# 2019-2023 Perinatal Health Data and Records

## Summary of DC's Perinatal Health Agenda and Descriptive Analyses of DC Live Births, Birth Outcomes, and Infant Mortality

**Prepared by:**
**Center of Policy Planning and Evaluation**
**Community Health Administration**

DC | HEALTH
GOVERNMENT OF THE DISTRICT OF COLUMBIA
GOVERNMENT OF THE DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR

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## Definitions of Terms

| | |
|---|---|
| Birthweight | Weight of the newborn at the time of birth. |
| Eclampsia | Eclampsia is defined as the presence of new-onset grand mal seizures in a woman with pre-eclampsia. Eclampsia is documented on the birth certificate [1]. |
| Gestational hypertension | Gestational hypertension is a condition characterized by high blood pressure during pregnancy. This type of hypertension is first diagnosed during pregnancy and is documented on the birth certificate (category includes pregnancy-induced hypertension and preeclampsia) [2]. |
| Gestational diabetes | Gestational diabetes is a type of diabetes that develops or is first recognized during pregnancy and is documented on the birth certificate (CDC factsheet) [3]. |
| Initiation into prenatal care | The time at which the mother has her first prenatal care visit. The trimester during which prenatal care was initiated was determined using the obstetric estimate for gestational age, date of birth, and date of first prenatal care visit. Initiation into prenatal is determined using the date of birth, the date of the first prenatal care visit, and the obstetric estimate of gestational age of the newborn at the time of birth. |
| Low birthweight | Birth of a newborn weighing less than 2,500 grams. |
| Neonatal period | The period between birth and 27 days of age. |
| Plurality | The number of live births or by the number of fetuses that remain in utero at 20 weeks of gestation and that are subsequently born separately. |
| Post-neonatal period | The period between 28 days and one year of age. |
| Pre-pregnancy weight of mother: | The mother's pre-pregnancy weight status is determined using Body Mass Index (BMI), which is calculated using the mother's height and pre-pregnancy weight, as documented on the birth certificate. A BMI less than 18.5 is considered underweight; between 18.5 and 24.9 is normal weight; between 25 and 29.9 is overweight; and 30 or above is considered obese. |

| | |
|---|---|
| Pre-pregnancy diabetes | The presence of pre-pregnancy diabetes indicates that the mother was diagnosed with diabetes prior to her pregnancy. |
| Pre-pregnancy hypertension | The presence of pre-pregnancy hypertension indicates that the mother was diagnosed with chronic hypertension prior to her pregnancy. |
| Pre-pregnancy smoking status | Mother smoked at least 1 cigarette during the three months prior to pregnancy. |
| Preterm birth | Birth prior to 37 weeks of gestation. |
| Previous preterm birth | Having had a previous preterm birth prior to the current birth. |
| Smoking status during pregnancy | Smoking during pregnancy is defined as smoking at least 1 cigarette during pregnancy. |
| Very low birthweight birth | Birth of a newborn weighing less than 1,500 grams. |

1. American College of Obstetricians and Gynecologists, Gestational Hypertension and Preeclampsia (2020). URL: https://www.acog.org/clinical/clinical-guidance/practice-bulletin/articles/2020/06/gestational-hypertension-and-preeclampsia
2. American College of Obstetricians and Gynecologists, Gestational Hypertension and Preeclampsia (2020). URL: https://www.acog.org/clinical/clinical-guidance/practice-bulletin/articles/2020/06/gestational-hypertension-and-preeclampsia
3. Centers for Disease Control and Prevention. Fact sheet on gestational diabetes, https://www.cdc.gov/pregnancy/documents/Diabetes_and_Pregnancy508.pdf

# Preface

The health of a society has long been measured by the health of its mothers and children. Infant mortality is a key indicator of population health. Healthy mothers tend to give birth to healthy babies and are best positioned to nurture them fully. Furthermore, good health during infancy and early childhood establishes a positive trajectory for health throughout the life course.

Perinatal health is the health and well-being of mothers and babies before, during, and after childbirth. Reflecting the importance of maternal and child health to the District of Columbia, DC Health has developed and is implementing a focused strategy for perinatal health. The strategy is built on a framework of seven elements:

- Every teenage girl and woman in DC is in control of her reproductive health
- Every pregnant woman receives patient-centered, high-quality prenatal care beginning in the 1st trimester
- Every newborn receives high-quality neonatal care in the hospital and outpatient settings
- Every parent has the life skills and resources needed to nurture and provide for their family
- Every healthcare provider serving women and infants has the tools and resources they need to provide quality care and to manage their patient's complex social needs
- Every infant and their parent/caregiver(s) has a safe and healthy environment to thrive and receive the support they need to promote early childhood development and learning
- Every healthcare facility providing maternal and infant care has tools and resources to practice evidence-based health care and document QI/QA activities

This report includes updated summary data on the health of mothers and infants in the District of Columbia through 2023, a comparison of data trends from 2015-2018 to 2019-2023, and a summary of DC Health's activities to improve perinatal health through 2023.

Data are presented in the main body of the report and in appendices. The data demonstrates meaningful improvements in key perinatal health indicators in recent years. In particular, the District of Columbia continues to experience decreases in rates of teen births, preterm births, low birth weight, and – most notably – infant mortality. Nonetheless, significant disparities in perinatal outcomes persist across racial and geographic lines. The city must continue to take targeted action to address these longstanding racial and ethnic inequities within the perinatal population. DC Health's approach to improving perinatal health includes improving preconception health, assuring high-quality health services and care, strengthening families, and promoting healthy environments. This report provides a summary of these efforts in the end section.

## Geography in the District

Many of the aggregate results we prepare and present in this report are computed and shared at a geographic level. The District of Columbia organizes its political and legislative boundaries by "wards". The boundaries of the eight wards comprising the District of Columbia are redrawn every ten years to account for changes in population size and to ensure even legislative representation in the DC City Council. Each ward has a unique composition of socio-demographic, economic, and cultural characteristics that influence residents' access to opportunities, public goods, resources, and other factors that impact their health. Therefore, key contextual data and information are paired with the ward of residence of a woman, making it imperative to evaluate or stratify many of the health characteristics addressed in this report by ward. Notable among the changes to the ward boundaries between 2012 and 2022 is the sizable section of Ward 2 that was reassigned to Ward 6 following the 2022 redistricting. While redistricting achieves the goal of balancing population size across wards, demographic and geographic shifts may occur.

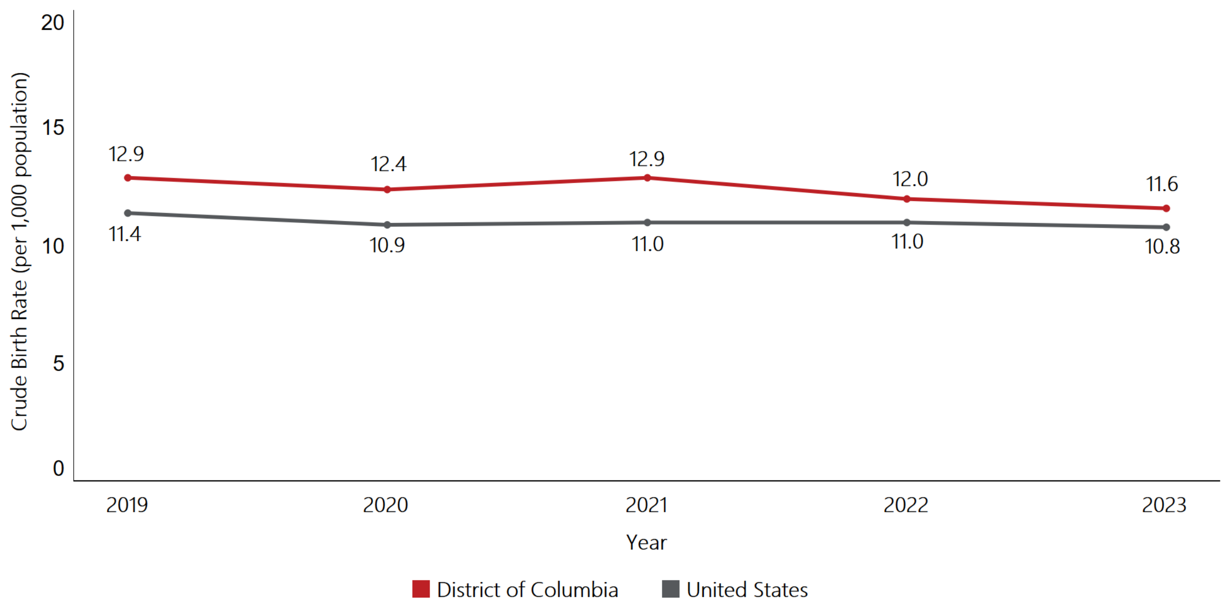
Given the recent redistricting in 2022, which intersects our reporting period of 2019-2023, we present ward-stratified results by further aggregating them to the year level (e.g., presenting results for 2019 and 2023 separately, where applicable). This is done intentionally to avoid biased results at the ward level, which are impacted by the changing population composition stemming from a redrawn boundary.

# Demographic and Health Characteristics of Pregnant Women

To implement effective strategies for improving perinatal health and reducing infant mortality, we must identify key patterns using both national and local data. Data derived from birth and death certificates provide valuable insights into the health status of pregnant women and infants. By examining data from 2019 to 2023, we can identify trends in maternal health, demographic characteristics, and birth outcomes.

This data also allows us to track five-year trends in live births overall and by maternal age, compare maternal characteristics before and during pregnancy, and provide a comprehensive profile of maternal health indicators in the pre-pregnancy and pregnancy periods.

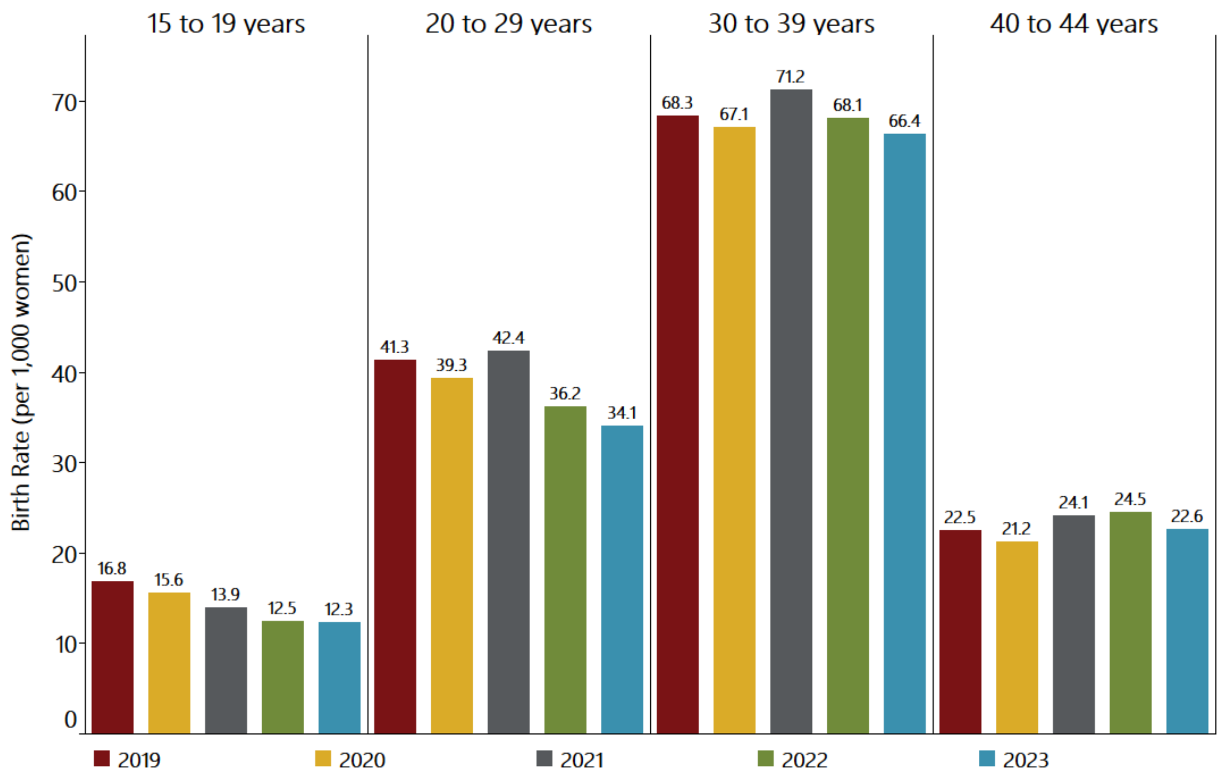
### Figure 1: Crude Birth Rate, United States and District of Columbia, 2019-2023




Data Source: US Crude birth rate, 2019-2023: National Center for Health Statistics. Health, United States, 2022: Table 8. Hyattsville, MD. 2024. Available from: https://www.cdc.gov/nchs//data/nvsr/nvsr73/nvsr73-02.pdf
2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning and Evaluation, D.C. Department of Health.
2019-2023 DC population estimates: Annual State Resident Population Estimates for 6 Race Groups (5 Race Alone Groups and Two or More Races) by Age, Sex, and Hispanic Origin: July 1st, Source US Census Bureau, Population Division.

The birth rate in the District of Columbia declined by 10.1% from 2019 to 2023, while the birth rate in the United States declined by 5.3% during the same period. From 2020 to 2021, during the COVID-19 pandemic, the birth rate rose by 4.0% in the District, possibly due to lifestyle changes such as increased time at home, shifting work patterns, or the shift of births as families postponed pregnancy from 2020 to 2021.

Figure 2: Selected Age-Specific Birth Rates, District of Columbia, 2019-2023

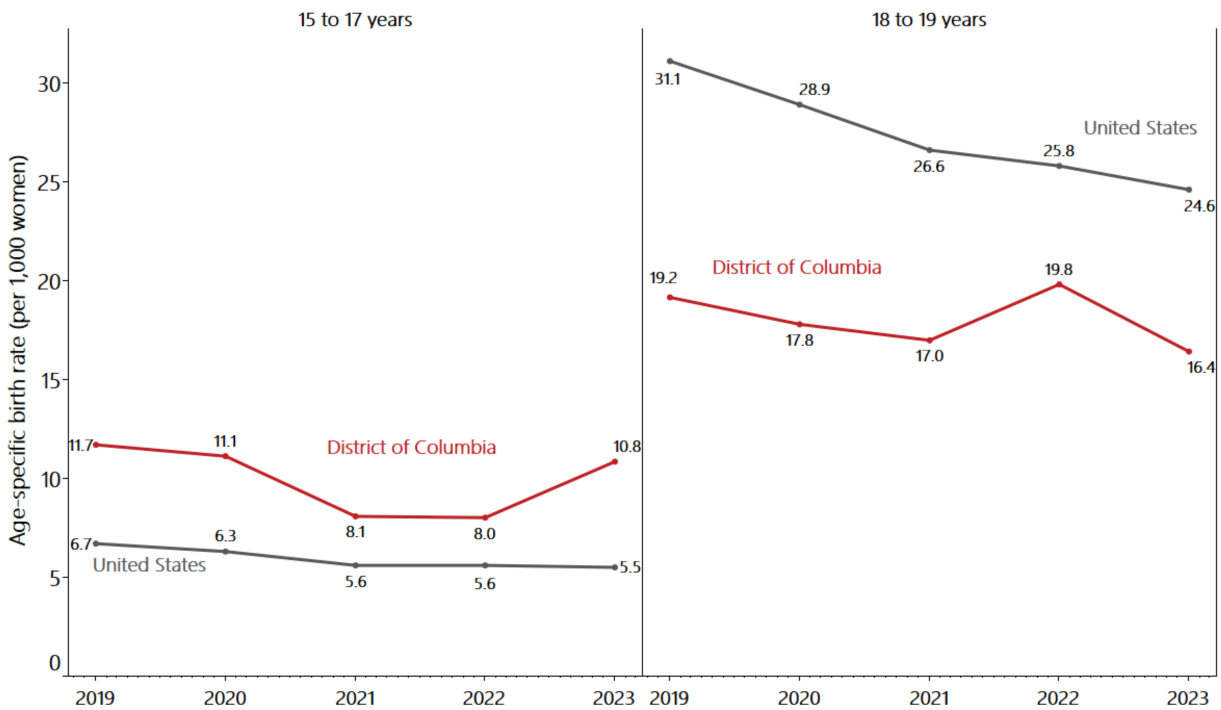



Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning and Evaluation, D.C. Department of Health. 2019-2023 DC population estimates: Annual State Resident Population Estimates for 6 Race Groups (5 Race Alone Groups and Two or More Races) by Age, Sex, and Hispanic Origin: July 1st, Source US Census Bureau, Population Division.

Age-specific birth rates were calculated to provide a more detailed understanding of fertility trends across different stages of the reproductive lifespan. Unlike broader measures, age-specific rates enable the identification of nuanced patterns within distinct age groups, providing a better understanding of how fertility behaviors are shifting among younger and older women.

A significant decline was observed among women aged 15-19, with the birth rate falling from 16.8 to 12.3 per 1,000 women, a 26.8% decrease. The birth rate trend for those aged 20-24 were similar to those from ages 25-29, as were those for women aged 30-34 and 35-39 so these ages were therefore combined into two groups for analysis (Figure 2). Among these 10-year age groups (Figure 2), the birth rate decreased among women aged 20-29 and 30-39, dropping by 17.4% and 2.8%, respectively. Notably, the 40-44 age group was the only ones to experience a slight increase in birth rates.

Figure 3: Younger and Older Teen Birth Rates (15-7 and 18-19 years) by Maternal Age Groups, District of Columbia & United States, 2019-2023

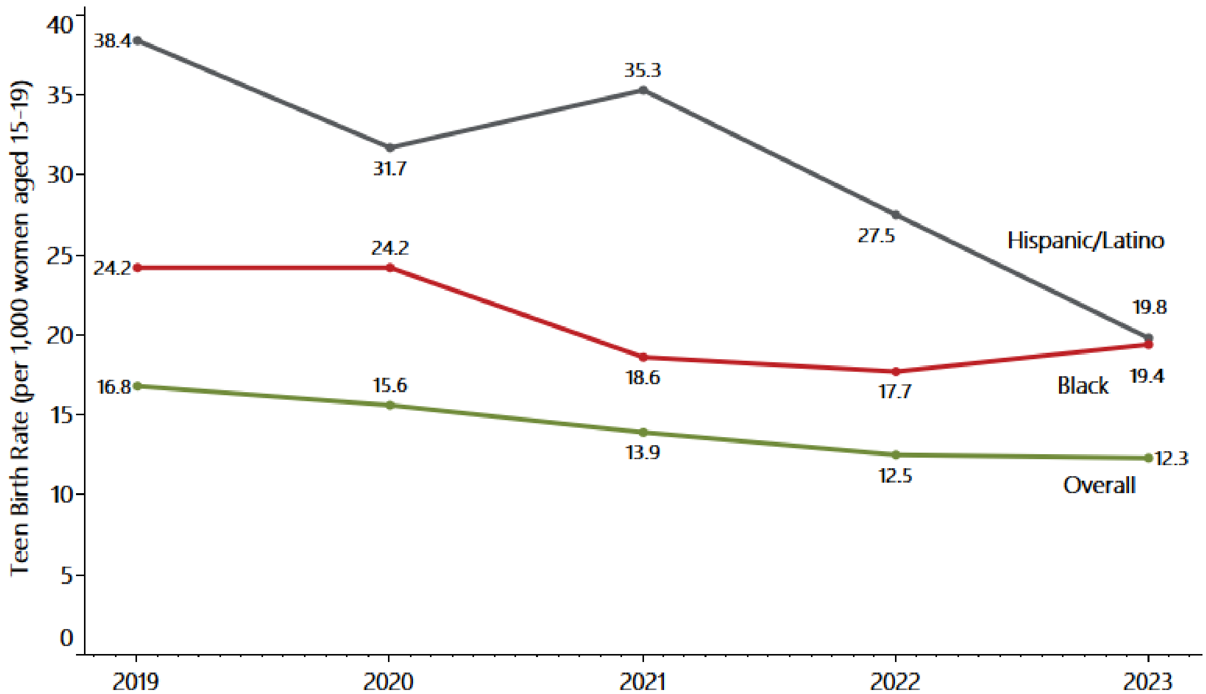



Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning and Evaluation, D.C. Department of Health.
2019-2023 DC population estimates: Annual State Resident Population Estimates for 6 Race Groups (5 Race Alone Groups and Two or More Races) by Age, Sex, and Hispanic Origin: July 1st, Source US Census Bureau, Population Division.
US teen birth rates, 2019-2023: Martin JA, Hamilton BE, Osterman MJK. Births in the United States, 2023. NCHS Data Brief, no 507. Hyattsville, MD: National Center for Health Statistics. 2024. DOI: https://dx.doi.org/10.15620/ CDC/158789.

For teenagers, additional differences are seen when the birth rates for younger and older teens are compared. From 2019 to 2023, the teen birth rate declined by 17.9% for teens aged 15 to 17 and 14.6% for teens aged 18 to 19. Despite an overall decline in births across both age groups, year-over-year changes revealed fluctuations. Among teens aged 18 to 19, the birth rate peaked in 2022 with a 16.5% increase from the previous year. For teens aged 15 to 17, the birth rate rose by 35% from 2022 to 2023.

Breaking down teen birth rates by maternal race and ethnicity revealed significant differences among groups. Black teens accounted for the largest proportion of teen births during the reporting period, representing 71% of all teen births in DC, though they represent 41% of the teen aged female population. Hispanic/Latino teens followed, comprising 27% of teen births. The remaining percentage was attributed to White, Asian, or Pacific Islander, and those who self-identified their race as "Other".

Figure 4: Birth rates for teens (15-19 years) overall and by maternal race/ethnicity, District of Columbia, 2019-2023*

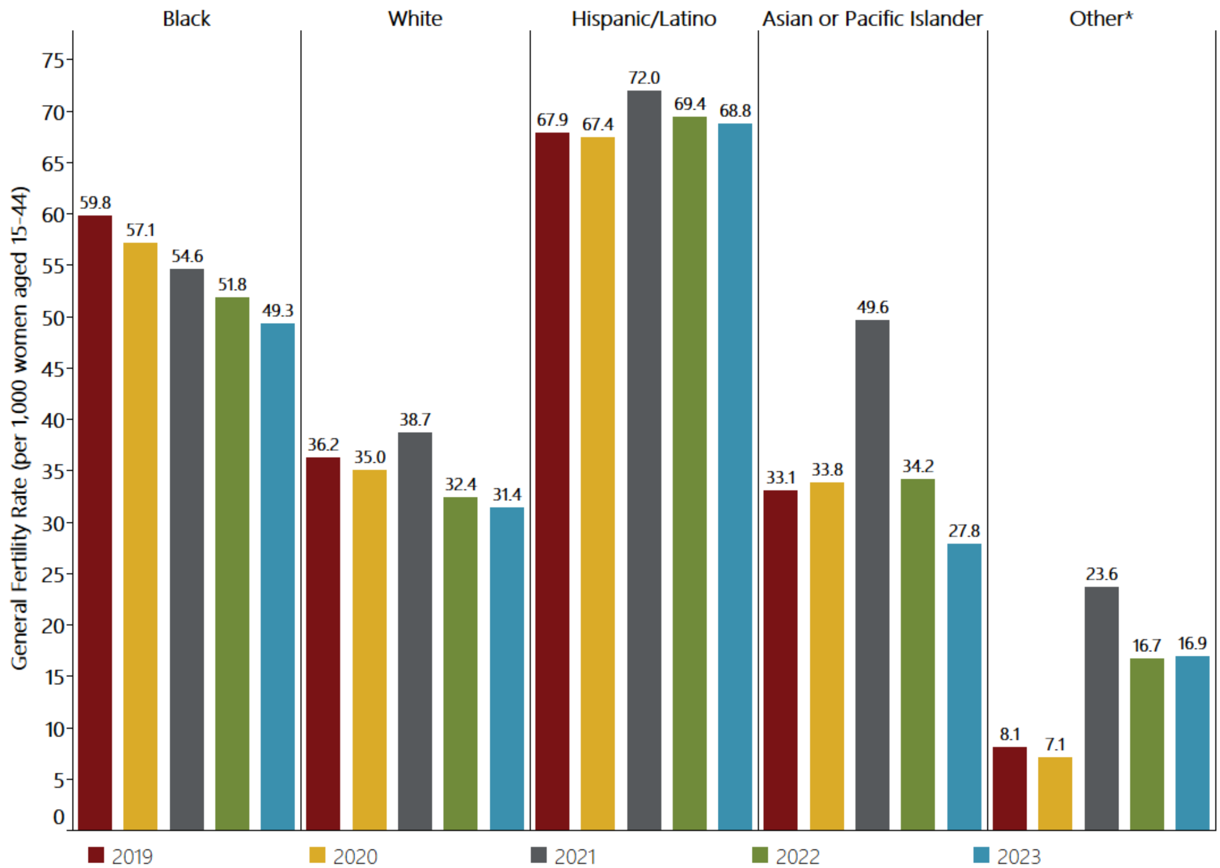



*Data Source:* 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning and Evaluation, D.C. Department of Health.2019-2023 DC population estimates: Annual State Resident Population Estimates for 6 Race Groups (5 Race Alone Groups and Two or More Races) by Age, Sex, and Hispanic Origin: July 1st, Source US Census Bureau, Population Division.
**Note: Rates based on fewer than 20 cases are suppressed due to statistical unreliability; therefore, the remaining racial-ethnic groups: White, Asian or Pacific Islander, and Other are not included in the figure.*

During this five-year period, teen birth rates in all racial and ethnic groups declined, with the overall teen birth rate declining by 5.3%. Hispanic/Latino teens saw the largest decline, with birth rates dropping 48.4% from 2019 to 2023.

It is important to highlight that Black and Hispanic teens represented 97.2% of all DC teen births over the five-year period. In contrast, White, Asian or Pacific Islander, and other groups collectively accounted for the remaining 2.8%. Due to confidentiality protection guidelines, the counts and rates for these groups are not displayed in the figure above.

Figure 5: General Fertility Rate (GFR) by Maternal Race and Ethnicity, District of Columbia, 2019-2023



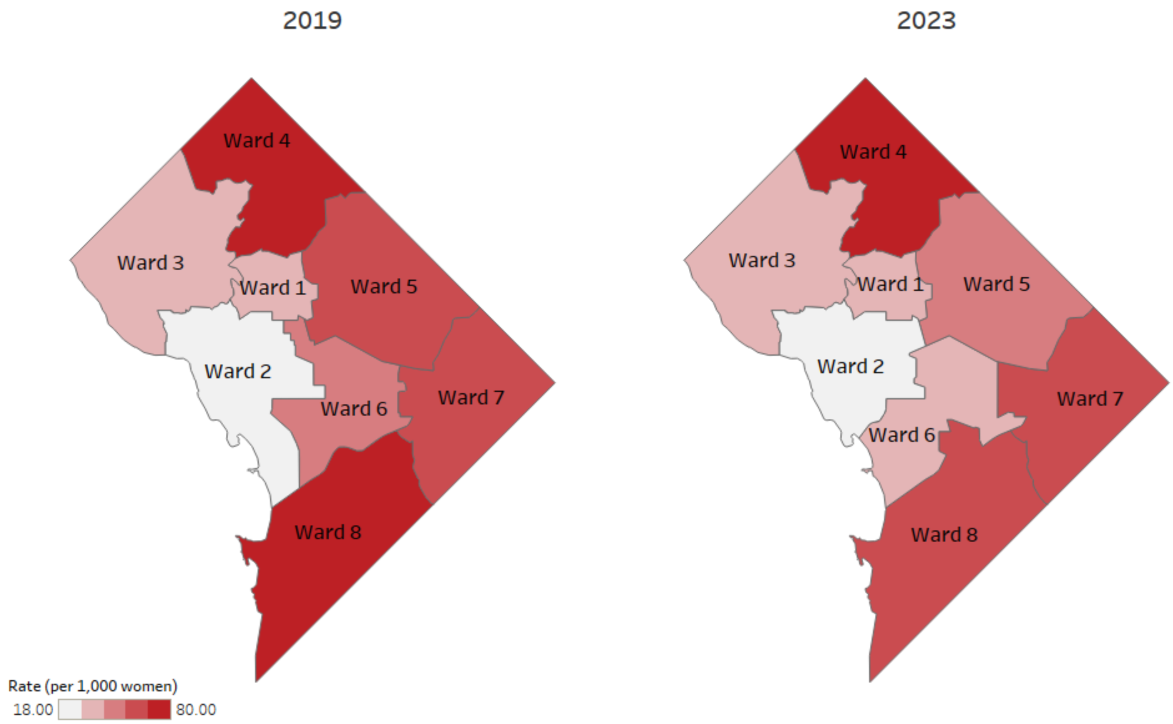

Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning and Evaluation, D.C. Department of Health. 2019-2023 DC population estimates: Annual State Resident Population Estimates for 6 Race Groups (5 Race Alone Groups and Two or More Races) by Age, Sex, and Hispanic Origin: July 1st, Source US Census Bureau, Population Division.
Note: GFR is the total number of resident live births divided by the female population age 15-44 years multiplied 1,000.
*The "Other" category encompasses individuals identifying as American Indian/Alaskan Native, Multiple Races, and those who selected "Other" when prompted about their race.

General fertility rates (GFR) by race are presented to highlight demographic trends and better understand how reproductive patterns vary across different communities. This data is essential for identifying disparities, guiding equitable policy development, and targeting information for public health interventions.

