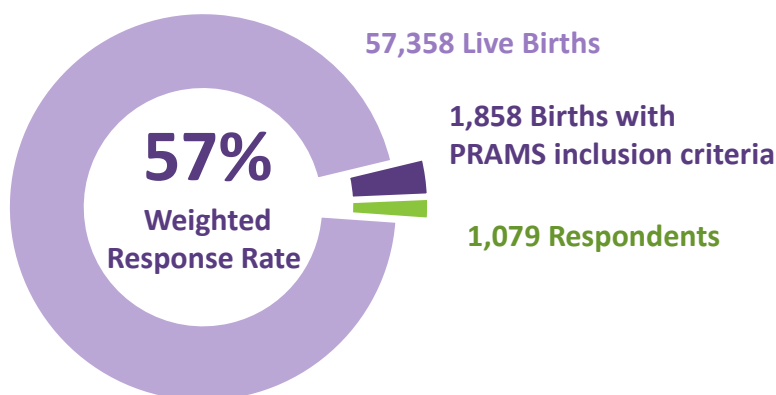
The Louisiana Pregnancy Risk Assessment Monitoring System (PRAMS) is a population-based survey of Louisiana resident women who deliver a live-born infant in the state within a given calendar year.

Since 1997, Louisiana PRAMS has provided vital information on women's behaviors and experiences before, during, and after pregnancy. Louisiana PRAMS data can guide program planners, healthcare providers, policy makers, and public health leaders when designing, implementing and evaluating programs and services relevant to women and infants in Louisiana.

The 2019 Louisiana PRAMS Surveillance Report highlights survey results for selected indicators and data for births occurring in 2019.

Louisiana PRAMS sample size and response rate

In 2019, there were 57,358 live births that satisfied the Louisiana PRAMS inclusion criteria, of which 1,858 were sampled. Of this sample, there were 1,079 respondents, resulting in a 57% overall weighted response rate.



More information and resources related to Louisiana PRAMS, including the 2019 questionnaire, can be found on the Partners for Family Health website: partnersforfamilyhealth.org/prams/.

Louisiana PRAMS is funded by the U.S. Centers for Disease Control and Prevention (CDC) under Cooperative Endeavor Agreement #U01 DP6227-04 and administered by the Louisiana Department of Health (LDH), Office of Public Health (OPH), Bureau of Family Health (BFH). More information about CDC PRAMS can be found at cdc.gov/prams/index.htm.

Gender Referencing

The Louisiana Pregnancy Risk Assessment Monitoring System strives to be inclusive of all birthing people and acknowledges that not all individuals who get pregnant or give birth identify as women. The use of terminology and language in this report is reflective of current research around behaviors and experiences before, during and after pregnancy. There is a need for increased awareness, medical assistance, and inclusion for individuals who do not identify as women in pregnancy and birth-related services.

Acknowledgements

Thank you to the women who shared their experiences so we could better understand the circumstances impacting the health status of mothers and infants in Louisiana.

Special thanks to the following contributors for their collaborative effort on this report:

Project Staff

Amy Zapata, M.P.H.: Title V Director

Jane Herwehe, M.P.H.: Data to Action Team Lead, PRAMS Principal Investigator

Dionka Pierce, M.P.H.: Data to Action Team Program Manager

Rosaria Trichilo, M.P.H.: Statewide Surveillance Manager

U. Vance, A.S.B.A.: Louisiana PRAMS Data Manager

Ana Dal Corso: Louisiana PRAMS Program Assistant

Elizabeth Gelvin: Louisiana PRAMS Program Assistant (2019)

Ayzsa Tannis, M.P.H.: Louisiana PRAMS Intern/Program Assistant (2019-2020)

Imani Evans, M.P.H.: GSEP Intern (2020)

Andrei Stefanescu, Ph.D., M.S.: MCH Epidemiologist

Danielle Broussard, Ph.D., M.P.H.: MCH Epidemiologist

Lyn Kieltyka, Ph.D., M.P.H.: Lead MCH Epidemiologist

Camille Teixeira, M.S.W, M.P.H.: Health Communications Specialist

Technical Support

U.S. Centers for Disease Control and Prevention (CDC)

We thank our national partners at the CDC's Division of Reproductive Health and the PRAMS team. We also acknowledge the Maternal and Child Health Epidemiology Program, Field Support Branch, Division of Reproductive Health, National Center for Chronic Disease Prevention and Public Health Promotion for contribution to this report.

Louisiana Department of Health, Office of Public Health

- Federal Title V Maternal and Child Health (MCH) Services Block Grant Program administered by the Bureau of Family Health
- Bureau of Family Health Data to Action Team
- Bureau of Family Health Communications Team
- Louisiana Vital Records and Statistics

PRAMS Moms Say Thank You!

“Thanks for choosing me to participate in your survey. I hope my answers help.”
- 2017 PRAMS Mom

“Thank you so much for conducting this research and outreach!”
- 2018 PRAMS Mom

“What you guys are doing -- you're helping people to have a better experience down the road, and that's pretty cool..”
- 2019 PRAMS Mom

“I hope my information helps . . . Thanks for the gift card!”
- 2018 PRAMS Mom

“Thank you for working to keep babies healthy in Louisiana.”
- 2016 PRAMS Mom

“Well for the most of everything it's not an easy thing, but its the best thing that a mother can experience is having a baby. Watching them grow every day is wonderful. But take it one day at a time and don't be afraid to ask for help or anything cause everyone cares for you and the baby you have or giving life to. Congrats to anyone and everyone and never forget love your baby. Thank you for all the support, help and love.”
- 2016 PRAMS Mom

“I'm glad y'all are trying to get the most info to have research to find answers for something that matters.”
- 2017 PRAMS Mom

**LOUISIANA
PRAMS**



Table of Contents

Executive Summary.....	5
Methodology.....	6-7
Maternal Demographics.....	8
Insurance.....	9
Preconception Health.....	10
Family Planning.....	11-12
Prior to Pregnancy.....	11
Postpartum.....	12
Prenatal Care.....	13-14
Initiation of Prenatal Care and Barriers to Care.....	13
Adequacy of Prenatal Care and Patient-Provider Dialogue.....	14
Prenatal Risk Factors	15
Maternity Leave.....	16-18
Maternal Tobacco Use	19
Maternal Drug and Alcohol Use.....	20
Maternal Drug & Opioid Use.....	21
Stressors & Discrimination.....	22
Intimate Partner Violence (IPV)	23
Breastfeeding.....	24-25
Breastfeeding Preparation, Initiation and Duration.....	24
Hospital Experiences.....	25
Infant Sleep Environment.....	26
Postpartum Depressive Symptoms.....	27
Maternal Disability.....	28
Appendices: Overview.....	29
Appendix A: Key Variables for Subgroup Analyses.....	30
Appendix B: Trends 2017-2019.....	31-32
Appendix C: Subgroup Analyses.....	33-40
Appendix D: Response Rates.....	41

Executive Summary

About Louisiana PRAMS

The goal of the Louisiana Pregnancy Risk Assessment Monitoring System (PRAMS) is to reduce infant and maternal morbidity and mortality by informing maternal and child health programs and policies designed to support healthy maternal behaviors. Louisiana PRAMS works toward this goal by: collecting high-quality population-based data, analyzing maternal behaviors and experiences and their relationship to health outcomes, and translating those data and analyses into information that can be used to guide and evaluate health programs and policies.

The Louisiana Department of Health (LDH), Office of Public Health (OPH), Bureau of Family Health (BFH), administers Louisiana PRAMS in conjunction with the U.S. Centers for Disease Control and Prevention (CDC). PRAMS collects state-specific, population-based data on maternal attitudes, behaviors and experiences around the time of pregnancy and childbirth, and is linked to Louisiana Vital Records birth data files.

Key Findings

Louisiana PRAMS sampled about 3% of the roughly 60,000 births in Louisiana in 2019. Each month, a stratified random sample of approximately 150 live births is selected. In 2019, 1,858 mothers were sampled and 1,079 (57%) responded. Key findings from frequently-requested data are highlighted below.

Family Planning:

- **53%** of women in Louisiana **did not intend to become pregnant or were unsure** if they wanted to become pregnant. **65%** of the women who were not trying to get pregnant **reported not doing anything to prevent a pregnancy**.
- Among women who reported **not using any contraceptive methods** to prevent an unintended pregnancy, the most common reasons were: **I thought I couldn't get pregnant at the time (34%), I didn't mind if I got pregnant (28%), and my partner did not want to use anything (17%)**.

Prenatal Care:

- **91%** of women reported they **received prenatal care during their first trimester**. **8%** of mothers began prenatal care after their first trimester and **<1%** of mothers reported **not receiving any prenatal care** during their pregnancy.
- The most commonly-reported **barriers to receiving prenatal care** as early as desired were: **couldn't get an appointment when desired (43%), not knowing they were pregnant (37%), not having a Medicaid card (26%), and not having a doctor or insurance plan that would start prenatal care when they wanted it (23%)**.

Tobacco and Alcohol Use During Pregnancy:

- **14%** of women reported that they were **currently smoking cigarettes** (at the time of the survey). **8%** of women reported that they **smoked cigarettes during the last three months of pregnancy**.
- **7%** of women reported they **consumed at least one alcoholic drink during the last three months of pregnancy**.

Breastfeeding and Infant Care:

- **75%** of women **breastfed or fed pumped milk** to their new baby **at least once**. **69%** of women who breastfed reported **breastfeeding for 8 weeks or more**.
- **69%** of women reported that their **new baby is placed to sleep most often on their back**.

This report contains more information on a variety of population health topics related to pregnancy. It is intended to guide maternal and child health resource distribution, policy and programs; as well as educate healthcare providers and the public.

Methodology

Sampling and Data Collection

Women are selected to participate in PRAMS from Louisiana's Vital Records birth certificate files. To participate in Louisiana PRAMS, mothers must be Louisiana residents who gave birth to a live-born infant in the state. Each month, a stratified random sample of approximately 150 live births is selected.

In 2019, the sampling stratum used was race, as well as a stratum that consisted of an oversample of four parishes identified as higher risk of exposure to opioid use— Orleans, Jefferson, St. Tammany, and East Baton Rouge. Parishes for this oversample were identified as high-risk areas using relevant data sources such as reported overdose hospitalizations, high rates of opioid related death, and Neonatal Opioid Withdrawal Syndrome (NOWS) and substance exposed infants (ICD-9 and ICD-10) using Louisiana Opioid Data and Surveillance System data.

As part of a national effort to collect data on opioid use during pregnancy, Louisiana PRAMS participated in the Opioid Supplement in conjunction with CDC PRAMS. In addition, Louisiana PRAMS also conducted an Opioid Callback Survey (OCBS). The OCBS utilized new methodology for PRAMS by contacting mothers again at 9 months postpartum to collect data on substance use, maternal and infant health, and sociodemographic variables. All core survey participants were contacted to take part in the OCBS portion regardless of reported opioid use or residence in one of the oversampled parishes. Six months of data from the Opioid Supplement and five months of data from the OCBS were included in the 2019 data. Strata were used in the following arrangement:

- African American,* opioid oversample parishes
- Non-African American, opioid oversample parishes
- African American, all other parishes
- Non-African American, all other parishes

Each monthly sample follows a 90-day cycle of scheduled contact attempts by mail, then telephone. The day after the sample is selected, an introductory letter is mailed. Within seven days of that, an initial questionnaire packet is mailed to the sampled moms. The packet contains the questionnaire, an informed consent document, a calendar to serve as a reference for survey respondents when asked about their experiences in the past year, a Louisiana PRAMS informational page, and a small incentive gift provided by federal funds.

If the questionnaire is not returned, a reminder letter is sent 7 to 10 days after the initial questionnaire is mailed, and a second questionnaire is mailed approximately 12 days after the reminder letter. If the second questionnaire is not returned, a third and final questionnaire is mailed approximately 2 weeks after the second questionnaire. Telephone follow-up is used for women who have not responded by mail by day 63, and continues until day 90. Several methods are used to identify phone numbers for women who require telephone follow up, and a maximum of 15 attempts are made using each identified phone number before the participant is considered unreachable.

More detailed information on PRAMS methodology, including weighting procedures, can be found on the [CDC PRAMS webpage](#).

*Note: African American and Black are both used within this report to reflect terms that were used in original documentation and data collection. Although sampling was conducted without regard to ethnicity, Louisiana PRAMS data can be reported as: Non-Hispanic White, Non-Hispanic Black, Hispanic, and Non-Hispanic Other Race.

Program Funding

Louisiana PRAMS is funded by the CDC under Cooperative Endeavor Agreement #U01 DP6227 – 04.

Methodology Continued

Data Analysis and Dissemination

Each year, Louisiana PRAMS develops a state analysis plan. In 2019, this plan was based on the following:

- Healthy People 2020 goals and objectives related to maternal and child health
- Expressed analytic needs of the Bureau of Family Health (BFH)
- Guidance provided by the Louisiana PRAMS Steering Committee.

The Steering Committee is comprised of internal BFH staff and external stakeholders who have an interest in using PRAMS data for maternal and child purposes. The state analysis plan is ultimately approved by the BFH Senior Management Team and the Louisiana PRAMS Coordinator.

Data dissemination occurs on a statewide and national basis. Current dissemination activities include presentations at national meetings, scientific publications, and data factsheets. The Louisiana PRAMS Surveillance Report is an annual publication of Louisiana PRAMS, presenting detailed results of data analysis for the most recent year of available data. Louisiana PRAMS data reports, which do not include additional analysis or interpretation, are also available on an annual basis. Additional data analyses are available by request, and are provided on a case-by-case basis.

Louisiana PRAMS Response Rates

Louisiana PRAMS data are weighted to be reflective of all Louisiana mothers delivering a live-born singleton (single infant), twin, or triplet in Louisiana. The CDC recommends a weighted response rate of at least 55% for data to be considered representative of the population. Louisiana's 2019 weighted response rate was 57% and successfully met this threshold.

Maternal Demographics

Louisiana differs from many U.S. states in its demographic and socioeconomic profile.

In 2019, 37% of all Louisiana resident births were to Non-Hispanic Black mothers, compared with 13% nationally. Forty-eight percent of births were to mothers with a high school degree or lower, compared with 38% nationally. Forty-four percent of Louisiana PRAMS respondents in 2019 were married, compared to 60% nationally. Lastly, in close alignment with national trends, 98% of Louisiana mothers delivered singleton births (single infants, as opposed to twins or triplets), as compared to 97% of mothers nationally (Louisiana data: Louisiana PRAMS, 2019; National data: National Vital Statistics Reports, 2021).