From 2019 to 2023, the GFR declined among three racial/ethnic groups: White, Black, and Asian or Pacific Islander. Black women saw the most significant decrease in GFR, dropping from 59.8 to 49.3 per 1,000 women, a 17.6% decline from 2019 to 2023. During the same period, GFR among Hispanic/Latino women increased by 1.3% (67.9 per 1,000 women to 68.8 per 1,000 women), and by 108.6% among other women (8.1 per 1,000 women to 16.9 per 1,000 women).

In 2021, the National Center for Health Statistics (NCHS) made several key updates to the birth data race field to improve the accuracy and comprehensiveness of the collected data. These updates included expanding the race and ethnicity categories for a more detailed representation of the population and introducing the option for multiple race reporting, allowing individuals to identify with more than one race. These changes likely contributed to the observed large increase in general fertility rates among Asian or Pacific Islanders and those categorized under Other race groups.

Figure 6: General Fertility Rate (GFR) by Ward, District of Columbia, 2019-2023*




Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning and Evaluation, D.C. Department of Health. 2019 and 2023 DC population estimates: Annual State Resident Population Estimates for 6 Race Groups (5 Race Alone Groups and Two or More Races) by Age, Sex, and Hispanic Origin: July 1st, Source US Census Bureau, Population Division.
*Note: Presented as the total number of resident live births divided by the female population age 15-44 years multiplied 1,000.

During the five-year period, all wards, except for Ward 2, experienced a decline in GFR. Ward 6 experienced the most significant percent change, as the GFR dropped by 26.7% (from 44.9 per 1,000 women to 32.9 per 1,000 women). Ward 3 was noticeably unchanged as the GFR only declined by 0.9% during this five-year period.

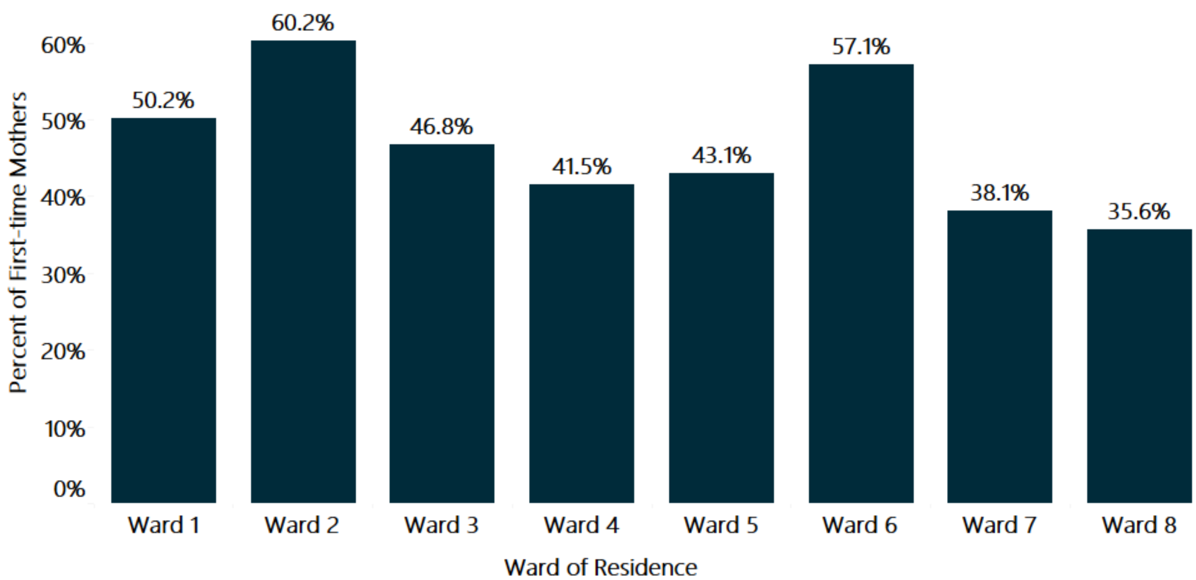
The GFR increased by 7.1% within Ward 2 (from 18.4 per 1,000 women to 19.7 per 1,000 women) despite the geographical changes resulting from the ward redistricting in 2022.

## Changes in the Demographics and Socioeconomic profile of mothers who had a live birth between 2019 and 2023.

The current profile of District of Columbia residents who gave birth is based on the most recent birth data (2019-2023). Appendix Table 7 presents the overall distribution of maternal sociodemographic characteristics from 2019 to 2023, and Appendix Table 8 provides the distribution by ward.

Since 2020, the number of births to first-time mothers has declined by 12.2% in the District of Columbia. However, in 2023, nearly half of all births were to women having their first child, representing a 2.2% increase from 2019, with an average maternal age of 31.

Figure 7: Distribution of First-Time Births by Maternal Residence (Ward), District of Columbia, 2023




**Data Source**: 2023 DC Birth Data, Vital Records Division, Center for Policy, Planning and Evaluation, D.C. Department of Health.

- In 2023, Ward 2 had the highest percentage of first-time mothers (60.2%), followed by Ward 6 (57.1%) and Ward 1 (50.2%).
- Wards 1, 6, 7, and 8 experienced an increase in the percentage of first-time mothers compared to 2019.
- Ward 8 had the lowest percentage of first-time mothers, with nearly 65% of live births occurring to women who had given birth previously.

## DC Health programs to support a healthy pregnancy

- DC Calling All Sectors Initiative was a multi-sector, collaborative effort led by the DC Health Office of Health Equity to address housing insecurity among pregnant residents. The collaborative effort successfully shifted policy and practice at DHS to facilitate immediate access to housing – starting at the 1st trimester – with the addition of care coordination, and supportive services for pregnant women, that formally was limited from exclusively to during the third trimester only.
- DC Health funds Mamatoto Village's Mothers Rising Home Visitation Program, which provides women with health education, support with social service needs, care coordination, advocacy, and parenting support during their pregnancies and throughout the infants' first three months of their life.
- The Maternal, Infant, and Early Childhood Home Visitation Program is a federally funded program that provides evidence-based home visiting services for at-risk pregnant women and parents of young children.
- The DC Perinatal Quality Collaborative convenes a team of perinatal care providers and public health professionals to reduce pregnancy-related morbidity and mortality among women in the District.

### Section Highlights

- The birth rate in the District of Columbia declined by 10.1% from 2019 to 2023.
- Maternal Age:
  - Women aged 15-19 experienced the largest decline, with the birth rate dropping from 16.8 to 12.3 per 1,000 women, a 26.8% decrease.
  - The age-specific birth rate was highest among women aged 30-39.
- Maternal Race and Ethnicity:
  - Black women had the highest birth rate, while Hispanic women had the highest general fertility rate (GFR).
- Ward of Residence:
  - Among all wards, Ward 2 was the only one to see an increase in the GFR and had the highest percentage of first-time mothers in 2023.

# Birth Outcomes

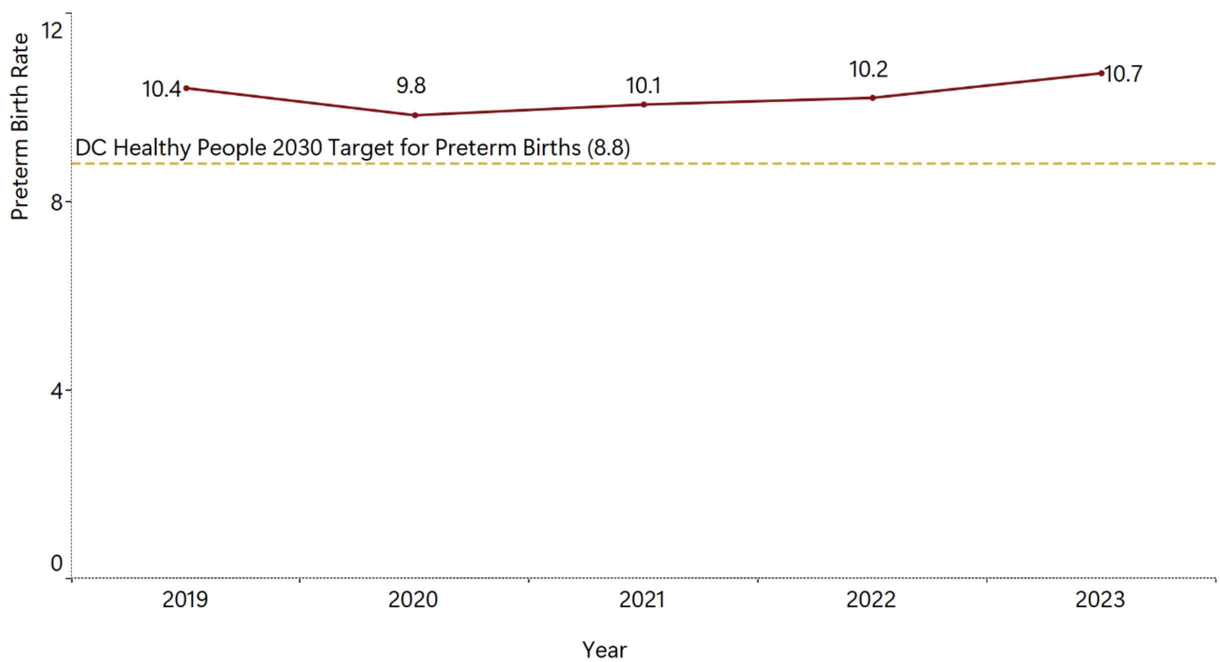
Key birth outcomes that are used to define the health of newborns and infants in the population include preterm births, low birth weight, and infant mortality. This section presents a five-year analysis of preterm births and low birth weight births. It presents the preterm birth rate and low birthweight birth rate based on maternal characteristics and behaviors, categorized by race and ethnicity, using combined data from 2019 to 2023. Most rates are derived from at least 20 events to ensure reliability, as rates based on fewer than 20 events may produce statistically unreliable estimates.

Infant mortality rates are presented according to sociodemographic characteristics, pre-pregnancy, pregnancy characteristics, and behaviors for the combined years 2019-2023. Although annual rates are included, five-year data are aggregated to enhance the reliability of estimates and identify differences across selected characteristics. Ward-level maps are provided for the combined years 2019-2023, given the small number of infant deaths in most Washington, DC, neighborhoods. The ten leading causes of infant and neonatal deaths are outlined for the five years of data.

## Preterm Birth

A preterm birth is defined as a live birth occurring prior to 37 weeks of gestation. The preterm birth rate among all live births to DC residents did not show a significant difference when comparing 2019 and 2023 (Figure 8).

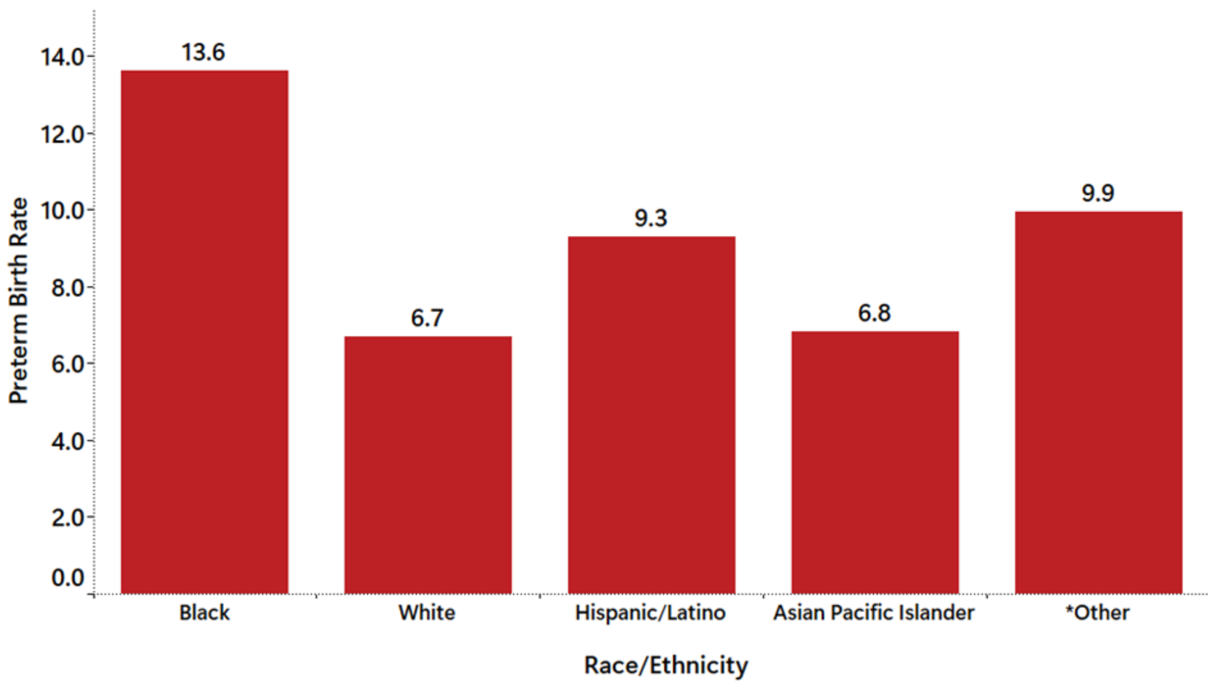
Figure 8: Preterm Live Birth Rate, District of Columbia, 2019-2023




**Data Source:** 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning and Evaluation, D.C. Department of Health.

Between 2019 to 2023, the overall preterm birth rate among Black mothers was significantly higher than that of all other racial/ethnic groups($p<0.05$) (Figure 9).

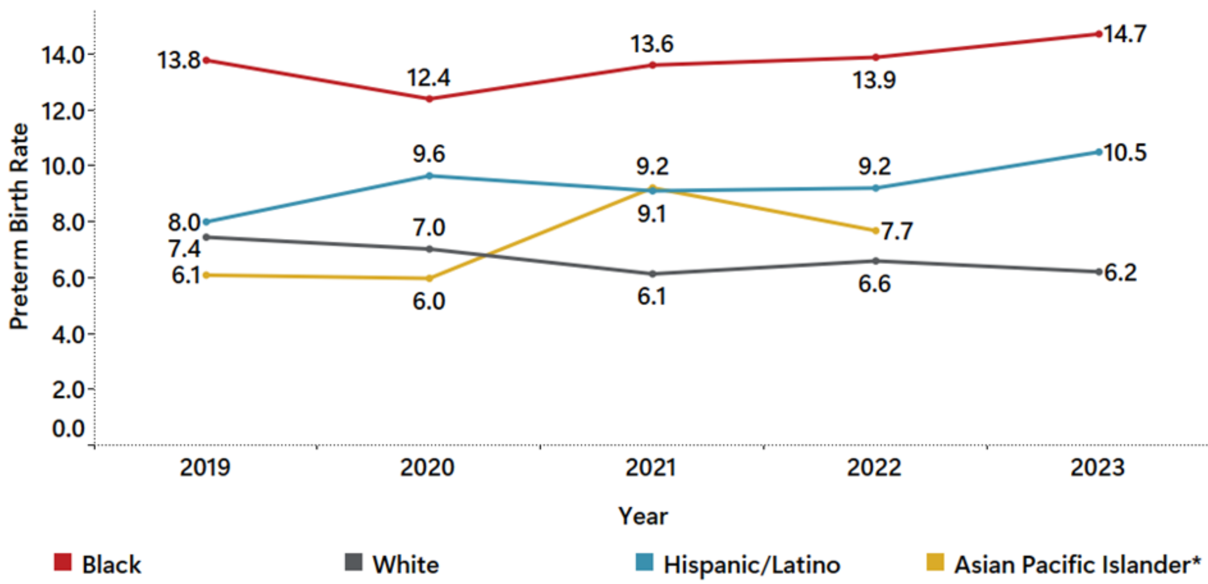
Figure 9: Preterm Live Birth Rate by Maternal Race/Ethnicity, District of Columbia, 2019-2023




Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning and Evaluation, D.C. Department of Health.
*The "Other" category encompasses individuals identifying as American Indian/Alaskan Native, Multiple Races, and those who selected "Other" when prompted about their race.

Between 2019 to 2023, preterm birth rates remained relatively stable across most Race/ethnicity groups when compared year over year. However, significant changes were observed among Black mothers between 2020 and 2023, with an 18.5% increase. Among White mothers there was a 17.6% decrease between 2019 and 2021, while Hispanic mothers experienced a 23.8% increase between 2019 and 2023 (Figure 10).

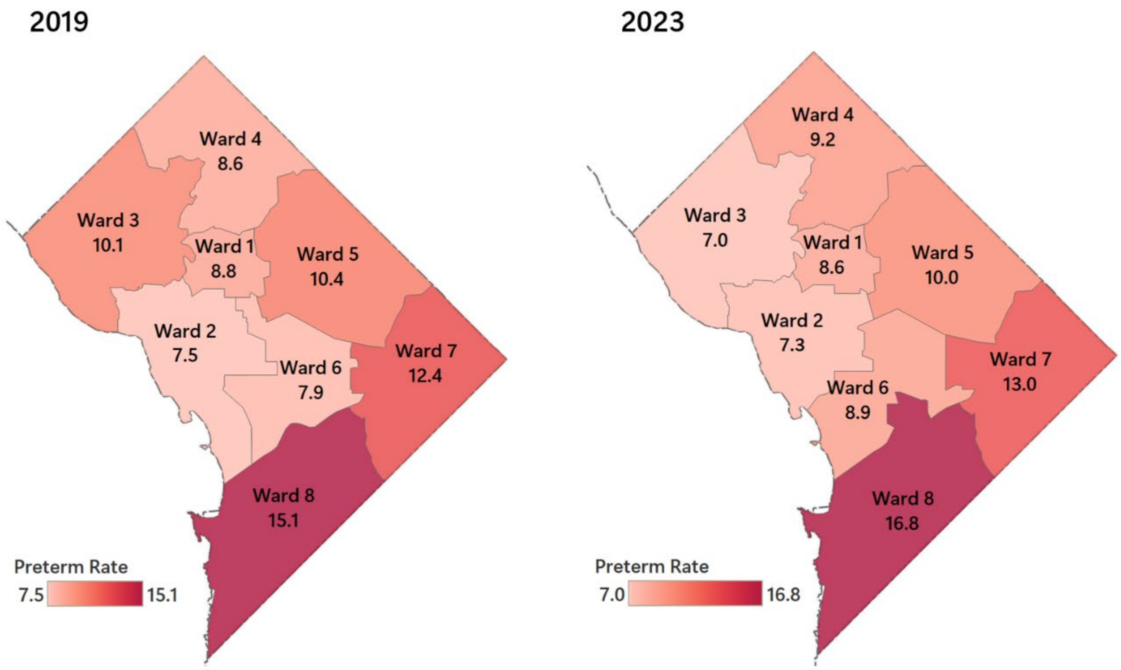
Figure 10: Annual Preterm Live Birth Rate by Maternal Race/Ethnicity, District of Columbia, 2019-2023




Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning and Evaluation, D.C. Department of Health.
* The rate for Asian Pacific Islander for the year 2023 is suppressed due to count less than 20.
**Note: Rates based on fewer than 20 cases are suppressed due to statistical unreliability; therefore, the "Other" race category is not included in the figure.*

The rate of preterm births showed a significant (30.7%) decrease in Ward 3 (dropping from 10.1% in 2019 to 7.0% in 2023), with all other wards remaining relatively stable (Figure 11).

Figure 11: Preterm Live Birth Rate by Ward, District of Columbia, 2019-2023




Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.

## Preterm live births by sociodemographic characteristics of the mother, District of Columbia, 2019-2023.

Between 2019 and 2023, the rate of preterm live births varied significantly by demographic characteristics such as age, race, and socioeconomic status.

- Black mothers had a significantly higher preterm birth rate of 13.6% compared with 6.7% among White mothers, 9.3% among Hispanic/Latino mothers, and 6.8% among Asian/Pacific Islander mothers ($p<0.05$).
- Mothers aged 25-29 had a significantly higher preterm birth rate of 11.9% compared with those aged 30-34 (9.5%) or 35-39 (8.9%) ($p<0.05$).
- Unmarried mothers had a significantly higher preterm birth rate of 13.6% compared with married mothers (7.4%) ($p<0.05$).
- Mothers without a high school diploma (13.5%) or those with only a high school diploma (13.8%) had significantly higher preterm rate compared with mothers with higher education (8.5%) ($p<0.05$).
- Medicaid-financed births had a significantly higher preterm birth rate of 13.3% compared with 7.7% for those with private insurance and 8.2% for self-pay births ($p<0.05$.
- Mothers who are Ward 8 residents had a significantly higher preterm birth rate of 14.4%, compared to mothers in all other wards($p<0.05$).

Appendix Table 10 details the above information, highlighting how these factors contribute to the disparities observed during this period.

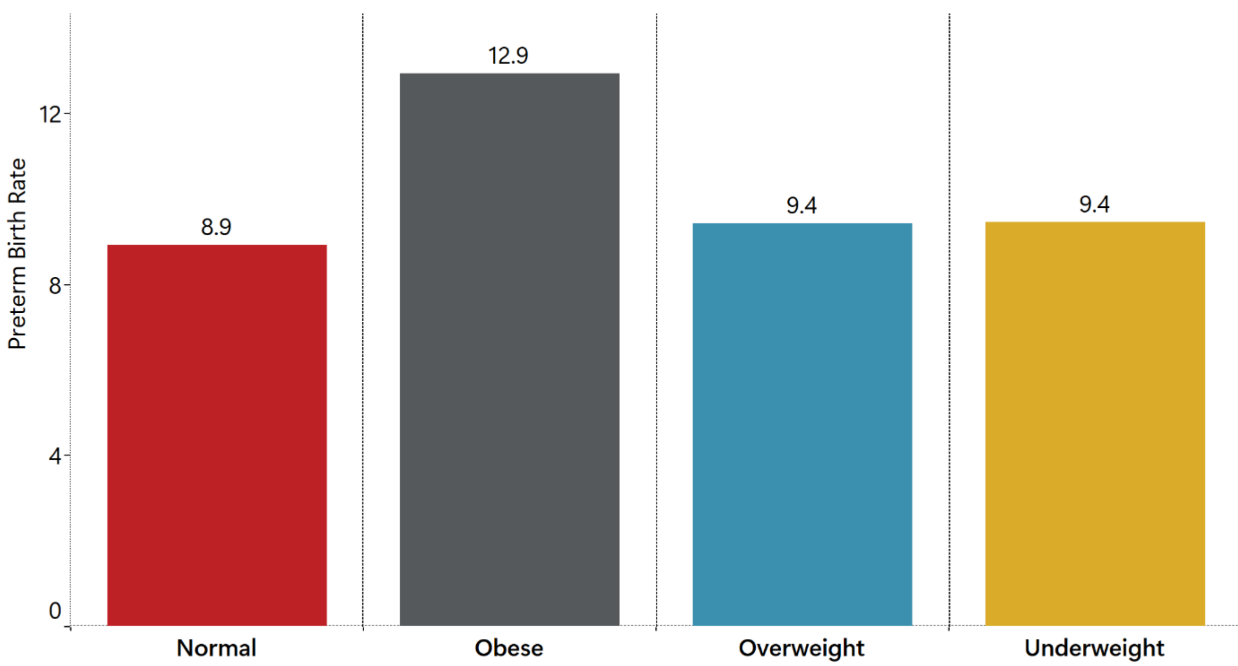
## Preterm live births by pre-pregnancy health characteristics and behaviors of the mother, District of Columbia, 2019-2023

The rate of preterm births varied based on health characteristics and behaviors before pregnancy. Key factors included a history of previous preterm births, pre-pregnancy weight, smoking, diabetes, and hypertension. Information on the preterm birth rate related to these characteristics is further detailed by maternal race, ethnicity, and ward (see Appendix Table 12).

The odds of preterm birth are 3.96 times higher in mothers with a preterm birth history compared to those without a history ($p<0.05$). The rate of preterm births was statistically significant among Black mothers with prior preterm births at 32.6% compared to White (20.2%) and Hispanic/Latino (25.1%) mothers of the same group ($p<0.05$) Appendix Table 12).

Overall, a significantly higher rate of preterm births (13%) occurred among obese mothers (Figure 12) than mothers in other weight categories. Across the pre-pregnancy weight categories of normal and overweight/obese, the rate of preterm births among Black mothers was significantly higher than among Hispanic/Latino, White, and Asian Pacific Islander mothers and the same held true for Hispanic/Latino mothers compared to White and Asian Pacific Islander mothers ($p<0.05$) (see Appendix Table 12).

Figure 12: Preterm Live Birth Rate by Pre-pregnancy Weight, District of Columbia, 2019-2023




**Data Source**: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning and Evaluation, D.C. Department of Health. Data for figure are presented in Appendix 12.

Overall, the odds of preterm birth among mothers who smoked prior to pregnancy were 2.4 times higher compared to those who did not smoke (Appendix Table 12). The percentage of preterm births among Black mothers who smoked prior to pregnancy (22.7%) was significantly higher than among those who did not smoke (13.1%) prior to pregnancy ($p<0.05$) (see Appendix Table 12). Among mothers who experienced a preterm birth and reported smoking prior to pregnancy, 92.4% were Black. All other racial and ethnic groups combined accounted for only 6.6% of such cases. Due to the smaller numbers among these groups, comparative analysis was only feasible for Black mothers.

Mothers who had diabetes before pregnancy had 2.38 times higher odds of experiencing preterm births compared to those without pre-pregnancy diabetes (OR = 2.38 and $p<0.05$). Among Black and Hispanic/Latino mothers, the rate of preterm births was also notably higher for those with diabetes at 25% and 18.5%, compared to 13.4% and 9.1% for those without.

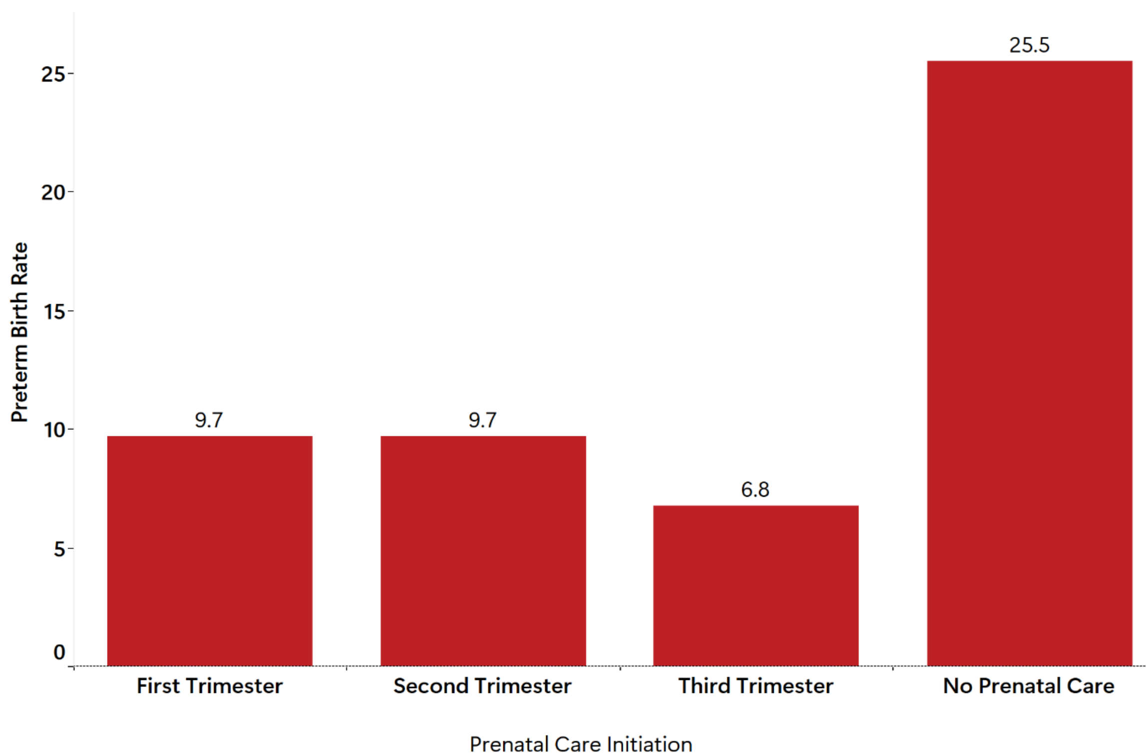
Similarly, mothers with pre-pregnancy hypertension had 2.63 times the odds of experiencing preterm births compared to those without hypertension (OR=2.63; $p<0.05$) (see Appendix Table 12).

## Preterm live births by health characteristics and behaviors of the mother during pregnancy, District of Columbia, 2019-2023

Preterm live births varied based on health characteristics and behaviors during pregnancy, including prenatal care initiation, smoking habits, diagnosis of gestational diabetes, diagnosis of gestational hypertension, and eclampsia. The breakdown of preterm births according to these factors is detailed by maternal race and ethnicity (see Appendix Table 14) and by ward (see Appendix Table 15).

Overall, the rate of preterm births was significantly higher among mothers who did not begin prenatal care (26.8%) compared to those who initiated care in the first trimester (9.9%), second trimester (9.9%), or third trimester (6.9%) ($p<0.05$) (refer to Figure 13, Appendix Table 14). This trend remained consistent, with the most significant absolute percentage difference observed among Black mothers.

Figure 13: Preterm Live Birth Rate by Prenatal Care Initiation, District of Columbia, 2019-2023




Data Source:2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning and Evaluation, D.C. Department of Health; Data for the figure are presented in Appendix Table 14.