More than 1 in 3 Louisiana mothers (35%) live in homes with a yearly household income of \$16,000 or less.

\$0-16,000	\$16,001-32,000	\$32,001-60k	\$60,001-85k	\$85,001+
35%	20%	14%	12%	19%

44%

of Louisiana mothers are **WIC participants**



The **Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)** provides supplemental foods, healthcare referrals and nutritional counseling for low-income pregnant and breastfeeding women, infants and children up to age 5. To be WIC eligible, the family income must be at or below 185% of the Federal poverty level (**\$46,435 or below** for a family of four).

52%

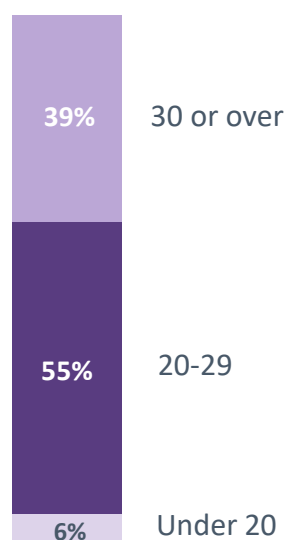
of Louisiana mothers have completed some education beyond high school



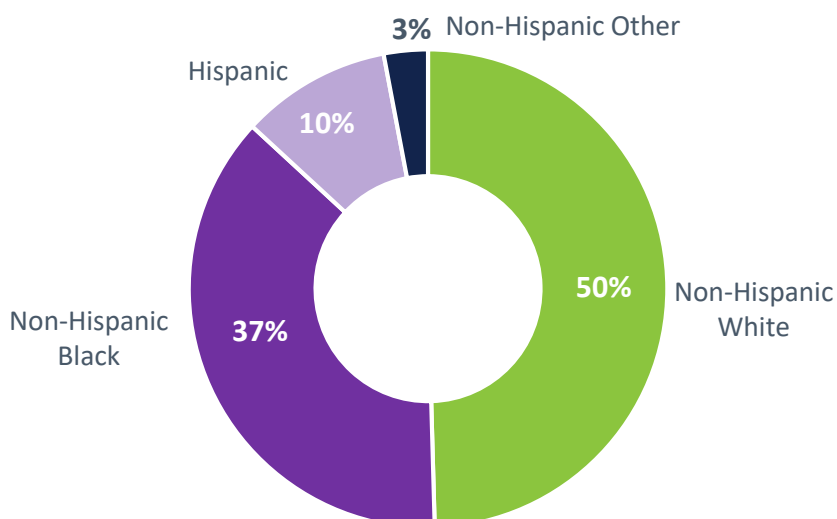
34% are high school graduates/GED

14% have less than a high school education

Over half (55%) of Louisiana mothers are in their 20s



Most Louisiana mothers are Non-Hispanic White & Non-Hispanic Black

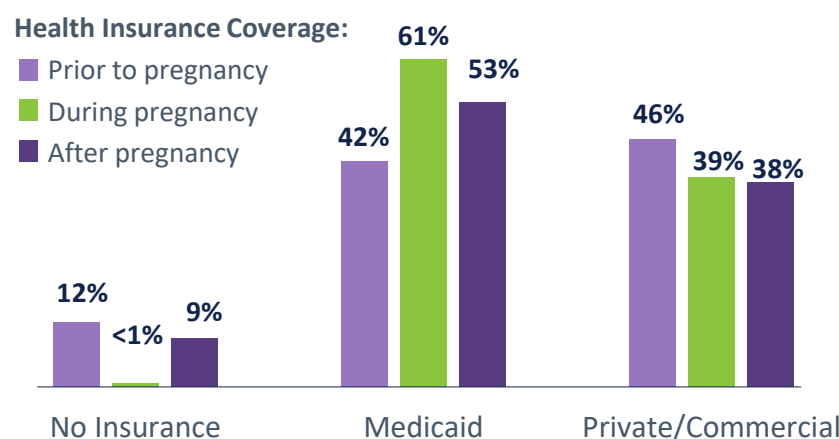


Insurance

Adequate insurance coverage is essential for women to receive high-quality prenatal and delivery care to support maternal and infant health.

As of 2014, the Affordable Care Act made health insurance for pregnancy, labor, delivery and newborn care mandatory. On June 1, 2016, Louisiana residents with incomes up to 138% of the federal poverty level became eligible to enroll in the state's expanded Medicaid program. In 2019, Medicaid provided prenatal coverage for 56% of Louisiana women, compared with 42% nationally (Louisiana PRAMS, 2019; National Vital Statistics Reports, 2021).

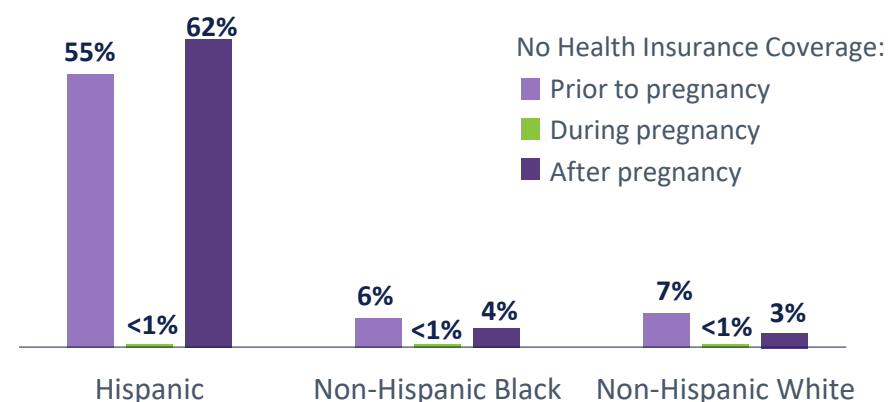
Less than 1% of mothers were uninsured during pregnancy



“Insurance companies make it difficult for people, like myself, to seek medical care. It was extremely difficult to find out how much pre-natal visits would cost with insurance.”
- 2019 PRAMS Mom

Racial disparities* among uninsured populations

*Denominator is the total number of births in each racial group



Hispanic women in Louisiana were **the most likely to be uninsured**.

While almost all Hispanic women had some form of insurance during pregnancy, **56% were uninsured prior to pregnancy and 62% were uninsured after pregnancy**.

Public Health Implications

While Medicaid covers over half of Louisiana births prenatally, fewer mothers had postpartum insurance coverage. Additionally, fewer Hispanic women have access to insurance coverage both prior to and after pregnancy as compared to non-Hispanic women.

Continuous access to health insurance and healthcare for women could improve maternal and infant health by providing opportunities to manage or treat conditions before, during and between pregnancies (Health Affairs, 2021).

Preconception Health

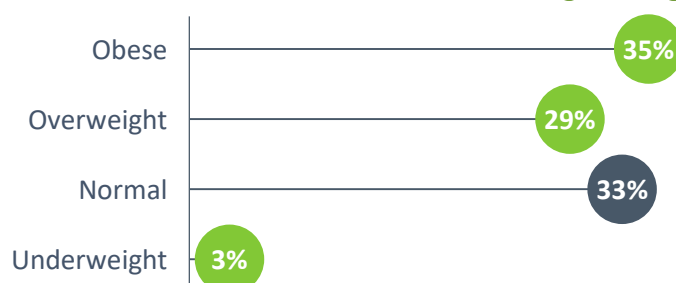
Driving factors behind preterm birth, low birth weight, and infant mortality are linked to poor maternal health status at the time of conception. Poor preconception health, pre-pregnancy weight, pre-pregnancy medical conditions (including diabetes and hypertension), and lack of interconception care are linked to adverse birth outcomes. According to [AmericasHealthRankings.org](https://americashealthrankings.org), in 2019, Louisiana ranked 47th in the nation for diabetes, 47th for obesity, and 49th for overall health.



Healthy People 2020 Goal: Increase the proportion of women delivering a live birth who took multivitamins/folic acid every day in the month prior to pregnancy.

- Healthy People 2020 target: 33.3%
- 2019 Louisiana status: 28.2%

Prior to pregnancy, the majority of women (67%) had BMIs* **outside of the normal weight range**



*Weight criteria based on national Body Mass Index (BMI) categories and calculated from self-reported height and weight before pregnancy on PRAMS Survey

Pre-pregnancy Conditions



16% had depression



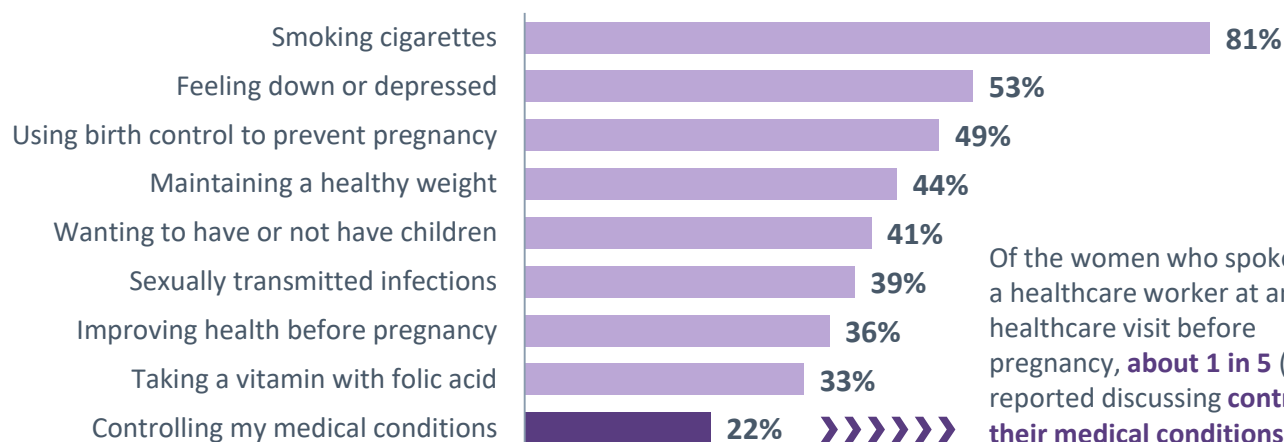
7% had high blood pressure



3% had diabetes

Topics discussed with a healthcare worker during any visit before pregnancy

Healthcare workers can support better birth outcomes by helping women manage chronic conditions throughout their lives.



Of the women who spoke to a healthcare worker at any healthcare visit before pregnancy, **about 1 in 5 (22%)** reported discussing **controlling their medical conditions**.

Public Health Implications

Maternal and Child Health programs seeking to improve preconception health and birth outcomes may benefit from focusing on improving women's overall health and preventing chronic disease. Furthermore, health and wellness programming should not necessarily be guided by pregnancy intention, as half of pregnancies in Louisiana are unplanned (Louisiana PRAMS, 2019).

Family Planning: Prior to Pregnancy

Fifty-three percent of new mothers in Louisiana were unsure if they wanted to become pregnant or did not intend to become pregnant (Louisiana PRAMS, 2019).

When compared to intended pregnancies, unintended pregnancies are associated with negative behavioral and health outcomes such as late initiation of prenatal care, lower rates of breastfeeding, maternal depression during and after pregnancy, and low birth weight (Journal of Women's Health, 2021; Guttmacher Institute, 2016).

In Louisiana, 65% of women who were not trying to become pregnant were also not using any form of contraception when they became pregnant (Louisiana PRAMS, 2019). Providing contraception and counseling around family planning improves maternal and infant health outcomes by helping people achieve their desired family size while maintaining healthy birth spacing.

About half (47%) of mothers **intended** to become pregnant

Unsure:
Mother wasn't sure what she wanted

22%

Unintended: Mother wanted to be pregnant later or never

31%

Intended:
Mother wanted to be pregnant sooner or then

47%

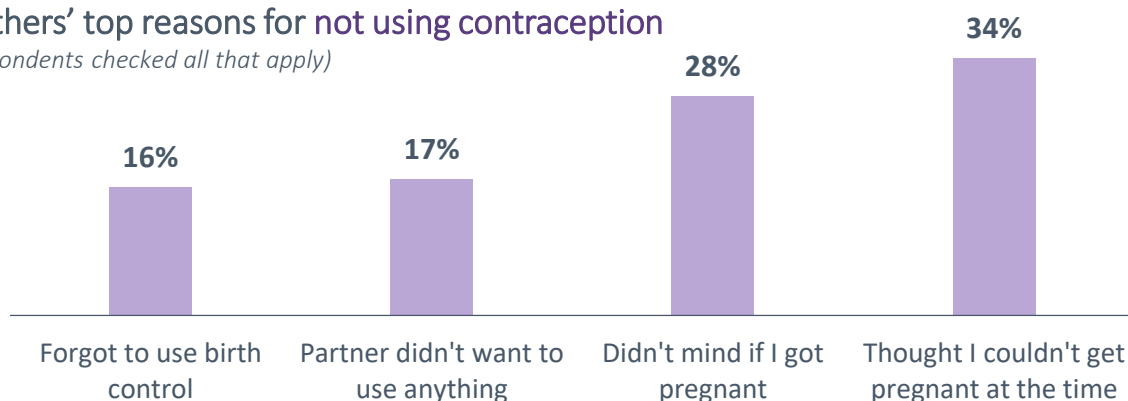
"I wasn't sure at first if I wanted to have the baby, but when I did have him, I was so happy and in tears."
- 2019 PRAMS Mom

Among women who were not trying to get pregnant, nearly **2 out of 3** (65%) reported that they **did not use any form of contraception** prior to pregnancy



Mothers' top reasons for not using contraception

(Respondents checked all that apply)



Family Planning: Postpartum



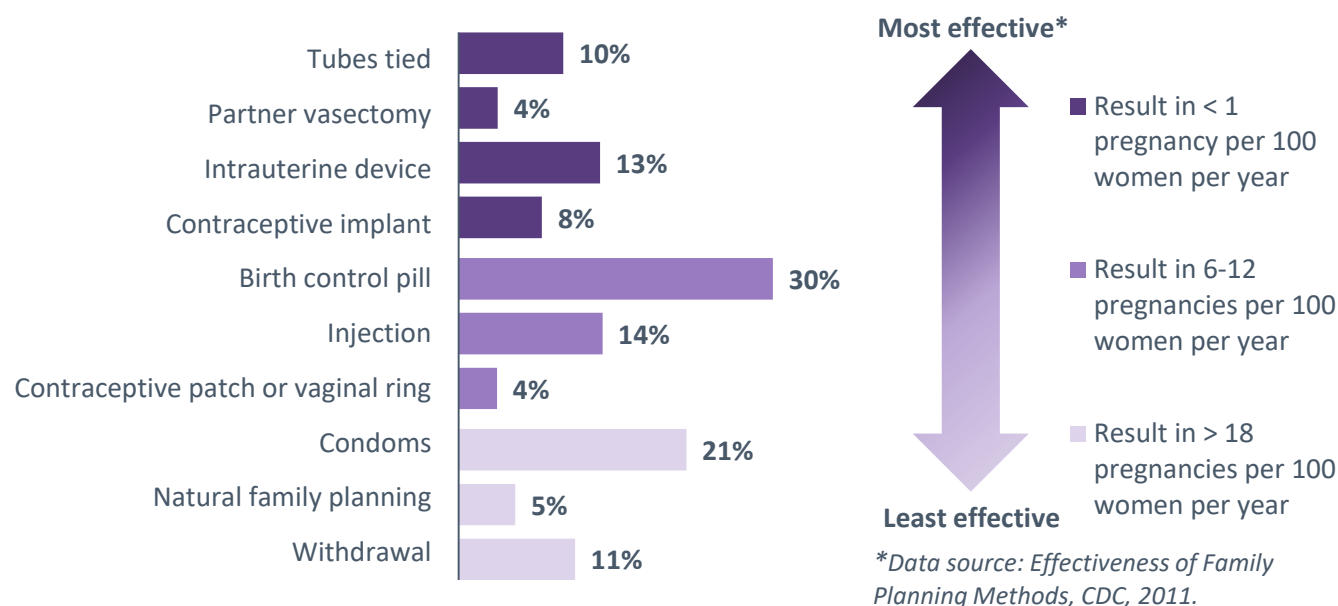
Healthy People 2020 Goal: Increase the proportion of women delivering a live birth who used contraception postpartum to plan their next pregnancy.