Mothers with twin births had 12.34 times higher odds of experiencing preterm birth compared to those with singleton pregnancies (OR = 12.34; $p<0.05$). This trend is consistent across all racial and ethnic groups. Among Black mothers who gave birth to twins, the preterm birth rate is particularly high at 59%. This is notably higher than the rates observed for Hispanic/Latino mothers at 44.9% and White mothers at 48.1%, who had twins ($p<0.05$).

Similarly, for singleton births, the rate of preterm birth is higher among Black mothers at 11.8% compared to 8.4% for Hispanic/Latino mothers and 5.4% for White mothers (see Appendix Table 14).

The rate of preterm birth for mothers who smoked was 22%, more than double the rate for non-smokers (10.2%). This effect remained consistent among Black mothers, as those who smoked during pregnancy had a significantly higher preterm birth rate of 22.9%, compared with 13.3% among non-smokers. Among mothers who experienced a preterm birth and reported smoking during pregnancy, 91% were Black. All other racial and ethnic groups combined accounted for only 8.3% of such cases. Due to the smaller numbers among these groups, comparative analysis was only feasible for Black mothers (see Appendix Table 14).

The rate of preterm birth was notably higher among mothers with gestational diabetes, at 13.5%, compared to 10.1% for those without the condition ($p<0.05$). Within the group of mothers with gestational diabetes, Black mothers experienced an even greater preterm birth rate of 16.3%, in contrast to 11.2% for White mothers and 12.0% for Hispanic/Latino mothers ($p<0.05$) (Appendix Table 14).

Mothers with gestational hypertension experienced a significantly higher rate of preterm births (18.0%) compared to those without the condition (9.5%) ($p<0.05$). Among those with gestational hypertension, Black mothers faced the highest preterm birth rate of 20.9%, compared to 14.1% for White mothers and 15.6% for Hispanic/Latino mothers ($p<0.05$) (Appendix Table 14).

Moreover, mothers with eclampsia had a significantly higher rate of preterm births (35.7%) compared to mothers without eclampsia (10.1%) ($p<0.05$) (Appendix Table 14).

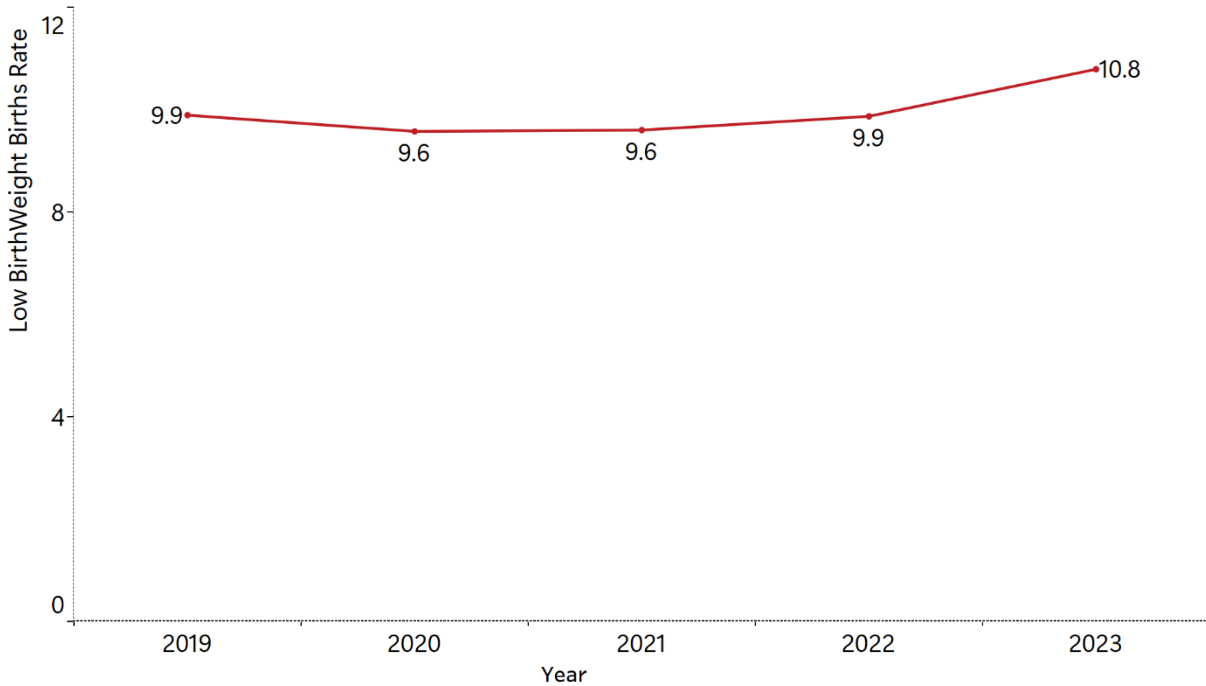
Section Highlights

- The preterm birth rate in the District did not change significantly when comparing 2019 to 2023.
- The rate of preterm births was between 1.5 and 2 times higher for:
    - Black mothers compared to White mothers.
    - unmarried mothers versus married mothers.
    - births covered by Medicaid versus private insurance.
    - births to mothers with less than a high school education compared to mothers with more than high school education.
    - births occurring to women who resided in ward 7 and 8 compared to wards 2, 4 and 6.
- The rate of preterm births was between 2 and 2.5 times higher for:
    - mothers with diabetes or hypertension prior to pregnancy compared to mothers without diabetes or hypertension prior to pregnancy, respectively.
    - women who smoked during pregnancy compared to women who did not smoke during pregnancy.
    - women who had had a previous preterm birth compared to those who did not.
    - mothers who did not receive prenatal care during pregnancy compared to women who entered prenatal care in their 1$^{st}$ trimester.
- The preterm birth rate was 3 times higher for:
    - mothers with gestational eclampsia compared to mothers without.
- The rate of preterm births was more than seven times higher among twin compared to singleton births.

## Low Birth Weight

Low birthweight infants are at high risk for health problems. A low birthweight birth is the birth of a newborn with a weight below 2,500 grams. The low birthweight birth rate among all live births to DC residents showed a statistically significant increase when comparing 2019 (9.8%) and 2023 (10.7%) ($p<0.05$) (Figure 14).

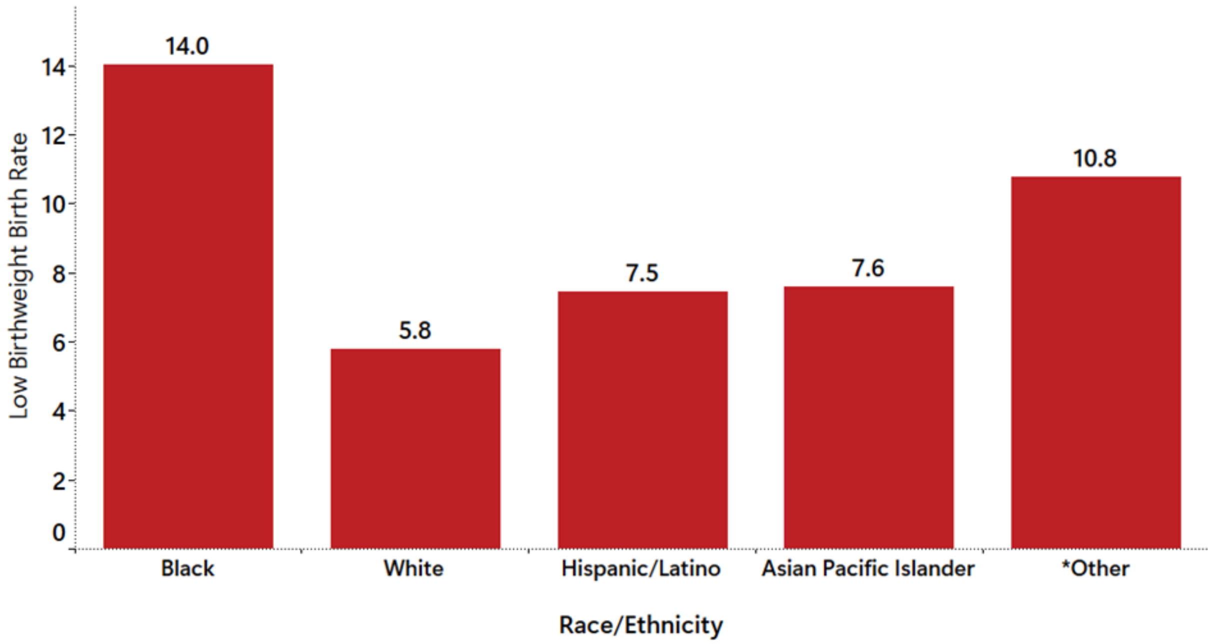
Figure 14: Low Birthweight Live Births Rate, District of Columbia, 2019-2023




Data Source: 2019- 2023 DC Birth Data, Vital Records Division, Center for Policy, Planning and Evaluation, D.C. Department of Health

Between 2019 to 2023, the overall low birthweight birth rate among Black mothers was significantly higher than that of all other racial/ethnic groups ($p<0.05$) (Figure 15).

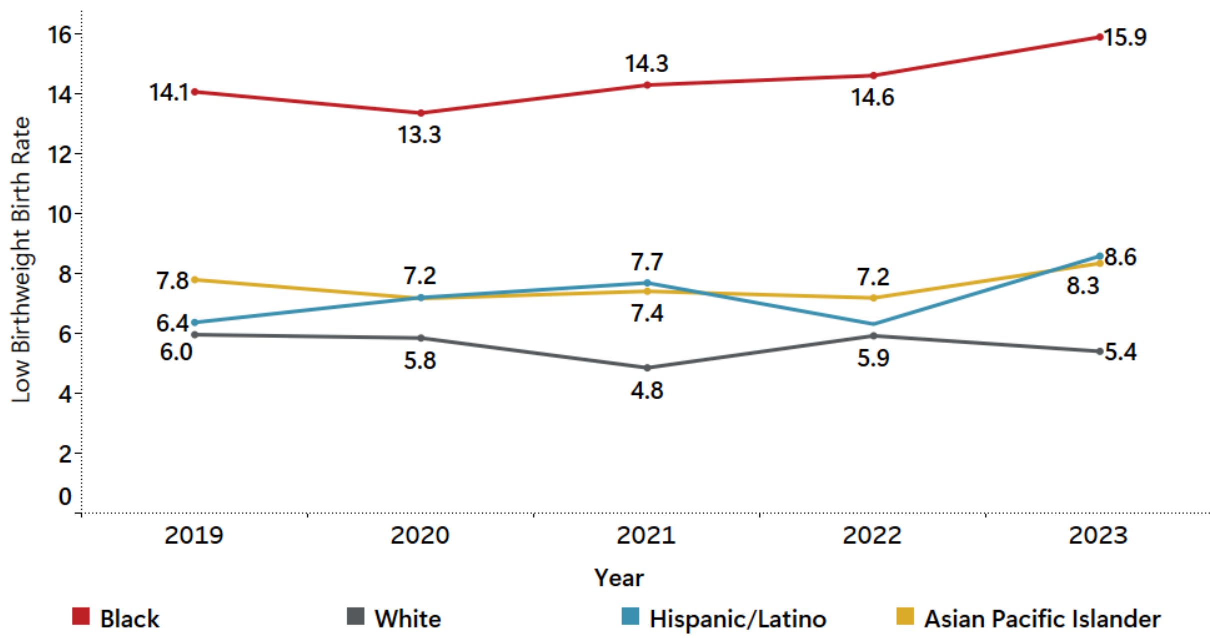
Figure 15: Low Birthweight Live Birth Rate by Maternal Race/Ethnicity, District of Columbia, 2019-2023




Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning and Evaluation, D.C. Department of Health.
*The "Other" category encompasses individuals identifying as American Indian/Alaskan Native, Multiple Races, and those who selected "Other" when prompted about their race.

From 2019 to 2023, the rate of low birthweight live births remained relatively stable for Whites and Asian Pacific Islanders. The rate among Black mothers increased from 14.1% in 2019 to 15.9% in 2023, representing a 12.8% increase. For Hispanic/Latino mothers, it rose from 6.4% to 8.6%, representing a 34% increase over the same period ($p<0.05$) (see Figure 16).

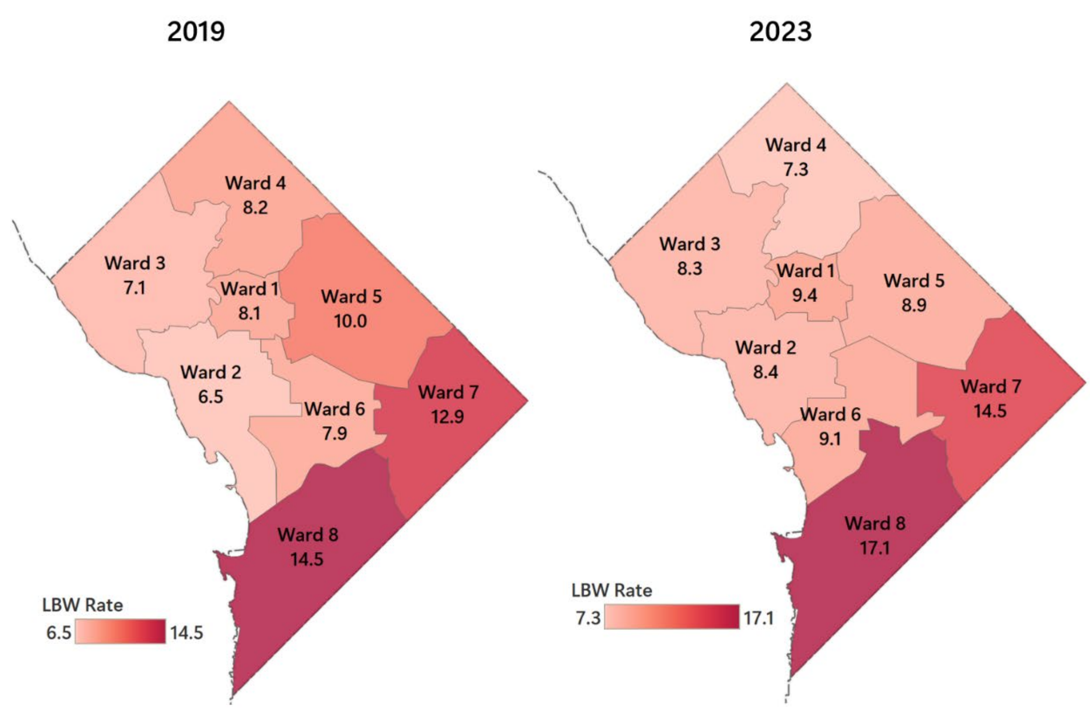
Figure 16: Annual Low Birthweight Live Birth Rate by Maternal Race/Ethnicity, District of Columbia, 2019-2023




Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning and Evaluation, D.C. Department of Health.
**Note: Rates based on fewer than 20 cases are suppressed due to statistical unreliability; therefore, the "Other" race category is not included in the figure.*

Figure 17 Shows the rate of low birthweight births by maternal residence ward, comparing 2019 and 2023. A statistically significant increase was observed in the percentage of low birthweight births between 2019 (14.5%) and 2023 (17.1%) for Ward 8, representing an 18% increase ($p<0.05$).

Figure 17: Low Birthweight Live Birth Rate by Ward, District of Columbia, 2019-2023



Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.

## Low birthweight live births by sociodemographic characteristics of the mother, District of Columbia, 2019-2023

From 2019-2023, significant variations in the rate of low birthweight live births were observed among different demographic groups, as detailed in Appendix Table 11. Notably, the odds of low birthweight birth was 2.15 times higher among Black mothers compared to Hispanic/Latino mothers and 2.84 times higher compared to White mothers which was statistically significant.

When considering maternal age, mothers aged 20-24 and 25-29 experienced a significantly higher percentage of low birthweight births (12.9% and 12.1%, respectively) than other age groups, except those younger than 20. Mothers aged 35-39 had a significantly lower rate of low birthweight births (7.8%) than all other age groups ($p<0.05$).

The odds of a low birthweight birth was 2.3 times higher for unmarried mothers than for married mothers ($p<0.05$).

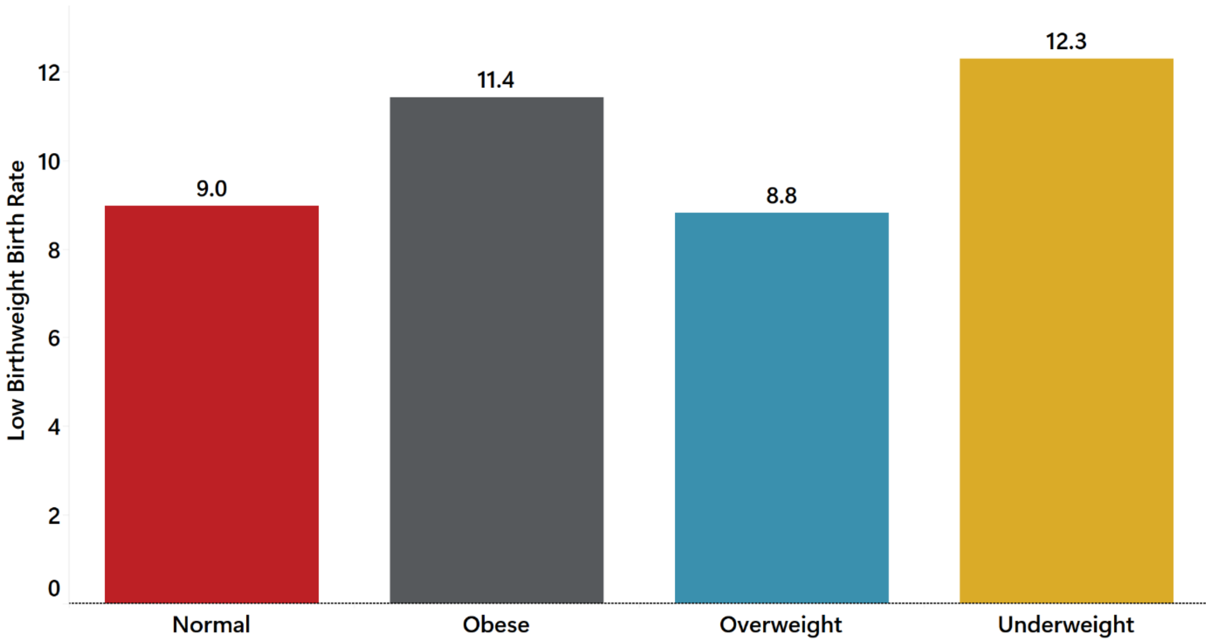
Educational attainment played a role in these outcomes. Mothers who had only a high school diploma (14.2%) and those without a high school diploma (12.9%) exhibited significantly higher rates of low birthweight births than those with more than a high school education (7.9%) ($p<0.05$).

Lastly, Medicaid-financed births in the District of Columbia showed a significantly higher rate of low birthweight births (13.4%) compared to those financed by private insurance (6.9%) ($p<0.05$) (Appendix Table 11).

## Low birthweight live births by pre-pregnancy health characteristics and behaviors of the mother, 2019-2023

The low birthweight live birth rate was significantly higher among underweight mothers (12.3%) or obese mothers (11.4%) before pregnancy compared to mothers with a normal pre-pregnancy weight (9.0%) ($p<0.05$) (Figure 18). Within each pre-pregnancy weight category, the rate of low birthweight births was significantly higher for Black mothers compared to White and Hispanic/Latino mothers (except for the underweight category, where $n<20$ for Hispanic/Latino), as detailed in Appendix Table 16. The low birthweight live birth rate by maternal health characteristics and behaviors before pregnancy is presented by maternal race and ethnicity in Appendix Table 16. Additionally, Appendix Table 17 displays this data based on the mother's residential ward.

Figure 18: Low Birthweight Birth Rate by Pre-pregnancy Weight, District of Columbia, 2019-2023




Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning and Evaluation, D.C. Department of Health. Data for the figure are presented in Appendix 16.

The low birthweight live birth rate among mothers who smoked before pregnancy was significantly higher at 22.3% compared to 9.6% for mothers who did not smoke. Among mothers who experienced a low birthweight birth and reported smoking prior to pregnancy, 93% were Black. All other racial and ethnic groups combined accounted for only 6.3% of such cases. Due to the smaller number among these groups, comparative analysis was only feasible for Black mothers.

The odds of delivering a low birthweight infant were 2.65 times higher in mothers with a history of pre-pregnancy hypertension compared to those without a history of pre-pregnancy hypertension (OR = 2.65; $p<0.05$). Among Black mothers, those with a prior diagnosis of hypertension had 1.98 times higher odds of delivering low birthweight infants compared to those without the diagnosis (OR = 1.98). The odds were even higher among White mothers (OR = 3.04) and Hispanic/Latino mothers (OR = 4.4). All associations were statistically significant. Information on the low birthweight live birth rate based on pre-pregnancy characteristics and behaviors can be found in Appendix Table 17, as presented by Ward.

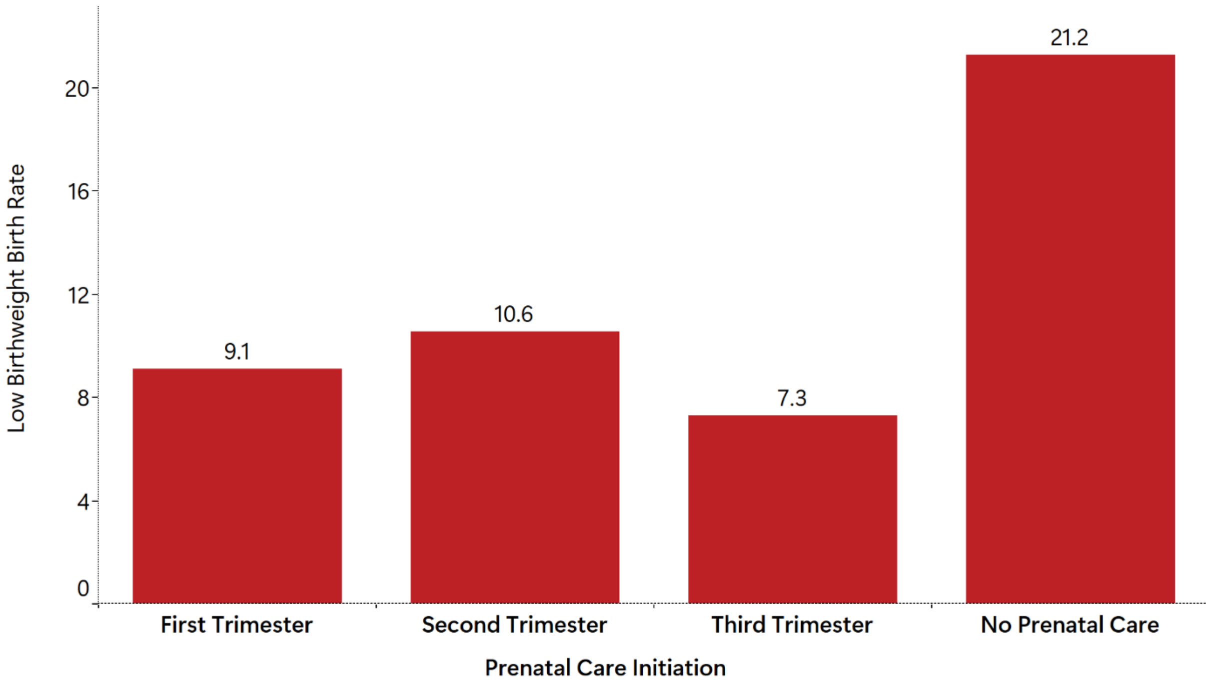
## Low birthweight live births by health characteristics and behaviors of the mother during pregnancy

A statistically significant difference in the rate of low birthweight births was observed between newborns whose mothers did not engage in prenatal care and those who initiated care. The low birthweight birth rate among mothers who did not start prenatal care (21.2%) was significantly higher compared with that of the mothers who initiated prenatal care in the first trimester (9.1%), second trimester (10.6%), and third trimester (7.3%) (refer to Figure 19).

Across the categories of first, second, and third prenatal care initiation, Black mothers exhibited the highest rate of low birthweight births compared to Hispanic/Latino mothers.

The low birthweight live birth rate is delineated based on maternal health characteristics and behaviors during pregnancy, with categorization by maternal race and ethnicity in Appendix Table 18 and by the residential ward of the mother in Appendix Table 19.

Figure 19: Low Birthweight Live Birth Rate by Prenatal Care Initiation, District of Columbia, 2019-2023




Data Source: 2019- 2023 DC Birth Data, Vital Records Division, Center for Policy, Planning and Evaluation, D.C. Department of Health; Data for the figure are presented in Appendix Table 18.

The odds of low birthweight births are 13.83 times higher among twin births than singleton births ($p<0.05$). Among singleton live births, it is noteworthy that Black mothers exhibit a significantly elevated rate of low birthweight births (12.5%) relative to White mothers (4.3%) and Hispanic/Latino mothers (6.3%) (Appendix Table 18).

A significantly higher percentage of infants born to mothers who smoked during pregnancy were classified as low birthweight, at 22.6%, compared to 9.7% among infants born to mothers who did not smoke ($p<0.05$). For non-smoking mothers, the rate of low birthweight live births was notably higher among Black mothers, at 13.9%, compared to White mothers, who had a rate of 5.6%, and Hispanic/Latino mothers, who had a rate of 7.2% ($p<0.05$). Additionally, among the non-smoking cohort, the rate of low birthweight births was significantly elevated for Hispanic/Latino mothers relative to White mothers. For further details, please refer to Appendix Table 18.

The rate of low birthweight live births among mothers with gestational diabetes was recorded at 10.3%, which did not represent a statistically significant increase compared to the 9.9% observed in mothers without a history of gestational diabetes.

Conversely, the rate of low birthweight live births was significantly elevated among mothers with gestational hypertension, at 18.5%, compared to 9.1% for those without a history of gestational hypertension ($p<0.05$). This trend was observed across White, Black, and Hispanic/Latino mothers. Notably, among mothers with gestational hypertension, the rate of low birthweight live births was particularly high for Black mothers, at 22.5%, relative to 13.2% for White mothers and 15.4% for Hispanic/Latino mothers (refer to Appendix Table 18).

**Section Highlights**

- Low birthweight births rate showed significant increase comparing 2019 and 2023.
- Mothers aged under 20 years were more likely to have a low birthweight baby compared to all other age groups.
- The rate of low birthweight births was between 1.5 and 2 times higher for:
    - Black mothers compared to Hispanic/Latino and White mothers
    - Unmarried mothers versus married mothers.
    - Birth to mothers with a high school diploma or less compared to mothers with more than a high school education.
    - births covered by Medicaid versus private insurance.
    - births occurring to women who resided in ward 7 and 8 compared to residents of other wards.
    - Mothers who smoked prior to pregnancy compared to those who did not smoke.
    - mothers with a history of pre-pregnancy hypertension compared to mothers with no history.
    - mothers who received no prenatal care compared to those who initiated prenatal care at any point during pregnancy.
    - mothers who smoked during pregnancy compared to those who did not smoke during pregnancy.
    - mothers with gestational hypertension compared to those without it.
- Mothers of twins were about seven times more likely to have a low birthweight baby compared to mothers of singletons.

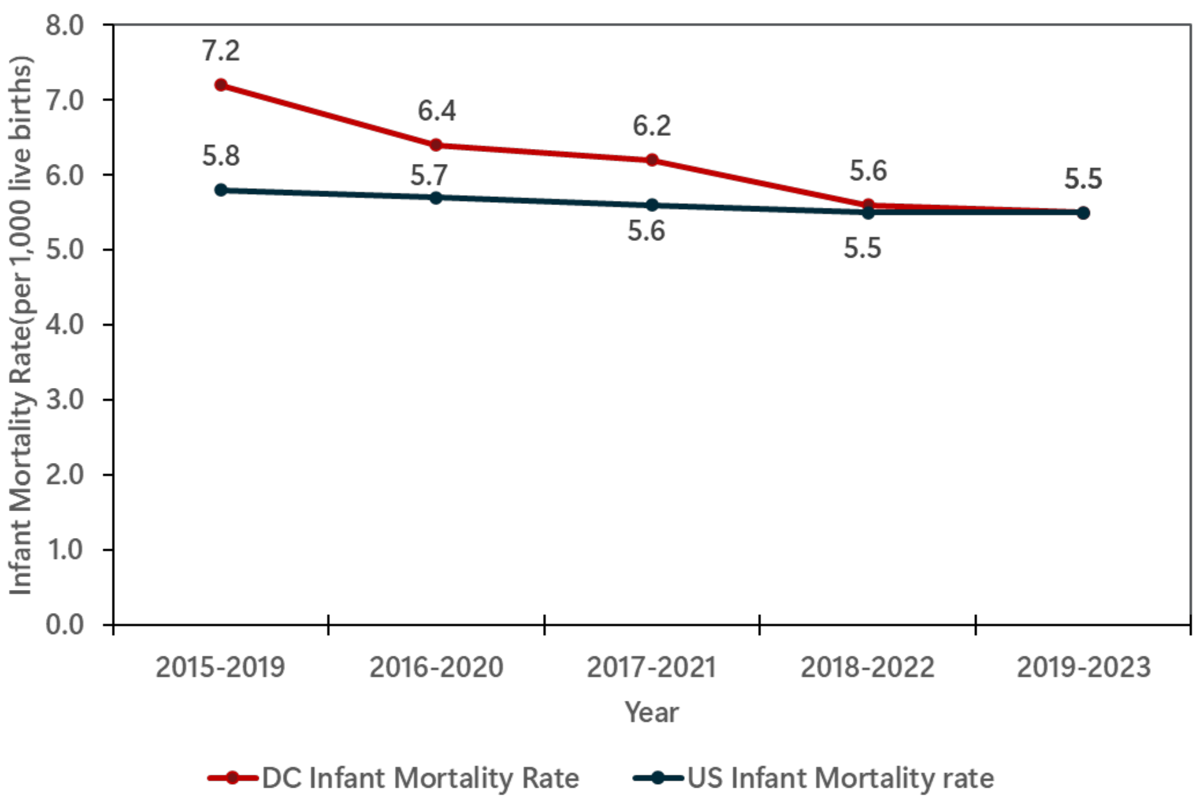
## Infant Mortality

Infant mortality is often considered a key indicator of the overall health and well-being of women and girls in a society. Infant mortality refers to the death of a baby before reaching one year of age.