- Healthy People 2020 target: **97.5%**
- 2019 Louisiana status: **73.7%**



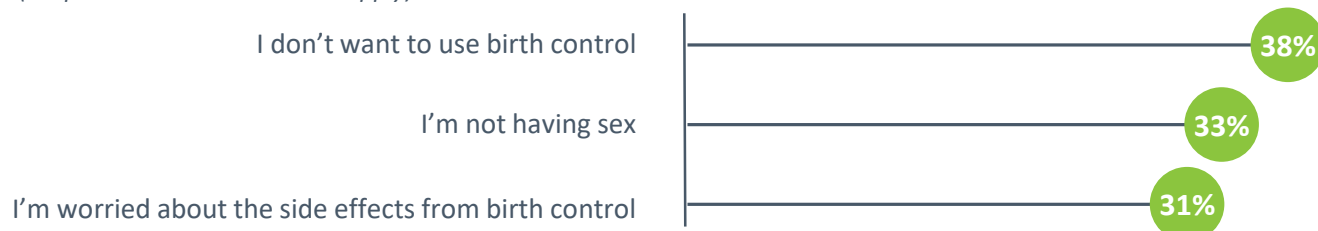
Almost 3 out of 4 mothers (74%) used contraception postpartum

Contraception methods used by Louisiana mothers postpartum and methods' effectiveness (respondents checked all that apply)



Top three reasons reported for **not using contraception** after having the baby

(Respondents checked all that apply)



Public Health Implications

The above data highlights opportunities to improve family planning programs and services. When developing educational materials and clinical guidelines, family planning and reproductive health programs may benefit from examining commonly-cited barriers to contraception use.

As previously mentioned, the top barriers prior to pregnancy included women not minding if they got pregnant, as well as their belief that they could not get pregnant. This could potentially be addressed through health education, regular reproductive healthcare, and provider counseling on the full range of contraceptive methods to help women determine their best-fit method, based on their values, lifestyle and family planning goals.

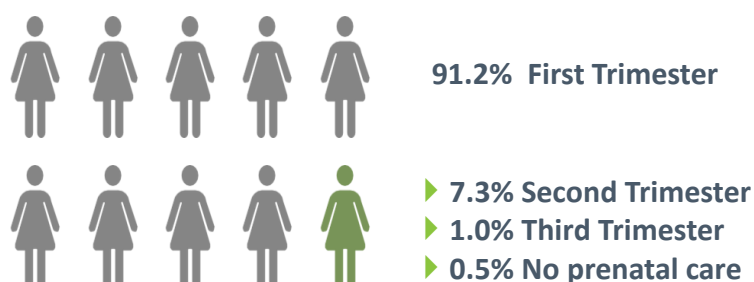
Prenatal Care

Healthy People 2020 Goal: Increase the proportion of pregnant women who receive early and adequate prenatal care.

In order to be early, prenatal care must begin in the first trimester, and in order to be adequate, it must begin by the fourth month of pregnancy. Consistent prenatal care that begins early in pregnancy can lead to improved health outcomes for mothers and infants through because it allows for timely assessment of risk factors (both genetic and behavioral), provision of health education, and treatment or management of chronic and pregnancy-associated conditions.

Almost **1 in 10 (10%)** Louisiana mothers do not receive prenatal care in the **first trimester**

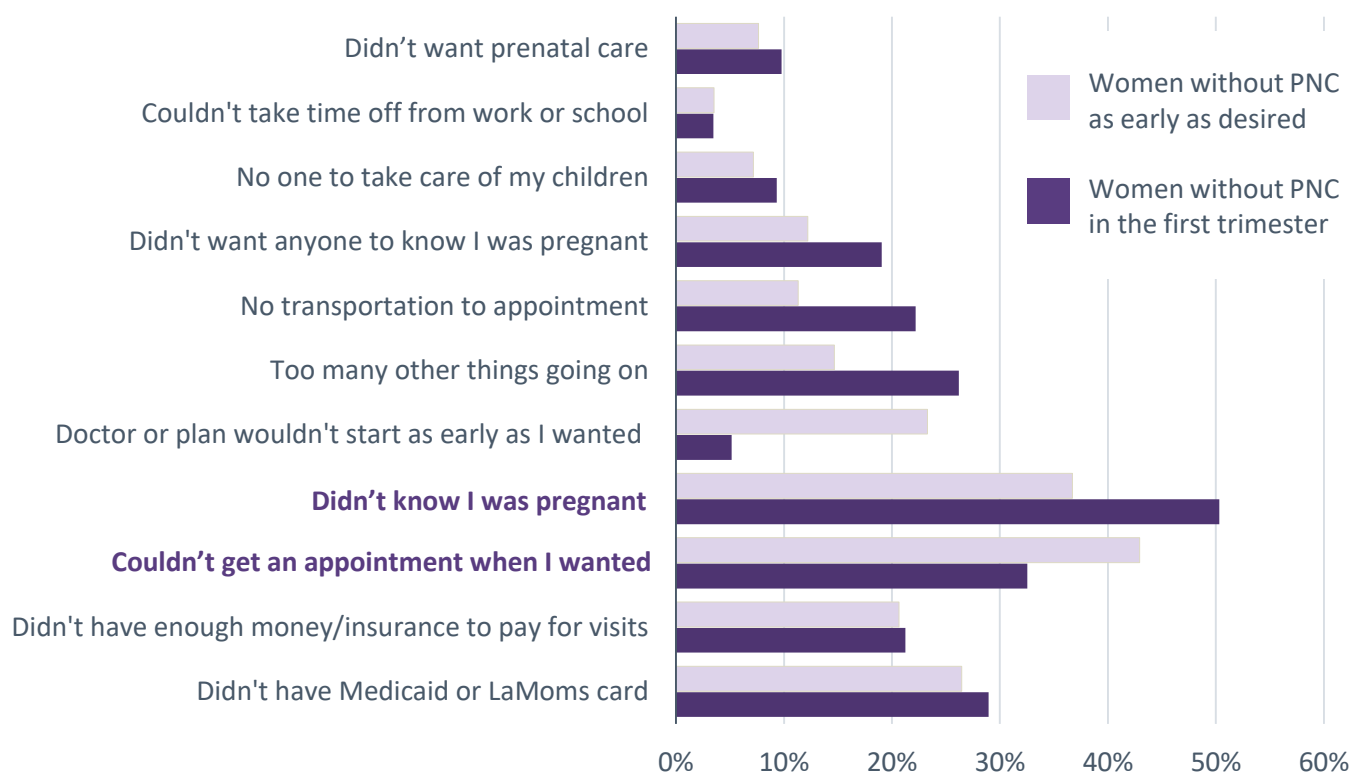
Timing of entry into prenatal care:



“Fortunately, I had an outstanding doctor. I was lucky to have her, family, friends, and a partner who were all loving and incredibly supportive. I spent approximately the first 6 months nauseated, vomiting, and feeling generally unwell despite using prescriptions for nausea.”
- 2019 PRAMS Mom

The top two factors preventing women from getting early prenatal care were: **not knowing they were pregnant & inability to get an appointment when desired**

All reported barriers to early prenatal care (PNC):



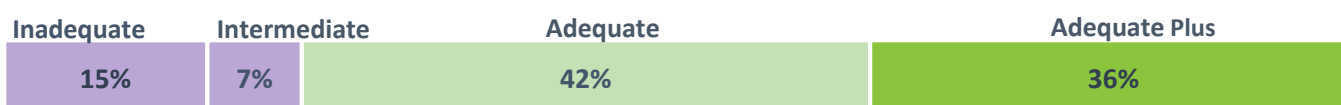


Prenatal Care – Part 2

Nearly 1 in 4 women (22%) received **less than adequate** prenatal care

Adequacy of Prenatal Care Utilization Index (Kotelchuck Index) scores two elements:
(1) timing of initial prenatal care visit, and (2) number of prenatal visits from initiation until delivery.

The index defines **less than adequate** prenatal care as having **received fewer than 80% of the recommended prenatal visits** for gestational age based on standards set by the American Congress of Obstetricians and Gynecologists. **“Less than adequate” includes both “inadequate” and “intermediate” responses.** It is important to note that this index does not measure quality of care. Additionally, women who experience high risk pregnancies require more prenatal care visits. It is possible that women with greater health needs (high risk pregnancies) make up a greater proportion of the “adequate plus” category.



“My pre-eclampsia was discovered after I continued to advocate for testing. It was not caught at a regular appointment and would not have been if I had not been monitoring my pressure at home and asked for blood work.”
-2019 PRAMS Mom

Conditions during pregnancy



18% had **high blood pressure, pre-eclampsia or eclampsia** which are among the **top underlying causes of pregnancy-related deaths** in Louisiana (Louisiana PAMR 2017)

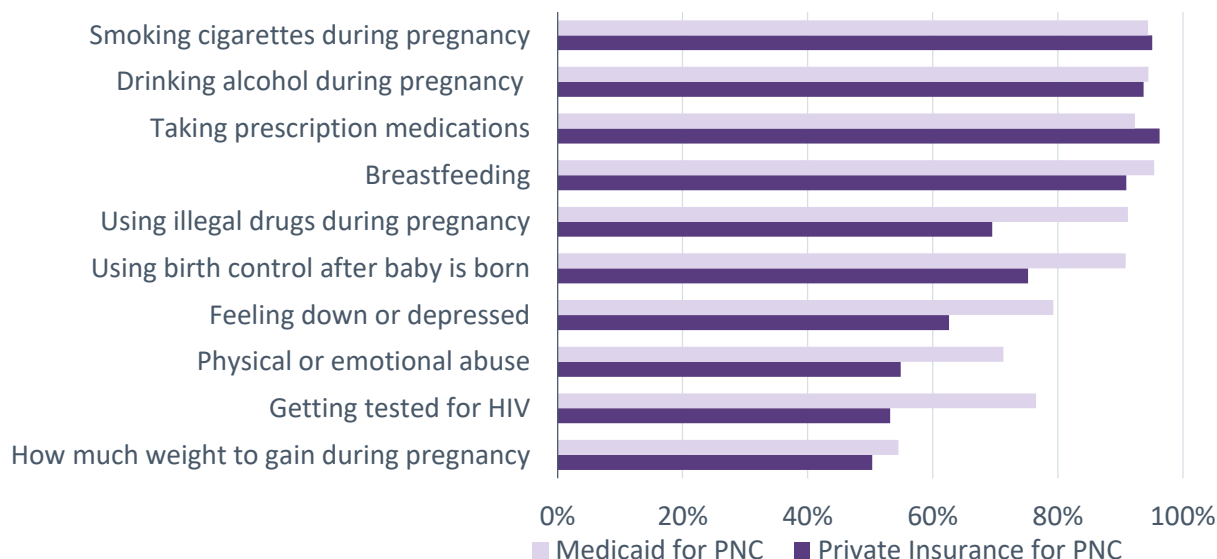


15% had depression



8% had gestational diabetes

Louisiana mothers with **Medicaid** reported discussing various topics with a doctor during prenatal care **more frequently** than mothers with private/commercial insurance

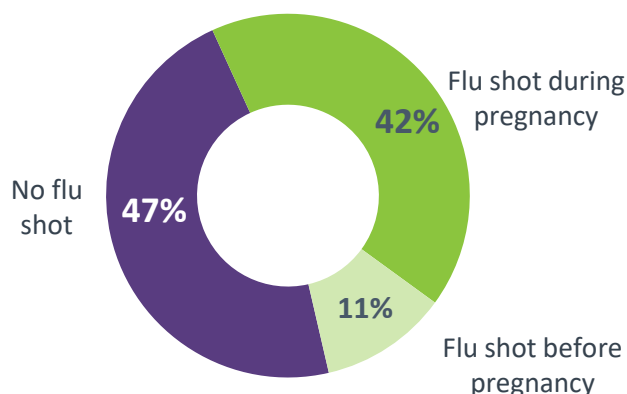


Prenatal Risk Factors

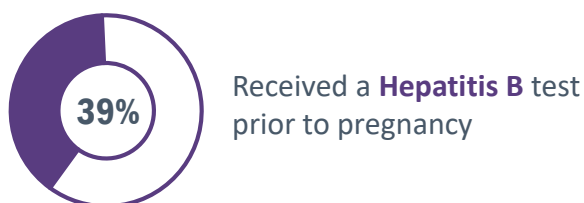
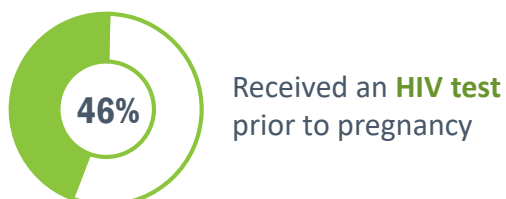
Certain medical factors, including viruses and previous adverse birth outcomes, increase the risk of health complications during pregnancy. It is recommended that all pregnant women receive a flu shot, as flu is more likely to cause severe illness in pregnant women than in women who are not pregnant (CDC, 2018).