The National Center for Health Statistics (NCHS) advises caution when interpreting data with fewer than 100 infant deaths, as small numbers can lead to less reliable results. Therefore, infant mortality estimates are often based on combined years of data to enhance the accuracy of our analyses. This report analyzes infant mortality rates over the most recent five-year period (2019-2023), categorized by maternal demographic characteristics, pre-pregnancy, and pregnancy factors and behaviors to ensure more reliable estimates.

Between 2019 and 2023, the infant mortality rate in DC was 5.5 deaths per 1,000 live births, based on 233 infant deaths (Appendix Table 21). This rate is consistent with the U.S. rate for the same time period. The District of Columbia's five-year rolling infant mortality rate has shown a declining trend over time, and the most recent five-year rate is now aligned with the national average. (Figure 20).

Figure 20: Five-Year Rolling Infant Mortality Rate, United States and District of Columbia, 2019-2023




Data Source: 2019- 2023 DC Birth and Death Data, Vital Records Division, Center for Policy, Planning and Evaluation, D.C. Department of Health.

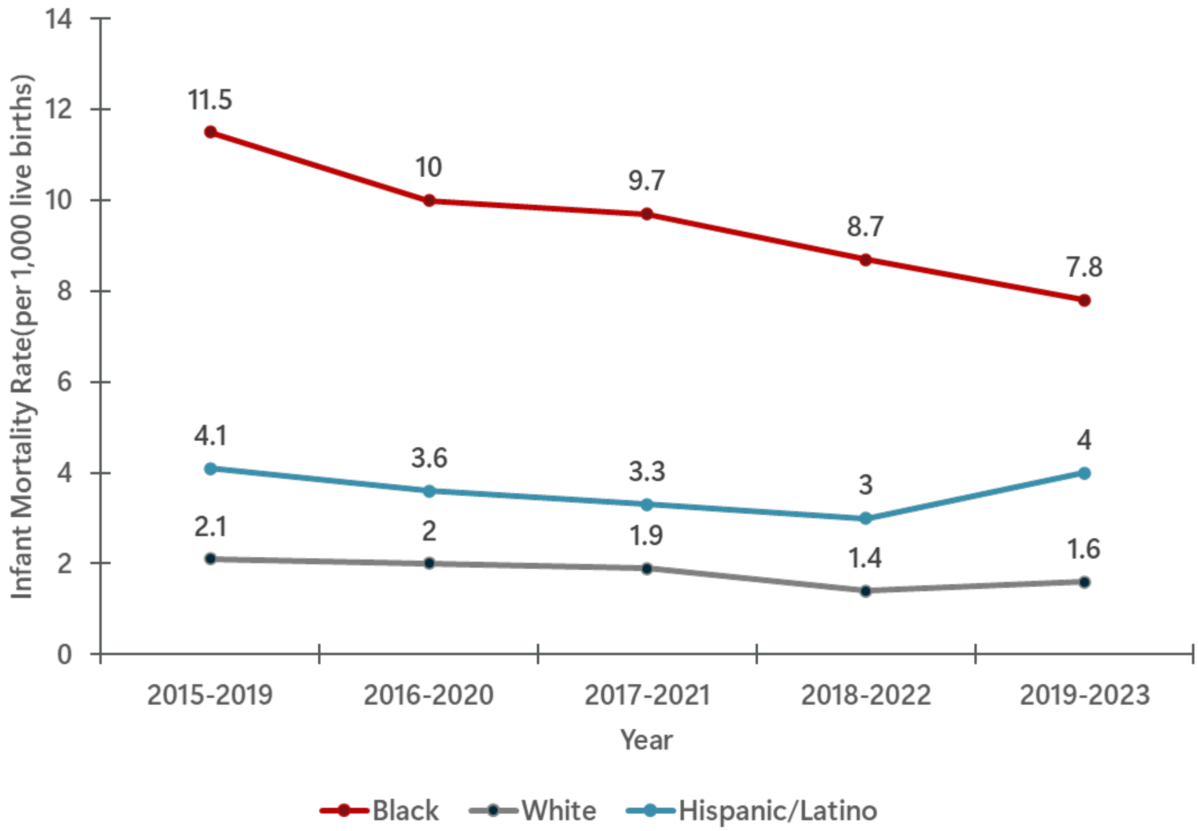
US Infant Death Data, 2019-2020: Murphy SL, Kochanek KD, Xu JQ, Arias E. Mortality in the United States, 2020. NCHS Data Brief, no 427. Hyattsville, MD: National Center for Health Statistics. 2021. https://dx.doi.org/10.15620/cdc:112079

US Infant Death Data, 2021-2022: Ely, Danielle M.;Driscoll, Anne K. Infant Mortality in the United States, 2021: Data From the Period Linked Birth/Infant Death File: National Center for Health Statistics. https://www.cdc.gov/nchs/data/nvsr/nvsr72/nvsr72-11.pdf

US Infant Death data, 2023 https://www.cdc.gov/nchs/products/databriefs/db521.htm#table5

Figure 21 presents the five-year rolling infant mortality rate by maternal race/ethnicity from 2015 to 2023. A significant disparity is observed among Black mothers when compared to both White and Hispanic/Latino mothers. Notably, the infant mortality rate among infants of Black mothers showed a significant decline over the years. Detailed annual infant mortality rates by maternal race and ethnicity from 2014 to 2023 are presented in Appendix Table 20.

Figure 21. Five-Year Rolling Infant Mortality Rate by Maternal Race-Ethnicity, District of Colombia, 2019-2023




Data Source: 2019-2023 DC Birth and Death Data, Vital Records Division, Center for Policy, Planning and Evaluation, D.C. Department of Health.

NOTE: Other and Asian Pacific Islanders are excluded due to counts less than 5.

## Infant mortality by sociodemographic characteristics of the mother, District of Columbia, 2019-2023

The infant mortality rate, categorized by the sociodemographic characteristics of the mother, is presented in Appendix Table 22. The infant mortality rate was significantly higher for infants born to Black mothers (7.8 per 1,000 live births) compared to infants born to Hispanic/Latino mothers (4 per 1,000 live births) and infants of White mothers (1.6 per 1,000 live births) (Appendix Table 22).

The infant mortality rates were significantly higher among infants born to mothers aged 20-24 (7.8 per 1,000 live births) and 25-29 (7 per 1,000 live births) compared with infants born to mothers aged 30-34 (4.1 per 1,000 live births) and 35-39 (3.0 per 1,000 live births), respectively (Appendix Table 22).

Also, the infant mortality rate was significantly higher among infants born to unmarried mothers compared to those born to married mothers (7.8 vs. 2.4 per 1,000 live births).

The infant mortality rate was also significantly lower among mothers with more than a high school diploma (3.2 per 1,000 live births) compared to those with a high school diploma (7.7 per 1,000 live births) and those without a high school diploma (7.0 per 1,000 live births). The infant mortality rate was significantly higher among infants whose births were financed by Medicaid, at 7.7 per 1,000 live births, compared to those financed by private insurance, which was 2.1 per 1,000 live births. (Table 1, Appendix Table 22).

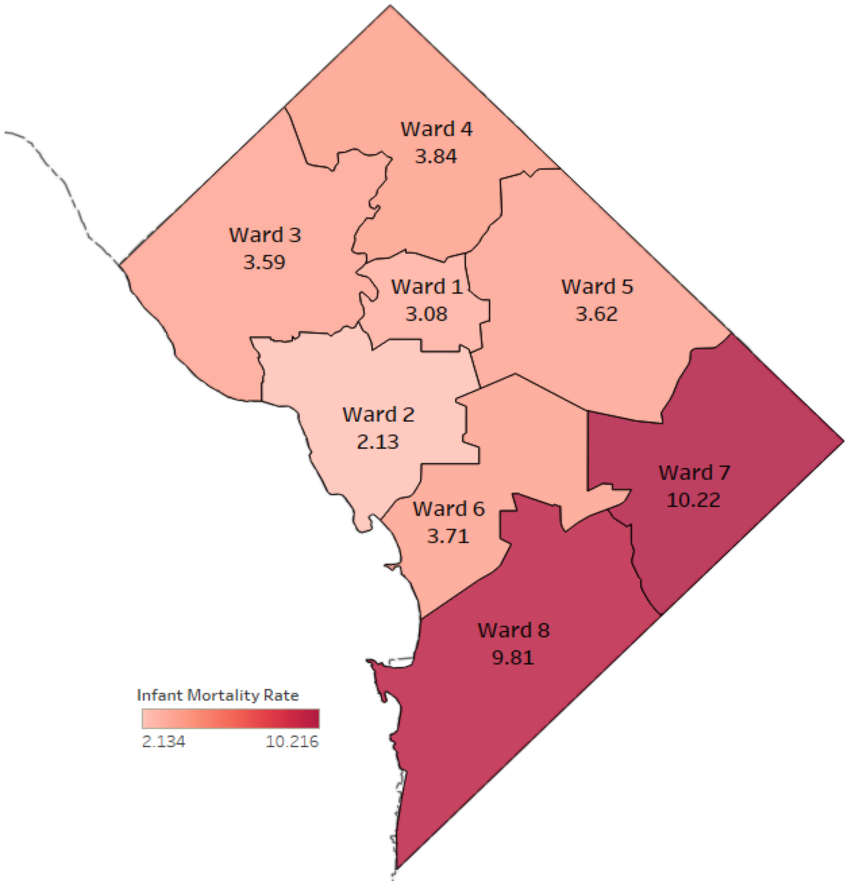
Table 1: Infant Mortality Rate per 1,000 live births by Selected Maternal Socioeconomic Characteristics, District of Columbia, 2019-2023

| | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
|---|---|---|---|---|---|---|
| Marital Status | | | | | | |
| Unmarried | 7.6 | 6.1 | 9.5 | 6.7 | 9.3 | 7.8 |
| Married | 2.3 | 2.5 | 2.7 | 2.9 | 1.9 | 2.4 |
| Education | | | | | | |
| High School or Less | 7.8 | 7.0 | 6.3 | 7.9 | 8.3 | 7.5 |
| More than High School | 2.7 | 2.5 | 5.2 | 2.3 | 3.1 | 3.2 |
| Insurance | | | | | | |
| Medicaid | 8.0 | 5.5 | 9.5 | 7.2 | 8.6 | 7.7 |
| Private Insurance | 1.8 | 2.6 | 2.5 | 2.0 | 1.8 | 2.1 |
| Other | 10.7 | 17.7 | 21.3 | 12.8 | 28.7 | 20.1 |

**Data Source:** 2019-2023 DC Birth and Death Data, Vital Records Division, Center for Policy, Planning and Evaluation, D.C. Department of Health.

Between 2019 and 2023, Wards 7 and 8 experienced the highest infant mortality rates, 10.2 and 9.8 per 1,000 live births, respectively. Infant mortality rates by Ward for 2019-2023 are illustrated in Figure 22.

Figure 22: Infant Mortality Rate by Ward, District of Columbia, 2019-2023




Data Source: 2019-2023 DC Birth and Death Data, Vital Records Division, Center for Policy, Planning and Evaluation, D.C. Department of Health.

## Infant mortality by pre-pregnancy health characteristics and behaviors of the mother, District of Columbia, 2019-2023

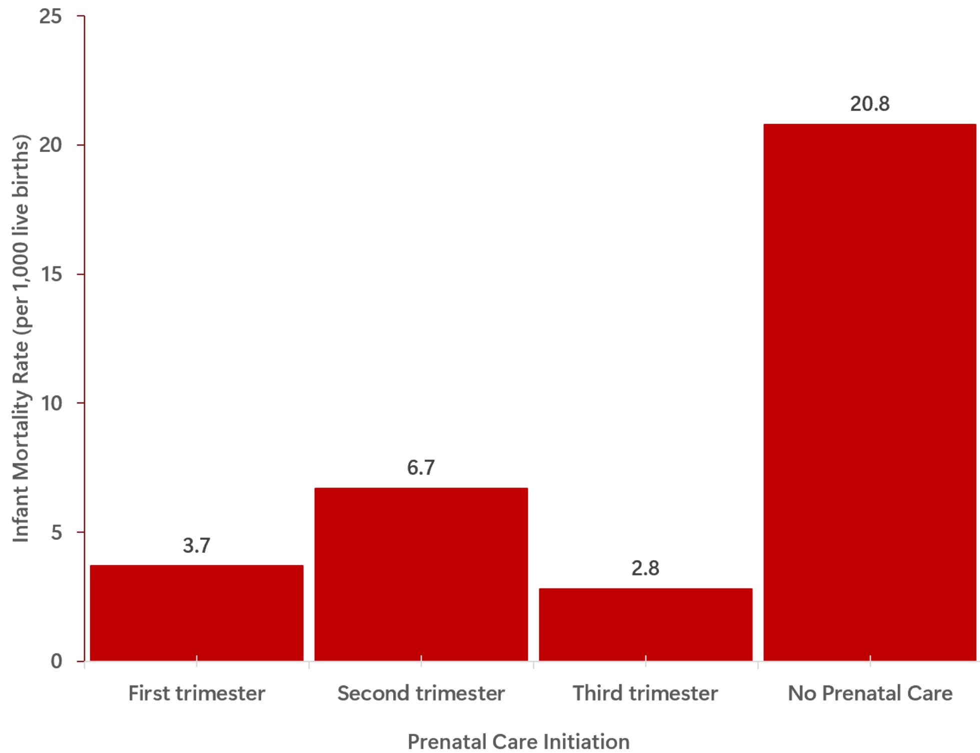
The infant mortality rate was significantly higher among women with a history of preterm birth, showing a rate of 13.3 per 1,000 live births compared to 4.6 per 1,000 live births for women without such a history. Moreover, the highest infant mortality rate was recorded among mothers classified as obese prior to pregnancy, with a rate of 7.9 per 1,000 live births, as opposed to a rate of 3.7 per 1,000 live births for mothers of normal weight. The infant mortality rates associated with maternal pre-pregnancy health characteristics and behaviors are presented in Appendix Table 23.

## Infant mortality by health characteristics and behaviors of the mother during pregnancy, District of Columbia, 2019-2023

Mothers who did not start prenatal care had a significantly higher infant mortality rate of 20.8 per 1,000 live births compared to those who initiated care in the first trimester (3.7 per 1,000) and second trimester (6.7 per 1,000) (Figure 23).

The infant mortality rate for singleton births was notably lower at 4.5 per 1,000 live births compared to twin births at 18.6 per 1,000 live births($p<0.05$). The infant mortality rates in relation to the health characteristics and behaviors of mothers during pregnancy is presented in Appendix Table 24.

Figure 23: Infant Mortality Rate by Prenatal Care Initiation, District of Columbia, 2019-2023




Data Source: 2019-2023 DC Birth and Death Data, Vital Records Division, Center for Policy, Planning and Evaluation, D.C. Department of Health.

Infants who are born with a low birth weight or are preterm have higher rates of mortality. According to Table 2, the infant mortality rate is highest among very low birth weight infants, at 144.7 deaths per 1,000 live births. This rate is significantly higher compared to that of normal birth weight infants, who have a mortality rate of 1.7 per 1,000 live births, and those weighing between 1,500 and 2,499 grams, with a rate of 9.3 per 1,000 live births. Additionally, the infant mortality rate for preterm infants is more than 17 times higher than that of full-term infants.

Table 2: Infant mortality rate by birthweight and preterm status, 2019-2023

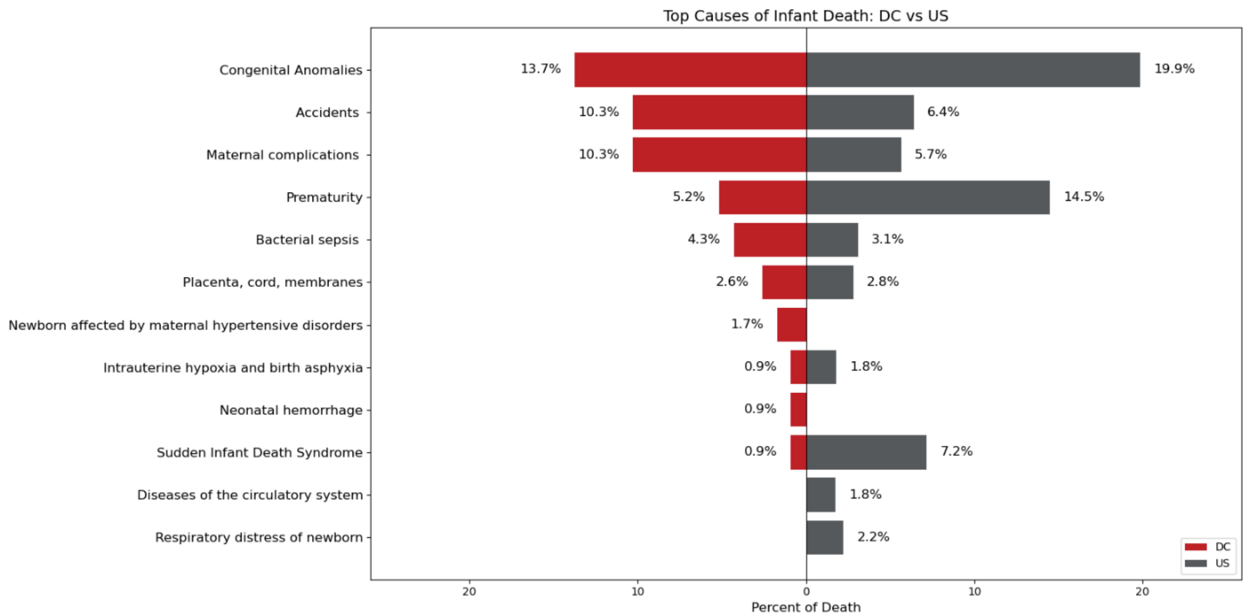
| Characteristic | | Births | Deaths | Rate (per 1,000) |
|---|---|---|---|---|
| Total Births | | 42,572 | 233 | 5.47 |
| Birthweight. | | | | |
| | Less than 1,500 grams | 767 | 111 | 144.72 |
| | 1,500-2,499 grams | 3,459 | 32 | 9.25 |
| | Normal birthweight (2,500 grams and greater) | 38,326 | 68 | 1.77 |
| Gestational age | | | | |
| | Preterm (<37 weeks gestation) | 4,358 | 138 | 31.67 |
| | Not preterm (37 and more weeks of gestation) | 38,158 | 70 | 1.83 |

Source: Data Management and Analysis Division, Center for Policy, Planning and Evaluation, D.C. Department of Health.

## Leading causes of infant death, District of Columbia, 2019-2023

From 2019 to 2023 the ten leading causes of death for infants in Washington, D.C. accounted for nearly 52% of all infant deaths in the area (see Figure 24). These data are not further stratified beyond the leading causes of death.

### Figure 24: Leading causes of infant mortality, United States and District of Columbia, 2019-2023




**Data Source**:2019-2023 DC Birth and Death Data: Vital Records Division, Center for Policy Planning and Evaluation, D.C. Department of Health.
2023 U.S. Data: Centers for Disease Control and Prevention.
https://www.cdc.gov/nchs/products/databriefs/:~:text=The%2010%20leading%20causes%20of%20infant%20death%20in%202023%20(congenital,and%20birth%20asphyxia%2C%20and%20diseases

The first-ranked cause of infant deaths during this period was congenital anomalies, accounting for 13.7 % of infant fatalities in Washington, DC with a rate of 7.5 deaths per 10,000 live births (Figure 22).

The second and third causes of infant deaths during this period were accidental suffocation and maternal complications, which together accounted for 21% of infant fatalities in Washington, DC. The infant mortality rate from accidental suffocation in DC was 5.6 per 10,000 live births which is identical to the rate for maternal complication.

In 2023, congenital anomalies remained the leading cause of infant death in the United States, responsible for 19.9% of infant fatalities. The rate of infant mortality from congenital anomalies in the US was approximately 11.1 per 10,000 live births.

In 2023, accidental suffocation and maternal complications were the fourth and fifth leading causes of infant death in the US, comprising 6.4% and 5.7% of infant fatalities, respectively.

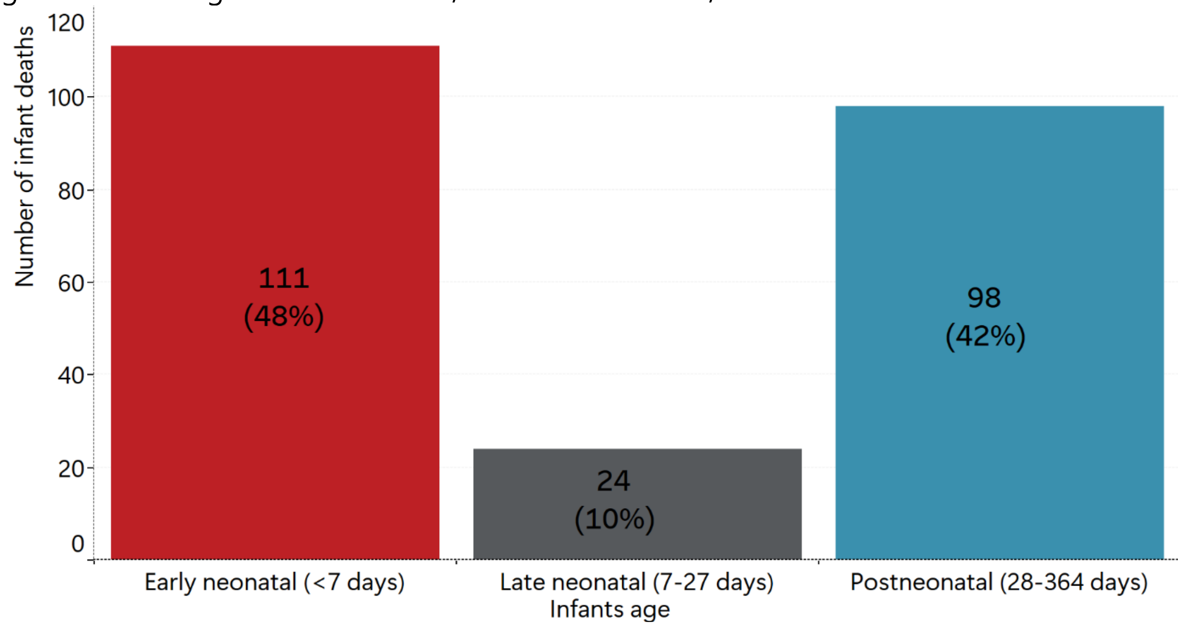
Prematurity ranked as the fourth leading cause of infant deaths in DC, accounting for 5.2% of fatalities. For every 10,000 live births in DC, around three infants died due to prematurity. In 2023, prematurity was the second leading cause of infant death in the US, comprising 14.5% of infant fatalities, with a rate of about eight deaths per 10,000 live births (Figure 22).

## Neonatal Mortality, District of Columbia 2019-2023

Between 2019 and 2023, there were a total of 233 infant deaths. Of these, more than half (58%, or 135 deaths) occurred among neonates, who are defined as newborns aged less than 28 days. This resulted in a neonatal mortality rate of 3.2 per 1,000 live births.

Notably, nearly half of all infant deaths (48%, or 111 deaths) occurred during the first six days after birth, which is referred to as the early neonatal period. Ten percent (or 24 deaths) occurred between 7 and 27 days after birth, categorized as the late neonatal period. The remaining 42% (or 98 deaths) took place in the post-neonatal period, which spans from 28 to 364 days after birth (Figure 25).

Figure 25: Infant Age at Time of Death, District of Columbia, 2019-2023




Data Source: DC Birth and Death Data: Vital Records Division, Center for Policy Planning and Evaluation, D.C. Department of Health.

NOTE: An early neonatal death is a death that occurs when the infant is less than 7 days old; a late neonatal death occurs when the infant is aged 7-27 days; a post-neonatal death is a death that occurs when the infant is aged 28 -364 days old.

To examine the characteristics of neonatal mortality related to maternal factors, we analyzed neonatal mortality rates over a five-year period from 2019 to 2023. The neonatal mortality rate was 3.2 per 1,000 live births (Appendix Table 21).

The neonatal mortality rate was significantly higher among Black infants (4.3 per 1,000 live births) compared to Hispanic and White infants (2.5 and 0.8 per 1,000 live births, respectively).

Infants whose mothers were unmarried had a significantly higher neonatal mortality rate (4.4 per 1,000 live births) than those whose mothers were married (1.5 per 1,000 live births).

Additionally, the neonatal mortality rate was notably higher for infants whose mothers had a high school diploma (4.0 per 1,000 live births) compared to those whose mothers had education beyond high school (2.0 per 1,000 live births).

Infants born to mothers whose births were financed by Medicaid exhibited a higher neonatal mortality rate (4.2 per 1,000 live births) than those whose births were financed by private insurance (1.4 per 1,000 live births). Wards 7 and 8 had the highest neonatal mortality rates at 5.4 and 5.1 per 1,000 live births, respectively.

## Leading causes of neonatal death, District of Columbia, 2019-2023

The five leading causes of neonatal deaths in Washington, D.C., during 2019-2023 accounted for 49.6% of all neonatal deaths in the area (Appendix Table 26). The primary cause of neonatal death during this period was maternal complications during pregnancy, which represented 17.8% (n = 24) of neonatal deaths in D.C. For every 10,000 live births to D.C. residents, nearly six infants died within the first 28 days due to maternal complications.

Congenital anomalies were the second leading cause of neonatal death, accounting for 12.6% (n = 17) of cases. This translates to 4 infants dying of congenital anomalies for every 10,000 live births to D.C. residents within the first 28 days of life. Prematurity was the third leading cause, responsible for 8.9% (n = 12) of neonatal deaths, which corresponds to nearly three infants dying due to prematurity for every 10,000 live births within the same period.

Section Highlights

- Between 2019 and 2023, the infant mortality rate in DC was 5.5 deaths per 1,000 live births The first-ranked cause of infant deaths was congenital anomalies, accounting for 13.7% of all infant fatalities.
  The first-ranked cause of infant deaths was congenital anomalies, accounting for 13.7% of all infant fatalities.
- The infant mortality rate was between 1.5 and 2.5 times higher for:
  - infants born to black mothers compared with infants born to Hispanic/Latino mothers.
  - infants of mothers aged 20-24 years versus mothers aged 30-34.
  - mothers with a high school education or less versus those with more than a high school diploma.
  - mothers classified as obese prior to pregnancy compared with those born to mothers of normal weight.
- The infant mortality rate was between 2.5 and 3.5 times higher for:
  - infants of unmarried mothers compared with infants of married mothers.
  - women with a prior history of preterm birth compared with those without.
  - infants of mothers aged 20-24 years versus mothers aged 35-39.
- The infant mortality rate was more than 3.5 times higher for:
  - infants born to black mothers compared with infants born to white mothers.
  - infants whose births were covered by Medicaid compared with those covered by private insurance.
  - infants born to mothers residing in ward 7 and 8 compared with those residing in other wards.
  - mothers who did not receive prenatal care compared with those who initiated care in the first trimester.

## Appendix Tables

### Appendix Table 1. Pre-pregnancy Hypertension among women who had a live birth overall and by maternal race and ethnicity, District of Columbia, 2019-2023

| | Total | | Pre-pregnancy Hypertension | |
|---|---|---|---|---|
| Race and Ethnicity | No. | % | No. | % |
| 2019[1] | | | | |
| Total | 9,065 | 100.0% | 239 | 2.6% |
| White | 3,024 | 100.0% | 33 | 1.1% |
| Black | 4,221 | 100.0% | 188 | 4.5% |
| Hispanic | 1,352 | 100.0% | 14 | 1.0% |
| Other | 452 | 100.0% | 3 | 0.7% |
| 2020[2] | | | | |
| Total | 8,865 | 100.0% | 326 | 3.7% |
| White | 2,978 | 100.0% | 35 | 1.2% |
| Black | 4,065 | 100.0% | 246 | 6.1% |
| Hispanic | 1,349 | 100.0% | 39 | 2.9% |
| Other | 457 | 100.0% | 6 | 1.3% |
| 2021[3] | | | | |
| Total | 8,548 | 100.0% | 273 | 3.2% |
| White | 2,967 | 100.0% | 40 | 1.3% |
| Black | 3,658 | 100.0% | 195 | 5.3% |
| Hispanic | 1,341 | 100.0% | 30 | 2.2% |
| Other | 573 | 100.0% | 8 | 1.4% |
| 2022[4] | | | | |
| Total | 8,053 | 100.0% | 260 | 3.2% |
| White | 2,519 | 100.0% | 43 | 1.7% |
| Black | 3,455 | 100.0% | 173 | 5.0% |
| Hispanic | 1,348 | 100.0% | 32 | 2.4% |
| Other | 488 | 100.0% | 5 | 1.0% |
| 2023[5] | | | | |
| Total | 7,884 | 100.0% | 261 | 3.3% |
| White | 2,482 | 100.0% | 57 | 2.3% |
| Black | 3,323 | 100.0% | 152 | 4.6% |
| Hispanic | 1,410 | 100.0% | 40 | 2.8% |
| Other | 443 | 100.0% | 5 | 1.1% |

[1] n = 5 records excluded due to missing data.