The American College of Obstetrics and Gynecology (ACOG) recommends certain routine blood tests be included in prenatal care to detect infections and other conditions in pregnancy, including tests for HIV and Hepatitis B.

47% of mothers did not receive a flu shot before or during their most recent delivery

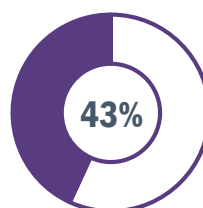


Less than half of mothers were tested for HIV (46%) or Hepatitis B (39%) prior to pregnancy

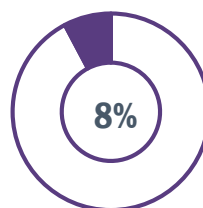


About 2 out of 5 (43%) mothers who had a prior preterm birth received 17P injections during pregnancy

17P, also called progesterone, Makena® or 17 alpha-hydroxyprogesterone, is a series of weekly injections administered to prevent preterm birth. The findings below are based on PRAMS participant recall and self-report, not medical records or birth certificate data.



About 2 in 5 mothers who had a prior preterm birth received 17P



1 in 12 (8%) mothers who did not have a prior preterm birth received 17P

“My doctor wanted to use progesterone because my first 2 pregnancies resulted in my babies being born 6 weeks early & my hospitalization before that, even though my 3rd pregnancy went full term with no issues.”
-2019 PRAMS Mom

Public Health Implications

It is important that women know if they have an infection or are at increased risk for preterm birth so they can receive necessary special care during pregnancy and delivery. Increased patient-provider dialogue during prenatal care visits may help pregnant women and their care providers determine what steps should be taken to ensure the health and safety of both mother and baby.

Additionally, all women should be made aware of common risk factors, including influenza. In 2019, about half (47%) of pregnant women in Louisiana did not get a flu shot, leaving them and their babies unprotected from the flu.

Maternity Leave

More than 2 out of 3 (69%) of Louisiana mothers worked during pregnancy.

The United States is currently the only industrialized country that does not require employers to provide their employees paid family leave, although some states have laws granting it.

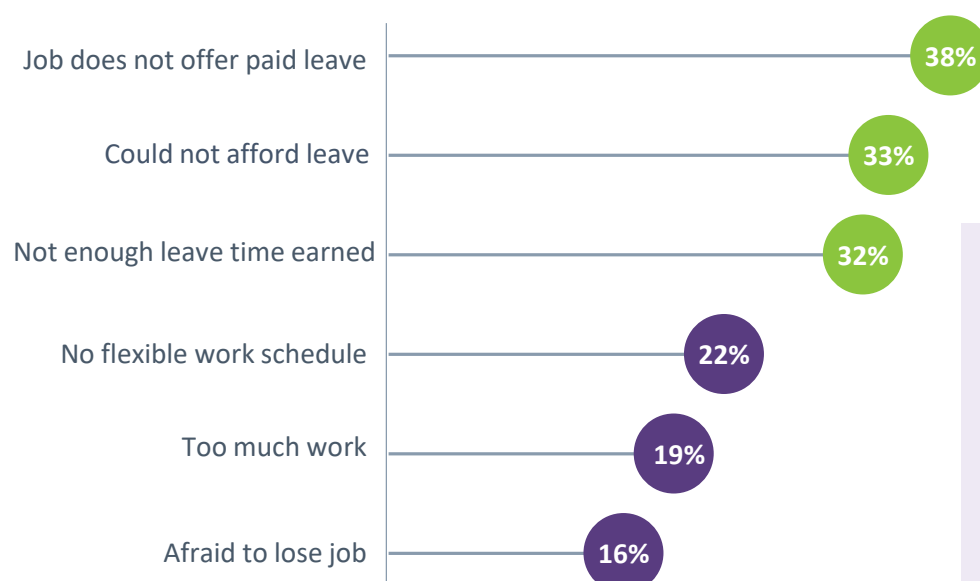
The Louisiana Fair Employment Practices (FEP) Act requires that employers with more than 25 employees provide unpaid leave for up to six weeks for “normal” pregnancies, and up to 4 months for more “seriously disabling” pregnancies. In accordance with the Family and Medical Leave Act (FMLA), a federal law, all FMLA-eligible employees in the United States are entitled to 12 work weeks of unpaid leave per year. During this time, employees are entitled to the same health benefits provided by their employer at the same cost they pay while working. When an employee’s FMLA leave ends, the employee has the right to return to the same or equivalent position.

Over half (51%) of Louisiana mothers who worked during pregnancy reported taking only unpaid maternity leave



Insufficient earned leave time, inability to afford leave, and lack of paid leave were the top factors affecting leave decisions

All factors affecting mothers’ leave decisions:



72% of women who worked during their pregnancies had **returned to work or planned to return to work** at the time they completed the survey.*

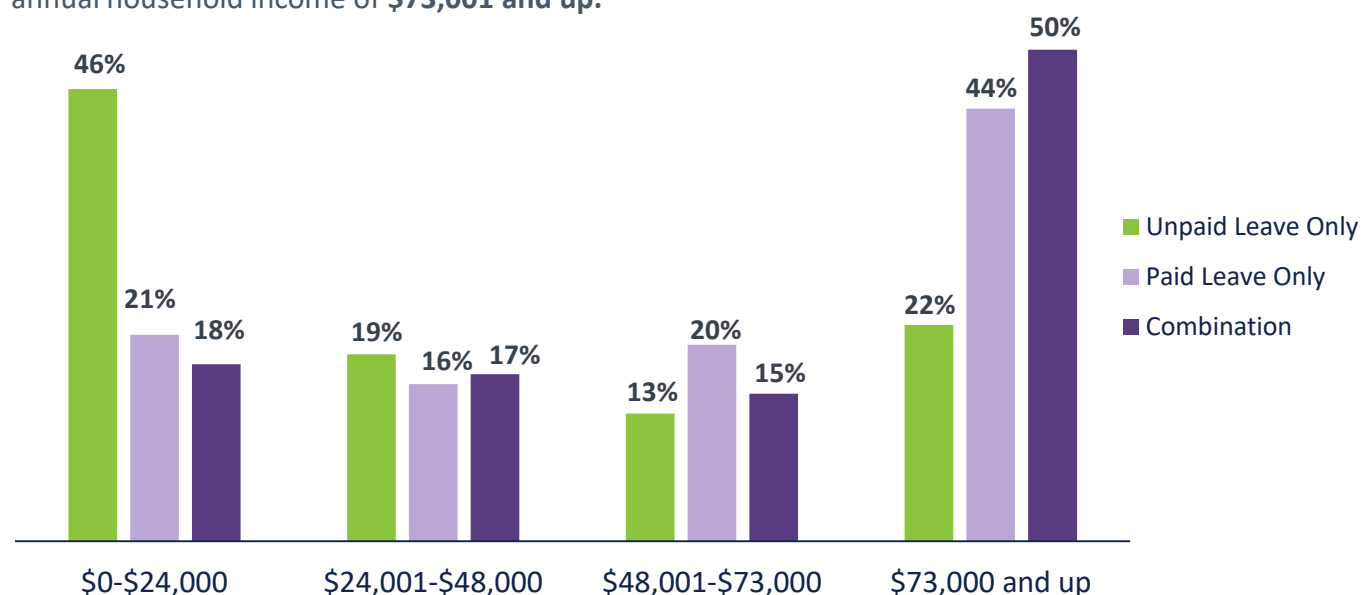
**PRAMS participants take the survey between 8 weeks and 6 months postpartum.*

Maternity Leave - Part 2

Maternity leave type and household income among women who worked during pregnancy

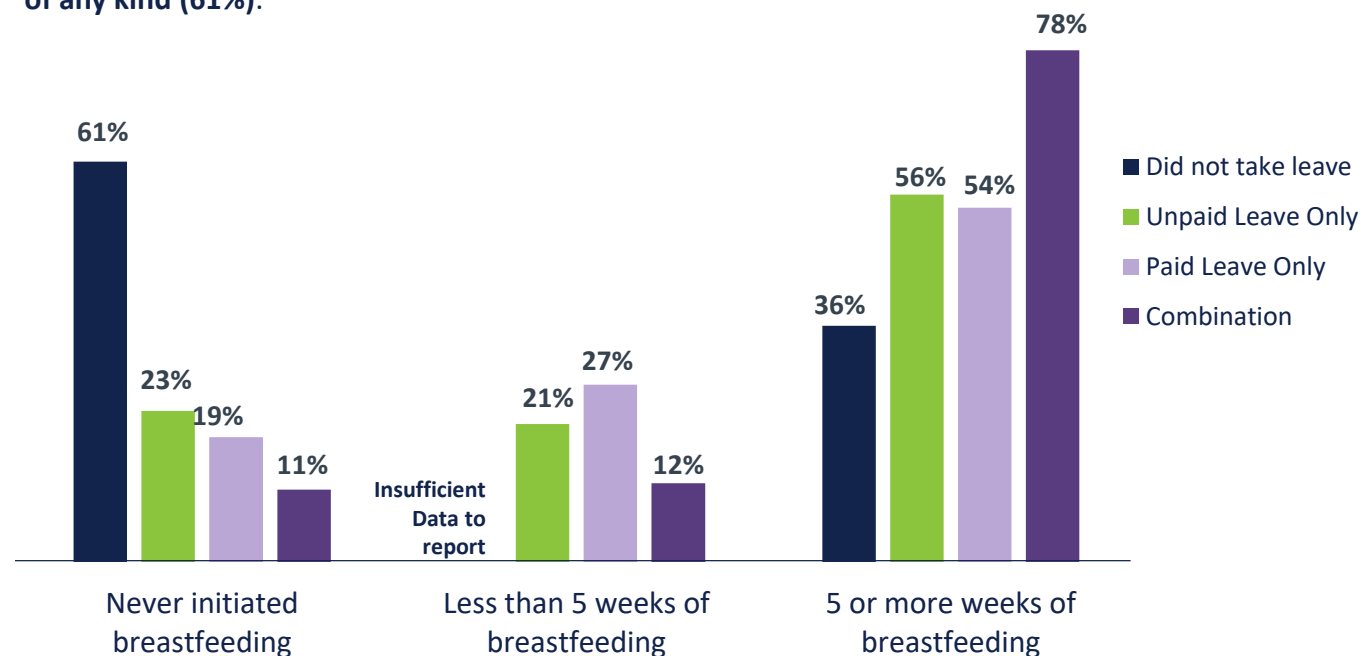
Among mothers who reported taking **only unpaid leave**, most reported an annual household income of **\$24,000 or less**.

Among mothers who reported taking a **combination of paid and unpaid leave**, most reported an annual household income of **\$73,001 and up**.



Maternity leave type and breastfeeding duration

A greater percentage of mothers reported **never initiating breastfeeding** if they **did not take leave of any kind (61%)**.



Maternity Leave- Part 3

PRAMS responses show that access to maternity leave is an important issue for mothers in Louisiana.

“With support for public health initiatives to promote breastfeeding as the primary source of nutrition, new breastfeeding mothers should be allowed a minimum of 6 months paid leave to implement WHO and AAP recommendations. Without such laws, it is difficult for mothers returning to work to implement 6 months of exclusive breastfeeding being away from baby. “

-2019 PRAMS Mom

“More needs to be done in Louisiana to ensure mothers can take paid leave. There is extensive research about the benefits for mother and child based on the amount of time a mother can spend with her child.”

- 2019 PRAMS Mom

“I struggled with mental health after delivery. I could not imagine having to be back at work & dealing with that. It is inhumane for a woman to carry her baby 40 weeks & be expected to return to work within 5-6 weeks or less. “

- 2019 PRAMS Mom

Public Health Implications

Maternity leave, and paid maternity leave in particular, is associated with a variety of individual and public health benefits, which include a reduction in low birthweight and preterm births and a decrease in infant mortality (National Partnership for Women & Families, 2021). Maternity leave gives mothers and babies more time to bond, and longer maternity leave is associated with increased breastfeeding duration, improved child development, and better mental health outcomes for both mothers and babies (National Partnership for Women & Families, 2021).

Louisiana PRAMS data show that women’s **inability to afford taking leave** was the top factor influencing their leave decisions.

Further, most women who took unpaid leave only had an annual household income of \$24,000 or less. In 2019, the federal poverty level for a four-person household was \$25,750 (U.S. Department of Health and Human Services, 2019). Lack of paid maternity leave could contribute to worse health outcomes among lower income women and children (compared to those in higher income brackets), thereby perpetuating health disparities among Louisiana families.

Maternal Tobacco Use

Tobacco use during and after pregnancy can put a woman and her baby at risk for health complications.

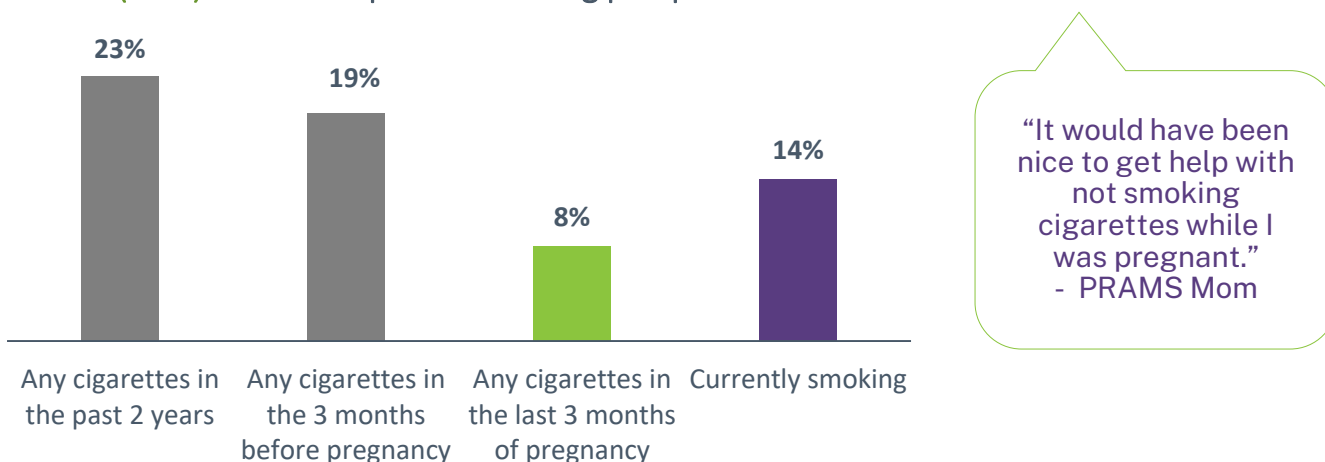
In the United States, 7% of women reported smoking during the last three months of pregnancy (CDC PRAMS, 2020). According to the Centers for Disease Control and Prevention (CDC), smoking during pregnancy and being around cigarette smoke can put both a mother and infant at increased risk for poor health outcomes such as birth defects. Smoking while pregnant can cause gum disease to worsen more quickly than it does in non-smokers and can increase the chance of miscarriage, premature birth or low birth weight (CDC, 2020).



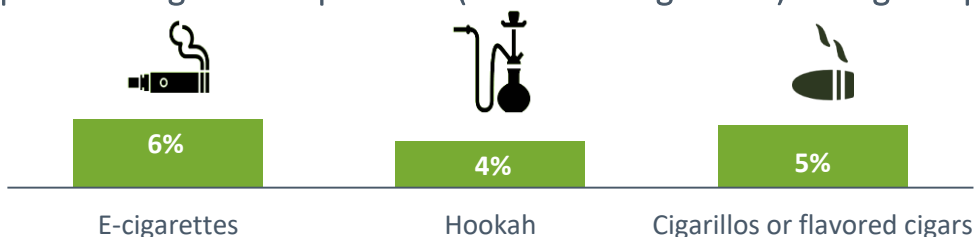
Healthy People 2020 Goal: Increase abstinence from cigarette smoking among pregnant women:

- Healthy People 2020 target: 98.6%
- 2019 Louisiana status: 91.9%

About **1 in 12 (8%)** women reported any smoking during their last trimester whereas about **1 in 7 (14%)** women reported smoking postpartum



Women reported using tobacco products (other than cigarettes) during the past two years



Public Health Implications

While over half of women (58%) who smoked before pregnancy quit by their last trimester, half of these women (50%) report smoking again after delivery (Louisiana PRAMS, 2019).

Smoking postpartum may expose an infant to secondhand smoke, putting the infant at increased risk for ear infections, asthma and Sudden Unexpected Infant Death (SUID) (CDC, 2018). Pregnancy may provide a timely opportunity for healthcare providers to initiate conversations with their patients about tobacco use and refer them to cessation resources. Providers are encouraged to continue discussing tobacco and smoking cessation options and supports with women after their babies are born so that new mothers are less likely to resume smoking postpartum.

Maternal Drug & Alcohol Use

Drinking alcohol during pregnancy can cause miscarriage, stillbirth, and a range of physical, behavioral, and intellectual disabilities (CDC, 2022).

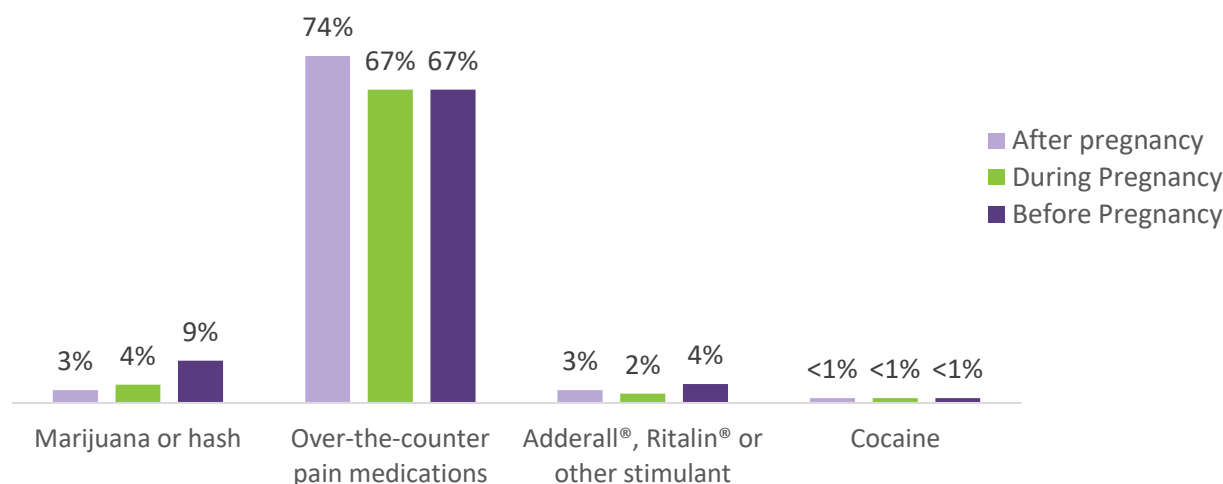
In general, drugs and pharmaceuticals should not be used during pregnancy without the guidance and approval of a medical professional, as they can cause preterm birth, miscarriage, low birthweight, heart defects, and neonatal abstinence syndrome (NAS) (CDC, 2023).



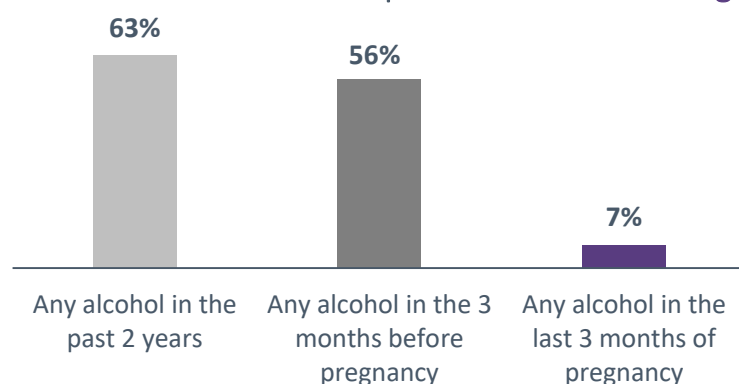
67%
of women

used **over-the-counter (OTC) pain relievers** such as aspirin, Tylenol®, Advil®, or Aleve® during pregnancy. Women should talk to their health provider before taking OTC medicines (March of Dimes, 2020).
Not all OTC medicines are safe to use during pregnancy.

Mother's use of over-the-counter, prescription, and illegal drugs before, during, and after pregnancy



Women's alcohol consumption before and during pregnancy



78%

of mothers who reported drinking during pregnancy consumed less than one drink per week



Public Health Implications

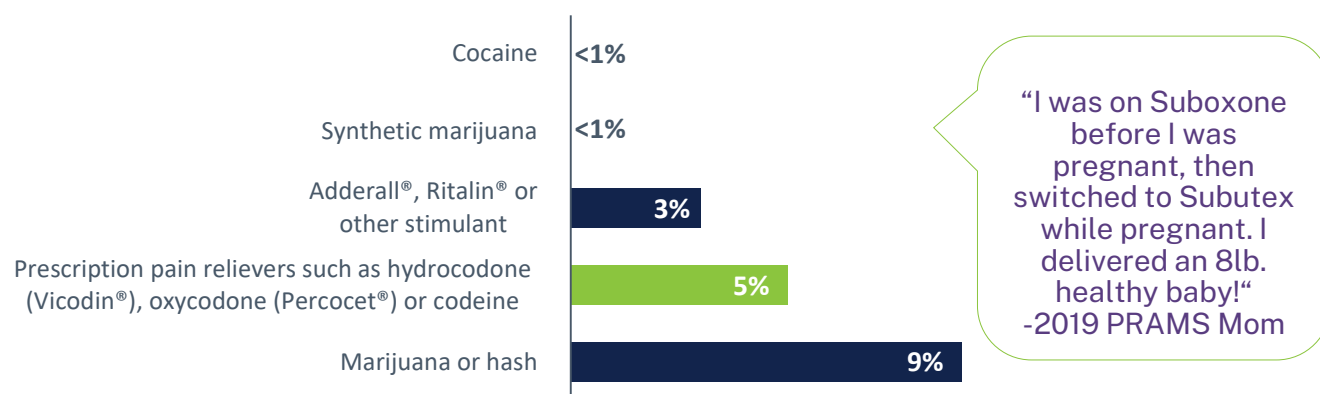
There is no known safe amount of alcohol use during pregnancy or while trying to get pregnant (CDC, 2022), and even prescription drugs may be harmful if used during pregnancy (March of Dimes, 2020).

Pregnancy may be an opportunity for women to change their patterns of alcohol and substance use, which may be facilitated by consulting with their healthcare provider. Providers can also counsel pregnant and postpartum women on how to safely use prescription and over-the-counter medications, and refer them to substance use disorder treatment programs when appropriate.

Maternal Drug & Opioid Use

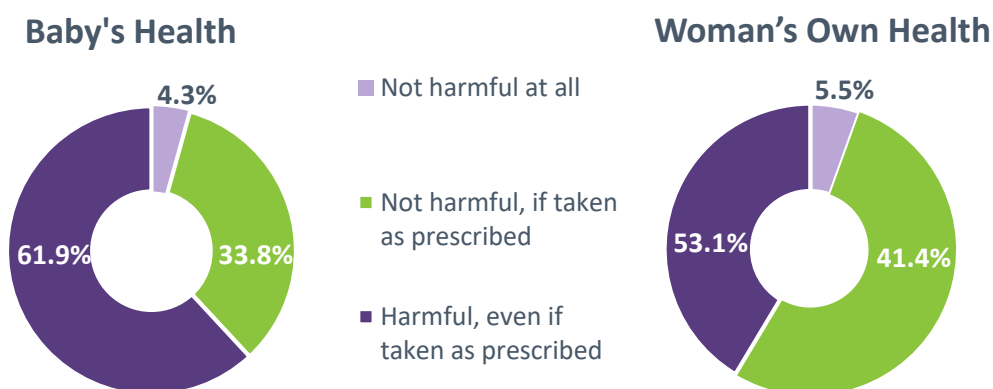
The incidence of opioid use has increased in the general population, for women of reproductive age (15-44 years), and for pregnant women. Regardless of the reason, opioid use during pregnancy poses significant risk to mother and fetus. Opioid use disorder (OUD) is defined as a problematic pattern of opioid use resulting in physical, psychological, and social harms. According to the CDC, OUD among pregnant women has gone up more than 4 times from 1999 to 2014 (CDC, 2022). OUD is associated with several negative health outcomes for mothers and their babies, both during pregnancy and after delivery including preterm birth, low birthweight, breathing problems, feeding problems, and maternal mortality (CDC, 2022).

Women's use of prescription and illegal drugs in the month before pregnancy



47.2% of mothers reported talking to a healthcare provider about how using prescription pain relievers during pregnancy could affect a baby

Perception of harm related to opioid use during pregnancy



Public Health Implications

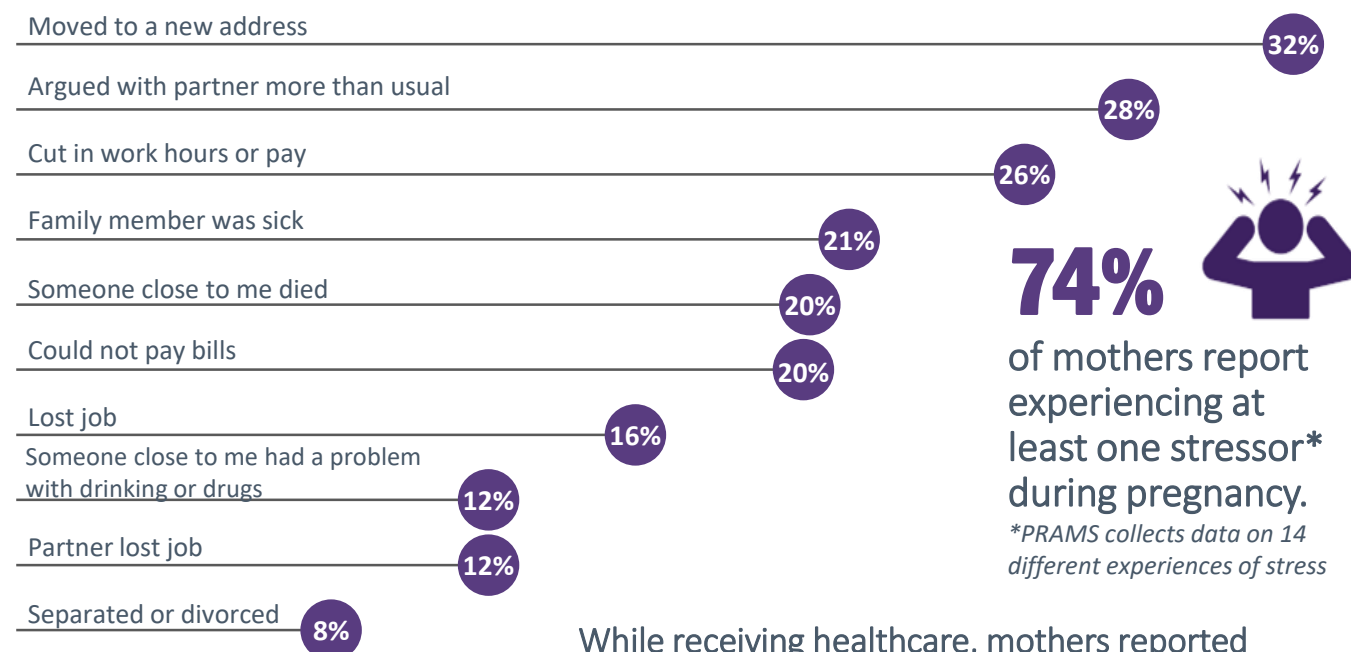
Opioid use during pregnancy is linked to poor health outcomes for women and babies. Obstetric providers should discuss the risks and benefits of opioid therapy for chronic pain during pregnancy with all pregnant women, screen them for substance use, misuse, and use disorders, including those involving prescription opioids, and refer them to treatment as needed. Clinical guidance in this area is provided by the CDC and American College of Obstetricians and Gynecologists (ACOG). Effective public health strategies to support the implementation of evidence-based guidelines could include improving state prescription drug monitoring program use, provider training, multidisciplinary state learning communities, quality improvement collaboratives (such as the Louisiana Perinatal Quality Collaborative), and consumer awareness.

Stressors & Discrimination

Prenatal maternal stress can be caused by both chronic and acute events in a woman's life. These stressors are associated with negative outcomes in fetal and infant development.

According to the March of Dimes Foundation, high cortisol levels caused by stress during pregnancy can affect an infant's growth in the womb and increase the infant's risk for negative health outcomes later in life. (March of Dimes, 2023).