[2] n = 4 records excluded due to missing data.

[3] n = 110 records excluded due to missing data.

[4] n = 24 records excluded due to missing data.

[5] n = 14 records excluded due to missing data.

Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.
Note: The racial-ethnic “Other” categories represent American Indians, Alaska Natives, and others.

Appendix Table 2. Pre-pregnancy Diabetes among women who had a live birth overall and by maternal race and ethnicity, District of Columbia, 2019-2023

| | Total | | Pre-pregnancy Diabetes | |
|---|---|---|---|---|
| Race and Ethnicity | No. | % | No. | % |
| 2019 | | | | |
| Total | 9,070 | 100.0% | 98 | 1.1% |
| White | 3,024 | 100.0% | 21 | 0.7% |
| Black | 4,226 | 100.0% | 55 | 1.3% |
| Hispanic | 1,352 | 100.0% | 16 | 1.2% |
| Other | 452 | 100.0% | 6 | 1.3% |
| 2020 | | | | |
| Total | 8,869 | 100.0% | 128 | 1.4% |
| White | 2,979 | 100.0% | 8 | 0.3% |
| Black | 4,068 | 100.0% | 82 | 2.0% |
| Hispanic | 1,349 | 100.0% | 33 | 2.4% |
| Other | 457 | 100.0% | 5 | 1.1% |
| 2021[1] | | | | |
| Total | 8,656 | 100.0% | 109 | 1.3% |
| White | 2,971 | 100.0% | 14 | 0.5% |
| Black | 3,660 | 100.0% | 58 | 1.6% |
| Hispanic | 1,341 | 100.0% | 34 | 2.5% |
| Other | 674 | 100.0% | 3 | 0.4% |
| 2022[2] | | | | |
| Total | 8,060 | 100.0% | 142 | 1.8% |
| White | 2,519 | 100.0% | 13 | 0.5% |
| Black | 3,459 | 100.0% | 85 | 2.5% |
| Hispanic | 1,348 | 100.0% | 37 | 2.7% |
| Other | 489 | 100.0% | 6 | 1.2% |
| 2023[3] | | | | |
| Total | 7,889 | 100.0% | 121 | 1.5% |
| White | 2,483 | 100.0% | 17 | 0.7% |
| Black | 3,324 | 100.0% | 52 | 1.6% |
| Hispanic | 1,411 | 100.0% | 37 | 2.6% |
| Other | 443 | 100.0% | 10 | 2.3% |

[1]n = 2 records excluded due to missing data.

[2]n = 17 records excluded due to missing data.

[3]n = 9 records excluded due to missing data.

Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.
Note: The racial-ethnic "Other" categories represent American Indians, Alaska Natives, and others.

Appendix Table 3. Hypertensive Eclampsia among women who had a live birth overall and by maternal race and ethnicity, District of Columbia, 2019-2023

| | Total | | Hypertensive Eclampsia | |
|---|---|---|---|---|
| Race and Ethnicity[1] | No. | % | No. | % |
| Total | 42,529 | 100.0% | 213 | 0.5% |
| White | 13,971 | 100.0% | 38 | 0.3% |
| Black | 18,731 | 100.0% | 129 | 0.7% |
| Hispanic | 6,798 | 100.0% | 32 | 0.5% |
| Other | 2,514 | 100.0% | 13 | 0.5% |

[1]n = 43 records excluded due to missing data.

Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.
Note: The racial-ethnic "Other" categories represent American Indians, Alaska Natives, and others.

Appendix Table 4. Pre-pregnancy BMI Categories among women who had a live birth overall and by maternal race and ethnicity, District of Columbia, 2019-2023

| | Total | | Underweight | | Normal | | Overweight | | Obese | |
|---|---|---|---|---|---|---|---|---|---|---|
| Race and Ethnicity | No. | % | No. | % | No. | % | No. | % | No. | % |
| 2019 | | | | | | | | | | |
| Total | 9,070 | 100.0% | 326 | 3.6% | 4,409 | 48.6% | 2,217 | 24.4% | 1,984 | 21.9% |
| White | 3,024 | 100.0% | 101 | 3.3% | 2,084 | 68.9% | 596 | 19.7% | 204 | 6.7% |
| Black | 4,226 | 100.0% | 169 | 4.0% | 1,451 | 34.3% | 1,140 | 27.0% | 1,413 | 33.4% |
| Hispanic | 1,352 | 100.0% | 31 | 2.3% | 559 | 41.3% | 389 | 28.8% | 337 | 24.9% |
| Other | 452 | 100.0% | 25 | 5.5% | 309 | 68.4% | 88 | 19.5% | 27 | 6.0% |
| 2020 | | | | | | | | | | |
| Total | 8,869 | 100.0% | 272 | 3.1% | 4,287 | 48.3% | 2,188 | 24.7% | 1,997 | 22.5% |
| White | 2,979 | 100.0% | 79 | 2.7% | 2,048 | 68.7% | 590 | 19.8% | 244 | 8.2% |
| Black | 4,068 | 100.0% | 137 | 3.4% | 1,407 | 34.6% | 1,097 | 27.0% | 1,387 | 34.1% |
| Hispanic | 1,349 | 100.0% | 32 | 2.4% | 500 | 37.1% | 415 | 30.8% | 342 | 25.4% |
| Other | 457 | 100.0% | 24 | 5.3% | 325 | 71.1% | 82 | 17.9% | 21 | 4.6% |
| 2021 | | | | | | | | | | |
| Total | 8,658 | 100.0% | 248 | 2.9% | 4,147 | 47.9% | 1,996 | 23.1% | 2,005 | 23.2% |
| White | 2,971 | 100.0% | 89 | 3.0% | 2,049 | 69.0% | 581 | 19.6% | 227 | 7.6% |
| Black | 3,662 | 100.0% | 109 | 3.0% | 1,243 | 33.9% | 915 | 25.0% | 1,338 | 36.5% |
| Hispanic | 1,341 | 100.0% | 25 | 1.9% | 475 | 35.4% | 398 | 29.7% | 403 | 30.1% |
| Other | 674 | 100.0% | 25 | 3.7% | 375 | 55.6% | 100 | 14.8% | 35 | 5.2% |
| 2022 | | | | | | | | | | |
| Total | 8,077 | 100.0% | 224 | 2.8% | 3,615 | 44.8% | 2,005 | 24.8% | 1,958 | 24.2% |
| White | 2,519 | 100.0% | 80 | 3.2% | 1,697 | 67.4% | 508 | 20.2% | 208 | 8.3% |
| Black | 3,459 | 100.0% | 86 | 2.5% | 1,028 | 29.7% | 952 | 27.5% | 1,270 | 36.7% |
| Hispanic | 1,348 | 100.0% | 29 | 2.2% | 455 | 33.8% | 398 | 29.5% | 382 | 28.3% |
| Other | 497 | 100.0% | 25 | 5.0% | 318 | 64.0% | 89 | 17.9% | 46 | 9.3% |
| 2023 | | | | | | | | | | |
| Total | 7,898 | 100.0% | 222 | 2.8% | 3,533 | 44.7% | 1,798 | 22.8% | 1,794 | 22.7% |
| White | 2,483 | 100.0% | 66 | 2.7% | 1,625 | 65.4% | 533 | 21.5% | 214 | 8.6% |
| Black | 3,324 | 100.0% | 101 | 3.0% | 1,032 | 31.0% | 805 | 24.2% | 1,074 | 32.3% |
| Hispanic | 1,411 | 100.0% | 19 | 1.3% | 480 | 34.0% | 337 | 23.9% | 420 | 29.8% |
| Other | 443 | 100.0% | 28 | 6.3% | 286 | 64.6% | 78 | 17.6% | 37 | 8.4% |

Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.
Note: The racial-ethnic "Other" categories represent American Indians, Alaska Natives, and others.

Appendix Table 5. Pre-pregnancy BMI Categories among women who had a live birth overall and by maternal race and ethnicity, District of Columbia, 2019-2023

| | Total | | Smoked Prior to Pregnancy | |
|---|---|---|---|---|
| Race and Ethnicity | No. | % | No. | % |
| 2019[1] | | | | |
| Total | 8,946 | 100.0% | 351 | 3.9% |
| White | 3,023 | 100.0% | 27 | 0.9% |
| Black | 4,125 | 100.0% | 311 | 7.5% |
| Hispanic | 1,333 | 100.0% | 11 | 0.8% |
| Other | 450 | 100.0% | 2 | 0.4% |
| 2020[2] | | | | |
| Total | 8,796 | 100.0% | 294 | 3.3% |
| White | 2,976 | 100.0% | 30 | 1.0% |
| Black | 4,015 | 100.0% | 248 | 6.2% |
| Hispanic | 1,335 | 100.0% | 12 | 0.9% |
| Other | 457 | 100.0% | 4 | 0.9% |
| 2021[3] | | | | |
| Total | 8,556 | 100.0% | 232 | 2.7% |
| White | 2,966 | 100.0% | 18 | 0.6% |
| Black | 3,622 | 100.0% | 199 | 5.5% |
| Hispanic | 1,325 | 100.0% | 11 | 0.8% |
| Other | 633 | 100.0% | 4 | 0.6% |
| 2022[4] | | | | |
| Total | 7,996 | 100.0% | 100 | 1.3% |
| White | 2,517 | 100.0% | 8 | 0.3% |
| Black | 3,416 | 100.0% | 77 | 2.3% |
| Hispanic | 1,338 | 100.0% | 9 | 0.7% |
| Other | 488 | 100.0% | 3 | 0.6% |
| 2023[5] | | | | |
| Total | 7,856 | 100.0% | 99 | 1.3% |
| White | 2,481 | 100.0% | 8 | 0.3% |
| Black | 3,300 | 100.0% | 80 | 2.4% |
| Hispanic | 1,408 | 100.0% | 3 | 0.2% |
| Other | 443 | 100.0% | 2 | 0.5% |

[1]n = 124 records excluded due to missing data.

[2]n = 73 records excluded due to missing data.

[3]n = 102 records excluded due to missing data.

[4]n = 81 records excluded due to missing data.

[5]n = 42 records excluded due to missing data.

Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.
Note: The racial-ethnic "Other" categories represent American Indians, Alaska Natives, and others.

Appendix Table 6. Pre-pregnancy BMI Categories among women who had a live birth overall and by maternal race and ethnicity, District of Columbia, 2019-2023

| | 2019 | | 2020 | | 2021 | | 2022 | | 2023 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Insurance | No. | % | No. | % | No. | % | No. | % | No. | % |
| Total | 3,990 | 100.0% | 4,011 | 100.0% | 3,946 | 100.0% | 3,681 | 100.0% | 3,522 | 100.0% |
| Medicaid | 1,272 | 31.9% | 1,259 | 31.4% | 1,160 | 29.4% | 1,182 | 32.1% | 1,142 | 32.4% |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Private | 2,591 | 64.9% | 2,604 | 64.9% | 2,593 | 65.7% | 2,316 | 62.9% | 2,215 | 62.9% |
| Other | 127 | 3.2% | 148 | 3.7% | 193 | 4.9% | 183 | 5.0% | 165 | 4.7% |

Data Source: 2019-2023 Distribution of Payer Type by Birth Order and Maternal Age: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.
Note: T*he "Other" insurance category represents those who elect to self-pay or are covered by Indian Health Service, CHAMPUS/TRICARE, etc.*

Appendix Table 6. Maternal characteristics of live births, District of Columbia 2019_2020 and 2021_2023

| Year of Birth | 2019-2020 | | 2021-2023 | |
|---|---|---|---|---|
| | No | % | No | % |
| All | 17,939 | 100.0 | 24,633 | 100.0 |
| Maternal Race/Ethnicity | | | | |
| White | 6,003 | 33.5 | 7,973 | 32.4 |
| Black | 8,294 | 46.2 | 10,445 | 42.4 |
| Hispanic | 2,701 | 15.1 | 4,100 | 16.6 |
| Asian/Pacific Islander | 830 | 4.6 | 1,306 | 5.3 |
| All other race-ethnic categories | 79 | 0.4 | 308 | 1.3 |
| Maternal Age (years) | | | | |
| Less than 20 years | 634 | 3.5 | 760 | 3.1 |
| 20-24 years | 2,224 | 12.4 | 2,876 | 11.7 |
| 25-29 years | 3,635 | 20.3 | 4,502 | 18.3 |
| 30-34 years | 5,719 | 31.9 | 7,847 | 31.9 |
| 35-39 years | 4,576 | 25.5 | 6,735 | 27.3 |
| 40 years and older | 1,145 | 6.4 | 1,904 | 7.7 |
| Marital Status<br>Married | 9,586 | 53.4 | 13,404 | 54.4 |
| Not Married | 8,311 | 46.3 | 11,187 | 45.4 |
| Missing | 42 | 0.2 | 42 | 0.2 |
| Maternal Education Level | | | | |
| Less than High School | 2,082 | 11.6 | 2,949 | 12.0 |
| High School Graduate | 3,868 | 21.6 | 5,038 | 20.5 |
| More than High School Education | 11,810 | 65.8 | 16,166 | 65.6 |
| Unknown | 179 | 1.0 | 452 | 1.8 |
| Insurance Type<br>Medicaid | 8,242 | 45.9 | 10,926 | 44.4 |
| Private Insurance | 9,078 | 50.6 | 12,382 | 50.3 |
| Other Government (Fed, State, Local) | 78 | 0.4 | 32 | 0.1 |
| Self-pay | 151 | 0.8 | 361 | 1.5 |
| CHAMPUS/TRICARE | 250 | 1.4 | 372 | 1.5 |
| Other | 111 | 0.6 | 456 | 1.9 |
| Unknown | 29 | 0.2 | 104 | 0.4 |
| Maternal Residence (Ward)<br>Ward 1 | 2,077 | 11.6 | 2,794 | 11.3 |
| Ward 2 | 1,016 | 5.7 | 1,795 | 7.3 |
| Ward 3 | 1,429 | 8.0 | 1,909 | 7.7 |
| Ward 4 | 2,766 | 15.4 | 4,012 | 16.3 |
| Ward 5 | 2,587 | 14.4 | 3,767 | 15.3 |
| Ward 6 | 2,647 | 14.8 | 2,749 | 11.2 |
| Ward 7 | 2,448 | 13.6 | 3,621 | 14.7 |
| Ward 8 | 2,959 | 16.5 | 3,970 | 16.1 |
| Ward 9 | 10 | 0.1 | 16 | 0.1 |

Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.
Note: The racial-ethnic "Other" categories represent American Indians, Alaska Natives, and others.
Totals and percentages may not sum to 100 due to missing values
[a] Percentage of characteristics is significantly different between the 2019-2020 and 2021-2023 time periods (p<0.05).
[b] Wards are based on 2022 Ward boundaries.

Appendix Table 7. Maternal characteristics of live births, District of Columbia 2019-2023

| | DC Overall | |
|---|---|---|
| | No | % |
| All | 42,572 | 100.0 |
| Maternal Race/Ethnicity | | |
| White | 13,976 | 32.8 |
| Black | 18,739 | 44.0 |
| Hispanic | 6,801 | 16.0 |
| Asian/Pacific Islander | 2,136 | 5.0 |
| All other race-ethnic categories | 387 | 0.9 |
| Maternal age (years) | | |
| Less than 20 years | 1,394 | 3.3 |
| 20-24 years | 5,100 | 12.0 |
| 25-29 years | 8,137 | 19.1 |
| 30-34 years | 13,566 | 31.9 |
| 35-39 years | 11,311 | 26.6 |
| 40 years and older | 3,049 | 7.2 |
| Marital Status | | |
| Married | 22,990 | 54.0 |
| Not Married | 19,498 | 45.8 |
| Missing | 84 | 0.2 |
| Maternal Education Level | | |
| Less than High School | 5,031 | 11.8 |
| High School Graduate | 8,906 | 20.9 |
| More than High School Education | 27,976 | 65.7 |
| Unknown | 631 | 1.5 |
| Insurance Type | | |
| Medicaid | 19,168 | 45.0 |
| Private Insurance | 21,460 | 50.4 |
| Other Government (Fed, State, Local) | 110 | 0.3 |
| Self-pay | 512 | 1.2 |
| CHAMPUS/TRICARE | 622 | 1.5 |
| Other | 567 | 1.3 |
| Unknown | 133 | 0.3 |
| Maternal Residence (Ward) | | |
| Ward 1 | 4,871 | 11.4 |
| Ward 2 | 2,811 | 6.6 |
| Ward 3 | 3,338 | 7.8 |
| Ward 4 | 6,778 | 15.9 |
| Ward 5 | 6,354 | 14.9 |
| Ward 6 | 5,396 | 12.7 |
| Ward 7 | 6,069 | 14.3 |
| Ward 8 | 6,929 | 16.3 |
| Ward 9 | 26 | 0.1 |

**Data Source**: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.
**Note:** The racial-ethnic "Other" categories represent American Indians, Alaska Natives, and others.
Totals and percentages may not sum to 100 due to missing values.

Appendix Table 8. Maternal characteristics of live births by ward, District of Columbia 2019-2023

| | Maternal Residence (Ward) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | |
| | No | % | No | % | No | % | No | % | No | % | No | % | No | % | No | % | No | % |
| Total Births | 4,871 | 100.0 | 2,811 | 100.0 | 3,338 | 100.0 | 6,778 | 100.0 | 6,354 | 100.0 | 5,396 | 100.0 | 6,069 | 100.0 | 6,929 | 100.0 | 26 | 100.0 |
| Maternal Race/Ethnicity<br>Missing | 61 | 1.3 | 30 | 1.1 | 54 | 1.6 | 82 | 1.2 | 93 | 1.5 | 73 | 1.4 | 72 | 1.2 | 61 | 0.9 | 7 | 26.9 |
| White | 1,876 | 38.5 | 1,478 | 52.6 | 2,269 | 68.0 | 2,120 | 31.3 | 1,883 | 29.6 | 3,159 | 58.5 | 622 | 10.2 | 564 | 8.1 | 5 | 19.2 |
| Black | 1,100 | 22.6 | 310 | 11.0 | 295 | 8.8 | 2,053 | 30.3 | 2,937 | 46.2 | 1,324 | 24.5 | 4,820 | 79.4 | 5,892 | 85.0 | 8 | 30.8 |
| Hispanic | 1,500 | 30.8 | 466 | 16.6 | 342 | 10.2 | 2,188 | 32.3 | 1,122 | 17.7 | 420 | 7.8 | 454 | 7.5 | 304 | 4.4 | 5 | 19.2 |
| Asian/Pacific Islander | 287 | 5.9 | 429 | 15.3 | 346 | 10.4 | 287 | 4.2 | 270 | 4.2 | 370 | 6.9 | 72 | 1.2 | 75 | 1.1 | 0 | 0 |
| All other race-ethnic categories | 47 | 1.0 | 98 | 3.5 | 32 | 1.0 | 48 | 0.7 | 49 | 0.8 | 50 | 0.9 | 29 | 0.5 | 33 | 0.5 | 1 | 3.8 |
| Maternal age (years)<br>Missing | 0 | 0 | 2 | 0.1 | 2 | 0.1 | 0 | 0 | 1 | 0.0 | 0 | 0 | 2 | 0.0 | 2 | 0.0 | 6 | 23.1 |
| Less than 20 years | 149 | 3.1 | 24 | 0.9 | 16 | 0.5 | 214 | 3.2 | 177 | 2.8 | 94 | 1.7 | 314 | 5.2 | 406 | 5.9 | 0 | 0 |
| 20-24 years | 478 | 9.8 | 190 | 6.8 | 83 | 2.5 | 700 | 10.3 | 707 | 11.1 | 293 | 5.4 | 1,175 | 19.4 | 1,470 | 21.2 | 4 | 15.4 |
| 25-29 years | 765 | 15.7 | 355 | 12.6 | 284 | 8.5 | 1,072 | 15.8 | 1,147 | 18.1 | 682 | 12.6 | 1,648 | 27.2 | 2,179 | 31.4 | 5 | 19.2 |
| 30-34 years | 1,568 | 32.2 | 1,073 | 38.2 | 1,161 | 34.8 | 2,126 | 31.4 | 2,076 | 32.7 | 2,133 | 39.5 | 1,655 | 27.3 | 1,771 | 25.6 | 3 | 11.5 |
| 35-39 years | 1,504 | 30.9 | 866 | 30.8 | 1,373 | 41.1 | 2,091 | 30.8 | 1,798 | 28.3 | 1,788 | 33.1 | 1,008 | 16.6 | 880 | 12.7 | 3 | 11.5 |
| 40 years and older | 407 | 8.4 | 301 | 10.7 | 419 | 12.6 | 575 | 8.5 | 448 | 7.1 | 406 | 7.5 | 267 | 4.4 | 221 | 3.2 | 5 | 19.2 |
| Marital Status<br>Married | 2,998 | 61.5 | 2,296 | 81.7 | 2,941 | 88.1 | 4,051 | 59.8 | 3,480 | 54.8 | 4,051 | 75.1 | 1,641 | 27.0 | 1,520 | 21.9 | 12 | 46.2 |
| Not Married | 1,864 | 38.3 | 501 | 17.8 | 390 | 11.7 | 2,719 | 40.1 | 2,860 | 45.0 | 1,340 | 24.8 | 4,415 | 72.7 | 5,401 | 77.9 | 8 | 30.8 |
| Missing | 9 | 0.2 | 14 | 0.5 | 7 | 0.2 | 8 | 0.1 | 14 | 0.2 | 5 | 0.1 | 13 | 0.2 | 8 | 0.1 | 6 | 23.1 |
| Maternal Education Level<br>Missing | 4 | 0.1 | 8 | 0.3 | 1 | 0.0 | 2 | 0.0 | 1 | 0.0 | 4 | 0.1 | 2 | 0.0 | 0 | 0 | 6 | 23.1 |
| Less than High School | 814 | 16.7 | 188 | 6.7 | 63 | 1.9 | 1,206 | 17.8 | 754 | 11.9 | 215 | 4.0 | 784 | 12.9 | 1,004 | 14.5 | 3 | 11.5 |
| High School Graduate | 788 | 16.2 | 192 | 6.8 | 106 | 3.2 | 1,199 | 17.7 | 1,210 | 19.0 | 496 | 9.2 | 2,034 | 33.5 | 2,876 | 41.5 | 5 | 19.2 |
| More than High School Education | 3,204 | 65.8 | 2,281 | 81.1 | 3,143 | 94.2 | 4,291 | 63.3 | 4,305 | 67.8 | 4,614 | 85.5 | 3,169 | 52.2 | 2,957 | 42.7 | 12 | 46.2 |
| Unknown | 61 | 1.3 | 142 | 5.1 | 25 | 0.7 | 80 | 1.2 | 84 | 1.3 | 67 | 1.2 | 80 | 1.3 | 92 | 1.3 | 0 | 0 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Insurance Type | | | | | | | | | | | | | | | | | | |
| Medicaid | 2,078 | 42.7 | 469 | 16.7 | 285 | 8.5 | 3,229 | 47.6 | 2,892 | 45.5 | 1,078 | 20.0 | 4,054 | 66.8 | 5,075 | 73.2 | 8 | 30.8 |
| Private Insurance | 2,619 | 53.8 | 2,092 | 74.4 | 2,946 | 88.3 | 3,314 | 48.9 | 3,261 | 51.3 | 4,121 | 76.4 | 1,791 | 29.5 | 1,309 | 18.9 | 7 | 26.9 |
| Other Government (Fed, State, Local) | 7 | 0.1 | 20 | 0.7 | 9 | 0.3 | 19 | 0.3 | 12 | 0.2 | 10 | 0.2 | 17 | 0.3 | 16 | 0.2 | 0 | 0 |
| Self-pay | 60 | 1.2 | 82 | 2.9 | 42 | 1.3 | 88 | 1.3 | 75 | 1.2 | 40 | 0.7 | 64 | 1.1 | 60 | 0.9 | 1 | 3.8 |
| CHAMPUS/TRICARE | 26 | 0.5 | 19 | 0.7 | 28 | 0.8 | 30 | 0.4 | 30 | 0.5 | 109 | 2.0 | 35 | 0.6 | 343 | 5.0 | 2 | 7.7 |
| Other | 72 | 1.5 | 109 | 3.9 | 20 | 0.6 | 87 | 1.3 | 58 | 0.9 | 26 | 0.5 | 83 | 1.4 | 111 | 1.6 | 1 | 3.8 |
| Unknown | 9 | 0.2 | 20 | 0.7 | 8 | 0.2 | 11 | 0.2 | 26 | 0.4 | 12 | 0.2 | 25 | 0.4 | 15 | 0.2 | 7 | 26.9 |

Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.
Note: *The racial-ethnic "Other" categories represent American Indians, Alaska Natives, and others.*
Totals and percentages may not sum to 100 due to missing values.