Top 10 stressors reported by Louisiana mothers



“All the resources I had available made my first pregnancy less stressful - which was great since I had many stressful life events during my pregnancy including increased work demands/duties; family stress, and car accidents.”
-2019 PRAMS Mom

While receiving healthcare, mothers reported experiencing discrimination related to:

Age	5%
Race or skin color	4%
Because of pregnancy	4%
Type of health insurance or lack of insurance	3%
Income	3%
Sex/gender	2%
Language	1%

Public Health Implications

Prenatal maternal stress is an important consideration when looking at the overall health of both mothers and infants. According to ACOG, the experience of stress during pregnancy has a negative influence on birth outcomes.

Physicians are encouraged to expand the treatment and care they provide to identify and address women's stress and anxiety. This may include, but is not limited to, increased screening for depression and other mental health issues, providing referrals to behavioral health providers, or prescribing psychiatric medication. This may help to reduce negative birth outcomes and improve quality of life for women.

Intimate Partner Violence (IPV)

According to the U.S. Department of Justice, intimate partner violence accounts for 15% of all violent crime in the United States (U.S. Department of Justice, Bureau of Justice Statistics, 2014).

In 2019, Louisiana had the fifth-highest homicide rate among female victims murdered by males. 56% of homicides with a female victim in Louisiana were committed by a partner or ex-partner (Violence Policy Center, 2021).

1 in 18 women 18 years or older reported being **physically abused** by someone in the year before or during their most recent pregnancy.



Over 1 in 4 (27%) reported that her partner tried to **control her daily activities**



Over 1 in 5 (21%) reported feeling **frightened** for her or her family's safety because of **anger or threats from her partner**



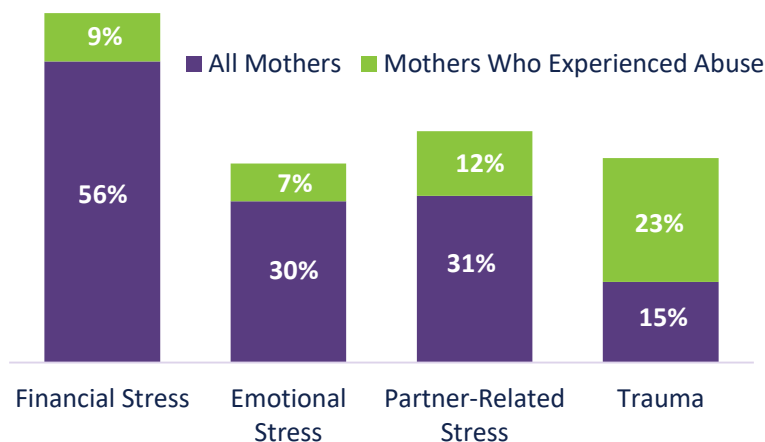
Over 1 in 8 (13%) reported that her partner **threatened her or made her feel unsafe**



Nearly 1 in 8 (12%) reported that her partner **forced her to take part in touching or sexual activity** when she did not want to

Mothers' experience of *stressors* and *abuse*

Many mothers experience **stress during or before pregnancy**, and some experienced **abuse** at the same time. The compounding effects of stress and abuse during pregnancy put both mother and infant at risk of poor health outcomes (March of Dimes, 2023). The American College of Obstetrics and Gynecologists recommends that physicians: (1) screen all patients for intimate partner violence and (2) counsel patients on stress management.



- **Financial stress includes:** separation or divorce, moved to new address, partner/mother lost job, cut in work hours/pay, or had bills they couldn't pay.
- **Emotional stress includes:** had a sick family member or had someone close to them die.
- **Partner-related stress includes:** argued with partner more, or partner said they didn't want the pregnancy.
- **Trauma includes:** homelessness, partner went to jail, or someone close to them had a problem with drinking/drugs

Public Health Implications

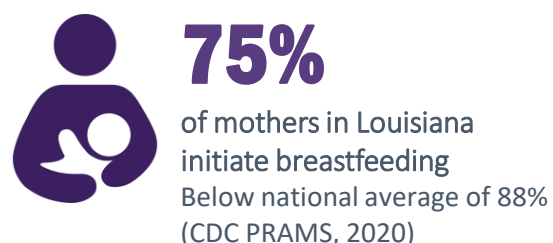
Domestic abuse is often life threatening for direct victims, and their dependents are also at increased risk of physical harm. Furthermore, people who experience domestic abuse are at increased risk for losing housing and employment (National Network to End Domestic Violence, 2017; National Coalition Against Domestic Violence, 2020). Domestic violence during pregnancy has been linked to maternal depression, substance abuse, smoking, vaginal bleeding, and lower birth weight in infants (National Coalition Against Domestic Violence, 2020). Increased patient-provider dialogue and consistent screening may help ensure individuals at risk for abuse or intimate partner violence are connected to resources.

Breastfeeding

Evidence consistently shows that breastfeeding has numerous health benefits for infants. Breastfeeding carries antibodies from the mother that help combat disease, lowering babies' risk of having asthma or allergies, ear infections, respiratory illnesses, and bouts of diarrhea (American Academy of Pediatrics, 2022).

Breastfeeding has also been found to have a protective effect against Sudden Infant Death Syndrome (SIDS). The American Academy of Pediatrics recommends exclusive breastfeeding for the first six months of a baby's life (American Academy of Pediatrics, 2022).

Most commonly-cited reasons for not breastfeeding

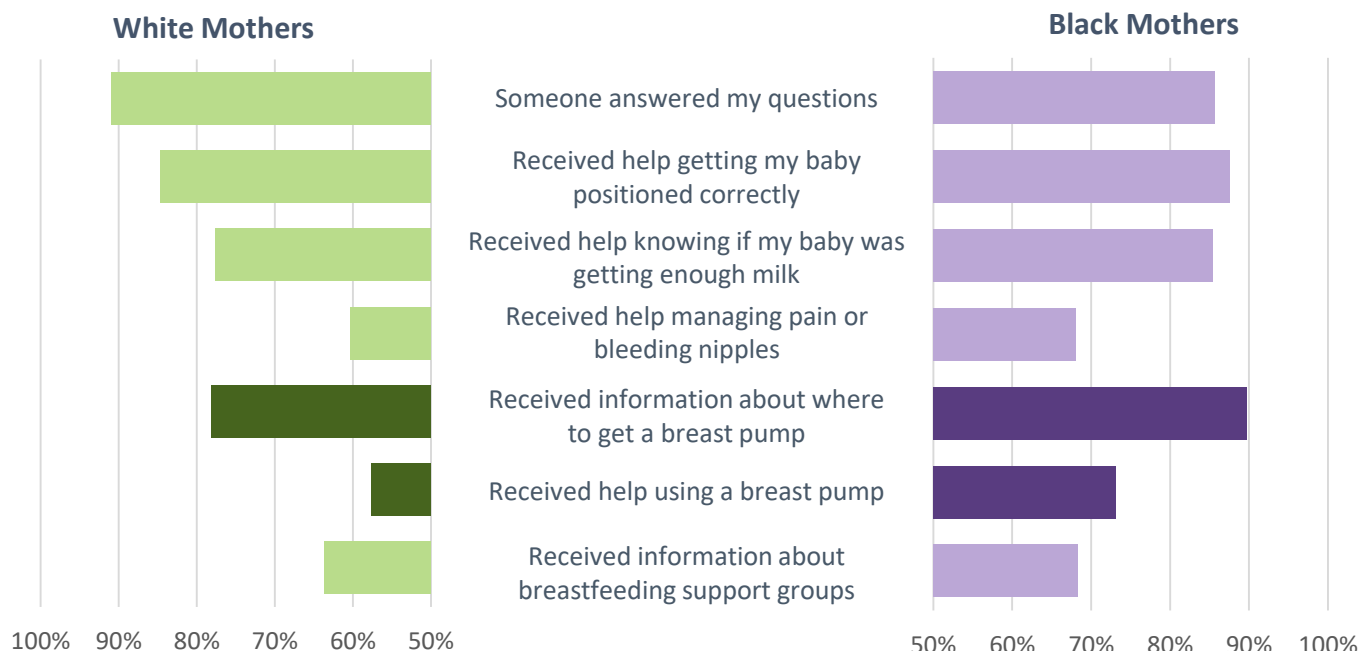


1. I didn't want to breastfeed	48%
2. I didn't like breastfeeding	23%
3. I went back to work	16%
4. I was sick or on medicine	13%

Most women (69%) who started breastfeeding continued for at least 8 weeks



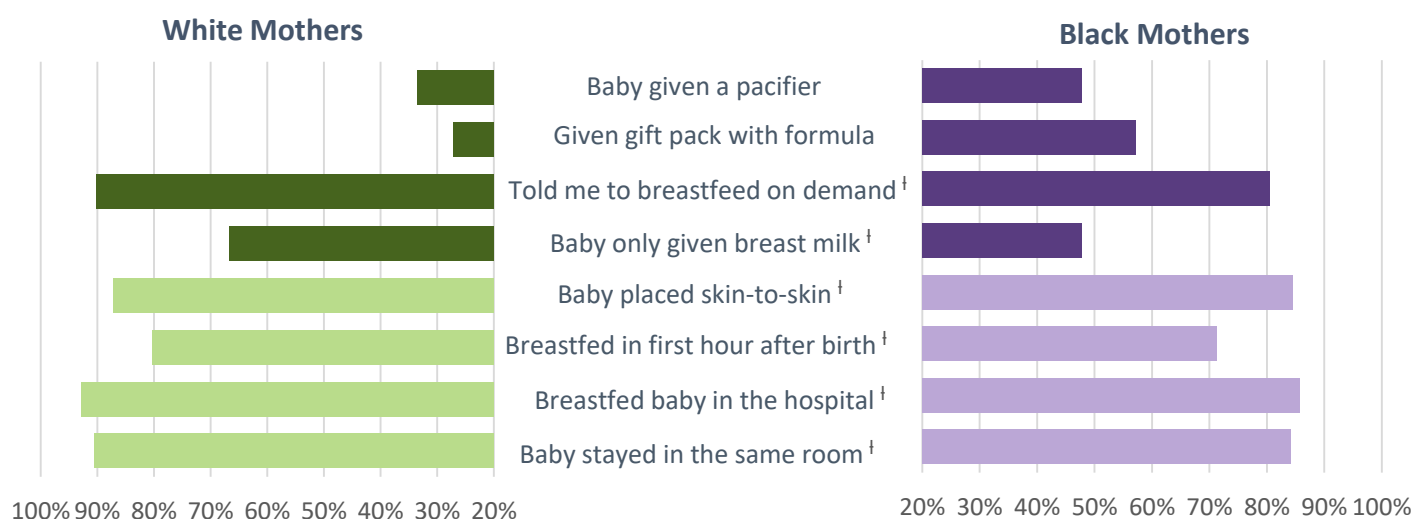
Racial differences* in breastfeeding support that mothers reported receiving after their baby was born



*Darker colors indicate a **difference of 10 percentage points or more** between groups.
Data represent Non-Hispanic populations.

Breastfeeding - Part 2

Black mothers have different* hospital breastfeeding experiences than white mothers



*Darker colors indicate a **difference of 10 or more percentage points** between groups

[†] Denotes breastfeeding-friendly practice

Racial disparities in breastfeeding



48% of Black babies used a pacifier** in the hospital in comparison to **34% of White babies.**



57% of Black mothers were given a gift pack with formula** at the hospital in comparison to **27% of White mothers.**

**These practices do not support and can hinder breastfeeding

“Need more support available for moms that have issues with breastfeeding within the hospital system. I had problems getting nurses in time to help my baby latch, especially at night. I felt like I had no help and support.”
- 2019 PRAMS Mom

“I did not feel like I received adequate help and guidance on breastfeeding from the hospital. After leaving, I had to seek help elsewhere to ensure that I maintained my journey of breastfeeding my child, but if I solely relied on my help I received from the lactation specialist from the hospital, I would have definitely given up breastfeeding and would have resorted to formula feeding.”
-2019 PRAMS Mom

Public Health Implications

Louisiana's breastfeeding initiation rate of 75% in 2019 fell short of the Healthy People 2020 goal of 82%.

Evidence shows that maternity care practices in the hospital can be a predictor of breastfeeding initiation (babyfriendlyusa.org). It is important to teach hospital staff that giving infants formula and pacifiers are practices that negatively impact mothers' breastfeeding efforts, overall breastfeeding rates, and infants' health (World Health Organization, 2018). Increased lactation support in the hospital and throughout the postpartum period (see previous page), promotion of breastfeeding-friendly work environments, and expanded maternity leave policies are other ways to support women in their efforts to start and continue breastfeeding.

Infant Sleep Environment

In 2019, **90** infants in Louisiana died suddenly and unexpectedly (CDC, NCHS, NVSS, Mortality 2018-2021 on CDC WONDER).

Deaths caused by Accidental Suffocation and Strangulation in Bed, SIDS (Sudden Infant Death Syndrome), or other unexplained causes are included in a category called SUID (Sudden Unexpected Infant Death).



**UNITED STATES
vs. LOUISIANA**

- In 2019, the national SUID rate was **89.2** per 100,000 live births (CDC, NCHS, NVSS, Mortality 2018-2021 on *CDC WONDER*)
- In 2019, the SUID rate in Louisiana was **155.1** per 100,000 live births (CDC, NCHS, NVSS, Mortality 2018-2021 on *CDC WONDER*)



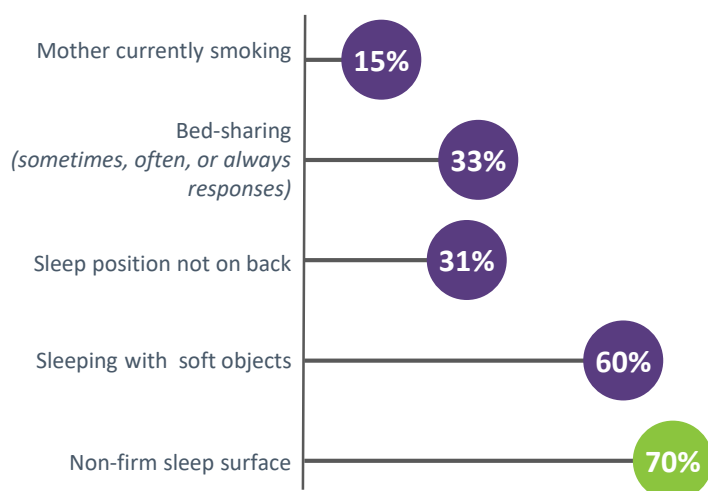
The American Academy of Pediatrics cites **bed-sharing** as the greatest risk factor for sleep-related infant deaths.

33%

About one third of Louisiana mothers say their infant sometimes, often or always bed-shares.