Appendix Table 9. Pre-pregnancy characteristics of women who had live births by ward, District of Columbia 2019-2023

| | Total Births | | Maternal Residence (Ward) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Ward 1 | | Ward 2 | | Ward 3 | | Ward 4 | | Ward 5 | | Ward 6 | | Ward 7 | | Ward 8 | | Missing | |
| | No | % | No | % | No | % | No | % | No | % | No | % | No | % | No | % | No | % | No | % |
| Total Births | 42,572 | 100.0 | 4,871 | 100.0 | 2,811 | 100.0 | 3,338 | 100.0 | 6,778 | 100.0 | 6,354 | 100.0 | 5,396 | 100.0 | 6,069 | 100.0 | 6,929 | 100.0 | 26 | 100.0 |
| Previous Preterm Birth | | | | | | | | | | | | | | | | | | | | |
| Unknown/Missing | 68 | 0.2 | 8 | 0.2 | 17 | 0.6 | 7 | 0.2 | 7 | 0.1 | 4 | 0.1 | 6 | 0.1 | 10 | 0.2 | 3 | 0.0 | 6 | 23.1 |
| No, no previous preterm birth | 40,849 | 96.0 | 4,724 | 97.0 | 2,750 | 97.8 | 3,252 | 97.4 | 6,560 | 96.8 | 6,115 | 96.2 | 5,256 | 97.4 | 5,691 | 93.8 | 6,481 | 93.5 | 20 | 76.9 |
| Yes, previous preterm birth | 1,655 | 3.9 | 139 | 2.9 | 44 | 1.6 | 79 | 2.4 | 211 | 3.1 | 235 | 3.7 | 134 | 2.5 | 368 | 6.1 | 445 | 6.4 | 0 | 0 |
| Pre-pregnancy weight | | | | | | | | | | | | | | | | | | | | |
| Missing | 1,347 | 3.2 | 147 | 3.0 | 203 | 7.2 | 38 | 1.1 | 235 | 3.5 | 185 | 2.9 | 107 | 2.0 | 196 | 3.2 | 228 | 3.3 | 8 | 30.8 |
| Underweight | 1,292 | 3.0 | 141 | 2.9 | 117 | 4.2 | 139 | 4.2 | 164 | 2.4 | 169 | 2.7 | 161 | 3.0 | 168 | 2.8 | 233 | 3.4 | 0 | 0 |
| Normal Weight | 19,991 | 47.0 | 2,587 | 53.1 | 1,716 | 61.0 | 2,279 | 68.3 | 3,054 | 45.1 | 2,774 | 43.7 | 3,140 | 58.2 | 2,117 | 34.9 | 2,318 | 33.5 | 6 | 23.1 |
| Overweight | 10,204 | 24.0 | 1,135 | 23.3 | 505 | 18.0 | 622 | 18.6 | 1,848 | 27.3 | 1,662 | 26.2 | 1,213 | 22.5 | 1,530 | 25.2 | 1,683 | 24.3 | 6 | 23.1 |
| Obese | 9,738 | 22.9 | 861 | 17.7 | 270 | 9.6 | 260 | 7.8 | 1,477 | 21.8 | 1,564 | 24.6 | 775 | 14.4 | 2,058 | 33.9 | 2,467 | 35.6 | 6 | 23.1 |
| Smoking prior to pregnancy | | | | | | | | | | | | | | | | | | | | |
| Missing | 422 | 1.0 | 31 | 0.6 | 56 | 2.0 | 12 | 0.4 | 47 | 0.7 | 54 | 0.8 | 29 | 0.5 | 91 | 1.5 | 96 | 1.4 | 6 | 23.1 |
| Did not smoke prior to pregnancy | 41,074 | 96.5 | 4,772 | 98.0 | 2,736 | 97.3 | 3,304 | 99.0 | 6,653 | 98.2 | 6,168 | 97.1 | 5,301 | 98.2 | 5,710 | 94.1 | 6,410 | 92.5 | 20 | 76.9 |
| Smoked prior to pregnancy | 1,076 | 2.5 | 68 | 1.4 | 19 | 0.7 | 22 | 0.7 | 78 | 1.2 | 132 | 2.1 | 66 | 1.2 | 268 | 4.4 | 423 | 6.1 | 0 | 0 |
| Pre-pregnancy diabetes | | | | | | | | | | | | | | | | | | | | |
| Unknown or Missing | 156 | 0.4 | 6 | 0.1 | 110 | 3.9 | 4 | 0.1 | 7 | 0.1 | 5 | 0.1 | 4 | 0.1 | 9 | 0.1 | 5 | 0.1 | 6 | 23.1 |
| Absent | 41,818 | 98.2 | 4,783 | 98.2 | 2,670 | 95.0 | 3,311 | 99.2 | 6,656 | 98.2 | 6,249 | 98.3 | 5,347 | 99.1 | 5,972 | 98.4 | 6,810 | 98.3 | 20 | 76.9 |
| Present | 598 | 1.4 | 82 | 1.7 | 31 | 1.1 | 23 | 0.7 | 115 | 1.7 | 100 | 1.6 | 45 | 0.8 | 88 | 1.4 | 114 | 1.6 | 0 | 0 |
| Pre-pregnancy hypertension | | | | | | | | | | | | | | | | | | | | |
| Unknown or Missing | 157 | 0.4 | 6 | 0.1 | 110 | 3.9 | 4 | 0.1 | 7 | 0.1 | 5 | 0.1 | 4 | 0.1 | 10 | 0.2 | 5 | 0.1 | 6 | 23.1 |
| Absent | 41,056 | 96.4 | 4,771 | 97.9 | 2,656 | 94.5 | 3,289 | 98.5 | 6,582 | 97.1 | 6,138 | 96.6 | 5,274 | 97.7 | 5,785 | 95.3 | 6,541 | 94.4 | 20 | 76.9 |
| Present | 1,359 | 3.2 | 94 | 1.9 | 45 | 1.6 | 45 | 1.3 | 189 | 2.8 | 211 | 3.3 | 118 | 2.2 | 274 | 4.5 | 383 | 5.5 | 0 | 0 |

Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.
Note: *The racial-ethnic "Other" categories represent American Indians, Alaska Natives, and others.*
Totals and percentages may not sum to 100 due to missing values

Appendix Table 10. Percentage of preterm births by maternal characteristics among live births in the District of Columbia, 2019-2023

| Characteristics | Total Births | Preterm (<37 weeks gestation) | | Not preterm (37 and more weeks of gestation) | |
|---|---|---|---|---|---|
| | No. | No. | % | No. | % |
| Total Births | 42,572 | 4,358 | 10.2 | 38,158 | 89.6 |
| Maternal Race and Ethnicity [a] | | | | | |
| White | 13,976 | 936 | 6.7 | 13,034 | 93.3 |
| [b] Black | 18,739 | 2,553 | 13.6 | 16,170 | 86.3 |
| Hispanic | 6,801 | 632 | 9.3 | 6,167 | 90.7 |
| Asian/Pacific Islander | 2,136 | 146 | 6.8 | 1,984 | 92.9 |
| Age of Mother (years) | | | | | |
| Less than 20 years | 1,394 | 164 | 11.8 | 1,225 | 87.9 |
| 20-24 years | 5,100 | 591 | 11.6 | 4,496 | 88.2 |
| [c] 25-29 years | 8,137 | 969 | 11.9 | 7,157 | 88.0 |
| 30-34 years | 13,566 | 1,285 | 9.5 | 12,277 | 90.5 |
| 35-39 years | 11,311 | 1,008 | 8.9 | 10,295 | 91.0 |
| 40 years and older | 3,049 | 339 | 11.1 | 2,703 | 88.7 |
| Marital Status | | | | | |
| Not Married | 19,498 | 2,653 | 13.6 | 16,826 | 86.3 |
| [d] Married | 22,990 | 1,696 | 7.4 | 21,278 | 92.6 |
| Mother's Education Level | | | | | |
| [e] Less than High School | 5,031 | 681 | 13.5 | 4,344 | 86.3 |
| High School Graduate | 8,906 | 1,227 | 13.8 | 7,670 | 86.1 |
| More than High School Education | 27,976 | 2,368 | 8.5 | 25,603 | 91.5 |
| Insurance Type | | | | | |
| [f] Medicaid | 19,168 | 2,546 | 13.3 | 16,611 | 86.7 |
| Private Insurance | 21,460 | 1,645 | 7.7 | 19,812 | 92.3 |
| Other Government (Fed, State, Local) | 110 | 18 | 16.4 | 92 | 83.6 |
| Self-pay | 512 | 42 | 8.2 | 468 | 91.4 |
| CHAMPUS/TRICARE | 622 | 39 | 6.3 | 583 | 93.7 |
| Other | 567 | 55 | 9.7 | 510 | 89.9 |
| Residence (Ward) | | | | | |
| Ward 1 | 4,871 | 425 | 8.7 | 4,440 | 91.2 |
| Ward 2 | 2,811 | 210 | 7.5 | 2,590 | 92.1 |
| Ward 3 | 3,338 | 284 | 8.5 | 3,050 | 91.4 |
| Ward 4 | 6,778 | 558 | 8.2 | 6,213 | 91.7 |
| Ward 5 | 6,354 | 623 | 9.8 | 5,725 | 90.1 |
| Ward 6 | 5,396 | 453 | 8.4 | 4,939 | 91.5 |
| Ward 7 | 6,069 | 808 | 13.3 | 5,254 | 86.6 |
| [g] Ward 8 | 6,929 | 996 | 14.4 | 5,928 | 85.6 |

**Data Source**: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.
**Note:** *The racial-ethnic "Other" categories represent American Indians, Alaska Natives, and others.*
[a] Other non-Hispanic race-ethnic categories are not presented due to small sample size.
[b] Percentage of preterm births is significantly higher among births of non-Hispanic black mother compared to all other race and ethnic categories ($p<0.05$). Hispanic mothers have significantly higher preterm birth compared to White mothers.

[c] Percentage of preterm births is significantly higher among infants of mothers aged 25-29 compared to mothers aged 30-34 years (p<0.05) and 35-39 years (p<0.05).
[d] Percentage of preterm births is significantly higher among births of unmarried mothers compared to married mothers (p<0.05).
[e] Percentage of preterm births is significantly higher among infants of mothers with less than a high school education as well a high school education compared to those with more than a high school education (p<0.05).
[f] Percentage of preterm births is significantly higher among infants of mothers with Medicaid coverage compared to mothers with private insurance (p<0.05)
[g] Percentage of preterm births is significantly higher among infants of mothers residing in Ward 8 compared to all other wards (p<0.05).

Appendix Table 11. Percentage of low birthweight live births by maternal characteristics among live births in District of Columbia, 2019-2023

| | Low birth weight | | | | | | Normal birthweight | |
|---|---|---|---|---|---|---|---|---|
| Characteristics | Overall (Less than 2,500 grams) | | Less than 1500 grams | | 1500-2499 grams | | 2,500 grams or more | |
| | N | % | N | % | N | % | N | % |
| DC Overall | 4226 | 9.9 | 767 | 1.8 | 3459 | 8.1 | 38326 | 90.0 |
| Maternal Race and Ethnicity [a] | | | | | | | | |
| White | 781 | 5.6 | 90 | 0.6 | 691 | 4.9 | 13192 | 94.4 |
| [b] Black | 2693 | 14.4 | 558 | 3.0 | 2135 | 11.4 | 16044 | 85.6 |
| Hispanic | 492 | 7.2 | 75 | 1.1 | 417 | 6.1 | 6309 | 92.8 |
| Asian/Pacific Islander | 161 | 7.5 | 22 | 1.0 | 139 | 6.5 | 1969 | 92.2 |
| Maternal age (years) | | | | | | | | |
| Less than 20 years | 186 | 13.3 | 31 | 2.2 | 155 | 11.1 | 1208 | 86.7 |
| [c] 20-24 years | 658 | 12.9 | 116 | 2.3 | 542 | 10.6 | 4439 | 87.0 |
| [c] 25-29 years | 983 | 12.1 | 187 | 2.3 | 796 | 9.8 | 7148 | 87.9 |
| 30-34 years | 1199 | 8.8 | 228 | 1.7 | 971 | 7.2 | 12365 | 91.2 |
| 35-39 years | 888 | 7.9 | 144 | 1.3 | 744 | 6.6 | 10421 | 92.1 |
| 40 years and older | 308 | 10.1 | 57 | 1.9 | 251 | 8.2 | 2740 | 89.9 |
| Marital Status | | | | | | | | |
| [d] Not Married | 2707 | 13.9 | 543 | 2.8 | 2164 | 11.1 | 16790 | 86.1 |
| Married | 1508 | 6.6 | 218 | 1.0 | 1290 | 5.6 | 21479 | 93.4 |
| Maternal Education Level | | | | | | | | |
| Less than High School | 652 | 13.0 | 112 | 2.2 | 540 | 10.7 | 4379 | 87.0 |
| High School Graduate | 1262 | 14.2 | 241 | 2.7 | 1021 | 11.5 | 7643 | 85.8 |
| [e] More than High School Education | 2227 | 8.0 | 384 | 1.4 | 1843 | 6.6 | 25747 | 92.0 |
| Insurance Type | | | | | | | | |
| [f] Medicaid | 2565 | 13.4 | 483 | 2.5 | 2082 | 10.9 | 16603 | 86.6 |
| Private Insurance | 1496 | 7.0 | 241 | 1.1 | 1255 | 5.9 | 19961 | 93.0 |
| Other Government (Fed, State, Local) | 17 | 15.5 | 6 | 5.5 | 11 | 10.0 | 93 | 84.6 |
| Self-pay | 46 | 9.0 | 10 | 2.0 | 36 | 7.0 | 466 | 91.0 |
| CHAMPUS/TRICARE | 35 | 5.6 | 4 | 0.6 | 31 | 5.0 | 587 | 94.4 |
| Other | 49 | 8.6 | 12 | 2.1 | 37 | 6.5 | 518 | 91.4 |
| Maternal Residence (Ward) | | | | | | | | |
| Ward 1 | 385 | 7.9 | 53 | 1.1 | 332 | 6.8 | 4484 | 92.1 |
| Ward 2 | 194 | 6.9 | 22 | 0.8 | 172 | 6.1 | 2609 | 92.8 |
| Ward 3 | 232 | 7.0 | 33 | 1.0 | 199 | 6.0 | 3106 | 93.1 |
| Ward 4 | 504 | 7.4 | 84 | 1.2 | 420 | 6.2 | 6273 | 92.6 |
| Ward 5 | 599 | 9.4 | 98 | 1.5 | 501 | 7.9 | 5755 | 90.6 |
| Ward 6 | 442 | 8.2 | 64 | 1.2 | 378 | 7.0 | 4953 | 91.8 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Ward 7 | 856 | 14.1 | 184 | 3.0 | 672 | 11.1 | 5211 | 85.9 |
| [g] Ward 8 | 1013 | 14.6 | 228 | 3.3 | 785 | 11.3 | 5916 | 85.4 |

Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.
Note: *The racial-ethnic "Other" categories represent American Indians, Alaska Natives, and others.*
Note: A low birthweight live birth is defined as a birth of an infant weighing less than 2,500 grams.
Missing values for the characteristics are included in the denominator but are not presented in the table.
a Other non-Hispanic race-ethnic categories are not presented due to small sample size.
b Percentage of low birthweight births is significantly higher among non-Hispanic black mothers compared to non-Hispanic white mothers ($p<0.05$), Hispanic mothers($p<0.05$), and non-Hispanic Asian/Pacific Islander mothers ($p<0.05$).
c Percentage of low birthweight births is significantly higher among infants of mothers aged 20-24 years and 25-29 years compared to mothers aged 30-34 years ($p<0.05$), 35-39 years ($p<0.05$), and 40 years and older ($p<0.05$).
d Percentage of low birthweight births is significantly higher among unmarried mothers compared to married mothers ($p<0.05$).
e Percentage of low birthweight births is significantly lower among mothers with more than a high school education compared to mothers with out a high school diploma and mothers who had only high school diploma ($p<0.05$).
f Percentage of preterm births is significantly higher among infants of mothers with Medicaid coverage compared to mothers with private insurance ($p<0.05$).
g Percentage of low birthweight births is significantly higher among mothers residing in Ward 8 compared to all other wards ($p<0.05$ for six comparisons) except Ward 7.

Appendix Table 12. Percentage of preterm and full term births by pre-pregnancy characteristics of mothers who had live births and maternal race and ethnicity, District of Columbia 2019-2023

| | Preterm (<37 weeks gestation) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Overall | | White | | Black | | Hispanic | | Asian/Pacific Islander | | All other race-ethnic categories | |
| | No | % | No | % | No | % | No | % | No | % | No | % |
| Total Births | 4,358 | 10.2 | 936 | 6.7 | 2,553 | 13.6 | 632 | 9.3 | 146 | 6.8 | 42 | 10.9 |
| Previous Preterm Birth | | | | | | | | | | | | |
| o, no previous preterm birth | 3,867 | 9.5 | 882 | 6.4 | 2,195 | 12.5 | 571 | 8.7 | 139 | 6.6 | 37 | 10 |
| [a] Yes, previous preterm birth | 485 | 29.3 | 51 | 20.2 | 357 | 32.6 | 61 | 25.1 | 6 | 20.7 | 4 | 36.4 |
| Pre-pregnancy weight | | | | | | | | | | | | |
| Underweight | 124 | 9.6 | 19 | 4.6 | 83 | 13.8 | 15 | 11 | 5 | 4.3 | 2 | 18.2 |
| Normal Weight | 1,795 | 9 | 634 | 6.7 | 836 | 13.6 | 201 | 8.1 | 88 | 6.2 | 19 | 10.2 |
| Overweight | 968 | 9.5 | 175 | 6.2 | 575 | 11.7 | 168 | 8.7 | 26 | 7.5 | 12 | 13.2 |
| [b] Obese | 1,264 | 13 | 92 | 8.4 | 935 | 14.4 | 212 | 11.3 | 8 | 7.4 | 4 | 6.9 |
| Smoking prior to pregnancy | | | | | | | | | | | | |
| Did not smoke prior to pregnancy | 4,077 | 9.9 | 926 | 6.7 | 2,303 | 13.1 | 624 | 9.3 | 141 | 6.8 | 38 | 10.2 |
| [c] Smoked prior to pregnancy | 225 | 20.9 | 9 | 9.9 | 208 | 22.7 | 3 | 6.5 | 1 | 10 | 2 | 40 |
| Pre-pregnancy diabetes | | | | | | | | | | | | |
| Absent | 4,220 | 10.1 | 925 | 6.7 | 2,469 | 13.4 | 602 | 9.1 | 136 | 6.7 | 41 | 11.1 |
| [d] Present | 126 | 21.1 | 10 | 13.7 | 83 | 25 | 29 | 18.5 | 2 | 8 | 0 | 0 |
| Pre-pregnancy hypertension | | | | | | | | | | | | |
| Absent | 4,043 | 9.8 | 900 | 6.5 | 2,326 | 13.1 | 593 | 8.9 | 136 | 6.7 | 40 | 10.9 |
| [e] Present | 303 | 22.3 | 35 | 16.8 | 226 | 23.7 | 38 | 24.5 | 2 | 9.5 | 1 | 16.7 |
| | Not preterm (37 and more weeks of gestation) | | | | | | | | | | | |
| Total Births | 38,158 | 89.6 | 13,034 | 93.3 | 16,170 | 86.3 | 6,167 | 90.7 | 1,984 | 92.9 | 340 | 87.9 |
| Previous Preterm Birth | | | | | | | | | | | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| o, no previous preterm birth | 36,961 | 90.5 | 12,828 | 93.5 | 15,419 | 87.5 | 5,981 | 91.3 | 1,959 | 93.4 | 331 | 89.2 |
| [a] Yes, previous preterm birth | 1,170 | 70.7 | 202 | 79.8 | 739 | 67.4 | 182 | 74.9 | 23 | 79.3 | 7 | 63.6 |
| Pre-pregnancy weight | | | | | | | | | | | | |
| Underweight | 1,168 | 90.4 | 396 | 95.4 | 519 | 86.2 | 121 | 89 | 111 | 95.7 | 9 | 81.8 |
| Normal Weight | 18,187 | 91 | 8,866 | 93.3 | 5,321 | 86.4 | 2,267 | 91.8 | 1,338 | 93.8 | 167 | 89.3 |
| Overweight | 9,231 | 90.5 | 2,633 | 93.8 | 4,330 | 88.2 | 1,768 | 91.3 | 320 | 92.5 | 79 | 86.8 |
| [b] Obese | 8,473 | 87 | 1,005 | 91.6 | 5,546 | 85.6 | 1,672 | 88.7 | 100 | 92.6 | 54 | 93.1 |
| Smoking prior to pregnancy | | | | | | | | | | | | |
| Did not smoke prior to pregnancy | 36,976 | 90 | 12,943 | 93.3 | 15,248 | 86.8 | 6,067 | 90.6 | 1,941 | 93.2 | 333 | 89 |
| [c] Smoked prior to pregnancy | 851 | 79.1 | 82 | 90.1 | 707 | 77.3 | 43 | 93.5 | 9 | 90 | 3 | 60 |
| Pre-pregnancy diabetes | | | | | | | | | | | | |
| Absent | 37,578 | 89.9 | 12,969 | 93.3 | 15,911 | 86.5 | 6,039 | 90.9 | 1,879 | 93.3 | 324 | 88 |
| [d] Present | 472 | 78.9 | 63 | 86.3 | 249 | 75 | 128 | 81.5 | 23 | 92 | 5 | 100 |
| Pre-pregnancy hypertension | | | | | | | | | | | | |
| Absent | 36,993 | 90.1 | 12,859 | 93.4 | 15,431 | 86.8 | 6,050 | 91 | 1,883 | 93.3 | 324 | 88.3 |
| [e] Present | 1,056 | 77.7 | 173 | 83.2 | 728 | 76.3 | 117 | 75.5 | 19 | 90.5 | 5 | 83.3 |

Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.
Note: *The racial-ethnic "Other" categories represent American Indians, Alaska Natives, and others.*
Totals and percentages may not sum to 100 due to missing values
a Percentage of preterm births is significantly higher among mothers who had previous preterm births compared to mothers who did not have previous preterm births ($p<0.05$).
b Percentage of preterm births is significantly higher among obese mothers compared to underweight, normal weight and overweight mothers ($p<0.05$).
c Percentage of preterm births is significantly higher among mothers who smoked prior to pregnancy compared to mothers who did not smoke prior to pregnancy ($p<0.05$).
d Percentage of preterm births is significantly higher among mothers with pre-pregnancy diabetes compared to mothers did not have pre-pregnancy diabetes ($p<0.05$).
e Percentage of preterm births is significantly higher among mothers with pre-pregnancy hypertension compared to mothers did not have pre-pregnancy hypertension ($p<0.05$).

Appendix Table 13. Percentage of preterm and full term births by pre-pregnancy characteristics of mothers who had live births and ward, District of Columbia 2019-2023

| | Preterm (<37 weeks gestation) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ward 1 | | Ward 2 | | Ward 3 | | Ward 4 | | Ward 5 | | Ward 6 | | Ward 7 | | Ward 8 | |
| | No | % | No | % | No | % | No | % | No | % | No | % | No | % | No | % |
| Total Births | 425 | 8.7 | 210 | 7.5 | 284 | 8.5 | 558 | 8.2 | 623 | 9.8 | 453 | 8.4 | 808 | 13.3 | 996 | 14.4 |
| Previous Preterm Birth | | | | | | | | | | | | | | | | |
| No, no previous preterm birth | 385 | 8.1 | 195 | 7.1 | 270 | 8.3 | 512 | 7.8 | 558 | 9.1 | 419 | 8 | 690 | 12.1 | 837 | 12.9 |
| Yes, previous preterm birth | 39 | 28.1 | 13 | 29.5 | 12 | 15.2 | 46 | 21.8 | 65 | 27.7 | 34 | 25.4 | 118 | 32.1 | 158 | 35.5 |
| Pre-pregnancy weight | | | | | | | | | | | | | | | | |
| Underweight | 7 | 5 | 6 | 5.1 | 11 | 7.9 | 12 | 7.3 | 17 | 10.1 | 17 | 10.6 | 26 | 15.5 | 28 | 12 |
| Normal Weight | 213 | 8.2 | 113 | 6.6 | 188 | 8.2 | 208 | 6.8 | 251 | 9 | 220 | 7 | 271 | 12.8 | 331 | 14.3 |
| Overweight | 91 | 8 | 36 | 7.1 | 46 | 7.4 | 153 | 8.3 | 151 | 9.1 | 108 | 8.9 | 177 | 11.6 | 205 | 12.2 |
| Obese | 97 | 11.3 | 24 | 8.9 | 31 | 11.9 | 157 | 10.6 | 175 | 11.2 | 95 | 12.3 | 306 | 14.9 | 379 | 15.4 |
| Smoking prior to pregnancy | | | | | | | | | | | | | | | | |
| Did not smoke prior to pregnancy | 413 | 8.7 | 200 | 7.3 | 277 | 8.4 | 541 | 8.1 | 593 | 9.6 | 434 | 8.2 | 731 | 12.8 | 887 | 13.8 |
| Smoked prior to pregnancy | 10 | 14.7 | 4 | 21.1 | 4 | 18.2 | 11 | 14.1 | 26 | 19.7 | 12 | 18.2 | 64 | 23.9 | 94 | 22.2 |
| Pre-pregnancy diabetes | | | | | | | | | | | | | | | | |
| Absent | 412 | 8.6 | 198 | 7.4 | 278 | 8.4 | 535 | 8 | 602 | 9.6 | 448 | 8.4 | 785 | 13.1 | 961 | 14.1 |
| Present | 13 | 15.9 | 3 | 9.7 | 5 | 21.7 | 22 | 19.1 | 21 | 21 | 5 | 11.1 | 23 | 26.1 | 34 | 29.8 |
| Pre-pregnancy hypertension | | | | | | | | | | | | | | | | |
| Absent | 404 | 8.5 | 191 | 7.2 | 278 | 8.5 | 523 | 7.9 | 591 | 9.6 | 429 | 8.1 | 735 | 12.7 | 891 | 13.6 |
| Present | 21 | 22.3 | 10 | 22.2 | 5 | 11.1 | 34 | 18 | 32 | 15.2 | 24 | 20.3 | 73 | 26.6 | 104 | 27.2 |
| | Not preterm (37 and more weeks of gestation) | | | | | | | | | | | | | | | |
| Total Births | 4,440 | 91.2 | 2,590 | 92.1 | 3,050 | 91.4 | 6,213 | 91.7 | 5,725 | 90.1 | 4,939 | 91.5 | 5,254 | 86.6 | 5,928 | 85.6 |
| Previous Preterm Birth | | | | | | | | | | | | | | | | |
| No, no previous preterm birth | 4,339 | 91.9 | 2,552 | 92.8 | 2,980 | 91.6 | 6,044 | 92.1 | 5,553 | 90.8 | 4,837 | 92 | 4,998 | 87.8 | 5,639 | 87 |
| Yes, previous preterm birth | 100 | 71.9 | 31 | 70.5 | 67 | 84.8 | 165 | 78.2 | 170 | 72.3 | 100 | 74.6 | 250 | 67.9 | 287 | 64.5 |
| Pre-pregnancy weight | | | | | | | | | | | | | | | | |
| Underweight | 134 | 95 | 111 | 94.9 | 128 | 92.1 | 152 | 92.7 | 152 | 89.9 | 144 | 89.4 | 142 | 84.5 | 205 | 88 |
| Normal Weight | 2,374 | 91.8 | 1,602 | 93.4 | 2,090 | 91.7 | 2,843 | 93.1 | 2,521 | 90.9 | 2,920 | 93 | 1,845 | 87.2 | 1,986 | 85.7 |
| Overweight | 1,044 | 92 | 469 | 92.9 | 576 | 92.6 | 1,694 | 91.7 | 1,509 | 90.8 | 1,105 | 91.1 | 1,352 | 88.4 | 1,477 | 87.8 |
| Obese | 764 | 88.7 | 246 | 91.1 | 229 | 88.1 | 1,320 | 89.4 | 1,389 | 88.8 | 680 | 87.7 | 1,752 | 85.1 | 2,087 | 84.6 |
| Smoking prior to pregnancy | | | | | | | | | | | | | | | | |
| Did not smoke prior to pregnancy | 4,359 | 91.3 | 2,533 | 92.6 | 3,026 | 91.6 | 6,107 | 91.8 | 5,571 | 90.3 | 4,867 | 91.8 | 4,976 | 87.1 | 5,518 | 86.1 |
| Smoked prior to pregnancy | 58 | 85.3 | 15 | 78.9 | 18 | 81.8 | 67 | 85.9 | 106 | 80.3 | 54 | 81.8 | 204 | 76.1 | 329 | 77.8 |
| Pre-pregnancy diabetes | | | | | | | | | | | | | | | | |
| Absent | 4,371 | 91.4 | 2,469 | 92.5 | 3,031 | 91.5 | 6,117 | 91.9 | 5,643 | 90.3 | 4,899 | 91.6 | 5,184 | 86.8 | 5,845 | 85.8 |
| Present | 69 | 84.1 | 28 | 90.3 | 18 | 78.3 | 93 | 80.9 | 79 | 79 | 40 | 88.9 | 65 | 73.9 | 80 | 70.2 |
| Pre-pregnancy hypertension | | | | | | | | | | | | | | | | |
| Absent | 4,367 | 91.5 | 2,462 | 92.7 | 3,009 | 91.5 | 6,055 | 92 | 5,543 | 90.3 | 4,845 | 91.9 | 5,047 | 87.2 | 5,646 | 86.3 |
| Present | 73 | 77.7 | 35 | 77.8 | 40 | 88.9 | 155 | 82 | 179 | 84.8 | 94 | 79.7 | 201 | 73.4 | 279 | 72.8 |

Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.

Note: *The racial-ethnic "Other" categories represent American Indians, Alaska Natives, and others.*

Totals and percentages may not sum to 100 due to missing values

Appendix Table 14. Percentage of preterm births by pregnancy characteristics of mothers who had live births and maternal race and ethnicity, District of Columbia 2019-2023

| | Preterm (<37 weeks gestation) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Overall | | White | | Black | | Hispanic | | Asian/Pacific Islander | | All other race-ethnic categories | |
| | N | Percent | N | Percent | N | Percent | N | Percent | N | Percent | N | Percent |
| Total Births | 4,358 | 10.2 | 936 | 6.7 | 2,553 | 13.6 | 632 | 9.3 | 146 | 6.8 | 42 | 10.9 |
| Trimester Prenatal | | | | | | | | | | | | |
| First Trimester | 2,799 | 9.7 | 784 | 6.7 | 1,467 | 13.7 | 395 | 9.2 | 108 | 6.8 | 22 | 10 |
| Second Trimester | 838 | 9.7 | 95 | 6 | 578 | 11.6 | 139 | 8.6 | 12 | 4.2 | 6 | 9.1 |
| Third Trimester | 148 | 6.8 | 11 | 3.1 | 102 | 8.1 | 28 | 6.8 | 7 | 6.9 | 0 | 0 |
| [a] No Prenatal Care | 270 | 25.5 | 15 | 20.5 | 203 | 29.7 | 16 | 13.9 | 15 | 14.2 | 12 | 22.2 |
| Plurality of birth | | | | | | | | | | | | |
| Singleton | 3,614 | 8.8 | 726 | 5.4 | 2,135 | 11.8 | 560 | 8.4 | 123 | 5.9 | 31 | 8.3 |
| [c] Twin | 699 | 54.2 | 192 | 48.1 | 401 | 59 | 66 | 44.9 | 22 | 52.4 | 8 | 80 |
| Triplet | 45 | 100 | 18 | 100 | 17 | 100 | 6 | 100 | 1 | 100 | 3 | 100 |
| Smoking during pregnancy | | | | | | | | | | | | |
| Did not smoke during pregnancy | 4,150 | 10 | 927 | 6.7 | 2,372 | 13.3 | 625 | 9.3 | 142 | 6.8 | 38 | 10.2 |
| [d] Smoked during pregnancy | 144 | 22 | 7 | 15.9 | 131 | 22.9 | 3 | 11.5 | 0 | 0 | 2 | 40 |
| Gestational diabetes | | | | | | | | | | | | |
| Absent | 4,028 | 10.1 | 874 | 6.5 | 2,379 | 13.5 | 569 | 9 | 124 | 6.7 | 40 | 11.4 |
| [e] Present | 316 | 13.5 | 61 | 11.2 | 172 | 16.3 | 61 | 12 | 14 | 7.5 | 1 | 4.5 |
| Gestational hypertension | | | | | | | | | | | | |
| Absent | 3,657 | 9.5 | 773 | 6 | 2,137 | 12.8 | 553 | 8.8 | 119 | 6.2 | 37 | 10.9 |
| [f] Present | 688 | 18 | 162 | 14.1 | 414 | 20.9 | 78 | 15.6 | 19 | 15.4 | 4 | 12.5 |
| Eclampsia | | | | | | | | | | | | |
| Absent | 4,267 | 10.1 | 923 | 6.6 | 2,499 | 13.4 | 619 | 9.2 | 136 | 6.7 | 41 | 11 |
| [g] Present | 76 | 35.7 | 9 | 23.7 | 53 | 41.1 | 12 | 37.5 | 2 | 16.7 | 0 | 0 |
| | Not preterm (37 and more weeks of gestation) | | | | | | | | | | | |
| Total Births | 38,158 | 89.6 | 13,034 | 93.3 | 16,170 | 86.3 | 6,167 | 90.7 | 1,984 | 92.9 | 340 | 87.9 |
| Trimester Prenatal | | | | | | | | | | | | |
| First Trimester | 26,078 | 90.3 | 10,950 | 93.3 | 9,216 | 86.2 | 3,912 | 90.8 | 1,485 | 93.2 | 197 | 89.5 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Second Trimester | 7,803 | 90.3 | 1,495 | 94 | 4,403 | 88.4 | 1,484 | 91.4 | 274 | 95.8 | 60 | 90.9 |
| Third Trimester | 2,034 | 93.2 | 344 | 96.9 | 1,160 | 91.9 | 384 | 93.2 | 94 | 93.1 | 29 | 100 |
| [a] No Prenatal Care | 780 | 73.7 | 58 | 79.5 | 476 | 69.6 | 97 | 84.3 | 91 | 85.8 | 40 | 74.1 |
| Plurality of birth | | | | | | | | | | | | |
| Singleton | 37,569 | 91.1 | 12,827 | 94.6 | 15,893 | 88.1 | 6,086 | 91.5 | 1,964 | 94.1 | 338 | 90.9 |
| [c] Twin | 589 | 45.7 | 207 | 51.9 | 277 | 40.7 | 81 | 55.1 | 20 | 47.6 | 2 | 20 |
| Triplet | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Smoking during pregnancy | | | | | | | | | | | | |
| Did not smoke during pregnancy | 37,290 | 89.9 | 12,985 | 93.3 | 15,493 | 86.7 | 6,087 | 90.7 | 1,946 | 93.2 | 333 | 89 |
| [d] Smoked during pregnancy | 511 | 78 | 37 | 84.1 | 440 | 77.1 | 23 | 88.5 | 3 | 100 | 3 | 60 |
| Gestational diabetes | | | | | | | | | | | | |
| Absent | 36,019 | 89.9 | 12,547 | 93.5 | 15,274 | 86.5 | 5,718 | 90.9 | 1,729 | 93.3 | 308 | 87.7 |
| [e] Present | 2,025 | 86.5 | 485 | 88.8 | 881 | 83.7 | 448 | 88 | 173 | 92.5 | 21 | 95.5 |
| Gestational hypertension | | | | | | | | | | | | |
| Absent | 34,909 | 90.5 | 12,047 | 93.9 | 14,594 | 87.2 | 5,746 | 91.2 | 1,798 | 93.8 | 301 | 88.3 |
| [f] Present | 3,139 | 82 | 985 | 85.9 | 1,564 | 79.1 | 421 | 84.4 | 104 | 84.6 | 28 | 87.5 |
| Eclampsia | | | | | | | | | | | | |
| Absent | 37,901 | 89.8 | 13,001 | 93.4 | 16,078 | 86.5 | 6,144 | 90.8 | 1,891 | 93.3 | 328 | 88.2 |
| [g] Present | 137 | 64.3 | 29 | 76.3 | 76 | 58.9 | 20 | 62.5 | 10 | 83.3 | 1 | 100 |

Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.

Note: *The racial-ethnic "Other" categories represent American Indians, Alaska Natives, and others.*

a Percentage of preterm births is significantly higher among mothers who had no prenatal care compared to mothers who initiated prenatal care in the first ($p<0.05$), second ($p<0.05$), and third trimester ($p<0.05$).

b Percentage of preterm births is significantly higher among mothers who had initiated prenatal care during the first or second trimester compared to mothers who initiated prenatal care in the third trimester ($p<0.05$ for all comparisons).

c Percentage of preterm births is significantly higher among twin births compared to singleton births ($p<0.05$).

d Percentage of preterm births is significantly higher among mothers who smoked during pregnancy compared to mothers who did not smoke during pregnancy ($p<0.05$).

e Percentage of preterm births is significantly higher among mothers who had gestational diabetes compared to mothers who did not have gestational diabetes ($p<0.05$).

f Percentage of preterm births is significantly higher among mothers who had gestational hypertension compared to mothers who did not have gestational hypertension ($p<0.05$).

g Percentage of preterm births is significantly higher among mothers who had eclampsia compared to mothers who did not have eclampsia ($p<0.05$).

Appendix Table 15. Percentage of preterm births by pregnancy characteristics of mothers who had live births and ward, District of Columbia 2019-2023

| | Preterm (<37 weeks gestation) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ward 1 | | Ward 2 | | Ward 3 | | Ward 4 | | Ward 5 | | Ward 6 | | Ward 7 | | Ward 8 | |
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| Total Births | 425 | 8.7 | 210 | 7.5 | 284 | 8.5 | 558 | 8.2 | 623 | 9.8 | 453 | 8.4 | 808 | 13.3 | 996 | 14.4 |
| Trimester Prenatal Care Initiated | | | | | | | | | | | | | | | | |
| First Trimester | 297 | 8.7 | 129 | 6.5 | 226 | 8.4 | 362 | 7.9 | 393 | 9.2 | 345 | 8.2 | 473 | 12.8 | 574 | 14.3 |
| Second Trimester | 71 | 7.7 | 29 | 7.1 | 33 | 7.5 | 110 | 7.8 | 140 | 10.6 | 64 | 7.9 | 180 | 12.1 | 210 | 11.5 |
| Third Trimester | 16 | 5.8 | 9 | 6.3 | 4 | 3.4 | 24 | 6.8 | 22 | 6.4 | 8 | 4.1 | 30 | 8.8 | 35 | 8.6 |
| No Prenatal Care | 15 | 20.0 | 34 | 18.9 | 8 | 36.4 | 20 | 17.7 | 29 | 22.0 | 16 | 28.6 | 55 | 27.9 | 93 | 32.7 |
| Plurality of birth | | | | | | | | | | | | | | | | |
| Singleton | 360 | 7.6 | 180 | 6.6 | 212 | 6.6 | 473 | 7.2 | 511 | 8.3 | 371 | 7.1 | 679 | 11.6 | 827 | 12.4 |
| Twin | 62 | 60.2 | 30 | 42.9 | 63 | 59.4 | 79 | 44.1 | 103 | 52.6 | 76 | 45.0 | 123 | 54.2 | 163 | 67.9 |
| Triplet | 3 | 100.0 | 0 | 0 | 9 | 100.0 | 6 | 100.0 | 9 | 100.0 | 6 | 100.0 | 6 | 100.0 | 6 | 100.0 |
| Smoking during pregnancy | | | | | | | | | | | | | | | | |
| Did not smoke during pregnancy | 418 | 8.7 | 201 | 7.3 | 277 | 8.4 | 546 | 8.2 | 607 | 9.7 | 442 | 8.3 | 746 | 12.9 | 912 | 14.0 |
| Smoked during pregnancy | 4 | 11.4 | 3 | 25.0 | 4 | 26.7 | 5 | 11.9 | 13 | 22.0 | 4 | 11.8 | 49 | 28.3 | 62 | 21.8 |
| Gestational diabetes | | | | | | | | | | | | | | | | |
| Absent | 402 | 8.8 | 187 | 7.3 | 259 | 8.2 | 506 | 8.0 | 581 | 9.7 | 416 | 8.1 | 760 | 13.2 | 916 | 14.0 |
| Present | 23 | 8.0 | 14 | 9.0 | 24 | 14.0 | 50 | 11.4 | 41 | 12.1 | 37 | 14.7 | 48 | 16.2 | 79 | 19.7 |
| Gestational hypertension | | | | | | | | | | | | | | | | |
| Absent | 356 | 7.9 | 167 | 6.7 | 240 | 7.8 | 464 | 7.5 | 522 | 9.0 | 384 | 7.9 | 687 | 12.6 | 836 | 13.5 |
| Present | 69 | 17.8 | 34 | 16.8 | 43 | 17.6 | 93 | 16.4 | 100 | 17.8 | 69 | 13.7 | 121 | 19.5 | 159 | 21.5 |
| Eclampsia | | | | | | | | | | | | | | | | |
| Absent | 422 | 8.7 | 198 | 7.4 | 278 | 8.4 | 544 | 8.1 | 612 | 9.7 | 445 | 8.3 | 794 | 13.2 | 973 | 14.2 |
| Present | 2 | 15.4 | 3 | 23.1 | 4 | 44.4 | 13 | 50.0 | 10 | 31.3 | 8 | 34.8 | 14 | 37.8 | 22 | 36.7 |
| Not preterm (37 and more weeks of gestation) | | | | | | | | | | | | | | | | |
| Total Births | 4,440 | 91.2 | 2,590 | 92.1 | 3,050 | 91.4 | 6,213 | 91.7 | 5,725 | 90.1 | 4,939 | 91.5 | 5,254 | 86.6 | 5,928 | 85.6 |
| Trimester Prenatal Care Initiated | | | | | | | | | | | | | | | | |
| First Trimester | 3,114 | 91.3 | 1,868 | 93.5 | 2,457 | 91.5 | 4,226 | 92.1 | 3,898 | 90.8 | 3,854 | 91.8 | 3,221 | 87.2 | 3,432 | 85.6 |
| Second Trimester | 856 | 92.3 | 377 | 92.9 | 409 | 92.5 | 1,309 | 92.2 | 1,187 | 89.4 | 743 | 92.1 | 1,306 | 87.9 | 1,609 | 88.5 |
| Third Trimester | 260 | 94.2 | 135 | 93.8 | 112 | 96.6 | 331 | 93.2 | 324 | 93.6 | 188 | 95.9 | 309 | 91.2 | 374 | 91.4 |
| No Prenatal Care | 60 | 80.0 | 144 | 80.0 | 14 | 63.6 | 90 | 79.6 | 101 | 76.5 | 40 | 71.4 | 141 | 71.6 | 190 | 66.9 |
| Plurality of birth | | | | | | | | | | | | | | | | |

| | Preterm (<37 weeks gestation) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ward 1 | | Ward 2 | | Ward 3 | | Ward 4 | | Ward 5 | | Ward 6 | | Ward 7 | | Ward 8 | |
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| Singleton | 4,401 | 92.4 | 2,550 | 93.3 | 3,007 | 93.3 | 6,113 | 92.7 | 5,632 | 91.6 | 4,846 | 92.8 | 5,150 | 88.3 | 5,851 | 87.6 |
| Twin | 39 | 37.9 | 40 | 57.1 | 43 | 40.6 | 100 | 55.9 | 93 | 47.4 | 93 | 55.0 | 104 | 45.8 | 77 | 32.1 |
| Triplet | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Smoking during pregnancy | | | | | | | | | | | | | | | | |
| Did not smoke during pregnancy | 4,380 | 91.3 | 2,540 | 92.6 | 3,033 | 91.6 | 6,135 | 91.8 | 5,623 | 90.2 | 4,891 | 91.7 | 5,050 | 87.1 | 5,619 | 86.0 |
| Smoked during pregnancy | 31 | 88.6 | 9 | 75.0 | 11 | 73.3 | 37 | 88.1 | 46 | 78.0 | 30 | 88.2 | 124 | 71.7 | 223 | 78.2 |
| Gestational diabetes | | | | | | | | | | | | | | | | |
| Absent | 4,176 | 91.2 | 2,355 | 92.5 | 2,902 | 91.7 | 5,822 | 91.9 | 5,424 | 90.3 | 4,724 | 91.9 | 4,998 | 86.8 | 5,601 | 85.9 |
| Present | 264 | 92.0 | 142 | 91.0 | 147 | 86.0 | 387 | 88.6 | 298 | 87.9 | 215 | 85.3 | 248 | 83.8 | 322 | 80.3 |
| Gestational hypertension | | | | | | | | | | | | | | | | |
| Absent | 4,122 | 92.1 | 2,329 | 93.2 | 2,848 | 92.2 | 5,735 | 92.5 | 5,260 | 90.9 | 4,506 | 92.1 | 4,747 | 87.3 | 5,343 | 86.4 |
| Present | 318 | 82.2 | 168 | 83.2 | 201 | 82.4 | 475 | 83.6 | 462 | 82.2 | 433 | 86.3 | 501 | 80.5 | 581 | 78.5 |
| Eclampsia | | | | | | | | | | | | | | | | |
| Absent | 4,428 | 91.3 | 2,483 | 92.5 | 3,043 | 91.6 | 6,196 | 91.9 | 5,700 | 90.2 | 4,922 | 91.7 | 5,226 | 86.8 | 5,886 | 85.8 |
| Present | 11 | 84.6 | 10 | 76.9 | 5 | 55.6 | 13 | 50.0 | 22 | 68.8 | 15 | 65.2 | 23 | 62.2 | 38 | 63.3 |

Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.

Note: *The racial-ethnic "Other" categories represent American Indians, Alaska Natives, and others.*

Totals and percentages may not sum to 100 due to missing values

Appendix Table 16. Percentage of low birthweight births by pre-pregnancy characteristics of mothers who had live births and maternal race and ethnicity, District of Columbia 2019-2023

| | Low Birthweight Births | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Overall | | White | | Black | | Hispanic | | Asian/Pacific Islander | | All other race-ethnic categories | |
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| Total Births | 4,226 | 9.9 | 781 | 5.6 | 2,693 | 14.4 | 492 | 7.2 | 161 | 7.5 | 53 | 13.7 |
| Previous Preterm Birth | | | | | | | | | | | | |
| No, no previous preterm birth | 3,817 | 9.3 | 750 | 5.5 | 2,369 | 13.4 | 451 | 6.9 | 157 | 7.5 | 51 | 13.7 |
| [a] Yes, previous preterm birth | 396 | 23.9 | 29 | 11.5 | 316 | 28.8 | 41 | 16.9 | 4 | 13.8 | 2 | 18.2 |
| Pre-pregnancy weight | | | | | | | | | | | | |
| [b] Underweight | 164 | 12.7 | 23 | 5.5 | 110 | 18.3 | 14 | 10.3 | 11 | 9.5 | 4 | 36.4 |
| Normal Weight | 1,815 | 9.1 | 547 | 5.8 | 967 | 15.7 | 165 | 6.7 | 101 | 7.1 | 21 | 11.2 |
| Overweight | 917 | 9.0 | 128 | 4.6 | 594 | 12.1 | 144 | 7.4 | 25 | 7.2 | 15 | 16.5 |
| Obese | 1,126 | 11.6 | 70 | 6.4 | 887 | 13.7 | 144 | 7.6 | 8 | 7.4 | 7 | 12.1 |
| Smoking prior to pregnancy | | | | | | | | | | | | |
| Did not smoke prior to pregnancy | 3,911 | 9.5 | 769 | 5.5 | 2,413 | 13.7 | 486 | 7.3 | 156 | 7.5 | 49 | 13.1 |
| [c] Smoked prior to pregnancy | 239 | 22.2 | 11 | 12.1 | 222 | 24.3 | 2 | 4.3 | 0 | 0 | 2 | 40.0 |
| Pre-pregnancy diabetes | | | | | | | | | | | | |
| Absent | 4,128 | 9.9 | 777 | 5.6 | 2,627 | 14.3 | 477 | 7.2 | 153 | 7.6 | 53 | 14.4 |
| [d] Present | 78 | 13.0 | 3 | 4.1 | 57 | 17.2 | 14 | 8.9 | 2 | 8.0 | 0 | 0 |
| Pre-pregnancy hypertension | | | | | | | | | | | | |
| Absent | 3,910 | 9.5 | 749 | 5.4 | 2,461 | 13.9 | 453 | 6.8 | 152 | 7.5 | 52 | 14.2 |
| [e] Present | 296 | 21.8 | 31 | 14.9 | 223 | 23.4 | 38 | 24.5 | 3 | 14.3 | 1 | 16.7 |
| Normal Birthweight Births | | | | | | | | | | | | |
| Total Births | 38,326 | 90.0 | 13,192 | 94.4 | 16,044 | 85.6 | 6,309 | 92.8 | 1,969 | 92.2 | 332 | 85.8 |
| Previous Preterm Birth | | | | | | | | | | | | |
| No, no previous preterm birth | 37,029 | 90.6 | 12,962 | 94.5 | 15,255 | 86.5 | 6,103 | 93.1 | 1,941 | 92.5 | 320 | 86.3 |
| [a] Yes, previous preterm birth | 1,259 | 76.1 | 224 | 88.5 | 780 | 71.2 | 202 | 83.1 | 25 | 86.2 | 9 | 81.8 |
| Pre-pregnancy weight | | | | | | | | | | | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [b] Underweight | 1,128 | 87.3 | 392 | 94.5 | 492 | 81.7 | 122 | 89.7 | 105 | 90.5 | 7 | 63.6 |
| Normal Weight | 18,175 | 90.9 | 8,956 | 94.2 | 5,193 | 84.3 | 2,304 | 93.3 | 1,325 | 92.9 | 166 | 88.8 |
| Overweight | 9,287 | 91.0 | 2,680 | 95.4 | 4,315 | 87.9 | 1,793 | 92.6 | 321 | 92.8 | 76 | 83.5 |
| Obese | 8,610 | 88.4 | 1,026 | 93.5 | 5,594 | 86.3 | 1,740 | 92.4 | 100 | 92.6 | 51 | 87.9 |
| Smoking prior to pregnancy | | | | | | | | | | | | |
| Did not smoke prior to pregnancy | 37,159 | 90.5 | 13,102 | 94.4 | 15,148 | 86.2 | 6,207 | 92.7 | 1,926 | 92.5 | 325 | 86.9 |
| [c] Smoked prior to pregnancy | 837 | 77.8 | 80 | 87.9 | 693 | 75.7 | 44 | 95.7 | 10 | 100.0 | 3 | 60.0 |
| Pre-pregnancy diabetes | | | | | | | | | | | | |
| Absent | 37,688 | 90.1 | 13,119 | 94.4 | 15,763 | 85.7 | 6,166 | 92.8 | 1,862 | 92.4 | 315 | 85.6 |
| [d] Present | 519 | 86.8 | 70 | 95.9 | 274 | 82.5 | 143 | 91.1 | 23 | 92.0 | 5 | 100.0 |
| Pre-pregnancy hypertension | | | | | | | | | | | | |
| Absent | 37,143 | 90.5 | 13,012 | 94.6 | 15,305 | 86.1 | 6,192 | 93.2 | 1,867 | 92.5 | 315 | 85.8 |
| [e] Present | 1,063 | 78.2 | 177 | 85.1 | 731 | 76.6 | 117 | 75.5 | 18 | 85.7 | 5 | 83.3 |

Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.

Note: T*he racial-ethnic "Other" categories represent American Indians, Alaska Natives, and others.*

Note: A low birthweight live birth is defined as a birth of an infant less than 2500 grams. Underweight is defined as a BMI<18.5; Normal weight is defined as a BMI between 18.5 and 24.9; overweight is defined as a BMI between 25 and 29.9; obese is defined as BMI of 30 and greater.

a The percentage of low birthweight live births was greater among mothers with previous preterm births compared to mothers with no preterm births (p<0.05).

b The percentage of low birthweight live births was greater among underweight mothers compared to normal weight mothers (p<0.05).

c The percentage of low birthweight live births was greater among mothers who smoked prior to pregnancy compared to those mothers who did not (p<0.05).

d The percentage of low birthweight live births was greater among mothers with pre-pregnancy diabetes than those without pre-pregnancy diabetes (p<0.05).

e The percentage of low birthweight live births was greater among mothers with pre-pregnancy hypertension than those without pre-pregnancy hypertension (p<0.05).

Appendix Table 17. Percentage of low birthweight births by pre-pregnancy characteristics of mothers who had live births and ward, District of Columbia 2019-2023

| | Ward 1 | | Ward 2 | | Ward 3 | | Ward 4 | | Ward 5 | | Ward 6 | | Ward 7 | | Ward 8 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| Low Birthweight Births | | | | | | | | | | | | | | | | |
| Total Births | 385 | 7.9 | 194 | 6.9 | 232 | 7.0 | 504 | 7.4 | 599 | 9.4 | 442 | 8.2 | 856 | 14.1 | 1,013 | 14.6 |
| Previous Preterm Birth | | | | | | | | | | | | | | | | |
| No, no previous preterm birth | 353 | 7.5 | 184 | 6.7 | 222 | 6.8 | 473 | 7.2 | 546 | 8.9 | 413 | 7.9 | 751 | 13.2 | 874 | 13.5 |
| Yes, previous preterm birth | 29 | 20.9 | 10 | 22.7 | 9 | 11.4 | 30 | 14.2 | 52 | 22.1 | 27 | 20.1 | 101 | 27.4 | 138 | 31.0 |
| Pre-pregnancy weight | | | | | | | | | | | | | | | | |
| Underweight | 15 | 10.6 | 6 | 5.1 | 9 | 6.5 | 12 | 7.3 | 33 | 19.5 | 19 | 11.8 | 30 | 17.9 | 40 | 17.2 |
| Normal Weight | 192 | 7.4 | 112 | 6.5 | 161 | 7.1 | 209 | 6.8 | 246 | 8.9 | 236 | 7.5 | 308 | 14.5 | 351 | 15.1 |
| Overweight | 84 | 7.4 | 32 | 6.3 | 31 | 5.0 | 126 | 6.8 | 143 | 8.6 | 96 | 7.9 | 184 | 12.0 | 220 | 13.1 |
| Obese | 78 | 9.1 | 15 | 5.6 | 24 | 9.2 | 134 | 9.1 | 153 | 9.8 | 76 | 9.8 | 298 | 14.5 | 348 | 14.1 |
| Smoking prior to pregnancy | | | | | | | | | | | | | | | | |
| Did not smoke prior to pregnancy | 370 | 7.8 | 183 | 6.7 | 228 | 6.9 | 486 | 7.3 | 563 | 9.1 | 422 | 8.0 | 767 | 13.4 | 891 | 13.9 |
| Smoked prior to pregnancy | 9 | 13.2 | 4 | 21.1 | 2 | 9.1 | 12 | 15.4 | 28 | 21.2 | 13 | 19.7 | 70 | 26.1 | 101 | 23.9 |
| Pre-pregnancy diabetes | | | | | | | | | | | | | | | | |
| Absent | 376 | 7.9 | 187 | 7.0 | 229 | 6.9 | 485 | 7.3 | 585 | 9.4 | 437 | 8.2 | 840 | 14.1 | 988 | 14.5 |
| Present | 7 | 8.5 | 1 | 3.2 | 2 | 8.7 | 17 | 14.8 | 13 | 13.0 | 3 | 6.7 | 12 | 13.6 | 23 | 20.2 |
| Pre-pregnancy hypertension | | | | | | | | | | | | | | | | |
| Absent | 362 | 7.6 | 177 | 6.7 | 224 | 6.8 | 473 | 7.2 | 556 | 9.1 | 417 | 7.9 | 778 | 13.4 | 922 | 14.1 |
| Present | 21 | 22.3 | 11 | 24.4 | 7 | 15.6 | 29 | 15.3 | 42 | 19.9 | 23 | 19.5 | 74 | 27.0 | 89 | 23.2 |
| Normal Birthweight Births | | | | | | | | | | | | | | | | |
| Total Births | 4,484 | 92.1 | 2,609 | 92.8 | 3,106 | 93.0 | 6,273 | 92.5 | 5,755 | 90.6 | 4,953 | 91.8 | 5,211 | 85.9 | 5,916 | 85.4 |
| Previous Preterm Birth | | | | | | | | | | | | | | | | |
| No, no previous preterm birth | 4,371 | 92.5 | 2,566 | 93.3 | 3,030 | 93.2 | 6,087 | 92.8 | 5,569 | 91.1 | 4,842 | 92.1 | 4,938 | 86.8 | 5,607 | 86.5 |
| Yes, previous preterm birth | 110 | 79.1 | 34 | 77.3 | 70 | 88.6 | 181 | 85.8 | 183 | 77.9 | 107 | 79.9 | 267 | 72.6 | 307 | 69.0 |
| Pre-pregnancy weight | | | | | | | | | | | | | | | | |
| Underweight | 126 | 89.4 | 111 | 94.9 | 130 | 93.5 | 152 | 92.7 | 136 | 80.5 | 142 | 88.2 | 138 | 82.1 | 193 | 82.8 |
| Normal Weight | 2,395 | 92.6 | 1,604 | 93.5 | 2,118 | 92.9 | 2,845 | 93.2 | 2,528 | 91.1 | 2,903 | 92.5 | 1,809 | 85.5 | 1,967 | 84.9 |
| Overweight | 1,051 | 92.6 | 473 | 93.7 | 591 | 95.0 | 1,722 | 93.2 | 1,519 | 91.4 | 1,117 | 92.1 | 1,346 | 88.0 | 1,463 | 86.9 |
| Obese | 783 | 90.9 | 255 | 94.4 | 236 | 90.8 | 1,343 | 90.9 | 1,411 | 90.2 | 699 | 90.2 | 1,758 | 85.4 | 2,119 | 85.9 |
| Smoking prior to pregnancy | | | | | | | | | | | | | | | | |
| Did not smoke prior to pregnancy | 4,402 | 92.2 | 2,553 | 93.3 | 3,076 | 93.1 | 6,166 | 92.7 | 5,605 | 90.9 | 4,878 | 92.0 | 4,941 | 86.5 | 5,519 | 86.1 |
| Smoked prior to pregnancy | 59 | 86.8 | 15 | 78.9 | 20 | 90.9 | 66 | 84.6 | 104 | 78.8 | 53 | 80.3 | 198 | 73.9 | 322 | 76.1 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pre-pregnancy diabetes | | | | | | | | | | | | | | | | |
| Absent | 4,407 | 92.1 | 2,483 | 93.0 | 3,082 | 93.1 | 6,171 | 92.7 | 5,664 | 90.6 | 4,909 | 91.8 | 5,131 | 85.9 | 5,822 | 85.5 |
| Present | 75 | 91.5 | 30 | 96.8 | 21 | 91.3 | 98 | 85.2 | 87 | 87.0 | 42 | 93.3 | 75 | 85.2 | 91 | 79.8 |
| Pre-pregnancy hypertension | | | | | | | | | | | | | | | | |
| Absent | 4,409 | 92.4 | 2,479 | 93.3 | 3,065 | 93.2 | 6,109 | 92.8 | 5,582 | 90.9 | 4,856 | 92.1 | 5,005 | 86.5 | 5,619 | 85.9 |
| Present | 73 | 77.7 | 34 | 75.6 | 38 | 84.4 | 160 | 84.7 | 169 | 80.1 | 95 | 80.5 | 200 | 73.0 | 294 | 76.8 |

Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.

Note: *The racial-ethnic "Other" categories represent American Indians, Alaska Natives, and others.*

Note: A low birthweight live birth is defined as a birth of an infant less than 2500 grams. Underweight is defined as a BMI<18.5; Normal weight is defined as a BMI between 18.5 and 24.9; overweight is defined as a BMI between 25 and 29.9; obese is defined as BMI of 30 and greater.