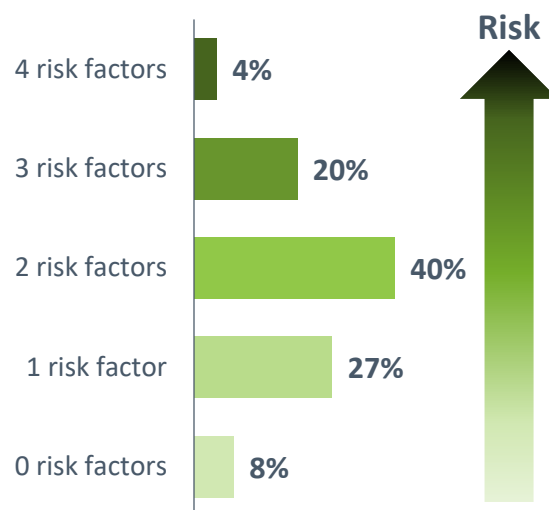
Safe Sleep Risk Factors*

About 7 out of 10 (70%) mothers reported that most often in the past two weeks their **babies slept on non-firm sleep surfaces**.



Infant Exposure to Risk Factors

About 1 in 4 (24%) babies in Louisiana are **exposed to 3 or more risk factors for sleep-related death**.



Public Health Implications

PRAMS data bring to light which SUID risk and protective factors occur most frequently in Louisiana. This data can be used to inform and narrow the focus of infant safe sleep interventions.

Further investigation into the barriers that prevent Louisiana families from consistently practicing safe sleep will help healthcare providers and public health professionals more effectively support Louisiana families in their efforts to increase protective factors and decrease risk factors for SUID.

Postpartum Depressive Symptoms

The Centers for Disease Control reports that approximately 1 in 8 women in the United States experience postpartum depressive symptoms (PPDS) (CDC PRAMS, 2020). In Louisiana, nearly 1 in 5 women experience PPDS.

PPDS can lead to clinically diagnosed postpartum depression (PPD), which is associated with altered mother-infant interaction, reduced cognitive development in infants, and overall reduced duration of breastfeeding (Women's Health, 2019). Decreasing the proportion of women who experience postpartum depression is a Healthy People 2020 goal.

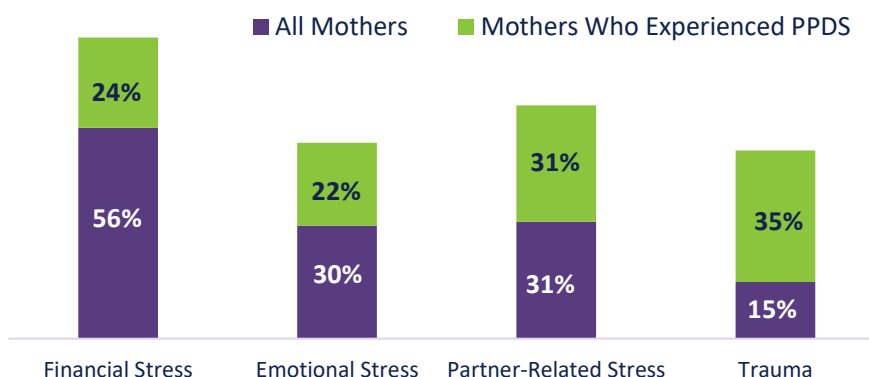
* See previous page (pg. 22) for operational definitions of Financial Stress, Emotional Stress, Partner-Related Stress, and Trauma.

71% of women who experienced postpartum depression symptoms spoke with a healthcare worker about these symptoms **during a prenatal care appointment**.

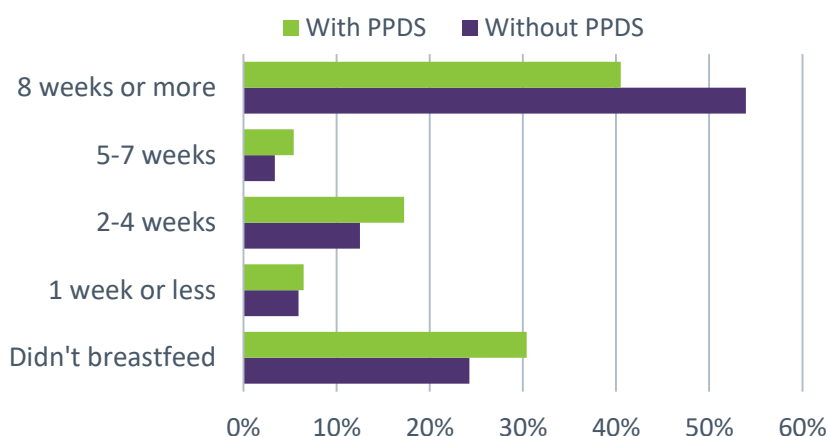
72% of all women spoke with a health care worker **during or after their pregnancy** about postpartum depressive symptoms.

"Although my husband's wages were too high to be accepted when our family applied for Medicaid, I wish someone could have been more informative in helping us figure out where we could be assisted financially with the expenses of this pregnancy. Our family was still paying off bills from our first child which led to us taking on debt. Upon finding out we were not accepted by Medicaid or LA MOMS it added to my depression causing more stress than needed."
- 2019 PRAMS Mom

Nearly 1 in 5 (19%) of Louisiana mothers experience postpartum depressive symptoms (PPDS).



Average breastfeeding duration was **shorter** for women with **postpartum depressive symptoms**



Public Health Implications

PPDS and anxiety may affect rates of breastfeeding and may also reduce breastfeeding duration. Nearly 1 in 5 (19%) Louisiana mothers report experiencing postpartum depressive symptoms. Of these women, 30% never breastfed. Increasing public health education and patient-provider dialogue about PPD/PPDS resources, as well as decreasing stigma around maternal depression are important steps to improve mothers' mental health.

Maternal Disability

Disability is broadly defined as difficulty with physical and mental functions such as movement, vision, hearing, self-care or cognition. Disability is estimated to affect as much as 18% of women of reproductive age in the United States (Morbidity and Mortality Weekly Report, 2018).

Healthy People 2020 Goal: Promote full community participation, choice, health equity and quality of life among individuals with disabilities of all ages.

In Louisiana, 43% of mothers report experiencing at least one of the following disabilities: difficulty seeing, difficulty hearing, difficulty walking or climbing steps, difficulty remembering or concentrating, difficulty with self care, or difficulty communicating (Louisiana PRAMS, 2019). Women with disabilities are at greater risk for adverse birth outcomes, including still birth, preterm birth, and low birth weight in infants (Health Affairs, 2022; Disability & Health Journal, 2017).

Mothers' difficulty with doing different activities



Almost **3 in 10** mothers (29%) reported **difficulty remembering** or concentrating



Over **1 in 5** mothers (22%) reported **difficulty seeing**, even when wearing glasses or contact lenses



1 in 20 mothers (5%) reported **difficulty communicating**, such as understanding or being understood



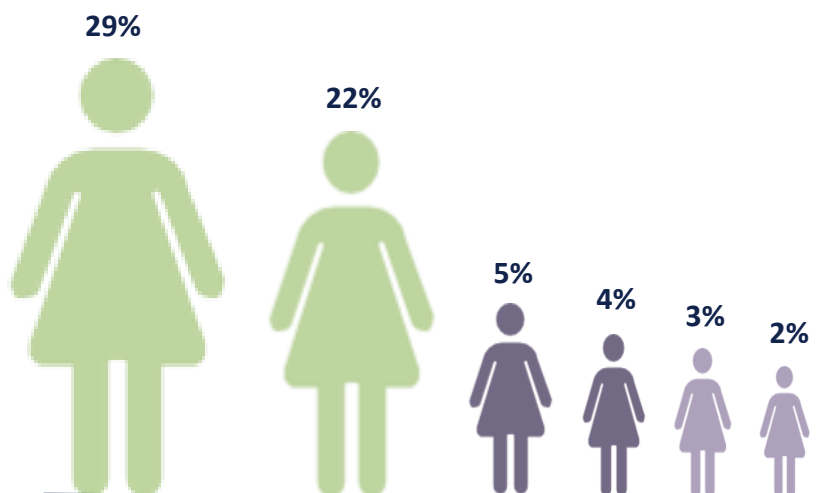
1 in 25 mothers (4%) reported **difficulty hearing**, even when using a hearing aid



3 in 100 mothers (3%) reported **difficulty walking** or climbing steps



1 in 50 mothers (2%) reported **difficulty with self care**, such as washing or getting dressed



Public Health Implications

In Louisiana, mothers most-commonly reported difficulty remembering or concentrating (29%) and difficulty seeing (22%).

Further research into maternal disabilities will help healthcare professionals ensure appropriate reproductive health care is available to mothers with disabilities. Policymakers can also use this information when creating services and programs designed to specifically meet the needs of mothers with disabilities.

Appendices: Overview

The following appendices include a series of subgroup analyses for select indicators, a guide to key variables, and a summary of 2019 Louisiana PRAMS survey response rates. The key variables included in the subgroup analyses were maternal race, maternal age, maternal education, marital status, Medicaid insurance coverage, and infant birth weight.

Appendix A contains the categories for these variables.

Appendix B includes data trends between 2017-2019 for certain key variables.

Appendix C contains the various subgroup analyses and includes the survey question that corresponds to each indicator. Please refer to the footnotes for additional information about interpretation of the findings.

Analyses include:

- Multivitamin use
- Pregnancy intention
- Preconception use of contraception by couples not trying to get pregnant
- Timing of prenatal care
- HIV testing during pregnancy
- Cigarette and alcohol use three months prior to pregnancy
- Drug use in the month prior to pregnancy

Finally, **Appendix D** includes the summary of annual PRAMS response rates. This page includes weighted and unweighted response rates for the strata used during 2019, as well as the total number of respondents and participants sampled by select maternal characteristics.

Appendix A: Key Variables for Subgroup Analyses

Variable	Categories
Maternal Race	Non-Hispanic White
	Non-Hispanic Black
	Hispanic
Maternal Age (in years)	Less than 20 years (<20)
	20 years - 29 years
	30 years and older (30+)
Maternal Education	Less than High School (<HS)
	High School Graduate (HS)
	More than High School (>HS)
Marital Status	Married
	Other (including: never married, living together, separated, widowed and divorced)
Medicaid Insurance Coverage	Prior to Pregnancy
	For Prenatal Care
Infant Birth Weight	Low Birth Weight (LBW, < 2,500 grams)
	Normal Birth Weight (NBW)

Appendix B: Trends 2017-2019

	2017	2018	2019
Health Indicator	% (95% CI)	% (95% CI)	% (95% CI)
Multivitamin Use			
≥4 days/week in month before pregnancy	28.9 (25.7 – 32.2)	28.4 (25.0 – 31.7)	32.7 (29.3 – 36.2)
Pre-pregnancy Weight			
Underweight (BMI < 18.5)	4.1 (2.6 – 5.6)	2.6 (1.4 – 3.8)	3.1 (1.8 – 4.3)
Healthy (18.5 ≤ BMI ≤ 24.9)	40.5 (37.0 – 44.1)	38.3 (34.7 – 41.9)	33.0 (29.6 – 36.5)
Overweight (25.0 ≤ BMI ≤ 29.9)	25.2 (22.1 – 28.4)	25.6 (22.3 – 28.8)	29.2 (25.8 – 32.6)
Obese (BMI ≥ 30.0)	30.1 (26.9 – 33.3)	33.6 (30.2 – 37.0)	34.7 (31.1 – 38.2)
Substance Use			
Any cigarette smoking during the 3 months before pregnancy	24.6 (21.5 – 27.7)	20.2 (17.3 – 23.2)	19.9 (16.9, 22.9)
Any cigarette smoking during the last 3 months of pregnancy	12.0 (9.6 – 14.4)	9.5 (7.4 – 11.7)	8.6 (6.5, 10.7)
Any cigarette smoking postpartum	18.8 (16.0 – 21.6)	14.4 (11.8– 17.0)	14.0 (11.4, 16.7)
Any alcohol use during the 3 months before pregnancy	53.8 (50.3 – 57.4)	52.2 (48.5 – 55.8)	55.8 (52.1, 59.5)
Any alcohol use during the last 3 months of pregnancy	5.7 (4.0 – 7.4)	4.3 (2.8 – 5.8)	6.8 (4.9, 8.7)
Postpartum Contraception Use			
Used any form of contraception postpartum	73.8 (70.7 – 76.9)	75.8 (72.6 – 78.9)	73.7 (70.5, 76.9)
Pregnancy Intention			
Intended	44.9 (41.4 – 48.4)	49.7 (46.2 – 53.3)	46.7 (43.1, 50.3)
Unintended*	55.1 (51.6 – 58.6)	50.3 (46.7 – 55.8)	53.3 (49.7, 56.9)

*Unintended pregnancy intention includes “desired pregnancy later”, “desired pregnancy never” and “unsure” responses.