Appendix Table 18. Percentage of low birthweight births by pregnancy characteristics of mothers who had live births and maternal race and ethnicity, District of Columbia 2019-2023

| | Overall | | White | | Black | | Hispanic | | Asian/Pacific Islander | | All other race-ethnic categories | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Percent | N | Percent | N | Percent | N | Percent | N | Percent | N | Percent |
| Low Birthweight Births | | | | | | | | | | | | |
| Total Births | 4,226 | 9.9 | 781 | 5.6 | 2,693 | 14.4 | 492 | 7.2 | 161 | 7.5 | 53 | 13.7 |
| Trimester Prenatal Care Initiated | | | | | | | | | | | | |
| [b] First Trimester | 2,629 | 9.1 | 663 | 5.6 | 1,510 | 14.1 | 284 | 6.6 | 125 | 7.8 | 30 | 13.6 |
| [b] Second Trimester | 913 | 10.6 | 83 | 5.2 | 678 | 13.6 | 121 | 7.5 | 14 | 4.9 | 7 | 10.6 |
| Third Trimester | 159 | 7.3 | 6 | 1.7 | 120 | 9.5 | 24 | 5.8 | 7 | 6.9 | 2 | 6.9 |
| [a] No Prenatal Care | 225 | 21.2 | 8 | 11.0 | 173 | 25.3 | 14 | 12.2 | 11 | 10.4 | 13 | 24.1 |
| Plurality of birth | | | | | | | | | | | | |
| Singleton | 3,462 | 8.4 | 582 | 4.3 | 2,247 | 12.5 | 417 | 6.3 | 134 | 6.4 | 42 | 11.3 |
| [c] Twin | 721 | 55.9 | 182 | 45.6 | 430 | 63.2 | 69 | 46.9 | 26 | 61.9 | 8 | 80.0 |
| Triplet | 43 | 95.6 | 17 | 94.4 | 16 | 94.1 | 6 | 100.0 | 1 | 100.0 | 3 | 100.0 |
| Smoking during pregnancy | | | | | | | | | | | | |
| Did not smoke during pregnancy | 3,990 | 9.6 | 773 | 5.6 | 2,487 | 13.9 | 486 | 7.2 | 156 | 7.5 | 49 | 13.1 |
| [d] Smoked during pregnancy | 148 | 22.6 | 5 | 11.4 | 137 | 24.0 | 3 | 11.5 | 0 | 0 | 2 | 40.0 |
| Gestational diabetes | | | | | | | | | | | | |
| Absent | 3,965 | 9.9 | 728 | 5.4 | 2,556 | 14.5 | 448 | 7.1 | 141 | 7.6 | 51 | 14.5 |
| Present | 240 | 10.3 | 52 | 9.5 | 127 | 12.1 | 43 | 8.4 | 14 | 7.5 | 2 | 9.1 |
| Gestational hypertension | | | | | | | | | | | | |
| Absent | 3,498 | 9.1 | 629 | 4.9 | 2,238 | 13.4 | 414 | 6.6 | 136 | 7.1 | 46 | 13.5 |
| [e] Present | 707 | 18.5 | 151 | 13.2 | 445 | 22.5 | 77 | 15.4 | 19 | 15.4 | 7 | 21.9 |
| Eclampsia | | | | | | | | | | | | |
| Absent | 4,123 | 9.8 | 765 | 5.5 | 2,634 | 14.2 | 479 | 7.1 | 150 | 7.4 | 52 | 14.0 |
| [f] Present | 81 | 38.0 | 13 | 34.2 | 50 | 38.8 | 12 | 37.5 | 5 | 41.7 | 1 | 100.0 |
| Normal Birthweight Births | | | | | | | | | | | | |
| Total Births | 38,326 | 90.0 | 13,192 | 94.4 | 16,044 | 85.6 | 6,309 | 92.8 | 1,969 | 92.2 | 332 | 85.8 |
| Trimester Prenatal Care Initiated | | | | | | | | | | | | |
| [b] First Trimester | 26,255 | 90.9 | 11,074 | 94.4 | 9,176 | 85.9 | 4,023 | 93.4 | 1,468 | 92.2 | 190 | 86.4 |
| [b] Second Trimester | 7,727 | 89.4 | 1,507 | 94.8 | 4,302 | 86.4 | 1,502 | 92.5 | 272 | 95.1 | 59 | 89.4 |
| Third Trimester | 2,022 | 92.7 | 348 | 98.0 | 1,142 | 90.5 | 388 | 94.2 | 94 | 93.1 | 27 | 93.1 |
| [a] No Prenatal Care | 834 | 78.8 | 65 | 89.0 | 511 | 74.7 | 101 | 87.8 | 95 | 89.6 | 41 | 75.9 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plurality of birth | | | | | | | | | | | | |
| Singleton | 37,755 | 91.6 | 12,974 | 95.7 | 15,793 | 87.5 | 6,231 | 93.7 | 1,953 | 93.6 | 330 | 88.7 |
| [c] Twin | 568 | 44.0 | 217 | 54.4 | 249 | 36.6 | 78 | 53.1 | 16 | 38.1 | 2 | 20.0 |
| Triplet | 2 | 4.4 | 1 | 5.6 | 1 | 5.9 | 0 | 0 | 0 | 0 | 0 | 0 |
| Smoking during pregnancy | | | | | | | | | | | | |
| Did not smoke during pregnancy | 37,467 | 90.4 | 13,141 | 94.4 | 15,388 | 86.1 | 6,228 | 92.8 | 1,932 | 92.5 | 325 | 86.9 |
| [d] Smoked during pregnancy | 507 | 77.4 | 39 | 88.6 | 434 | 76.0 | 23 | 88.5 | 3 | 100.0 | 3 | 60.0 |
| Gestational diabetes | | | | | | | | | | | | |
| Absent | 36,099 | 90.1 | 12,695 | 94.6 | 15,106 | 85.5 | 5,841 | 92.9 | 1,712 | 92.4 | 300 | 85.5 |
| Present | 2,101 | 89.7 | 494 | 90.5 | 926 | 87.9 | 466 | 91.6 | 173 | 92.5 | 20 | 90.9 |
| Gestational hypertension | | | | | | | | | | | | |
| Absent | 35,086 | 90.9 | 12,193 | 95.1 | 14,503 | 86.6 | 5,887 | 93.4 | 1,781 | 92.9 | 295 | 86.5 |
| [e] Present | 3,119 | 81.5 | 996 | 86.8 | 1,532 | 77.5 | 422 | 84.6 | 104 | 84.6 | 25 | 78.1 |
| Eclampsia | | | | | | | | | | | | |
| Absent | 38,063 | 90.2 | 13,161 | 94.5 | 15,953 | 85.8 | 6,286 | 92.9 | 1,877 | 92.6 | 320 | 86.0 |
| [f] Present | 132 | 62.0 | 25 | 65.8 | 79 | 61.2 | 20 | 62.5 | 7 | 58.3 | 0 | 0 |

Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.

Note: *The racial-ethnic "Other" categories represent American Indians, Alaska Natives, and others.*

Note: A low birthweight live birth is defined as a birth of an infant less than 2500 grams.

a The percentage of low birthweight live births was greater among mothers with no prenatal care compared to mothers who initiated prenatal care during the first trimester ($p<0.05$), second trimester ($p<0.05$), and third trimester ($p<0.05$).

b The percentage of low birthweight live births was greater among mothers who initiated prenatal care during this specific trimester compared to mothers who initiated prenatal care during the third trimester ($p<0.05$ for all comparisons).

c The percentage of low birthweight live births was greater among twin births compared to singleton births ($p<0.05$).

d The percentage of low birthweight live births was greater among mothers who smoked during pregnancy compared to mothers who did not smoke during ($p<0.05$).

e The percentage of low birthweight live births was greater among mothers with gestational hypertension compared to those without gestational hypertension ($p<0.05$).

f The percentage of low birthweight live births was greater among mothers with eclampsia compared to those without eclampsia ($p<0.05$).

Appendix Table 19. Percentage of low birthweight births by pregnancy characteristics of mothers who had live births and ward, District of Columbia 2019-2023

| | Ward 1 | | Ward 2 | | Ward 3 | | Ward 4 | | Ward 5 | | Ward 6 | | Ward 7 | | Ward 8 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Percent | N | Percent | N | Percent | N | Percent | N | Percent | N | Percent | N | Percent | N | Percent |
| Low Birthweight Births | | | | | | | | | | | | | | | | |
| Total Births | 385 | 7.9 | 194 | 6.9 | 232 | 7.0 | 504 | 7.4 | 599 | 9.4 | 442 | 8.2 | 856 | 14.1 | 1,013 | 14.6 |
| Trimester Prenatal Care Initiated | | | | | | | | | | | | | | | | |
| First Trimester | 262 | 7.7 | 125 | 6.3 | 184 | 6.9 | 316 | 6.9 | 365 | 8.5 | 319 | 7.6 | 491 | 13.3 | 567 | 14.1 |
| Second Trimester | 73 | 7.9 | 28 | 6.9 | 29 | 6.6 | 112 | 7.9 | 144 | 10.9 | 80 | 9.9 | 202 | 13.6 | 244 | 13.4 |
| Third Trimester | 10 | 3.6 | 8 | 5.6 | 3 | 2.6 | 21 | 5.9 | 28 | 8.1 | 9 | 4.6 | 34 | 10.0 | 46 | 11.2 |
| No Prenatal Care | 12 | 16.0 | 26 | 14.4 | 5 | 22.7 | 14 | 12.4 | 21 | 15.9 | 10 | 17.9 | 57 | 28.9 | 80 | 28.2 |
| Plurality of birth | | | | | | | | | | | | | | | | |
| Singleton | 322 | 6.8 | 158 | 5.8 | 171 | 5.3 | 412 | 6.2 | 477 | 7.8 | 356 | 6.8 | 717 | 12.3 | 848 | 12.7 |
| Twin | 60 | 58.3 | 36 | 51.4 | 53 | 50.0 | 87 | 48.6 | 113 | 57.7 | 80 | 47.3 | 133 | 58.6 | 159 | 66.3 |
| Triplet | 3 | 100.0 | 0 | 0 | 8 | 88.9 | 5 | 83.3 | 9 | 100.0 | 6 | 100.0 | 6 | 100.0 | 6 | 100.0 |
| Smoking during pregnancy | | | | | | | | | | | | | | | | |
| Did not smoke during pregnancy | 371 | 7.7 | 184 | 6.7 | 228 | 6.9 | 493 | 7.4 | 581 | 9.3 | 429 | 8.0 | 785 | 13.5 | 918 | 14.0 |
| Smoked during pregnancy | 6 | 17.1 | 3 | 25.0 | 2 | 13.3 | 4 | 9.5 | 11 | 18.6 | 6 | 17.6 | 48 | 27.7 | 68 | 23.9 |
| Gestational diabetes | | | | | | | | | | | | | | | | |
| Absent | 367 | 8.0 | 176 | 6.9 | 206 | 6.5 | 468 | 7.4 | 565 | 9.4 | 410 | 8.0 | 813 | 14.1 | 959 | 14.7 |
| Present | 16 | 5.6 | 12 | 7.7 | 25 | 14.6 | 34 | 7.8 | 32 | 9.4 | 30 | 11.9 | 39 | 13.2 | 52 | 13.0 |
| Gestational hypertension | | | | | | | | | | | | | | | | |
| Absent | 314 | 7.0 | 156 | 6.2 | 192 | 6.2 | 407 | 6.6 | 499 | 8.6 | 366 | 7.5 | 723 | 13.3 | 840 | 13.6 |
| Present | 69 | 17.8 | 32 | 15.8 | 39 | 16.0 | 95 | 16.7 | 98 | 17.4 | 74 | 14.7 | 129 | 20.7 | 171 | 23.1 |
| Eclampsia | | | | | | | | | | | | | | | | |
| Absent | 379 | 7.8 | 183 | 6.8 | 229 | 6.9 | 488 | 7.2 | 586 | 9.3 | 430 | 8.0 | 838 | 13.9 | 989 | 14.4 |
| Present | 3 | 23.1 | 5 | 38.5 | 2 | 22.2 | 14 | 53.8 | 11 | 34.4 | 10 | 43.5 | 14 | 37.8 | 22 | 36.7 |
| Normal Birthweight Births | | | | | | | | | | | | | | | | |
| Total Births | 4,484 | 92.1 | 2,609 | 92.8 | 3,106 | 93.0 | 6,273 | 92.5 | 5,755 | 90.6 | 4,953 | 91.8 | 5,211 | 85.9 | 5,916 | 85.4 |
| Trimester Prenatal Care Initiated | | | | | | | | | | | | | | | | |
| First Trimester | 3,149 | 92.3 | 1,873 | 93.7 | 2,500 | 93.1 | 4,273 | 93.1 | 3,927 | 91.5 | 3,880 | 92.4 | 3,204 | 86.7 | 3,441 | 85.9 |
| Second Trimester | 854 | 92.1 | 378 | 93.1 | 413 | 93.4 | 1,307 | 92.1 | 1,183 | 89.1 | 726 | 90.0 | 1,284 | 86.4 | 1,575 | 86.6 |
| Third Trimester | 266 | 96.4 | 136 | 94.4 | 113 | 97.4 | 334 | 94.1 | 318 | 91.9 | 187 | 95.4 | 304 | 89.7 | 363 | 88.8 |
| No Prenatal Care | 63 | 84.0 | 154 | 85.6 | 17 | 77.3 | 99 | 87.6 | 111 | 84.1 | 46 | 82.1 | 140 | 71.1 | 204 | 71.8 |
| Plurality of birth | | | | | | | | | | | | | | | | |
| Singleton | 4,441 | 93.2 | 2,575 | 94.2 | 3,052 | 94.7 | 6,180 | 93.7 | 5,672 | 92.2 | 4,864 | 93.2 | 5,117 | 87.7 | 5,835 | 87.3 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Twin | 43 | 41.7 | 34 | 48.6 | 53 | 50.0 | 92 | 51.4 | 83 | 42.3 | 89 | 52.7 | 93 | 41.0 | 81 | 33.8 |
| Triplet | 0 | 0 | 0 | 0 | 1 | 11.1 | 1 | 16.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Smoking during pregnancy | | | | | | | | | | | | | | | | |
| Did not smoke during pregnancy | 4,427 | 92.3 | 2,560 | 93.3 | 3,083 | 93.1 | 6,192 | 92.6 | 5,653 | 90.7 | 4,903 | 91.9 | 5,012 | 86.4 | 5,618 | 86.0 |
| Smoked during pregnancy | 29 | 82.9 | 9 | 75.0 | 13 | 86.7 | 38 | 90.5 | 48 | 81.4 | 28 | 82.4 | 125 | 72.3 | 217 | 76.1 |
| Gestational diabetes | | | | | | | | | | | | | | | | |
| Absent | 4,211 | 92.0 | 2,369 | 93.1 | 2,957 | 93.5 | 5,864 | 92.6 | 5,444 | 90.6 | 4,729 | 92.0 | 4,946 | 85.9 | 5,562 | 85.3 |
| Present | 271 | 94.4 | 144 | 92.3 | 146 | 85.4 | 403 | 92.2 | 307 | 90.6 | 222 | 88.1 | 257 | 86.8 | 349 | 87.0 |
| Gestational hypertension | | | | | | | | | | | | | | | | |
| Absent | 4,164 | 93.0 | 2,343 | 93.8 | 2,898 | 93.8 | 5,796 | 93.4 | 5,287 | 91.4 | 4,524 | 92.5 | 4,712 | 86.7 | 5,343 | 86.4 |
| Present | 318 | 82.2 | 170 | 84.2 | 205 | 84.0 | 473 | 83.3 | 464 | 82.6 | 427 | 85.1 | 493 | 79.3 | 569 | 76.9 |
| Eclampsia | | | | | | | | | | | | | | | | |
| Absent | 4,471 | 92.2 | 2,501 | 93.2 | 3,094 | 93.1 | 6,256 | 92.8 | 5,730 | 90.7 | 4,937 | 92.0 | 5,183 | 86.1 | 5,874 | 85.6 |
| Present | 10 | 76.9 | 8 | 61.5 | 7 | 77.8 | 12 | 46.2 | 21 | 65.6 | 13 | 56.5 | 23 | 62.2 | 38 | 63.3 |

Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.

Note: *The racial-ethnic "Other" categories represent American Indians, Alaska Natives, and others.*

Note: A low birthweight live birth is defined as a birth of an infant less than 2500 grams.

Appendix Table 20. Annual infant mortality rates by maternal race and ethnicity, District of Columbia 2018-2023

| | Overall | | | White | | | Black | | | Hispanic | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Number of Births | Number of Deaths | Infant Mortality Rate (per 1,000 persons) | Number of Births | Number of Deaths | Infant Mortality Rate (per 1,000 persons) | Number of Births | Number of Deaths | Infant Mortality Rate (per 1,000 persons) | Number of Births | Number of Deaths | Infant Mortality Rate (per 1,000 persons) |
| 2014 | 9,513 | 72 | 7.6 | 2,952 | 11 | 3.7 | 4,791 | 50 | 10.4 | 1,291 | 6 | 4.6 |
| 2015 | 9,571 | 82 | 8.6 | 2,961 | 7 | 2.4 | 4,795 | 65 | 13.6 | 1,330 | 9 | 6.8 |
| 2016 | 9,854 | 70 | 7.1 | 3,099 | 7 | 2.3 | 4,875 | 55 | 11.3 | 1,349 | 5 | 3.7 |
| 2017 | 9,559 | 77 | 8.1 | 3,065 | 13 | 4.2 | 4,648 | 53 | 11.4 | 1,336 | 6 | 4.5 |
| 2018 | 9,212 | 64 | 6.9 | 3,058 | 1 | 0.3 | 4,324 | 51 | 11.8 | 1,296 | 4 | 3.1 |
| 2019 | 9,070 | 45 | 5.0 | 3,024 | 4 | 1.3 | 4,226 | 38 | 9.0 | 1,352 | 3 | 2.2 |
| 2020 | 8,869 | 40 | 4.5 | 2,979 | 5 | 1.7 | 4,068 | 24 | 5.9 | 1,349 | 6 | 4.4 |
| 2021 | 8,658 | 57 | 6.6 | 2,971 | 6 | 2.0 | 3,662 | 36 | 9.8 | 1,341 | 3 | 2.2 |
| 2022 | 8,077 | 39 | 4.8 | 2,519 | 4 | 1.6 | 3,459 | 23 | 6.6 | 1,348 | 4 | 3.0 |
| 2023 | 7,898 | 52 | 6.6 | 2,483 | 3 | 1.2 | 3,324 | 26 | 7.8 | 1,411 | 11 | 7.8 |

Data Source: 2019-2023 DC Birth Data, Vital Records Division, Center for Policy, Planning, and Evaluation, DC Department of Health.

Note: *The racial-ethnic "Other" categories represent American Indians, Alaska Natives, and others.*

Appendix Table 21. Neonatal mortality rate by infant age and maternal characteristics, 2019-2023

| Characteristic | All Infants | | | Neonatal | | Post Neonatal | |
|---|---|---|---|---|---|---|---|
| | Births | Total deaths | Rate (per 1,000 live births) | Total deaths | Rate (per 1,000 live births) | Total deaths | Rate (per 1,000 live births) |
| DC Overall | 42,572 | 233 | 5.5 | 135 | 3.17 | 98 | 2.30 |
| Maternal Race and Ethnicity [a] | | | | | | | |
| White | 13,976 | 22 | 1.6 | 13 | 0.93 | 9 | 0.64 |
| Black | 18,739 | 147 | 7.8 | 80 | 4.27 | 67 | 3.58 |
| Hispanic | 6,801 | 27 | 4.0 | 17 | 2.50 | 10 | 1.47 |
| Maternal age (years) | | | | | | | |
| Less than 20 years | 1,394 | 10 | 7.2 | 5 | 3.59 | 5 | 3.59 |
| 20-24 years | 5,100 | 40 | 7.8 | 19 | 3.73 | 21 | 4.12 |
| 25-29 years | 8,137 | 57 | 7.0 | 28 | 3.44 | 29 | 3.56 |
| 30-34 years | 13,566 | 55 | 4.1 | 38 | 2.80 | 17 | 1.25 |
| 35-39 years | 11,311 | 34 | 3.0 | 22 | 1.95 | 12 | 1.06 |
| 40 years and older | 3,049 | 13 | 4.3 | 9 | 2.95 | 4 | 1.31 |
| Marital Status | | | | | | | |
| Married | 22,990 | 56 | 2.4 | 35 | 1.52 | 21 | 0.91 |
| Not Married | 19,498 | 152 | 7.8 | 86 | 4.41 | 66 | 3.38 |
| Maternal Education Level | | | | | | | |
| Less than High School | 5,031 | 35 | 7.0 | 15 | 2.98 | 20 | 3.98 |
| High School Graduate | 8,906 | 69 | 7.7 | 36 | 4.04 | 33 | 3.71 |
| More than High School Education | 27,976 | 89 | 3.2 | 57 | 2.04 | 32 | 1.14 |
| Insurance Type | | | | | | | |
| Medicaid | 19,168 | 148 | 7.7 | 81 | 4.23 | 67 | 3.50 |
| Private Insurance | 21,460 | 46 | 2.1 | 31 | 1.44 | 15 | 0.70 |
| Other Government (Fed, State, Local) | 110 | 1 | 9.1 | 0 | 0.00 | 1 | 9.09 |
| Self-pay | 512 | 2 | 3.9 | 1 | 1.95 | 1 | 1.95 |
| CHAMPUS/TRICARE | 622 | 2 | 3.2 | 1 | 1.61 | 1 | 1.61 |
| Other | 567 | 8 | 14.1 | 5 | 8.82 | 3 | 5.29 |
| Maternal Residence (Ward) | | | | | | | |
| Ward 1 | 4,871 | 15 | 3.1 | 9 | 1.85 | 6 | 1.23 |
| Ward 2 | 2,811 | 6 | 2.1 | 3 | 1.07 | 3 | 1.07 |
| Ward 3 | 3,338 | 12 | 3.6 | 9 | 2.70 | 3 | 0.90 |
| Ward 4 | 6,778 | 26 | 3.8 | 15 | 2.21 | 11 | 1.62 |
| Ward 5 | 6,354 | 23 | 3.6 | 18 | 2.83 | 5 | 0.79 |
| Ward 6 | 5,396 | 20 | 3.7 | 12 | 2.22 | 8 | 1.48 |
| Ward 7 | 6,069 | 62 | 10.2 | 33 | 5.44 | 29 | 4.78 |
| Ward 8 | 6,929 | 68 | 9.8 | 35 | 5.05 | 33 | 4.76 |

Source: Data Management and Analysis Division, Center for Policy, Planning and Evaluation, D.C. Department of Health.

[a] Non-Hispanic, Asian/Pacific Islander and Other non-Hispanic race-ethnicity categories are not presented due to the small sample size.

Appendix Table 22. Infant mortality rate by maternal characteristics, 2019-2023

| Characteristic | Births | Deaths | Rate (per 1,000 live births) |
|---|---|---|---|
| DC Overall | 42,572 | 233 | 5.5 |
| Maternal Race and Ethnicity [a] | | | |
| White | 13,976 | 22 | 1.6 |
| [b] Black | 18,739 | 147 | 7.8 |
| Hispanic | 6,801 | 27 | 4.0 |
| Maternal age (years) | | | |
| Less than 20 years | 1,394 | 10 | 7.2 |
| [c] 20-24 years | 5,100 | 40 | 7.8 |
| [c] 25-29 years | 8,137 | 57 | 7.0 |
| 30-34 years | 13,566 | 55 | 4.1 |
| 35-39 years | 11,311 | 34 | 3.0 |
| 40 years and older | 3,049 | 13 | 4.3 |
| Marital Status | | | |
| Married | 22,990 | 56 | 2.4 |
| [d] Not Married | 19,498 | 152 | 7.8 |
| Maternal Education Level | | | |
| Less than High School | 5,031 | 35 | 7.0 |
| High School Graduate | 8,906 | 69 | 7.7 |
| [e] More than High School Education | 27,976 | 89 | 3.2 |
| Insurance Type | | | |
| [f] Medicaid | 19,168 | 148 | 7.7 |
| Private Insurance | 21,460 | 46 | 2.1 |
| Other Government (Fed, State, Local) | 110 | 1 | 9.1 |
| Self-pay | 512 | 2 | 3.9 |
| CHAMPUS/TRICARE | 622 | 2 | 3.2 |
| Other | 567 | 8 | 14.1 |
| Maternal Residence (Ward) | | | |
| Ward 1 | 4,871 | 15 | 3.1 |
| Ward 2 | 2,811 | 6 | 2.1 |
| Ward 3 | 3,338 | 12 | 3.6 |
| Ward 4 | 6,778 | 26 | 3.8 |
| Ward 5 | 6,354 | 23 | 3.6 |
| Ward 6 | 5,396 | 20 | 3.7 |
| Ward 7 | 6,069 | 62 | 10.2 |
| [g] Ward 8 | 6,929 | 68 | 9.8 |

Source: Data Management and Analysis Division, Center for Policy, Planning and Evaluation, D.C. Department of Health.

[a] Asian/Pacific Islander and Other race-ethnicity categories are not presented due to the small sample size.

[b] Infant mortality rate is significantly higher among non-Hispanic black mothers compared to non-Hispanic white mothers ($p<0.05$), and Hispanic mothers ($p<0.05$).

[c] Infant mortality rate is significantly higher among infants of mothers aged 20-24 years compared to mothers aged 30-34 years ($p<0.05$) and 35-39 years ($p<0.05$).

[d] Infant mortality rate is significantly higher among unmarried mothers compared to married mothers ($p<0.05$).

[e] Infant mortality rate is significantly lower among mothers with more than a high school diploma compared to mothers with less than a high school education ($p<0.05$) and mothers with a high school diploma ($p<0.05$).

[f] Infant mortality rate is significantly higher among mothers with Medicaid coverage compared to mothers with private insurance ($p<0.05$).

[g] Percentage of low birthweight births is significantly higher among mothers residing in Ward 8 compared to all other wards ($p<0.05$ for six comparisons), except Ward 7

Appendix Table 23: Infant mortality rate by pre-pregnancy characteristics, 2019-2023

| Characteristic | Births | Deaths | Rate (per 1,000) |
|---|---|---|---|
| Total Births | 42,572 | 233 | 5.47 |
| Previous Preterm Birth | | | |
| No, no previous preterm birth | 40,849 | 187 | 4.58 |
| [a] Yes, previous preterm birth | 1,655 | 22 | 13.29 |
| Pre-pregnancy weight | | | |
| Underweight | 1,292 | 5 | 3.87 |
| Normal Weight | 19,991 | 75 | 3.75 |
| Overweight | 10,204 | 48 | 4.70 |
| [b] Obese | 9,738 | 77 | 7.91 |
| Smoking prior to pregnancy | | | |
| Did not smoke prior to pregnancy | 41,074 | 186 | 4.53 |
| [c] Smoked prior to pregnancy | 1,076 | 16 | 14.87 |
| Pre-pregnancy diabetes | | | |
| Absent | 41,818 | 205 | 4.90 |
| [C] Present | 598 | 4 | 6.69 |
| Pre-pregnancy hypertension | | | |
| [C] Absent | 41,056 | 196 | 4.77 |
| Present | 1,359 | 13 | 9.57 |

Source: Data Management and Analysis Division, Center for Policy, Planning and Evaluation, D.C. Department of Health.

[a] Infant mortality rate is significantly higher among mothers with a previous preterm birth compared to mothers without a previous preterm ($p<0.05$).

[b] Infant mortality rate is significantly higher among mothers who were obese prior to pregnancy compared to mothers who were normal weight ($p<0.05$) and overweight ($p<0.05$).

[c] Insufficient data to compare.

Appendix Table 24: Infant mortality rate by pregnancy characteristics, 2019-2023

| Characteristic | Births | Deaths | Rate (per 1,000) |
|---|---|---|---|
| Total Births | 42,572 | 233 | 5.47 |
| Trimester prenatal care initiated. | | | |
| First Trimester | 28,884 | 107 | 3.70 |
| Second Trimester | 8,641 | 58 | 6.71 |
| Third Trimester | 2,182 | 6 | 2.75 |
| [a]No Prenatal Care | 1,059 | 22 | 20.77 |
| Plurality of birth | | | |
| Singleton | 41,220 | 185 | 4.49 |
| [b]Twin | 1,290 | 24 | 18.60 |
| Triplet | 45 | 2 | 44.44 |
| Quadruplet | 0 | 0 | 0.00 |
| Smoked during pregnancy | | | |
| Did not smoke during pregnancy | 41,461 | 191 | 4.61 |
| Smoked during pregnancy | 655 | 10 | 15.27 |
| Gestational diabetes | | | |
| Absent | 40,067 | 201 | 5.02 |
| Present | 2,341 | 8 | 3.42 |
| Eclampsia | | | |
| Absent | 42,188 | 206 | 4.88 |
| Present | 213 | 3 | 14.08 |
| Gestational hypertension | | | |
| [c]Absent | 38,586 | 188 | 4.87 |
| Present | 3,827 | 21 | 5.49 |

Source: Data Management and Analysis Division, Center for Policy, Planning and Evaluation, D.C. Department of Health.

[a] Infant mortality rate is significantly higher among mothers with who did not initiate prenatal care compared to mothers who initiated care during the first trimester ($p<0.05$) or second trimester ($p<0.05$), ($p<0.05$).

[b] Infant mortality rate is significantly higher among twin births compared to singleton births ($p<0.05$).

[c] Infant mortality rate is not significantly different between mothers without this characteristic compared to mothers with this characteristic ($p<0.05$).

Appendix Table 25:Ten Leading Causes of Infant Death, 2019-2023

| Leading Cause of Death Category | ICD-10 codes | Total Infant Deaths | Percent | Infant Mortality Rate (per 10,000 live births) |
|---|---|---|---|---|
| Total infant deaths | | 233 | 100.00 | 54.73 |
| Congenital Anomalies | Q00-Q99 | 32 | 13.73 | 7.52 |
| Accidents | V01-X59 | 24 | 10.30 | 5.64 |
| Maternal complications | P01 | 24 | 10.30 | 5.64 |
| Prematurity | P07 | 12 | 5.15 | 2.82 |
| Bacterial sepsis | P36 | 10 | 4.29 | 2.35 |
| Placenta, cord, membranes | P02 | 6 | 2.58 | 1.41 |
| Newborn affected by maternal hypertensive disorders | P00.0 | 4 | 1.72 | 0.94 |
| Diarrhea and gastroenteritis of infectious origin | A09 | . | . | . |
| Intrauterine hypoxia and birth asphyxia | P20-P21 | . | . | . |
| Necrotizing enterocolitis of newborn | P77 | . | . | . |
| Neonatal hemorrhage | P50–P52,P54 | . | . | . |
| Respiratory distress | P22 | . | . | . |
| SIDS | R95 | . | . | . |
| Other | | 108 | 46.35 | 25.37 |

Source: Data Management and Analysis Division, Center for Policy, Planning and Evaluation, D.C. Department of Health.

*Data suppressed for less than four infant deaths.

Appendix Table 26: Ten leading causes of neonatal deaths, District of Columbia, 2019-2023

| Cause of Death Category | ICD-10 Codes | Total neonatal deaths | Percent | Neonatal Mortality Rate (per 10,000 live births) |
|---|---|---|---|---|
| Total neonatal deaths | | 135 | 100.00 | 31.71 |
| Maternal complications | P01 | 24 | 17.78 | 5.64 |
| Congenital Anomalies | Q00-Q99 | 17 | 12.59 | 3.99 |
| Prematurity | P07 | 12 | 8.89 | 2.82 |
| Bacterial sepsis | P36 | 9 | 6.67 | 2.11 |
| Placenta, cord, membranes | P02 | 5 | 3.70 | 1.17 |
| Diarrhea and gastroenteritis of infectious origin | A09 | 0 | 0.00 | 0.00 |
| SIDS | R95 | 0 | 0.00 | 0.00 |
| Accidents | V01-X59 | . | . | . |
| Intrauterine hypoxia and birth asphyxia | P20-P21 | . | . | . |
| Necrotizing enterocolitis of newborn | P77 | . | . | . |
| Neonatal hemorrhage | P50–P52,P54 | . | . | . |
| Newborn affected by maternal hypertensive disorders | P00.0 | . | . | . |
| Respiratory distress | P22 | . | . | . |
| Other | | 55 | 40.74 | 12.92 |

Source: Data Management and Analysis Division, Center for Policy, Planning and Evaluation, D.C. Department of Health.

*Data suppressed for less than five infant deaths