Trends 2017-2019

	2017	2018	2019
Health Indicator	% (95% CI)	% (95% CI)	% (95% CI)
Depression			
Postpartum depressive symptoms	15.1 (12.6 – 17.6)	15.9 (13.2 – 18.6)	19.1 (16.1, 22.0)
Health Care Services			
Began prenatal care in 1 st trimester	86.6 (84.2 – 88.9)	87.3 (85.0 – 89.7)	87.0 (84.4, 89.5)
Had flu shot before or during pregnancy	47.3 (43.8 – 50.9)	47.3 (43.7 – 50.9)	54.3 (50.7, 58.0)
Had maternal postpartum checkup	84.9 (82.3 – 87.4)	88.9 (86.7 – 91.2)	89.1 (86.8, 91.4)
Pre-pregnancy Health Insurance			
Private/Commercial insurance	47.4 (43.9 – 50.9)	47.7 (44.1 – 51.3)	47.7 (44.0, 51.4)
Medicaid	36.8 (33.6 – 40.1)	38.9 (35.6 – 42.1)	39.8 (36.4, 43.3)
No insurance	15.8 (13.1 – 18.5)	13.5 (10.8 – 16.1)	12.5 (10.1, 14.9)
Health Insurance During Pregnancy			
Private/Commercial Insurance	40.5 (37.0 – 44.0)	43.5 (39.9 – 47.1)	43.6 (39.9, 47.2)
Medicaid	59.3 (55.8 – 52.8)	56.4 (52.8 – 60.0)	55.7 (52.0, 59.4)
No insurance	**	**	0.7 (0.1, 1.3)
Health Insurance Postpartum			
Private/Commercial Insurance	39.8 (36.3 – 43.2)	42.9 (39.3 – 46.5)	42.7 (39.1, 46.4)
Medicaid	50.2 (46.8 – 53.6)	49.1 (45.6 – 52.6)	47.9 (44.4, 51.5)
No insurance	10.1 (7.8 – 12.3)	8.0 (5.9 – 10.1)	9.3 (7.3, 11.4)
Infant Sleep Practices			
Baby most often laid on back to sleep	67.9 (64.6 – 71.3)	68.5 (65.1 – 71.8)	69.3 (65.9, 72.6)
Breastfeeding Practices			
Ever breastfed	69.2 (66.0 – 72.3)	73.3 (70.2 – 76.4)	75.0 (71.9, 78.0)
Breastfeeding at 8 weeks	44.9 (41.4 – 48.4)	48.3 (44.7 – 51.9)	49.5 (46.0, 53.1)

**Insufficient data to report: Data are unreliable with a numerator less than 10 or relative standard error > 30%.

Appendix C: Subgroup Analyses

Multivitamin use at least four times a week during the month prior to pregnancy*, survey question 5

	% Multivitamin	95% CI
Total	32.7	29.3, 36.2
Race/Ethnicity		
Non-Hispanic White	40.1	34.5, 45.7
Non-Hispanic Black	22.9	18.4, 27.3
Hispanic	30.5	19.4, 41.7
Age in Years		
<20	**	**
20-29	25.3	20.8, 29.8
30+	44.9	39.3, 50.5
Education		
<HS	17.2	10.1, 24.2
HS	21.6	16.0, 27.2
>HS	44.2	39.1, 49.2
Marital Status		
Married	49.4	43.7, 55.0
Other	19.6	15.7, 23.5
Insurance Status		
Medicaid before pregnancy	20.5	15.8, 25.2
Medicaid for prenatal care	21.7	17.5, 28.9
Birth Weight		
LBW	26.0	16.2, 35.8
NBW	33.5	29.8, 37.2

* Denominator is the total sub-analysis group. For example: Among married respondents, 49.4% reported multivitamin use at least four times a week during the month prior to pregnancy.

**Insufficient data to report: Data are unreliable with a numerator less than 10 or relative standard error > 30%.

† Rates in some subgroups may be unstable and unreliable due to small sample size. This instability is reflected in very wide confidence intervals. In these cases, rates should be interpreted with caution.

Pregnancy intention*, survey questions 12-13

	% Unintended	95% CI	% Trying	95% CI
Total	53.3	49.7, 56.9	46.7	43.1, 50.3
Race/Ethnicity				
Non-Hispanic White	42.3	36.5, 48.1	57.7	51.9, 63.5
Non-Hispanic Black	71.3	66.7, 76.0	28.7	24.0, 33.3
Hispanic	38.1	27.1, 49.2	61.9	50.8, 72.9
Age in Years				
<20	**	**	15.1	2.3, 29.9
20-29	54.8	49.9, 59.8	45.2	40.2, 50.1
30+	46.5	41.0, 52.0	53.5	48.0, 59.0
Education				
<HS	70.6	62.2, 79.0	29.4	21.0, 37.8
HS	62.1	55.7, 68.5	37.9	31.5, 44.3
>HS	43.1	38.2, 47.9	56.9	52.1, 61.8
Marital Status				
Married	30.9	25.8, 36.1	69.1	63.9, 74.2
Other	70.9	66.5, 75.3	29.1	24.7, 33.5
Insurance Status				
Medicaid before pregnancy	70.2	65.0, 75.4	29.8	24.6, 35.0
Medicaid for prenatal care	67.8	63.2, 72.3	32.2	27.7, 36.8
Birth Weight				
LBW	58.8	48.0, 69.6	41.2	30.4, 52.0
NBW	52.7	48.9, 56.5	47.3	43.5, 51.1

* Denominator is the total sub-analysis group. For example: Among married respondents, 30.9% reported an unintended pregnancy, while 69.1% reported trying to get pregnant. Women who were unsure about wanting to become pregnant were included in the Unintended group. The “trying” category includes women who reported trying to conceive.

**Insufficient data to report: Data are unreliable with a numerator less than 10 or relative standard error > 30%.

† Rates in some subgroups may be unstable and unreliable due to small sample size. This instability is reflected in very wide confidence intervals. In these cases, rates should be interpreted with caution.

Preconception contraception use by mothers who were not trying to get pregnant*, survey question 14

	% Using Contraception at Time of Conception	95% CI
Total	35.3	30.2, 40.3
Race/Ethnicity		
Non-Hispanic White	35.2	26.0, 44.5
Non-Hispanic Black	33.5	27.1, 39.9
Hispanic	49.9	29.9, 69.9
Age in Years		
<20	33.9	20.7, 47.2
20-29	32.2	25.4, 39.0
30+	40.7	32.2, 49.3
Education		
<HS	42.7	30.0, 55.3
HS	31.5	23.1, 39.8
>HS	35.0	27.4, 42.6
Marital Status		
Married	38.5	27.8, 49.3
Other	34.2	28.4, 40.0
Insurance Status		
Medicaid before pregnancy	36.7	29.5, 43.9
Medicaid for prenatal care	36.1	29.9, 42.4
Birth Weight		
LBW	37.8	22.2, 53.4
NBW	34.9	29.5, 40.3

* Denominator is the total sub-analysis group. For example: Among married respondents, 38.5% reported using contraception at the time of conception.

** Insufficient data to report: Data are unreliable with a numerator less than 10 or relative standard error > 30%.

† Rates in some subgroups may be unstable and unreliable due to small sample size. This instability is reflected in very wide confidence intervals. In these cases, rates should be interpreted with caution.

Prenatal care began during first trimester*, survey question 16

	% Prenatal Care in First Trimester	95% CI
Total	87.0	84.4, 89.5
Race/Ethnicity		
Non-Hispanic White	90.9	87.3, 94.5
Non-Hispanic Black	82.5	78.3, 86.7
Hispanic	87.0	78.8, 95.2
Age in Years		
<20	71.8	55.8, 87.8
20-29	87.1	83.6, 90.6
30+	89.1	85.4, 92.7
Education		
<HS	76.5	68.3, 84.6
HS	83.1	78.0, 88.2
>HS	92.2	89.3, 95.1
Marital Status		
Married	91.4	88.1, 94.8
Other	83.4	79.7, 87.2
Insurance Status		
Medicaid before pregnancy	82.2	77.6, 86.8
Medicaid for prenatal care	83.1	79.3, 87.0
Birth Weight		
LBW	79.3	69.4, 89.3
NBW	87.9	85.3, 90.5

* Denominator is the total sub-analysis group. For example: Among married respondents, 91.4% reported receiving prenatal care in the first trimester.

**Insufficient data to report: Data are unreliable with a numerator less than 10 or relative standard error > 30%.

† Rates in some subgroups may be unstable and unreliable due to small sample size. This instability is reflected in very wide confidence intervals. In these cases, rates should be interpreted with caution.

Received prenatal care as early as wanted in pregnancy*, survey question 17

	% Yes	95% CI
Total	85.6	82.9, 88.2
Race/Ethnicity		
Non-Hispanic White	86.8	82.8, 90.9
Non-Hispanic Black	86.0	82.1, 89.8
Hispanic	77.1	66.9, 87.2
Age in Years		
<20	81.8	68.2, 95.5
20-29	85.6	81.9, 89.3
30+	86.2	82.2, 90.2
Education		
<HS	82.1	74.7, 89.6
HS	84.9	79.9, 89.8
>HS	86.9	83.4, 90.5
Marital Status		
Married	87.3	83.4, 91.1
Other	84.2	80.5, 87.9
Insurance Status		
Medicaid before pregnancy	86.5	82.3, 90.7
Medicaid for prenatal care	82.0	78.0, 86.1
Birth Weight		
LBW	79.1	69.2, 89.0
NBW	86.3	83.6, 89.1

* Denominator is the total sub-analysis group. For example: Among married respondents, 87.3% reported receiving prenatal care as early as they wanted.

**Insufficient data to report: Data are unreliable with a numerator less than 10 or relative standard error > 30%.

† Rates in some subgroups may be unstable and unreliable due to small sample size. This instability is reflected in very wide confidence intervals. In these cases, rates should be interpreted with caution.

Received a HIV test in the 12 months before pregnancy*, survey question 8

	% HIV Test	95% CI
Total	45.5	41.4, 49.7
Race/Ethnicity		
Non-Hispanic White	29.9	23.8, 36.1
Non-Hispanic Black	67.9	61.8, 73.9
Hispanic	42.1	26.3, 57.8
Age in Years		
<20	51.4	30.6, 72.2
20-29	49.1	43.0, 55.2
30+	40.5	34.9, 46.1
Education		
<HS	71.3	59.8, 82.9
HS	55.9	47.9, 64.0
>HS	34.9	29.9, 39.8
Marital Status		
Married	29.5	23.9, 35.1
Other	61.5	55.6, 67.5
Insurance Status		
Medicaid before pregnancy	68.6	61.9, 75.3
Medicaid for prenatal care	63.8	57.6, 69.9
Birth Weight		
LBW	59.3	45.8, 72.8
NBW	43.9	39.6, 48.3

*Denominator is the total sub-analysis group. For example: Among married respondents, 29.5% reported receiving a HIV test in the year before pregnancy.

**Insufficient data to report: Data are unreliable with a numerator less than 10 or relative standard error > 30%.

† Rates in some subgroups may be unstable and unreliable due to small sample size. This instability is reflected in very wide confidence intervals. In these cases, rates should be interpreted with caution.

Cigarette and alcohol use three months prior to pregnancy*, survey questions 29 & 36

	% Smoked Cigarettes	95% CI	% Drank Alcohol	95% CI
Total	19.4	16.4, 22.3	55.8	52.1, 59.5
Race/Ethnicity				
Non-Hispanic White	25.9	20.8, 31.0	65.9	60.4, 71.5
Non-Hispanic Black	15.3	11.5, 19.1	49.4	44.2, 54.6
Hispanic	**	**	35.3	23.9, 46.7
Age in Years				
<20	**	**	**	**
20-29	21.3	17.0, 25.6	54.2	49.1, 59.3
30+	19.4	14.7, 24.0	62.5	56.9, 68.0
Education				
<HS	30.1	21.3, 38.9	26.6	18.2, 35.0
HS	19.2	14.0, 24.3	49.4	42.7, 56.0
>HS	16.4	12.4, 20.4	67.7	62.9, 72.4
Marital Status				
Married	10.0	6.5, 13.5	61.7	56.1, 67.3
Other	26.8	22.5, 31.1	51.1	46.2, 56.0
Insurance Status				
Medicaid before pregnancy	27.9	22.7, 33.1	49.8	44.1, 55.6
Medicaid for prenatal care	25.4	21.0, 29.8	46.4	41.4, 51.4
Birth Weight				
LBW	26.9	16.3, 37.6	55.4	43.8, 67.1
NBW	18.5	15.3, 21.6	55.8	52.0, 59.7

* Denominator is the total sub-analysis group. For example: Among married respondents, 10.0% reported smoking cigarettes and 61.7% reported drinking three months prior to pregnancy.

**Insufficient data to report: Data are unreliable with a numerator less than 10 or relative standard error > 30%.

† Rates in some subgroups may be unstable and unreliable due to small sample size. This instability is reflected in very wide confidence intervals. In these cases, rates should be interpreted with caution.

Drug use in month before pregnancy*, survey question 68

	% Over-the-counter drug use	95% CI	% Non over-the-counter drug use #	95% CI
Total	65.7	30.9, 37.7	15.6	12.9, 18.3
Race/Ethnicity				
Non-Hispanic White	73.4	68.3, 78.5	16.9	12.5, 21.2
Non-Hispanic Black	58.6	53.5, 63.7	17.3	13.3, 21.3
Hispanic	61.9	50.8, 73.0	**	**
Age in Years				
<20	68.8	53.4, 84.3	**	**
20-29	63.0	58.2, 67.8	16.2	12.5, 19.8
30+	69.0	63.9, 74.2	14.9	10.9, 18.9
Education				
<HS	58.5	49.5, 67.5	22.2	13.9, 30.4
HS	61.0	54.7, 67.3	14.6	10.1, 19.2
>HS	70.5	65.9, 75.1	14.5	10.9, 18.1
Marital Status				
Married	71.5	66.5, 76.5	10.8	7.4, 14.2
Other	61.1	56.4, 65.8	19.4	15.5, 23.3
Insurance Status				
Medicaid before pregnancy	62.2	56.6, 67.7	23.8	18.7, 28.9
Medicaid for prenatal care	60.0	55.2, 64.8	19.6	15.5, 23.6
Birth Weight				
LBW	68.0	58.1, 77.8	21.1	10.6, 31.6
NBW	65.4	61.8, 69.1	15.0	12.3, 17.7

Non over-the-counter drug use includes use of prescribed pain relievers, prescribed medications for depression or anxiety, and/or illicit drugs.

* Denominator is the total sub-analysis group. For example: Among married respondents, 71.5% reported over-the-counter drug use and 10.8% reported non over-the-counter drug use in the month before pregnancy.

**Insufficient data to report: Data are unreliable with a numerator less than 10 or relative standard error > 30%.

† Rates in some subgroups may be unstable and unreliable due to small sample size. This instability is reflected in very wide confidence intervals. In these cases, rates should be interpreted with caution.

Appendix D: Response Rates

Stratum	% Responding (Unweighted)	% Responding (Weighted)
All races, opioid parishes	61.1	61.1
African American, opioid parishes	55.0	55.0
Non-African American, opioid parishes	65.6	66.1
African American, non-opioid parishes	51.2	51.2
Non-African American, non-opioid parishes	57.3	57.3

Characteristic	# Sampled	Respondents	% Response (Unweighted)	% Response (Weighted)
Overall	1,858	1,079	58.1	57.1
Race/Ethnicity				
Non-Hispanic White	718	443	61.7	60.2
Non-Hispanic Black	855	458	53.6	52.8
Non-Hispanic Other	79	44	55.7	45.0
Hispanic	203	132	65.0	62.6

Hispanic Ethnicity				
Hispanic	203	132	65.0	62.6
Non-Hispanic	1653	946	57.2	56.5

Age in Years				
<20	124	61	49.2	44.3
20-29	997	555	55.7	56.0
30+	737	463	62.8	60.9

Education				
<HS	301	167	55.5	54.8
HS	577	334	57.9	56.2
>HS	966	572	59.2	58.8

Marital Status				
Married	754	462	61.3	60.1
Other	1104	617	55.9	54.8

Previous Births				
No Prev. Live Births	689	423	61.4	58.9
1+ Prev. Live Births	1166	653	56.0	56.0